

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.S. ROUTE 2320 (IL RTE 113 /MAIN STREET)  
SECTION: D1HSRR2016-04  
AT UNION PACIFIC RR (HIGH SPEED RAIL)  
PROJECT: HSR-2320(002)  
TRAFFIC SIGNAL RELOCATION  
WILL COUNTY

C-91-017-16

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	D1HSRR2016-04	WILL	35	1
MAIN ST. (IL RTE 113)		ILLINOIS	CONTRACT NO. 62B35	

DOT# 290506L  
MP 57.31

D-91-017-16

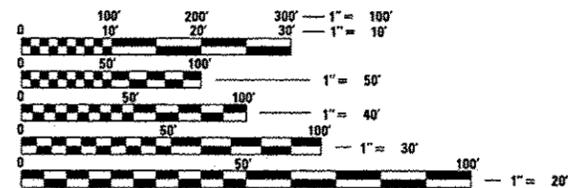
FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

PROJECT LOCATED IN THE  
CITY OF BRAIDWOOD

FUNCTIONAL CLASSIFICATION

MAJOR COLLECTOR (IL 113)  
2013 ADT = 7,450  
DESIGN SPEED = 30 MPH  
P.V. = N/A S.U. = N/A M.U. = N/A



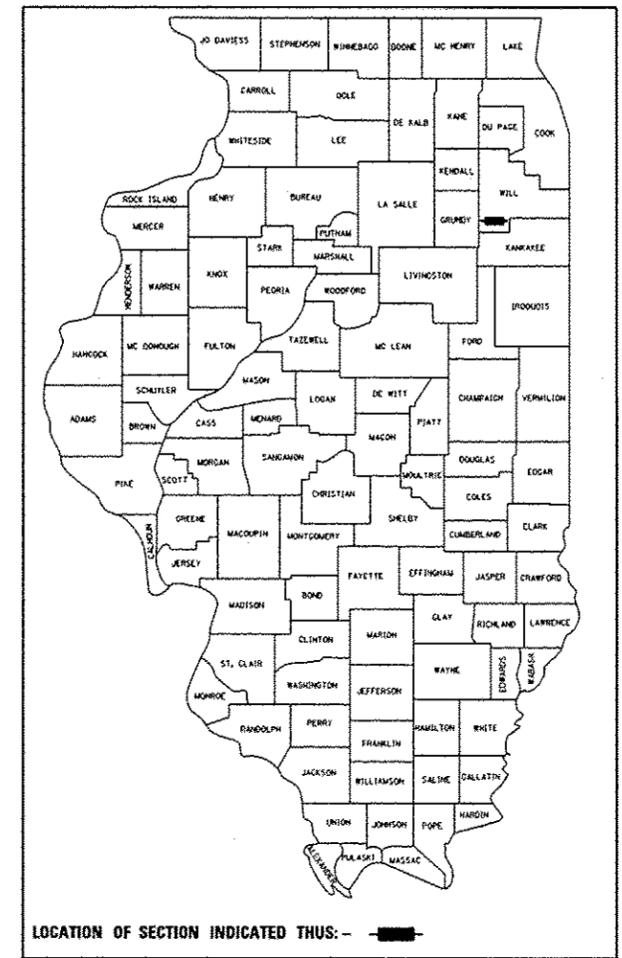
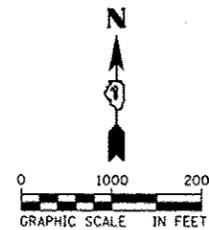
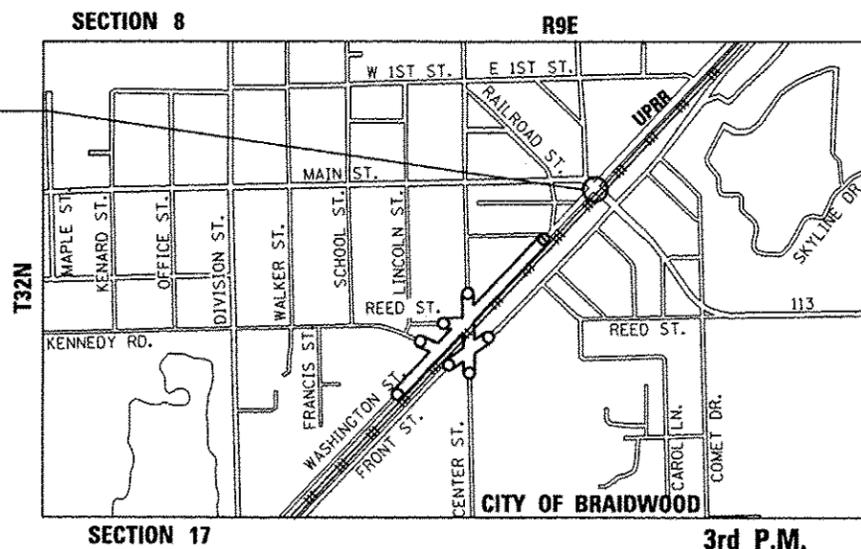
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: ANDY E. RABADI (847) 705-4256  
UNIT CHIEF: JOSE A. DOMINGUEZ (847) 705-4385  
TOWNSHIP: REED

CONTRACT NO. 62B35

LOCATION OF PROJECT



LOCATION OF SECTION INDICATED THUS: [Symbol]

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED October 20, 2015  
John Furtman  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 4 2015  
Don D. Baranowski  
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 4 2015  
Omar Osman  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

MATTHEW J. LETOURNEAU  
062-055763  
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

DANIEL A. DUZAN  
062-059108  
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

DATE: 10/23/2015  
MATTHEW J. LETOURNEAU, P.E.  
LICENSE NO.: 062-055763  
EXPIRES: NOVEMBER 30, 2015

DATE: 10/23/2015  
DANIEL A. DUZAN, P.E.  
LICENSE NO.: 062-059108  
EXPIRES: NOVEMBER 30, 2015

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**AECOM**  
AECOM TECHNICAL SERVICES, INC.  
303 E WACKER DRIVE, SUITE 1400  
CHICAGO, ILLINOIS 60601  
PH. 312-373-7700

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**HIGHWAY STANDARDS**

000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS  
 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE  
 701011-04 OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY  
 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS  
 701336-06 LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS > 45 MPH  
 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED  
 701502-06 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE  
 701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION  
 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE  
 701901-04 TRAFFIC CONTROL DEVICES  
 720001-01 SIGN PANEL MOUNTING DETAILS  
 720006-04 SIGN PANEL ERECTION DETAILS  
 814001-03 HANDHOLES  
 814006-02 DOUBLE HANDHOLES  
 857006-01 SUPERVISED RAILROAD INTERCONNECT CIRCUIT  
 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)  
 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING  
 877012-02 STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56" THROUGH 75"  
 878001-10 CONCRETE FOUNDATION DETAILS  
 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS  
 886001-01 DETECTOR LOOP INSTALLATIONS

**DISTRICT DETAILS**

TC-10 TRAFFIC CONTROL & PROTECTION FOR SIDE ROADS  
 TC-22 ARTERIAL ROAD INFORMATION SIGN

**GENERAL NOTES**

THE CONTRACTOR SHALL DEVELOP A PLAN TO ACCOMPLISH THIS WORK AND MINIMIZE DISRUPTION OF ACCESS. THIS PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

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

FOR STABILIZATION, ALL TYPE III BARRICADES 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. 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 EARTH EXCAVATION.

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 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.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN DRAINAGE FLOWS AT ALL TIMES DURING THE PERFORMANCE OF THE WORK. METHODS USED BY THE CONTRACTOR SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. THE COST OF MAINTAINING DRAINAGE FLOWS SHALL BE INCLUDED IN THE CONTRACT.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. THE CONTRACTOR SHALL CONTACT THE MUNICIPALITY FOR ANY MUNICIPAL OWNED UTILITIES. (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 BURIED FIBER OPTIC CABLES IN UNION PACIFIC RIGHT-OF-WAY.

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.

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:  
 1. SPRINT (FO)  
 2. LEVEL 3 COMMUNICATIONS (FO)  
 3. COMMONWEALTH EDISON (E)  
 4. AT&T (FO)  
 5. COMCAST (FO)  
 6. CITY OF BRAIDWOOD (W)  
 7. NICOR GAS (G)

NON-MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:  
 1. UNION PACIFIC RAILROAD COMPANY (FIBER OPTIC)  
 2. UNION PACIFIC RAILROAD, IL HSR PROGRAM (RAILROAD SIGNALS)  
 3. ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) DISTRICT ONE  
 4. IDOT DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR

ALIGNMENT AND STATIONING TO BE ESTABLISHED AS PART OF AN ADJACENT ROADWAY CONTRACT BY OTHERS.

THE CONTRACTOR SHALL SECURE THE PROPOSED PROPOSED COMBINATION MAST ARM ASSEMBLY AND ALL REQUIRED BID ITEM MATERIALS IN ADVANCE OF THE SCHEDULED ROAD CLOSURE FOR THE ADJACENT RAILROAD CROSSING MODIFICATION CONTRACT.

THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

ANY PROPOSED ACTIVITY IN THE VICINITY OF A HIGHWAY-RAIL GRADE CROSSING MUST ADHERE TO THE GUIDELINES SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), UNDER SECTION 6G.18, WHICH STATES: "WHEN GRADE CROSSINGS EXIST EITHER WITHIN OR IN THE VICINITY OF A TTC ZONE, LANE RESTRICTIONS, FLAGGING, OR OTHER OPERATIONS SHALL NOT CREATE CONDITIONS WHERE VEHICLES CAN BE QUEUED ACROSS THE TRACKS. IF THE QUEUING OF VEHICLES ACROSS THE TRACKS CANNOT BE AVOIDED, A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER SHALL BE PROVIDED AT THE CROSSING TO PREVENT VEHICLES FROM STOPPING ON THE TRACKS, EVEN IF AUTOMATIC WARNING DEVICES ARE IN PLACE.

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.

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3. COMMONWEALTH EDISON (E)
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6. CITY OF BRAIDWOOD (W)
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**COMMITMENTS**

ALL EMERGENCY SERVICES, LOCAL POLICE, FIRE DEPARTMENTS, UTILITIES, AND SCHOOL DISTRICTS, SHALL BE NOTIFIED BY THE CONTRACTOR A MINIMUM OF 7 DAYS PRIOR ANY ROAD CLOSURES OR CHANGES IN TRAFFIC PATTERNS.

THE RESIDENT ENGINEER SHALL ENSURE THAT AN OPER 2410 HAS BEEN SUBMITTED TO SPRINGFIELD NO LESS THAN 21 DAYS PRIOR TO ANY ROAD CLOSURE.

**UNION PACIFIC RAILROAD GENERAL NOTES**

1. WITHIN THESE NOTES, THE UNION PACIFIC RAILROAD SHALL BE REFERRED TO AS THE "RAILROAD".
2. A CONTRACTOR'S RIGHT-OF-ENTRY PERMIT IS REQUIRED BEFORE ANY WORK CAN COMMENCE ON RAILROAD PROPERTY. THE COST TO OBTAIN THIS PERMIT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
3. NO DISRUPTIONS OF RAILROAD OPERATIONS WILL BE PERMITTED.
4. ALL WORK WITHIN 25 FEET OF THE NEAREST TRACK WILL REQUIRE A RAILROAD FLAGMAN. TO SCHEDULE A FLAGMAN FOR WORK ON A COMMUTER LINE, CALL CANDICE MILLER AT (312) 496-4738, A MINIMUM 72 HOURS IN ADVANCE OF START OF WORK. TO SCHEDULE A FLAGMAN FOR WORK ON FREIGHT LINES, CALL DARYL CLARK AT (708) 649-5273, A MINIMUM OF 72 HOURS IN ADVANCE OF START OF WORK.
5. WORK WINDOWS WITHIN THE 25 FOOT ZONE ARE ONLY AVAILABLE FROM 9:00 AM - 3:00 PM, MONDAY THROUGH FRIDAY. NIGHT WORK WINDOWS ARE AVAILABLE FROM 8:00 PM - 4:00 AM. PLEASE PROVIDE AT LEAST 72 HOURS OF ADDITIONAL NOTICE WHEN REQUESTING TO WORK AT NIGHT TO ENSURE APPROPRIATE FLAGGING COVERAGE. EXTENDED WORK WINDOWS MAY BE AVAILABLE ON THE WEEKENDS, NOT WITHSTANDING THE FORGOING, DUE TO INTERSTATE FREIGHT TRAIN AND COMMUTER PASSENGER TRAIN OPERATIONS AND SCHEDULES ALL WORK WINDOWS WITHIN THE TIMES LISTED ABOVE ARE SUBJECT TO ON SITE UNILATERAL ADJUSTMENT OR DENIAL FROM THE RAILROAD'S LOCAL FIELD MANAGER AND/OR CORRIDOR MANAGER. THIS MAY RESULT IN DENIAL OR ADJUSTMENT OF ACCESS FOR ANY AND ALL CONTRACTORS, SUBCONTRACTORS AND MATERIAL MEN DURING WORK WINDOWS.
6. NO UN-USED WORK EQUIPMENT WILL BE ALLOWED TO REMAIN ON THE RAILROAD'S COMMUTER PLATFORM IF PRESENT.
7. RAILROAD UTILITIES ARE NOT INCLUDED UNDER JULIE. CALL CANDICE MILLER AT (312) 496-4738 FOR LOCATES.
8. FIBER OPTICS MAY BE PRESENT IN THIS AREA. CALL (800) 336-9193 TO COORDINATE ANY REQUIRED PROTECTION OR RELOCATION, PRIOR TO CONSTRUCTION.
9. RAILROAD REVIEW AND APPROVAL OF SHORING, DEMOLITION, ERECTION, AND FALSEWORK IS REQUIRED.
10. ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTIONS TO RAILROAD'S OPERATIONS. ERECTION OVER THE RAILROAD'S TRACK SHALL BE DEVELOPED SUCH THAT IT ENABLES THE TRACK(S) TO REMAIN OPEN TO TRAIN TRAFFIC PER RAILROAD'S REQUIREMENTS.
11. MINIMUM CONSTRUCTION CLEARANCE ENVELOPE OF 21 FEET VERTICAL ABOVE THE PLANE OF TOP-OF-RAIL AND 12 FEET HORIZONTAL AT RIGHT ANGLE FROM CENTERLINE OF TRACK SHALL BE MAINTAINED AT ALL TIME DURING CONSTRUCTION.
12. FALSEWORK CLEARANCE SHALL COMPLY WITH THE RAILROAD'S MINIMUM CONSTRUCTION CLEARANCE ENVELOPE.
13. FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD MINIMUM REQUIREMENTS AS PART OF SPECIAL PROVISIONS.
14. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SETTLEMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.
15. THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.

FILE NAME: c:\pwworking\johrsh\johrsh-johnson\1548\0162835-1.ctb; PROJECT: 1548; SHEET: 2



USER NAME: jzohrsh	DESIGNED: MJL	REVISED: -
PLotted SCALE: 40,000 / in.	DRAWN: ZGJ	REVISED: -
PLotted DATE: 10/29/2015	CHECKED: KMO	REVISED: -
	DATE: 10/23/15	REVISED: -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS</b>	
SCALE: NTS	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 2
CONTRACT NO. 62B35				
(ILLINOIS) FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% FED. SIGNAL
				0021
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	10	10
* 66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	1
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	LSUM	1	1
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	LSUM	1	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	LSUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1
72000100	SIGN PANEL - TYPE 1	SO FT	15	15
72400710	RELOCATE SIGN PANEL - TYPE 1	SO FT	7	7
72400720	RELOCATE SIGN PANEL - TYPE 2	SO FT	13	13
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	60	60
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	105	105

\* =SPECIALTY ITEM

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USER NAME = Zahrah.Javanmardi	DESIGNED MJL	REVISED -
DRAWN ZGJ	REVISED -	
PLOT SCALE = 40,0000' / in.	CHECKED KMO	REVISED -
PLOT DATE = 10/29/2015	DATE 10/23/15	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
IL RTE 113 AT UPRR**

SCALE: NTS SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	3
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% FED.
				SIGNAL 0021
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	116	116
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	25	25
81028250	UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA.	FOOT	50	50
81400100	HANDHOLE	EACH	3	3
81603051	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	220	220
81800330	AERIAL CABLE, 3-1/C NO. 6 WITH MESSENGER WIRE	FOOT	360	360
82102310	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2	2
84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	1	1
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
85700310	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	770	770
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,195	1,195
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	802	802
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	237	237
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	483	483

\* =SPECIALTY ITEM

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USER NAME = Zahrah.Javanmardi	DESIGNED MJL	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN ZCJ	REVISED -
PLOT DATE = 10/29/2015	CHECKED KMO	REVISED -
	DATE 10/23/15	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
IL RTE 113 AT UPRR

SCALE: NTS SHEET 2 OF 5 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2015-04	WILL	35	4
			CONTRACT NO. 62B35	
[ILLINOIS] FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% FED.
				SIGNAL 0021
87301750	ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	93	93
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	177	177
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2	2
87703040	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 62 FT.	EACH	1	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12	12
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21	21
87900200	DRILL EXISTING HANDHOLE	EACH	15	15
88500100	INDUCTIVE LOOP DETECTOR	EACH	19	19
88600100	DETECTOR LOOP, TYPE I	FOOT	334	334
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	4	4
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3	3
89500300	RELOCATE EXISTING ILLUMINATED SIGN	EACH	1	1
89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	3	3
89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1	1
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1	1

\* =SPECIALTY ITEM

FILE NAME = e:\work\king\shohab\_javanmard\1\enr\pwr\basissus\adms\1546\DI62935-ht-900.dgn



USER NAME = Zohreh.Javanmard	DESIGNED MJL	REVISED -
	DRAWN ZGJ	REVISED -
PLOT SCALE = 10,0000 1/ in.	CHECKED KMO	REVISED -
PLOT DATE = 10/29/2015	DATE 10/23/15	REVISED -

**STATE OF ILLINOIS  
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**SUMMARY OF QUANTITIES  
IL RTE 113 AT UPRR**

SCALE: NTS SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 9
				CONTRACT NO. 62935
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% FED.
				SIGNAL 0021
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,205	3,205
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	3,615	3,615
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1
89502376	REBUILD EXISTING HANDHOLE	EACH	2	2
89502380	REMOVE EXISTING HANDHOLE	EACH	4	4
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2	2
X0322141	REMOVE TEMPORARY WOOD POLE	EACH	1	1
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	194	194
X0325815	REMOVE EXISTING CABLE	FOOT	168	168
X0326148	TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	1	1
X0327004	TEMPORARY WOOD POLE, 60 FT., CLASS 4	EACH	1	1
X8100863	INTERCEPT EXISTING CONDUIT	EACH	7	7
X8161000	EXPOSE AND RELOCATE EXISTING UNIT DUCT	FOOT	110	110
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1

\* =SPECIALTY ITEM

FILE NAME: c:\projects\100-100-0000\100-100-0000\100-100-0000\100-100-0000\100-100-0000.dwg



USER NAME : Zahrah_Javanmardi	DESIGNED MJL	REVISED -
PLT SCALE = 40.0000 / in.	DRAWN ZGJ	REVISED -
PLT DATE = 10/29/2015	CHECKED XMO	REVISED -
	DATE 10/23/15	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

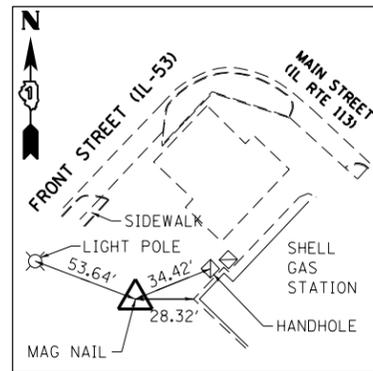
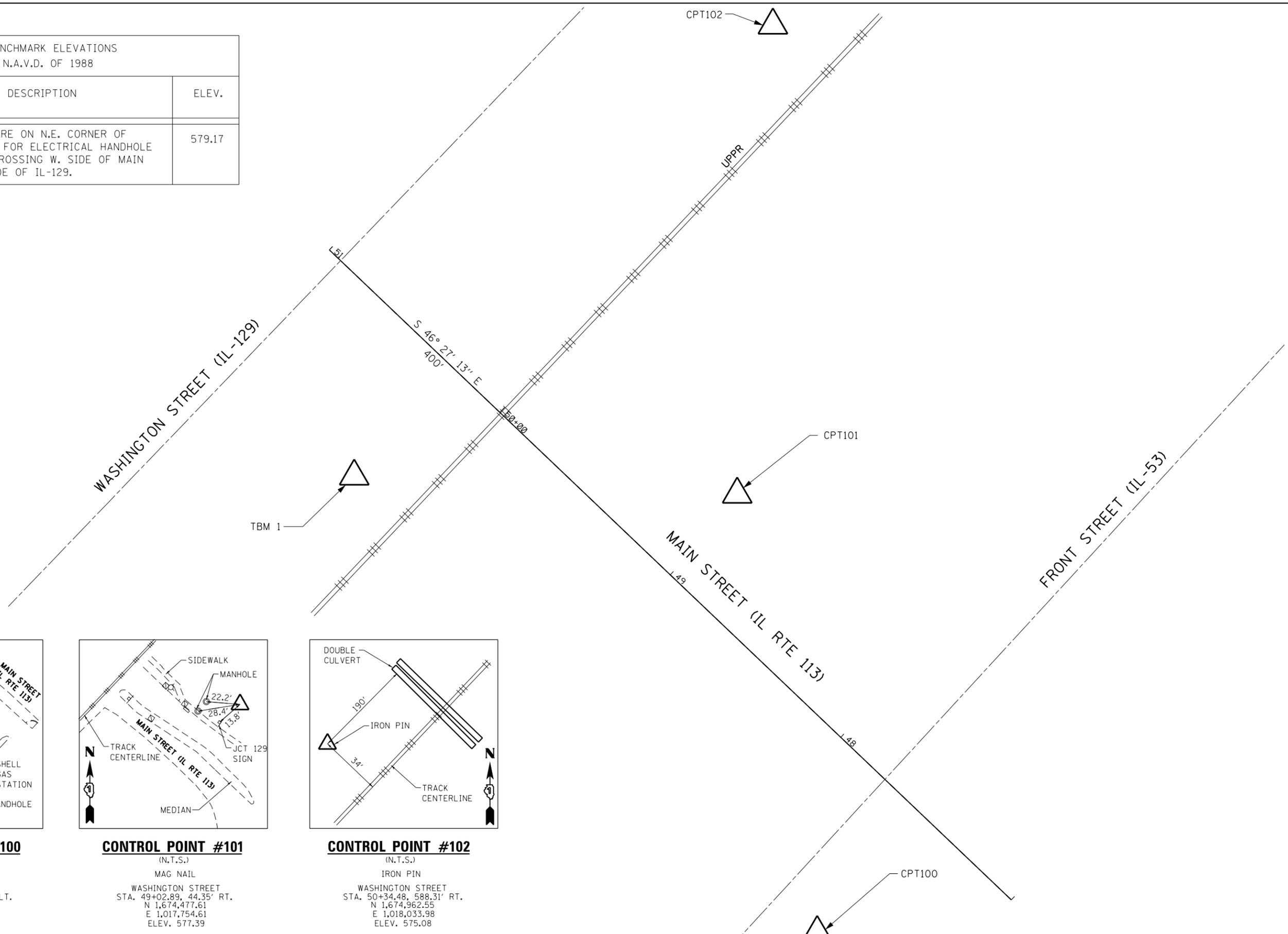
SUMMARY OF QUANTITIES  
IL RTE 113 AT UPRR

SCALE: NTS SHEET 4 OF 5 SHEETS STA. TO STA.

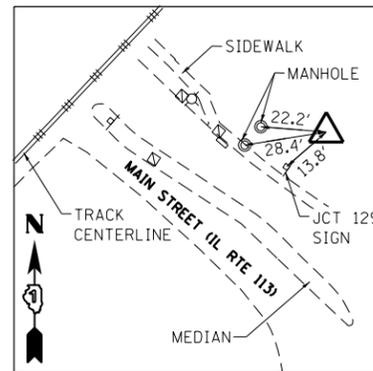
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	6
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	



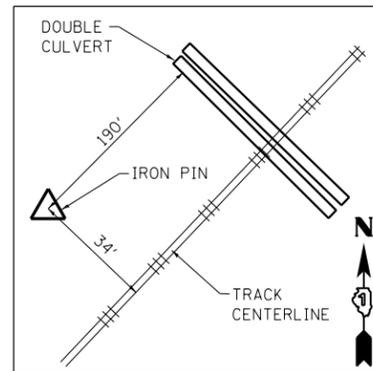
PROJECT BENCHMARK ELEVATIONS		
DATUM: N.A.V.D. OF 1988		
NO.	DESCRIPTION	ELEV.
TBM 1	CHISELED SQUARE ON N.E. CORNER OF CONCRETE PAD FOR ELECTRICAL HANDHOLE N.W. OF R.R. CROSSING W. SIDE OF MAIN ST. AND S. SIDE OF IL-129.	579.17



**CONTROL POINT #100**  
(N.T.S.)  
MAG NAIL  
FRONT STREET  
STA. 47+01.80, 143.92' LT.  
N 1,674,202.61  
E 1,017,770.65  
ELEV. 579.40



**CONTROL POINT #101**  
(N.T.S.)  
MAG NAIL  
WASHINGTON STREET  
STA. 49+02.89, 44.35' RT.  
N 1,674,477.61  
E 1,017,754.61  
ELEV. 577.39



**CONTROL POINT #102**  
(N.T.S.)  
IRON PIN  
WASHINGTON STREET  
STA. 50+34.48, 588.31' RT.  
N 1,674,962.55  
E 1,018,033.98  
ELEV. 575.08

FILE NAME: c:\ywork\chicago\andy.becker\transportation\62B35\ahc-atb.dgn



USER NAME = Andy.Becker	DESIGNED ATB	REVISED -
DRAWN ATB	REVISIONS	REVISED -
PLOT SCALE = 40.0000 sf / in.	CHECKED KMO	REVISED -
PLOT DATE = 10/23/2015	DATE 10/23/15	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ALIGNMENTS, TIES AND BENCHMARKS**

SCALE: NTS    SHEET 1 OF 1 SHEETS    STA.    TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	8
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	



THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE DEPARTMENT. THE ITEMS SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE SPECIAL PROVISIONS.

- 1 TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE OF THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 COMBINATION MAST ARM ASSEMBLY AND POLE

THE FOLLOWING EXISTING TRAFFIC SIGNAL ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND REINSTALLED IN THE LOCATIONS SHOWN:

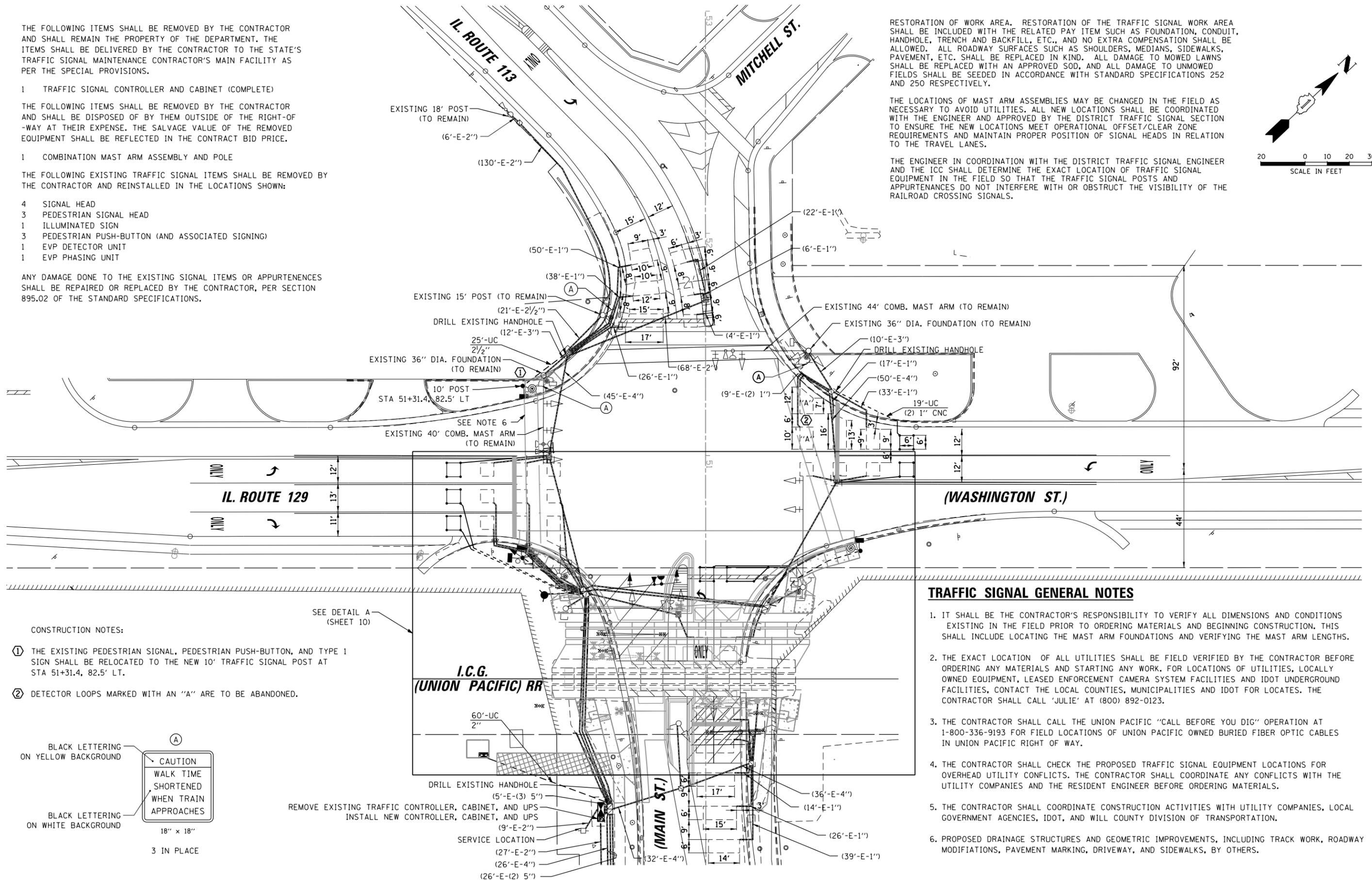
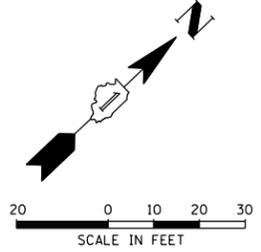
- 4 SIGNAL HEAD
- 3 PEDESTRIAN SIGNAL HEAD
- 1 ILLUMINATED SIGN
- 3 PEDESTRIAN PUSH-BUTTON (AND ASSOCIATED SIGNING)
- 1 EVP DETECTOR UNIT
- 1 EVP PHASING UNIT

ANY DAMAGE DONE TO THE EXISTING SIGNAL ITEMS OR APPURTENANCES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, PER SECTION 895.02 OF THE STANDARD SPECIFICATIONS.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED WITH 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.

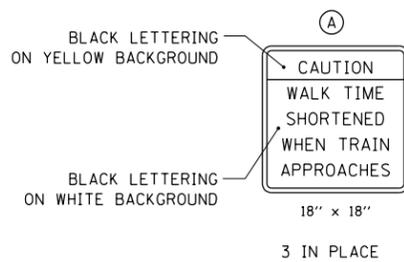
THE LOCATIONS OF MAST ARM ASSEMBLIES MAY BE CHANGED IN THE FIELD AS NECESSARY TO AVOID UTILITIES. ALL NEW LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER AND APPROVED BY THE DISTRICT TRAFFIC SIGNAL SECTION TO ENSURE THE NEW LOCATIONS MEET OPERATIONAL OFFSET/CLEAR ZONE REQUIREMENTS AND MAINTAIN PROPER POSITION OF SIGNAL HEADS IN RELATION TO THE TRAVEL LANES.

THE ENGINEER IN COORDINATION WITH THE DISTRICT TRAFFIC SIGNAL ENGINEER AND THE ICC SHALL DETERMINE THE EXACT LOCATION OF TRAFFIC SIGNAL EQUIPMENT IN THE FIELD SO THAT THE TRAFFIC SIGNAL POSTS AND APPURTENANCES DO NOT INTERFERE WITH OR OBSTRUCT THE VISIBILITY OF THE RAILROAD CROSSING SIGNALS.



**CONSTRUCTION NOTES:**

- ① THE EXISTING PEDESTRIAN SIGNAL, PEDESTRIAN PUSH-BUTTON, AND TYPE 1 SIGN SHALL BE RELOCATED TO THE NEW 10' TRAFFIC SIGNAL POST AT STA 51+31.4, 82.5' LT.
- ② DETECTOR LOOPS MARKED WITH AN "A" ARE TO BE ABANDONED.



**TRAFFIC SIGNAL GENERAL NOTES**

- 1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.
- 2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123.
- 3. 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.
- 4. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- 5. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, IDOT, AND WILL COUNTY DIVISION OF TRANSPORTATION.
- 6. PROPOSED DRAINAGE STRUCTURES AND GEOMETRIC IMPROVEMENTS, INCLUDING TRACK WORK, ROADWAY MODIFICATIONS, PAVEMENT MARKING, DRIVEWAY, AND SIDEWALKS, BY OTHERS.

FILE NAME: c:\ywork\chicago\zohreh.javanmardi\transportation\station\11548\0162835-shi-t-1.dgn



USER NAME = Zohreh.Javanmardi	DESIGNED MJL	REVISED -
DRAWN ZGJ	REVISOR -	
PLOT SCALE = 40.000' / in.	CHECKED KMO	REVISOR -
PLOT DATE = 10/29/2015	DATE 10/23/15	REVISOR -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 129 AT IL ROUTE 113**

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 10
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED WITH 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 SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE LOCATIONS OF MAST ARM ASSEMBLIES MAY BE CHANGED IN THE FIELD AS NECESSARY TO AVOID UTILITIES. ALL NEW LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER AND APPROVED BY THE DISTRICT TRAFFIC SIGNAL SECTION TO ENSURE THE NEW LOCATIONS MEET OPERATIONAL OFFSET/CLEAR ZONE REQUIREMENTS AND MAINTAIN PROPER POSITION OF SIGNAL HEADS IN RELATION TO THE TRAVEL LANES.

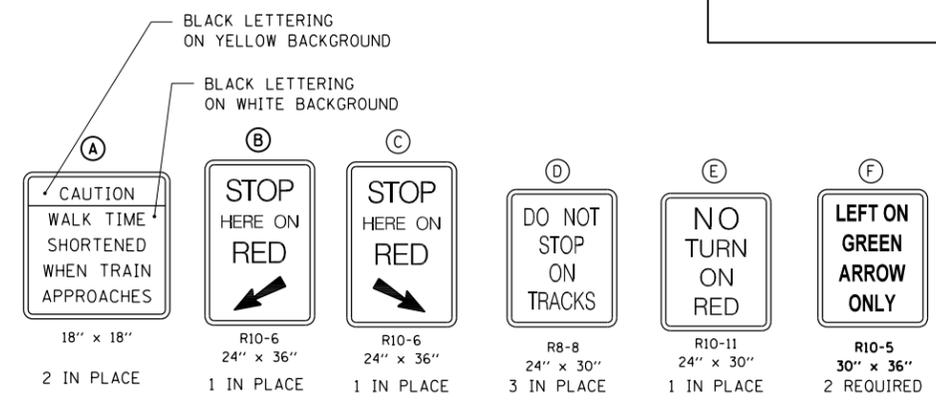
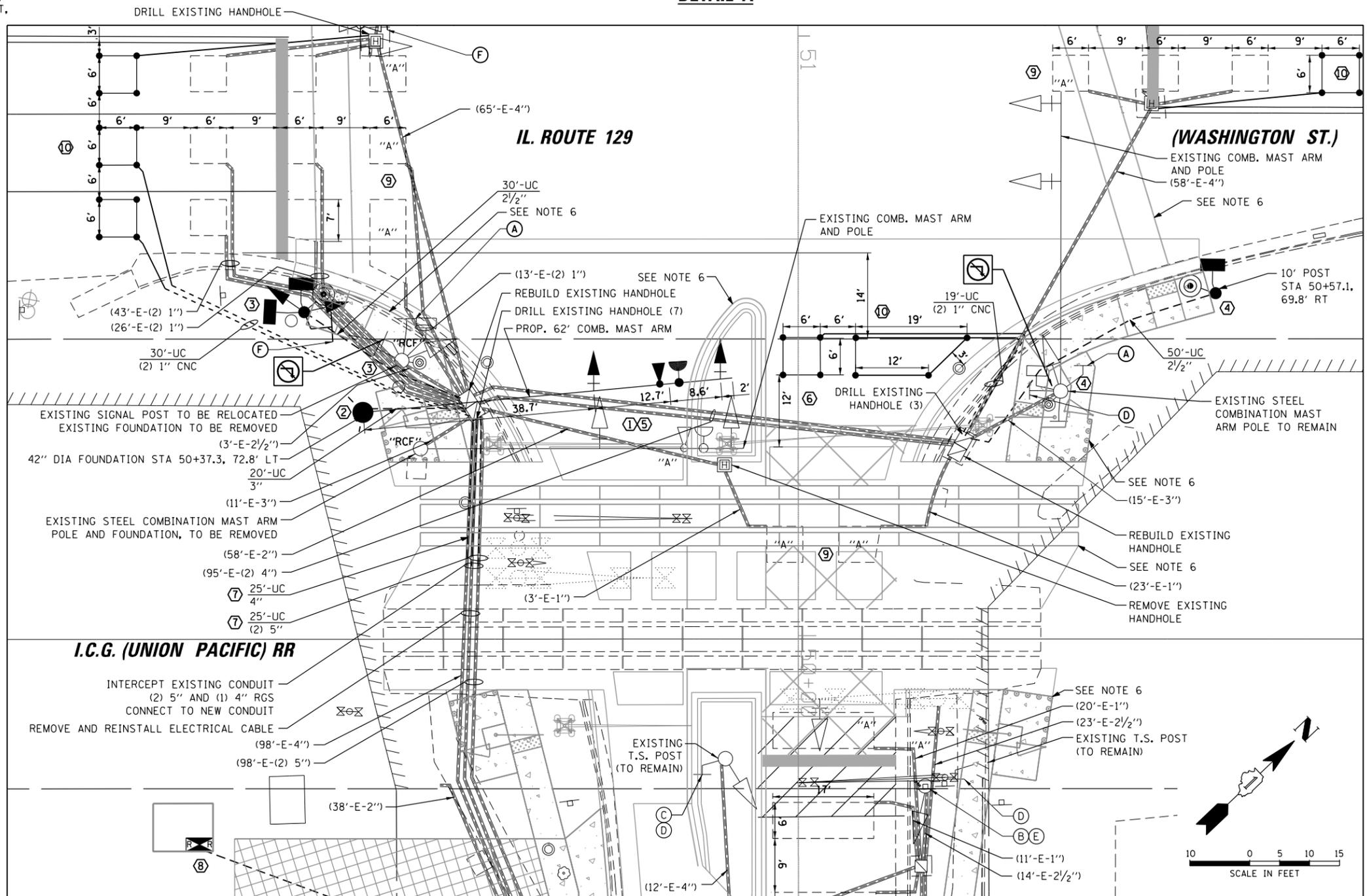
THE ENGINEER IN COORDINATION WITH THE DISTRICT TRAFFIC SIGNAL ENGINEER AND THE ICC SHALL DETERMINE THE EXACT LOCATION OF TRAFFIC SIGNAL EQUIPMENT IN THE FIELD SO THAT THE TRAFFIC SIGNAL POSTS AND APPURTENANCES DO NOT INTERFERE WITH OR OBSTRUCT THE VISIBILITY OF THE RAILROAD CROSSING SIGNALS.

**CONSTRUCTION NOTES:**

- 1 TRAFFIC SIGNAL SHOULD NOT OBSTRUCT RAILROAD SIGNAL.
- 2 TWO 2 1/2" CONDUITS SHALL BE INSTALLED IN MAST ARM FOUNDATION AND STUBBED FOR USE AS RACEWAY FOR COMBINATION STREET LIGHTING. SEE LIGHTING PLANS.
- 3 THE EXISTING TRAFFIC SIGNALS, RIGHT TURN BLANK-OUT SIGN, PEDESTRIAN SIGNAL, PEDESTRIAN PUSH-BUTTON, AND TYPE 1 SIGN SHALL BE RELOCATED WITH THE TRAFFIC SIGNAL POLE TO STA 50+54.0, 82.6' LT.
- 4 THE EXISTING PEDESTRIAN SIGNAL, PEDESTRIAN PUSH-BUTTON, AND TYPE 1 SIGN SHALL BE RELOCATED TO THE NEW 10' TRAFFIC SIGNAL POST AT STA 50+57.1, 69.8' RT.
- 5 THE EXISTING SIGNAL HEADS, EMERGENCY VEHICLE EQUIPMENT, AND STREET NAME SIGN SHALL BE RELOCATED TO THE NEW 62' STEEL COMBINATION MAST ARM AT STA 50+37.3, 72.8' LT. MAST ARM TO BE ORIENTED TO AVOID CONFLICTS WITH THE RAILROAD WARNING DEVICES, AS DIRECTED BY THE ENGINEER.
- 6 TRAFFIC SIGNAL DETECTOR LOOPS SHALL BE INSTALLED AT LEAST 10 FEET FROM RAILROAD CROSSING DETECTOR LOOPS.
- 7 INSTALL CONDUIT UNDER THE PROPOSED RAILROAD TRACK WITHIN AN 8" RGS SLEEVE A MINIMUM OF 5.5 FT BELOW GRADE, PER UPRR DESIGN REQUIREMENTS. SEE DETAIL SHEET 31.
- 8 CONDUIT TO BE TERMINATED INTO THE BUNGALOW OR JUNCTION BOX MOUNTED TO THE BUNGALOW (IF PRESENT). CONTRACTOR TO COORDINATE EXACT CONDUIT TERMINATION AND TERMINATION OF CONDUCTORS/CABLE WITH RAILROAD FORCES IN THE FIELD.
- 9 DETECTOR LOOPS MARKED WITH AN "A" ARE TO BE ABANDONED AND DISCONNECTED FROM THE HANDHOLE DETECTOR LOOP SPLICE.
- 10 PROPOSED DETECTOR LOOPS SHALL BE ADDED TO THE HANDHOLE DETECTOR LOOP SPLICE FOR THE TRAFFIC LANE THAT THE DETECTOR LOOP IS BEING ADDED TO.

FILE NAME: c:\ywork\hunting\zohreh.javanmard\transportation\station\11548\0162835-shi-ts2.dgn

**DETAIL A**



**TRAFFIC SIGNAL GENERAL NOTES**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.
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4. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
5. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, IDOT, AND WILL COUNTY DIVISION OF TRANSPORTATION.
6. PROPOSED DRAINAGE STRUCTURES AND GEOMETRIC IMPROVEMENTS, INCLUDING TRACK WORK, ROADWAY MODIFICATIONS, PAVEMENT MARKING, DRIVEWAY, AND SIDEWALKS, BY OTHERS.
7. SEE LIGHTING PLANS FOR TEMPORARY AND PERMANENT LIGHTING RELATED WORK.



USER NAME = Zohreh.Javanmard	DESIGNED MJL	REVISED -
	DRAWN ZGJ	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED KMO	REVISED -
PLOT DATE = 10/29/2015	DATE 10/23/15	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

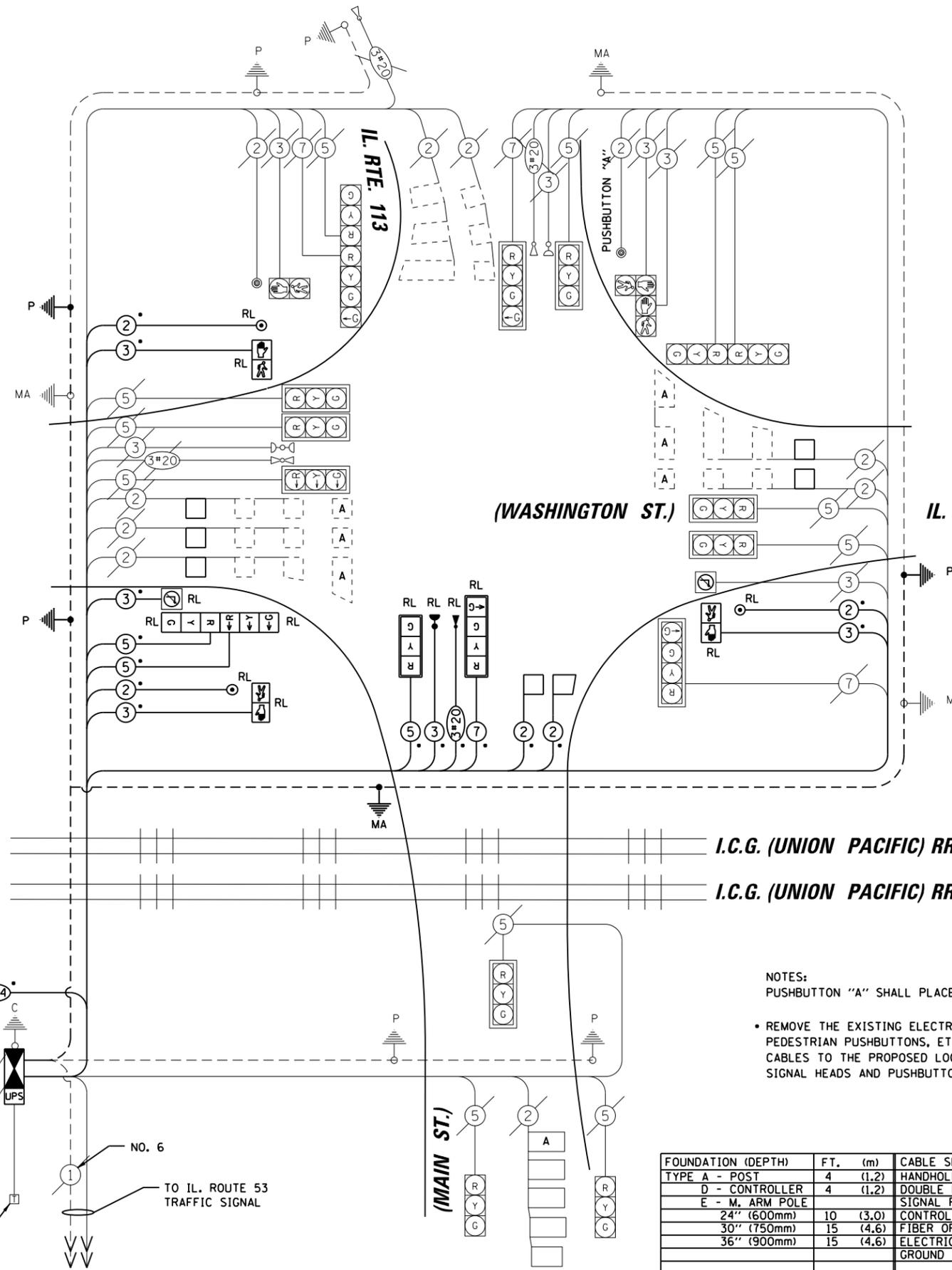
**TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 129 AT IL ROUTE 113**

SCALE: 1"=10' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 11
				CONTRACT NO. 62B35
ILLINOIS FED. AID PROJECT				

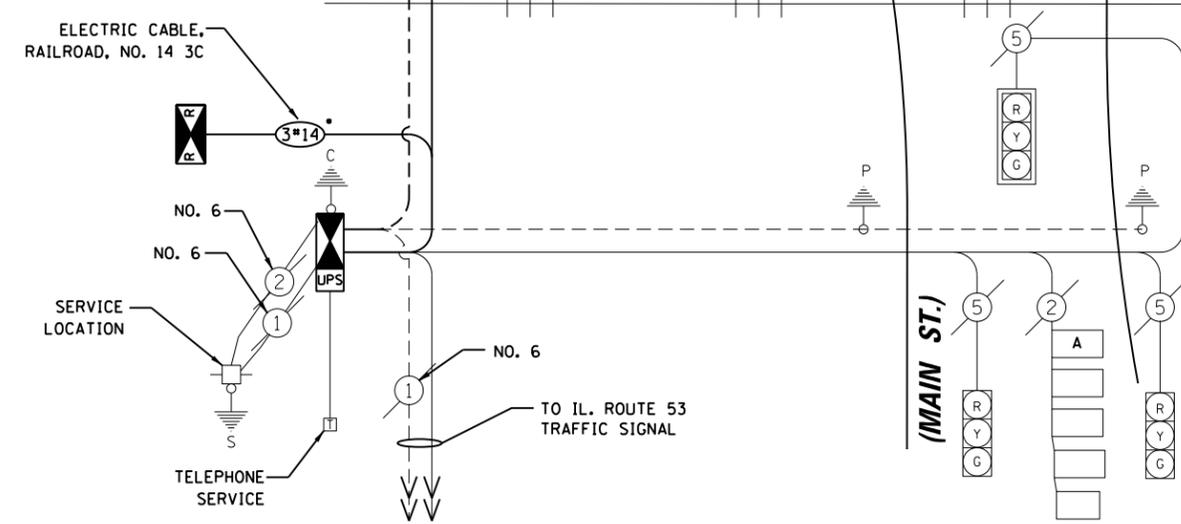
SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SO FT	15
RELOCATE SIGN PANEL - TYPE 1	SO FT	7
RELOCATE SIGN PANEL - TYPE 2	SO FT	13
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	105
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	25
UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA.	FOOT	50
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	770
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1195
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	802
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	237
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	483
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	93
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	177
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 62 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	13
INDUCTIVE LOOP DETECTOR	EACH	19
DETECTOR LOOP, TYPE I	FOOT	334
RELOCATE EXISTING SIGNAL HEAD	EACH	4
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3
RELOCATE EXISTING ILLUMINATED SIGN	EACH	1
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	3
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3205
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	3615
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	2
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	194
INTERCEPT EXISTING CONDUIT	EACH	3
STEEL CASINGS 8"	FOOT	123
UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL	EACH	1



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	34	135	17	0.50	289.00
(YELLOW)	34	135	25	0.25	212.50
(GREEN)	42	135	15	0.25	157.50
ARROW	-	135	12	0.10	-
PED. SIGNAL	12	90	25	1.00	300.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	6	252	25	0.05	7.50
FLASHER	-	-	-	0.50	-
ENERGY COSTS TO:					TOTAL = 1066.50

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: DENETTE PRICE  
 PHONE: (815) 724-5590  
 COMPANY: COMED



NOTES:  
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.  
 REMOVE THE EXISTING ELECTRIC CABLES BETWEEN THE EXISTING SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, ETC. TO THE CONTROLLER CABINET. INSTALL NEW ELECTRIC CABLES TO THE PROPOSED LOCATIONS OF THE RELOCATED SIGNAL HEADS AND PUSHBUTTONS, ETC.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'
E - M. ARM POLE	2 (1.0)	SIGNAL POST	2 (1.0)	(6m+L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

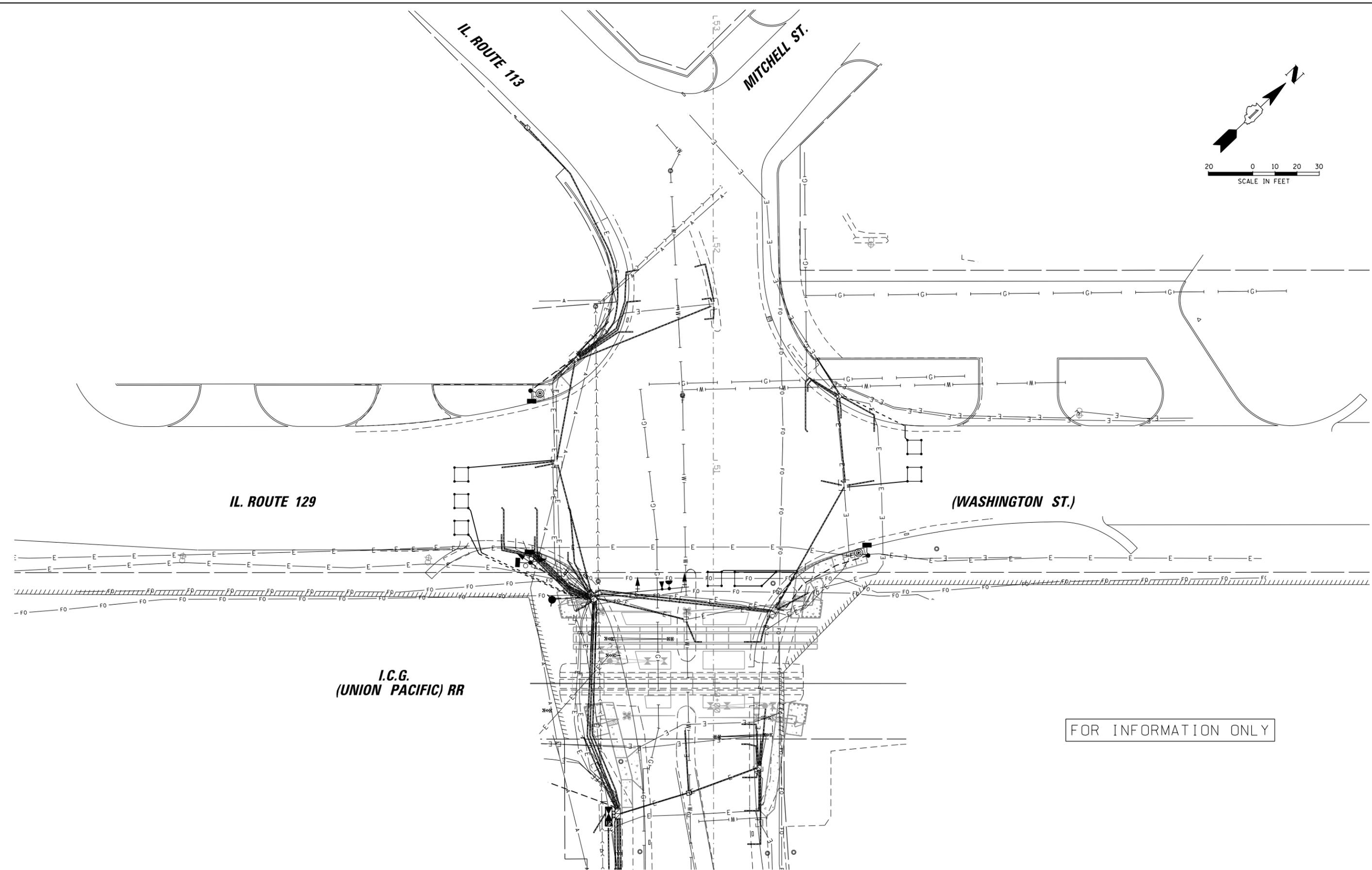
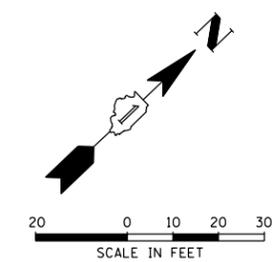


USER NAME = Zahreh.Javanmardi	DESIGNED MJL	REVISED -
PLOT SCALE = 40.000' / in.	DRAWN ZGJ	REVISED -
DATE = 10/29/2015	CHECKED KMO	REVISED -
	DATE 10/23/15	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN AND QUANTITIES  
 IL ROUTE 129 AT IL ROUTE 113  
 SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 12
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	



FOR INFORMATION ONLY

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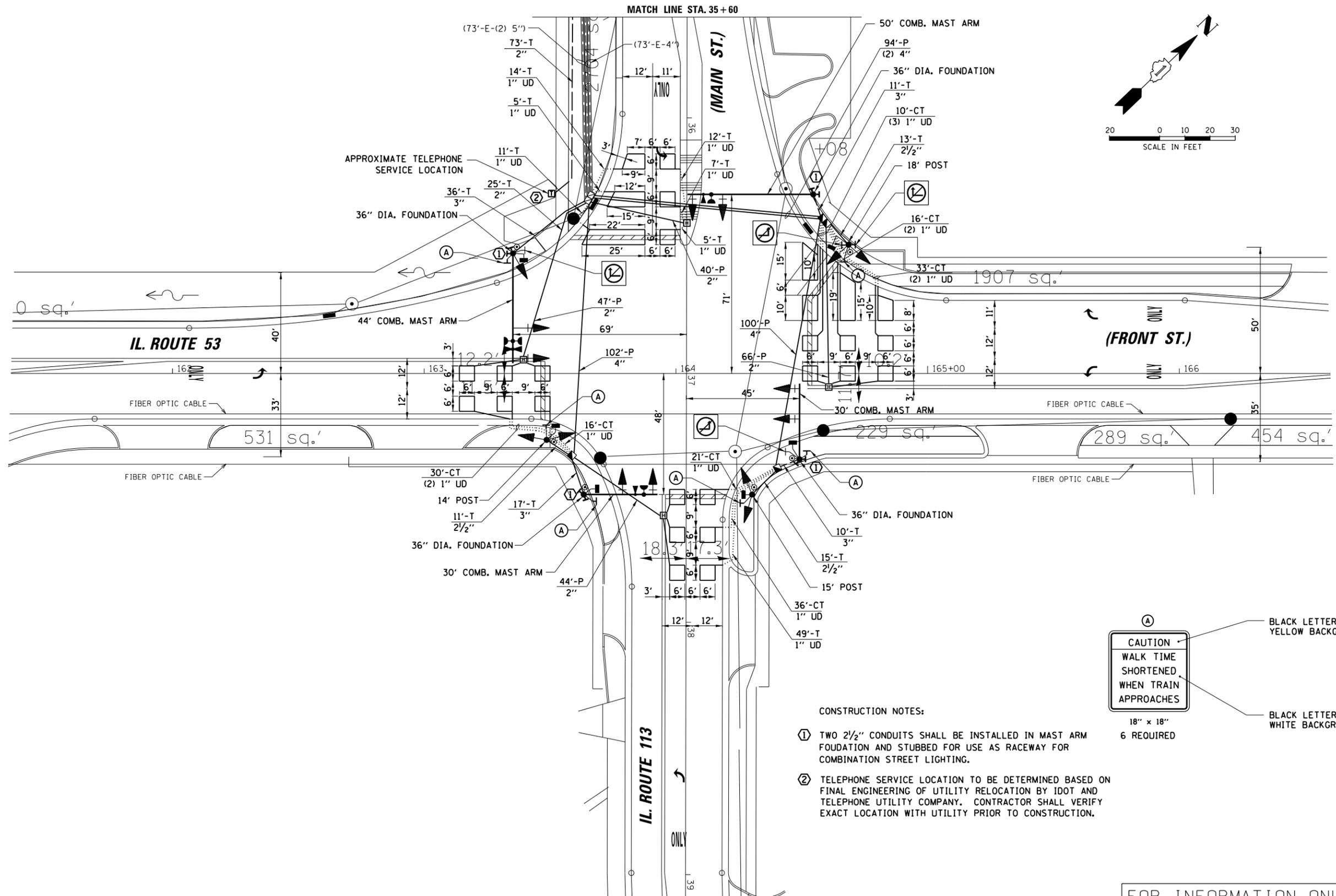


USER NAME = Andy.Becker	DESIGNED MJL	REVISED -
	DRAWN ZGJ	REVISED -
PLOT SCALE = 40.000' / in.	CHECKED KMO	REVISED -
PLOT DATE = 10/23/2015	DATE 10/23/15	REVISED -

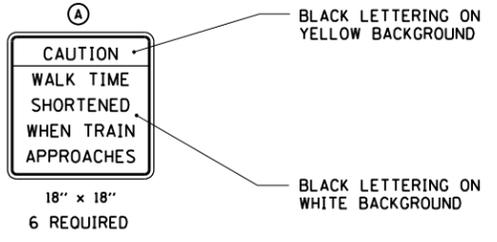
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

<b>UTILITY PLAN</b>	
<b>IL ROUTE 129 AT IL ROUTE 113</b>	
SCALE: 1" = 20'	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	13
CONTRACT NO. 62B35				
ILLINOIS FED. AID PROJECT				



- CONSTRUCTION NOTES:
- ① TWO 2 1/2" CONDUITS SHALL BE INSTALLED IN MAST ARM FOUNDATION AND STUBBED FOR USE AS RACEWAY FOR COMBINATION STREET LIGHTING.
  - ② TELEPHONE SERVICE LOCATION TO BE DETERMINED BASED ON FINAL ENGINEERING OF UTILITY RELOCATION BY IDOT AND TELEPHONE UTILITY COMPANY. CONTRACTOR SHALL VERIFY EXACT LOCATION WITH UTILITY PRIOR TO CONSTRUCTION.



FOR INFORMATION ONLY

FILE NAME: c:\neworking\andy.becker\transportation\11548\0162835-shi-ts5.dgn

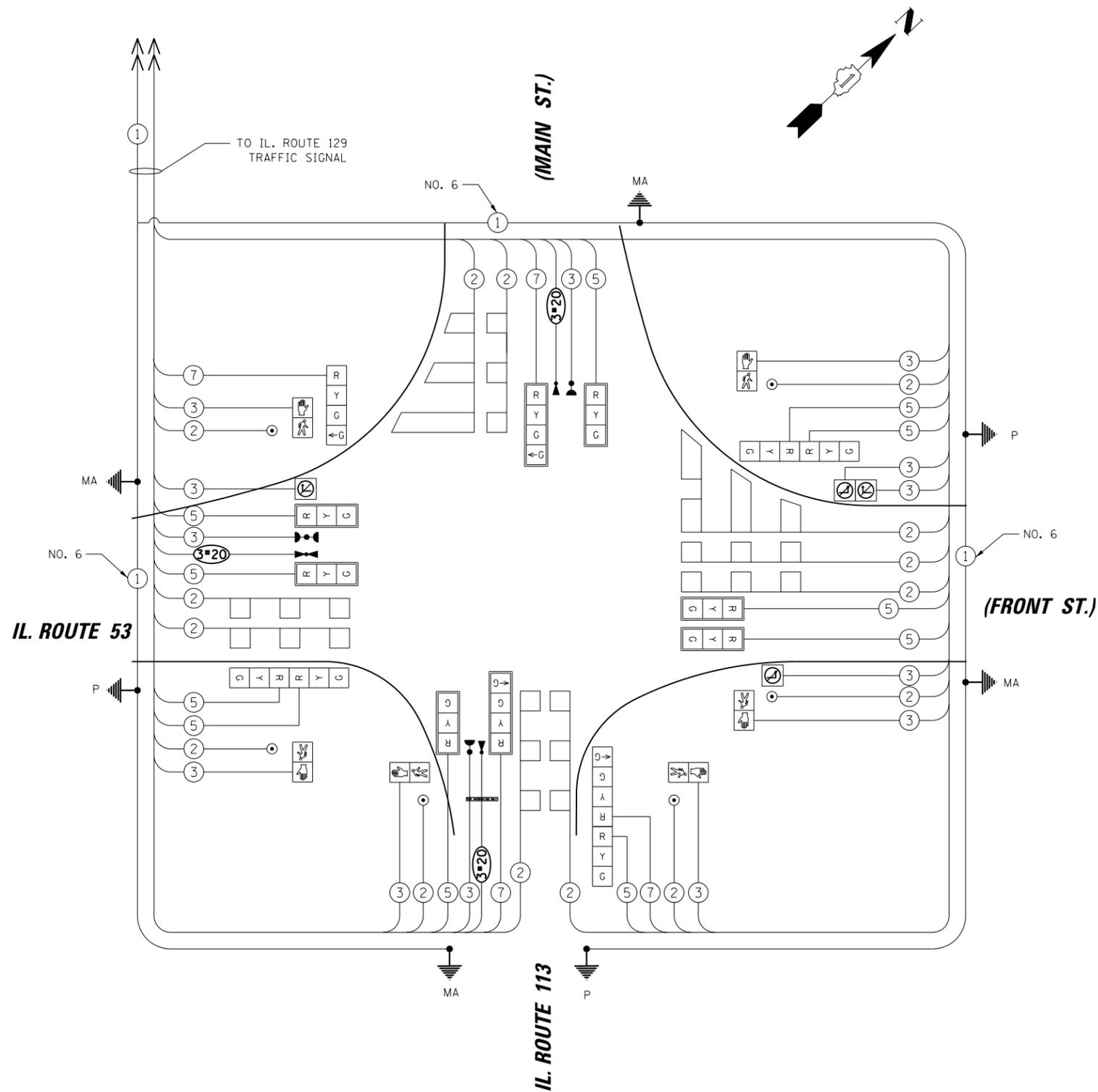


USER NAME = Andy.Becker	DESIGNED MJL	REVISED -
DRAWN ZGJ	REVISOR -	
PLOT SCALE = 40.000' / in.	CHECKED KMO	REVISOR -
PLOT DATE = 10/23/2015	DATE 10/23/15	REVISOR -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING TRAFFIC SIGNAL PLAN	
IL ROUTE 129 AT IL ROUTE 53	
SCALE: 20	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	14
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	



**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SMI2F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION

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PLOT DATE = 10/23/2015		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING TRAFFIC SIGNAL CABLE PLAN	
IL ROUTE 129 AT IL ROUTE 53	
SCALE: NTS	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	15
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	





**EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION**

									PREEMPTOR 3	PREEMPTOR 4	PREEMPTOR 5	PREEMPTOR 6	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	17		17				17						CLEAR TO NORMAL SEQUENCE
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1UU	1VV	1WW	1XX	1YY	1ZZ	1AAA	2	3	4	5		
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1VV	2	1XX	1YY	1ZZ	3 OR 4	5						◇
IL RTE 53 AT IL RTE 113 ALL SIGNALS	N/B	R	R	R	R	R	R	R	R	R	G	R	◇
IL RTE 53 AT IL RTE 113 ALL SIGNALS	S/B	R	R	R	R	R	R	R	R	R	G	R	◇
IL RTE 113 AT IL RTE 53 END MAST ARM AND FAR LEFT SIGNALS	E/B	G ← G	G ← G	G ← G	G ← G	Y	R	G ← G	G ← G	R	R	G ← G	◇
IL RTE 113 AT IL RTE 53 FAR RIGHT MAST ARM SIGNAL	E/B	G	G	G	G	Y	R	G	G	R	R	G	◇
IL RTE 113 AT IL RTE 53 END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	G ← G	R	R	◇
IL RTE 113 AT IL RTE 53 FAR RIGHT MAST ARM AND NEAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	G	R	R	◇
IL RTE 113 (EAST OF TRACKS) ALL SIGNALS	W/B	R	R	R	R	R	R	R	R	G	G	R	◇
IL RTE 113 AT IL RTE 129 END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	G ← G	G ← G	R	◇
IL RTE 113 AT IL RTE 129 FAR RIGHT MAST ARM SIGNAL	W/B	R	R	R	R	R	R	R	R	G	G	R	◇
IL RTE 113 AT IL RTE 129 END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	R	G ← G	R	R	R	◇
IL RTE 113 AT IL RTE 129 FAR RIGHT MAST ARM AND NEAR RIGHT SIGNALS	E/B	R	R	R	R	R	R	R	G	R	R	R	◇
IL RTE 129 AT IL RTE 113 ALL SIGNALS	N/B	Y	R	Y	R	R	R	G	R	R	R	G	◇
IL RTE 129 AT IL RTE 113 END MAST ARM AND FAR LEFT SIGNALS	S/B	← R	← R	← R	← R	← R	← R	← R	← R	← R	← R	← R	◇
IL RTE 129 AT IL RTE 113 NEAR RIGHT, FAR MID AND RIGHT MAST ARM SIGNALS	S/B	Y	R	Y	R	R	R	G	R	R	R	G	◇
PEDESTRIAN SIGNALS CROSSING IL RTE 113 ON EAST SIDE OF IL RTE 53		H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS CROSSING IL RTE 53 ON NORTH SIDE OF IL RTE 113		H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS CROSSING IL RTE 53 ON SOUTH SIDE OF IL RTE 113		H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS CROSSING IL RTE 113 ON WEST SIDE OF IL RTE 129		H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS CROSSING IL RTE 129 ON NORTH SIDE OF IL RTE 113		H	H	H	H	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS CROSSING IL RTE 129 ON SOUTH SIDE OF IL RTE 113		H	H	H	H	H	H	H	H	H	H	H	◇

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

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION  
IL ROUTE 113 AT UPRR  
SCALE: NTS SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 18
CONTRACT NO. 62B35			ILLINOIS FED. AID PROJECT	

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**RAILROAD PREEMPTION SEQUENCE OF OPERATION**

	PREEMPTION SEQUENCE																	PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	PREEMPTOR NUMBER 6	PREEMPTOR NUMBER 2										
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	5	9	13	17																											
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION NUMBER																		2	3	4	5											
RAILROAD PREEMPTION INTERVAL	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	2	3	4	5	CLEAR TO NORMAL SEQUENCE									
CHANGE TO RAILROAD PREEMPTION SEQUENCE INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	1P	2	1R	2	1T	2	3	4	5											
IL RTE 53 AT IL RTE 113 ALL SIGNALS	N/B	Y	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	△									
IL RTE 53 AT IL RTE 113 ALL SIGNALS	S/B	Y	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	△									
IL RTE 113 AT IL RTE 53 END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	←G	R	R	R	R	←G	←G	←G	Y	R	R	△															
IL RTE 113 AT IL RTE 53 FAR RIGHT MAST ARM SIGNAL	E/B	R	R	R	R	G	G	G	G	G	G	G	R	R	R	R	G	G	G	Y	R	R	△									
IL RTE 113 AT IL RTE 53 END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	△									
IL RTE 113 AT IL RTE 53 FAR RIGHT MAST ARM AND NEAR RIGHT SIGNALS	W/B	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	△									
IL RTE 113 (EAST OF TRACKS) ALL SIGNALS	W/B	Y	R	Y	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	△									
IL RTE 113 AT IL RTE 129 END MAST ARM AND FAR LEFT SIGNALS	W/B	←G	←G	←G	←G	R	R	R	R	R	R	R	←G	←G	←G	←G	R	R	←G	Y	R	R	△									
IL RTE 113 AT IL RTE 129 FAR RIGHT MAST ARM SIGNAL	W/B	G	G	G	G	R	R	R	R	R	R	R	G	G	G	G	R	R	G	Y	R	R	△									
IL RTE 113 AT IL RTE 129 END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	Y	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	△									
IL RTE 113 AT IL RTE 129 FAR RIGHT MAST ARM AND NEAR RIGHT SIGNALS	E/B	R	R	R	R	Y	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	△									
IL RTE 129 AT IL RTE 113 ALL SIGNALS	N/B	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	G	△									
IL RTE 129 AT IL RTE 113 END MAST ARM AND FAR LEFT SIGNALS	S/B	←R	←R	←R	←R	←R	←R	←Y	←R	←R	←R	←R	←R	△																		
IL RTE 129 AT IL RTE 113 NEAR RIGHT, FAR MID AND RIGHT MAST ARM SIGNALS	S/B	R	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	G	△									
PEDESTRIAN SIGNALS CROSSING IL RTE 113 ON EAST SIDE OF IL RTE 53	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△									
PEDESTRIAN SIGNALS CROSSING IL RTE 53 ON NORTH SIDE OF IL RTE 113	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△									
PEDESTRIAN SIGNALS CROSSING IL RTE 53 ON SOUTH SIDE OF IL RTE 113	H	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△									
PEDESTRIAN SIGNALS CROSSING IL RTE 113 ON WEST SIDE OF IL RTE 129	H	H	H	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△									
PEDESTRIAN SIGNALS CROSSING IL RTE 129 ON NORTH SIDE OF IL RTE 113	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△									
PEDESTRIAN SIGNALS CROSSING IL RTE 129 ON SOUTH SIDE OF IL RTE 113	H	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△									
INTERNALLY ILLUMINATED NRT SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△									
INTERNALLY ILLUMINATED NLT SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△									

HOLD

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

NLT = "NO LEFT TURN" OR 

NRT = "NO RIGHT TURN" OR 

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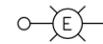
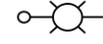
USER NAME: Andy.Becker	DESIGNED: MJL	REVISED: -
PLOT SCALE: 2:1974' / 1" =	DRAWN: ZGJ	REVISED: -
PLOT DATE: 10/23/2015	CHECKED: KMO	REVISED: -
	DATE: 10/23/15	REVISED: -

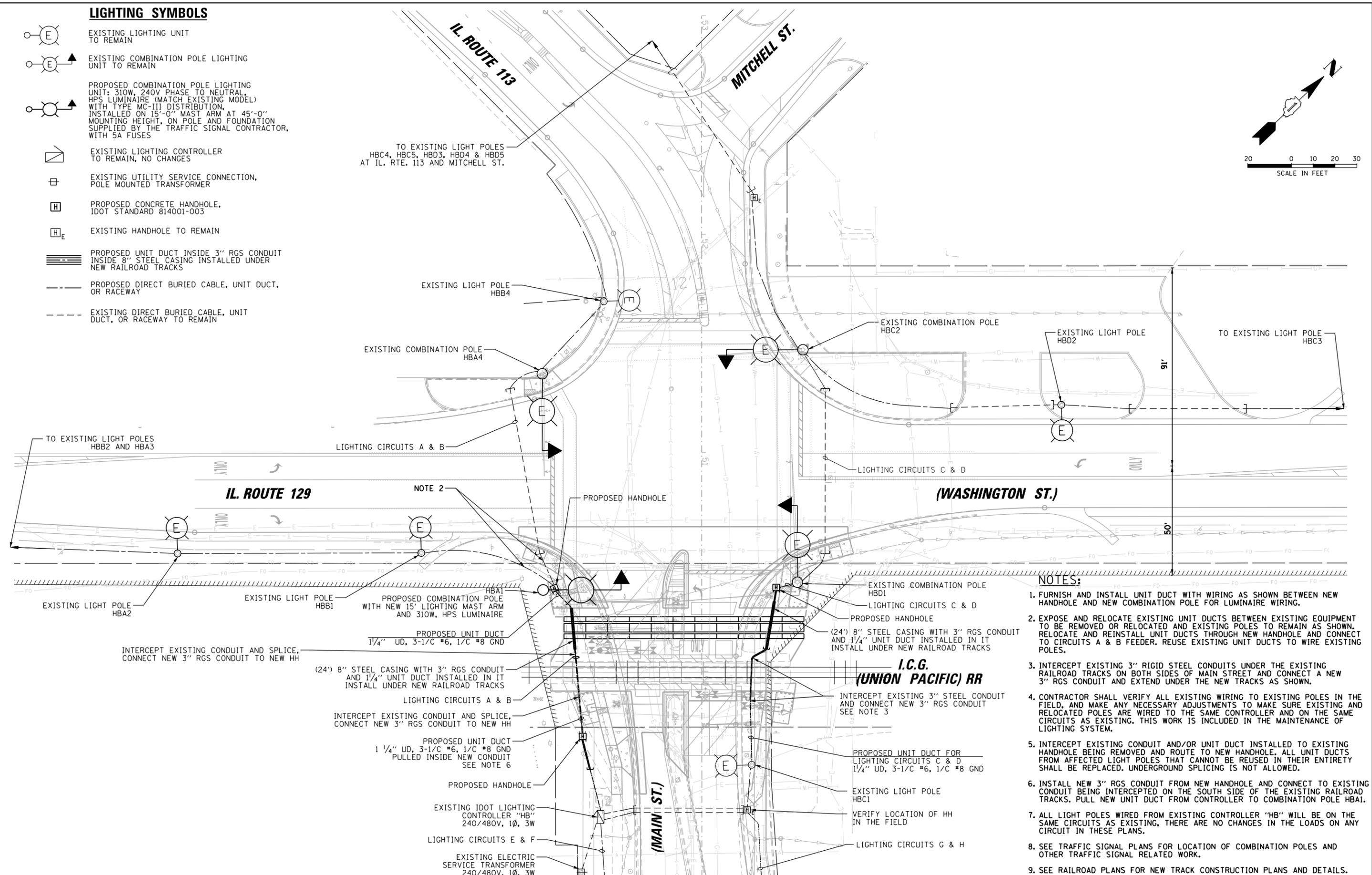
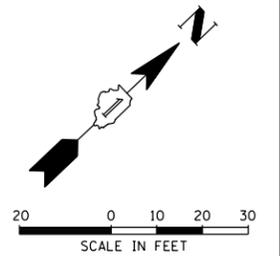
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RAILROAD PREEMPTION SEQUENCE OF OPERATION			
IL ROUTE 113 AT UPRR			
SCALE: NTS	SHEET 1 OF 1 SHEETS	STA.	TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 19
CONTRACT NO. 62B35				ILLINOIS FED. AID PROJECT

**LIGHTING SYMBOLS**

-  EXISTING LIGHTING UNIT TO REMAIN
-  EXISTING COMBINATION POLE LIGHTING UNIT TO REMAIN
-  PROPOSED COMBINATION POLE LIGHTING UNIT: 310W, 240V PHASE TO NEUTRAL, HPS LUMINAIRE (MATCH EXISTING MODEL) WITH TYPE MC-III DISTRIBUTION, INSTALLED ON 15'-0" MAST ARM AT 45'-0" MOUNTING HEIGHT, ON POLE AND FOUNDATION SUPPLIED BY THE TRAFFIC SIGNAL CONTRACTOR, WITH 5A FUSES
-  EXISTING LIGHTING CONTROLLER TO REMAIN, NO CHANGES
-  EXISTING UTILITY SERVICE CONNECTION, POLE MOUNTED TRANSFORMER
-  PROPOSED CONCRETE HANDHOLE, IDOT STANDARD 814001-003
-  EXISTING HANDHOLE TO REMAIN
-  PROPOSED UNIT DUCT INSIDE 3" RGS CONDUIT INSIDE 8" STEEL CASING INSTALLED UNDER NEW RAILROAD TRACKS
-  PROPOSED DIRECT BURIED CABLE, UNIT DUCT, OR RACEWAY
-  EXISTING DIRECT BURIED CABLE, UNIT DUCT, OR RACEWAY TO REMAIN



- NOTES:**
1. FURNISH AND INSTALL UNIT DUCT WITH WIRING AS SHOWN WITH NEW HANDHOLE AND NEW COMBINATION POLE FOR LUMINAIRE WIRING.
  2. EXPOSE AND RELOCATE EXISTING UNIT DUCTS BETWEEN EXISTING EQUIPMENT TO BE REMOVED OR RELOCATED AND EXISTING POLES TO REMAIN AS SHOWN. RELOCATE AND REINSTALL UNIT DUCTS THROUGH NEW HANDHOLE AND CONNECT TO CIRCUITS A & B FEEDER. REUSE EXISTING UNIT DUCTS TO WIRE EXISTING POLES.
  3. INTERCEPT EXISTING 3" RIGID STEEL CONDUITS UNDER THE EXISTING RAILROAD TRACKS ON BOTH SIDES OF MAIN STREET AND CONNECT A NEW 3" RGS CONDUIT AND EXTEND UNDER THE NEW TRACKS AS SHOWN.
  4. CONTRACTOR SHALL VERIFY ALL EXISTING WIRING TO EXISTING POLES IN THE FIELD, AND MAKE ANY NECESSARY ADJUSTMENTS TO MAKE SURE EXISTING AND RELOCATED POLES ARE WIRED TO THE SAME CONTROLLER AND ON THE SAME CIRCUITS AS EXISTING. THIS WORK IS INCLUDED IN THE MAINTENANCE OF LIGHTING SYSTEM.
  5. INTERCEPT EXISTING CONDUIT AND/OR UNIT DUCT INSTALLED TO EXISTING HANDHOLE BEING REMOVED AND ROUTE TO NEW HANDHOLE. ALL UNIT DUCTS FROM AFFECTED LIGHT POLES THAT CANNOT BE REUSED IN THEIR ENTIRETY SHALL BE REPLACED. UNDERGROUND SPLICING IS NOT ALLOWED.
  6. INSTALL NEW 3" RGS CONDUIT FROM NEW HANDHOLE AND CONNECT TO EXISTING CONDUIT BEING INTERCEPTED ON THE SOUTH SIDE OF THE EXISTING RAILROAD TRACKS. PULL NEW UNIT DUCT FROM CONTROLLER TO COMBINATION POLE HBA1.
  7. ALL LIGHT POLES WIRED FROM EXISTING CONTROLLER "HB" WILL BE ON THE SAME CIRCUITS AS EXISTING, THERE ARE NO CHANGES IN THE LOADS ON ANY CIRCUIT IN THESE PLANS.
  8. SEE TRAFFIC SIGNAL PLANS FOR LOCATION OF COMBINATION POLES AND OTHER TRAFFIC SIGNAL RELATED WORK.
  9. SEE RAILROAD PLANS FOR NEW TRACK CONSTRUCTION PLANS AND DETAILS.

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	DATE 10/23/15	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN**  
**IL ROUTE 129 AT IL ROUTE 113**

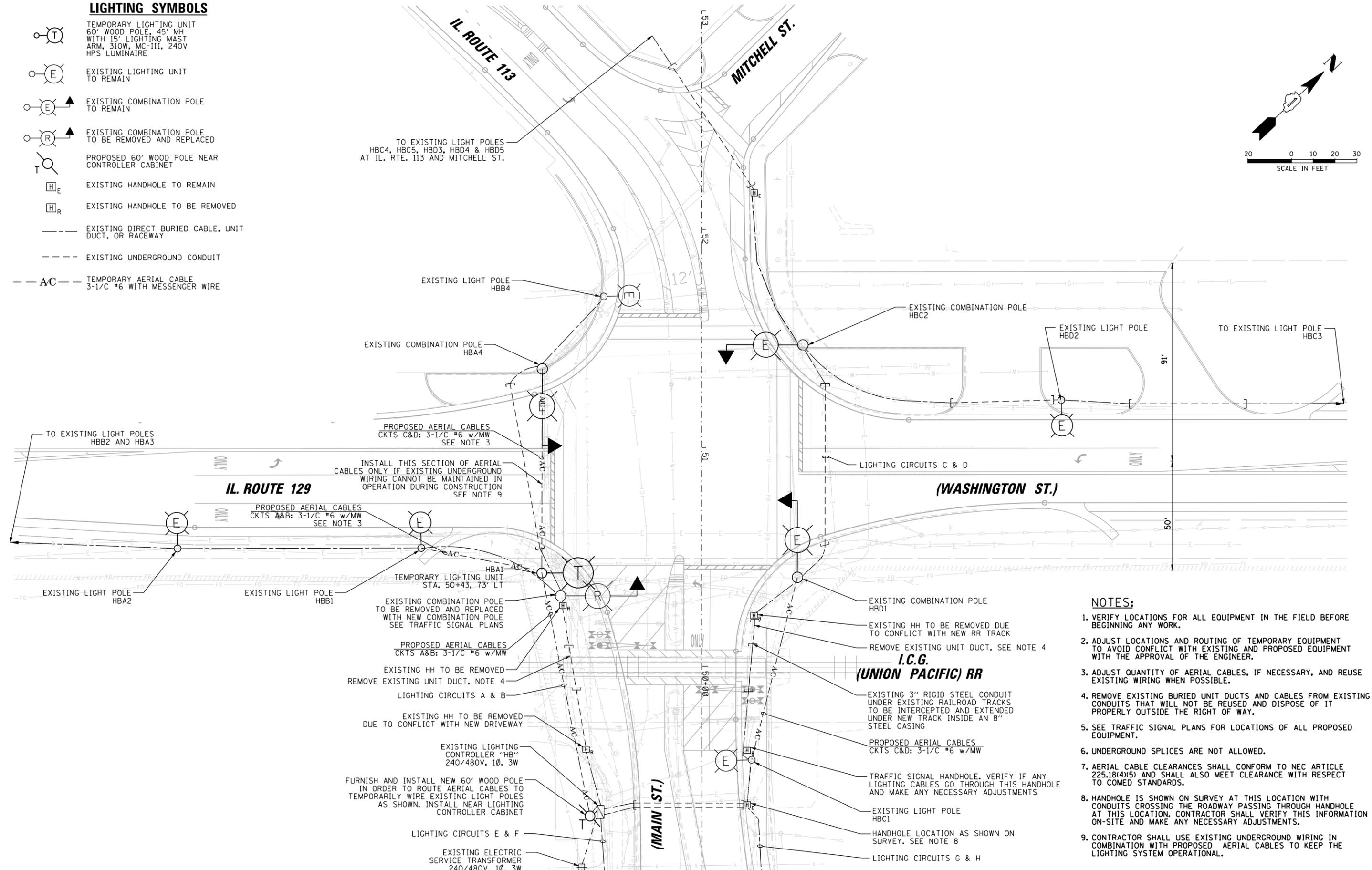
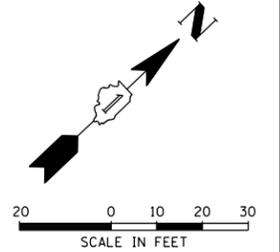
F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 20
CONTRACT NO. 62B35				

SCALE: 20 SHEET 1 OF 2 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

**LIGHTING SYMBOLS**

-  TEMPORARY LIGHTING UNIT  
60' WOOD POLE, 45' MH  
WITH 15' LIGHTING MAST  
ARM, 310W, MC-III, 240V  
HPS LUMINAIRE
-  EXISTING LIGHTING UNIT  
TO REMAIN
-  EXISTING COMBINATION POLE  
TO REMAIN
-  EXISTING COMBINATION POLE  
TO BE REMOVED AND REPLACED
-  PROPOSED 60' WOOD POLE NEAR  
CONTROLLER CABINET
-  EXISTING HANDHOLE TO REMAIN
-  EXISTING HANDHOLE TO BE REMOVED
-  EXISTING DIRECT BURIED CABLE, UNIT  
DUCT, OR RACEWAY
-  EXISTING UNDERGROUND CONDUIT
-  TEMPORARY AERIAL CABLE  
3-1/8" #6 WITH MESSENGER WIRE



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CHECKED DAD	REVISIONS	REVISED -
DATE 10/23/15	REVISIONS	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**LIGHTING TEMPORARY & REMOVAL PLAN**  
**IL ROUTE 129 AT IL ROUTE 113**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	21
CONTRACT NO. 62B35				
ILLINOIS FED. AID PROJECT				

SCALE: 20 SHEET 2 OF 2 SHEETS STA. TO STA.

# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT							
DETECTOR LOOP, TYPE I				RADIO REPEATER							
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

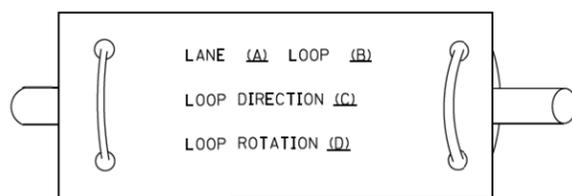
## RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

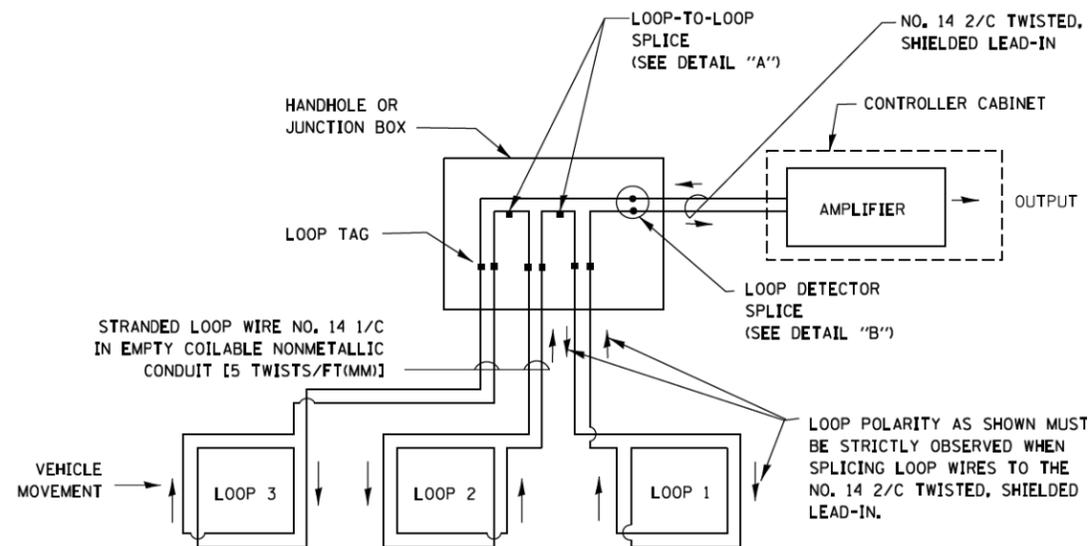
**LOOP DETECTOR NOTES**

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**

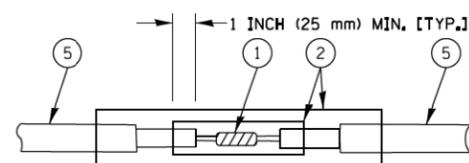


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

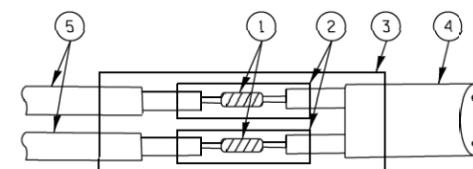


**DETECTOR LOOP WIRING SCHEMATIC**

- 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.

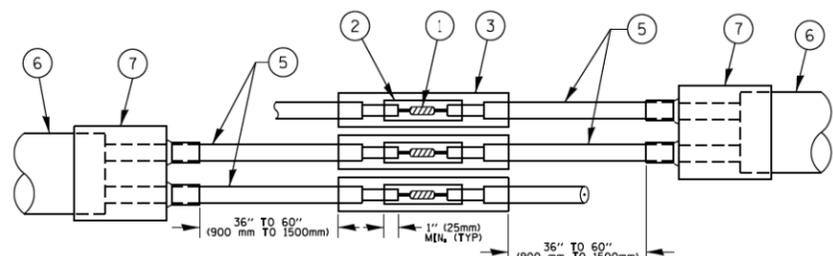


DETAIL "A"  
LOOP-TO-LOOP SPLICE

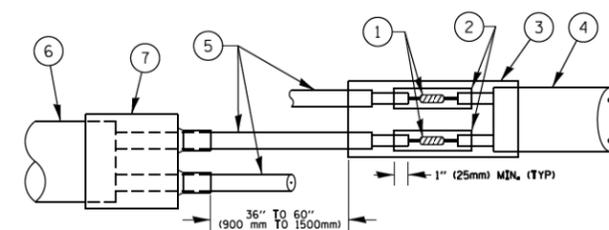


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**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 LENGTH 6" (150 mm), UNDERWATER GRADE.
- 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

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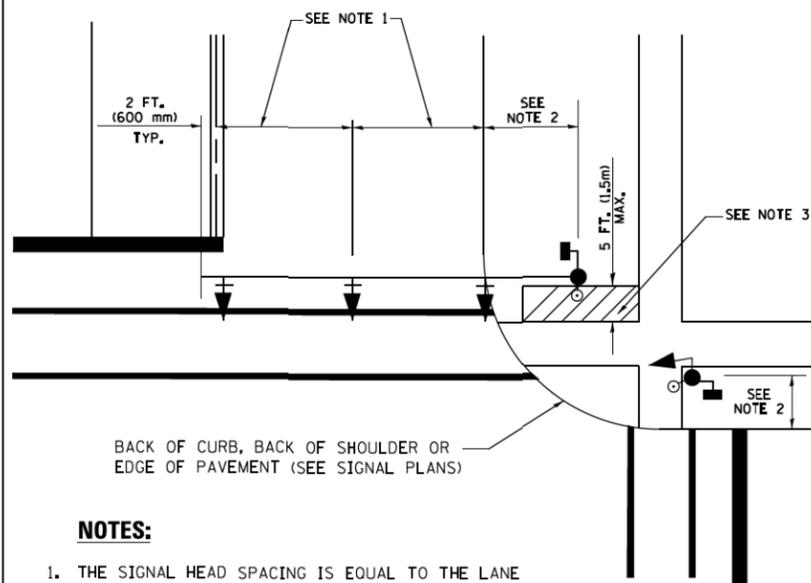
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 2 OF 7 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05		CONTRACT NO. 62B35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

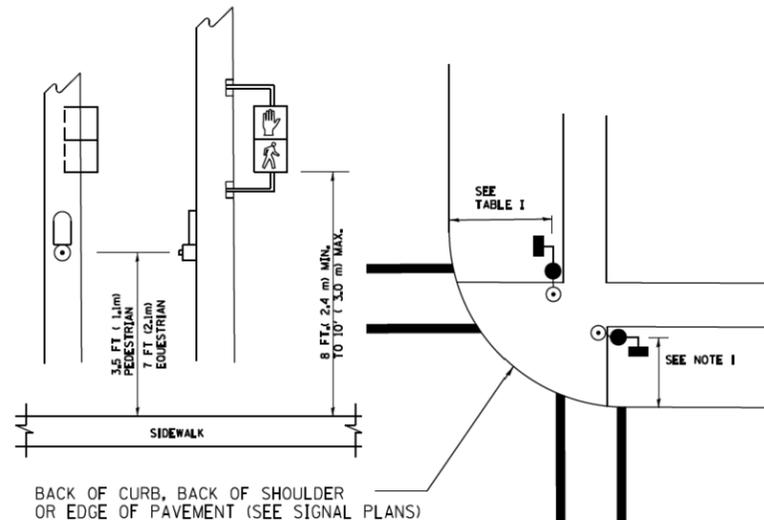
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. 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."

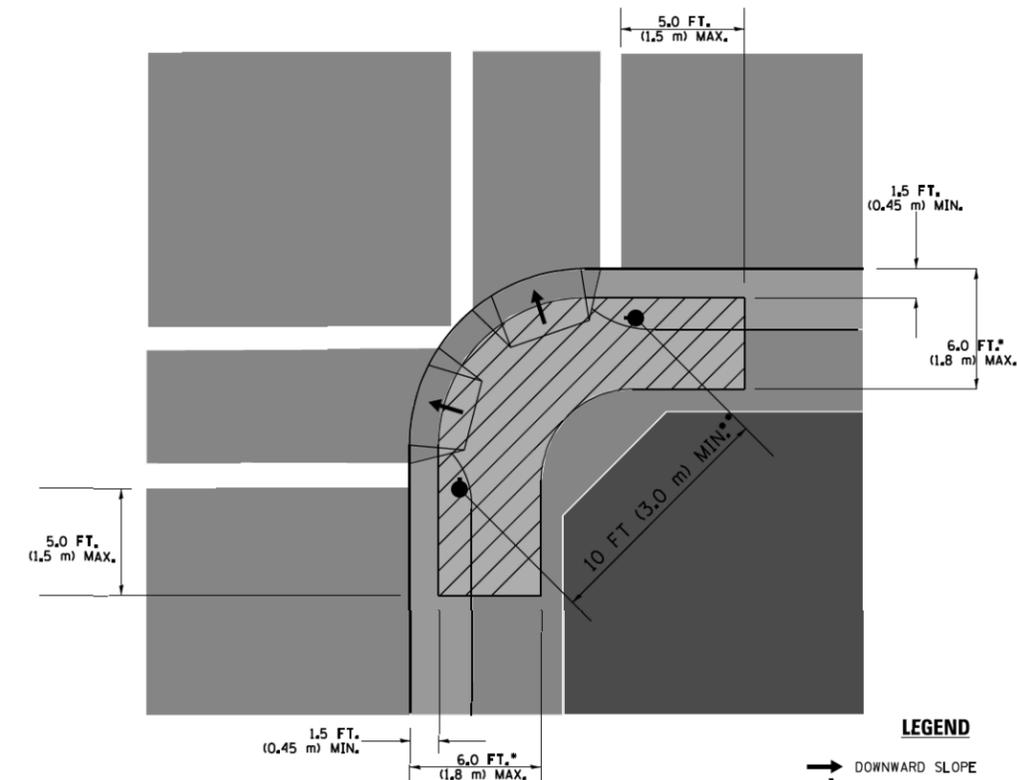
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**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."

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

- \* 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:**

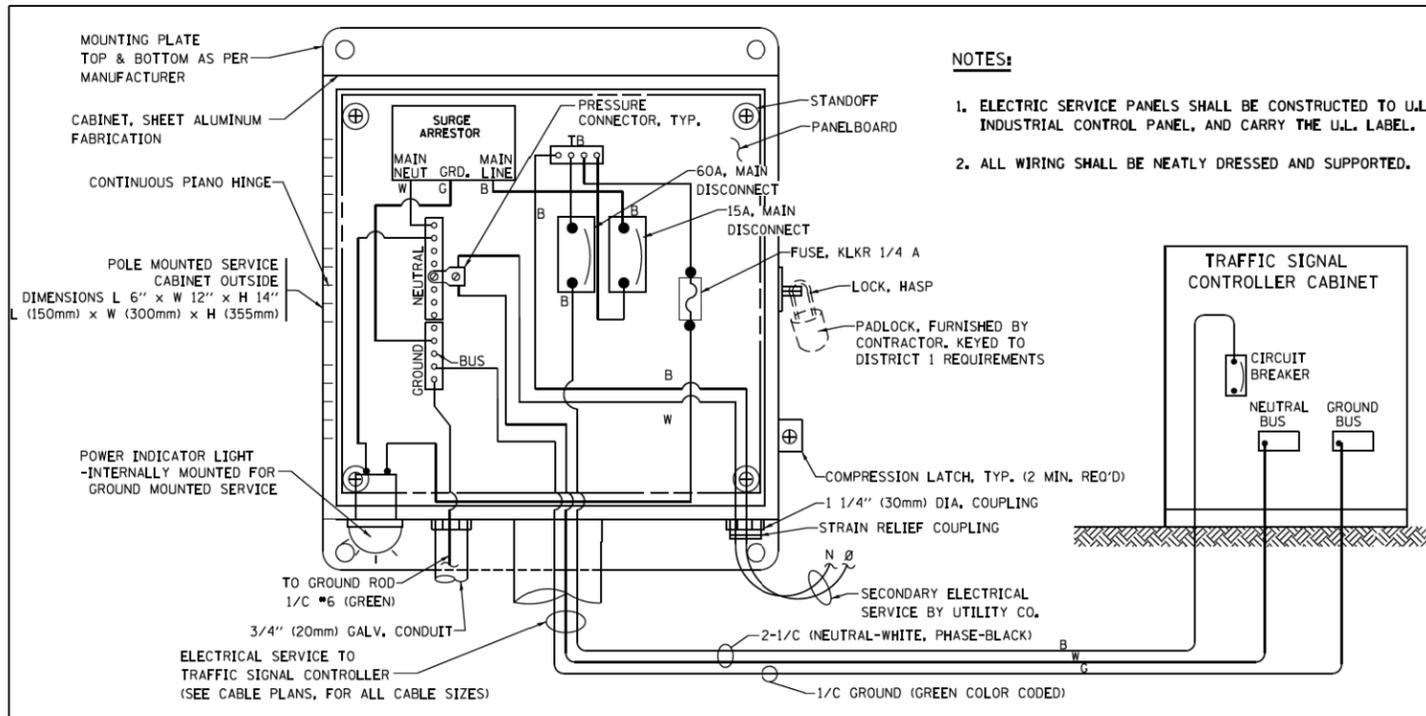
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY 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 HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

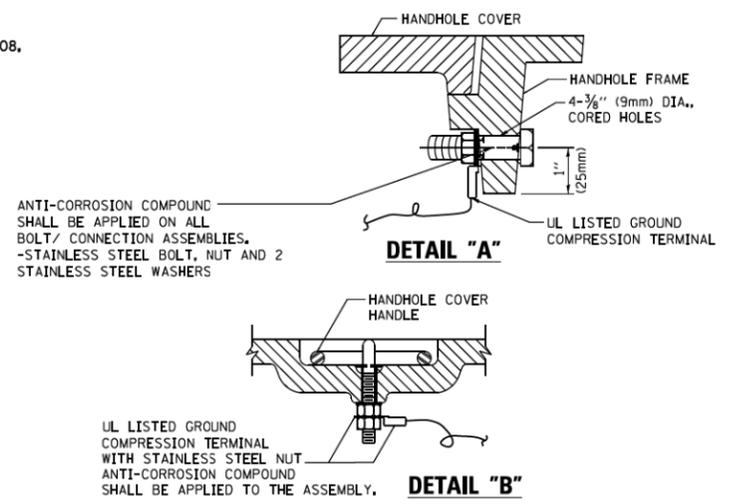
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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 TO THE 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.

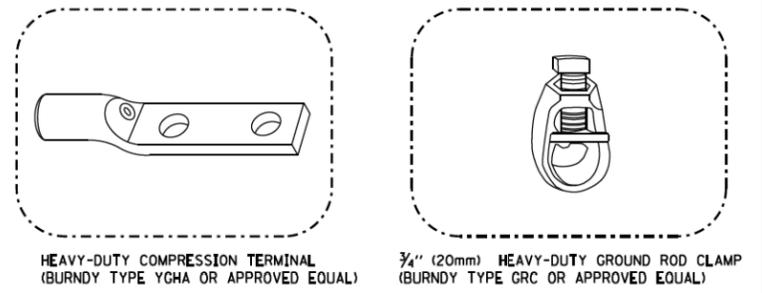
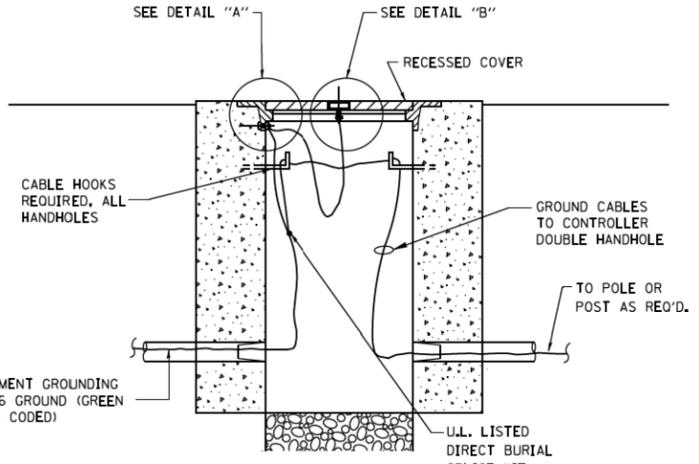


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



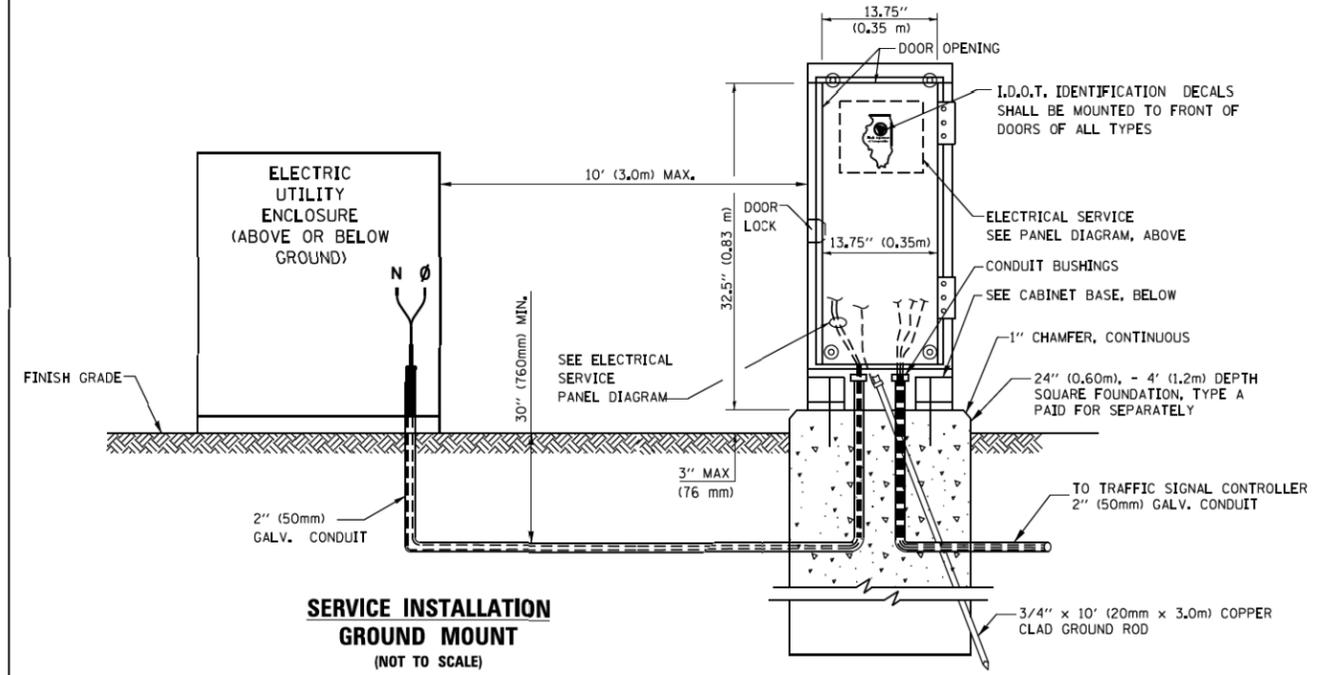
**NOTES:**  
**GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

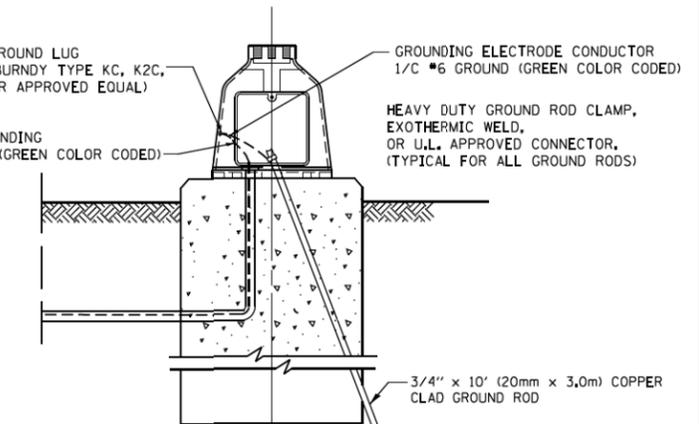
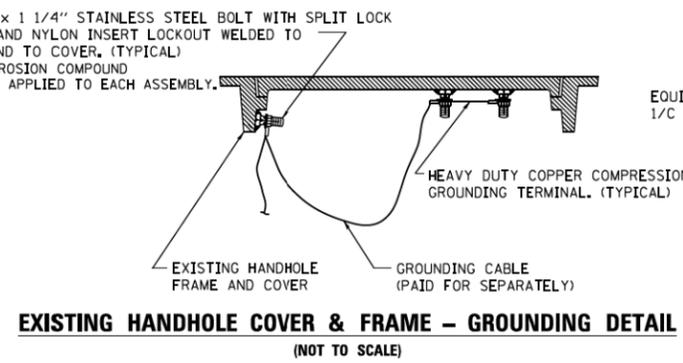


**NOTES:**

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
- 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
- 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
- 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

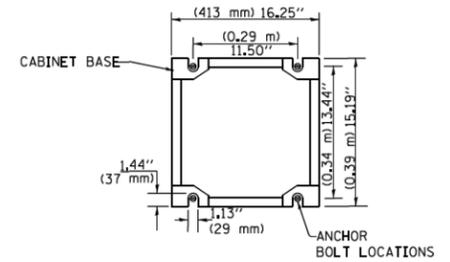


**HANDHOLE COVER & FRAME – GROUNDING DETAIL**  
 (NOT TO SCALE)



**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

**CABINET – BASE BOLT PATTERN**  
 (NOT TO SCALE)

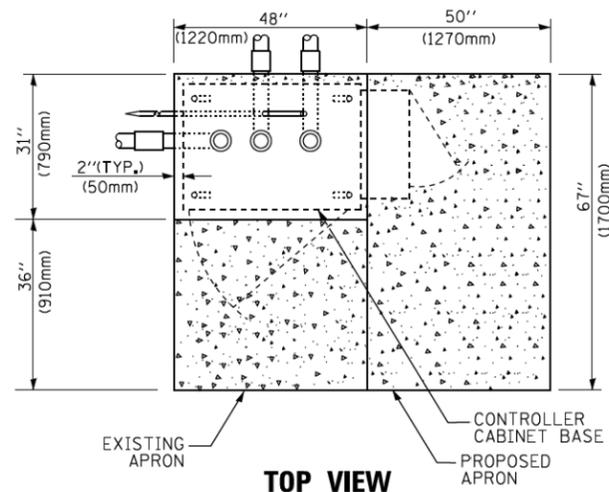


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		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

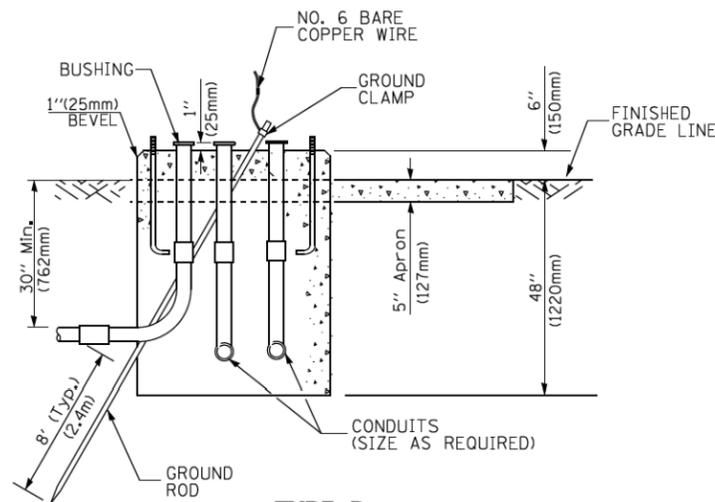
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**  
 SCALE: NONE SHEET NO. 4 OF 7 SHEETS STA. TO STA.

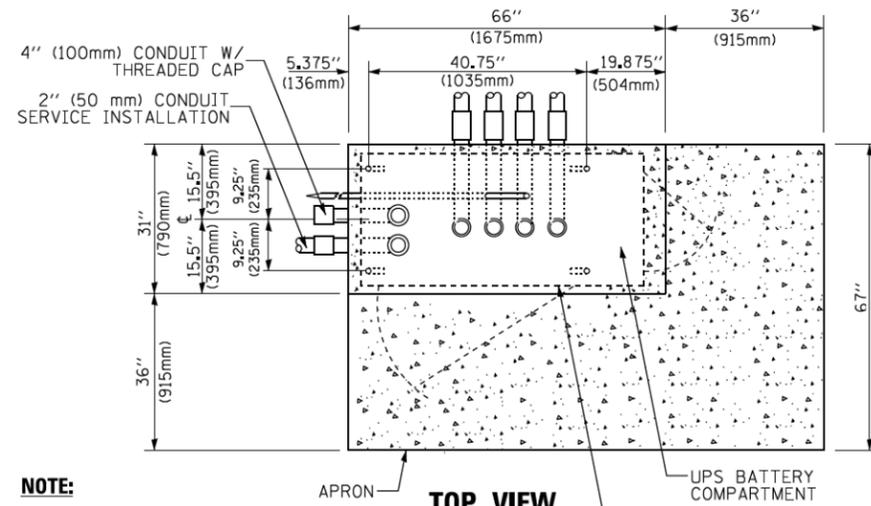
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	25
	<b>TS-05</b>	<b>CONTRACT NO. 62B35</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**TOP VIEW**

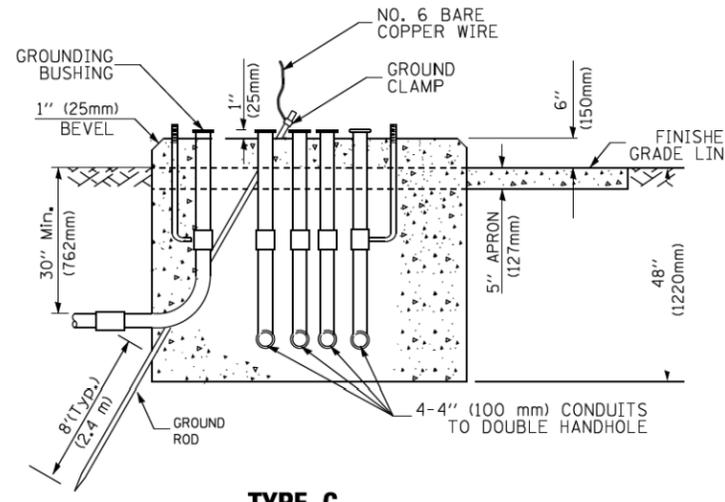


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

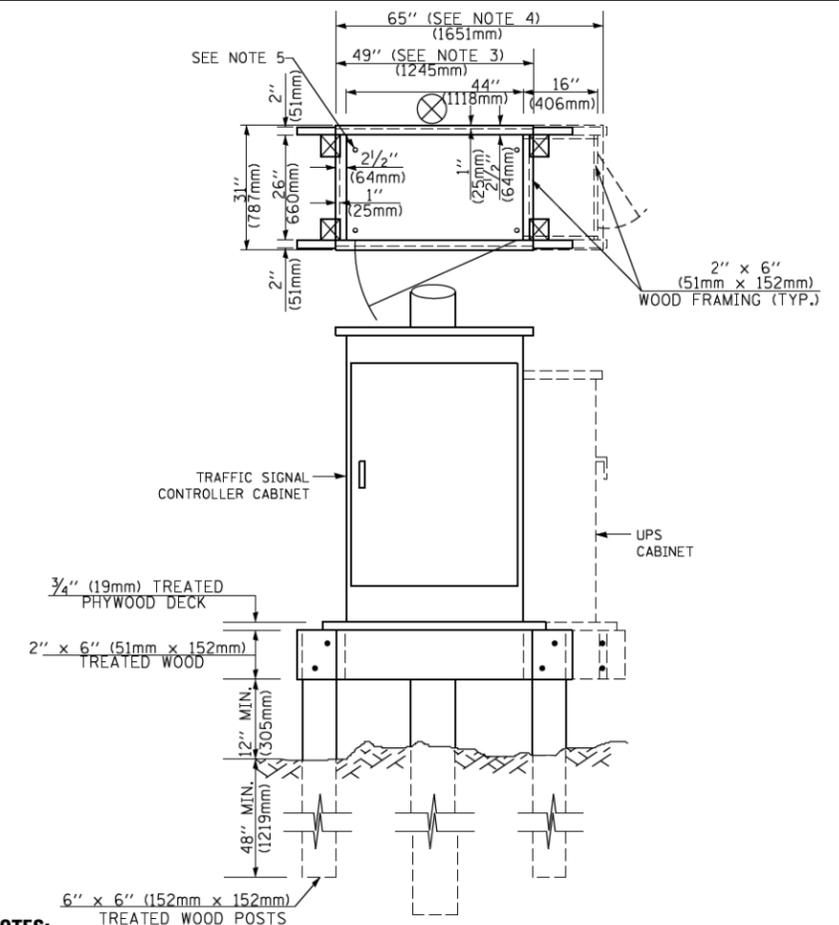


**TOP VIEW**

**NOTE:**  
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

1. 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

**CABLE SLACK**

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**

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)

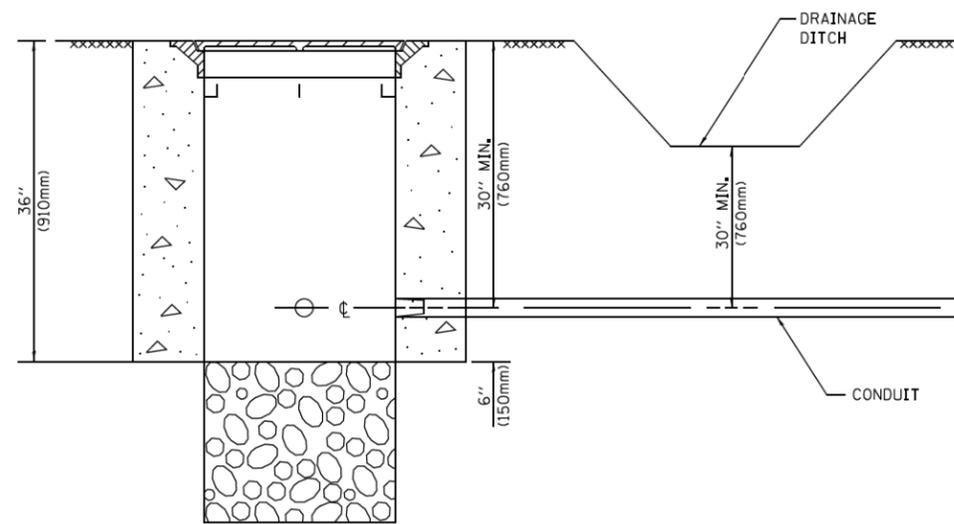
**DEPTH OF FOUNDATION**

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 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 56' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

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 (Qu) > 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..

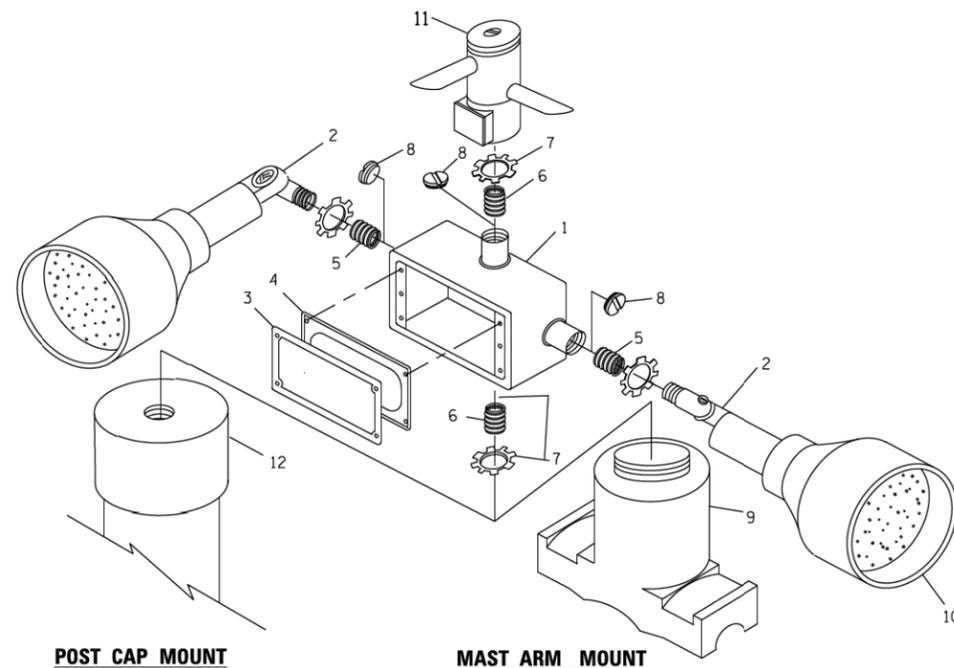
**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**



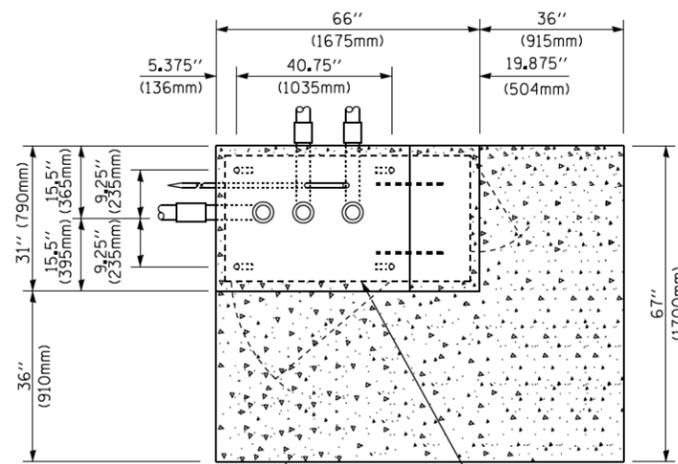
**NOTES:**

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.

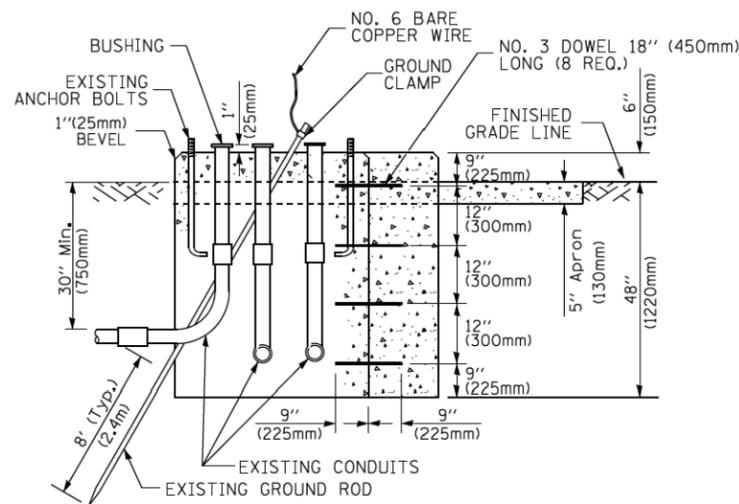
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**TOP VIEW**  
(NOT TO SCALE)

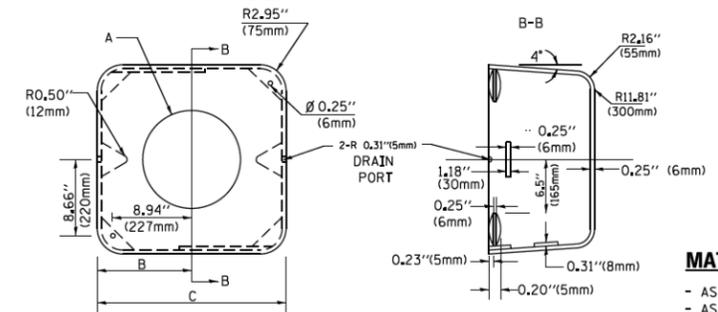


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

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	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (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:**

1. 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.



	A	B	C	HEIGHT	WEIGHT
VARIABLES	VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

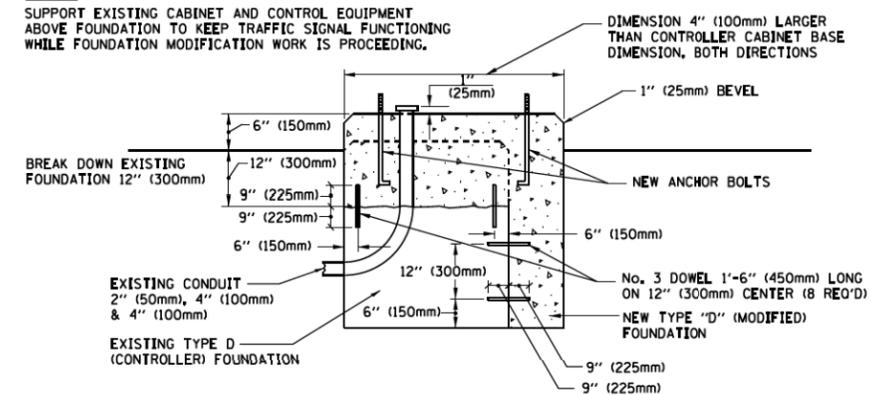
**SHROUD**

**NOTES:**

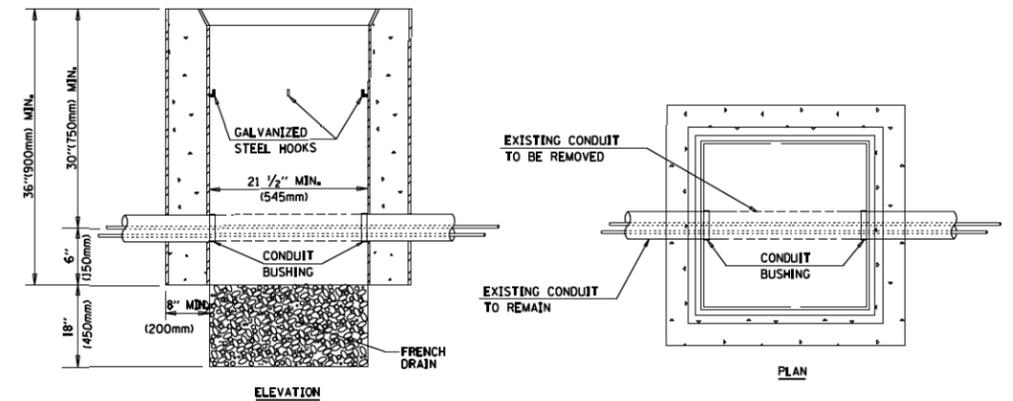
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**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**

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
cc:\pwork\pwork\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -
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	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

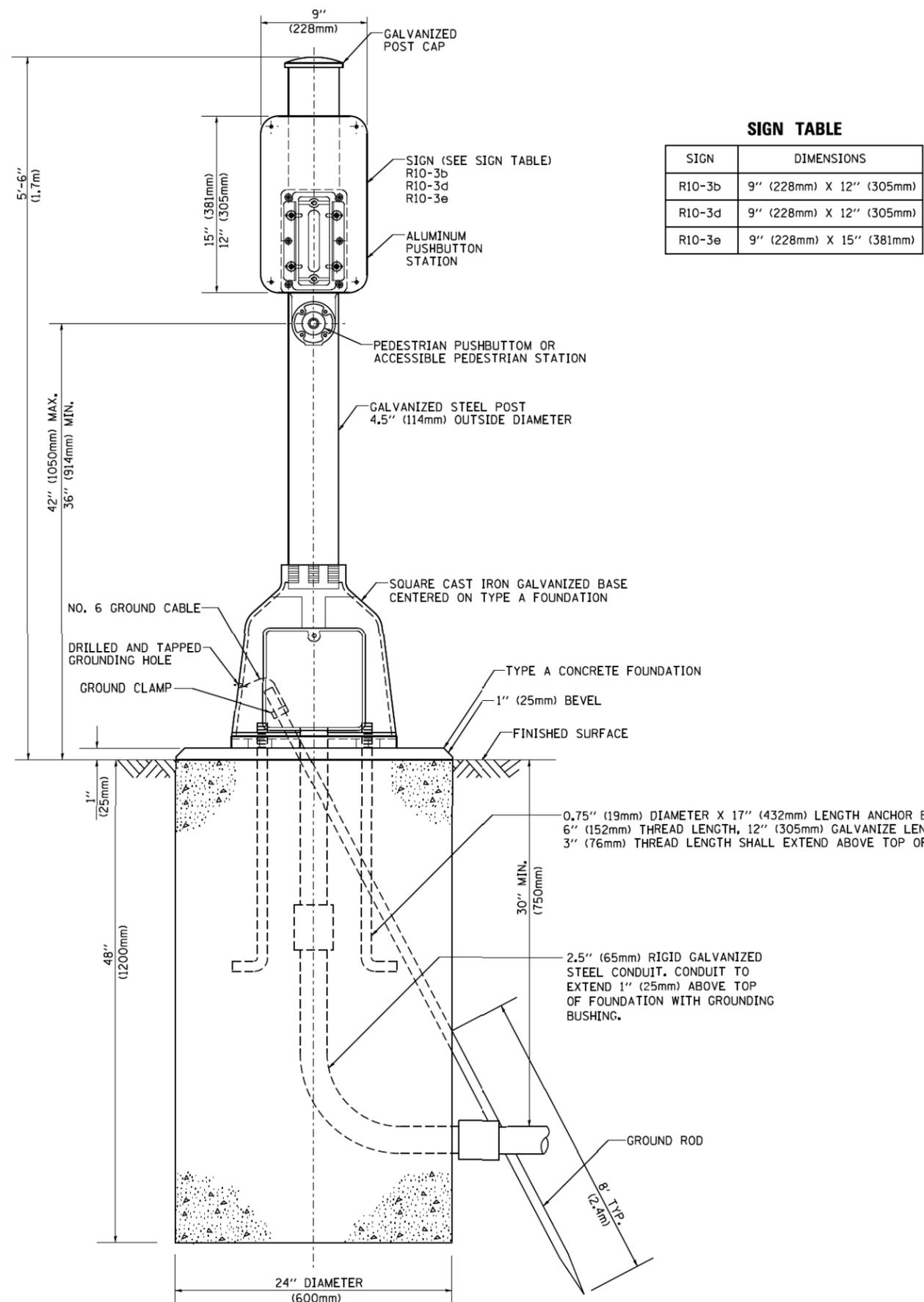
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE

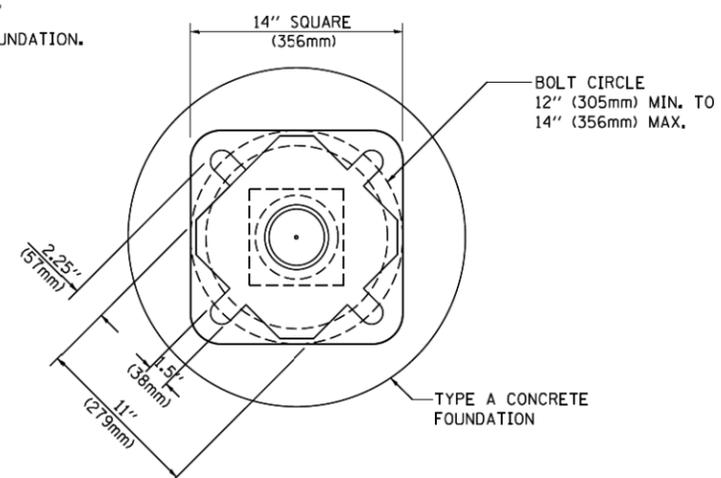
SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	27
	<b>TS-05</b>	<b>CONTRACT NO. 62B35</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



**BOLT PATTERN**

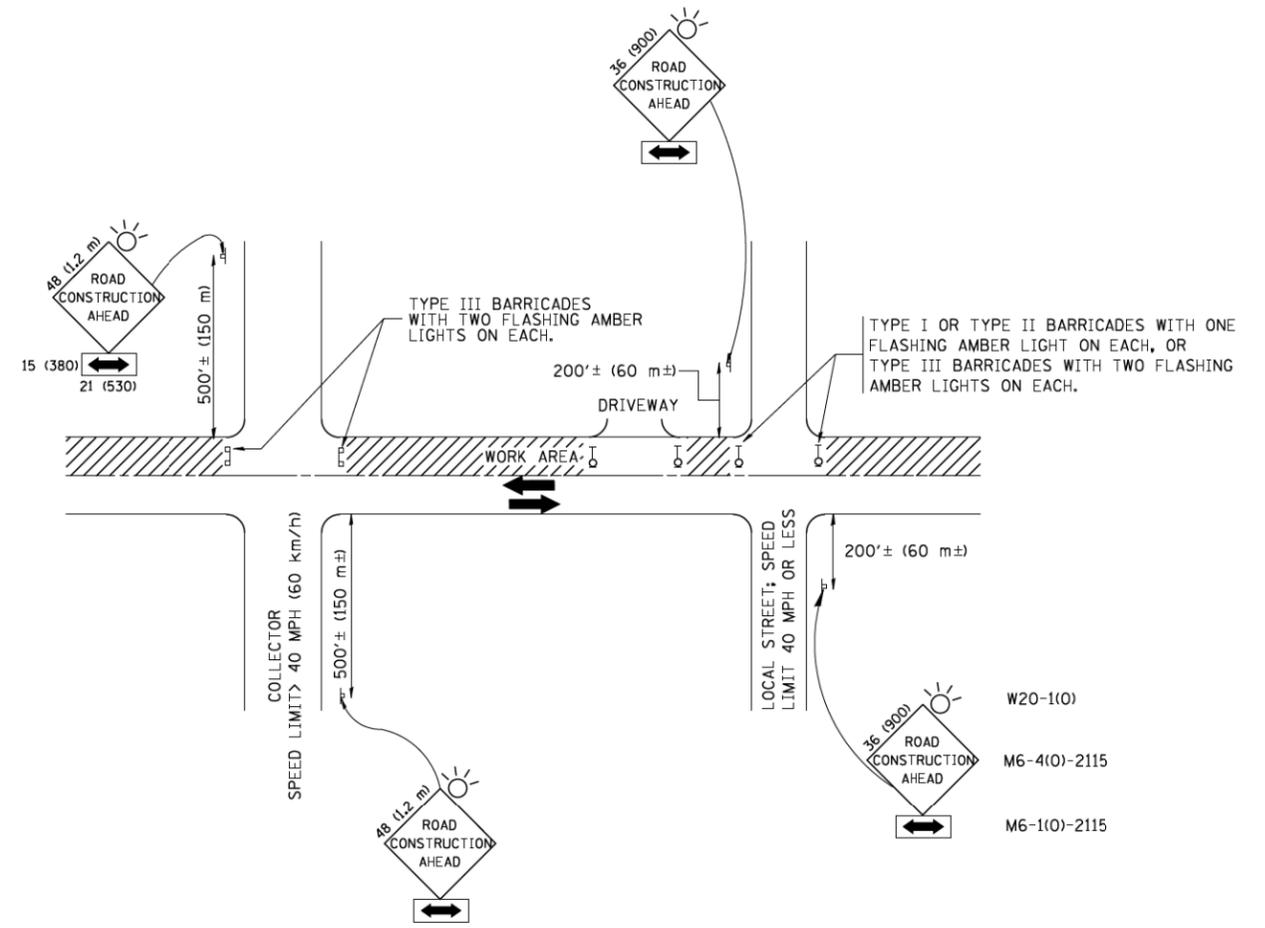
**PEDESTRIAN PUSH BUTTON POST, TYPE A**

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	PLOT DATE = 1/13/2014	DATE - 10/1/2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE</b>	
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	
SCALE: NONE	SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 28
<b>TS-05</b>		CONTRACT NO. 62B35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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:
    - a) 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:
    - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 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 (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.

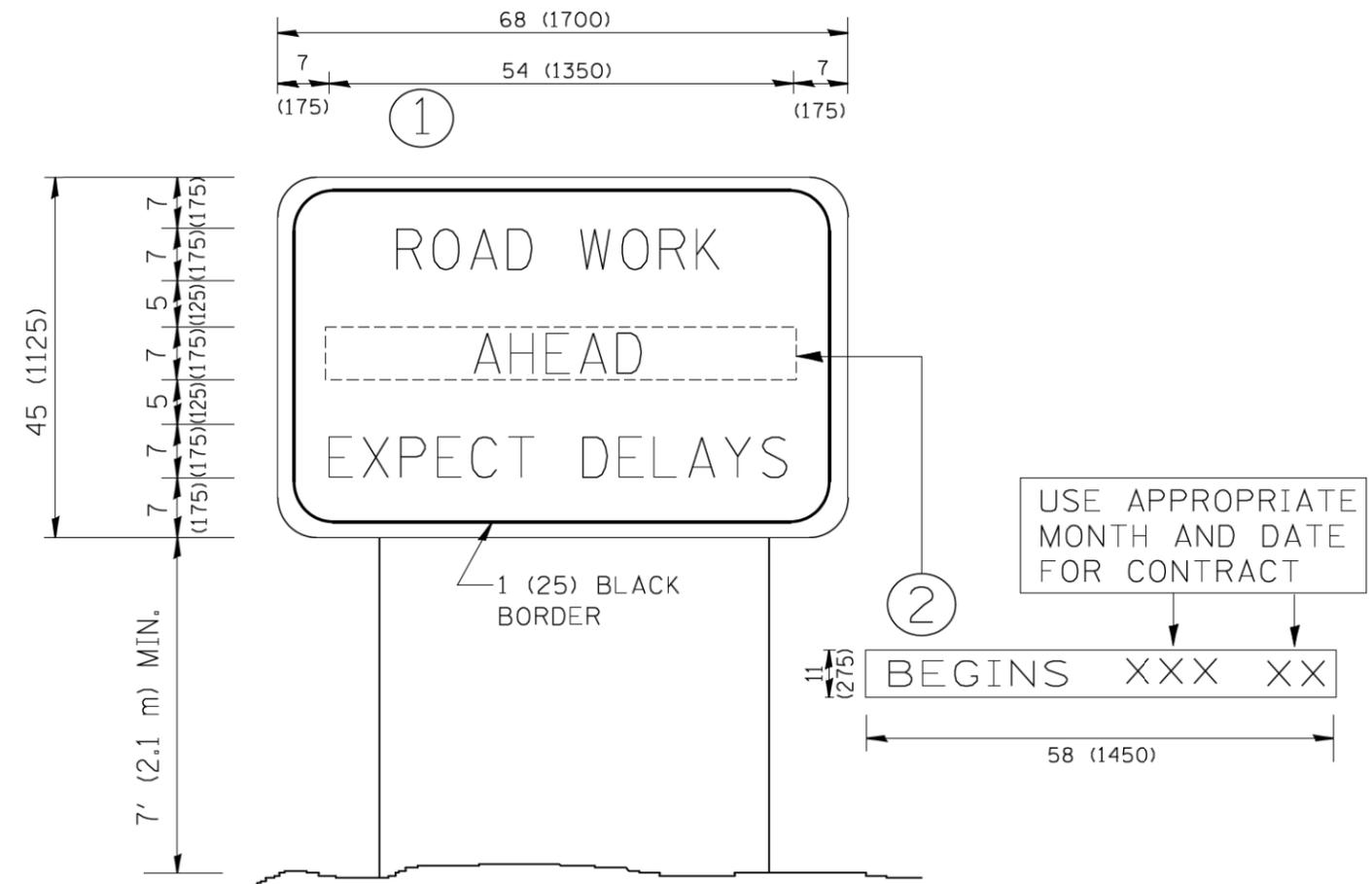
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.S. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	29
<b>TC-10</b>			<b>CONTRACT NO. 62B35</b>	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



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.

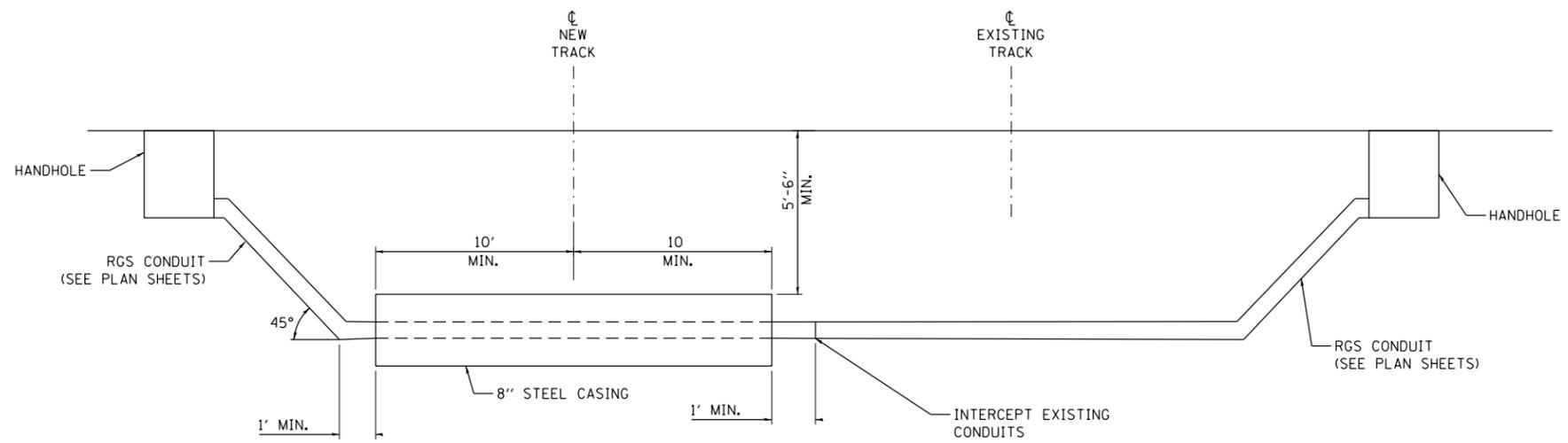
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PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	
PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.S. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	30
TC-22		CONTRACT NO. 62B35		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



**NOTES:**

1. ALL HORIZONTAL DISTANCES TO BE MEASURED AT RIGHT ANGLES FROM THE CENTERLINE OF TRACK.
2. A RAILROAD SIGNAL REPRESENTATIVE MUST BE PRESENT DURING INSTALLATION IF RAILROAD SIGNALS ARE IN THE VICINITY OF THE CROSSING.

FILE NAME = c:\ywork\hunting\andy.becker\transport\station\dm11548\62B35-shi-details1.dgn  
 DT62B35-shi-details1.dgn 10/23/2015 2:42:07 PM



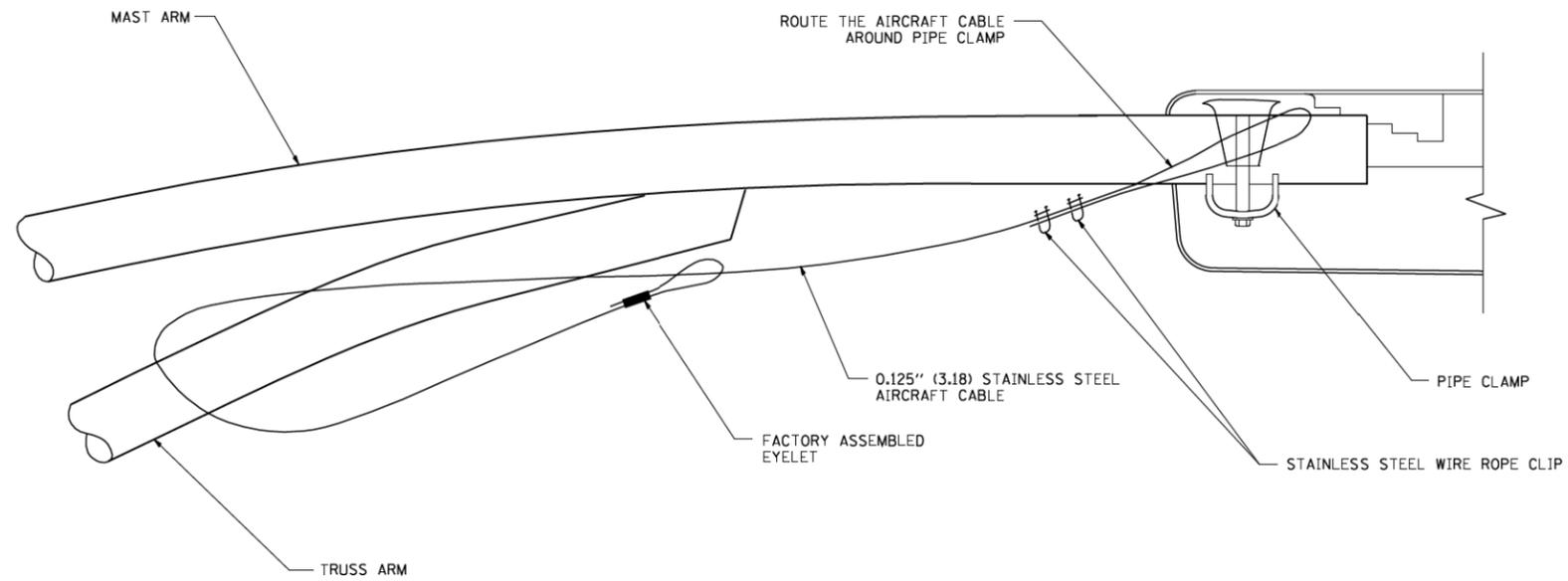
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	DRAWN	REVISED -
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PLOT DATE = 10/23/2015	DATE	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

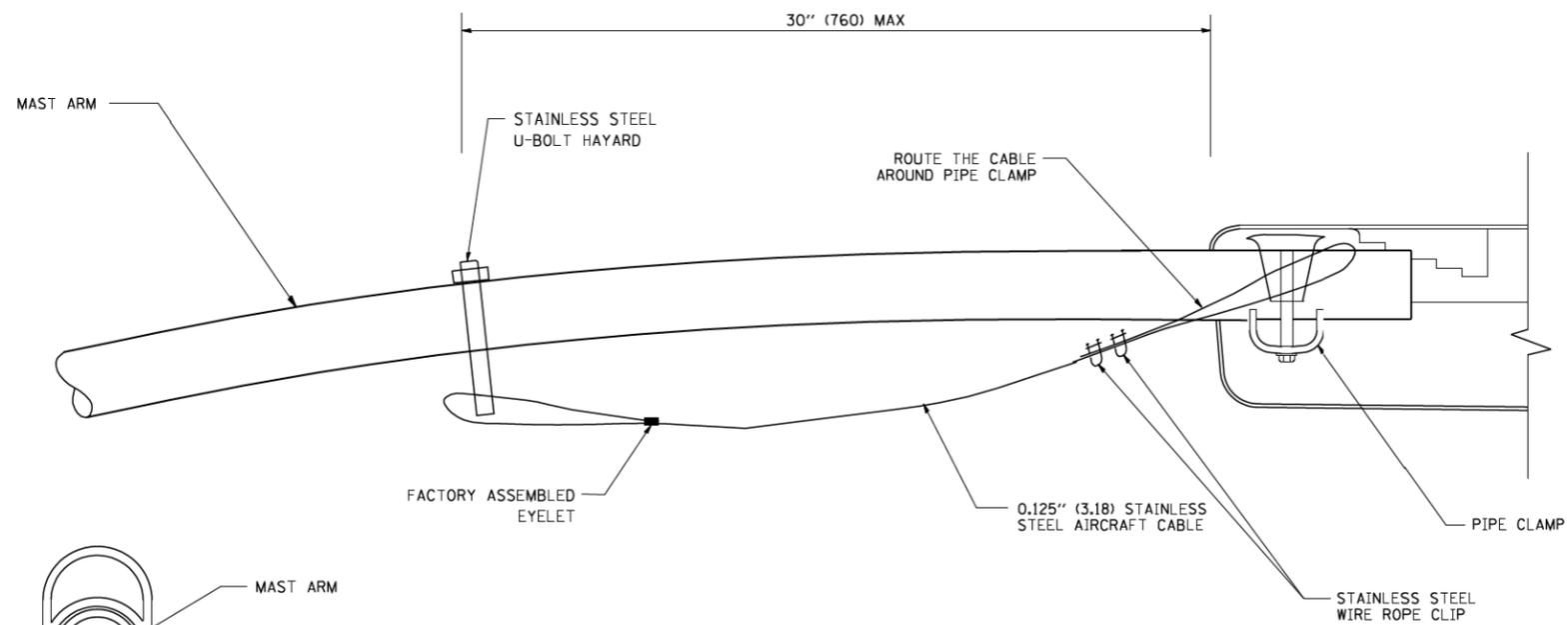
**CONDUIT UNDER RAILROAD TRACKS DETAIL**

SCALE: SHEET OF SHEETS STA. TO STA.

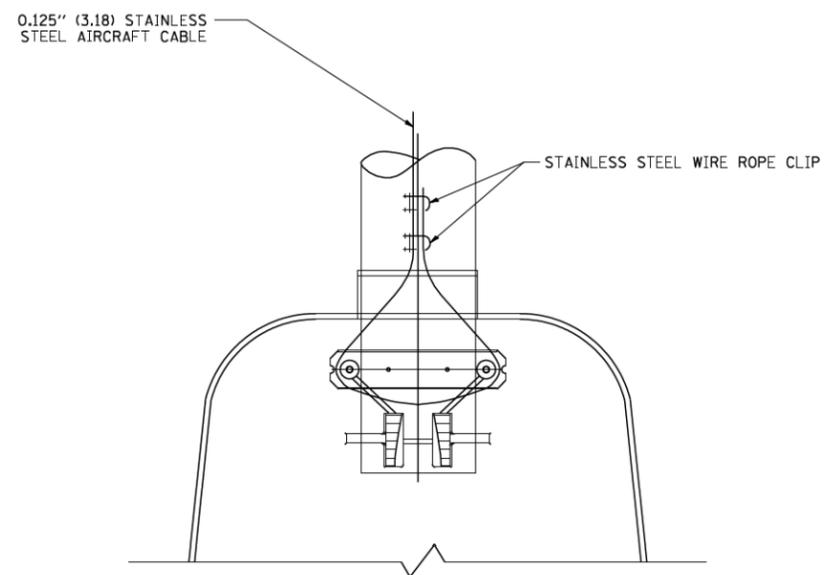
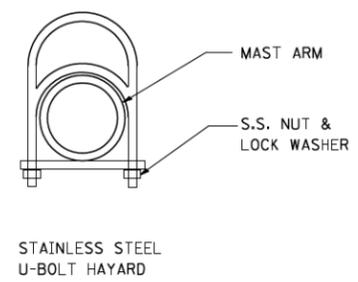
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	31
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B35	



**SIDE VIEW (TRUSS ARM)**  
N.T.S.



**SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)**  
N.T.S.

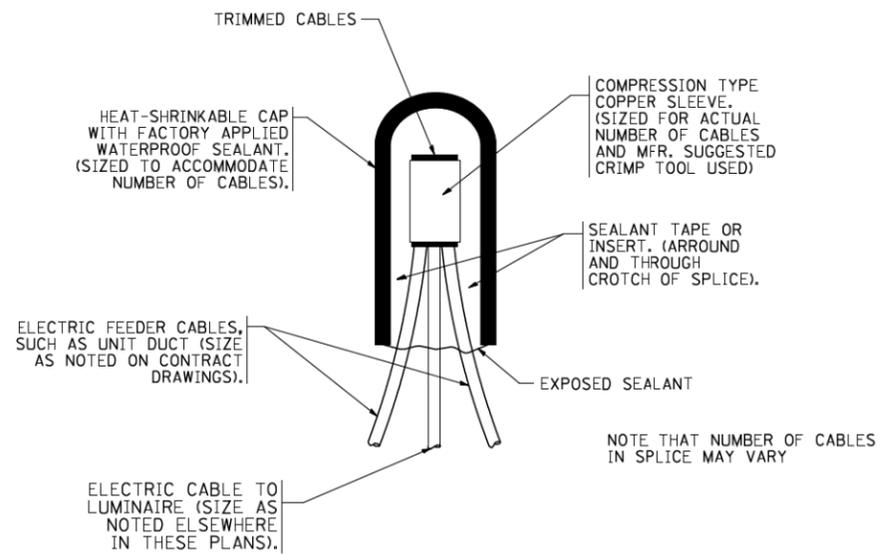


**BOTTOM VIEW**  
N.T.S.

- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
  2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
  3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
  4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

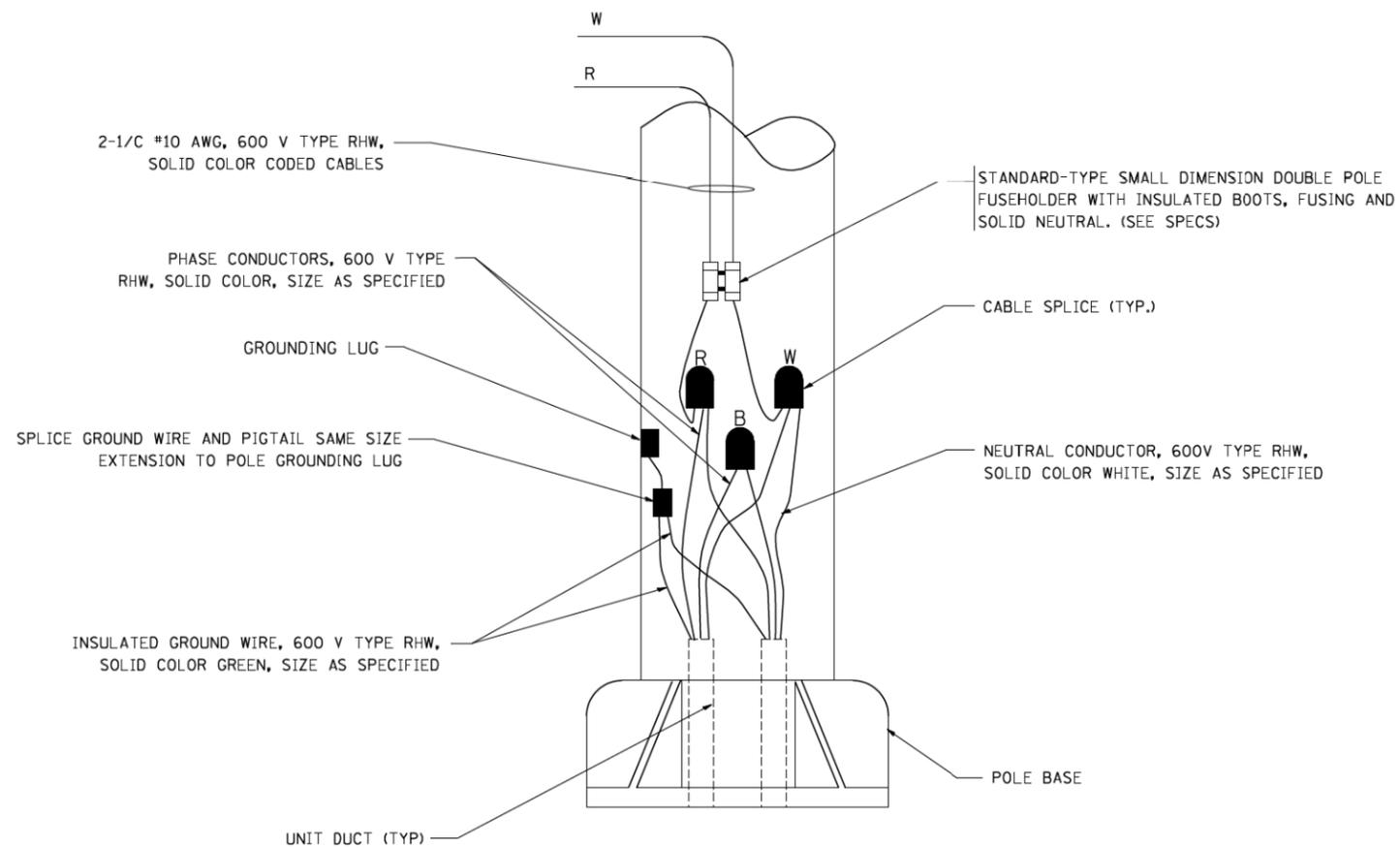
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -					2320	DIHSRR2016-04	WILL	35	32
PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BE-701</b>		CONTRACT NO. 62B35		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT												

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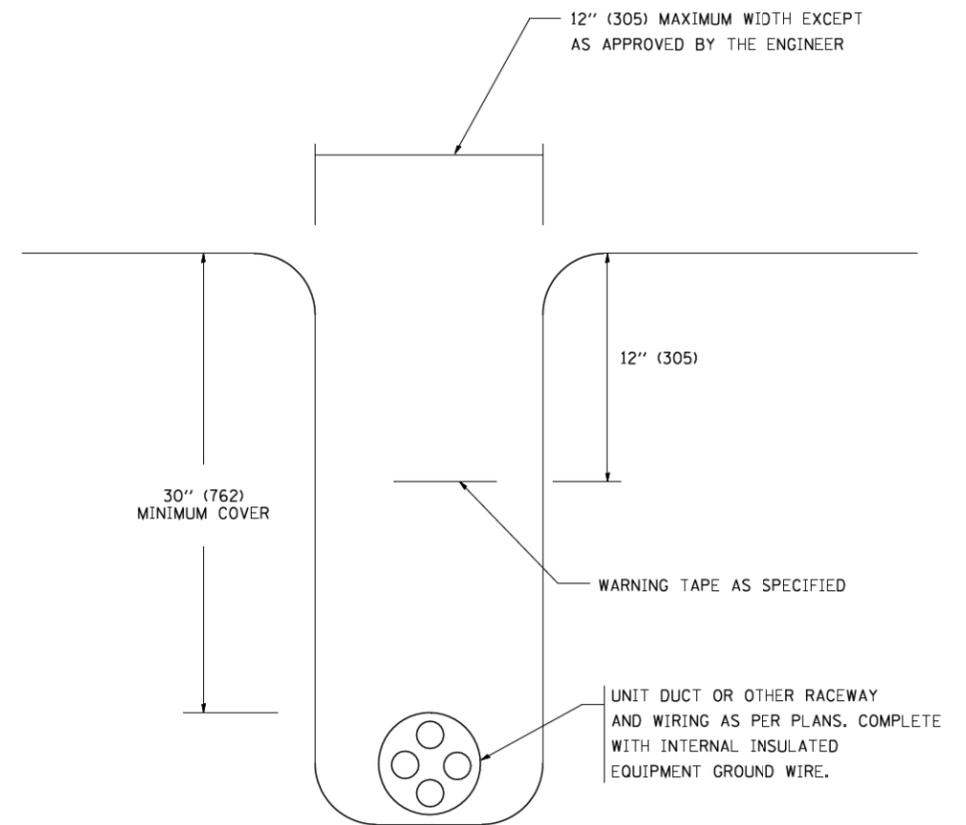
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

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W:\diststd\22x34\be702.dgn

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DESIGNED -  
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DATE -

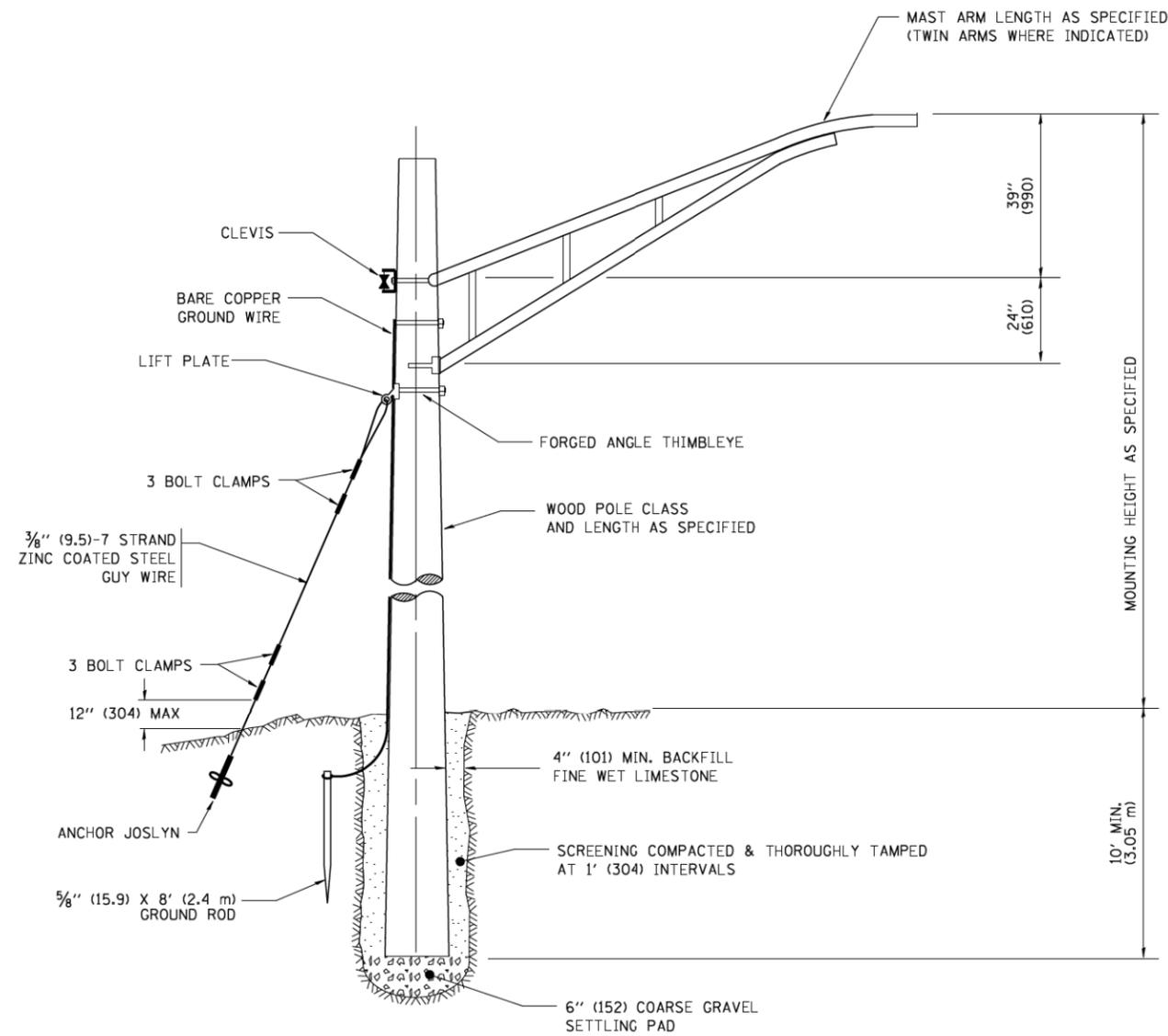
REVISED - 08-08-03  
REVISED -  
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REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

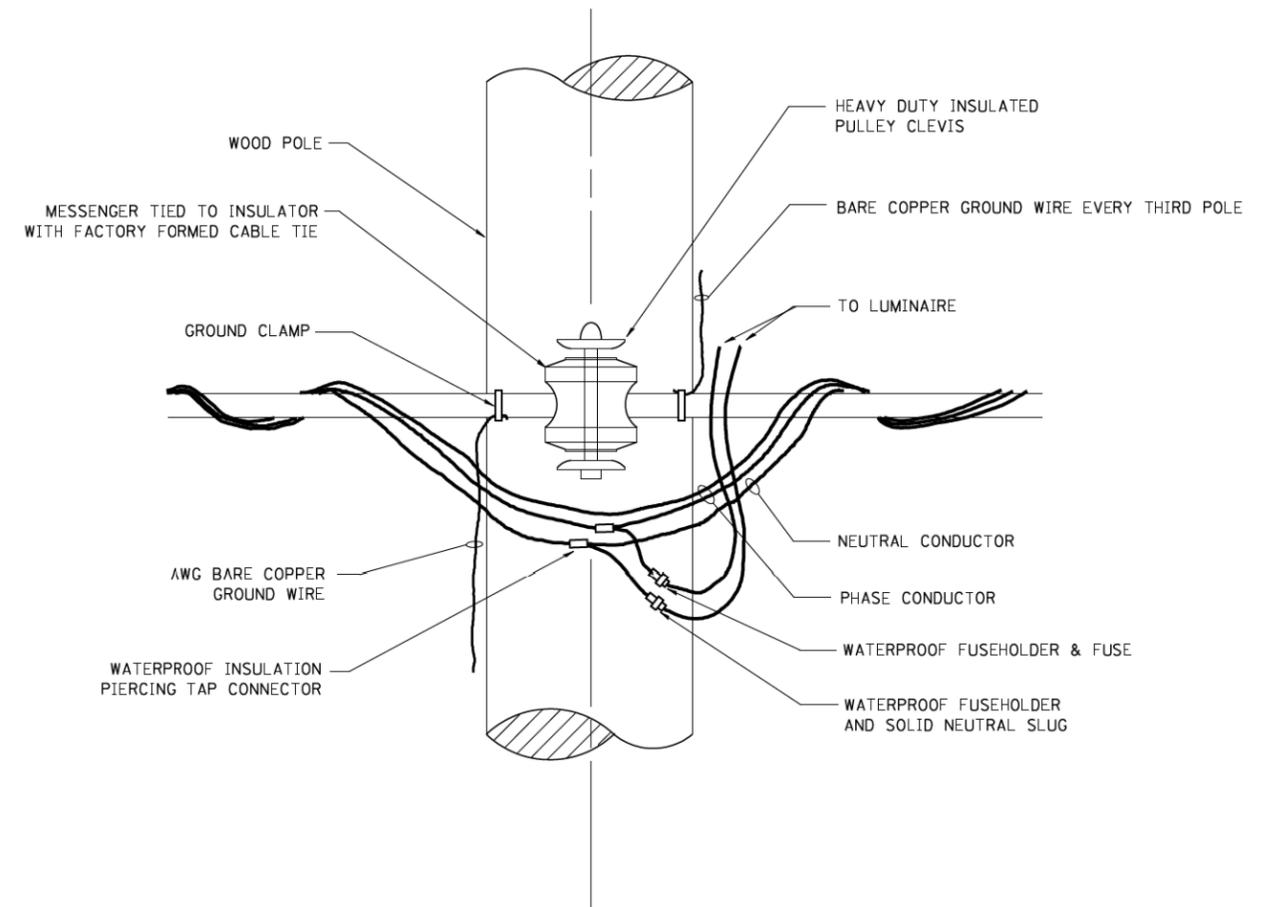
MISC. ELECTRICAL DETAILS  
SHEET A

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	DIHSRR2016-04	WILL	35	33
BE-702		CONTRACT NO. 62B35		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



TEMPORARY LIGHT POLE DETAIL

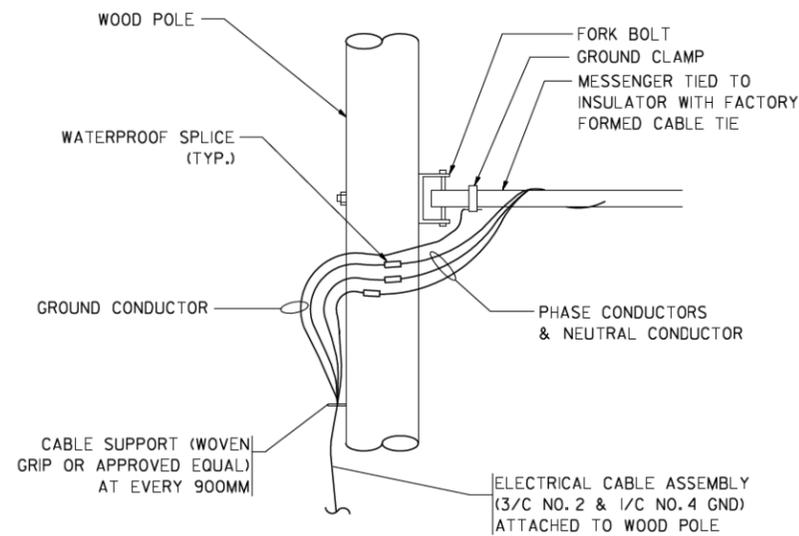


TEMPORARY LIGHT POLE ATTACHMENT DETAIL

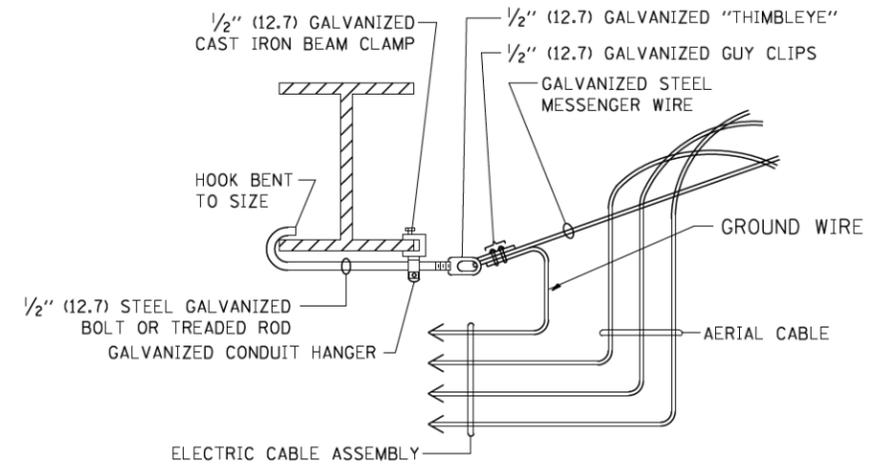
**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

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	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BE-800</b>		CONTRACT NO. 62B35	
PLOT DATE = 1/4/2008	DATE -	REVISED -						FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



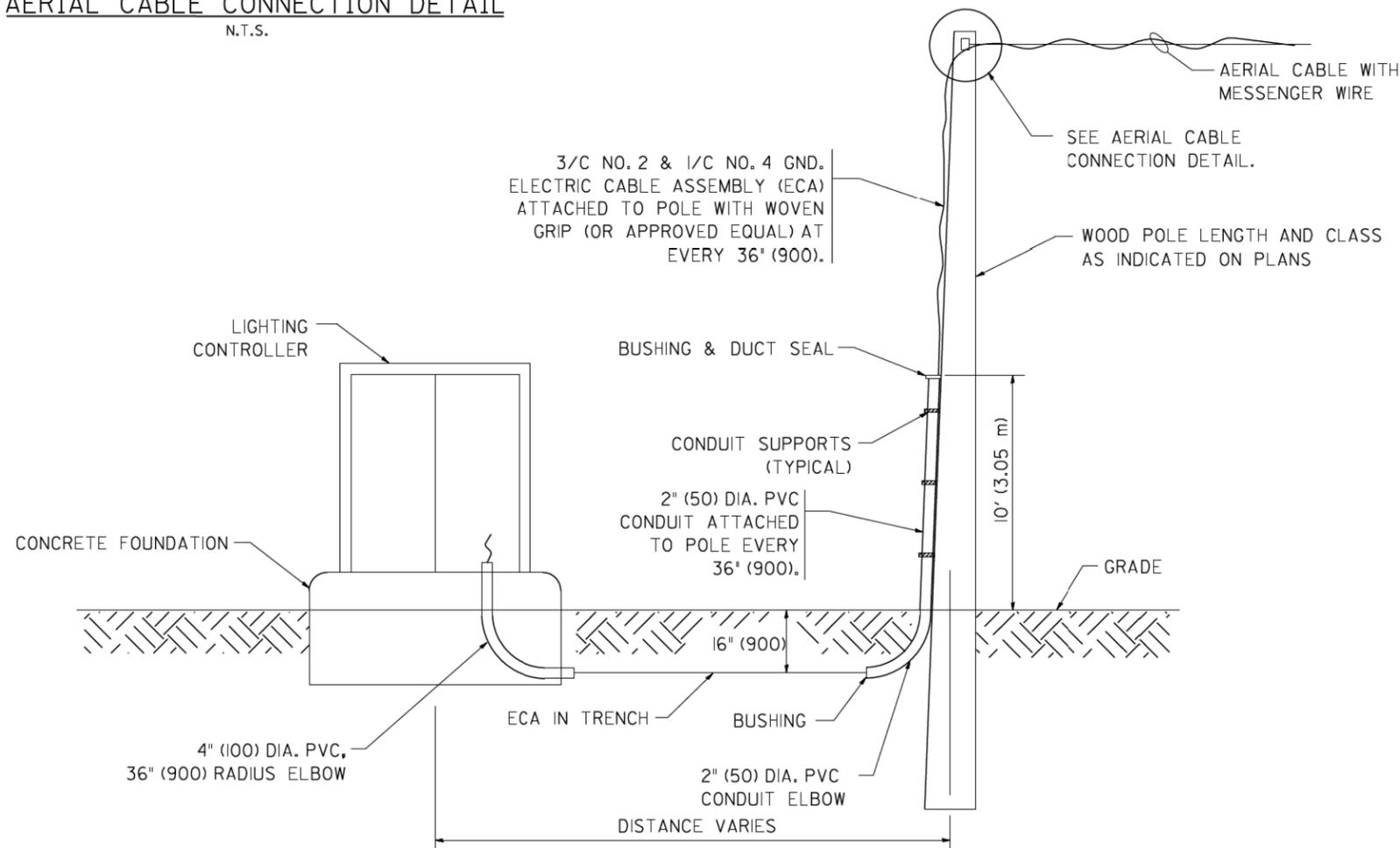
**AERIAL CABLE CONNECTION DETAIL**  
N.T.S.



**AERIAL CABLE ATTACHED TO STRUCTURE**  
NOT TO SCALE

**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



**WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL**  
N.T.S.

FILE NAME = W:\diststd\22x34\be801.dgn	USER NAME = gaglianob	DESIGNED - DRAWN -	REVISED - 08-08-03 REVISED - REVISED - REVISED -
PLOT SCALE = 50.000' / IN.	CHECKED -	DATE -	
PLOT DATE = 1/4/2008			

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY AERIAL CABLE INSTALLATION**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTES 2320	SECTION DIHSRR2016-04	COUNTY WILL	TOTAL SHEETS 35	SHEET NO. 35
<b>BE-801</b>		CONTRACT NO. 62B35		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				