03-03-2017 LETTING ITEM 103

FOR INDEX OF SHEETS, SEE SHEET NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3336344	116TS&N-2	LAKE	X102	1
	ILLINOIS	CONTRACT NO. 60W92		

X 102 + 1 = 103 total pages

PROJECT IS LOCATED IN:
THE VILLAGE OF GRAYSLAKE
THE VILLAGE OF HAINESVILLE
THE VILLAGE OF LIBERTYVILLE

TRAFFIC DATA

ROUTE SEGMENT	SPEED	ADT(YEAR)
IL 120(BELVIDERE RD)		
IL 134(MAIN ST) TO HAINESVILLE RD	40 MPH	16,400(2015)
HAINESVILLE RD TO ALLEGHANY RD	40 MPH	20,100(2015)
ALLEGHANY RD TO S. LAKE ST	40 MPH	18,000(2015)
S. LAKE ST TO S. SEYMOUR AVE	40,35 MPH	13,500(2015)
S. SEYMOUR AVE TO US 45	35 MPH	17,600(2013)
US 45		
IL 120(BELVIDERE RD) TO WINCHESTER RD	45 MPH	26,700(2015)

GEORGE M. ZIEGLER 062-045853 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

August 4, 2016

GEORGE M. ZIEGLER
ILLINOIS REGISTRATION No. 062-045853
EXPIRATION DATE: 11/30/17
APPLIES TO SHEETS: 29, 43-86

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500
PROFESSIONAL DESIGN FIRM No.: 184-001742
EXPIRATION DATE: 04-30-2017

100' 10' 200' 20' 300' 30' — 1" = 100' / 10'
50' 100' — 1" = 50'
50' 100' — 1" = 40'
50' 100' — 1" = 30'
50' 100' — 1" = 20'

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

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

PROJECT ENGINEER: DAN WILGREEN (847) 705-4240
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 60W92

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

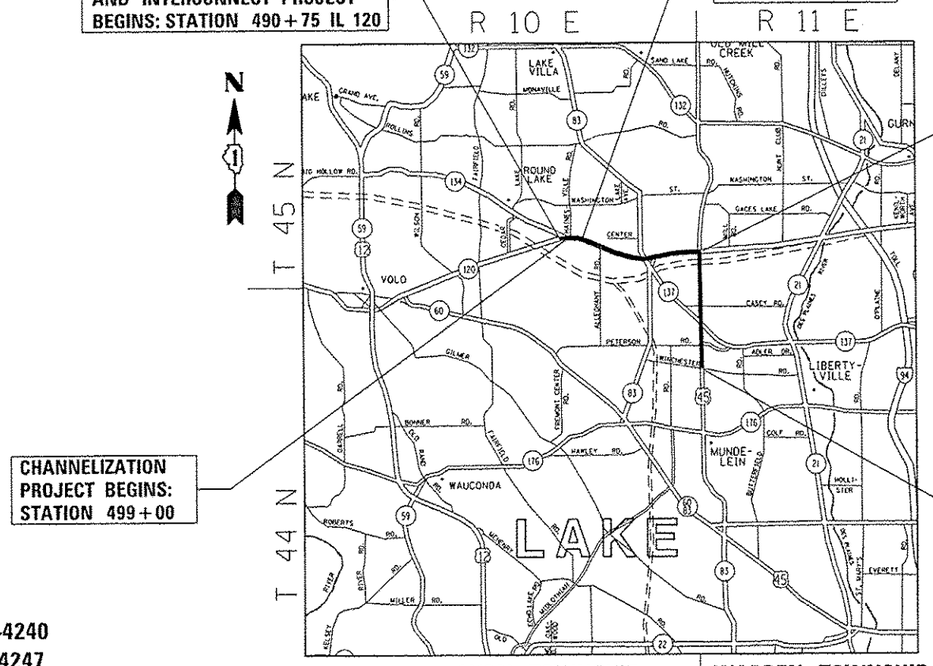
PROPOSED
HIGHWAY PLANS

FAP 333 /IL 120 (BELVIDERE ROAD)
IL 134 (MAIN STREET) TO US 45
FAP 344 /US 45
IL 120 (BELVIDERE ROAD) TO WINCHESTER ROAD
SECTION 116TS&N-2
TRAFFIC SIGNAL MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
PROJECT: ACCM-000V(100)
LAKE COUNTY

C-91-401-13

TRAFFIC SIGNAL MODERNIZATION AND INTERCONNECT PROJECT BEGINS: STATION 490+75 IL 120

CHANNELIZATION PROJECT ENDS: STATION 507+08



CHANNELIZATION PROJECT BEGINS: STATION 499+00

STATION 677+85 IL 120 = STATION 1020+25 US 45

TRAFFIC SIGNAL MODERNIZATION AND INTERCONNECT PROJECT ENDS: STATION 871+00 US 45

GROSS AND NET LENGTH = 33635 FT. = 6.4 MILES

D-91-401-13

LOCATION OF SECTION INDICATED THUS: —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED October 18, 2016
REGIONAL ENGINEER

Jan 27, 2017
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 31, 2017
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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19-20	ALIGNMENT, TIES, AND BENCHMARKS
21-22	EXISTING AND PROPOSED ROADWAY PLANS AND PROFILE IL ROUTE 120 (BELVIDERE ROAD) AND HAINESVILLE ROAD
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STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
424001-09	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424021-03	DEPRESSED CORNER FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
601001-05	PIPE UNDERDRAINS
602301-04	INLET - TYPE A
602401-03	MANHOLE TYPE A
602601-04	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-04	FRAME AND LIDS, TYPE 1
604036-03	GRATE TYPE 8
604091-03	FRAME AND GRATE TYPE 24
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-RD MOVING OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-RD MOVING OPERATIONS, MULTILANE, 15'(4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-07	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-06	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
728001-01	TELESCOPING STEEL SIGN SUPPORT
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-06	STEEL MAST ARM ASSEMBLY AND POLE 16' THOUGH 55'
877002-03	STEEL MAST ARM ASSEMBLY AND POLE 56' THOUGH 75'
877011-08	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THOUGH 55'
878001-10	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGES OF HAINESVILLE, GRAYSLAKE, LIBERTYVILLE, AND LAKE COUNTY DEPARTMENT OF TRANSPORTATION.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
4. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
5. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. OFFSETS TO STORM STRUCTURES ARE TO CENTER OF STRUCTURE. TOP OF FRAME ("RIM") ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF EACH STRUCTURE. FRAMES ON ALL NEW STRUCTURES SHALL BE ADJUSTED TO THE FINAL ELEVATIONS OF THE AREAS IN WHICH THEY ARE LOCATED, AS PART OF THE STRUCTURE COST. TOP OF FRAME ("RIM") ELEVATIONS SHOWN ON THE PLANS FOR STRUCTURES LOCATED IN THE CURB LINE ARE GIVEN AT THE EDGE OF PAVEMENT.
7. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
9. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470, AND LAKE COUNTY DIVISION OF TRANSPORTATION (847) 377-7400 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
10. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT WALTER.CZARNY@ILLINOIS.GOV, A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
11. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
12. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
13. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.
14. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
15. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 45 MPH.WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H).
16. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
17. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
18. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
19. ALL SIDEWALK RAMPS WITHIN THE LIMITS OF THE PROJECT SHALL CONFORM TO CURRENT ADA REQUIREMENTS AND APPLICABLE STATE HIGHWAY STANDARDS OR AS DETERMINED BY THE ENGINEER. ANY SIDE CURB REQUIRED SHALL BE PAID FOR AS CONCRETE CURB, TYPE B.
20. THE RESIDENT ENGINEER SHALL CONTACT RICK WILLMAN, TRANSPORTATION ENGINEER OF PACE SUBURBAN BUS, AT (847)228-3584 OR RICHARD.WILLMAN@PACEBUS.COM, A MINIMUM OF TWO (2) WEEKS PRIOR TO CONSTRUCTION TO COORDINATE CONSTRUCTION ACTIVITIES.

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IL 120 @ IL 134 0021 80% FEDERAL 20% STATE	IL 120 @ HAINESVILLE RD 0005 80% FEDERAL 20% STATE	IL 120 @ HAINESVILLE RD 0021 80% FEDERAL 20% HAINESVILLE	IL 120 @ HAINESVILLE RD 0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	IL 120 @ HAINESVILLE RD 0021 80% FEDERAL 20% HAINESVILLE	IL 120 @ ALLEGHANY RD 0021 80% FEDERAL 20% STATE	IL 120 @ LAKE ST 0021 80% FEDERAL 20% STATE	IL 120 @ IL 83 0021 80% FEDERAL 20% STATE	IL 120 @ ATKINSON RD 0021 80% FEDERAL 20% STATE	IL 120 @ US 45 0021 80% FEDERAL 20% STATE	INTERCONNECT 0021 80% FEDERAL 20% STATE	EVP 0021 100% COUNTY	LCDOT PASSAGE NETWORK 0021 80% FEDERAL 20% COUNTY	PACE BUS PAD 0021 100% PACE
20101100	TREE TRUNK PROTECTION	EACH	1		1												
20101200	TREE ROOT PRUNING	EACH	1		1												
20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	1		1												
20200100	EARTH EXCAVATION	CU YD	391		390	1											
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	665		499.8	165.2											
20400800	FURNISHED EXCAVATION	CU YD	255		111.3	143.7											
20800150	TRENCH BACKFILL	CU YD	53		51.9	1.1											
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	280		201.8	78.2											
25000210	SEEDING, CLASS 2A	ACRE	0.37		0.26	0.11											
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	35		25.1	9.9											
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	35		25.1	9.9											
25100630	EROSION CONTROL BLANKET	SQ YD	1726		1243	483											
28000305	TEMPORARY DITCH CHECKS	FOOT	48		6	42											
28000400	PERIMETER EROSION BARRIER	FOOT	1235		735	500											
28000510	INLET FILTERS	EACH	10		10												

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3338344	116TS&N-2	LAKE	102	3

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IL 120 @ IL 134 0021 80% FEDERAL 20% STATE	IL 120 @ HAINESVILLE RD 0005 80% FEDERAL 20% STATE	IL 120 @ HAINESVILLE RD 0021 80% FEDERAL 20% HAINESVILLE	IL 120 @ HAINESVILLE RD 0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	IL 120 @ HAINESVILLE RD 0021 80% FEDERAL 20% HAINESVILLE	IL 120 @ ALLEGHANY RD 0021 80% FEDERAL 20% STATE	IL 120 @ LAKE ST 0021 80% FEDERAL 20% STATE	IL 120 @ IL 83 0021 80% FEDERAL 20% STATE	IL 120 @ ATKINSON RD 0021 80% FEDERAL 20% STATE	IL 120 @ US 45 0021 80% FEDERAL 20% STATE	INTERCONNECT 0021 80% FEDERAL 20% STATE	EVP 0021 100% COUNTY	LCDOT PASSAGE NETWORK 0021 80% FEDERAL 20% COUNTY	PACE BUS PAD 0021 100% PACE
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	937		937												
35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	522		256			266									
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	42		42												
35501315	HOT-MIX ASPHALT BASE COURSE, 7 3/4"	SQ YD	625		625												
35600707	HOT-MIX ASPHALT BASE COURSE WIDENING, 7 3/4"	SQ YD	44		44												
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1174		576			598									
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	3476		3476												
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	7		7												
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	216		216												
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	77		77												
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	64		34			30									
40603565	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70	TON	504		504												
42001300	PROTECTIVE COAT	SQ YD	1141		825	303		13									
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	321		321												

14 * SPECIALTY ITEMS

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	4

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES				IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	4632		1448	2722		112									350
42400800	DETECTABLE WARNINGS	SQ FT	137		97			40									
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	4465		4465												
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	543		543												
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	30		30												
44000600	SIDEWALK REMOVAL	SQ FT	1400		1400												
44004250	PAVED SHOULDER REMOVAL	SQ YD	179		179												
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SQ YD	74		74												
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SQ YD	74		74												
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SQ YD	77		77												
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	700		700												
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	28		28												
50105220	PIPE CULVERT REMOVAL	FOOT	60		60												
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2			2											
54247130	GRATING FOR CONCRETE FLARED END SECTION 24"	EACH	2			2											

* SPECIALTY ITEMS

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	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338&344	116TS&N-2	LAKE	102	5

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
CODE NO	ITEM	UNIT		0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	18		18												
550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	159		159												
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	20			20											
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	7		7												
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	150		150												
60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	710		710												
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		1												
60219000	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	3		3												
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	3		3												
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	4		4												
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	4		4												
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	2		2												
60600605	CONCRETE CURB, TYPE B	FOOT	112		92	20											
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	292		292												
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	702		702												

19 * SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	6
		CONTRACT NO. 60W92		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

Rev

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
				0021	0005	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% HAINESVILLE	80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	80% FEDERAL 20% HAINESVILLE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	100% COUNTY	80% FEDERAL 20% COUNTY	100% PACE
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	393	15.5	373									4.5			
* 66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	0.04	0.95									0.01			
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	9	4	2									3			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9		9												
67100100	MOBILIZATION	LSUM	1		1												
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	LSUM	1										0.3	0.7			
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												
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2272		2272												
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	757		757												

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* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	7

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

Rev

SUMMARY OF QUANTITIES				IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	219		219												
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3115		3115												
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	113		113												
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1244		1244												
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	136		136												
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	143		143												
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	1167		1167												
72000100	SIGN PANEL - TYPE 1	SQ FT	54	15	39												
72000200	SIGN PANEL - TYPE 2	SQ FT	80	30			50										
* 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	3		3												
* 72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	3		3												
* 72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	3		3												
* 72400600	RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	3		3												
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	81		81												
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	219		219												

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338&344	116TS&N-2	LAKE	102	8

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

Rev

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
				0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3115		3115												
* 78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	113		113												
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1244		1244												
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	136		136												
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	112		112												
* 78008270	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 24"	FOOT	31		31												
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	83		83												
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	72		72												
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	17621	757			617							16247			
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	88	33			55										
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	115	42			73										
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	617	285			332										
81400100	HANDHOLE	EACH	10	1			3							6			
81400200	HEAVY-DUTY HANDHOLE	EACH	35	7			5							23			

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* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	9

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES				IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
81400300	DOUBLE HANDHOLE	EACH	2	1			1										
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	11						1	1	1	1	1	4		2	
86400100	TRANSCEIVER - FIBER OPTIC	EACH	2	1			1										
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	19578											19578			
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	450				450										
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3070	610			1062		274	149	99	457	419				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2011	1155			856										
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2718	1338			1380										
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3098	1530			1568										
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	221	138			83										
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1151	537			614										
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1				1										
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3	2			1										

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	10
		CONTRACT NO. 60W92		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				0021	0005	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% HAINESVILLE	80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	80% FEDERAL 20% HAINESVILLE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	100% COUNTY	80% FEDERAL 20% COUNTY	100% PACE
				CONSTRUCTION TYPE CODE			0021										
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	2	1			1										
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1	1													
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1				1										
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1				1										
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1	1													
87702890	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT	EACH	1	1													
87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT	EACH	1				1										
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24	12			12										
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	8	4			4										
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20	10			10										
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	80	39			41										
87900200	DRILL EXISTING HANDHOLE	EACH	5											5			
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9	5			4										
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3	2			1										
*	SPECIALTY ITEMS																

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3338,344	116TS&N-2	LAKE	102	11
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES				IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
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88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION,	EACH	2	2													
	BRACKET MOUNTED																
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION,	EACH	2	2													
	MAST ARM MOUNTED																
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION,	EACH	6	2			4										
	BRACKET MOUNTED																
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION,	EACH	6	2			4										
	MAST-ARM MOUNTED																
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE,	EACH	4				4										
	BRACKET MOUNTED WITH COUNTDOWN TIMER																
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED,	EACH	17	9			8										
	FORMED PLASTIC																
88500100	INDUCTIVE LOOP DETECTOR	EACH	14	7			7										
88600100	DETECTOR LOOP, TYPE I	FOOT	1600	878			722										
88700200	LIGHT DETECTOR	EACH	5												5		
88700300	LIGHT DETECTOR AMPLIFIER	EACH	2												2		
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4				4										
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	1			1										

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	12

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES				IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	2						1		1						
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	1			1										
89502380	REMOVE EXISTING HANDHOLE	EACH	18	9			9										
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	15	7			8										
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	775												775		
X0325462	MEDIA CONVERTER	EACH	1											1			
X0327036	BIKE PATH REMOVAL	SQ YD	60		60												
X1400081	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	2	1			1										
X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	2	1			1										
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	7		7												
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1		1												
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	2		2												
* SPECIALTY	ITEMS																

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3336344	116TS&N-2	LAKE	102	13
		CONTRACT NO. 60W92		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

Rev

SUMMARY OF QUANTITIES				IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
X6061311	CONCRETE MEDIAN SURFACE, 5 INCH	SQ FT	200		200												
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	2689		2689												
X8100105	CONDUIT SPLICE	EACH	2											2			
X8210402	LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	1									1					
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	2	1			1										
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	19734											19734			
X8730571	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	1818	184			236		274	149	99	457	419				
X8730800	ELECTRIC CABLE IN CONDUIT, VIDEO, NO.20 4 C	FOOT	1818	184			236		274	149	99	457	419				
X1400215	REMOTE CONTROLLED VIDEO SYSTEM	EACH	7	1			1		1	1	1	1	1				
X1400216	LAYER II (DATALINK) SWITCH	EACH	6	1			1		1	1	1	1					
X1400217	TERMINATE FIBER IN CABINET	EACH	6													6	
X1400218	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	9881											9881			
X1400219	SPLICE FIBER IN CABINET	EACH	42													42	
X1400220	VIDEO ENCODER	EACH	7	1			1		1	1	1	1	1				
X1400221	UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	4						1	1	1	1					
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	525				142		209		99		75				

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3338344	116TS&N-2	LAKE	102	14
		CONTRACT NO. 60W92		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

REV

SUMMARY OF QUANTITIES				IL 120 @ IL 134	IL 120 @ HAINESVILLE RD				IL 120 @ ALLEGHANY RD	IL 120 @ LAKE ST	IL 120 @ IL 83	IL 120 @ ATKINSON RD	IL 120 @ US 45	INTERCONNECT	EVP	LCDOT PASSAGE NETWORK	PACE BUS PAD
				CONSTRUCTION TYPE CODE													
CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	0021 80% FEDERAL 20% STATE	0005 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 10% STATE 5% COUNTY 5% HAINESVILLE	0021 80% FEDERAL 20% HAINESVILLE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 80% FEDERAL 20% STATE	0021 100% COUNTY	0021 80% FEDERAL 20% COUNTY	0021 100% PACE
X1400222	BLUETOOTH DETECTOR	EACH	4				1		1		1		1				
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	62		62												
Z0010688	CAMERA MOUNTING ASSEMBLY	EACH	2						1				1				
Z0013798	CONSTRUCTION LAYOUT	LSUM	1		1												
△ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	1		1												
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4		51.4												
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1											1			
Z0056612	STORM SEWER (WATER MAIN REQUIREMENTS) 18 INCH	FOOT	75		75												
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2	1			1										
Z0076600	TRAINEES	HOUR	500	500													
Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500													

△ NON-PARTICIPATING (100% STATE)
* SPECIALTY ITEMS
∅ 0042

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DATE - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

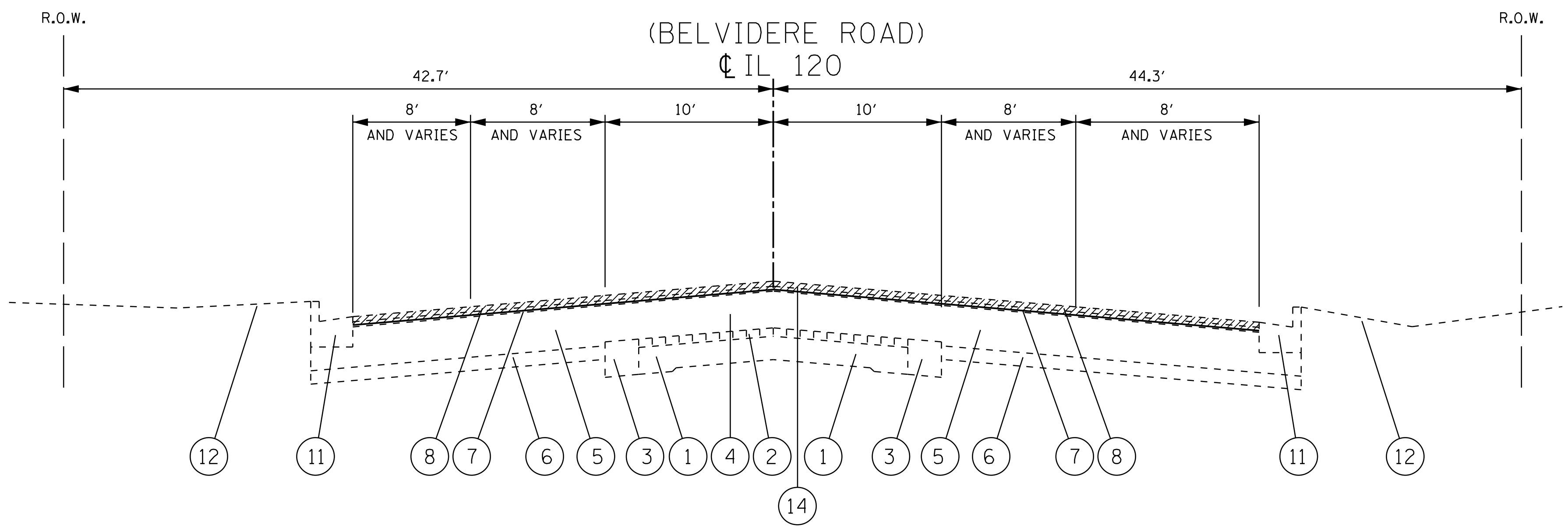
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

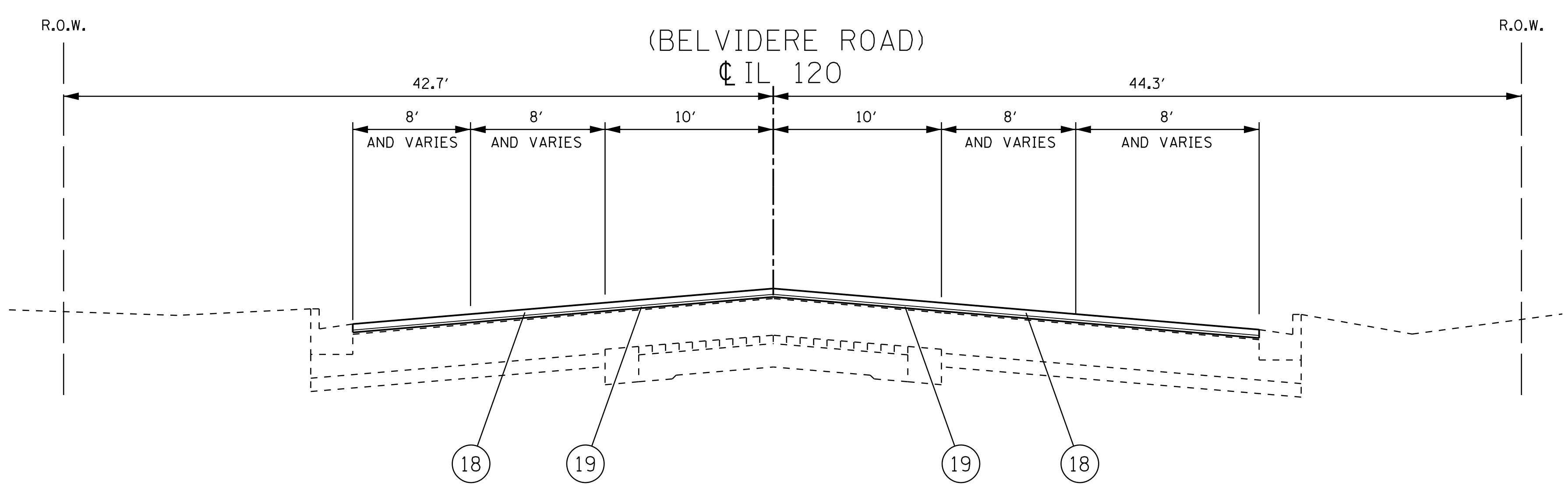
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	15

CONTRACT NO. 60W92

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



EXISTING TYPICAL ROADWAY SECTION
STA. 499+00 TO STA. 500+00



PROPOSED TYPICAL ROADWAY SECTION
STA. 499+00 TO STA. 500+00

LEGEND:

1. EXISTING PCC PAVEMENT, 7″-8″±
2. EXISTING PAVING BRICK, 2½″±
3. EXISTING PCC BASE WIDENING, 10½″±
4. EXISTING HMA PAVEMENT, VARIES 4⅝″-6⅞″±
5. EXISTING HMA BASE COURSE, 12″±
6. EXISTING SUB-BASE GRANULAR MATERIAL TYPE B, 4″±
7. EXISTING HMA BINDER COURSE, 1½″±
8. EXISTING HMA SURFACE COURSE, 1½″±
9. EXISTING HMA SHOULDER, 8″±
10. EXISTING AGGREGATE SHOULDER, 8″
11. EXISTING COMBINATION CONCRETE CURB AND GUTTER
12. EXISTING TOPSOIL AND GRASS
13. EXISTING PCC SIDEWALK
14. PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2½″
15. PROPOSED PAVED SHOULDER REMOVAL
16. PROPOSED AGGREGATE SHOULDER REMOVAL(PAID FOR AS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL")
17. PROPOSED SIDEWALK REMOVAL
18. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70 (IL 9.5MM), 1¾″
19. PROPOSED LEVELING BINDER (MACHINE METHOD), N70, ¾″
20. FOR WITDHS 6 FEET OR LESS, USE PROPOSED HOT-MIX ASPHALT BASE COURSE WIDENING, 7¾″

    FOR WITDHS GREATER THAN 6 FEET, USE PROPOSED HOT-MIX ASPHALT BASE COURSE, 7¾″
21. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12″
22. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
23. PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
24. PROPOSED TOPSOIL, SEED, FERTILIZER AND EROSION CONTROL BLANKET
25. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5MM), 2″
26. PROPOSED AGGREGATE BASE COURSE, TYPE B, 6″
27. PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5″

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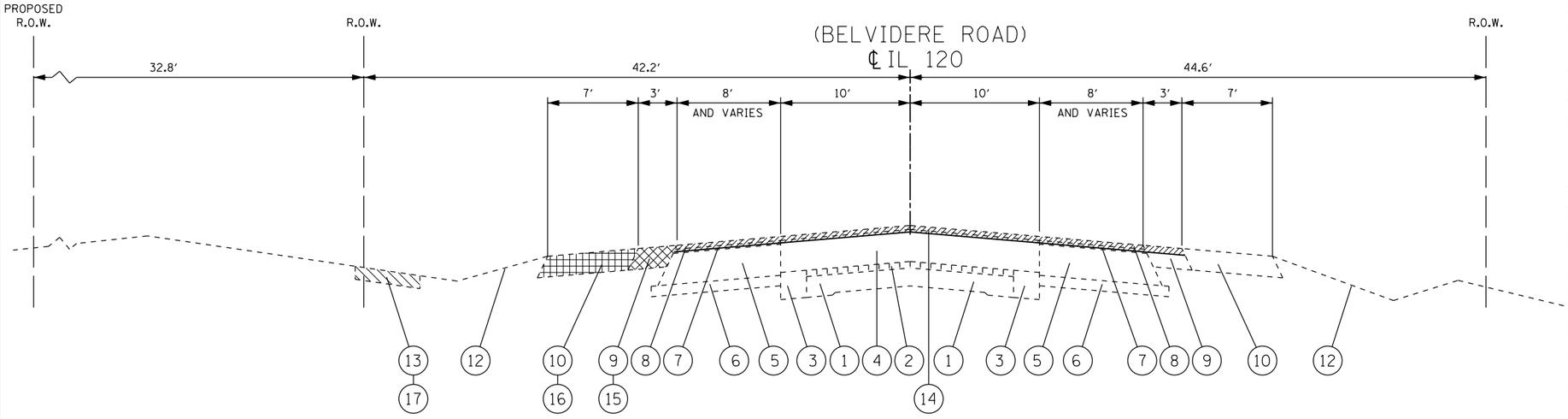
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

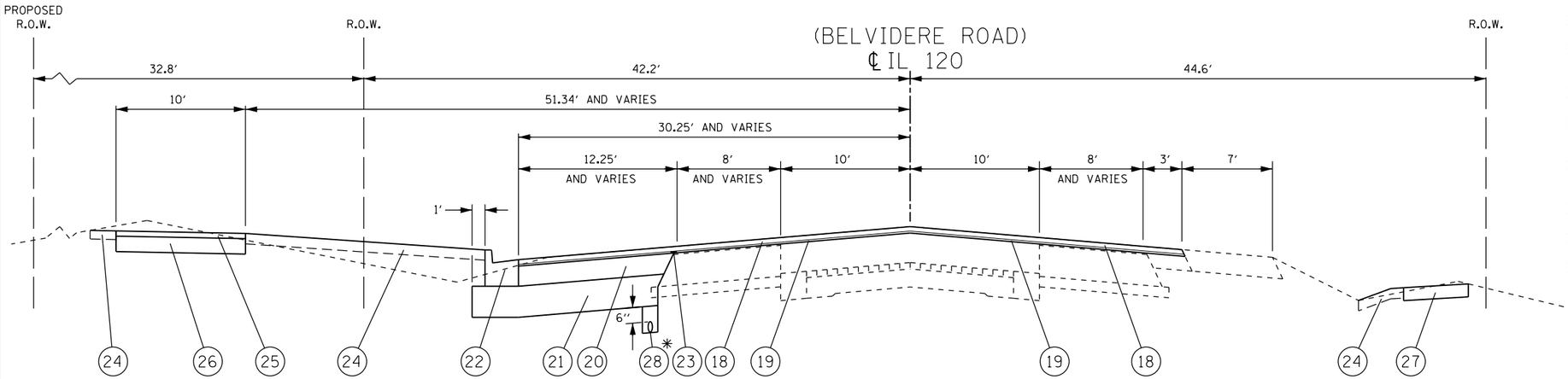
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
EXISTING AND PROPOSED TYPICAL SECTIONS

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	16
		CONTRACT NO. 60W92		
	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL ROADWAY SECTION
STA. 500+00 TO STA. 507+08



PROPOSED TYPICAL ROADWAY SECTION
STA. 500+00 TO STA. 507+08

LEGEND:

1. EXISTING PCC PAVEMENT, 7″-8″±
2. EXISTING PAVING BRICK, 2½″±
3. EXISTING PCC BASE WIDENING, 10½″±
4. EXISTING HMA PAVEMENT, VARIES 4⅝″-6⅞″±
5. EXISTING HMA BASE COURSE, 12″±
6. EXISTING SUB-BASE GRANULAR MATERIAL TYPE B, 4″±
7. EXISTING HMA BINDER COURSE, 1½″±
8. EXISTING HMA SURFACE COURSE, 1½″±
9. EXISTING HMA SHOULDER, 8″±
10. EXISTING AGGREGATE SHOULDER, 8″
11. EXISTING COMBINATION CONCRETE CURB AND GUTTER
12. EXISTING TOPSOIL AND GRASS
13. EXISTING PCC SIDEWALK
14. PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2½″
15. PROPOSED PAVED SHOULDER REMOVAL
16. PROPOSED AGGREGATE SHOULDER REMOVAL(PAID FOR AS ″REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL″)
17. PROPOSED SIDEWALK REMOVAL
18. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ″E″, N70 (IL 9.5MM), 1¾″
19. PROPOSED LEVELING BINDER (MACHINE METHOD), N70, ¾″
20. FOR WITDHS 6 FEET OR LESS, USE PROPOSED HOT-MIX ASPHALT BASE COURSE WIDENING, 7¾″

    FOR WITDHS GREATER THAN 6 FEET, USE PROPOSED HOT-MIX ASPHALT BASE COURSE, 7¾″
21. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12″
22. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
23. PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
24. PROPOSED TOPSOIL, SEED, FERTILIZER AND EROSION CONTROL BLANKET
25. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX ″D″, N50 (IL 9.5MM), 2″
26. PROPOSED AGGREGATE BASE COURSE, TYPE B, 6″
27. PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5″
28. PROPOSED PIPE UNDERDRAINS, TYPE 2, 4″

* PIPE UNDERDRAINS TYPE 2 SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE ″STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION″ LATEST VERSION, AND STANDARD 601001 - PIPE UNDERDARINS. TOP OF PIPE UNDERDRAINS SHALL BE PLACED 6″ MIN. BELOW THE SUBGRADE OR UNDERCUT. CONNECTIONS OF THE PIPE UNDERDRAINS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
EXISTING AND PROPOSED TYPICAL SECTIONS

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	17
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

1	2	3	4	5	6	7
IL 120 (BELVIDERE ROAD) AT HAINESVILLE ROAD	EARTH EXCAVATION (CU YD)	EMBANKMENT (CU YD)	ADJUSTMENT FOR SHRINKAGE (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)	UNSUITABLE MATERIAL (CU YD)	TOPSOIL EXCAVATION AND PLACEMENT (CU YD)
IL 120 (BELVIDERE ROAD)						
STA. 500+73 LT TO STA. 507+00 LT	364	406.7	310	-96.7	432	170
STA. 500+28 RT TO STA. 505+75 RT	1	161.7	0.85	-160.85	185.5	86
HAINESVILLE ROAD						
STA. 200+33 LT TO STA. 200+57 LT	1	1.3	0.85	-0.45	16.0	3
STA. 200+15 RT TO STA. 201+08 RT	25	18.3	21.3	3.0	31.5	21
TOTAL	391	588	333	-255	665	280

COLUMN 1: LOCATION FROM PLANS
COLUMN 2: CUT QUANTITIES FROM CROSS SECTIONS, WHICH DOES NOT INCLUDE UNSUITABLE MATERIAL
COLUMN 3: QUANTITIES FROM CROSS SECTIONS (FILL)
COLUMN 4: EARTH EXCAVATION THAT IS TO BE USED AS FILL FILL MATERIAL IN THE EMBANKMENT, SHRINKAGE FACTOR IS 15%
COLUMN 5: COLUMN 4 - COLUMN 3
POSITIVE QUANTITY = EXTRA EXCAVATION
NEGATIVE QUANTITY = FURNISHED EXCAVATION NEEDED
COLUMN 6: CUT MATERIAL THAT IS DETERMINED TO BE EITHER UNSTABLE OR UNSUITABLE FOR USE IN EMBANKMENT
COLUMN 7: TOPSOIL EXCAVATION AND PLACEMENT = AREA OF SOD AND TOPSOIL

NOTES:

1. TOPSOIL SHALL BE EXCAVATED TO A DEPTH OF 12" THROUGHOUT THE PROJECT LIMITS.
2. EXCAVATED TOPSOIL REQUIRED AT LOCATIONS OF NEW SEEDING AREAS AS SHOWN ON THE LANDSCAPING PLAN SHALL BE PLACED AT A DEPTH OF 6" AND PAID FOR AS TOPSOIL EXCAVATION AND PLACEMENT.
3. EXCAVATED TOPSOIL NOT REQUIRED ON THE PROJECT SHALL BE CONSIDERED UNSUITABLE MATERIAL AND PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGE-MENT PROGRAM (QMP)
MIXTURE TYPE	AIR VOIDS(%) @ $N_{DES.}$	
PAVEMENT RESURFACING		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70 (IL 9.5 mm), 1¾"	4% @ 70 GYR	QC/QA
LEVELING BINDER (MACHINE METHOD), N70, (IL 9.5 mm), ¾"	4% @ 70 GYR	QC/QA
PATCHING		
CLASS D PATCH (HMA BINDER IL-19 mm), 13"	4% @ 70 GYR	QC/QA
DRIVEWAYS		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 2"	4% @ 50 GYR	QC/QA
HMA BASE COURSE (HMA BINDER IL-19 mm), PE - 6"	4% @ 50 GYR	QC/QA
PAVEMENT WIDENING		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70 (IL 9.5 mm), 1¾"	4% @ 70 GYR	QC/QA
LEVELING BINDER (MACHINE METHOD), N70, (IL 9.5 mm), ¾"	4% @ 70 GYR	QC/QA
HMA BASE COURSE (HMA BINDER IL-19 mm), 7¾" HMA BASE COURSE WIDENING (HMA BINDER IL-19 mm), 7¾"	4% @ 70 GYR 4% @ 70 GYR	QC/QA QC/QA
HOT MIX ASPHALT MULTI-USE PATH		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 2"	4% @ 50 GYR	QC/QA
QMP DESIGNATION: QUALITY CONTROL FOR PERFORMANCE(QCP) QUALITY CONTROL/QUALITY ASSURANCE(QA/QC)		

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE

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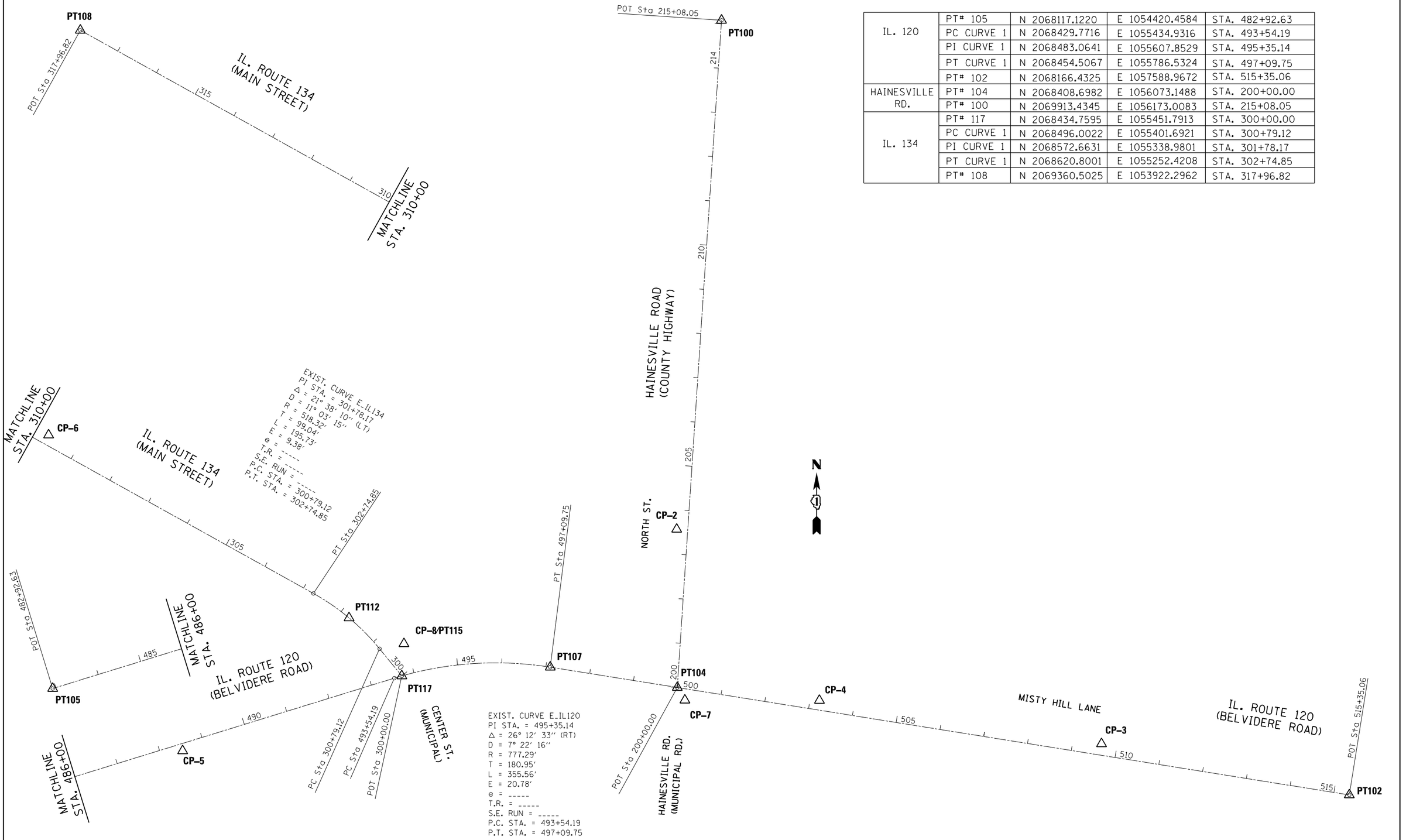
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SCHEDULE OF QUANTITIES (EARTHWORK) AND HMA MIXTURE TABLE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	18
		CONTRACT NO. 60W92		
	ILLINOIS	FED. AID PROJECT		



IL. 120	PT# 105	N 2068117.1220	E 1054420.4584	STA. 482+92.63
	PC CURVE 1	N 2068429.7716	E 1055434.9316	STA. 493+54.19
	PI CURVE 1	N 2068483.0641	E 1055607.8529	STA. 495+35.14
	PT CURVE 1	N 2068454.5067	E 1055786.5324	STA. 497+09.75
	PT# 102	N 2068166.4325	E 1057588.9672	STA. 515+35.06
HAINESVILLE RD.	PT# 104	N 2068408.6982	E 1056073.1488	STA. 200+00.00
	PT# 100	N 2069913.4345	E 1056173.0083	STA. 215+08.05
IL. 134	PT# 117	N 2068434.7595	E 1055451.7913	STA. 300+00.00
	PC CURVE 1	N 2068496.0022	E 1055401.6921	STA. 300+79.12
	PI CURVE 1	N 2068572.6631	E 1055338.9801	STA. 301+78.17
	PT CURVE 1	N 2068620.8001	E 1055252.4208	STA. 302+74.85
	PT# 108	N 2069360.5025	E 1053922.2962	STA. 317+96.82

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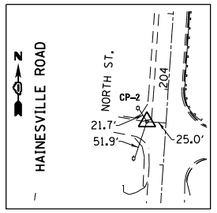
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT
SCALE: 1"=100' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	19
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

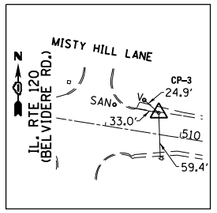
CONTROL POINT #2

SET "MAG" NAIL
STA. 203+55.9
N= 2068765.4593
E= 1056071.8482



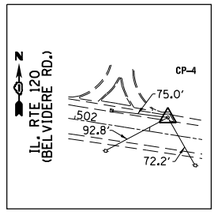
CONTROL POINT #3

SET "MAG" NAIL
STA. 509+64.86
N= 2068281.7622
E= 1057029.9586



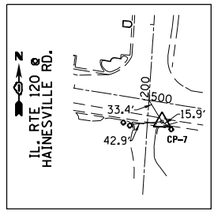
CONTROL POINT #4

SET "MAG" NAIL
STA. 503+21.72
N= 2068378.5275
E= 1056394.1232



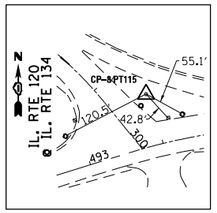
CONTROL POINT #7

SET "MAG" NAIL
STA. 500+21.47
N= 2068379.9880
E= 1056090.3047



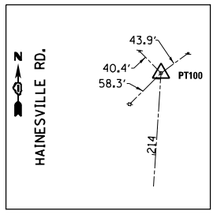
CONTROL POINT #8/PT115

SET "MAG" NAIL
STA. 300+53.17
N= 2068507.3751
E= 1055456.5885



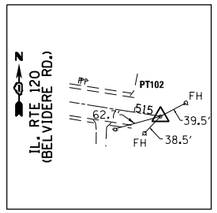
POINT #100

SET "MAG" NAIL
STA. 215+08.05
N= 2069913.4345
E= 1056173.0083



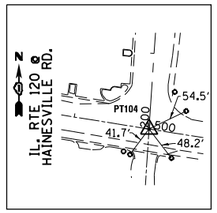
POINT #102

SET "MAG" NAIL
STA. 515+35.06
N= 2068166.4325
E= 1057588.9672



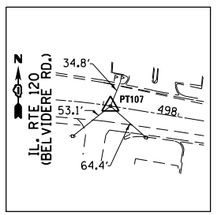
POINT #104

SET "MAG" NAIL
STA. ℄ - ℄
N= 2068408.6982
E= 1056073.1488



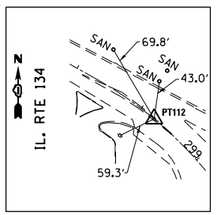
POINT #107

SET "MAG" NAIL
STA. 497+09.75
N= 2068454.5067
E= 1055786.5324



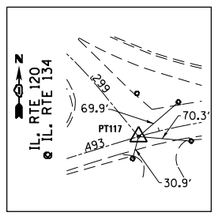
POINT #112

SET "MAG" NAIL
STA. 301+78.17
N= 2068566.2492
E= 1055332.0282



POINT #117

SET "MAG" NAIL
STA. ℄ - ℄
N= 2068434.7595
E= 1055451.7913



BENCHMARK #1

ELEV. 797.37

□-CUT IN NW CORNER CONC. BASE OF PRAIRIE VIEW SCHOOL SIGN
STA. 509+30/56' (R)

BENCHMARK #2

ELEV. 802.27

□-CUT WEST CORNER OF CONC. BASE OF DBL HANDHOLD
STA. 500+53/38' (L)

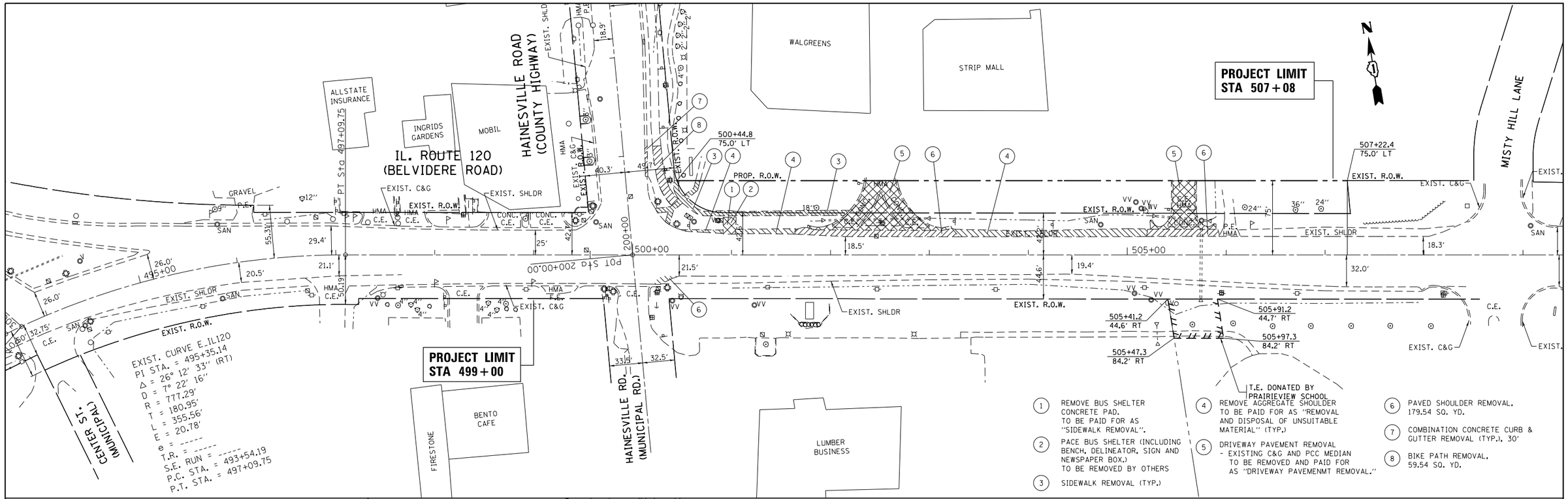
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P170409\Data\GADsheets\P170409-sht-ATB.dgn	USER NAME = PencePL	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 200.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

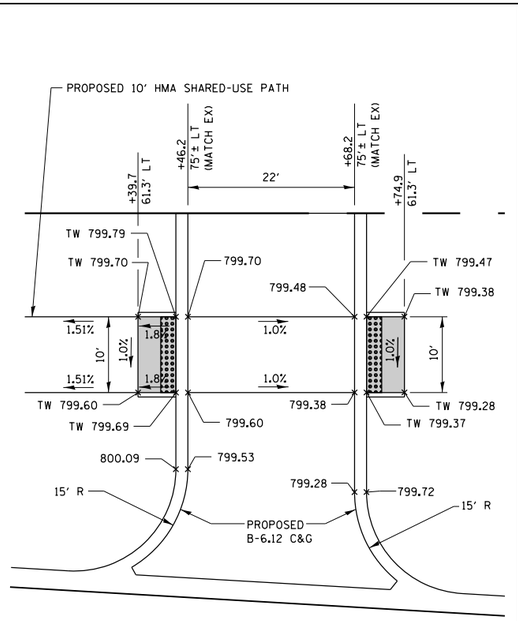
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT

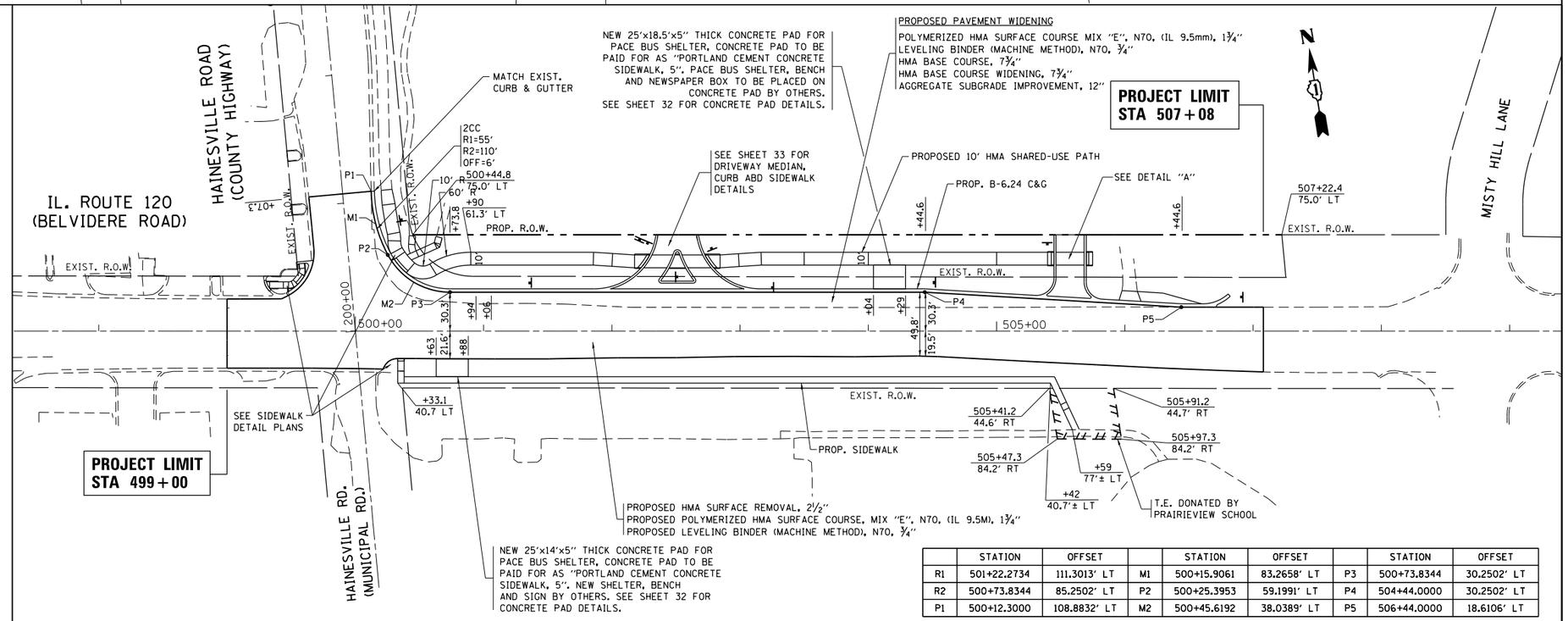
SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	20
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			





DETAIL "A"
SCALE: 1"=10'



	STATION	OFFSET		STATION	OFFSET		STATION	OFFSET
R1	501+22.2734	111.3013' LT	M1	500+15.9061	83.2658' LT	P3	500+73.8344	30.2502' LT
R2	500+73.8344	85.2502' LT	P2	500+25.3953	59.1991' LT	P4	504+44.0000	30.2502' LT
P1	500+12.3000	108.8832' LT	M2	500+45.6192	38.0389' LT	P5	506+44.0000	18.6106' LT

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P170409\Final Data\GADsheets\P170409-sht-plnprf.dgn	USER NAME = PencePL	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT
SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	21
		CONTRACT NO. 60W92		
		ILLINOIS	FED. AID PROJECT	

PLAN

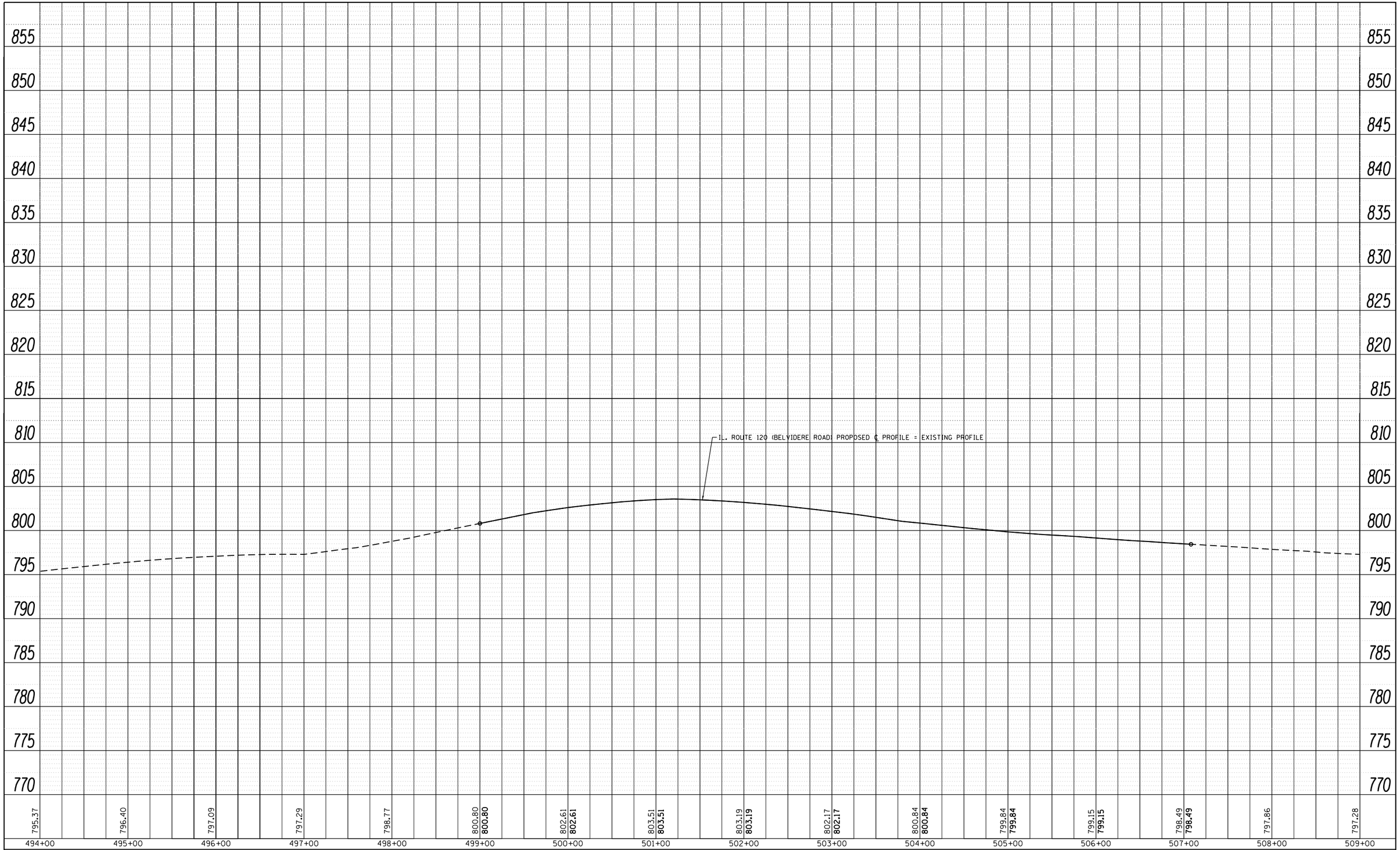
SURVEYED	
PLOTTED	
DRAWN	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
CADD FILE NAME	
NOTE BOOK	
NO.	

BY	DATE

PROFILE

SURVEYED	
PLOTTED	
DRAWN	
CROSS SECTIONS CHECKED	
BM. NOTED	
STRUCTURE NOTATNS CHKD	
NOTE BOOK	
NO.	

BY	DATE



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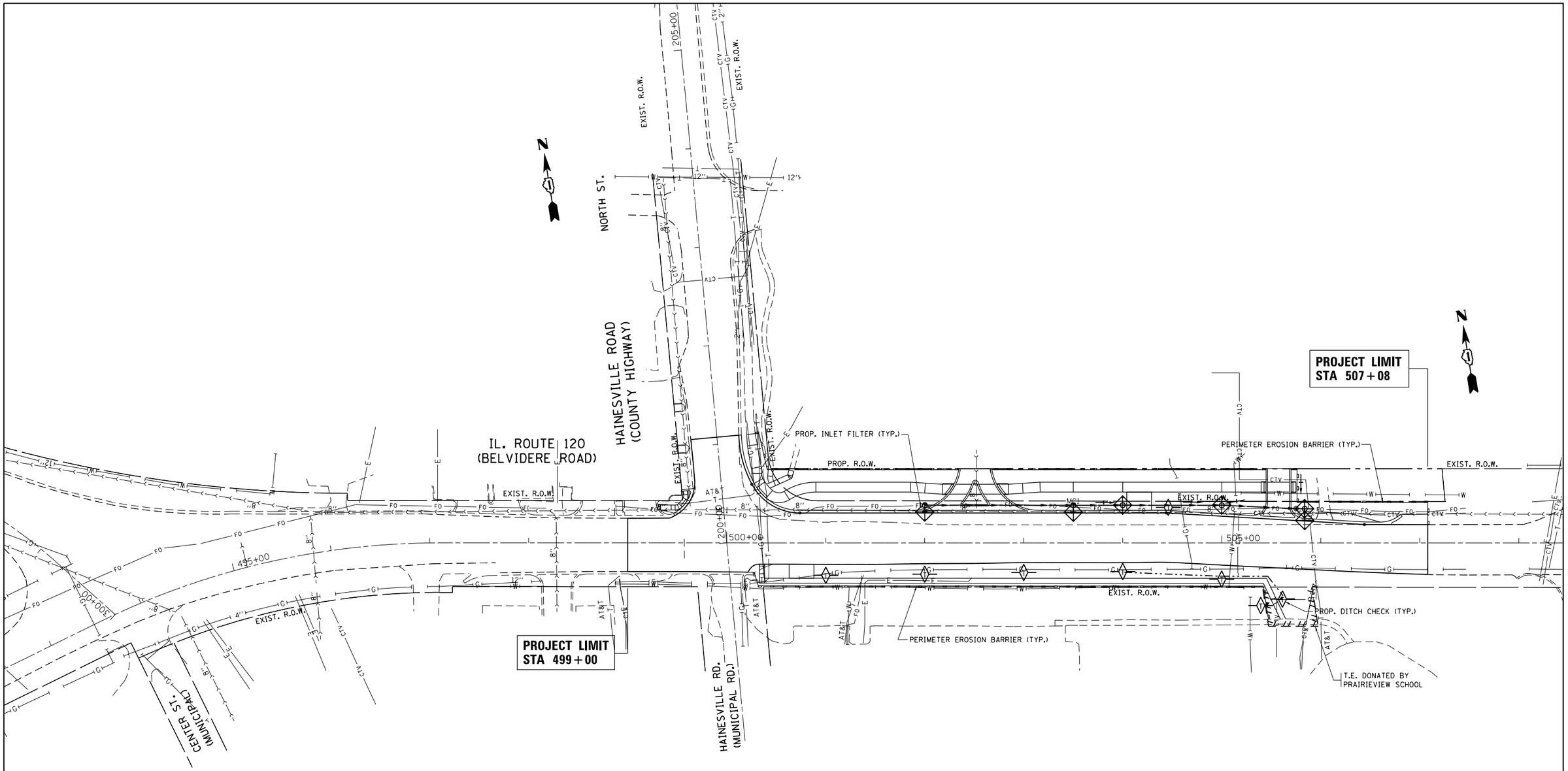
Default	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT

SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	22
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			



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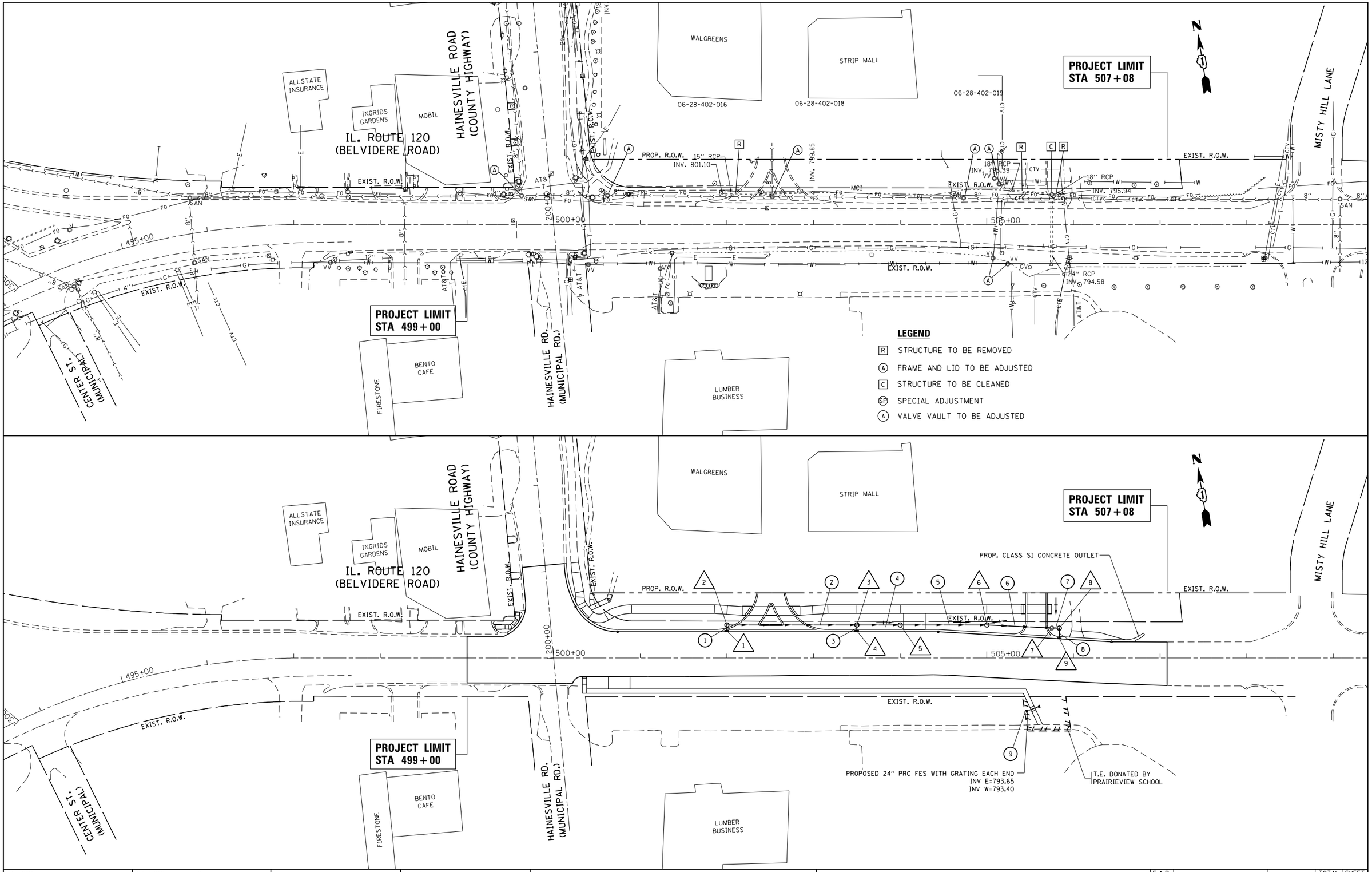
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL PLAN
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT

SCALE: 1"= 50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	23
		CONTRACT NO. 60W92		
	ILLINOIS	FED. AID PROJECT		



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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

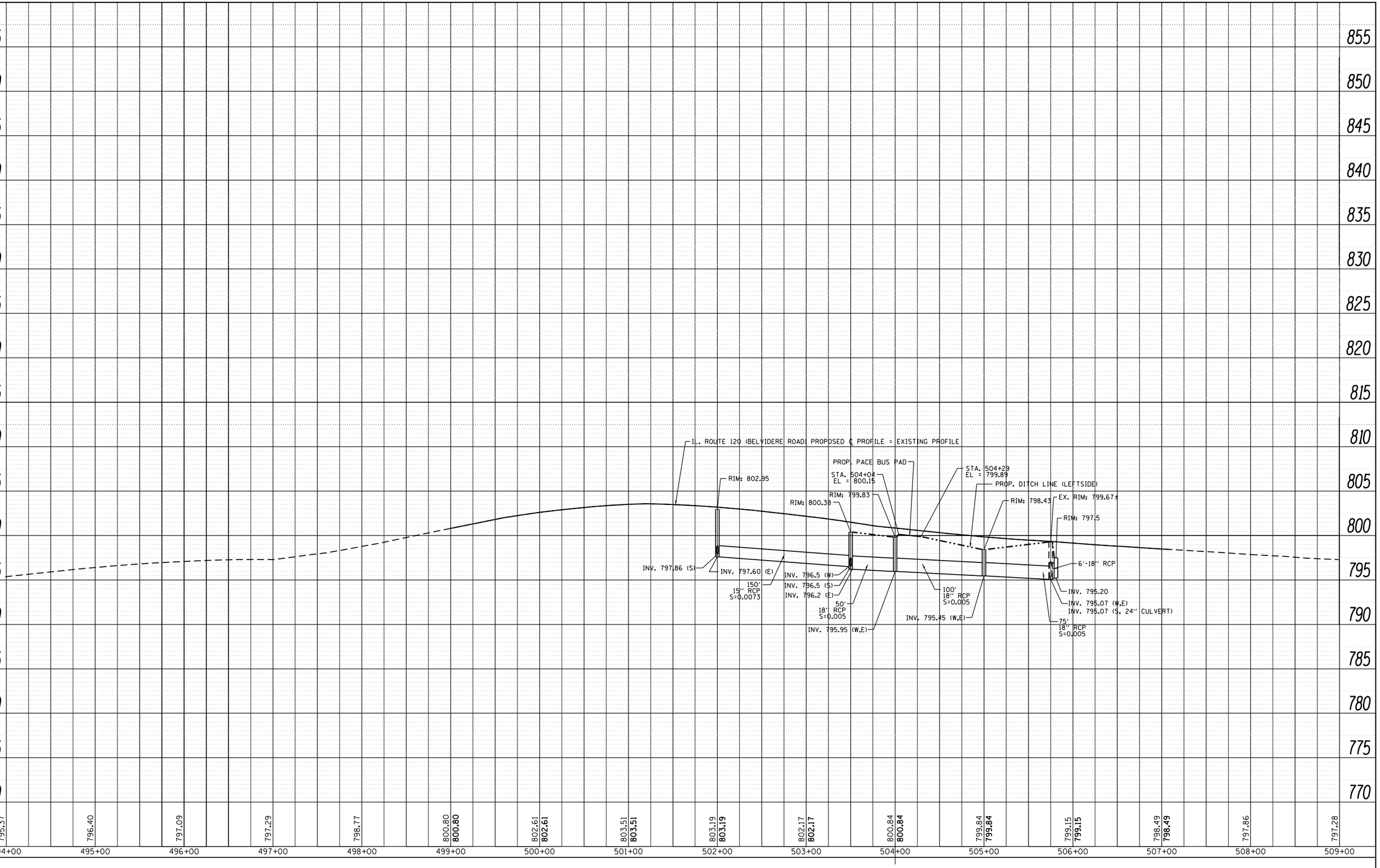
DRAINAGE PLAN
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT

SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	24
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE



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	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PROFILE
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT
SCALE: 1″=50′ | SHEET OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	25
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

DRAINAGE STRUCTURES

1
INL, TY-A, 2' DIA W/ TY-24 FRAME AND GRATE
STA.= 502+00, 31.25' LT
RIM= 802.34
INV.= 797.90 (N)

FLAT TOP
2
MH, TY-A, 4' DIA W/ TY-1 F, CL
STA.= 502+00, 38.1' LT
RIM= 802.95
INV.= 797.86 (S)
INV.= 797.60 (E)

FLAT TOP
3
MH, TY-A, 4' DIA W/ TY-8 GRATE
STA.= 503+50, 38.1' LT
RIM= 800.38
INV.= 796.50 (S)
INV.= 796.50 (W)
INV.= 796.20 (E)

4
INL, TY-A, 2' DIA W/ TY-24 FRAME AND GRATE
STA.= 503+50, 31.25' LT
RIM= 800.53
INV.= 796.54 (N)

FLAT TOP
5
MH, TY-A, 4' DIA W/ TY-8 GRATE
STA.= 504+00, 38.1' LT
RIM= 799.76
INV.= 795.95 (W)
INV.= 795.95 (E)

FLAT TOP
6
MH, TY-A, 4' DIA W/ TY-8 GRATE
STA.= 505+00, 38.1' LT
RIM= 798.43
INV.= 795.45 (W)
INV.= 795.45 (E)

7
EXISTING
MH, TY-A, 4' DIA W/ TY-1 F, CL
STA.= 505+75, 34.6' LT
RIM= 799.67±
INV.= 795.17± (EX. W)
INV.= 795.17± (EX. NE)
INV.= 795.07± (EX. S)
INV.= 795.07 (PROP. W)
INV.= 795.07 (PROP. E)

FLAT TOP
8
MH, TY-A, 4' DIA W/ TY-8 GRATE
STA.= 507+83.7, 34.4' LT
RIM= 797.50
INV.= 795.50 (S)
INV.= 795.20 (W)

9
INL, TY-A, 2' DIA W/ TY-24 FRAME AND GRATE
STA.= 507+83.7, 23.2' LT
RIM= 798.70
INV.= 795.58 (N)

STORM SEWERS

(1)
12" DIA SS, CL A, TY 2
LENGTH = 6.75'
SLOPE = 0.59%
TBF = 2.4 CU. YD.

(2)
15" DIA SS, CL A, TY 2
LENGTH = 150 '
SLOPE = 0.73%
TBF = 39.5 CU. YD.

(3)
12" DIA SS, CL A, TY 1
LENGTH = 6.75'
SLOPE = 0.59%
TBF = 1.8 CU. YD.

(4)
18" DIA SS, CL A, TY 1
LENGTH = 50'
SLOPE = 0.50%
TBF = 0.0 CU. YD.

(5)
18" DIA SS, CL A, TYP1
LENGTH = 100'
SLOPE = 0.50%
TBF = 7.1 CU. YD.

(6)
18" DIA SS,
(WATERMAIN REQUIREMENTS)
LENGTH = 75 '
SLOPE = 0.50%
TBF = 8.5 CU. YD.

(7)
18" DIA SS, CL A, TY 1
LENGTH = 8.7'
SLOPE = 1.49%
TBF = 0.0 CU. YD.

(8)
12" DIA SS, CL A, TY 1
LENGTH = 11.2'
SLOPE = 0.71%
TBF = 1.2 CU. YD.

(9)
24" DIA SS, CL A, TY 1
LENGTH = 17.5'
SLOPE = 1.43%
TBF = 1.1 CU. YD.

(PIPE LENGTH AND SLOPE
INCLUDES PRC FES WITH GRATING EACH END)

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P170409\Data\GADsheets\P170409-sht-drain.dgn Default	USER NAME = PencePL	DESIGNED -	REVISED -
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	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

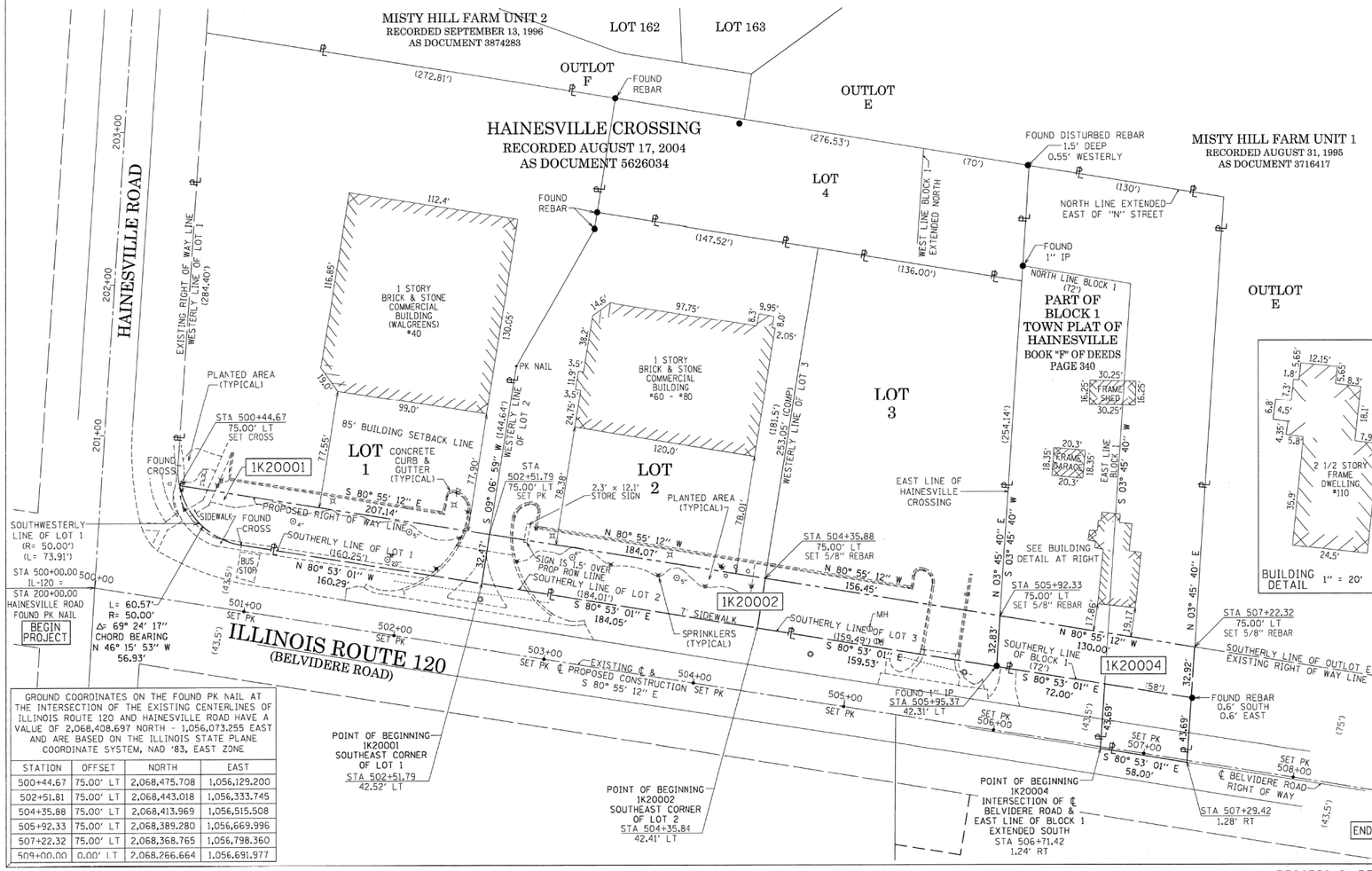
PROPOSED DRAINAGE STRUCTURES AND STORM SEWER
IL 120 / US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNECT

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	26
		CONTRACT NO. 60W92		
	ILLINOIS	FED. AID PROJECT		

PART OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE 3RD. PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA ACRES	EASEMENT AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
1K20001	CHICAGO TITLE LAND TRUST COMPANY, AS TRUSTEE UNDER TRUST NUMBER 8002356755 DATED MARCH 11, 2011	1.770	0.145		1.625				06-28-402-016	
1K20002	RUBY-07-HAINESVILLE, LLC, A DELEWARE LIMITED LIABILITY COMPANY	1.877	0.255		1.622				06-28-402-018 06-28-402-019	
1K20004	CHICAGO TITLE LAND TRUST COMPANY, AS SUCCESSOR TRUSTEE TO CITIZENS BANK AND TRUST COMPANY, AS TRUSTEE UNDER TRUST AGREEMENT DATED THE 26TH DAY OF APRIL, 1971, AND KNOWN AS TRUST NUMBER 395	1.037	0.156	0.058	0.881				06-28-403-002 06-28-400-007	



GROUND COORDINATES ON THE FOUND PK NAIL AT THE INTERSECTION OF THE EXISTING CENTERLINES OF ILLINOIS ROUTE 120 AND HAINESVILLE ROAD HAVE A VALUE OF 2,068,408.697 NORTH - 1,056,073.255 EAST AND ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD '83, EAST ZONE

STATION	OFFSET	NORTH	EAST
500+44.67	75.00' LT	2,068,475.708	1,056,129.200
502+51.81	75.00' LT	2,068,443.018	1,056,333.745
504+35.88	75.00' LT	2,068,413.969	1,056,515.508
505+92.33	75.00' LT	2,068,389.280	1,056,669.996
507+22.32	75.00' LT	2,068,368.765	1,056,798.360
509+00.00	0.00' LT	2,068,266.664	1,056,691.977

LEGEND

SECTION CORNER (9 | 10 / 16 | 15)

QUARTER SECTION CORNER (16 — 15)

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' — MEASURED DIMENSION
- 129.32' (COMP) — COMPUTED DIMENSION
- (129.32') — RECORDED DIMENSION
- EXISTING BUILDING

N

GRAPHIC SCALE FEET 0 40

SCALE: 1" = 40'

BEARINGS AND COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83, EAST ZONE, AND THE EXISTING CENTERLINE OF ILLINOIS ROUTE 120 BEARS S 80° 55' 12" E

- ● IRON PIPE OR ROD FOUND
- + CUT CROSS FOUND OR SET
- ⊕ "MAG" NAIL SET
- ○ 5/8" REBAR SET
- ● T1 T2 T3 — THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ● BT1 BT2 BT3 — THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ — STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M — STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ◉ — PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS).
- □ — RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS)
)SS
COUNTY OF)

THIS IS TO CERTIFY THAT I, WILLIAM J. FLEMING, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 12TH DAY OF DECEMBER, A.D. 2015.

STATE OF ILLINOIS — WILLIAM J FLEMING 35-3226 — PROFESSIONAL LAND SURVEYOR

ILLINOIS PROFESSIONAL LAND SURVEYOR 35-3226
LICENSE EXPIRATION DATE: 11/30/2016

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

GRAEF
8501 West Higgins Road
Suite 280
Chicago, IL 60631-2801
773 / 399 0112
www.graef-usa.com
Illinois Professional Design Corporation 184-000938

RECEIVED
JAN 05 2016

PLATS & LEGALS

PTB 161/017 WO#2
GRAEF PROJECT 2012-3007.02

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILLINOIS 120

SECTION: HAINESVILLE ROAD	COUNTY: LAKE
PROJECT	JOB NO.: R-91-016-11
STATION	TO STATION
SCALE: 1" = 40'	SHEET 2 OF 2

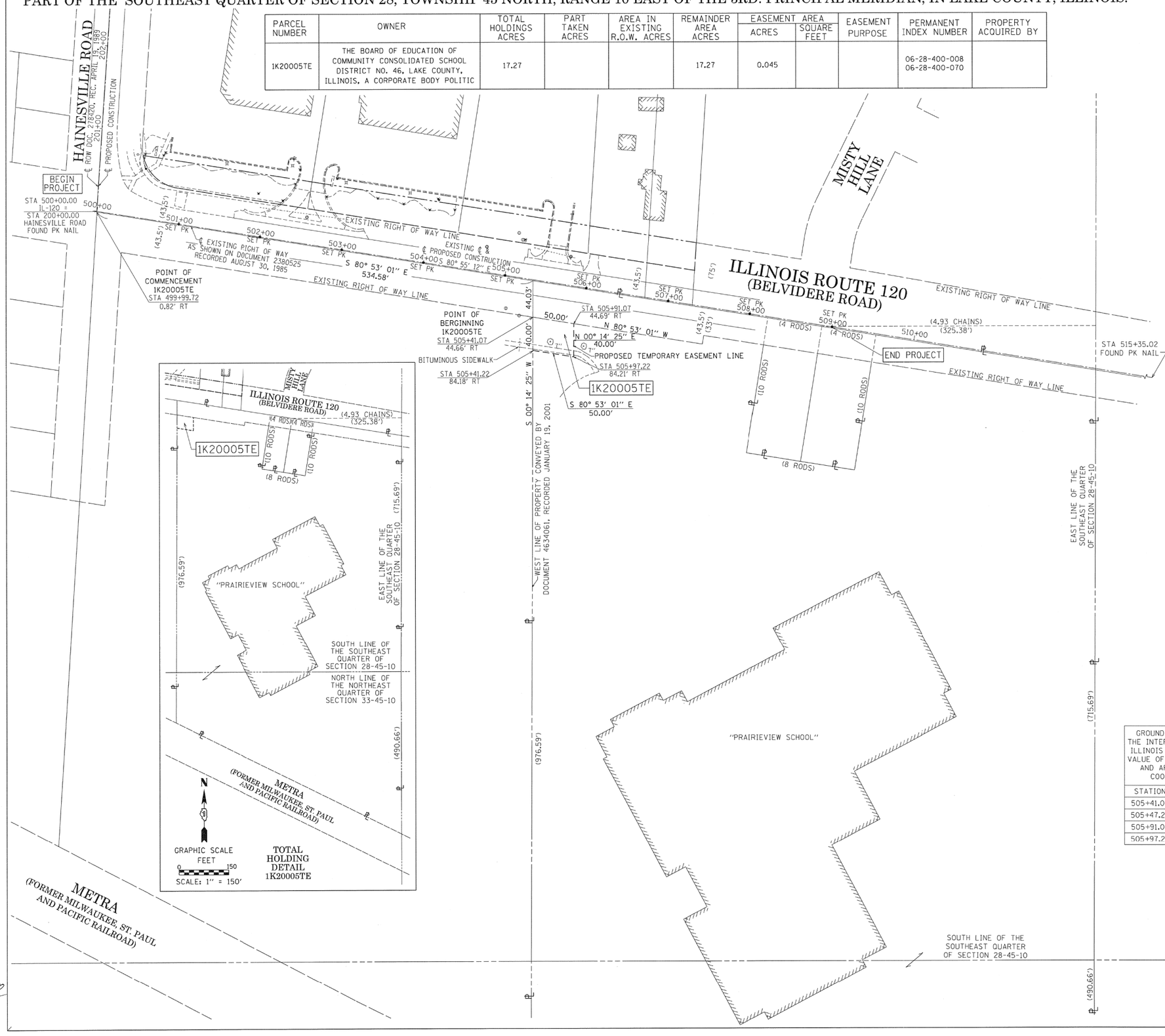
BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

REVISION DATE MADE BY

ROUTE NAME: ILLINOIS 120 SECTION: AT HAINESVILLE ROAD COUNTY: LAKE JOB NO.: R-91-016-11 RECORDING: RECORDED ON

PART OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE 3RD. PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA ACRES	EASEMENT AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
1K20005TE	THE BOARD OF EDUCATION OF COMMUNITY CONSOLIDATED SCHOOL DISTRICT NO. 46, LAKE COUNTY, ILLINOIS, A CORPORATE BODY POLITIC	17.27			17.27	0.045			06-28-400-008 06-28-400-070	



LEGEND

SECTION CORNER (9 | 10 / 16 | 15)

QUARTER SECTION CORNER (16 — 15)

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' — MEASURED DIMENSION
- 129.32' (COMP) — COMPUTED DIMENSION
- (129.32') — RECORDED DIMENSION
- EXISTING BUILDING

N

GRAPHIC SCALE FEET 0 60

SCALE: 1" = 60'

BEARINGS AND COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83, EAST ZONE, AND THE CENTERLINE OF PROPOSED CONSTRUCTION OF ILLINOIS ROUTE 120 BEARS S 80° 55' 12" E

- ● IRON PIPE OR ROD FOUND
- ⊕ 'MAG' NAIL SET
- \+ CUT CROSS FOUND OR SET
- ○ 5/8" REBAR SET
- ● T1 T2 T3 — THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ● BT1 BT2 BT3 — THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M — STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ◔ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS).
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS)
)SS
COUNTY OF)

THIS IS TO CERTIFY THAT I, WILLIAM J. FLEMING, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 8TH DAY OF JANUARY, A.D. 2016.

STATE OF ILLINOIS — WILLIAM J. FLEMING 35-3226 — PROFESSIONAL LAND SURVEYOR

ILLINOIS PROFESSIONAL LAND SURVEYOR 35-3226
LICENSE EXPIRATION DATE: 11/30/2016

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

GROUND COORDINATES ON THE FOUND PK NAIL AT THE INTERSECTION OF THE EXISTING CENTERLINES OF ILLINOIS ROUTE 120 AND HAINESVILLE ROAD HAVE A VALUE OF 2,068,408.697 NORTH - 1,056,073.255 EAST AND ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD '83, EAST ZONE

STATION	OFFSET	NORTH	EAST
505+41.07	44.66' RT	2,068,279.210	1,056,600.498
505+47.22	84.18' RT	2,068,239.210	1,056,600.330
505+91.07	44.69' RT	2,068,271.288	1,056,649.866
505+97.22	84.21' RT	2,068,231.288	1,056,649.698

GRAEF
8501 West Higgins Road
Suite 280
Chicago, IL 60631-2801
773 / 399 0112
www.graef-usa.com
Illinois Professional Design Corporation 184-000938

PTB 161/017 WO#2
GRAEF PROJECT 2012-3007.02

PLAT OF HIGHWAYS

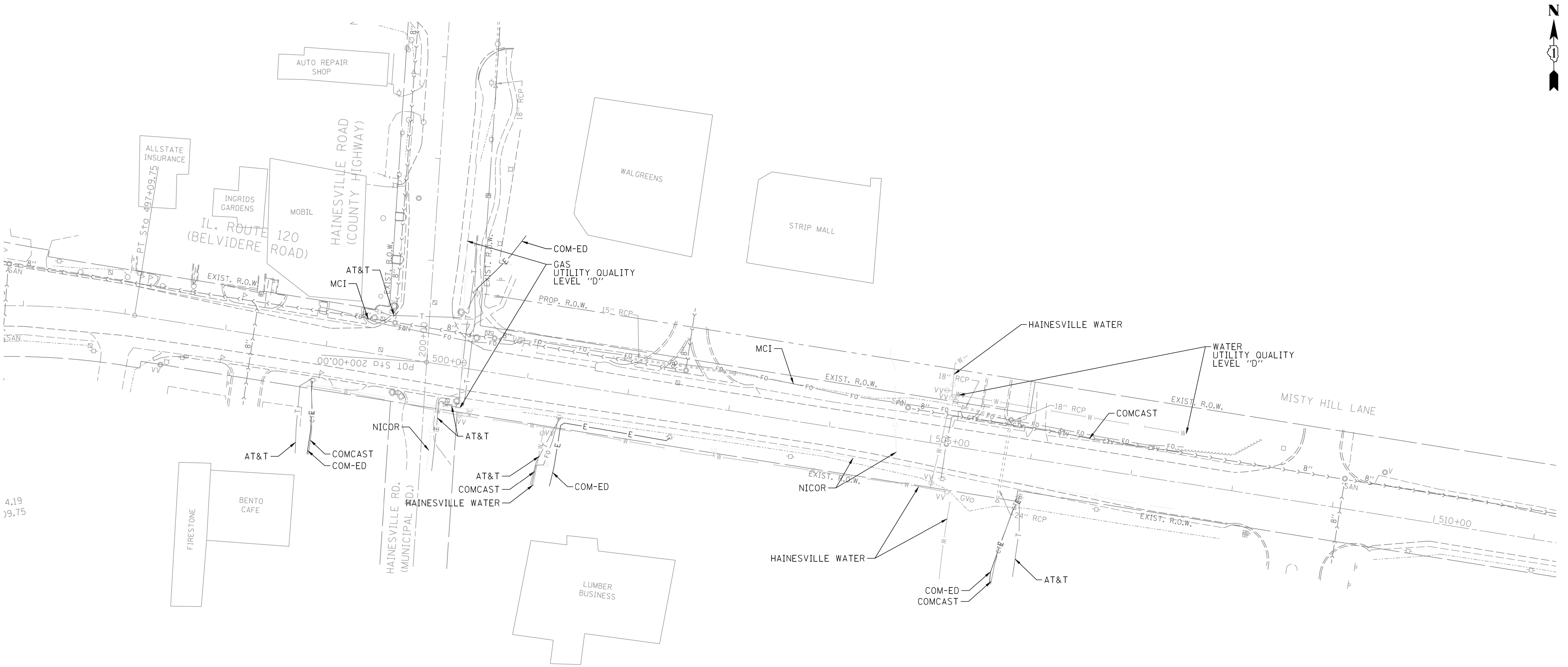
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS 120

SECTION: HAINESVILLE ROAD COUNTY: LAKE
PROJECT JOB NO.: R-91-016-11
STATION 500+00.00 TO STATION 509+00.00
SCALE: 1" = 60' SHEET 3 OF 3

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

REVISION DATE MADE BY



Legend	
—A—A—	AERIAL
— — — —	UNKNOWN
—CTV—CTV—	CABLE TV
—T—T—	TELEPHONE
—G—	GAS
—E—E—	ELECTRIC
—W—	WATER
—FO—FO—	FIBER OPTIC
⊕	TBE TEST HOLE

UTILITY OWNERS

AT&T = TELEPHONE
COMCAST = CABLE TV
COMCAST = FIBER OPTIC
COM-ED = ELECTRIC
MCI = FIBER OPTIC
NICOR = GAS
HAINESVILLE WATER = WATER

Utilities shown on these plans as depicted in the legend have been investigated by Cardno TBE in accordance with SUE Industry Standards. All other information shown has been provided to Cardno TBE by others. Cardno TBE's SUE field investigation was performed 10/14/13 through 10/21/13. Changes to utilities after 10/21/13 may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.

20 0 METERS 20 40
50 0 FEET 50 100

Cardno TBE

Dynasty Group
Engineers & Surveyors

TBE Job No. IL09510543
SUE Plan Page: 1 of 1

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SUE INVESTIGATION OF UNDERGROUND UTILITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	28
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
ALL DATA RECEIVED
CADD FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\PLN_EX-UTIL_IL134.dgn

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
ALL DATA RECEIVED
STRUCTURE NOTATNS CHKD

BY | DATE
ejensen

N

0 10 20 40
SCALE: 1" = 40'

EXISTING UTILITY PLAN
IL ROUTE 120 AND IL ROUTE 134 /COMMERCIAL ENT.

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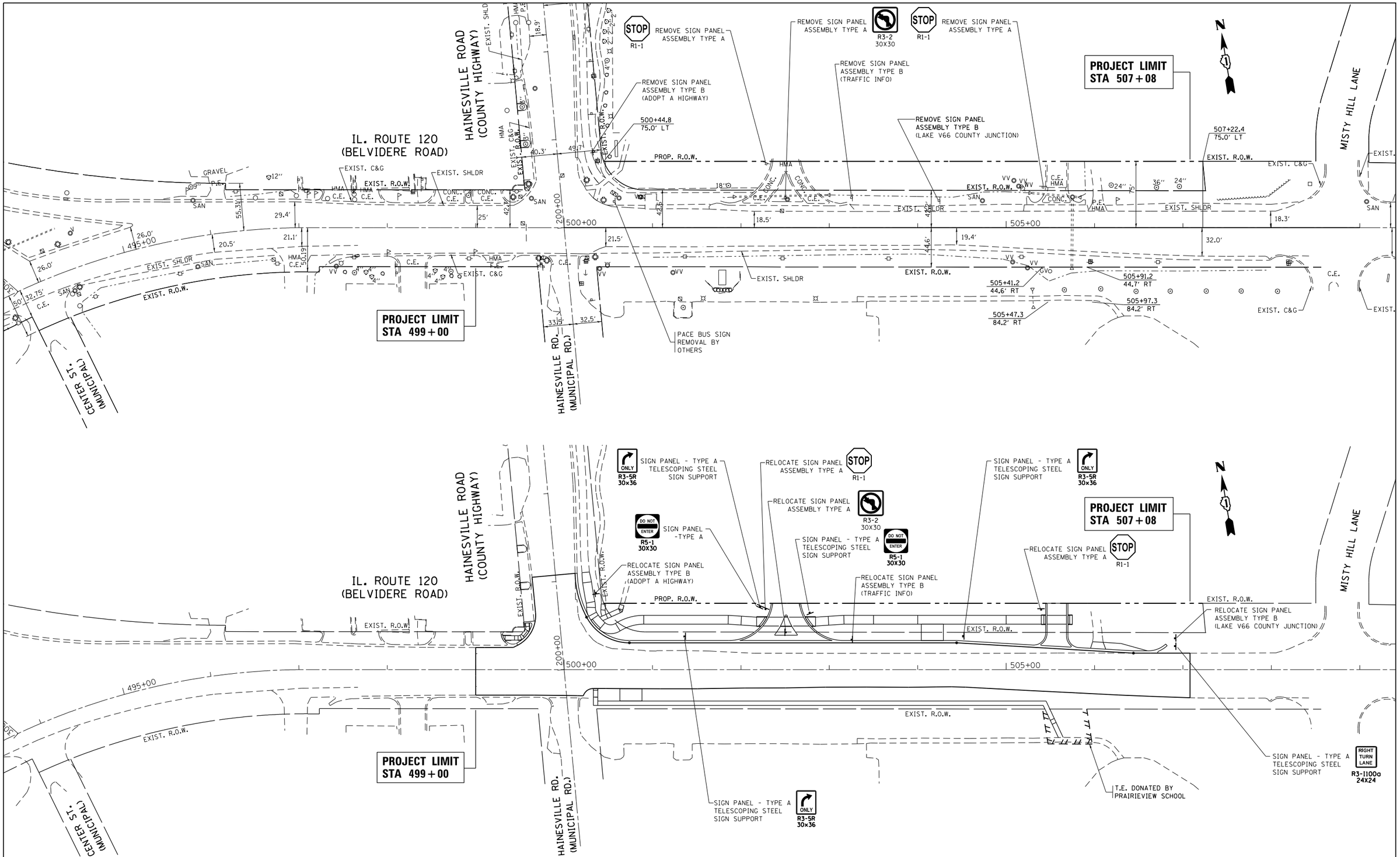
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	29
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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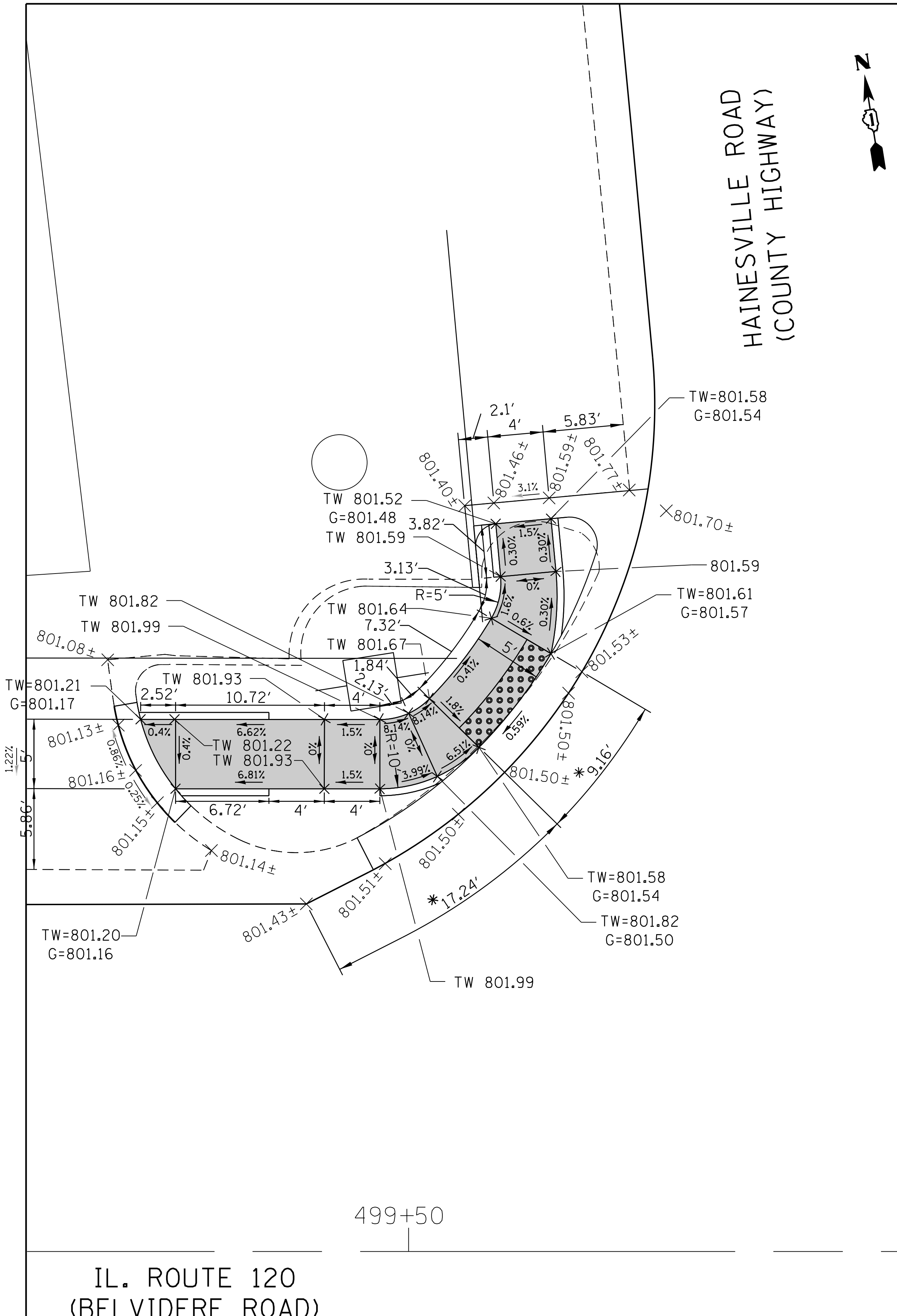
Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

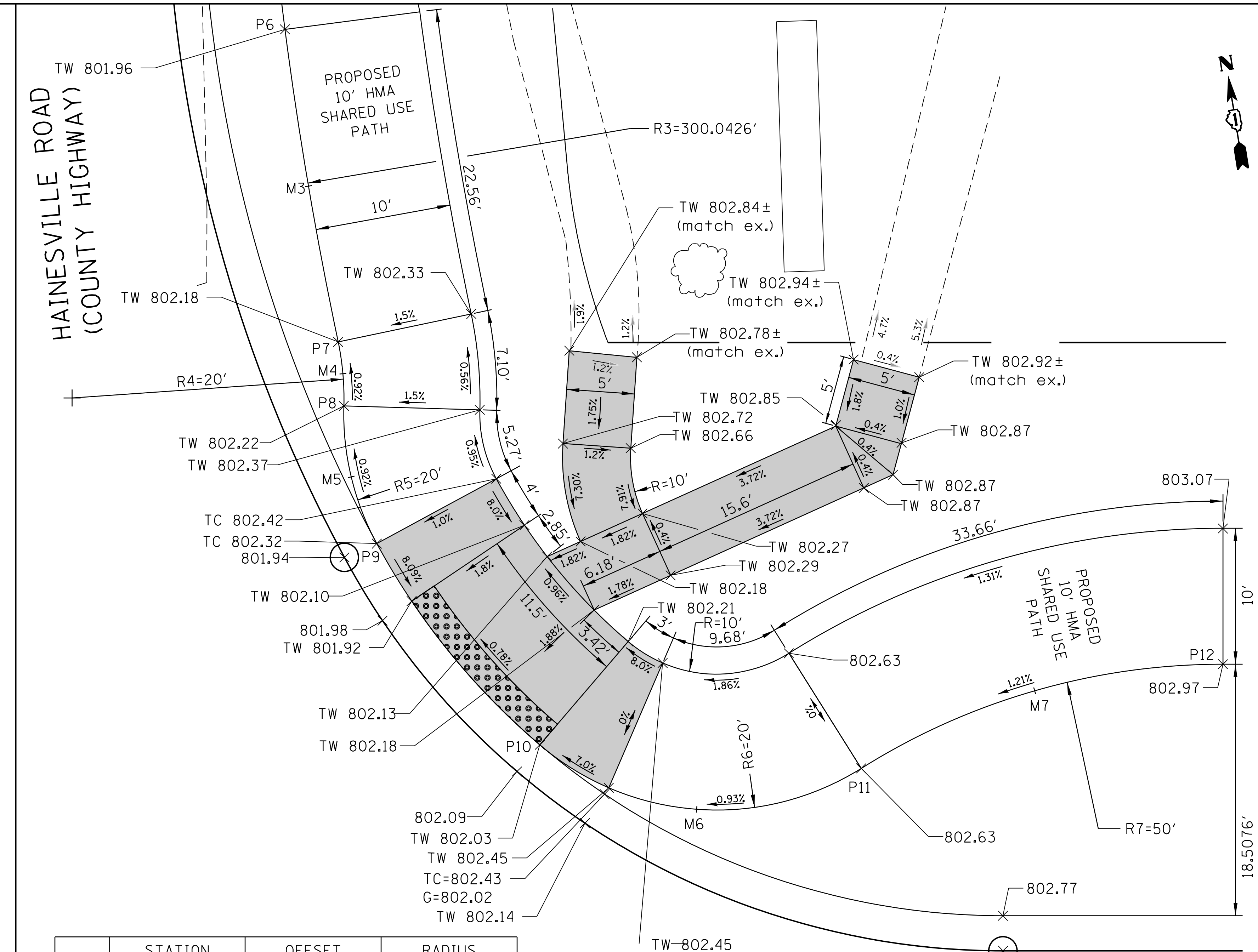
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
TRAFFIC SIGNING PLAN

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	30
		CONTRACT NO. 60W92		
		ILLINOIS	FED. AID PROJECT	



* AS MEASURED ALONG
EX. EDGE OF PAVEMENT



	STATION	OFFSET	RADIUS
R3	503+18.5464	136.8650' LT	300.0426'
R4	500+05.3691	70.9311' LT	20'
R5	500+45.3521	69.7642' LT	20'
R6	500+52.7661	60.6091' LT	20'
R7	500+90.0127	1.3411' LT	50'

	STATION	OFFSET		STATION	OFFSET
P6	500+21.0248	98.0512' LT	P9	500+27.7810	60.2107' LT
M3	500+22.7588	86.5132' LT	P10	500+39.7690	45.4079' LT
P7	500+24.9401	75.0514' LT	M6	500+51.3042	40.6626' LT
M4	500+25.2897	72.7120' LT	P11	500+63.4080	43.6754' LT
P8	500+25.3606	70.3476' LT	M7	500+76.1692	49.3865' LT
M5	500+25.8991	65.1188' LT	P12	500+90.0127	51.3411' LT

IL. ROUTE 120
(BELVIDERE ROAD)

500+50

PROPOSED PORTLAND CEMENT
CONCRETE SIDEWALK, 5"

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Default	PLOT DATE = 10/27/2016	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

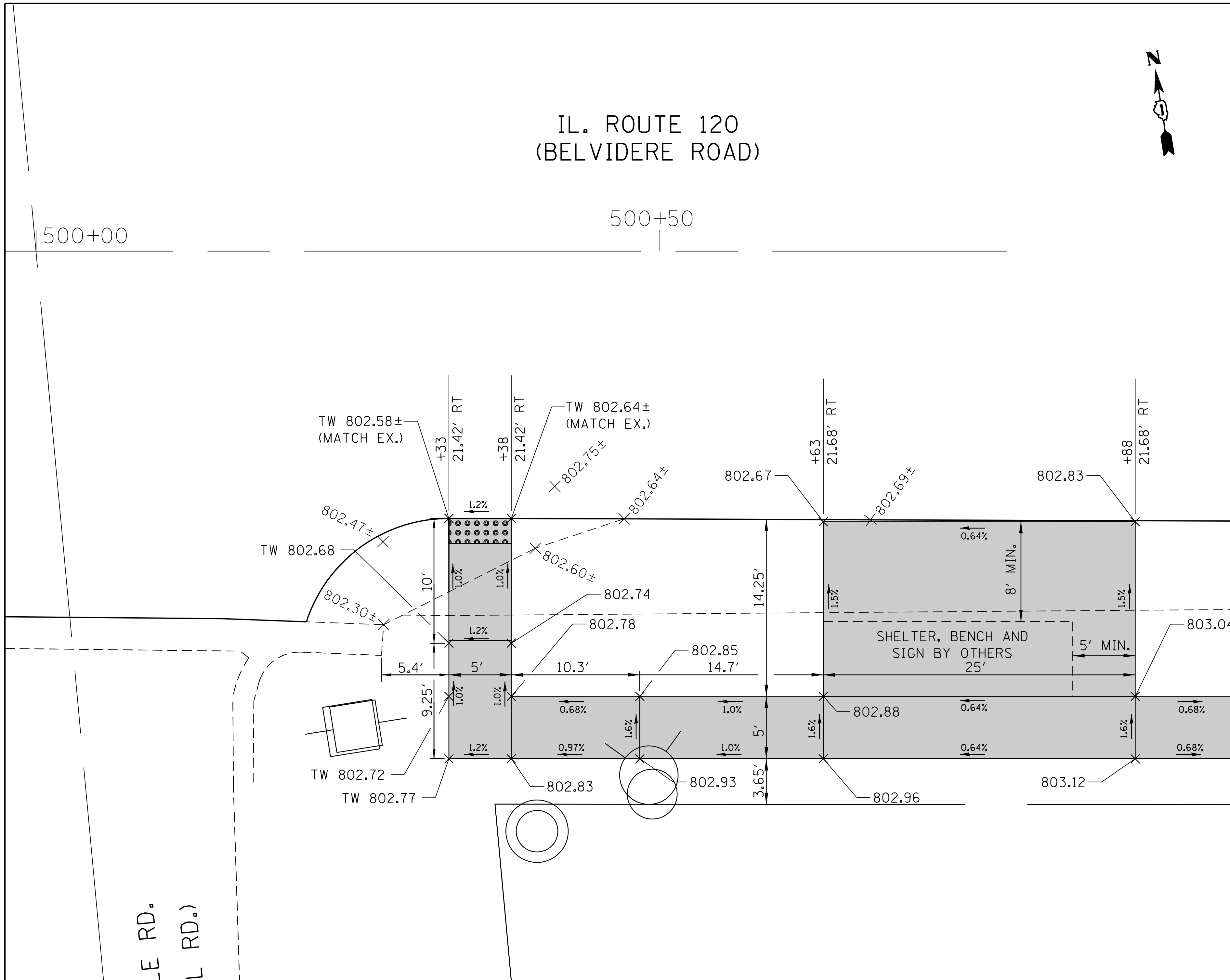
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SIDEWALK DETAILS

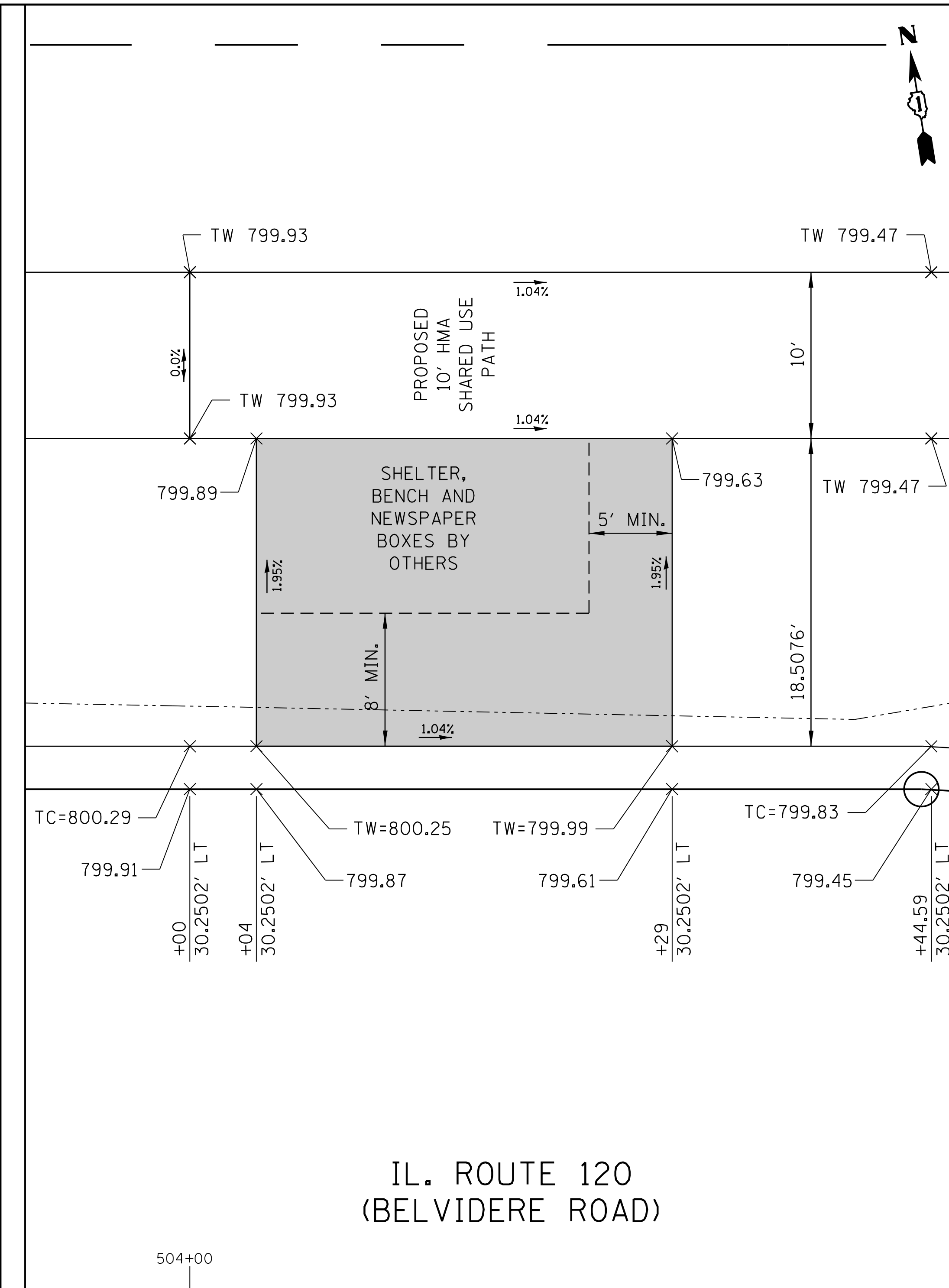
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	31

CONTRACT NO. 60W92

ILLINOIS FED. AID PROJECT





NOTE:

PROPOSED 25'x14'x5'' THICK CONCRETE PAD FOR PACE BUS SHELTER. SHELTER, BENCH AND SIGN CONSTRUCTED BY OTHERS. SHELTER SHALL BE PLACED UPON CONCRETE PAD SO AS TO PROVIDE A 5 FOOT MINIMUM CLEAR PEDESTRIAN ACCESS FROM PROPOSED 5' SIDEWALK TO PROPOSED EDGE OF PAVEMENT, AND AN 8 FOOT MINIMUM CLEAR SPACE FROM PROPOSED EDGE OF PAVEMENT, FOR BOARDING AND ALIGHTING AREA.

NOTE:

PROPOSED 25'x18.5'x5'' THICK CONCRETE PAD FOR PACE BUS SHELTER. SHELTER, BENCH AND NEWSPAPER BOXES CONSTRUCTED BY OTHERS, SHALL BE PLACED UPON CONCRETE PAD SO AS TO PROVIDE A 5 FOOT MINIMUM CLEAR PEDESTRIAN ACCESS FROM PROPOSED 10' HMA SHARED-USE PATH TO PROPOSED CURB AND AN 8 FOOT MINIMUM CLEAR SPACE FROM PROPOSED CURB, FOR BOARDING AND ALIGHTING AREA.

PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5''

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Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

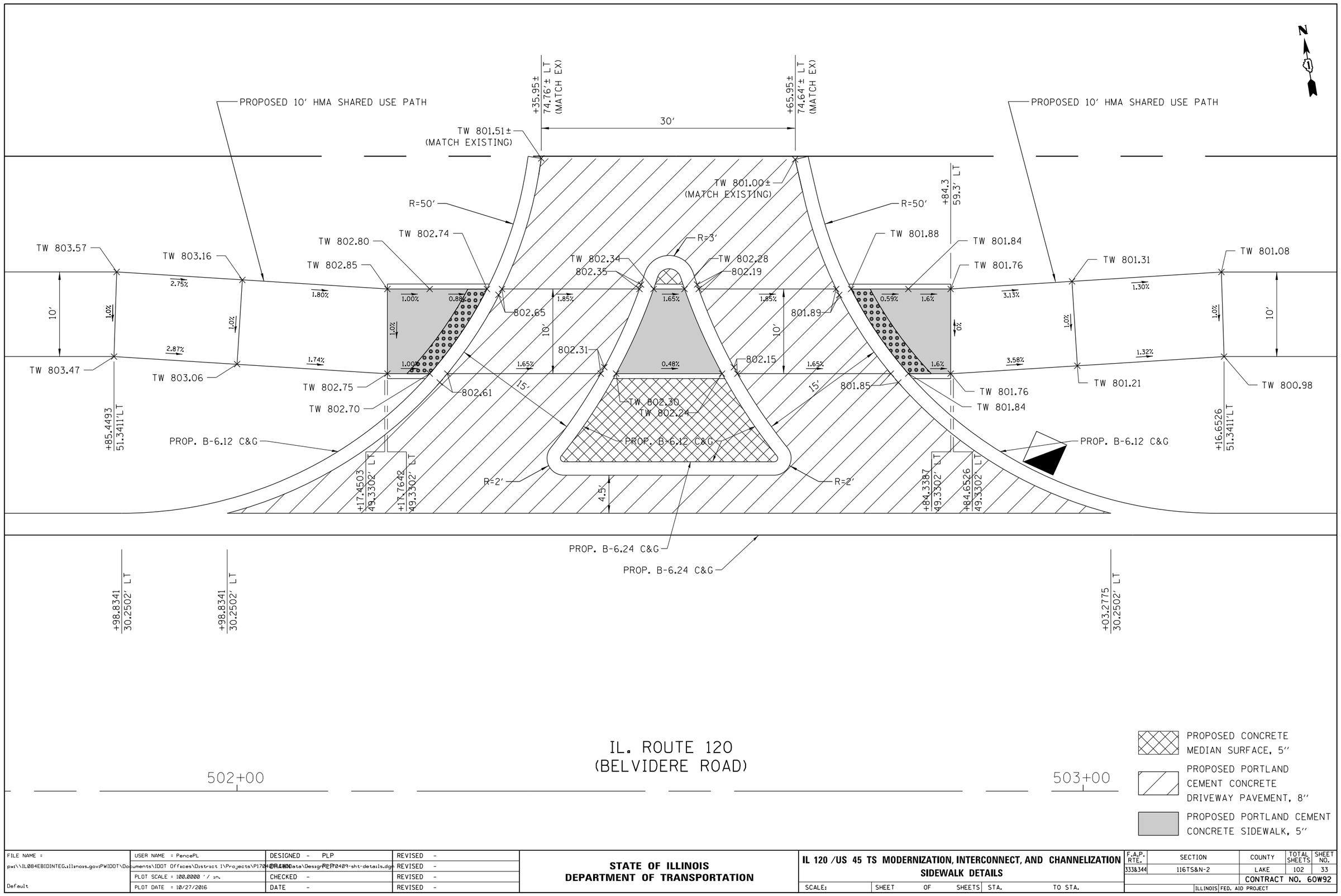
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SIDEWALK DETAILS

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	32

CONTRACT NO. 60W92

ILLINOIS FED. AID PROJECT



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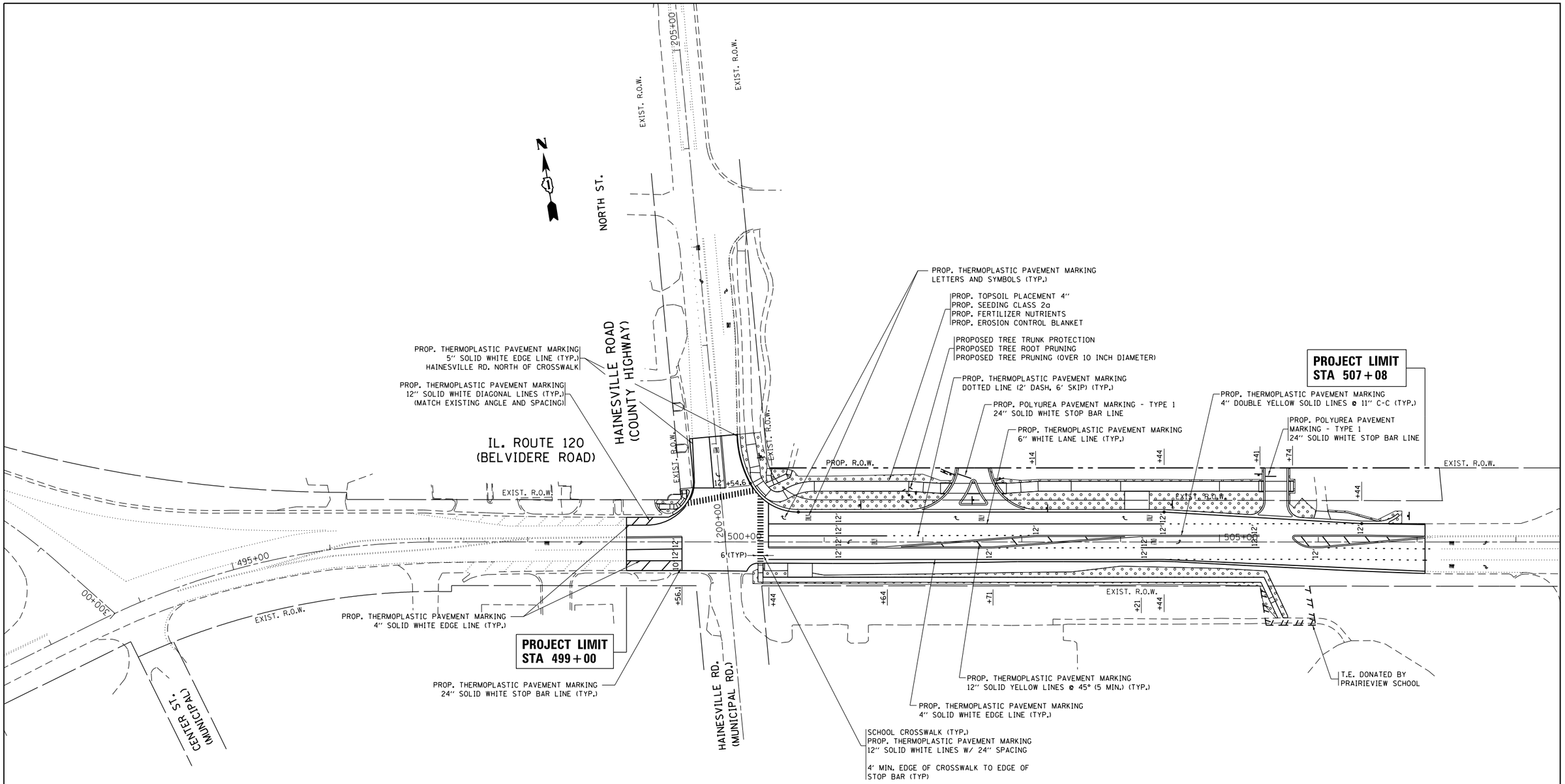
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
SIDEWALK DETAILS

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	33
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			



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Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

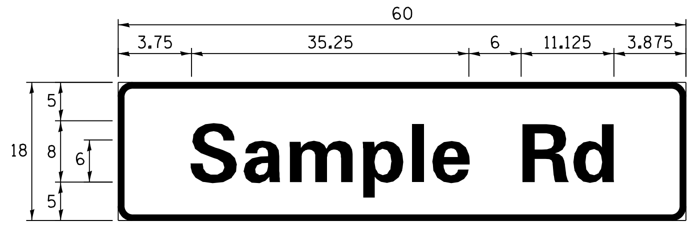
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

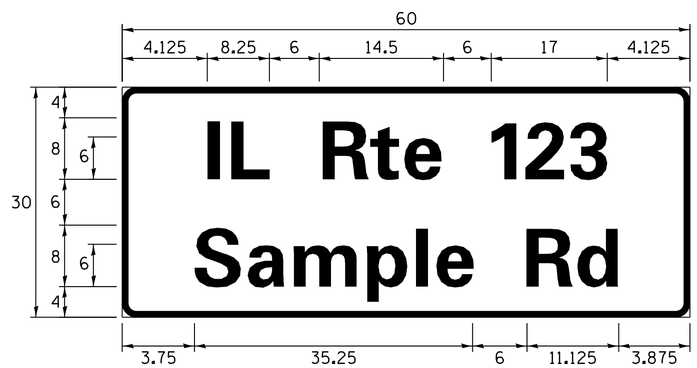
PAVEMENT MARKING AND LANDSCAPING PLAN
IL 120 /US 45 CHANNELIZATION, TS MODERNIZATION AND INTERCONNNECT

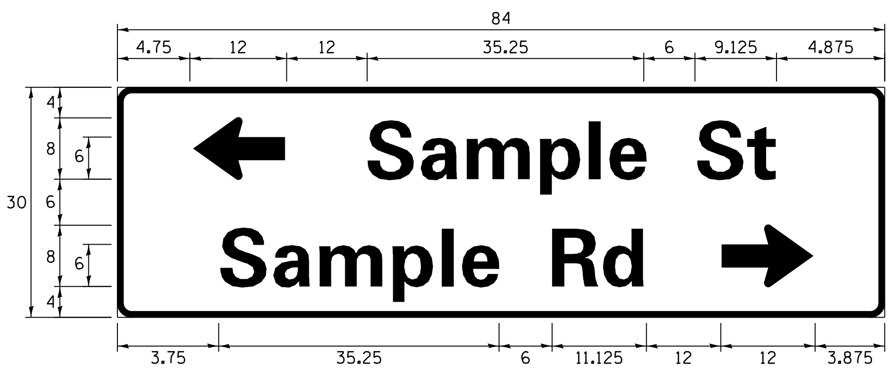
SCALE: 1"= 50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	34
		CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

SIGN PANEL – TYPE 1 OR TYPE 2







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

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

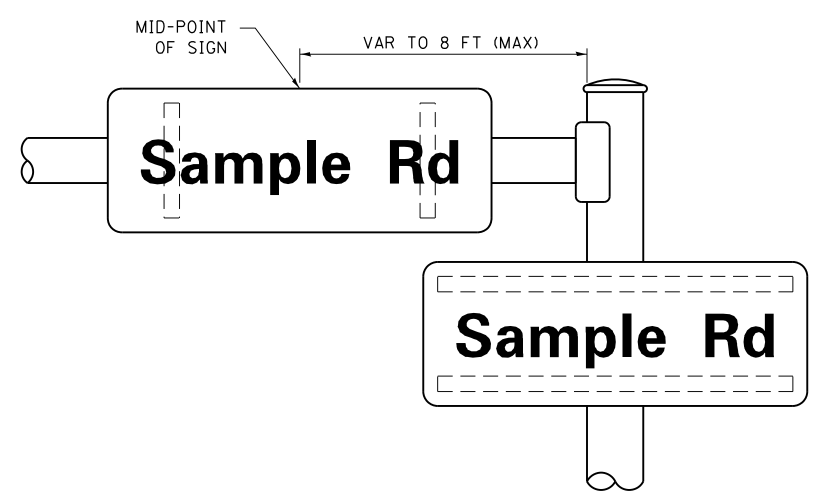
1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

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

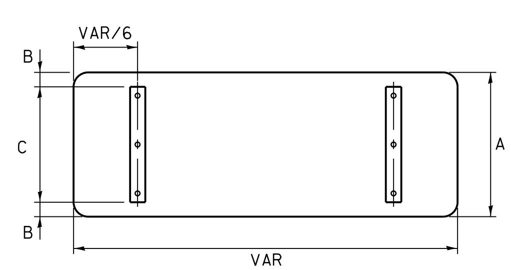
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

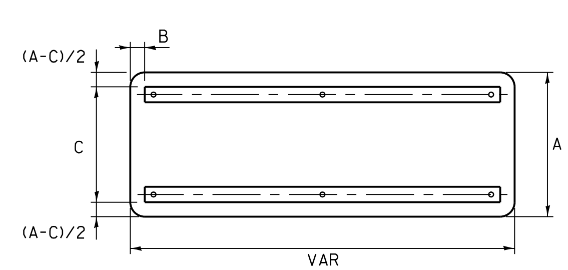
ARM OR POLE MOUNTED



SUPPORTING CHANNELS



A	B	C
18"	2"	14"
30"	2"	24"



A	B	C
18"	2"	12"
30"	2"	22"

STANDARD ALPHABETS SPACING CHART

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

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	35
	TS-02	CONTRACT NO. 60W92		
	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	CC	CC
MASTER CONTROLLER	MC	MC
MASTER MASTER CONTROLLER	MMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	ET	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX	J	J
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET	RXR	RXR
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P P	P P
SAMPLING (SYSTEM) DETECTOR	S S	S S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS IS	IS IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS QS	QS QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	P	P
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	P RB	P RB
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C D	C D
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 1 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	36
	TS-05	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

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.

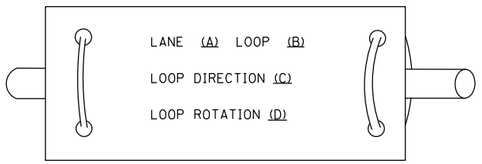
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

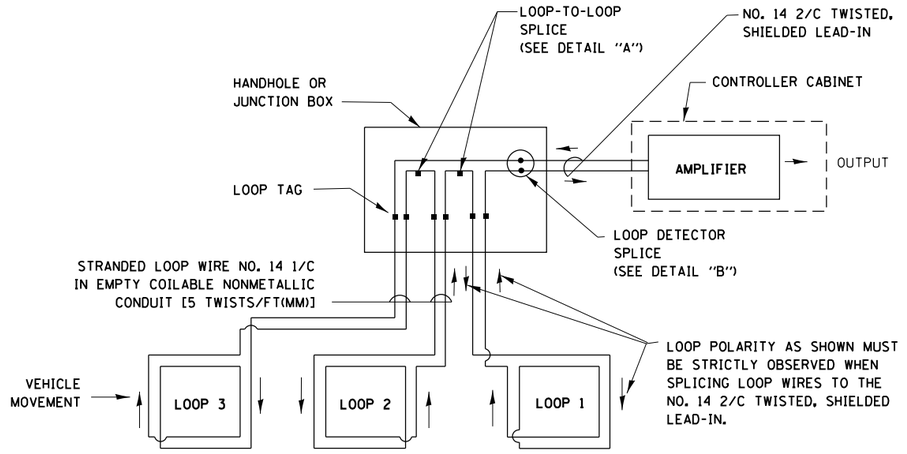


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

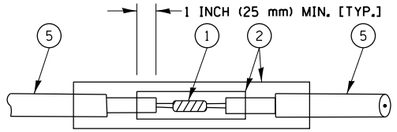
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

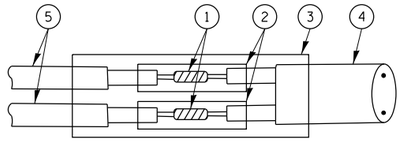


DETECTOR LOOP WIRING SCHEMATIC

- 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.

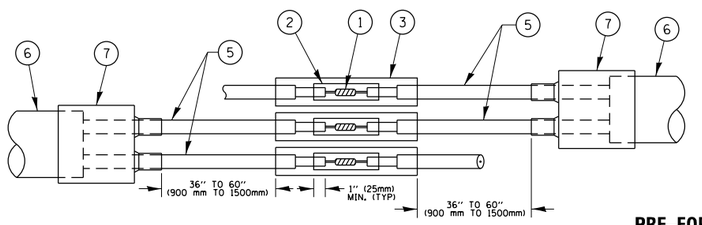


DETAIL "A"
LOOP-TO-LOOP SPLICE



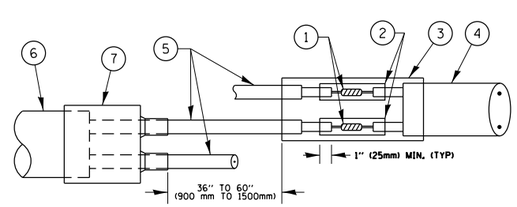
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



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 LENGHT 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

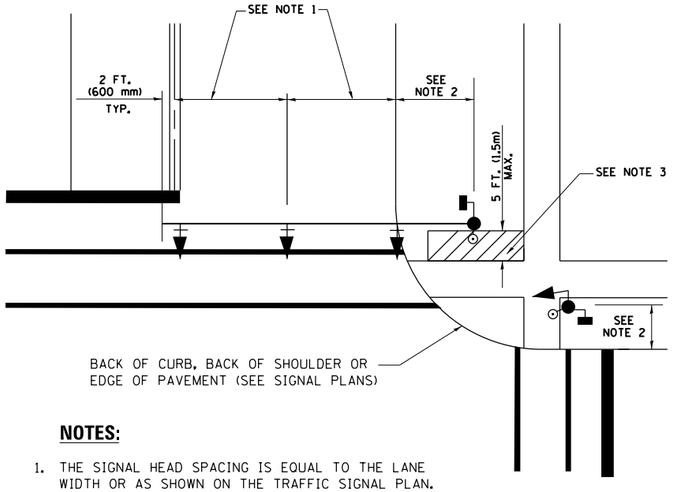
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 2 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	37
	TS-05	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

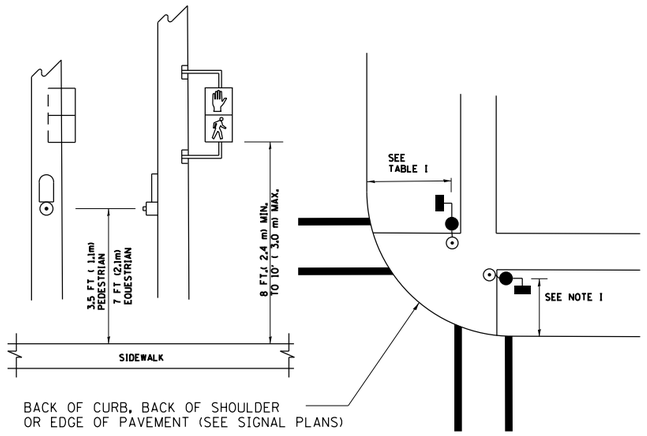
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

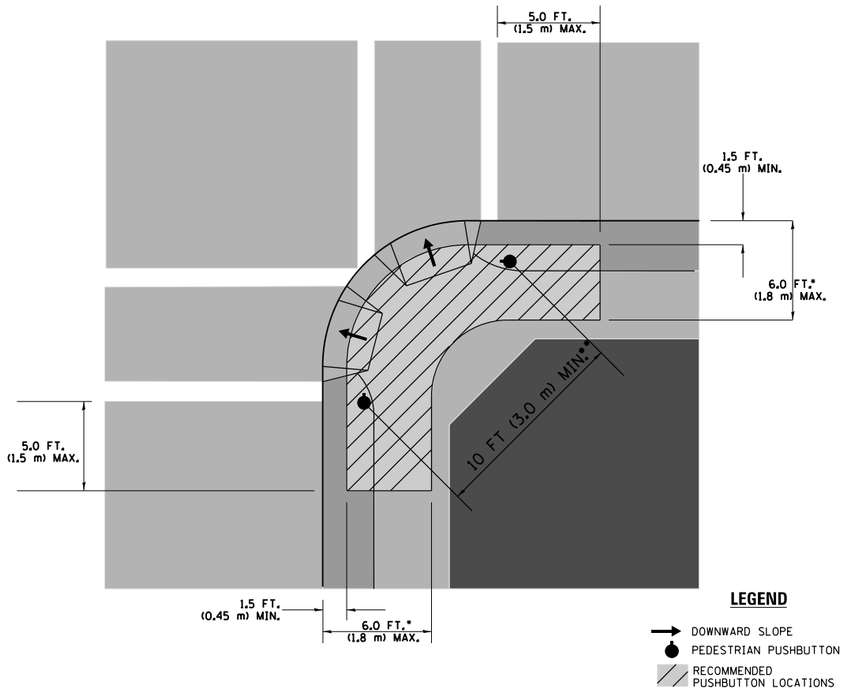
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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



- 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 TOTHE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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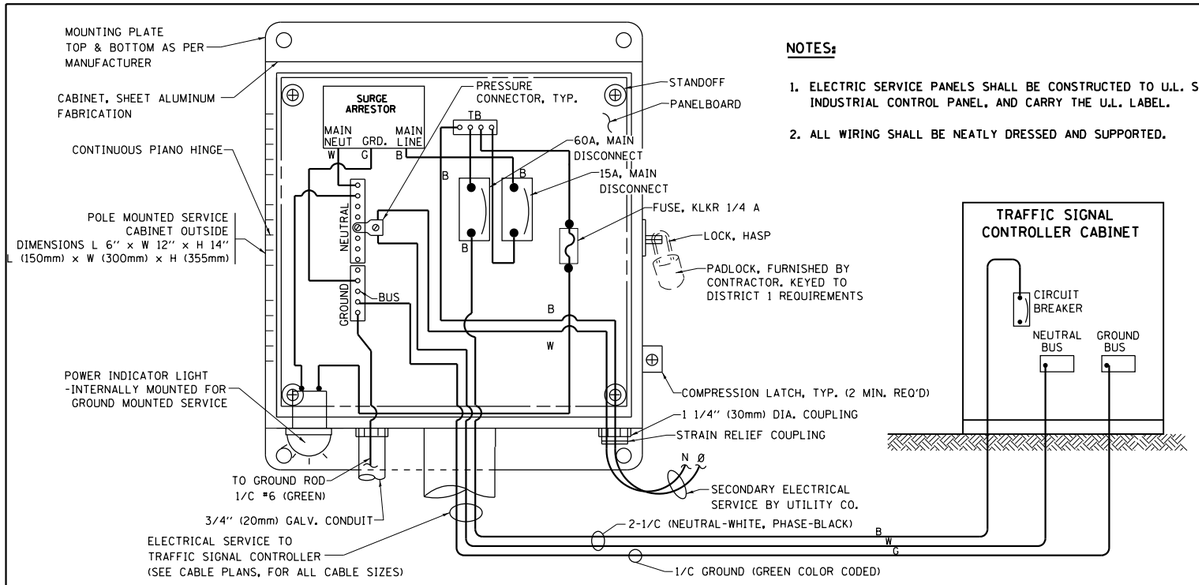
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 3 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	38
	TS-05	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			



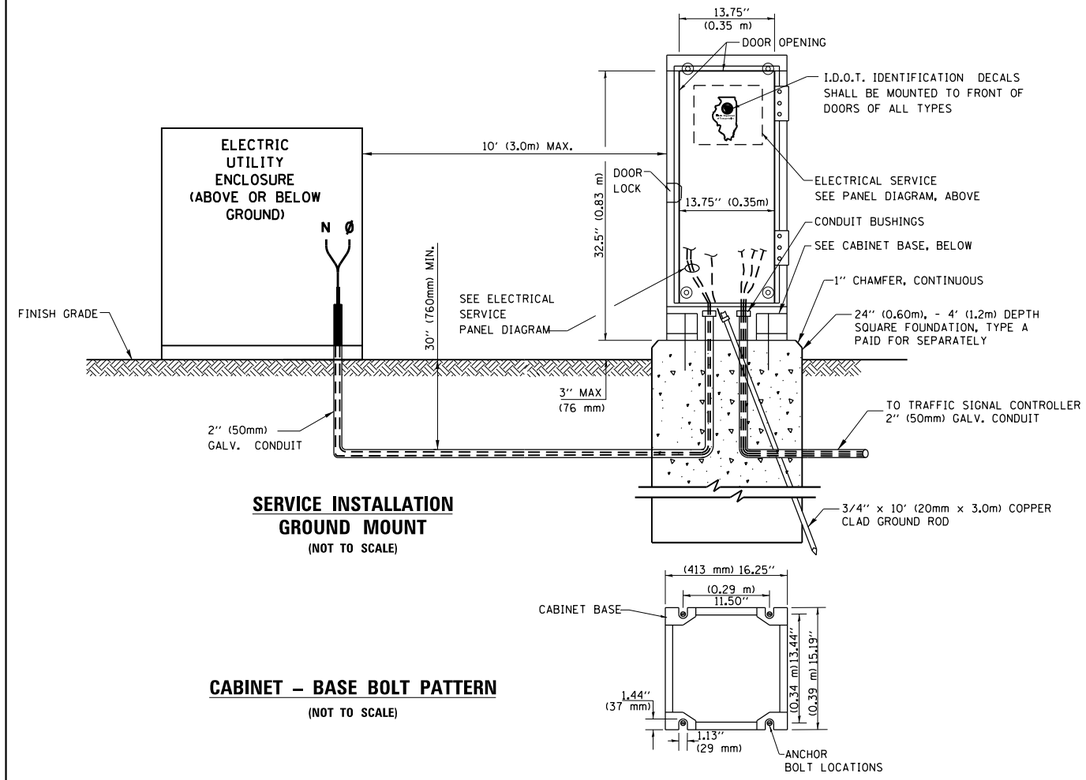
NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

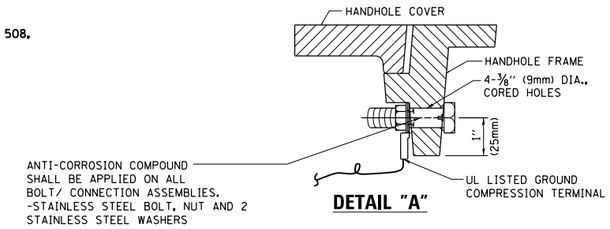


SERVICE INSTALLATION GROUND MOUNT

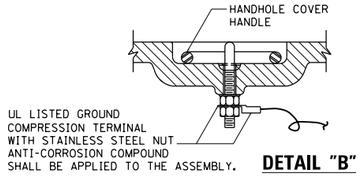
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

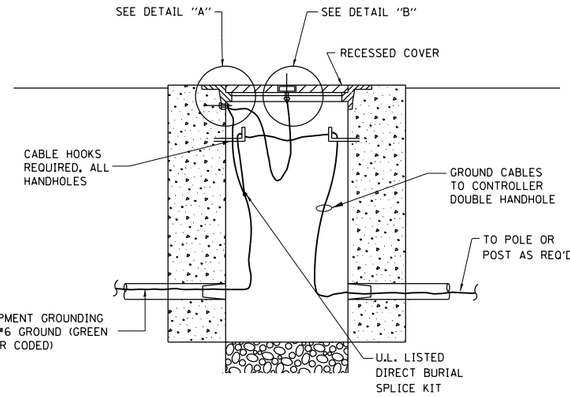
(NOT TO SCALE)



DETAIL "A"

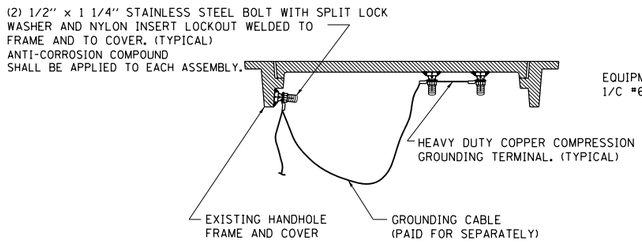


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

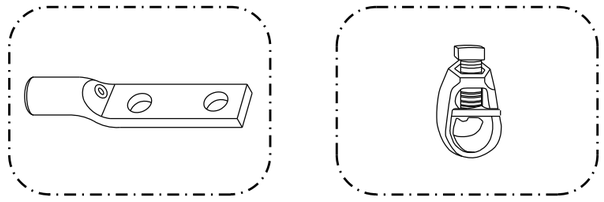


EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(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.

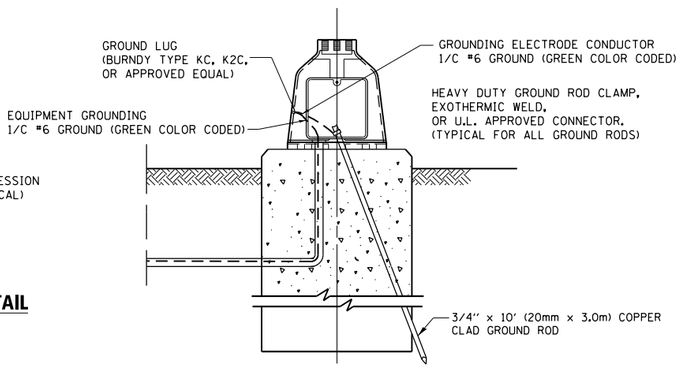


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

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.



MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

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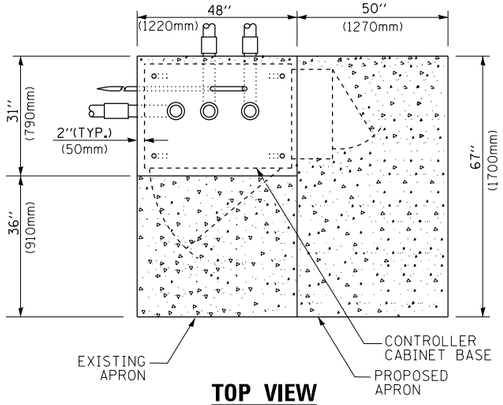
Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

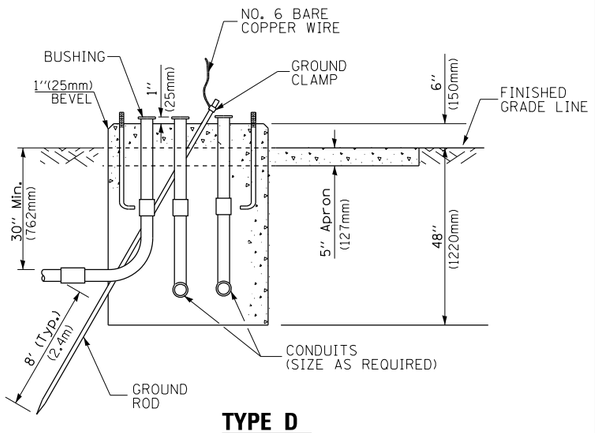
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 4 OF 7 SHEETS | STA. | TO STA.

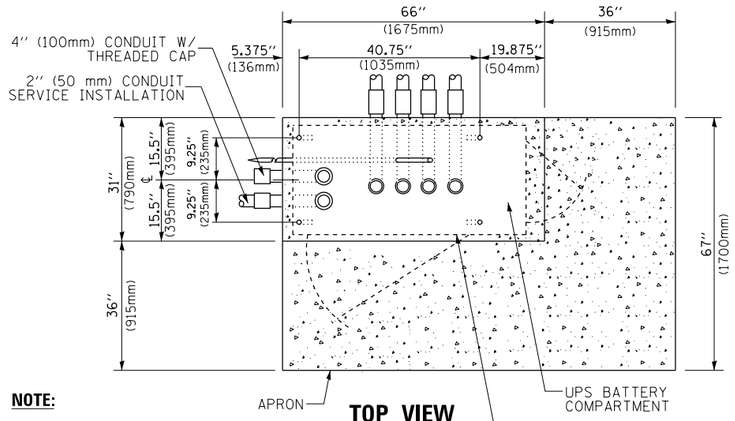
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	39
	TS-05	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			



TOP VIEW



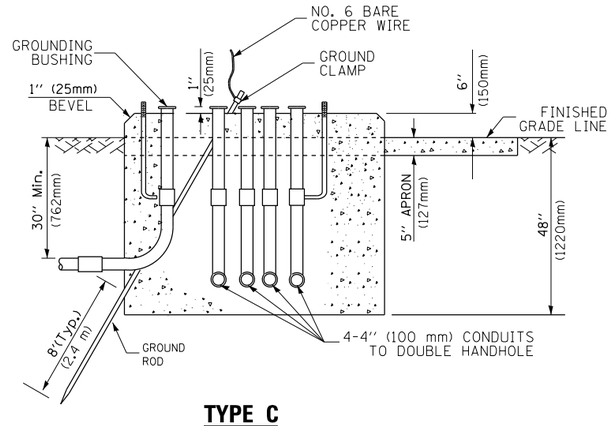
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



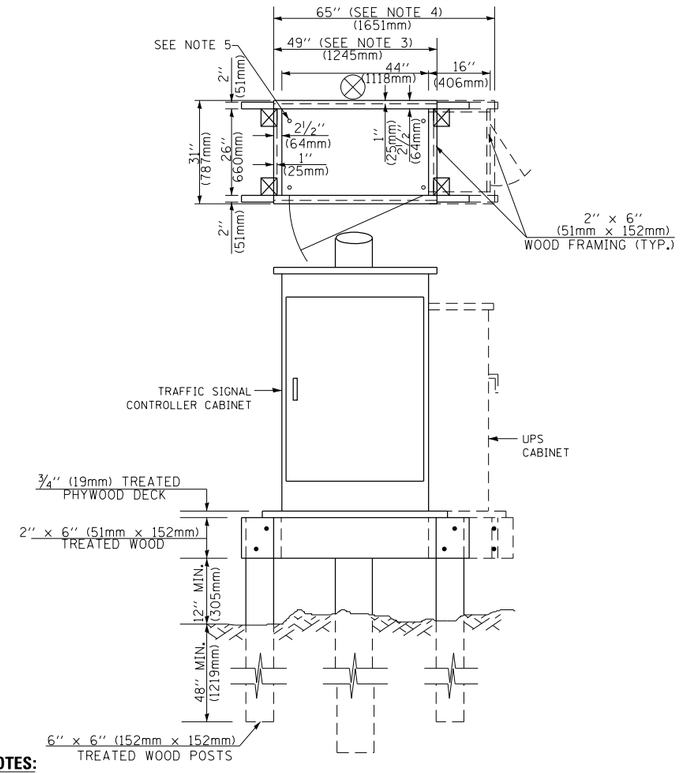
NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

TOP VIEW



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

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

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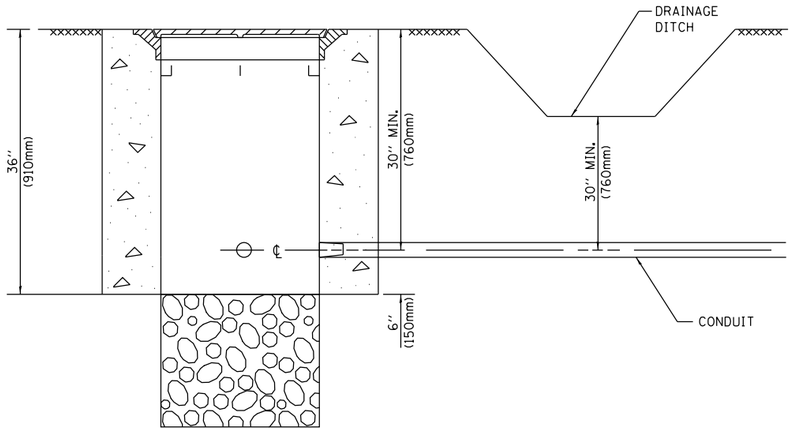
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 5 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	40
	TS-05	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

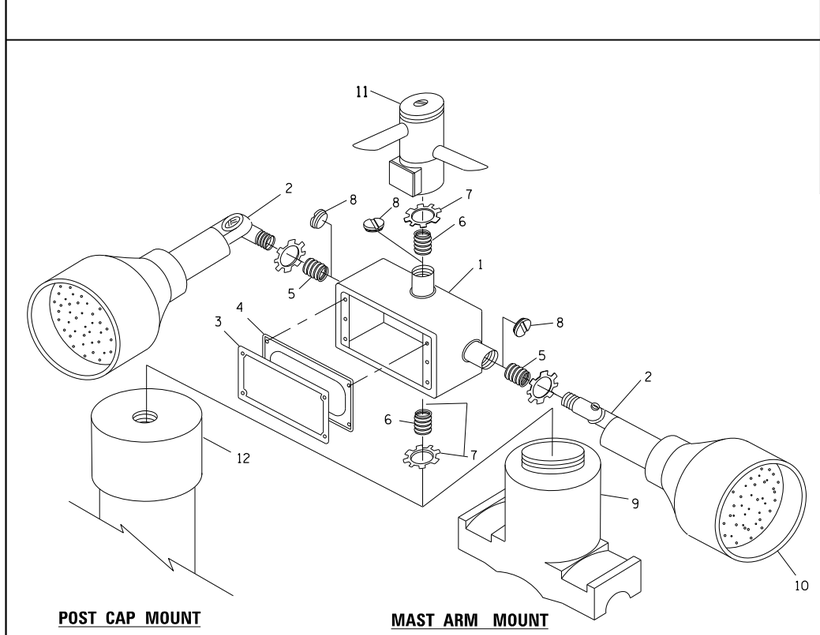


NOTES:

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

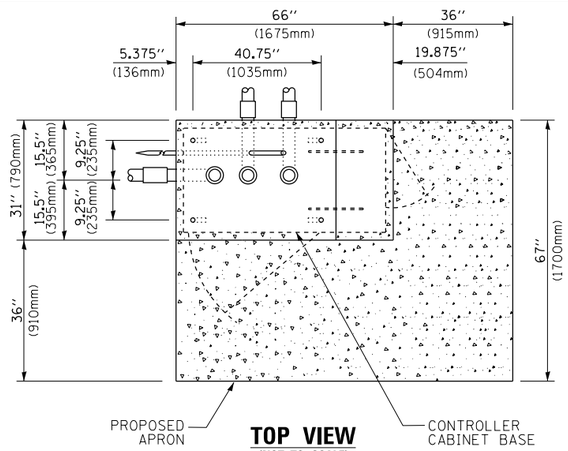
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



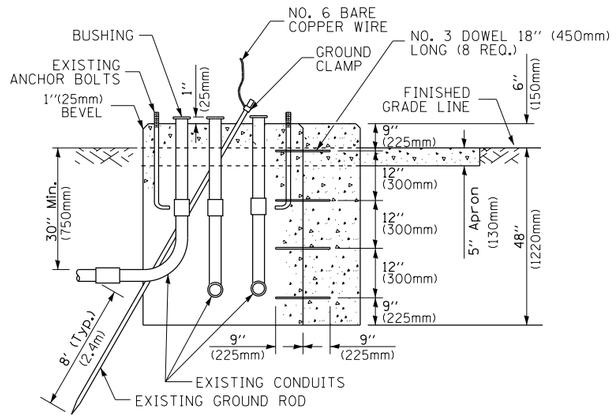
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW

(NOT TO SCALE)



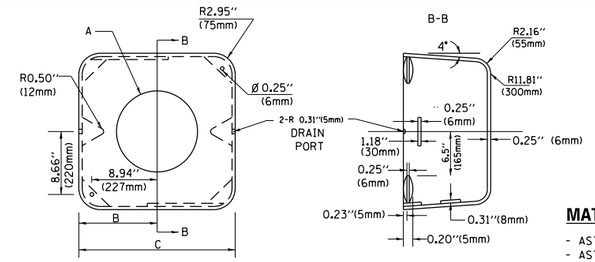
MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(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	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

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.



MATERIAL:

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

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

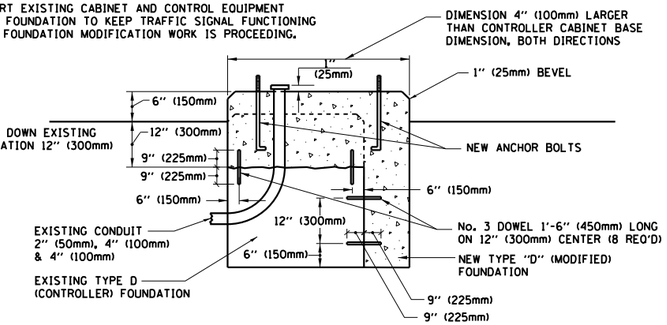
SHROUD

NOTES:

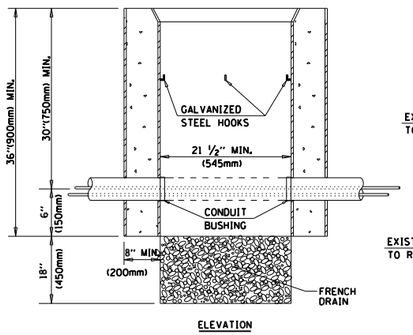
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

NOTE:

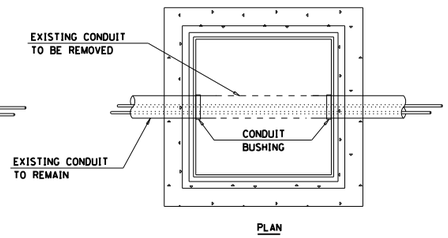
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



ELEVATION



PLAN

NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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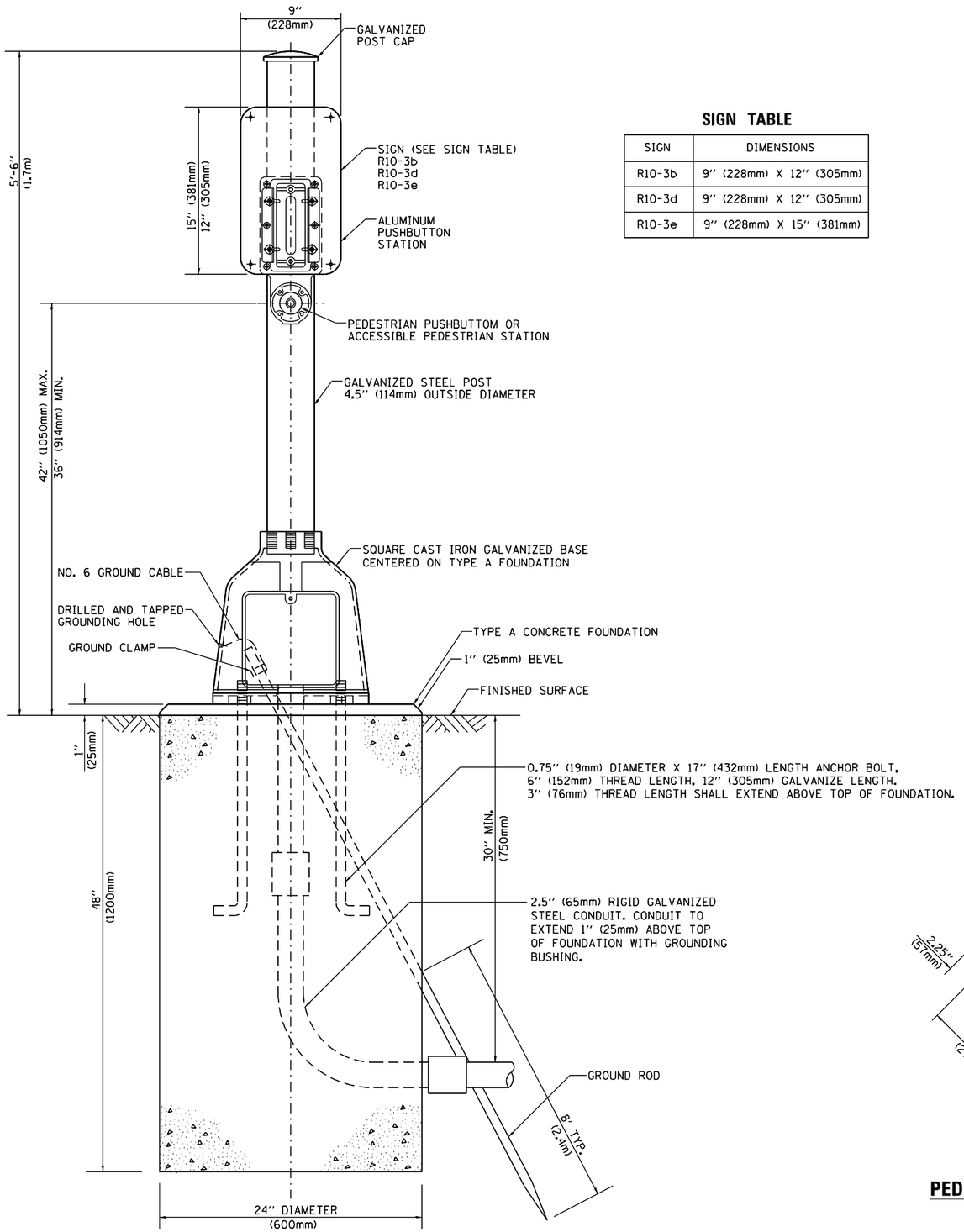
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

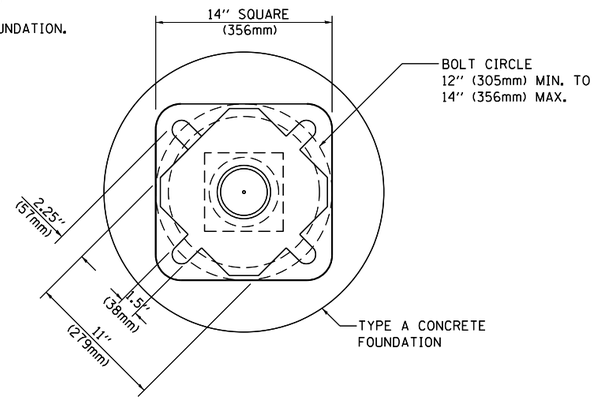
SCALE: NONE | SHEET 6 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3338&344	116TS&N-2	LAKE	102	41
	TS-05	CONTRACT NO. 60W92		
		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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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

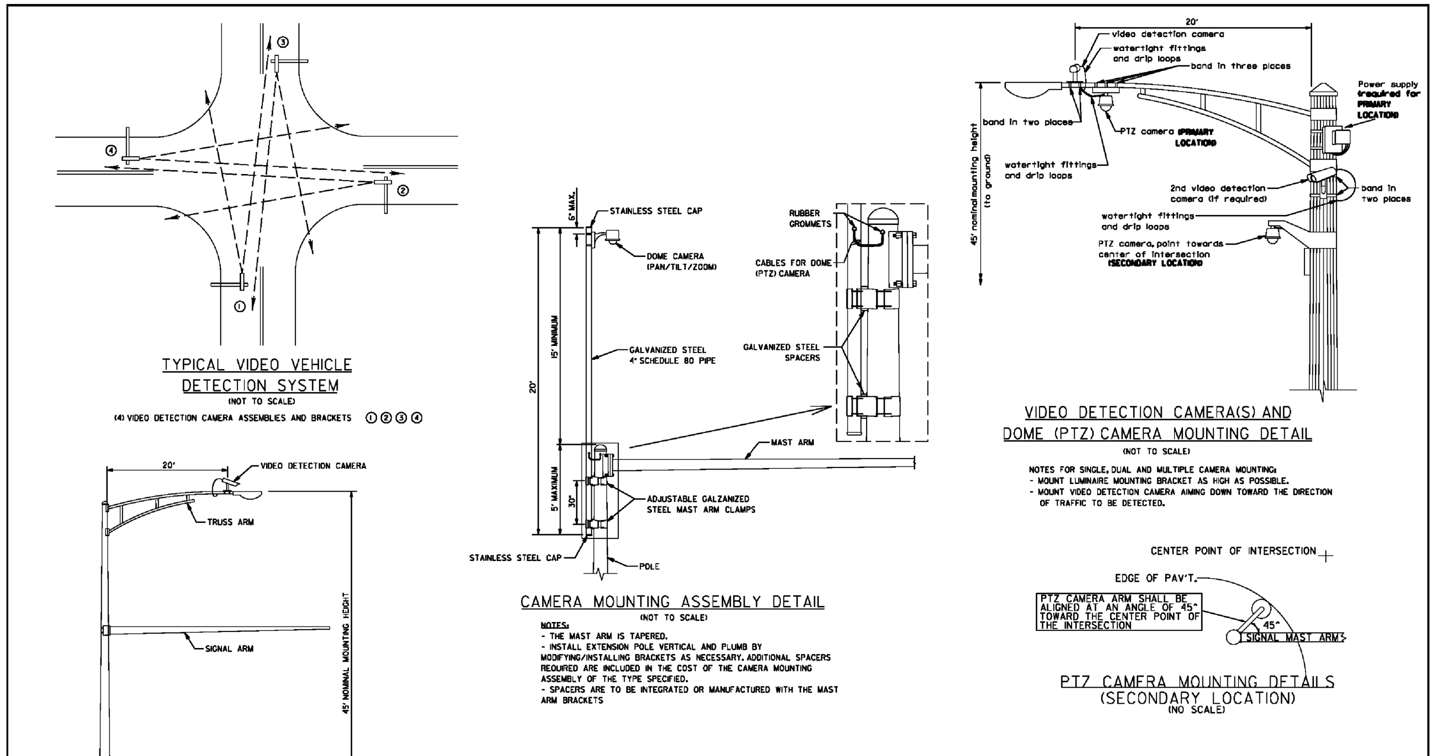
SCALE: NONE | SHEET 7 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	42
	TS-05	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN — NOTE BOOK NO. — SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. CHECKED / CADD FILE NAME — BY: ejensen — N:\LCDOT\120226\6 - IL 120\Traffic\DET_LCDOT_01.dgn

PROFILE — NOTE BOOK NO. — SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHKD



TYPICAL VIDEO VEHICLE DETECTION SYSTEM
(NOT TO SCALE)
(4) VIDEO DETECTION CAMERA ASSEMBLIES AND BRACKETS ① ② ③ ④

COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS
(NOT TO SCALE)

CAMERA MOUNTING ASSEMBLY DETAIL
(NOT TO SCALE)

NOTES:
- THE MAST ARM IS TAPERED.
- INSTALL EXTENSION POLE VERTICAL AND PLUMB BY MODIFYING/INSTALLING BRACKETS AS NECESSARY. ADDITIONAL SPACERS REQUIRED ARE INCLUDED IN THE COST OF THE CAMERA MOUNTING ASSEMBLY OF THE TYPE SPECIFIED.
- SPACERS ARE TO BE INTEGRATED OR MANUFACTURED WITH THE MAST ARM BRACKETS

VIDEO DETECTION CAMERA(S) AND DOME (PTZ) CAMERA MOUNTING DETAIL
(NOT TO SCALE)

NOTES FOR SINGLE, DUAL AND MULTIPLE CAMERA MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
- MOUNT VIDEO DETECTION CAMERA AIMING DOWN TOWARD THE DIRECTION OF TRAFFIC TO BE DETECTED.

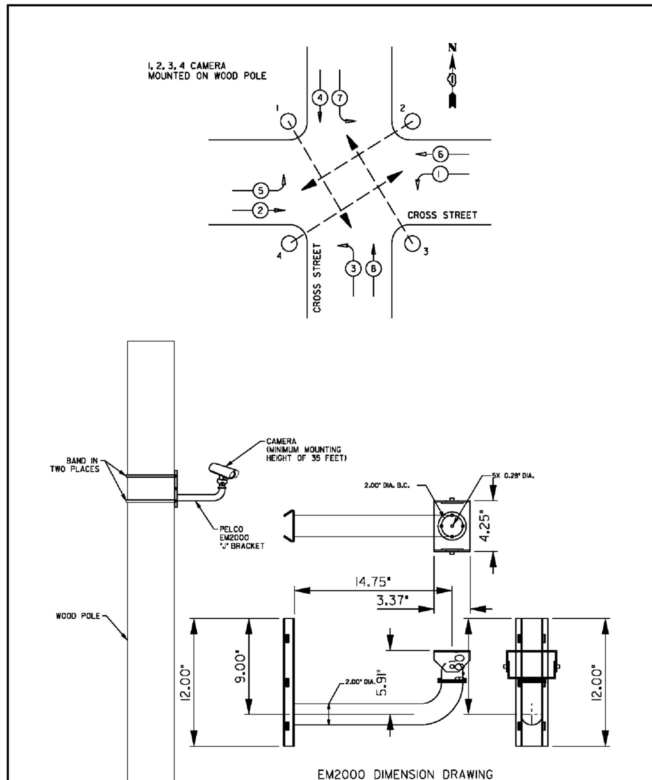
PTZ CAMERA MOUNTING DETAILS
(SECONDARY LOCATION)
(NO SCALE)

REVISIONS	DATE
Mounting Details Revised	05/01/08
2nd Camera Locat. added	01/14/09
Mast Arm Taper Detail	06/01/12
Mounting Details Revised	06/13/14

LakeCounty Division of Transportation — APPROVED BY: J. P. NELSON — DATE: JUNE 13, 2014

CAMERA MOUNTING DETAILS — LC8900

PROJECT NAME	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
LAKE COUNTY STANDARDS & DETAILS	CHXX	XXX	XX-XXXXX-XX-XX	XXX	XXX



TEMPORARY CAMERA MOUNTING DETAILS
(NOT TO SCALE)

LakeCounty Division of Transportation — APPROVED BY: A. KHAWAJA — DATE: APRIL 1, 2007

TEMPORARY AUTOSCOPE INSTALLATION — LC8901

PROJECT NAME	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
LAKE COUNTY STANDARDS & DETAILS	CHXX	XXX	XX-XXXXX-XX-XX	XXX	XXX

TS SHT NO. 52

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\DET_LCDOT_01.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
	PLOT SCALE = 2'	DRAWN - FPB	REVISED -
	PLOT DATE = 9/26/2016	CHECKED - GMZ	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LAKE COUNTY STANDARD DETAILS
LC8900 & LC8901

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	43

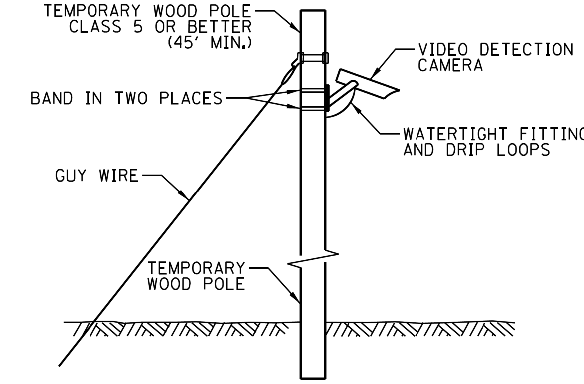
CONTRACT NO. 60W92

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

REMOVAL NOTES:

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

1	EACH	CONTROLLER AND CABINET (COMPLETE)
3	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 4-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3 SECTION
4	EACH	ALUMINUM MAST ARM AND POLE
2	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION
4	EACH	TRAFFIC SIGNAL BACKPLATE

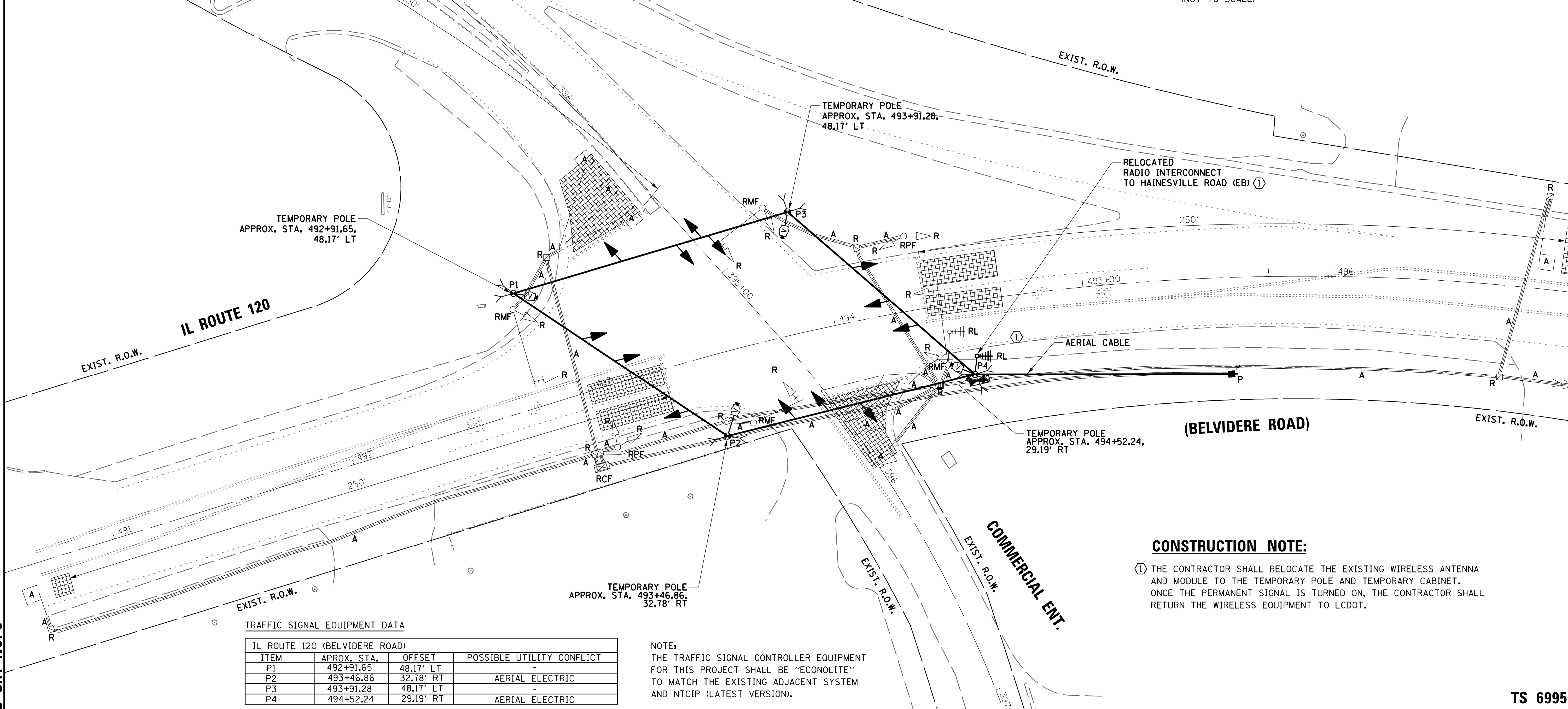


TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)

N

SCALE: 1'' = 40'



CONSTRUCTION NOTE:

(1) THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS ANTENNA AND MODULE TO THE TEMPORARY POLE AND TEMPORARY CABINET. ONCE THE PERMANENT SIGNAL IS TURNED ON, THE CONTRACTOR SHALL RETURN THE WIRELESS EQUIPMENT TO LCDOT.

TRAFFIC SIGNAL EQUIPMENT DATA

IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
P1	492+91.65	48.17' LT	-
P2	493+46.86	32.78' RT	AERIAL ELECTRIC
P3	493+91.28	48.17' LT	-
P4	494+52.24	29.19' RT	AERIAL ELECTRIC

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

TS 6995

TS SHT NO. 9

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\TMP_IL134.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL AND TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN
IL ROUTE 120 AND IL ROUTE 134 /COMMERCIAL ENT.

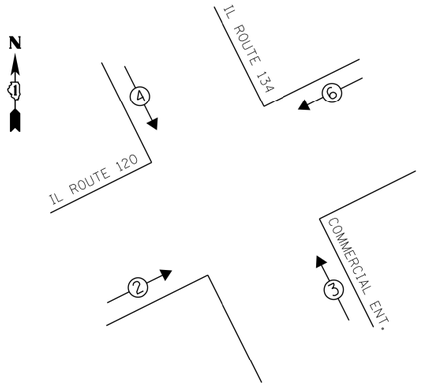
SCALE: 1'' = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	44

CONTRACT NO. 60W92

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

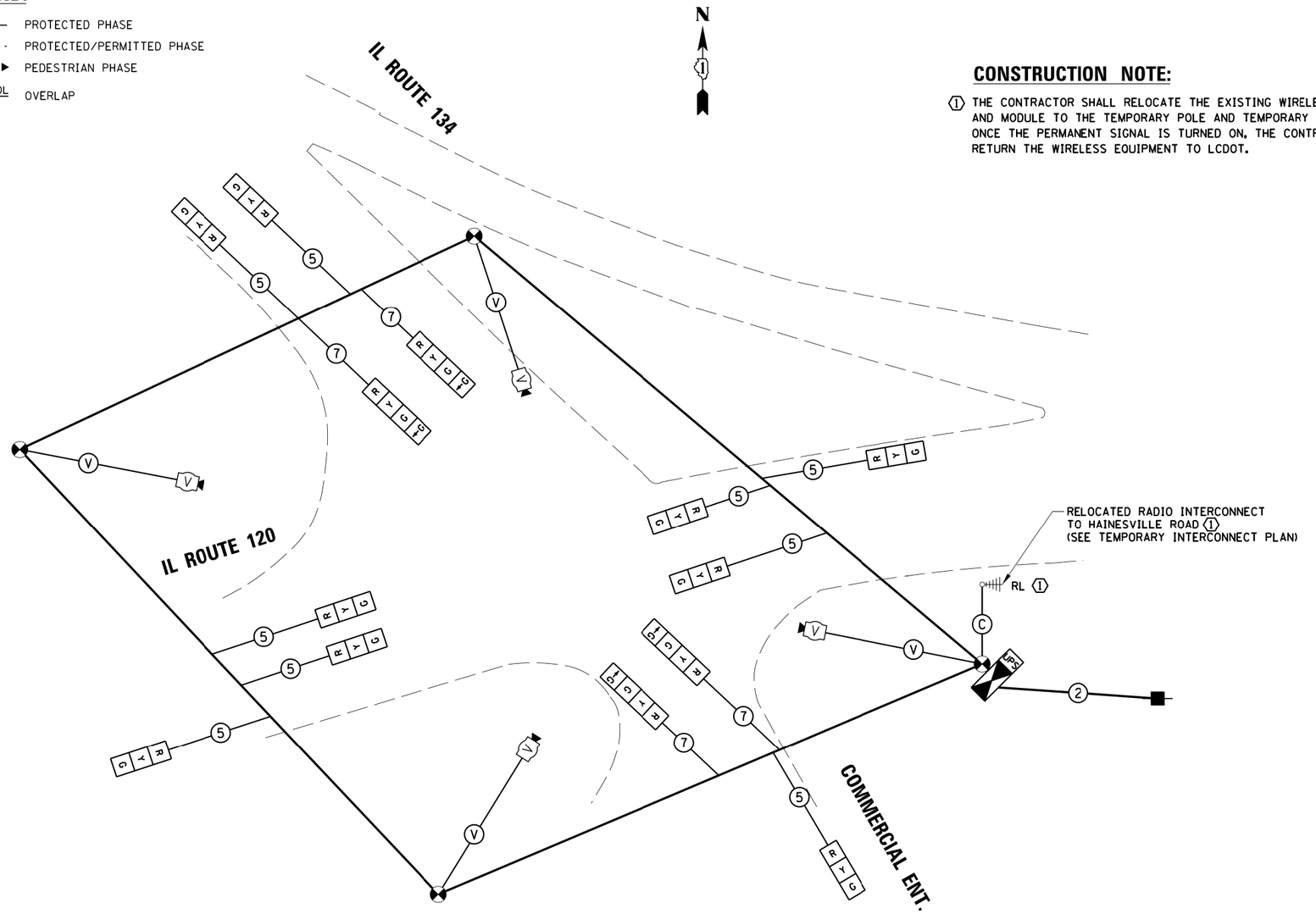
TEMPORARY CONTROLLER SEQUENCE



NOTE:
PHASES 3 AND 4 SHALL BE SPLIT PHASE.

LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP



TEMPORARY CABLE PLAN

CONSTRUCTION NOTE:

(1) THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS ANTENNA AND MODULE TO THE TEMPORARY POLE AND TEMPORARY CABINET. ONCE THE PERMANENT SIGNAL IS TURNED ON, THE CONTRACTOR SHALL RETURN THE WIRELESS EQUIPMENT TO LCDOT.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	17	12	45	91.8
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
-	-	-	-	-
ENERGY COSTS TO:			TOTAL =	451.3

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

TS SHT NO. 10

TS 6995

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Rosemont, Illinois 60018
(847) 823-0500

PLAN — NOTE BOOK — NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — PLANS CHECKED — CADD FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\TCB_IL134.dgn — BY — DATE — STRUCTURE NOTATNS CHKD

PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — PLANS CHECKED — STRUCTURE NOTATNS CHKD

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\TCB_IL134.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM
IL ROUTE 120 AND IL ROUTE 134 / COMMERCIAL ENT.

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3338344	116TS&N-2	LAKE	102	45
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

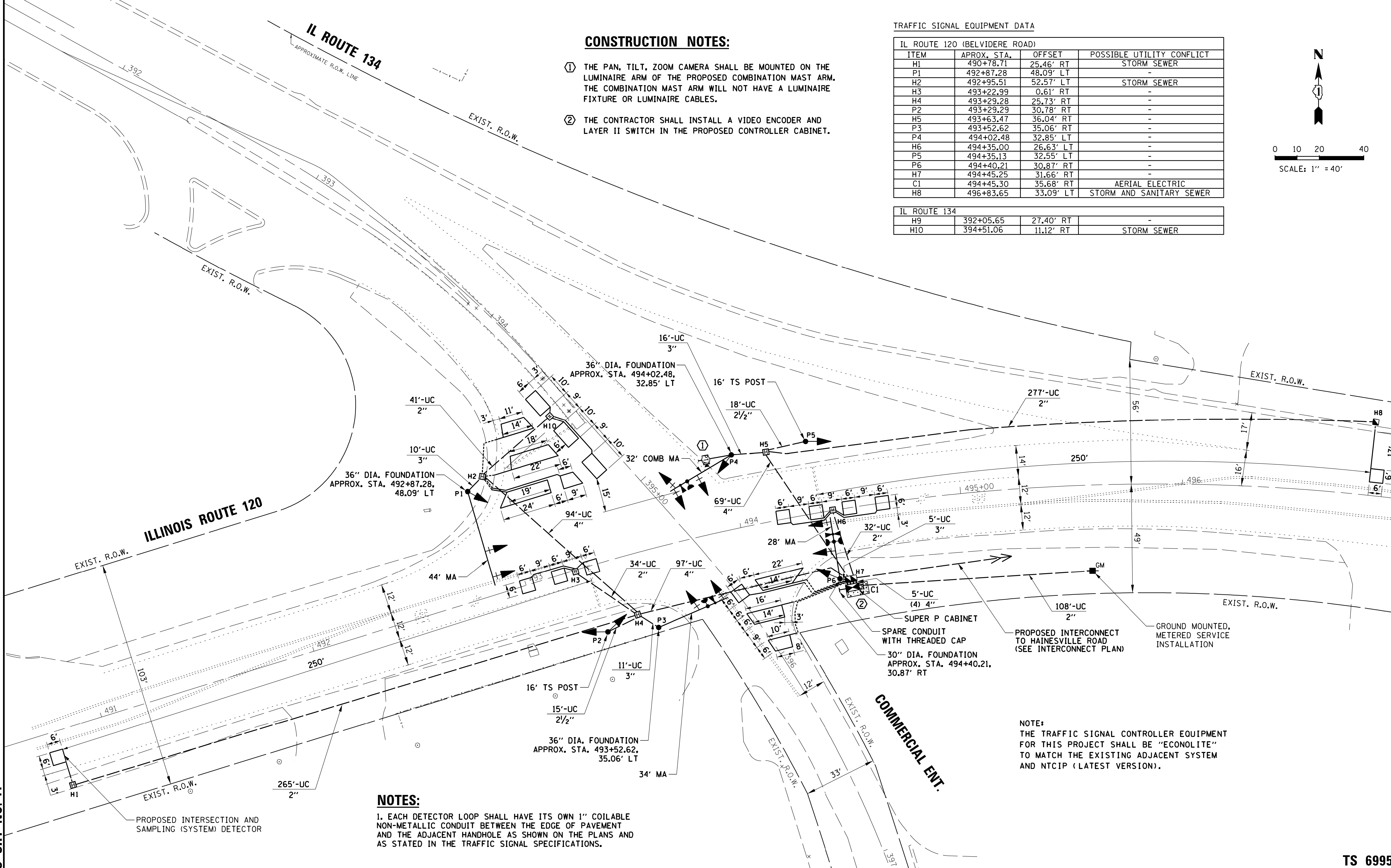
CONSTRUCTION NOTES:

① THE PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE LUMINAIRE ARM OF THE PROPOSED COMBINATION MAST ARM. THE COMBINATION MAST ARM WILL NOT HAVE A LUMINAIRE FIXTURE OR LUMINAIRE CABLES.

② THE CONTRACTOR SHALL INSTALL A VIDEO ENCODER AND LAYER II SWITCH IN THE PROPOSED CONTROLLER CABINET.

TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
IL ROUTE 120 (BELVIDERE ROAD)			
H1	490+78.71	25.46' RT	STORM SEWER
P1	492+87.28	48.09' LT	-
H2	492+95.51	52.57' LT	STORM SEWER
H3	493+22.99	0.61' RT	-
H4	493+29.28	25.73' RT	-
P2	493+29.29	30.78' RT	-
H5	493+63.47	36.04' RT	-
P3	493+52.62	35.06' RT	-
P4	494+02.48	32.85' LT	-
H6	494+35.00	26.63' LT	-
P5	494+35.13	32.55' LT	-
P6	494+40.21	30.87' RT	-
H7	494+45.25	31.66' RT	-
C1	494+45.30	35.68' RT	AERIAL ELECTRIC
H8	496+83.65	33.09' LT	STORM AND SANITARY SEWER
IL ROUTE 134			
H9	392+05.65	27.40' RT	-
H10	394+51.06	11.12' RT	STORM SEWER



NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

TS 6995

TS SHT NO. 11

CHRISTOPHER B. BURKE ENGINEERING LTD.
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Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\TSD_IL134.dgn
USER NAME = ejensen
PLOT SCALE = 40'
PLOT DATE = 9/26/2016
DESIGNED - EAJ
DRAWN - FPB
CHECKED - GMZ
DATE -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
IL ROUTE 120 AND IL ROUTE 134 /COMMERCIAL ENT.

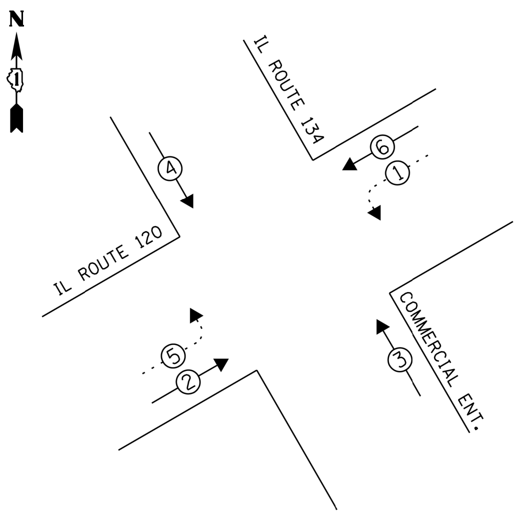
SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	46

CONTRACT NO. 60W92

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

PROPOSED CONTROLLER SEQUENCE



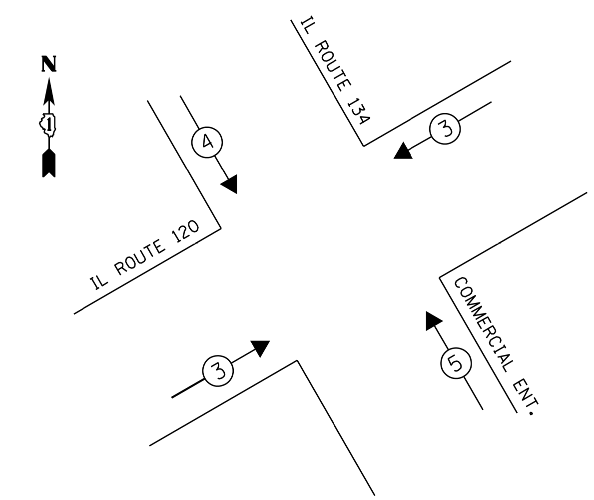
LEGEND:

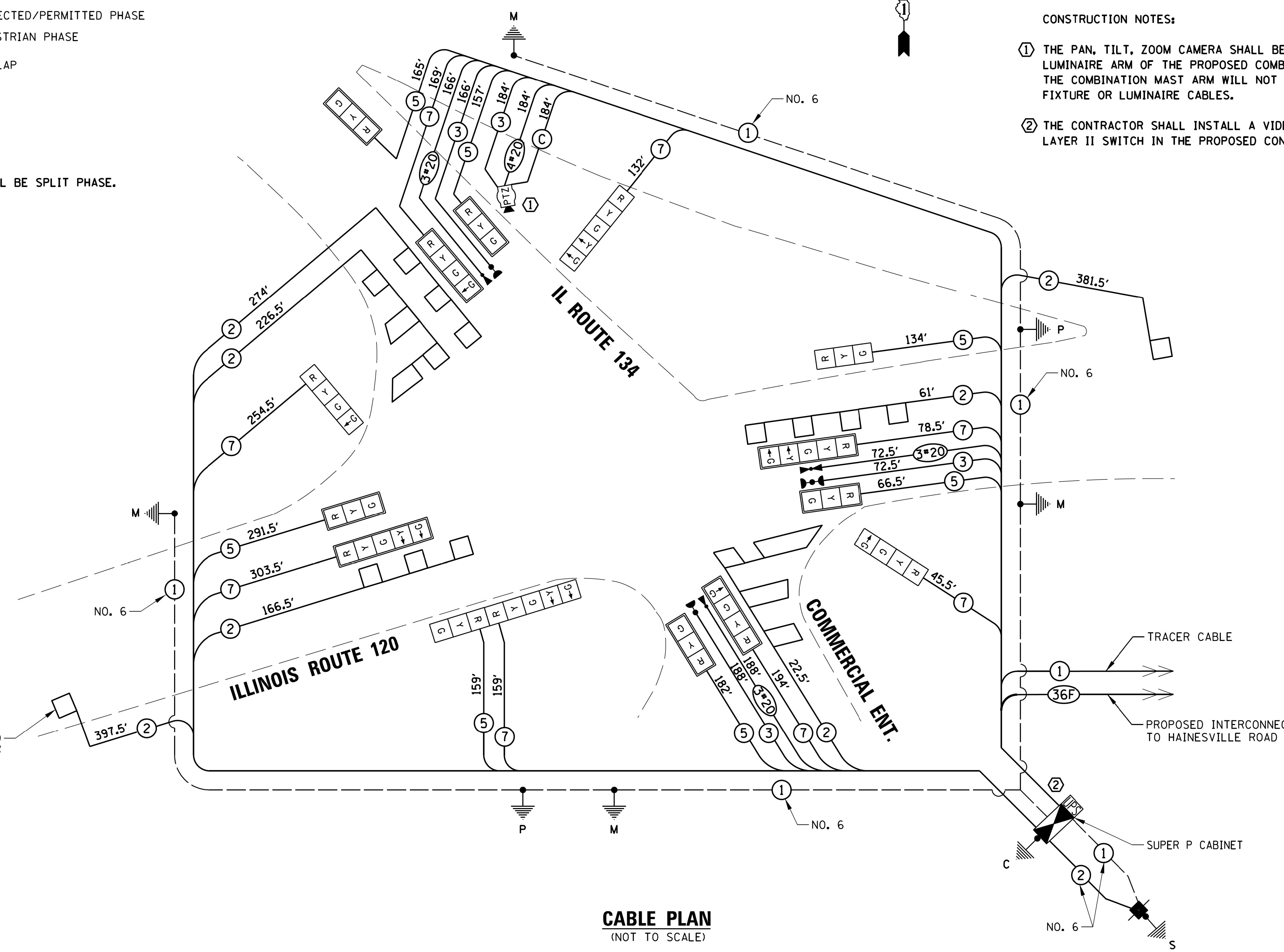
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

NOTE:

PHASES 3 AND 4 SHALL BE SPLIT PHASE.

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

(NOT TO SCALE)

CONSTRUCTION NOTES:

1. THE PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE LUMINAIRE ARM OF THE PROPOSED COMBINATION MAST ARM. THE COMBINATION MAST ARM WILL NOT HAVE A LUMINAIRE FIXTURE OR LUMINAIRE CABLES.
2. THE CONTRACTOR SHALL INSTALL A VIDEO ENCODER AND LAYER II SWITCH IN THE PROPOSED CONTROLLER CABINET.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15.0
(GREEN)	19	12	45	102.6
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
-	-	-	-	-
ENERGY COSTS TO:			TOTAL =	333.1

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

TS 6995

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

TS SHT NO. 12

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PLOT SCALE = 40'
PLOT DATE = 9/26/2016
DESIGNED - EAJ
DRAWN - FPB
CHECKED - GMZ
DATE -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 120 AND IL ROUTE 134 / COMMERCIAL ENT.

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

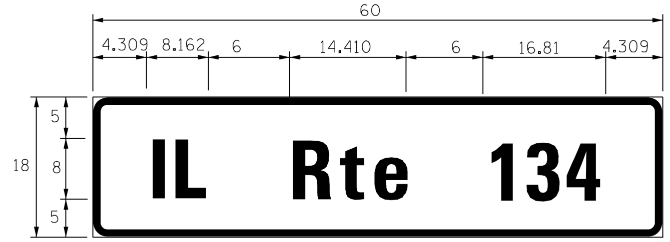
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	47

CONTRACT NO. 60W92

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

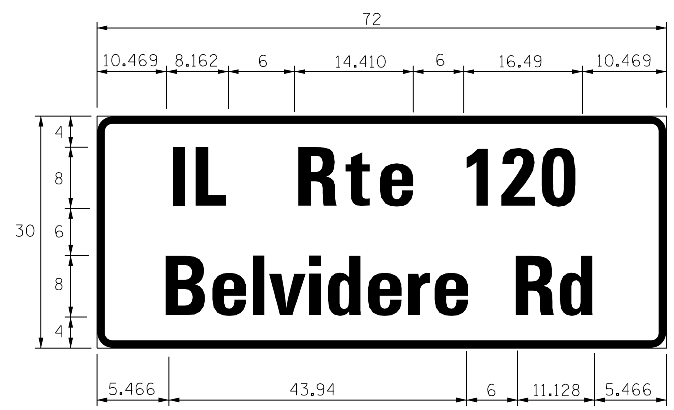
MAST ARM MOUNTED STREET NAME SIGNS

SIGN PANEL – TYPE 1



DESIGN SERIES	AREA (SQ. FT.)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	7.5	1	ZZ	2

SIGN PANEL – TYPE 2



DESIGN SERIES	AREA (SQ. FT.)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15.0	2	ZZ	2

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	757
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	33
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	42
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	285
HANDHOLE	EACH	1
HEAVY-DUTY HANDHOLE	EACH	7
DOUBLE HANDHOLE	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	610
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,155
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,338
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,530
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	138
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	537
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	878
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	426
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	184
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	184
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

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9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

TS SHT NO. 13

TS 6995

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_IL134_02.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

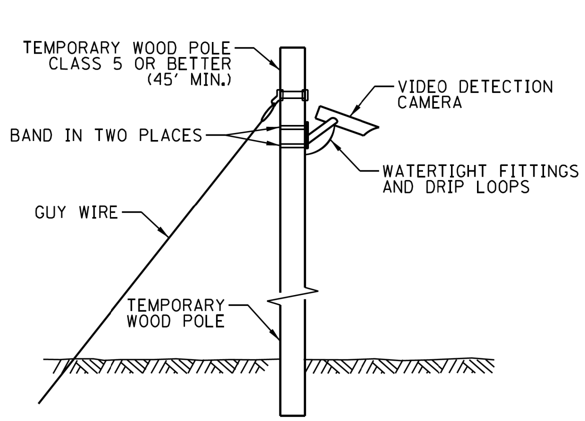
SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGNS IL ROUTE 120 AND IL ROUTE 134 / COMMERCIAL ENT.

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

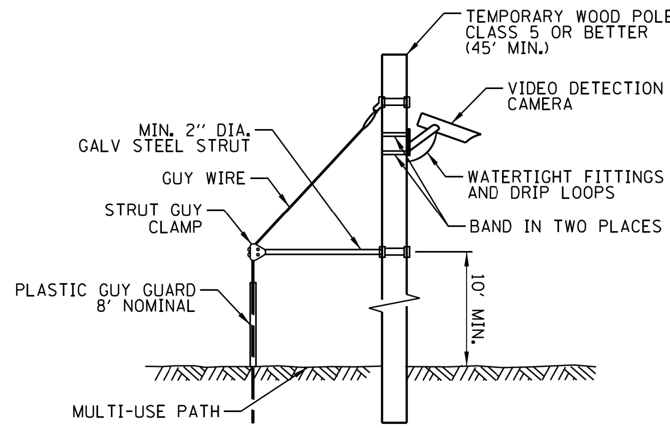
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	48

CONTRACT NO. 60W92

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)



TEMPORARY POLE DETAIL WITH MULTI-USE PATH STRUT AND TYP. VIDEO DETECTION MOUNTING
(NOT TO SCALE)

REMOVAL NOTES:

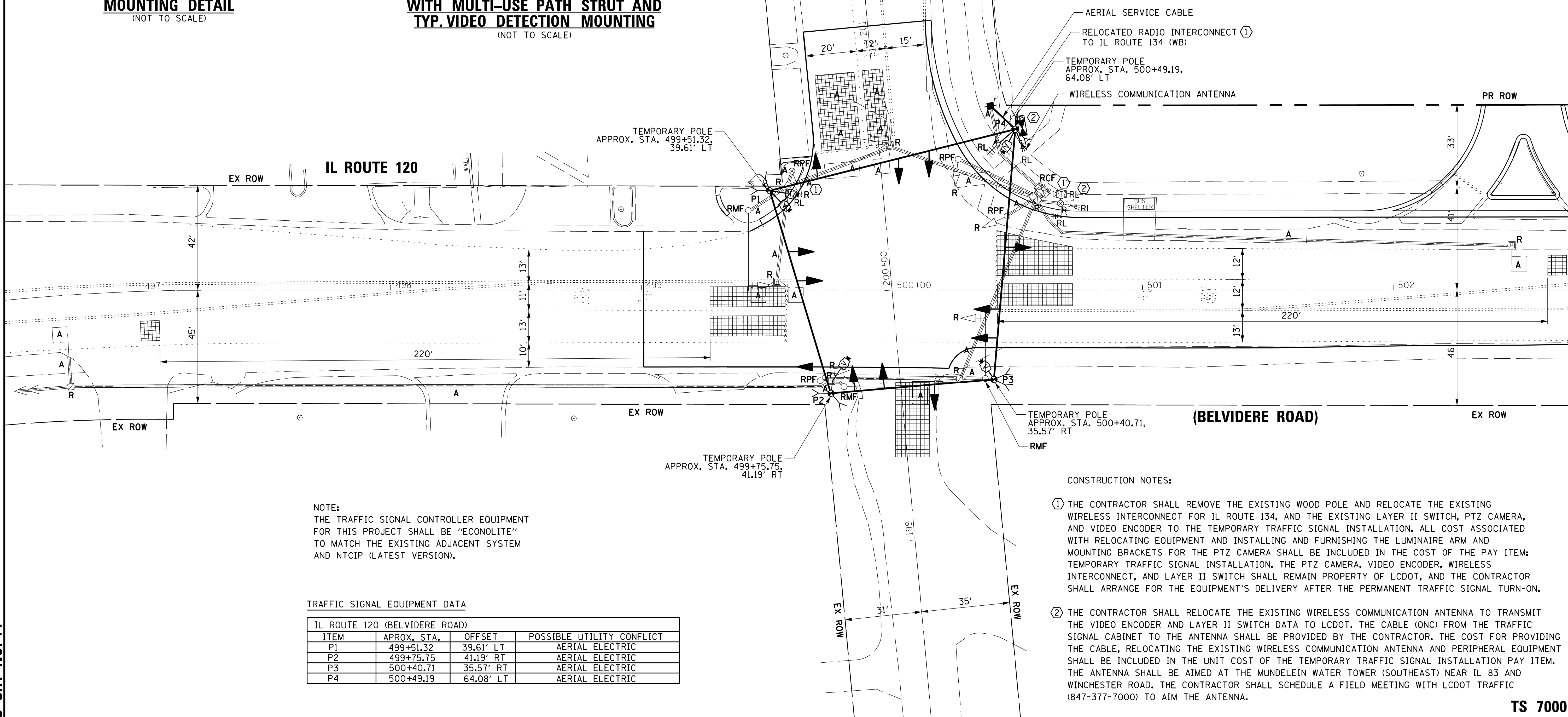
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	CONTROLLER AND CABINET (COMPLETE)
3	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 4-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3 SECTION
4	EACH	ALUMINUM MAST ARM AND POLE
2	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION
1	EACH	TEMPORARY WOOD POLE
3	EACH	TRAFFIC SIGNAL BACKPLATE

N

0 10 20 40

SCALE: 1" = 40'



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

TRAFFIC SIGNAL EQUIPMENT DATA

IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
P1	499+51.32	39.61' LT	AERIAL ELECTRIC
P2	499+75.75	41.19' RT	AERIAL ELECTRIC
P3	500+40.71	35.57' RT	AERIAL ELECTRIC
P4	500+49.19	64.08' LT	AERIAL ELECTRIC

CONSTRUCTION NOTES:

(1) THE CONTRACTOR SHALL REMOVE THE EXISTING WOOD POLE AND RELOCATE THE EXISTING WIRELESS INTERCONNECT FOR IL ROUTE 134, AND THE EXISTING LAYER II SWITCH, PTZ CAMERA, AND VIDEO ENCODER TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL COST ASSOCIATED WITH RELOCATING EQUIPMENT AND INSTALLING AND FURNISHING THE LUMINAIRE ARM AND MOUNTING BRACKETS FOR THE PTZ CAMERA SHALL BE INCLUDED IN THE COST OF THE PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION. THE PTZ CAMERA, VIDEO ENCODER, WIRELESS INTERCONNECT, AND LAYER II SWITCH SHALL REMAIN PROPERTY OF LCDOT, AND THE CONTRACTOR SHALL ARRANGE FOR THE EQUIPMENT'S DELIVERY AFTER THE PERMANENT TRAFFIC SIGNAL TURN-ON.

(2) THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS COMMUNICATION ANTENNA TO TRANSMIT THE VIDEO ENCODER AND LAYER II SWITCH DATA TO LCDOT. THE CABLE (ONC) FROM THE TRAFFIC SIGNAL CABINET TO THE ANTENNA SHALL BE PROVIDED BY THE CONTRACTOR. THE COST FOR PROVIDING THE CABLE, RELOCATING THE EXISTING WIRELESS COMMUNICATION ANTENNA AND PERIPHERAL EQUIPMENT SHALL BE INCLUDED IN THE UNIT COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM. THE ANTENNA SHALL BE AIMED AT THE MUNDELEIN WATER TOWER (SOUTHEAST) NEAR IL 83 AND WINCHESTER ROAD. THE CONTRACTOR SHALL SCHEDULE A FIELD MEETING WITH LCDOT TRAFFIC (847-377-7000) TO AIM THE ANTENNA.

TS 7000

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN — NOTE BOOK NO. — SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.T. OF WAY CHECKED / CADD FILE NAME — BY: ejensen — N:\LCDOT\120226\6 - IL 120\Traffic\TMP_HAINESVILLE.dgn — DATE

PROFILE — NOTE BOOK NO. — SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTAT'NS CHK'D — BY — DATE

TS SHT NO. 14

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\TMP_HAINESVILLE.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL AND TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN
IL ROUTE 120 AND HAINESVILLE ROAD

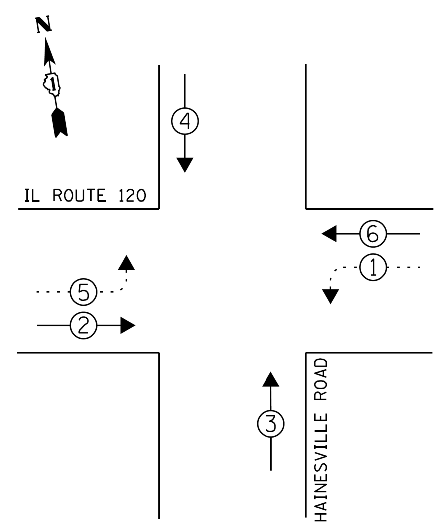
SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	49

CONTRACT NO. 60W92

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

TEMPORARY CONTROLLER SEQUENCE

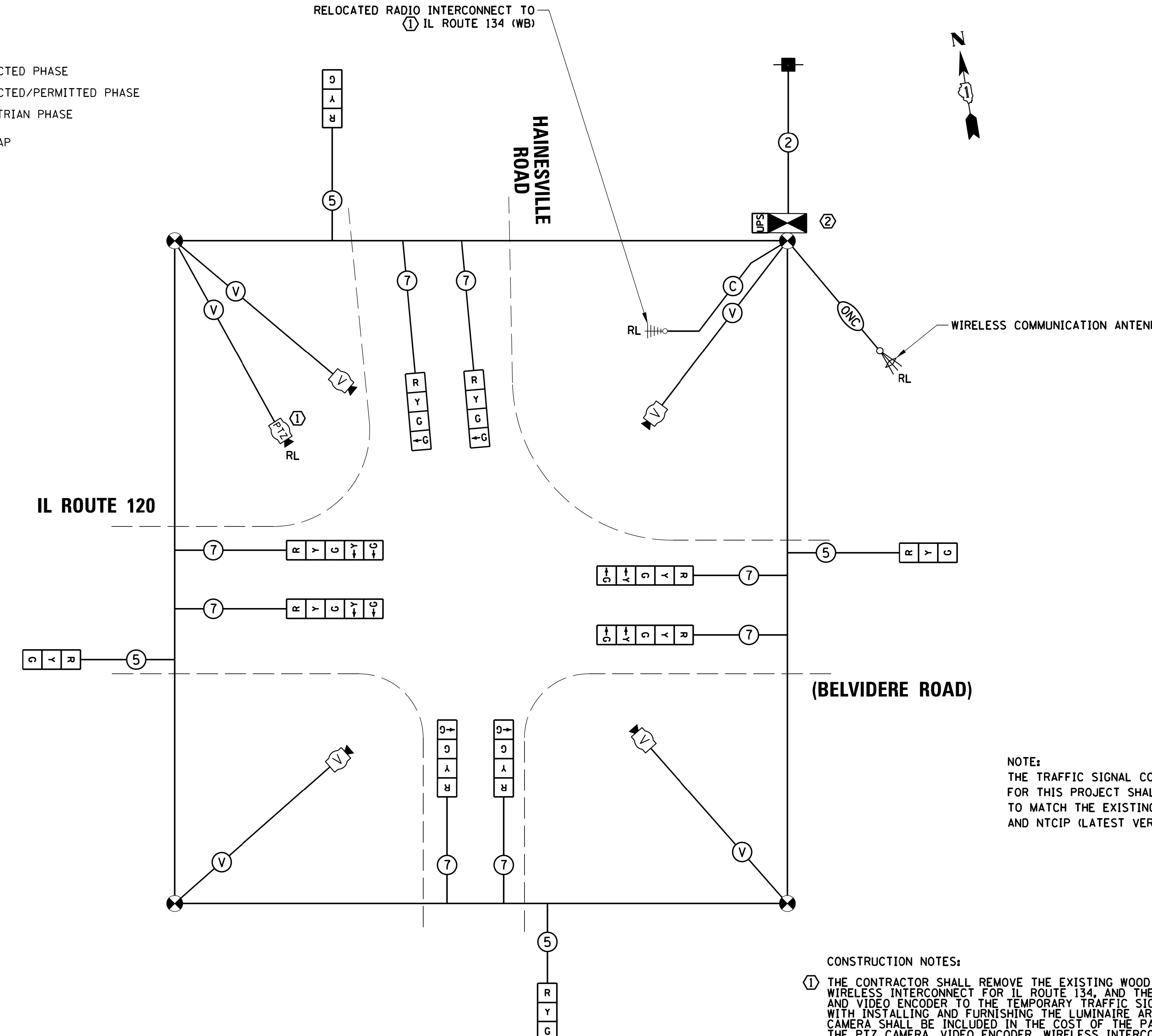


LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

NOTE:

PHASES 3 AND 4 SHALL BE SPLIT PHASE.



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

TEMPORARY CABLE PLAN

(NOT TO SCALE)

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL REMOVE THE EXISTING WOOD POLE AND RELOCATE THE EXISTING WIRELESS INTERCONNECT FOR IL ROUTE 134, AND THE EXISTING LAYER II SWITCH, PTZ CAMERA, AND VIDEO ENCODER TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL COST ASSOCIATED WITH INSTALLING AND FURNISHING THE LUMINAIRE ARM AND MOUNTING BRACKETS FOR THE PTZ CAMERA SHALL BE INCLUDED IN THE COST OF THE PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION. THE PTZ CAMERA, VIDEO ENCODER, WIRELESS INTERCONNECT, AND LAYER II SWITCH SHALL REMAIN PROPERTY OF LCDOT, AND THE CONTRACTOR SHALL ARRANGE FOR THE EQUIPMENT'S DELIVERY AFTER THE PERMANENT TRAFFIC SIGNAL TURN-ON.

2. THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS COMMUNICATION ANTENNA TO TRANSMIT THE VIDEO ENCODER AND LAYER II SWITCH DATA TO LCDOT. THE CABLE (ONC) FROM THE TRAFFIC SIGNAL CABINET TO THE ANTENNA SHALL BE PROVIDED BY THE CONTRACTOR. THE COST FOR PROVIDING THE CABLE, RELOCATING THE EXISTING WIRELESS COMMUNICATION ANTENNA AND PERIPHERAL EQUIPMENT SHALL BE INCLUDED IN THE UNIT COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM. THE ANTENNA SHALL BE AIMED AT THE MUNDELEIN WATER TOWER (SOUTHEAST) NEAR IL 83 AND WINCHESTER ROAD. THE CONTRACTOR SHALL SCHEDULE A FIELD MEETING WITH LCDOT TRAFFIC (847-377-7000) TO AIM THE ANTENNA.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	-	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
-	-	-	-	-
ENERGY COSTS TO:			TOTAL =	447.4

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 15

TS 7000

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\TCB_HAINESVILLE.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND
TEMPORARY PHASE DESIGNATION DIAGRAM
IL ROUTE 120 (BELVIDERE ROAD) AND HAINESVILLE ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

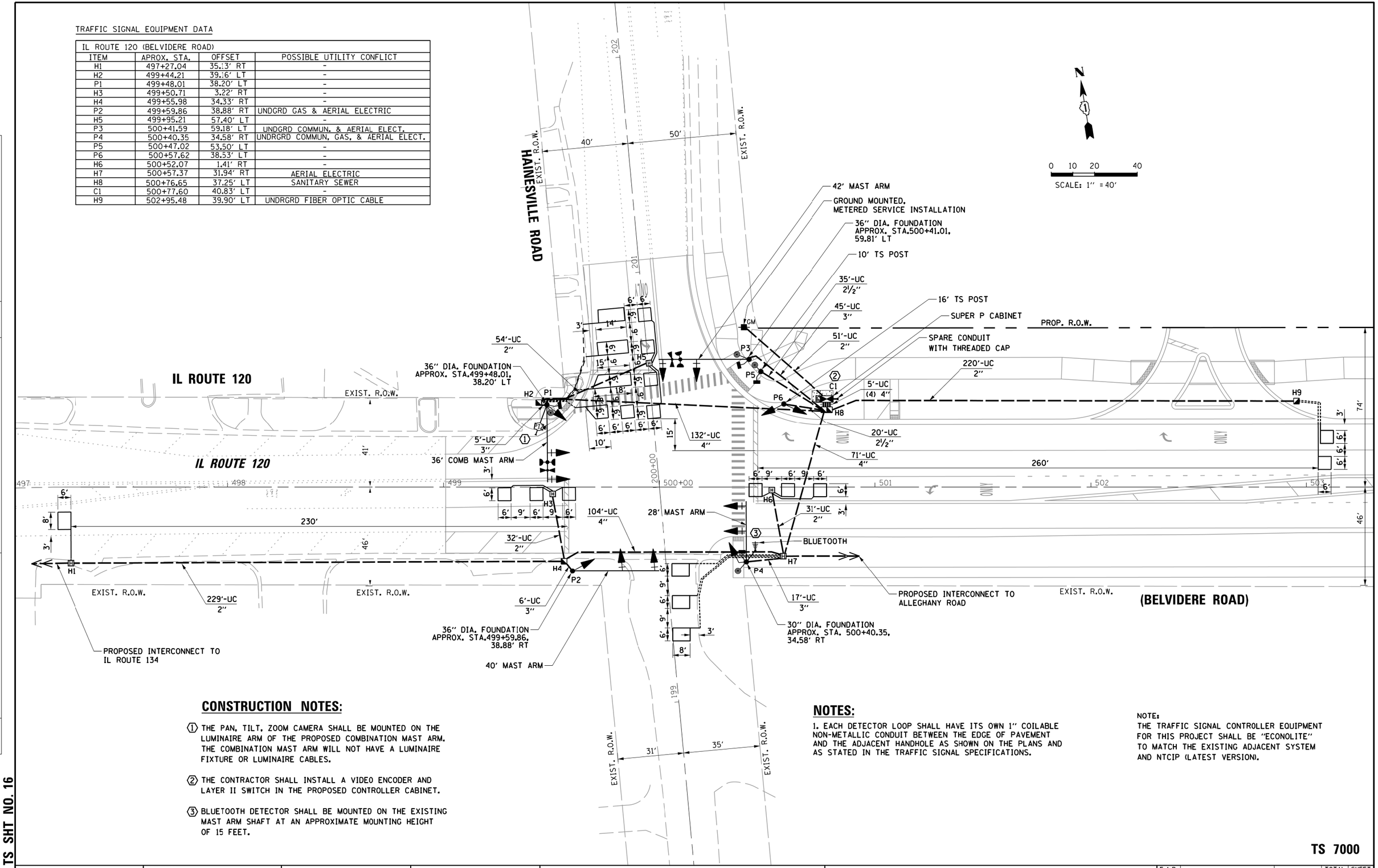
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	50

CONTRACT NO. 60W92

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TRAFFIC SIGNAL EQUIPMENT DATA

IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
H1	497+27.04	35.13' RT	-
H2	499+44.21	39.16' LT	-
P1	499+48.01	38.20' LT	-
H3	499+50.71	3.22' RT	-
H4	499+55.98	34.33' RT	-
P2	499+59.86	38.88' RT	UNDGRD GAS & AERIAL ELECTRIC
H5	499+95.21	57.40' LT	-
P3	500+41.59	59.18' LT	UNDGRD COMMUN. & AERIAL ELECT.
P4	500+40.35	34.58' RT	UNDRGRD COMMUN, GAS, & AERIAL ELECT.
P5	500+47.02	53.50' LT	-
P6	500+57.62	38.53' LT	-
H6	500+52.07	1.41' RT	-
H7	500+57.37	31.94' RT	AERIAL ELECTRIC
H8	500+76.65	37.25' LT	SANITARY SEWER
C1	500+77.60	40.83' LT	-
H9	502+95.48	39.90' LT	UNDRGRD FIBER OPTIC CABLE



CONSTRUCTION NOTES:

1. THE PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE LUMINAIRE ARM OF THE PROPOSED COMBINATION MAST ARM. THE COMBINATION MAST ARM WILL NOT HAVE A LUMINAIRE FIXTURE OR LUMINAIRE CABLES.
2. THE CONTRACTOR SHALL INSTALL A VIDEO ENCODER AND LAYER II SWITCH IN THE PROPOSED CONTROLLER CABINET.
3. BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.

NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

TS 7000

TS SHT NO. 16

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Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, ALL UTILITIES NOTED, CADD FILE NAME: N:\LCDOT\120226\6 - IL 120\Traffic\TSD_HAINESVILLE.dgn, BY: ejensen, DATE

PROFILE: SURVEYED, PLOTTED, ALL UTILITIES NOTED, STRUCTURE NO., NOTE BOOK, NO., CHKD, DATE, BY

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\TSD_HAINESVILLE.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

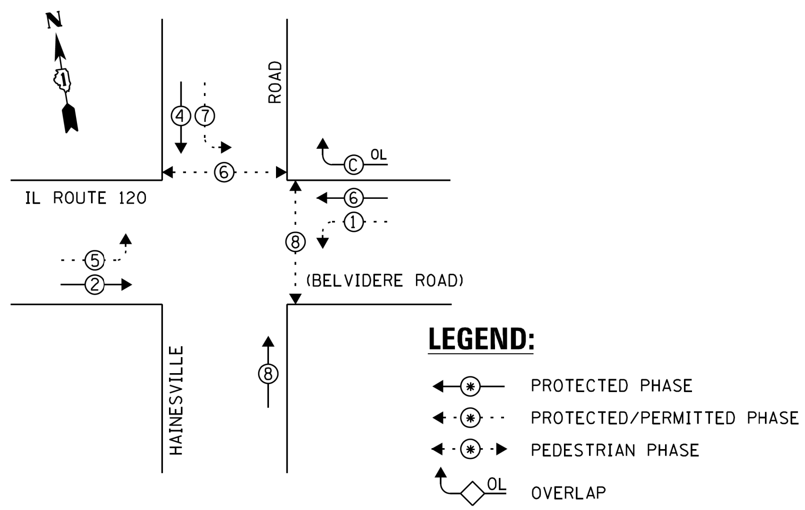
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
IL ROUTE 120 AND HAINESVILLE ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	51
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

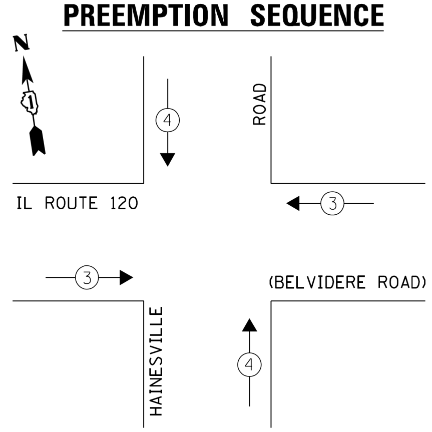
PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
C	=	6	+	7

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

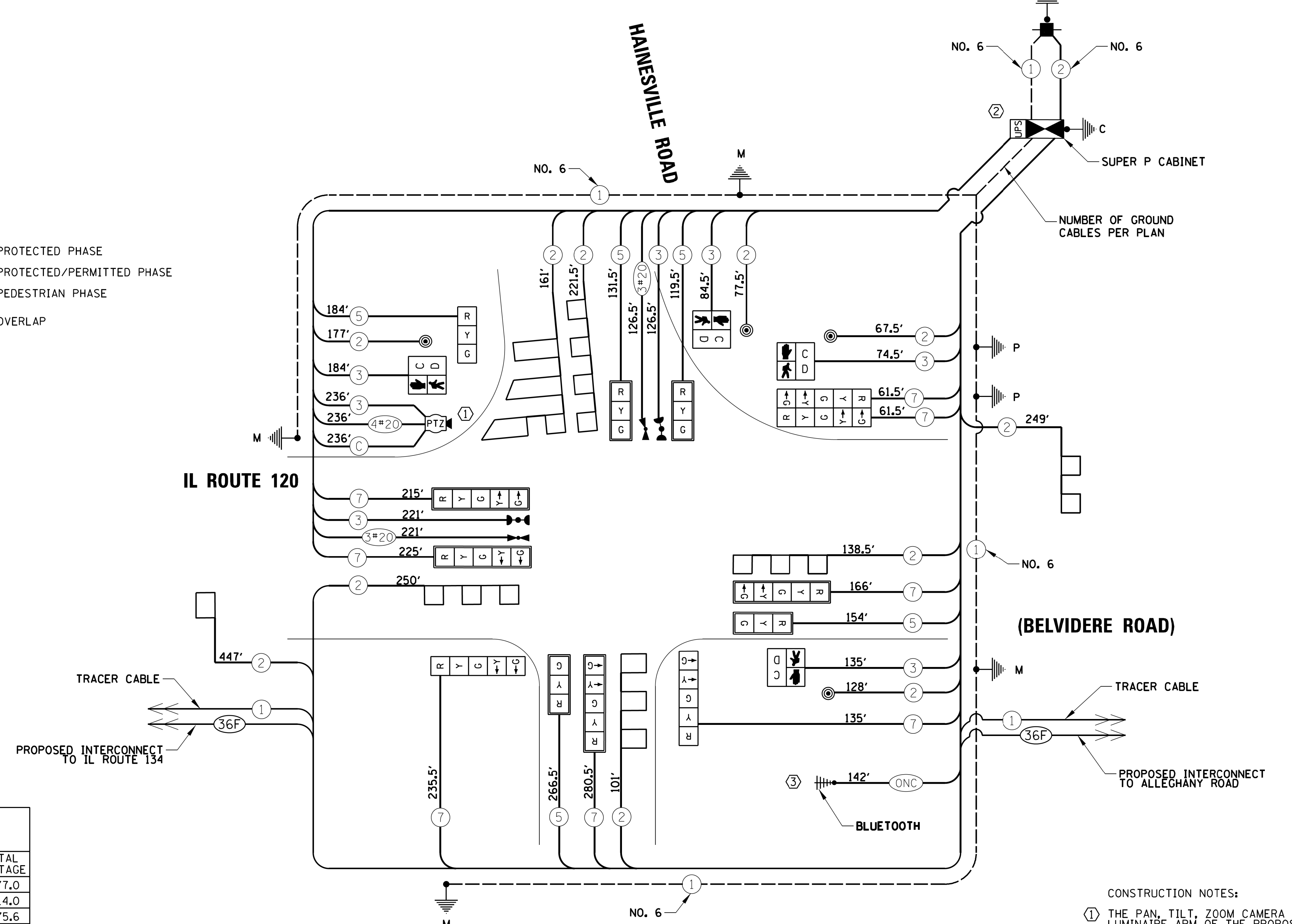


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	14	10	10	14.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
-	-	-	-	-
ENERGY COSTS TO:			TOTAL =	385.6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

(NOT TO SCALE)

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).

CONSTRUCTION NOTES:

1. THE PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE LUMINAIRE ARM OF THE PROPOSED COMBINATION MAST ARM. THE COMBINATION MAST ARM WILL NOT HAVE A LUMINAIRE FIXTURE OR LUMINAIRE CABLES.
2. THE CONTRACTOR SHALL INSTALL A VIDEO ENCODER AND LAYER II SWITCH IN THE PROPOSED CONTROLLER CABINET.
3. BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.

TS 7000

TS SHT NO. 17

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FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_HAINESVILLE_01.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
	PLOT SCALE = 40'	DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 120 AND HAINESVILLE ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

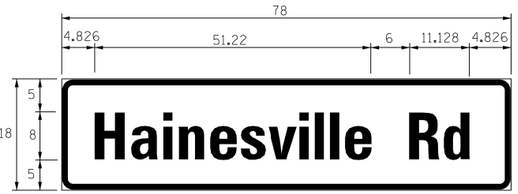
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	52

CONTRACT NO. 60W92

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

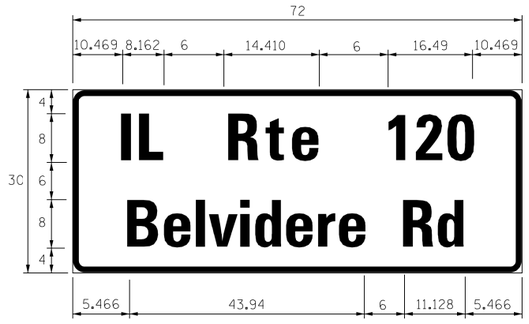
MAST ARM MOUNTED STREET NAME SIGNS

SIGN PANEL – TYPE 2



DESIGN SERIES	AREA (SQ. FT.)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	9.75	2	ZZ	2

SIGN PANEL – TYPE 2



DESIGN SERIES	AREA (SQ. FT.)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15.0	2	ZZ	2

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 2	SQ FT	50
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	617
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	55
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	73
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	332
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	450
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,062
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	856
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,380
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,568
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	83
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	614
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	41
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	722
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	348
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	236
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	236
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	142
BLUETOOTH DETECTOR	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

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Rosemont, Illinois 60018
(847) 823-0500

PLAN — NOTE BOOK — NO. —
SURVEYED — PLOTTED — ALIGNMENT CHECKED — PLANS CHECKED — STRUCTURE NOTATNS CHKD — BY — DATE
CADD FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_HAINESVILLE_02.dgn

PROFILE — NOTE BOOK — NO. —
SURVEYED — PLOTTED — DRAWN — PLANS CHECKED — STRUCTURE NOTATNS CHKD — BY — DATE

TS SHT NO. 18

TS 7000

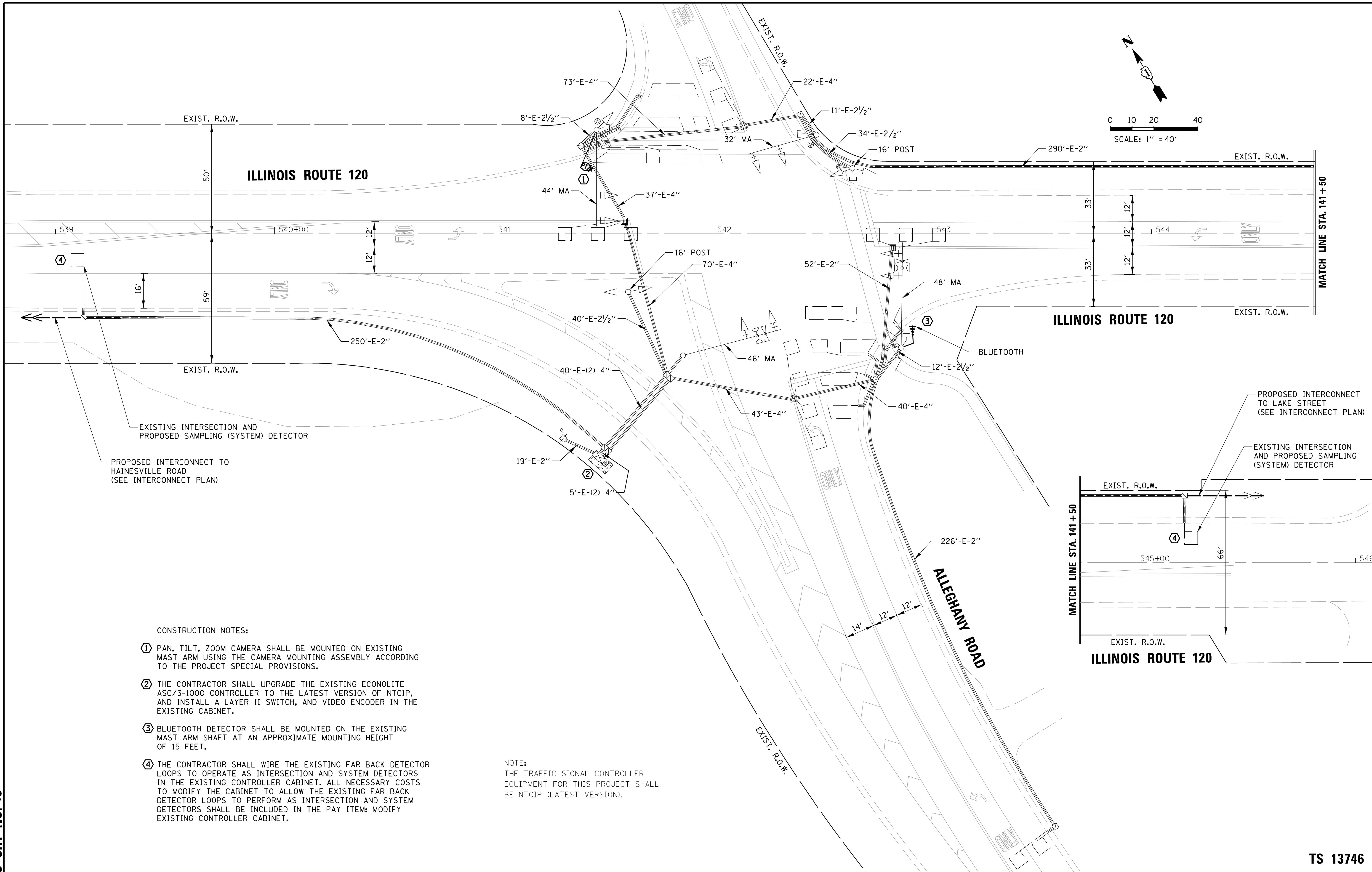
FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_HAINESVILLE_02.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGNS IL ROUTE 120 AND HAINESVILLE ROAD

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	53
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION NOTES:

(1) PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON EXISTING MAST ARM USING THE CAMERA MOUNTING ASSEMBLY ACCORDING TO THE PROJECT SPECIAL PROVISIONS.

(2) THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP, AND INSTALL A LAYER II SWITCH, AND VIDEO ENCODER IN THE EXISTING CABINET.

(3) BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.

(4) THE CONTRACTOR SHALL WIRE THE EXISTING FAR BACK DETECTOR LOOPS TO OPERATE AS INTERSECTION AND SYSTEM DETECTORS IN THE EXISTING CONTROLLER CABINET. ALL NECESSARY COSTS TO MODIFY THE CABINET TO ALLOW THE EXISTING FAR BACK DETECTOR LOOPS TO PERFORM AS INTERSECTION AND SYSTEM DETECTORS SHALL BE INCLUDED IN THE PAY ITEM: MODIFY EXISTING CONTROLLER CABINET.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS 13746

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9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

TS SHT NO. 19

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\MOD_ALLEGHANY.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

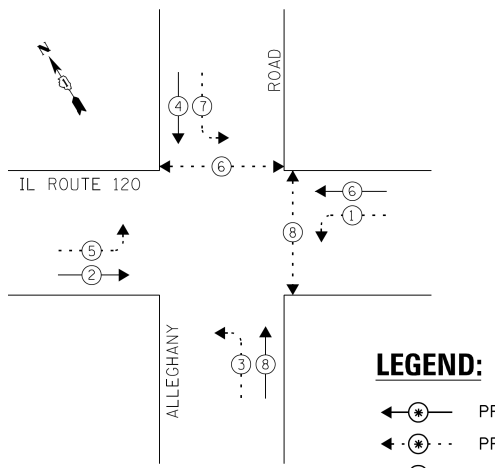
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 120 (BELVIDERE ROAD) AND ALLEGHANY ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	54
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

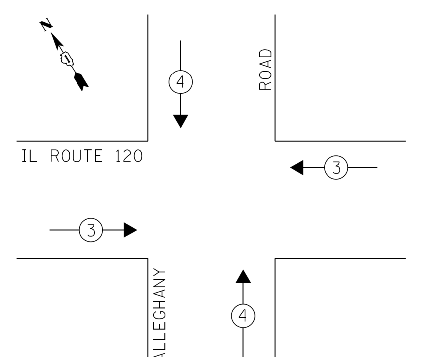
EXISTING CONTROLLER SEQUENCE

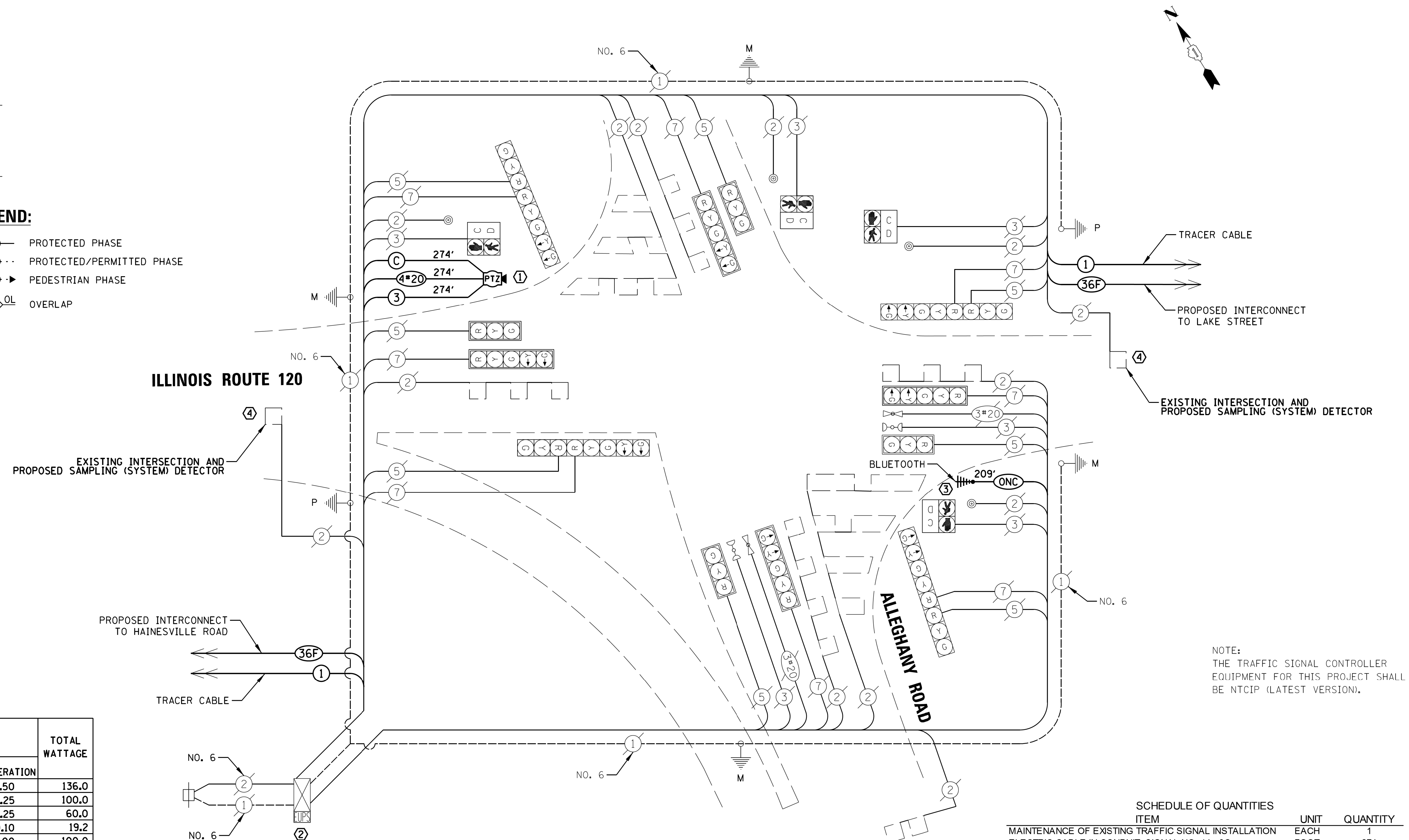


LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS		WATTAGE			TOTAL WATTAGE
TYPE	NO. OF LAMPS	×INCAND.	LED	× % OPERATION	
SIGNAL (RED)	16		17	0.50	136.0
(YELLOW)	16		25	0.25	100.0
(GREEN)	16		15	0.25	60.0
ARROW	16		12	0.10	19.2
PED. SIGNAL	4		25	1.00	100.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
ILLUMINATED SIGN	-		25	0.50	-
VIDEO SYSTEM	-		150	1.00	-
BATTERY BACKUP SYSTEM	1		25	1.00	25.0
FLASHER	-		25	0.50	-
ENERGY COSTS TO:				TOTAL =	540.2

VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVENUE
GRAYSLAKE, IL 60030

ENERGY SUPPLY: PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS

CONSTRUCTION NOTES:

(1) PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON EXISTING MAST ARM USING THE CAMERA MOUNTING ASSEMBLY ACCORDING TO THE PROJECT SPECIAL PROVISIONS.

(2) THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP, AND INSTALL A LAYER II SWITCH, AND VIDEO ENCODER IN THE EXISTING CABINET.

(3) BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.

(4) THE CONTRACTOR SHALL WIRE THE EXISTING FAR BACK DETECTOR LOOPS TO OPERATE AS INTERSECTION AND SYSTEM DETECTORS IN THE EXISTING CONTROLLER CABINET. ALL NECESSARY COSTS TO MODIFY THE CABINET TO ALLOW THE EXISTING FAR BACK DETECTOR LOOPS TO PERFORM AS INTERSECTION AND SYSTEM DETECTORS SHALL BE INCLUDED IN THE PAY ITEM: MODIFY EXISTING CONTROLLER CABINET.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	274
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	274
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	274
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	209
BLUETOOTH DETECTOR	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS 13746

TS SHT NO. 20

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_ALLEGHANY.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
	PLOT SCALE = 40'	DRAWN - FPB	REVISED -
	PLOT DATE = 9/26/2016	CHECKED - GMZ	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

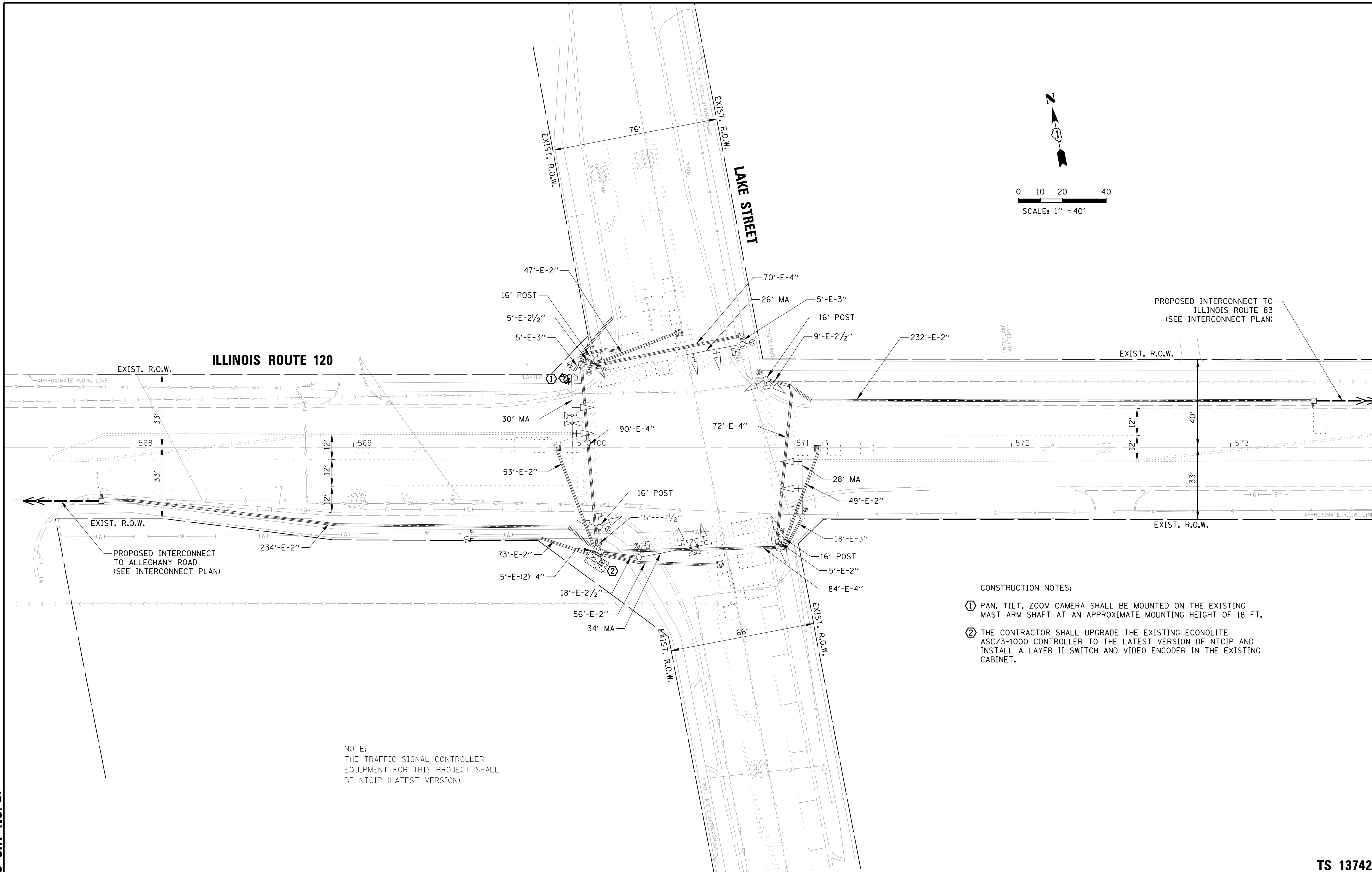
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 120 AND ALLEGHANY ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	55

CONTRACT NO. 60W92

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



CONSTRUCTION NOTES:

1. PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 18 FT.
2. THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP AND INSTALL A LAYER II SWITCH AND VIDEO ENCODER IN THE EXISTING CABINET.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS 13742

TS SHT NO. 21

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CADD FILE NAME: N:\LCDOT\120226\6 - IL 120\Traffic\MOD_LAKE.dgn / BY: ejensen / NOTE BOOK NO.

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHKD / NOTE BOOK NO.

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\MOD_LAKE.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

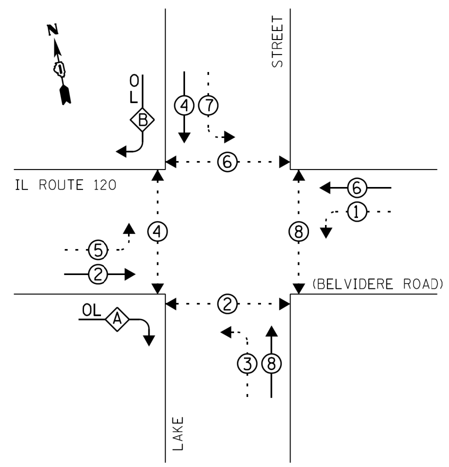
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 120 AND LAKE STREET

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	56
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



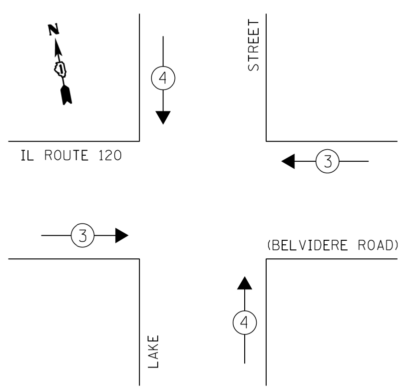
LEGEND:

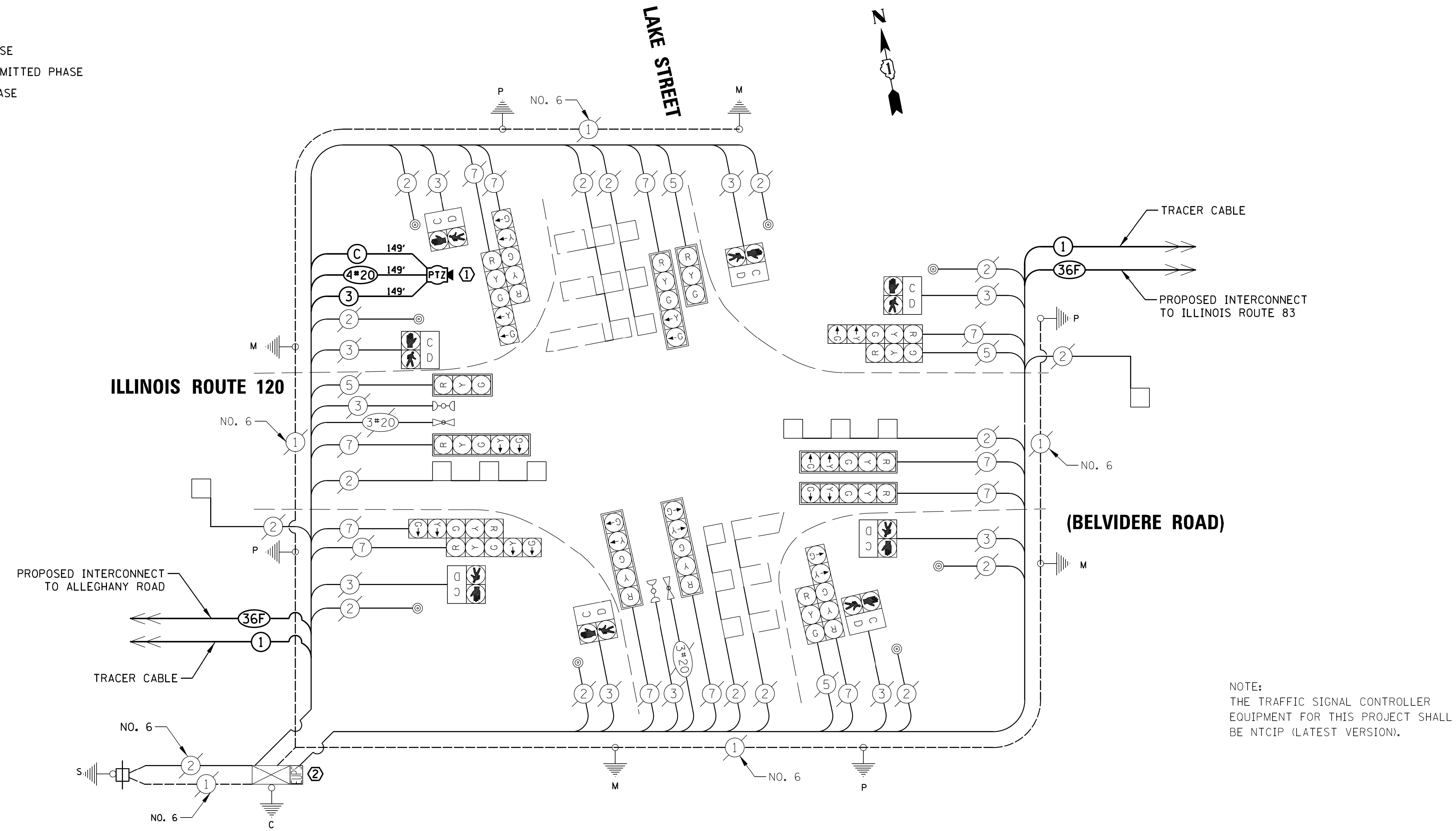
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE ×INCAND.	LED	× % OPERATION	
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.0
ARROW	24		12	0.10	28.80
PED. SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
LUMINAIRE	-		250	0.50	-
ILLUMINATED SIGN	-		25	0.50	-
VIDEO SYSTEM	-		150	1.00	-
BATTERY BACKUP SYSTEM	-		25	1.00	-
FLASHER	-		25	0.50	-
ENERGY COSTS TO:				TOTAL =	624.80

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: PHONE: (847) 816-5492
COMPANY: MAUREEN RAYE

CONSTRUCTION NOTES:

(1) PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 18 FT.

(2) THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP AND INSTALL A LAYER II SWITCH AND VIDEO ENCODER IN THE EXISTING CABINET.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	149
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	149
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	149
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1

TS 13742

TS SHT NO. 22

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_LAKE.dgn
USER NAME = ejensen
PLOT SCALE = 40'
PLOT DATE = 9/26/2016
DESIGNED - EAJ
DRAWN - FPB
CHECKED - GMZ
DATE -
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

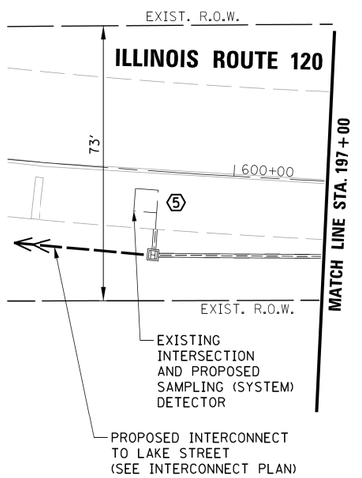
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 120 AND LAKE STREET

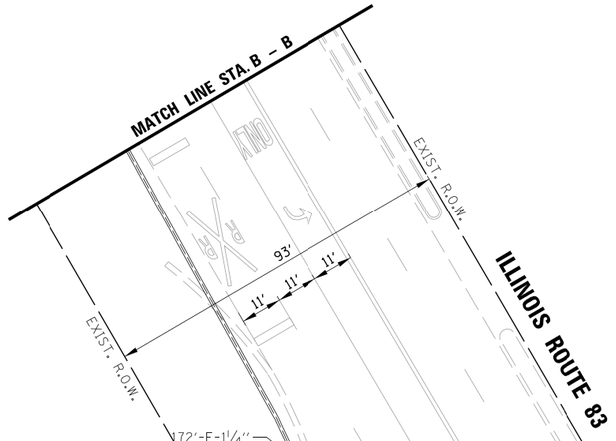
SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

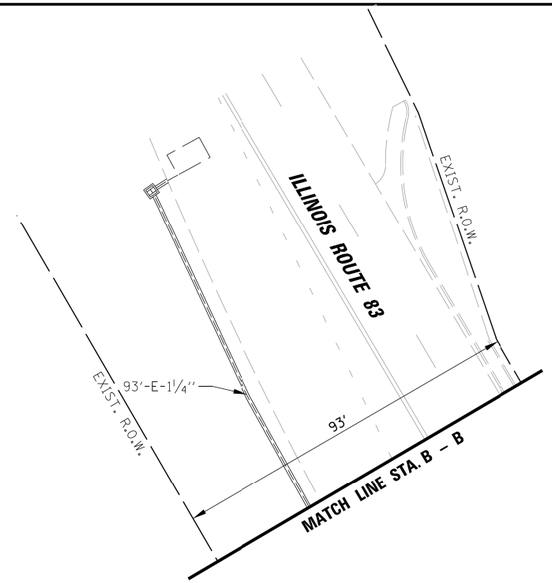
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	57

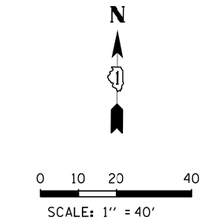
CONTRACT NO. 60W92

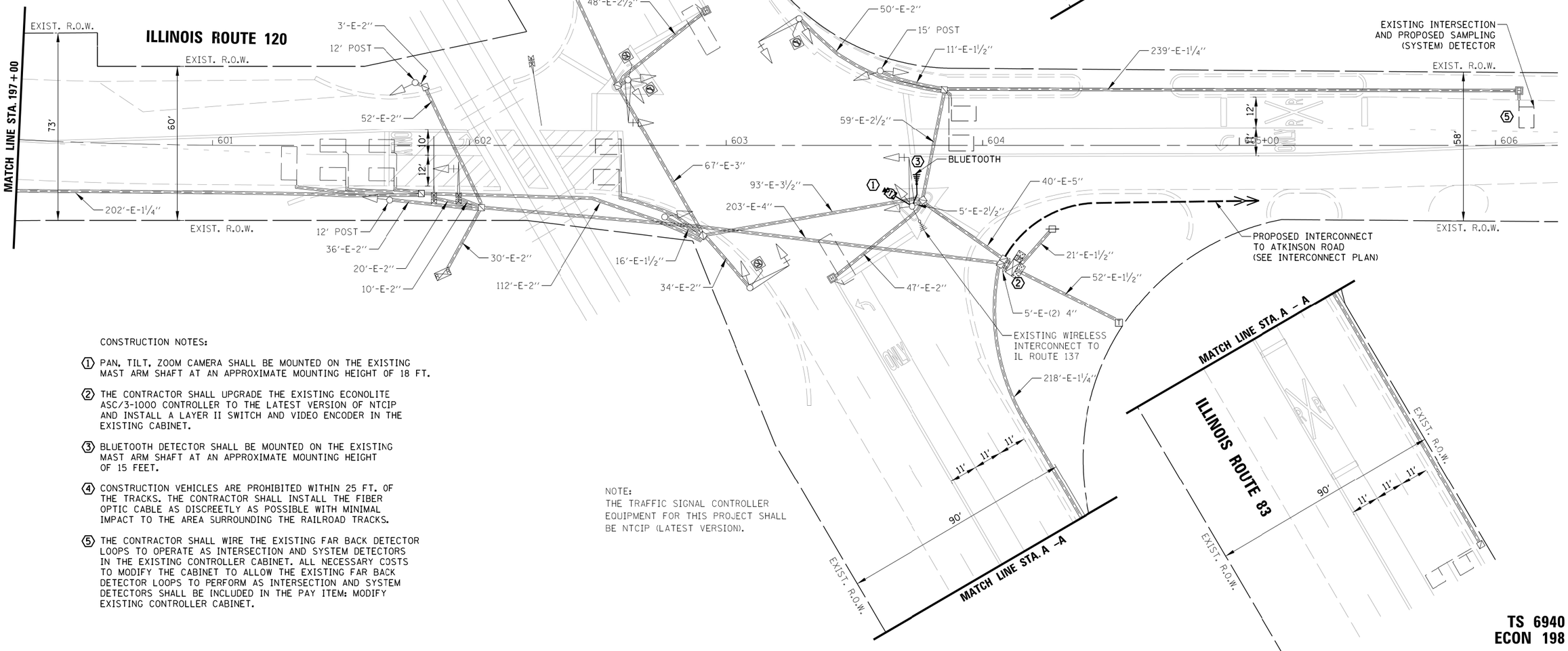
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT











CONSTRUCTION NOTES:

1. PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 18 FT.
2. THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP AND INSTALL A LAYER II SWITCH AND VIDEO ENCODER IN THE EXISTING CABINET.
3. BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.
4. CONSTRUCTION VEHICLES ARE PROHIBITED WITHIN 25 FT. OF THE TRACKS. THE CONTRACTOR SHALL INSTALL THE FIBER OPTIC CABLE AS DISCREETLY AS POSSIBLE WITH MINIMAL IMPACT TO THE AREA SURROUNDING THE RAILROAD TRACKS.
5. THE CONTRACTOR SHALL WIRE THE EXISTING FAR BACK DETECTOR LOOPS TO OPERATE AS INTERSECTION AND SYSTEM DETECTORS IN THE EXISTING CONTROLLER CABINET. ALL NECESSARY COSTS TO MODIFY THE CABINET TO ALLOW THE EXISTING FAR BACK DETECTOR LOOPS TO PERFORM AS INTERSECTION AND SYSTEM DETECTORS SHALL BE INCLUDED IN THE PAY ITEM: MODIFY EXISTING CONTROLLER CABINET.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 23

TS 6940
ECON 198

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN / PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — STRUCTURE NOTATNS. CHKD — BY — DATE

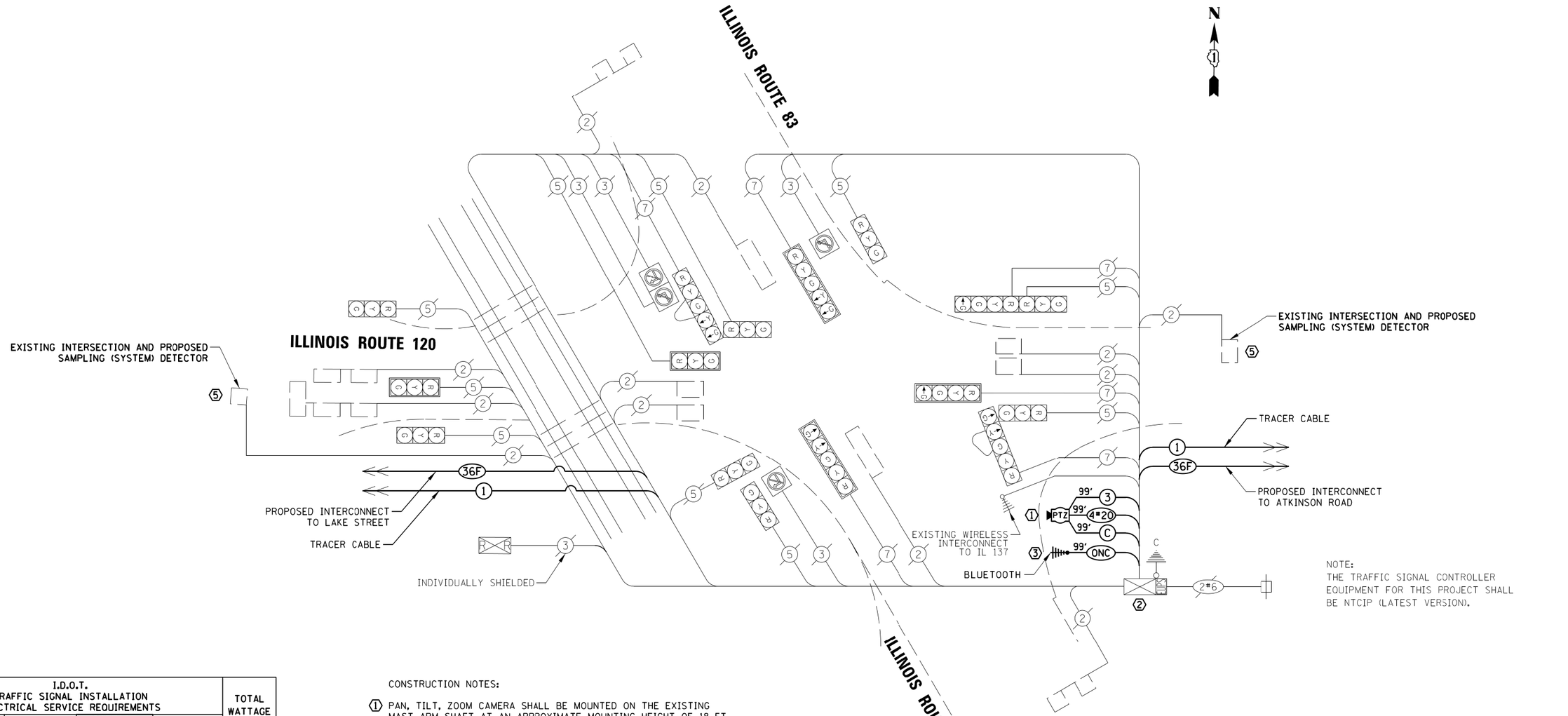
FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\MOD_183.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
ILLINOIS ROUTE 120 AND ILLINOIS ROUTE 83

SCALE: 1'' = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	58
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

CABLE PLAN

CONSTRUCTION NOTES:

1. PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 18 FT.
2. THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP AND INSTALL A LAYER II SWITCH AND VIDEO ENCODER IN THE EXISTING CABINET.
3. BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.
4. CONSTRUCTION VEHICLES ARE PROHIBITED WITHIN 25 FT. OF THE TRACKS. THE CONTRACTOR SHALL INSTALL THE FIBER OPTIC CABLE AS DISCREETLY AS POSSIBLE WITH MINIMAL IMPACT TO THE AREA SURROUNDING THE RAILROAD TRACKS.
5. THE CONTRACTOR SHALL WIRE THE EXISTING FAR BACK DETECTOR LOOPS TO OPERATE AS INTERSECTION AND SYSTEM DETECTORS IN THE EXISTING CONTROLLER CABINET. ALL NECESSARY COSTS TO MODIFY THE CABINET TO ALLOW THE EXISTING FAR BACK DETECTOR LOOPS TO PERFORM AS INTERSECTION AND SYSTEM DETECTORS SHALL BE INCLUDED IN THE PAY ITEM: MODIFY EXISTING CONTROLLER CABINET.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	99
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	99
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	99
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	99
BLUETOOTH DETECTOR	EACH	1

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

TYPE	NO. OF LAMPS	WATTAGE ×INCAND.	WATTAGE LED	× % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16		17	0.50	136.0
(YELLOW)	16		25	0.25	100.0
(GREEN)	16		15	0.25	19.75
ARROW	10		12	0.10	12.0
PED. SIGNAL	2		25	1.00	50.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
ILLUMINATED SIGN	-		25	0.50	-
VIDEO SYSTEM	-		150	1.00	-
BATTERY BACKUP SYSTEM	-		25	1.00	-
FLASHER	-		25	0.50	-
ENERGY COSTS TO:				TOTAL =	417.75

VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVENUE
GRAYSLAKE, IL 60030

ENERGY SUPPLY: PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS

TS SHT NO. 24

TS 6940
ECON 198

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, CADD FILE NAME: N:\LCDOT\120226\6 - IL 120\Traffic\CAB_IL83.dgn, BY: ejensen, DATE; NOTE BOOK; NO.
PROFILE: SURVEYED, PLOTTED, ALIGNMENT CHECKED, STRUCTURE NO(S), NOTATNS CHKD; NOTE BOOK; NO.

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_IL83.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 120 AND IL ROUTE 83

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	59
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING
SEQUENCE OF OPERATION

MOVEMENT	5 ⮥ 1 (1+5)				6, 1		5, 2		2, 6			4, 8					FLASH
PHASE	1 + 5				1 + 6		2 + 5		2 + 6			4+8					
INTERVAL	1	2	3	4	5	6	7	8	9	10A	10B	11	12A	12B	12C	12D	
CHANGE TO	/	1+6	2+5	2+6	/	2+6	/	2+6	/	4+8		/	1+5 1+6 2+5 2+6				
ILL. RTE. 83 N/B END MAST ARM AND FAR LEFT SIGNALS	R ◄G	R ◄Y	R ◄G	R ◄Y	R	R	G ◄G	G ◄Y	G	Y	R	R	R	R	R	R	R
ILL. RTE. 83 N/B NEAR RIGHT AND FAR RIGHT SIGNALS	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R
ILL. RTE. 83 S/B END MAST ARM AND FAR LEFT SIGNALS	R ◄G	R ◄G	R ◄Y	R ◄Y	G ◄G	G ◄Y	R	R	G	Y	R	R	R	R	R	R	R
ILL. RTE. 83 S/B NEAR RIGHT AND FAR RIGHT SIGNALS	R	R	R	R	G	G	R	R	G	Y	R	R	R	R	R	R	R
ILL. RTE. 120 (WEST OF TRACKS) E/B ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R
ILL. RTE. 120 (EAST OF TRACKS) E/B END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	R
ILL. RTE. 120 (EAST OF TRACKS) E/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	R
ILL. RTE. 120 ALL SIGNALS W/B	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	R

EXISTING
RAILROAD PREEMPTION SEQUENCE OF OPERATION

										PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	5		7		9		11						
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	2	1E	2	1G	2	1J	2	3	4	5		
ILL. RTE. 83 N/B END MAST ARM AND FAR LEFT SIGNALS	R ◄Y	R	R	Y	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 83 N/B NEAR RIGHT AND FAR RIGHT SIGNALS	R	R	R	Y	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 83 S/B END MAST ARM AND FAR LEFT SIGNALS	R ◄Y	Y	R	R	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 83 S/B NEAR RIGHT AND FAR RIGHT SIGNALS	R	Y	R	R	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 120 (WEST OF TRACKS) E/B ALL SIGNALS	R	R	R	R	R	R	R	Y	R	R	R	R	R	△
ILL. RTE. 120 (EAST OF TRACKS) E/B END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	G	G	G ◄G	Y	R	R	△
ILL. RTE. 120 (EAST OF TRACKS) E/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	G	G	G	Y	R	R	△
ILL. RTE. 120 ALL SIGNALS W/B	R	R	R	R	R	R	R	Y	R	R	R	R	R	△
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△
INTERNALLY ILLUMINATED NO LEFT TURN SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△
													HOLD	

NRT = "NO RIGHT TURN" OR (NO RIGHT TURN symbol)

NLT = "NO LEFT TURN" OR (NO LEFT TURN symbol)

△ 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.

TS 6940
ECON 198

TS SHT NO. 25

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\SEQ_IL83.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SEQUENCE OF OPERATION AND RAILROAD PREEMPTION SEQUENCE OF OPERATION IL ROUTE 120 AND IL ROUTE 83
		DRAWN - FPB	REVISED -		
	PLOT SCALE = 2'	CHECKED - GMZ	REVISED -		
	PLOT DATE = 9/26/2016	DATE -	REVISED -		SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

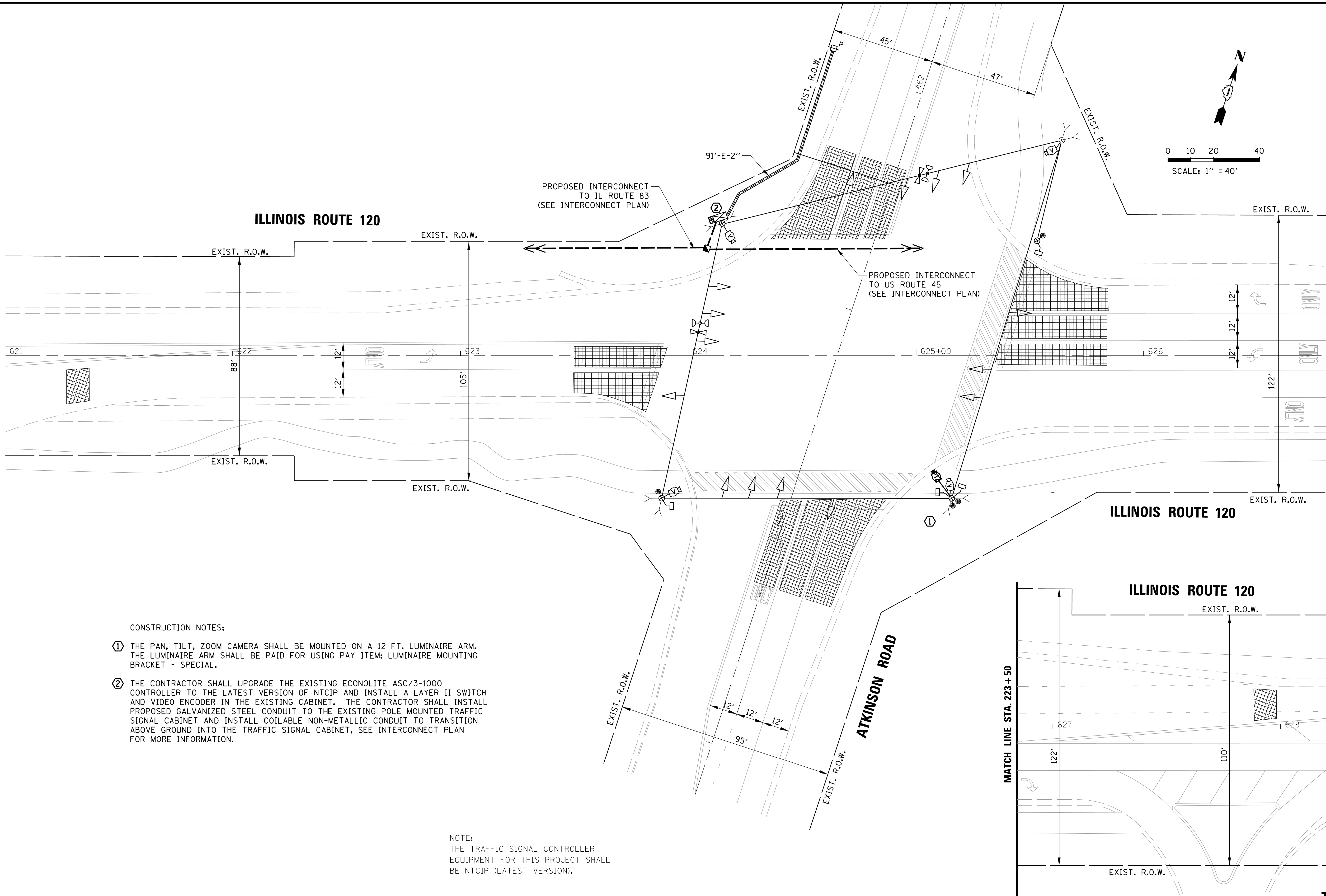
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	60
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN
NOTE BOOK
NO. ___
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME N:\LCDOT\120226\6 - IL 120\Traffic\MOD_ATKINSON.dgn
BY ejensen
DATE

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFILE
NOTE BOOK
NO. ___
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

TS SHT NO. 26



CONSTRUCTION NOTES:

(1) THE PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON A 12 FT. LUMINAIRE ARM. THE LUMINAIRE ARM SHALL BE PAID FOR USING PAY ITEM: LUMINAIRE MOUNTING BRACKET - SPECIAL.

(2) THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP AND INSTALL A LAYER II SWITCH AND VIDEO ENCODER IN THE EXISTING CABINET. THE CONTRACTOR SHALL INSTALL PROPOSED GALVANIZED STEEL CONDUIT TO THE EXISTING POLE MOUNTED TRAFFIC SIGNAL CABINET AND INSTALL COILABLE NON-METALLIC CONDUIT TO TRANSITION ABOVE GROUND INTO THE TRAFFIC SIGNAL CABINET, SEE INTERCONNECT PLAN FOR MORE INFORMATION.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS 6943

FILE NAME =	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
N:\LCDOT\120226\6 - IL 120\Traffic\MOD_ATKINSON.dgn		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

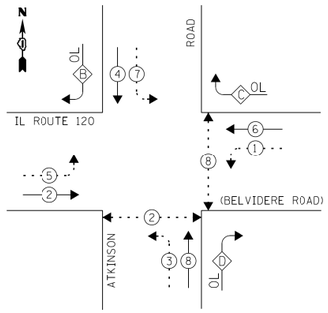
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
ILLINOIS ROUTE 120 AND ATKINSON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	61
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

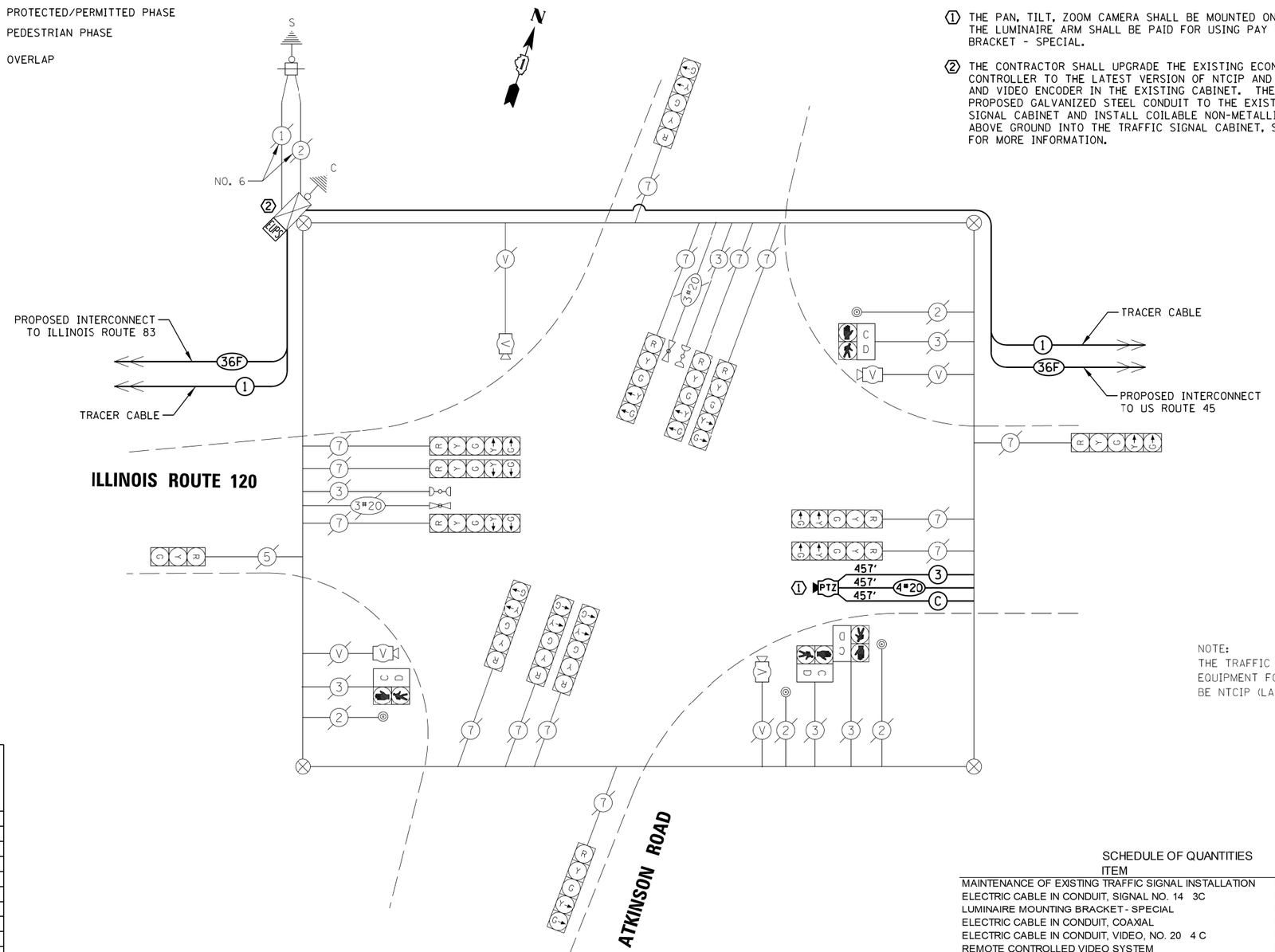
OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5
C	=	6	+	7
D	=	8	+	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE LED	x % OPERATION	
SIGNAL (RED)	15	x	17	0.50	128.0
(YELLOW)	15		25	0.25	94.0
(GREEN)	15		15	0.25	56.0
ARROW	28		12	0.10	34.0
PED. SIGNAL	4		25	1.00	100.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
ILLUMINATED SIGN	-		25	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP SYSTEM	1		25	1.00	25.0
FLASHER	-		25	0.50	-
ENERGY COSTS TO:				TOTAL =	687.0

VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVENUE
GRAYSLAKE, IL 60030

ENERGY SUPPLY: PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS



CABLE PLAN

CONSTRUCTION NOTES:

1. THE PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON A 12 FT. LUMINAIRE ARM. THE LUMINAIRE ARM SHALL BE PAID FOR USING PAY ITEM: LUMINAIRE MOUNTING BRACKET - SPECIAL.
2. THE CONTRACTOR SHALL UPGRADE THE EXISTING ECONOLITE ASC/3-1000 CONTROLLER TO THE LATEST VERSION OF NTCIP AND INSTALL A LAYER II SWITCH AND VIDEO ENCODER IN THE EXISTING CABINET. THE CONTRACTOR SHALL INSTALL PROPOSED GALVANIZED STEEL CONDUIT TO THE EXISTING POLE MOUNTED TRAFFIC SIGNAL CABINET AND INSTALL COILABLE NON-METALLIC CONDUIT TO TRANSITION ABOVE GROUND INTO THE TRAFFIC SIGNAL CABINET, SEE INTERCONNECT PLAN FOR MORE INFORMATION.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	457
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	457
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	457
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1

TS 6943

TS SHT NO. 27

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_ATKINSON.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 120 AND ATKINSON ROAD

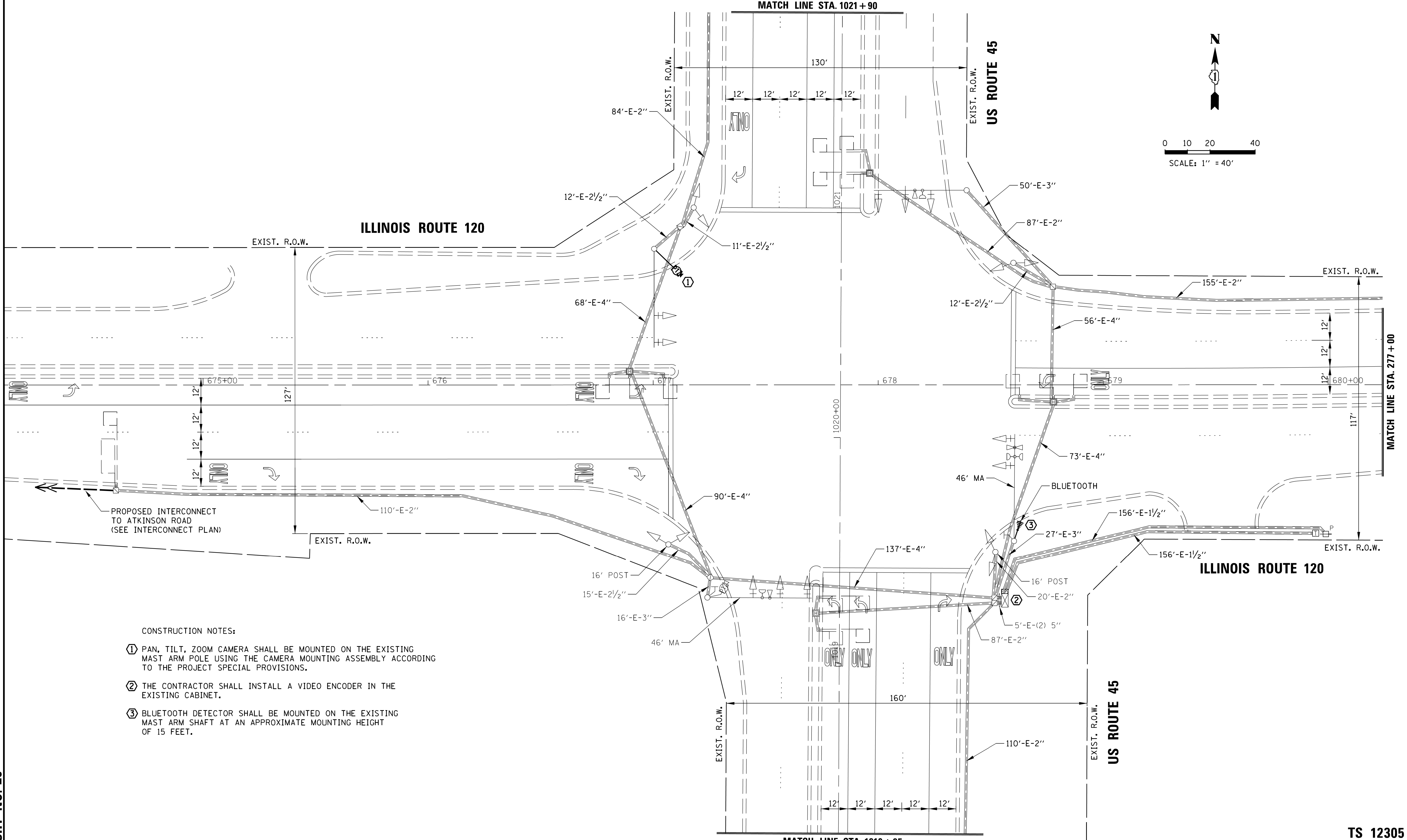
SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	62
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, CADD FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_ATKINSON.dgn, BY = ejensen, DATE, NOTE BOOK, NO.

PROFILE: SURVEYED, PLOTTED, ALIGNMENT CHECKED, STRUCTURE NO(TATN)S CHK'D, BY, DATE, NOTE BOOK, NO.



CONSTRUCTION NOTES:

1. PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE EXISTING MAST ARM POLE USING THE CAMERA MOUNTING ASSEMBLY ACCORDING TO THE PROJECT SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL INSTALL A VIDEO ENCODER IN THE EXISTING CABINET.
3. BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.

TS 12305
EAGLE 4C

TS SHT NO. 28

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME =	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
N:\LCDOT\120226\6 - IL 120\Traffic\MOD-01_US45.dgn		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

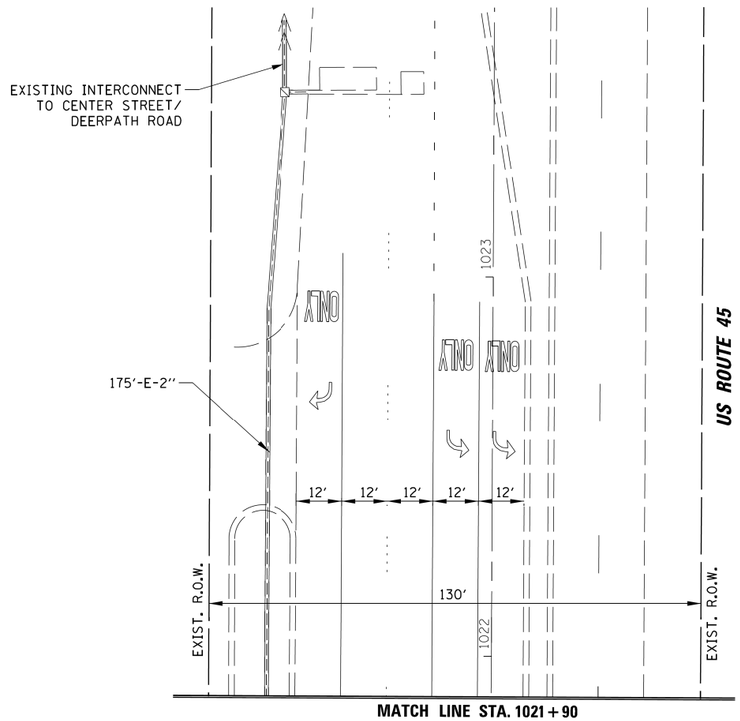
TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 1 OF 2)
IL ROUTE 120 AND US ROUTE 45

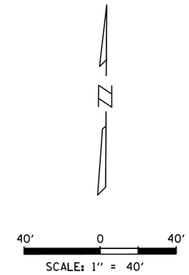
SCALE: 1'' = 20' | SHEET NO. OF SHEETS | STA. TO STA.

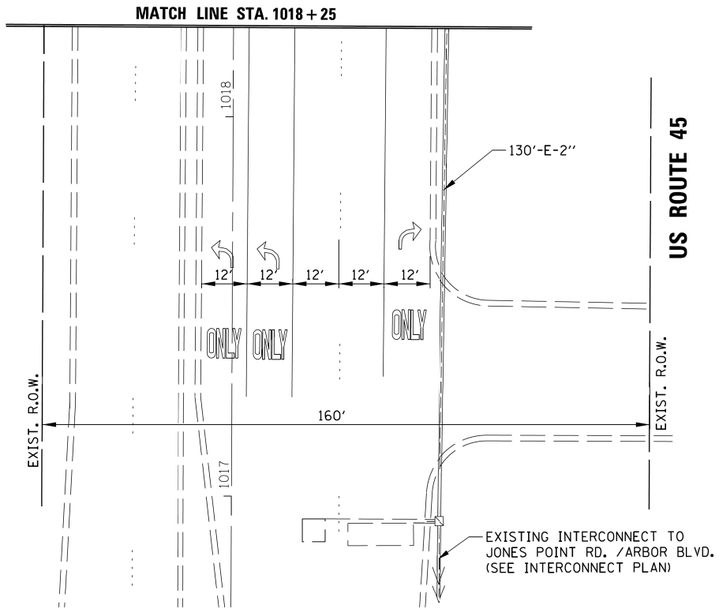
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	63

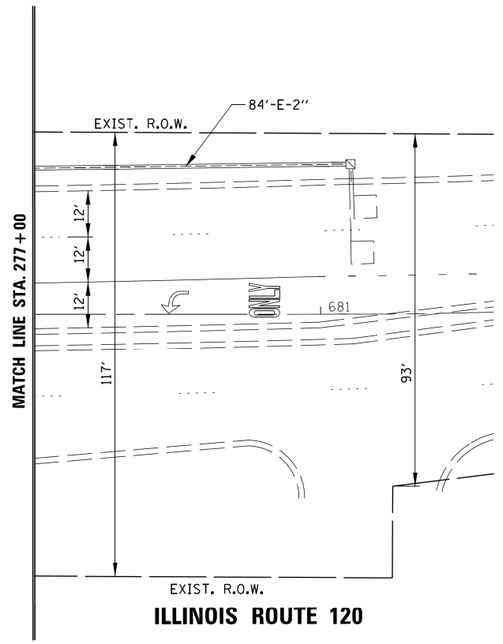
CONTRACT NO. 60W92

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT









TS SHT NO. 29

TS 12305
EAGLE 4C

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\MOD-02_US45.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
IL ROUTE 120 AND US ROUTE 45

SCALE: 1'' = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

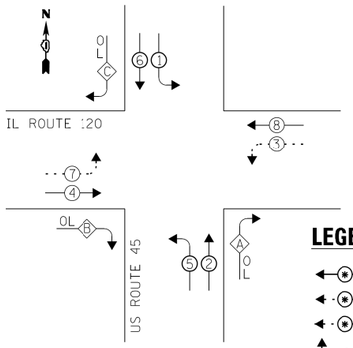
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	64
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED | PLOTTED | ALIGNMENT CHECKED | ALL NOTES CHECKED | CADD FILE NAME: N:\LCDOT\120226\6 - IL 120\Traffic\MOD-02_US45.dgn | NOTE BOOK | NO. | BY | DATE | ejensen

PROFILE: SURVEYED | PLOTTED | PROFILE CHECKED | ALL NOTES | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO. | BY | DATE

EXISTING CONTROLLER SEQUENCE



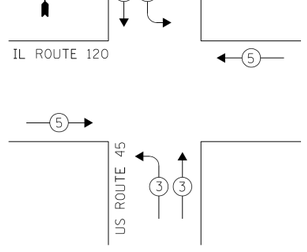
LEGEND:

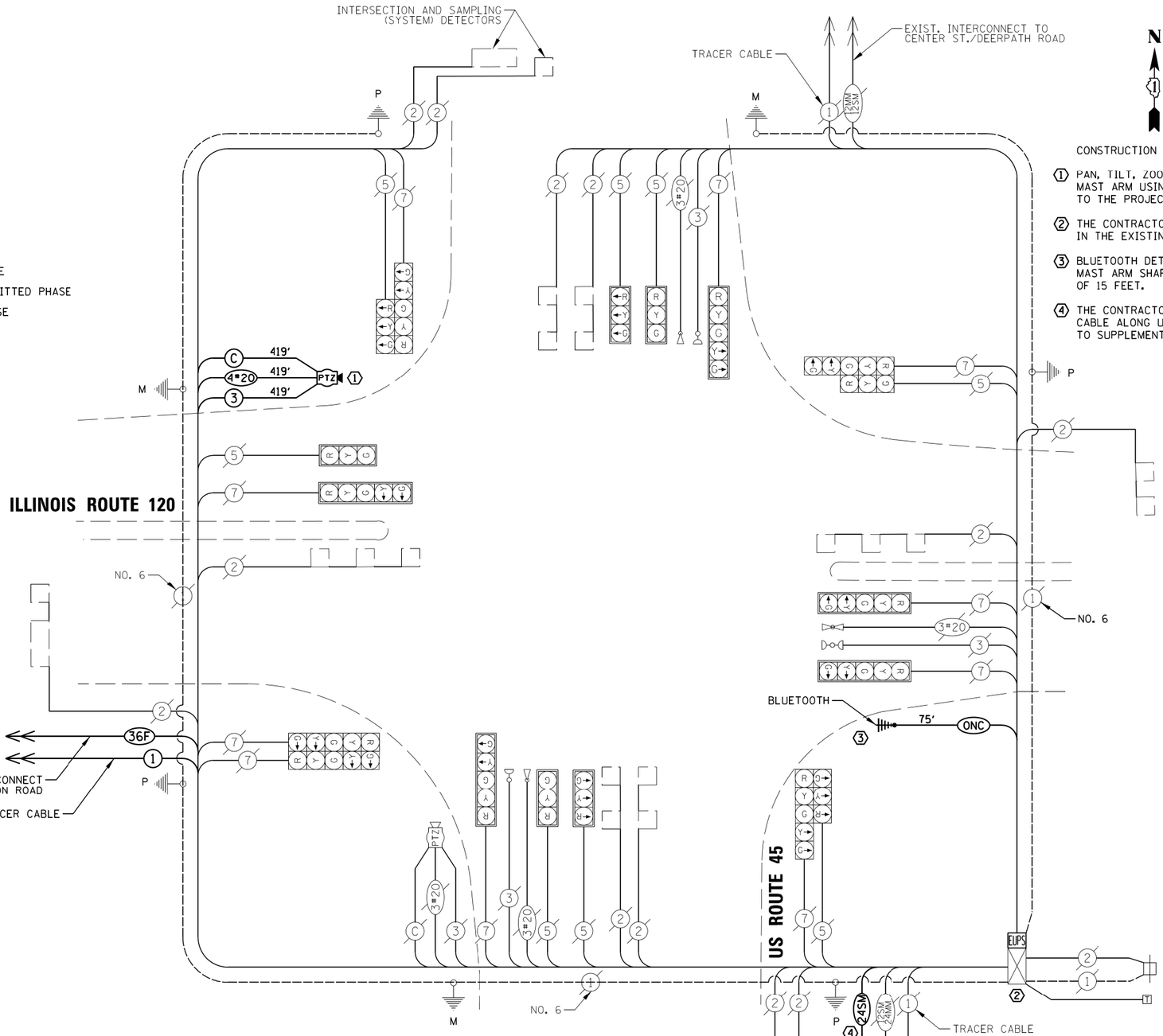
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5
C	=	6	+	7

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CONSTRUCTION NOTES:

1. PAN, TILT, ZOOM CAMERA SHALL BE MOUNTED ON THE EXISTING MAST ARM USING THE CAMERA MOUNTING ASSEMBLY ACCORDING TO THE PROJECT SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL INSTALL A VIDEO ENCODER IN THE EXISTING CABINET.
3. BLUETOOTH DETECTOR SHALL BE MOUNTED ON THE EXISTING MAST ARM SHAFT AT AN APPROXIMATE MOUNTING HEIGHT OF 15 FEET.
4. THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE x INCAND.	WATTAGE LED	x % OPERATION	
SIGNAL (RED)	18		17	0.50	68.0
(YELLOW)	18		25	0.25	50.0
(GREEN)	18		15	0.25	30.0
ARROW	20		12	0.10	9.6
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
ILLUMINATED SIGN	-		25	0.50	-
VIDEO SYSTEM	-		150	1.00	-
BATTERY BACKUP SYSTEM			25	1.00	-
FLASHER	-		25	0.50	-
ENERGY COSTS TO:				TOTAL =	257.6

VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVENUE
GRAYSLAKE, IL 60030

ENERGY SUPPLY: PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	419
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	419
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	419
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
VIDEO ENCODER	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	75
BLUETOOTH DETECTOR	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 30

TS 12305
EAGLE 4C

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFILE PLAN — NOTE BOOK — NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — STRUCTURE NOTATNS CHKD — BY — DATE

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_US45.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

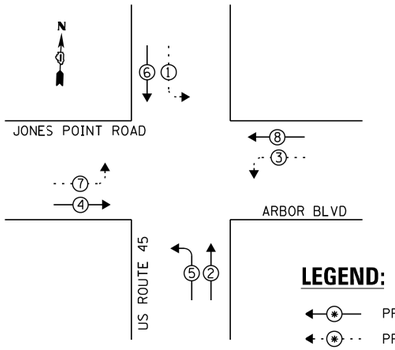
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 120 AND US ROUTE 45

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	65
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

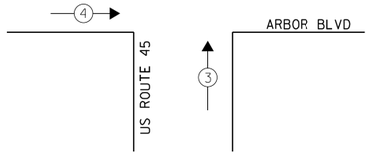
EXISTING CONTROLLER SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

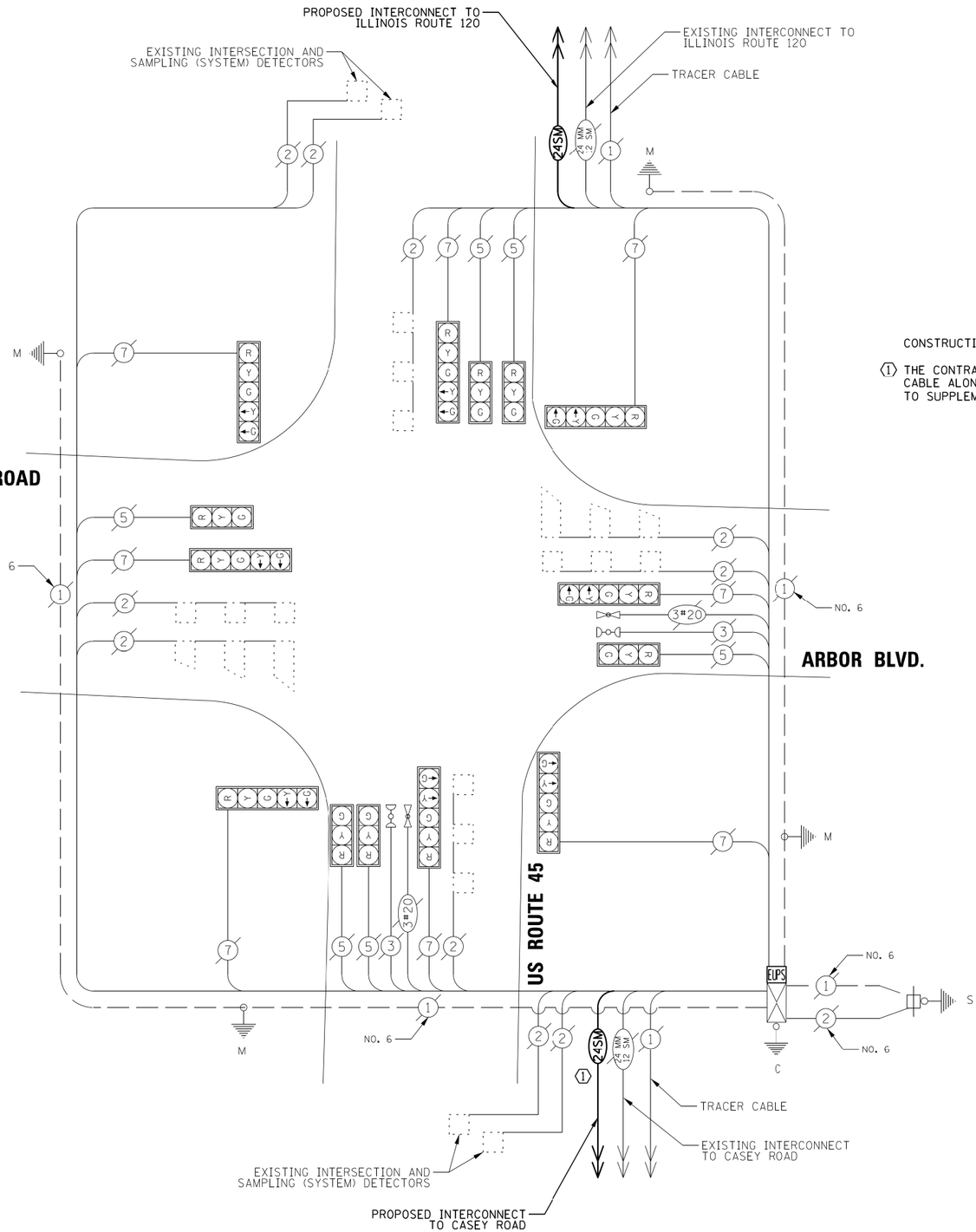


I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE x INCAND.	WATTAGE LED	x % OPERATION	
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	16		12	0.10	19.2
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	403.2

VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVENUE
GRAYSLAKE, ILLINOIS 60030

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS

TS SHT NO. 31



CONSTRUCTION NOTE:

(1) THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

TS 21885
EAGLE 4C

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFILE: SURVEYED, PLOTTED, ALIGNMENT CHECKED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO.
PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, CADD FILE NAME = N:\LCDOT\120226\S - IL 120\Traffic\CAB_US45-Arbor.dgn, NOTE BOOK, NO.
DATE, BY

FILE NAME = N:\LCDOT\120226\S - IL 120\Traffic\CAB_US45-Arbor.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

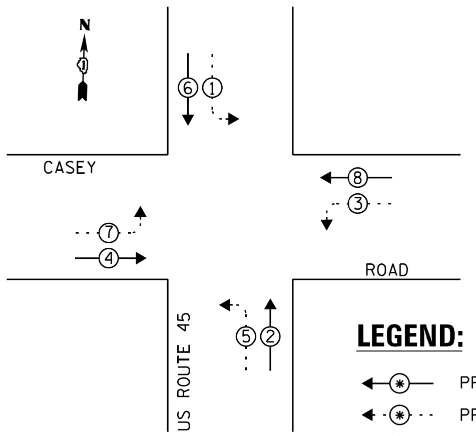
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US ROUTE 45 AND JONES POINT ROAD / ARBOR BLVD.

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	66
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

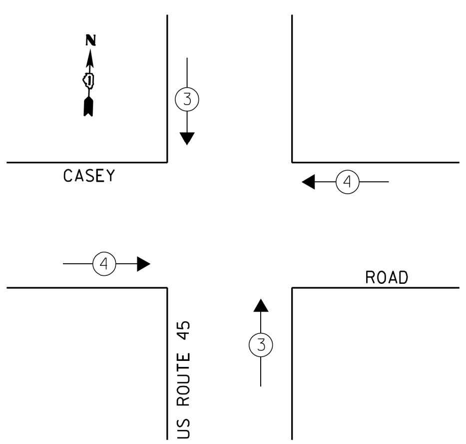
EXISTING CONTROLLER SEQUENCE

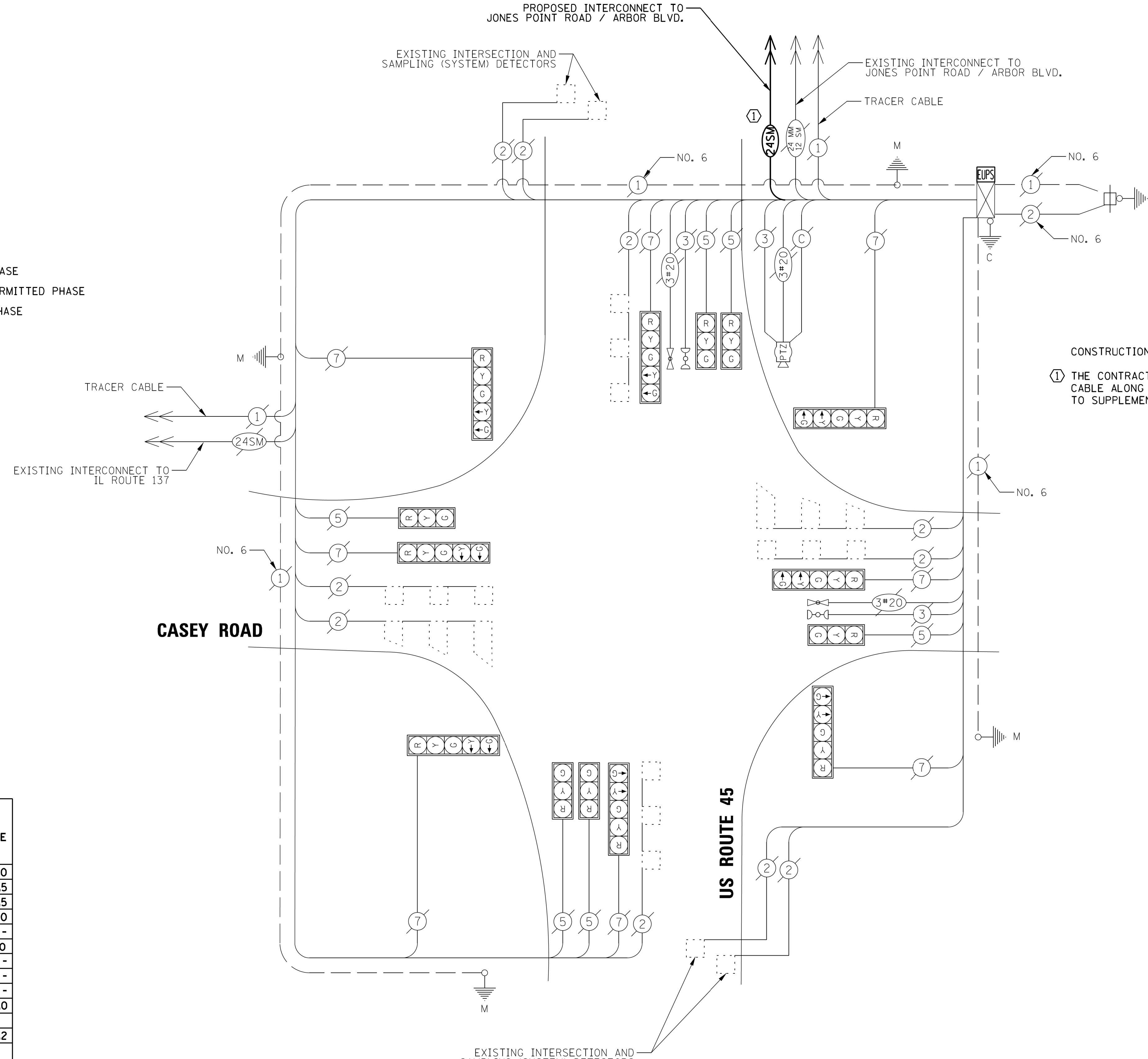


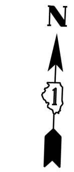
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE







CONSTRUCTION NOTE:

(1) THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

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

TYPE	NO. OF LAMPS	WATTAGE ×INCAND.	WATTAGE LED	× % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	16		12	0.10	19.20
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	403.2

VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVENUE
GRAYSLAKE, ILLINOIS 60030

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS

TS 21663

TS SHT NO. 32

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. CHECKED / CADD FILE NAME N:\LCDOT\120226\6 - IL 120\Traffic\CAB_US45-Casey.dgn / BY ejensen / DATE / NOTE BOOK / NO.

PROFILE: SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHECKED / BY / DATE / NOTE BOOK / NO.

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_US45-Casey.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

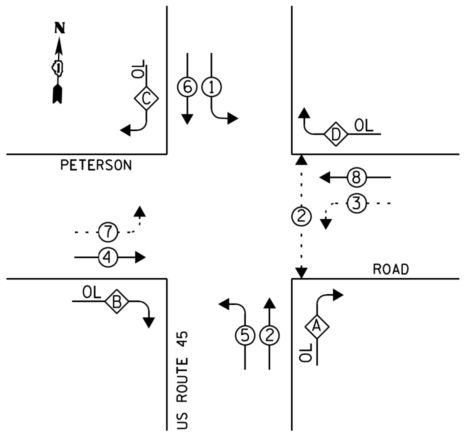
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US ROUTE 45 AND CASEY ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	67
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



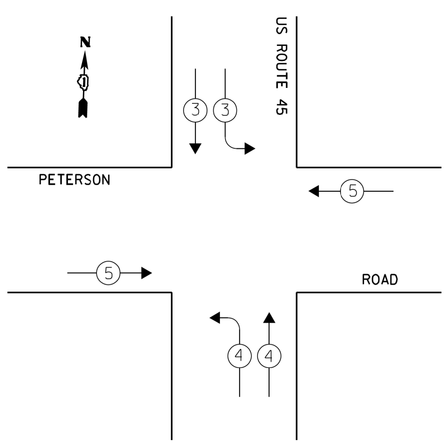
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5
C	=	6	+	7
D	=	8	+	1

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

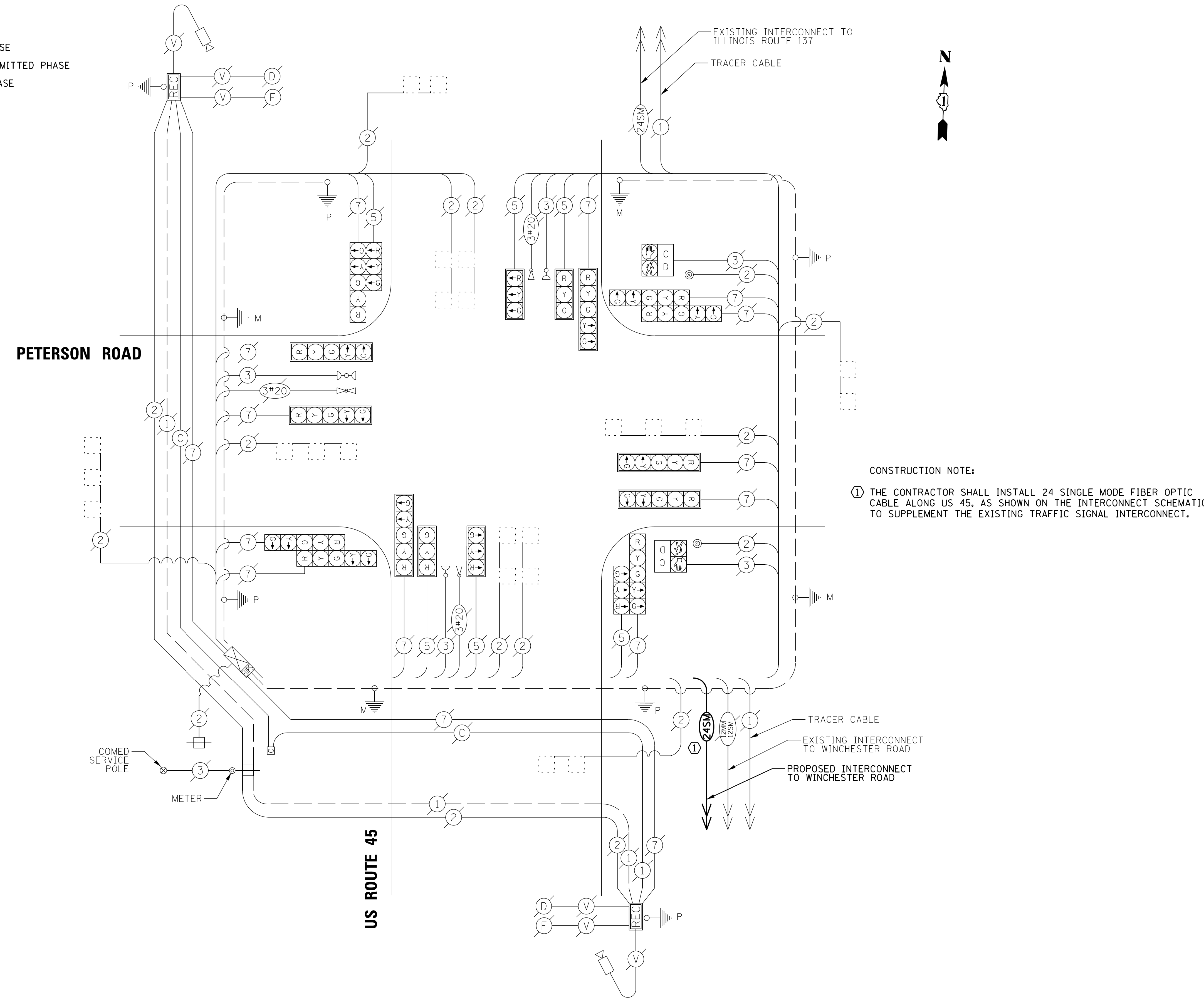


I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE ×INCAND.	WATTAGE LED	× % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18		17	0.50	153.0
(YELLOW)	18		25	0.25	112.5
(GREEN)	18		15	0.25	67.5
ARROW	24		12	0.10	28.8
PED. SIGNAL	2		25	1.00	50.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER	-			0.50	-
ENERGY COSTS TO:				TOTAL =	536.8

VILLAGE OF LIBERTYVILLE
118 W. COOK AVENUE
LIBERTYVILLE, ILLINOIS 60048

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS



CONSTRUCTION NOTE:

1. THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

TS
EAGLE 1J

TS SHT NO. 33

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_US45-Peterson.dgn
USER NAME = ejensen
PLOT SCALE = 40'
PLOT DATE = 9/26/2016
DESIGNED - EAJ
DRAWN - FPB
CHECKED - GMZ
DATE -
REVISED -

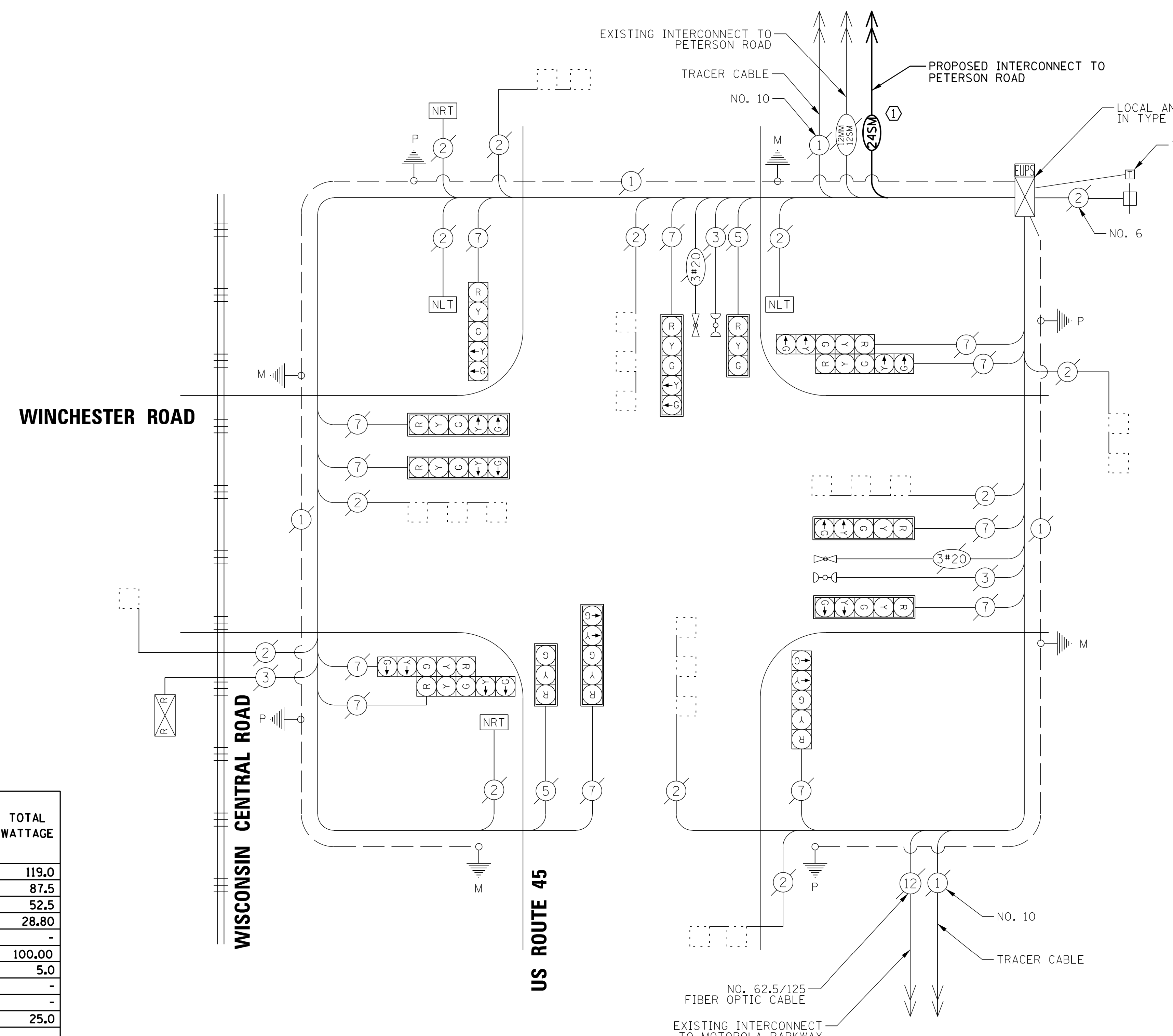
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US ROUTE 45 AND PETERSON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	68

CONTRACT NO. 60W92
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



CONSTRUCTION NOTE:

1. THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.
2. THE CONTRACTOR SHALL INSTALL A MEDIA CONVERTER IN THE COMMUNICATION CABINET AT US 45 AND WINCHESTER ROAD. THE MEDIA CONVERTER PAY ITEM SHALL INCLUDE THE MAINTENANCE OF THE COMMUNICATIONS CABINET. SEE INTERCONNECT PLANS FOR LOCATION.

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

TYPE	NO. OF LAMPS	WATTAGE × INCAND.	WATTAGE LED	× % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	24		12	0.10	28.80
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	4	25		0.05	5.0
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	417.8

VILLAGE OF LIBERTYVILLE
118 W. COOK AVENUE
LIBERTYVILLE, ILLINOIS 60048

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: (866) 639-3532
COMPANY: COMED - NEW BUSINESS

TS 12330
EAGLE 1J

TS SHT NO. 34

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\CAB_US45-Winchester.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US ROUTE 45 AND WINCHESTER ROAD

SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	69
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING
SEQUENCE OF OPERATION

MOVEMENT	1	2	3	4	5	6	7	8	9	10A	10B	11	12	13	14	15	16A	16B	17A	17B	18	19	20A	20B	21A	21B	22	23	24A	24B	25A	25B	FLASH
MOVEMENT	OL 5 1 OL				6 1 OL		OL 5 2		6 2			3 7				3 8						4 7						4 8					
PHASE	1 + 5				1 + 6		2 + 5		2 + 6			3 + 7				3 + 8						4 + 7						4 + 8					
CHANGE TO		1+6	2+5	2+6		2+6		2+6		3+7 4+7 3+8 4+8			1+5 2+5 4+8 1+6 2+6	3+8	4+7		1+5 1+6		2+5 2+6		4+8		1+6 2+6		1+5 2+5		4+8		1+5 1+6		2+5 2+6		
U.S. ROUTE 45 FAR RIGHT MAST ARM SIGNAL N/B	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS N/B	R ←G	R ←Y	R ←G	R ←Y	R	R	G ←G	G ←Y	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 45 FAR RIGHT MAST ARM SIGNALS S/B	R	R	R	R	G	G	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS S/B	R ←G	R ←G	R ←Y	R ←Y	G ←G	G ←Y	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
WINCHESTER ROAD NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS E/B	R →G	R →Y	R →G	R →Y	R	R	R →G	R →Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	Y →G	R →G	G	G	Y	R	Y	R	R
WINCHESTER ROAD FAR LEFT AND END MAST ARM SIGNALS E/B	R	R	R	R	R	R	R	R	R	R	R	R ←G	R ←Y	R ←Y	R ←G	R	R	R	R	R	R	G ←G	Y	R	Y	R	G ←Y	G	Y	R	Y	R	R
WINCHESTER ROAD NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS W/B	R →G	R →G	R →Y	R →Y	R →G	R →Y	R	R	R	R	R	R	R	R	R	G	Y →G	R →G	Y	R	G	R	R	R	R	R	R	G	Y →G	R →G	Y	R	R
WINCHESTER ROAD FAR LEFT AND END MAST ARM SIGNALS W/B	R	R	R	R	R	R	R	R	R	R	R	R ←G	R ←Y	R ←G	R ←Y	G ←G	Y	R	Y	R	G ←Y	R	R	R	R	R	R	G	Y	R	Y	R	R

PHASES 2 AND 6 SHALL BE ON RECALL.

EXISTING
RAILROAD PREEMPTION SEQUENCE OF OPERATION

														PREEMPTOR NUMBER 3		PREEMPTOR NUMBER 4		PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	5		7		9		11	15		19	23										
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER														2		3						
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	2	1E	2	1G	2	2	1K	2	2	1N	2	1Q	2	1S	2	3	4	5		
U.S. ROUTE 45 FAR RIGHT MAST ARM SIGNAL N/B	R	R	R	Y	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS N/B	R ←Y	R	R	Y	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
U.S. ROUTE 45 FAR RIGHT MAST ARM SIGNALS S/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS S/B	R ←Y	Y	R	R	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
WINCHESTER ROAD NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS E/B	R →Y	R	R	R →G	R →G	R	R	R	R	R	G	G	G	R	R	G	G	G	Y	R	R	Δ
WINCHESTER ROAD FAR LEFT AND END MAST ARM SIGNALS E/B	R	R	R	R	R	R	R	R ←G	R	R	G ←G	G	G	R	R	G	G	G ←G	Y	R	R	Δ
WINCHESTER ROAD NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS W/B	R →Y	R →Y	R	R	R	R	R	R	Y	R	R	Y	R	R	R	Y	R	R	R	R	R	Δ
WINCHESTER ROAD FAR LEFT AND END MAST ARM SIGNALS W/B	R	R	R	R	R	R	R	R ←Y	Y	R	R	Y	R	R	R	Y	R	R	R	R	R	Δ
U.S. ROUTE 45 ILLUMINATED NLT SIGNS N/B	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	Δ
U.S. ROUTE 45 ILLUMINATED NRT SIGNS S/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	Δ
																					HOLD	

Δ 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.

NRT = "NO RIGHT TURN" OR 

NLT = "NO LEFT TURN" OR 

EXISTING
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

																						PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	1	5	5		7	7		9	9		11	15		15	19		19	23		23			CLEAR TO NORMAL SEQUENCE
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	2	3	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	3	2	1E	3	2	1H	3	2	1L	3	2 OR 3	1P	2	3	1S	2	3	1V	2	3			◊
U.S. ROUTE 45 FAR RIGHT MAST ARM SIGNAL N/B	R	R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS N/B	R ←Y	R ←Y	R	R	R	G ←Y	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
U.S. ROUTE 45 FAR RIGHT MAST ARM SIGNALS S/B	R	R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS S/B	R ←Y	R ←Y	G ←Y	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
WINCHESTER ROAD NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS E/B	R →Y	R →G	R	R	R	R →Y	R →G	R →G	R	R	R	R	R	R	R	Y	R	G	Y	R	G	R	G	◊
WINCHESTER ROAD FAR LEFT AND END MAST ARM SIGNALS E/B	R	R	R	R	R	R	R	R	R	R	R	R ←Y	R	R	R	Y	R	G ←Y	Y	R	G	R	G	◊
WINCHESTER ROAD NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS W/B	R →Y	R →G	R →Y	R →G	R →G	R	R	R	R	R	R	R	Y	R	G	R	R	R	Y	R	G	R	G	◊
WINCHESTER ROAD FAR LEFT AND END MAST ARM SIGNALS W/B	R	R	R	R	R	R	R	R	R	R	R	R ←Y	Y	R	G ←Y	R	R	R	Y	R	G	R	G	◊

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

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	46-R	LAKE	257	175
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SEQUENCE OF OPERATION, EMERGENCY AND RAILROAD PREEMPTION SEQUENCE OF OPERATIONS

U.S. ROUTE 45 & WINCHESTER ROAD

SCALE: NONE

DATE: 5/21/99
DRAWN BY: MLB
CHECKED BY: CJS

TS 12305
EAGLE 1J

TS SHT NO. 35

PROFILE | SURVEYED | PLOTTED | GRADES CHECKED | B.M. NOTED | STRUCTURE NOTAT'NS CH'KD | NOTE BOOK | NO. | BY | DATE

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN | SURVEYED | PLOTTED ejensen | ALIGNMENT CHECKED | RT. OF WAY CHECKED | CADD FILE NAME N:\LCDOT\120226\6 - IL 120\Traffic\SEQ_US45-Winchester.dgn | NOTE BOOK | NO. | BY | DATE

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\SEQ_US45-Winchester.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

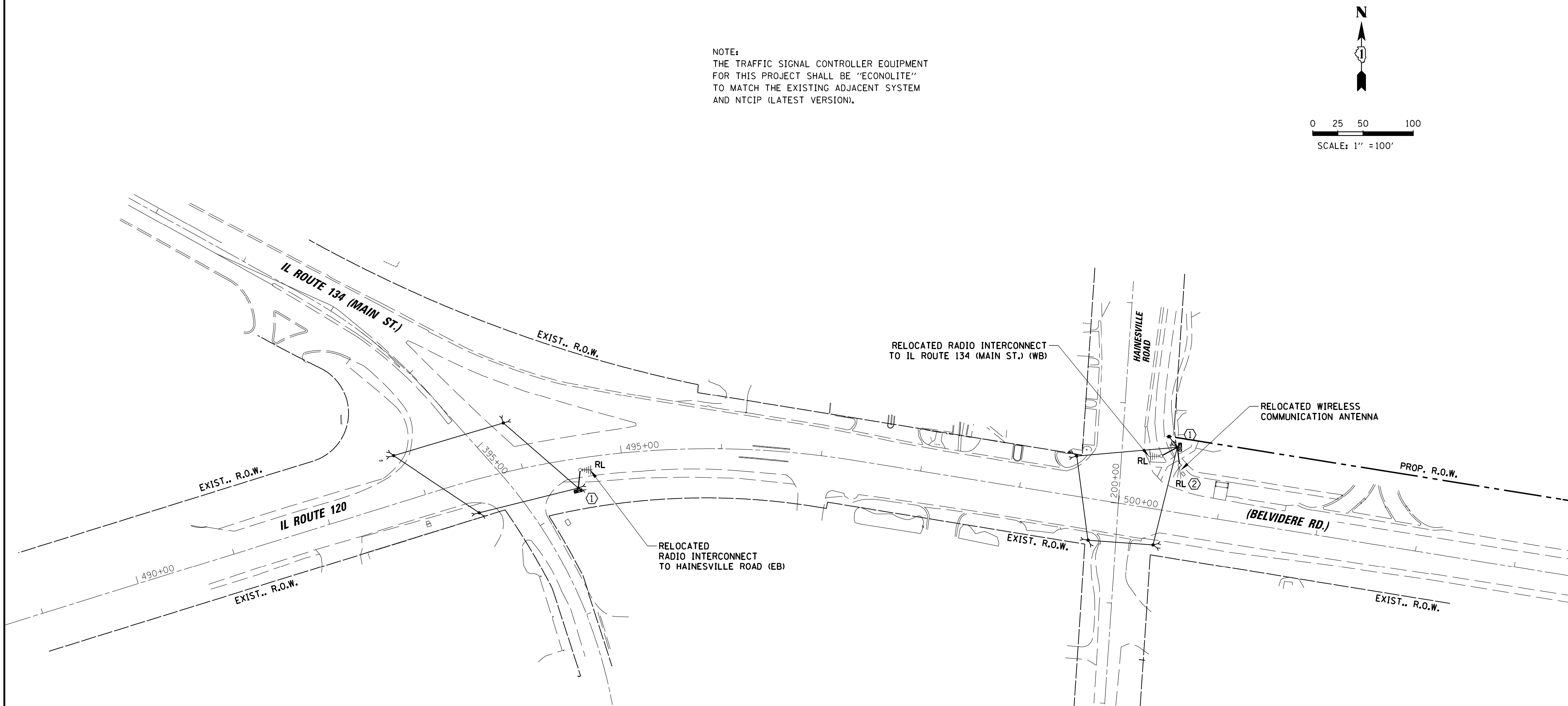
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEQUENCE OF OPERATION, EMERGENCY AND RAILROAD PREEMPTION SEQUENCE OF OPERATIONS
US ROUTE 45 AND WINCHESTER ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	70
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).



CONSTRUCTION NOTE:

1. THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS ANTENNAS AND MODULES TO THE TEMPORARY POLE AND TEMPORARY CABINET. ONCE THE PERMANENT SIGNAL IS TURNED ON, THE CONTRACTOR SHALL RETURN THE WIRELESS EQUIPMENT TO LCDOT. ALL COSTS ASSOCIATED WITH RELOCATING THE EQUIPMENT SHALL BE INCLUDED IN THE PAY ITEM:TEMPORARY TRAFFIC SIGNAL INSTALLATION.

2. THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS COMMUNICATION ANTENNA TO TRANSMIT THE VIDEO ENCODER AND LAYER II SWITCH DATA TO LCDOT. THE CABLE (ONC) FROM THE TRAFFIC SIGNAL CABINET TO THE ANTENNA SHALL BE PROVIDED BY THE CONTRACTOR. THE COST FOR PROVIDING THE CABLE, RELOCATING THE EXISTING WIRELESS COMMUNICATION ANTENNA AND PERIPHERAL EQUIPMENT SHALL BE INCLUDED IN THE UNIT COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM. THE ANTENNA SHALL BE AIMED AT THE MUNDELEIN WATER TOWER (SOUTHEAST) NEAR IL 83 AND WINCHESTER ROAD. THE CONTRACTOR SHALL SCHEDULE A FIELD MEETING WITH LCDOT TRAFFIC (847-377-7000) TO AIM THE ANTENNA.

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN	
NOTE BOOK NO.	SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.T. OF WAY CHECKED / CADD FILE NAME

BY	DATE

PROFILE	
NOTE BOOK NO.	SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHKD

BY	DATE

TS SHT NO. 36

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\INT-TMP_IL120.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

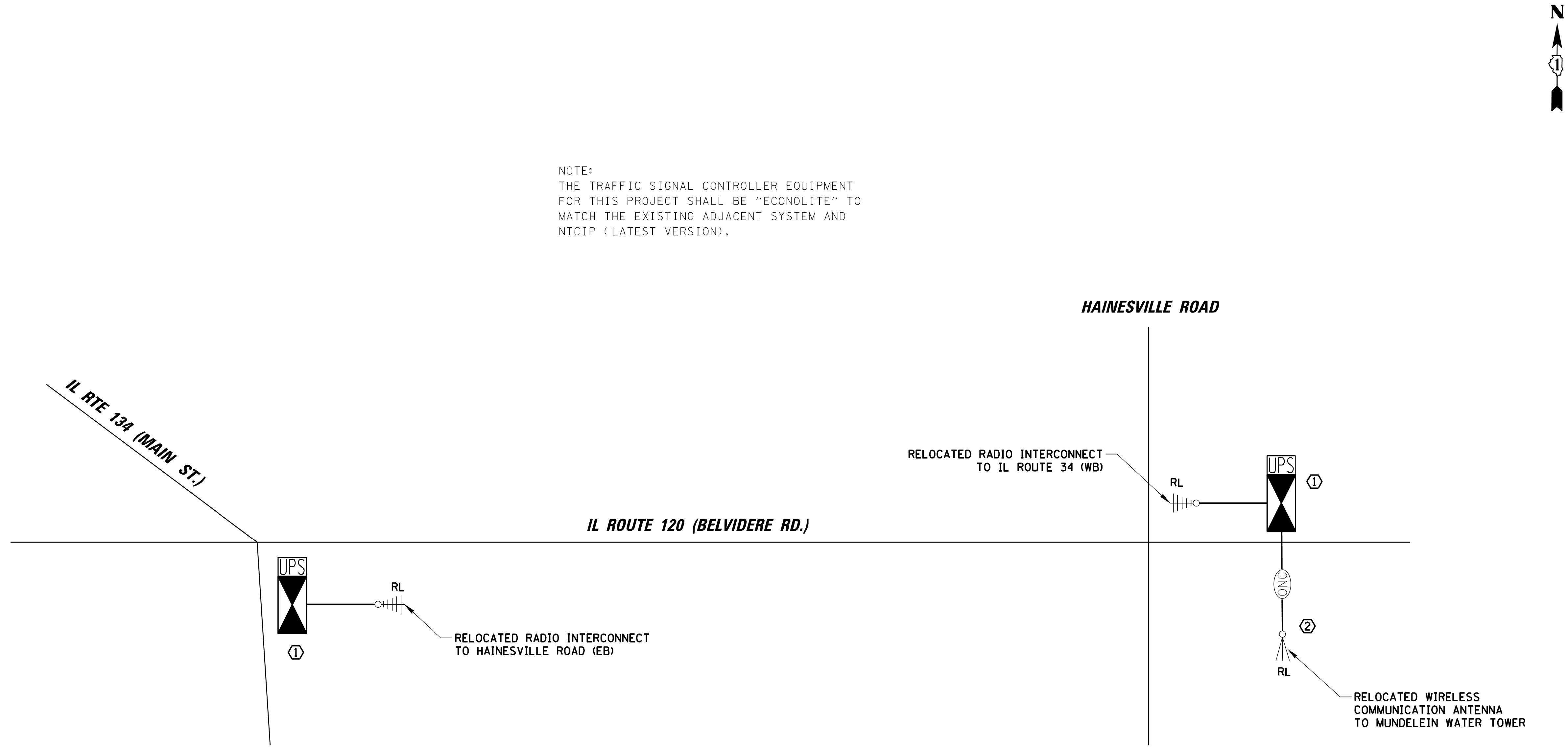
TEMPORARY INTERCONNECT PLAN
IL ROUTE 120 (BELVIDERE ROAD)
FROM IL ROUTE 134 (MAIN ST.) TO HAINESVILLE ROAD

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	71
		CONTRACT NO. 60W92		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AND NTCIP (LATEST VERSION).



CONSTRUCTION NOTE:

① THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS ANTENNAS AND MODULES TO THE TEMPORARY POLE AND TEMPORARY CABINET. ONCE THE PERMANENT SIGNAL IS TURNED ON, THE CONTRACTOR SHALL RETURN THE WIRELESS EQUIPMENT TO LCDOT. ALL COSTS ASSOCIATED WITH RELOCATING THE EQUIPMENT SHALL BE INCLUDED IN THE PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION.

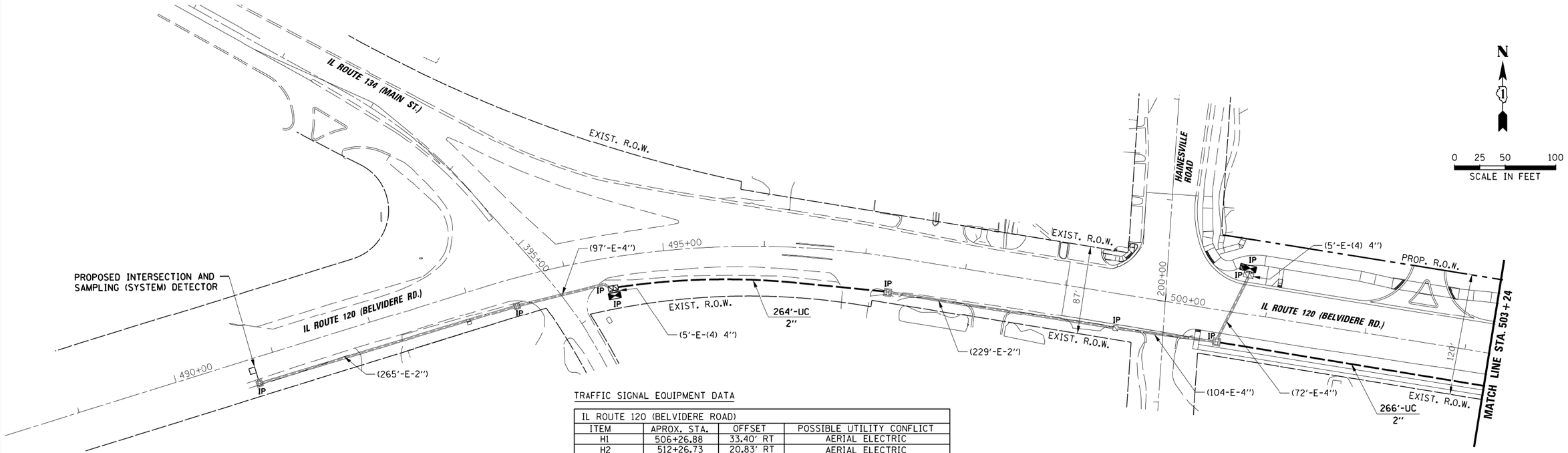
② THE CONTRACTOR SHALL RELOCATE THE EXISTING WIRELESS COMMUNICATION ANTENNA TO TRANSMIT THE VIDEO ENCODER AND LAYER II SWITCH DATA TO LCDOT. THE CABLE (ONC) FROM THE TRAFFIC SIGNAL CABINET TO THE ANTENNA SHALL BE PROVIDED BY THE CONTRACTOR. THE COST FOR PROVIDING THE CABLE, RELOCATING THE EXISTING WIRELESS COMMUNICATION ANTENNA AND PERIPHERAL EQUIPMENT SHALL BE INCLUDED IN THE UNIT COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM. THE ANTENNA SHALL BE AIMED AT THE MUNDELEIN WATER TOWER (SOUTHEAST) NEAR IL 83 AND WINCHESTER ROAD. THE CONTRACTOR SHALL SCHEDULE A FIELD MEETING WITH LCDOT TRAFFIC (847-377-7000) TO AIM THE ANTENNA.

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

TS SHT NO. 37

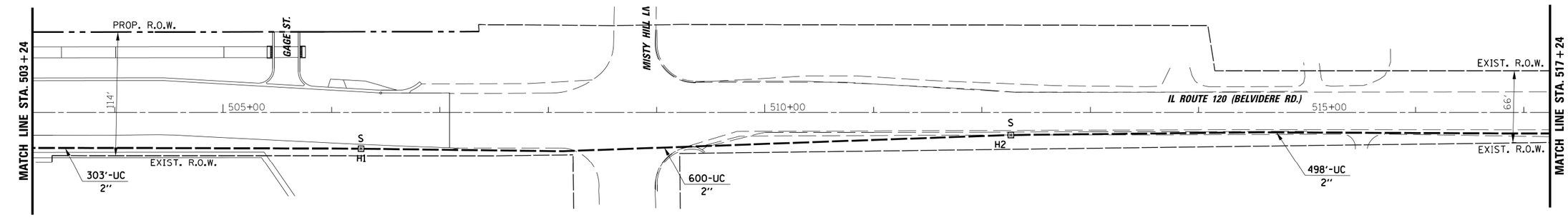
FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\SCH-TMP_IL120.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY INTERCONNECT SCHEMATIC IL ROUTE 120 (BELVIDERE ROAD) FROM IL ROUTE 134 (MAIN ST.) TO HAINESVILLE ROAD
		DRAWN - FPB	REVISED -		
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -		
	PLOT DATE = 9/26/2016	DATE -	REVISED -		SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

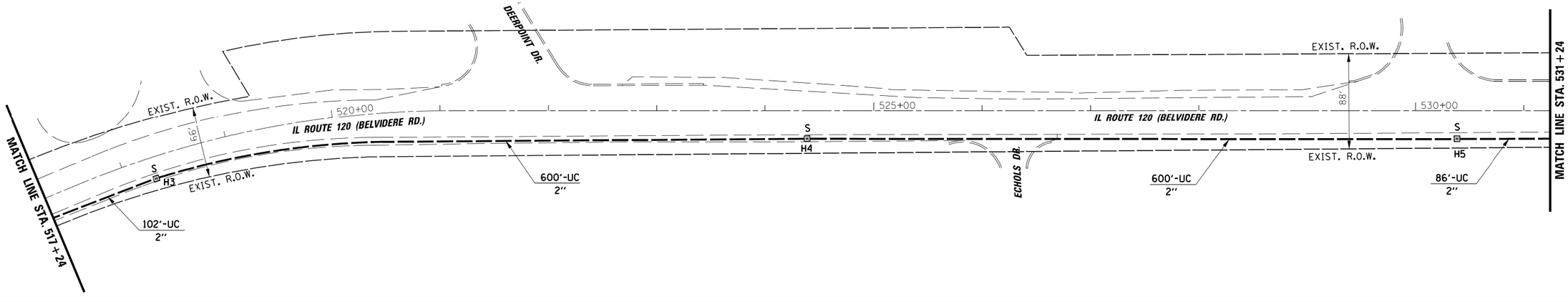
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	72
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC SIGNAL EQUIPMENT DATA

IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
H1	506+26.88	33.40' RT	AERIAL ELECTRIC
H2	512+26.73	20.83' RT	AERIAL ELECTRIC
H3	518+27.42	19.81' RT	AERIAL ELECTRIC
H4	524+38.61	26.20' RT	AERIAL ELECTRIC
H5	530+37.97	26.31' RT	AERIAL ELECTRIC





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PLAN: NOTE BOOK ____ NO. ____ | SURVEYED | PLOTTED | ALIGNMENT CHECKED | XSECTS PLOTTED | STRUCTURE NOTATNS CHKD | CADD FILE NAME | BY | DATE

PROFILE: NOTE BOOK ____ NO. ____ | SURVEYED | PLOTTED | ALIGNMENT CHECKED | XSECTS PLOTTED | STRUCTURE NOTATNS CHKD | BY | DATE

TS SHT NO. 38

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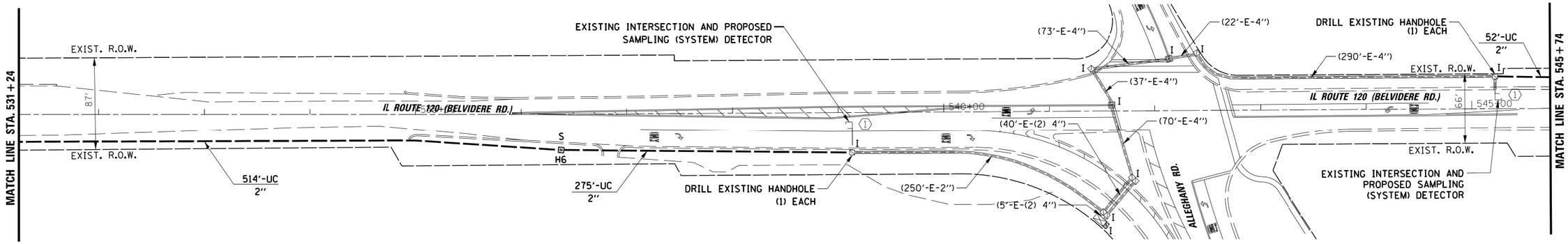
		DRAWN - FPB	REVISED -
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN (SHEET 1 OF 8)
IL ROUTE 120 (BELVIDERE ROAD) FROM
IL ROUTE 134 (MAIN ST.) TO US ROUTE 45

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	73
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC SIGNAL EQUIPMENT DATA

IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
H6	536+37.54	34.22' RT	AERIAL ELECTRIC
H7	551+23.01	18.33' LT	UNDGRD & AERIAL COMMUN.
H8	557+31.79	24.78' LT	SANITARY SEWER
H9	563+31.92	16.12' LT	UNDGRD COMMUN. CABLE
H10	563+31.30	15.54' RT	AERIAL ELECTRIC

CONSTRUCTION NOTES:

(1) THE CONTRACTOR SHALL WIRE THE EXISTING FAR BACK DETECTOR LOOPS TO OPERATE AS INTERSECTION AND SYSTEM DETECTORS IN THE EXISTING CONTROLLER CABINET. (SEE INTERSECTION PLANS FOR MORE DETAIL)

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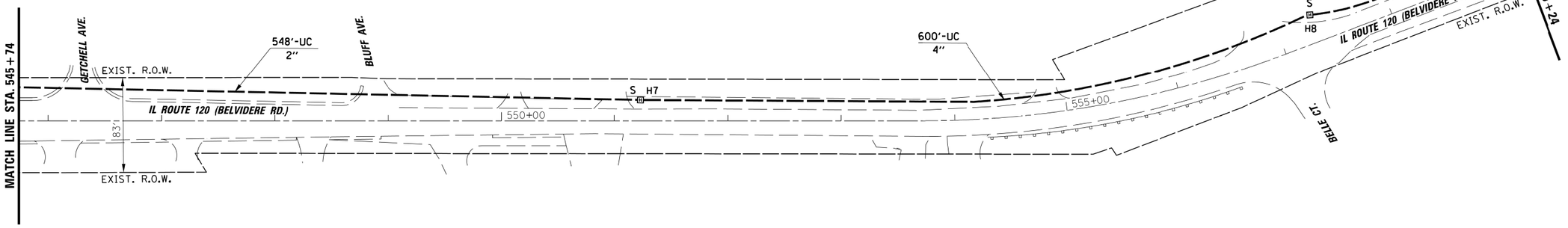
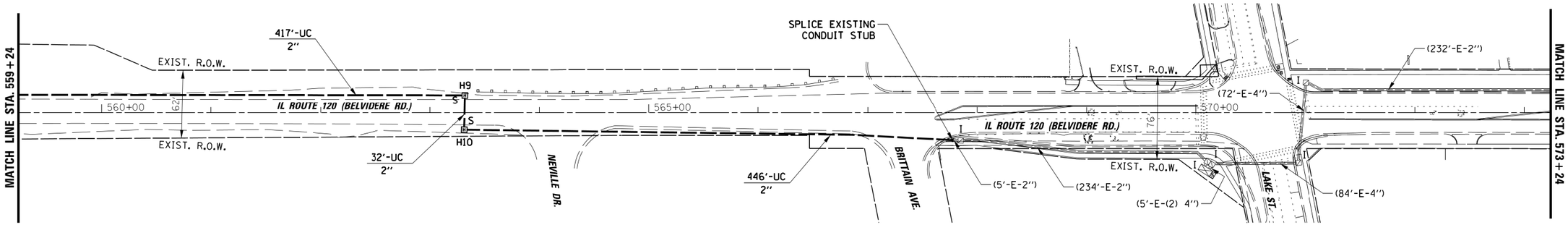
SCALE IN FEET





PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
SHADED
STRUCTURE NOTATNS CHKD
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
SHADED
STRUCTURE NOTATNS CHKD
BY
DATE

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TS SHT NO. 39

FILE NAME =	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
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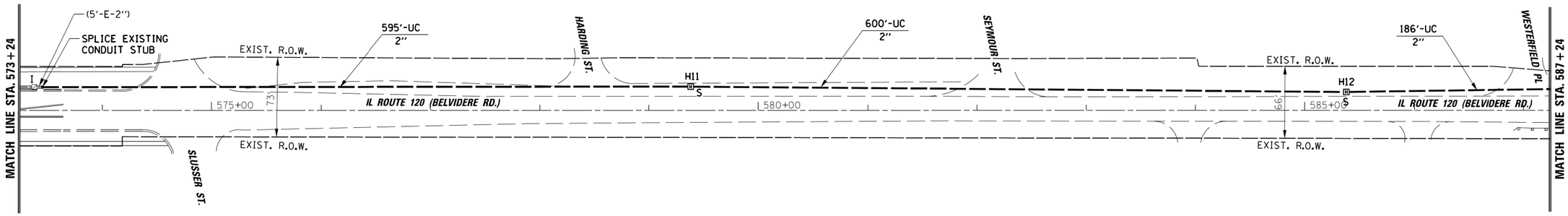
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN (SHEET 2 OF 8)
IL ROUTE 120 (BELVIDERE ROAD) FROM
IL ROUTE 134 (MAIN ST.) TO US ROUTE 45

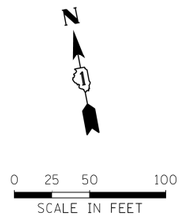
SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	74
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC SIGNAL EQUIPMENT DATA

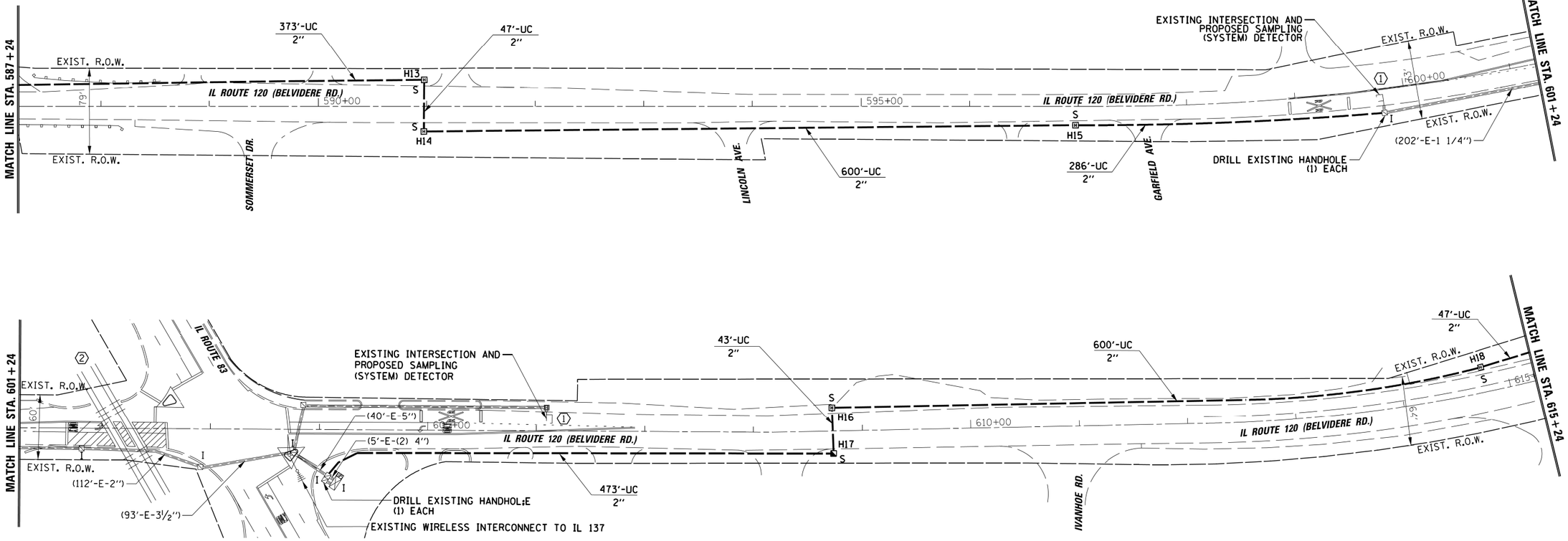
IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
H11	579+38.02	21.77' LT	-
H12	585+37.94	16.83' LT	-
H13	590+97.89	24.25' LT	AERIAL ELECTRIC
H14	590+97.50	23.15' RT	AERIAL ELECTRIC
H15	596+97.47	17.39' RT	AERIAL ELECTRIC
H16	608+72.51	21.72' LT	-
H17	608+73.20	20.74' RT	AERIAL ELECTRIC
H18	614+76.39	23.34' LT	STORM SEWER



CONSTRUCTION NOTE:

(1) THE CONTRACTOR SHALL WIRE THE EXISTING FAR BACK DETECTOR LOOPS TO OPERATE AS INTERSECTION AND SYSTEM DETECTORS IN THE EXISTING CONTROLLER CABINET. (SEE INTERSECTION PLANS FOR MORE DETAIL)

(2) CONSTRUCTION VEHICLES ARE PROHIBITED WITHIN 25 FT. OF THE TRACKS. THE CONTRACTOR SHALL INSTALL THE FIBER OPTIC CABLE AS DISCREETLY AS POSSIBLE WITH MINIMAL IMPACT TO THE AREA SURROUNDING THE RAILROAD TRACKS.



ECON 198

TS SHT NO. 40

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PLAN / PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
DRAWN
CHECKED
STRUCTURE NO
ALIGNMENT CHECKED
CADD FILE NAME
NOTATNS CHKD
BY
DATE

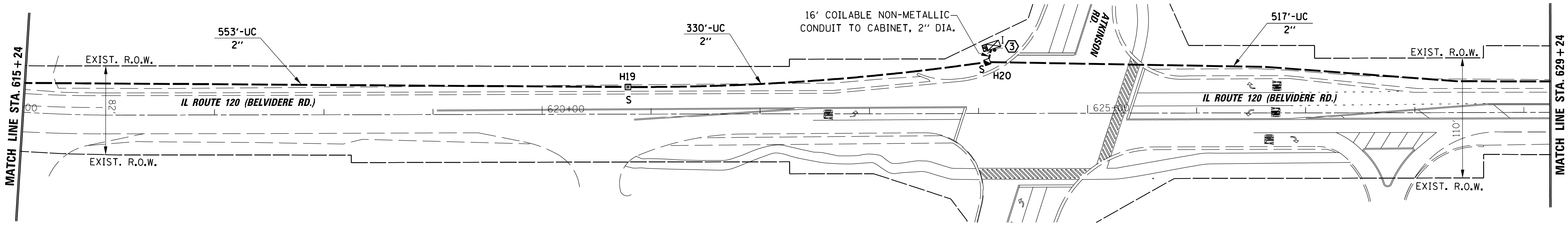
FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\INT-03_IL120.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN (SHEET 3 OF 8)
IL ROUTE 120 (BELVIDERE ROAD) FROM
IL ROUTE 134 (MAIN ST.) TO US ROUTE 45

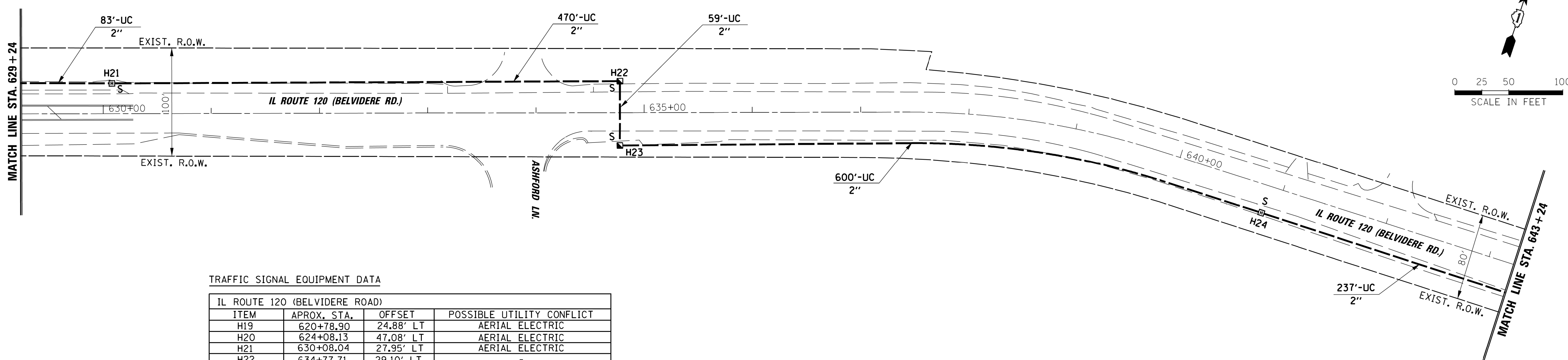
SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	75
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



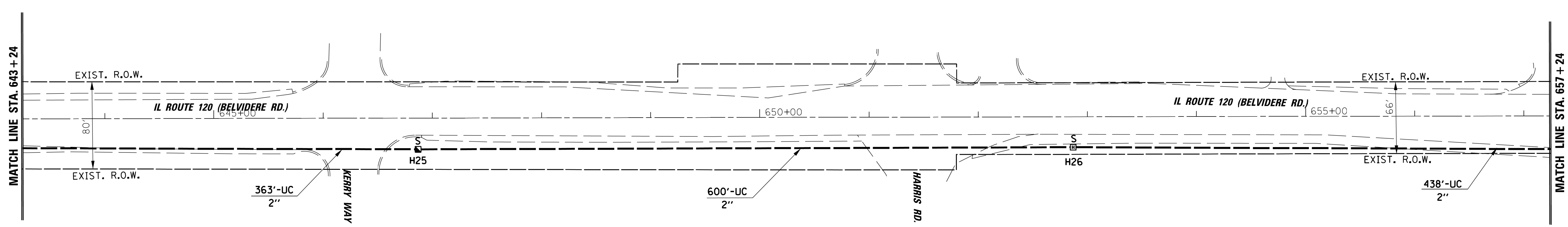
CONSTRUCTION NOTE:

(3) THE CONTRACTOR SHALL INSTALL PROPOSED COILABLE NON-METALLIC CONDUIT FROM THE HANDHOLE TO THE POLE MOUNTED CONTROLLER CABINET. THE COST FOR THE COILABLE NON-METALLIC CONDUIT SHALL BE INCLUDED IN THE UNIT COST OF THE PAY ITEM: UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.



TRAFFIC SIGNAL EQUIPMENT DATA

IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
H19	620+78.90	24.88' LT	AERIAL ELECTRIC
H20	624+08.13	47.08' LT	AERIAL ELECTRIC
H21	630+08.04	27.95' LT	AERIAL ELECTRIC
H22	634+77.71	29.10' LT	-
H23	634+77.58	30.33' RT	-
H24	640+86.96	25.86' RT	-
H25	646+86.94	28.69' RT	-
H26	652+86.91	27.96' RT	WATER MAIN



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FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\INT-04_IL120.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

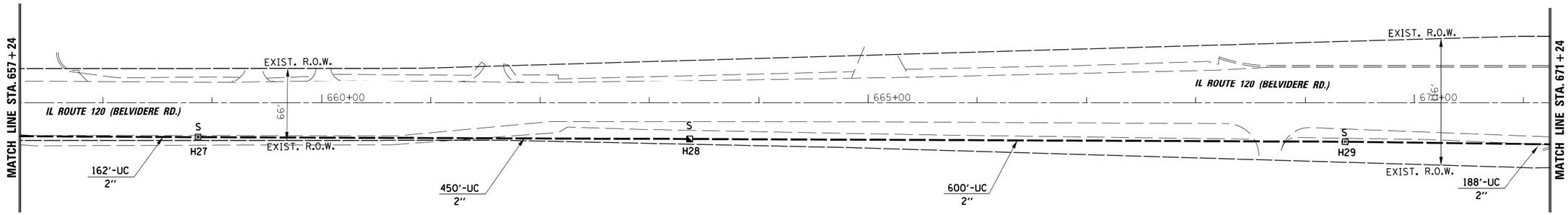
INTERCONNECT PLAN (SHEET 4 OF 8)
IL ROUTE 120 (BELVIDERE ROAD) FROM
IL ROUTE 134 (MAIN ST.) TO US ROUTE 45

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	76

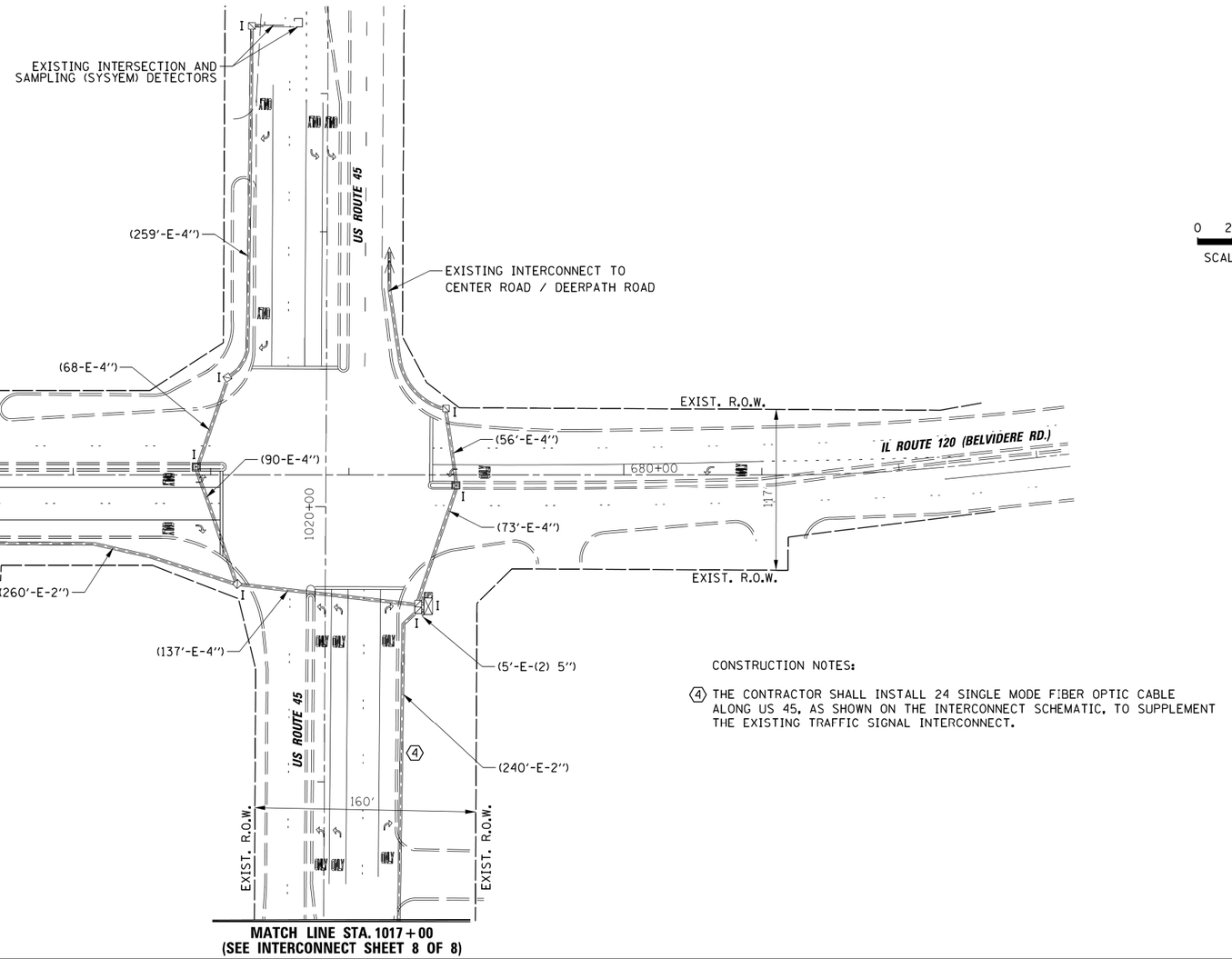
CONTRACT NO. 60W92

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



TRAFFIC SIGNAL EQUIPMENT DATA

IL ROUTE 120 (BELVIDERE ROAD)			
ITEM	APROX. STA.	OFFSET	POSSIBLE UTILITY CONFLICT
H27	658+86.79	31.23' RT	-
H28	663+36.78	33.04' RT	-
H29	669+36.78	35.54' RT	-



N

0 25 50 100

SCALE: 1" = 100'

CONSTRUCTION NOTES:

④ THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

EAGLE 4C

TS SHT NO. 42

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PLAN / PROFILE: NOTE BOOK ____ NO. ____ SURVEYED ____ PLOTTED ____ CROSS SECTIONED ____ ANALYZED ____ STRUCTURE NOTATNS CHKD ____ DATE ____ BY ____

FILE NAME =	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
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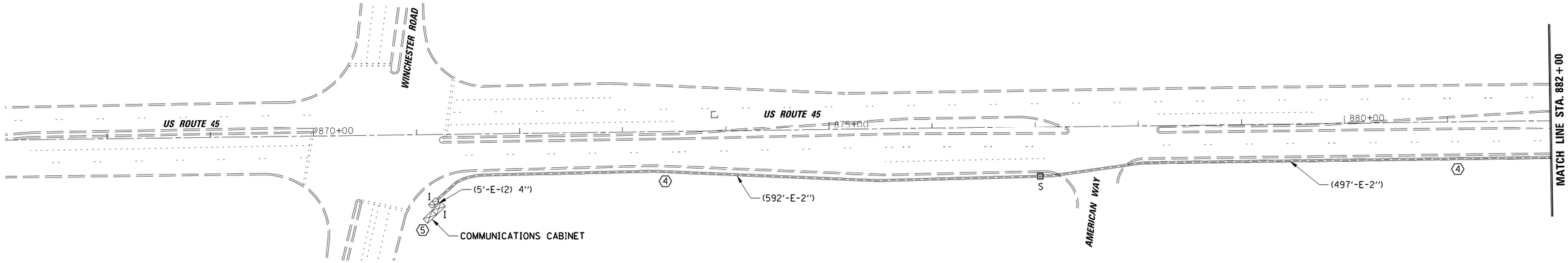
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

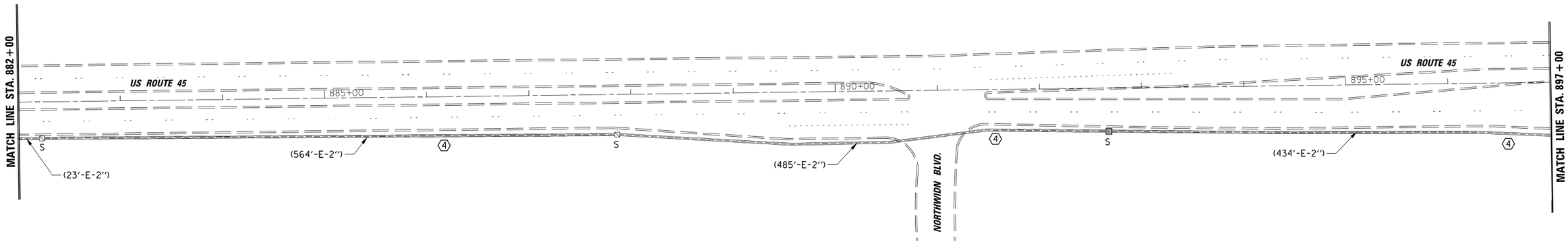
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

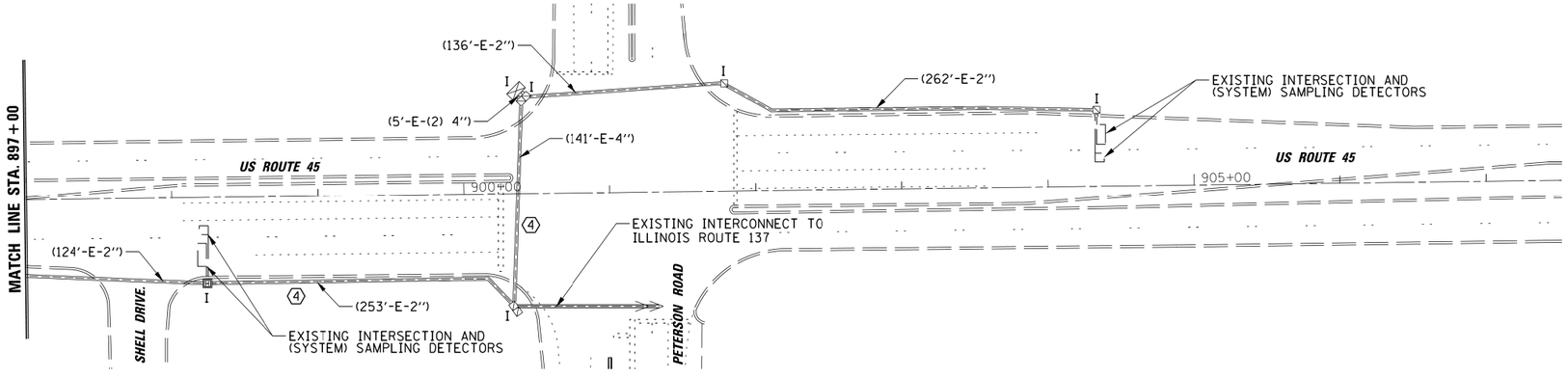
INTERCONNECT PLAN (SHEET 5 OF 8)
IL ROUTE 120 (BELVIDERE ROAD) FROM
IL ROUTE 134 (MAIN ST.) TO US ROUTE 45

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	77
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		







CONSTRUCTION NOTES:

(4) THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

(5) THE CONTRACTOR SHALL INSTALL A MEDIA CONVERTER IN THE COMMUNICATION CABINET AT US 45 AND WINCHESTER ROAD. THE MEDIA CONVERTER PAY ITEM SHALL INCLUDE THE MAINTENANCE OF THE COMMUNICATIONS CABINET.

EAGLE 4C

TS SHT NO. 43

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PLAN: NOTE BOOK ___ NO. ___ | SURVEYED ___ | PLOTTED ___ | ALIGNMENT CHECKED ___ | ALL INFO CHECKED ___ | CADD FILE NAME ___ | BY ___ | DATE ___

PROFILE: NOTE BOOK ___ NO. ___ | SURVEYED ___ | PLOTTED ___ | SHAPES CHECKED ___ | STRUCTURE NOTATNS CHKD ___ | BY ___ | DATE ___

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		DRAWN - FPB	REVISED -
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

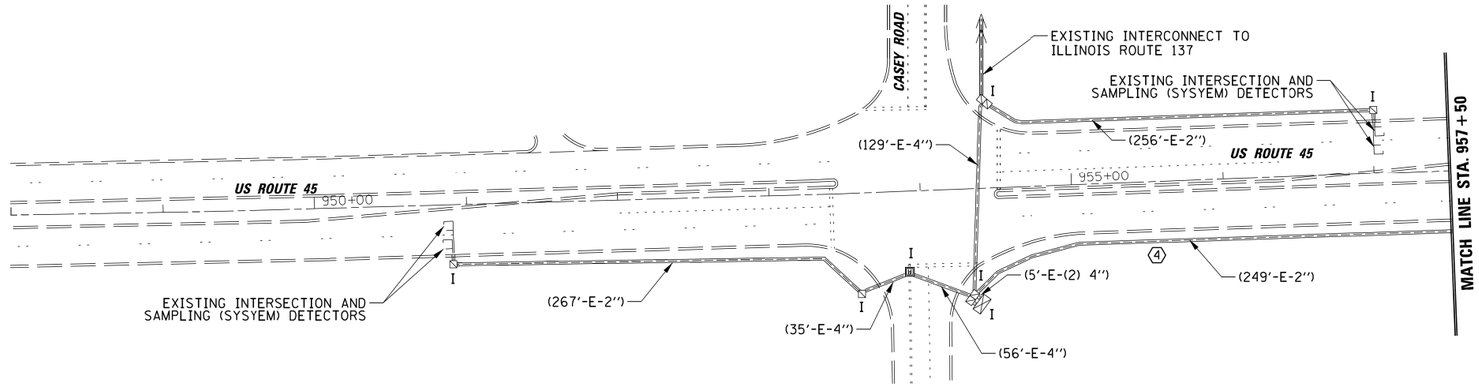
INTERCONNECT PLAN (SHEET 6 OF 8)
US ROUTE 45
FROM WINCHESTER ROAD TO PETERSON ROAD

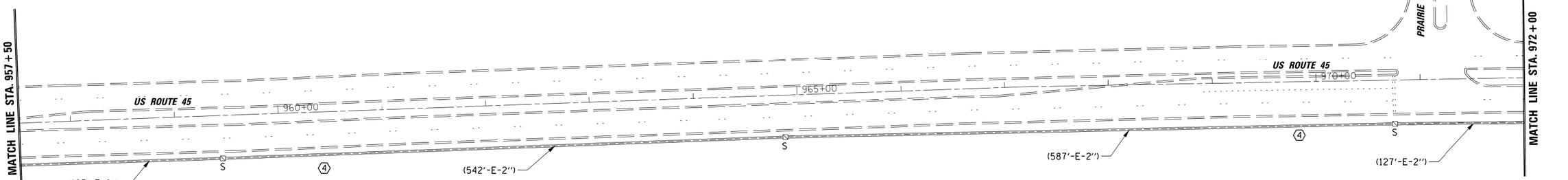
SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

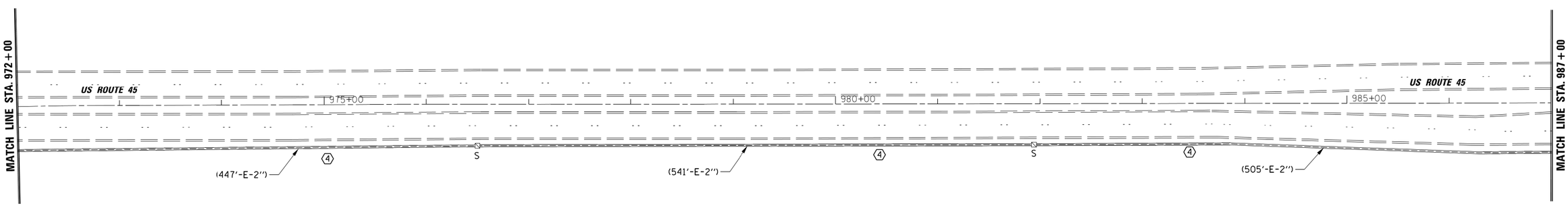
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	78
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONSTRUCTION NOTE:

④ THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN IN THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.







EAGLE 4C

TS SHT NO. 44

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PLAN / PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
ALIGNMENT NOTATNS CHKD
STRUCTURE NOTATNS CHKD
BY
DATE

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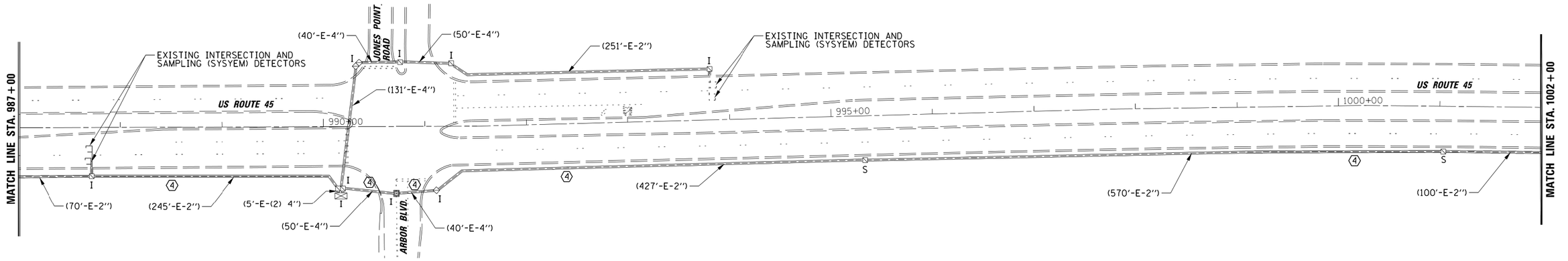
		DRAWN - FPB	REVISED -
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

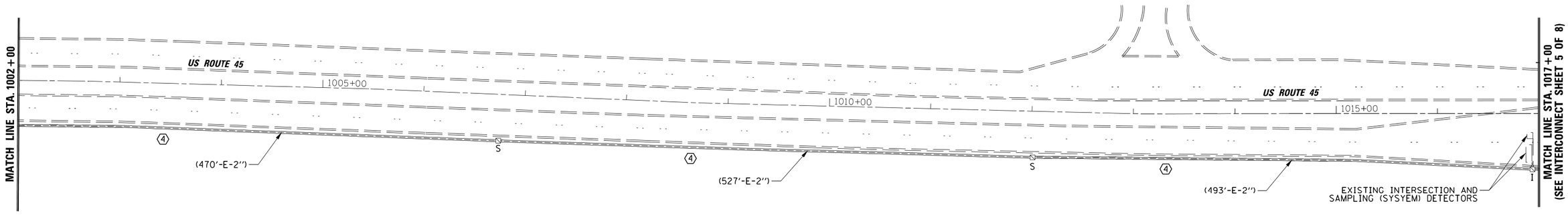
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN (SHEET 7 OF 8)
US ROUTE 45
FROM CASEY ROAD TO IL ROUTE 120

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	79
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





CONSTRUCTION NOTE:

(4) THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN IN THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

N

0 25 50 100

SCALE: 1" = 100'

EAGLE 4C

TS SHT NO. 45

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PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, ALL NOTES CHECKED, CADD FILE NAME, NOTE BOOK, NO., DATE, BY

PROFILE: SURVEYED, PLOTTED, RAILS CHECKED, ALL NOTES, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., DATE, BY

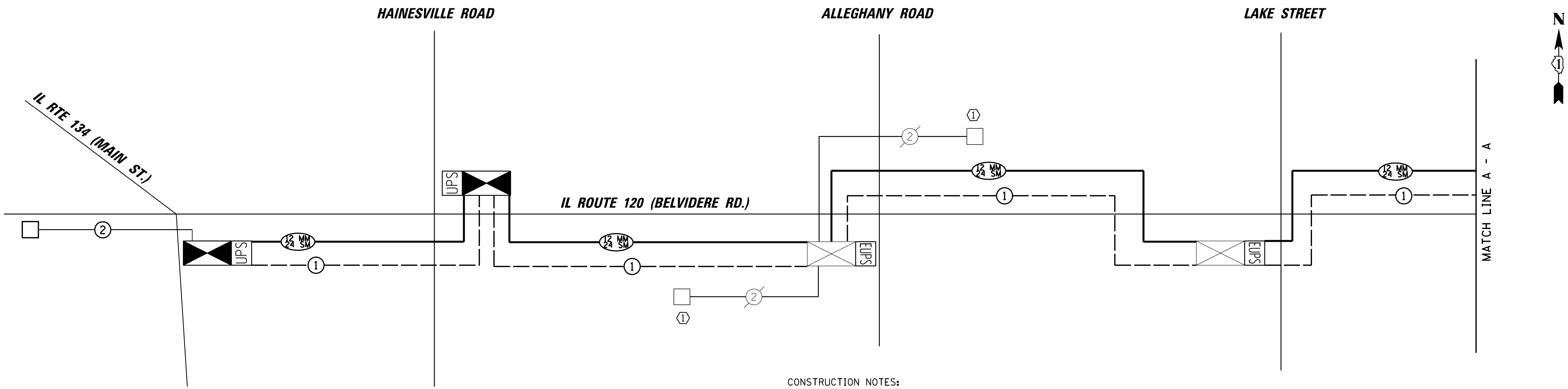
FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\INT-08_US45.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 100'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN (SHEET 8 OF 8)
US ROUTE 45
FROM CASEY ROAD TO IL ROUTE 120

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	80
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



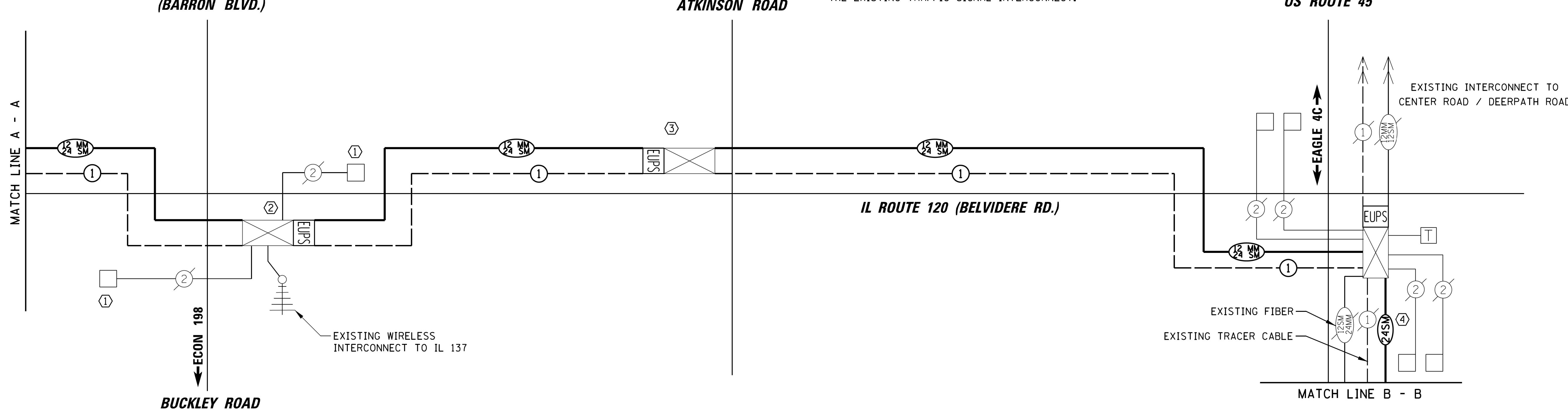
CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL WIRE THE EXISTING FAR BACK DETECTOR LOOPS TO OPERATE AS INTERSECTION AND SYSTEM DETECTORS IN THE EXISTING CONTROLLER CABINET. (SEE INTERSECTION PLANS FOR MORE DETAIL)

2. CONSTRUCTION VEHICLES ARE PROHIBITED WITHIN 25 FT. OF THE TRACKS. THE CONTRACTOR SHALL INSTALL THE FIBER OPTIC CABLE AS DISCREETLY AS POSSIBLE WITH MINIMAL IMPACT TO THE AREA SURROUNDING THE RAILROAD TRACKS.

3. THE CONTRACTOR SHALL INSTALL PROPOSED COILABLE NON-METALLIC CONDUIT FROM THE HANDHOLE TO THE POLE MOUNTED CONTROLLER CABINET. THE COST FOR THE COILABLE NON-METALLIC CONDUIT SHALL BE INCLUDED IN THE UNIT COST OF THE PAY ITEM: UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.

4. THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.



ECON 198
EAGLE 4C

TS SHT NO. 46

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\SCH_IL120_01.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC (SHEET 1 OF 2)
IL ROUTE 120 (BELVIDERE ROAD)
FROM IL ROUTE 134 (MAIN ST.) TO U.S. ROUTE 45

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	81
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

THE FOLLOWING INTERSECTIONS ARE TO BE INCLUDED IN THE ITEM: OPTIMIZE TRAFFIC SIGNAL SYSTEM
IL 120 AT IL 134
IL 120 AT HAINESVILLE ROAD
IL 120 AT ALLEGHANY ROAD
IL 120 AT LAKE STREET
IL 120 AT IL 83
IL 120 AT ATKINSON ROAD
IL 120 AT US 45

THE FOLLOWING INTERSECTIONS ARE TO BE INCLUDED IN THE ITEM: MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
US 45 AT JONES POINT ROAD
US 45 AT CASEY ROAD
US 45 AT PETERSON ROAD
US 45 AT WINCHESTER ROAD

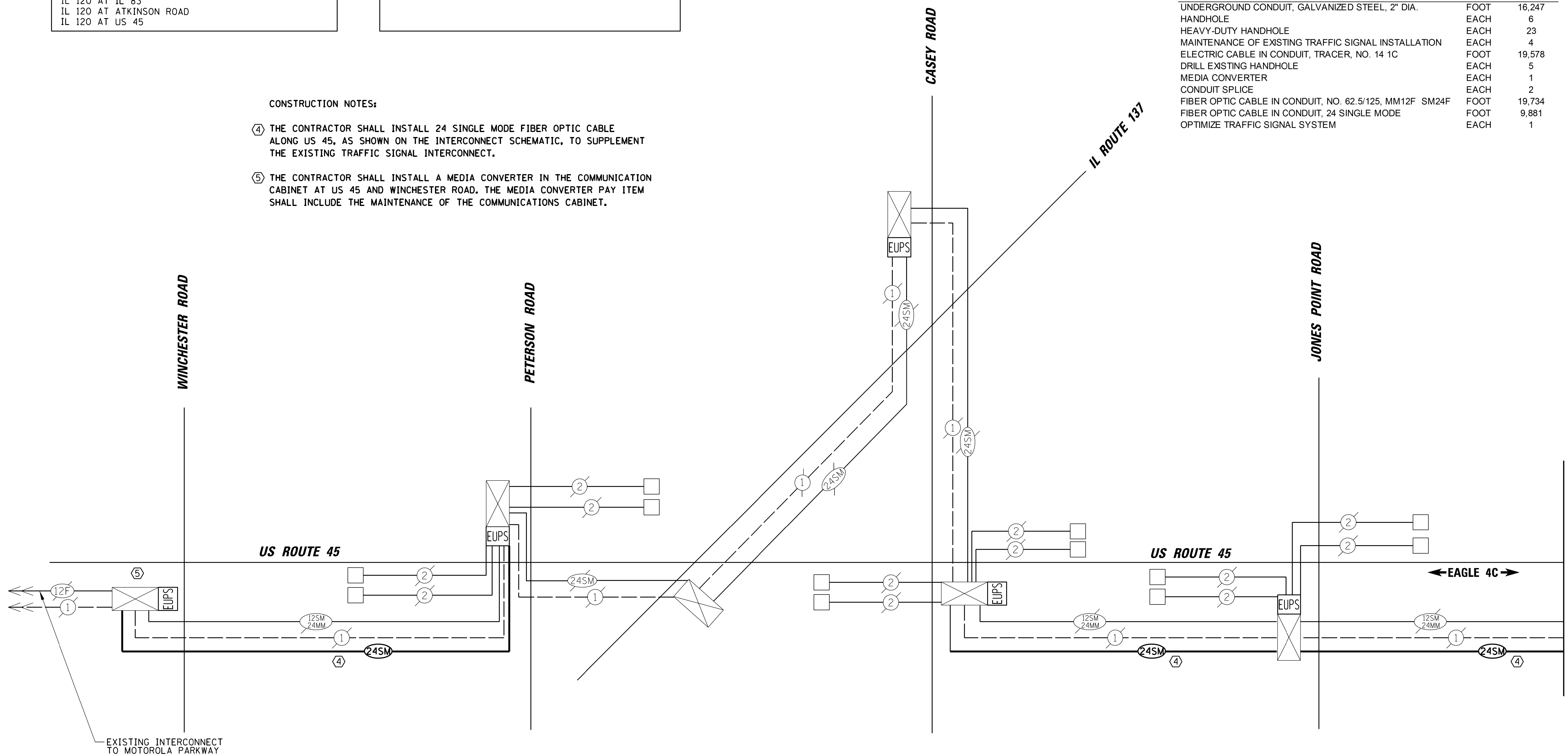
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	16,247
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	23
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	19,578
DRILL EXISTING HANDHOLE	EACH	5
MEDIA CONVERTER	EACH	1
CONDUIT SPLICE	EACH	2
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	19,734
FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	9,881
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

CONSTRUCTION NOTES:

(4) THE CONTRACTOR SHALL INSTALL 24 SINGLE MODE FIBER OPTIC CABLE ALONG US 45, AS SHOWN ON THE INTERCONNECT SCHEMATIC, TO SUPPLEMENT THE EXISTING TRAFFIC SIGNAL INTERCONNECT.

(5) THE CONTRACTOR SHALL INSTALL A MEDIA CONVERTER IN THE COMMUNICATION CABINET AT US 45 AND WINCHESTER ROAD. THE MEDIA CONVERTER PAY ITEM SHALL INCLUDE THE MAINTENANCE OF THE COMMUNICATIONS CABINET.



EAGLE 4C

TS SHT NO. 47

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

N:\LCDOT\120226\6 - IL 120\Traffic\SCH_IL120_02.dgn
ejensen

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\SCH_IL120_02.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC (SHEET 2 OF 2)
FROM WINCHESTER ROAD TO PETERSON ROAD
AND FROM CASEY ROAD TO U.S. ROUTE 45

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	82

CONTRACT NO. 60W92

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

THE FOLLOWING INTERSECTIONS ARE TO BE INCLUDED IN THE ITEM: MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
IL 137 AT CASEY ROAD IL 137 AT US 45

FIBER TERMINATIONS COUNT

INTERSECTIONS	INCLUDED IN COST OF FIBER OPTIC CABLE		BID ITEM	
	SPLICES	TERMINATIONS	SPLICES	TERMINATIONS
IL 120 AT IL 134		12		
IL 120 AT HAINESVILLE	6	12		
IL 120 AT ALLEGHANY	6	12		
IL 120 AT LAKE STREET	6	12		
IL 120 AT IL 83	6	12		
IL 120 AT ATKINSON	6	12		
US 45 AT IL 120		12		
US 45 AT JONES POINT/ARBOR BLVD	12			
US 45 AT CASEY	12			
IL 137 AT CASEY			21	3
US 45 AT IL 137			21	3
US 45 AT PETERSON	12			
US 45 AT WINCHESTER		12		
TOTAL	**66**	**96**	**42**	**6**

PATCH PANEL COLOR CODING

SINGLE MODE FIBER

- BLUE
- ORANGE
- GREEN
- BROWN
- SLATE
- WHITE
- RED
- BLACK
- YELLOW
- VIOLET
- ROSE
- AQUA

ALL SINGLE MODE PATCH PANEL CONNECTORS ARE TO BE TYPE SC

- BLUE with BLACK tracer
- ORANGE with BLACK tracer
- GREEN with BLACK tracer
- BROWN with BLACK tracer
- SLATE with BLACK tracer
- WHITE with BLACK tracer
- RED with BLACK tracer
- BLACK with BLACK tracer
- YELLOW with BLACK tracer
- VIOLET with BLACK tracer
- ROSE with BLACK tracer
- AQUA with BLACK tracer

ALL MULTIMODE PATCH PANEL CONNECTORS ARE TO BE TYPE ST

CONSTRUCTION NOTE:

(1) THE CONTRACTOR SHALL PERFORM ADDITIONAL TERMINATIONS AND SPLICING ON THE EXISTING INTERCONNECT CABLES AT THE INTERSECTIONS OF IL 137 AT CASEY ROAD AND IL 137 AT US 45 ACCORDING TO THE FIBER SPLICING DIAGRAM OR AS DIRECTED BY THE ENGINEER. QUANTITIES FOR THE ADDITIONAL TERMINATIONS, SPLICES, AND MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATIONS HAVE BEEN INCLUDED.

(1) SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXSTING TRAFFIC SIGNAL INSTALLATION	EACH	2
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	42

TS SHT NO. 48

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED; PLOTTED; ALIGNMENT CHECKED; CADD FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\DET_Fiber Term Spice Count.dgn; BY = ejensen; DATE; NOTE BOOK; NO.

PROFILE: SURVEYED; PLOTTED; SHEETS CHECKED; STRUCTURE NOTATNS CHKD; BY; DATE; NOTE BOOK; NO.

FILE NAME = N:\LCDOT\120226\6 - IL 120\Traffic\DET_Fiber Term Spice Count.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = 2'	CHECKED - GMZ	REVISED -
	PLOT DATE = 9/26/2016	DATE -	REVISED -

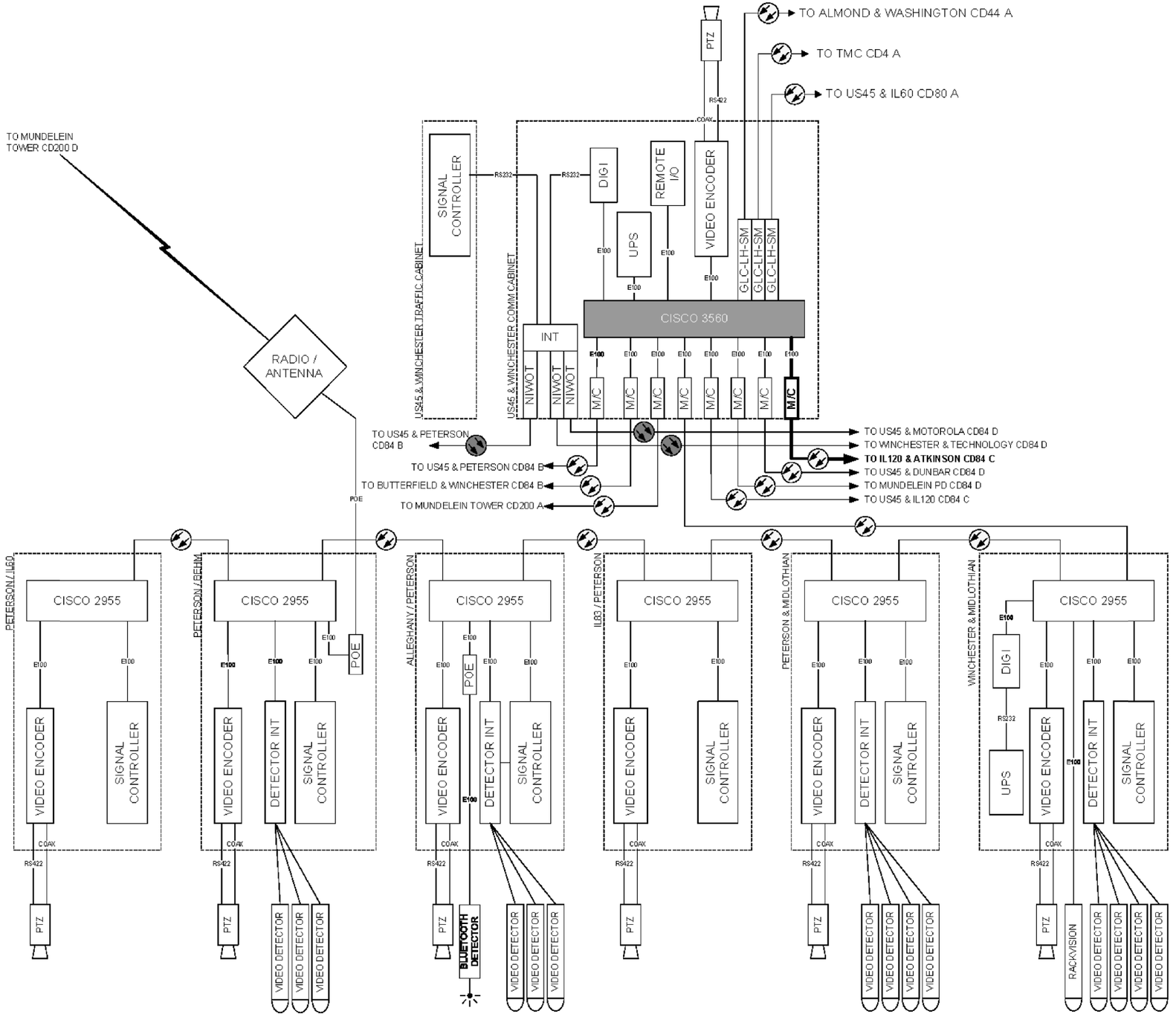
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER TERMINATION /SPLICE COUNT AND PATCH PANEL COLOR CODE

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	83
		CONTRACT NO. 60W92		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TS SHT NO. 49



	DESIGNED - DG	REVISED - 2014.08.06	LAKE COUNTY DIVISION OF TRANSPORTATION	84A US45 / WINCHESTER	ROUTE	SECTION	ROUTE SECTION	SHEET	SHEETS
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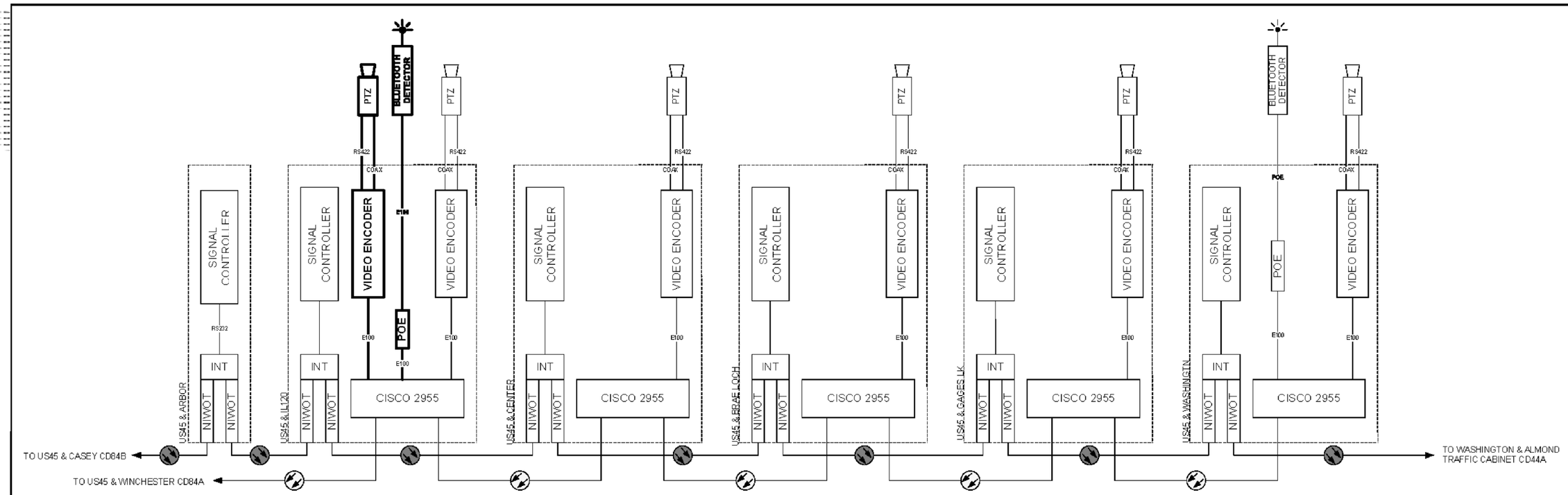
	CHECKED - DG	REVISED -							
	DATE 2015.12.01	REVISED -		SCALE N/A					



	DESIGNED - DG	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	84C US45 / WINCHESTER	ROUTE	SECTION	ROUTE SECTION	SHEET	SHEETS
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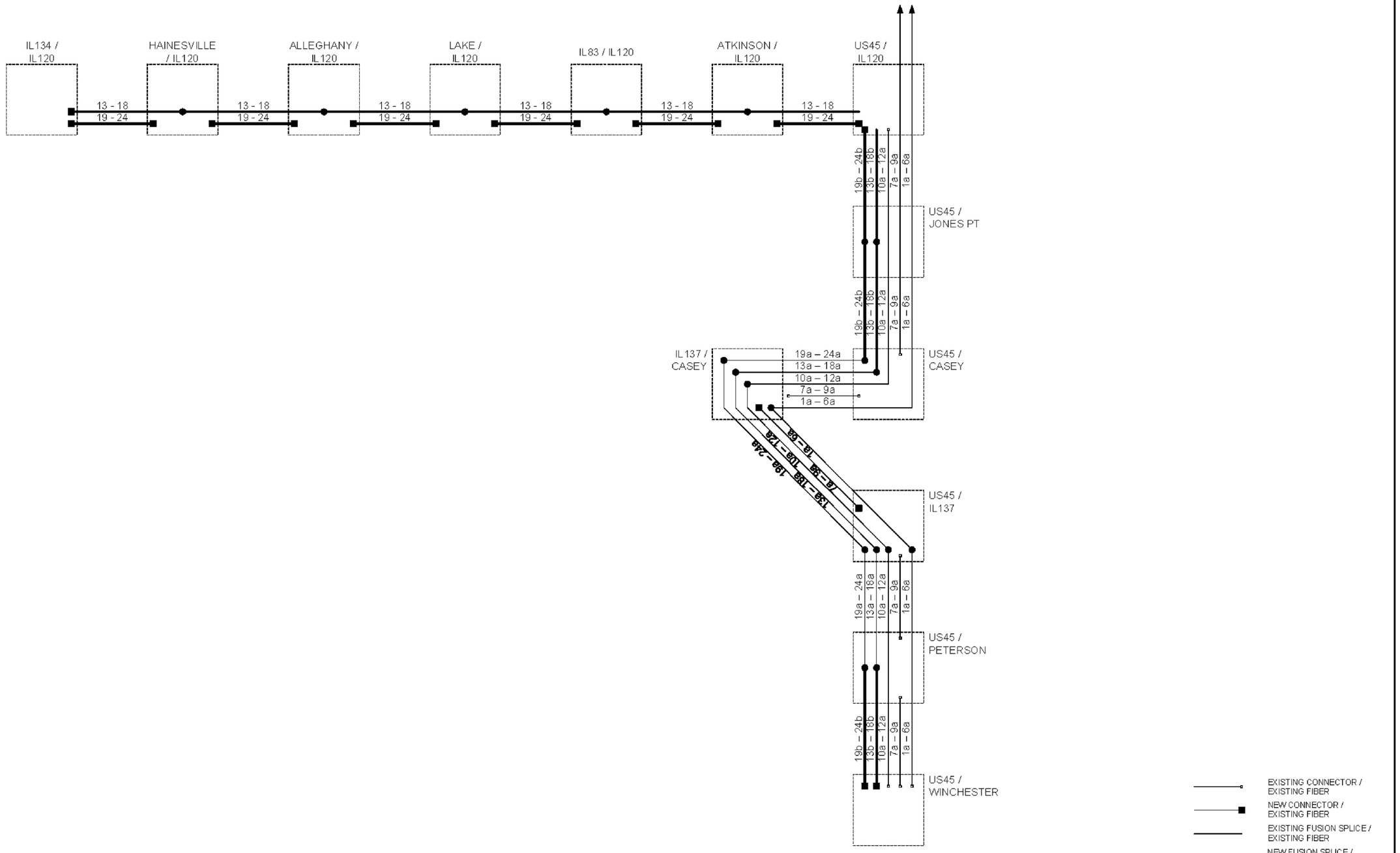
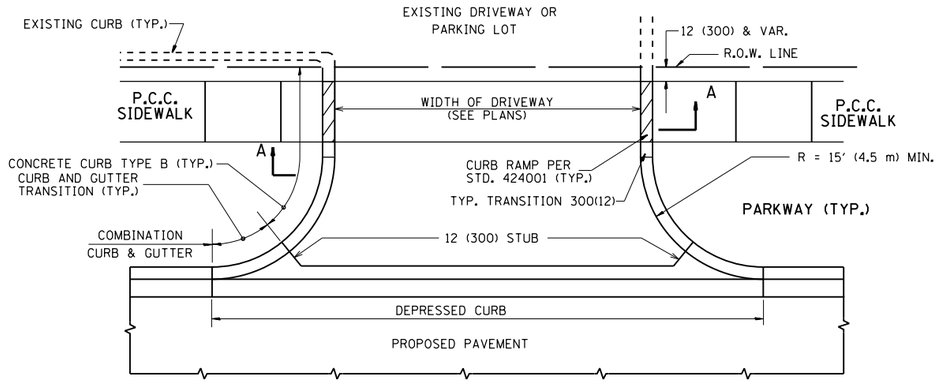
	CHECKED - DG	REVISED -							
	DATE 2015.12.01	REVISED -		SCALE N/A					

TS SHT NO. 50

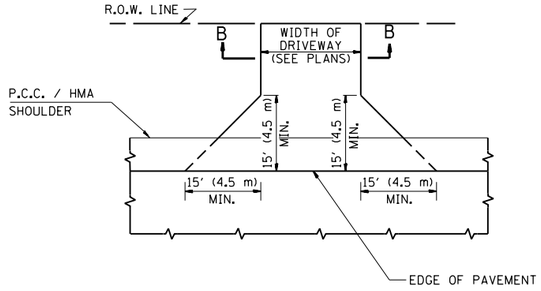


		DESIGNED - DG	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	FIBER SPLICING DIAGRAM 1	ROUTE	SECTION	ROUTE SECTION	SHEET	SHEETS
		DRAWN - YM	REVISED -							
		CHECKED - DG	REVISED -							
		DATE 2015.12.01	REVISED -		SCALE N/A					

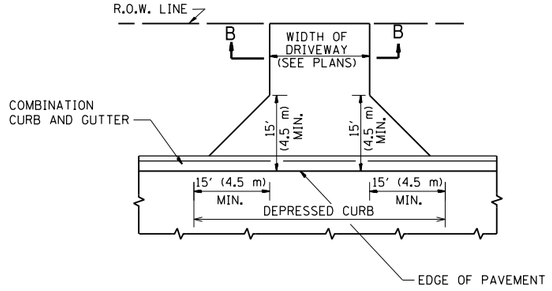
TS SHT NO. 51



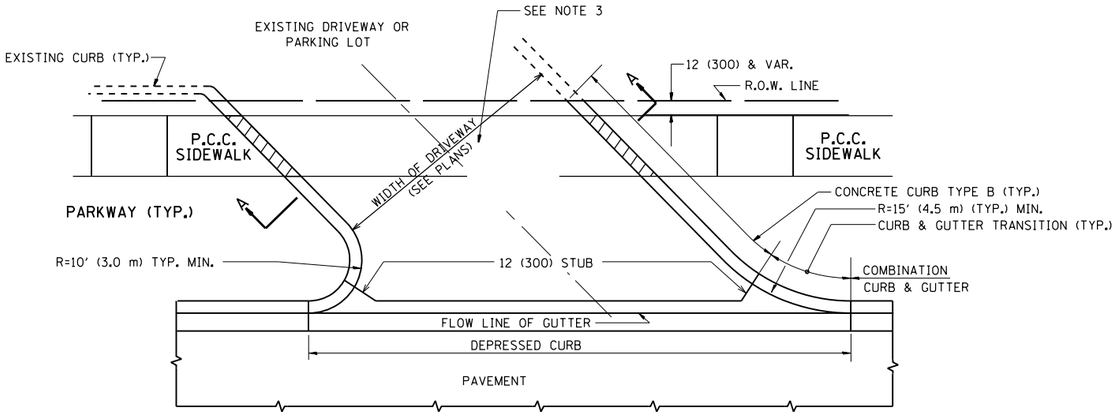
WITH CONCRETE CURB, TYPE B



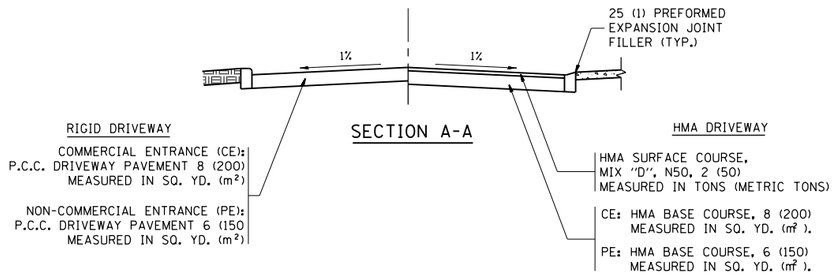
ADJACENT TO P.C.C. / HMA SHOULDER

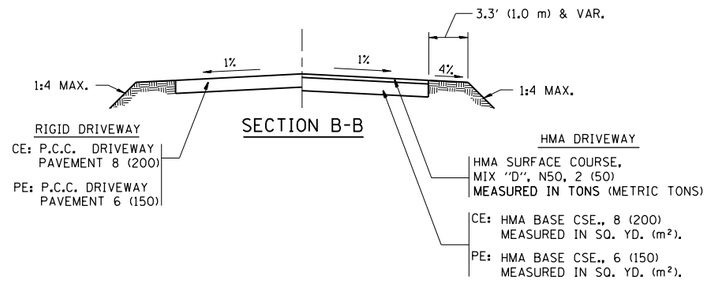


ADJACENT TO CURB AND GUTTER



WITH CONCRETE CURB, TYPE B





RURAL FIELD ENTRANCE (FE)

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

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

GENERAL NOTES:

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

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

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

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

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

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

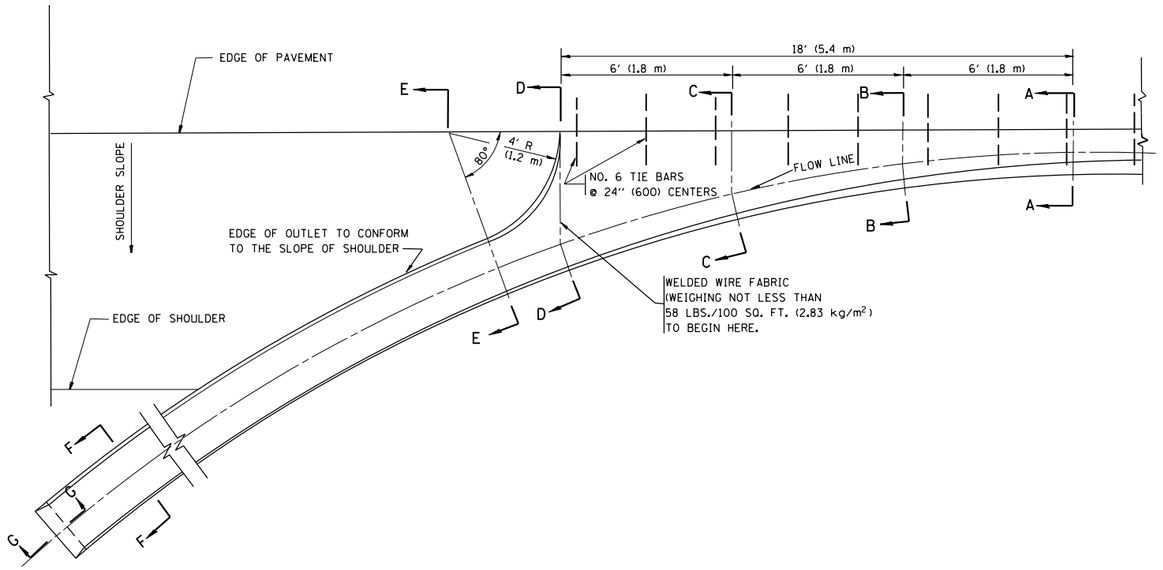
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P1704\DRAWN	USER NAME = PencePL	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 10/27/2016	DATE - 11-04-95	REVISED - R. BORO 06-11-08
			REVISED - R. BORO 09-06-11

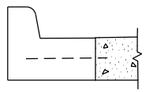
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

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

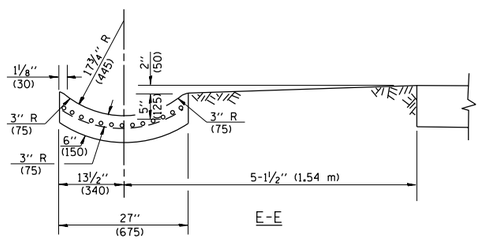
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	87
	BD0156-07 (BD-01)	CONTRACT NO. 60W92		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



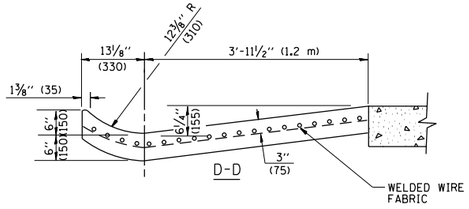


A-A *

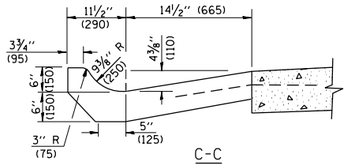
* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001.
FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



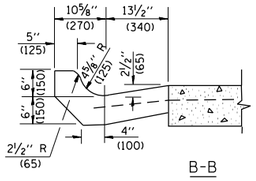
E-E



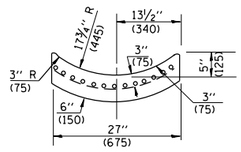
D-D



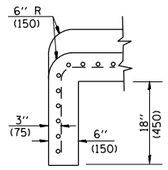
C-C



B-B



F-F



G-G

GENERAL NOTES

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

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

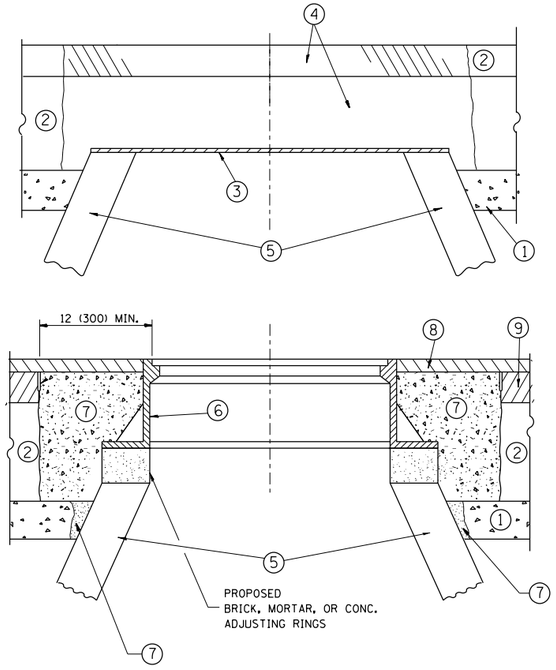
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL=
1.25 CU. YDS. (0.96 m^3) CLASS SI CONCRETE (OUTLET) FOR 9" (225) PAV'T.
1.27 CU. YDS. (0.96 m^3) CLASS SI CONCRETE (OUTLET) FOR 10" (250) PAV'T.
FOR SECTION F-F=
0.045 CU. YDS. (0.03 m^3) CLASS SI CONCRETE PER ft. (m).

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P1704\DRAWD	USER NAME = PencePL	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OUTLET FOR CONCRETE CURB AND GUTER			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. SHAH 10-25-94					333&344	116TS&N-2	LAKE	102	88
	PLOT DATE = 10/27/2016	DATE - 08-04-86	REVISED - E. GOMEZ 12-21-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	BD600-01 (BD-03)		CONTRACT NO. 60W92		
								FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 (900) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS PP-1* CONCRETE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA BINDER COURSE

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

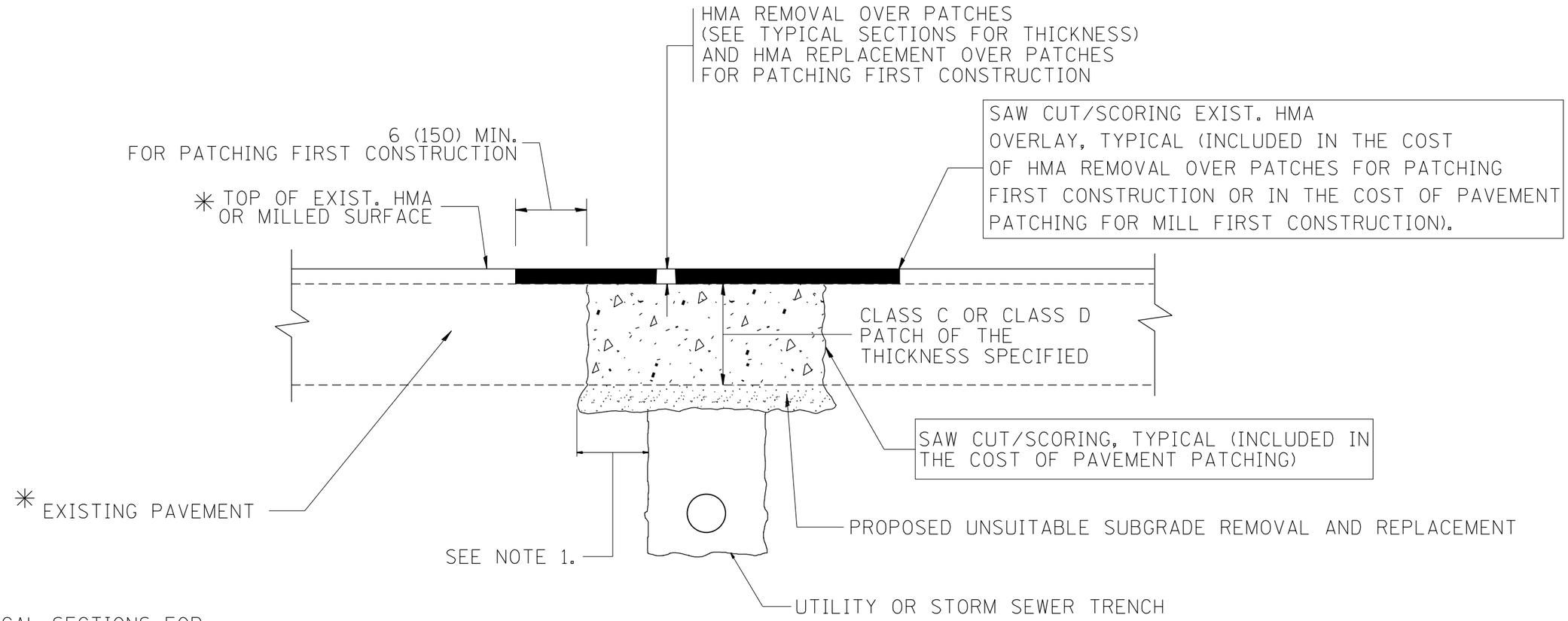
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P170402\Drawings\Design\DistStd.dgn	USER NAME = PencePL	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
			REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 10/27/2016	DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	89
	BD600-03 (BD-8)	CONTRACT NO. 60W92		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



✳ SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST $4\frac{1}{2}$ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

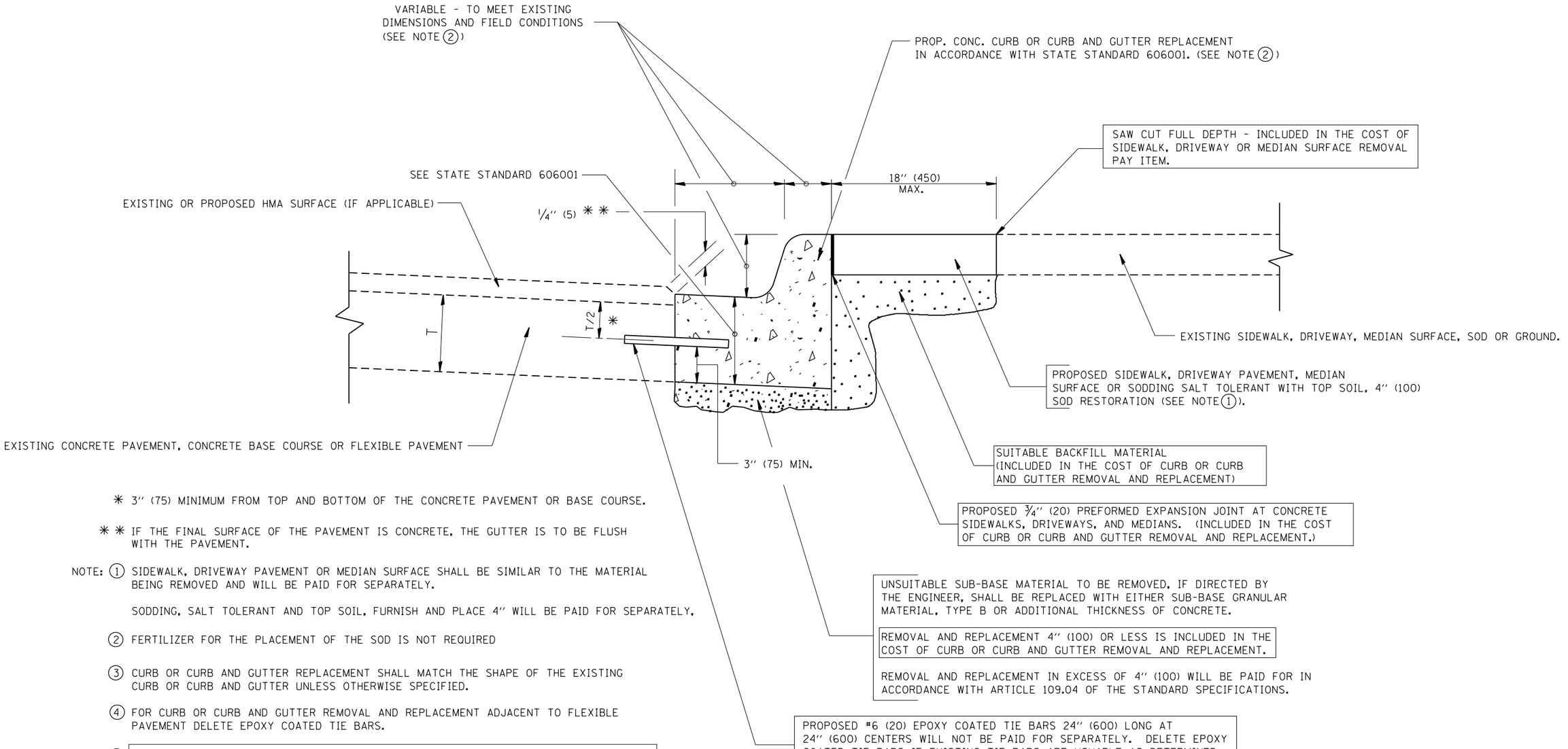
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P170401\Final\Data\Design\DistStd.dgn	USER NAME = PencePL	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 10/27/2016	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	90
	BD400-04 (BD-22)	CONTRACT NO. 60W92		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

* * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: (1) SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

(2) FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

(3) CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

(4) FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

(5) LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

(6) THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

(7) THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

(8) THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

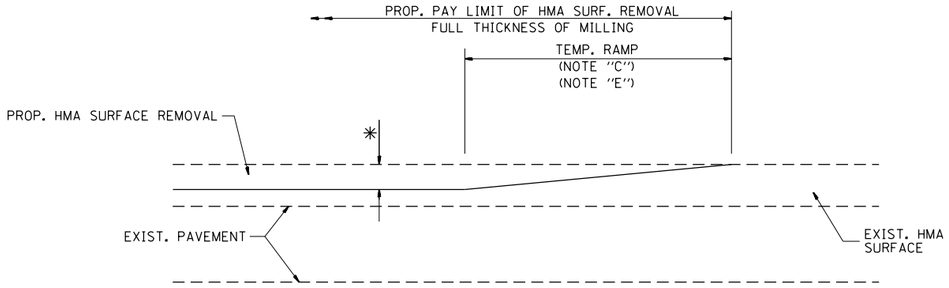
BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

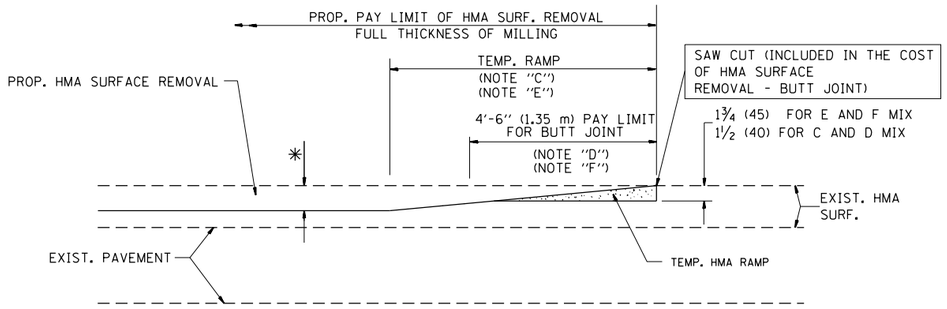
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P170402\Working Data\Design\DistStd.dgn	USER NAME = PencePL	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED - A. ABBAS 03-21-97				333&344	116TS&N-2	LAKE	102	91
	PLOT DATE = 10/27/2016	CHECKED -	REVISED - M. GOMEZ 01-22-01				BD600-06 (BD-24)		CONTRACT NO. 60W92		
		DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

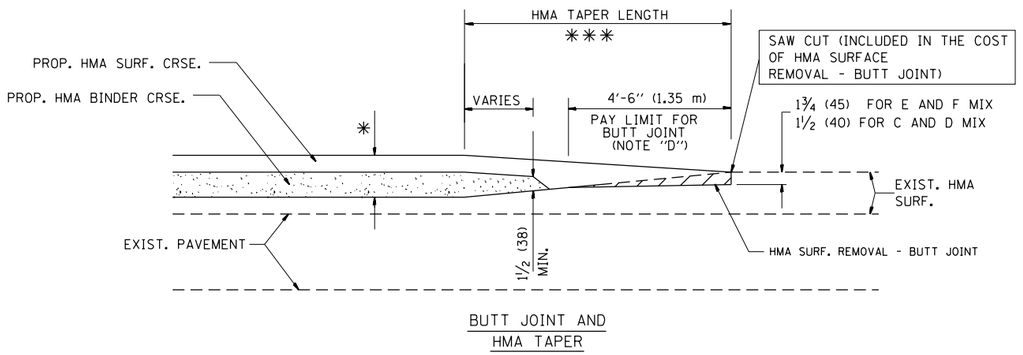


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

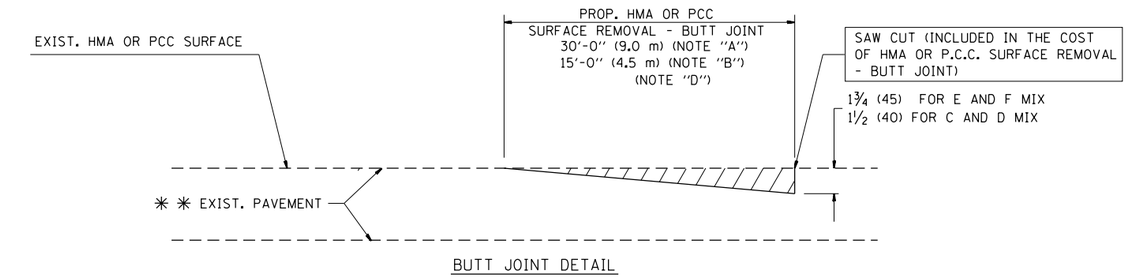
OPTION 2

TYPICAL TEMPORARY RAMP

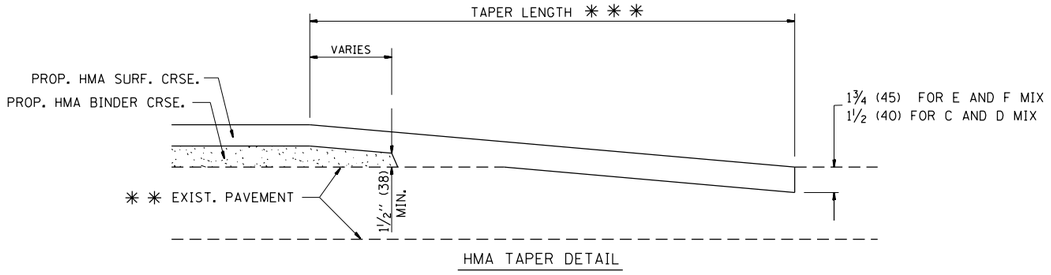


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

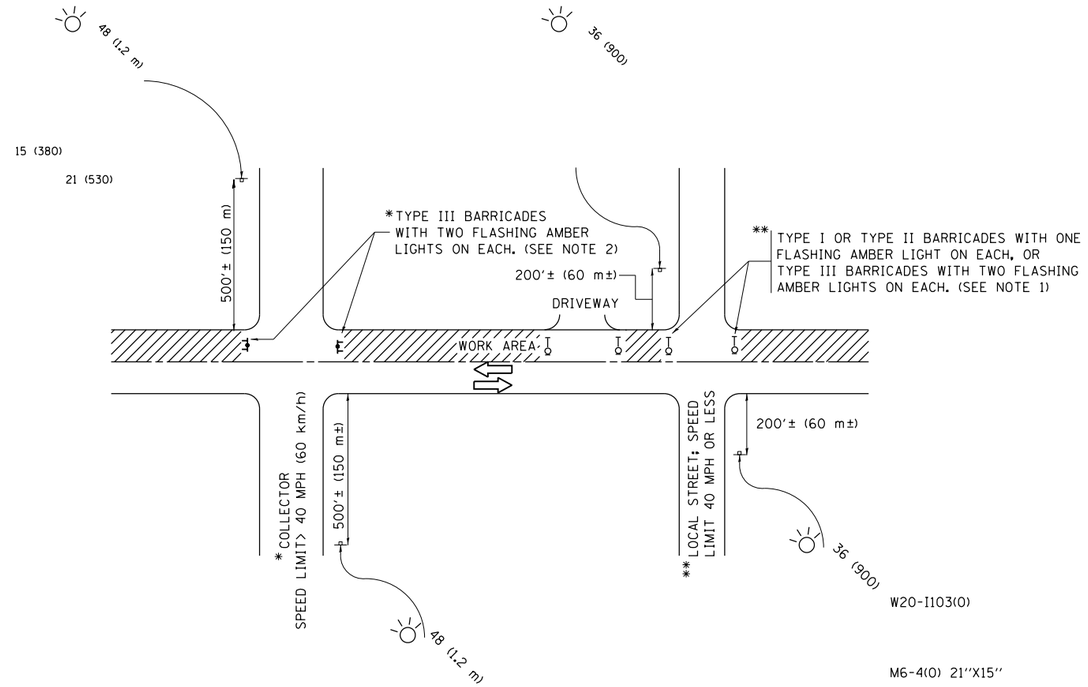
BASIS OF PAYMENT:

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

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\P170402\WorkingData\Design\DistStd.dgn	USER NAME = PencePL	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS
	PLOT SCALE = 100.0000 '/ in.	DRAWN -	REVISED - A. ABBAS 03-21-97		
	PLOT DATE = 10/27/2016	CHECKED -	REVISED - M. GOMEZ 04-06-01		
		DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	92
	BD400-05 BD32	CONTRACT NO. 60W92		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

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 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. 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).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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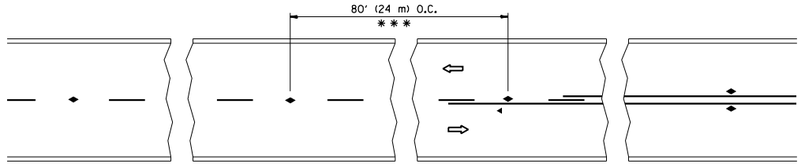
		DRAWN -	REVISED - T. RAMMACHER 01-06-00
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
Default	PLOT DATE = 10/27/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

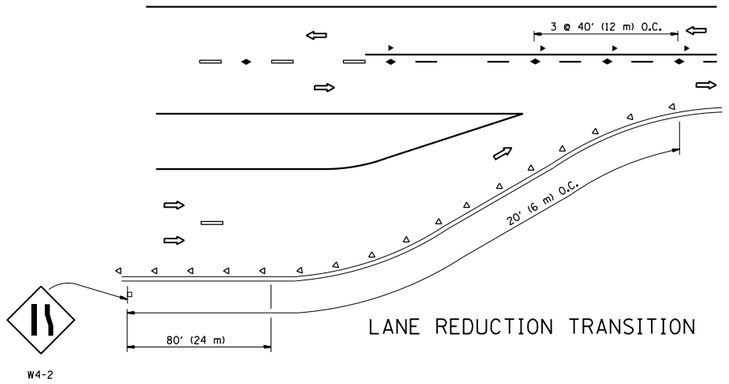
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	93
	TC-10	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

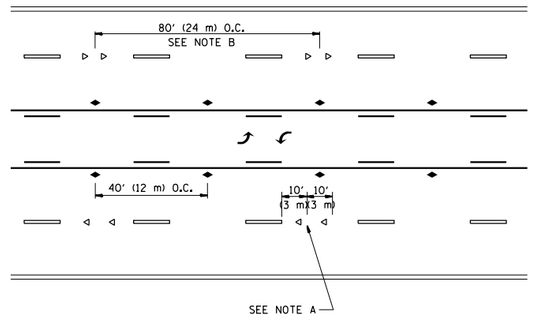


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

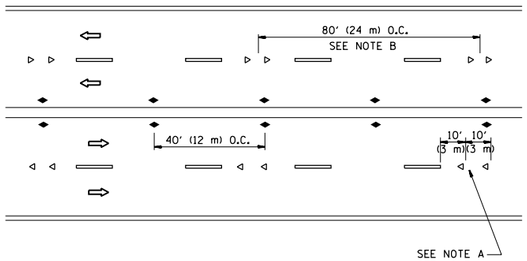
TWO-LANE/TWO-WAY



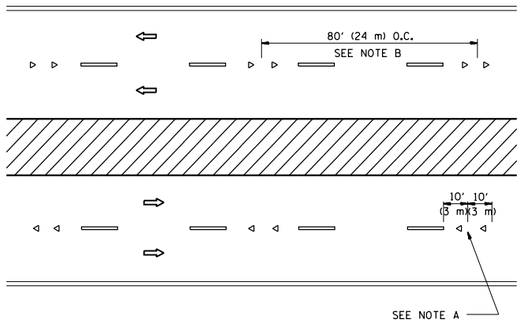
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

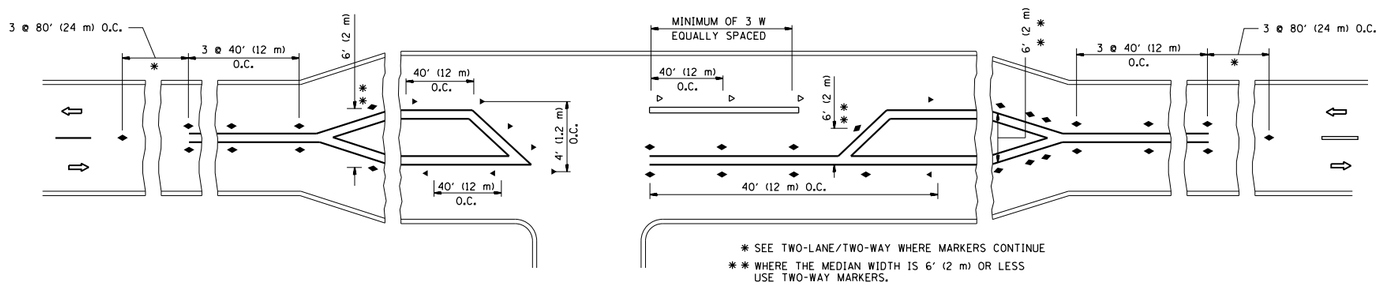
LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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

DESIGN NOTES

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



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

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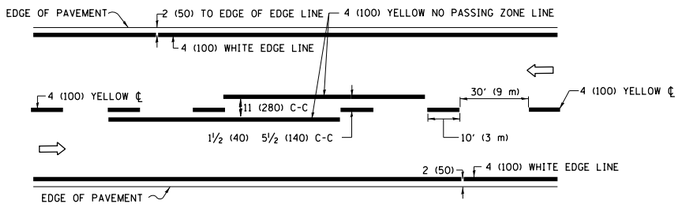
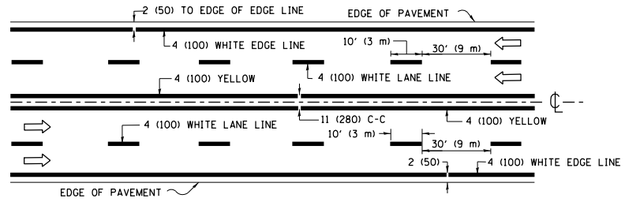
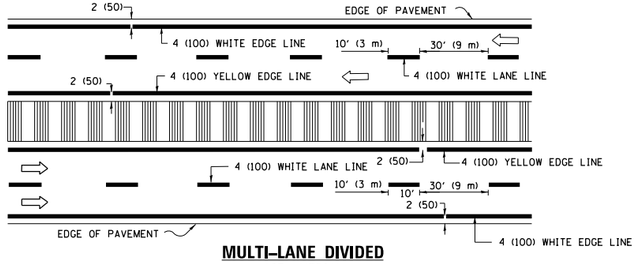
		DRAWN -	REVISED - T. RAMMACHER 03-12-99					333&344	116TS&N-2	LAKE	102	94
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00						TC-11		CONTRACT NO. 60W92	
	PLOT DATE = 10/27/2016	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2–LANE ROADWAY

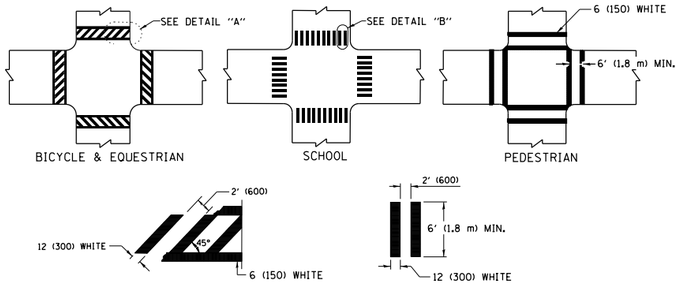


MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

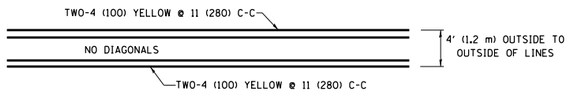
TYPICAL LANE AND EDGE LINE MARKING



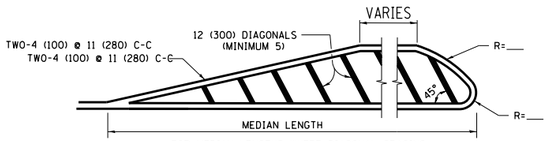
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

✳ MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



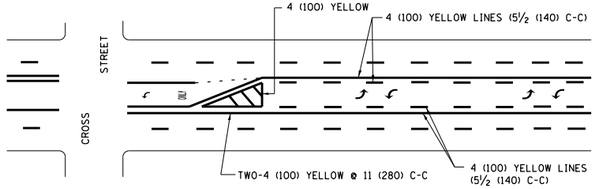
4' (1.2 m) WIDE MEDIANS ONLY



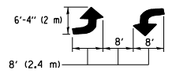
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

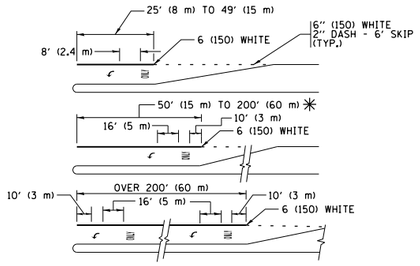


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

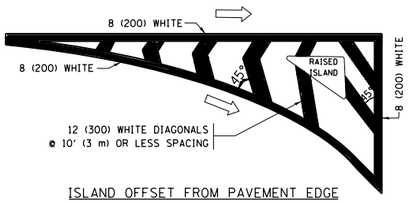


FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

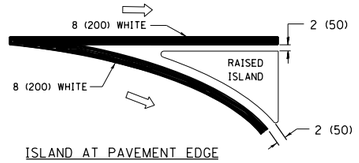
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

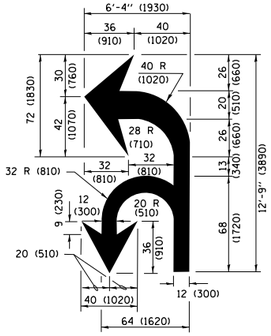


ISLAND OFFSET FROM PAVEMENT EDGE

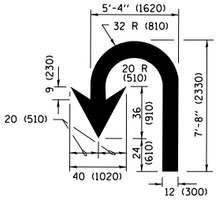


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

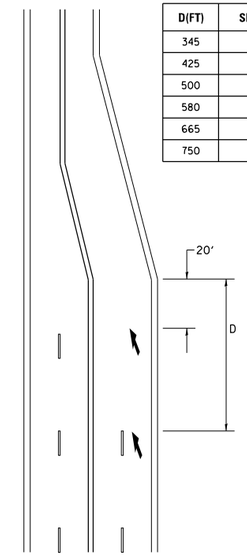


COMBINATION LEFT AND U–TURN



U–TURN

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55



LANE REDUCTION TRANSITION

✳ LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 ⌀ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⌀ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 ⌀ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⌀ 6 (150) 12 (300) ⌀ 45° 12 (300) ⌀ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⌀ 4 (100) WITH 12 (300) DIAGONALS ⌀ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⌀ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) ⌀ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

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	PLOT DATE = 10/27/2016	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
			REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	95
	TC-13	CONTRACT NO. 60W92		
	ILLINOIS FED. AID PROJECT			

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

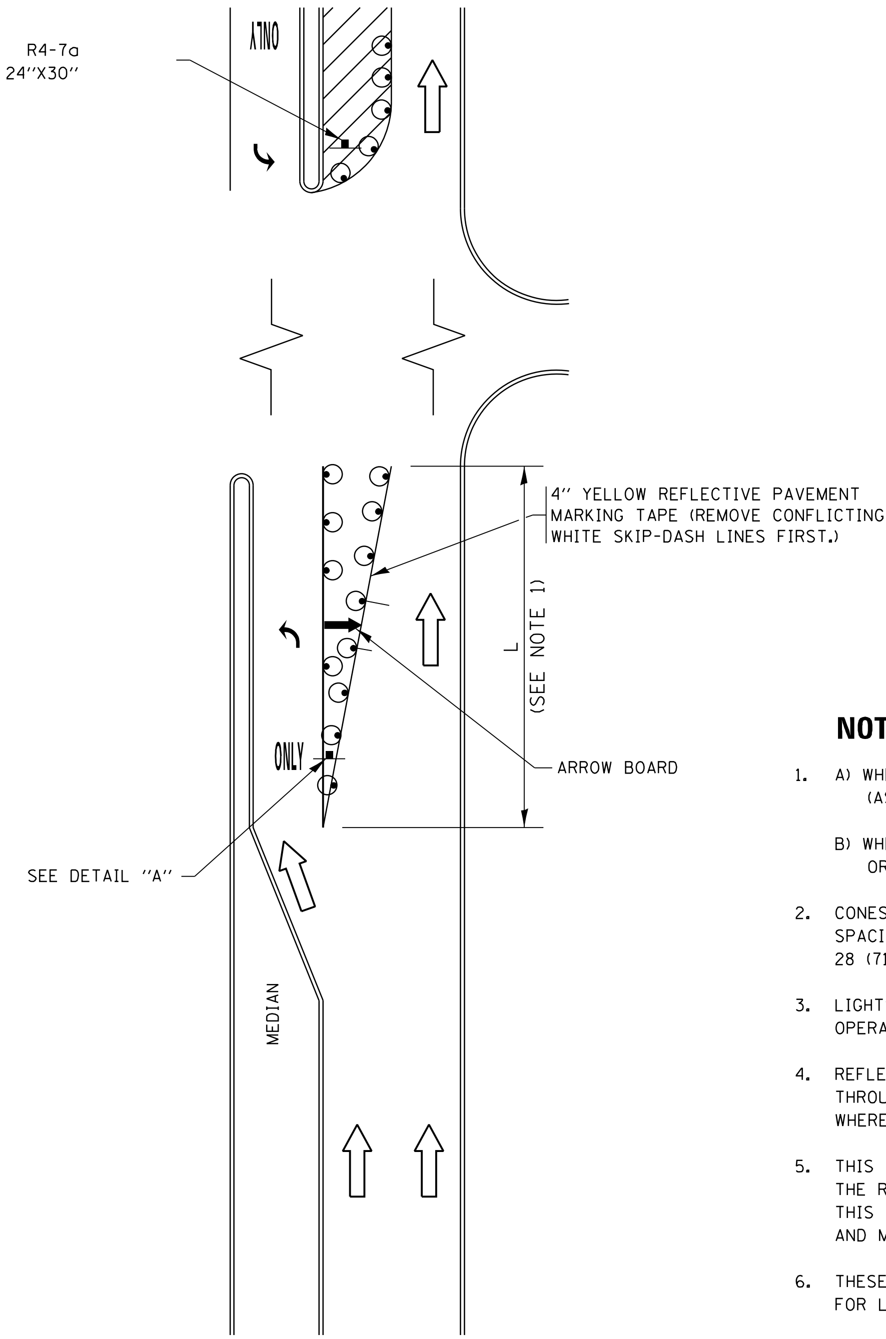


FIGURE 1

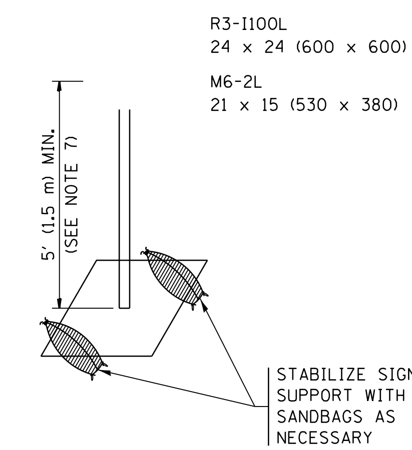
LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN ''L'' IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.

   B) WHEN ''L'' IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, ''RIGHT TURN LANE'' R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

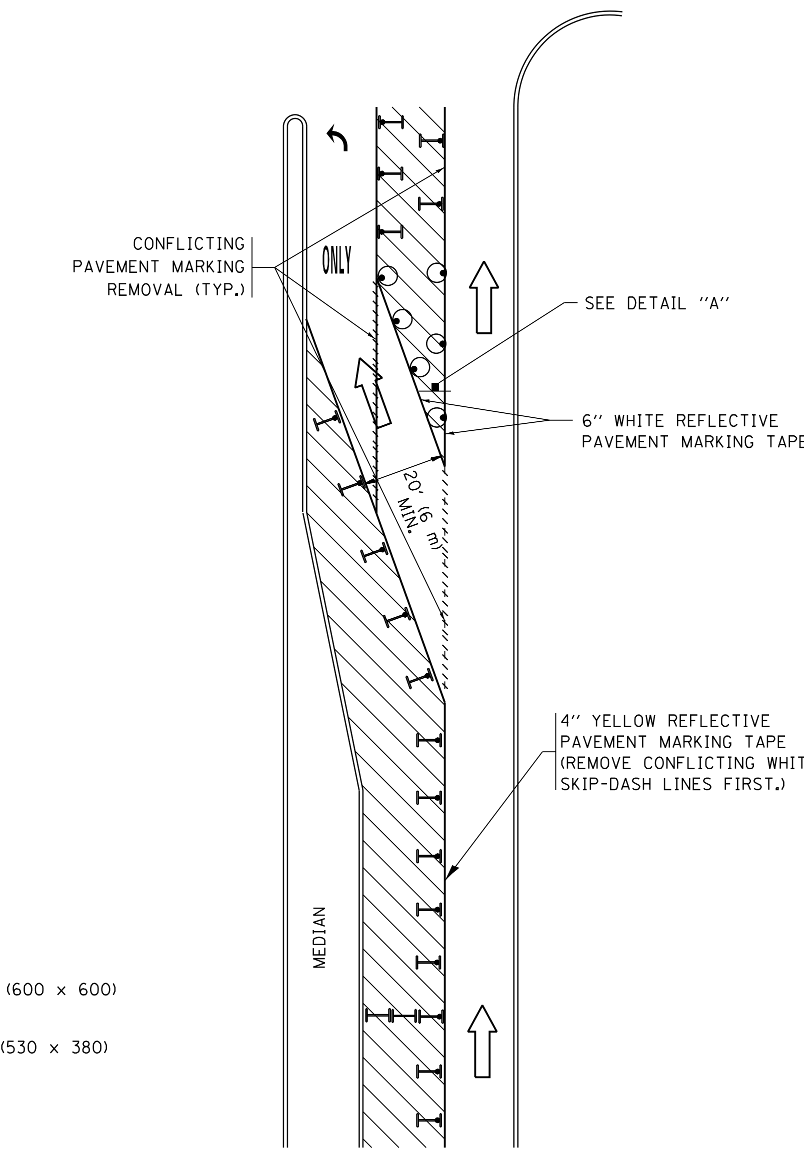


FIGURE 2

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

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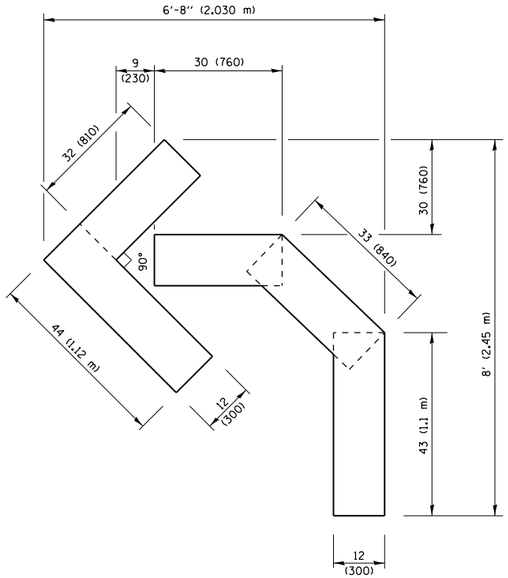
	PLOT SCALE = 100.0000 ' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
Default	PLOT DATE = 10/27/2016	REVISED -T. RAMMACHER 01-06-00	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)

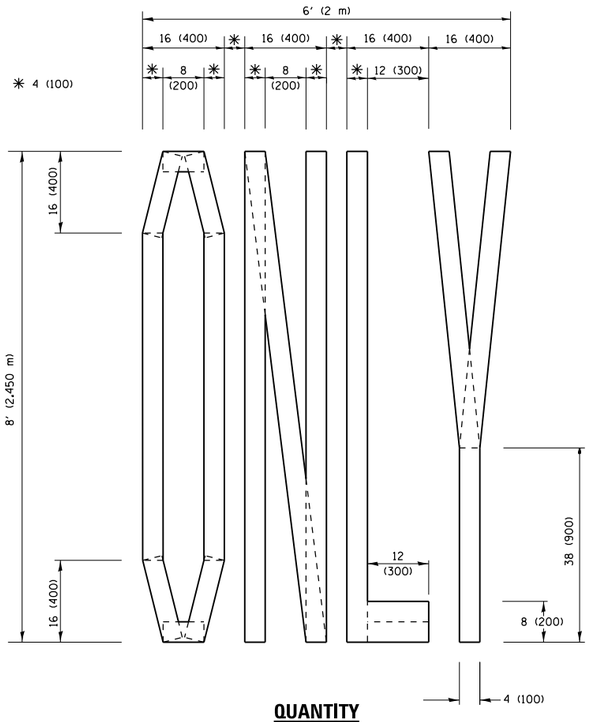
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	96
	TC–14	CONTRACT NO. 60W92		
	ILLINOIS	FED. AID PROJECT		



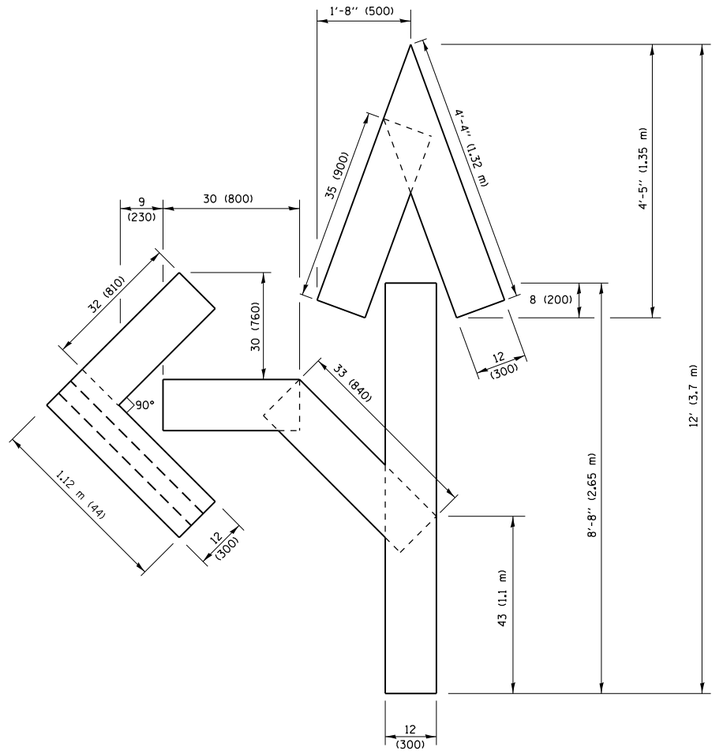
QUANTITY

4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.41 sq. m)



QUANTITY

4 (100) LINE = 64.1 ft. (19.5 m)
21.4 sq. ft. (1.99 sq. m)

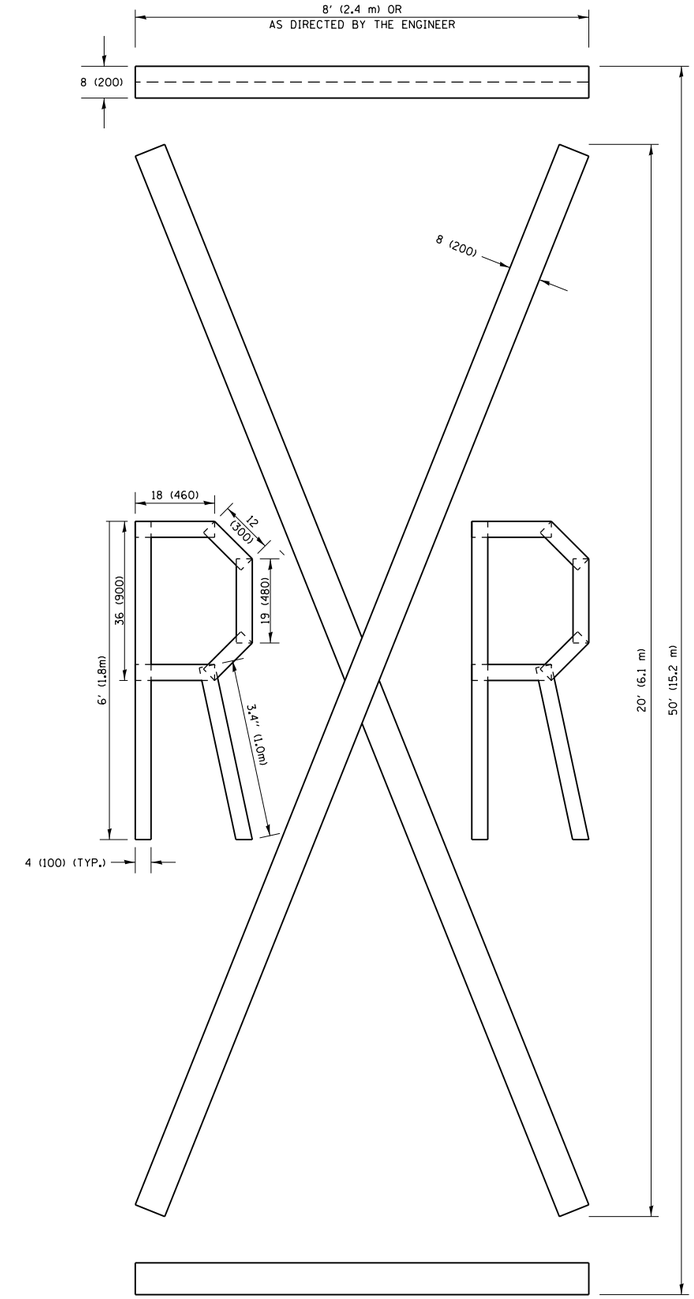


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m)
27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY

4 (100) LINE = 225.9 ft. (68.9 m)
75.3 sq. ft. (6.99 sq. m)

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

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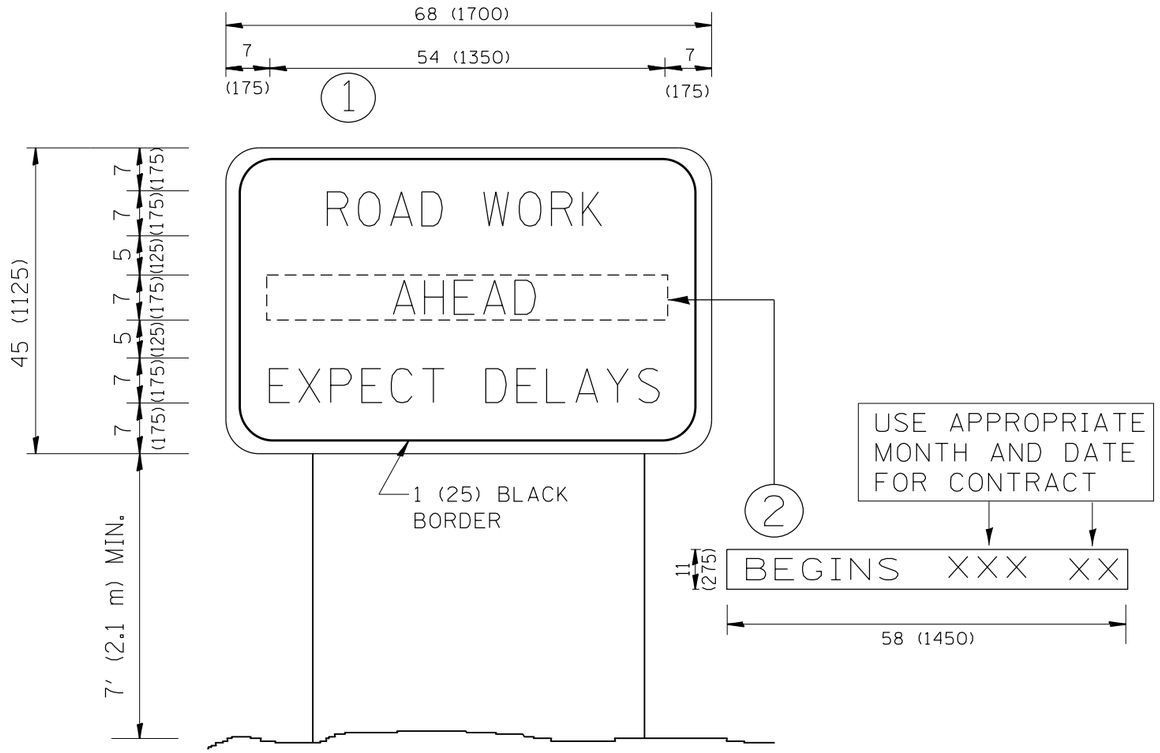
		DRAWN -	REVISED -E. GOMEZ 08-28-00
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -E. GOMEZ 08-28-00
	PLOT DATE = 10/27/2016	DATE - 09-18-94	REVISED -A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	97
	TC-16	CONTRACT NO. 60W92		
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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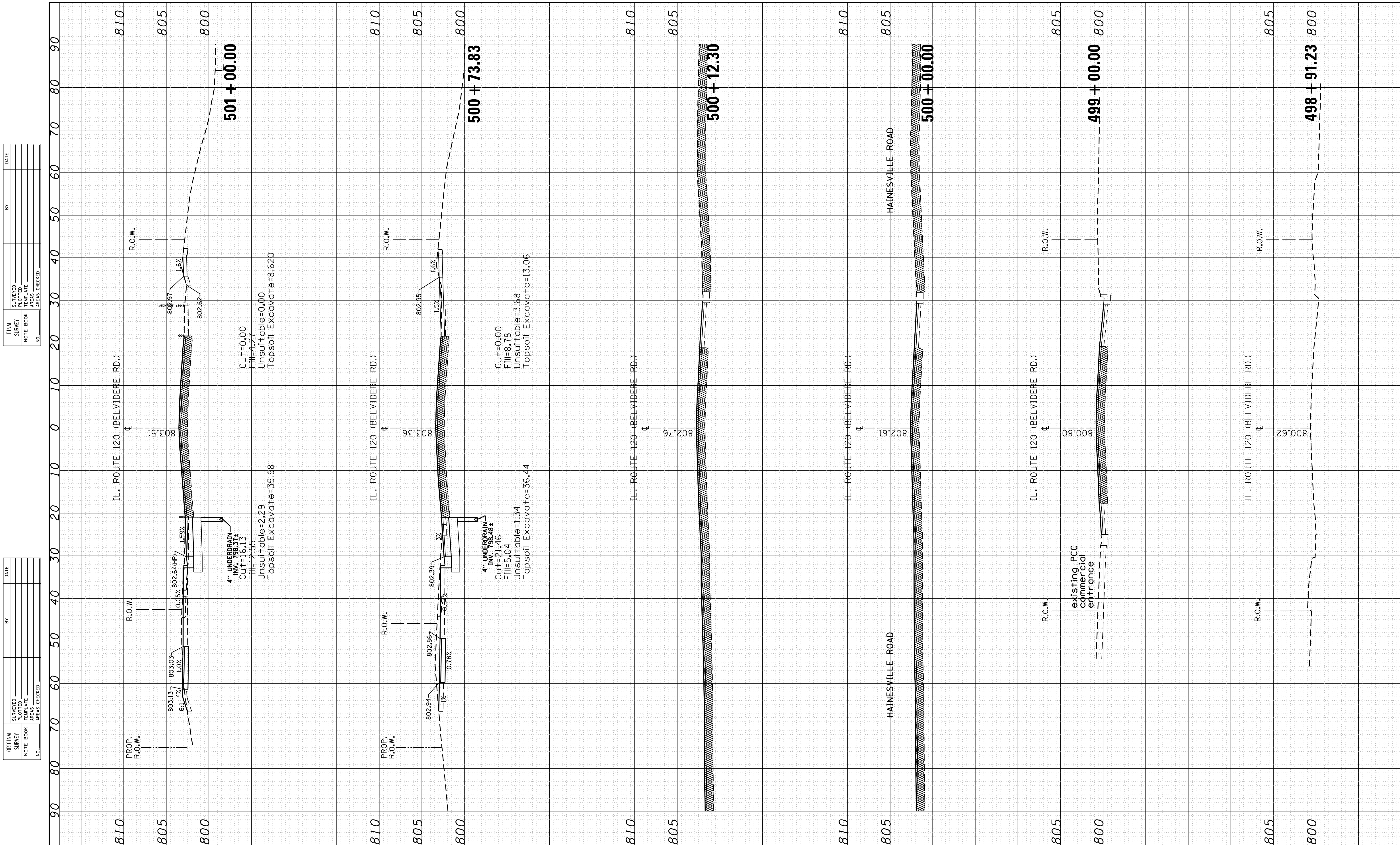
	PLOT DATE = 10/27/2016	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	98
	TC-22	CONTRACT NO. 60W92		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/27/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

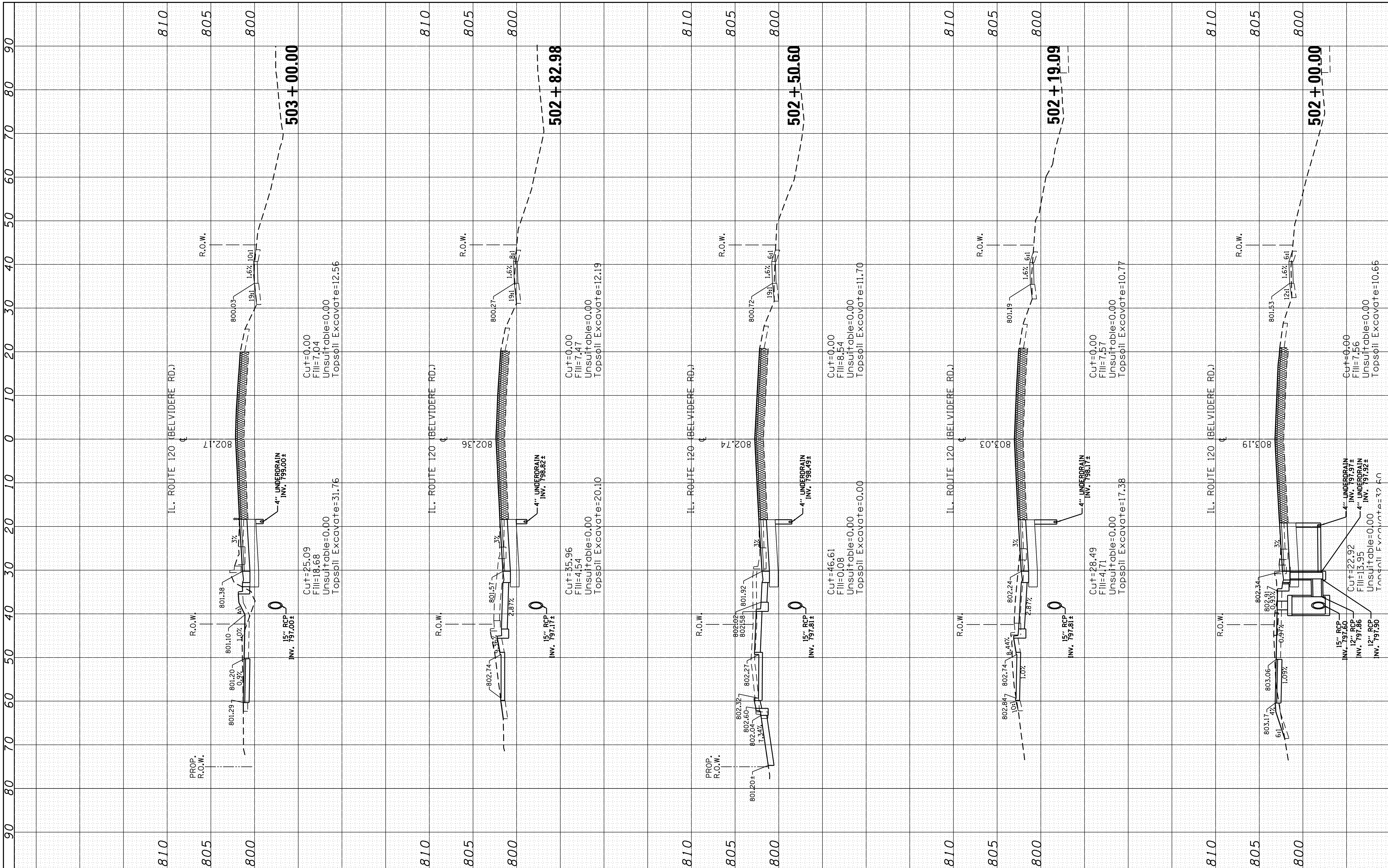
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 498+91.23 TO STA. 501+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	99

CONTRACT NO. 60W92

ILLINOIS FED. AID PROJECT



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		DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

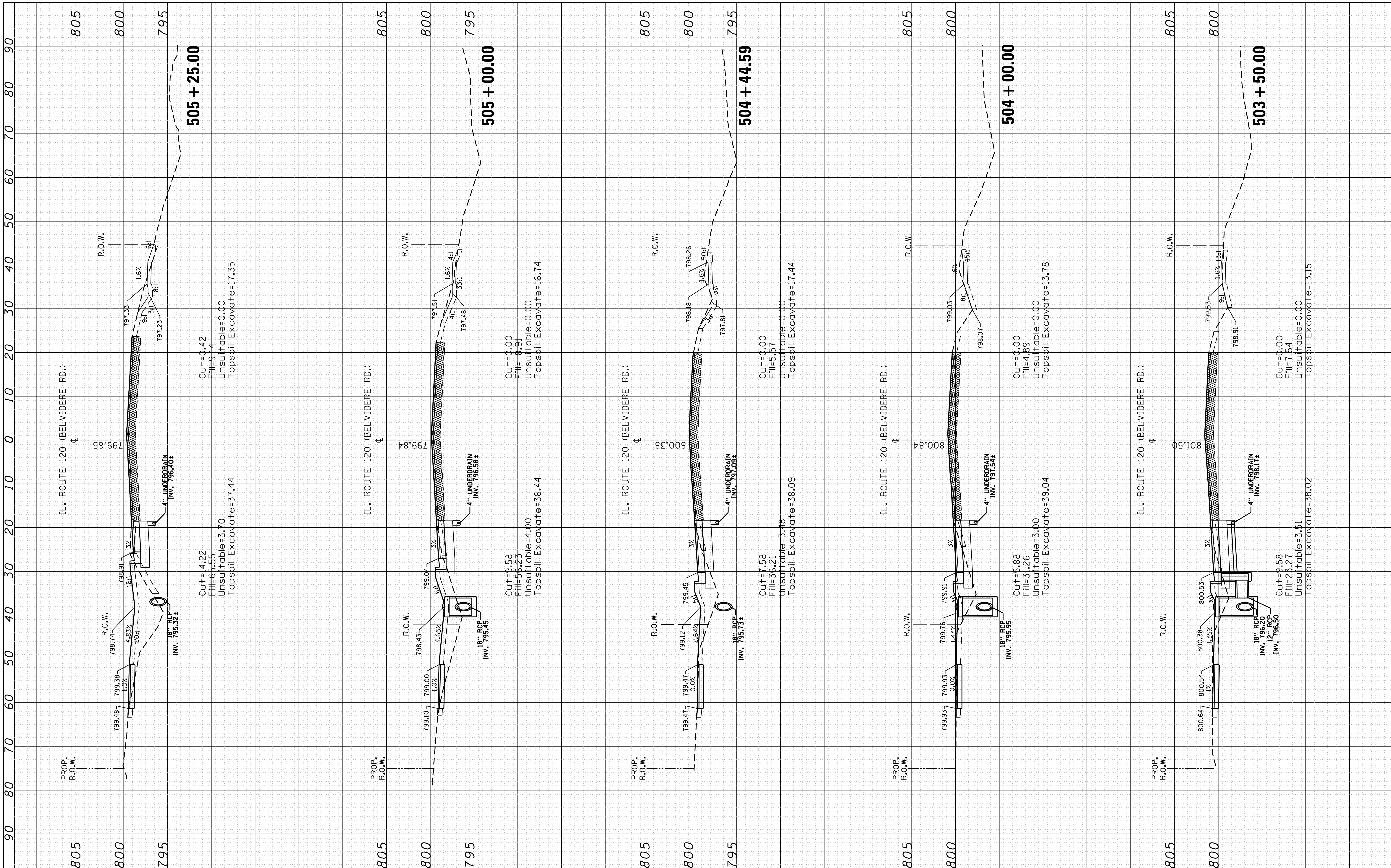
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 502+00.00 TO STA. 503+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	100

CONTRACT NO. 60W92

ILLINOIS FED. AID PROJECT



FINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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Default

USER NAME = PencePL
PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 10/27/2016

DESIGNED	-	REVISED	-
DRAWN	-	REVISED	-
CHECKED	-	REVISED	-
DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

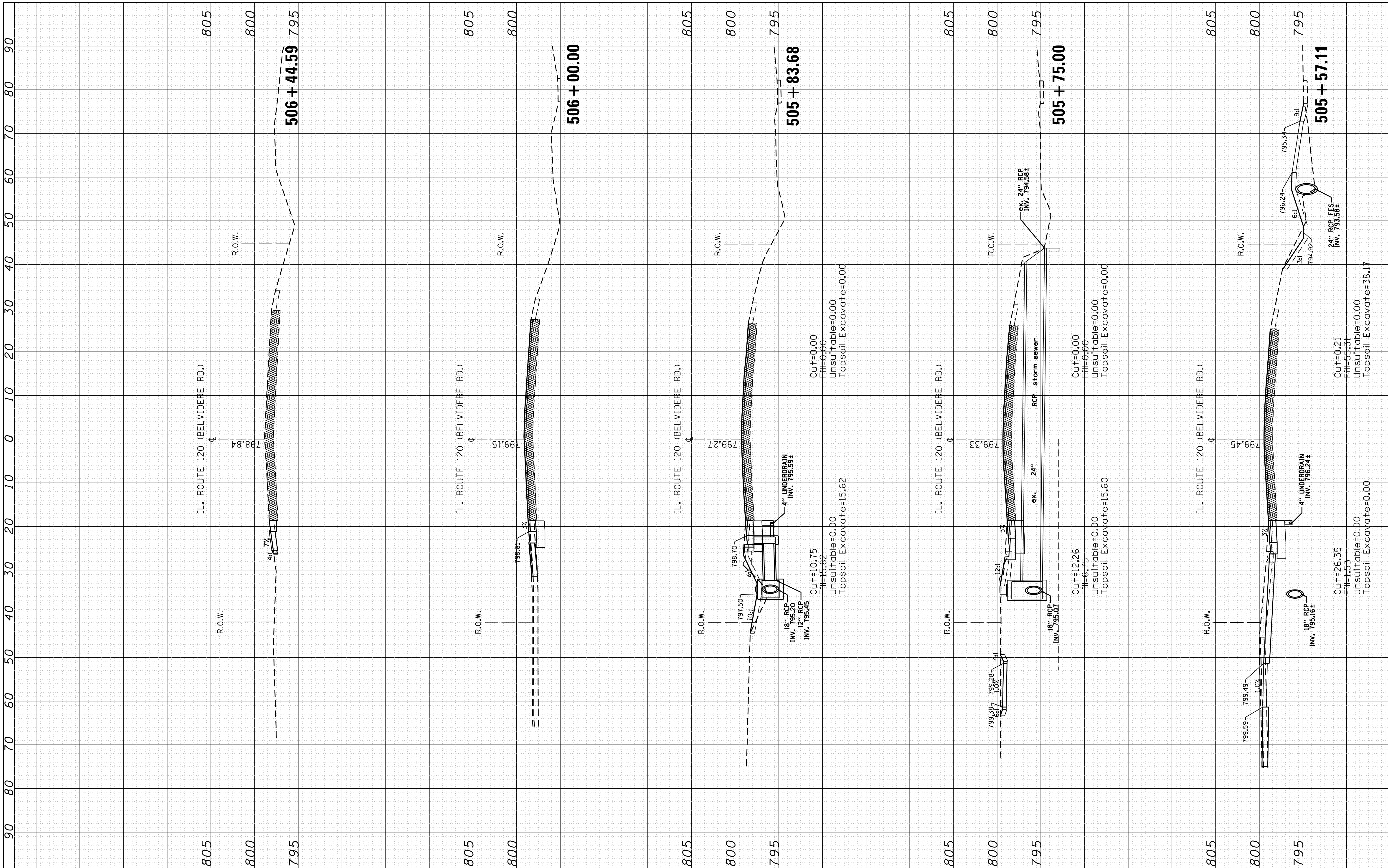
IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 503+50.00 TO STA.505+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	101

CONTRACT NO. 60W92

ILLINOIS FED. AID PROJECT



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Default	PLOT DATE = 10/27/2016	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 120 /US 45 TS MODERNIZATION, INTERCONNECT, AND CHANNELIZATION
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 505+57.11 TO STA. 506+44.59

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333&344	116TS&N-2	LAKE	102	102

CONTRACT NO. 60W92

ILLINOIS | FED. AID PROJECT