FOR INDEX OF SHEETS AND LIST OF HIGHWAY STANDARDS. SEE SHEET NO. 2

STATE OF ILLINOIS

TOTAL SHEE SECTION COUNTY MCHENRY 18-00480-00-TL 132 1 ILLINOIS CONTRACT NO. 61H50 FED. ROAD DIST. NO.

CARROLL

MERCER

03/11/2022 LETTING ITEM 098

DEPARTMENT OF TRANSPORTATION

THIS PROJECT IS LOCATED IN: VILLAGE OF ALGONQUIN, VILLAGE OF HUNTLEY,

### VILLAGE OF SPRING GROVE, AND VILLAGE OF LAKE IN THE HILLS

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ALGONQUIN ROAD ADT: 26,700 (2017)

**HALIGUS ROAD** POSTED SPEED 35 MPH ADT: 9,400 (2017)

LAKEWOOD ROAD POSTED SPEED 25 MPH /45 MPH ADT: 2,250 /16,100 (2017)

POSTED SPEED 40 MPH ADT: 11,200 (2017)

POSTED SPEED 25 MPH ADT: 25,600 (2017)

FRANK ROAD POSTED SPEED 35 MPH ADT: 6,400 (2017)

HANSON ROAD /HILLTOP DRIVE POSTED SPEED 30 MPH /25 MPH ADT: 7,000 /1,800 (2017)

PYOTT ROAD POSTED SPEED 45 MPH ADT: 13,100 (2017)

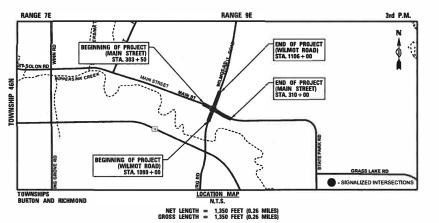
**MAIN STREET** POSTED SPEED LIMIT 45 MPH /50 MPH ADT: 8,325 (2017)

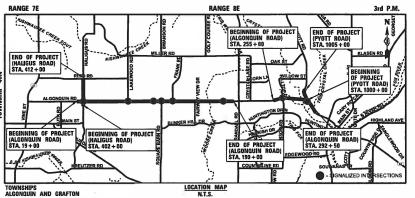
WILMOT ROAD POSTED SPEED LIMIT 40 MPH /45 MPH ADT: 4,950 (2017)

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

ALGONQUIN ROAD FROM HALIGUS ROAD TO HARVEST GATE ROAD / TALAGA DRIVE HANSON ROAD /HILLTOP DRIVE TO PYOTT ROAD AND WILMOT ROAD AT MAIN STREET TRAFFIC SIGNAL MODERNIZATION

> **SECTION: 18-00480-00-TL** PROJECT NO.: GMIC(624) **MCHENRY COUNTY** JOB NO.: C-91-197-19





NET LENGTH = 22,350 FEET (4.23 MILES)
GROSS LENGTH = 28,850 FEET (5.46 MILES)

STEPHEN N. SUGG// ILLINOIS REGISTRATION No. 062-044117

EXPIRATION DATE: 02/28/22

NOVEMBER 29, 2021

SHEETS 10-22

**SHEETS 94-125** NOVEMBER 29, 2021

any Dess ANTHONY J. DeRICCO ILLINOIS REGISTRATION No. 062-057484 EXPIRATION DATE: 02/28/22

LOCATION OF SECTION INDICATED THUS: -STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** APPROVED NOV. 18 20 2 COUNTY OF MCHENRY, COUNTY ENGINEER PASSED \_\_\_ DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS RELEASING FOR BID BASED ON LIMITED REVIEW Mulus 5 20 27

## PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

SHEETS 9, 23-93



NOVEMBER 29, 2021 GEORGE M. ZIEGLER ILLINOIS REGISTRATION No. 062-045853

CBBEL PROJECT NO. 180176 DATE: 11-29-2021

REGIONAL 1 ENGINEER

#### TRAFFIC DATA

POSTED SPEED 45 MPH

**SQUARE BARN ROAD** 

HARVEST GATE ROAD /TALAGA DRIVE

**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 MANAGER: THOMAS F. SZABO

osemont Illinois 60018 CONTRACT NO. 61H50

CHRISTOPHER B. BURKE ENGINEERING, LTD. 9575 W. Higgins Road, Suite 600

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RAMOS, ENGINEI

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#### **INDEX OF SHEETS** COVER SHEET EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN ALGONOUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE INDEX OF SHEETS AND LIST OF HIGHWAY STANDARDS 55 TEMPORARY TRAFFIC SIGNAL INSTALLATION ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE 3 TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE 4 - 7 TIES AND BENCHMARKS 8 - 9 100 10 ACCESIBILITY MODIFICATION DETAILS TRAFFIC SIGNAL MODERNIZATION PLAN ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE 57 11 - 12 ACCESIBILITY REMOVAL AND MODIFICATION PLANS ALGONQUIN ROAD AT HALIGUS ROAD 101 CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE 13 - 14 ACCESIBILITY REMOVAL AND MODIFICATION PLANS ALGONQUIN ROAD AT LAKEWOOD ROAD 102 15 - 16 ACCESIBILITY REMOVAL AND MODIFICATION PLANS ALGONOUIN ROAD AT SQUARE BARN ROAD SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE 103 17 - 18 ACCESIBILITY REMOVAL AND MODIFICATION PLANS ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON ROAD PAVEMENT MARKING PLAN ALGONQUIN ROAD AT HALIGUS ROAD 19 105 TEMPORARY TRAFFIC SIGNAL INSTALLATION ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON ROAD 61 PAVEMENT MARKING PLAN ALGONQUIN ROAD AT LAKEWOOD ROAD 20 106 TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON ROAD 62 PAVEMENT MARKING PLAN ALGONQUIN ROAD AT SQUARE BARN ROAD 21 107 PAVEMENT MARKING PLAN ALGONQUIN ROAD AT HARVEST GATE ROAD /TALAGA DRIVE 63 TRAFFIC SIGNAL MODERNIZATION PLAN ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON ROAD 108 DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON ROAD 109 SPECIAL TRAFFIC SIGNAL DETAIL SHEET 30 110 31 EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN ALGONOUIN ROAD AT HALIGUS ROAD SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON ROAD 32 TEMPORARY TRAFFIC SIGNAL INSTALLATION ALGONQUIN ROAD AT HALIGUS ROAD EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN ALGONQUIN ROAD AT PYOTT ROAD 66-67 117-118 TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT HALIGUS ROAD 33 68-69 TEMPORARY TRAFFIC SIGNAL INSTALLATION ALGONQUIN ROAD AT PYOTT ROAD 119-120 TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT PYOTT ROAD 34 70 TRAFFIC SIGNAL MODERNIZATION PLAN ALGONQUIN ROAD AT HALIGUS ROAD 121-122 CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT HALIGUS ROAD 35 123 71-72 TRAFFIC SIGNAL MODERNIZATION PLAN ALGONQUIN ROAD AT PYOTT ROAD 124-125 SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT HALIGUS ROAD CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT PYOTT ROAD 73 126-129 EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN ALGONQUIN ROAD AT LAKEWOOD ROAD SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT PYOTT ROAD TEMPORARY TRAFFIC SIGNAL INSTALLATION ALGONQUIN ROAD AT LAKEWOOD ROAD 38 TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT LAKEWOOD ROAD EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN WILMOT ROAD AT MAIN STREET 75 39 TEMPORARY TRAFFIC SIGNAL INSTALLATION WILMOT ROAD AT MAIN STREET 76-77 TRAFFIC SIGNAL MODERNIZATION PLAN ALGONQUIN ROAD AT LAKEWOOD ROAD 40 TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE WILMOT ROAD AT MAIN STREET CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT LAKEWOOD ROAD 41 79-80 TRAFFIC SIGNAL MODERNIZATION PLAN WILMOT ROAD AT MAIN STREET SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT LAKEWOOD ROAD 42 CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WILMOT ROAD AT MAIN STREET EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN ALGONQUIN ROAD AT SQUARE BARN ROAD 43 SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN WILMOT ROAD AT MAIN STREET TEMPORARY TRAFFIC SIGNAL INSTALLATION ALGONQUIN ROAD AT SQUARE BARN ROAD TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT SQUARE BARN ROAD 45 TEMPORARY INTERCONNECT PLAN HALIGUS ROAD FROM ALGONQUIN ROAD TO FAITHS WAY TEMPORARY INTERCONNECT PLAN ALGONQUIN ROAD FROM LAKEWOOD ROAD TO FRANK ROAD 84-85 46 TRAFFIC SIGNAL MODERNIZATION PLAN ALGONQUIN ROAD AT SQUARE BARN ROAD TEMPORARY INTERCONNECT PLAN ALGONQUIN ROAD FROM HARVEST GATE ROAD / TALAGA DRIVE TO PYOTT ROAD 86-87 CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT SQUARE BARN ROAD 47 TEMPORARY INTERCONNECT SCHEMATIC DIAGRAM 88 48 SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT SQUARE BARN ROAD INTERCONNECT PLAN ALGONQUIN ROAD FROM HALIGUS ROAD TO HARVEST GATE ROAD / TALAGA DRIVE 89-92 49 SPAN-WIRE TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN ALGONQUIN ROAD AT FRANK ROAD 93 INTERCONNECT SCHEMATIC DIAGRAM 50 94 GENERAL NOTES AND BILL OF MATERIALS

	STD. No.	DESCRIPTION
TEMPORARY LIGHTING PLAN ALGONQUIN ROAD AT SQUARE BARN ROAD	000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
TEMPORARY LIGHTING PLAN	001006	DECIMAL OF AN INCH AND OF A FOOT
ALGONQUÍN ROAD AT FRANK ROAD	424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
TEMPORARY LIGHTING PLAN ALGONQUIN ROAD AT HARVEST GATE ROAD / TALA	GA DRIVE 424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
TEMPORARY LIGHTING PLAN ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON RO	606001-08 DAD	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
TEMPORARY LIGHTING PLAN ALGONQUIN ROAD AT PYOTT ROAD	701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
TEMPORARY LIGHTING PLAN MAIN STREET AT WILMOT ROAD	701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
PROPOSED LIGHTING PLAN	701301-04	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
ALGONQUIN ROAD AT HALIGUS ROAD PROPOSED LIGHTING PLAN	701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS >= 45 MPH
ALGONQUIN ROAD AT LAKEWOOD ROAD	701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS <= 40 MPH
PROPOSED LIGHTING PLAN ALGONQUIN ROAD AT SQUARE BARN ROAD	701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
PROPOSED LIGHTING PLAN ALGONQUIN ROAD AT FRANK ROAD	701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
PROPOSED LIGHTING PLAN	701901-08	TRAFFIC CONTROL DEVICES
ALGONQUIN ROAD AT HARVEST GATE ROAD / TALA	720001-01	SIGN PANEL MOUNTING DETAILS
PROPOSED LIGHTING PLAN ALGONQUIN ROAD AT HILLTOP DRIVE / HANSON RO	DAD 720006-04	SIGN PANEL ERECTION DETAILS
PROPOSED LIGHTING PLAN	720016-04	MAST ARM MOUNTED STREET NAME SIGNS
ALGONQUIN ROAD AT PYOTT ROAD	780001-05	TYPICAL PAVEMENT MARKINGS
PROPOSED LIGHTING PLAN MAIN STREET AT WILMOT ROAD	814001-03	HANDHOLES
PROPOSED LIGHTING DETAILS	857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
RECORD DRAWINGS (EXISTING LIGHTING) ALGONQUIN ROAD AT HALIGUS ROAD	862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
RECORD DRAWINGS (EXISTING LIGHTING) ALGONQUIN ROAD AT LAKEWOOD	873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
ALGONQUIN ROAD AT LAKEWOOD  RECORD DRAWINGS (EXISTING LIGHTING) ALGONQUIN ROAD AT SQUARE BARN ROAD	877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
	877011-10	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
RECORD DRAWINGS (EXISTING LIGHTING) ALGONQUIN ROAD AT FRANK ROAD	877012-07	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56' THROUGH 75'
6 RECORD DRAWINGS (EXISTING LIGHTING) ALGONQUIN ROAD AT HARVEST GATE ROAD / TALA	GA DRIVE 878001-11	CONCRETE FOUNDATION DETAILS
DISTRICT 1 STANDARDS	880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
	880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

#### LIST OF DISTRICT ONE STANDARDS

LIST OF HIGHWAY STANDARDS

STD. No.	DESCRIPTION
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BE-240	COMBINATION LIGHTING, TRAFFIC SIGNAL SCHEMATIC
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

ILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -
02_INDEX-180176		DRAWN - FPB	REVISED -
	PLOT SCALE = 2'	CHECKED - GMZ	REVISED -
	DLOT DATE - 1/12/2022	DATE -	DEVISED -

TRAFFIC SIGNAL MODERNIZATION PLAN ALGONQUIN ROAD AT FRANK ROAD

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ALGONQUIN ROAD AT FRANK ROAD

SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT FRANK ROAD

51

52

53

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IND

SCALE: NOT TO

TEMPORARY LIGHTING PLAN ALGONQUIN ROAD AT LAKEWOOD ROAD

) F.V. O	E OUEETO	AND	LICT OF	IIIOIIIA/AV	CTANDADDO	F.A.P RTE.	SEC.	TION	COUNTY	TOTAL SHEETS	SHEET NO.	
JEX U	DEX OF SHEETS AND LIST OF HIGHWAY STANDARDS					18-0048	0-00-TL	MCHENRY	132	2		
									CONTRACT	NO. 61H	150	
SCALE	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO.	ILLINOIS FED.	AID PROJECT			

#### **GENERAL NOTES**

#### SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2022, HEREON KNOWN AS THE "STANDARD SPECIFICATIONS"; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2022; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", (ILMUTCD); "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JUNE 2014 SEVENTH EDITION, THE "DETAIL" IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.
- 2. ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT HIGHWAY STANDARD.
- 3. CODES OF THE IEPA TITLE 35, AND O.S.H.A. SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS
- 4. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS
- 5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPENCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, THEY MUST IMMEDIATELY REPORT THEM TO THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR BIDDING ON THE PROJECT.
- 6. ALL REQUIRED PERMITS FROM THE PROPER GOVERNING AGENCY SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.
- 7. OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY CENTERLINE.
- 8. ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR VESTS AT ALL TIMES THAT MEET THE ANSI 207 STANDARD WHILE ON THE CONSTRUCTION SITE.

#### **UTILITIES**

- 1. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS
- 2. THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, THE COUNTY, AND THE DEPARTMENT DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER.
- 4. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE (48 HOURS NOTIFICATION IS REQUIRED).
- 5. ALL EXPLORATORY EXCAVATION SHALL BE AS DIRECTED BY THE ENGINEER.

#### WATER, STORM SEWER AND SANITARY SEWER

- 1. WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS.
- 2. DRAIN TILES DISTURBED DURING CONSTRUCTION SHALL BE RECONNECTED BY THOSE RESPONSIBLE FOR THE DISTURBANCE. UNLESS THE PLANS SPECIFY ABANDONMENT OF THE DRAIN TILES. ALL ABANDONED

DRAIN TILESWITHIN DISTURBED AREAS SHALL BE REMOVED IN THEIR ENTIRETY. DRAIN TILES WITHIN THE DISTURBED AREA OF A CONSTRUCTION SITE SHALL BE REPLACED, BYPASSED AROUND THE SITE OR INTERCEPTED AND CONNECTED TO THE STORMWATER MANAGEMENT SYSTEM FOR THE SITE. THE SITE OF THE REPLACED OR BYPASSED DRAIN TILE SHALL BE EQUIVALENT TO THE EXISTING DRAIN TILE.

#### SIDEWALK/ CURB RAMPS

- 1. COORDINATION BETWEEN THE ELECTRICAL CONTRACTOR AND SIDEWALK CONTRACTOR IS REQUIRED BEFORE THE SIDEWALK CONSTRUCTION BEGINS TO INSURE SIDEWALK AND TRAFFIC SIGNAL INFRASTRUCTURE ARE CONSTRUCTED IN SUBSTANTIAL COMFORMANCE WITH THE PLANS, SPECIFICATIONS AND ADA/PROWAG COMPLIANCE REQUIREMENTS
- 2. DETECTABLE WARNINGS SHALL BE INSTALLED AT INTERSECTING STREETS AS SHOWN ON THE PLANS.
- PROPOSED CONCRETE CURB AND GUTTER SHALL BE TRANSITIONED TO EXISTING CURB AND GUTTER OVER A LENGTH OF 5 FEET.

#### **MISCELLANEOUS**

- 1.ACCESS: THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT, EXCEPT FOR PERIODS OF SHORT DURATION.
- 2. ALL SAW CUTTING SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAW CUTTING WILL NOT BE MEASURED FOR PAYMENT.
- 3. SAW CUTTING OF PAVEMENT, SIDEWALK, ETC. SHALL BE TO THE FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING.
- 4. PAVEMENT GRADES: THE ELEVATIONS INDICATED ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.
- 5. VANDALISM: SPECIAL ATTENTION IS CALLED TO THE SPECIAL PROVISION FOR "INSPECTION" AS WELL AS ARTICLE 107.30 OF THE "STANDARD SPECIFICATIONS." ANY DEFACED WORK AS DETERMINED AND DIRECTED BY THE COUNTY SHALL BE CORRECTED OR REPLACED TO THE SATISFACTION OF THE ENGINEER BY THE CONTRACTOR AT HIS SOLE EXPENSE PRIOR TO FINAL PAYMENT. MCHENRY COUNTY WILL COOPERATE WITH THE CONTRACTOR TO MINIMIZE VANDALISM, BUT THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE TO CORRECT ANY DAMAGE. THE DEPARTMENT, COUNTY AND ANY LOCAL MUNICIPALITY WILL NOT BE RESPONSIBLE FOR THE SECURITY OF THE WORK SITE IN THIS REGARD, OTHER THAN NORMAL PATROLLING AND RESPONSE TO EMERGENCIES.

#### TRAFFIC SIGNALS

- 1. ALL MAST ARM MOUNTED TRAFFIC SIGNAL HEADS SHALL BE POSITIOINED OVER THE CENTER OF EACH ASSOCIATED TRAVEL LANE AS SHOWN ON THE PLANS.
- 2. THE LOCATION OF THE PEDESTRIAN PUSHBUTTON MUST BE PARALLEL TO THE CROSSWALK. PEDESTRIAN PUSH-BUTTON LOCATIONS SHALL FOLLOW THE GUIDELINES FROM ADA/PROWAG. THE CONTRACTOR WILL BE ALLOWED TO UTILIZE PUSH-BUTTON EXTENSION HARDWARE TO COMPLY WITH ADA/PROWAG PUSH-BUTTON REQUIREMENTS ONLY IF COMPLIANCE CANNOT BE OBTAINED BY FIELD ADJUSTMENT OF PROPOSED SIDEWALK AND/OR TRAFFIC SIGNAL SUPPORTS.

#### SIGNS AND PAVEMENT MARKING

- 1. LOCATIONS OF SIGNS SHOWN IN THE PLANS ARE APPROXIMATE AND SHALL BE ADJUSTED BASED ON FIELD CONDITIONS BY THE CONTRACTOR AS NECESSARY IN ACCORDANCE WITH HIGHWAY STANDARD 720006 AND THE ILLINOIS MUTCD.
- 2. ALL MAST ARM MOUNTED SIGN PANELS AND OTHER SIGN PANELS SPECIFIED BY THE ENGINEER, SHALL INCLUDE SUPPORTING CHANNELS INSTALLED ON THE BACK SIDE OF THE SIGN IN ACCORDANCE WITH HIGHWAY STANDARD 720001.
- 3. THE CONTRACTOR SHALL RELOCATE OR REMOVE SIGNS, WHICH INTERFERE WITH CONSTRUCTION OPERATIONS, AND TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS IN ACCORDANCE TO ARTICLE 107.25 OF THE "STANDARD SPECIFICATIONS". STOP SIGNS, SPEED LIMIT SIGNS, STREET NAME SIGNS AND ALL OTHER SIGNS SPECIFIED BY THE ENGINEER SHALL BE UP AND VISIBLE AT ALL TIMES.
- 4. ALL SIGNS TO BE REMOVED SHALL REMAIN THE PROPERTY OF MCDOT AND SHALL BE RETURNED TO MCDOT AT 16111 NELSON ROAD, WOODSTOCK, IL 60098, (815) 334-4960 UPON REMOVAL

SCALE: NOT TO SCALE

5. SEE IDOT HIGHWAY STANDARD 780001-05, DISTRICT ONE STANDARD DETAIL TC-13 AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.

#### TRAFFIC CONTROL AND PROTECTION

NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.

#### PROJECT CONTACTS

SCHOOLS	DISTRICT 155	SHANNON	(815) 455-8500
		PODZIMEK	
	DISTRICT 158	MS. TENGSTRAND	(708) 474-6700
	DISTRICT 300	TRACI MAGSAMEN	(847) 551-8300
EMS	HUNTLEY FIRE PROTECTION DISTRICT	CHIEF SCOTT	(847) 669-5066
		RAVAGNIE	
	ALGONQUIN - LAKE IN THE HILLS FIRE PROTECTION DISTRICT	CHIEF MICHAEL KERN	(847) 658-8233
	NORTHWESTERN MEDICINE HUNTLEY HOSPITAL	CINDY AMORE	(815) 759-8044
STATE	ILLINOIS DEPARTMENT OF TRANSPORTATION – DISTRICT ONE	CARMEN RAMOS	(847) 705-4269
COUNTY	MCHENRY COUNTY DIVISION OF	BENJAMIN	
	TRANSPORTATION	REDDING	(815) 334-4980
VILLAGES	ALGONQUIN	ROBERT MITCHARD	(847) 658-2700 X4402
***************************************	HUNTLEY	TIMOTHY FARRELL	(847) 515-5285
	LAKE IN THE HILLS	TOM MIGATZ	(847) 960-7506
	SPRING GROVE	MIKE RINGLER	(815) 675-2121
UTILITIES	AT&T (DISTRIBUTION)	STEVE LARSON	(630) 573-5450
	AT&T (TRANSMISSION LONG DISTANCE)	KEN COLWELL	(630) 383-9249
	COMCAST	MARTHA GIERAS	(224) 229-5862
	COMED ELECTRONIC-PLAN SUBMITTAL	LISA ARGAST	(630) 576-7094
	FRONTIER COMMUNICATIONS	KALIN HINSHAW	(815) 895-1515
	MCI-VERIZON BUSINESS	INVESTIGATION TEAM	(708) 458-6410
	MEDIACOM	CHRIS MINARD	(815) 597-5103
	MIDWEST FIBER	RICHARD TRGOVEC	(414) 672-5612
	NICOR	BRUCE KOPPANG	(630) 388-3046

E NAME =	USER NAME = pandrews	DESIGNED - IFS	REVISED -
3_GEN Notes-180176		DRAWN - FPB	REVISED -
	PLOT SCALE = 2'	CHECKED - GMZ	REVISED -
	D: 07 0475 4 47 40000		DEVICED

		OFN	IEDAL NO	TEO		F.A.P RTE.	SEC	CTION	COUNTY	TOTAL SHEETS	SHEE NO.
		GEN	IERAL NO	IF2			18-004	80-00-TL	MCHENRY	132	3
									CONTRACT	NO. 61H	150
SHEE.	T NO.	0F	SHEETS	STA.	TO STA.	FED. RC	AD DIST. NO.	ILLINOIS FED. AI	D PROJECT		

SPECIAL NOTES	SP	CODE NO.	ITEM	UNIT	TOTAL	Algonquin Road @ Haligus Road	Algonquin Road @ Lakewood Road	Algonquin Road @ Square Barn Road	Algonquin Road @ Frank Road	Algonquin Road @ Harvest Gate Road / Talaga Drive	Algonquin Road @ Hilltop Drive / Hanson Road	Algonquin Road @ Pyott Road	Algonquin Road Interconnect	Wilmot Road ( Main Street
						Construction Code 0	021			,				
****		20200100	EARTH EXCAVATION	CU YD	52	13	3	30		6				
		31101180	SUBBASE GRANULAR MATERIAL, TYPE B 2"	SQ YD	577	243	60	143		131				
		31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	368	153	72	55		88				
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	5194	2187	539	1283	6	1179				
	*	40400000	DETECTABLE WARNINGS	00.57	400	141	0.5	00		444				
		42400800	DETECTABLE WARNINGS	SQ FT	408	141	65	88		114				
		44000600	SIDEWALK REMOVAL	SQ FT	4262	1970	523	547	6	1216				
											***************************************			
		60250400	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	4	1		2		1				
		66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	20	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.24
	*	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	0,11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
						0,11	0.11	0.44	0.11	0.11	0.44	0.44	0.44	0.12
	*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	0,11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
	*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	0,11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
-	*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	1	0,11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
		67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	1,33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.36
		07000400	ENGINEER OTHER, THE A	- CAE MIO	12									
		67100100	MOBILIZATION	L SUM	1	0,11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
														2 10
_	*	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0,11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
	*	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0,11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
		70107025	CHANGEABLE MESSAGE SIGN	CAL DA	252	28	28	28	28	28	28	28		56
														ļ
+	*	72000100	SIGN PANEL - TYPE 1	SQ FT	420	60	60	30	60	60	60	30		60
****		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2212	690	396	486		640				
****		78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	3011	958	541	656		856				
**** - S	COCOLAL TV	ITENS	100 M		<u> </u>	L							<u> </u>	<u></u>

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED - TFS
DRAWN - FPB

CHECKED - GMZ

DATE

REVISED -

REVISED -

REVISED -

REVISED -

USER NAME = pandrews

PLOT SCALE = 2'
PLOT DATE = 1/12/2022

FILE NAME =

ØØ4\_SUM1-18Ø176

SUMMARY OF QUANTITIES

TO STA.

SHEET NO. OF SHEETS STA.

PECIAL IOTES	SP	CODE NO.	ITEM	UNIT	TOTAL	Algonquin Road @ Haligus Road	Algonquin Road @ Lakewood Road	Algonquin Road @ Square Barn Road	Algonquin Road @ Frank Road	Algonquin Road @ Harvest Gate Road / Talaga Drive	Algonquin Road @ Hilltop Drive / Hanson Road	Algonquin Road @ Pyott Road	Algonquin Road Interconnect	d Wilmot Road Main Stree
0120 1	- Oi	TOODE NO.	11201			Construction Code 0	021							
****		78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	149	54	41			54				
****	*	78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	2212	690	396	486		640				
	*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	253	32	24	73		100				24
	*	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	822	143	38	149	166	145	67	58		56
	*	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	391	127			264					_
	*	81028250	UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA.	FOOT	18		18							-
	*	81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	10875								10875	1
														1
	*	81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	205	205								<del> </del>
	*	81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	1015		310	170	200	335				-
														-
$\perp$	*	81400100	HANDHOLE	EACH	21	1		1	2				17	
		81702101	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 14	FOOT	3925	615	875	670	550	1215				
_														
		81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	6390	3080	875	670	550	1215				-
														+
		81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	9930		2620	2015	1650	3645				+
		81800240	AERIAL CABLE, 2-1/C NO. 8 WITH MESSENGER WIRE	FOOT	3190	545	505	440		460	415	495		330
		84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	2					2				
										_				+
		84200804	REMOVAL OF POLE FOUNDATION	EACH	2					2				1
													1	-
+	*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2				1					1
$\dashv$													6	
	*	86400100	TRANSCEIVER - FIBER OPTIC	EACH	6									
													11319	
+	*	87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	11319								11919	
+						<u> </u>			627	4004				
-		87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4686	1471	468	826	(941	1294				
• SPEC					<u> </u>			·	l	1	<u> </u>	L	L	

FILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -			F.A.P RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.	
ØØ5_SUM2-18Ø176		DRAWN - FPB	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES		18-00480-00-TL	MCHENRY	132 5	_
	PLOT SCALE = 2'	CHECKED - GMZ	REVISED -	DEPARTMENT OF TRANSPORTATION	TO CTA			CONTRACT	NO. 61H50	_
1	PLOT DATE = 1/12/2022	DATE -	REVISED -		SCALE: 1" = 2' SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD	DIST. NO.   ILLINOIS FED. A	ID PROJECT		۷

SPECIAL NOTES	SP	CODE NO.	ITEM	UNIT	TOTAL	Algonquin Road @ Haligus Road	Algonquin Road @ Lakewood Road	Algonquin Road @ Square Barn Road	Algonquin Road @ Frank Road	Algonquin Road @ Harvest Gate Road / Talaga Drive	Algonquin Road @ Hilltop Drive / Hanson Road	Algonquin Road @ Pyott Road	Algonquin Road Interconnect	Wilmot Road ( Main Street
						Construction Code 0	021					-		
		87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	8187	2008	1228	1171.5	931	1763	449	346.5		290
		87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	18340	2122.5	2578	2229.5	1908.5	2184	3109	2596.5		1612
		87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	12571	2634.5	2310.5	480	1546.5	1686	210.5	2058		1645
		87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	630	29	153	52.5	29	91	124.5	83.5		67.5
	*	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	5747	576	944	678.5	678.5	839	675	667.5		688.5
	Á	87500600	TRAFFIC SIGNAL POST, 10 FT.	EACH	8	3	1	3		1				
	*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	29	4	4	2	4	4	3	4		4
	*		STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1				1					
	*		STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 18 FT.	EACH	1						1			
	*									1				
	*		STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1					1				
	*	87702900	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1				1	***************************************				
	•	87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1						1			
	+	87702920	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	2			1		1				
	*	87702940	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	3						1	1		1
	*	87702960	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	2			1			1			
	*	87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	2							1		1
	*	87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	6	2	1	1						2
	*	87702985	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1				1					
	*	87702990	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	2		1			1				
	*	87703000	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 55 FT.	EACH	1	1								

PROFILE SURVEYED BY 0ATE

PROFILE SURVEYED BY 0ATE

NOTE OF SURVEYED B

FILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED ~
ØØ6_SUM3-18Ø176		DRAWN - FPB	REVISED -
	PLOT SCALE = 2'	CHECKED - GMZ	REVISED -
	PLOT DATE = 1/12/2022	DATE -	REVISED -

STAT	E 01	F ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

							RTE.	SEC	TION	COUNTY	SHEETS	NO.
		SUN	IMARY	OF QUA	ANTITIES	i		18-0048	0-00-TL	MCHENRY	132	6
										CONTRACT	NO. 61H	50
 SCALE: 1" = 2'	SHEET	NO.	OF	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO.	ILLINDIS FED. AI	D PROJECT		

CIAL TES	SP	CODE NO.	ITEM	UNIT	TOTAL	Algonquin Road @ Haligus Road	Algonquin Road @ Lakewood Road	Algonquin Road @ Square Barn Road	Algonquin Road @ Frank Road	Algonquin Road @ Harvest Gate Road / Talaga Drive		Algonquin Road @ Pyott Road	Algonquin Road Interconnect	Wilmot Road Main Stree
						Construction Code 0	021					_		
	*	87703010	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	2	1	1							
	*	87703030	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	3		1		1	1				
	*	87704450	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT. AND 22 FT.	EACH	1							1		
		07704430	OTELE COMBINATION MACHANIA ACCEMBET AND FOLL WITH BOAL MACHANING, 4411. AND 2211.	LAOII								,		
	*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	120	28	8	16	16	24	20	4		4
	*	87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4		4							
	*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	375	45	30	45	45	45	60	45		60
	*	87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	125	25	50		25	25				
		97000100	DRILL EXISTING FOUNDATION	EACH	3		1	1						1
		87900100	DRILL EXISTING FOUNDATION	EAUR	3			1						
		87900200	DRILL EXISTING HANDHOLE	EACH	51	9	8	5	4	10	4	3	4	4
	*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	54	6	9	6	6	6	12	5		4
	*	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	38	4	4	7	4	4	6	5		4
	*	88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	22	4	2	1	4	4		3		4
	*	88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	24	4	2	1	4	4		5		4
	*	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6	2	3				1			
	*	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6	2	3				1			
	*	88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1							1		
	*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	30	8	4	6	4	8				
		88200100	TRAFFIC SIGNAL BACKPLATE	EACH	149	22	23	14	18	18	20	18		16
		20000122	TEMPODADY TRAFFIC CICAMI INICTALI ATION	EACH	7	1	1	1		1	1	1		1
		89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	7	T		l l		1	1	I		1
	*	89500120	REMOVE EXISTING SERVICE INSTALLATION	EACH	5			1		1	1	1		1

FILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -			F.A.P SECTION	COUNTY TOTAL SHEET
ØØ7_SUM4-18Ø176		DRAWN - FPB	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES	18-00480-00-TL	MCHENRY 132 7
	PLOT SCALE = Z'	CHECKED - GMZ	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 61H50
	PLOT DATE = 1/12/2022	DATE -	REVISED -		SCALE: 1" = 2' SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED.	AID PROJECT

CIAL	SP	CODE NO.	ITEM	UNIT	TOTAL	Algonquin Road @ Haligus Road	Algonquin Road @ Lakewood Road	Algonquin Road @ Square Barn Road	Algonquin Road @ Frank Road	Algonquin Road @ Harvest Gate Road / Talaga Drive	Algonquin Road @ Hilltop Drive / Hanson Road	Algonquin Road @ Pyott Road	Algonquin Road Interconnect	Wilmot Road Main Stree
					·	Construction Code 00	021		*					T
_	*	89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	20	2	3	2	2	2	3	4		2
	*	89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	8	1	1	1	1	1	1	1		1
		89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	38920	7778	7573.5	3924.5		6181	4480	5134.5		3848.5
	*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	8	1	1	1	1	1	1	1		1
		89502376	REBUILD EXISTING HANDHOLE	EACH	2	1	1							
		89502380	REMOVE EXISTING HANDHOLE	EACH	2	1		1						
		89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	34	5	6	4	4	4	4	3		4
		X0321973	MODIFY EXISTING SERVICE INSTALLATION	EACH	2	1	1							
	•	X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	3157	346	742	311.5	320	432	456.5	252		297
	*	X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	3600	500	500	300	500	300	500	500		500
	*	X0325815	REMOVE EXISTING CABLE	FOOT	2770	450	755	465	440	660				
	*	X0325922	CELLULAR MODEM	EACH	1									1
	•	X0326104	RELOCATE RADAR DETECTOR SYSTEM	EACH	2							1		1
	*	X0327485	MAST ARM,STREET LIGHTING,15'	EACH	35	3	6	4		6	4	7		5
	•	X0327698	LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	31	4	4	3	4	4	4	4		4
	*	X1200139	REMOVAL OF LIGHTING LUMINAIRE, SALVAGE	EACH	11						4	3		4
	*	X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	1411	234	245	101.5	114		193	321.5		202
	•	X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	5			1		1	1	1		1
		X1400156	RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, FAR BACK	EACH	1									1
	*	X1400238	LUMINAIRE, LED, SPECIAL	EACH	4		da d		4					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TFS FPB GMZ REVISED

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SUMMARY OF QUANTITIES

TO STA.

SHEET NO. OF SHEETS STA.

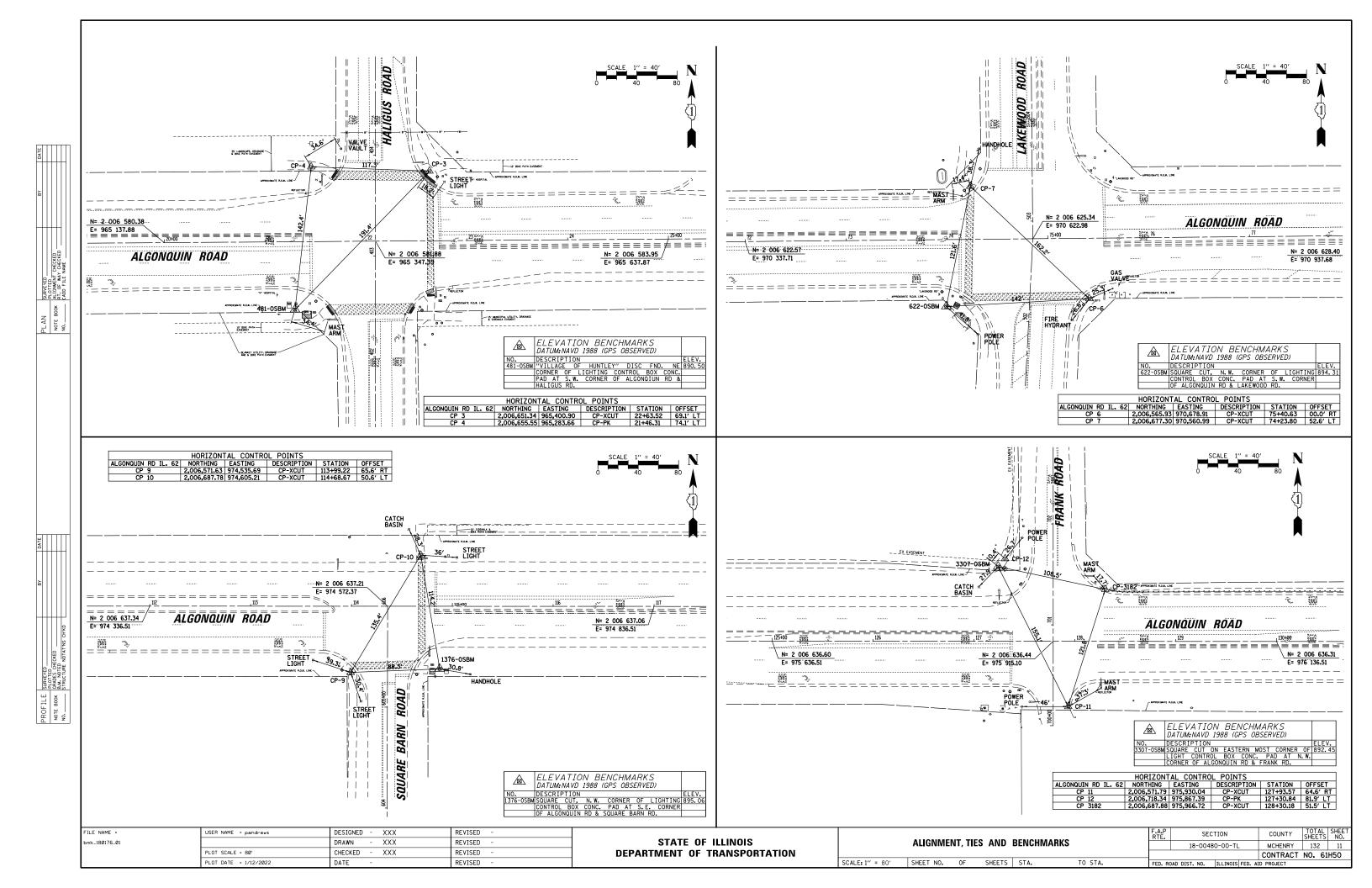
SCALE: 1" = 2

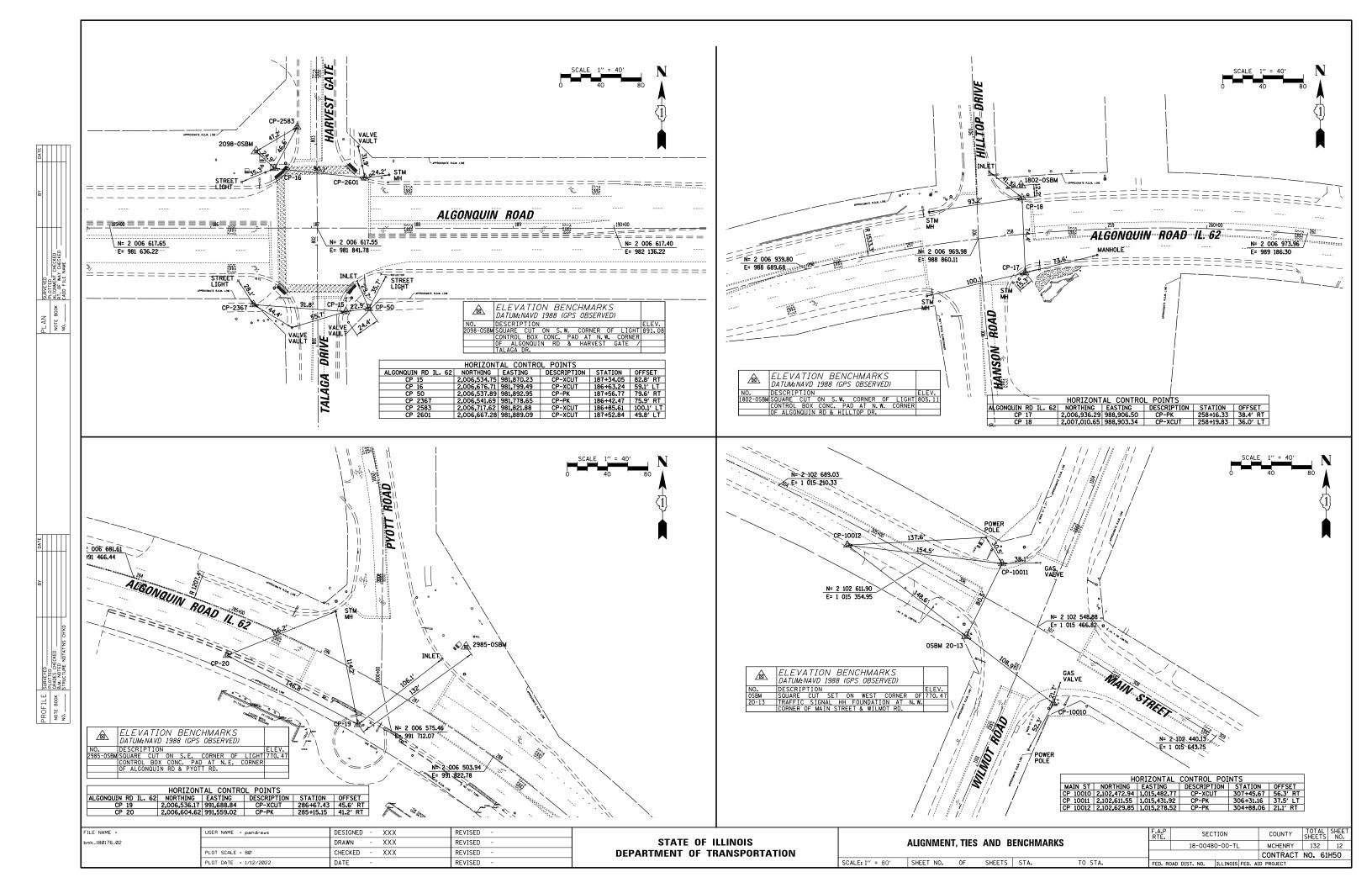
SPECIAL NOTES	SP	CODE NO.	ITEM	UNIT	TOTAL	Algonquin Road @ Haligus Road	Algonquin Road @ Lakewood Road	Algonquin Road @ Square Barn Road	Algonquin Road @ Frank Road	Algonquin Road @ Harvest Gate Road / Talaga Drive	Algonquin Road @ Hilltop Drive / Hanson Road	Algonquin Road @ Pyott Road	Algonquin Road Interconnect	Wilmot Road @ Main Street
		<del></del>				Construction Code 00	021 T							1
	*	X1400424	ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	6115	830	841	538.5	749.5	771	641.5	976.5		767
	*	X2501020	SEEDING, CLASS 2A (SPECIAL)	ACRE	0.25	0.060	0.035	0.079		0.076				
****	*	X4400220	CURB REMOVAL AND REPLACEMENT	FOOT	492	181	108	79		124				
****	*	X4420201	PAVEMENT PATCHING (SPECIAL)	SQYD	229	92	50	35		52				
	*	Y8100105	CONDUIT SPLICE	EACH	35	7	10	6	4	8				
	ŧ	X8100863	INTERCEPT EXISTING CONDUIT	EACH	3					11	1	1		
	*	X8140230	HANDHOLE, COMPOSITE CONCRETE (SPECIAL)	EACH	14	4	4	2		4				
	*	X8161000	EXPOSE AND RELOCATE EXISTING UNIT DUCT	FOOT	715	155	175	105		280				
	*	X8250091	COMBINATION LIGHTING CONTROLLER	EACH	3						1	1		1
	*	X8410141	REMOVAL OF TEMPORARY LUMINAIRE	EACH	37	3	6	4	2	6	4	7		5
	*	X8440102	RELOCATE EXISTING LUMINAIRE	EACH	13	4	. 5	2	:	2				
	*	X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	6		1	1	1	1		1		1
	*	X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	6		1	. 1	1	1		1		1
	*	V0740000	SIDED ODTIGORALI E IN CONDUIT. NO CO SUCE ANNOS ONCOS	5007	44420								11420	
	•	X8710200 I	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM36F	FOOT	11420								111111	
	*	X8730571	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	889							321.5		567.5
	*	X8760055	PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	4		1			3				
	*	X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	30	8	4	6	4	8				
	*	X8950114	MODIFY EXISTING CONTROLLER AND CABINET	EACH	1	1								
	*	X8950450	REMOVE EXISTING UNDERGROUND CONDUIT	FOOT	9		9							
	*	XX005431	LOCATING UNDERGROUND UTILITY	EACH	16	2	2	2	2	2	2	2		2
		701000401	ESSATING GIBERGROOMS OTHER	ENON			-							

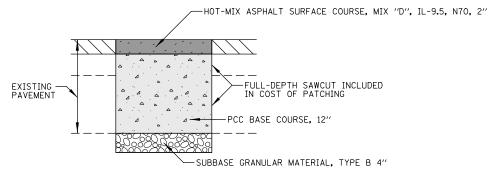
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES	SP	CODE NO.	ITEM	UNIT	TOTAL	Algonquin Road @ Haligus Road	Algonquin Road @ Lakewood Road	Algonquin Road @ Square Barn Road	Algonquin Road @ Frank Road	Algonquin Road @ Harvest Gate Road / Talaga Drive	Algonquin Road @ Hilltop Drive / Hanson Road	Algonquin Road @ Pyott Road	Algonquin Road Interconnect	Wilmot Road @ Main Street
				·····		Construction Code 00	21	4				·		1
	*	XX005723	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	8	1	1	1	1	1	1	1		1
	*	XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	7	1	1	1	1		1	1		1
	*	XX008068	LUMINAIRE INSTALLATION, TYPE 1	EACH	5									5
	*	XX008069	LUMINAIRE INSTALLATION, TYPE 2	EACH	30	3	6	4		6	4	7		
	*	XX008454	ETHERNET SWITCH, TYPE 2	EACH	7	1	1	1	1	1	1	1		
	*	XX008608	CABLE, SPECIAL	FOOT	1370						410	425		535
	*	XX009148	LUMINAIRE INSTALLATION, TYPE 3	EACH	4									4
3	*	XX009266	LUMINAIRE INSTALLATION, TYPE 4	EACH	10						4	6		
		Z0013798	CONSTRUCTION LAYOUT	L SUM	1									
	*	Z0030850	TEMPORARY INFORMATION SIGNING	SQFT	771	102.8	102.8	102.8	77.1	102.8	102.8	77.1		102.8
	*	Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	L SUM	1	0.125	0.125	0.125	0.125	0.125	0.125	0.125		0.125
	*	Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	5		***************************************						5	
	*	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	7	1	1	1		1	1	1		1
***	*	Z0076600	TRAINEES	HOUR	1000									
***	*	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1000									

1										
FILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -			F.A.P RTE.	SECTION	COUNTY	TOTAL SHE	£Τ Ĵ.
Ø1Ø_SUM7-18Ø176		DRAWN - FPB	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES		18-00480-00-TL	MCHENRY	132 1	)
	PLOT SCALE = 2'	CHECKED - GMZ	REVISED -	DEPARTMENT OF TRANSPORTATION				CONTRACT	NO. 61H50	
	PLOT DATE = 1/12/2022	DATE -	REVISED -	7	SCALE: 1" = 2' SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD C	OIST, NO. ILLINOIS FED.	AID PROJECT		







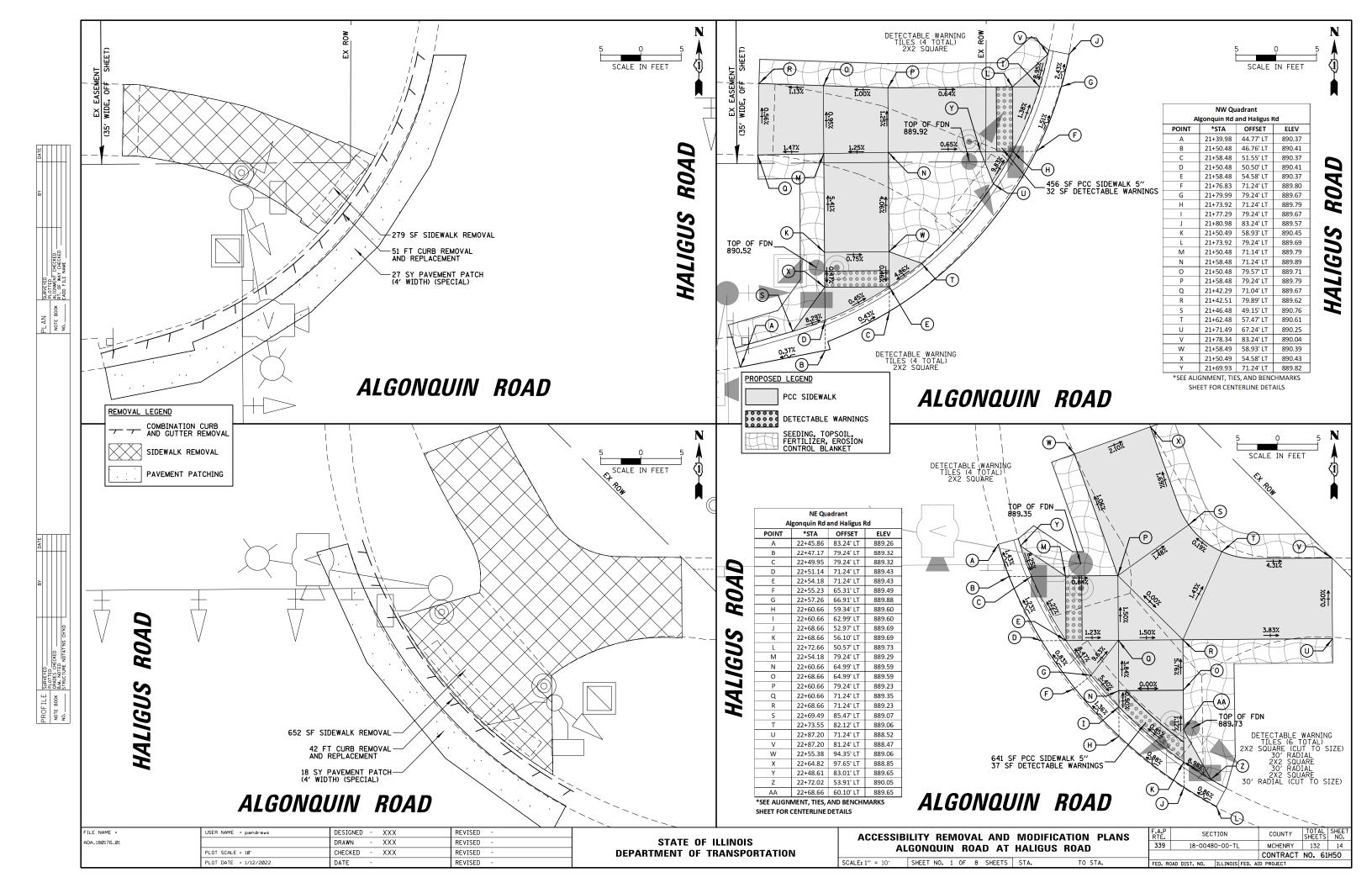
## **PAVEMENT PATCHING (SPECIAL)**

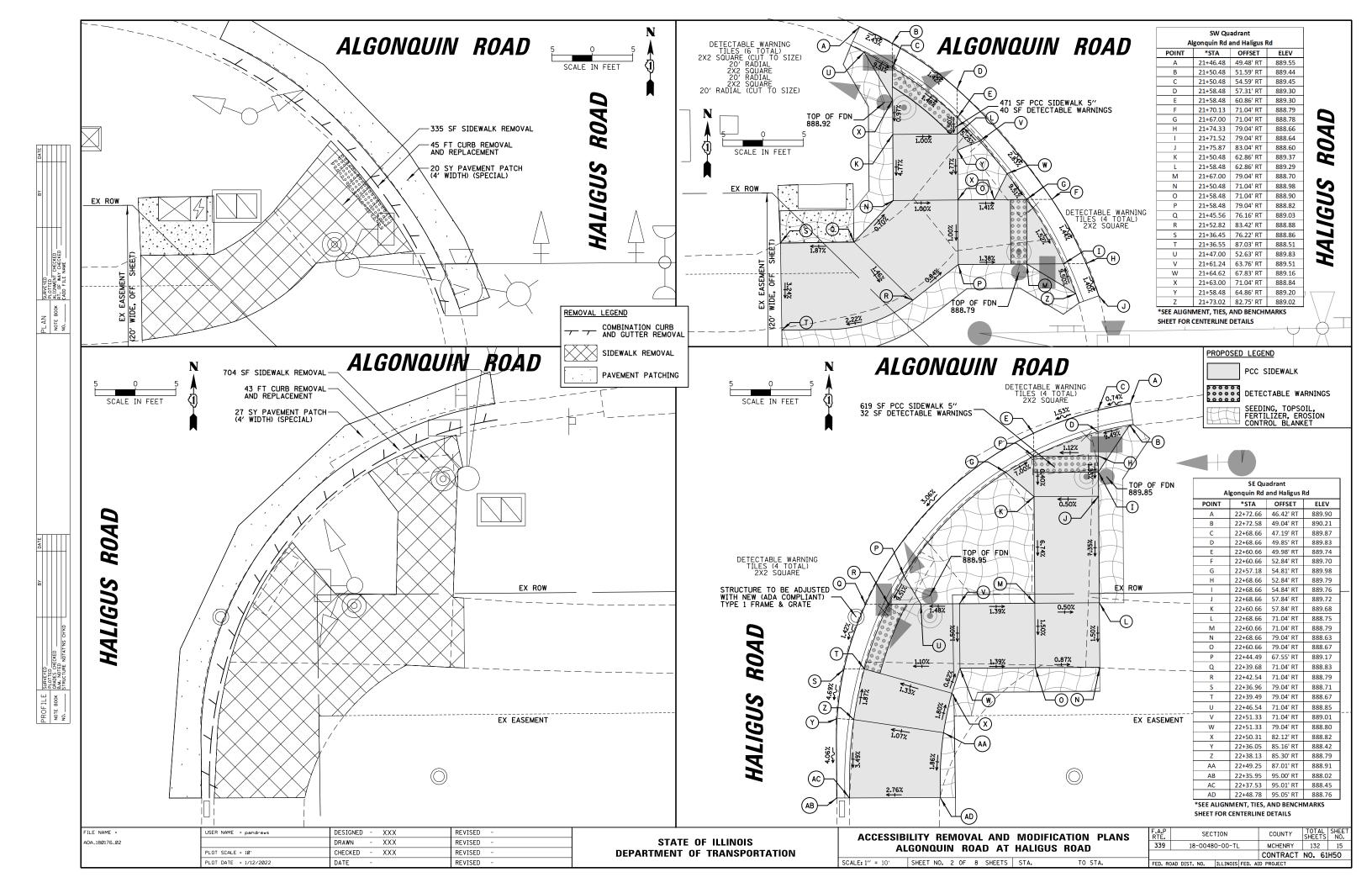
HOT-MIX ASPHALT MIXTURE REQUIREM	MENTS	
MIXTURE TYPE PAVEMENT PATCHING (SPECIAL)	AIR VOIDS @NDES	QMP
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 2"	4% @ 70 GYR.	LR 1030 - 2

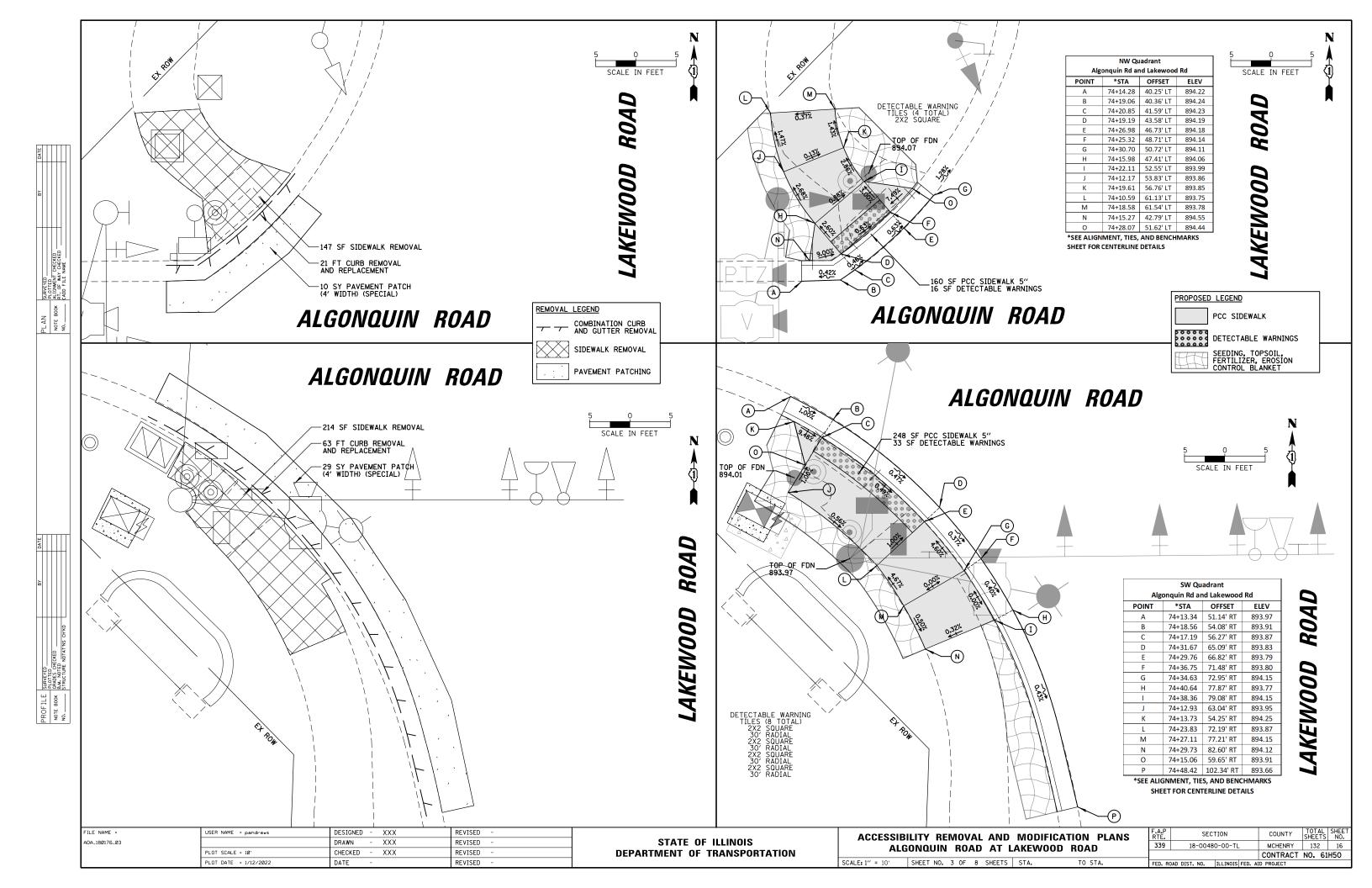
1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.

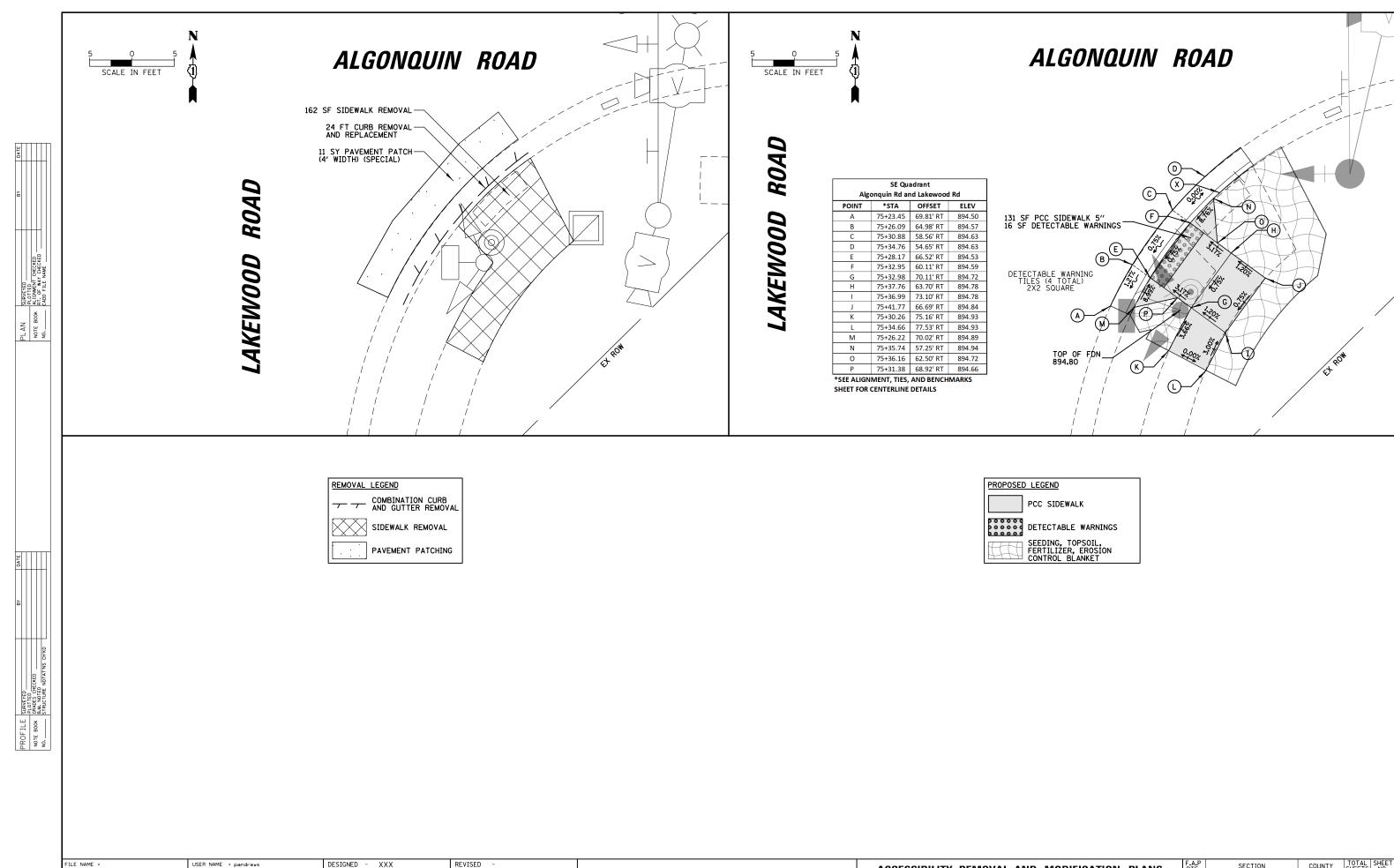
2. THE AC TYPE FOR NON-POLYMERIZED HMA SHALL BE "PG 64-22", UNLESS MODIFED BY RECLAIMED MATERIALS SPECIFICATIONS.

FILE NAME =	USER NAME = pandrews	DESIGNED - XXX	REVISED -			F.A.P	CECTION	COLINTY	TOTAL   SHEET
DET_18Ø176_Ø1	pondi ews	DRAWN - XXX	REVISED -	STATE OF ILLINOIS	ACCESSIBILITY MODIFICATION DETAILS	RTE.	SECTION 10 SECTION	LOUNTY	SHEETS NO.
	PLOT SCALE = 10'	CHECKED - XXX	REVISED -	DEPARTMENT OF TRANSPORTATION	ACCESCIBLE INCOME DE L'ALEC	339	18-00480-00-TL	MCHENRI	NO. 61H50
	PLOT DATE = 1/12/2022	DATE -	REVISED -		SCALE: 1" = 10' SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO.   ILLINOIS FED. A		



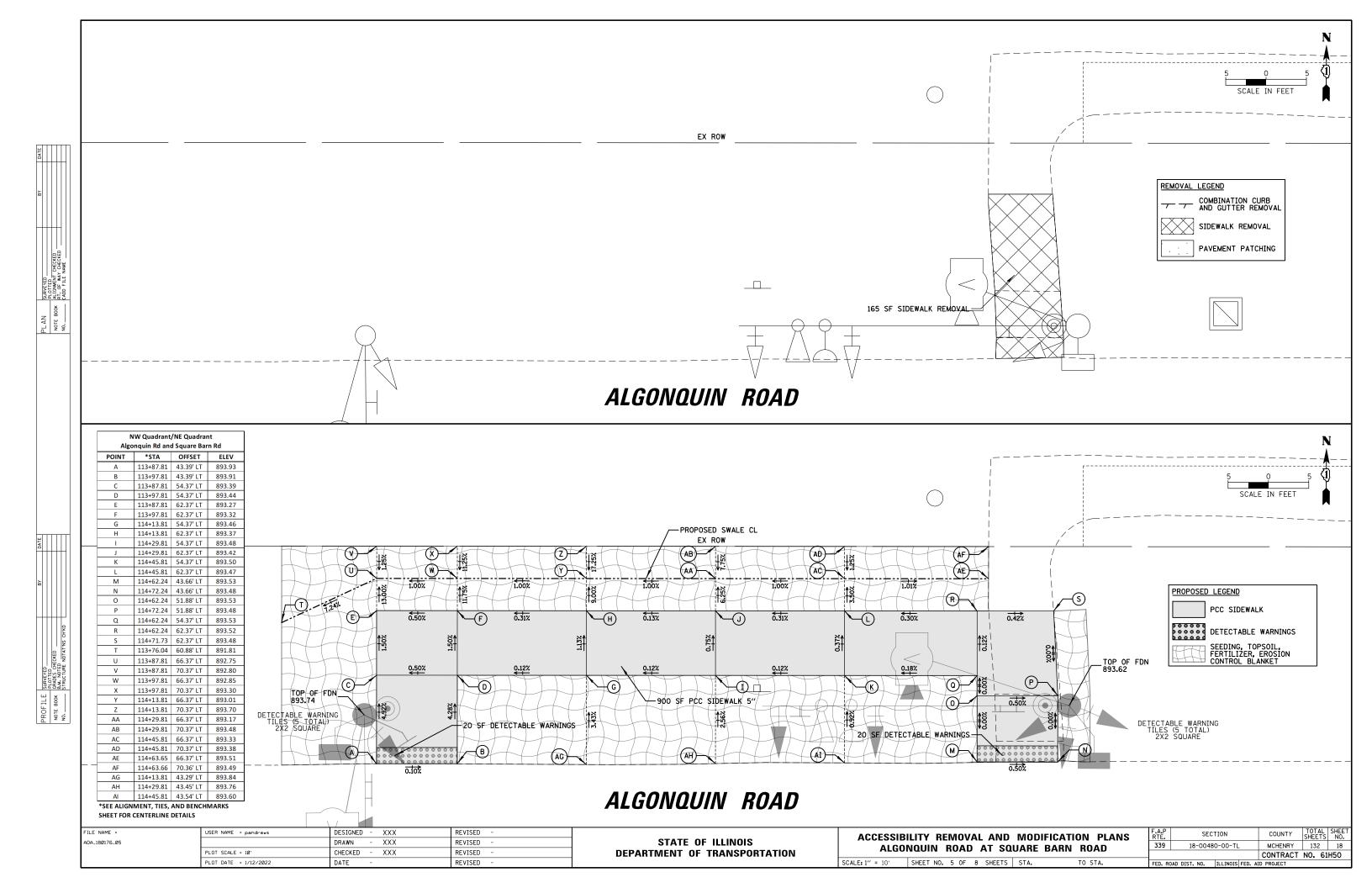


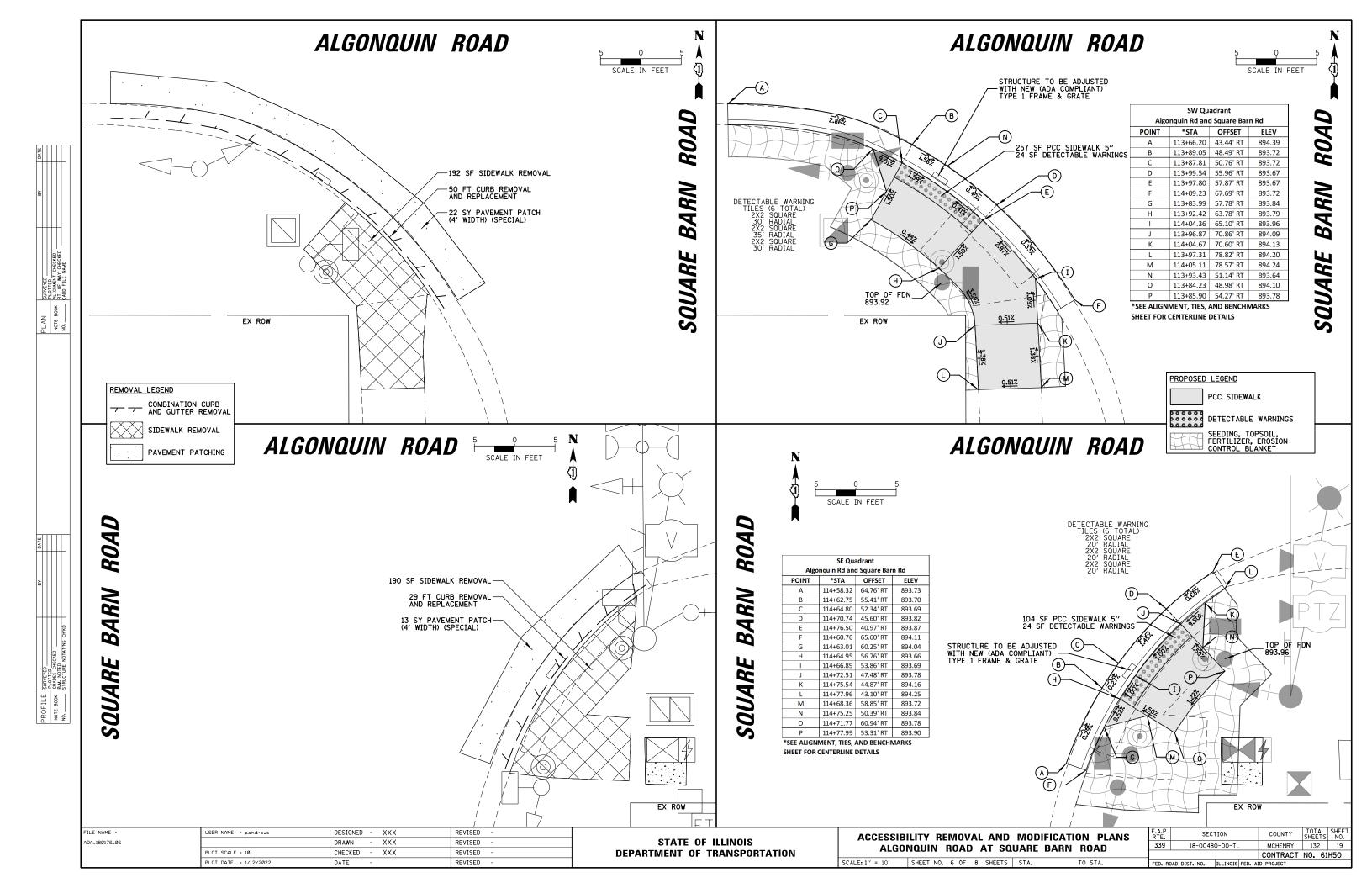


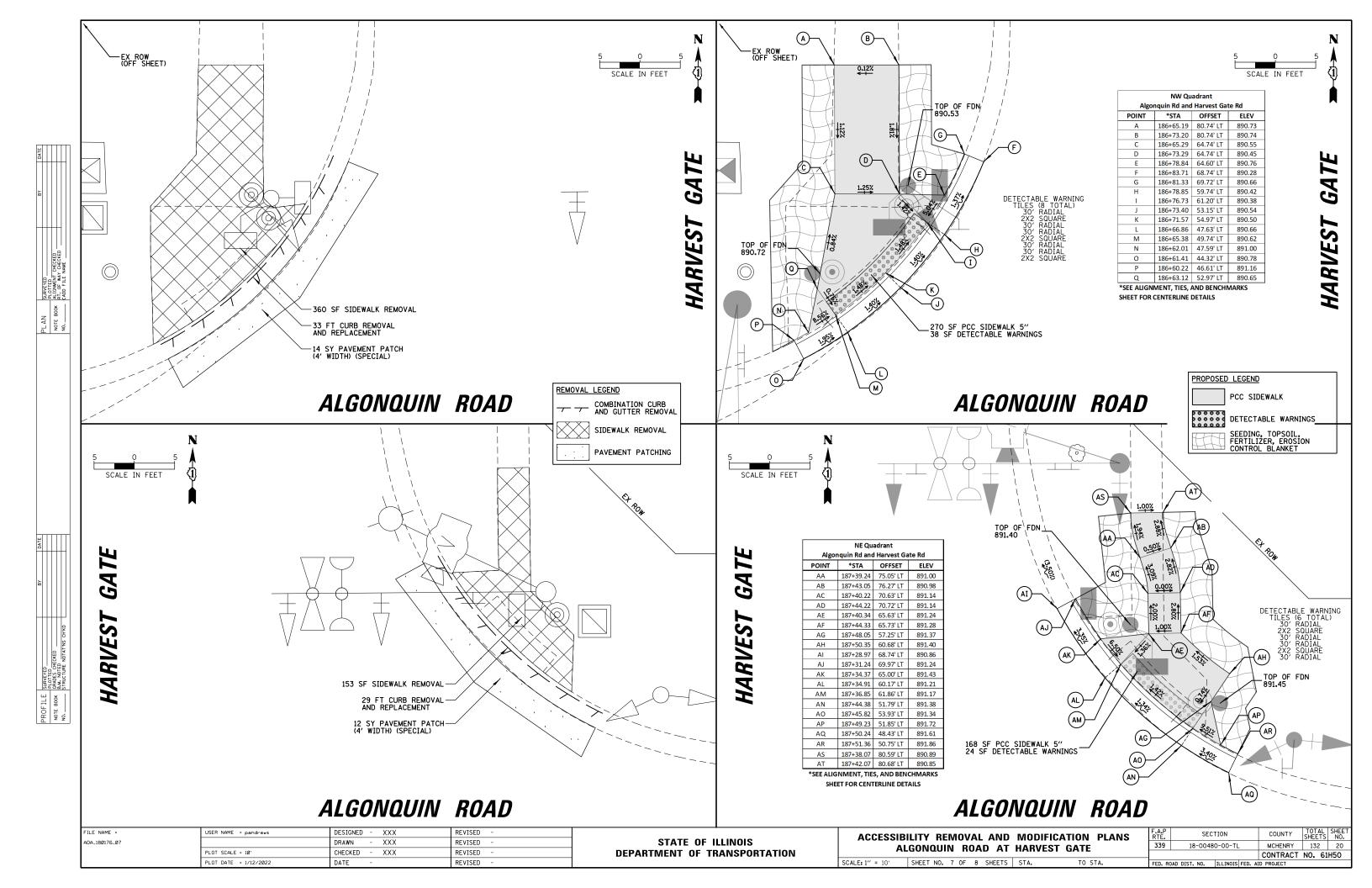


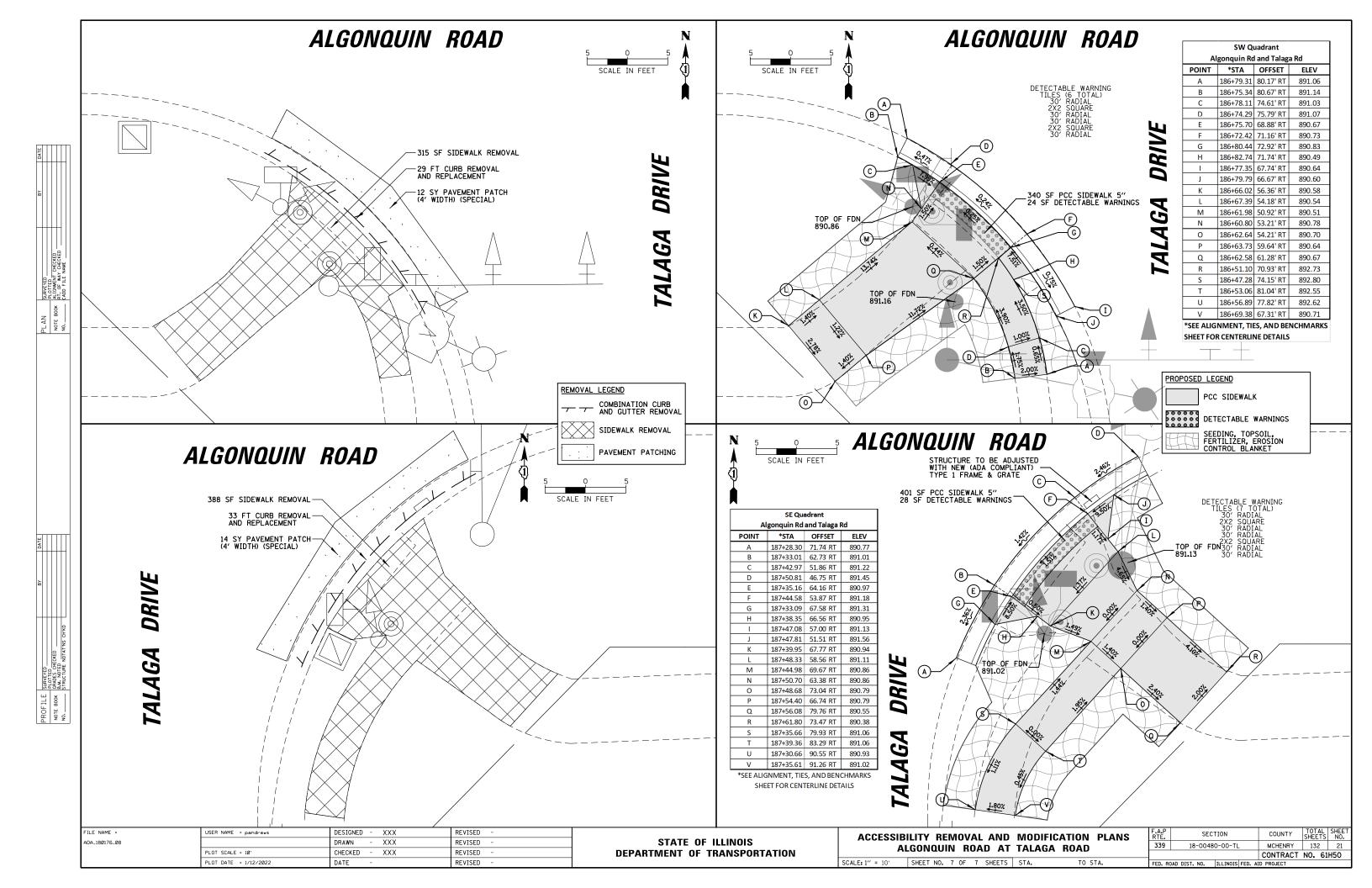
=	USER NAME = pandrews	DESIGNED - XXX	REVISED -
5_04		DRAWN - XXX	REVISED -
	PLOT SCALE = 10'	CHECKED - XXX	REVISED -
	PLOT DATE = 1/12/20122	DATE -	REVISED -

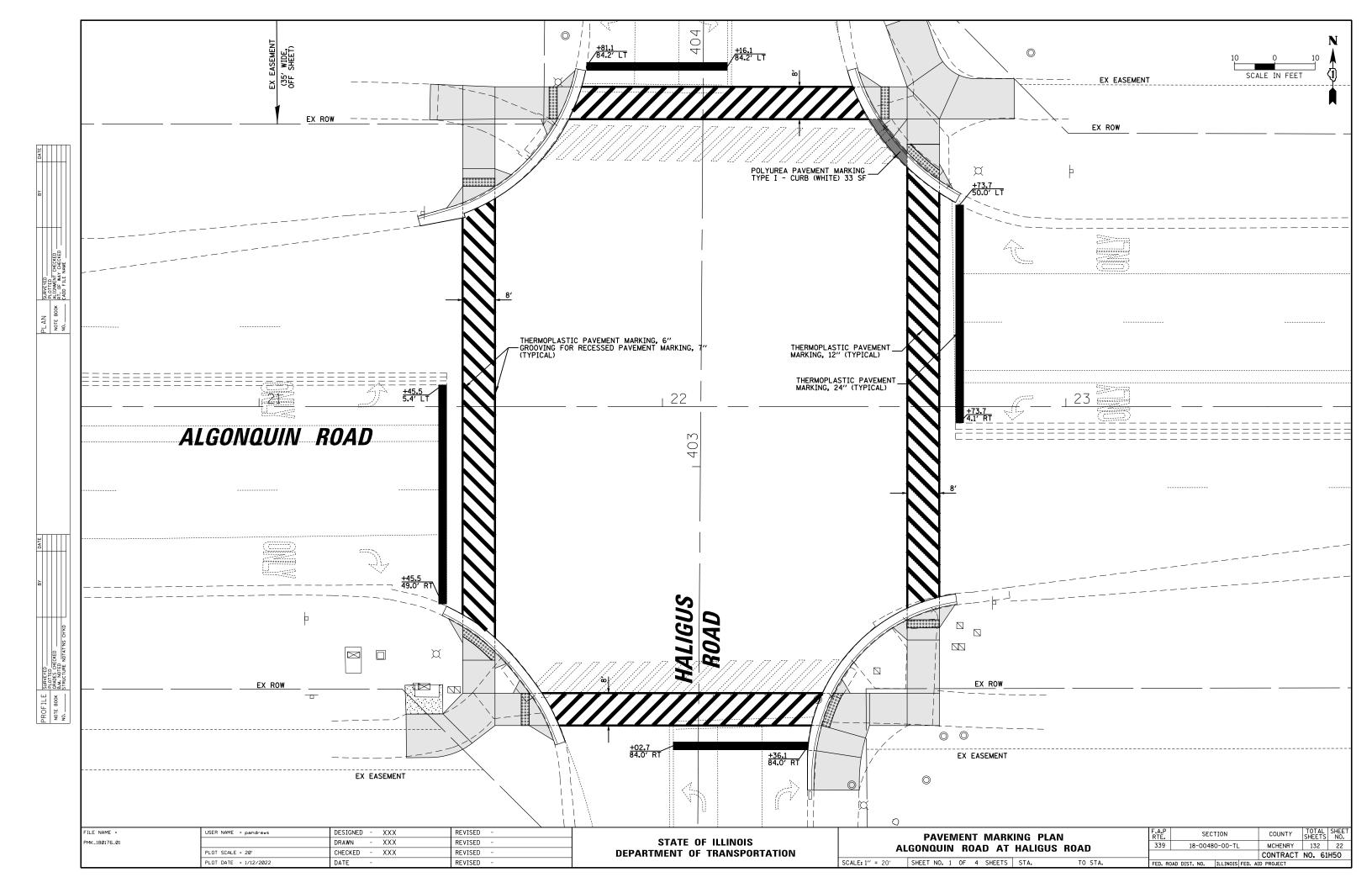
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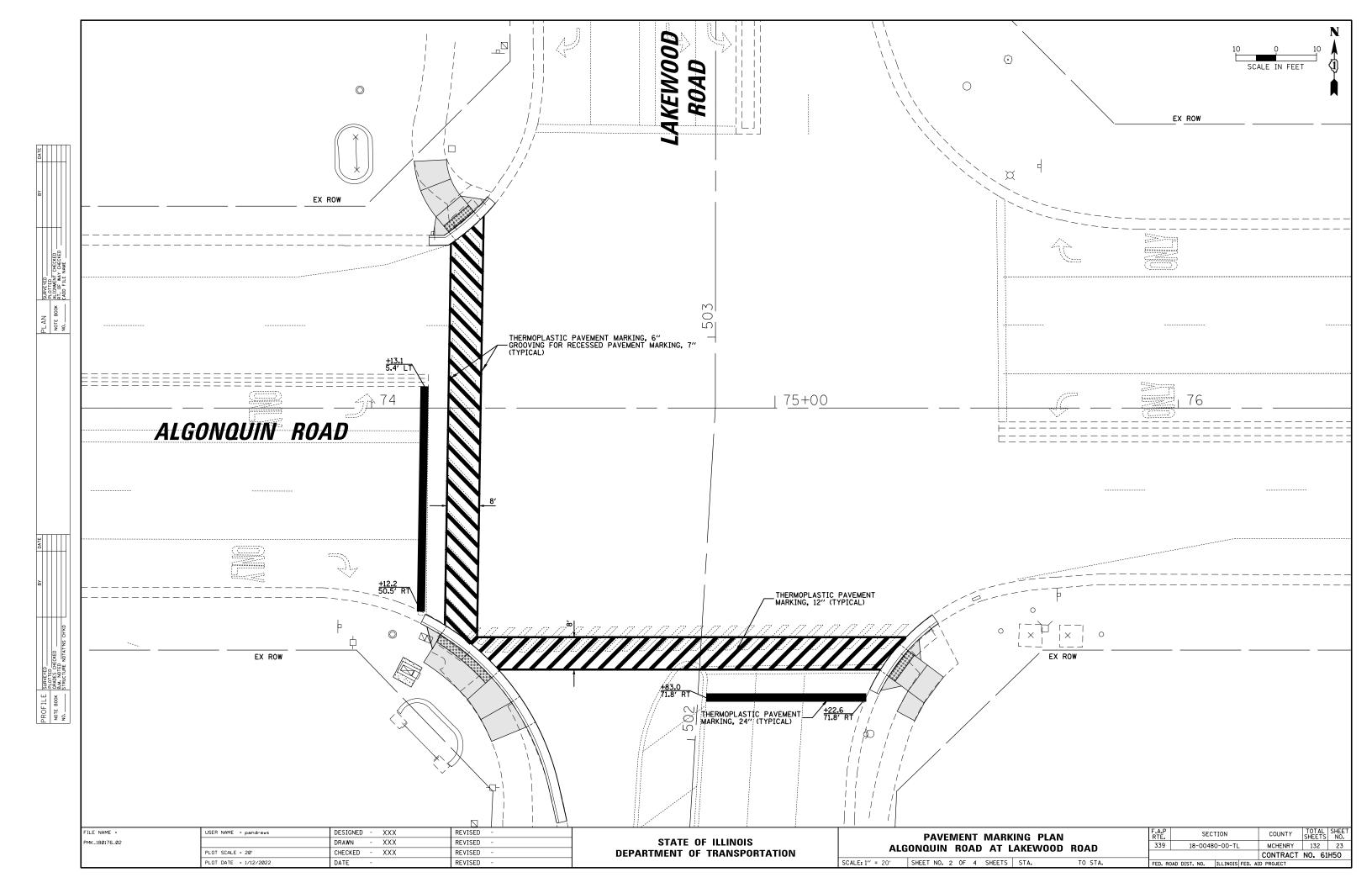


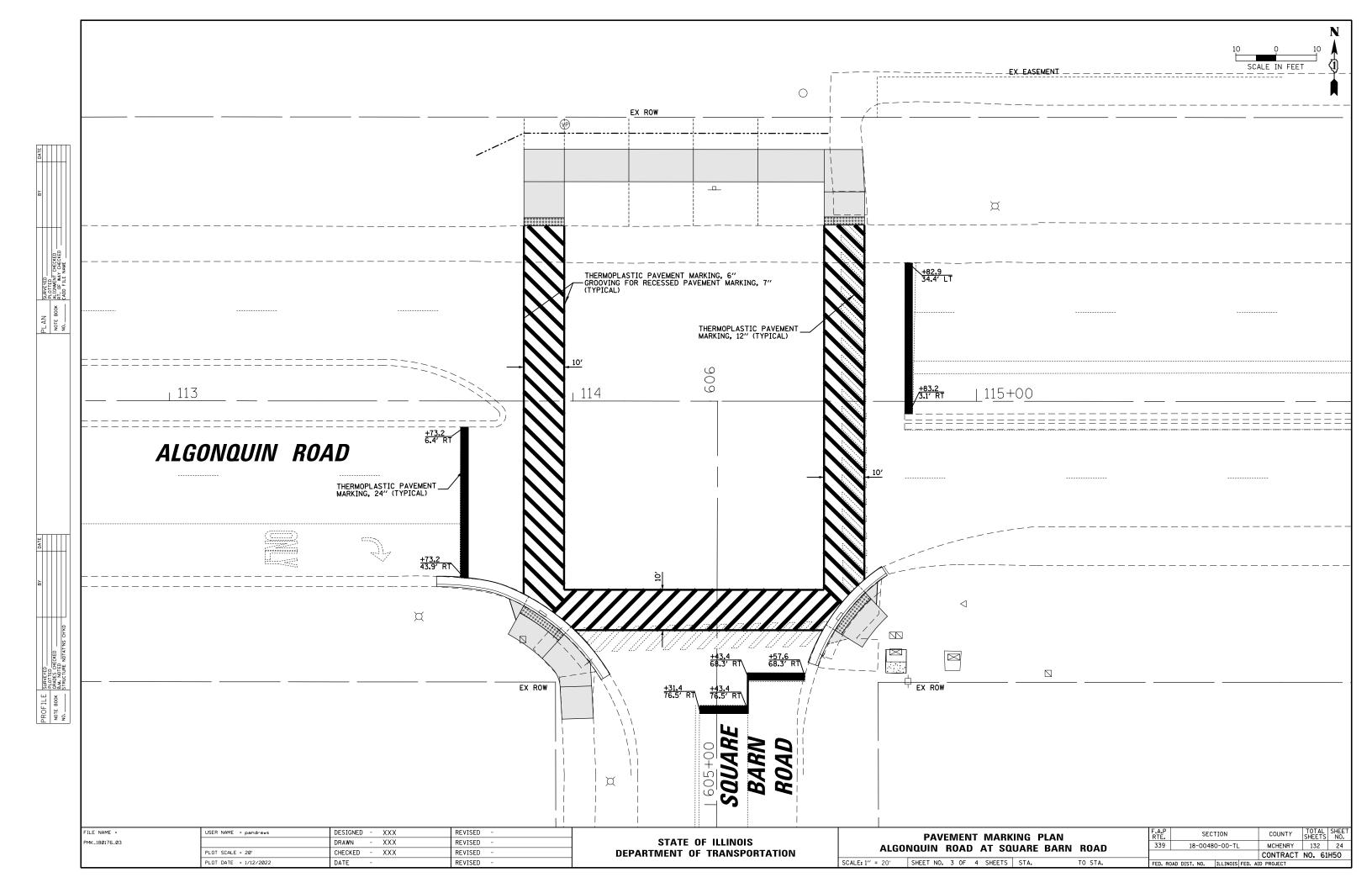


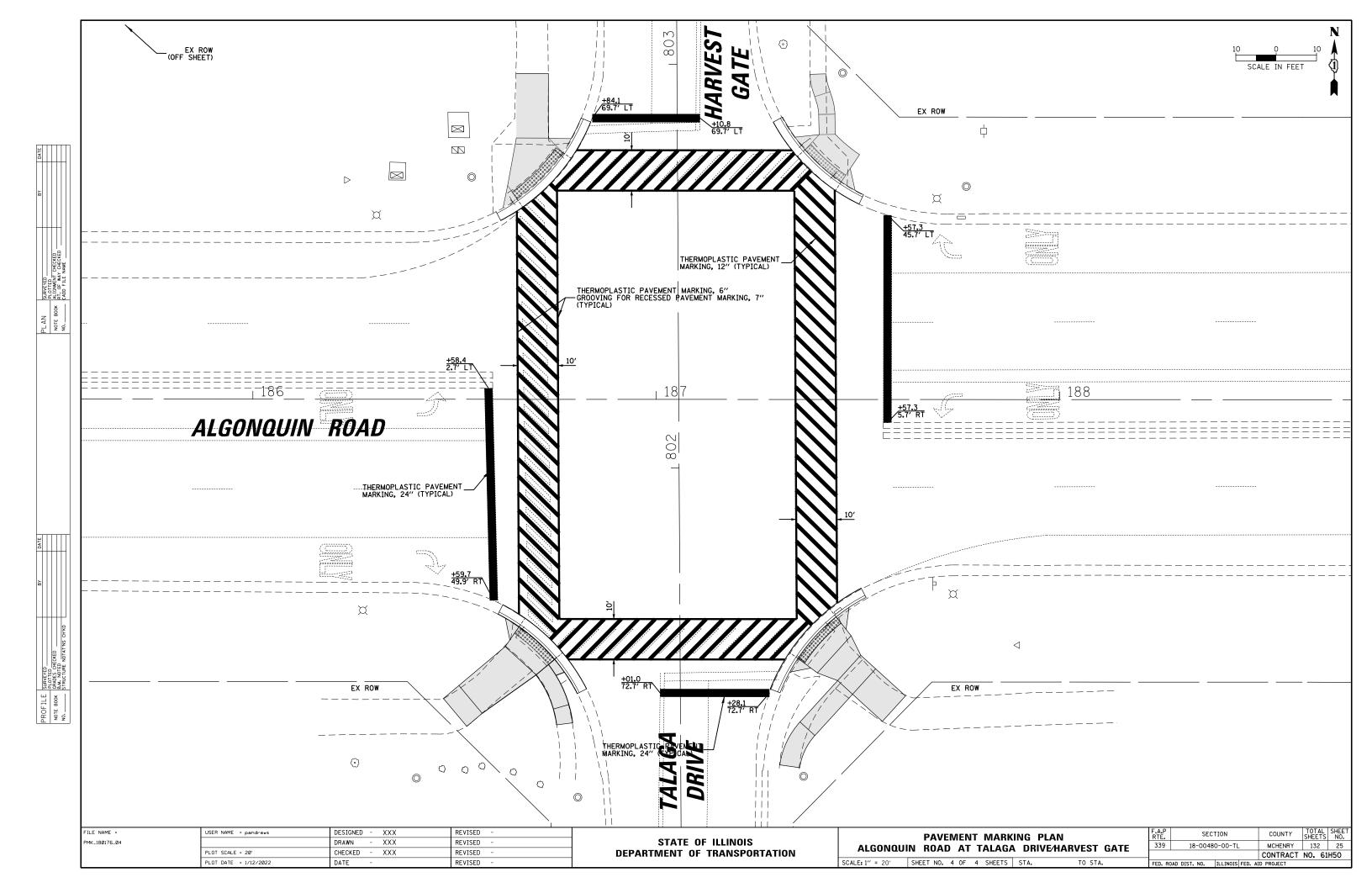












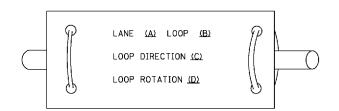
## TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

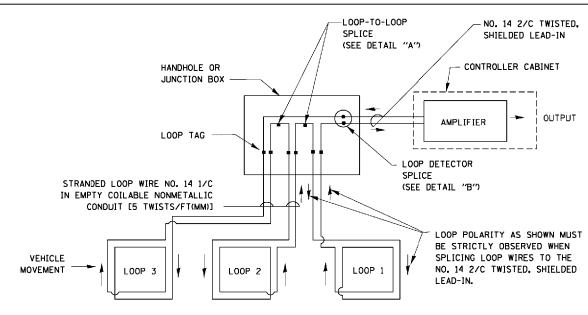
TEM	EXISTING	PROPOSED	ITEM	EXISTING	<u>PROPOSED</u>	<u>ITEM</u>	EXISTING	PROPOSED
ONTROLLER CABINET	$\boxtimes$	×	HANDHOLE -SOUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		R R Y
OMMUNICATION CABINET	ECC	СС	HEAVY DUTY HANDHOLE					G G 4Y 4Y 4G
ASTER CONTROLLER	EMC	MC	-SQUARE -ROUND		⊞ 18			R
MASTER MASTER CONTROLLER	ЕММС	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
NINTERRUPTABLE POWER SUPPLY	<b>[</b>	<b></b>	JUNCTION BOX	<b>O</b>	•	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
SERVICE INSTALLATION (P) POLE MOUNTED	- <u>-</u> -P	- <b>■</b> -	RAILROAD CANTILEVER MAST ARM	$X \longrightarrow X$	HI I			G G G G 4Y 4Y 4Y 4G 4G
ERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	<del>∑⊙</del> ∑	X <del>•X</del>		P RB	P RB
(G) GROUND MOUNTED (GM) GROUND MOUNTED METERED	$\boxtimes^{G} \boxtimes^{GM}$	<b>⊠</b> <sup>G</sup> <b>⊠</b> <sup>GM</sup>	RAILROAD CROSSING GATE	<del>∑0∑</del> >	X+X-	PEDESTRIAN SIGNAL HEAD	<b>(P)</b>	<b>₽</b>
ELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	否	*	AT RAILROAD INTERSECTIONS		<b>₽</b> <b>x</b>
TEEL MAST ARM ASSEMBLY AND POLE	0	•	RAILROAD CONTROLLER CABINET		<b>≯</b> ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C D	<b>₽</b> C <b>1</b> D
LUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL	<del></del>				
STEEL COMBINATION MAST ARM SSEMBLY AND POLE WITH LUMINAIRE	o¤—	• <del>×</del>	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	<ul><li>● BM</li></ul>	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		_5_
			INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED		
OOD POLE	⊗	θ	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1*6	(1*6)
GUY WIRE	>-	<b>&gt;</b>	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER	,	
IGNAL HEAD	>	-	ABANDON ITEM		A	NO. 14 1/C		—1)—
SIGNAL HEAD WITH BACKPLATE	+1>	+ <b>&gt;</b>	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	<u> </u>	<u>—c—</u>
IGNAL HEAD OPTICALLY PROGRAMMED	-D" +D"	<b>→</b> + <b>→</b> +	MAST ARM POLE AND		RMF	VENDOR CABLE		<b>—</b> V—
FLASHER INSTALLATION -(FS) SOLAR POWERED	0+5 <sup>F</sup> 0+5 <sup>FS</sup> □+5 <sup>F</sup> □+5 <sup>FS</sup>	→ F → FS	FOUNDATION TO BE REMOVED SIGNAL POST AND			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	<del></del>	<del></del>
		_	FOUNDATION TO BE REMOVED		RPF	FIBER OPTIC CABLE	—	—(12F)—
PEDESTRIAN SIGNAL HEAD	-0		DETECTOR LOOP, TYPE I			-NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			PREFORMED DETECTOR LOOP	[P] (P)	P P	-NO. 62.5/125, MM12F SM24F	<u>24F</u>	—(24F)—
RADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR	$\begin{bmatrix} \overline{s} \end{bmatrix}$ $(\widehat{s})$	s s		<u> 36</u> F	—(36F)—
VIDEO DETECTION CAMERA	(V)	<b>v</b> •	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	[ <u>īs]</u> ( <u>í</u> s)	IS (IS)			<u></u>
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING (SYSTEM) DETECTOR	[ <u>as</u> ] ( <u>a</u> s)	os os	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	<u>_C _M _P _S</u>	$\stackrel{\underline{=}^C}{\downarrow} \stackrel{\underline{=}^M}{\downarrow} \stackrel{\underline{=}^P}{\downarrow} \stackrel{\underline{=}^S}{\downarrow}$
PAN, TILT, ZOOM (PTZ) CAMERA	PIZM	<b>PTZ■</b>	WIRELESS DETECTOR SENSOR	( <u>)</u>	<b>®</b>	-(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	$\bowtie$	<b>~</b>	WIRELESS ACCESS POINT		-			
CONFIMATION BEACON	<b>~</b> I	<b>⊷</b>			_			
WIRELESS INTERCONNECT	0++ -	<del>•-+   </del>						
	ERR	RR						

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

#### **LOOP LEAD-IN CABLE TAG**

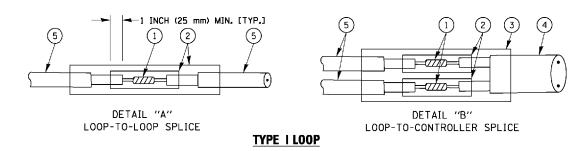


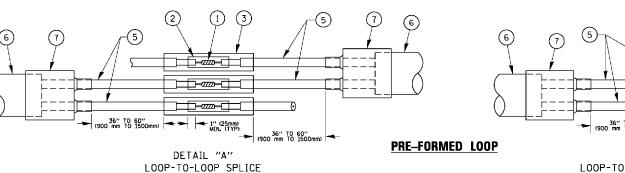
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **DETECTOR LOOP WIRING SCHEMATIC**

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

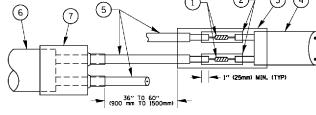




#### LOOP DETECTOR SPLICE

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

SCALE: NONE



DETAIL "B" LOOP-TO-CONTROLLER SPLICE

COUNTY

McHENRY

132 27

CONTRACT NO. 61H50

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- TXL POLYOLEFIN 2 CONDUCTOR
  BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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

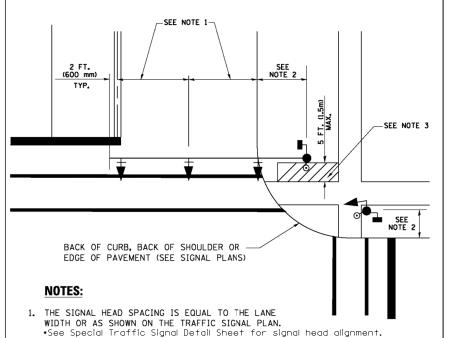
DESIGNED -DAD REVISED DAG 1-1-14 USER NAME = footem. c:\pw\_work\pwidot\footemj\dØ108315\ta05 DRAWN BCK REVISED CHECKED DAD REVISED PLOT SCALE = 50.0000 '/ in. PLOT DATE = 1/13/2014 DATE 10-28-09 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION DISTRICT ONE 18-00480-00-TL STANDARD TRAFFIC SIGNAL DESIGN DETAILS SHEET NO. 2 OF 7 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

<u>8</u> SHT

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

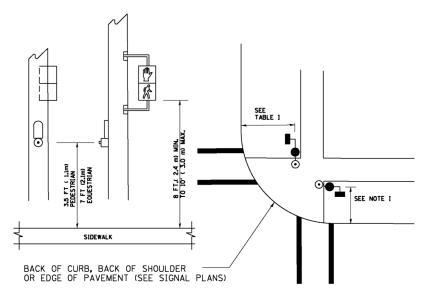


3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.

2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.

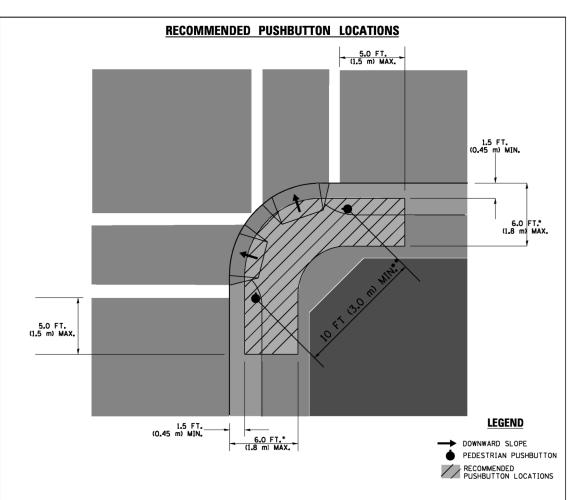
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

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



#### NOTES

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



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

#### **NOTES:**

- 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.						

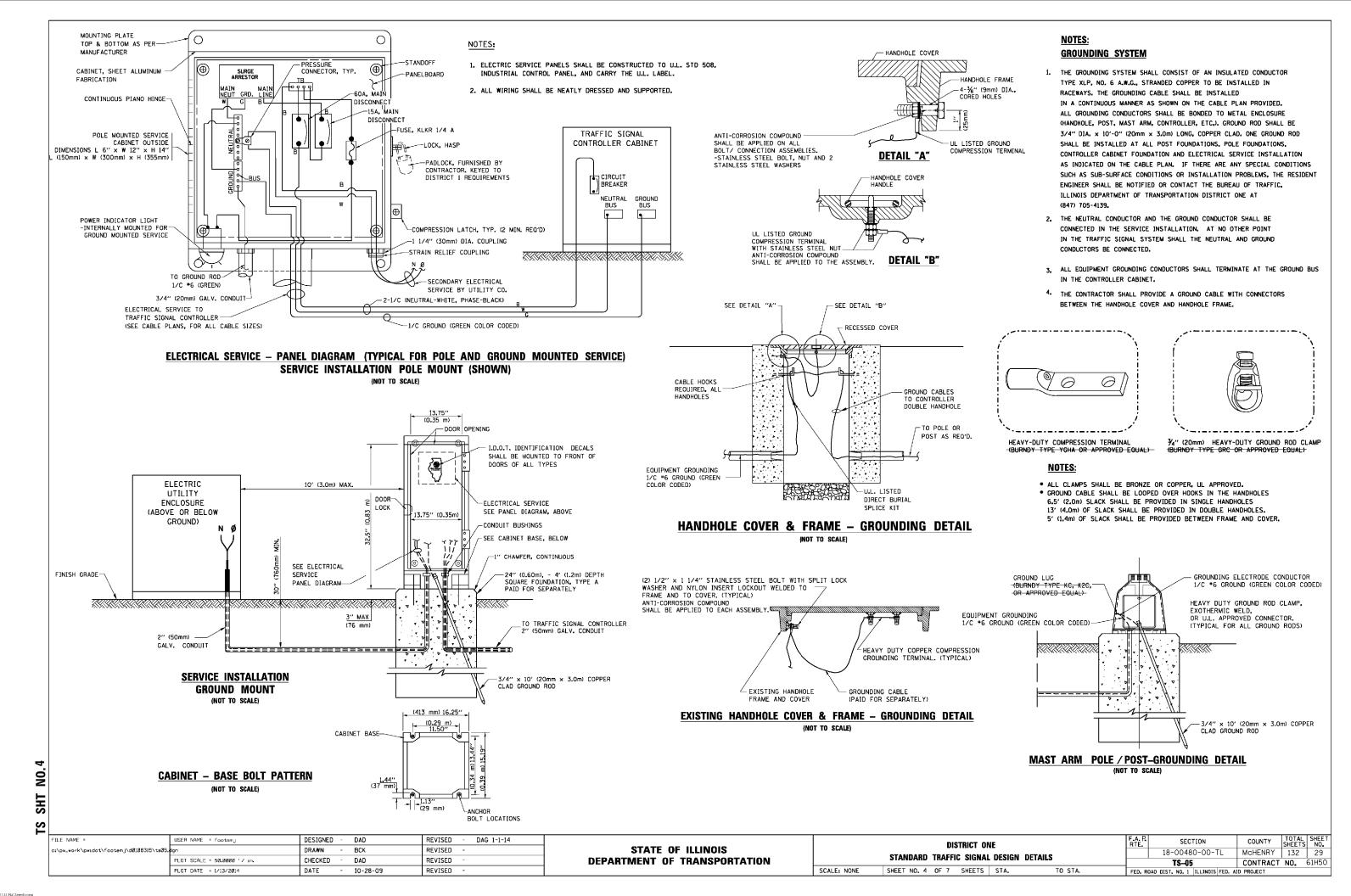
#### NOTES:

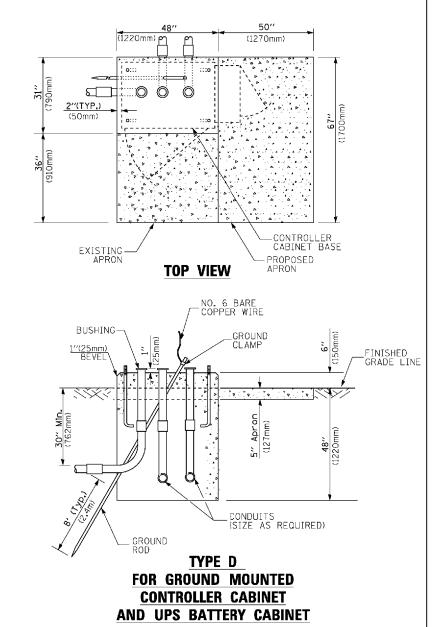
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 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.

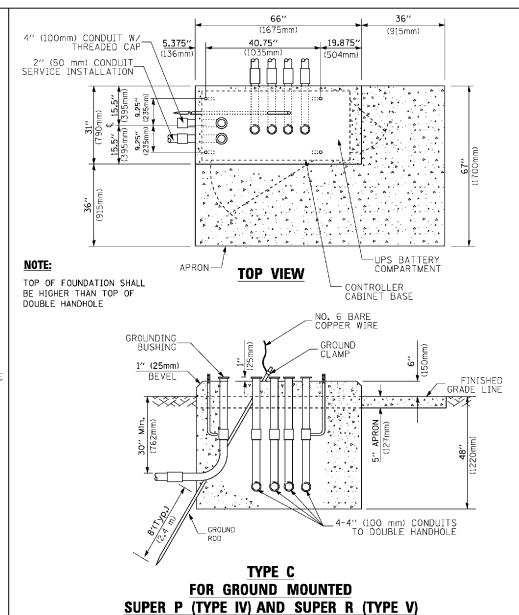
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		PLOT SCALE = 50.0000 '/ in.	CHECKED -	DAD	REVISED -	
		PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -	1

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

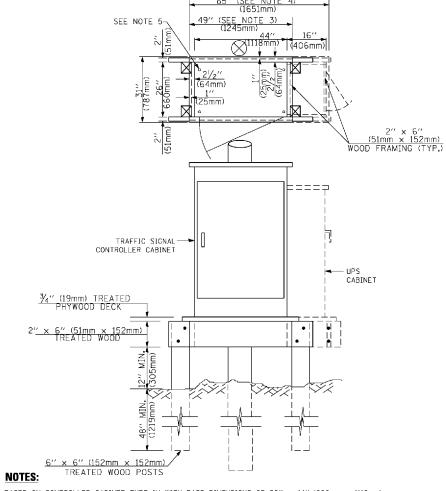
	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ı						18-00480-00-TL	McHENRY	132	28	
ı		STANDARD TRAFFIC	SIGNAL	DESIGN	DETAILS		TS-05	CONTRACT	NO.	61H50
ı	SCALE: NONE	SHEET NO. 3 OF 7 S	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				







**CONTROLLER CABINETS** 



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

#### NOTES:

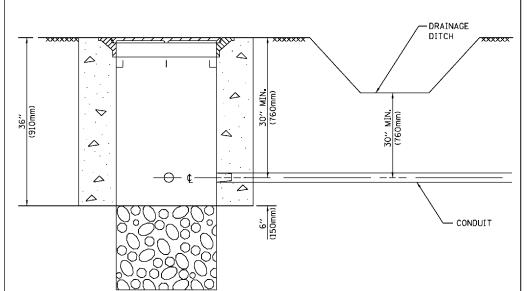
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
  the length of the shaft, with an average Unconfined Compressive Strength (0u) > 1.0 tsf (100 kpa).
  This strength shall be verified by boring data prior to construction or with testing by the Engineer
  during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
  design if other conditions are encountered.
- 2. Combination most arm assembiles 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 most arm assemblies with dual arms refer to state standard 878001..

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

FILE NAME =	USER NAME = footsmj	DESIGNED	-	DAG	REVISED	-	DAG 1-1-14
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	PLOT SCALE = 50.0000 '/ in.	CHECKED	-	DAD	REVISED	-	
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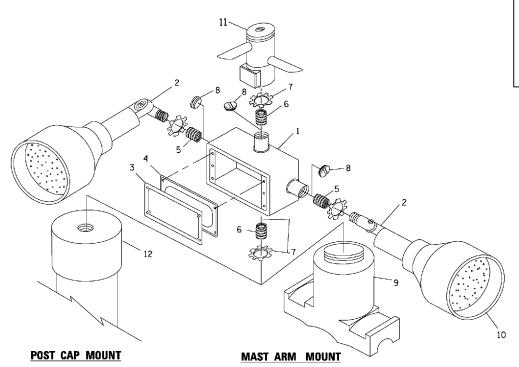
STATE O	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

DISTR	RTE.	SECTION	COUNTY	SHEETS	NO.		
STANDARD TRAFFIC		18-00480-00-TL	McHENRY	132	30		
STANDARD TRAFFIC SIGNAL DESIGN DETAILS				T\$-05	CONTRACT	NO.	61H50
SCALE: NONE SHEET NO. 5 OF 7 S	HEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- 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)



# < 0 -CONTROLLER CABINET BASE **TOP VIEW** NO. 6 BARE COPPER WIRE NO. 3 DOWEL 18" (450mm) LONG (8 REQ.) BUSHING \_GROUND CLAMP / ANCHOR BOLTS 1"(25mm) -EXISTING CONDUITS EXISTING GROUND ROD

(1675mm)

40.75"

(1035mm)

5.375"

(136mm)

(915mm)

19.875"

(504mm)

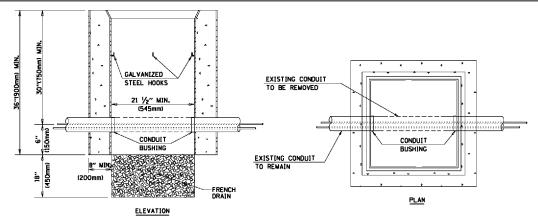
#### - ASTM A36 STEEL - ASTM A-123 HOT DIPPED GALVANIZED HEIGHT WEIGHT 7" (178mm) - 12" (300mm 53 lbs (24kg) VARIES 9.5"(241mm) 19"(483mm) VARIES 10.75"(273mm 21.5"(546mm) 7" (178mm) - 12" (300mm 68 lbs (31 kg) VARIES (178mm) 81 lbs (37 kg) 13.0"(330m 26"(660mm VARIES 18.5"(470mm) 37"(940mm) 7" (178mm) - 12" (300mm 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. SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING DIMENSION 4" (100mm) LARGER THAN CONTROLLER CABINET BASE DIMENSION, BOTH DIRECTIONS WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING. BREAK DOWN EXISTING -12" (300mm FOUNDATION 12" (300m NEW ANCHOR BOLTS 9" (225mm) 9" (225mm) No. 3 DOWEL 1'-6" (450mm) LONG ON 12" (300mm) CENTER (8 REQ'D) EXISTING CONDUIT 2" (50mm), 4" (100mm) & 4" (100mm) 6" (150mm) NEW TYPE "D" (MODIFIED) MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION MODIFY EXISTING TYPE "D" FOUNDATION (NOT TO SCALE) IDENTIFICATION 1 OUTLET BOX- GALY. 21 CU, IN. (0,000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER RUBBER COVER GASKET REDUCING BUSHING 1/4"(19 mm) CLOSE NIPPL GALVANIZED TO BE REMOVED 3/4"(19 mm) LOCKNUT SADDLE BRACKET - GALV. 6 WATT PAR 38 LED FLOOD LAMP

RO.50'

# 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
- 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. EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



SCALE: NONE

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.

R2.95" (75mm)

0.25

- 0.20"(5mm)

\_\_\_ 0.31"(8mm)

1.18"— (30mm)

0.25"-

0.23"(5m

PORT

-0.25" (6mm)

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.

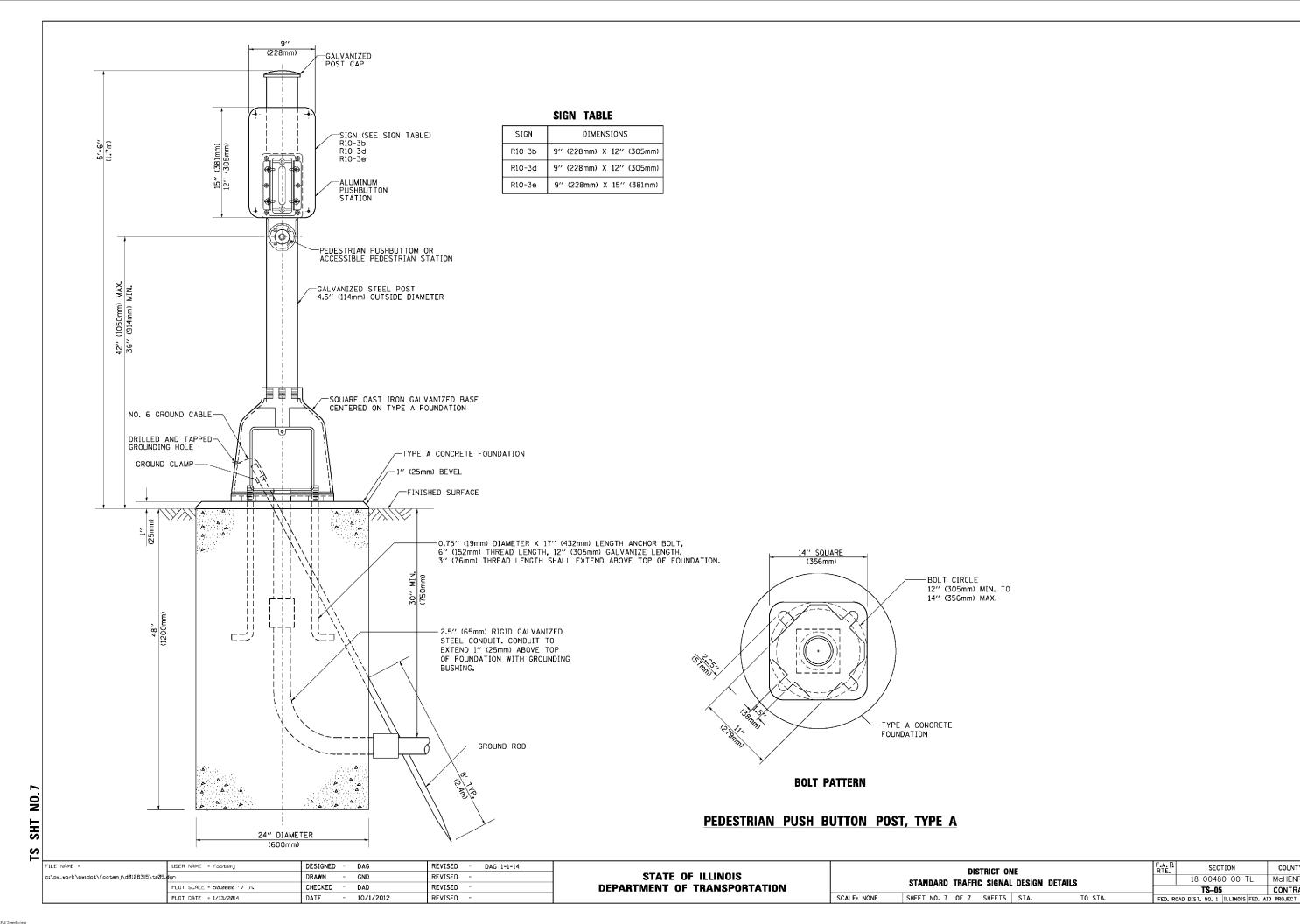
#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

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	PLOT SCALE = 50.0000 '/ in.	CHECKED -	DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY 18-00480-00-TL McHENRY 132 31 STANDARD TRAFFIC SIGNAL DESIGN DETAILS CONTRACT NO. 61H50 SHEET NO. 6 OF 7 SHEETS STA. TO STA.

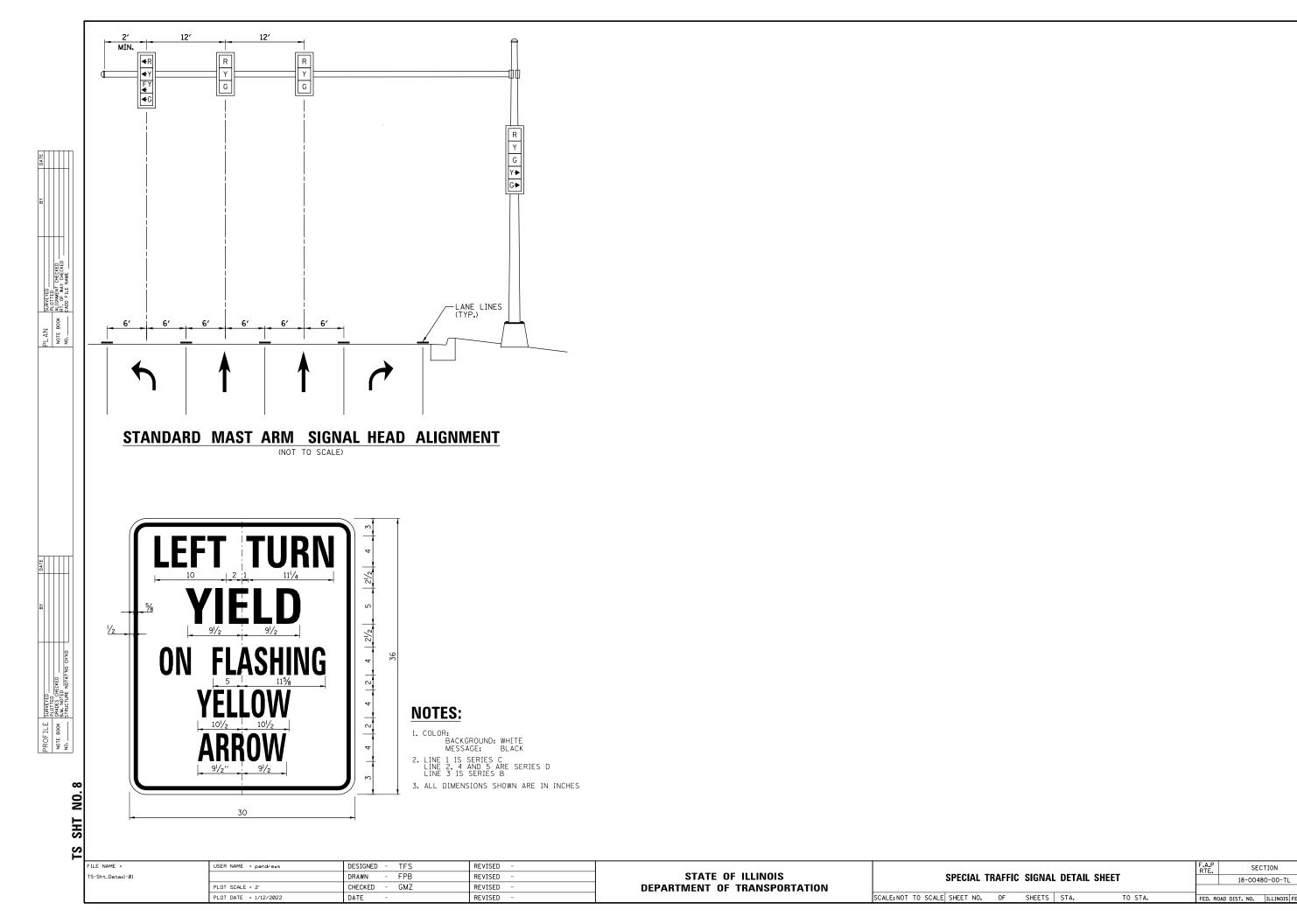
<u>8</u>



COUNTY TOTAL SHEETS NO.

MCHENRY 132 32

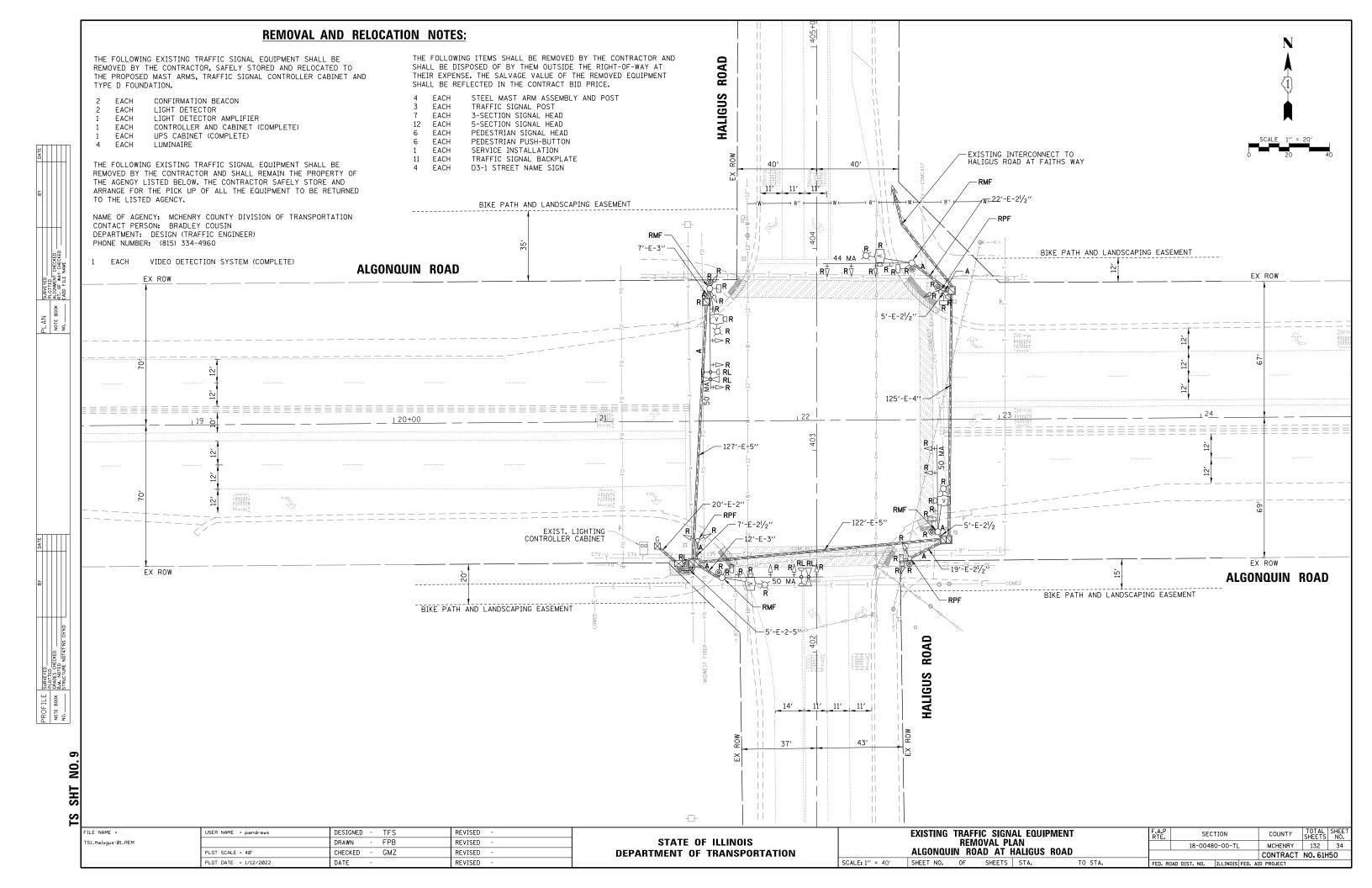
CONTRACT NO. 61H50

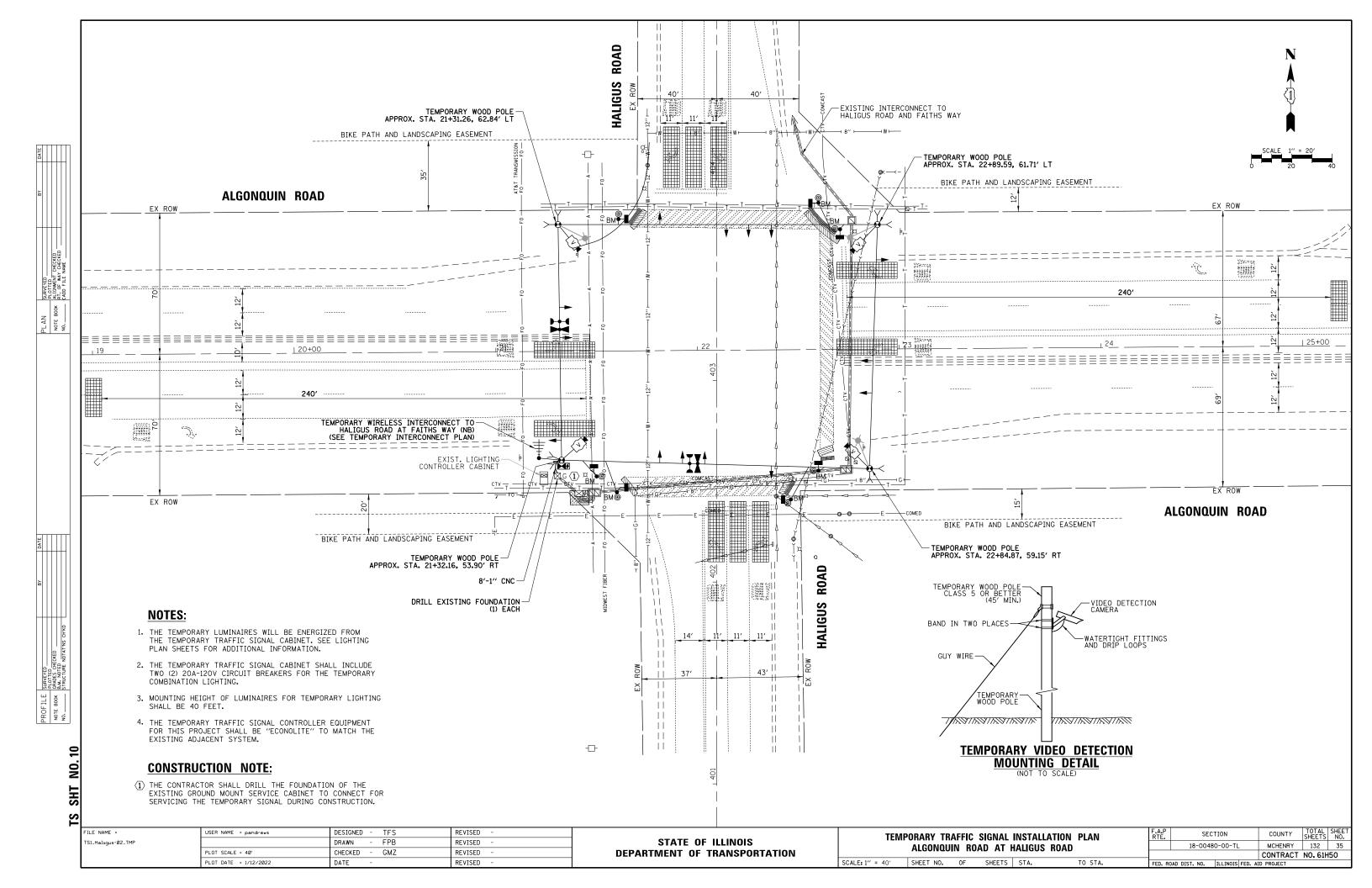


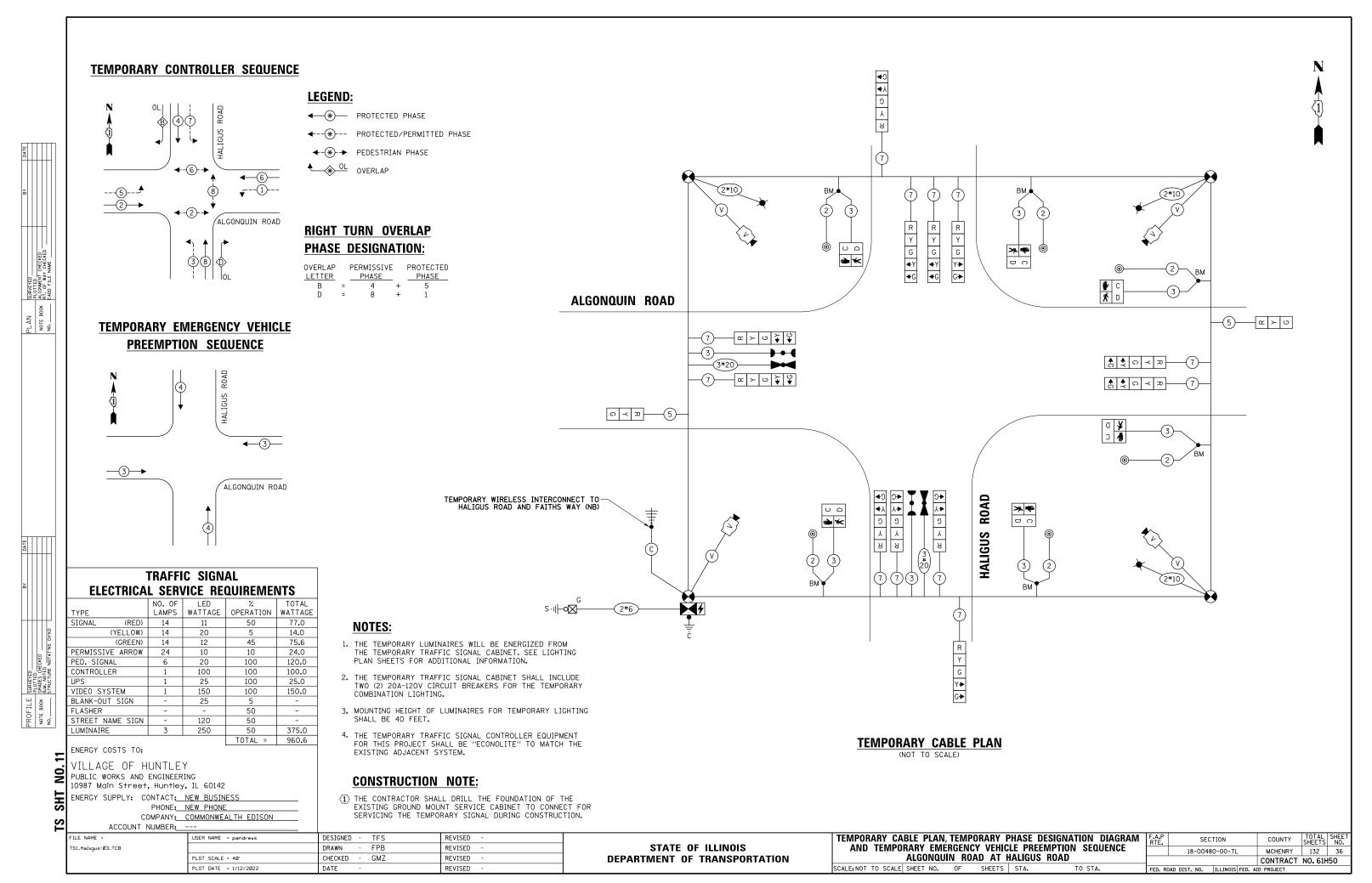
COUNTY

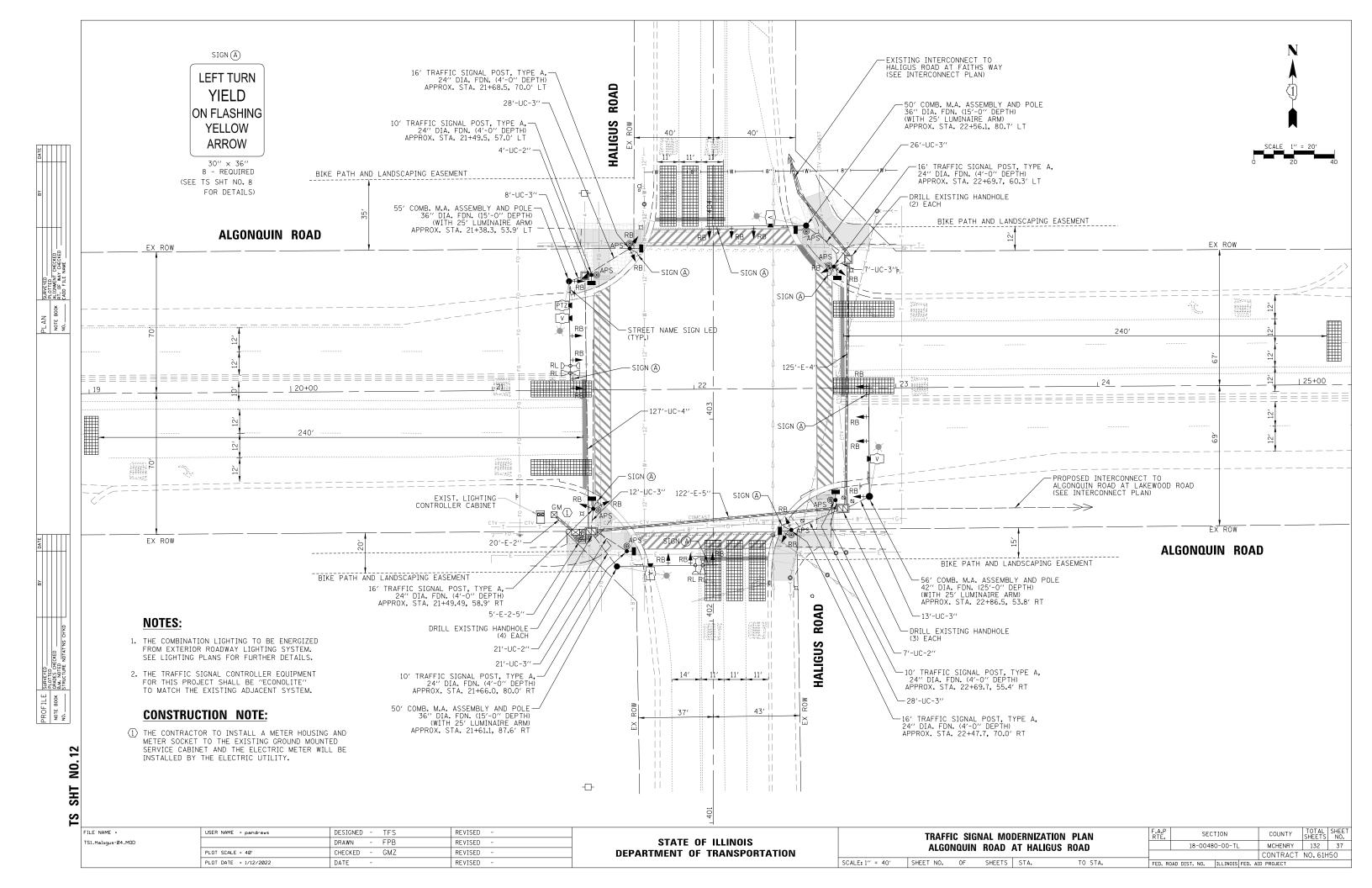
MCHENRY 132 33

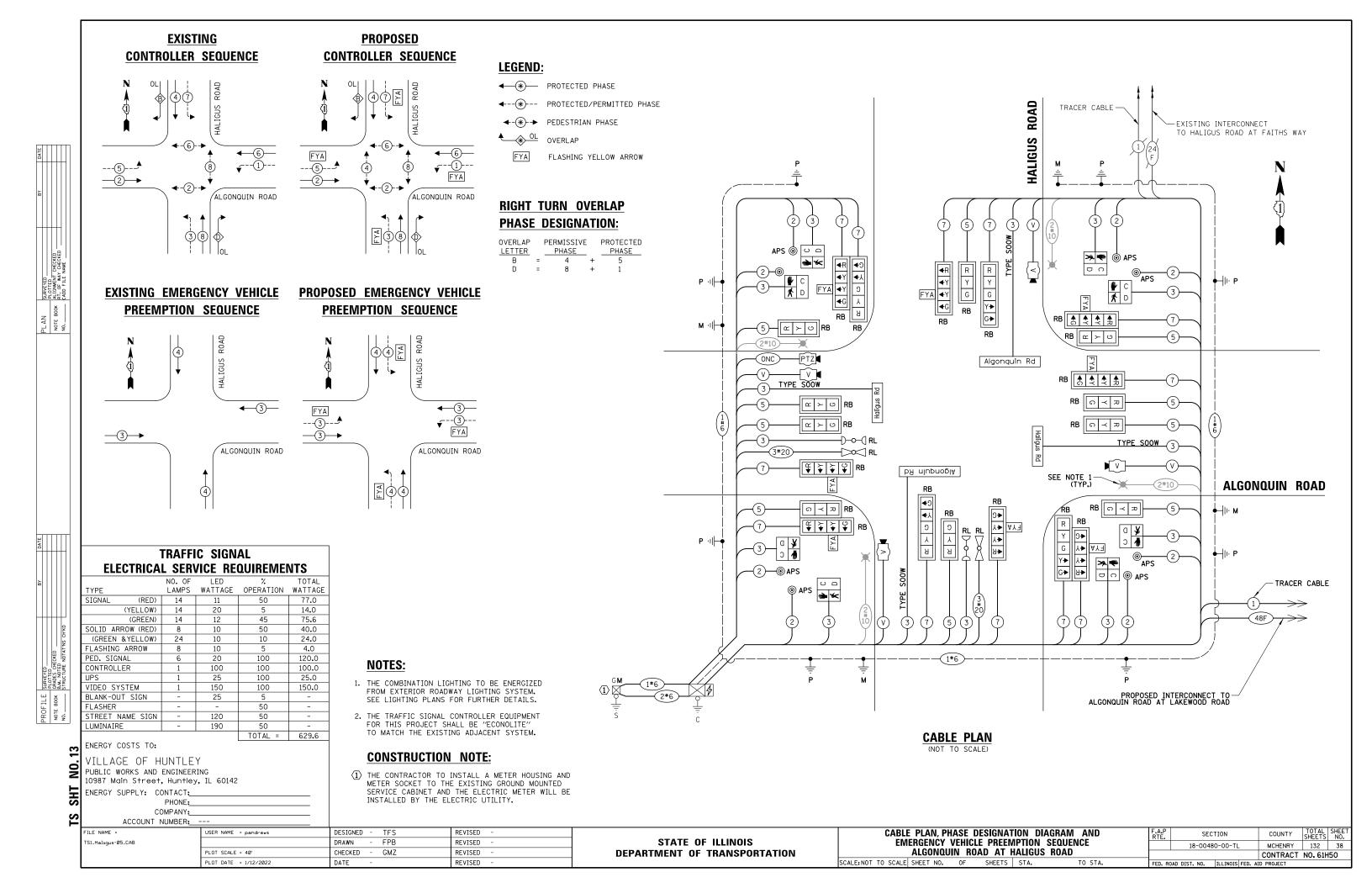
CONTRACT NO. 61H50











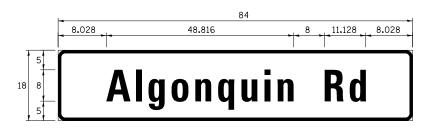
### SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	28
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	32
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	143
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	127
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1471
ELECTRIC CABLE IN CONDUIT. SIGNAL NO. 14 3C	FOOT	2008
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2122.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2634.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 76  ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	2034.3
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C  ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	576
TRAFFIC SIGNAL POST, 10 FT.	EACH	
		3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 55 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	28
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	25
DRILL EXISTING HANDHOLE	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE	EACH	22
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7778
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
MODIFY EXISTING SERVICE INSTALLATION	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	346
** ROD AND CLEAN EXISTING CONDUIT	FOOT	500
LED INTERNALLY ILLUMINATED STREET NAME SIGN		
	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	234
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	830
CONDUIT SPLICE	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1
LOCATING UNDERGROUND UTILITY	EACH	2
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
ETHERNET SWITCH, TYPE 2	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

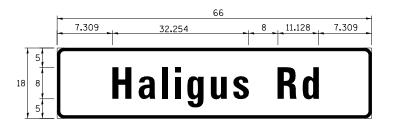
<sup>\*\*</sup>Nominal Quantity to be used as Directed by the Engineer

### LED ILLUMINATED STREET NAME SIGNS

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	10.5	ZZ	2



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	8, 25	ZZ	2

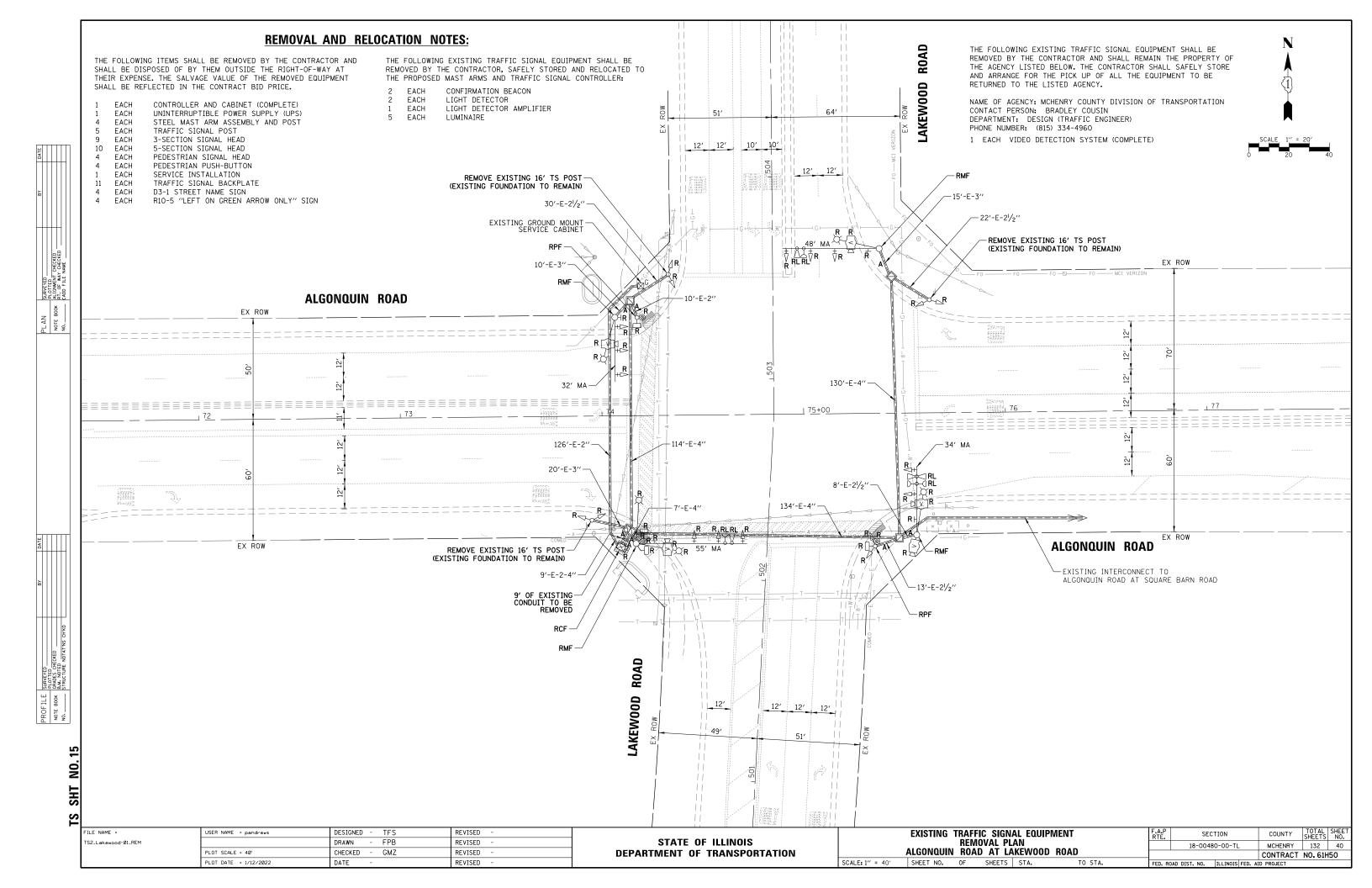
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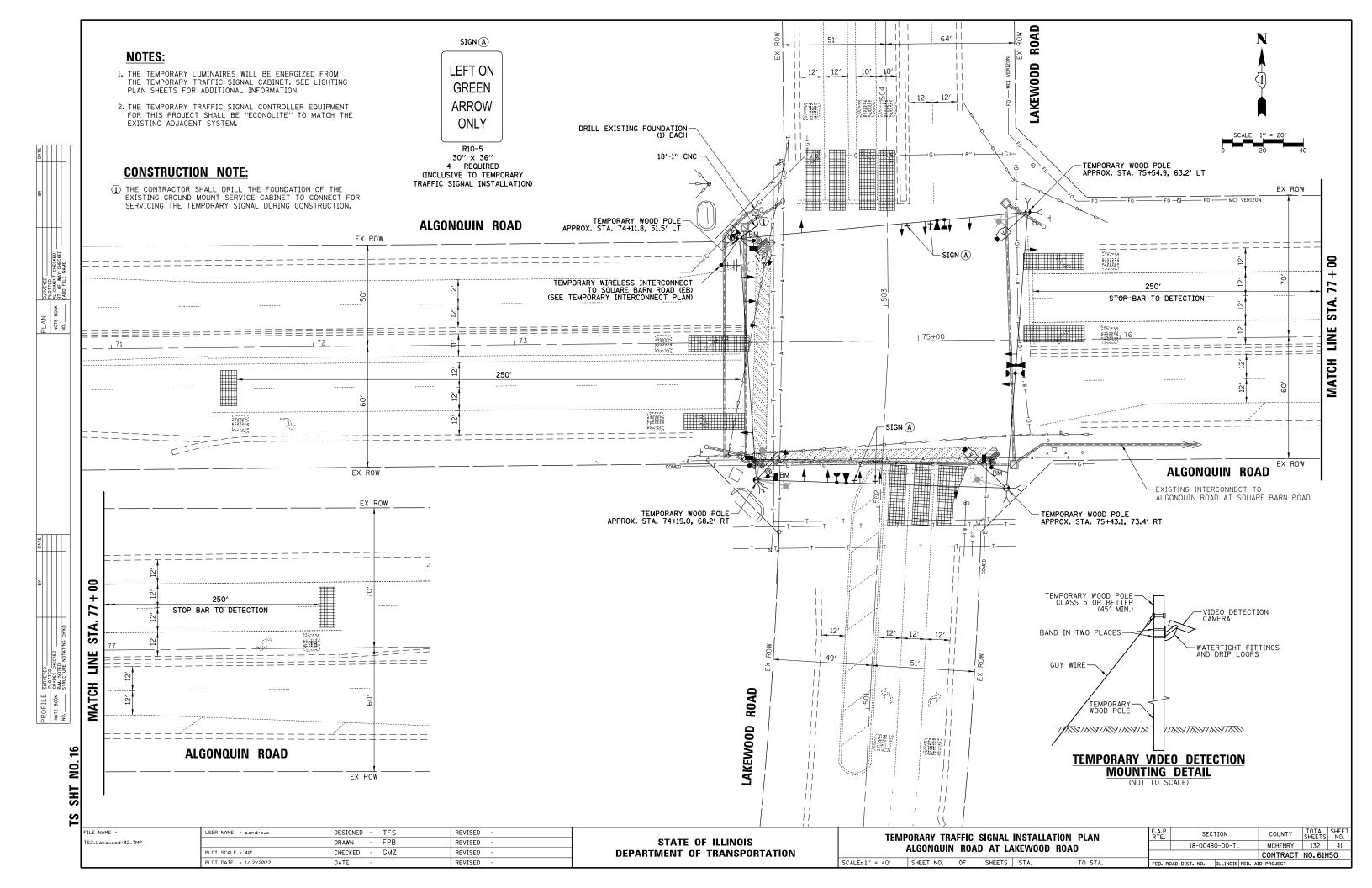
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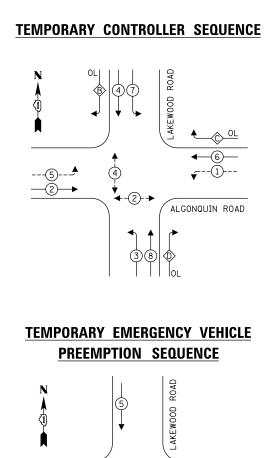
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ILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -
Sl_Haligus-06_STN		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 1/12/2022	DATE -	REVISED -

SCHEDULE OF QUAI			F.A.P RTE.	SECTI	ION	COUNTY	TOTAL SHEETS	SHEET NO.
MAST ARM MOUNTED STREET NAME SIGN				18-00480	-00-TL	MCHENRY	132	39
ALGONQUIN ROAD AT	HALIGUS	KUAD				CONTRACT	NO. 61H	150
SCALE: NOT TO SCALE SHEET NO. OF SHEETS	STA.	TO STA.	FED. RC	DAD DIST. NO. I	LLINOIS FED. AI	D PROJECT		







### **LEGEND:**

**◆ \* PROTECTED PHASE** 

←--(\*)--- PROTECTED/PERMITTED PHASE

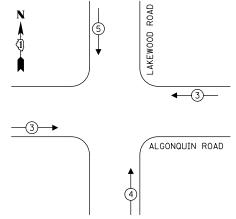
←-\*
PEDESTRIAN PHASE

OVERLAP

### RIGHT TURN OVERLAP **PHASE DESIGNATION:**

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
В	=	4	+	5
С	=	6	+	7
D	=	8	+	1

### **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE



## TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

NO. OF LED % TOTAL

TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	20	10	10	20.0
PED. SIGNAL	4	20	100	80.0
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	-
LUMINAIRE	6	250	50	750.0
			TOTAL =	1267.8

VILLAGE OF HUNTLEY PUBLIC WORKS AND ENGINEERING 10987 Main Street, Huntley, IL 60142

ENERGY SUPPLY: CONTACT: NEW BUSINESS

### PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

## NOTES:

- 1. THE TEMPORARY LUMINAIRES WILL BE ENERGIZED FROM THE TEMPORARY TRAFFIC SIGNAL CABINET, SEE LIGHTING PLAN SHEETS FOR ADDITIONAL INFORMATION.
- 2. THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

### **CONSTRUCTION NOTE:**

 $\stackrel{\textstyle <}{1}$  the contractor shall drill the foundation of the existing ground mount service cabinet to connect for servicing the temporary signal during construction.

# TEMPORARY WIRELESS INTERCONNECT TO SQUARE BARN ROAD (EB) 1) 🛱 G **4**R **4**R **4**Y **4**Y **4**G **4**G Y**≯** G**≯ ALGONQUIN ROAD ★** ○ ≺ ¬ — - w > o ¥ ¥ - R > D ≯ ♀ © ≺ ¬ (5) ROAD LAKEW00D Y G Y→

### **TEMPORARY CABLE PLAN**

(NOT TO SCALE)

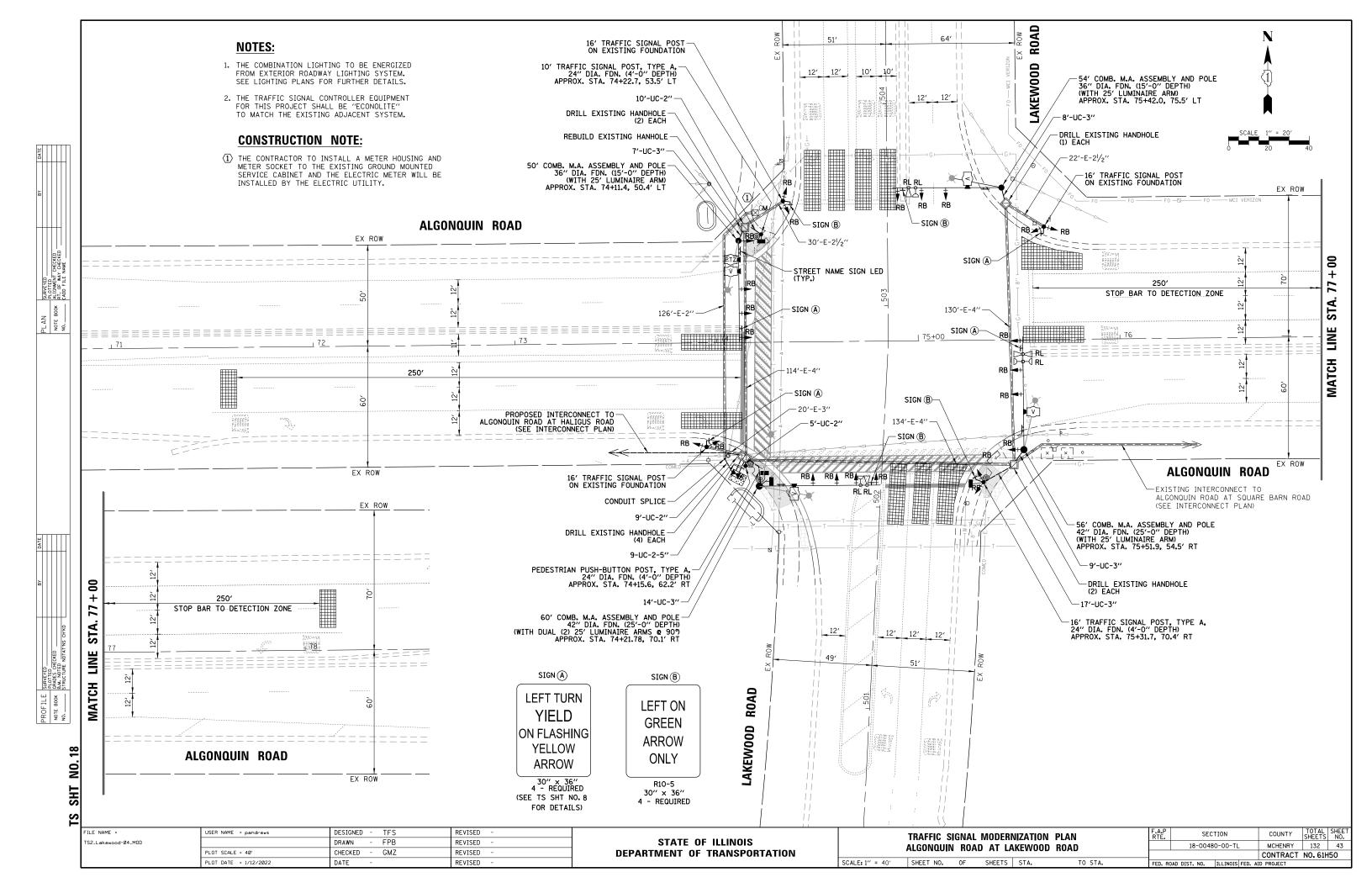
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM SECTION COUNTY AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE 18-00480-00-TL MCHENRY 132 42 ALGONQUIN ROAD AT LAKEWOOD ROAD CONTRACT NO. 61H50 SCALE: NOT TO SCALE SHEET NO. OF SHEETS STA.

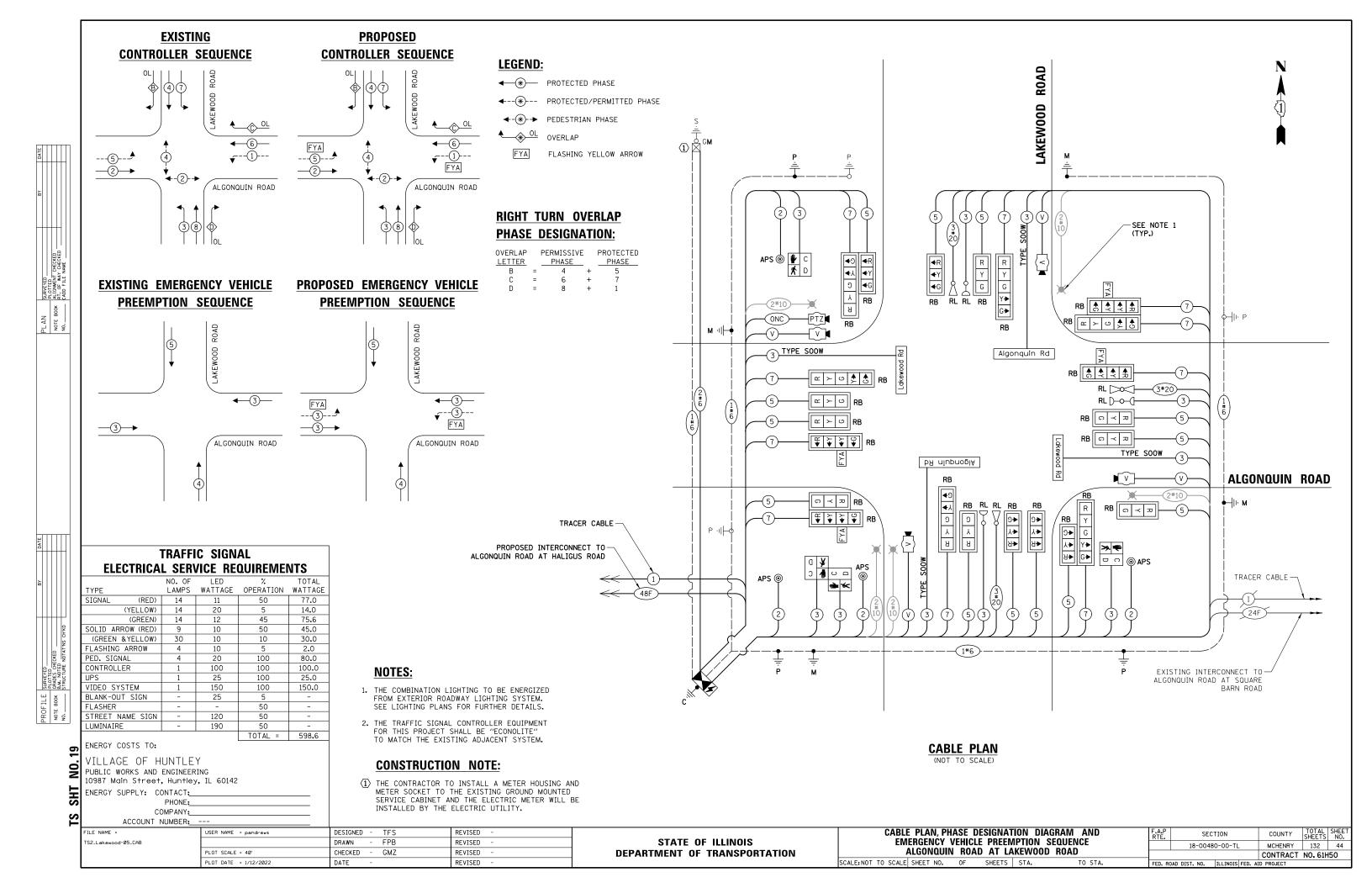
# ENERGY COSTS TO:

TS2\_Lakewood-03\_TCB

DESIGNED - TFS REVISED USER NAME = pandrews DRAWN - FPB REVISED PLOT SCALE = 40' CHECKED GMZ REVISED PLOT DATE = 1/12/2022 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 





### SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	28
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	24
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	38
UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA.	FOOT	18
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	468
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1228
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2578
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2310.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	153
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	944
TRAFFIC SIGNAL POST, 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	50
DRILL EXISTING FOUNDATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
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	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE	EACH	23
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7573.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
MODIFY EXISTING SERVICE INSTALLATION	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	742
** ROD AND CLEAN EXISTING CONDUIT	FOOT	500
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	245
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	841
CONDUIT SPLICE	EACH	10
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
REMOVE EXISTING UNDERGROUND CONDUIT	FOOT	9
LOCATING UNDERGROUND UTILITY	EACH	2
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
ETHERNET SWITCH, TYPE 2	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

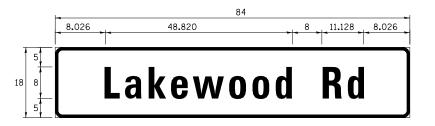
<sup>\*\*</sup>Nominal Quantity to be used as Directed by the Engineer

### LED ILLUMINATED STREET NAME SIGNS

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE

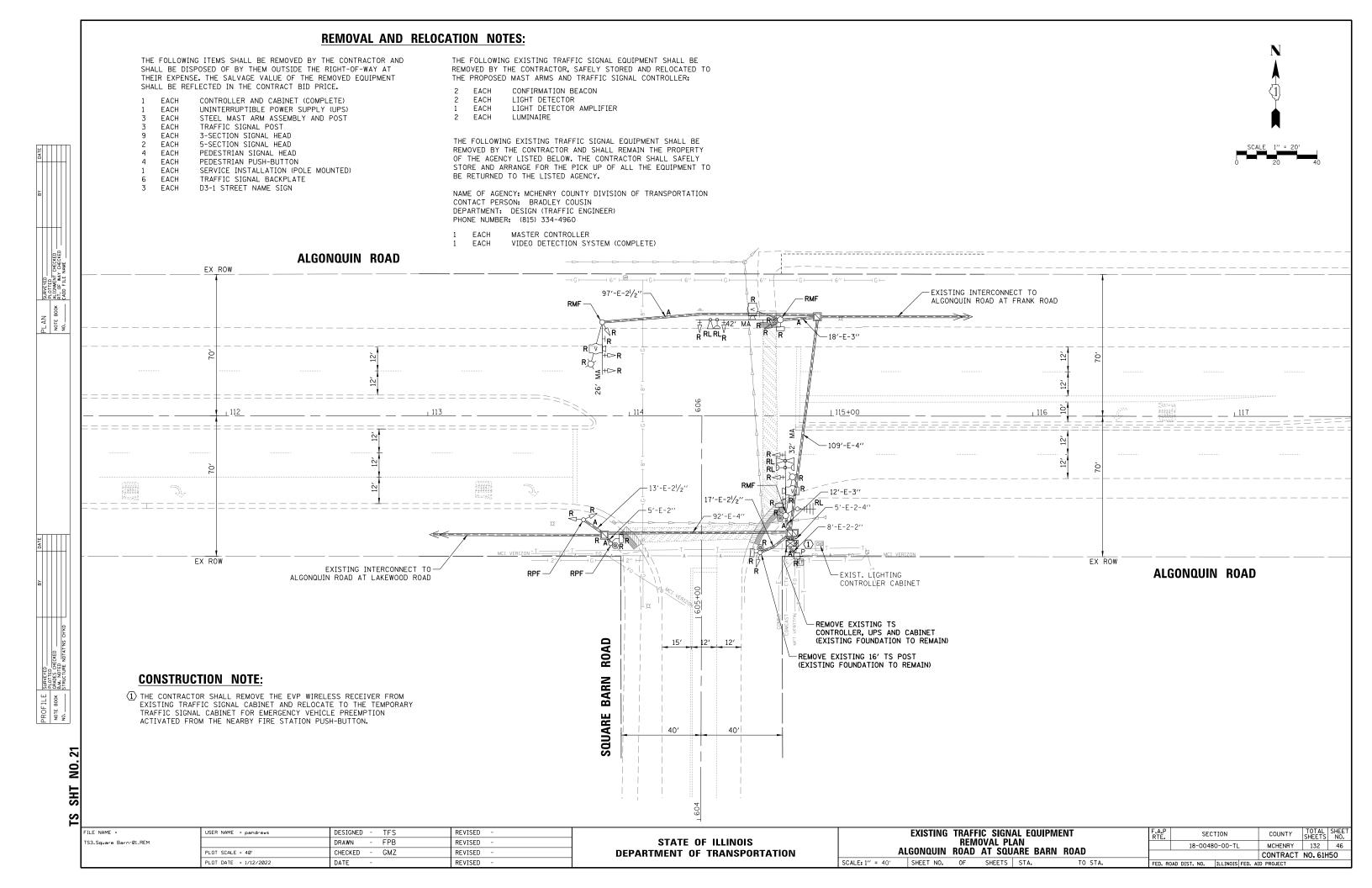


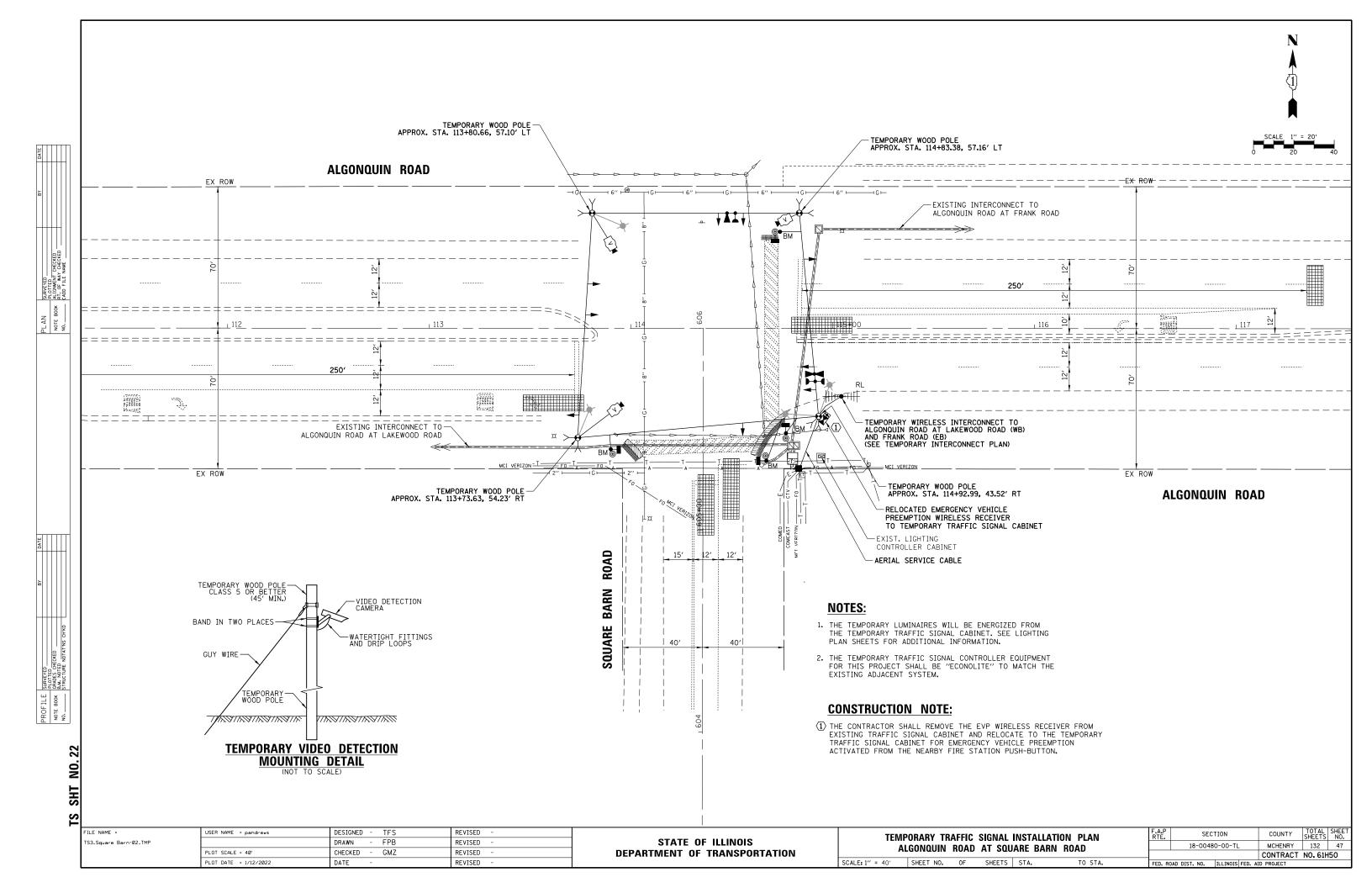
DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	10.5	ZZ	2



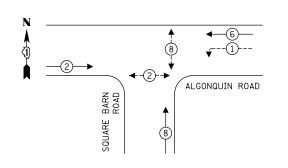
DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	10.5	ZZ	2

LE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -	
2_Lakewood-06_STN		DRAWN - FPB	REVISED -	
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -	
	DLOT DATE - 1/12/2022	DATE	BEVICED	ı





### TEMPORARY CONTROLLER SEQUENCE



### **LEGEND:**

**◆ \* PROTECTED PHASE** ←--\*\*--- PROTECTED/PERMITTED PHASE

◆-(\*)-→ PEDESTRIAN PHASE

OL OVERLAP

-TEMPORARY WIRELESS INTERCONNECT TO ALGONQUIN ROAD AT LAKEWOOD ROAD (WB) AND FRANK ROAD (EB)

## **ALGONQUIN ROAD**



BARN

SQUARE

(5)

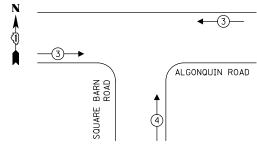
G

**TEMPORARY CABLE PLAN** 

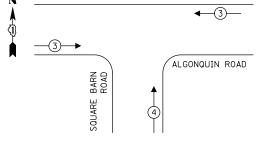
(NOT TO SCALE)

C

## **TEMPORARY EMERGENCY VEHICLE**



# PREEMPTION SEQUENCE



# TRAFFIC SIGNAL

TIPE	LAMPS	WATTAGE	UPERATION	WALLAGE
SIGNAL (RED)	9	11	50	49.5
(YELLOW)	9	20	5	9.0
(GREEN)	9	12	45	48.6
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	4	20	100	80.0
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	-
LUMINAIRE	4	250	50	500.0
			TOTAL =	966.1

ENERGY COSTS TO:

VILLAGE OF ALGONQUIN

PUBLIC WORKS

110 Meyer Drive, Algonquin, IL 60102

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

## **ELECTRICAL SERVICE REQUIREMENTS**

THE CONTRACTOR SHALL REMOVE THE EVP WIRELESS RECEIVER FROM EXISTING TRAFFIC SIGNAL CABINET AND RELOCATE TO THE TEMPORARY TRAFFIC SIGNAL CABINET FOR EMERGENCY VEHICLE PREEMPTION

### NOTES:

- 1. THE TEMPORARY LUMINAIRES WILL BE ENERGIZED FROM THE TEMPORARY TRAFFIC SIGNAL CABINET. SEE LIGHTING PLAN SHEETS FOR ADDITIONAL INFORMATION.
- 2. THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

### **CONSTRUCTION NOTE:**

# ACTIVATED FROM THE NEARBY FIRE STATION PUSH-BUTTON.

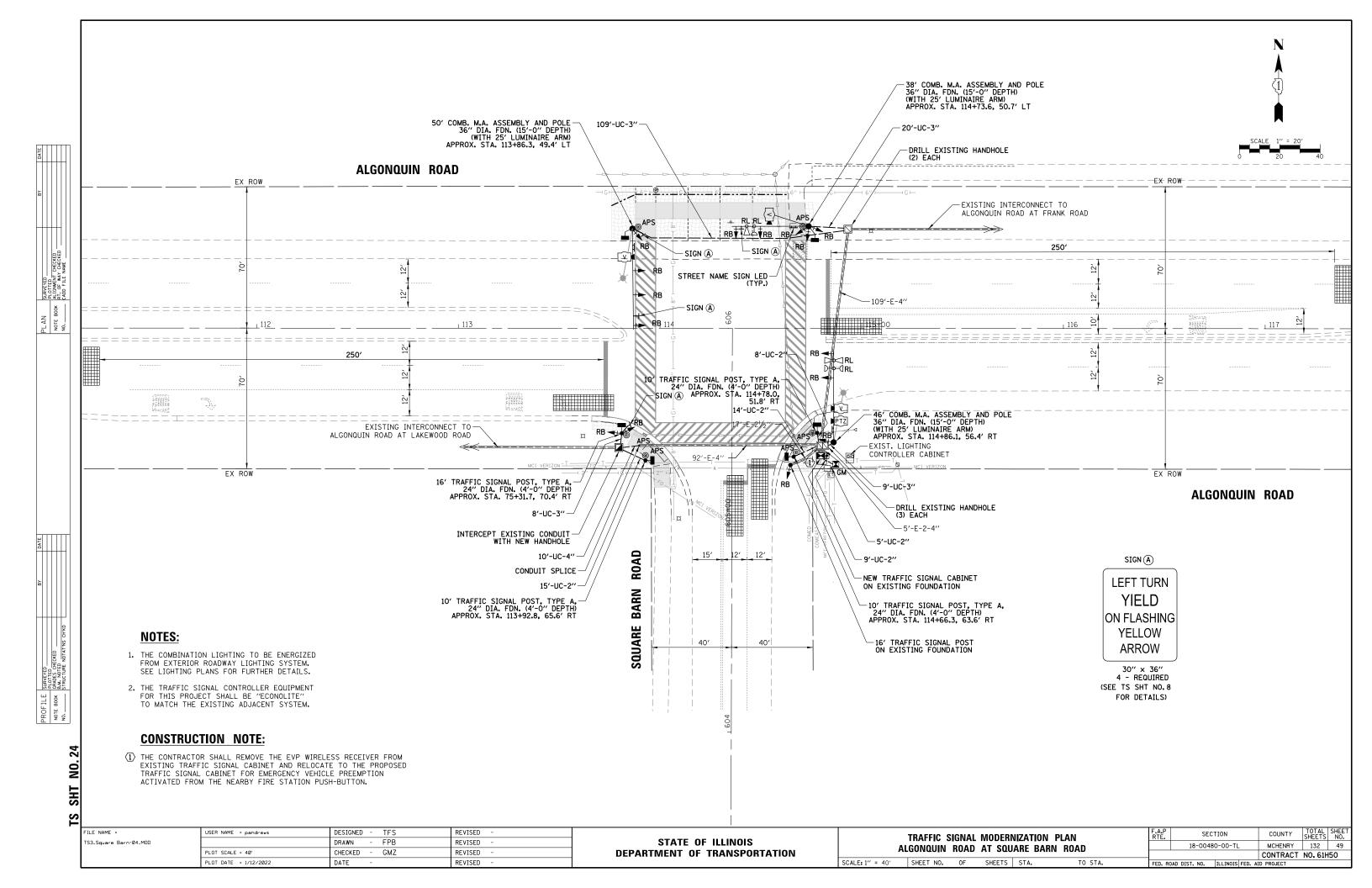
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM	F.A.P	
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE	1112.	_
ALGONQUIN ROAD AT SQUARE BARN ROAD		_
SCALE-NOT TO SCALE SHEET NO. OF SHEETS STA. TO STA	550 00	-

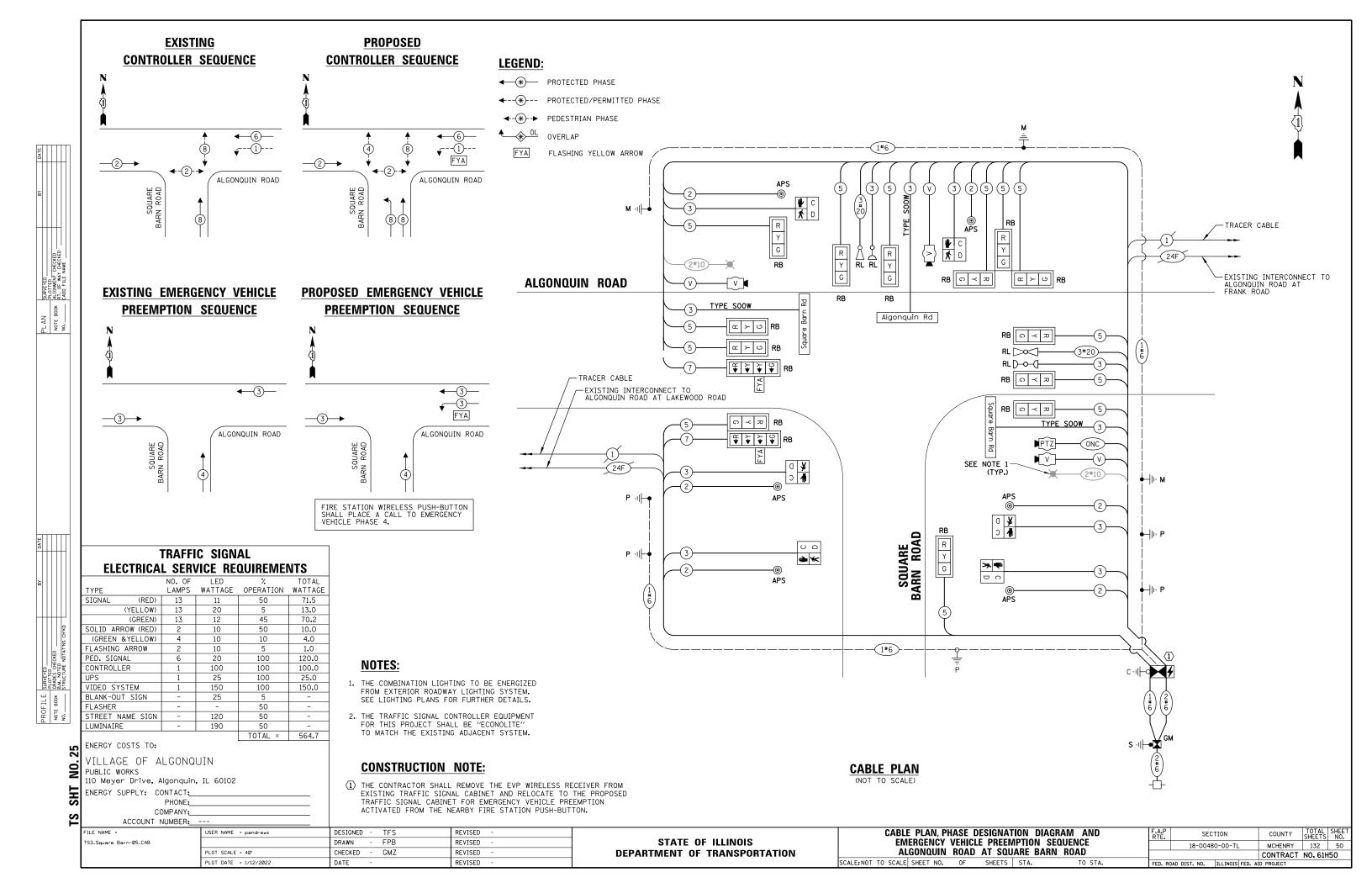
SECTION COUNTY 18-00480-00-TL MCHENRY 132 48 CONTRACT NO. 61H50

TS3\_Square Barn-03\_TCB

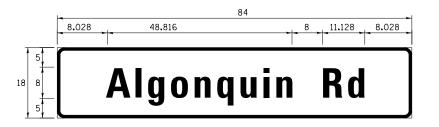
DESIGNED - TFS REVISED USER NAME = pandrews DRAWN - FPB REVISED PLOT SCALE = 40' CHECKED GMZ REVISED PLOT DATE = 1/12/2022 REVISED DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

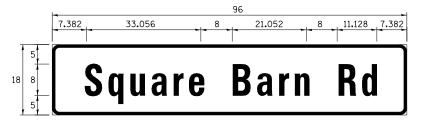




ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	10.5	ZZ	1



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	12.0	ZZ	2

### SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	28
SIGN PANEL - TYPE 1	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	73
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	149
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	826
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1171.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2229.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	480
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	52.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	678.5
TRAFFIC SIGNAL POST, 10 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
DRILL EXISTING FOUNDATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE	EACH	14
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING SERVICE INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3924.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	311.5
** ROD AND CLEAN EXISTING CONDUIT	FOOT	300
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	3
OUTDOOR RATED NETWORK CABLE	FOOT	101.5
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	538.5
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
CONDUIT SPLICE	EACH	6
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
LOCATING UNDERGROUND UTILITY	EACH	2
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
ETHERNET SWITCH, TYPE 2	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

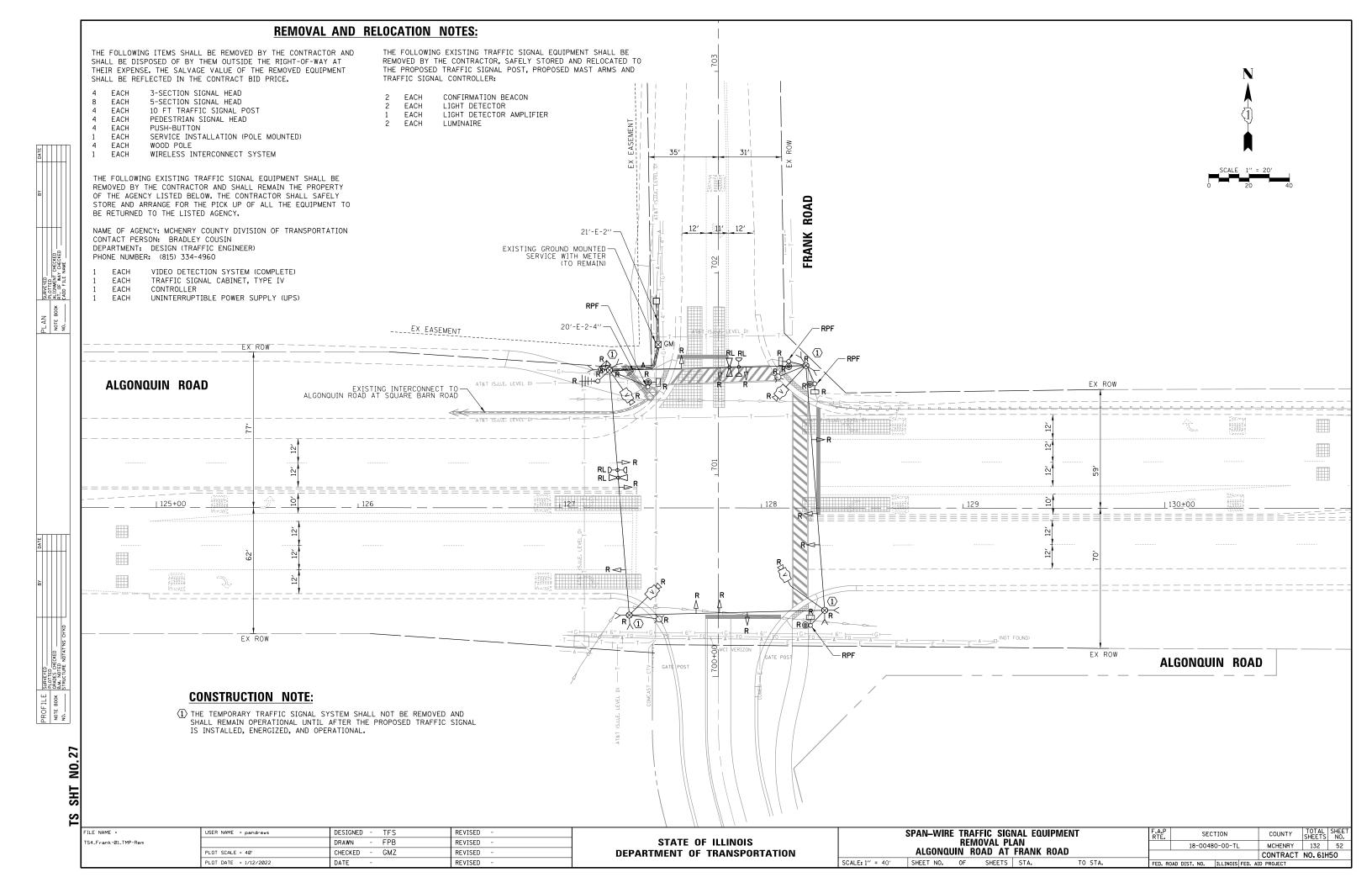
<sup>\*\*</sup>Nominal Quantity to be used as Directed by the Engineer

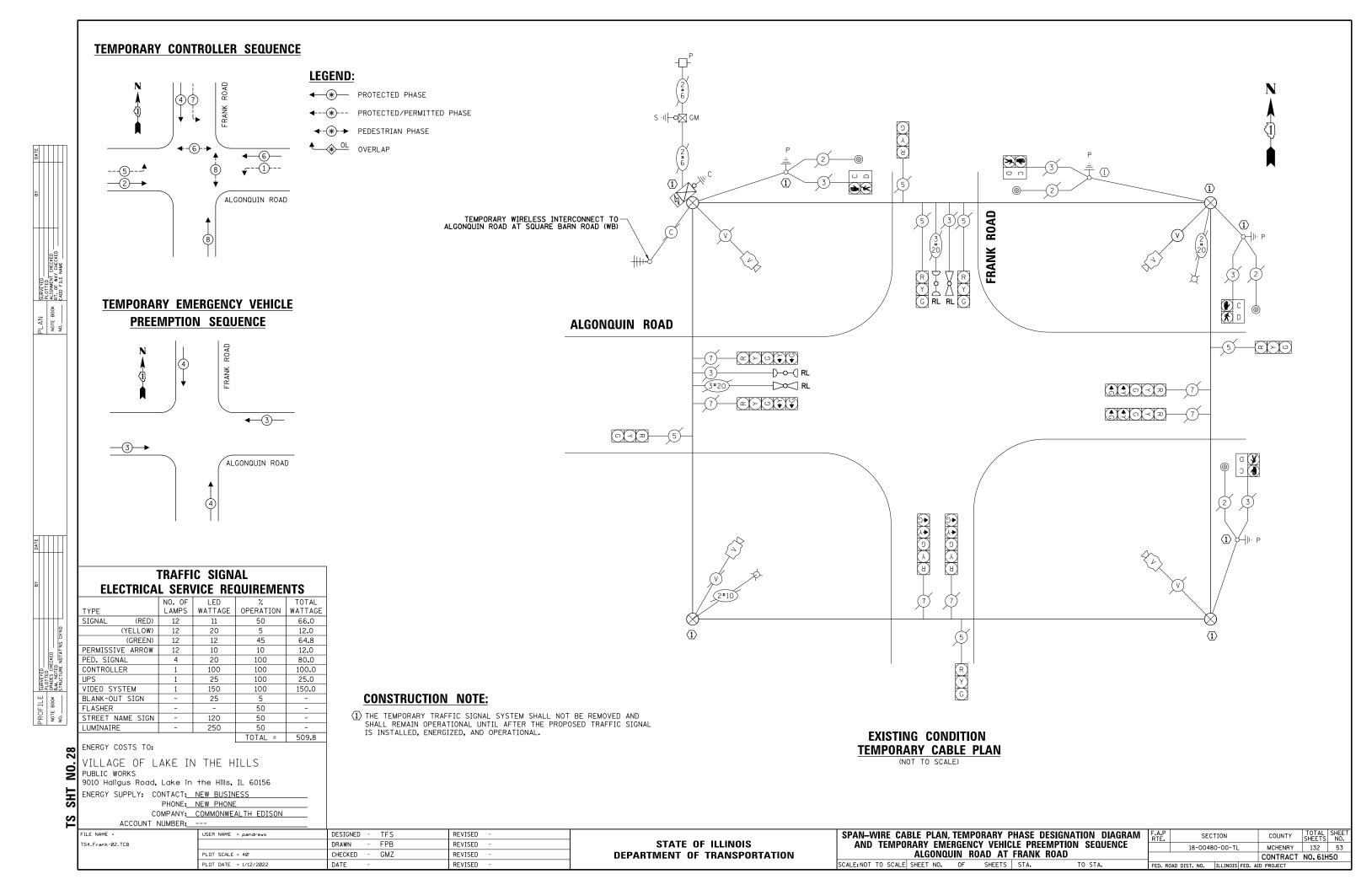
S SHT NO. 26

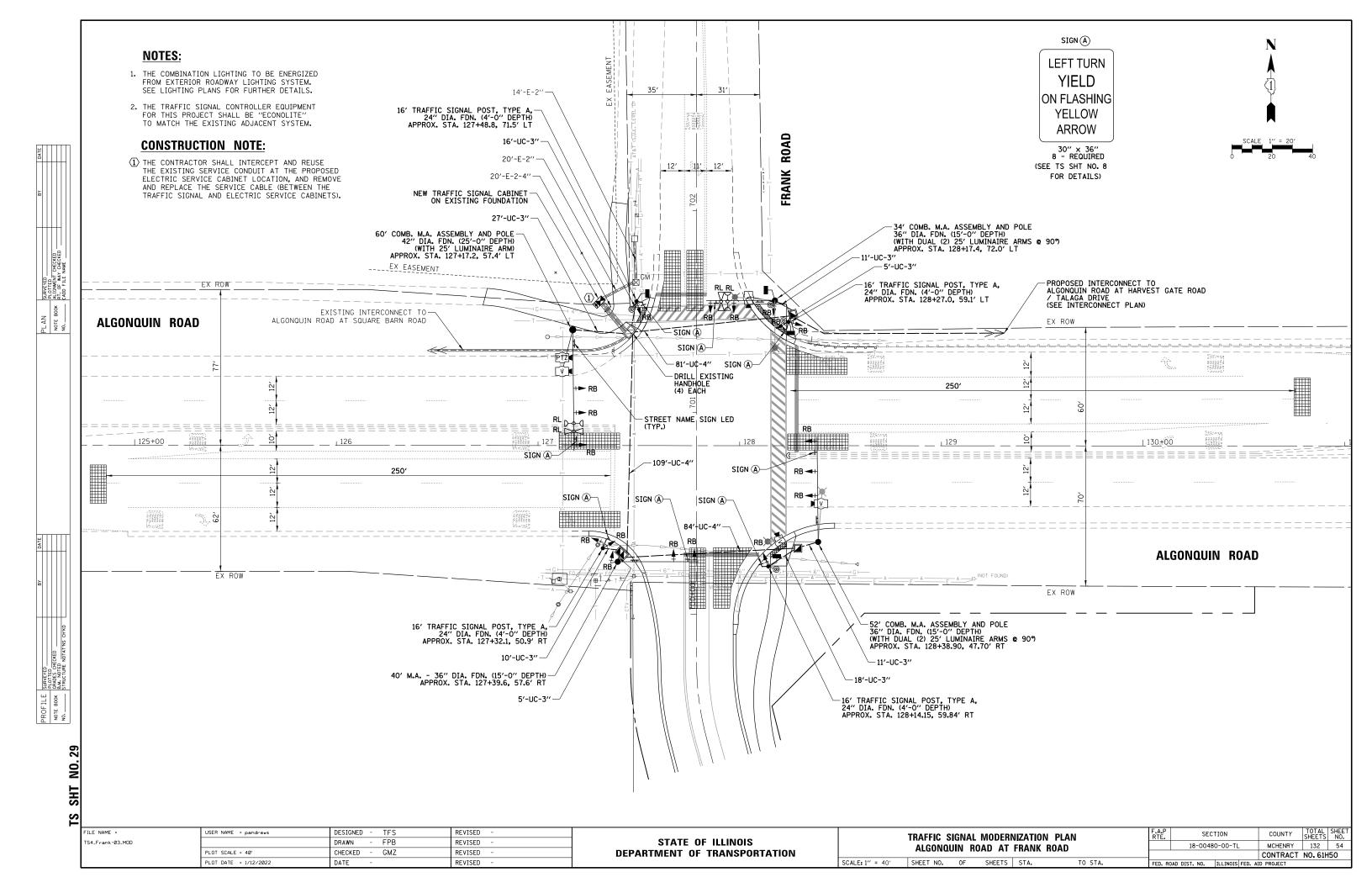
FILE NAME = TS3.Square Barn-06.STN

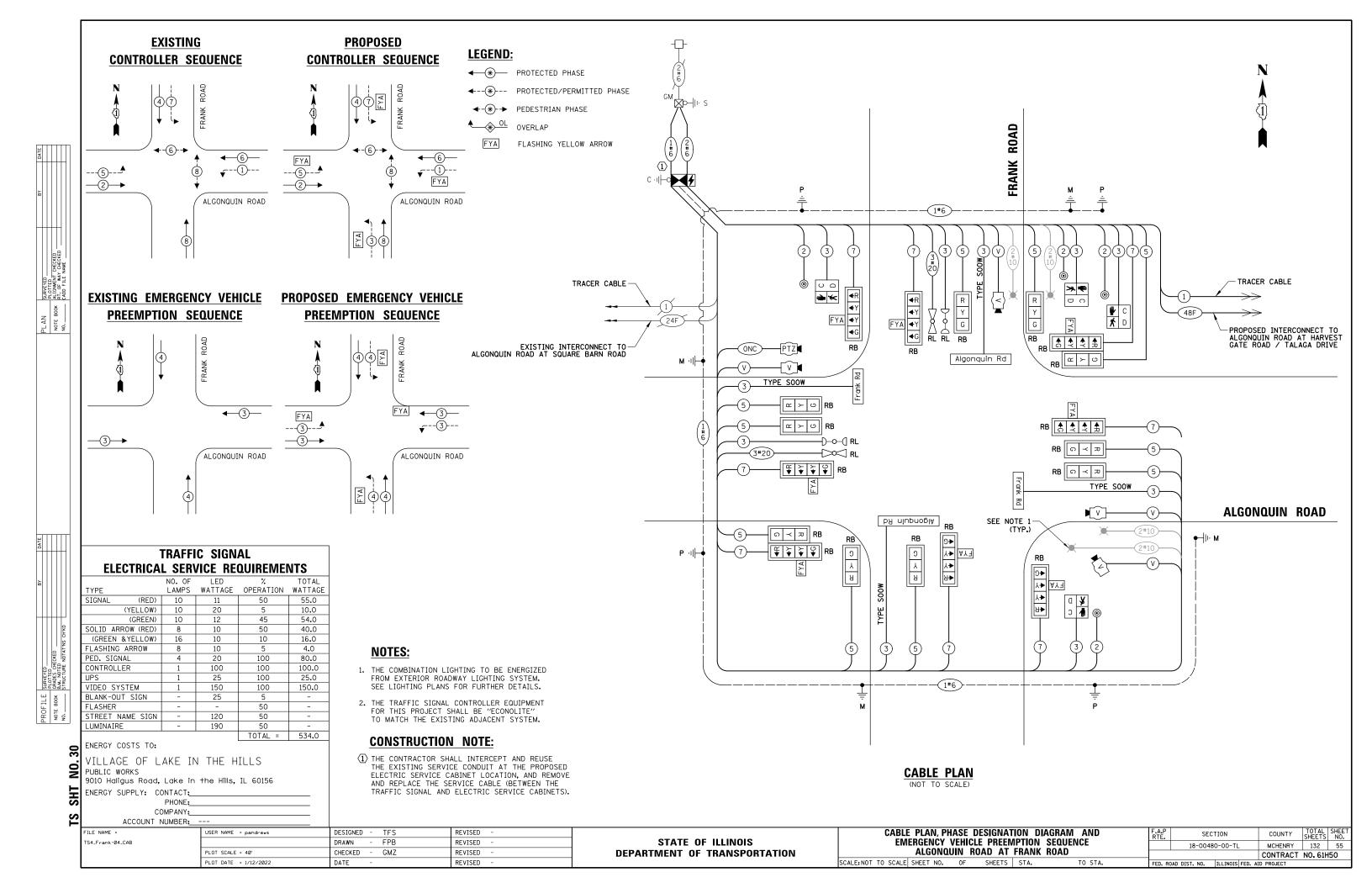
	USER NAME = pandrews	DESIGNED - TFS	REVISED -
'N		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 1/12/2022	DATE -	REVISED -

SCHEDULE OF QUANTITIES AND						F.A.P RTE.	SEC.	TION	COUNTY	TOTAL SHEETS	SHEET NO.
MAST ARM MOUNTED STREET NAME SIGN					18-0048	0-00-TL	MCHENRY	132	51		
ALGONQUIN ROAD AT SQUARE BARN ROAD								CONTRACT	NO. 61H	150	
SCALE: NOT TO SCALE	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO.	ILLINOIS FED. AI	D PROJECT		





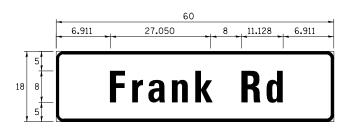




ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)		REQUIRED
D	10.5	ZZ	2



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

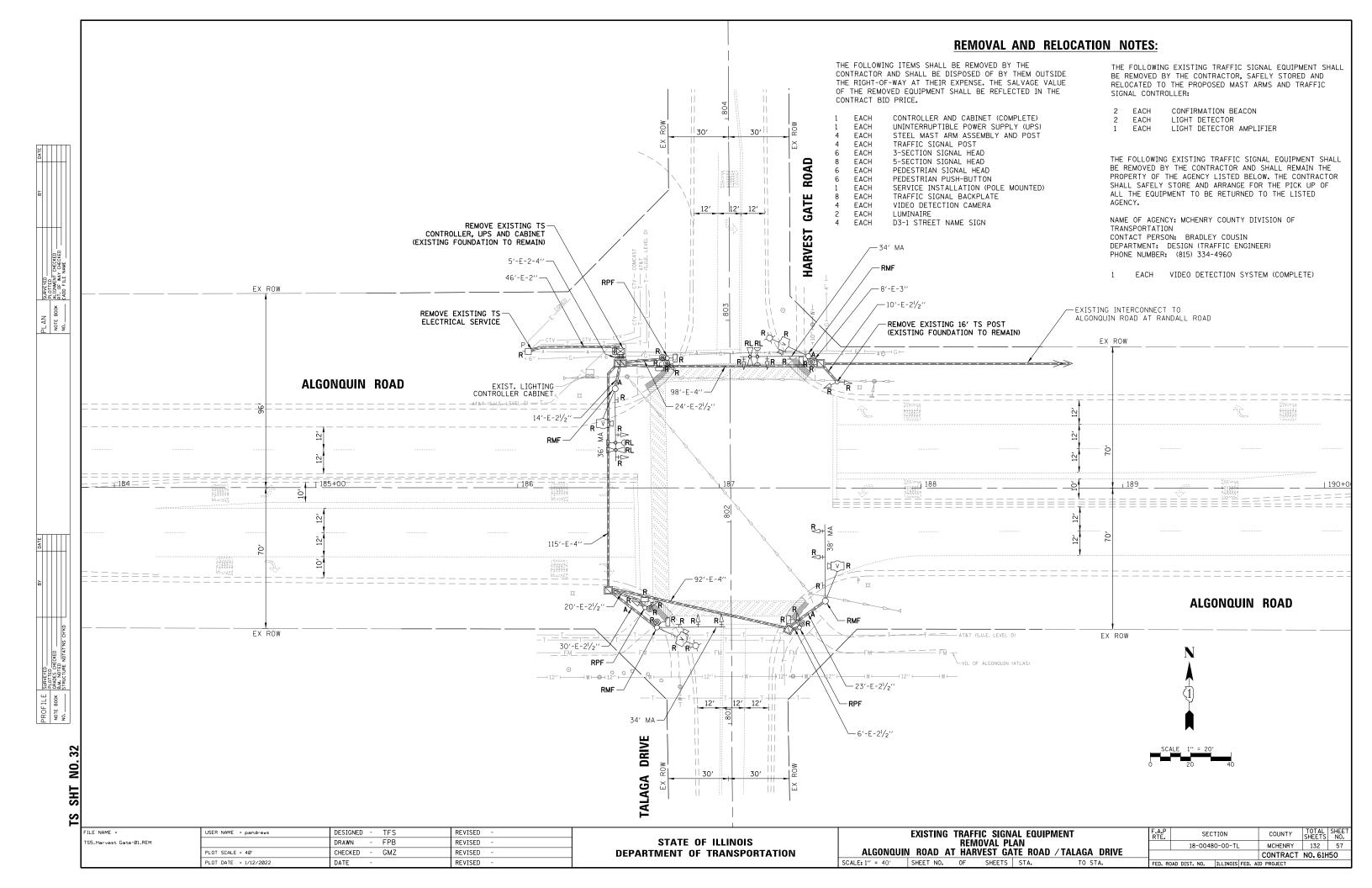
### **SCHEDULE OF QUANTITIES**

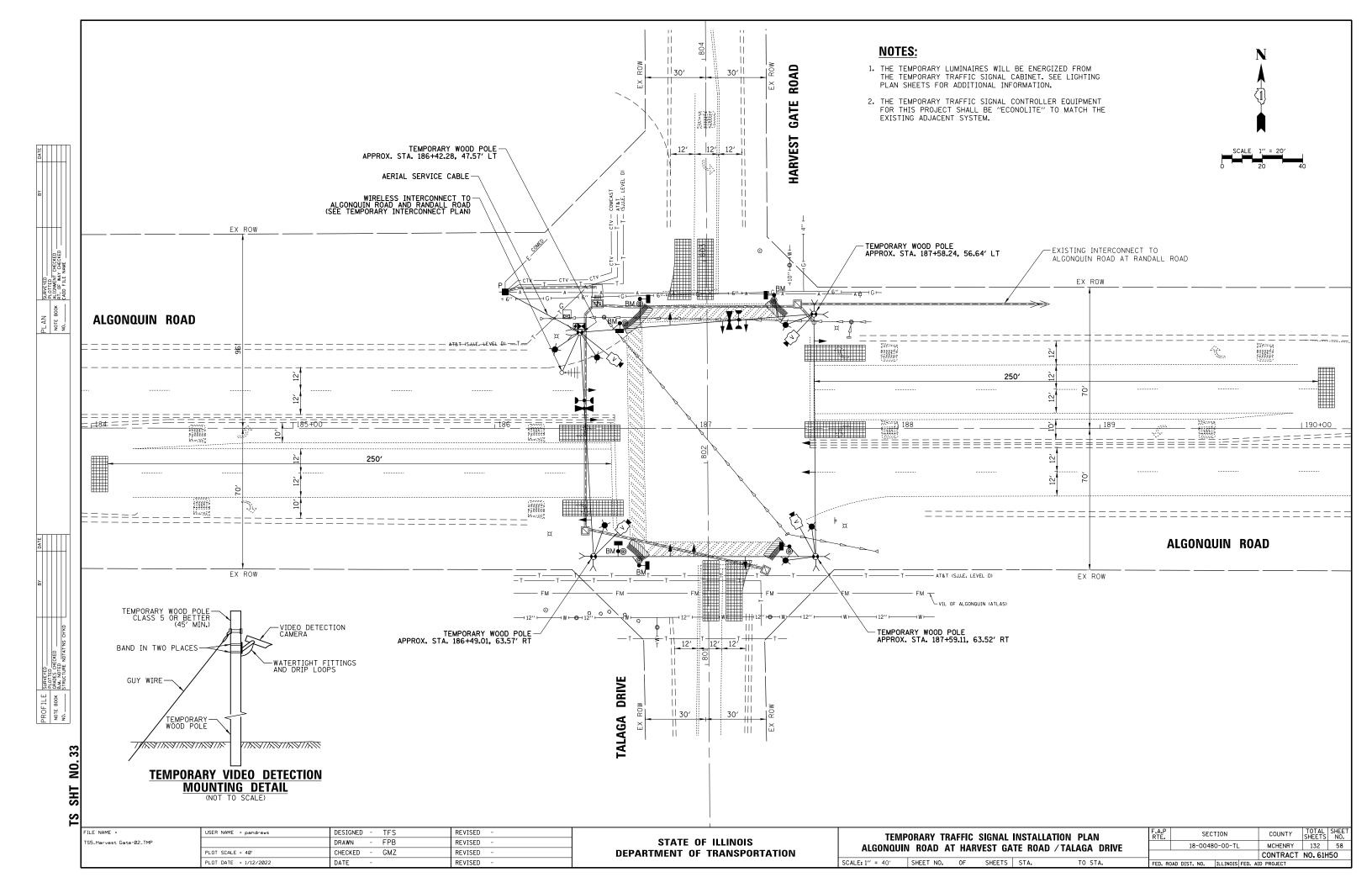
ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	28
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	101
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	264
HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	626.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	931
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1908.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1546.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	29
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	678.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	25
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE	EACH	18
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	320
** ROD AND CLEAN EXISTING CONDUIT	FOOT	500
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	114
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	749.5
CONDUIT SPLICE	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
LOCATING UNDERGROUND UTILITY	EACH	2
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
ETHERNET SWITCH, TYPE 2	EACH	7 77 4
TEMPORARY INFORMATION SIGNING	SQ FT	77.1

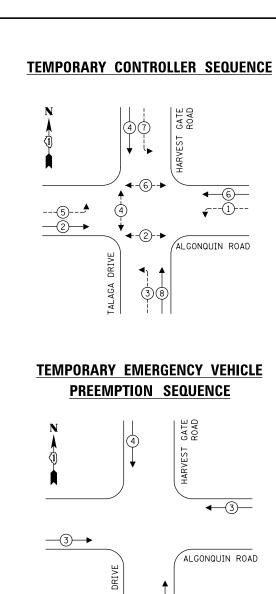
<sup>\*\*</sup>Nominal Quantity to be used as Directed by the Engineer

FILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -
TS4_Frank-05_STN		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 1/12/2022	DATE -	REVISED -

SCHEDULE OF QU	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
MAST ARM MOUNTED		18-00480-00-TL	MCHENRY	132	56		
ALGONQUIN ROAD			CONTRACT	NO. 61H	150		
SCALE: NOT TO SCALE SHEET NO. OF SHEE	TS STA.	TO STA.	FED. RC	DAD DIST. NO.   ILLINOIS FED. A	D PROJECT		







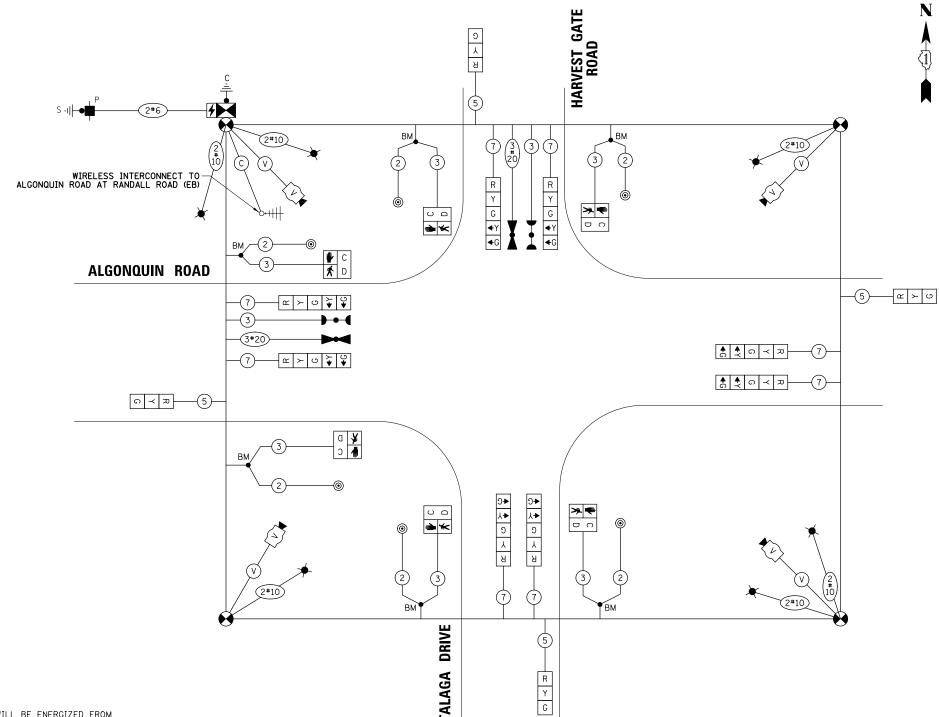
### LEGEND:

**◆ \* PROTECTED PHASE** 

←--\*\*--- PROTECTED/PERMITTED PHASE

←-(\*)- → PEDESTRIAN PHASE

OVERLAP OVERLAP



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS** NO. OF LED % TOTAL

	1101		/•	101/12
TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	6	20	100	120.0
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	-
LUMINAIRE	6	250.0	50	750.0
			TOTAL =	1303.8

ENERGY COSTS TO:

VILLAGE OF LAKE IN THE HILLS

ACCOUNT NUMBER:

PUBLIC WORKS 9010 Haligus Road, Lake in the Hills, IL 60156 ENERGY SUPPLY: CONTACT: NEW BUSINESS PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON

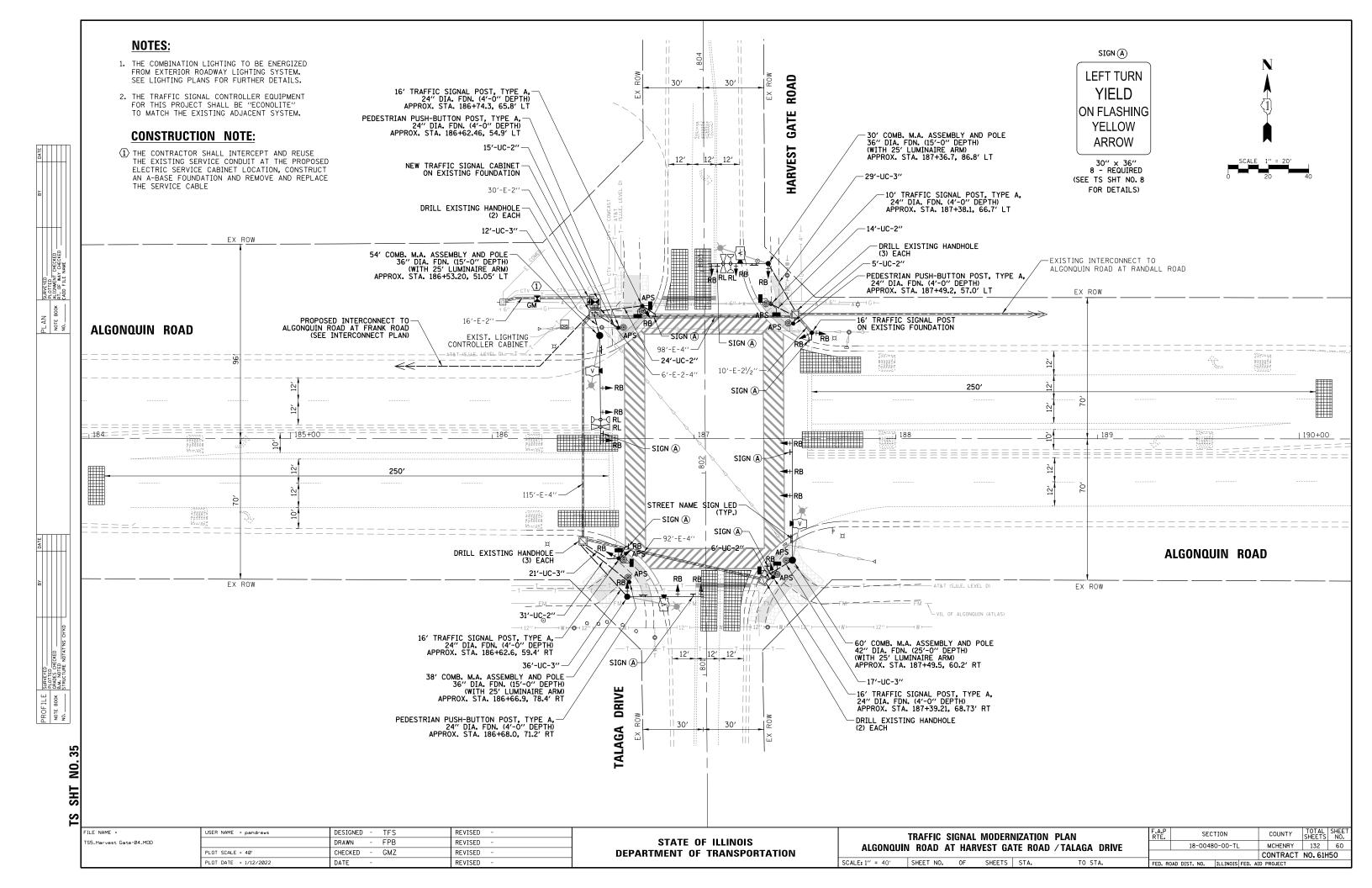
### NOTES:

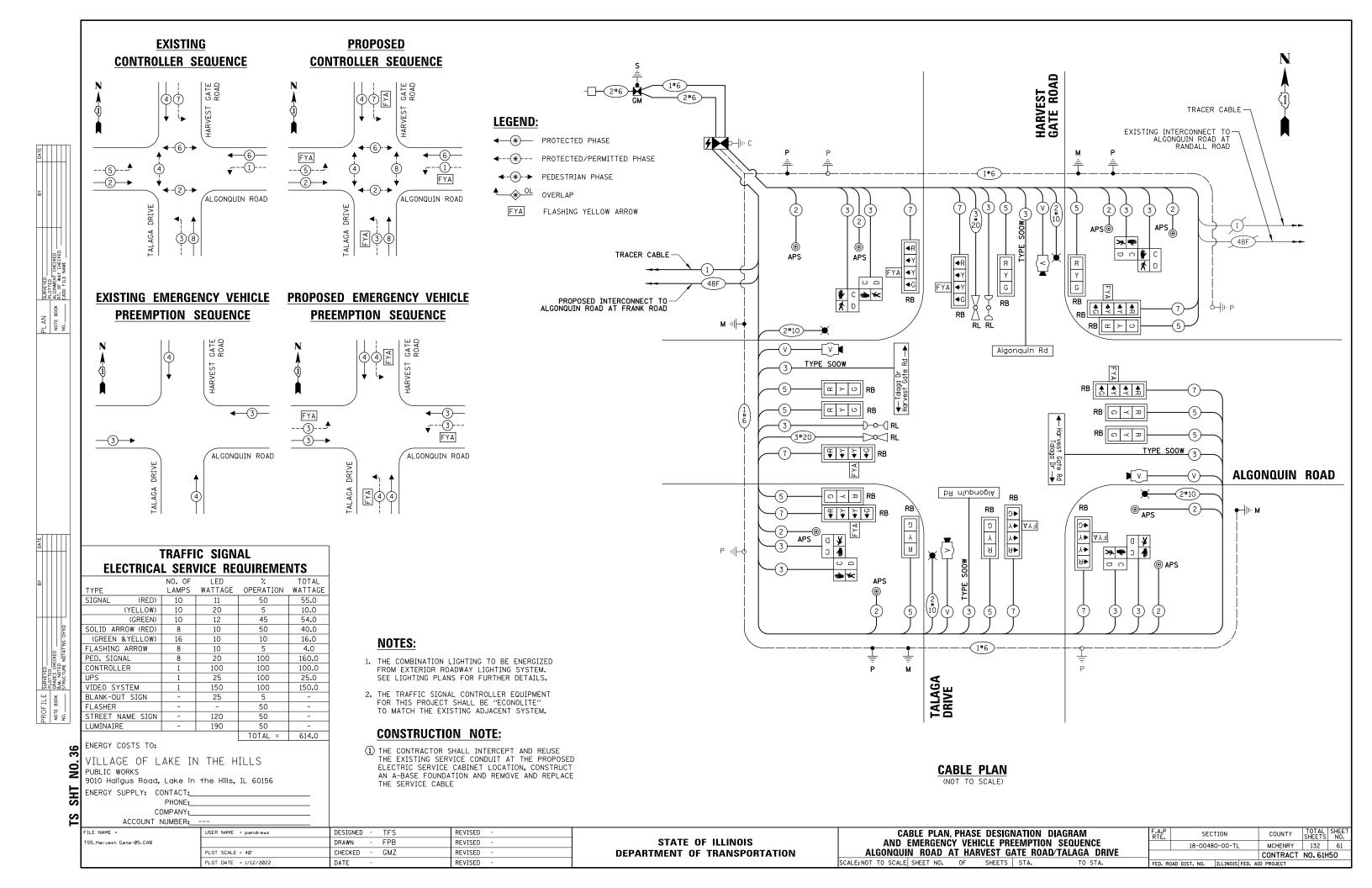
- 1. THE TEMPORARY LUMINAIRES WILL BE ENERGIZED FROM THE TEMPORARY TRAFFIC SIGNAL CABINET, SEE LIGHTING PLAN SHEETS FOR ADDITIONAL INFORMATION.
- 2. THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

### **TEMPORARY CABLE PLAN**

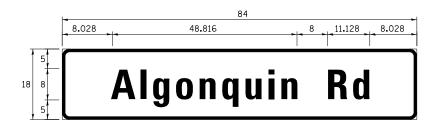
(NOT TO SCALE)

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM DESIGNED - TFS REVISED USER NAME = pandrews SECTION COUNTY AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE STATE OF ILLINOIS DRAWN - FPB TS5\_Harvest Gate-03\_TCB REVISED 18-00480-00-TL MCHENRY 132 59 PLOT SCALE = 40' CHECKED - GMZ REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61H50 PLOT DATE = 1/12/2022 REVISED SCALE: NOT TO SCALE SHEET NO. OF SHEETS STA. TO STA. DATE

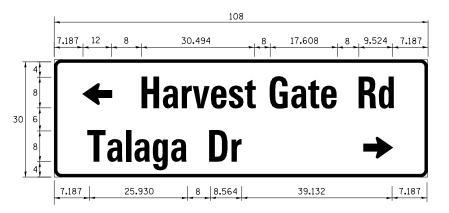




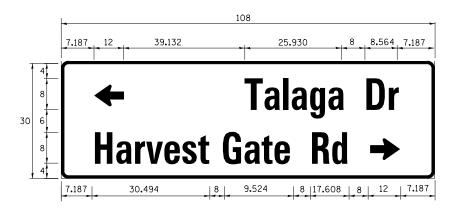
ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	10.5	ZZ	2



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
С	22.5	ZZ	1



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
С	22.5	ZZ	1

### **SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	28
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	99.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	145
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1294
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1763
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2184
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1686
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	91
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	839
TRAFFIC SIGNAL POST, 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	24
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	25
DRILL EXSTING HANDHOLE	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE	EACH	18
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING SERVICE INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6181
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	432
** ROD AND CLEAN EXISTING CONDUIT	FOOT	300
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	771
INTERCEPT EXISTING CONDUIT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	3
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
LOCATING UNDERGROUND UTILITY	EACH	2
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
ETHERNET SWITCH, TYPE 2	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
		•

<sup>\*\*</sup>Nominal Quantity to be used as Directed by the Engineer

TO OIL TIES

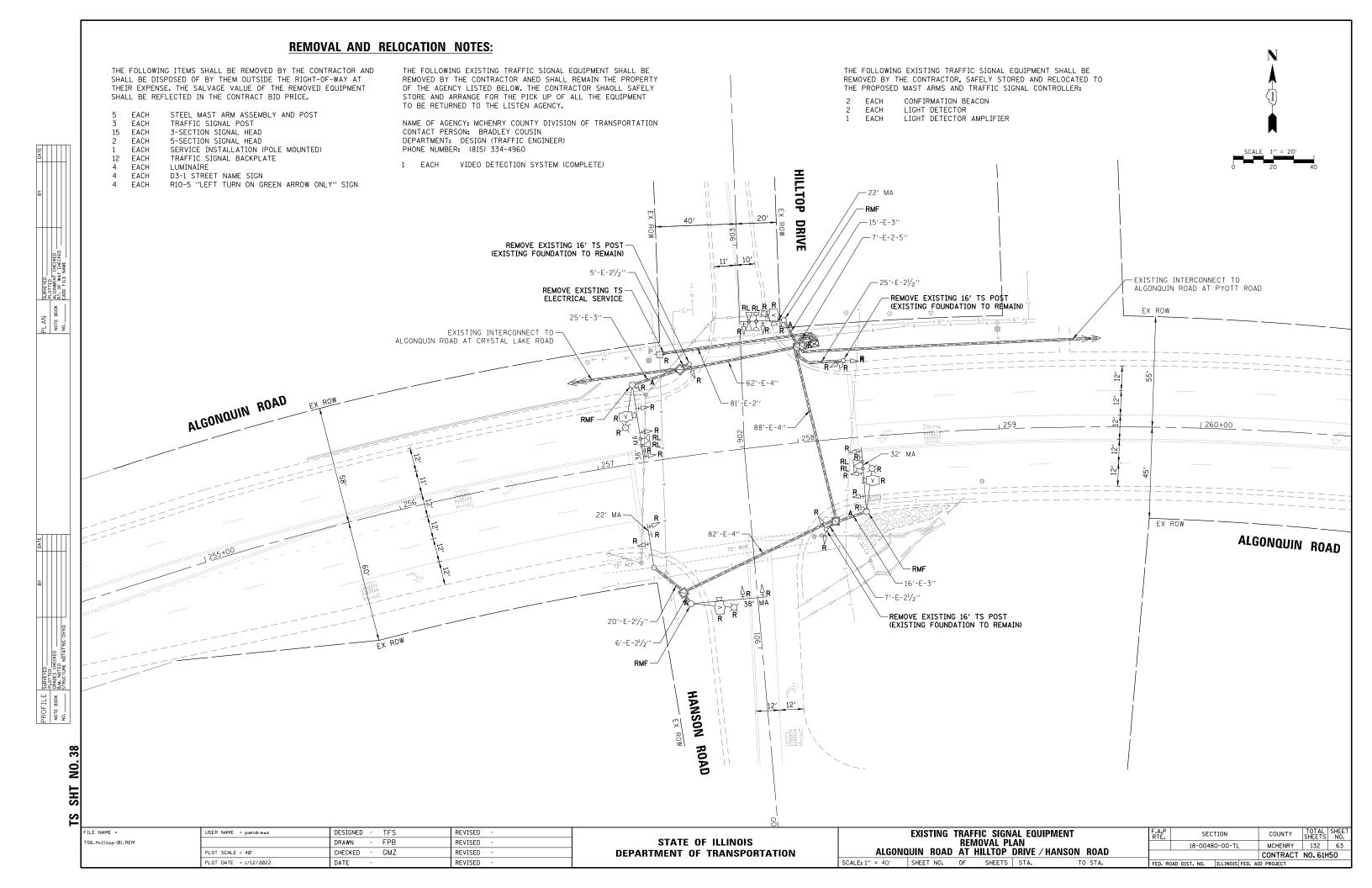
TS5\_Harvest Gate-86\_STN

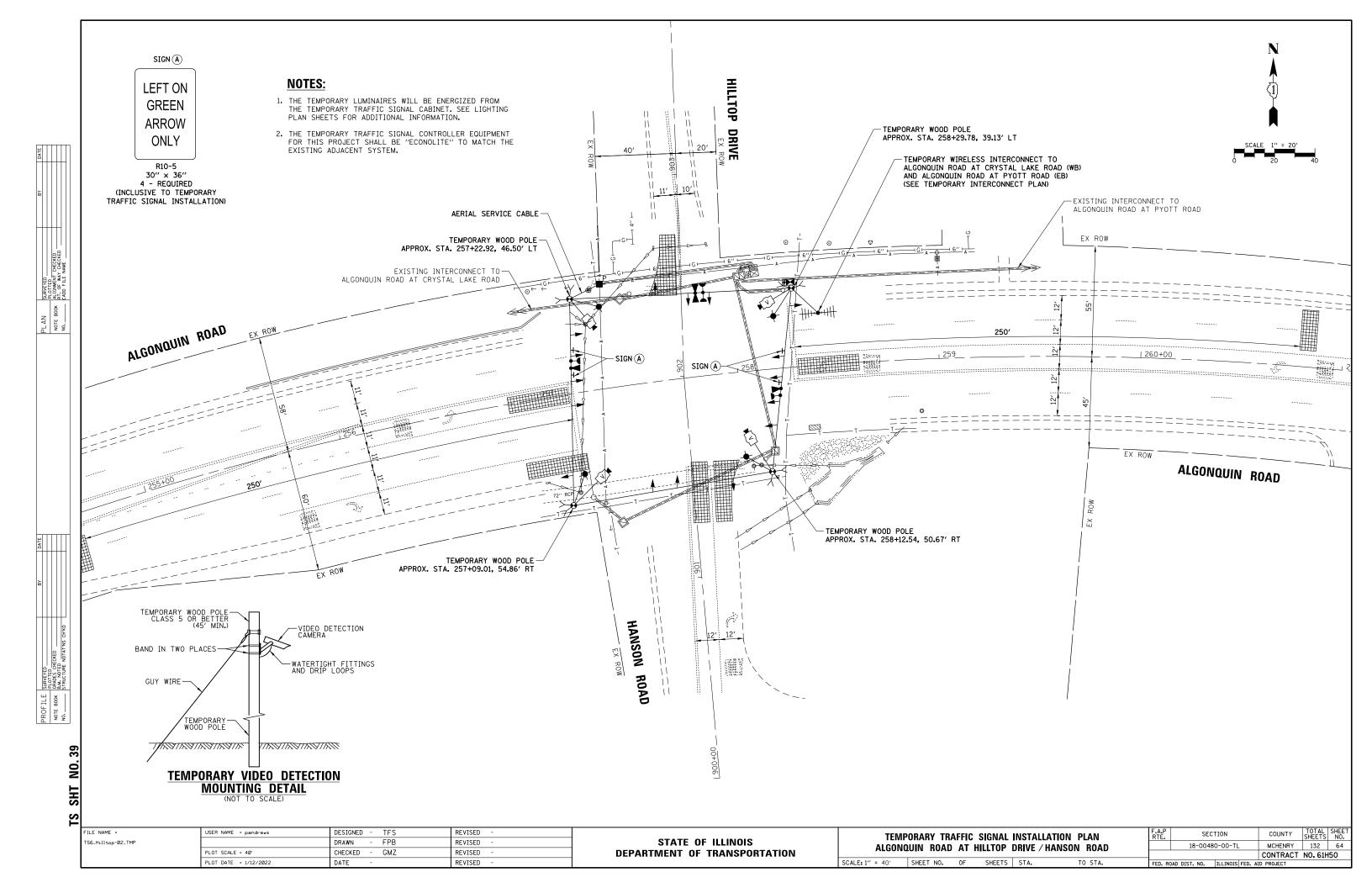
PLOT SCALE

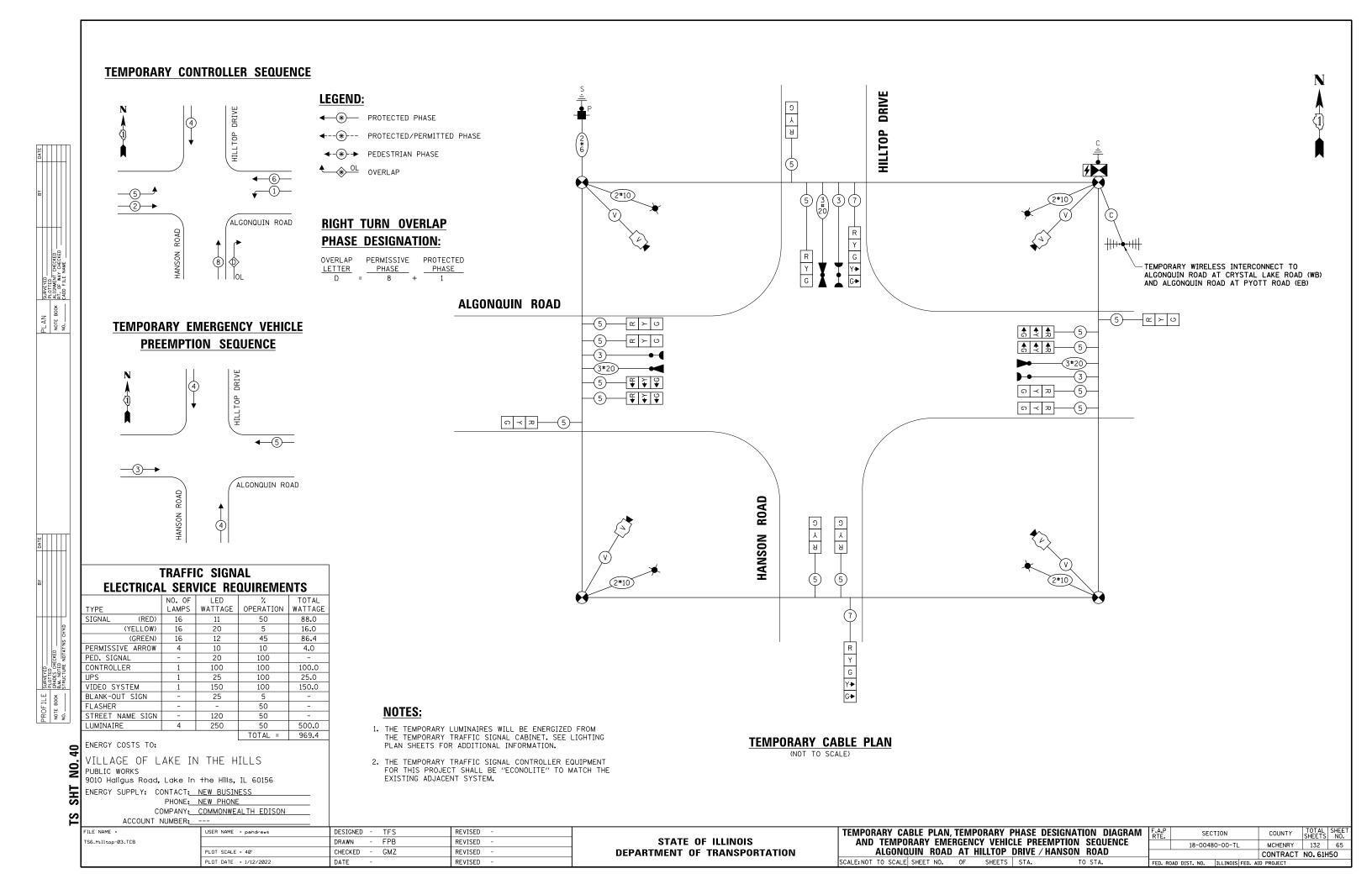
USER NAME = pandrews	DESIGNED -	-	TFS	REVISED	-
	DRAWN -	-	FPB	REVISED	-
PLOT SCALE = 40'	CHECKED -	-	GMZ	REVISED	-
PLOT DATE = 1/12/2022	DATE -	-		REVISED	-

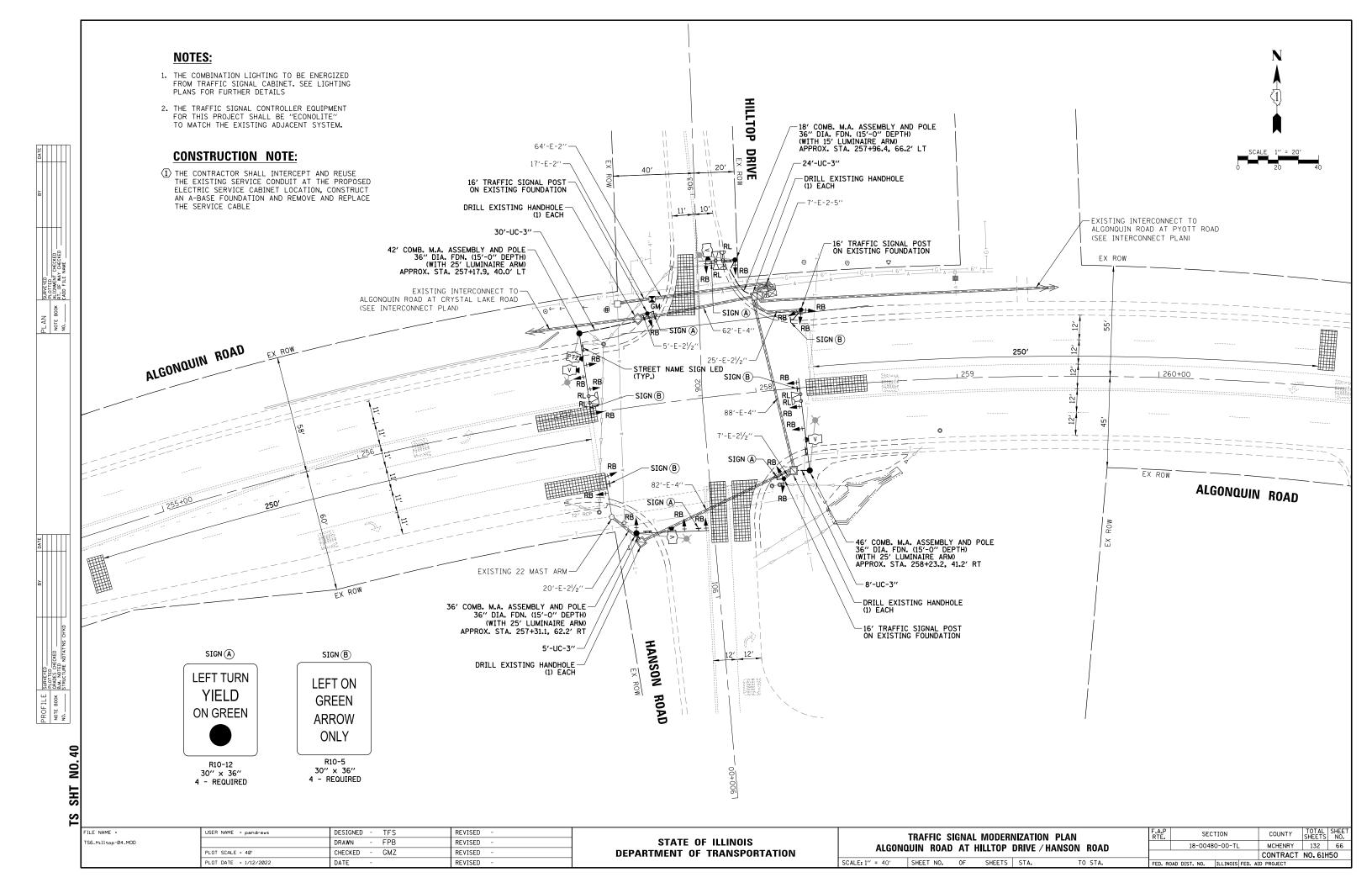
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

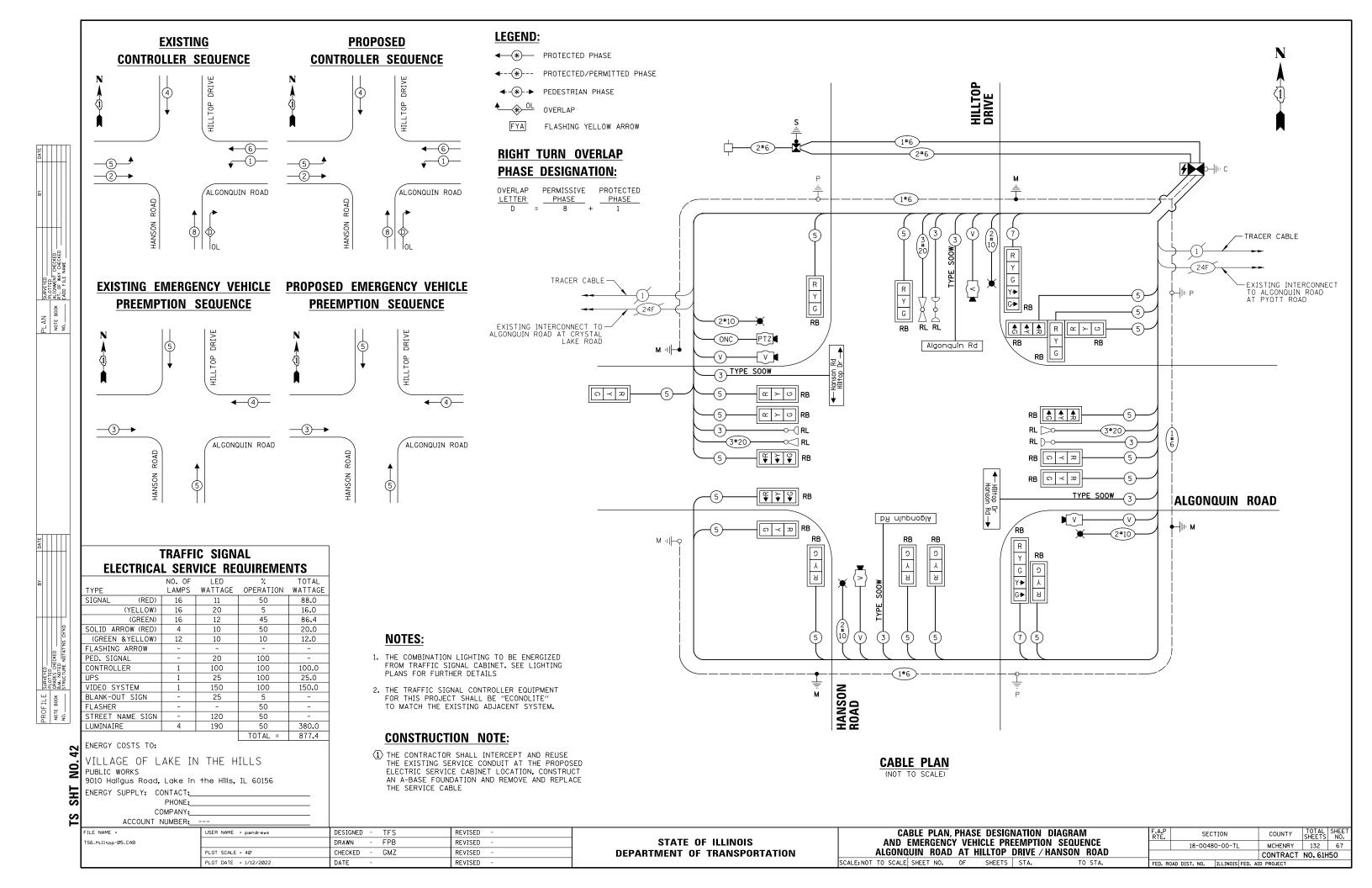
SCHEDULE OF QUANTITIES AND	F.A.P RTE.	SECT	TION	COUNTY	TOTAL SHEETS	SHEET NO.	
MAST ARM MOUNTED STREET NAME SIGN		18-00480	0-00-TL	MCHENRY	132	62	
ALGONQUIN ROAD AT HARVEST GATE ROAD / TALAGA DRIVE				CONTRACT	NO. 61H	150	
SCALE: NOT TO SCALE SHEET NO. OF SHEETS STA. TO STA.	Ì	FED. RO	AD DIST. NO.	ILLINOIS FED. A	D PROJECT		



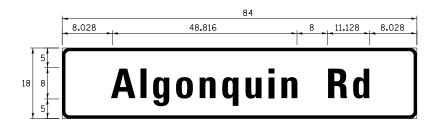




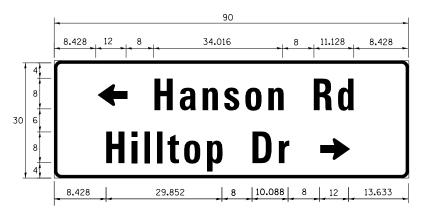




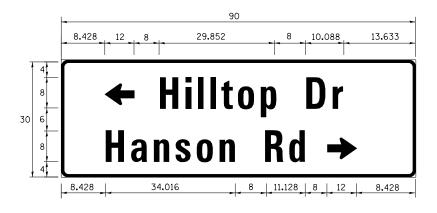
ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	10.5	ZZ	2



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	18.75	ZZ	1



DESIGN	AREA	SHEETING	QTY.		
SERIES	(SQ FT)	TYPE	REQUIRED		
D	18.75	ZZ	1		

### **SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	28
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	67
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	449
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3109
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	210.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	124.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	675
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 18 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	12
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE	EACH	20
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING SERVICE INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4480
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	456.5
** ROD AND CLEAN EXISTING CONDUIT	FOOT	500
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	193
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	641.5
INTERCEPT EXISTING CONDUIT	EACH	1
LOCATING UNDERGROUND UTILITY	EACH	2
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
ETHERNET SWITCH, TYPE 2	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

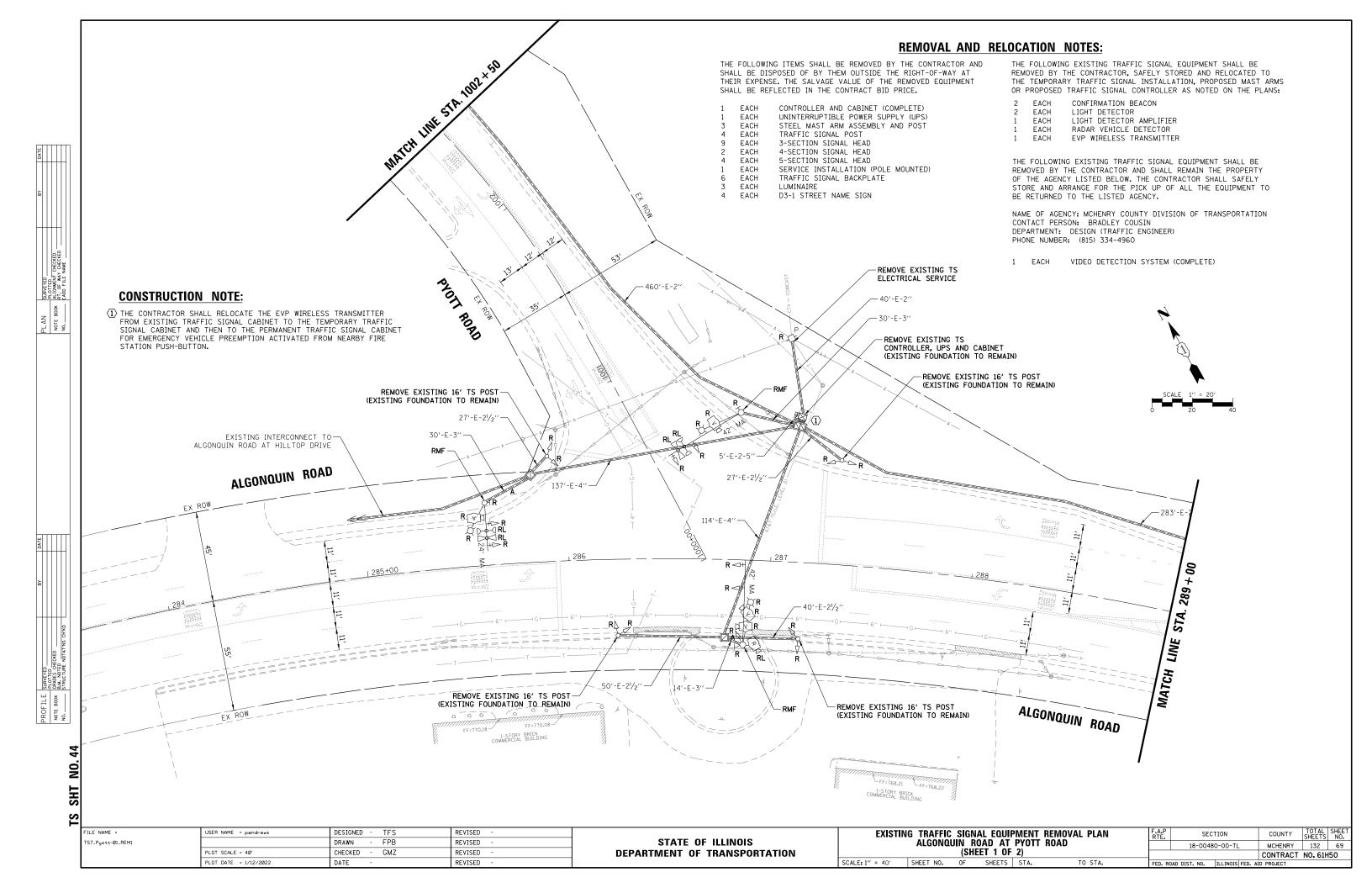
<sup>\*\*</sup>Nominal Quantity to be used as Directed by the Engineer

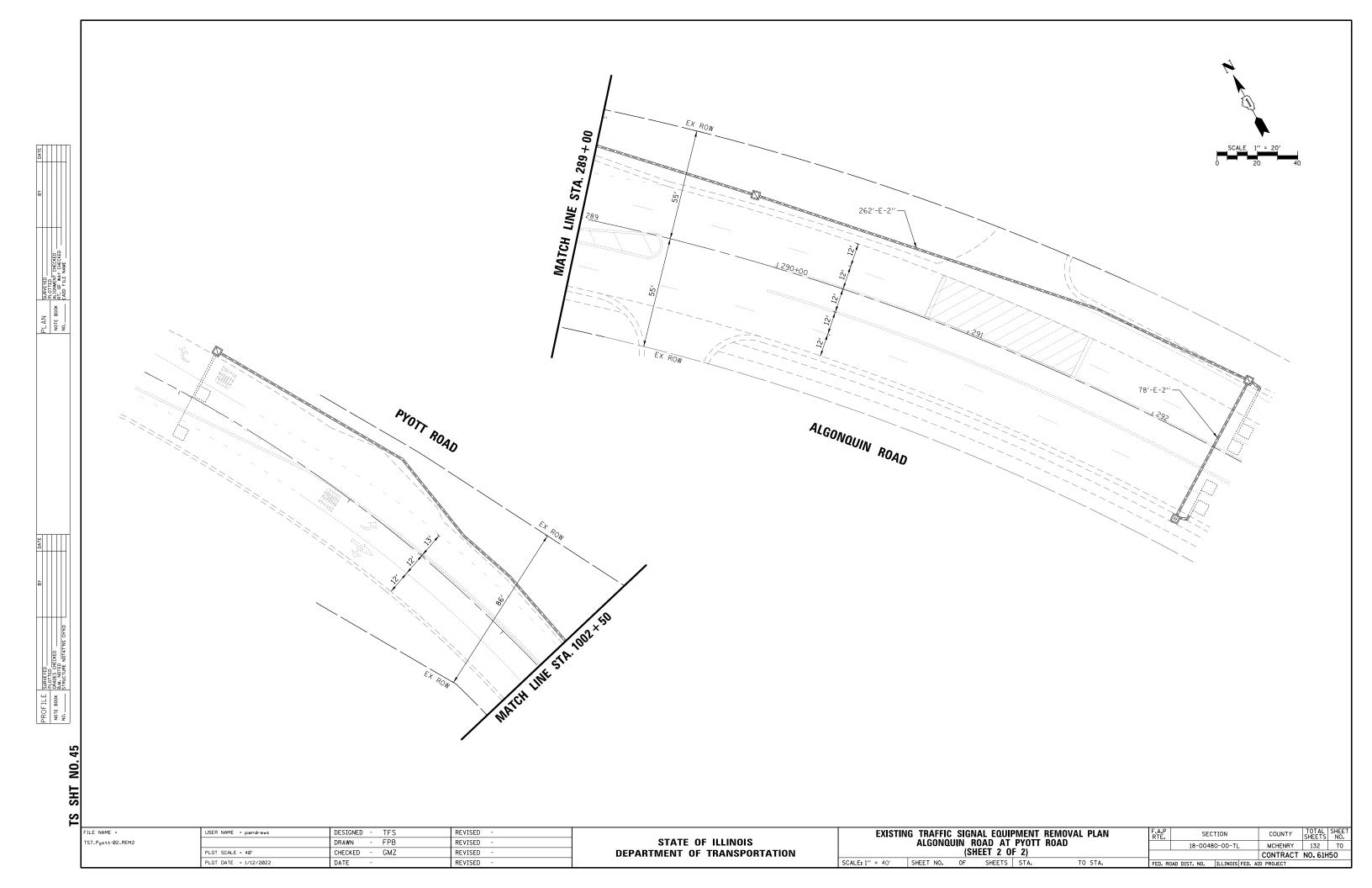
SCALE: 1"

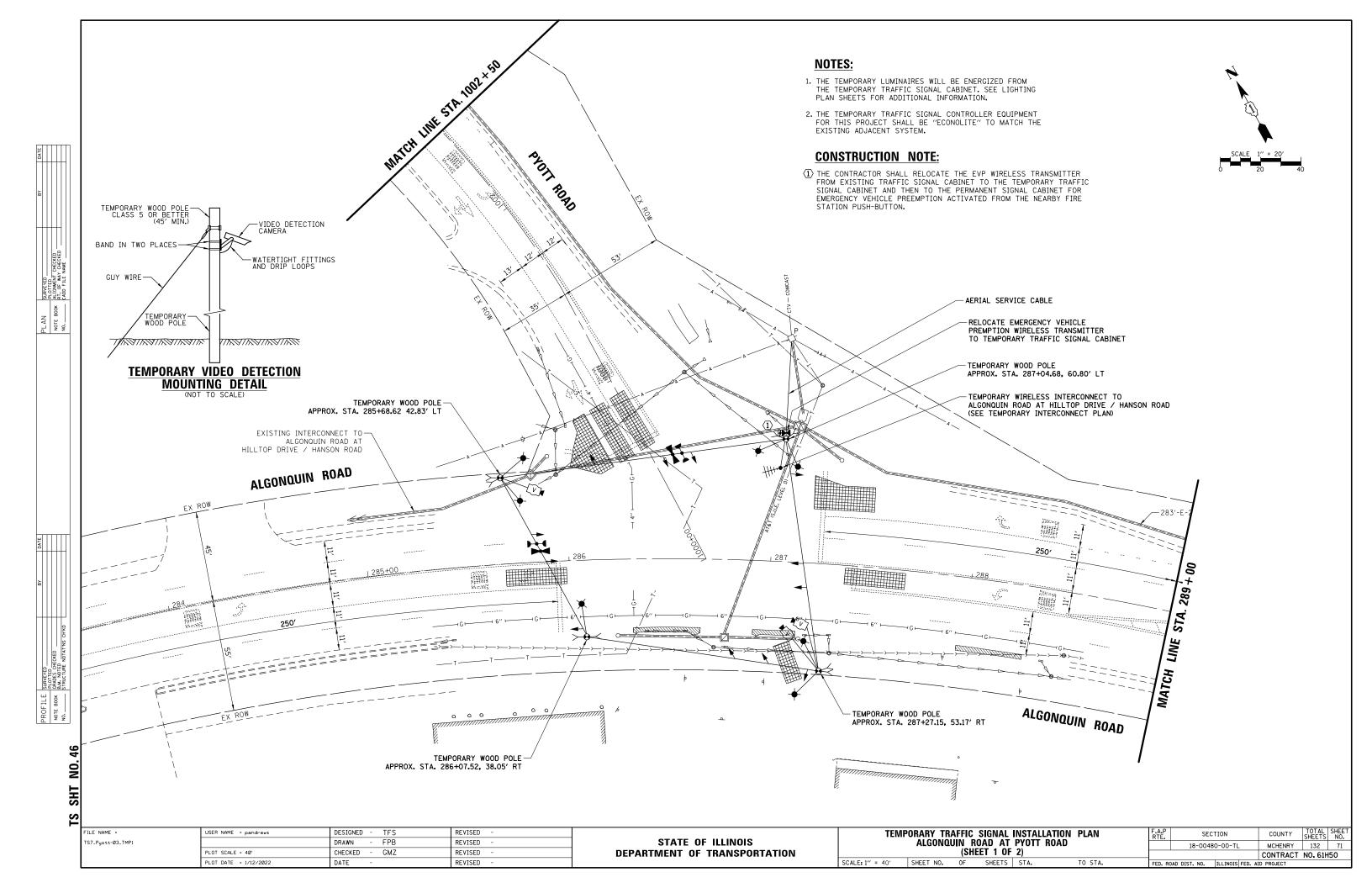
SHT NO 43

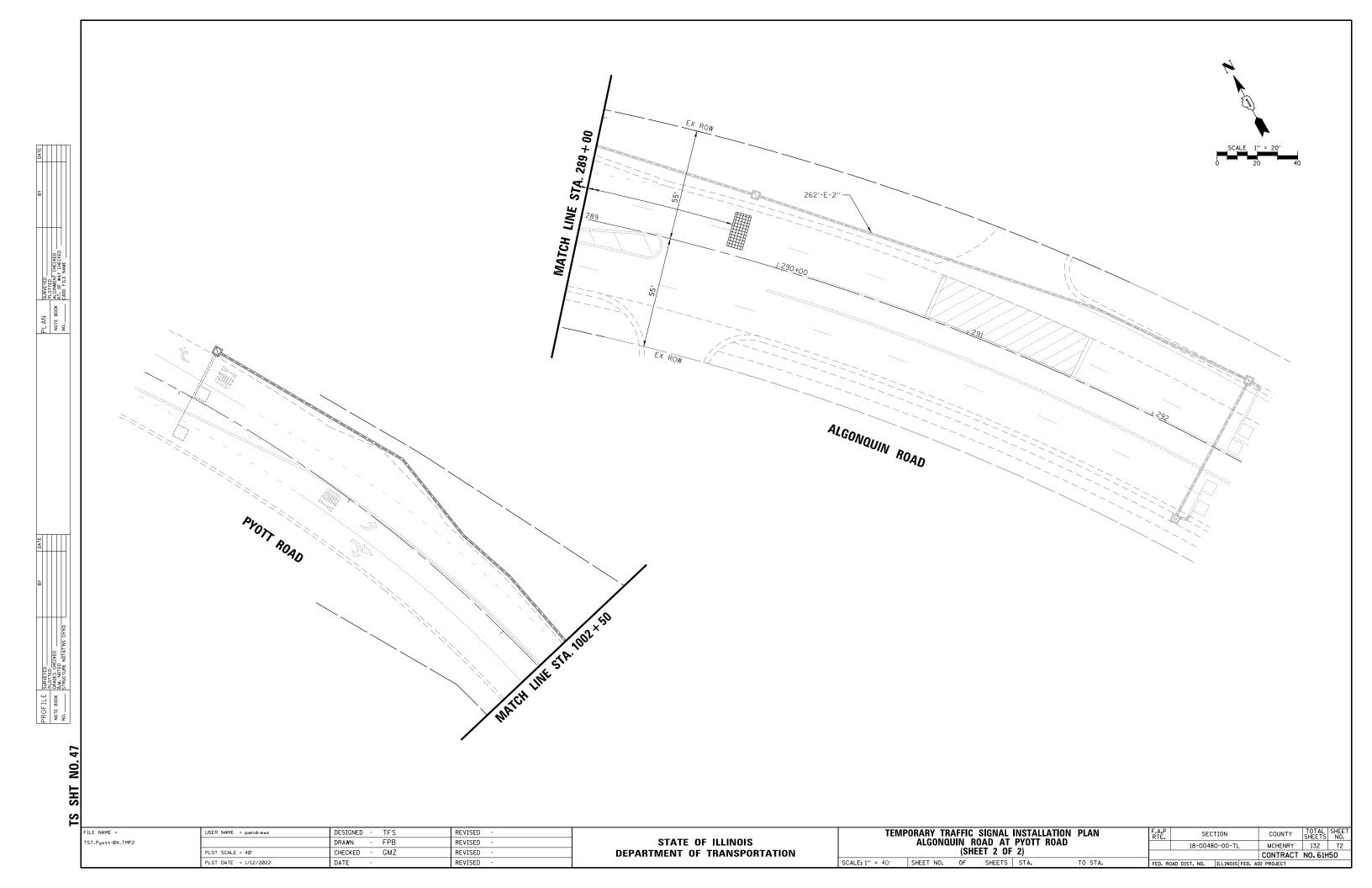
LE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -
56_Hılltop-06_STN		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	DI OT DATE - 1/12/2022	DATE	DEVICED

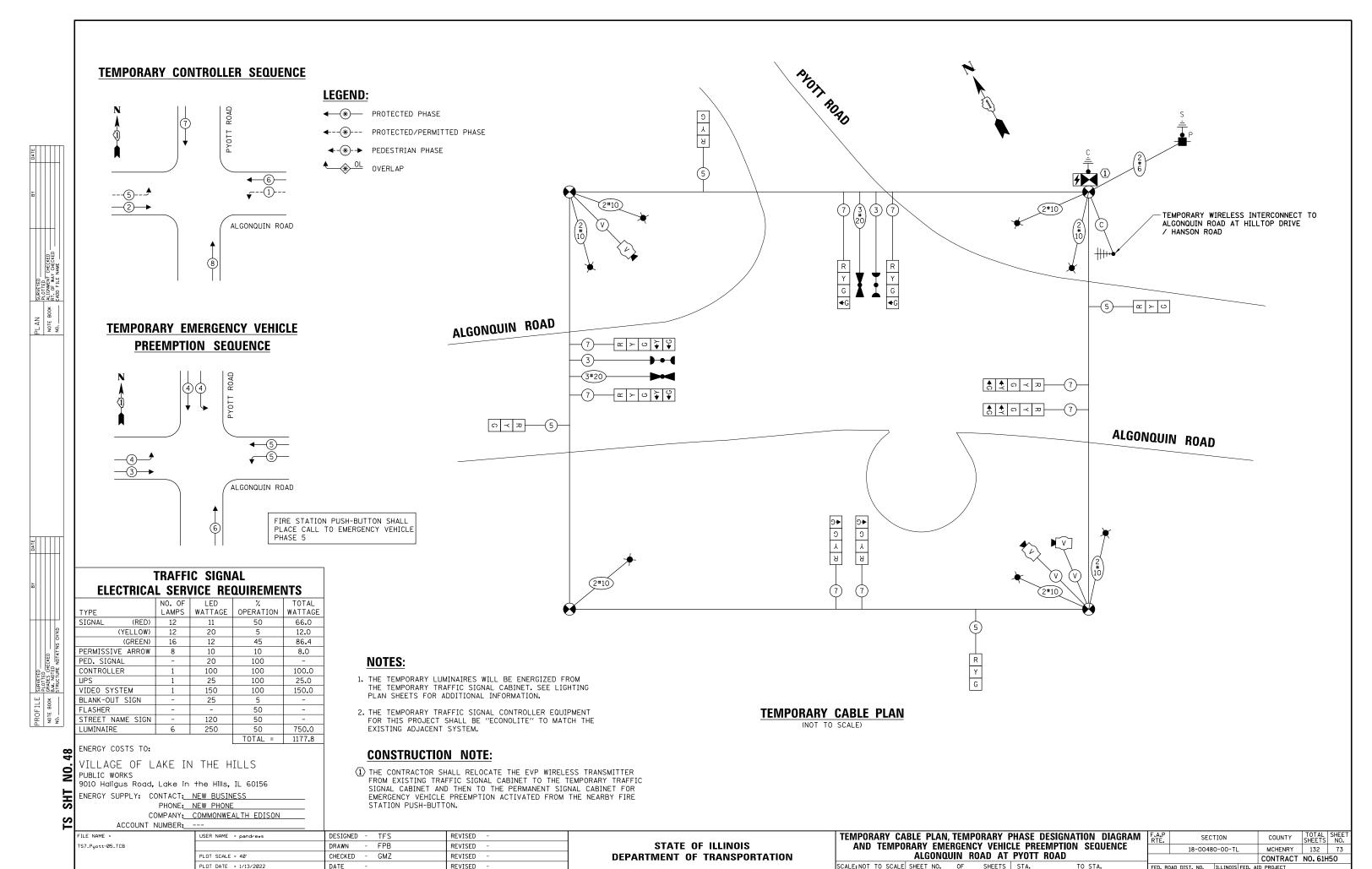
SCHEDOLL OF GOARTHIES AND				F.A.		SECTION			COUNTY	TOTAL SHEETS	SHEET NO.		
MAST ARM MOUNTED STREET NAME SIGN						18-00480-00-TL			MCHENRY	132	68		
ALGONQUIN ROAD AT HILLTOP DRIVE /HANSON ROAD							CONTRACT	NO. 61H	150				
" = 40"	SHEET NO.	0F	SHEETS	STA.	TO STA.	FED.	ROAD DIS	T. NO.	ILLINOIS	FED. AI	D PROJECT		

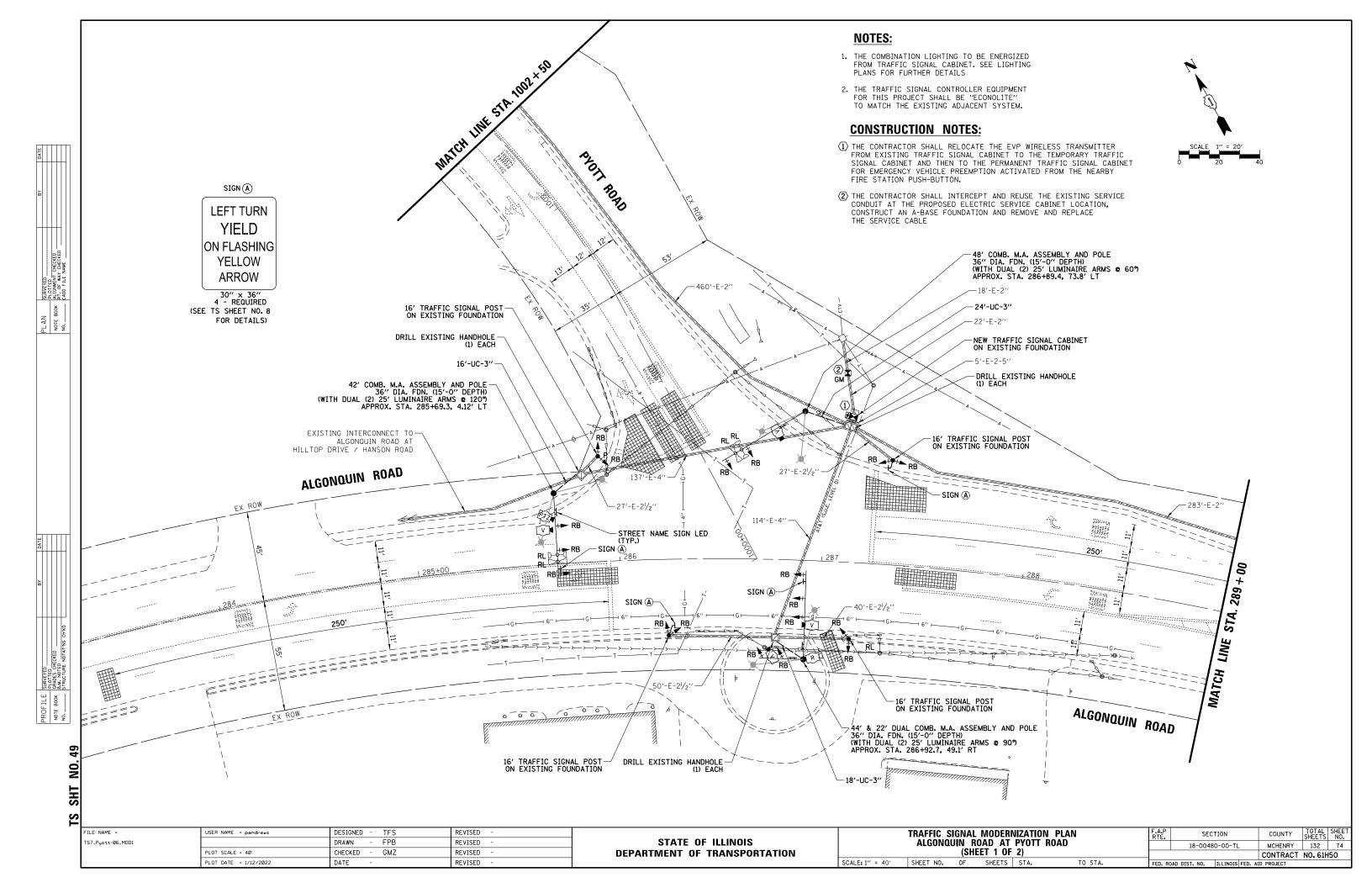


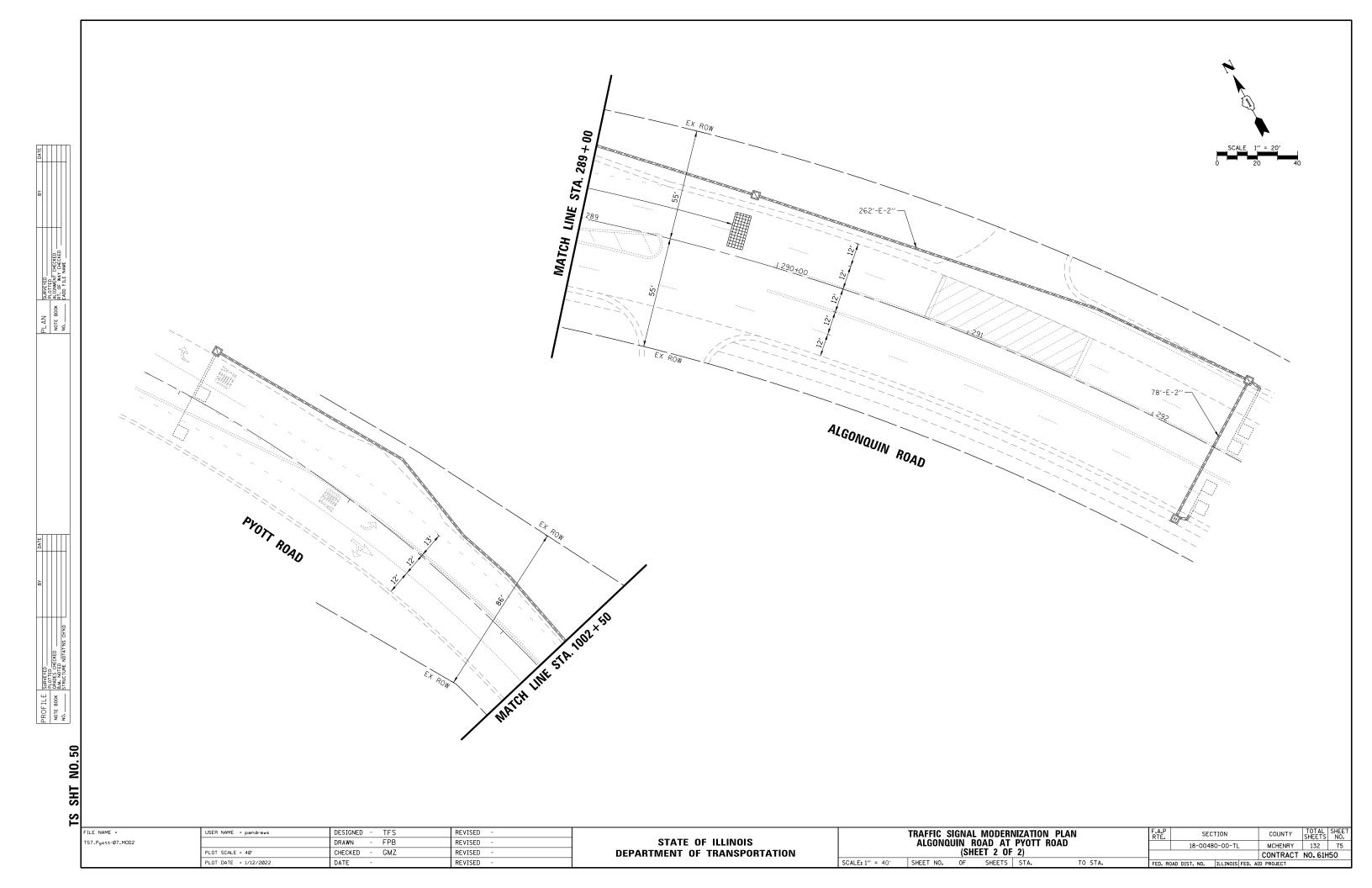


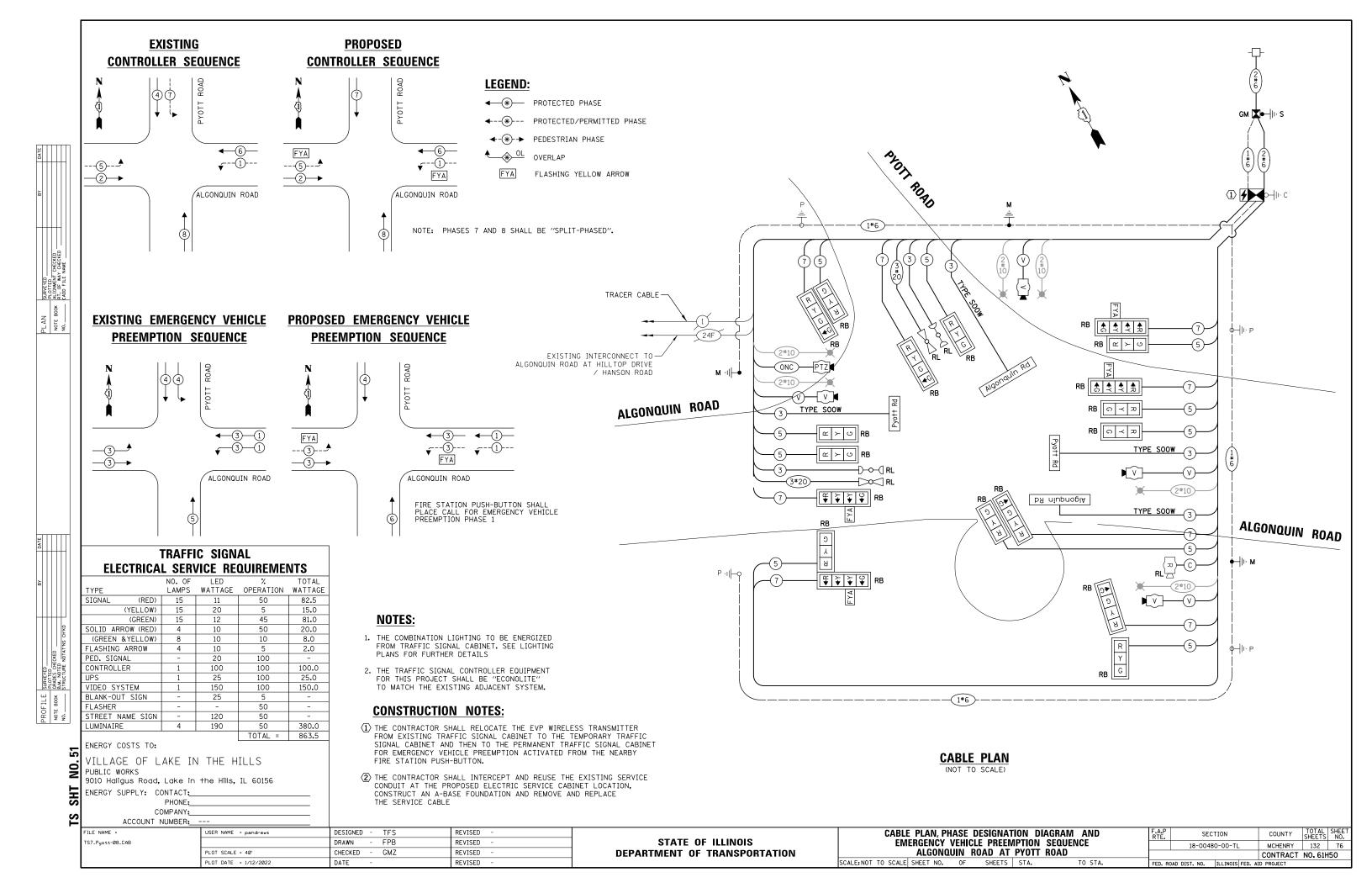






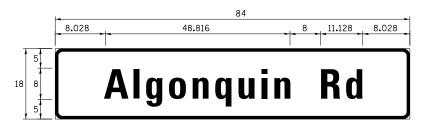




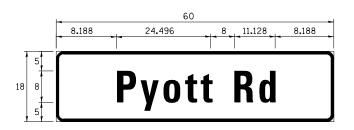


### LED ILLUMINATED STREET NAME SIGNS

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	10.5	ZZ	2



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	7.5	ZZ	

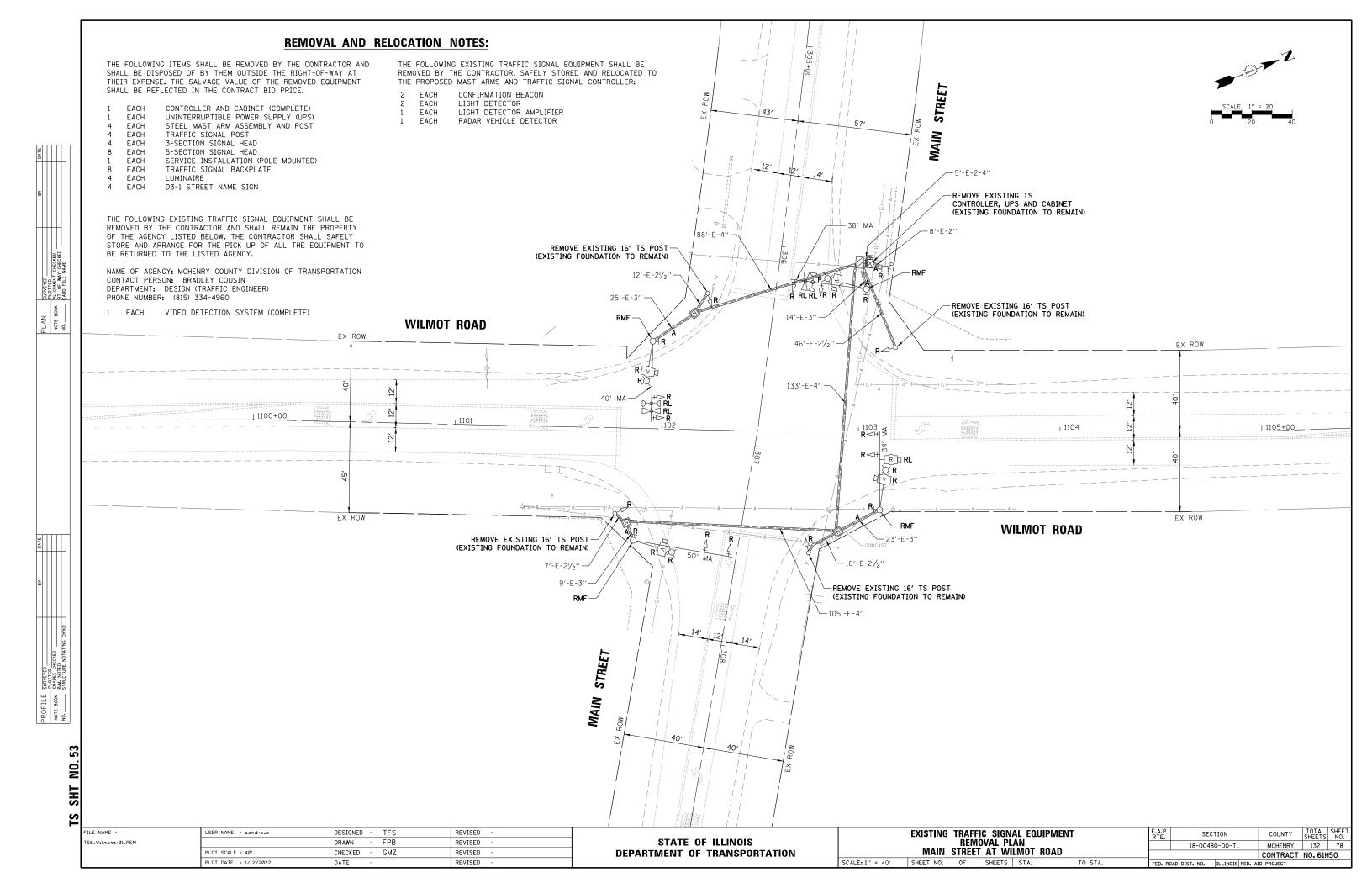
### **SCHEDULE OF QUANTITIES**

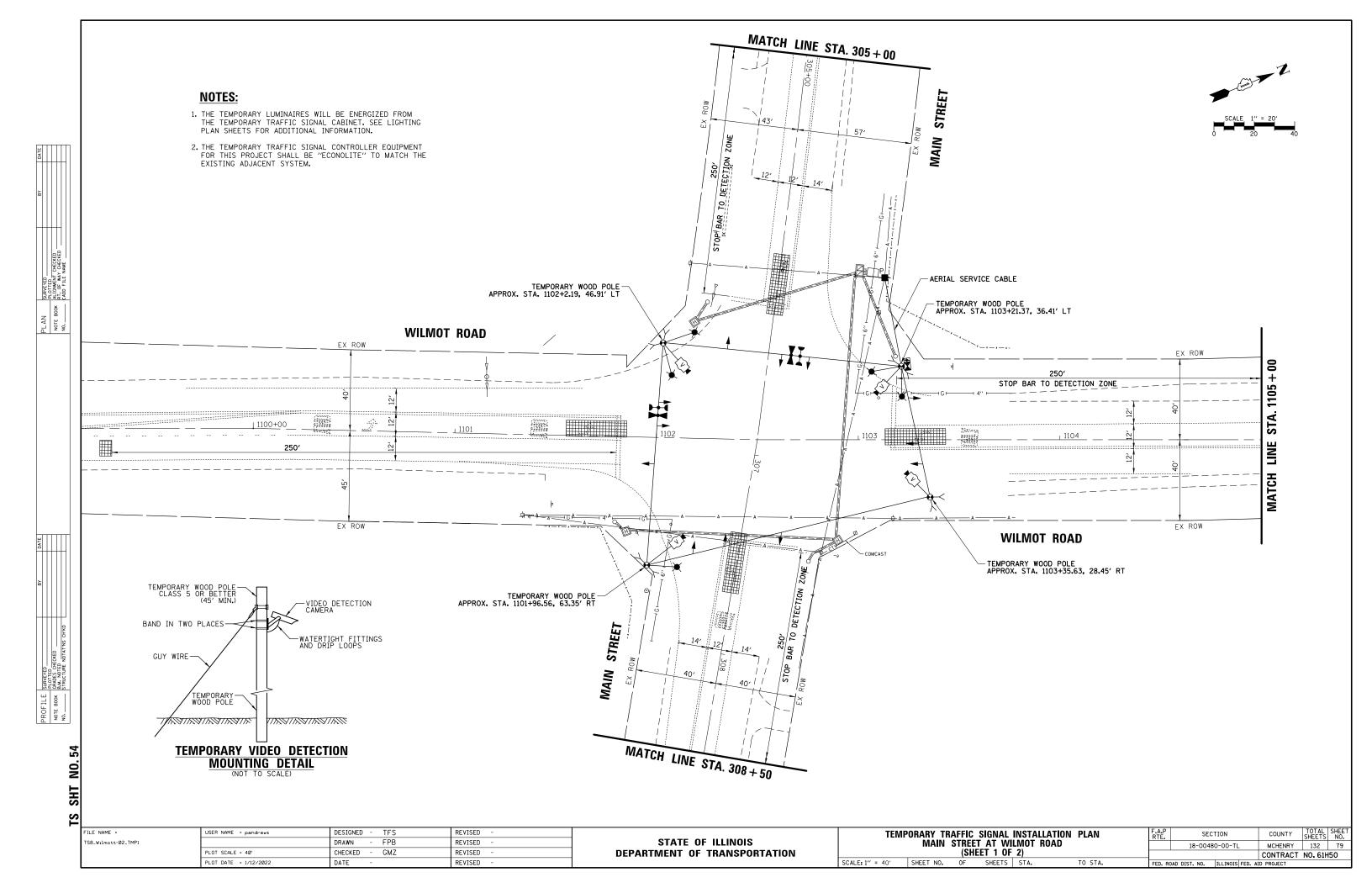
ПЕМ	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	28
SIGN PANEL - TYPE 1	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	58
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	346.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2596.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2058
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	83.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	667.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT. AND 22 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	5
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE	EACH	18
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING SERVICE INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	4
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	5134.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	252
** ROD AND CLEAN EXISTING CONDUIT	FOOT	500
RELOCATE RADAR DETECTOR SYSTEM	EACH	1
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	321.5
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	976.5
INTERCEPT EXISTING CONDUIT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	321.5
LOCATING UNDERGROUND UTILITY	EACH	2
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
ETHERNET SWITCH, TYPE 2	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	77.1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

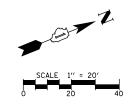
\*\*Nominal Quantity to be used as Directed by the Engineer

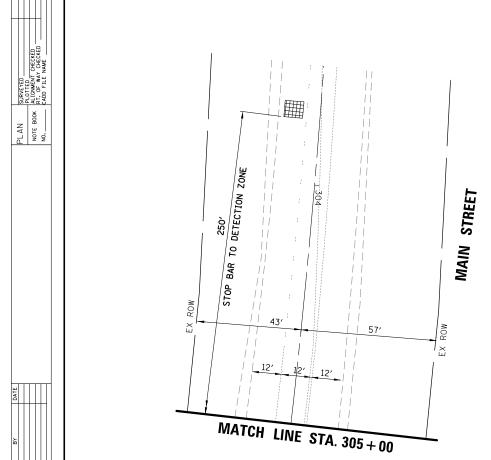
FILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -
TS7_Pyott-09_STN		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 1/12/2022	DATE -	REVISED -

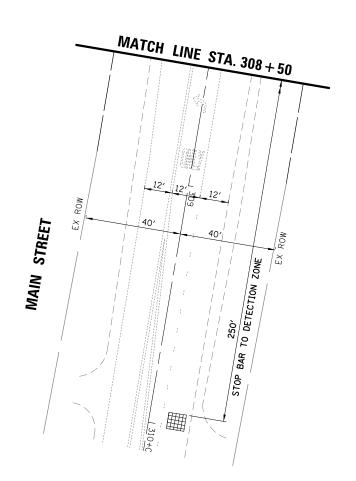
	F.A.P RTE.	SEC.	TION	COUNTY	TOTAL SHEETS	SHEET NO.					
MAST ARM MOUNTED STREET NAME SIGN ALGONQUIN ROAD AT PYOTT ROAD							18-0048	0-00-TL	MCHENRY	132	77
				CONTRACT	NO. 61H	150					
SCALE:NOT TO SCALE	SHEET NO.	0F	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO.	ILLINOIS FED. AI	D PROJECT		

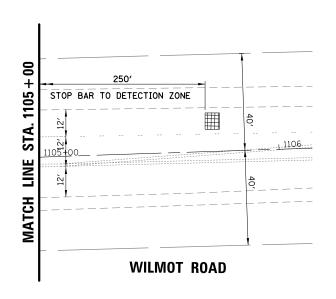








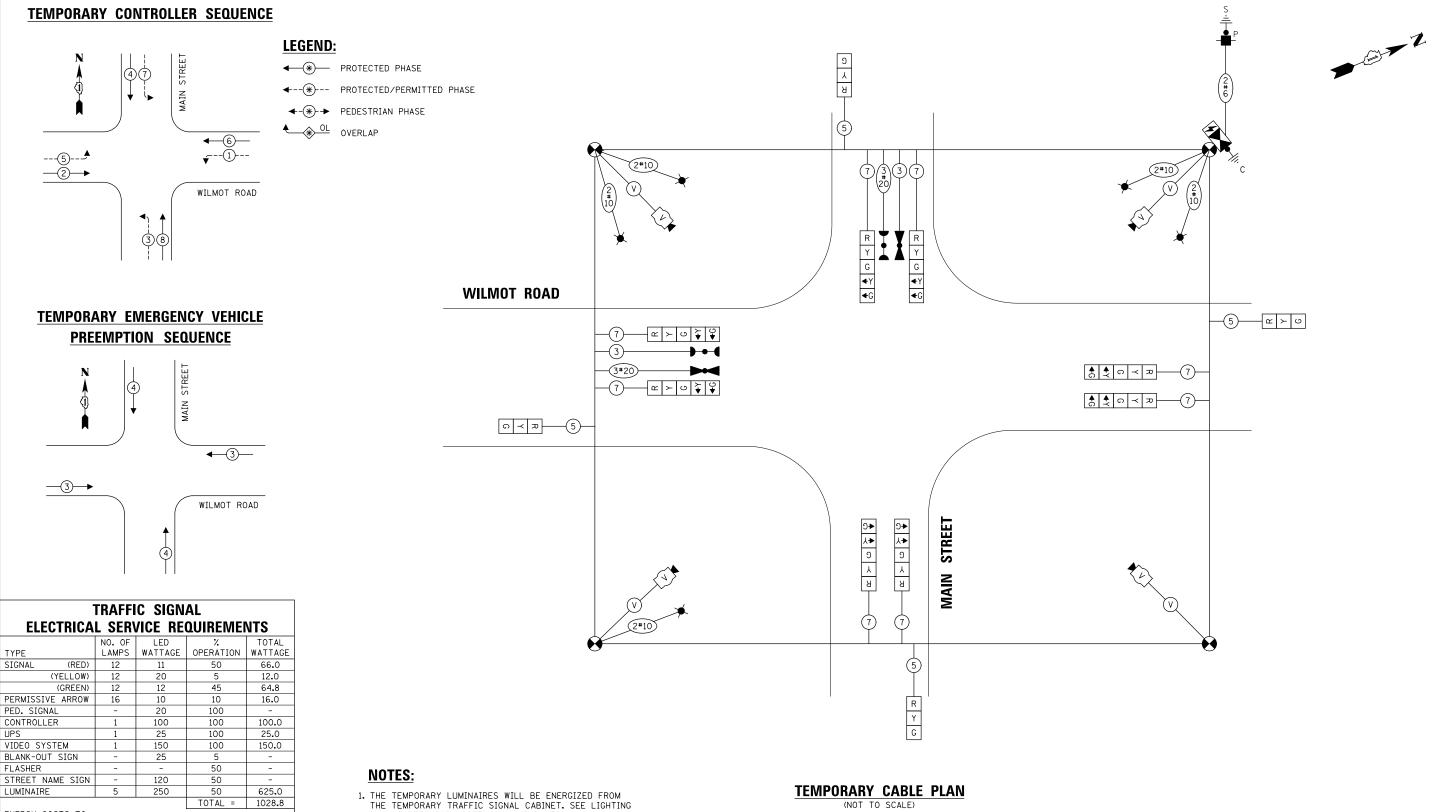




S SHT NO. 55

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FI	ILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -		TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN	F.A	A.P	SECTION	COUNTY	TOTAL SH	HEET
TS	S8_Wilmott-03_TMP2		DRAWN - FPB	REVISED -	STATE OF ILLINOIS	MAIN STREET AT WILMOT ROAD	181		8-00480-00-TL	MCHENRY	132	80
		PLOT SCALE = 40'	CHECKED - GMZ	REVISED -	DEPARTMENT OF TRANSPORTATION	(SHEET 2 OF 2)			0 00 100 00 12	CONTRACT	NO. 61H5	ر
- 1		PLOT DATE = 1/12/2022	DATE -	REVISED -		SCALE: 1" = 40' SHEET NO. OF SHEETS STA. TO STA.	FEI	D. ROAD DIST.	. NO. ILLINOIS FED. A	ID PROJECT		





ENERGY COSTS TO:

VILLAGE OF SPRING GROVE PUBLIC WORKS DEPARTMENT

7401 Meyer Road, Spring Grove, Illinois 60081

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

TS8\_Wilmott-04\_TCB

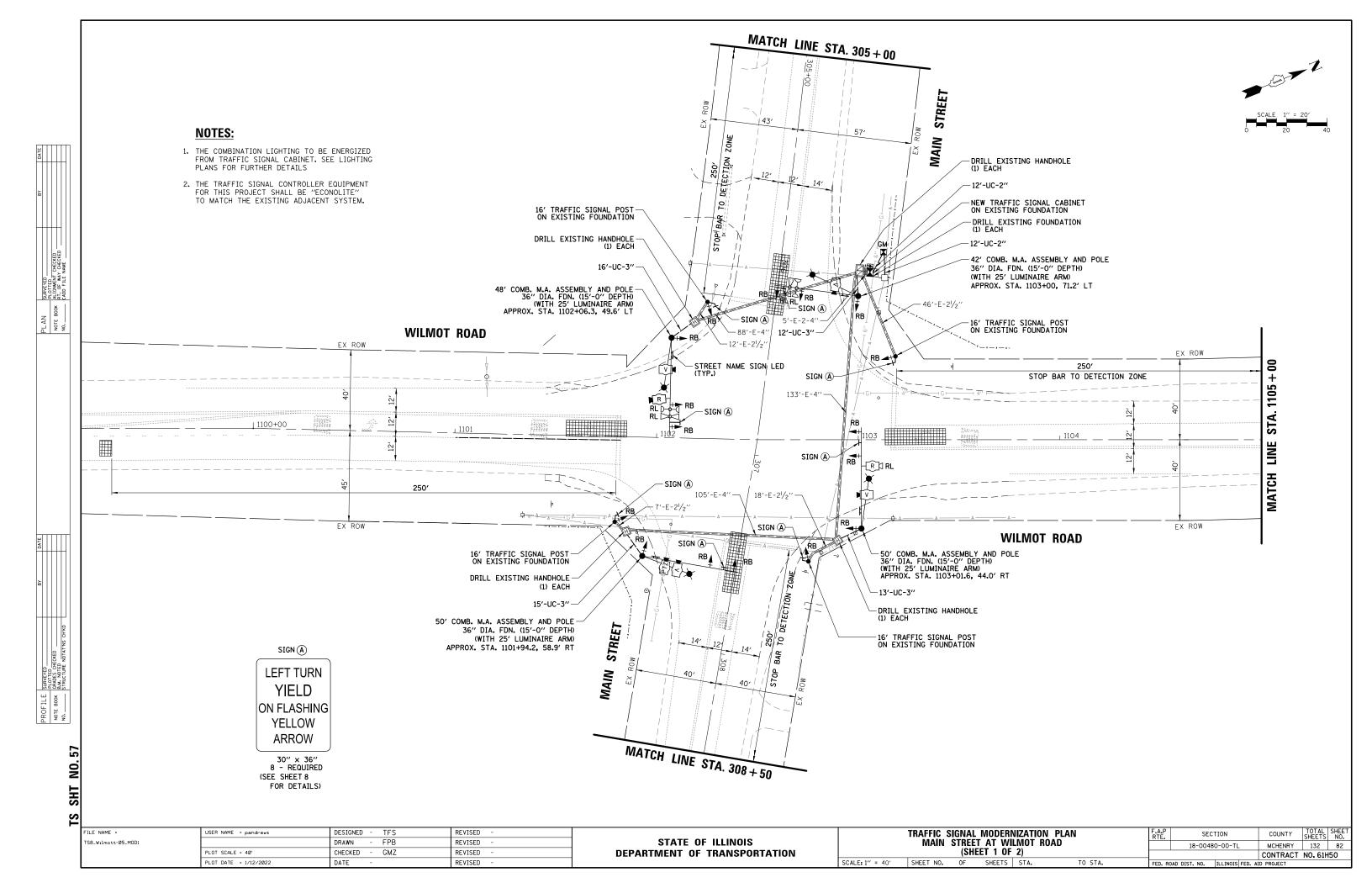
DESIGNED - TFS REVISED USER NAME = pandrews DRAWN - FPB REVISED PLOT SCALE = 40' CHECKED - GMZ REVISED PLOT DATE = 1/12/2022 REVISED DATE

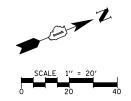
PLAN SHEETS FOR ADDITIONAL INFORMATION.

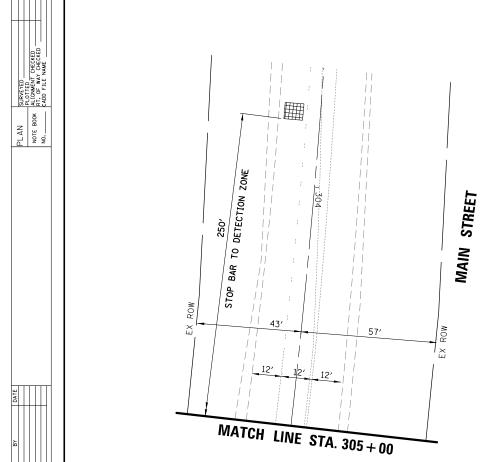
2. THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

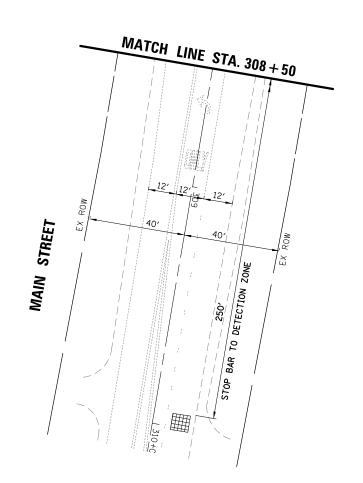
### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

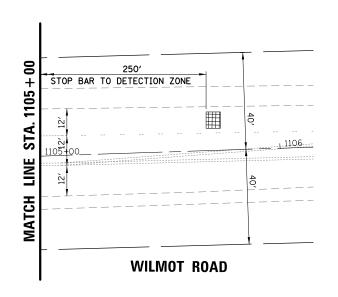
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE SECTION COUNTY MCHENRY 132 81 18-00480-00-TL MAIN STREET AT WILMOT ROAD CONTRACT NO. 61H50 SCALE: NOT TO SCALE SHEET NO. OF SHEETS STA.





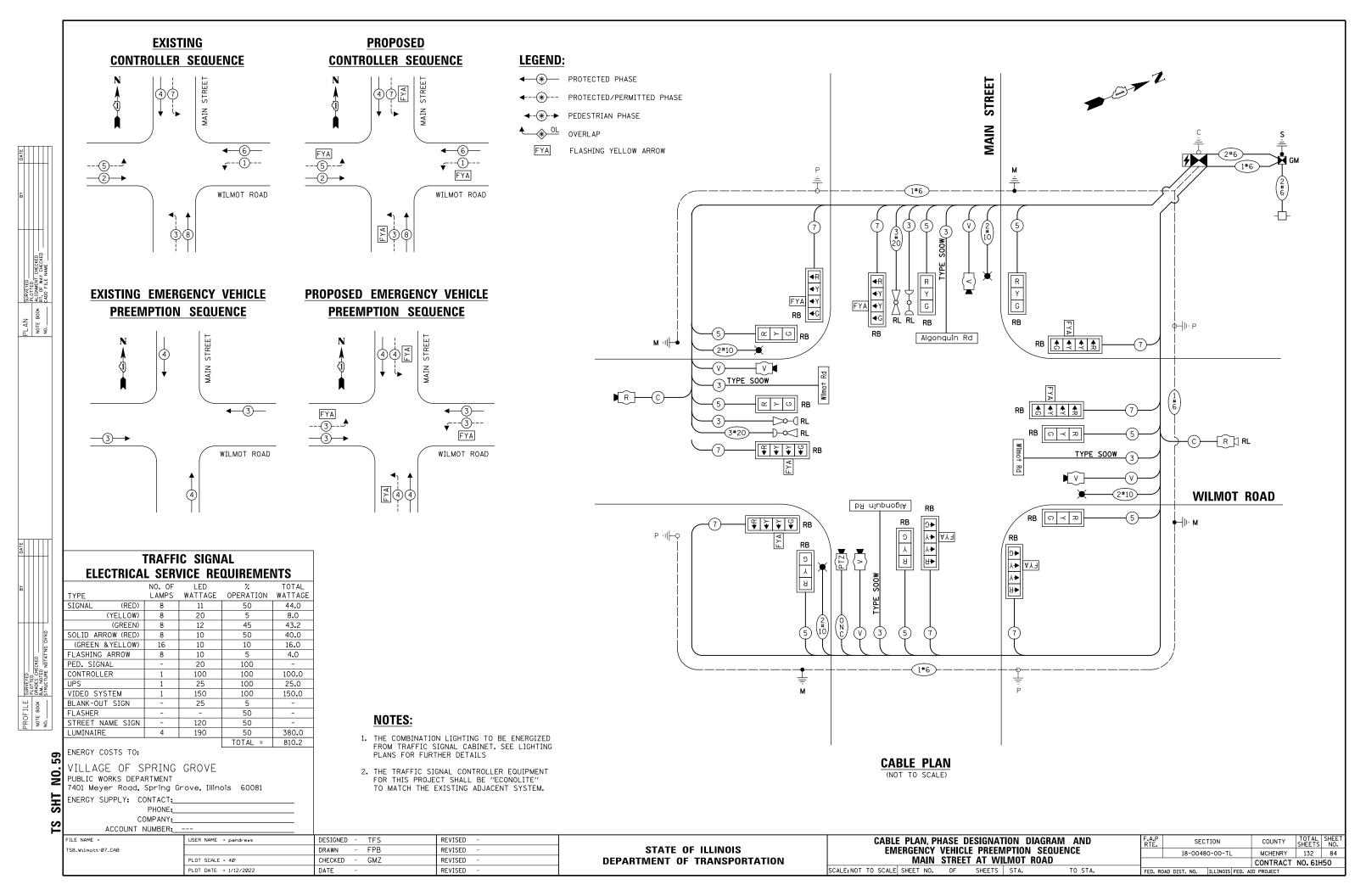






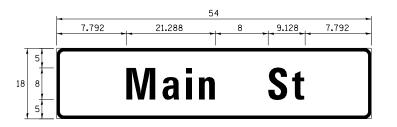
SHT NO 58

$\vdash$											
	FILE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -		TRAFFIC SIGNAL MODERNIZATION PLAN	F.A.P	SECTION	COUNTY	TOTAL	SHEET
	TS8_Wilmott-06_MOD2		DRAWN - FPB	REVISED -	STATE OF ILLINOIS	MAIN STREET AT WILMOT ROAD	18-	00480-00-TL	MCHENRY	132	83
		PLOT SCALE = 40'	CHECKED - GMZ	REVISED -	DEPARTMENT OF TRANSPORTATION	(SHEET 2 OF 2)	100	20100 00 12	CONTRACT	F NO. 61H	50
		PLOT DATE = 1/12/2022	DATE -	REVISED -		SCALE: 1" = 40' SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. N	NO. ILLINOIS FED. A			

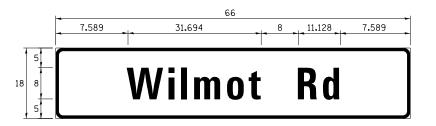


### LED ILLUMINATED STREET NAME SIGNS

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	REQUIRED
D	6. 75	ZZ	



Į				
	D	8, 25	ZZ	2
	SERIES	(SQ FT)	TYPE	REQUIRED
	DESIGN	AREA	SHEETING	QTY.

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

# CUT NO CO

LE NAME =	USER NAME = pandrews	DESIGNED - TFS	REVISED -
58_Wilmott-08_STN		DRAWN - FPB	REVISED -
	PLOT SCALE = 40'	CHECKED - GMZ	REVISED -
	PLOT DATE = 1/12/2022	DATE -	REVISED -

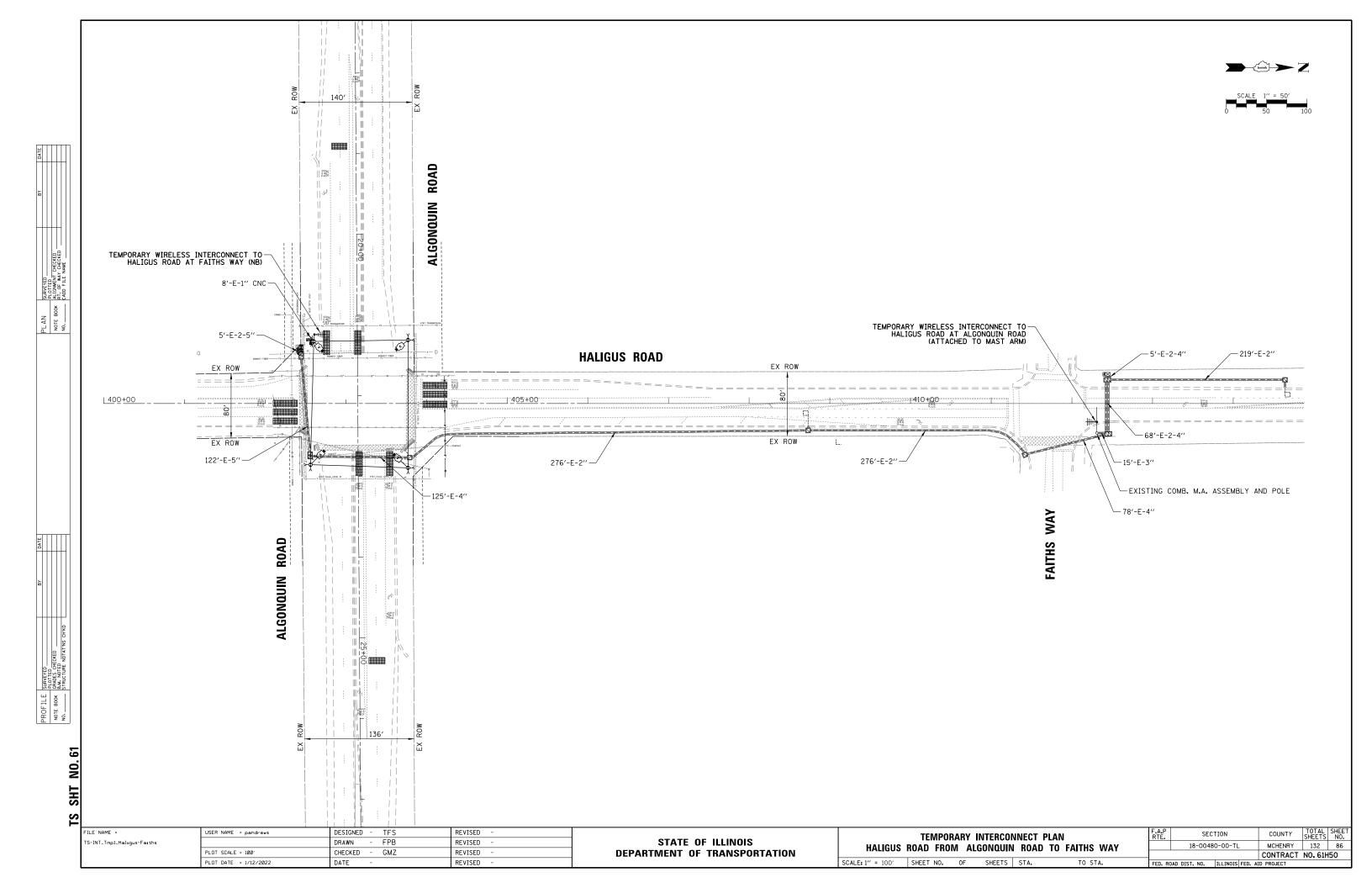
### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

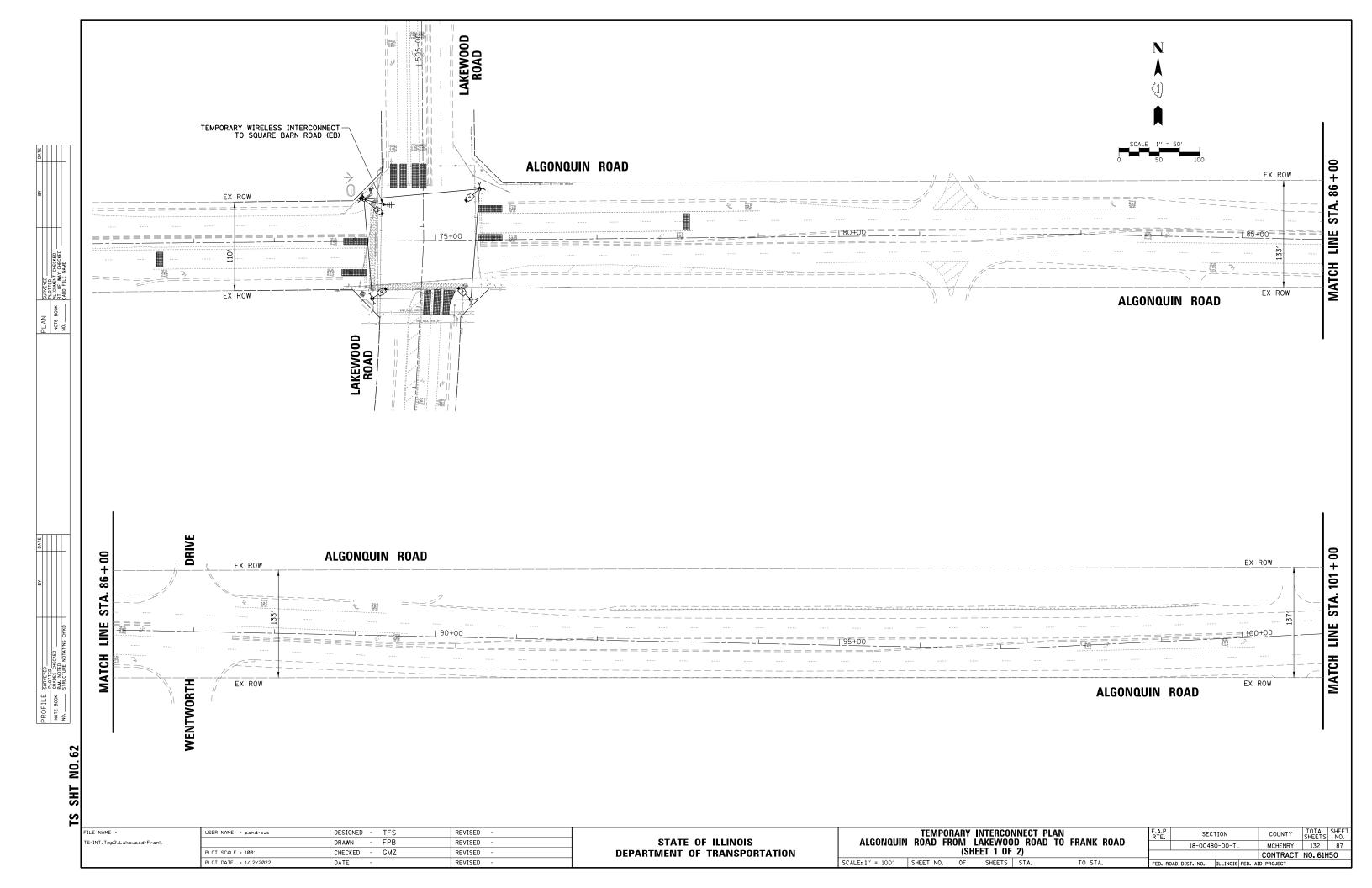
# SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN RTE. SECTION COUNTY SHEETS NO. 18-00480-00-TL MCHENRY 132 85 SCALE: NOT TO SCALE SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

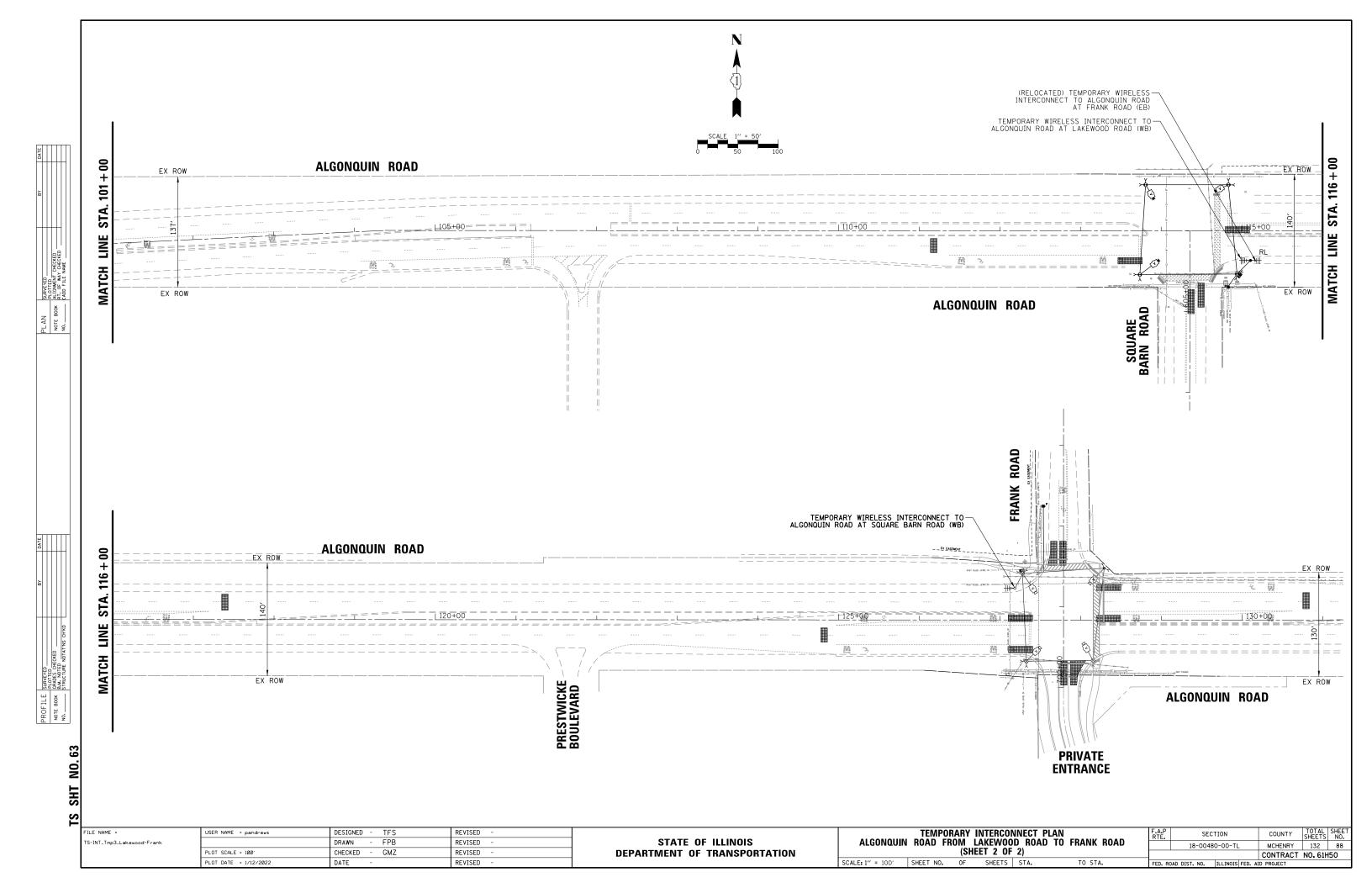
### **SCHEDULE OF QUANTITIES**

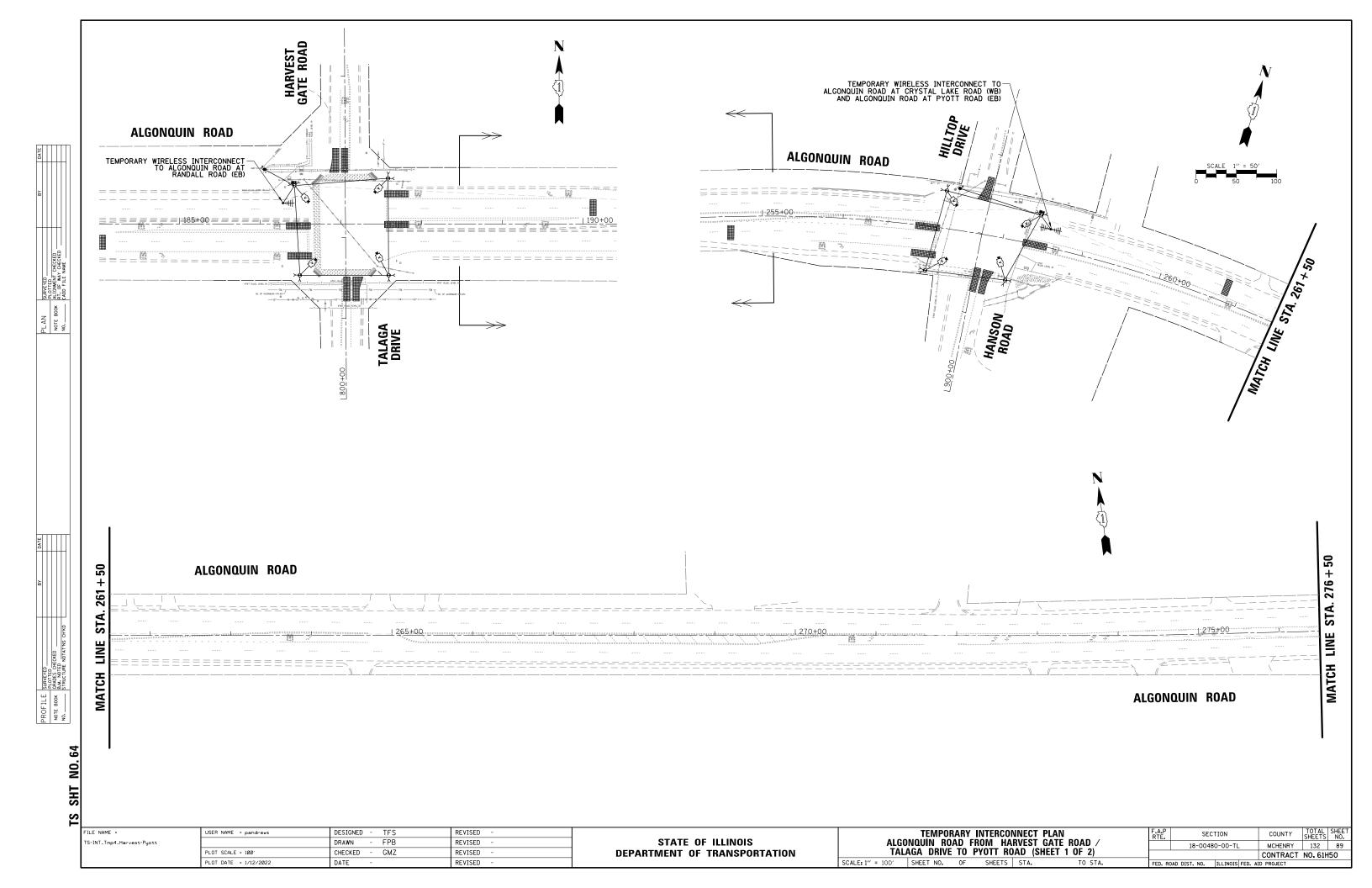
ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL DA	5
SIGN PANEL - TYPE 1	SQ FT	6
JNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2
JNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	29
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	161
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	164
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	67.
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	688
FRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	
CONCRETE FOUNDATION, TYPE A	FOOT	
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	6
DRILL EXISTING FOUNDATION	EACH	`
DRILL EXISTING HANDHOLE	EACH	
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	
SIGNAL HEAD, LED, 14-ACE, 3-SECTION, BRACKET MOUNTED	EACH	
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	
TRAFFIC SIGNAL BACKPLATE	EACH	1
	EACH	
TEMPORARY TRAFFIC SIGNAL INSTALLATION		
REMOVE EXISTING SERVICE INSTALLATION	EACH	
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	00.40
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3848
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	
REMOVE EXISTING CONCRETE FOUNDATION	EACH	
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	29
ROD AND CLEAN EXISTING CONDUIT	FOOT	50
CELLULAR MODEM	EACH	
RELOCATE RADAR DETECTOR SYSTEM	EACH	
ED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	
OUTDOOR RATED NETWORK CABLE	FOOT	20
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	
RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, FAR BACK	EACH	
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	76
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	
JNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	567
OCATING UNDERGROUND UTILITY	EACH	
/IDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	
NTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	
	SQ FT	102
TEMPORARY INFORMATION SIGNING		

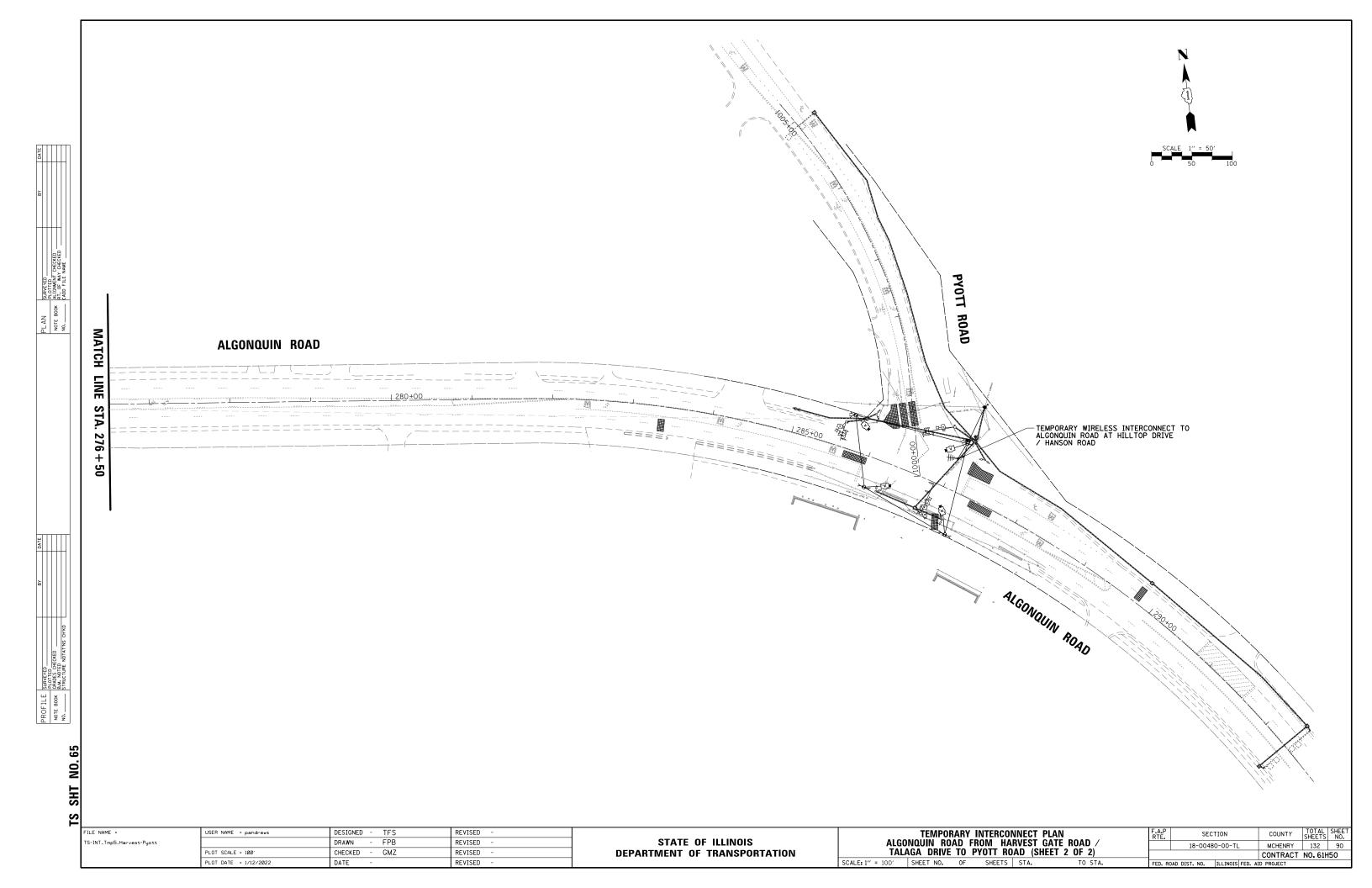
\*\*Nominal Quantity to be used as Directed by the Engineer

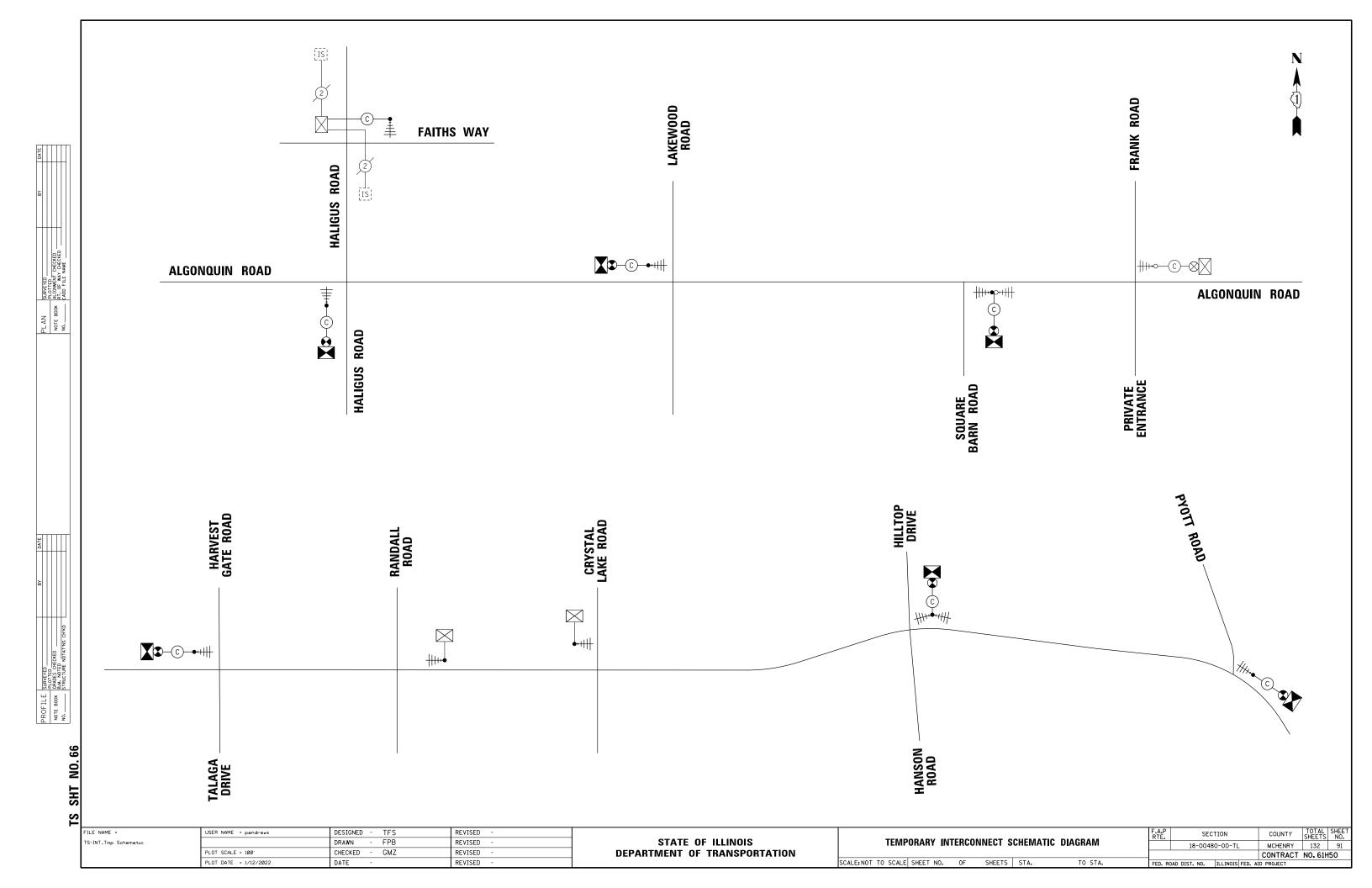


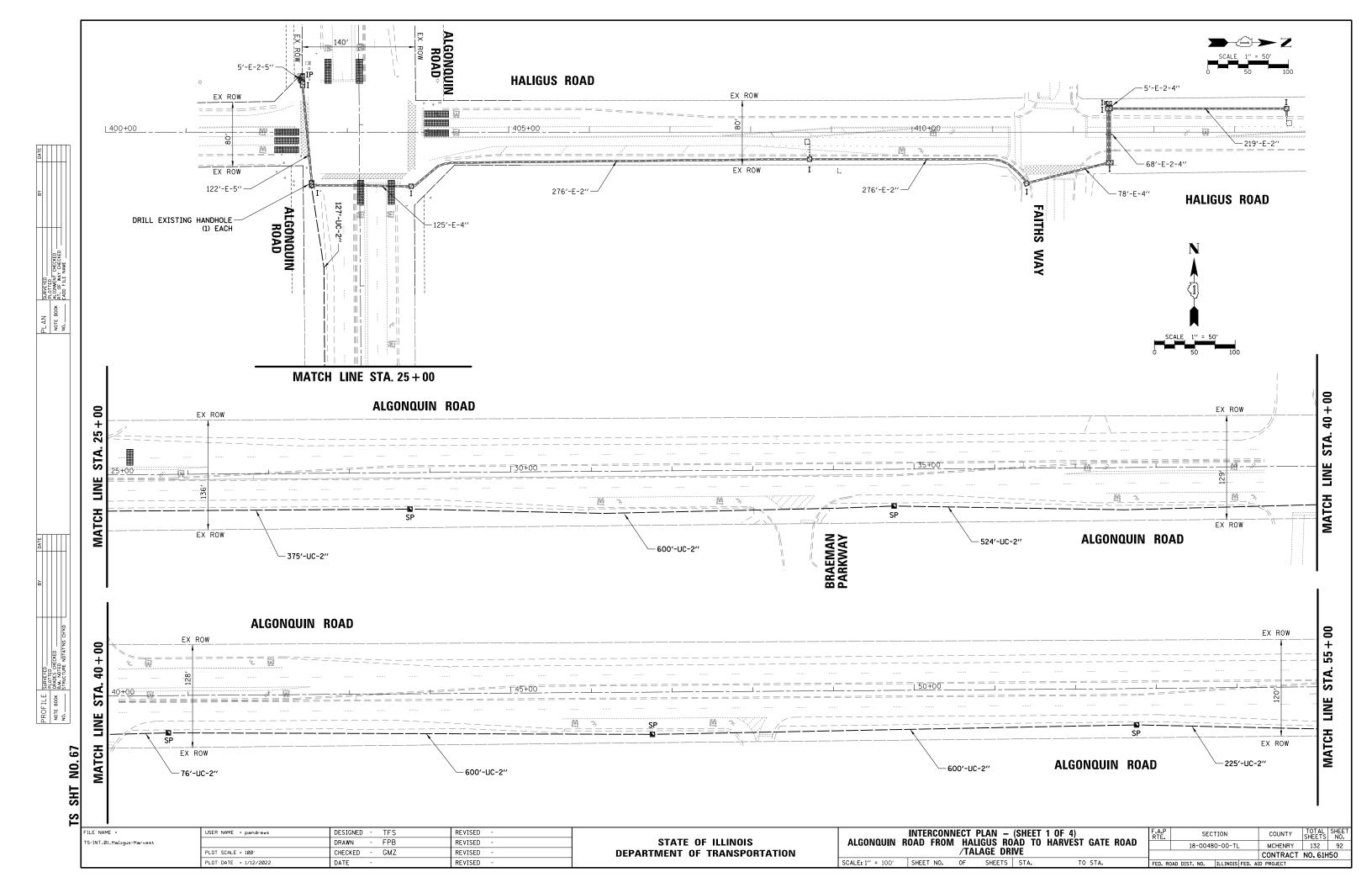


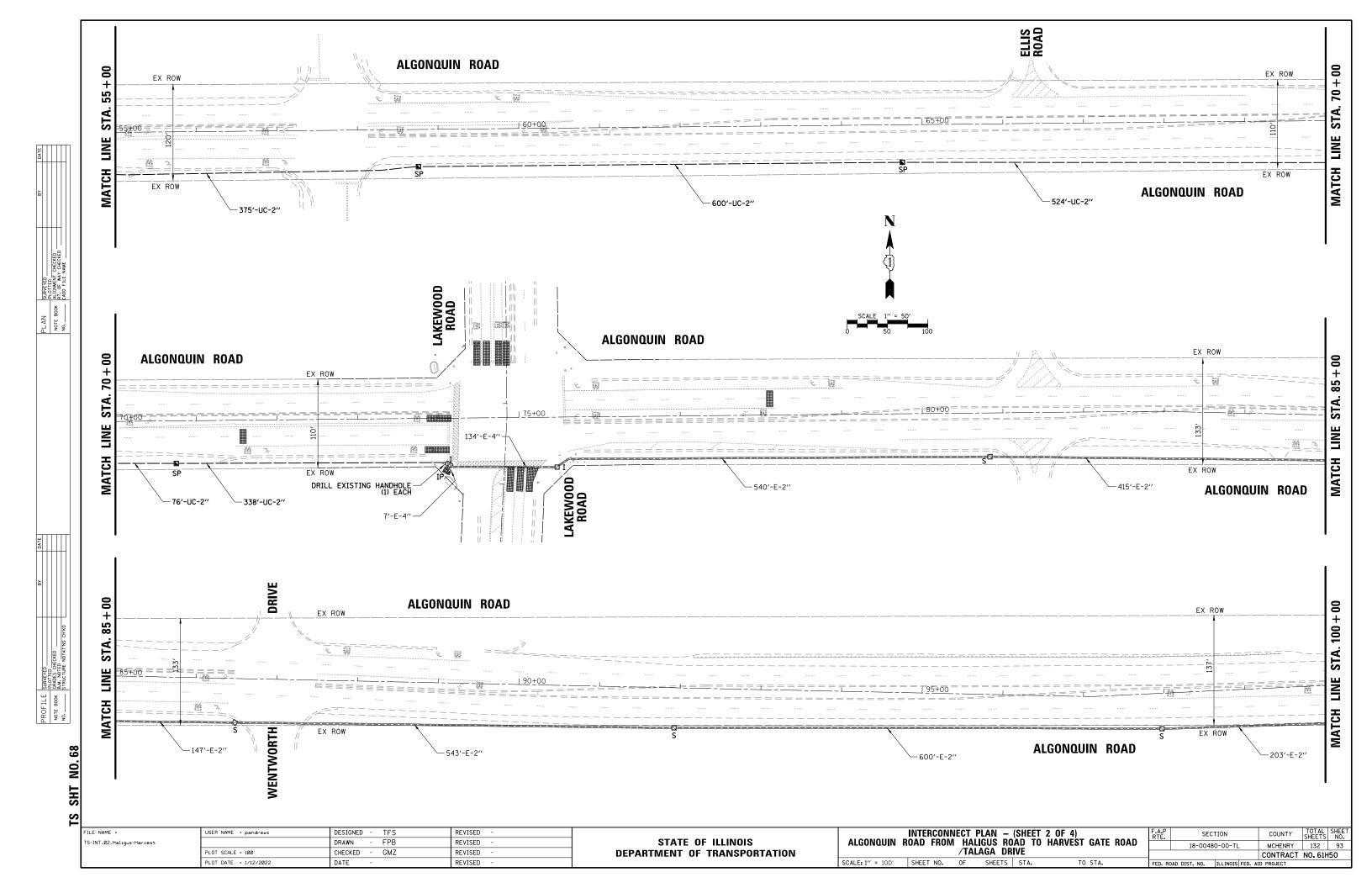


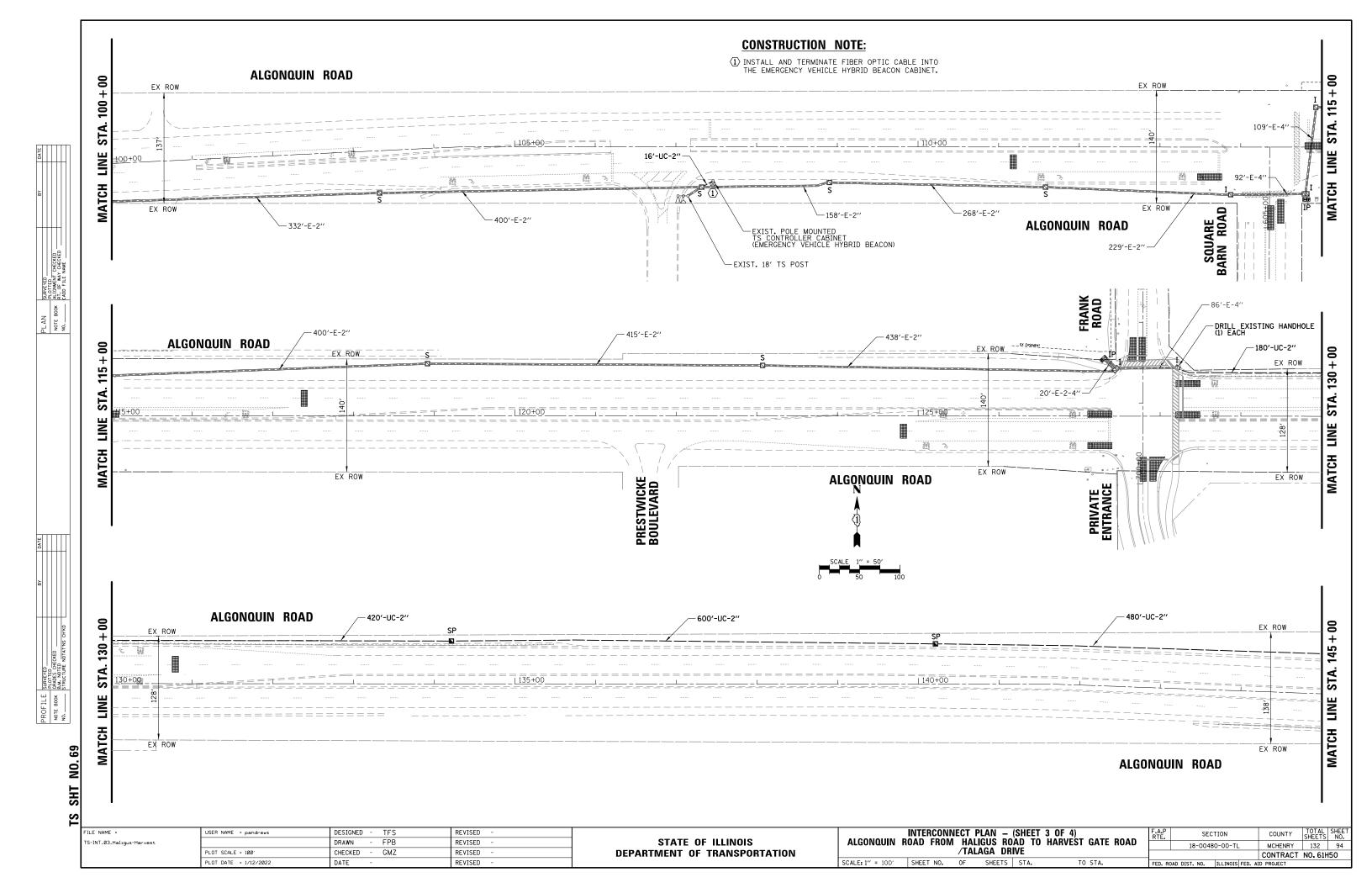


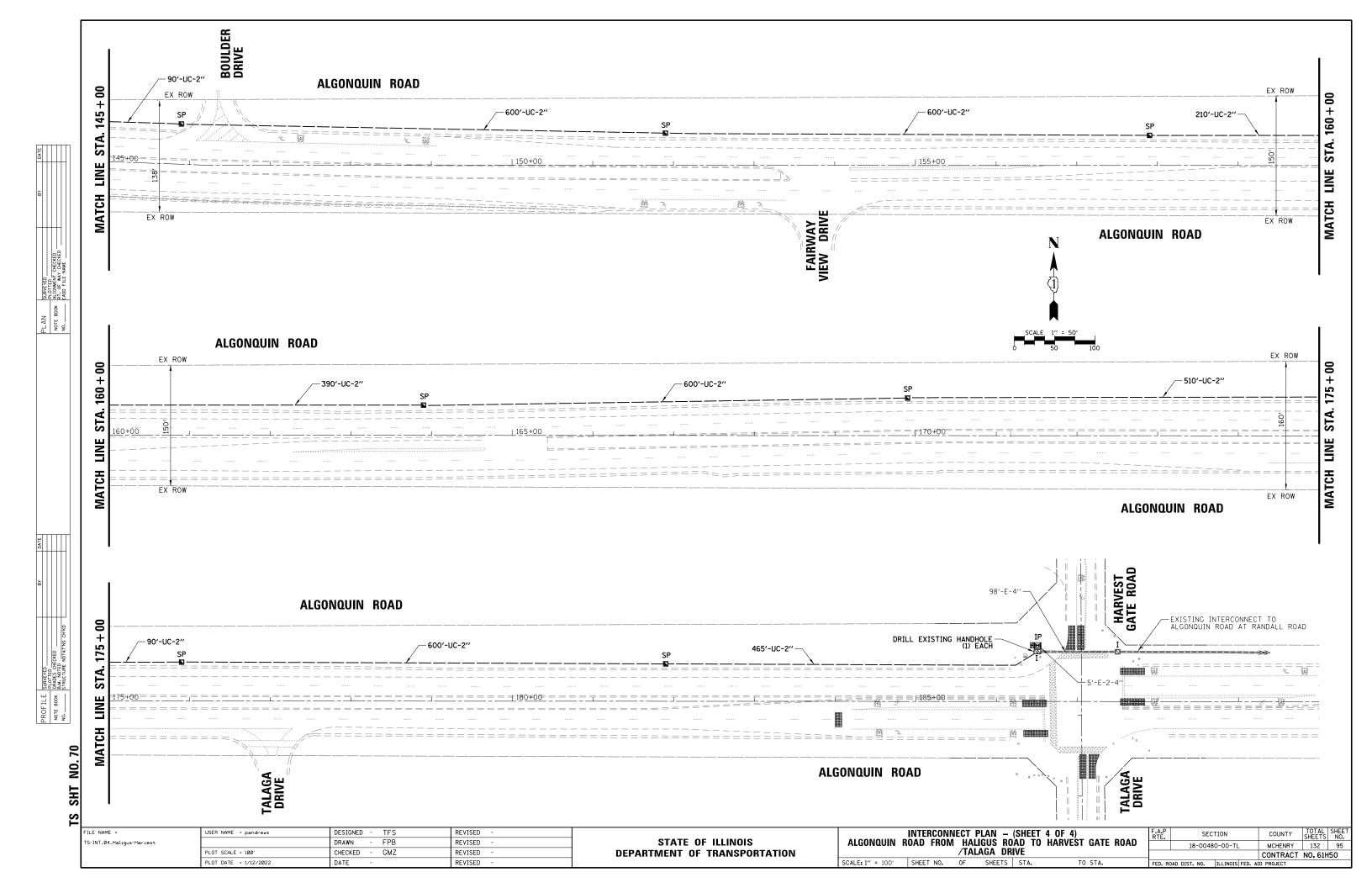


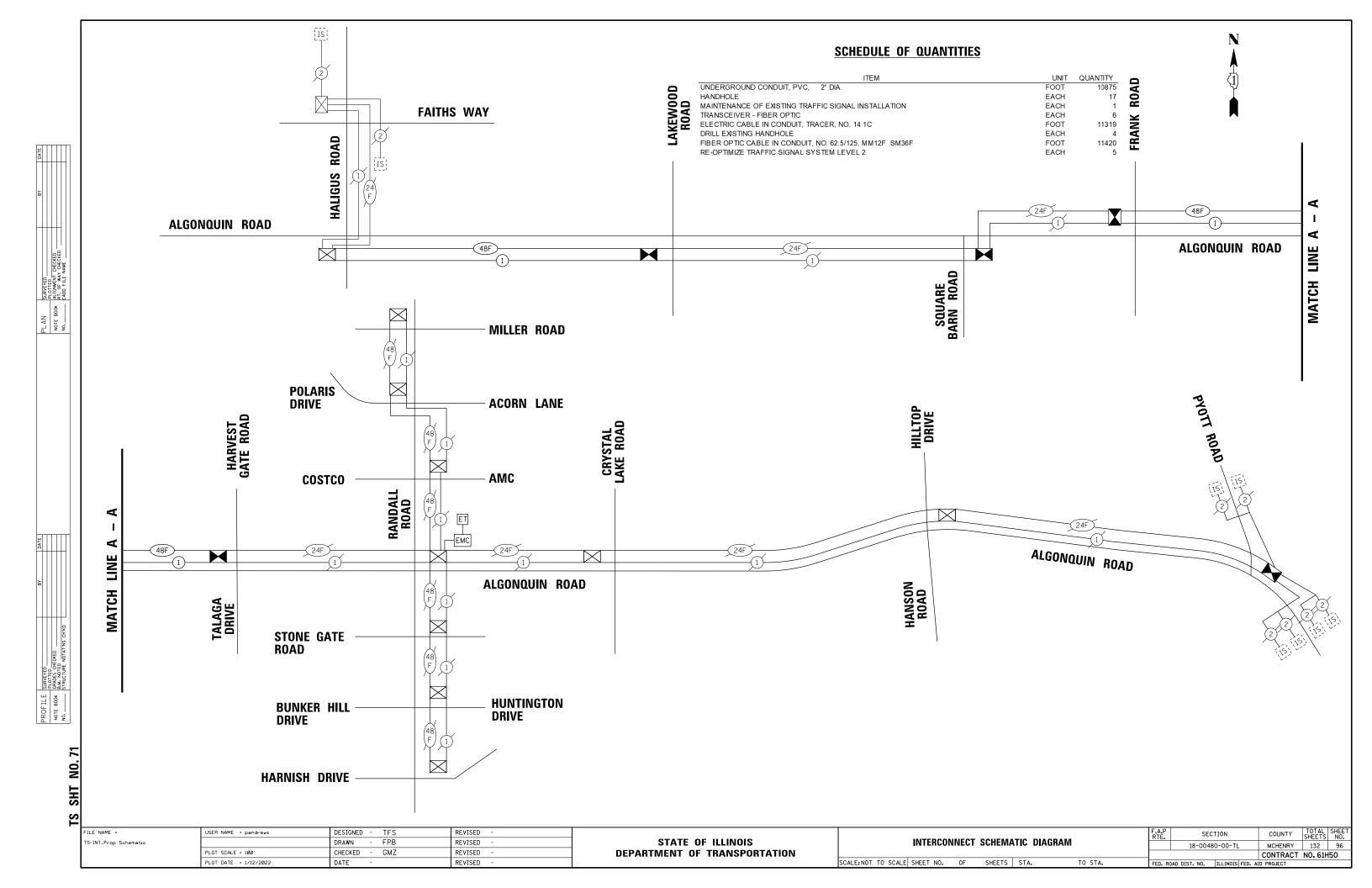












## LIGHTING GENERAL NOTES THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT (800) 892-0123. 2. BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD AND UNDERGROUND ELECTRIC UTILITIES THE CONTRACTOR SHALL CALL COM ED FOR LOCATION APPROVAL AND MINIMUM CLEARANCE REQUIREMENTS. 3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION. 4. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF: A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS PREPARED BY IDOT. B. "THE NATIONAL ELECTRICAL CODE". C. MUNICIPAL CODES & STANDARDS. 5. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL ALL PERTINENT EQUIPMENT SUBMITTALS HAVE BEEN REVIEWED BY THE ENGINEER. 6. ALL UNDERGROUND LIGHTING WIRING SHALL BE XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, INSTALLED IN SCH 40 HDPE CONDUIT A MINIMUM 30 INCHES BELOW FINISHED GRADE, FOLLOWING THE ROADWAY OR SIDEWALK EDGE. 7. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, (IF APPLICABLE) AND HAVE BEEN REVIEWED BY THE ENGINEER.

		STRUCTUR LEFT TO S			WITH	LUMINAIRE	ARMS,	THEY	SHALL	NOT

9. THE LIGHT POLE LOCATIONS SHALL COMPLY WITH THE MINIMUM CLEAR WIDTH FOR AN ACCESSIBLE ROUTE FOR SIDEWALKS PER CURRENT AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS (COMPLY WITH IDOT BDE CHAPTER 17-4.04 AND PROWAG R301.1).

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF THE TOP OF FOUNDATION ELEVATION WITH THE FINISHED GRADE.
- 11. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
- 12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL PROPOSED ELECTRICAL EQUIPMENT FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER. ALL UTILITIES SHALL BE LOCATED PRIOR TO MARKING PROPOSED ELECTRICAL EQUIPMENT.
- 13. THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO SETS OF FULL SIZE RECORD DRAWINGS TO THE ENGINEER UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATIONS OF ALL LIGHT POLES, UNDERGROUND CONDUITS/WIRING, HANDHOLES, JUNCTION BOXES AND CONTROLLER CABINETS. THE DRAWINGS WILL BE REVIEWED BY THE
- 14. UPON COMPLETION OF THE PROPOSED LIGHTING IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS, ALL ELECTRICAL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.

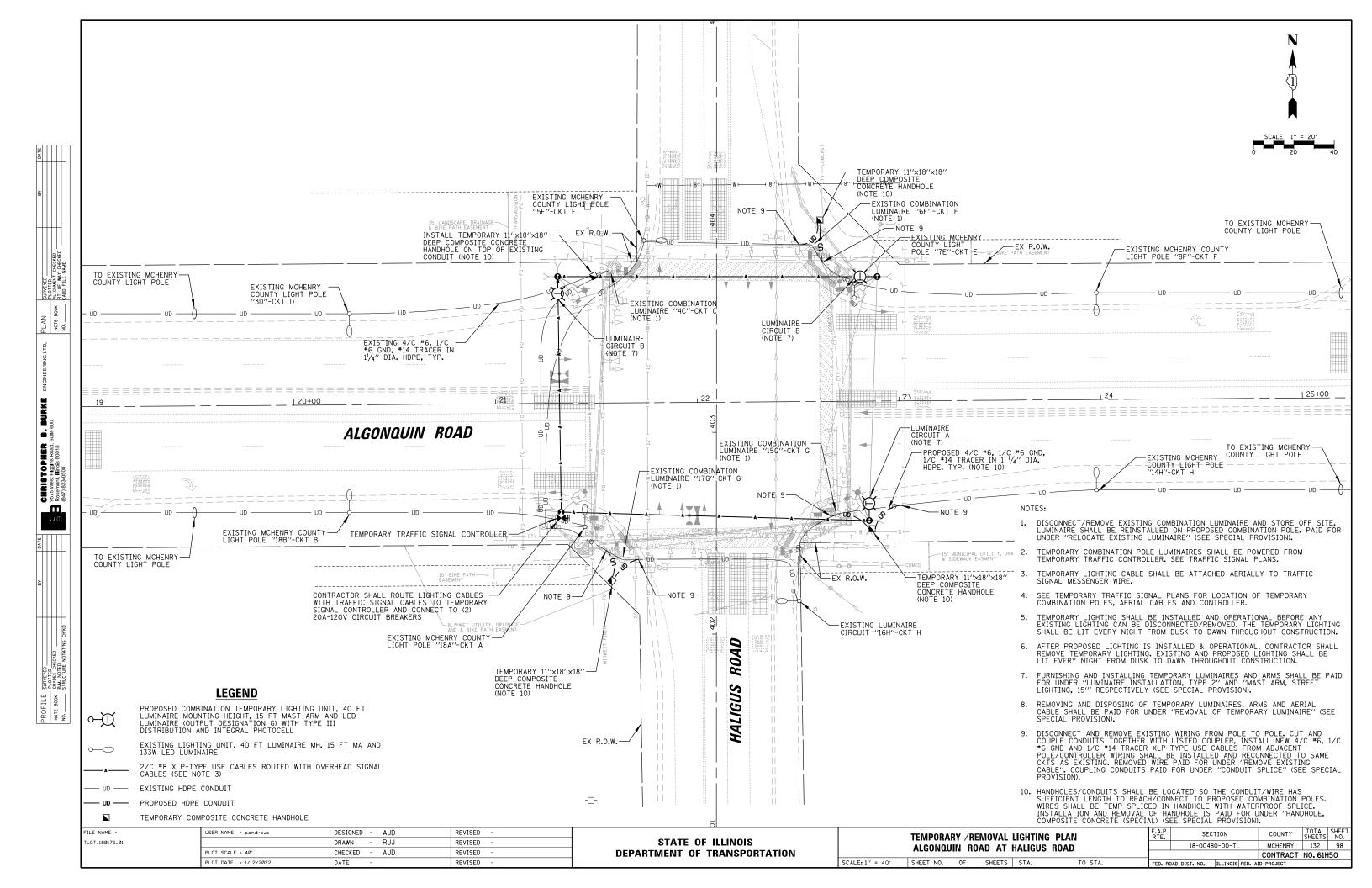
### **BILL OF MATERIALS**

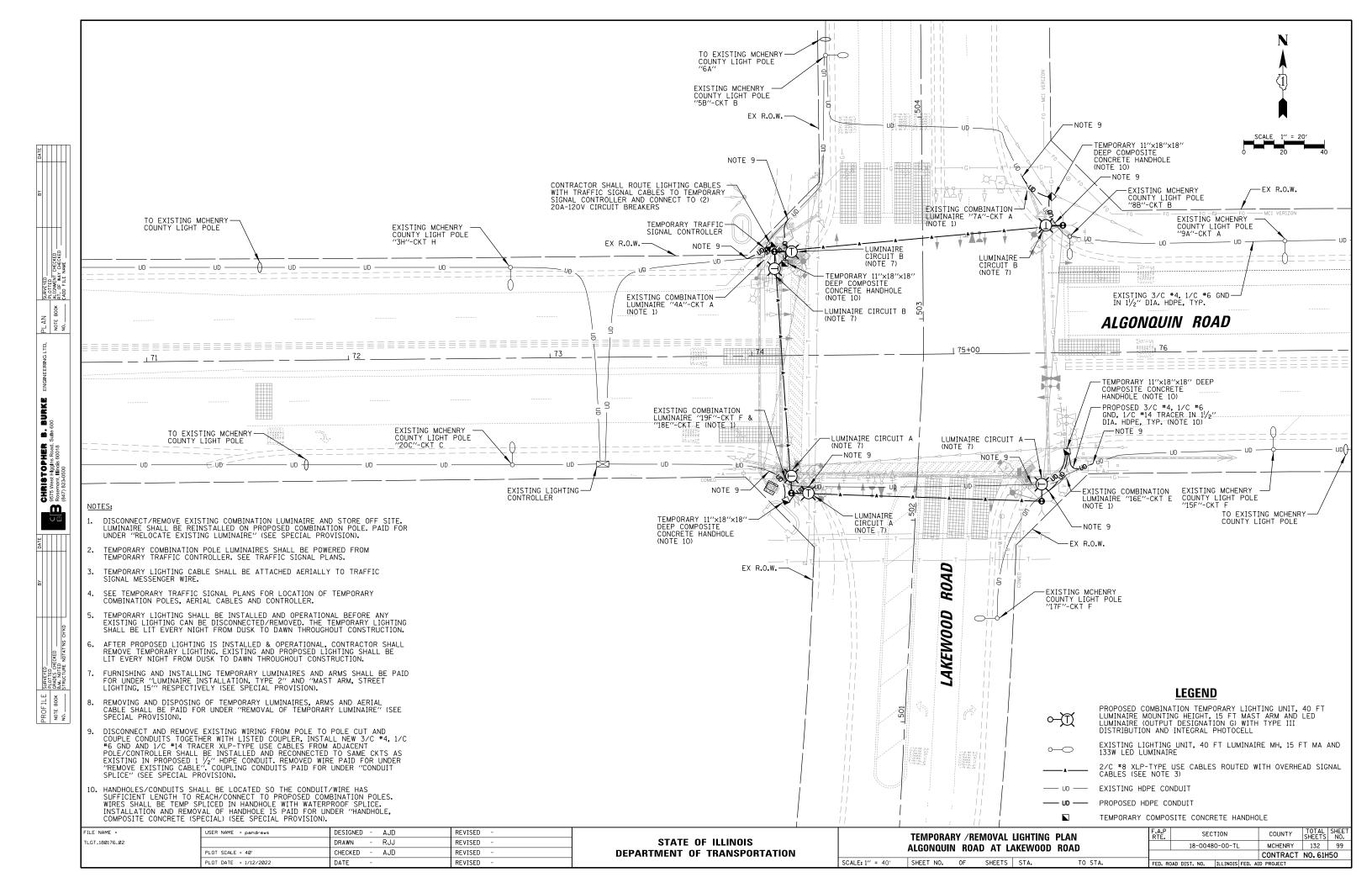
DESCRIPTION	UNIT	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	F00T	65
UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 11/4" DIA.	FOOT	205
UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, $1^{1}\!\!/_{\!2}{}^{\prime\prime}$ DIA.	FOOT	1015
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 14	F00T	3925
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	6390
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	9930
AERIAL CABLE, 2-1/C NO. 8 WITH MESSENGER WIRE	FOOT	3190
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	2
REMOVAL OF POLE FOUNDATION	EACH	2
REMOVE EXISTING CABLE	FOOT	2770
• MAST ARM, STREET LIGHTING, 15'	EACH	35
REMOVAL OF LIGHTING LUMINAIRE, SALVAGE	EACH	11
• LUMINAIRE, LED, SPECIAL	EACH	4
CONDUIT SPLICE	EACH	32
HANDHOLE, COMPOSITE CONCRETE (SPECIAL)	EACH	14
EXPOSE AND RELOCATE EXISTING UNIT DUCT	FOOT	715
COMBINATION LIGHTING CONTROLLER	EACH	3
REMOVAL OF TEMPORARY LUMINAIRE	EACH	37
RELOCATE EXISTING LUMINAIRE	EACH	13
• LUMINAIRE INSTALLATION, TYPE 1	EACH	5
• LUMINAIRE INSTALLATION, TYPE 2	EACH	30
CABLE, SPECIAL	FOOT	1370
• LUMINAIRE INSTALLATION, TYPE 3	EACH	4
• LUMINAIRE INSTALLATION, TYPE 4	EACH	10
MAINTAIN EXISTING LIGHTING SYSTEM	LSUM	1
SEE SPECIAL PROVISION		

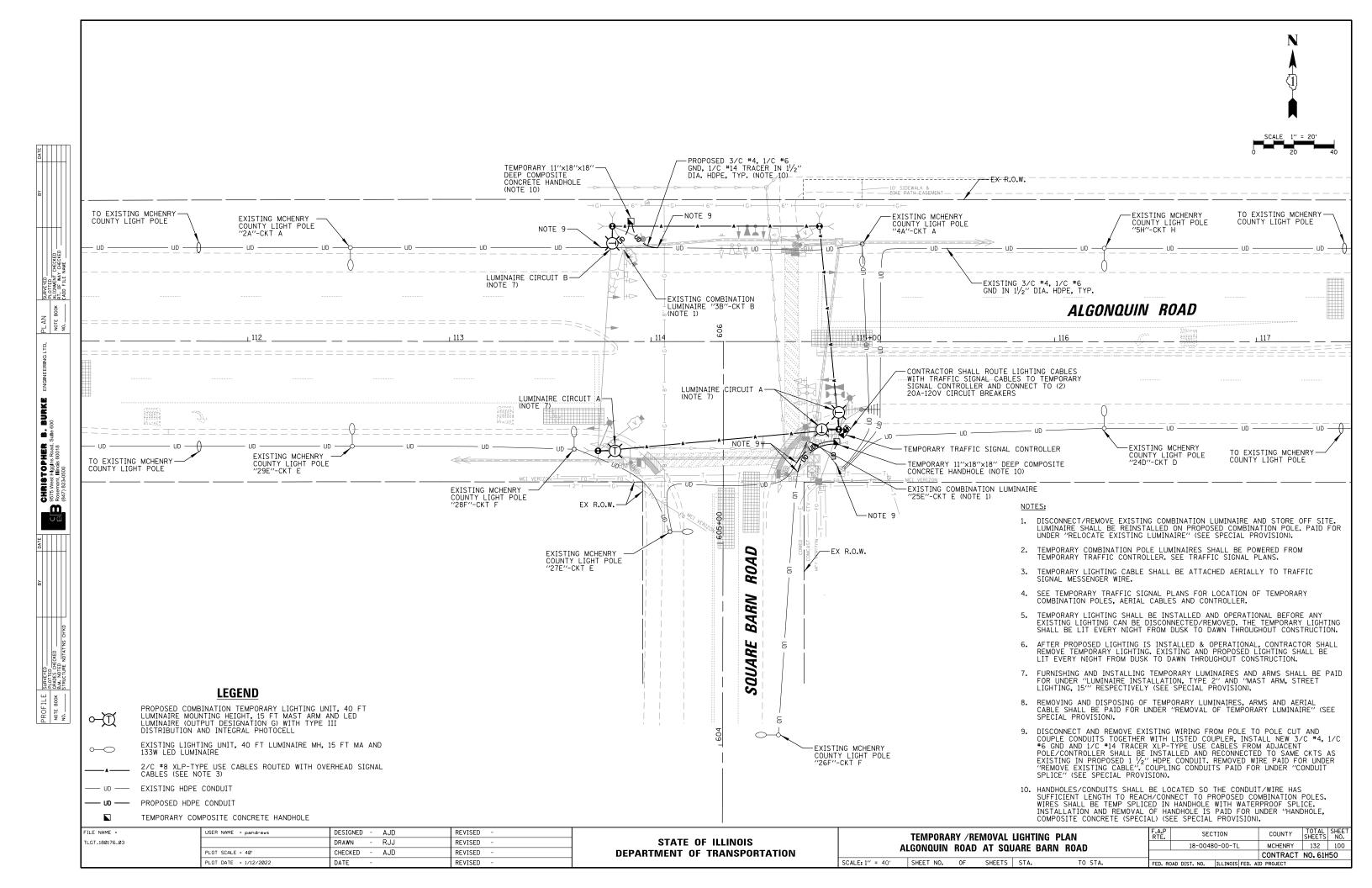
#### **ABBREVIATIONS**

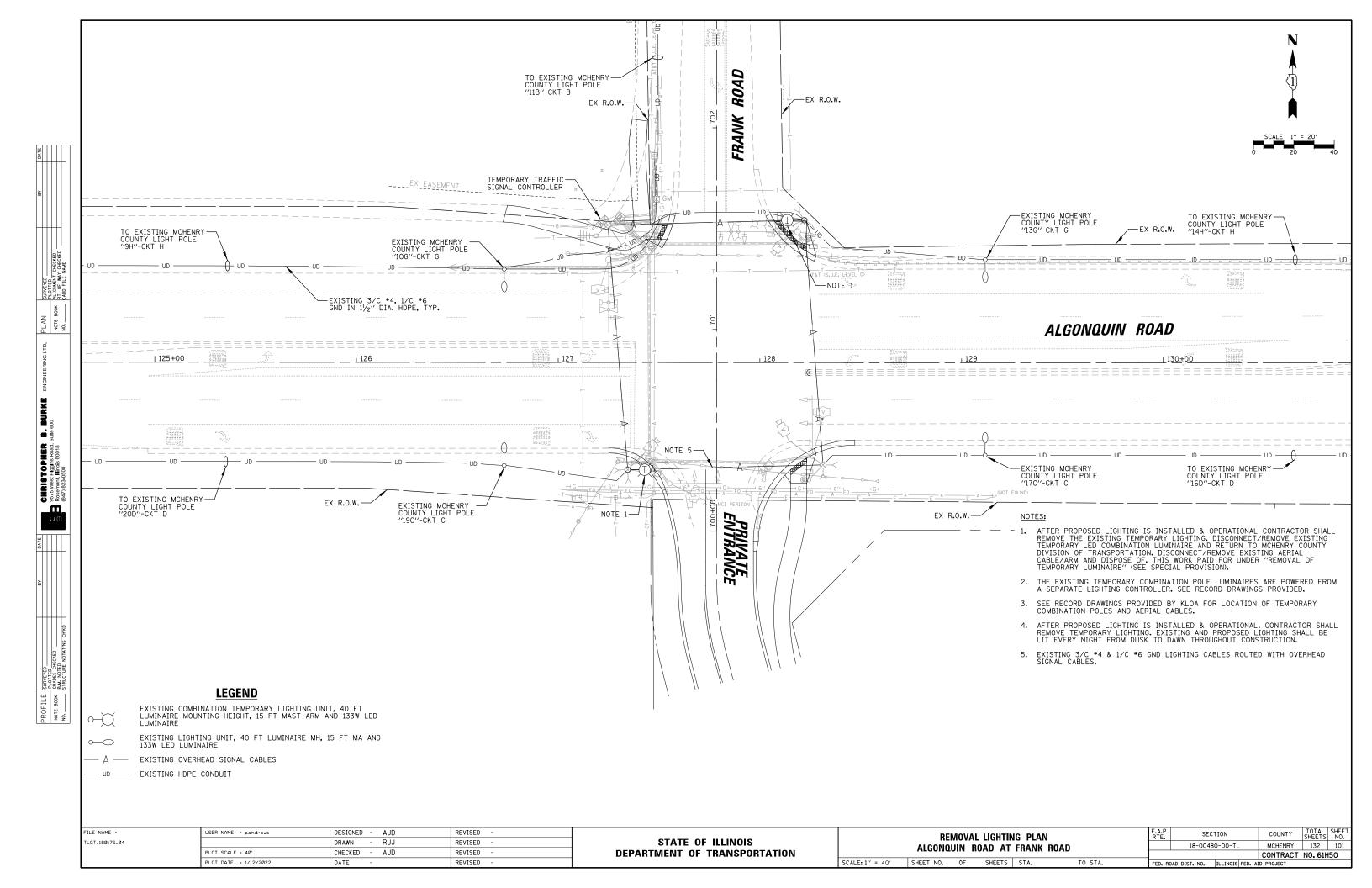
ADDITE VIA HOUSE							
Α	AMPS						
CKT	CIRCUIT						
CNC	COILABLE NON-METALLIC CONDUIT						
DIA	DIAMETER						
FT	FOOT						
FOC	FACE OF CURB						
GFCI	GROUND FAULT CIRCUIT INTERRUPTER						
GND	GROUND						
HDPE	HIGH DENSITY POLYETHYLENE						
HH	HAND HOLE						
HPS	HIGH PRESSURE SODIUM						
PVC	POLYVINYL CHLORIDE						
RGS	RIGID GALVANIZED STEEL CONDUIT						
ROW	RIGHT OF WAY						
SS	STAINLESS STEEL						
STA	STATION						
V	VOLTS						
W	WATTS						
WR	WEATHER RESISTANT						

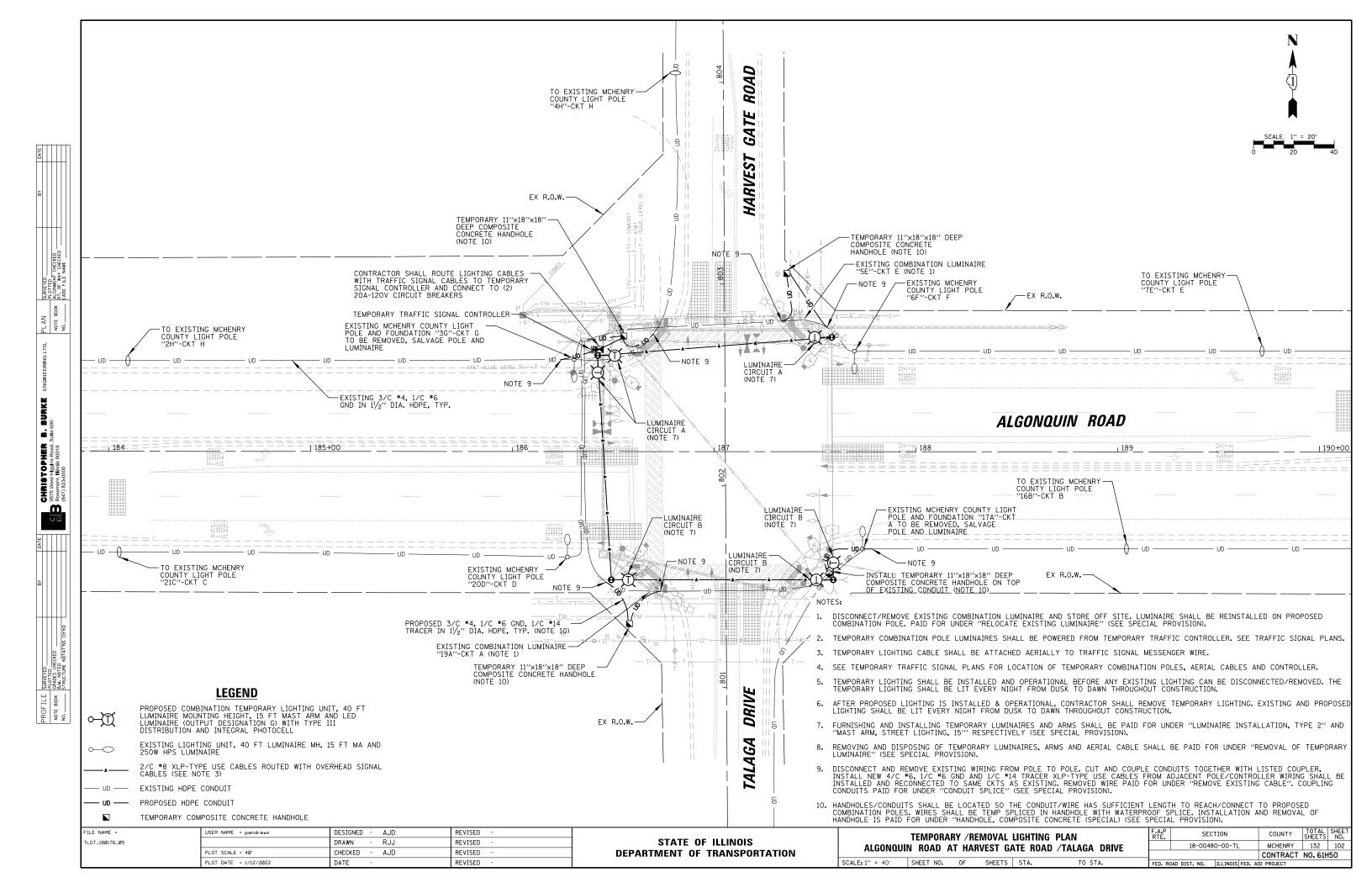
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GN_18Ø176_Ø1		DRAWN - RJJ	REVISED -	STATE OF ILLINOIS	GENERAL NOTES AND BILL OF MATERIALS			18-00480-00-TL	MCHENRY 132 97
	PLOT SCALE = N.T.S.	CHECKED - AJD	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO. 61H50
PLOT DATE = 1/12/2022		DATE -	REVISED -		SCALE: N.T.S.	SHEET NO. OF SHEETS STA. TO STA.	FED.	ROAD DIST. NO.   ILLINOIS FED. A	1

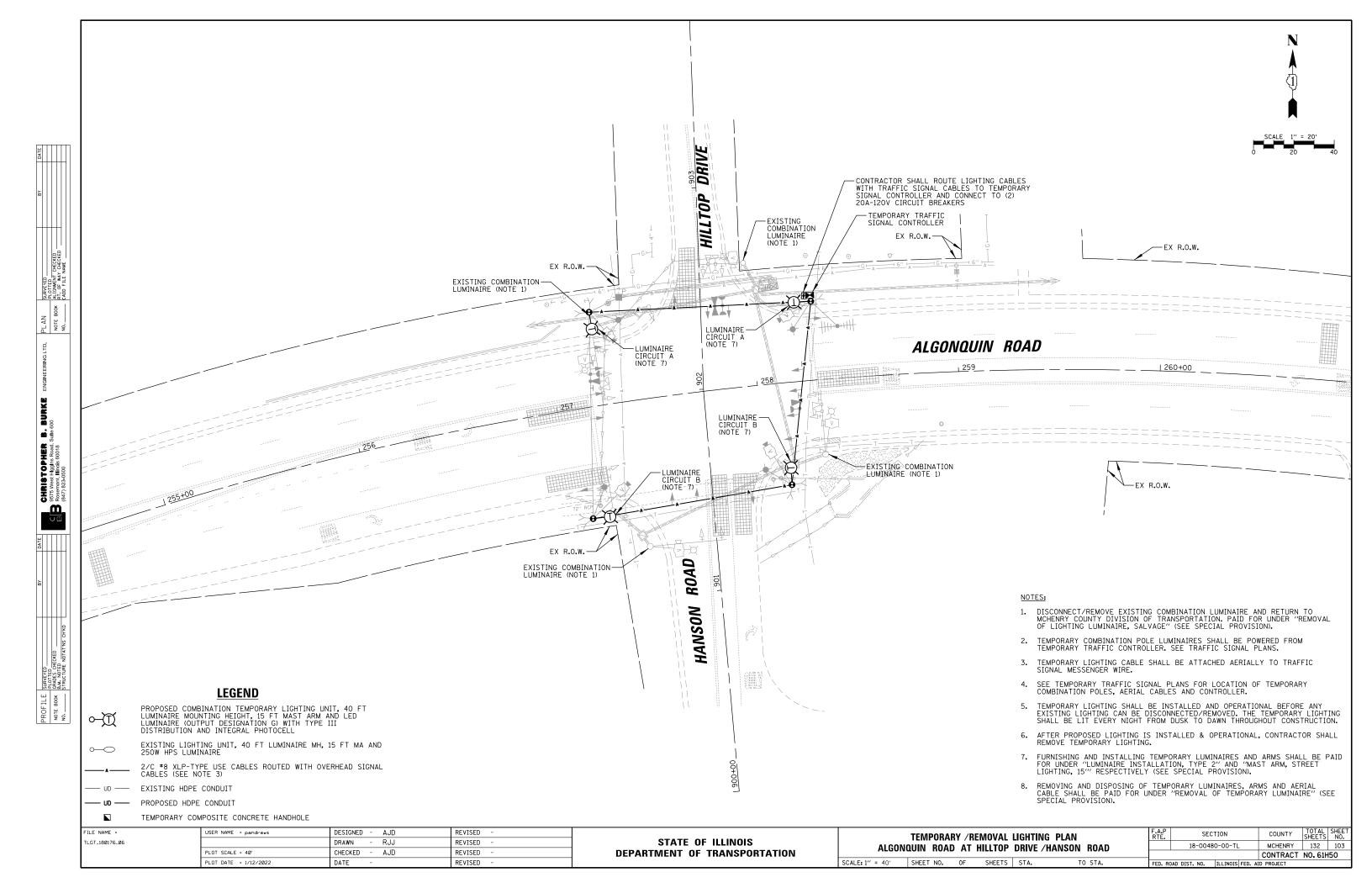


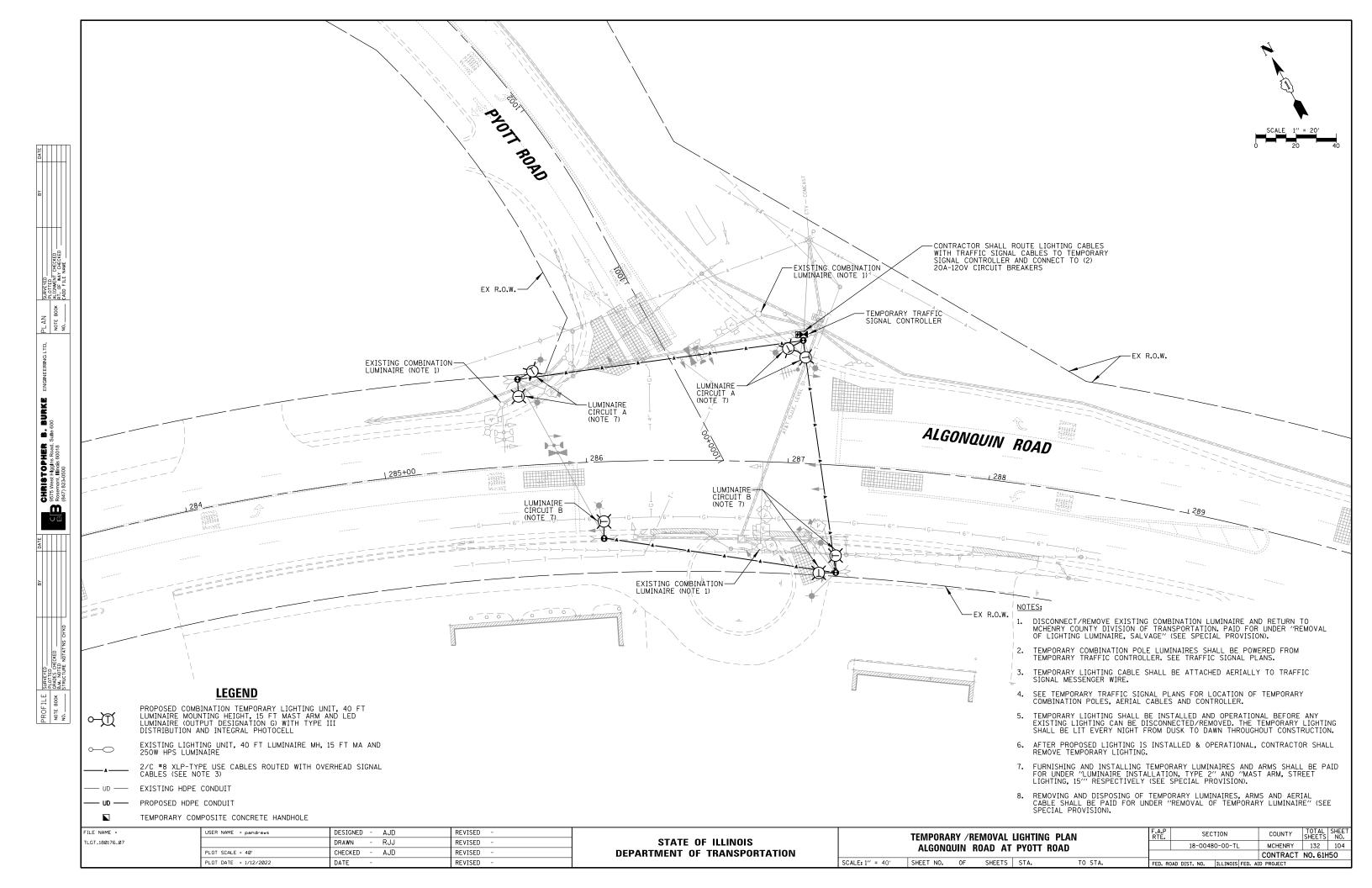


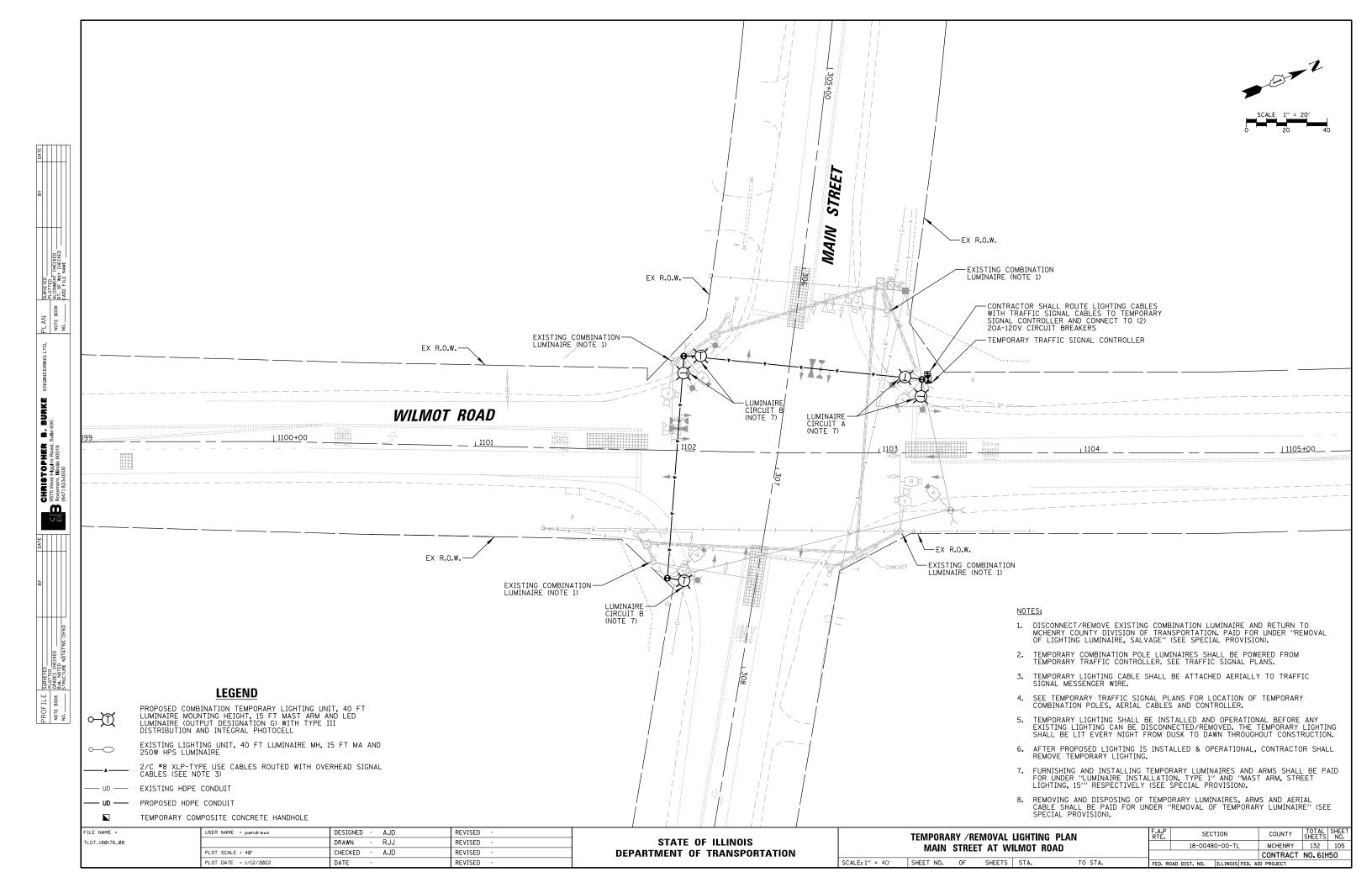


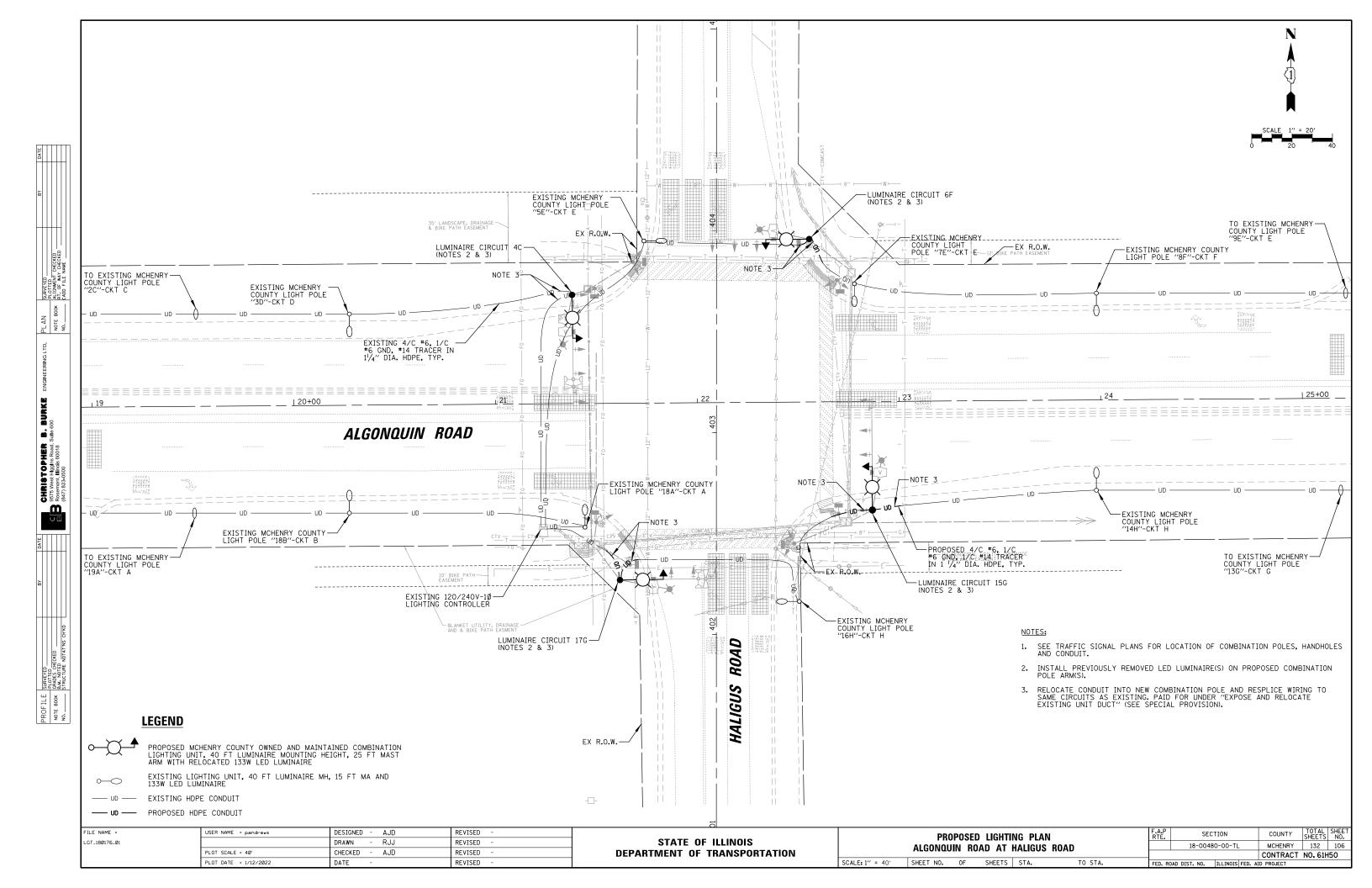


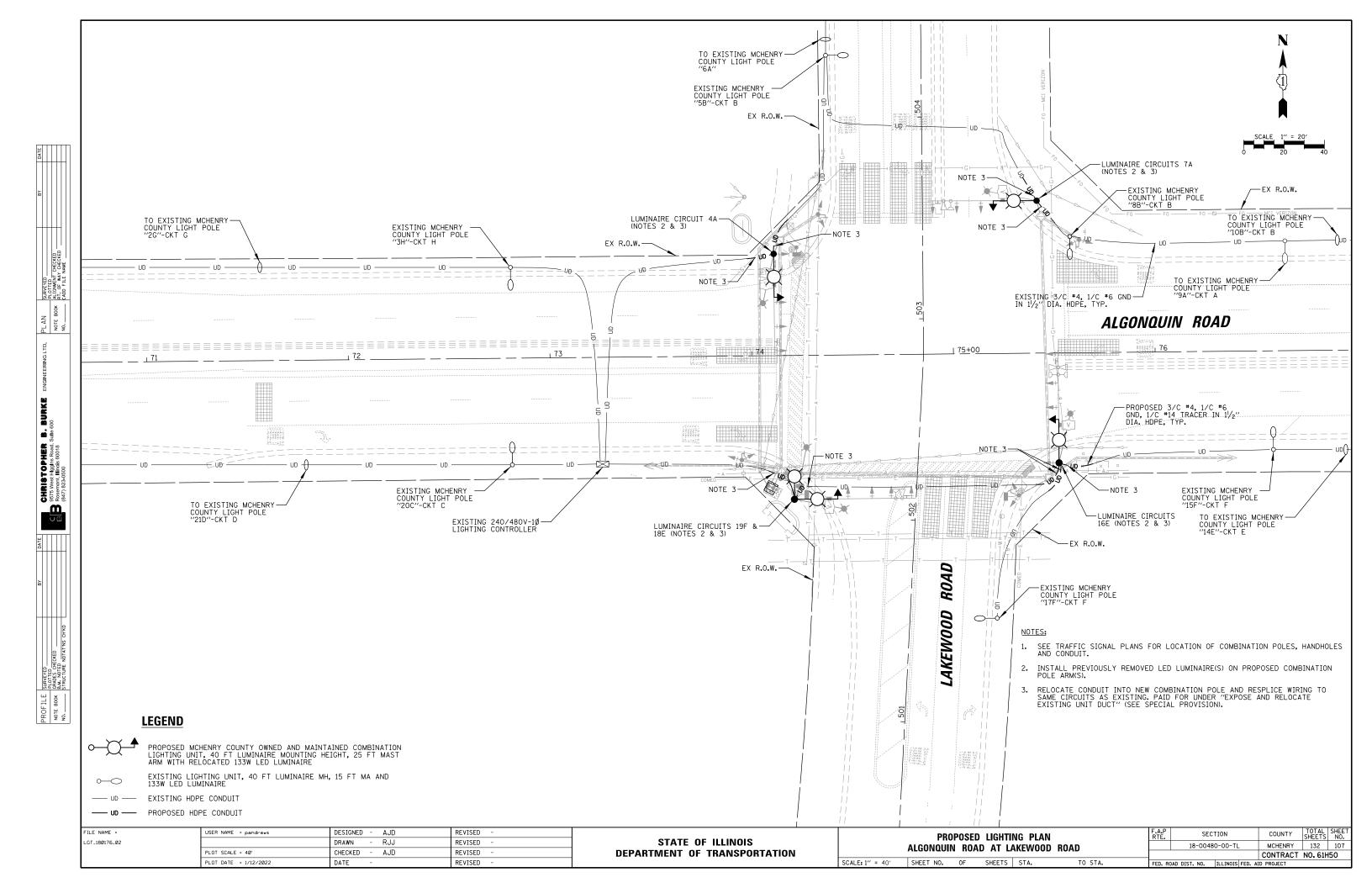


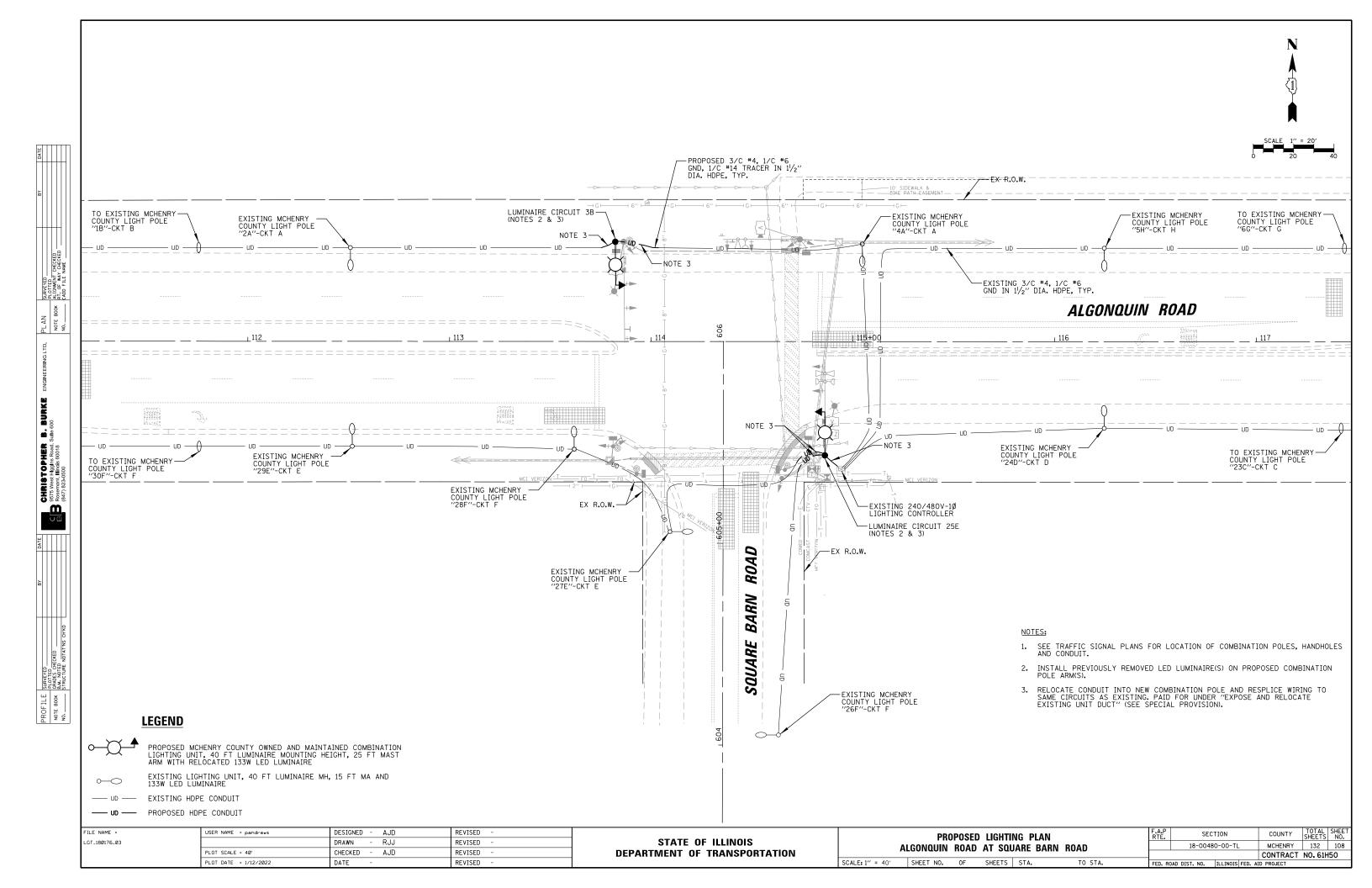


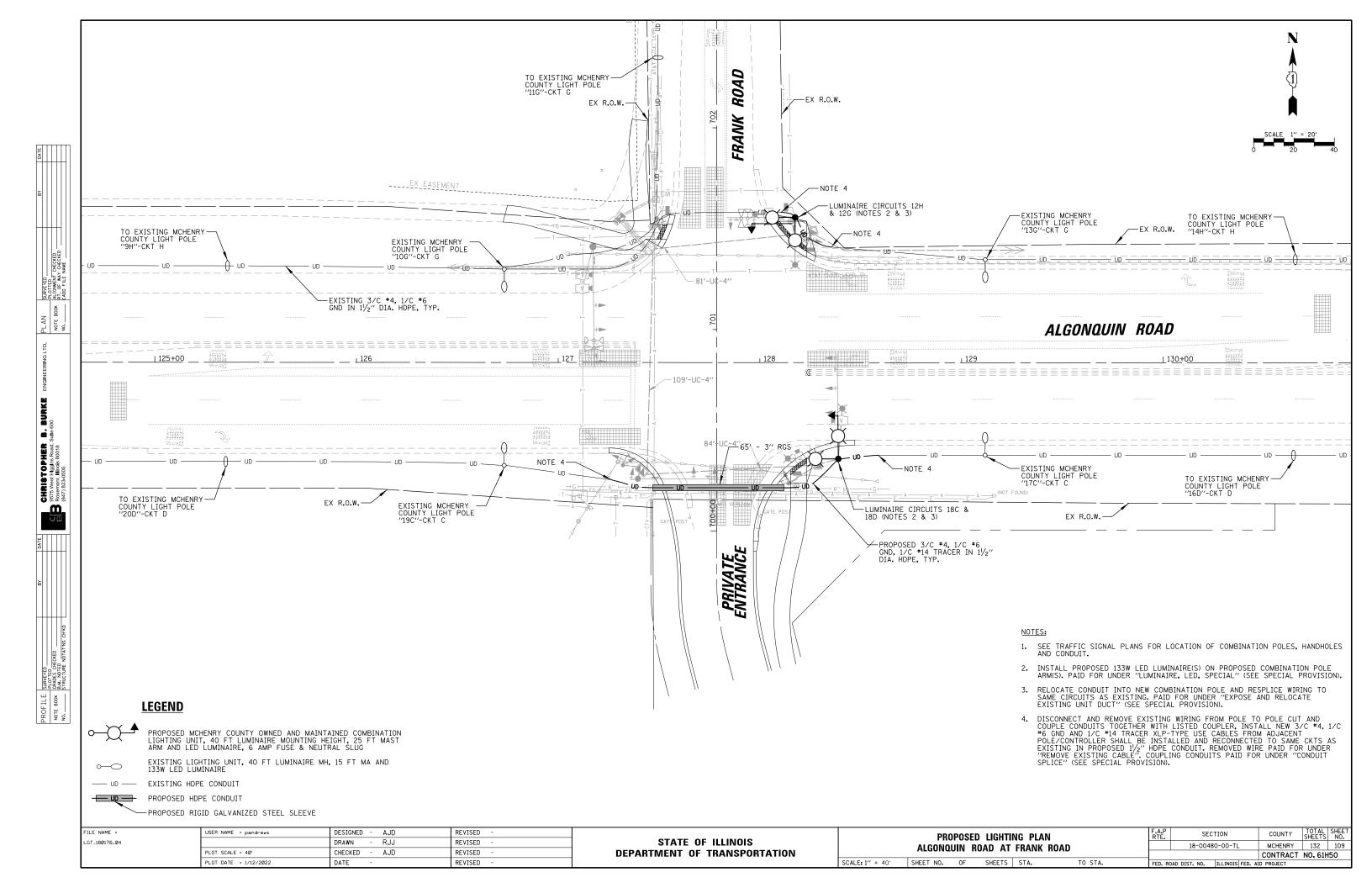


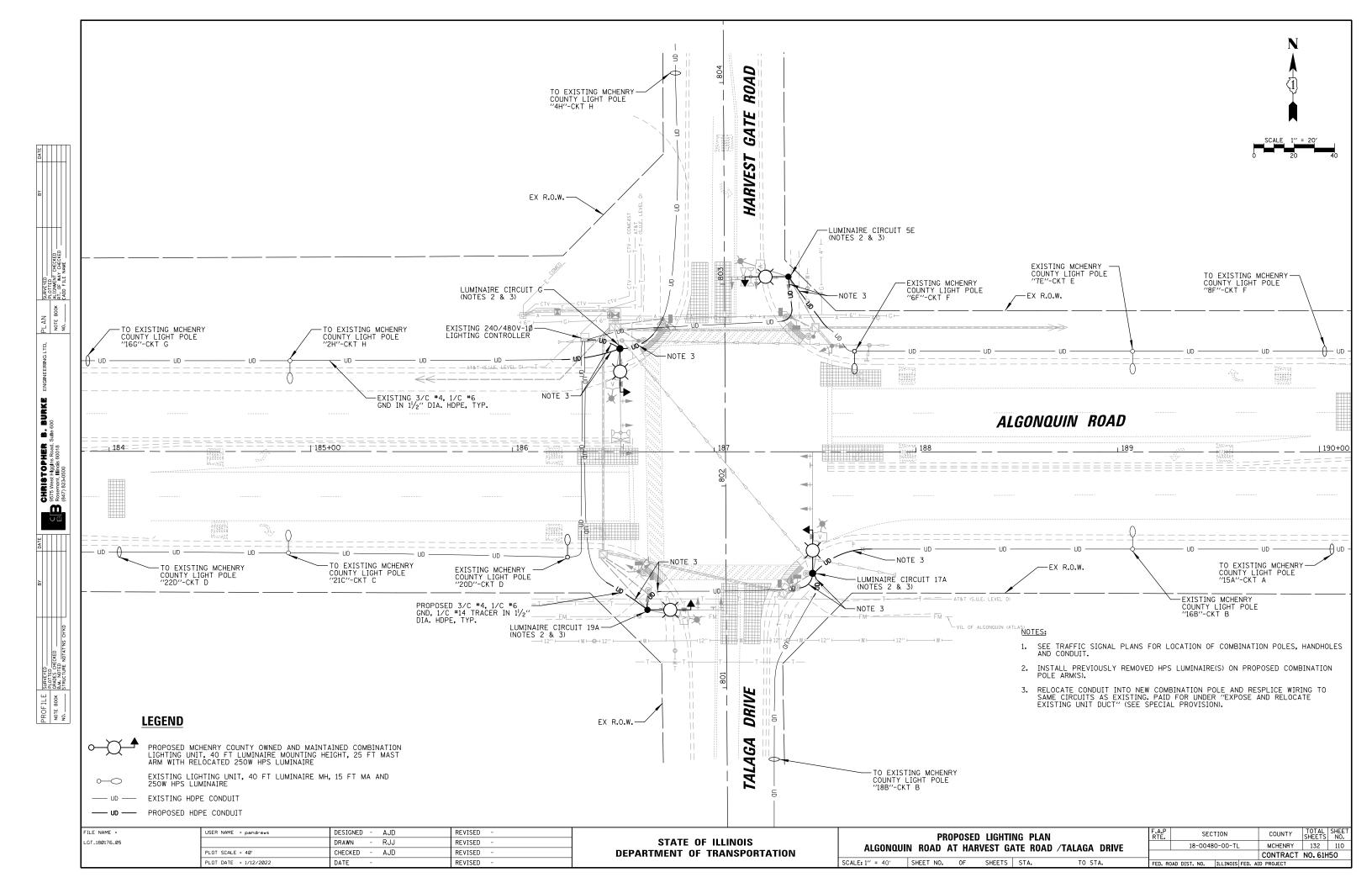


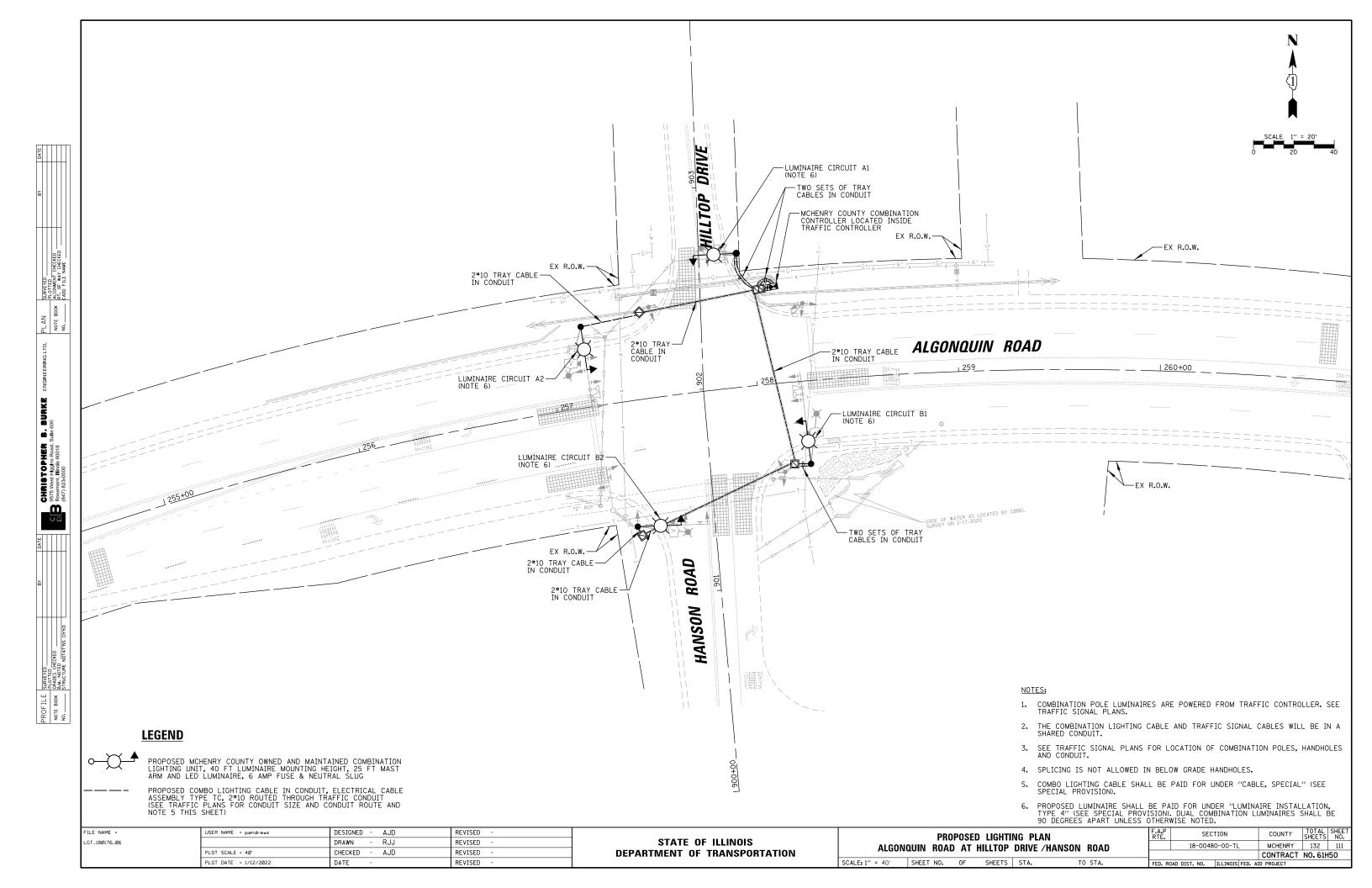


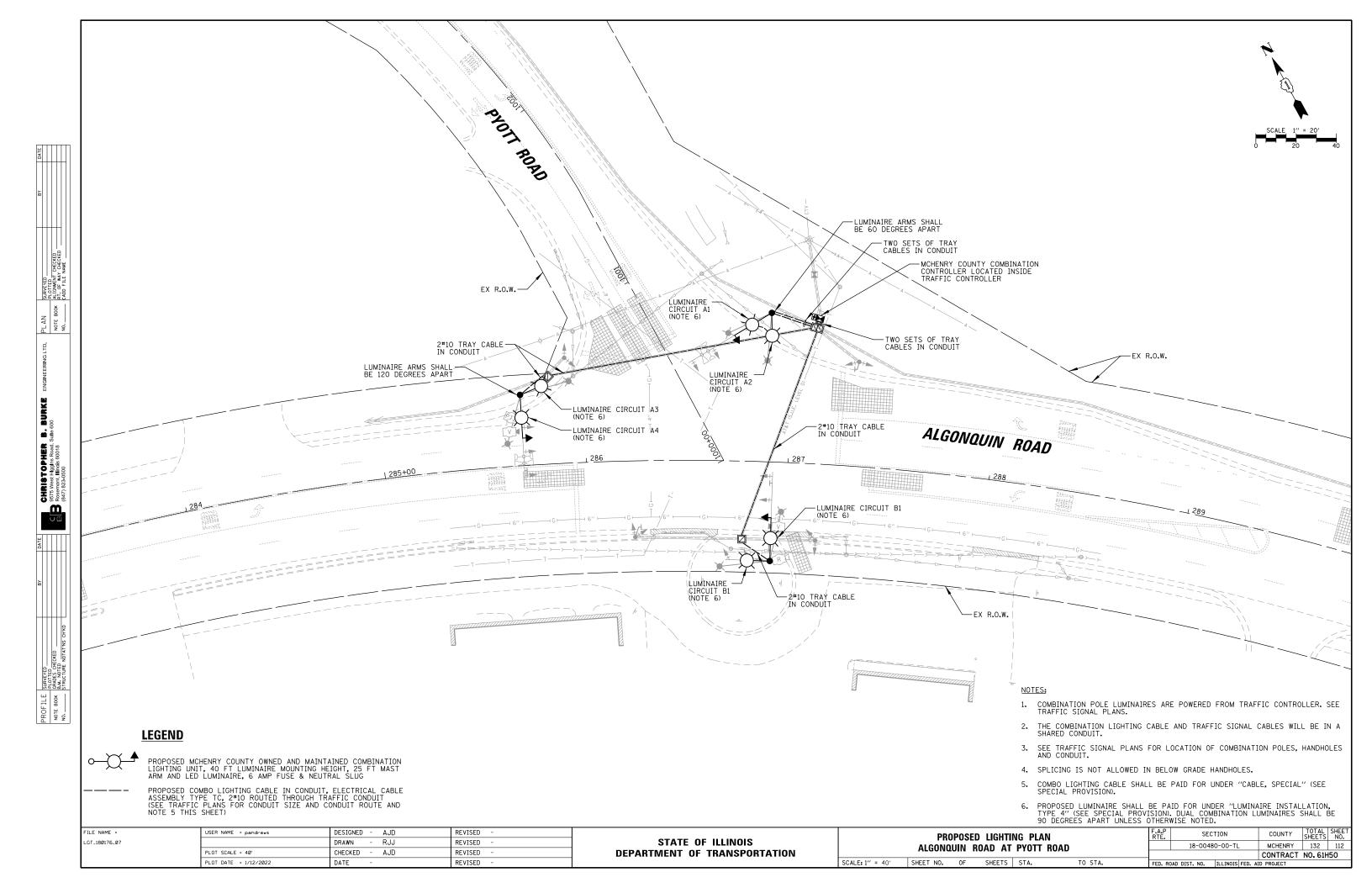


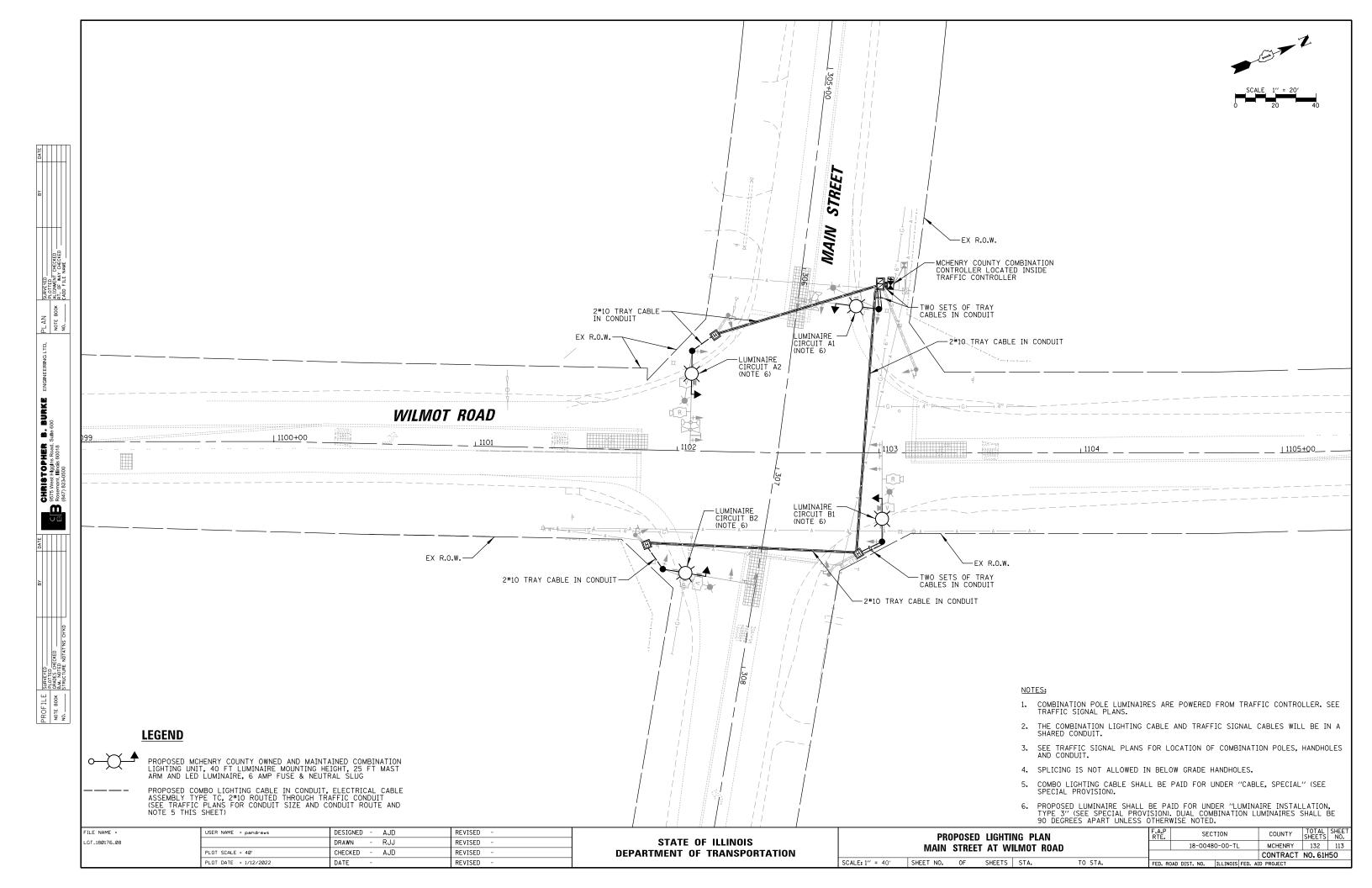


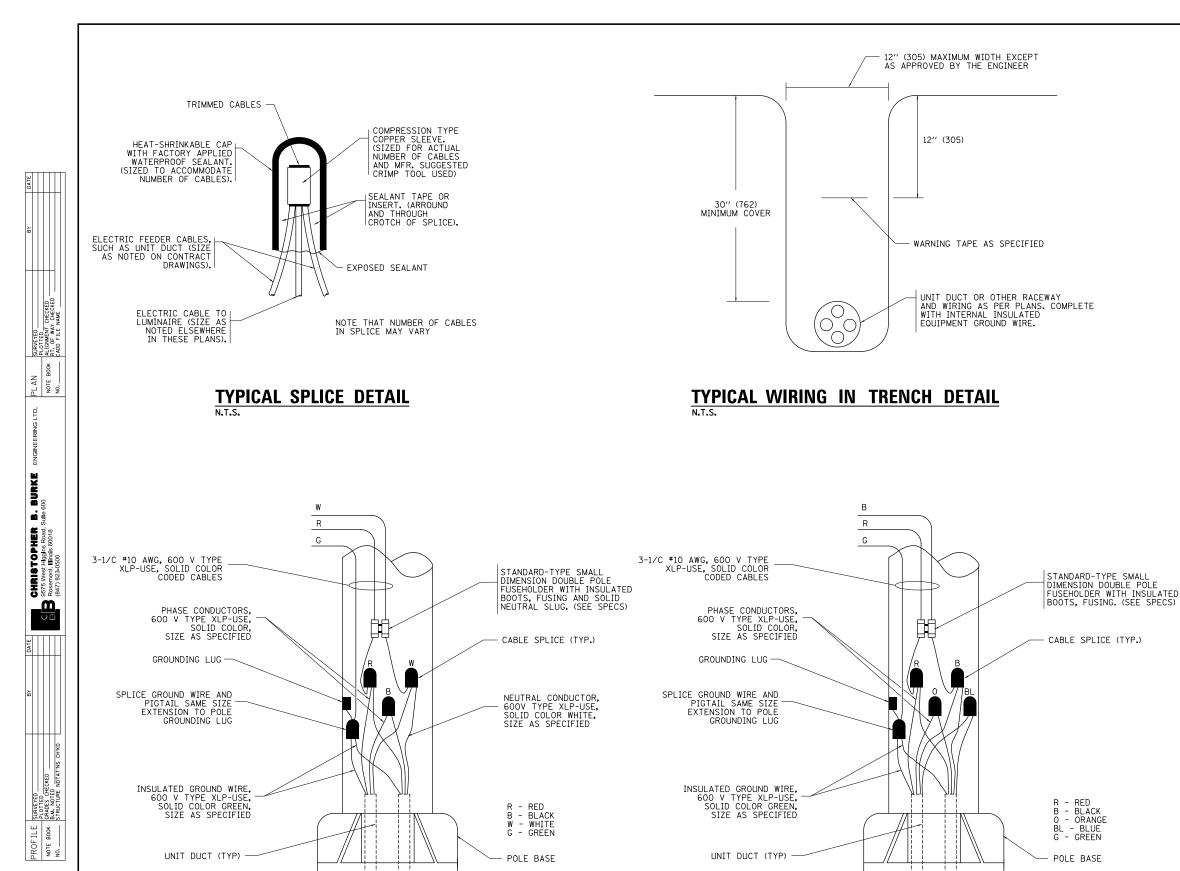












POLE WIRING DETAIL FOR ALL INTERSECTIONS

**EXCEPT ALGONQUIN RD /HALIGUS RD** 

## POLE WIRING DETAIL FOR INTERSECTION OF ALGONQUIN RD /HALIGUS RD

② SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.

③ SLEEVE SHALL BE A MINIMUM OF 36" BELOW ROADWAY OR CURB BOTTOM.

ELECTRIC CONDUIT INSTALLATION

1 SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) CONDUIT.

**ROADWAY CROSSING** 

1 RGS CONDUIT

TRENCH CROSS SECTION

VARIABLE

-LID SHALL BE GASKETED, BOLTED AND HAVE THE FOLLOWING LOGOS: "LIGHTING"

LID SHALL BE FLUSH WITH GRADE

-3/8-16 UNC STAINLESS STEEL HEX HEAD BOLT

> -POLYMER CONCRETE HANDHOLE (SIZE AS SHOWN ON PLANS)

-12" CRUSHED STONE

CONDUITS AS SHOWN ON PLANS TO EXTEND 2" ABOVE STONE BASE

-¢ OF TRENCH

<u>6</u>" TO 10"

RED WARNING TAPE 6" WIDE

CABLE AND DUCT SIZES AS SHOWN ON LIGHTING PLANS

2

MIN. 2'

R.O.W.

OPEN BOTTOM

W/ WASHER (2)

\_VANAMAN ANAMAN ANAMANAN ANAMAN ANAMAN ANAMAN ANAMAN ANAMAN ANAMAN ANAMAN ANAMAN ANAMA

LOGO

355555 35505

1. NO SPLICING ALLOWED IN HANDHOLE.

2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GREY.

3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS, AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTERN UNDERGROUND COMMITTEE GUIDE 3.6.

NAMANAMA ANAMAN

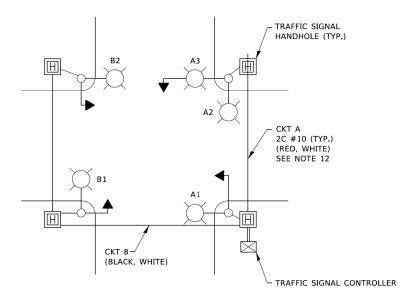
N.T.S.

MIN. 2'

R.O.W.

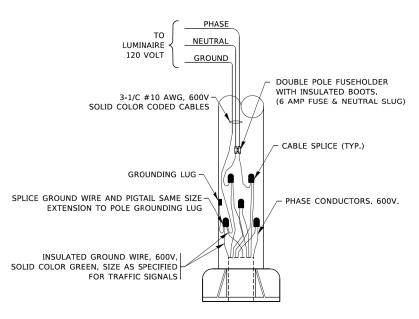
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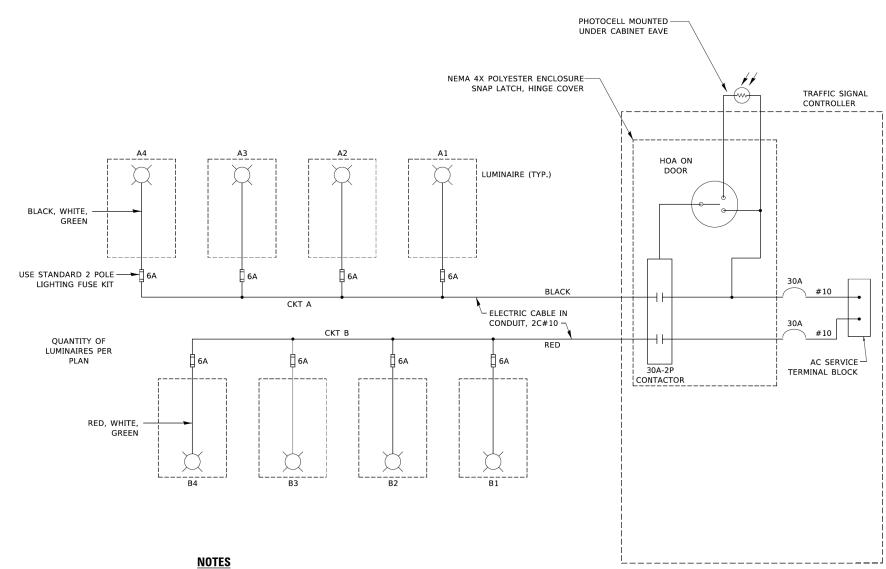
## TYPICAL LIGHTING CIRCUIT

(NOT TO SCALE)



### **COMBINATION POLE WIRING DETAIL**

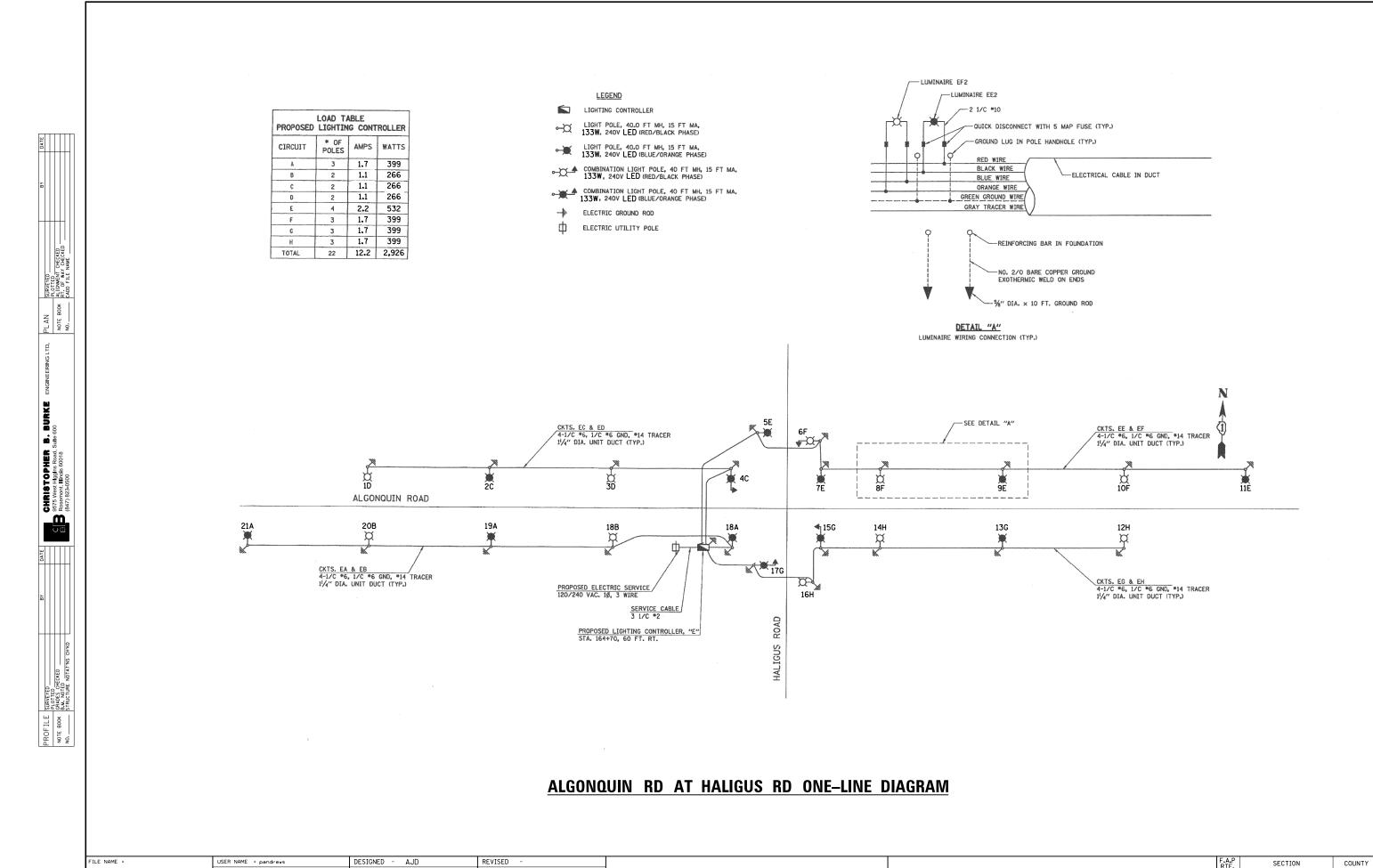
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- 1. 4 LUMINAIRES PER CIRCUIT, MAXIMUM.
- 2. TWO #10 (XLP-TYPE USE) CABLES TO BE USED FOR LIGHTING CIRCUITS.
- 3. ROUTE LIGHTING CIRCUITS IN TRAFFIC SIGNAL CONDUIT SYSTEM.
- 4. ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY.
- 5. FOR LIGHTING CIRCUITS, CONNECT TWO CIRCUIT BREAKERS TO AC SERVICE TERMINAL BLOCK.
- 6. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED. (UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED).
- 7. THE H.O.A. SWITCH SHALL BE LABELED AS "LIGHTING CONTROL" WITH THE POSITIONS "AUTO", "OFF" AND "TEST" WITH ENGRAVED NAME PLATES.
- 8. LIGHTING CONNECTED TO UPS BYPASS CIRCUIT.
- 9. COMBINATION LIGHTING MUST BE INSTALLED PRIOR TO SIGNAL TURN ON.
- 10. LUMINAIRE VOLTAGE SHALL BE 120V
- 12. THE UNDERGROUND EQUIPMENT GROUND WIRE IS SHOWN IN THE TRAFFIC SIGNAL PLANS AND IS INCLUDED IN THE SIGNAL PLANS. IT IS SHARED GROUND BETWEEN SIGNALS AND LIGHTING.

**IDOT STANDARD BE-240** (REVISED 8/3/2021)
(USE FOR INTERSECTIONS OF ALGONQUIN/HILLTOP, ALGONQUIN/PYOTT AND WILMOT/MAIN) 11. POLE WIRING & FUSE KITS ARE INCLUDED IN THE LUMINAIRE PAY ITEM.

FILE NAME =	USER NAME = pandrews	DESIGNED - AJD	REVISED -			F.A.P SECTION	COUNTY TOTAL SHEET SHEETS NO.
LDT_180176_02		DRAWN - RJJ	REVISED -	STATE OF ILLINOIS	PROPOSED LIGHTING DETAILS	18-00480-00-TL	MCHENRY 132 115
	PLOT SCALE = N.T.S.	CHECKED - AJD	REVISED -	DEPARTMENT OF TRANSPORTATION		'	CONTRACT NO. 61H50
	PLOT DATE = 1/12/2022	DATE -	REVISED -		SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.   ILLINOIS FED.	AID PROJECT



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

LDT\_180176\_03

DRAWN - RJJ

CHECKED - AJD

DATE

PLOT DATE = 1/12/2022

REVISED

REVISED

REVISED

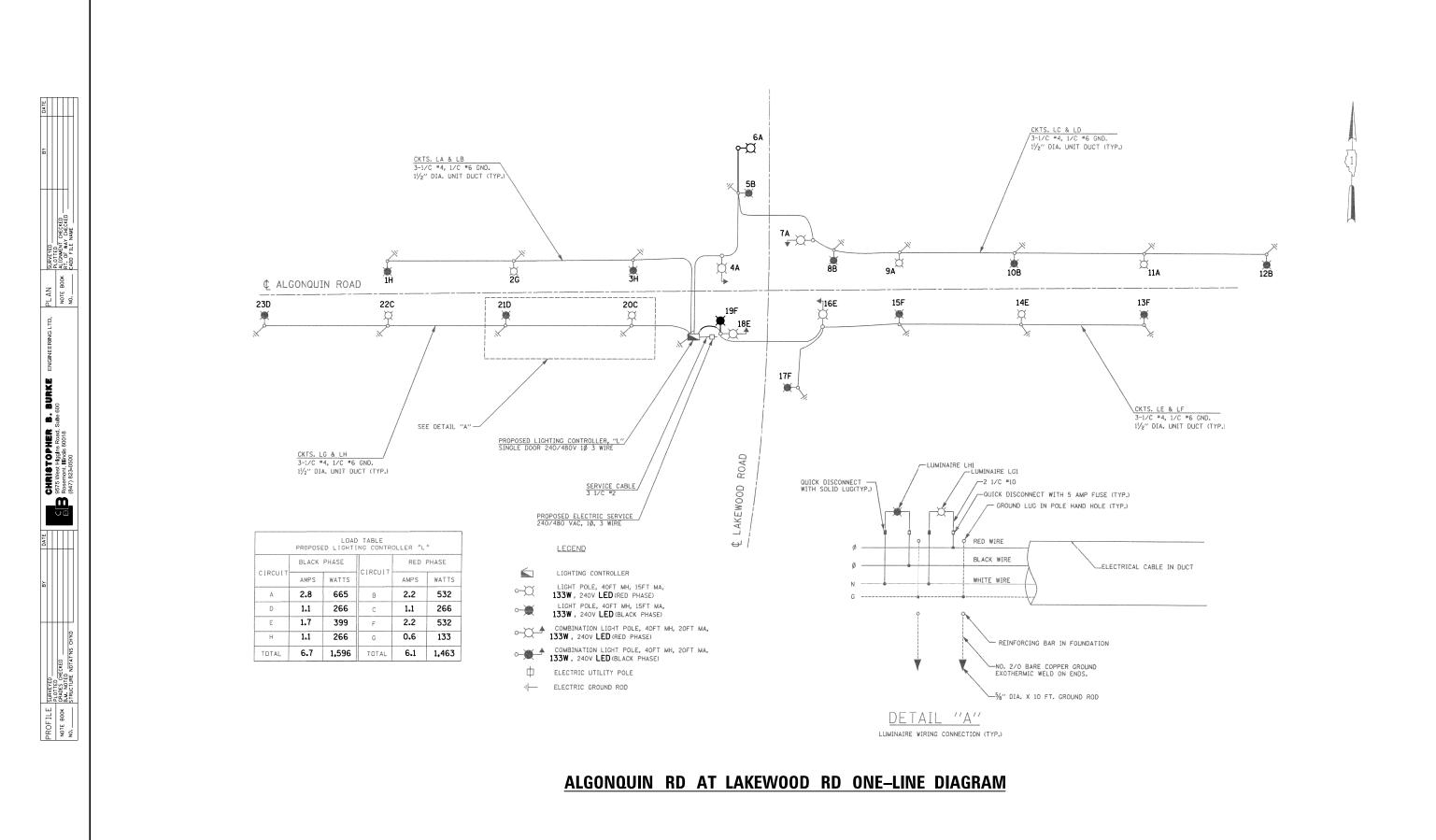
PROPOSED LIGHTING DETAILS

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

18-00480-00-TL

MCHENRY 132 116

CONTRACT NO. 61H50



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SECTION

18-00480-00-TL

PROPOSED LIGHTING DETAILS

TO STA.

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

COUNTY

MCHENRY 132 117

CONTRACT NO. 61H50

FILE NAME =

LDT\_180176\_04

USER NAME = pandrews

PLOT DATE = 1/12/2022

DESIGNED - AJD

- RJJ

DRAWN

DATE

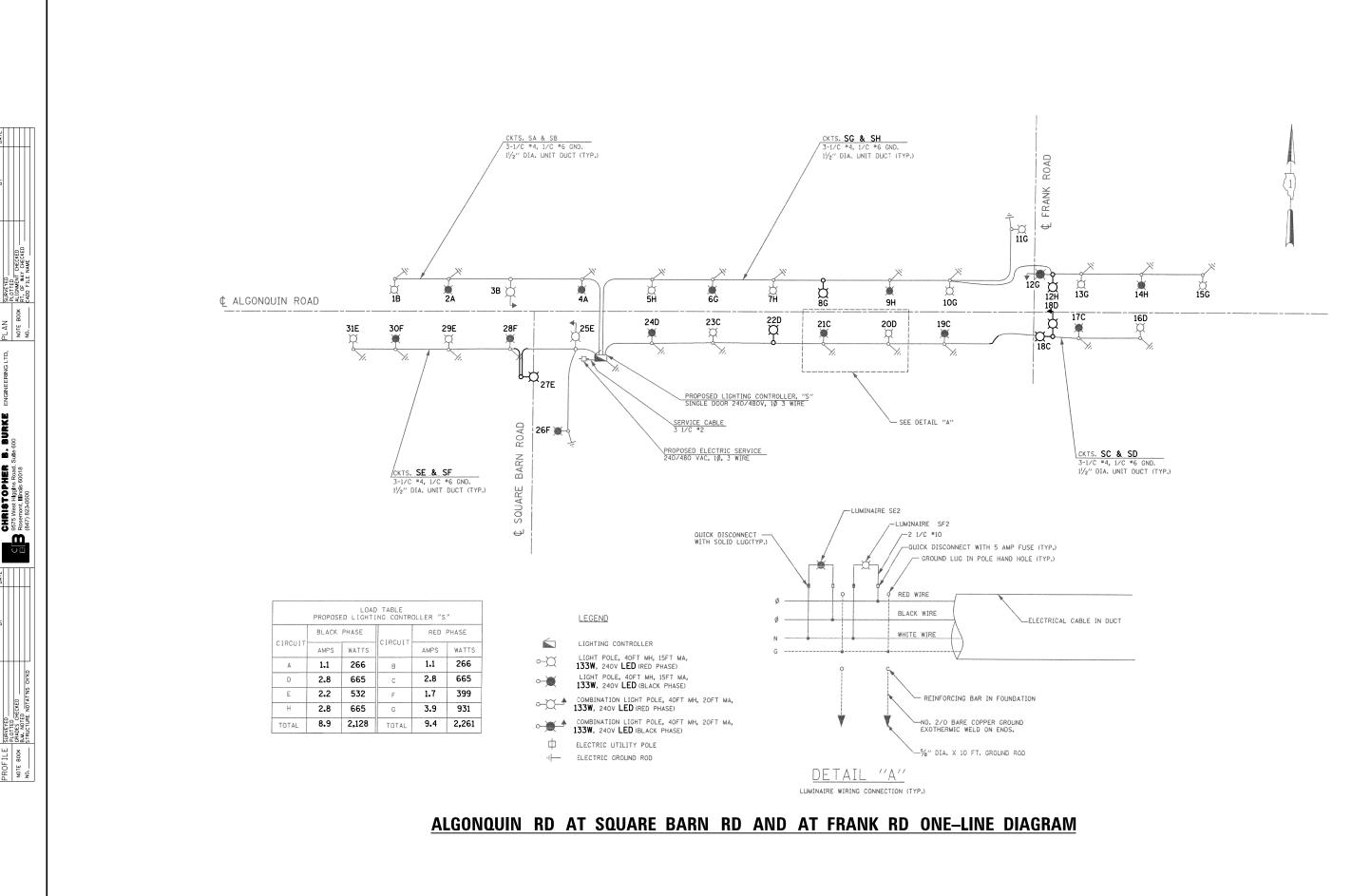
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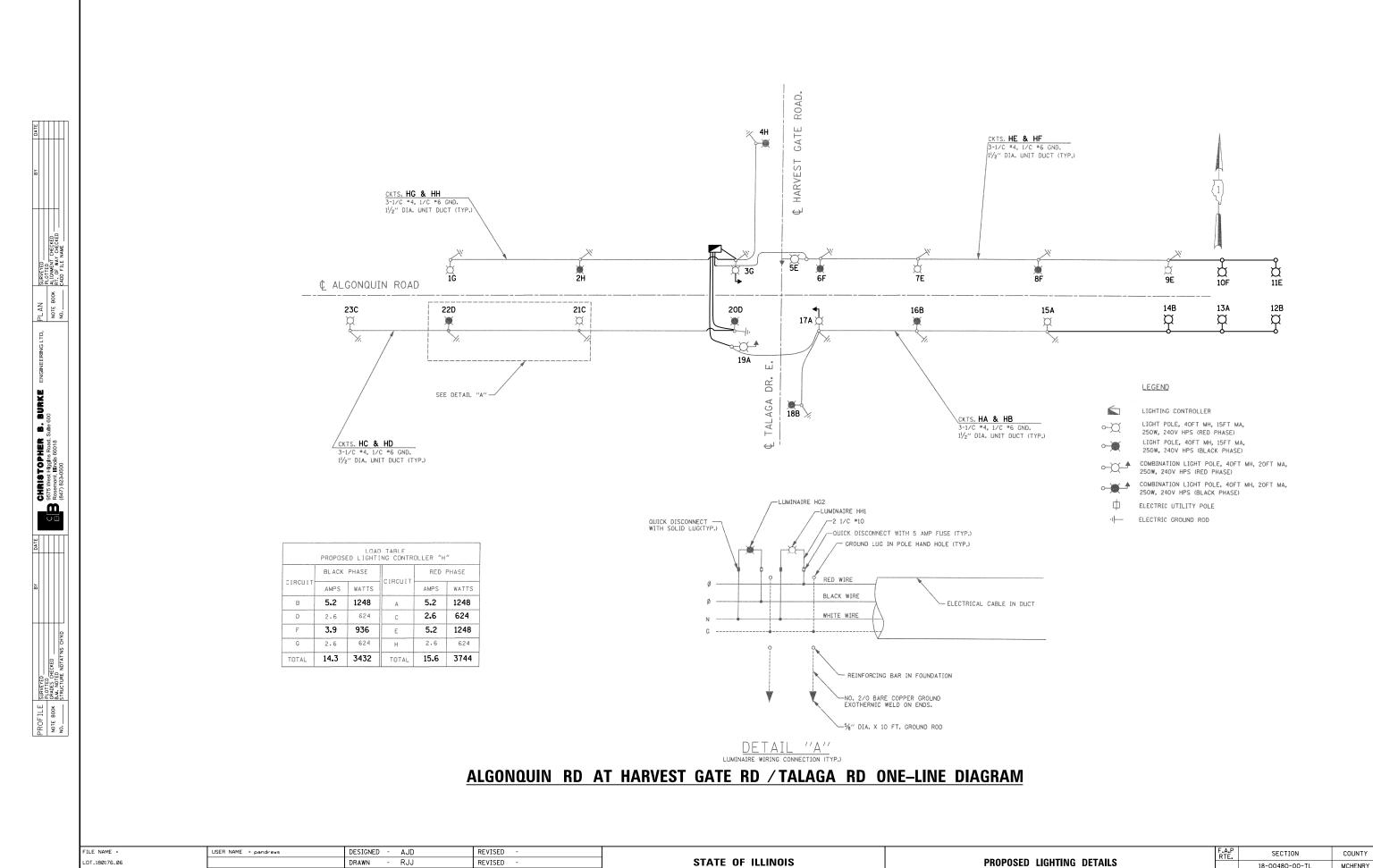
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FILE NAME =	USER NAME = pandrews	DESIGNED - AJD	REVISED -									F.A.P RTF.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
LDT_180176_05		drawn - RJJ	REVISED -	STATE OF ILLINOIS		PROPOSED LIGHTING DETAILS						777.20	18-00480-00-TL	MCHENRY	132	118	
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**DEPARTMENT OF TRANSPORTATION** 

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

CHECKED - AJD

DATE

PLOT DATE = 1/12/2022

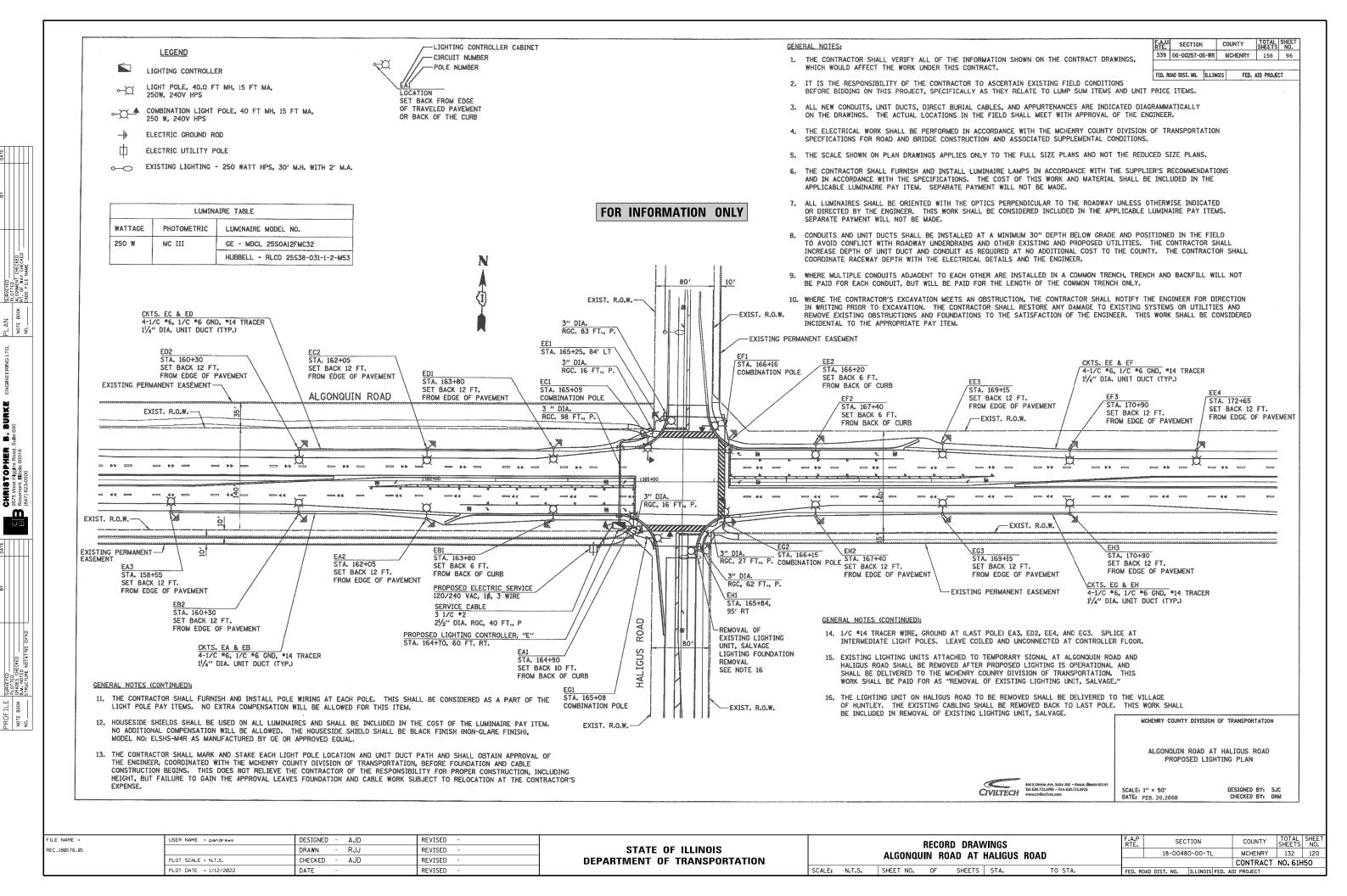
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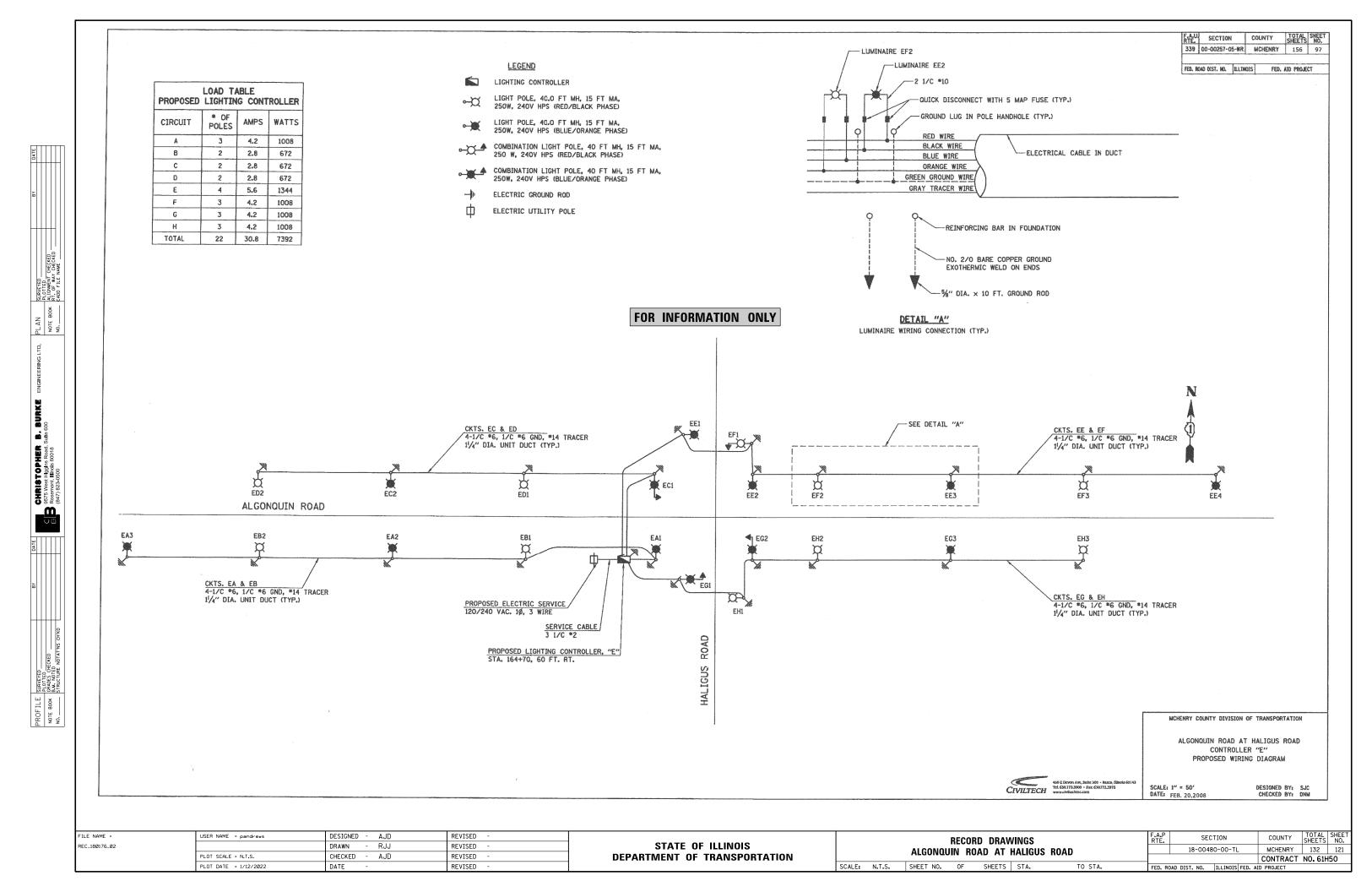
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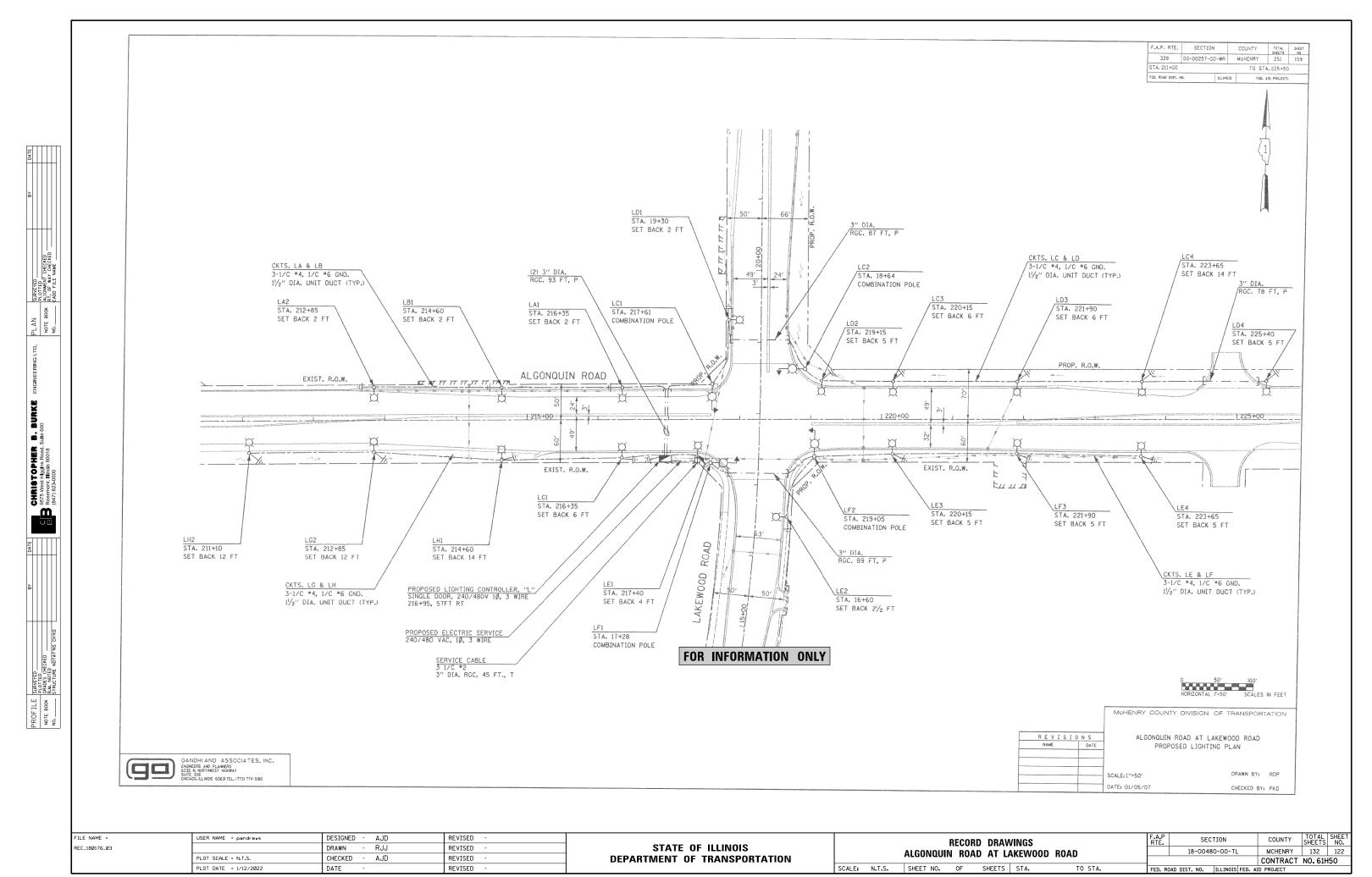
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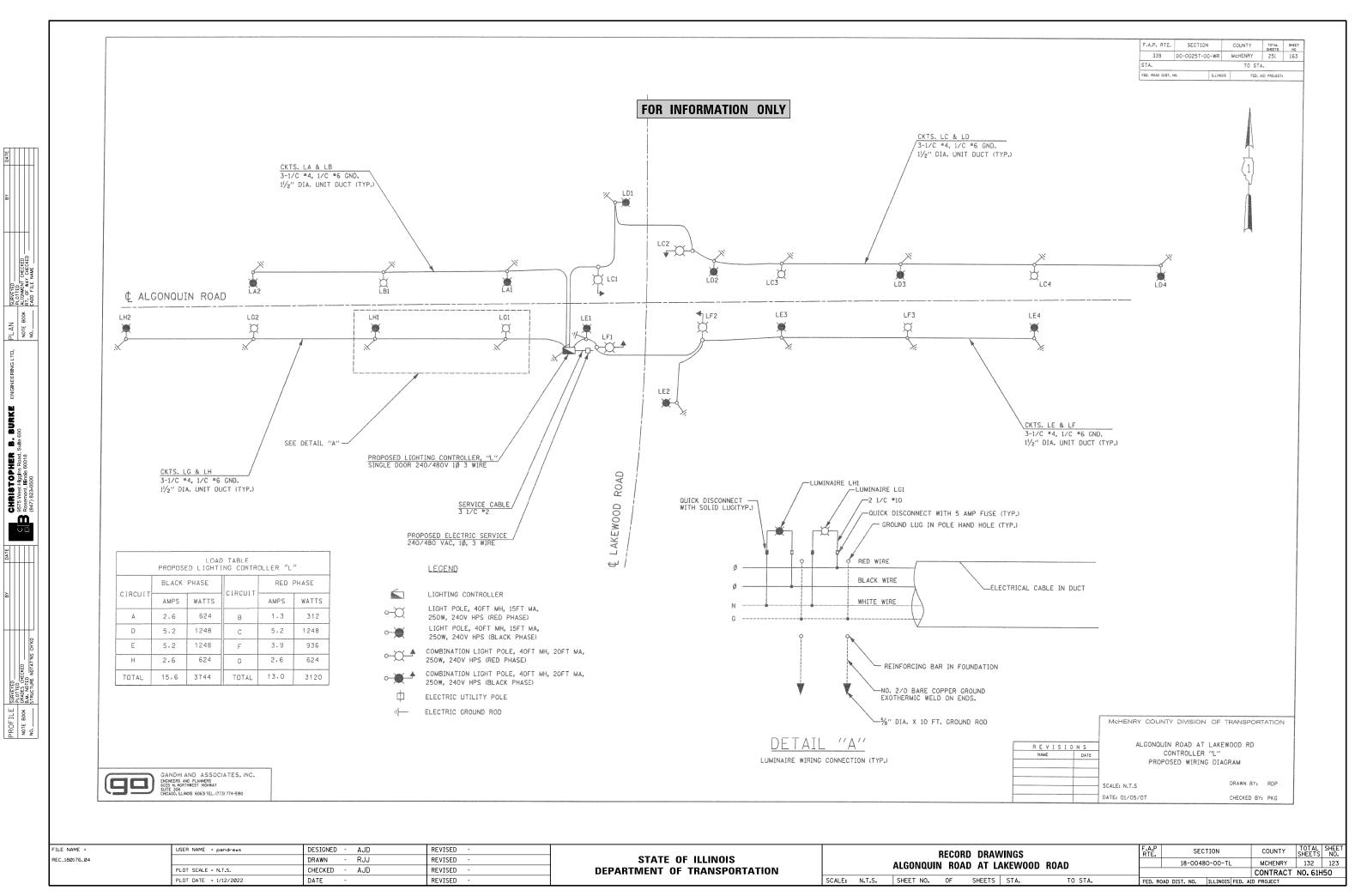
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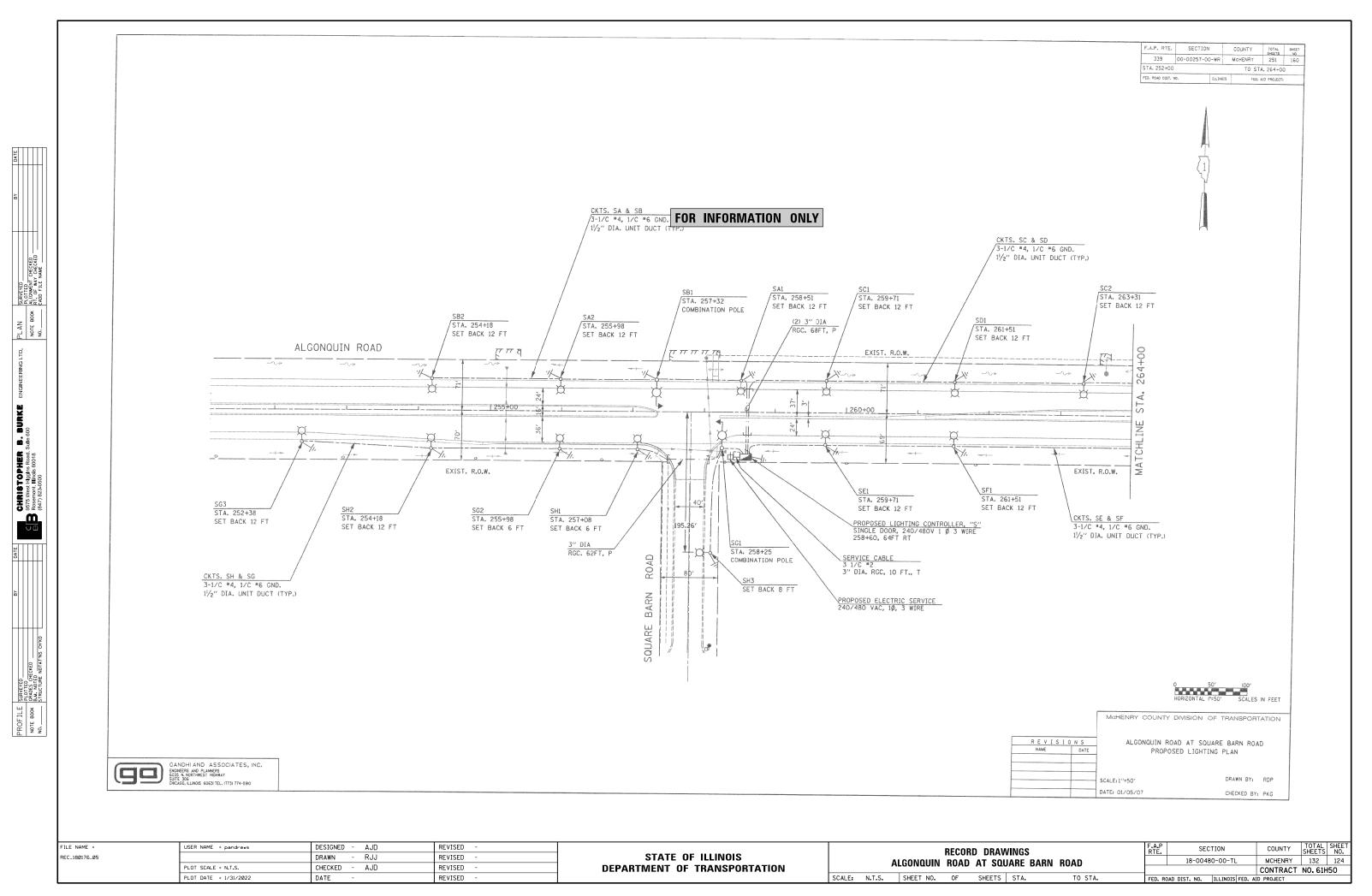
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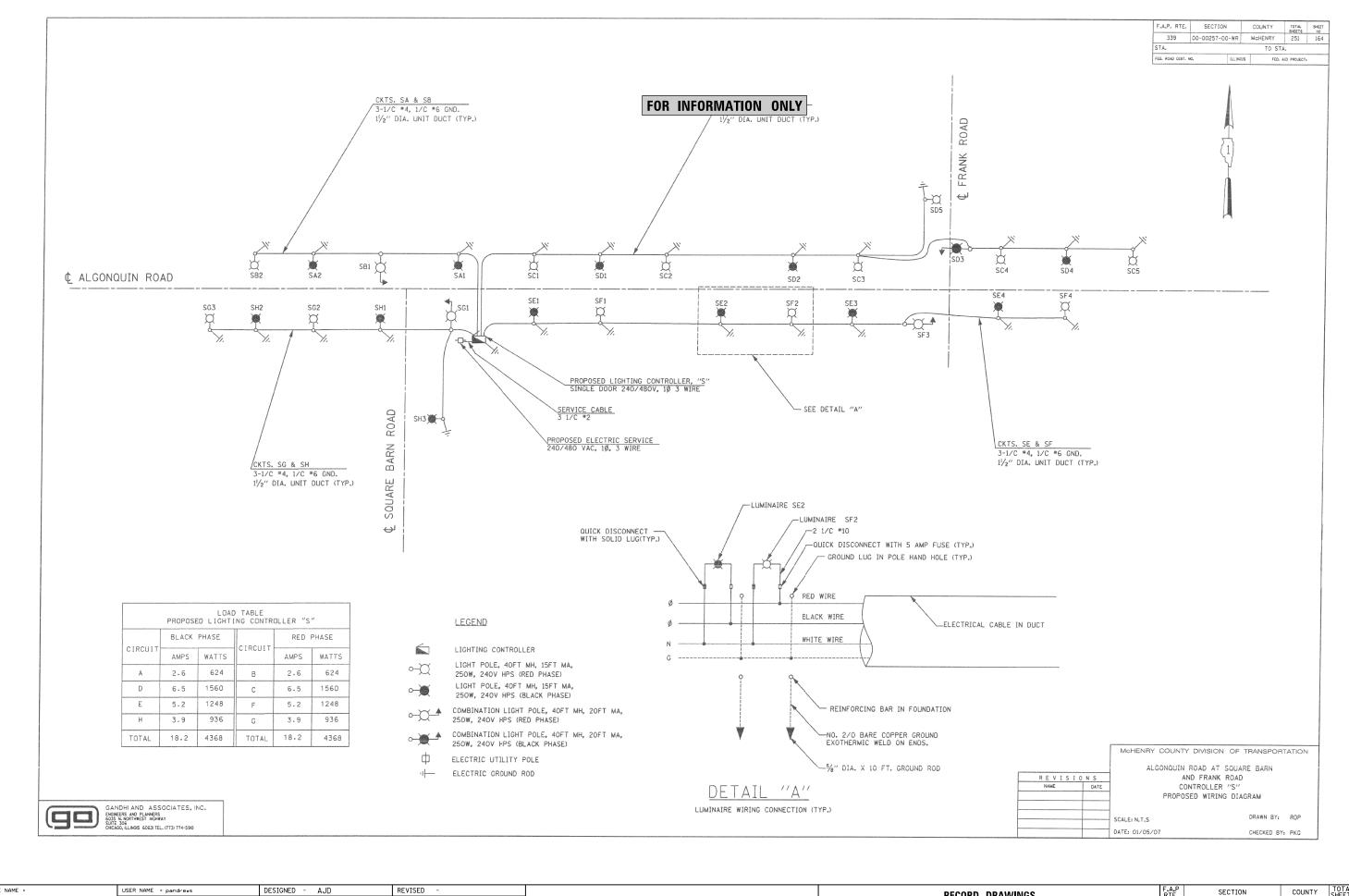






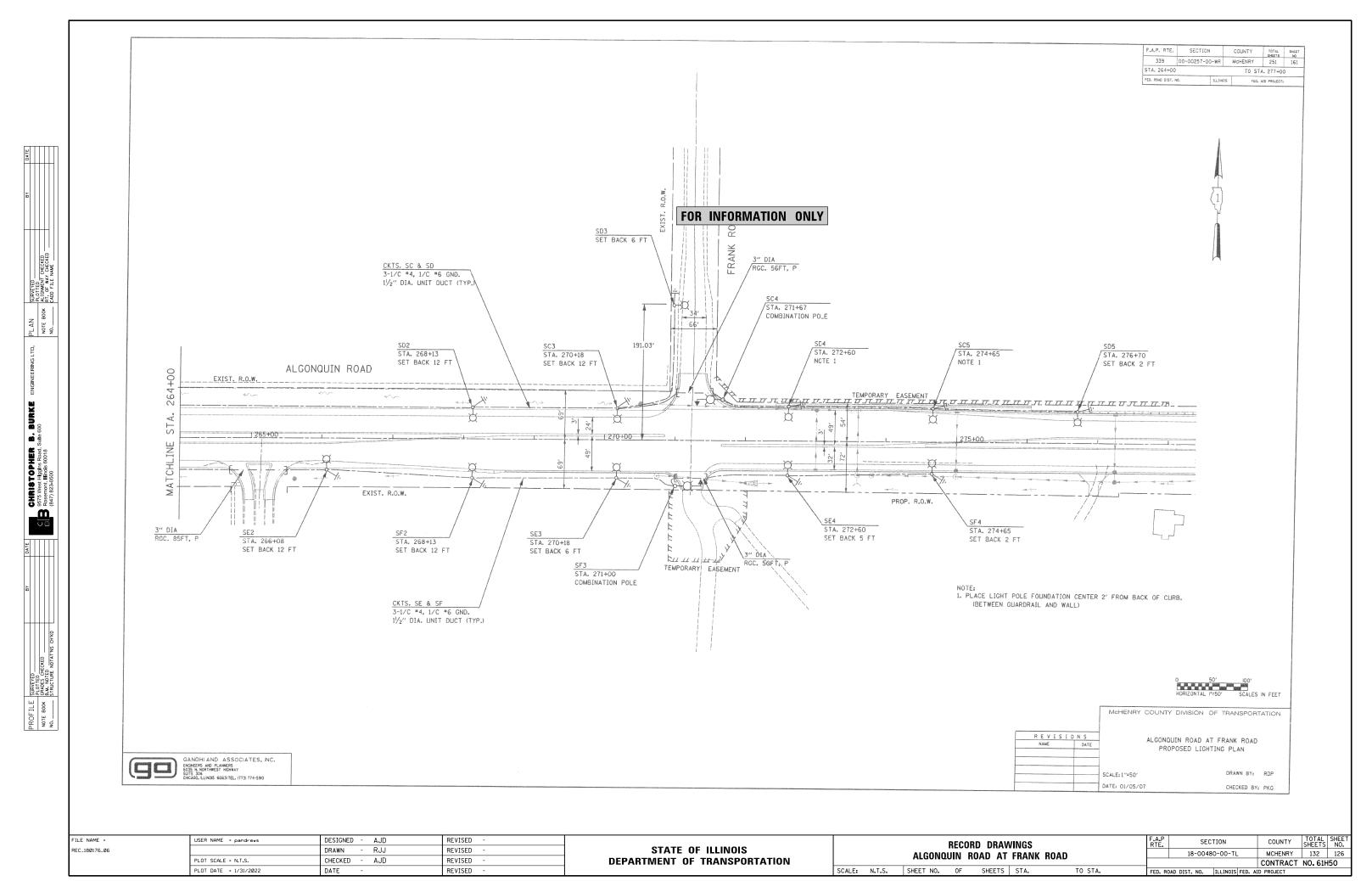


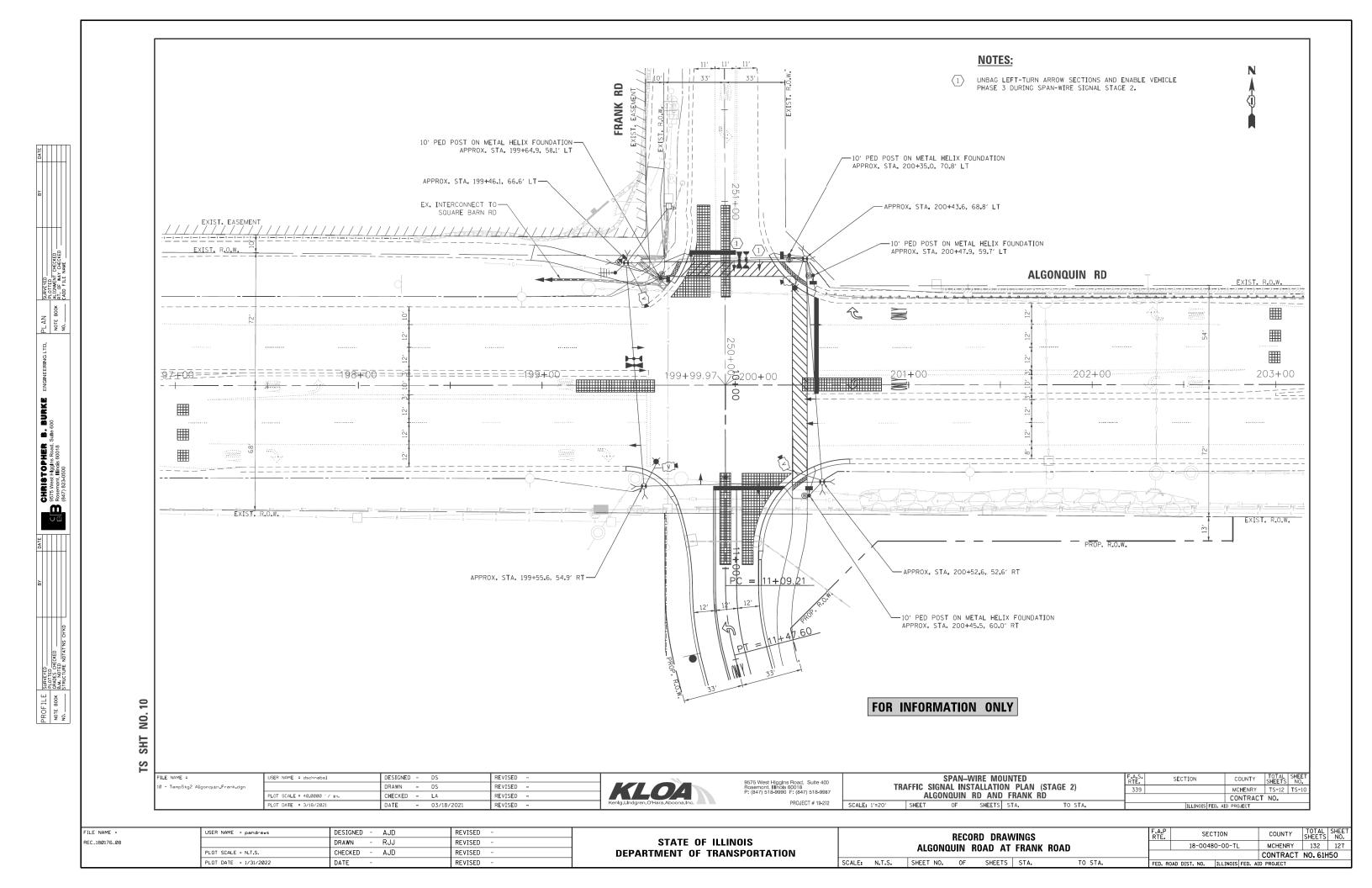


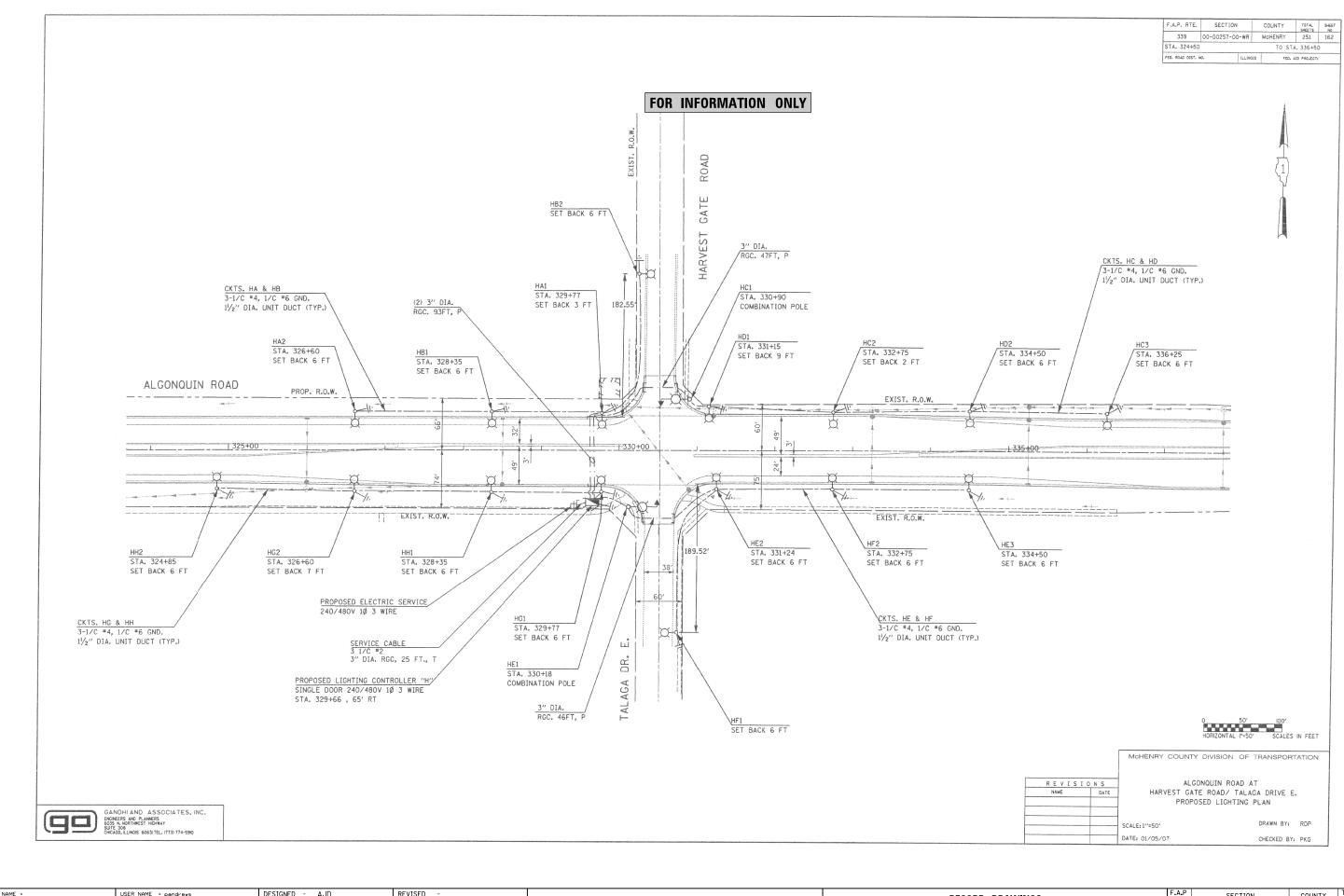


CHRISTOPHER 1 9575 West Highls Road, Su Rosemont, Illinois 60018 (847) 822-04600

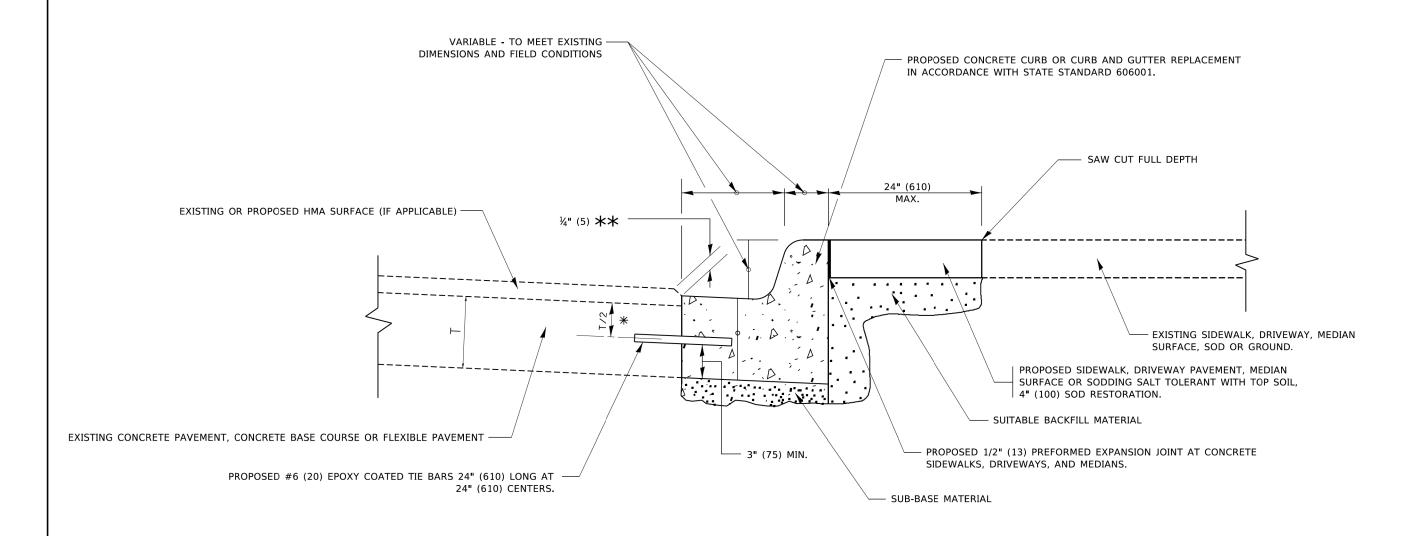
> FILE NAME = SECTION COUNTY RECORD DRAWINGS STATE OF ILLINOIS REC\_180176\_07 DRAWN - RJJ REVISED 18-00480-00-TL MCHENRY 132 125 ALGONQUIN ROAD AT SQUARE BARN ROAD PLOT SCALE = N.T.S. CHECKED AJD REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61H50 SCALE: N.T.S. SHEET NO. OF SHEETS STA. PLOT DATE = 1/31/2022 REVISED DATE







FILE NAME = USER NAME = pandrews DESIGNED - AJD REVISED SECTION COUNTY RECORD DRAWINGS STATE OF ILLINOIS REC\_180176\_09 DRAWN - RJJ REVISED 18-00480-00-TL MCHENRY 132 128 ALGONQUIN ROAD AT HARVEST GATE ROAD CHECKED - AJD REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61H50 SCALE: N.T.S. SHEET NO. OF SHEETS STA. PLOT DATE = 1/12/2022 DATE REVISED



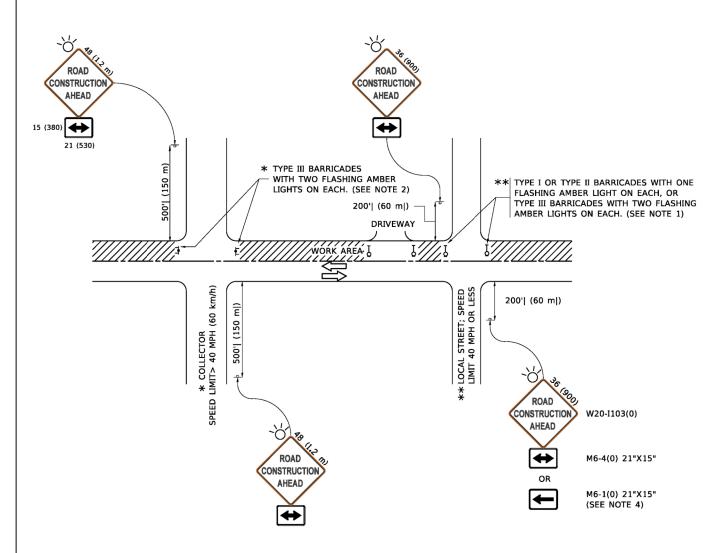
- X 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- $\star\star$  IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

USER NAME = footemj REVISED - A. ABBAS 03-21-97 COUNTY TOTAL SHEE NO.

McHENRY 132 129 DESIGNED - A. HOUSEH **CURB OR CURB AND GUTTER STATE OF ILLINOIS** 18-00480-00-TL DRAWN REVISED - M. GOMEZ 01-22-01 REMOVAL AND REPLACEMENT PLOT SCALE = 50.0000 ' / in. CHECKED -REVISED - R. BORO 12-15-09 **DEPARTMENT OF TRANSPORTATION** BD600-06 (BD-24) CONTRACT NO. 61H50 SHEET 1 OF 1 SHEETS STA. SCALE: NONE DATE REVISED - K. SMITH 07-11-19



### 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.
- 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
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
  b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
  OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
  4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
  BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 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
- 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.

N 0

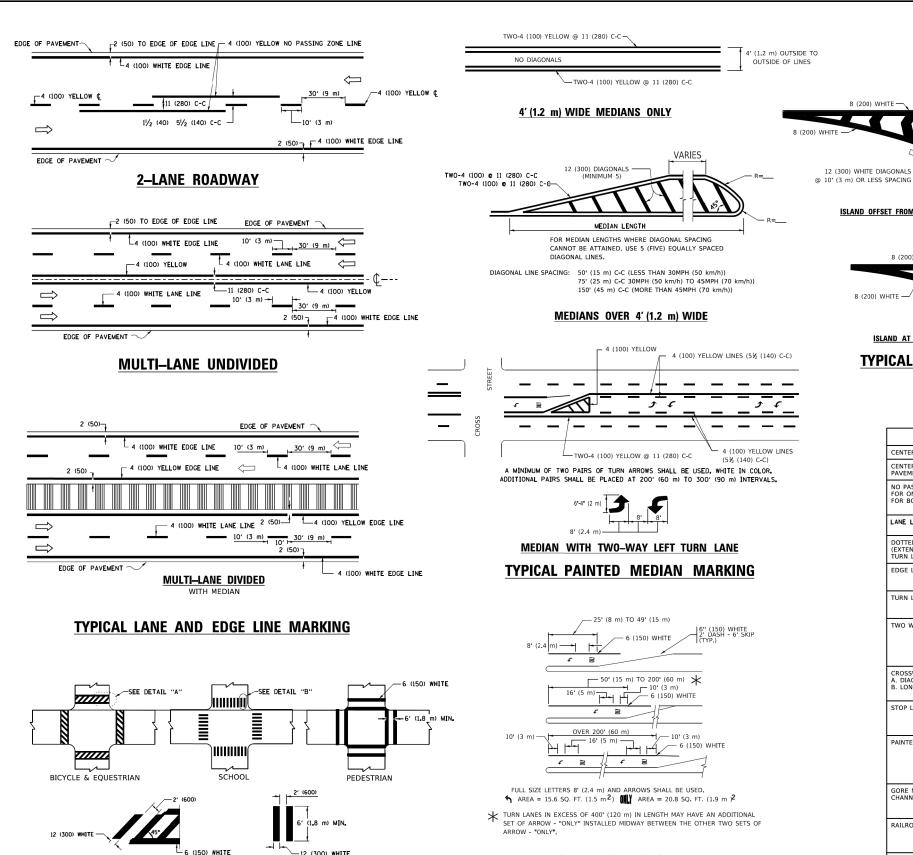
SHT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 TRAFFIC
 CONTROL AND PROTECTION FOR
 F.A. P. RTE.
 SECTION

 SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
 18-00480-00

 SHEET 1
 OF 1
 SHEETS STA.
 TO STA.
 TC-10



NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS 5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN 4 (100) 2 @ 4 (100) LANE LINES SKIP-DASH SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE (125) ON FREEWAYS DOTTED LINES SAME AS LINE BEING EXTENDED SKIP-DASH SAME AS LINE BEING EXTENDED 2' (600) LINE WITH 6' (1.8 m) SPACE (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) EDGE LINES 4 (100) SOLID YELLOW-LEFT WHITE-RIGHT OUTLINE MEDIANS IN YELLOW 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) TURN LANE MARKINGS SOLID SEE TYPICAL TURN LANE MARKING DETAIL WHITE TWO WAY LEFT TURN MARKING 2 @ 4 (100) EACH DIRECTION YELLOW 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) NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. 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 STOP LINES 24 (600) SOLID WHITE PAINTED MEDIANS 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. 2 @ 4 (100) WITH 12 (300) DIAGONALS SOLID YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS 8 (200) WITH 12 (300) DIAGONALS @ 45° SOLID 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)) 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" RAILROAD CROSSING SOLID WHITE SEE STATE STANDARD 780001 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)) TYPICAL LEFT (OR RIGHT) TURN LANE SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8') WHITE - RIGHT YELLOW - LEFT 12 (300) @ 45° U TURN ARROW SEE DETAIL SOL TO WHITE TYPICAL TURN LANE MARKING 2 ARROW COMBINATION LEFT AND U TURN 30.4 SF

2 (50)

(50)

WIDTH OF LINE

RAISED

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

SCALE: NONE

12 (300) WHITE DIAGONALS

8 (200) WHITE -

ISLAND OFFSET FROM PAVEMENT EDGE

8 (200) WHITE -

ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING

unless otherwise shown.

D(FT)

665

750

LANE REDUCTION TRANSITION

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

SPACING / REMARKS

SPEED LIMIT

50

USER NAME = footemj DESIGNED -EVERS REVISED - C. JUCIUS 09-09-09 DRAWN REVISED - C. JUCIUS 07-01-13 CHECKED REVISED -PLOT SCALE = 50.0000 ' / in C. JUCIUS 12-21-15 DATE

DETAIL "B"

DETAIL "A"

TYPICAL CROSSWALK MARKING

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

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

COUNTY TOTAL SHEETS NO.

MCHENRY 132 131 DISTRICT ONE 18-00480-00-TL TYPICAL PAVEMENT MARKINGS CONTRACT NO. 61H5C OF 2 SHEETS STA. SHEET 1

**COMBINATION** 

LEFT AND U-TURN

5'-4" (1620)

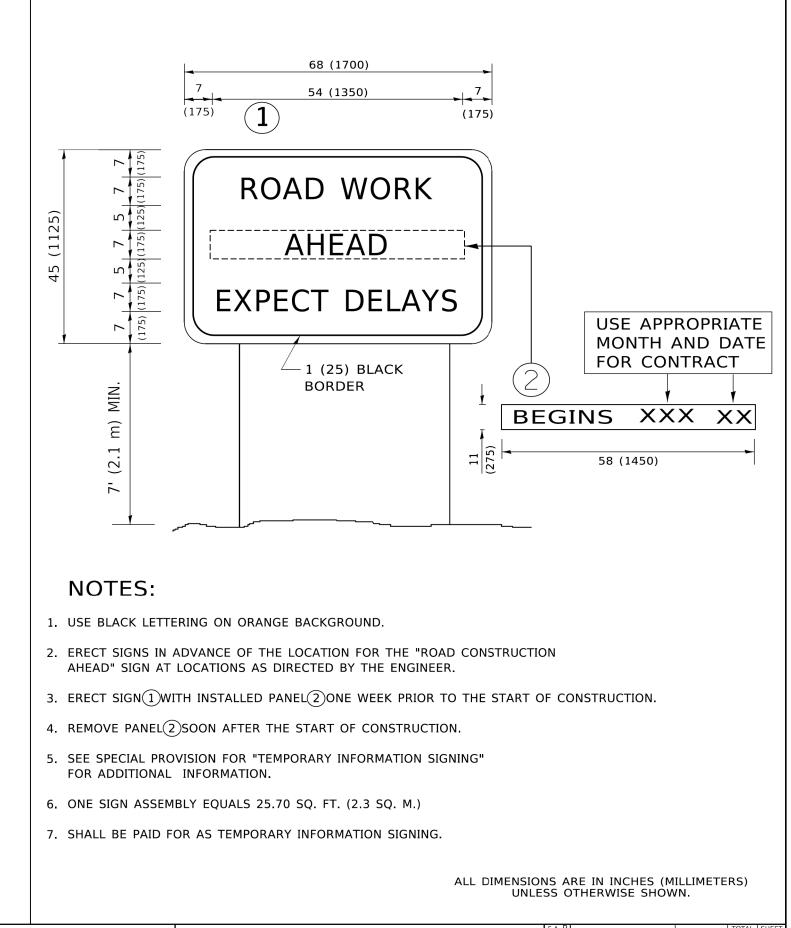
**U\_TURN** 

COLOR

40 (1020)

PATTERN

# <u>8</u> SHT



TS SHT NO. 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD
INFORMATION SIGN

SHEET 1 OF 1 SHEETS STA. TO STA.

SCALE: NONE