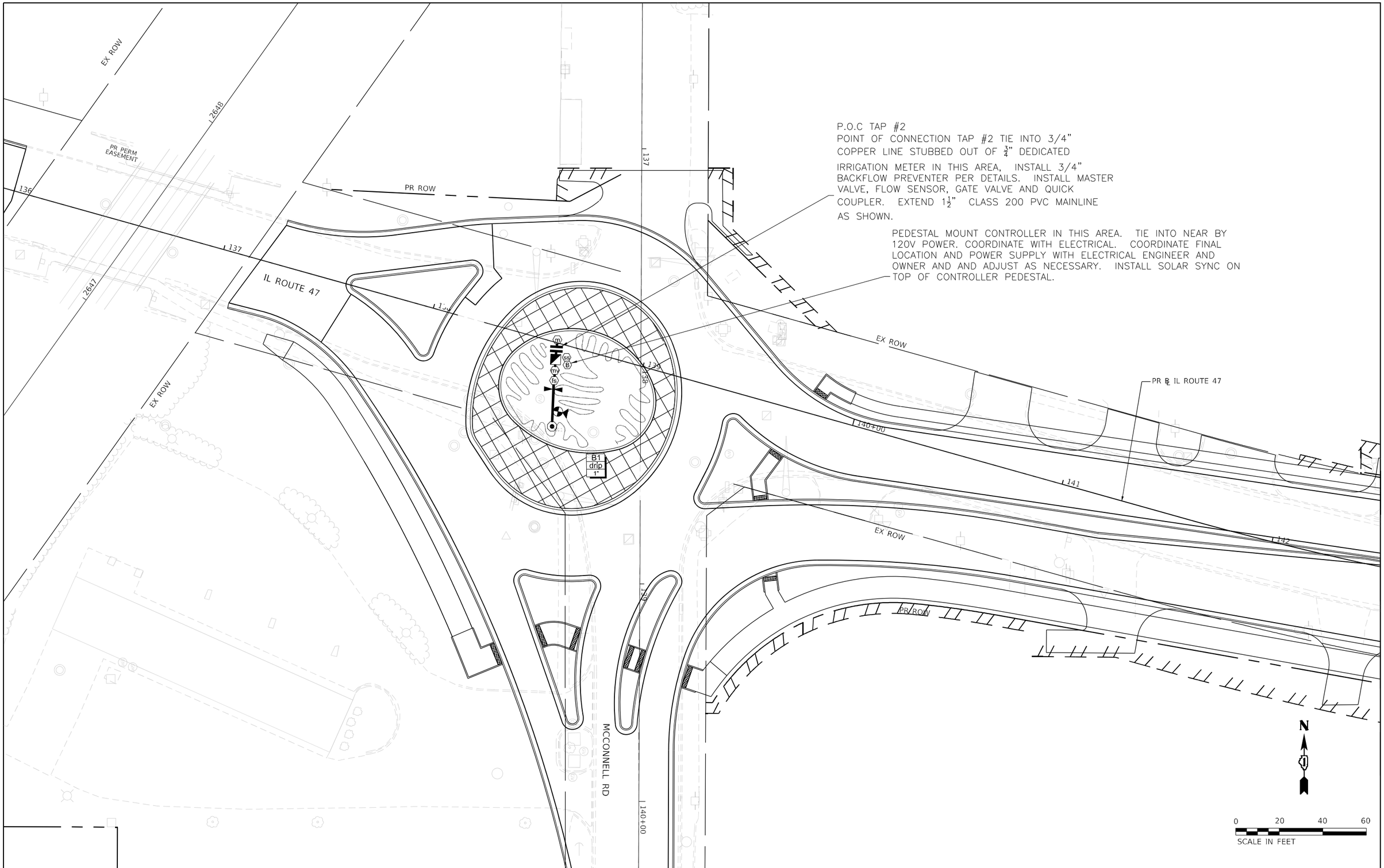

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HRG PROJ. CONTACT: $HRGPM$
FILE NAME: D60XH7-sht-irrigation-04.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC
Irrigation Design and Landscape Architecture
302 E. Geneseo St.
Lafayette, Colorado 80026
720-273-3884

USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	
	DRAWN - JFR	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - JTK	REVISED -	
PLOT DATE = 2/6/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED IRRIGATION PLAN – TAP #2
IL ROUTE 47

SCALE: 1"=20' | SHEET 3 OF 10 SHEETS | STA. TO STA.

F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N, C, SW, FL	McHENRY	941	701
		CONTRACT NO. 62X94		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

P.O.C TAP #3
POINT OF CONNECTION TAP #3 TIE INTO 3/4" COPPER LINE STUBBED OUT OF $\frac{3}{4}$" DEDICATED IRRIGATION METER IN THIS AREA, INSTALL 3/4" BACKFLOW PREVENTER PER DETAILS. INSTALL MASTER VALVE, FLOW SENSOR, GATE VALVE AND QUICK COUPLER. EXTEND $1\frac{1}{2}$" CLASS 200 PVC MAINLINE AS SHOWN.

1-4" SLEEVE

MATCH LINE STA 159+00

IL ROUTE 47

158

PR ℄ IL-47

PP

1-4" SLEEVE

157

EX ROW

C4
9,9
1"

C3
drip
1"

C2
5,3
1"

C1
9,9
1"

PR ROW

EX ROW

IL ROUTE 47

156+80

2/6/2025

PEDESTAL MOUNT CONTROLLER IN THIS AREA. TIE INTO NEAR BY 120V POWER. COORDINATE WITH ELECTRICAL. COORDINATE FINAL LOCATION AND POWER SUPPLY WITH ELECTRICAL ENGINEER AND OWNER AND AND ADJUST AS NECESSARY. INSTALL SOLAR SYNC ON TOP OF CONTROLLER PEDESTAL.

N

154

PR EASEMENT

PR ROW

0 20 40 60
SCALE IN FEET

HRG PROJECT NO: $PROJECTNO$
HRG PROJ CONTACT: $HRGPM$
FILE NAME: D60XM7-sht-irrigation-05.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC
Irrigation Design and Landscape Architecture
302 E. Geneseo St.
Lafayette, Colorado 80026
720-273-3884

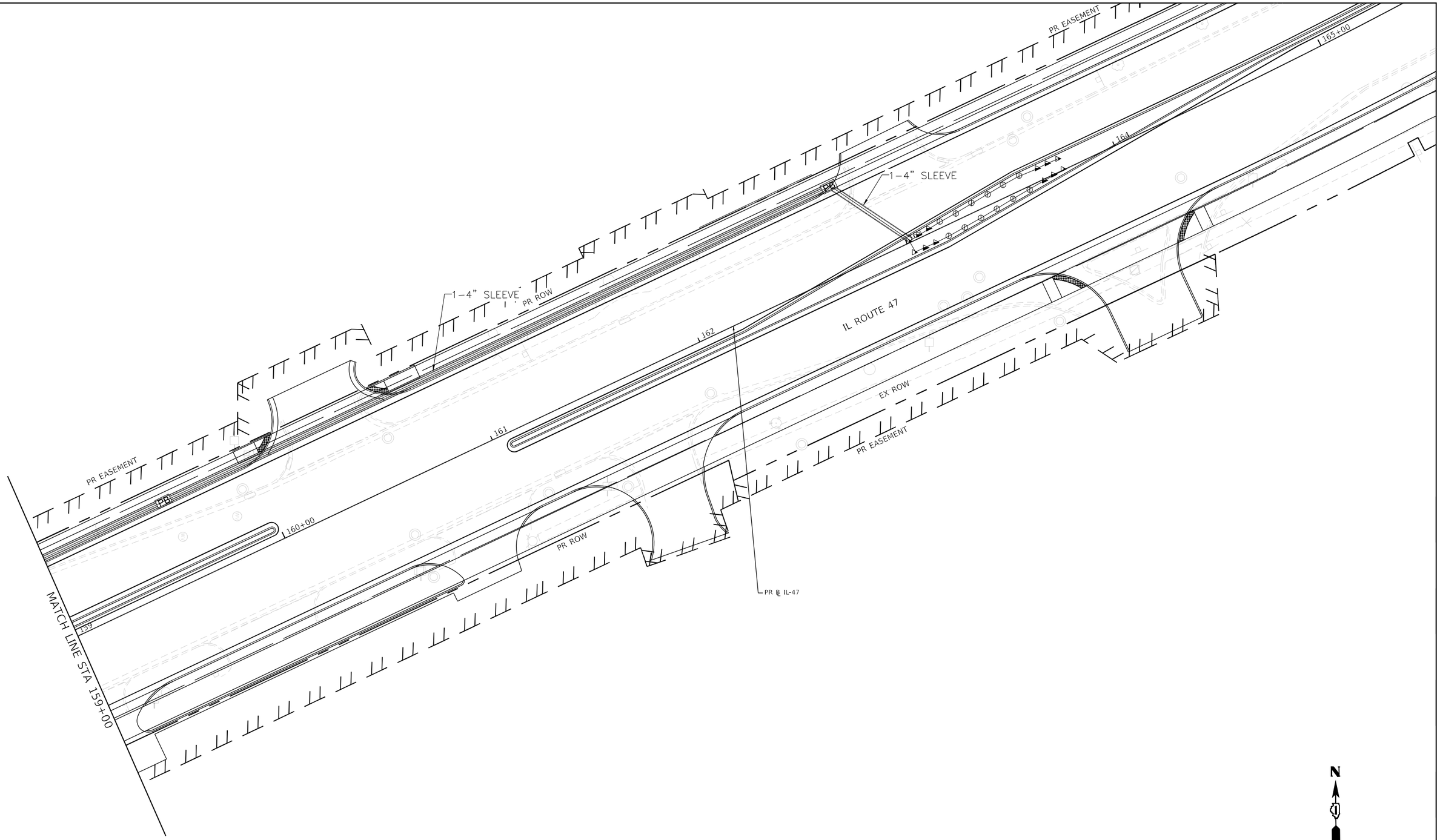
USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	
	DRAWN - JFR	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - JTK	REVISED -	
PLOT DATE = 2/6/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED IRRIGATION PLAN – TAP #3
IL ROUTE 47

SCALE: 1"=20' | SHEET 4 OF 10 SHEETS | STA. TO STA.

F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N, C, SW, FL	McHENRY	941	702
		CONTRACT NO. 62X94		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



N

0 20 40 60

SCALE IN FEET

HRG PROJECT NO: $PROJECTNO$
HRG PROJ. CONTACT: $HRGPM$
FILE NAME: D160XT-sht-irrigation-06.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC
Irrigation Design and Landscape Architecture
302 E. Geneseo St.
Lafayette, Colorado 80026
720-273-3884

USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	
	DRAWN - JFR	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - JTK	REVISED -	
PLOT DATE = 2/6/2025	DATE -	REVISED -	

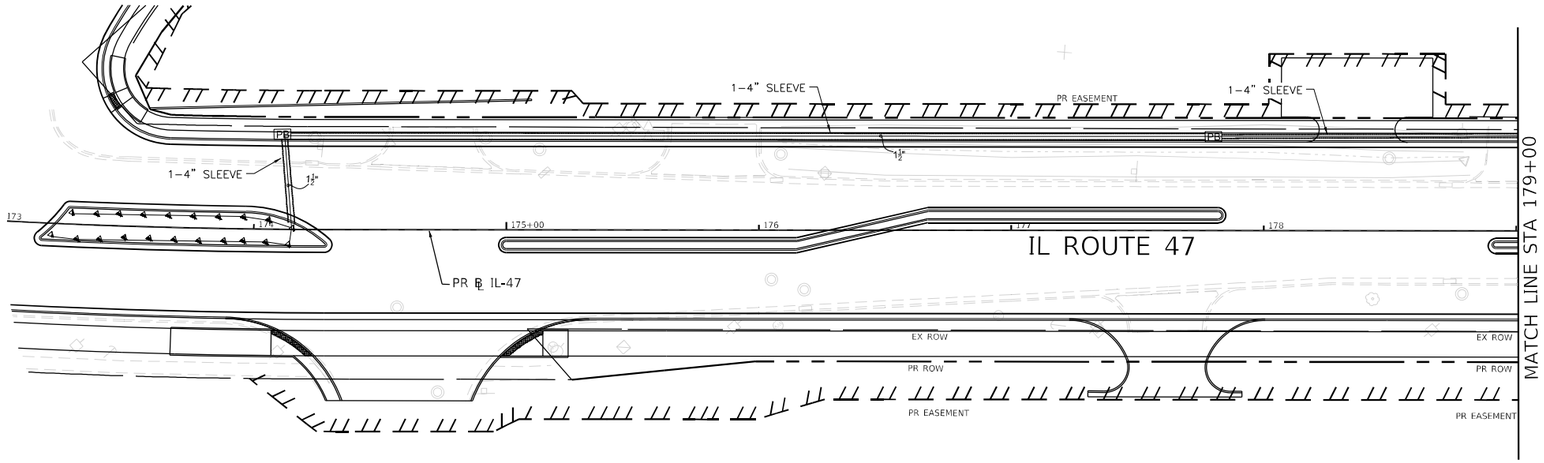
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

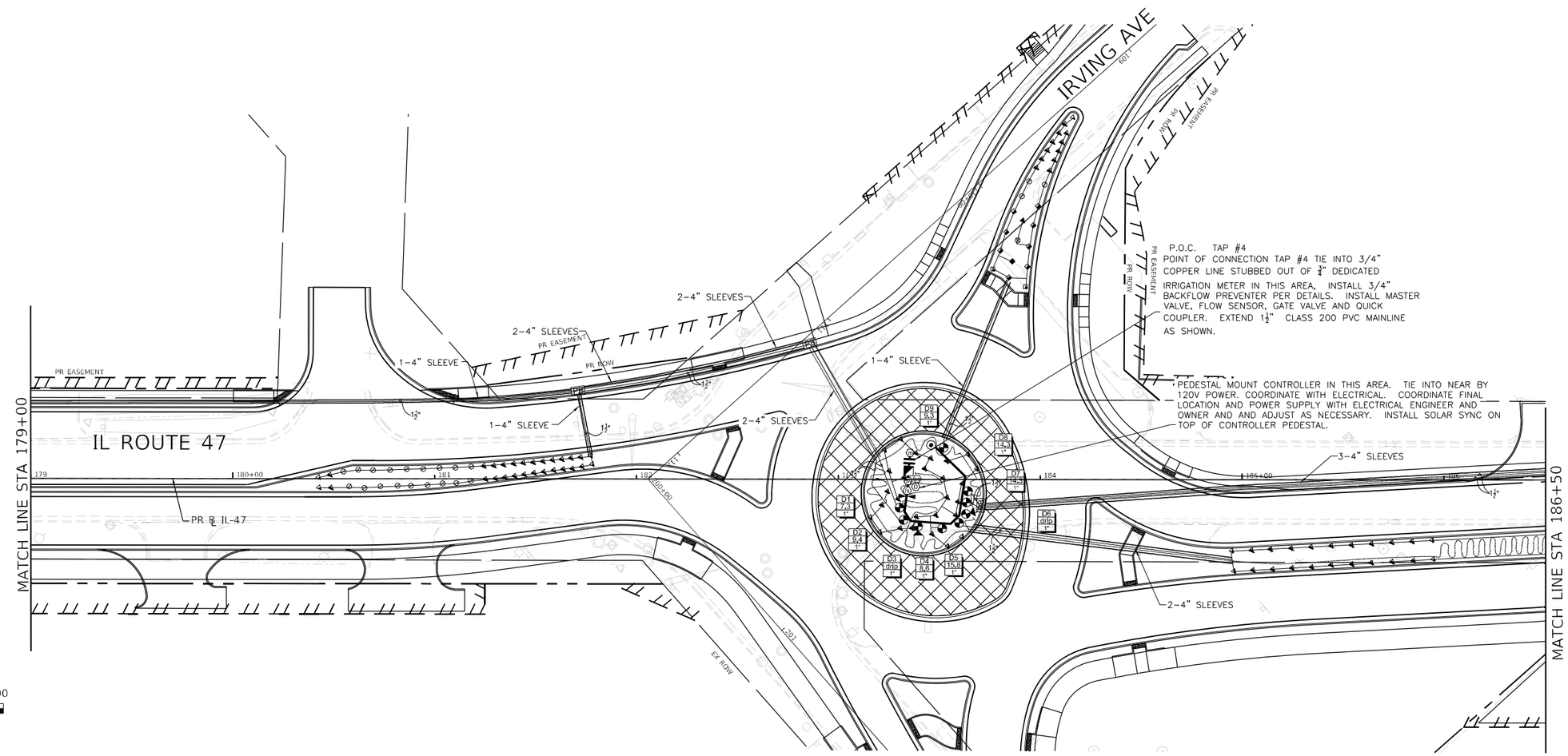
PROPOSED IRRIGATION PLAN – TAP #3
IL ROUTE 47

SCALE: 1"=20' | SHEET 5 OF 10 SHEETS | STA. TO STA.

F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N, C, SW, FL	McHENRY	941	703
		CONTRACT NO. 62X94		

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





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HRG PROJ. CONTACT: $HRGPM$
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PLOT DRIVER: PL_T_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC
Irrigation Design and Landscape Architecture
302 E. Geneseo St.
Lafayette, Colorado 80026
720-273-3884

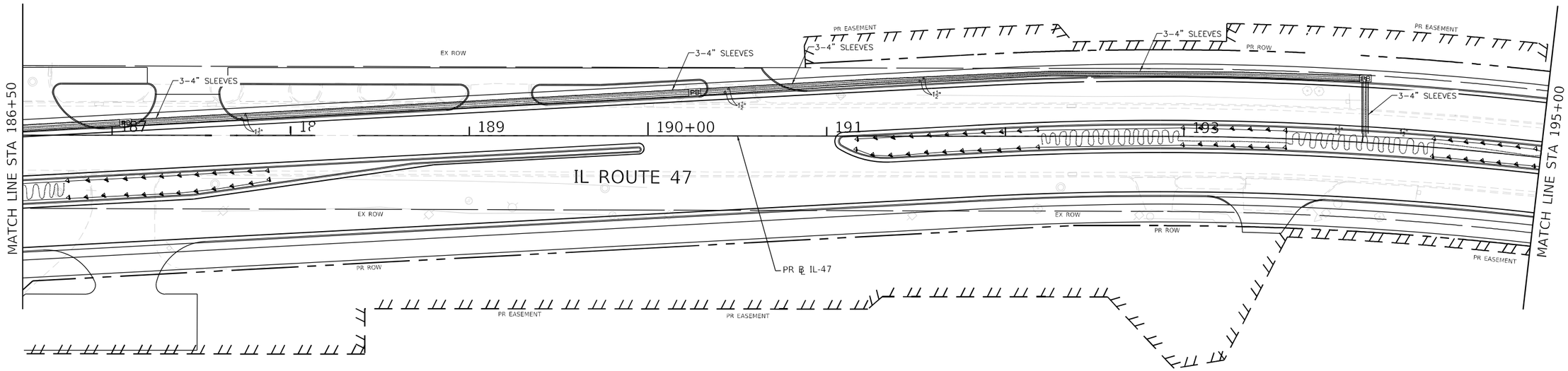
USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	
	DRAWN - JFR	REVISED -	
PLOT SCALE = 60.0000 ' / in.	CHECKED - JTK	REVISED -	
PLOT DATE = 2/6/2025	DATE -	REVISED -	

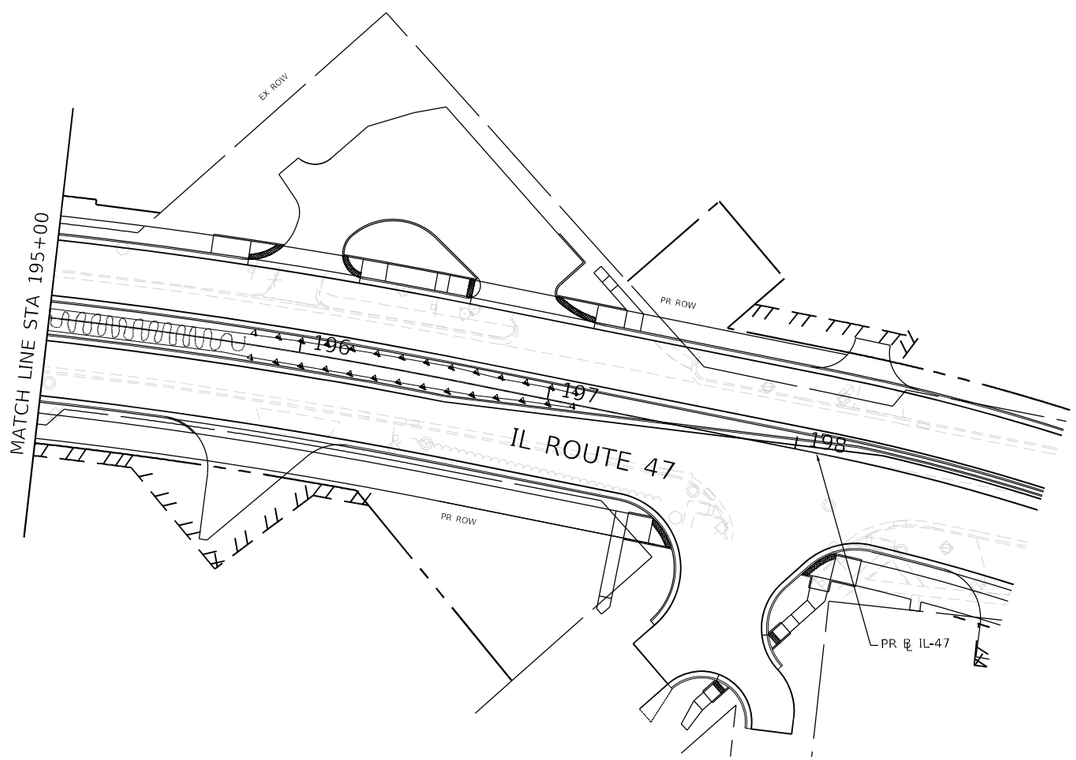
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

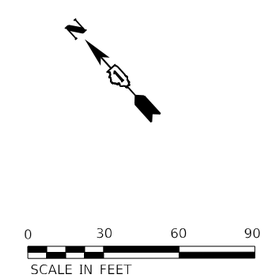
PROPOSED IRRIGATION PLAN – TAP #4
IL ROUTE 47

SCALE: 1"=30' | SHEET 6 OF 10 SHEETS | STA. TO STA.

F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N, C, SW, FL	McHENRY	941	704
		CONTRACT NO. 62X94		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		







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HRG PROJ. CONTACT: $WRGPM$
FILE NAME: DIG017-sht-irrigation-08.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC
Irrigation Design and Landscape Architecture
302 E. Geneseo St.
Lafayette, Colorado 80026
720-273-3884

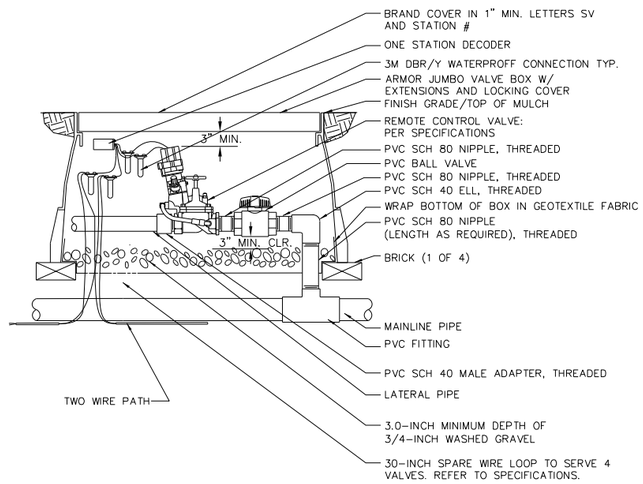
USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	
	DRAWN - JFR	REVISED -	
PLOT SCALE = 60.0000 ' / in.	CHECKED - JTK	REVISED -	
PLOT DATE = 2/6/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED IRRIGATION PLAN – TAP #4
IL ROUTE 47

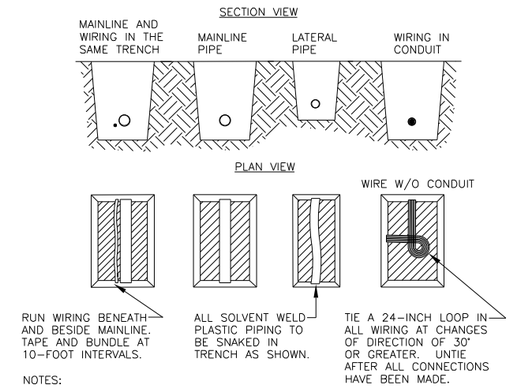
SCALE: 1"=30' | SHEET 7 OF 10 SHEETS | STA. TO STA.

F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N, C, SW, FL	McHENRY	941	705
		CONTRACT NO. 62X94		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



1 AUTOMATIC SECTION VALVE

NOT TO SCALE

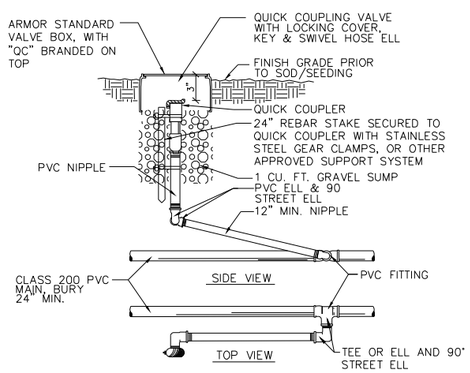


NOTES:

1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH CLASS 200 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.
3. ALL LATERALS TO BE A MINIMUM OF 12" DEPTH. ALL MAINLINES TO BE A MINIMUM OF 24" DEPTH.

2 PIPE AND WIRE TRENCHING

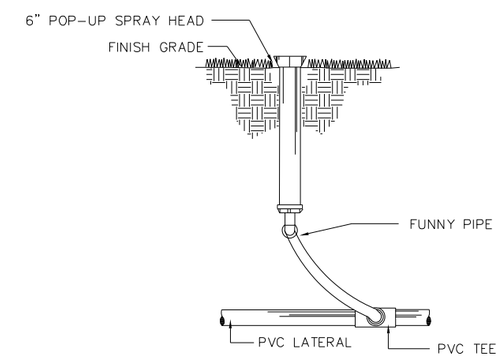
NOT TO SCALE



NOTE: COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL

3 QUICK COUPLER

NOT TO SCALE

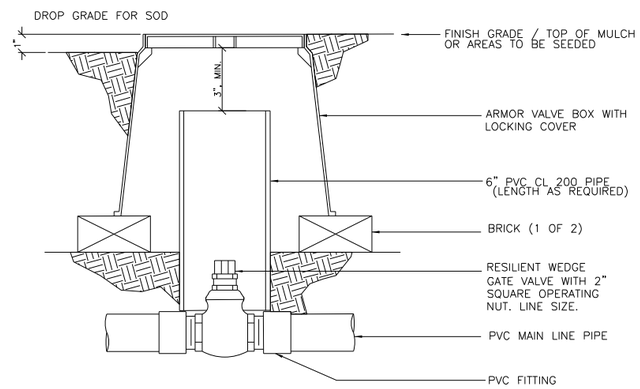


4 POP-UP SPRAY HEAD

NOT TO SCALE

HRG PROJECT NO.: $PROJECTNO$
HRG PROJ. CONTACT: $WRGPM$
FILE NAME: DIGXIT-sht-irrigation-09.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC Irrigation Design and Landscape Architecture 302 E. Geneseo St. Lafayette, Colorado 80026 720-273-3884	USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED IRRIGATION PLAN DETAILS IL ROUTE 47	F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - JFR	REVISED -			326	2024-1052-N, C, SW, FL	McHENRY	941 / 706
	PLOT SCALE = 2.0000 ' / in.	CHECKED - JTK	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE -	REVISED -		SCALE: N/A / SHEET 8 OF 10 SHEETS / STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

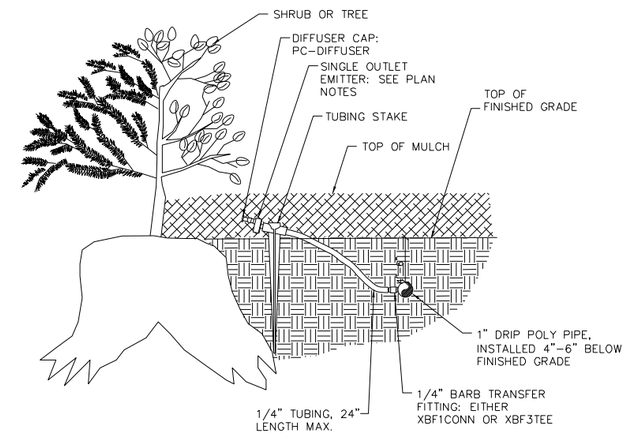


NOTE:

1. NOMINAL SIZE OF GATE VALVE TO MATCH NOMINAL MAINLINE SIZE.
2. INSTALL A 4" THICK CONCRETE PAD BELOW VALVE WITH NO. 4 REBAR WHEN USING PUSH ON TYPE VALVES.

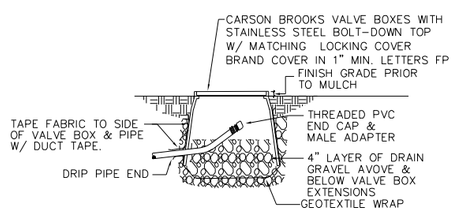
5 ISOLATION GATE VALVE

NOT TO SCALE



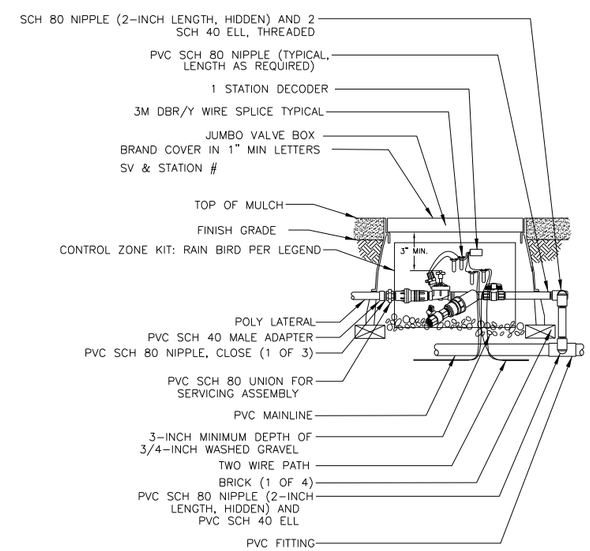
6 DRIP EMITTER PLACEMENT

NOT TO SCALE



7 DRIP FLUSH VALVE

NOT TO SCALE



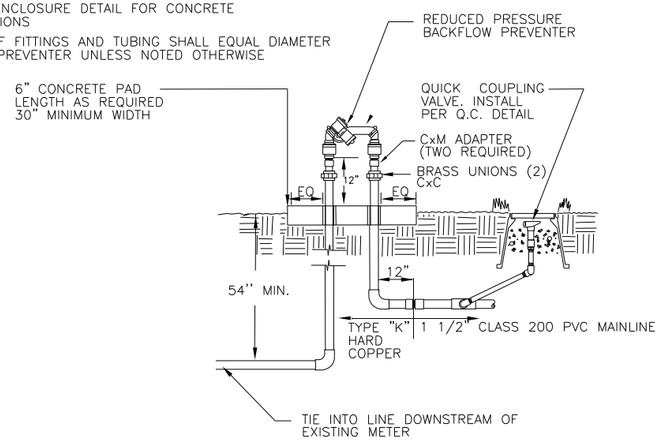
8 DRIP VALVE DETAIL

NOT TO SCALE

HRC PROJECT NO. $PROJECTNO$
HRC PROJ. CONTACT: $HRCPM$
FILE NAME: D160X17-sht-irrigation-10.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC Irrigation Design and Landscape Architecture 302 E. Geneseo St. Lafayette, Colorado 80026 720-273-3884	USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED IRRIGATION PLAN DETAILS IL ROUTE 47	F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JFR	REVISED -			326	2024-1052-N, C, SW, FL	McHENRY	941	707
	PLOT SCALE = 2.0000 ' / in.	CHECKED - JTK	REVISED -					CONTRACT NO. 62X94		
	PLOT DATE = 2/6/2025	DATE -	REVISED -		SCALE: N/A SHEET 9 OF 10 SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTE:
* CONCRETE PAD PENETRATIONS TO BE 1" LARGER THAN TUBING DIAMETER
* REFER TO ENCLOSURE DETAIL FOR CONCRETE PAD DIMENSIONS
* DIAMETER OF FITTINGS AND TUBING SHALL EQUAL DIAMETER BACKFLOW PREVENTER UNLESS NOTED OTHERWISE

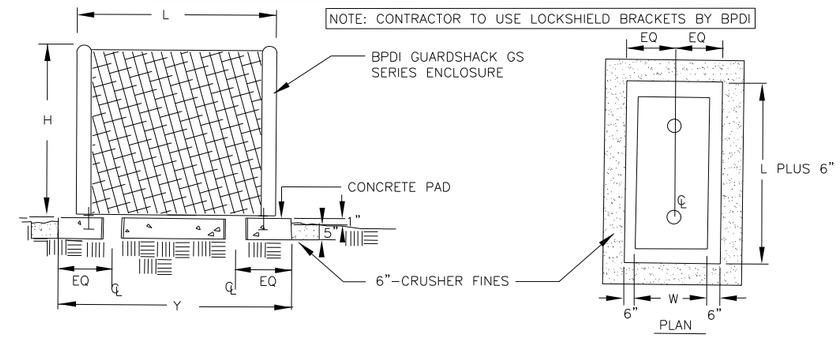


1 BACKFLOW PREVENTER 2" AND SMALLER

NTS

BFP MODEL/SIZE	ENCLOSURE MODEL	W	H	L
FEBCO 825YA – ¾", 1", 1¼", 2"	GS–1	10"	24"	22"

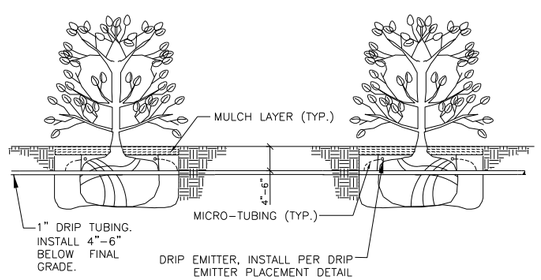
NOTE: CONTRACTOR TO USE LOCKSHIELD BRACKETS BY BPDI



NOTE:
* INSTALL ENCLOSURE ANCHORS AS PER MANUFACTURER'S RECOMMENDATIONS.
* PROVIDE OWNER WITH KEYED PADLOCK FOR ENCLOSURE
* PROVIDE ENCLOSURE WITH STANDARD DARK GREEN POWDER COATED FINISH
* PAD PENETRATIONS FOR BACKFLOW PREVENTER RISERS TO BE 1" LARGER THAN RISER DIAMETER.
* TOP SURFACE OF CONCRETE PAD SHALL BE 1" ABOVE FINISH GRADE

2 BACKFLOW ENCLOSURE

NTS



3 SHRUB/TREE EMITTER PLACEMENT

NOT TO SCALE

HRG PROJECT NO.: $PROJECTNO$
HRG PROJ. CONTACT: $WRGPM$
FILE NAME: D160117-sht-irrigation-il.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

Munding Design, LLC
Irrigation Design and Landscape Architecture
302 E. Geneseo St.
Lafayette, Colorado 80026
720-273-3884

USER NAME = mzuzzio	DESIGNED - JFR	REVISED -	
	DRAWN - JFR	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - JTK	REVISED -	
PLOT DATE = 2/6/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED IRRIGATION PLAN DETAILS
IL ROUTE 47

SCALE: N/A | SHEET 10 OF 10 SHEETS | STA. TO STA.

F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N, C, SW, FL	McHENRY	941	708
		CONTRACT NO. 62X94		

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

IDOT LIGHTING LEGEND

PROPOSED LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H , 120V, 45 FT. M.H., 15 FT. M.A., ON STEEL COMBINATION MAST ARM AND POLE (SEE TRAFFIC SIGNAL PLANS FOR LOCATION)

PROPOSED SINGLE ARM LIGHTING UNIT 47.5 FT. M.H., 15' M.A., WITH PROPOSED LED LUMINAIRE, 240V, OUTPUT DESIGNATION H

TEMPORARY SINGLE ARM LIGHTING UNIT 50 FT. M.H., 15' M.A., WITH TEMPORARY LED LUMINAIRE, 240V, OUTPUT DESIGNATION H

TEMPORARY SINGLE ARM LIGHTING UNIT 50 FT. M.H., 15' M.A., WITH TEMPORARY LED LUMINAIRE, 240V, OUTPUT DESIGNATION I

EXISTING SINGLE ARM COMBINATION LIGHTING UNIT TO BE REMOVED AND SALVAGED

EXISTING SINGLE ARM LIGHTING UNIT TO BE REMOVED AND SALVAGED

UNDERGROUND RIGID GALVANIZED STEEL CONDUIT (RGC) SIZE AS INDICATED

UNIT DUCT, AS SPECIFIED IN PLANS

EXISTING CABLE AND CONDUIT TO REMAIN IN PLACE

EXISTING CABLE AND CONDUIT TO BE REMOVED

PROPOSED LIGHTING CONTROLLER BASE MOUNTED 240/480V, 200 AMP., SINGLE PHASE, 3 WIRE

EXISTING LIGHTING CONTROLLER TO BE REMOVED AND SALVAGED

PROPOSED ELECTRIC SERVICE LOCATION

GROUND ROD, 5/8'' X 10 FT

CALL-OUT SAMPLES

DEFINITION	EXAMPLE
CKT. NO. LOCATION SET BACK AS INDICATED IN GENERAL NOTES	MZA1 STA. 591+85 SET BACK 7 FT
HC A 1 POLE NUMBER CIRCUIT NUMBER LIGHTING CONTROL CABINET	
CONDUIT SIZE TYPE, LENGTH	3'' DIA. RGC, 50 FT
CIRCUITS CONDUCTORS RACEWAY	CKT. MZAB 3-1/C#8, 1/C#10 GND, 1'' DIA. UNIT DUCT
CONTROLLER DESIGNATION LOCATION DESCRIPTION	PROPOSED LIGHTING CONTROLLER ''MZ'' STA. 590+95, 51 FT LT 1-PHASE, 240/480V, 3 WIRE

ABBREVIATIONS

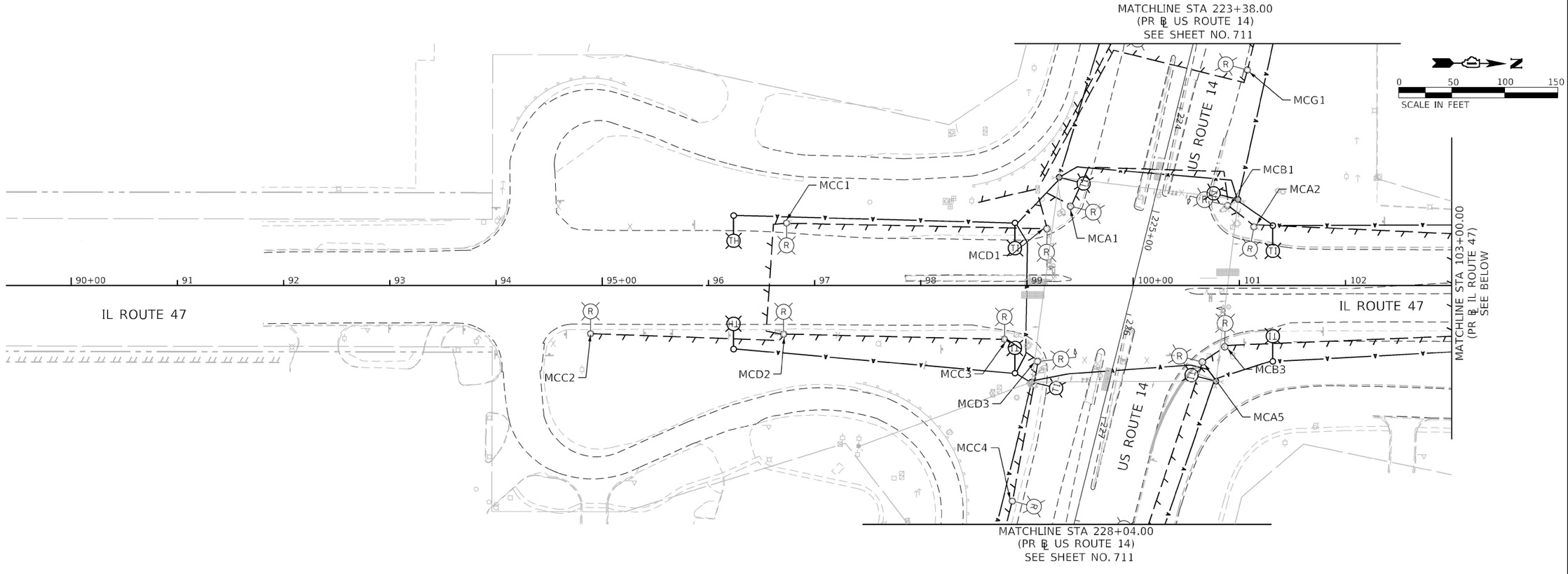
ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
AMP	AMPERE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CNC	COILABLE NONMETALLIC CONDUIT
CP	CONTROL PANEL
DIA.	DIAMETER
E	EXISTING UNIT TO REMAIN
ECA	ELECTRIC CABLE ASSEMBLY
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HMLT	HIGH MAST LIGHT TOWER
HPS	HIGH PRESSURE SODIUM
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
M.A.	MAST ARM
M.H.	MOUNTING HEIGHT
NO.	NUMBER
P	POLE
RGC	RIGID GALVANIZED CONDUIT
RGS	RIGID GALVANIZED STEEL
STA	STATION
T	TEMPORARY LIGHTING UNIT
TB	TRANSFORMER BASE
TMP	TEMPORARY
UD	UNIT DUCT
V	VOLT
W	WATT
WP	WOOD POLE
XFMR	TRANSFORMER

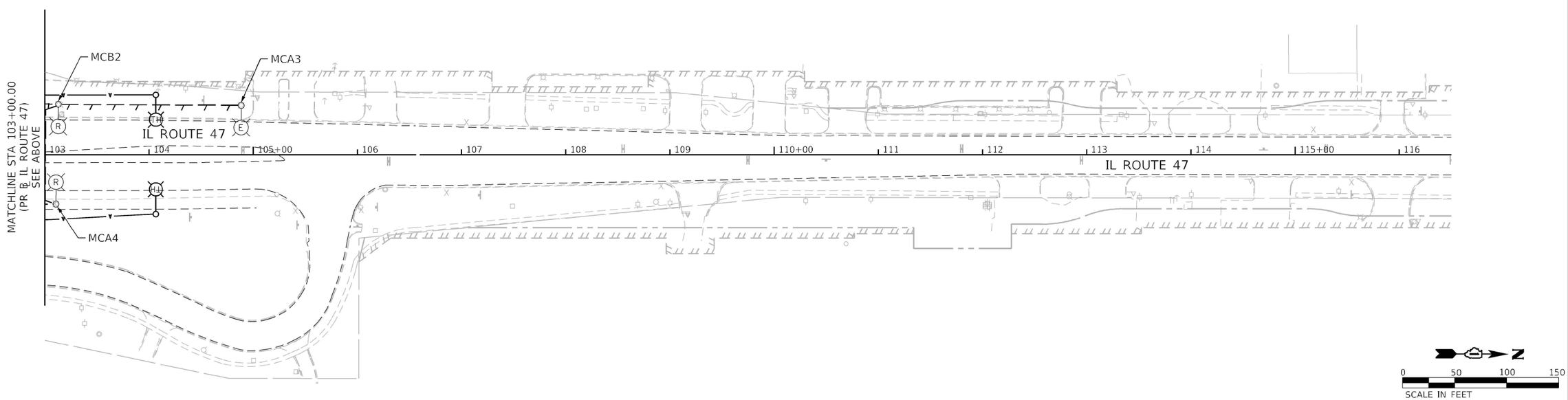
GENERAL NOTES:

1. LIGHT POLE SET BACKS ARE MEASURED FROM FACE OF CURB TO CENTER OF POLE.
2. OFFSETS FOR TEMPORARY LIGHT POLES ARE MEASURED FROM ROADWAY CENTERLINE TO CENTER OF POLE.
3. WHEREVER TEMPORARY AERIAL CABLE IS REQUIRED TO CROSS AN EXISTING OR PROPOSED ROADWAY, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 20 FEET OF VERTICAL CLEARANCE OVER THE ROADWAY AT ALL TIMES.
4. LUMINAIRES FROM EXISTING LIGHTING UNITS TO BE REMOVED SHALL BE SALVAGED TO IDOT. THE ASSOCIATED POLES, ARMS, AND BREAKAWAY DEVICES SHALL BE SALVAGED TO IDOT. THIS WORK WILL BE PAID FOR AS ''REMOVAL OF LIGHTING UNIT, SALVAGE.'' EXISTING LIGHTING CONTROLLER TO BE REMOVED SHALL BE SALVAGED TO IDOT. THIS WORK SHALL BE PAID FOR WITH THE ''REMOVAL OF LIGHTING CONTROLLER'' PAY ITEM.

IDOT LIGHTING SCHEDULE OF QUANTITIES

Item	Unit	Quantity
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	0.3
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	715
UNIT DUCT, 600V, 4-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	5825
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C 350MCM	FOOT	210
AERIAL CABLE, 4-1/C NO. 6 WITH MESSENGER WIRE	FOOT	4750
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	30
LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 200AMP	EACH	1
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	26
LIGHT POLE, WOOD, 60 FOOT, CLASS 3, WITH 15FT MAST ARM	EACH	24
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 8'	EACH	26
BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	26
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	29
REMOVAL OF POLE FOUNDATION	EACH	29
REMOVAL OF LIGHTING CONTROLLER	EACH	1
REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	15288
TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	16
TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION I	EACH	8
TEMPORARY LIGHTING CONTROLLER	EACH	1
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	30
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	24





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TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = MTodden	DESIGNED - MK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL-47 & US 14 - LIGHTING REMOVAL PLAN IDOT DISTRICT 1
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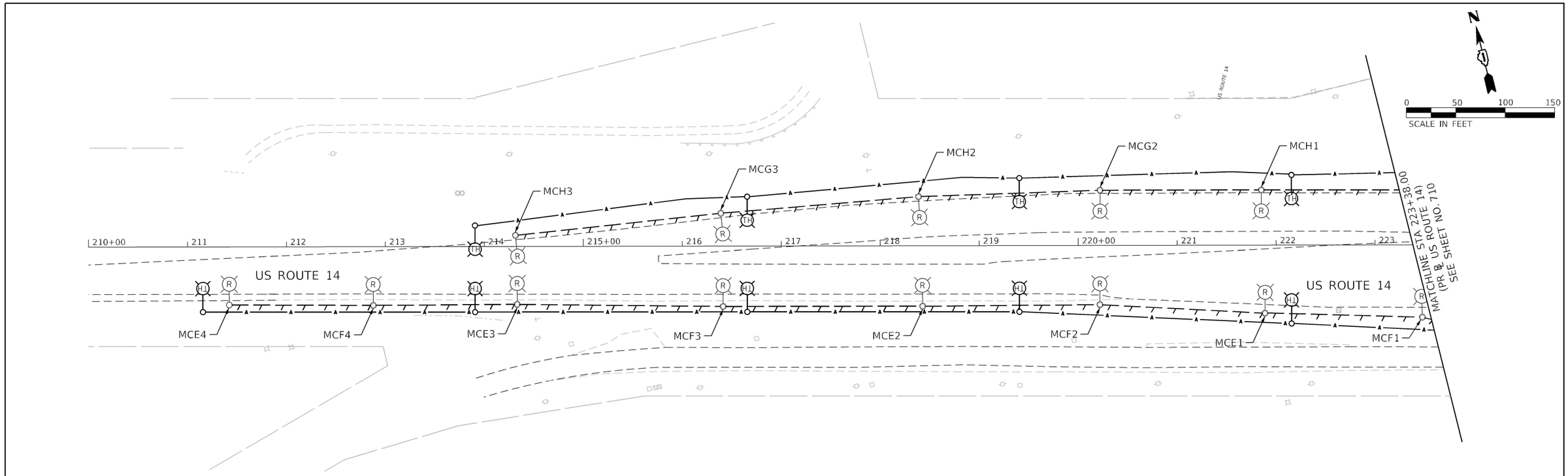
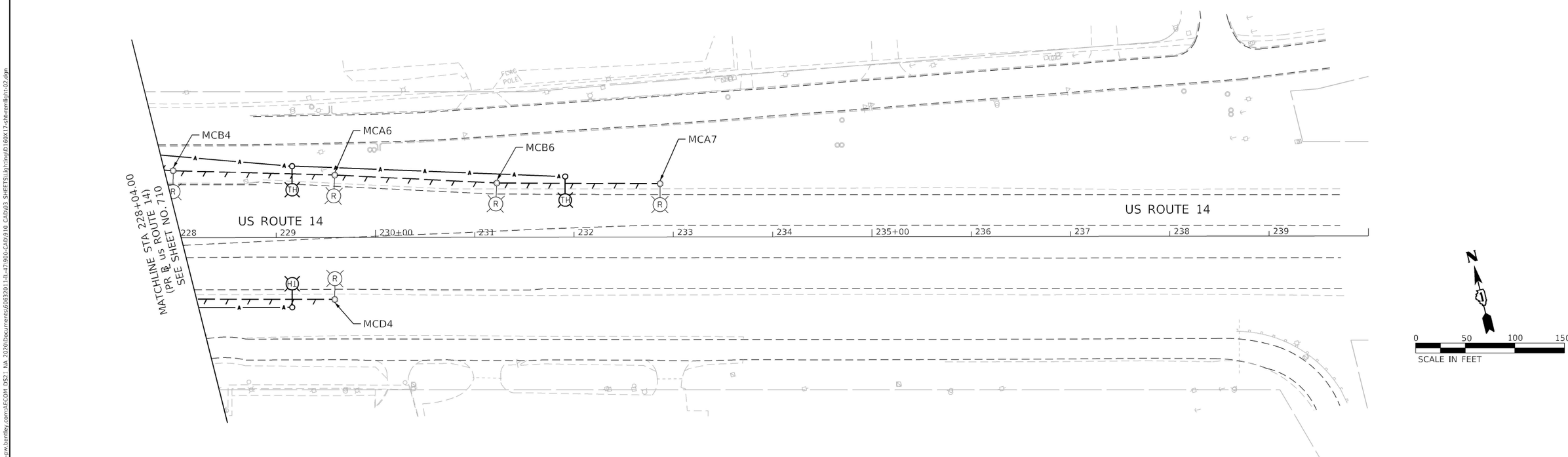
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	710
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		





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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL-47 & US 14 – LIGHTING REMOVAL PLAN
IDOT DISTRICT 1

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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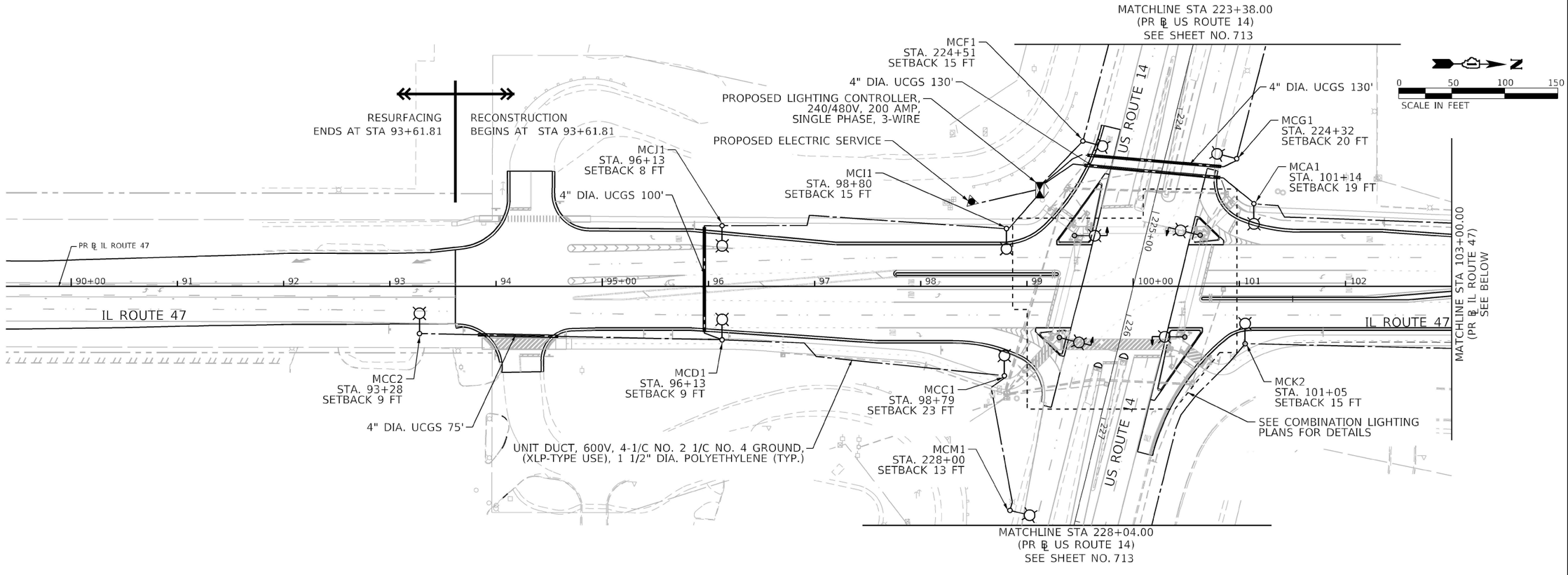
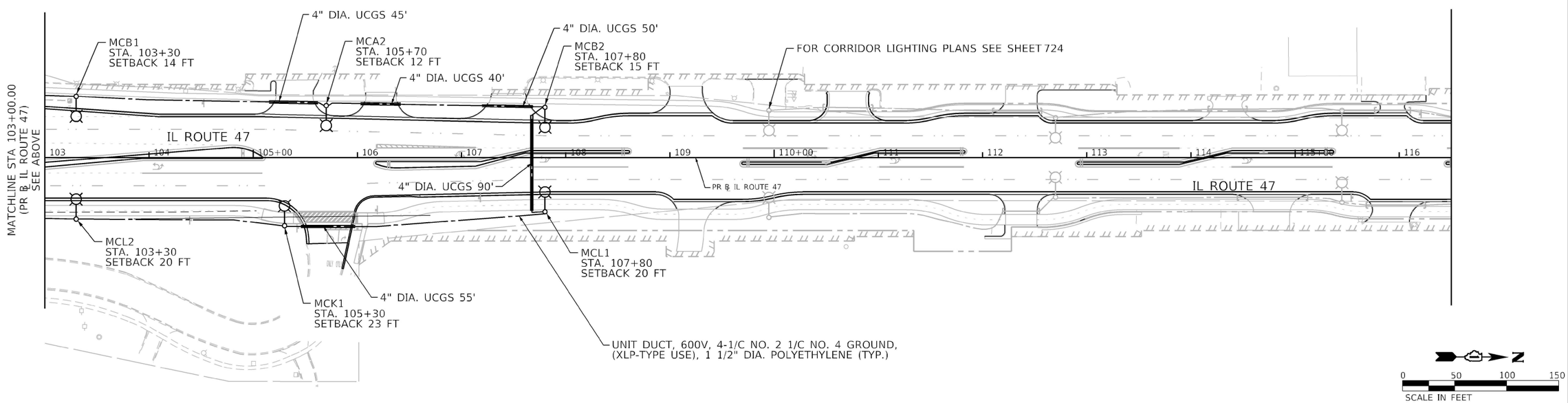
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	





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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL-47 & US 14 - PROPOSED LIGHTING PLAN
IDOT DISTRICT 1

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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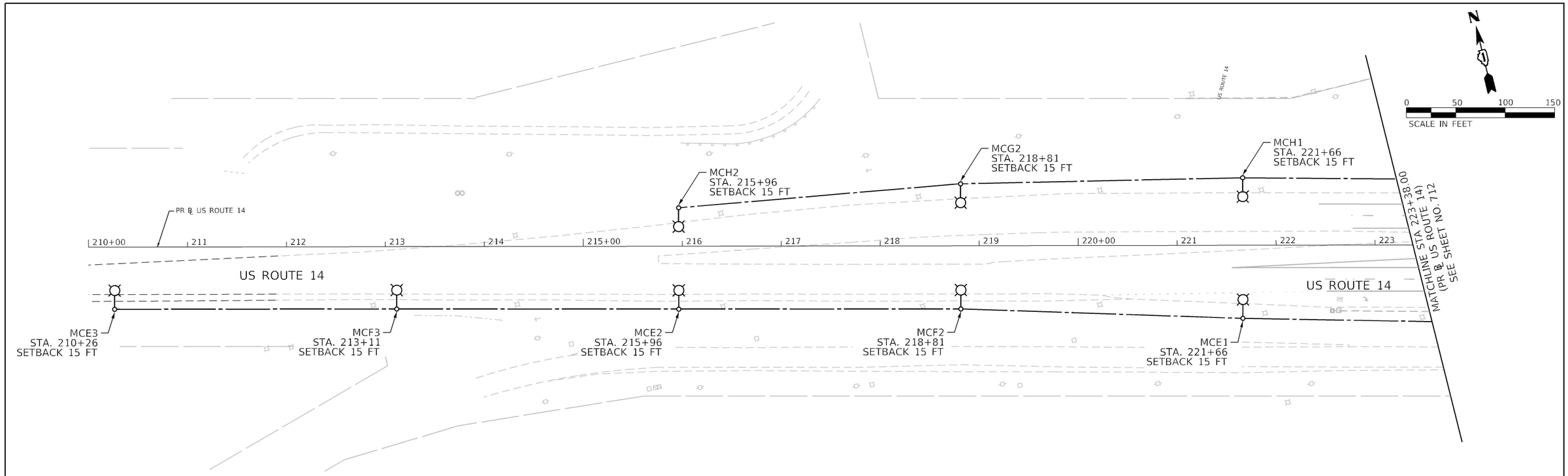
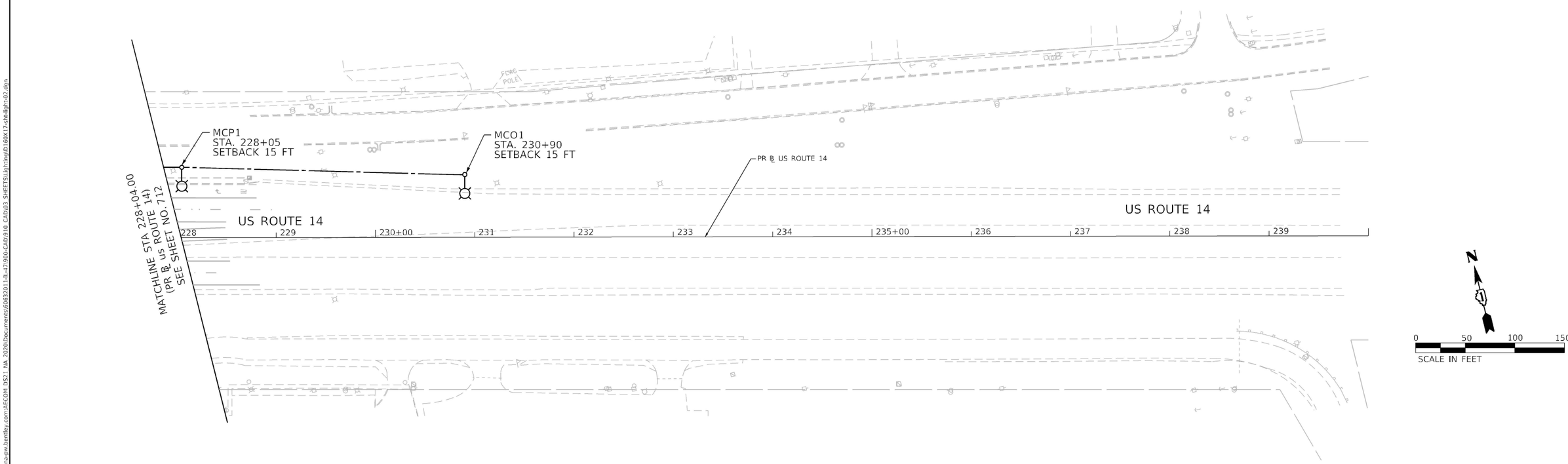
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		





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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL-47 & US 14 – PROPOSED LIGHTING PLAN
IDOT DISTRICT 1

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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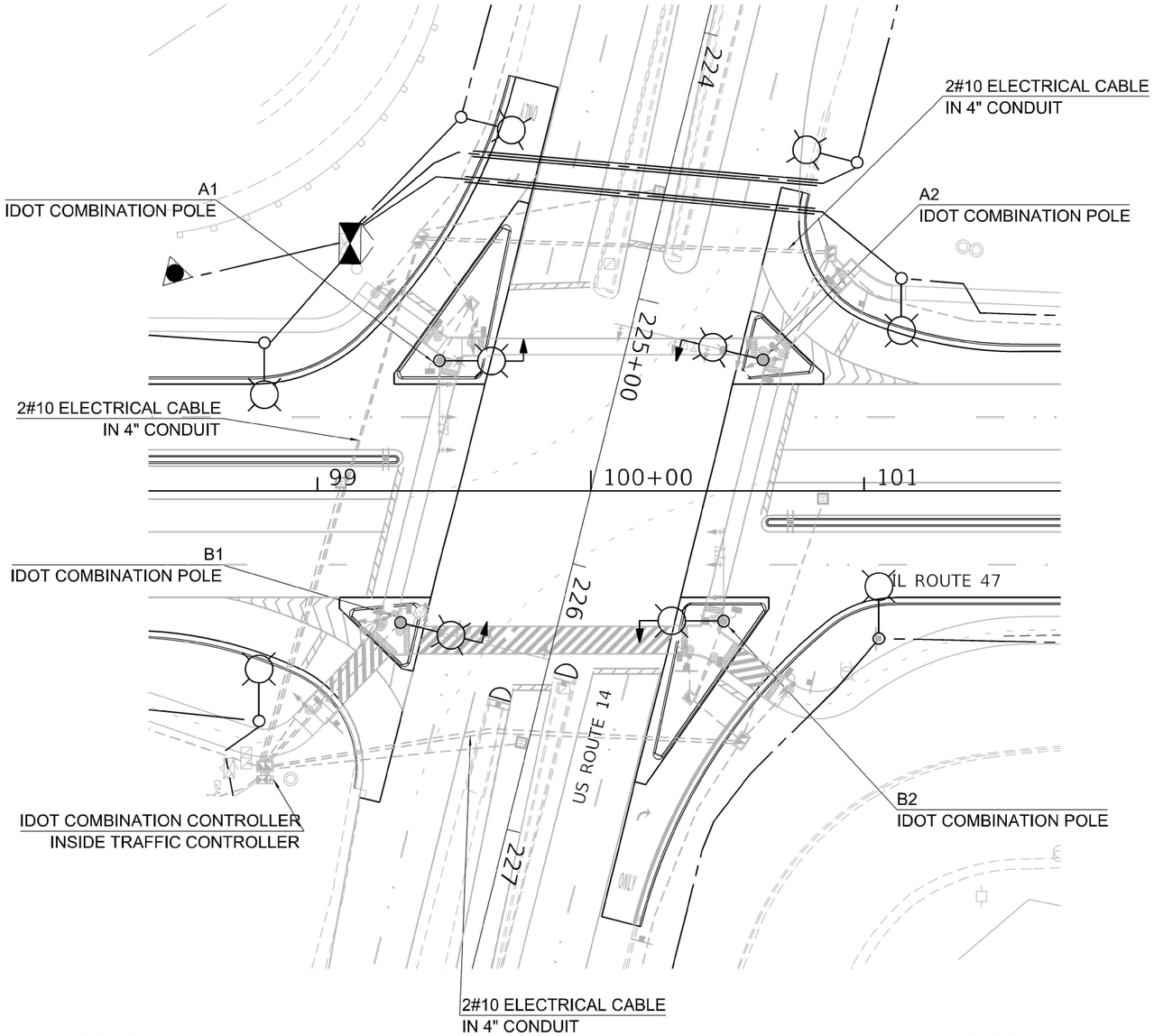
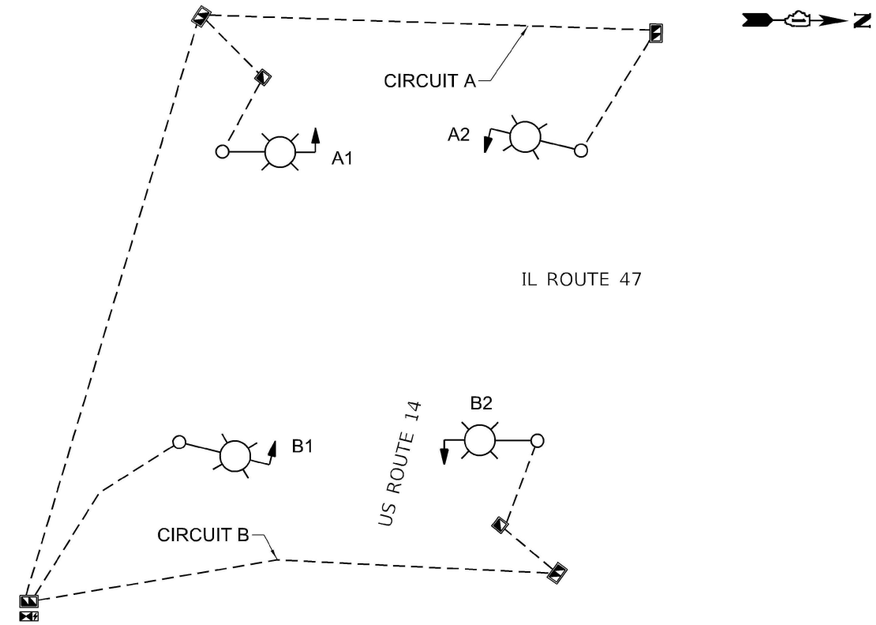
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		





ONE LINE DIAGRAM
IL ROUTE 47. AND US ROUTE 14

IDOT COMBINATION LIGHTING SCHEDULE OF QUANTITIES
IL ROUTE 47 AND US ROUTE 14

DESCRIPTION	UNIT	QUANTITY
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1320
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	4
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	4
COMBINATION LIGHTING CONTROLLER	EACH	1

NOTES:

1.0 THE IDOT COMBINATION LIGHTING CIRCUITS SHALL NOT BE CONNECTED TO THE ROADWAY LIGHTING CIRCUITS.

2.0 LUMINAIRES ARE POWERED FROM IDOT TRAFFIC CONTROLLER. SEE DETAIL BE-240.

3.0 THE COMBINATION LIGHTING CABLE AND SIGNAL CABLES WILL BE IN SHARED CONDUIT.

4.0 SEE TRAFFIC PLANS FOR LOCATION OF COMBINATION POLES, HANDHOLES AND CONDUIT.

5.0 CIRCUIT DECALS SHALL NOT BE INSTALLED ON COMBINATION POLES.

LEGEND:

PROPOSED LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H , 120V, 45 FT. M.H.,15 FT. M.A., ON STEEL COMBINATION MAST ARM AND POLE (SEE TRAFFIC SIGNAL PLANS FOR LOCATION)

PROPOSED ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10

PROPOSED COMBINATION LIGHTING CONTROLLER (SEE TRAFFIC SIGNAL PLANS FOR LOCATION)

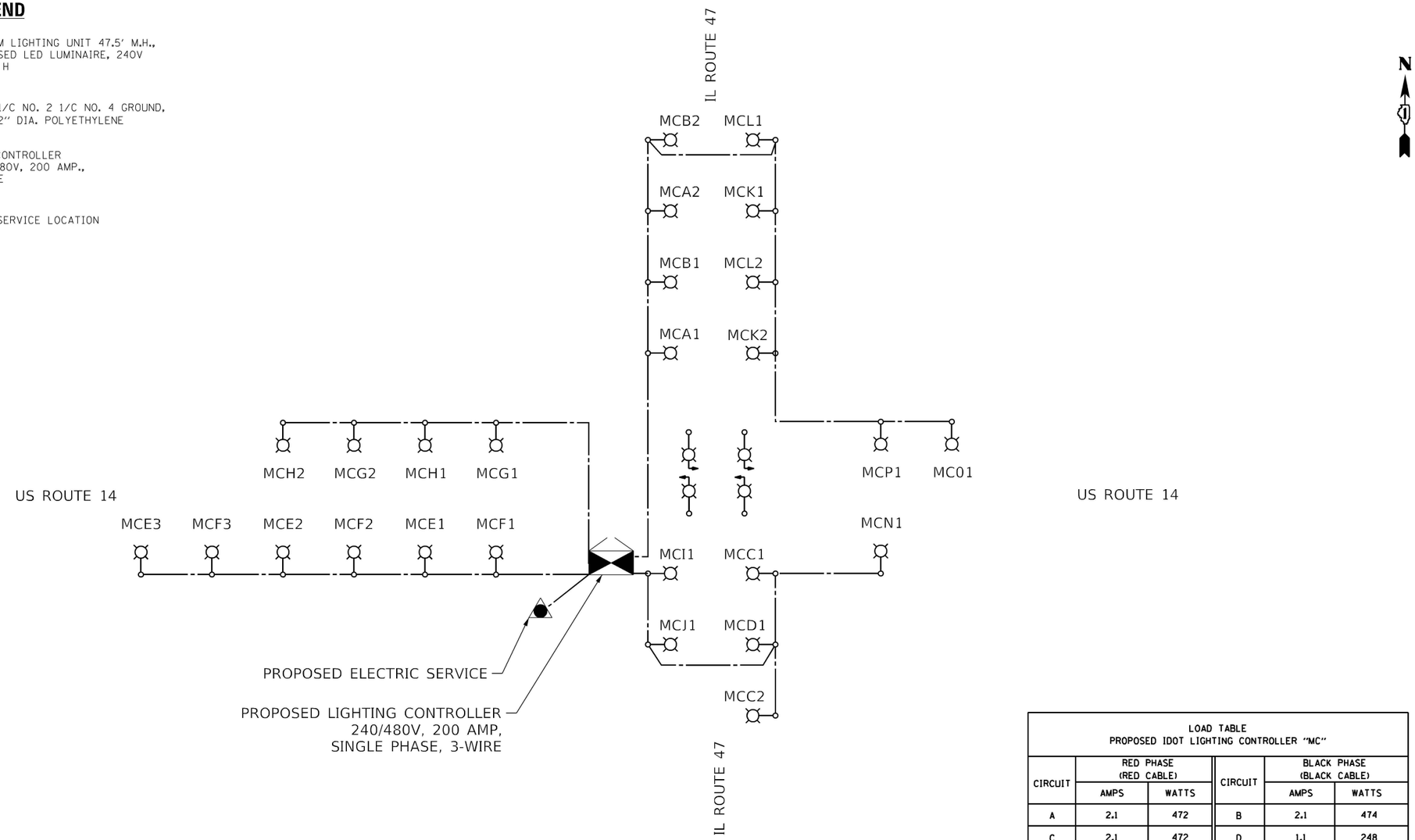
LIGHTING LEGEND

PROPOSED SINGLE ARM LIGHTING UNIT 47.5' M.H., 15' M.A., WITH PROPOSED LED LUMINAIRE, 240V OUTPUT DESIGNATION H

UNIT DUCT, 600V, 4-1/C NO. 2 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE

PROPOSED LIGHTING CONTROLLER BASE MOUNTED 240/480V, 200 AMP., SINGLE PHASE, 3 WIRE

PROPOSED ELECTRIC SERVICE LOCATION



LOAD TABLE
PROPOSED IDOT LIGHTING CONTROLLER "MC"

CIRCUIT	RED PHASE (RED CABLE)		CIRCUIT	BLACK PHASE (BLACK CABLE)	
	AMPS	WATTS		AMPS	WATTS
A	2.1	472	B	2.1	474
C	2.1	472	D	1.1	248
E	3.2	720	F	3.2	720
G	2.1	472	H	2.1	474
I	1.1	248	J	1.1	248
K	2.1	472	L	2.1	474
M	0	0	N	1.1	248
O	1.1	248	P	1.1	248
TOTAL	13.8	3104	TOTAL	13.9	3134

TOTAL AMPS:

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL-47 & US 14 – LIGHTING ONE-LINE DIAGRAM
IDOT DISTRICT 1

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	715

CONTRACT NO. 62X94

ILLINOIS | FED. AID PROJECT

CITY OF WOODSTOCK LIGHTING LEGEND

PROPOSED DECORATIVE LIGHTING UNIT, 40' M.H., 6' M.A., WITH PROPOSED PENDANT LED LUMINAIRE, 240V, WITH TWIN MID-MOUNT ACORN LED LUMINAIRES, 240V

PROPOSED SINGLE ARM LIGHTING UNIT, 40' M.H., 15' M.A., WITH PROPOSED LUMINAIRE, 240V, OUTPUT DESIGNATION G (BY OTHERS)

PROPOSED JUNCTION BOX SIZE AND TYPE PER PLANS

UNDERGROUND RIGID GALVANIZED STEEL CONDUIT (RGC) SIZE AS INDICATED

UNIT DUCT, AS SPECIFIED IN PLANS

PROPOSED LIGHTING CONTROLLER BASE MOUNTED 120/240V, 200 AMP., SINGLE PHASE, 3 WIRE

PROPOSED ELECTRIC SERVICE LOCATION

GROUND ROD, 5/8" X 10 FT

CALL-OUT SAMPLES

DEFINITION	EXAMPLE
CKT. NO. LOCATION SET BACK AS INDICATED IN GENERAL NOTES	MZA1 STA. 591+85 SET BACK 7 FT
HC A 1 POLE NUMBER CIRCUIT NUMBER LIGHTING CONTROL CABINET	
CONDUIT SIZE TYPE, LENGTH	3" DIA. RGC, 50 FT
CIRCUITS CONDUCTORS RACEWAY	CKT. MZAB 3-1/C#8, 1/C#10 GND, 1" DIA. UNIT DUCT
CONTROLLER DESIGNATION LOCATION DESCRIPTION	PROPOSED LIGHTING CONTROLLER "MZ" STA. 590+95, 51 FT LT 1-PHASE, 240/480V, 3 WIRE

GENERAL NOTES:

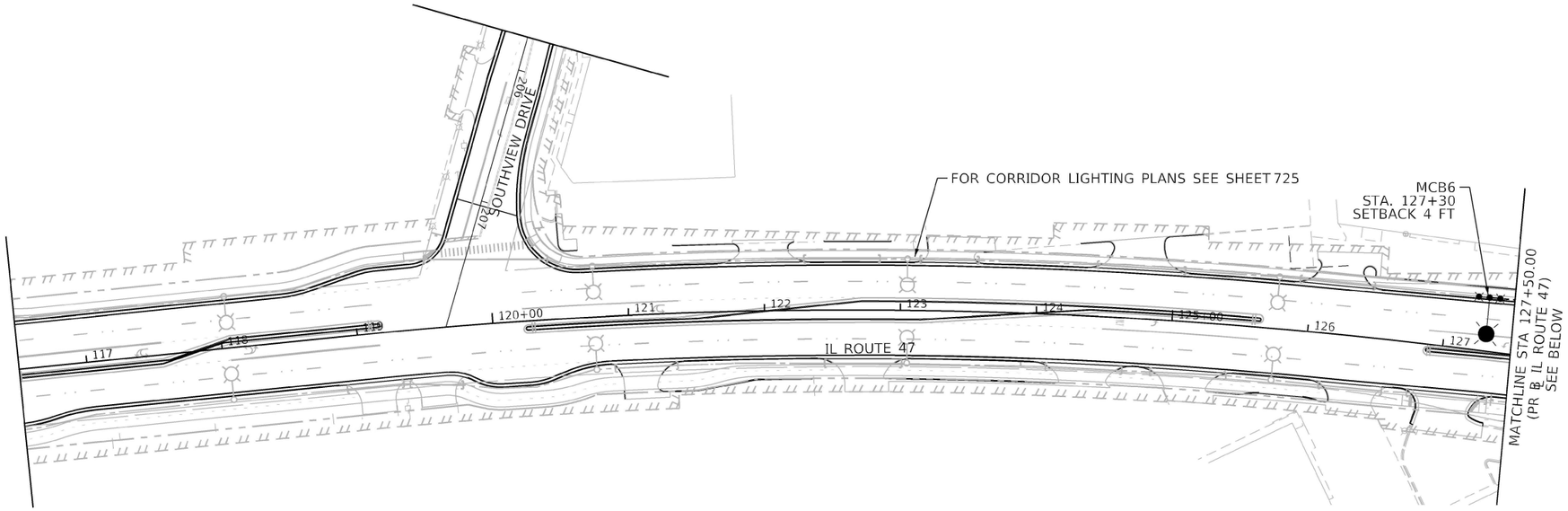
1. LIGHT POLE SET BACKS ARE MEASURED FROM FACE OF CURB TO CENTER OF POLE.
2. OFFSETS FOR TEMPORARY LIGHT POLES ARE MEASURED FROM ROADWAY CENTERLINE TO CENTER OF POLE.
3. WHEREVER TEMPORARY AERIAL CABLE IS REQUIRED TO CROSS AN EXISTING OR PROPOSED ROADWAY, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 20 FEET OF VERTICAL CLEARANCE OVER THE ROADWAY AT ALL TIMES.

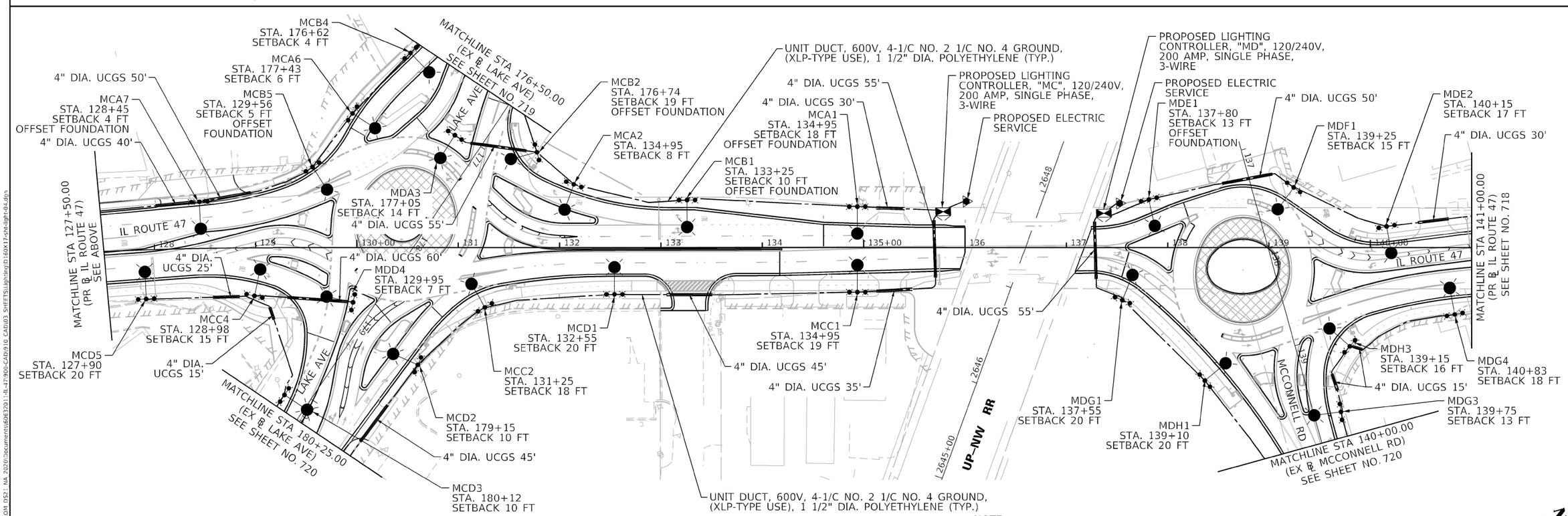
CITY OF WOODSTOCK LIGHTING SCHEDULE OF QUANTITIES

Item	Unit	Quantity
ELECTRIC SERVICE INSTALLATION	EACH	3
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	0.7
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1130
UNIT DUCT, 600V, 4-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	6513
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C 350MCM	FOOT	795
LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 200AMP	EACH	3
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 8'	EACH	49
BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	49
ORNAMENTAL LIGHT UNIT, COMPLETE	EACH	49
LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	56
TEMPORARY LIGHTING SYSTEM	EACH	1
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	49

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
AMP	AMPERE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CNC	COILABLE NONMETALLIC CONDUIT
CP	CONTROL PANEL
DIA.	DIAMETER
E	EXISTING UNIT TO REMAIN
ECA	ELECTRIC CABLE ASSEMBLY
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HMLT	HIGH MAST LIGHT TOWER
HPS	HIGH PRESSURE SODIUM
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
M.A.	MAST ARM
M.H.	MOUNTING HEIGHT
NO.	NUMBER
P	POLE
RGC	RIGID GALVANIZED CONDUIT
RGS	RIGID GALVANIZED STEEL
STA	STATION
T	TEMPORARY LIGHTING UNIT
TB	TRANSFORMER BASE
TMP	TEMPORARY
UD	UNIT DUCT
V	VOLT
W	WATT
WP	WOOD POLE
XFMR	TRANSFORMER





NOTE:
CONTRACTOR SHALL INSTALL TEMPORARY LIGHTING AT THE MCCONNELL RD. ROUNDABOUT IN ADVANCE OF MOT STAGE 1B WHEN THE ROUNDABOUT WILL BE OPEN TO TRAFFIC. INSTALLATIONS WILL BE INTENDED TO ILLUMINATE THE APPROACHES AND CIRCULATING ROADWAY OF PROJECT ROUNDABOUTS, EITHER IN AN INTERIM CONDITION OR PRIOR TO THE ACTIVATION OF PERMANENT LIGHTING, IN A CONFIGURATION THAT MEETS WITH THE APPROVAL OF THE ENGINEER. THIS WORK SHALL BE PAID FOR UNDER THE PAY ITEM "TEMPORARY LIGHTING SYSTEM".

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL-47 ROUNDABOUT - PROPOSED LIGHTING PLAN
CITY OF WOODSTOCK LIGHTING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	717
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

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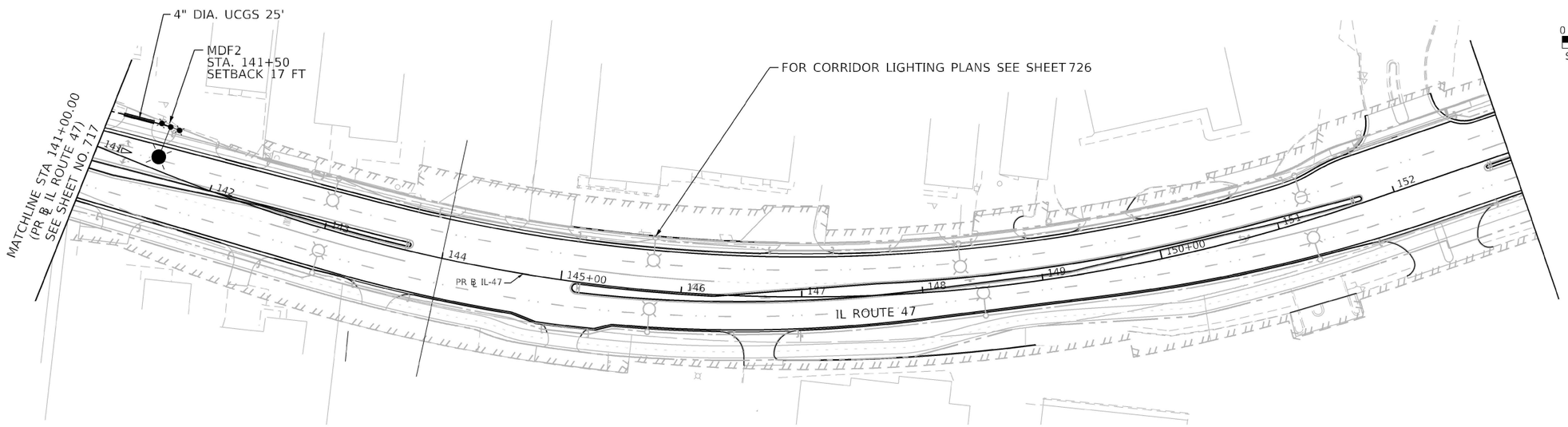

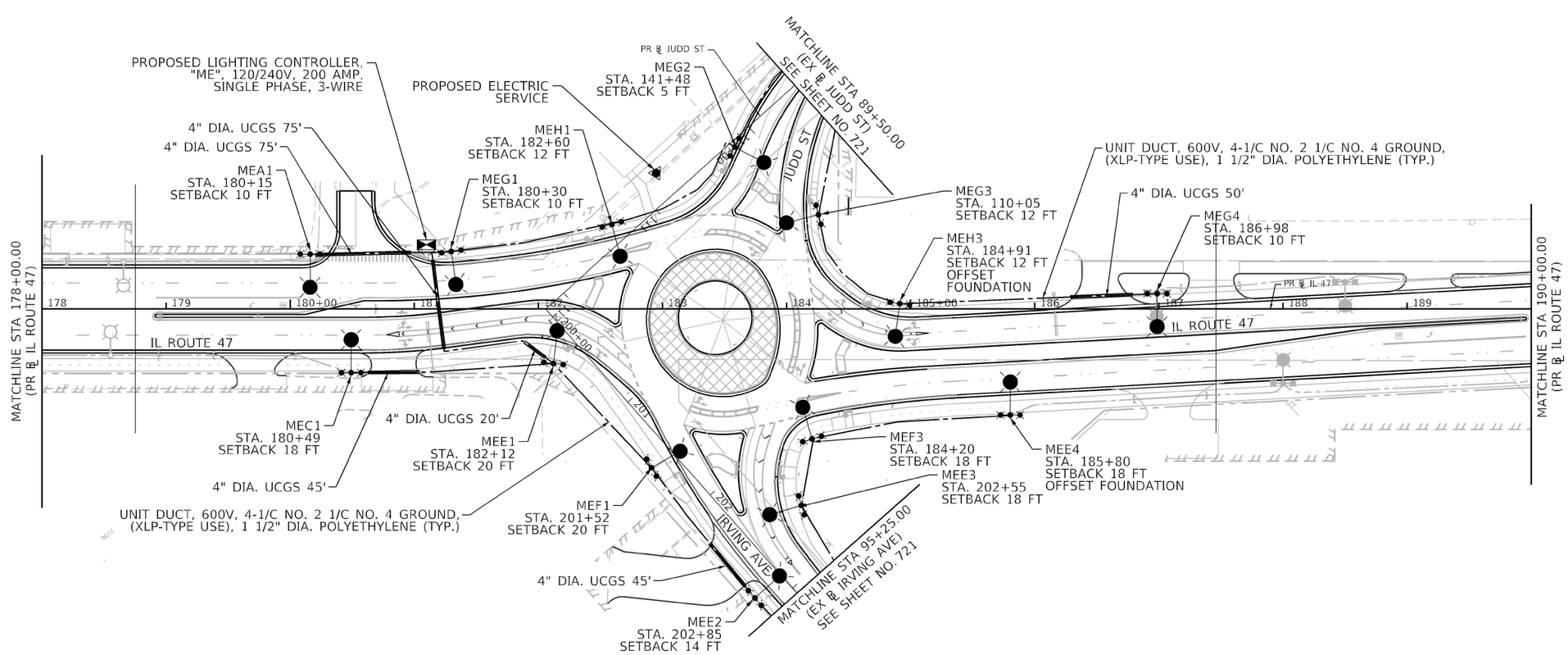

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

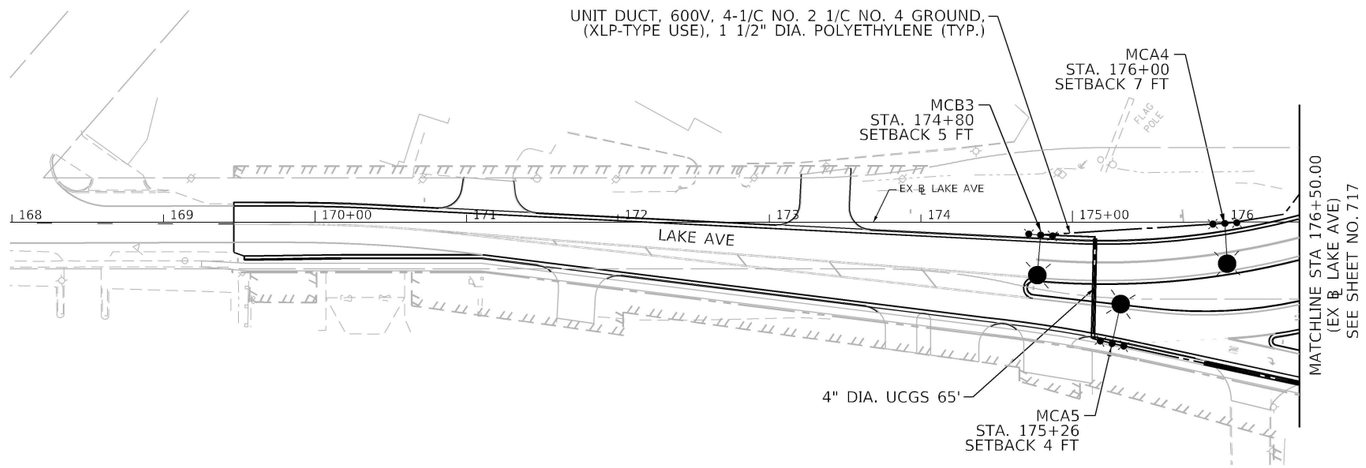
IL-47 ROUNDABOUT - PROPOSED LIGHTING PLAN
CITY OF WOODSTOCK LIGHTING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	718

CONTRACT NO. 62X94

ILLINOIS | FED. AID PROJECT



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STATE OF ILLINOIS
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IL-47 ROUNDABOUT - PROPOSED LIGHTING PLAN
CITY OF WOODSTOCK LIGHTING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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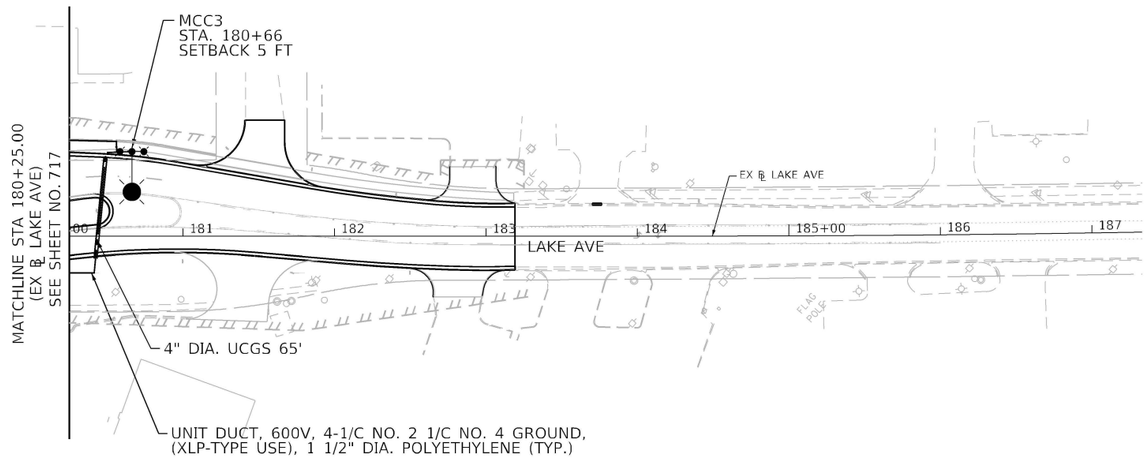
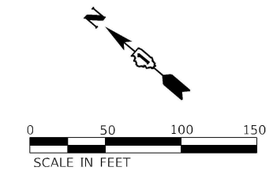
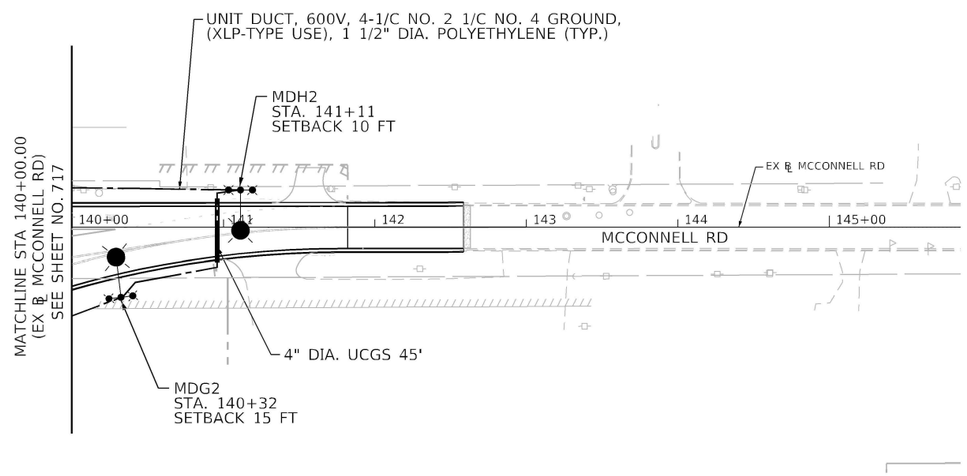
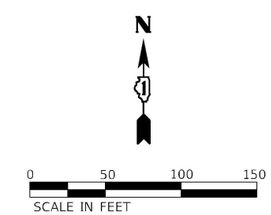
		CONTRACT NO. 62X94		
	ILLINOIS	FED. AID PROJECT		









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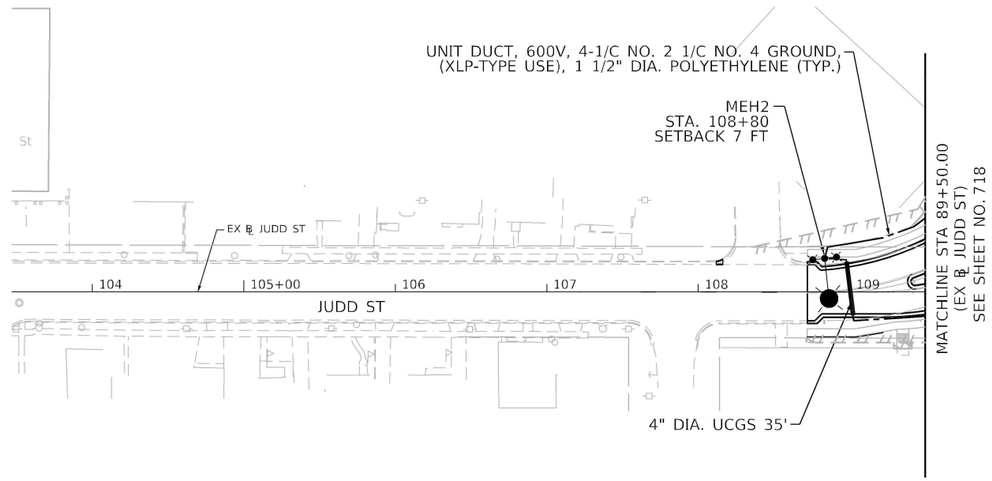
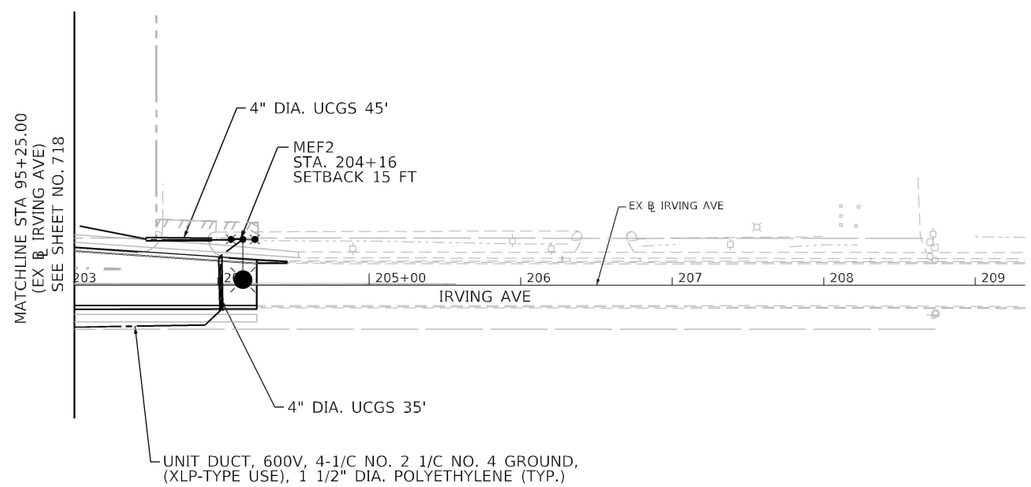
		DRAWN - MT	REVISED -			326	2024-1052-N,C,SW,FL	MCHENRY	941 / 720
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MR	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/5/2025	DATE - 02/06/2025	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	





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Chicago, Illinois 60606

USER NAME = MTodden	DESIGNED - MK	REVISED -	
	DRAWN - MT	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MR	REVISED -	
PLOT DATE = 2/5/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

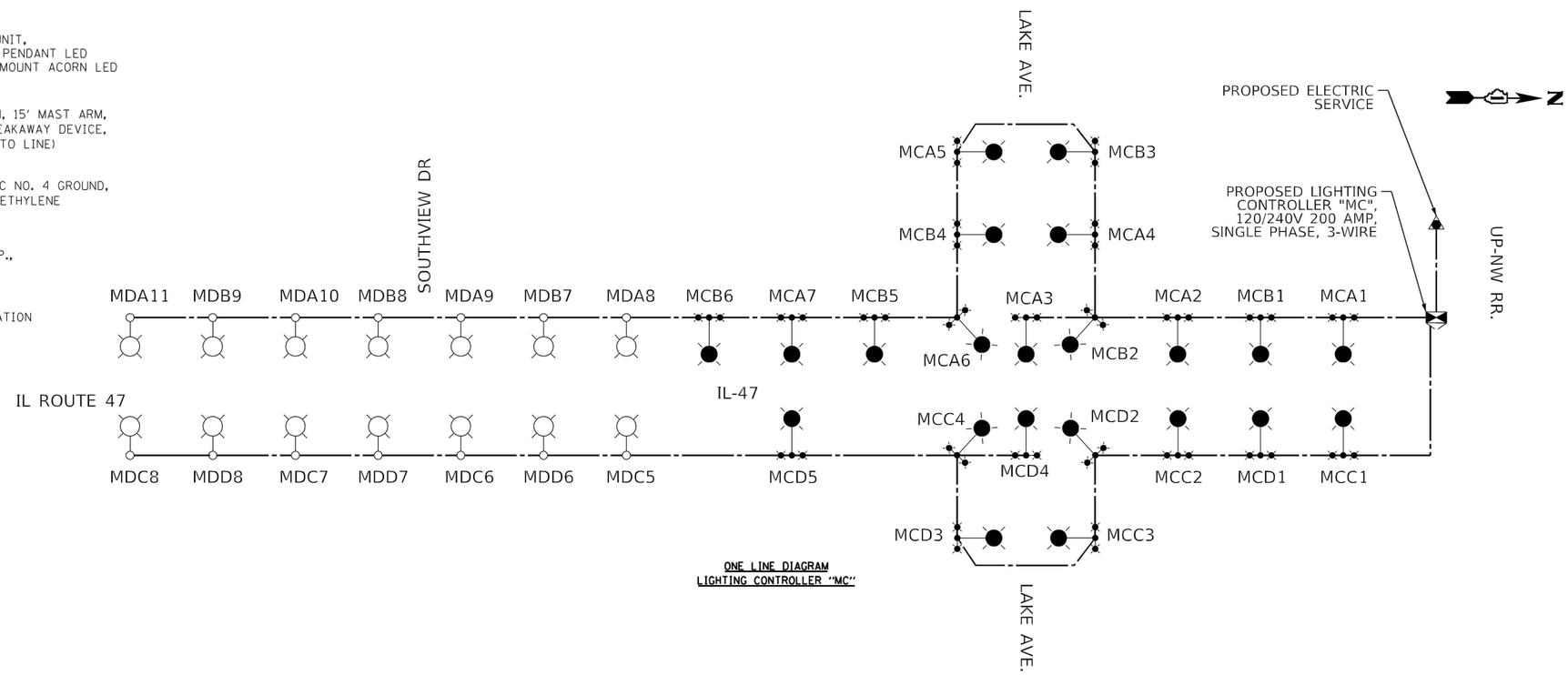
IL-47 ROUNDABOUT - PROPOSED LIGHTING PLAN
CITY OF WOODSTOCK LIGHTING

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

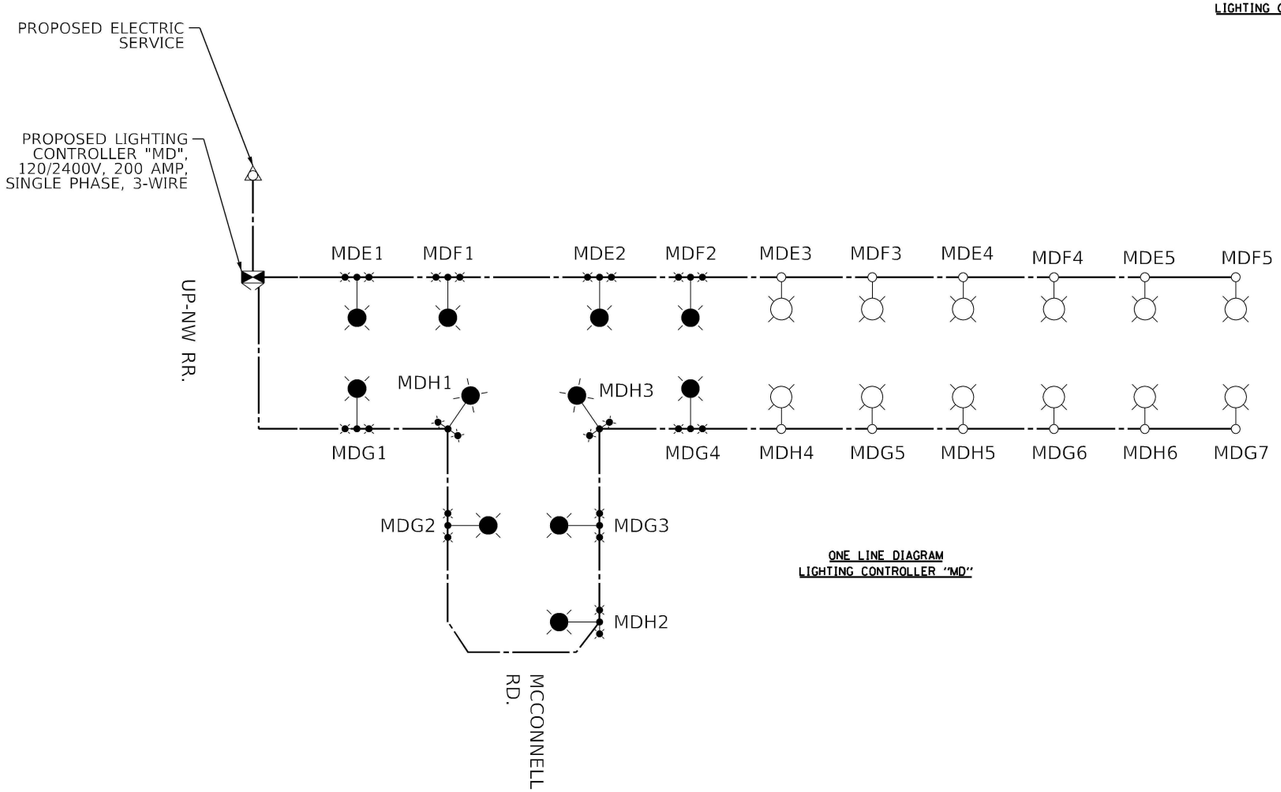
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	721
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

LIGHTING LEGEND

- PROPOSED DECORATIVE LIGHTING UNIT, 40' M.H., 6' M.A., WITH PROPOSED PENDANT LED LUMINAIRE, 240V, WITH TWIN MID-MOUNT ACORN LED LUMINAIRES, 240V
- PROPOSED LIGHTING UNIT 47.5' MH, 15' MAST ARM, LED ROADWAY LUMINAIRE WITH BREAKAWAY DEVICE, METAL FOUNDATION (240V - LINE TO LINE)
- UNIT DUCT, 600V, 4-1/C NO. 2 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE
- PROPOSED LIGHTING CONTROLLER BASE MOUNTED 120/240V, 200 AMP., SINGLE PHASE, 3 WIRE
- PROPOSED ELECTRIC SERVICE LOCATION



ONE LINE DIAGRAM
LIGHTING CONTROLLER "MC"



ONE LINE DIAGRAM
LIGHTING CONTROLLER "MD"

LOAD TABLE
PROPOSED WOODSTOCK LIGHTING CONTROLLER "MC"

CIRCUIT	RED PHASE (RED CABLE)		CIRCUIT	BLACK PHASE (BLACK CABLE)	
	AMPS	WATTS		AMPS	WATTS
A	9.9	2140	B	8.1	1761
C	7	1516	D	7.2	1553
E			F		
G			H		
I			J		
K			L		
M			N		
O			P		
TOTAL	16.9	3656	TOTAL	15.3	3314

TOTAL AMPS:

LOAD TABLE
PROPOSED WOODSTOCK LIGHTING CONTROLLER "MD"

CIRCUIT	RED PHASE (RED CABLE)		CIRCUIT	BLACK PHASE (BLACK CABLE)	
	AMPS	WATTS		AMPS	WATTS
A			B		
C			D		
E	4.3	929	F	4.3	929
G	6.2	1345	H	5.3	1137
I			J		
K			L		
M			N		
O			P		
TOTAL	10.5	2274	TOTAL	9.6	2066

TOTAL AMPS:

MODEL: Default
FILE NAME: pw:\\becom-ha-pw.bentley.com:AECOM DS21 - NA 2020\Documents\60632011-IL-47-900-CAD\03 CAD\03 SHEETS\Lighting\D160X17-int-light-10.dgn

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = MTadden	DESIGNED - MK	REVISED -
	DRAWN - MT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MR	REVISED -
PLOT DATE = 2/5/2025	DATE - 02/06/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL-47 ROUNDABOUT - LIGHTING ONE-LINE DIAGRAM
CITY OF WOODSTOCK LIGHTING

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

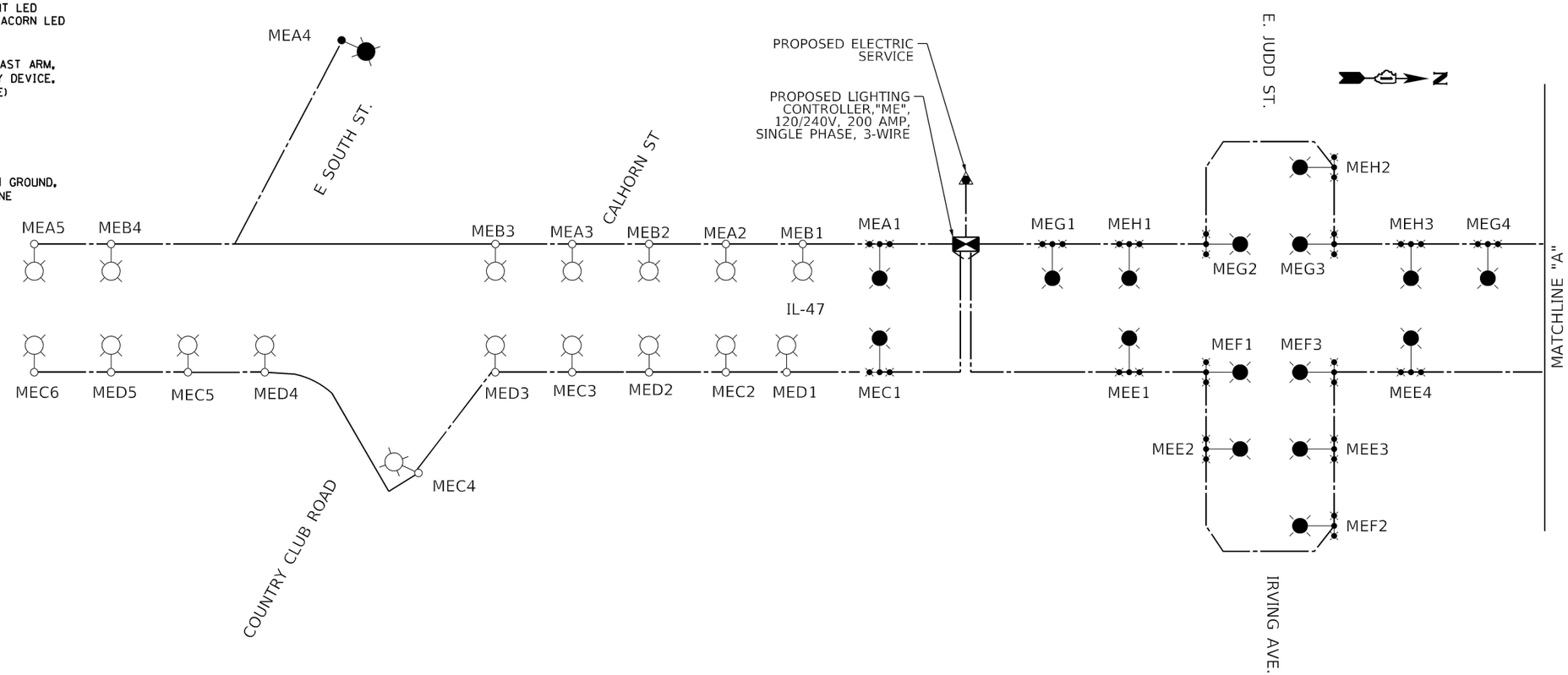
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	722

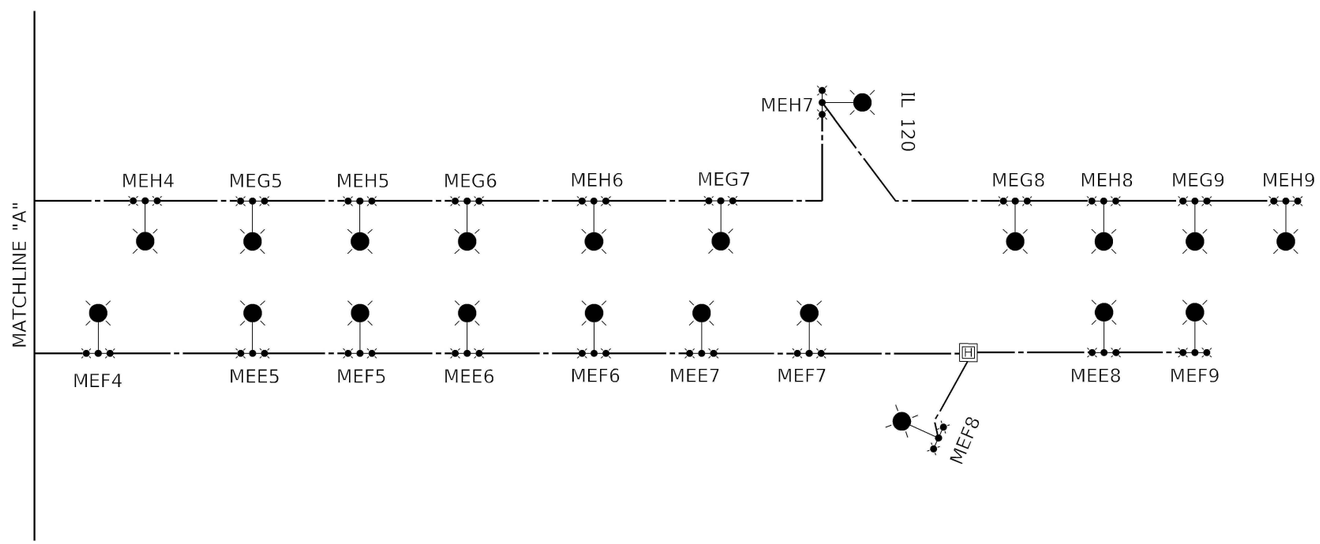
CONTRACT NO. 62X94

ILLINOIS | FED. AID PROJECT

LIGHTING LEGEND

- PROPOSED DECORATIVE LIGHTING UNIT, 40' M.H., 6' M.A., WITH PROPOSED PENDANT LED LUMINAIRE, 240V, WITH TWIN MID-MOUNT ACORN LED LUMINAIRES, 240V
- PROPOSED LIGHTING UNIT 47.5' MH, 15' MAST ARM, LED ROADWAY LUMINAIRE WITH BREAKAWAY DEVICE, METAL FOUNDATION (240V - LINE TO LINE)
- EXISTING LIGHTING UNIT TO REMAIN
- UNIT DUCT, 600V, 4-1/C NO. 2 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE
- EXISTING HANDHOLE
- PROPOSED LIGHTING CONTROLLER BASE MOUNTED 120/240V, 200 AMP., SINGLE PHASE, 3 WIRE
- PROPOSED ELECTRIC SERVICE LOCATION





LOAD TABLE PROPOSED WOODSTOCK LIGHTING CONTROLLER "ME"					
CIRCUIT	RED PHASE (RED CABLE)		CIRCUIT	BLACK PHASE (BLACK CABLE)	
	AMPS	WATTS		AMPS	WATTS
A	4.1	892	B	3.2	684
C	4.9	1063	D	3.9	855
E	7.7	1664	F	8.6	1872
G	8.6	1872	H	8.6	1872
I			J		
K			L		
M			N		
O			P		
TOTAL	25.3	5491	TOTAL	24.3	5283

TOTAL AMPS:

MODEL: Default
FILE NAME: pw:\\becom-pw-pw.bentley.com:AECOM DS21 NA 2020\Documents\60832011-IL-47-900-CAD\03 SHEETS\Lighting\D160X17-sht-light-11

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

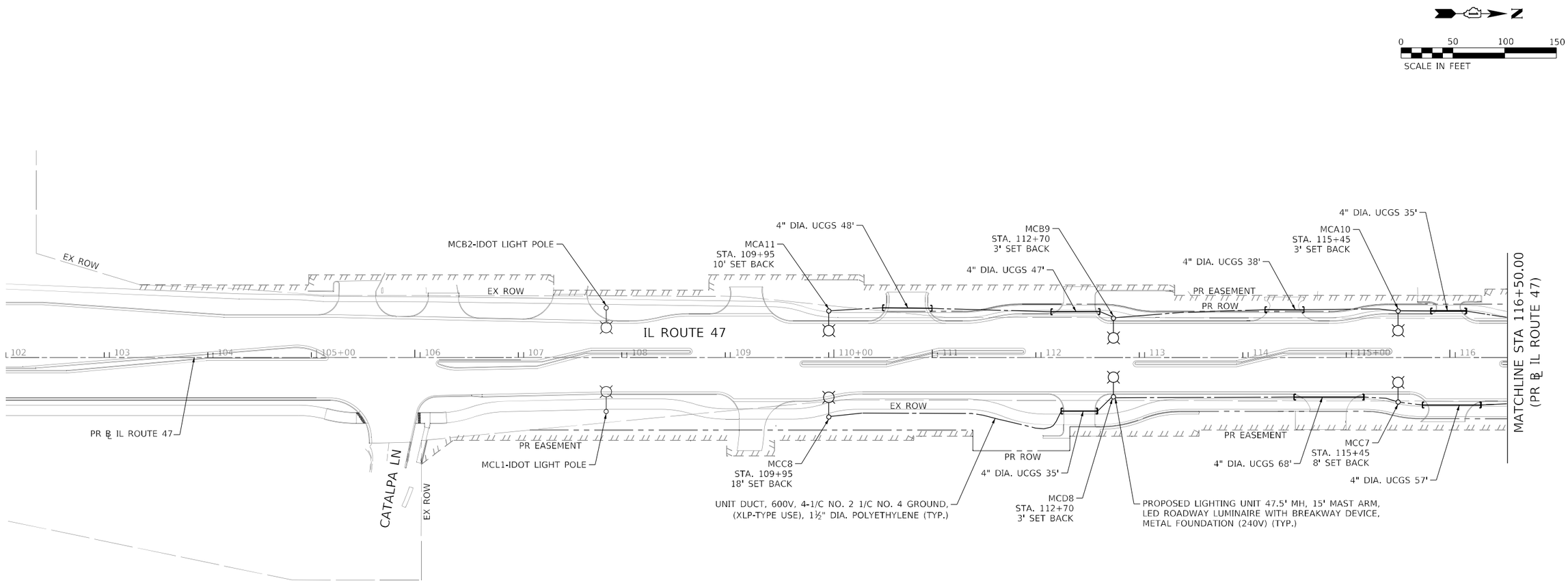
USER NAME = MTodden	DESIGNED - MK	REVISED -	
	DRAWN - MT	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MR	REVISED -	
PLOT DATE = 2/5/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL-47 ROUNDABOUT – LIGHTING ONE-LINE DIAGRAM
CITY OF WOODSTOCK LIGHTING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	723
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



GENERAL LIGHTING NOTES:

1. IL ROUTE 47 FROM NORTH OF CATALPA LANE TO NORTH OF IL ROUTE 120. THE PROPOSED LIGHTING SHALL BE OWNED AND MAINTAINED BY THE CITY OF WOODSTOCK. THE COMBINATION LIGHTING SHALL BE OWNED AND MAINTAINED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION.
2. THE QUANTITIES OF RACEWAYS WHEREVER INDICATED IN THESE PLANS ARE APPROXIMATIONS ONLY.
3. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
4. THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND UTILITIES AND TREES PRIOR TO INSTALLATION OF LIGHT POLES AND CONDUITS. IF THERE IS A CONFLICT WITH THE LIGHT POLES/CONDUITS AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL SUGGEST ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING WORK.
5. TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
6. LIGHTING SYSTEM INSTALLATION SHALL CONFORM TO THE LATEST IDOT STANDARDS, NEC AND CITY OF WOODSTOCK CODES.
7. ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE U/L LISTED AND LABELED.
8. GROUND RODS SHALL BE INSTALLED AT EACH LIGHTING UNIT.
9. THE CONTRACTOR SHALL TAKE CARE WHEN INSTALLING UNIT DUCT TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES AND TREES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE AS DETERMINED BY THE ENGINEER.

LEGEND:

- PROPOSED LIGHTING UNIT 47.5' MH, 15' MAST ARM, LED ROADWAY LUMINAIRE WITH BREAKWAY DEVICE, METAL FOUNDATION (240V - LINE TO LINE)
- UNDERGROUND CONDUIT, GALVANIZED STEEL
- UNIT DUCT, 600V, 4-1/C NO. 2 1/C NO. 4 GROUND, (XLP-TYPE USE), 1½" DIA. POLYETHYLENE
- ELECTRIC CABLE IN CONDUIT, 600 3-1/C NO. 1/0
- COMBINATION LIGHTING 45' MH, 15' MAST ARM, LED ROADWAY LUMINAIRE (120V - LINE TO NEUTRAL)
- PROPOSED DECORATIVE LIGHTING UNIT 40' MH, 6' MAST ARM WITH PROPOSED PENDENT LED LUMINAIRE WITH TWIN MID-MOUNT ACORN LED LUMINAIRES (240V - LINE TO LINE)

HRG PROJECT NO: $PROJECTNO$
HRG PROJ. CONTACT: $HRGPMS
FILE NAME: D160X17-light01.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

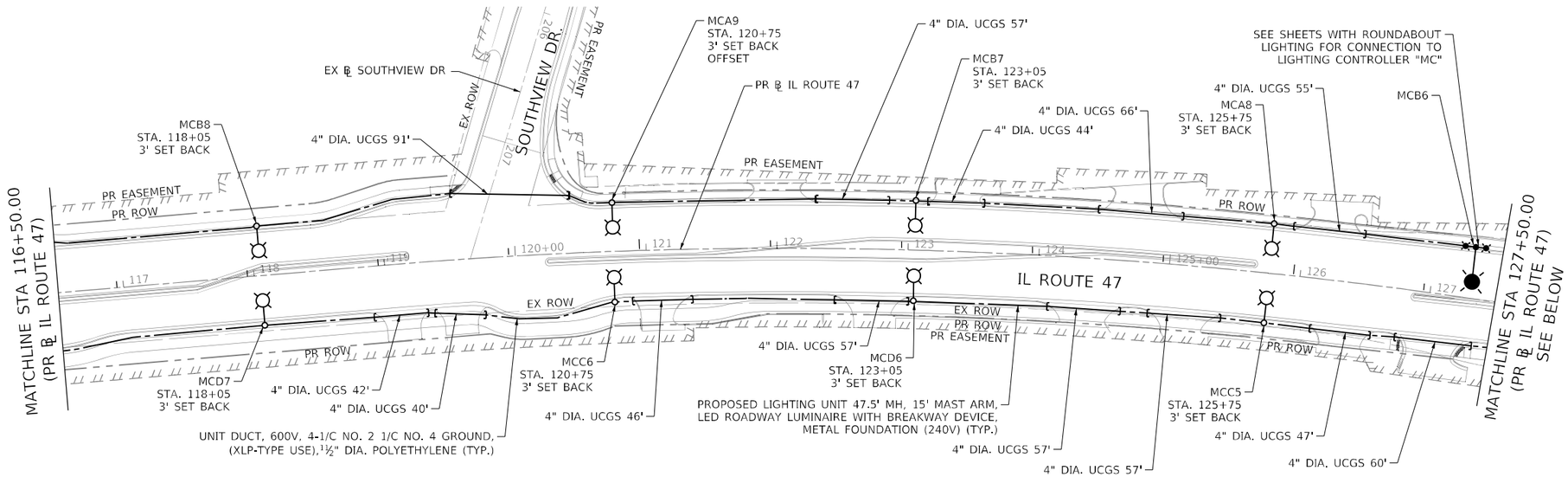
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WOODSTOCK LIGHTING PLAN
IL ROUTE 47

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

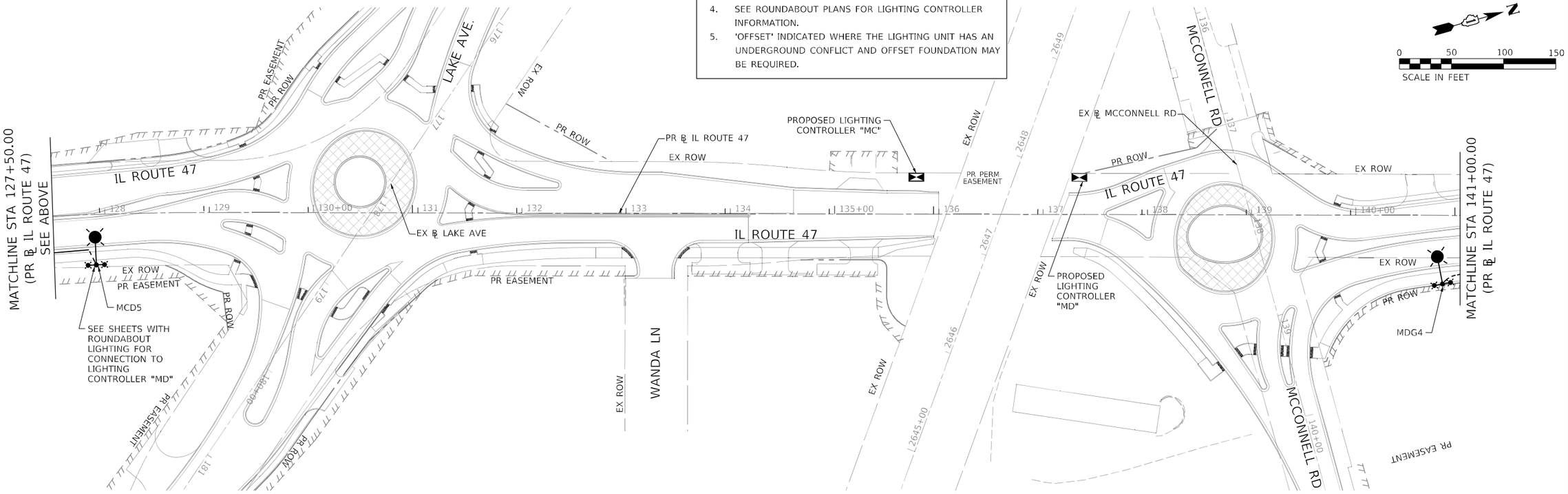
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	McHENRY	941	724
		CONTRACT NO. 62X94		

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



NOTES:

1. SEE GENERAL NOTES AND LEGEND ON SHEET 724.
2. SET BACK IS FROM FACE OF CURB TO CENTER OF POLE.
3. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
4. SEE ROUNDABOUT PLANS FOR LIGHTING CONTROLLER INFORMATION.
5. 'OFFSET' INDICATED WHERE THE LIGHTING UNIT HAS AN UNDERGROUND CONFLICT AND OFFSET FOUNDATION MAY BE REQUIRED.



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HRC PROJ. CONTACT: $HRCPM$
FILE NAME: DIGOXIT-light02.dgn
PLOT DRIVER: PL_T_DRV
PEN TABLE: PEN_TABLE

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

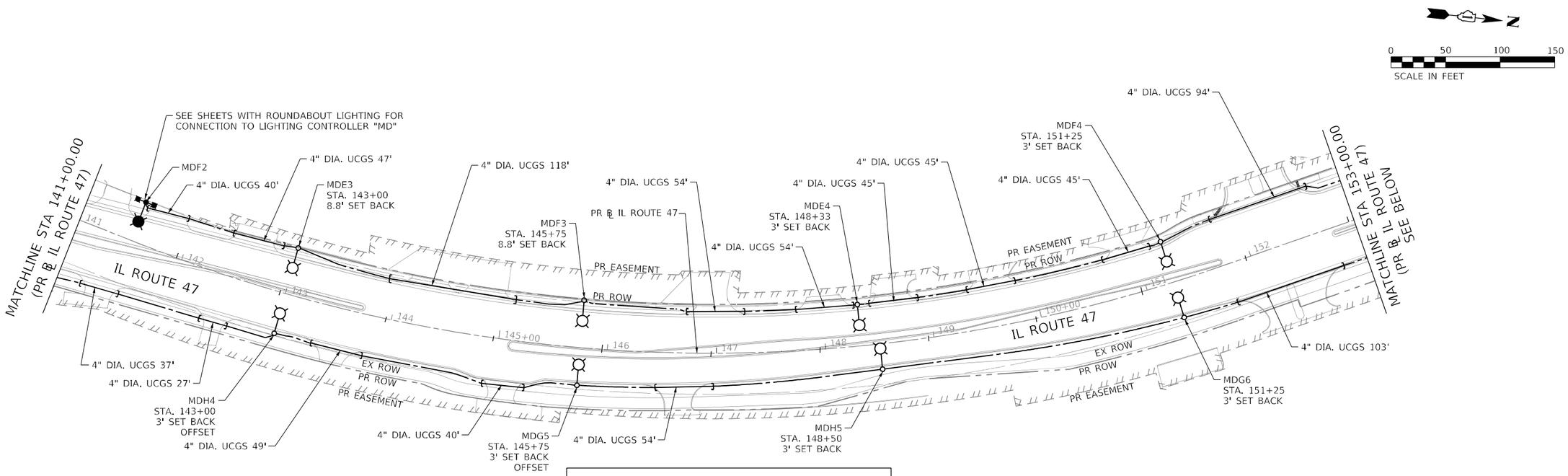
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WOODSTOCK LIGHTING PLAN
IL ROUTE 47

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

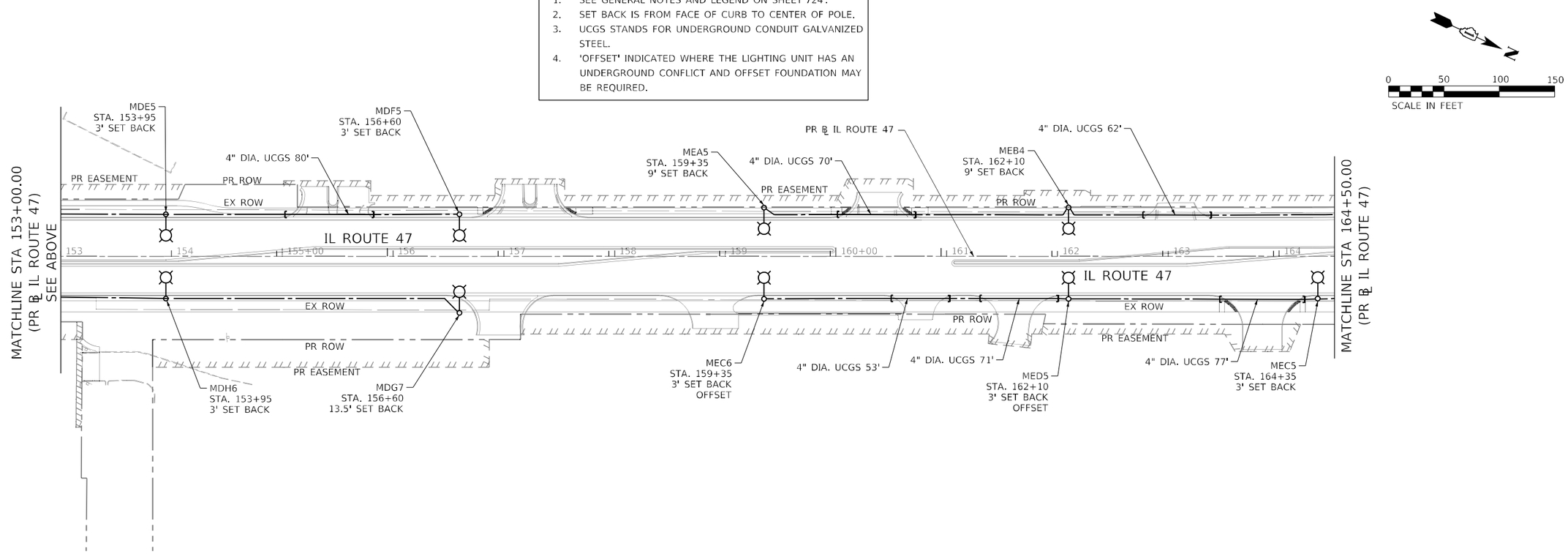
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	McHENRY	941	725
		CONTRACT NO. 62X94		

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



NOTES:

1. SEE GENERAL NOTES AND LEGEND ON SHEET 724.
2. SET BACK IS FROM FACE OF CURB TO CENTER OF POLE.
3. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
4. 'OFFSET' INDICATED WHERE THE LIGHTING UNIT HAS AN UNDERGROUND CONFLICT AND OFFSET FOUNDATION MAY BE REQUIRED.



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FILE NAME: DIGOX17-light03.dgn
PLOT DRIVER: PL_T_DRV
PEN TABLE: PEN_TABLE

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

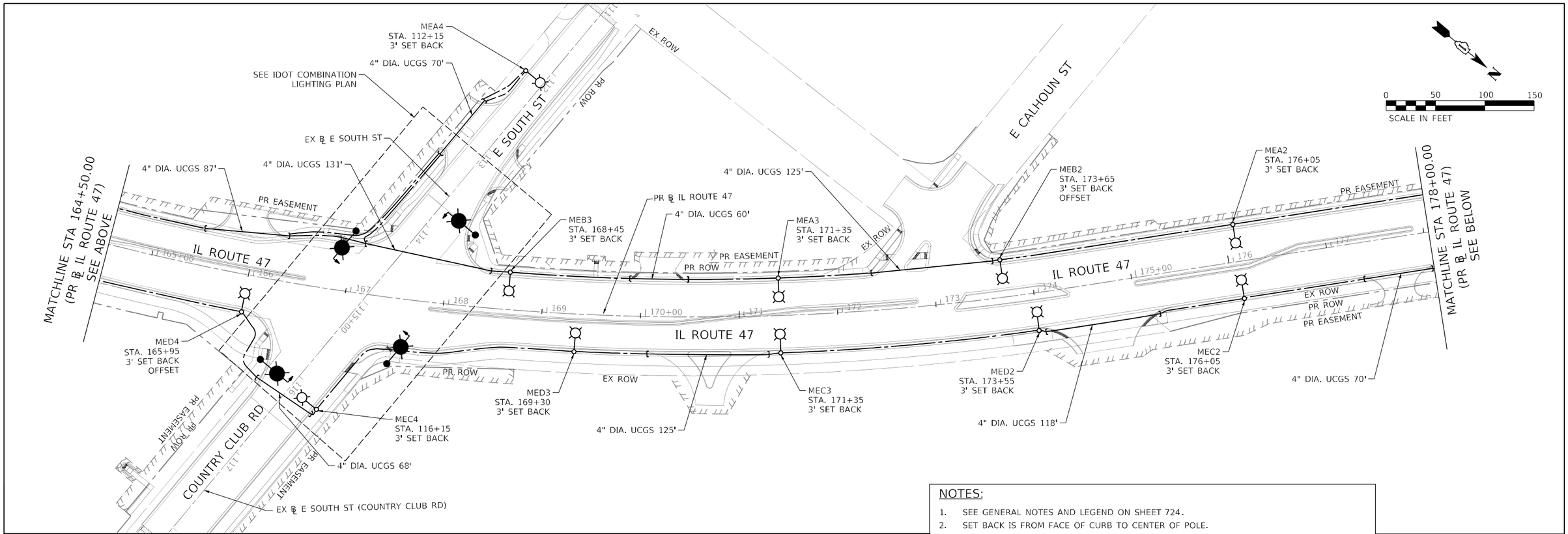
USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WOODSTOCK LIGHTING PLAN
IL ROUTE 47

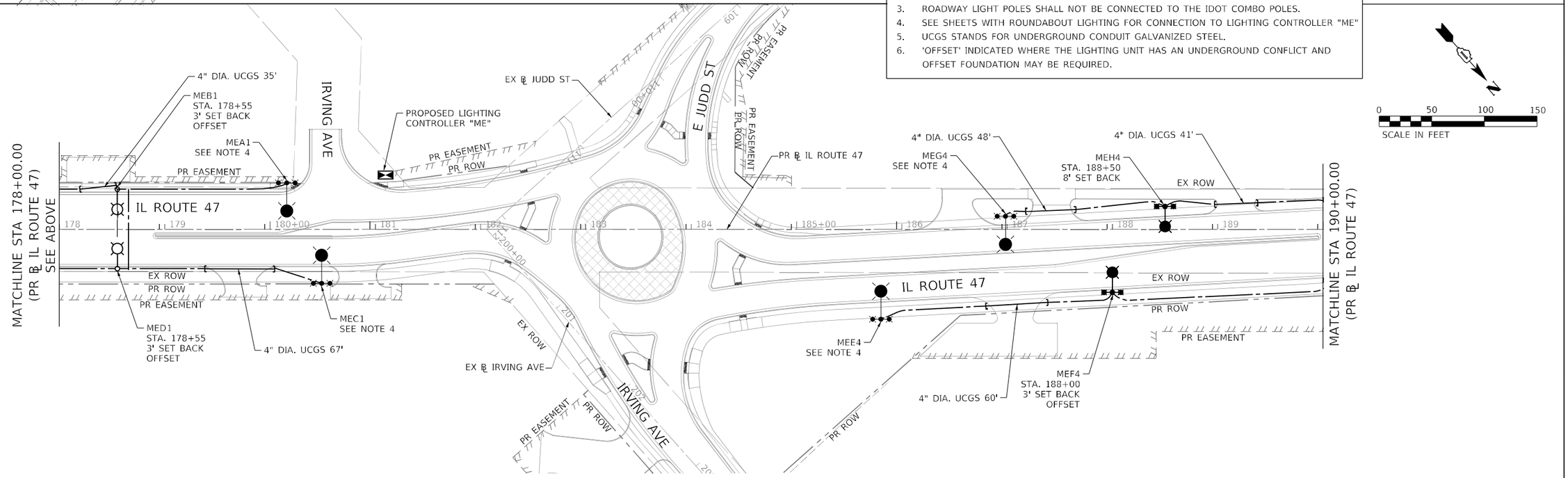
SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	McHENRY	941	726
		CONTRACT NO. 62X94		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

1. SEE GENERAL NOTES AND LEGEND ON SHEET 724.
2. SET BACK IS FROM FACE OF CURB TO CENTER OF POLE.
3. ROADWAY LIGHT POLES SHALL NOT BE CONNECTED TO THE IDOT COMBO POLES.
4. SEE SHEETS WITH ROUNDABOUT LIGHTING FOR CONNECTION TO LIGHTING CONTROLLER "ME"
5. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
6. 'OFFSET' INDICATED WHERE THE LIGHTING UNIT HAS AN UNDERGROUND CONFLICT AND OFFSET FOUNDATION MAY BE REQUIRED.



HRG PROJECT NO.: $PROJECTNO$
HRG PROJ. CONTACT: $HRGPM$
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PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

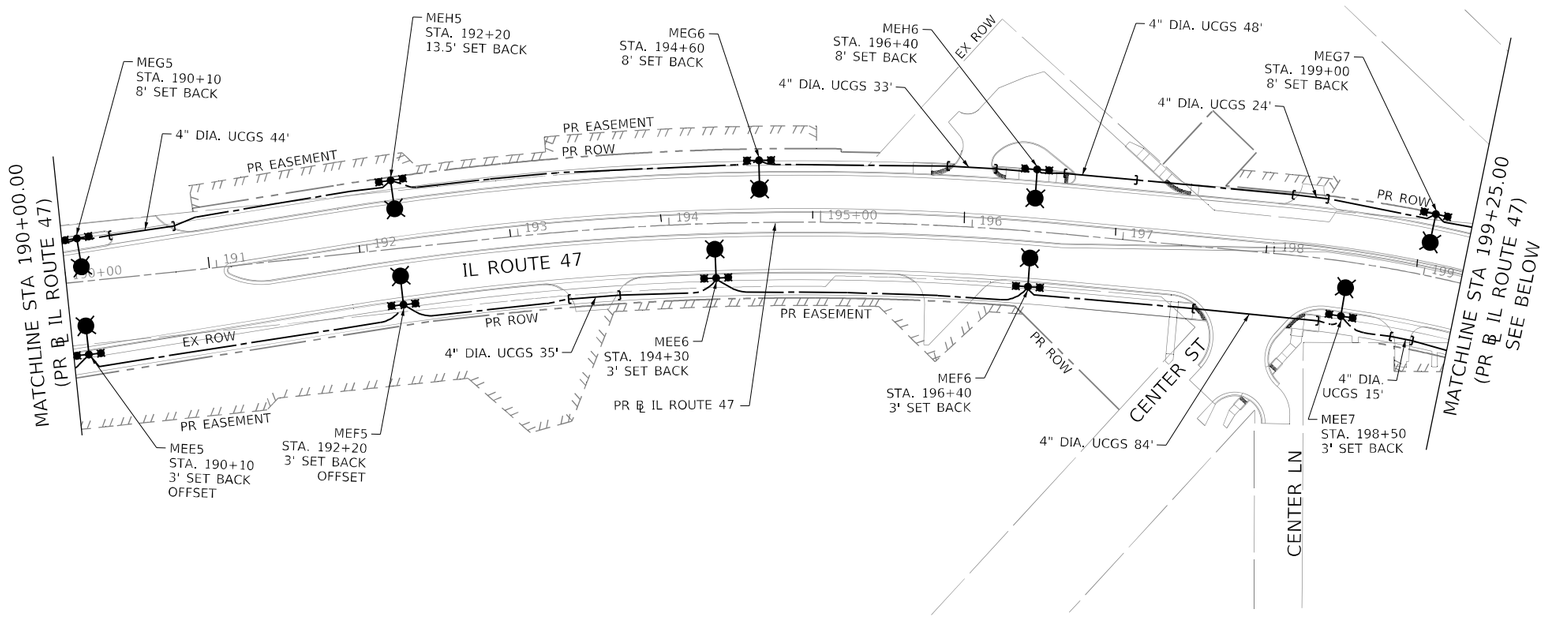
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WOODSTOCK LIGHTING PLAN
IL ROUTE 47

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

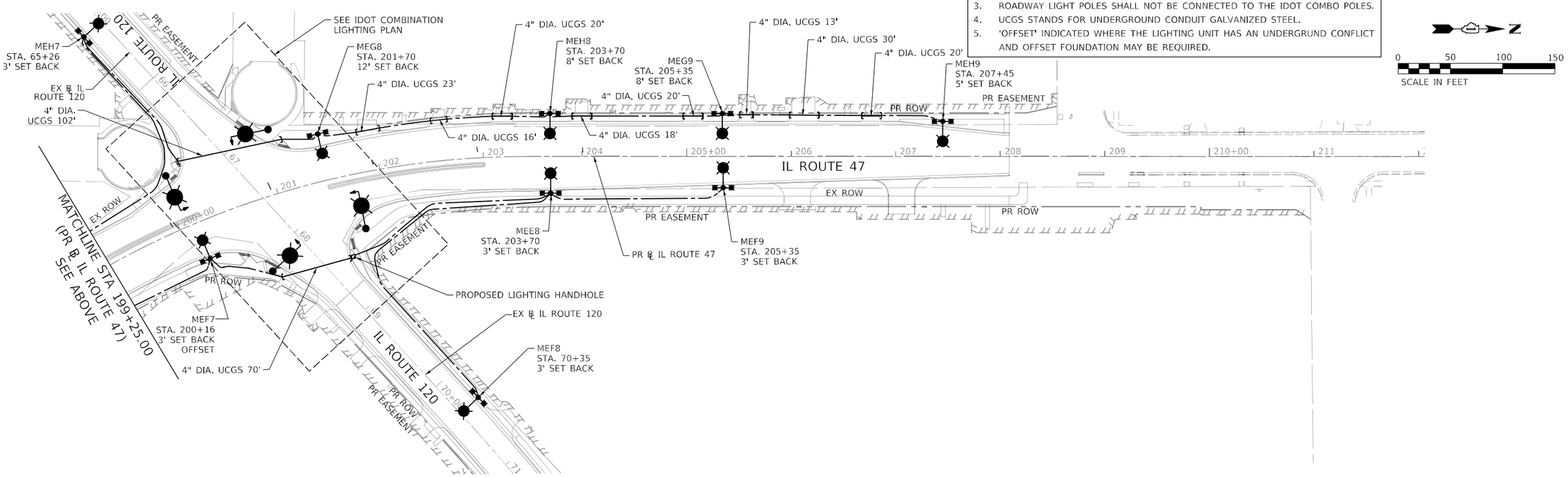
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	McHENRY	941	727
		CONTRACT NO. 62X94		

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



NOTES:

1. SEE GENERAL NOTES AND LEGEND ON SHEET 724.
2. SET BACK IS FROM FACE OF CURB TO CENTER OF POLE.
3. ROADWAY LIGHT POLES SHALL NOT BE CONNECTED TO THE IDOT COMBO POLES.
4. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
5. 'OFFSET' INDICATED WHERE THE LIGHTING UNIT HAS AN UNDERGRUND CONFLICT AND OFFSET FOUNDATION MAY BE REQUIRED.



AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WOODSTOCK LIGHTING PLAN
IL ROUTE 47

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

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	McHENRY	941	728
		CONTRACT NO. 62X94		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HRG PROJECT NO: $PROJECTNO$
HRG PROJ. CONTACT: $HRGPM$
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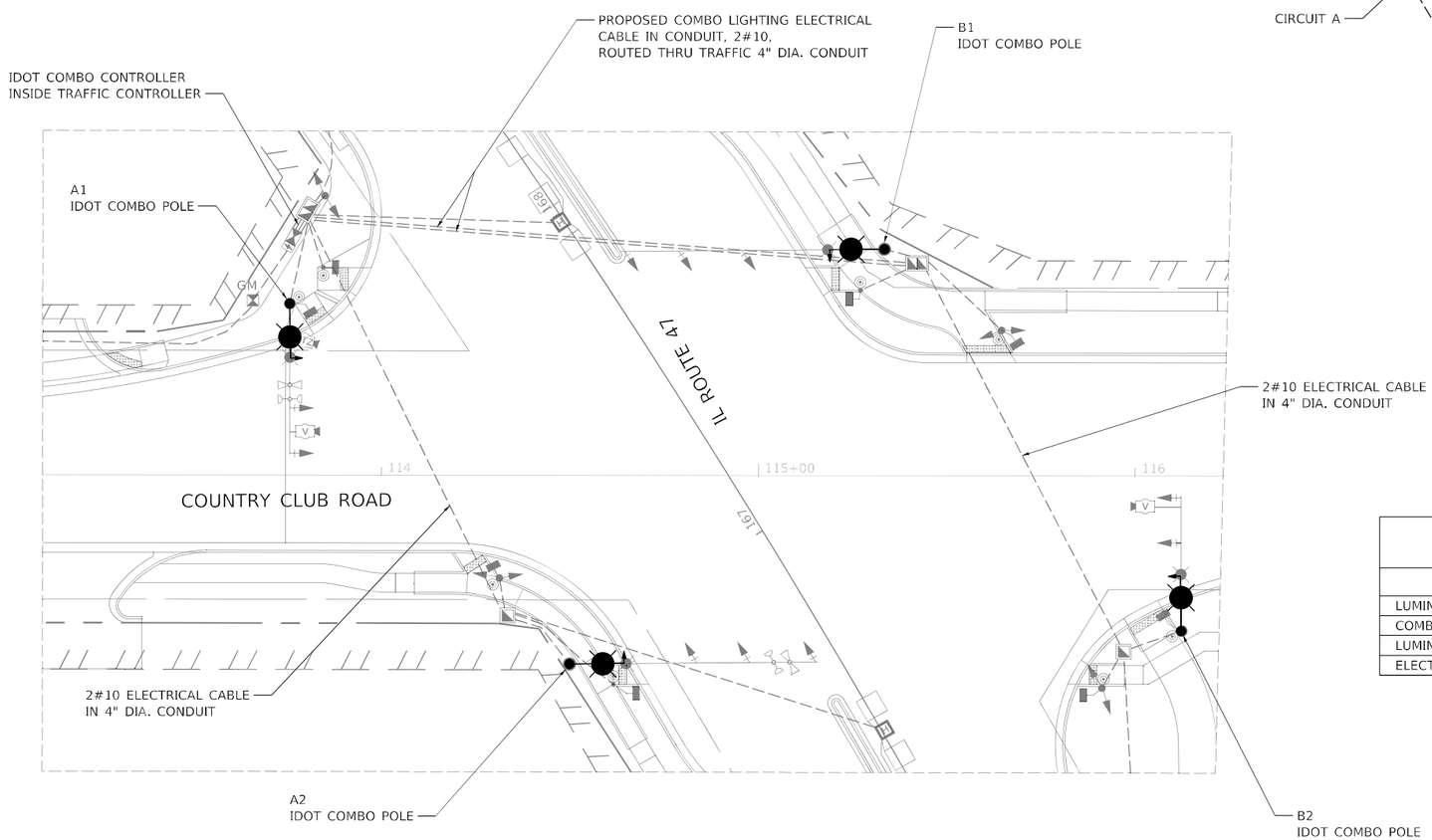
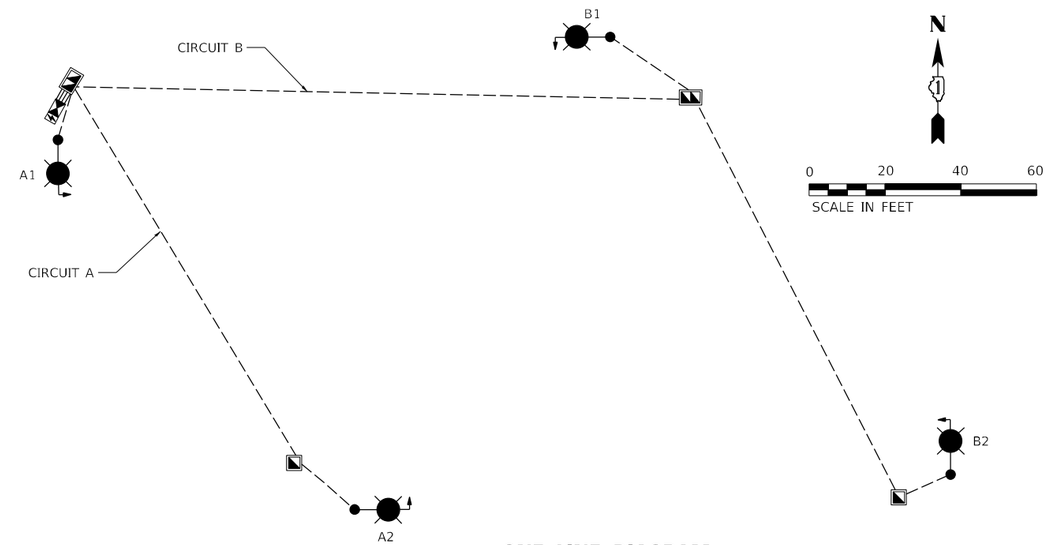
PLOT DRIVER: PL_T_DRV
PEN TABLE: PEN_TABLE





ONE LINE DIAGRAM

IDOT COMBO LIGHTING SCHEDULE OF QUANTITIES		
DESCRIPTION	UNIT	QUANTITY
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	4
COMBINATION LIGHTING CONTROLLER	EACH	1
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	4
ELECTRICAL CABLE IN CONDUIT, 600 V, (XLP TYPE USE) 1/C NO. 10	FOOT	660

NOTES:

1. THE IDOT COMBO LIGHTING CIRCUITING SHALL NOT BE CONNECTED TO THE ROADWAY LIGHTING CIRCUITS.
2. LUMINAIRES ARE POWERED FROM IDOT TRAFFIC CONTROLLER. SEE DETAIL BE-240
3. THE COMBO LIGHTING CABLE AND SIGNAL CABLES WILL BE IN SHARED CONDUIT.
4. SEE TRAFFIC PLANS FOR LOCATION OF COMBO POLES, HANDHOLES AND CONDUIT.
5. CIRCUIT DECALS SHALL NOT BE INSTALLED ON COMBO POLES. CIRCUITING DECALS SHOWN IN FOR GUIDANCE ONLY.

HRG PROJECT NO: $PROJECTNO$
HRG PROJ. CONTACT: $HRGPM$
FILE NAME: D:\GOXT-light06.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

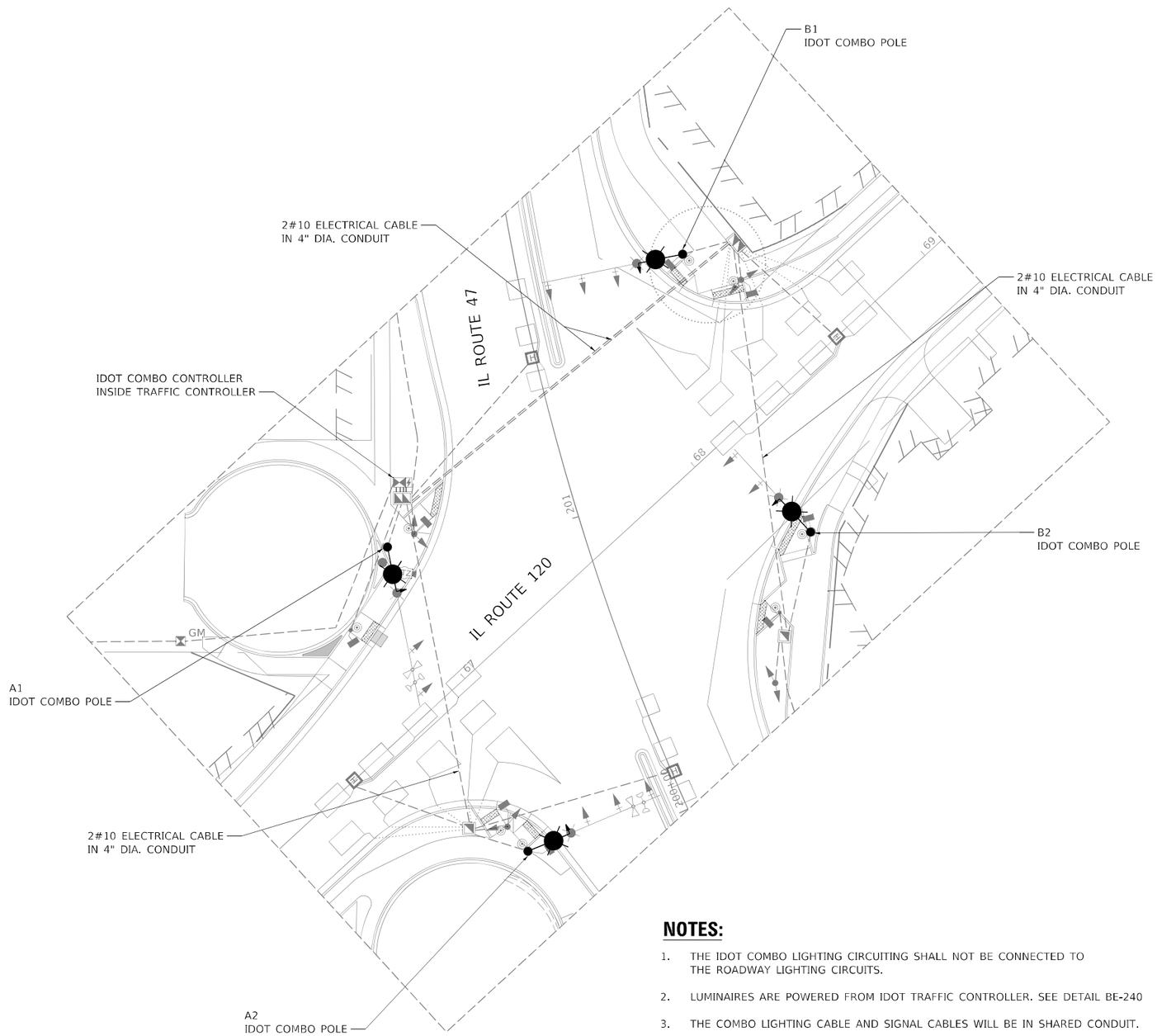
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

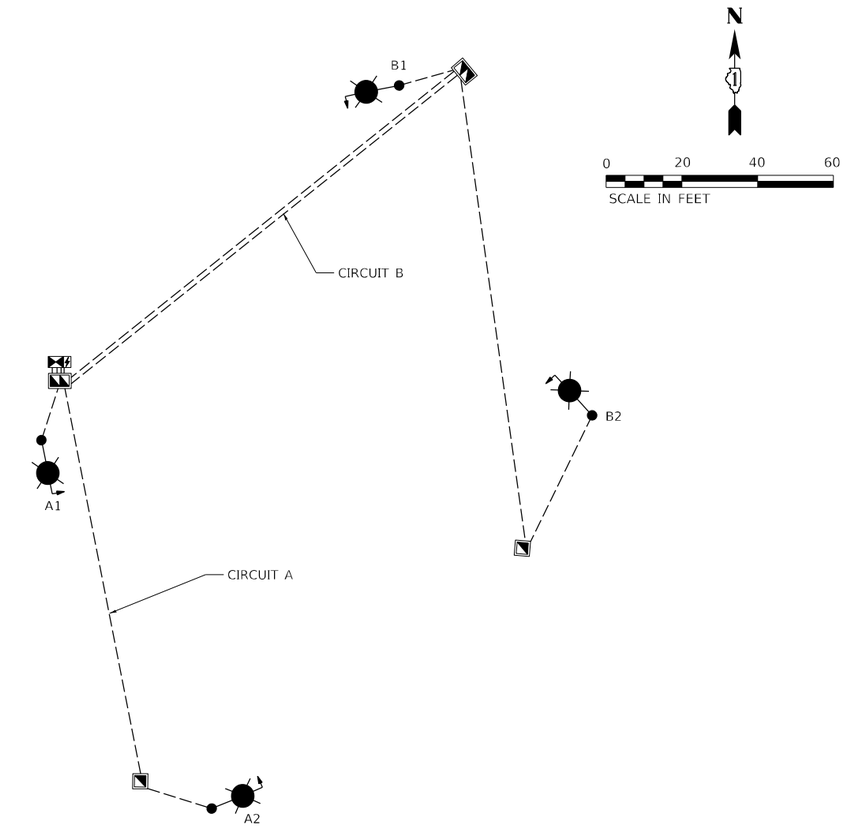
IDOT PROPOSED LIGHTING COMBINATION PLAN
SHEET 1 OF 2

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

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	729
		CONTRACT NO. 62X94		

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





ONE LINE DIAGRAM

IDOT COMBO LIGHTING SCHEDULE OF QUANTITIES		
DESCRIPTION	UNIT	QUANTITY
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	4
COMBINATION LIGHTING CONTROLLER	EACH	1
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	4
ELECTRICAL CABLE IN CONDUIT, 600 V, (XLP TYPE USE) 1/C NO. 10	FOOT	955

NOTES:

1. THE IDOT COMBO LIGHTING CIRCUITING SHALL NOT BE CONNECTED TO THE ROADWAY LIGHTING CIRCUITS.
2. LUMINAIRES ARE POWERED FROM IDOT TRAFFIC CONTROLLER. SEE DETAIL BE-240
3. THE COMBO LIGHTING CABLE AND SIGNAL CABLES WILL BE IN SHARED CONDUIT.
4. SEE TRAFFIC PLANS FOR LOCATION OF COMBO POLES, HANDHOLES AND CONDUIT.
5. CIRCUIT DECALS SHALL NOT BE INSTALLED ON COMBO POLES. CIRCUITING DECALS SHOWN IN FOR GUIDANCE ONLY.

HRG PROJECT NO: $PROJECTNO$
HRG PROJ. CONTACT: $HRGPM$
FILE NAME: D160X17-light07.dgn
PLOT DRIVER: PLT_DRV
PEN TABLE: PEN_TABLE

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

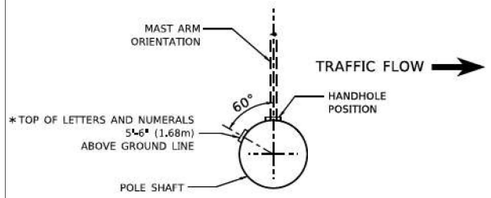
USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

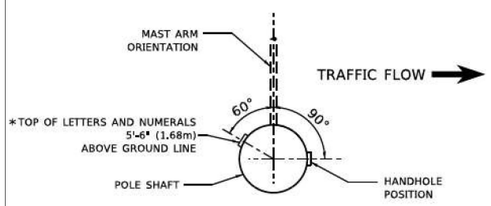
IDOT PROPOSED LIGHTING COMBINATION PLAN
SHEET 2 OF 2

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

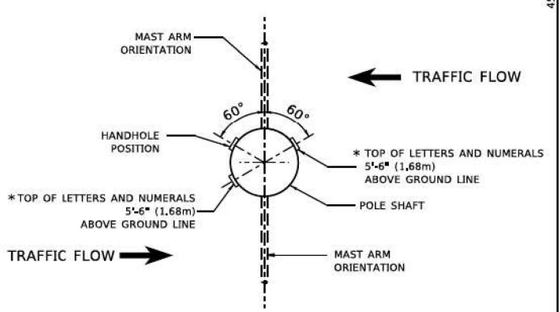
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	730
		CONTRACT NO. 62X94		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



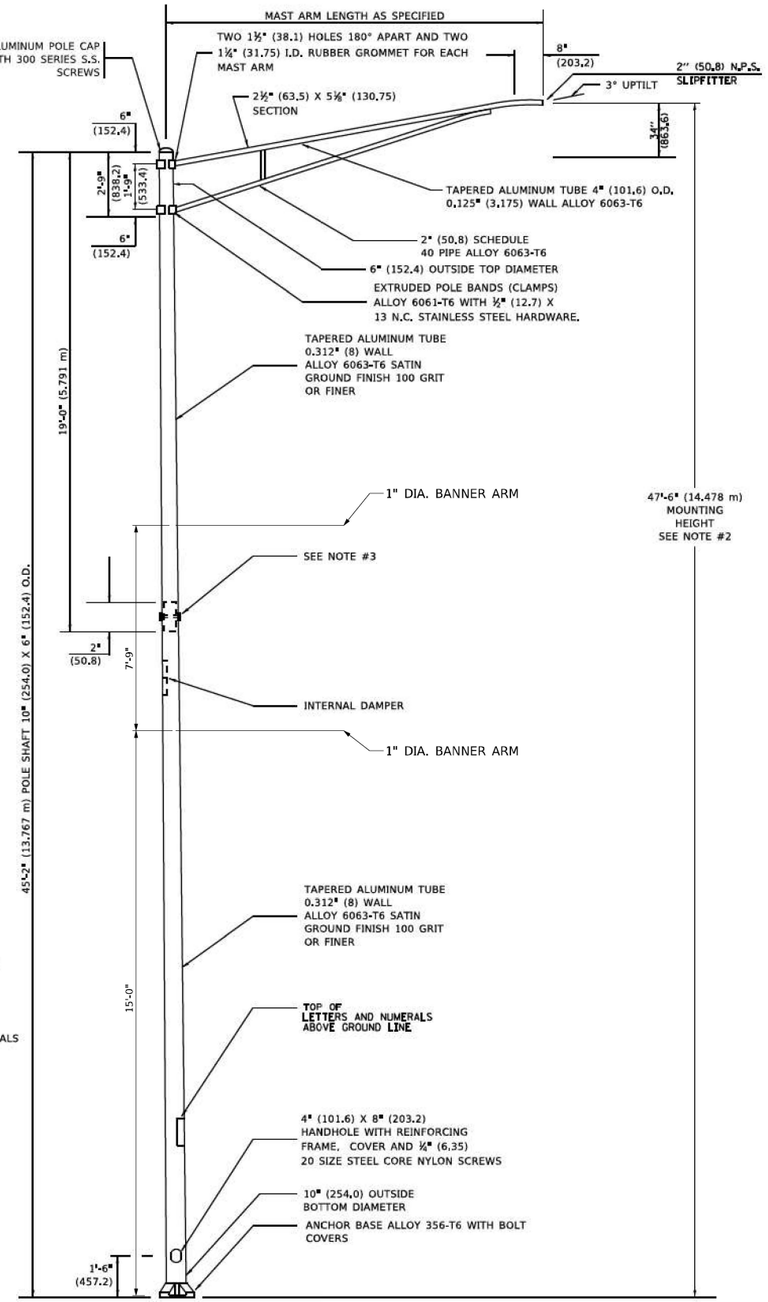
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL

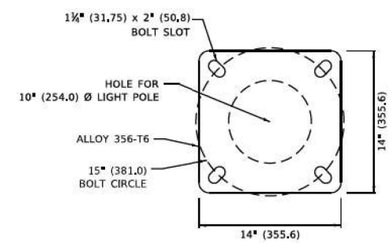


POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



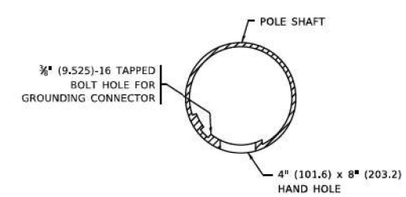
POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES





LIGHT POLE BASE PLATE DETAIL

15 INCH (381.0) BOLT CIRCLE



HANDHOLE DETAIL
(N.T.S.)

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.
9. LIGHT POLE AND MAST ARM SHALL HAVE A POLYESTER BLACK PAINT FINISH TO MATCH THE DECORATIVE LIGHTING UNITS.
10. THE TWO BREAKAWAY BANNER ARMS SHALL BE DESIGNED TO BREAK AT 60 MPH WIND SPEED.
11. BANNER ARM POLES CANNOT BE INSTALLED AT SIGNALIZED INTERSECTIONS OR TRANSITION AREAS.

HRG PROJECT NO: $PROJECTNO$
HRG PROJ. CONTACT: $HRGPM$
FILE NAME: D160XT7-light08.dgn
PLOT DRIVER: PL_DRV
PEN TABLE: PEN_TABLE

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = Srahman	DESIGNED - BL	REVISED -	
	DRAWN - SR/MD	REVISED -	
PLOT SCALE = 0.0870 ' / in.	CHECKED - MH	REVISED -	
PLOT DATE = 2/7/2025	DATE - 12-31-2024	REVISED -	

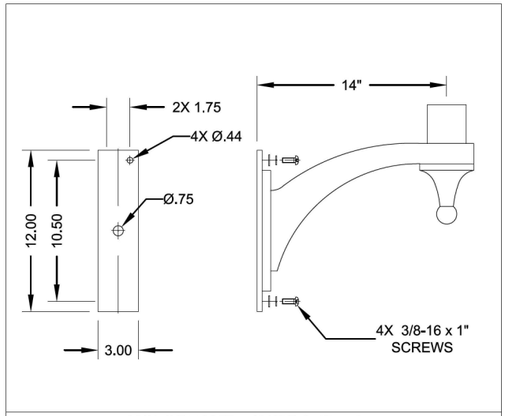
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WOODSTOCK – ALUMINUM LIGHT POLE
47'–6" (14.478 m) MOUNTING HEIGHT

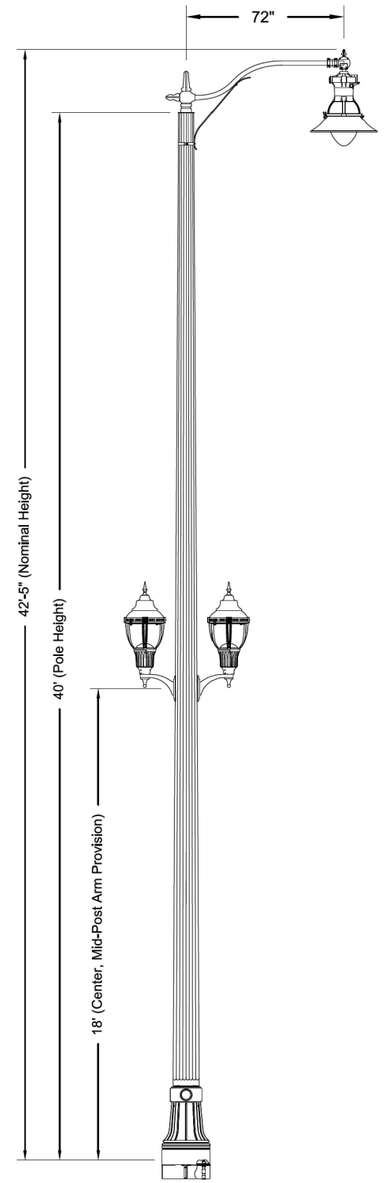
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	731
		CONTRACT NO. 62X94		

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



HOLOPHANE - AWBBO (Pole)



Round Tapered Fluted (16 Sharp)Steel Pole
Tenon: 3"x5", Finish: Holophane Black
Harrisburg Ø22" Cast Aluminum Clamshell Base
Break-away Couplings
Boston Harbor Roadway Arm
Black finish, for Single Teardrop style fixture
Annapolis Mid-Post Arm
Bolt-on, 2 @ 180°
for Single Pendant Style fixture 3x3 Tenon
Boston Harbor Decorative Fitter w/QSM
Esplanade Teardrop LED 2 Series
14,900 Lumens, 3 COBs
AutoSensing Voltage (120-277) 50/60Hz
Black finish
Teardrop Glass & Door
Type 3 Asymmetric Distribution
Quick Lock Stem Mount
Ø30" Deep Skirt for Cutoff Requirement
Utility Washington FCO LED Series
LED Performance Pkg P20
4000 Series CCT
Auto-Sensing Voltage (120-277)
Black finish, Spike Finial
Type 3 Cutoff LED Distribution
NEMA Twistlock Dimming Photocontrol Receptacle 7-Pin
Shorting Cap

CUSTOMER NOTES:
1. STANDARD HOLOHANE SPECS NOT SHOWN HERE CAN BE FOUND ON SEPARATE CUT SHEETS (PLEASE SEE SALES).
2. ***ANCHORAGE DETAIL PROVIDED FOR VISUAL ONLY - DO NOT USE TO SET ANCHOR BOLTS.***
3. SIGNED APPROVAL TO ACCOMPANY PO.

Catalog #'s:
Pole: FL219-900A400-3T5-(2)PROVS-CSB-BRKWT-BK **RFD318978**
Anchor Bolts: VAL1ABSET **RFD318978**
Roadway Arm: BHC72/1CABKH
Mid-Post Arms: (2)AWBBOCABKH **RFD318978**
Fitter: BHDF13200BK
Fixture: ESL2P35S40KASBKTG3SDS

Customer Signature **Date**

NOTE:
ORIENTATION OF ACORN FIXTURES SHALL BE PARALLEL TO ROADWAY.

HOLOPHANE
LEADER IN LIGHTING SOLUTIONS
An AcuityBrands Company

214 OAKWOOD AVE., NEWARK, OH 43055

REV	DRAWN BY–DATE	CHECK BY–DATE	DESCRIPTION
—	MAB 11/12/20	MAB 11/12/20	— — — — — — — — — — — — — — —

SOLD TO: CITY OF WOODSTOCK, RFD318978
SHIP TO: WOODSTOCK, IL
P.O. #: 2414-20-10109-1 (DR22139)
AGENT: STEPHANIE LEHMAN

JOB CITY OF WOODSTOCK, RFD318978
WOODSTOCK, IL
TITLE LIGHTING STRUCTURES

ORDER NUMBER: IL496305P2
PAGE NUMBER: 2 OF 1
DRAWING NUMBER TSG012415
REV -

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS21_NA_2020\Documents\60632011-IL-47\900-CAD\910_CAD\03_SHEETS\Lighting\D160X17-sht-D1-STD_light_09A.dgn

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = MTodden	DESIGNED - MK	REVISED -	
	DRAWN - MT	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MR	REVISED -	
PLOT DATE = 2/5/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

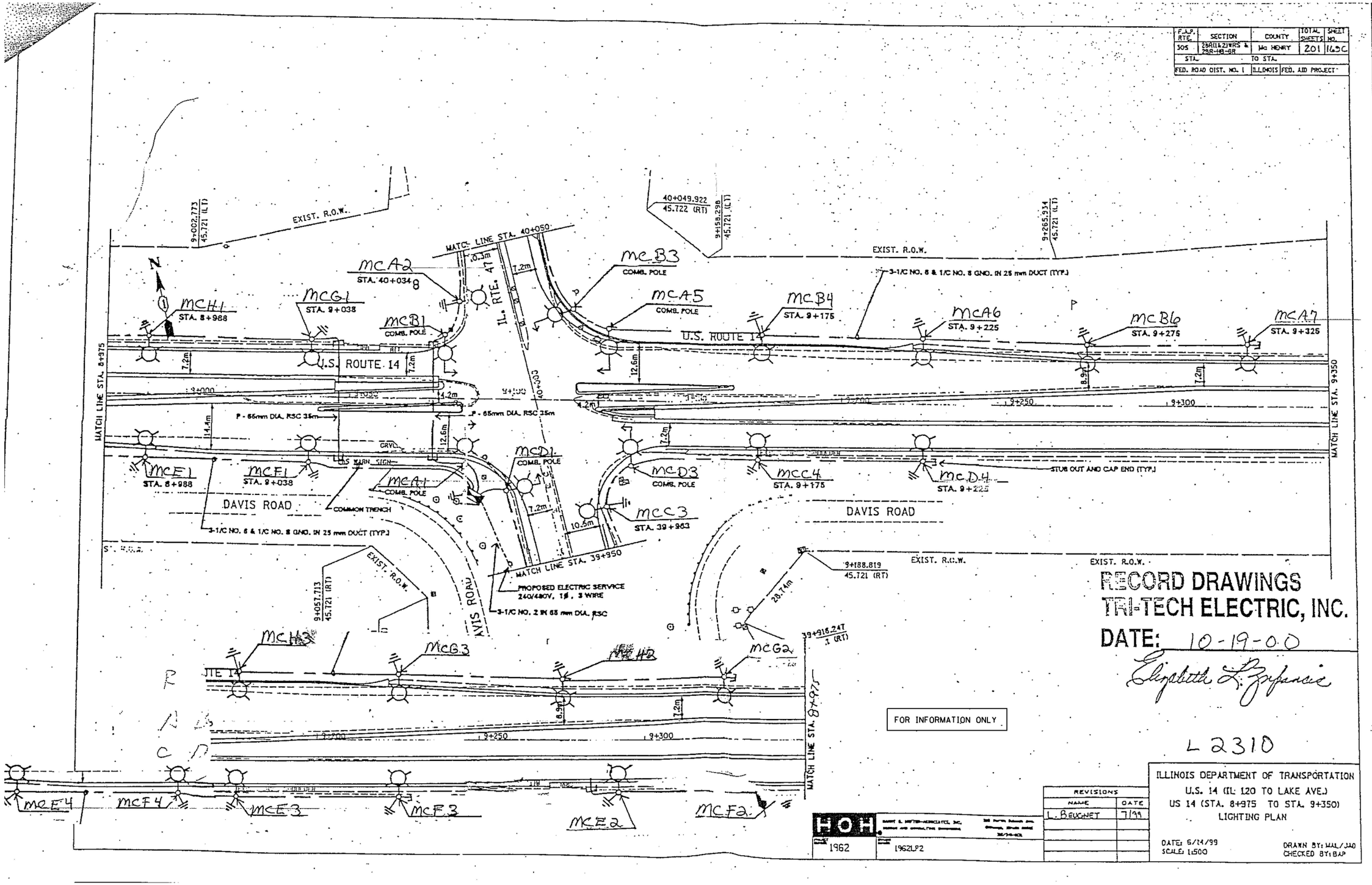
WOODSTOCK DETAILS
DECORATIVE LIGHT POLE DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	732

CONTRACT NO. 62X94
ILLINOIS FED. AID PROJECT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	28R(1&2)WRS & 28R-1&3-SR	Mc HENRY	201	165C
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE
L. BEUCHET	7/99

ILLINOIS DEPARTMENT OF TRANSPORTATION
U.S. 14 (IL 120 TO LAKE AVE.)
US 14 (STA. 8+975 TO STA. 9+350)
LIGHTING PLAN

DATE: 6/14/99
SCALE: 1:500
DRAWN BY: MAL/JAO
CHECKED BY: BAP

MODEL: Default
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TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = MTadden	DESIGNED - MK	REVISED -
	DRAWN - MT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MR	REVISED -
PLOT DATE = 2/5/2025	DATE - 02/06/2025	REVISED -

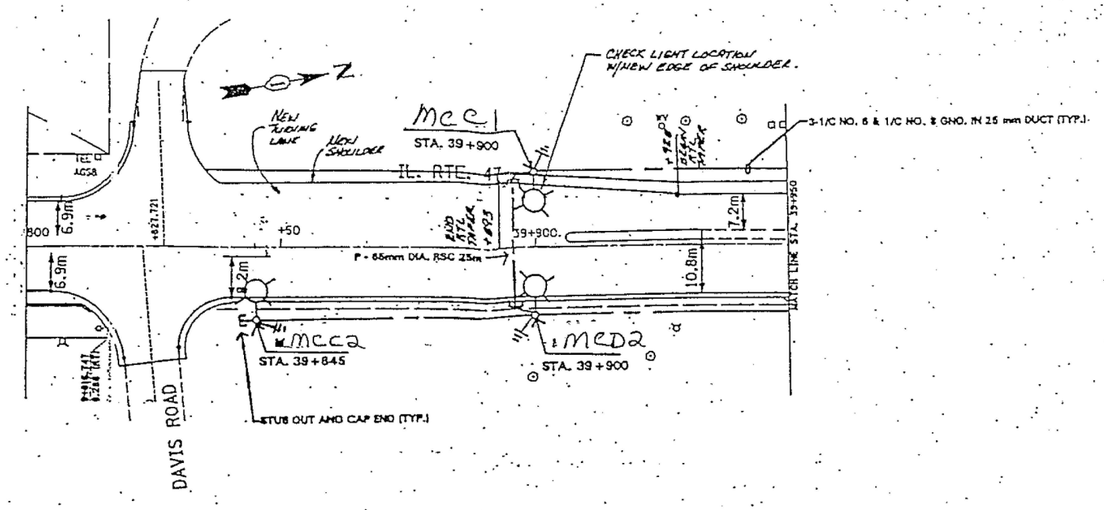
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

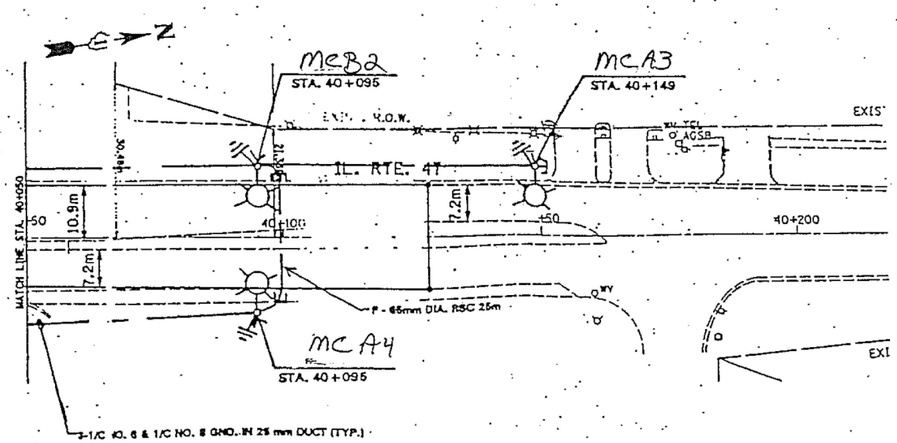
WOODSTOCK DETAILS
AS-BUILT PLANS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	733
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	28R(1&2)WRS & 28R-1&-8R	Mc HENRY	201	169D
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





RECORD DRAWINGS
TRI-TECH ELECTRIC, INC.
DATE: 10-19-00
Elizabeth L. Zepeda

L2310

REVISIONS	
NAME	DATE
L. BEUGNET	7/99

HOH

1962 | 1962LP3

ILLINOIS DEPARTMENT OF TRANSPORTATION
U.S. 14 (IL. 120 TO LAKE AVE.)
IL. RTE. 47
(STA. 39+800 TO STA. 40+200)
LIGHTING PLAN

SCALE: VERT: 1:50 HORIZ: 1:500
DRAWN BY: MAL/JAD
CHECKED BY: BAP

P. 10

MODEL: Default
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TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = MTadden	DESIGNED - MK	REVISED -	
	DRAWN - MT	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MR	REVISED -	
PLOT DATE = 2/5/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WOODSTOCK DETAILS
AS-BUILT PLANS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL	MCHENRY	941	734
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

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

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

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

TS SHT NO. 1

MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\DistStd22x34\CADdata\CADsheets\ts05.dgn

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	DRAWN - IP	REVISED -	
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PLOT DATE = 3/4/2019	DATE - 9/29/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	735
	TS-05	CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

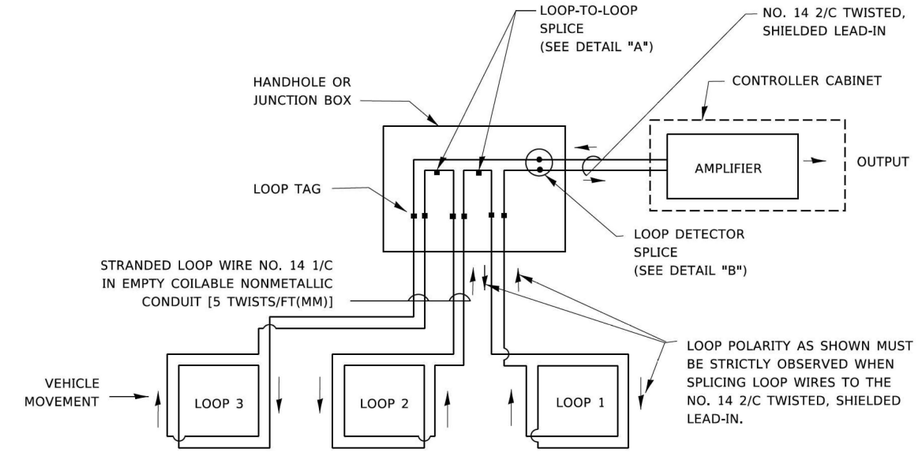
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

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

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

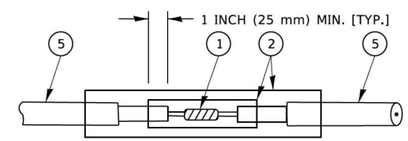
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

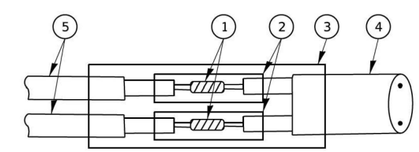


DETECTOR LOOP WIRING SCHEMATIC

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



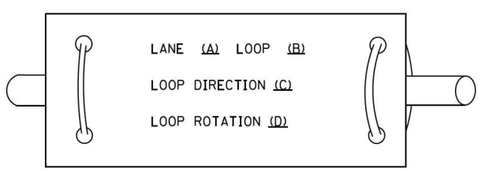
DETAIL "A"
LOOP-TO-LOOP SPLICE



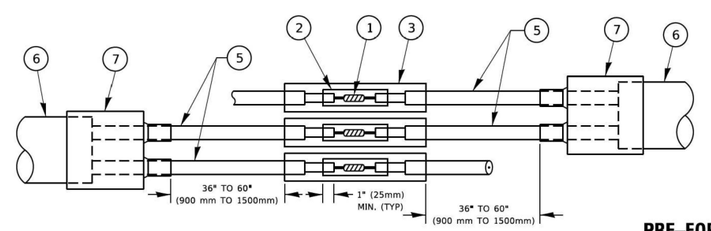
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP

LOOP LEAD-IN CABLE TAG

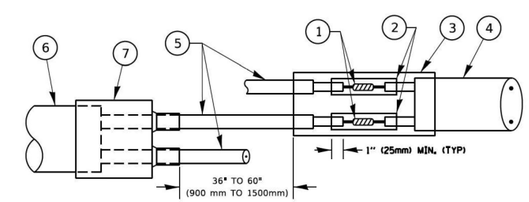


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

1. WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
2. WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
3. WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
4. NO. 14 2/C TWISTED, SHIELDED CABLE.
5. LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP
6. XL POLYOLEFIN 2 CONDUCTOR
7. BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

TS SHT NO. 2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

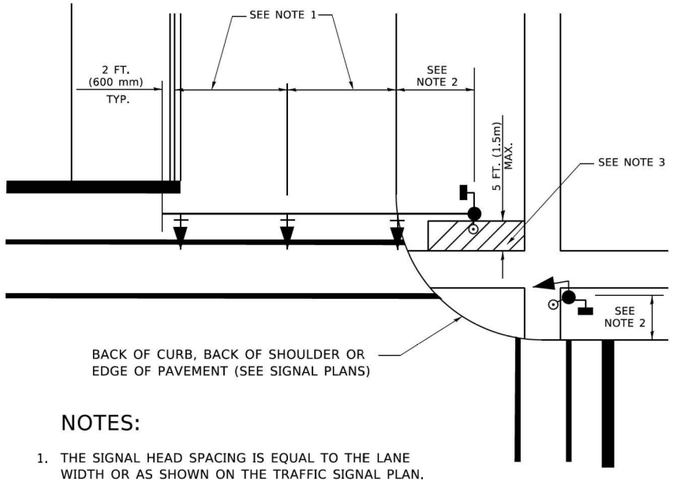
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	736
	TS-05	CONTRACT NO. 62X94		
	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

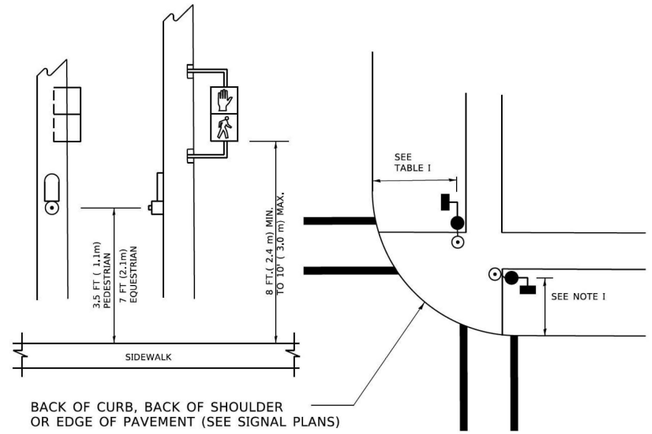
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

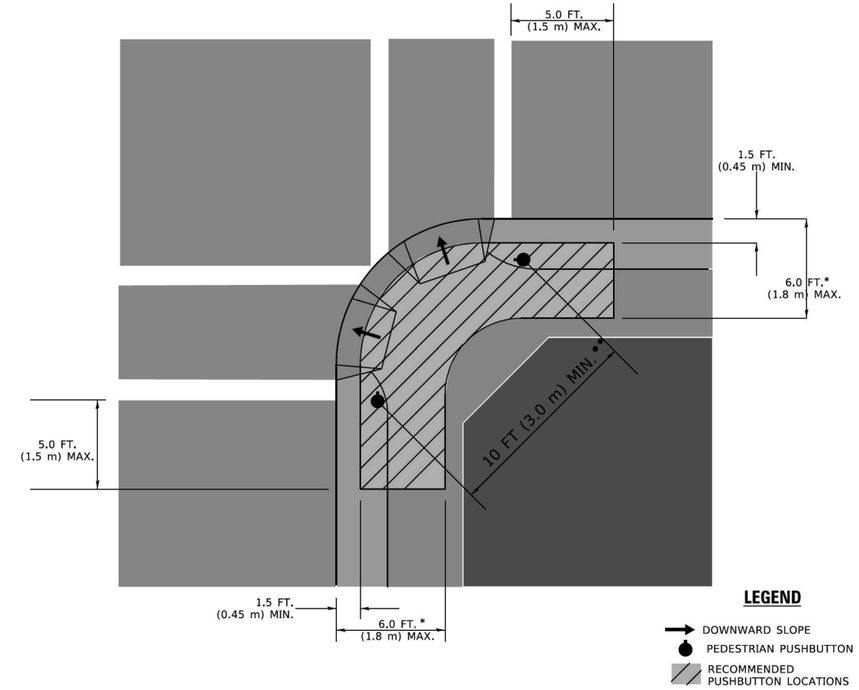
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

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

TS SHT NO. 3

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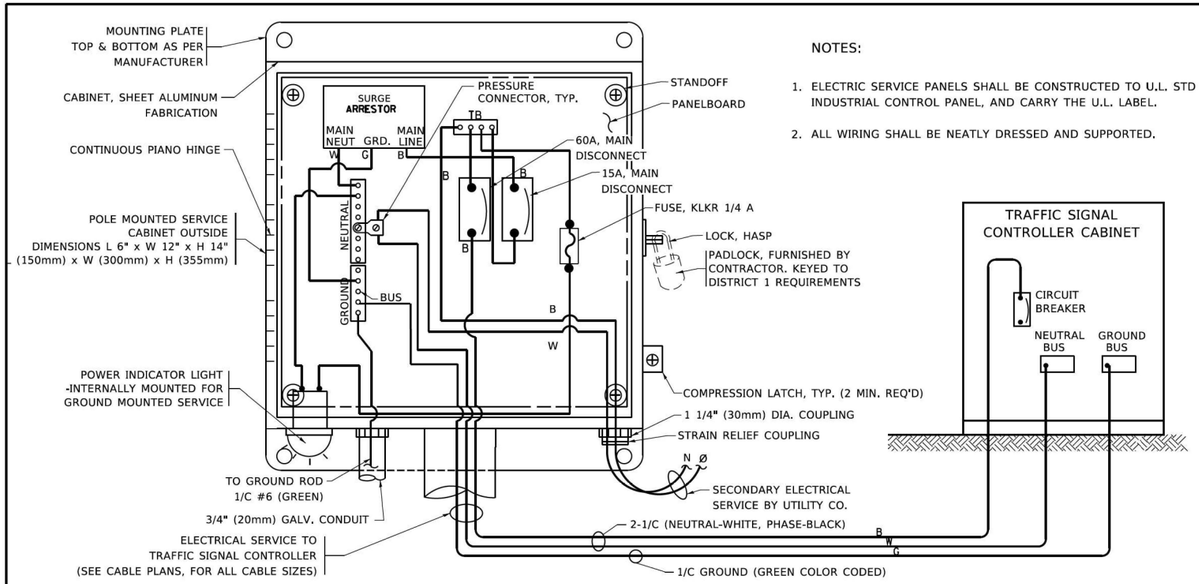
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	737
	TS-05	CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



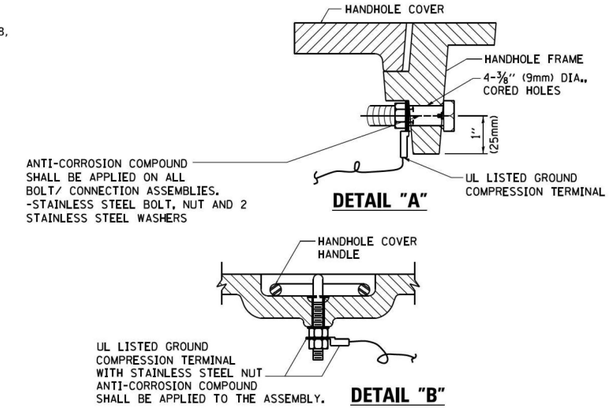
NOTES:

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

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

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



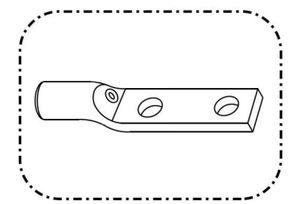
NOTES:

GROUNDING SYSTEM

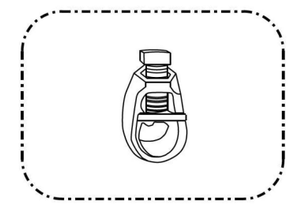
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE,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

HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



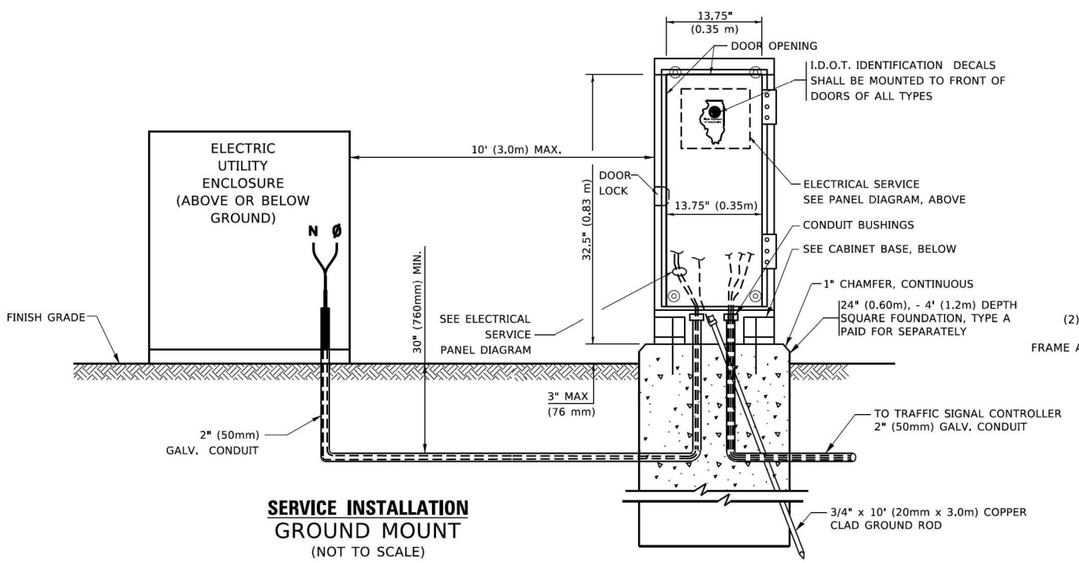
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

NOTES:

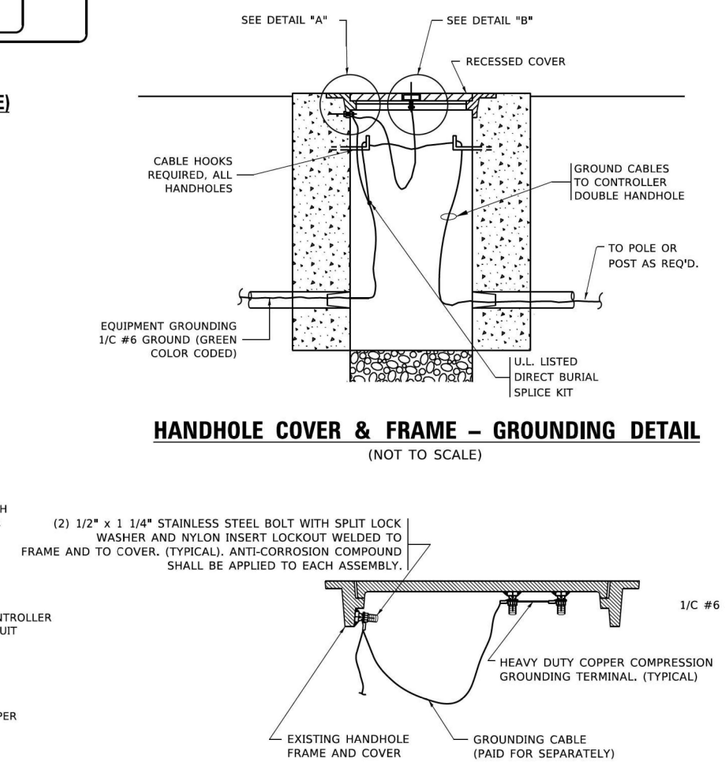
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



SERVICE INSTALLATION

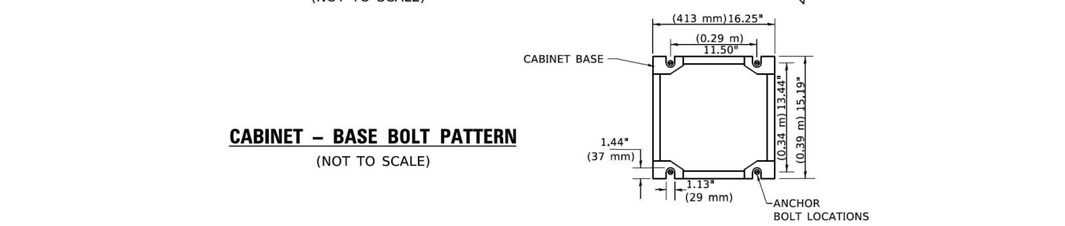
GROUND MOUNT

(NOT TO SCALE)



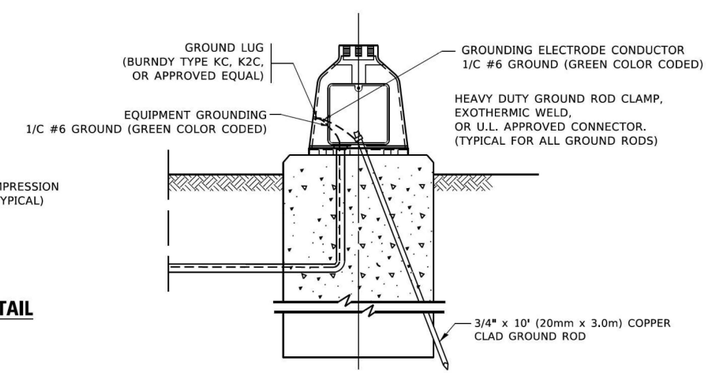
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



MAST ARM POLE /POST–GROUNDING DETAIL

(NOT TO SCALE)

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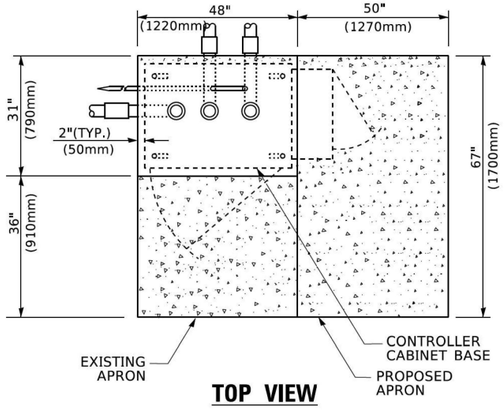
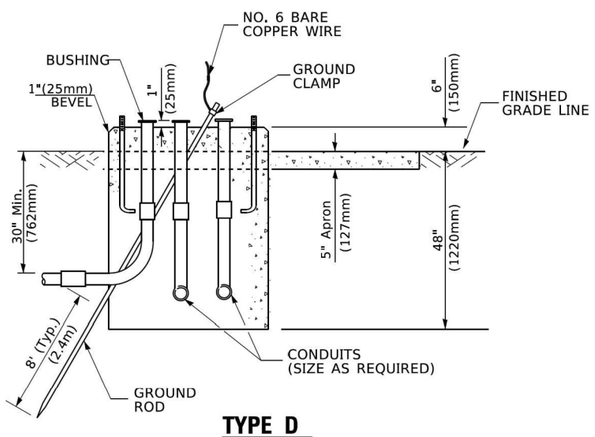
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

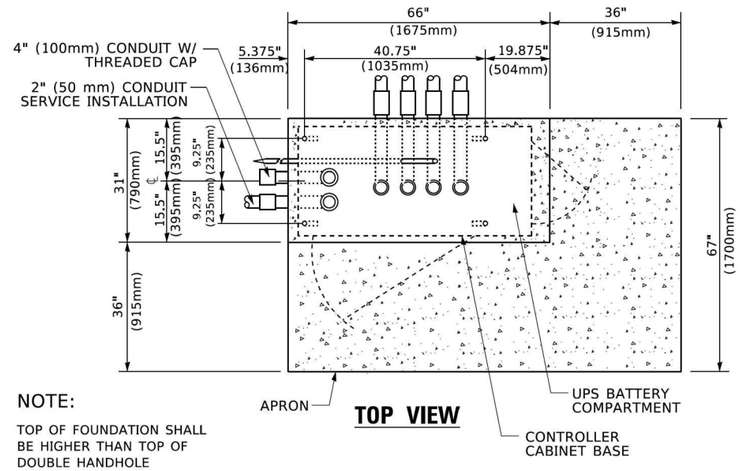
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	738
	TS–05	CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



TOP VIEW



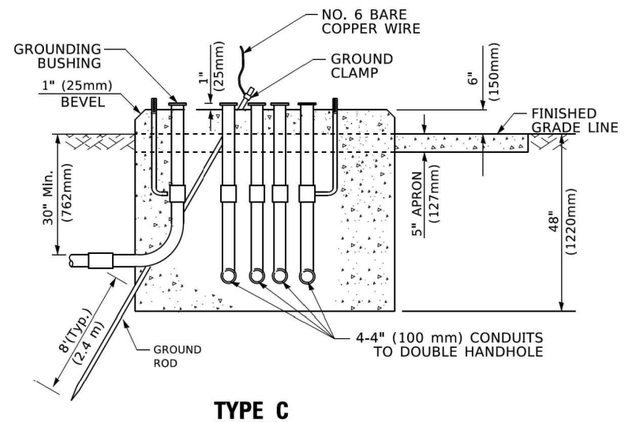
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



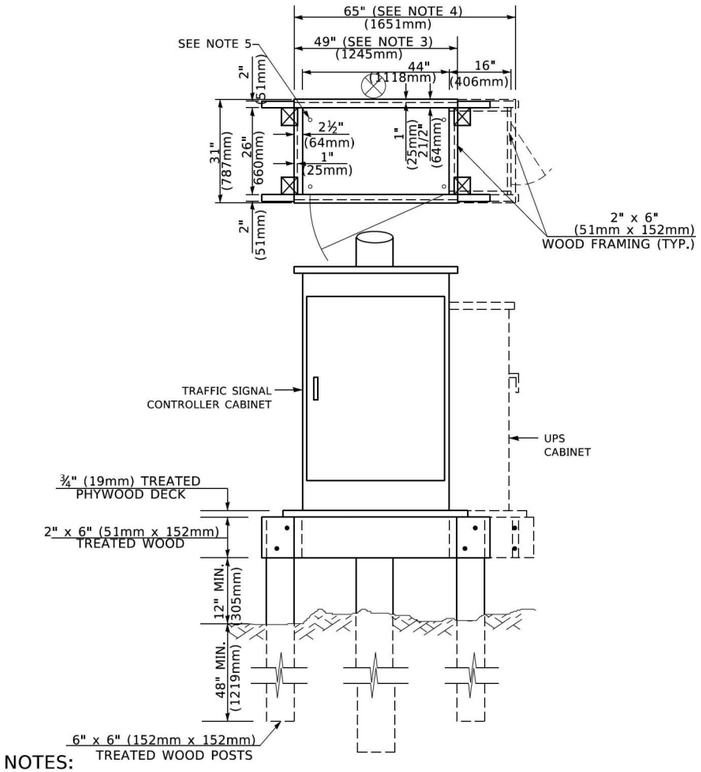
NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

TOP VIEW



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



NOTES:

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

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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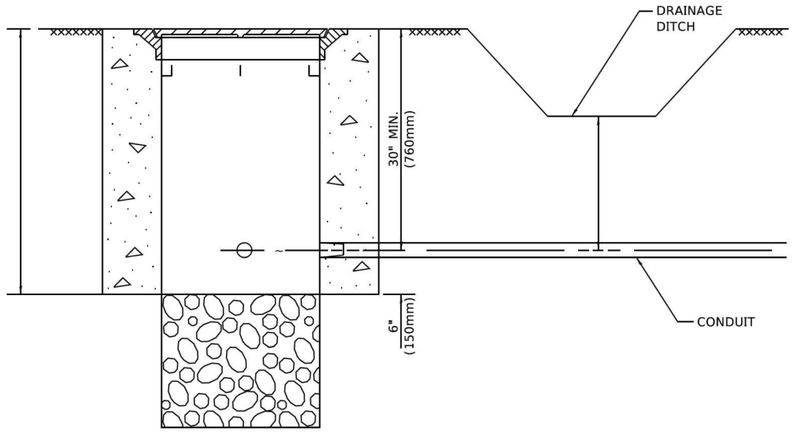
	TS-05	CONTRACT NO. 62X94		
	ILLINOIS	FED. AID PROJECT		

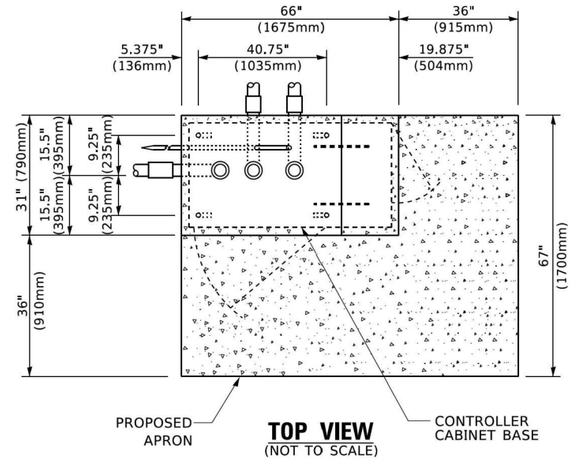


NOTES:

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

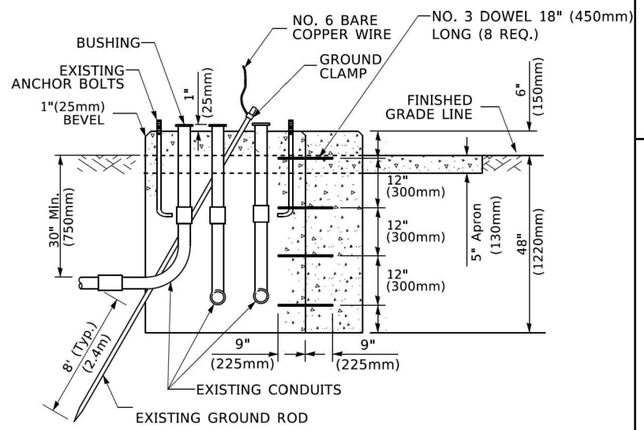
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



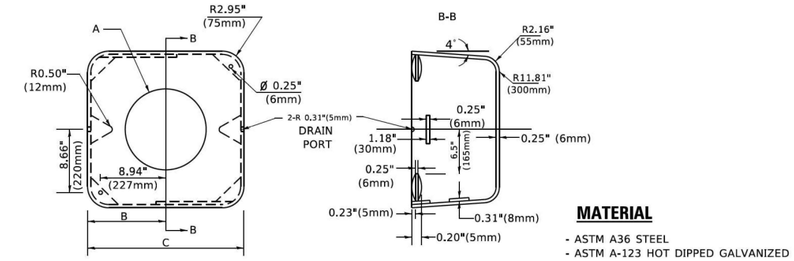
TOP VIEW

(NOT TO SCALE)



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

(NOT TO SCALE)



MATERIAL

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

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

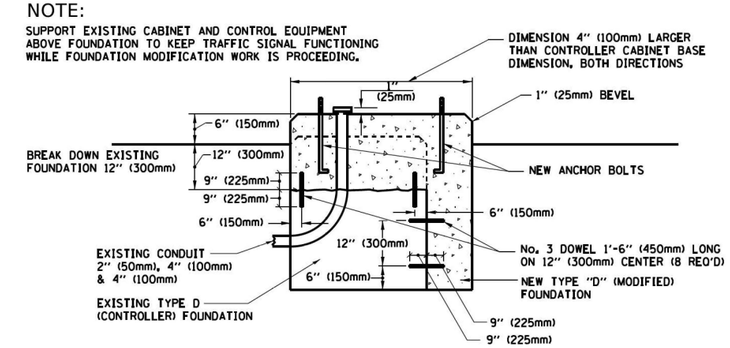
SHROUD

NOTES:

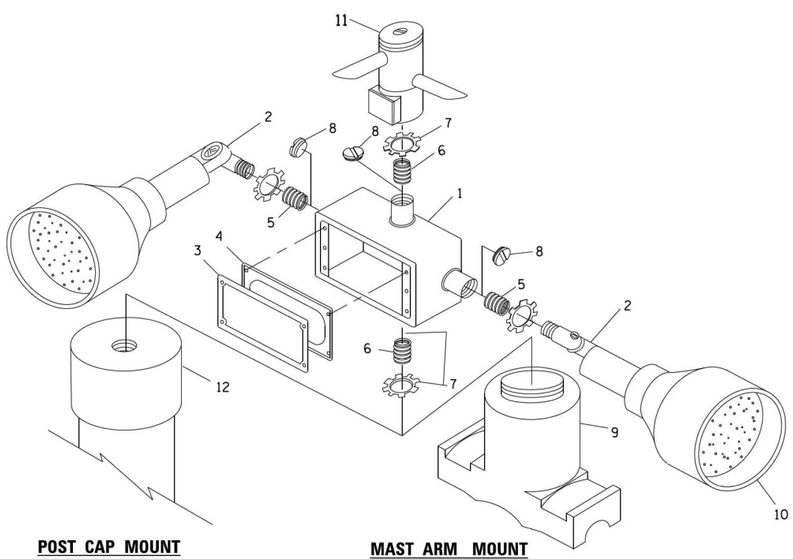
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

NOTE:

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



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

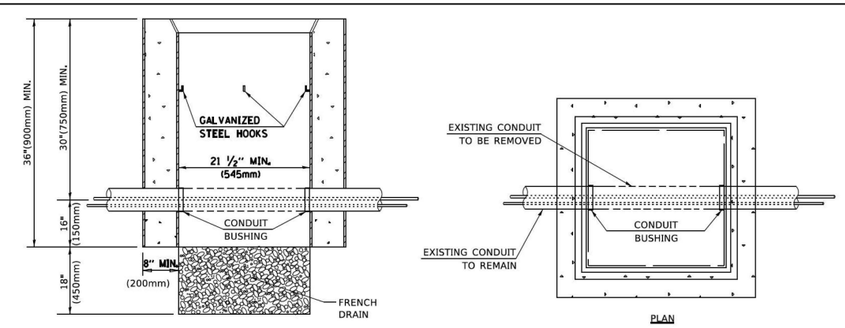
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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

NOTES:

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



NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

TS SHT NO. 6

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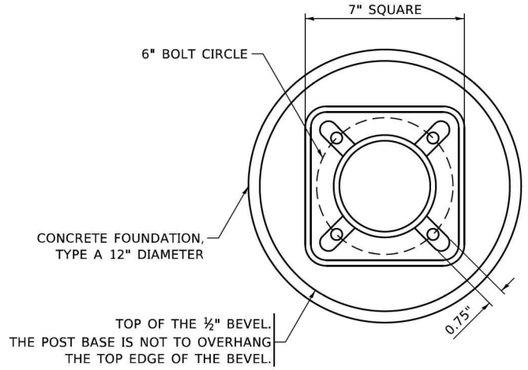
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

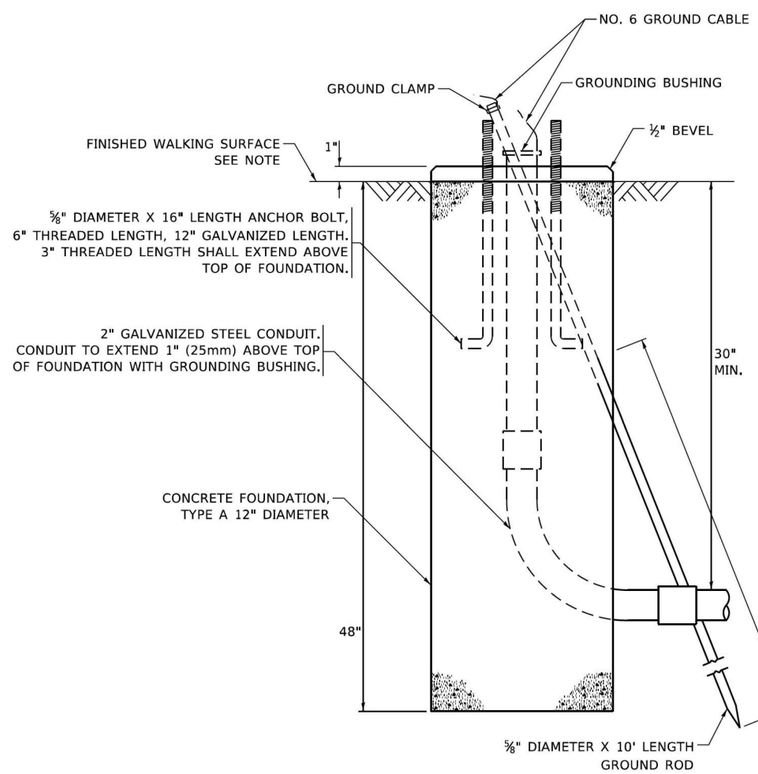
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	740
	TS-05	CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



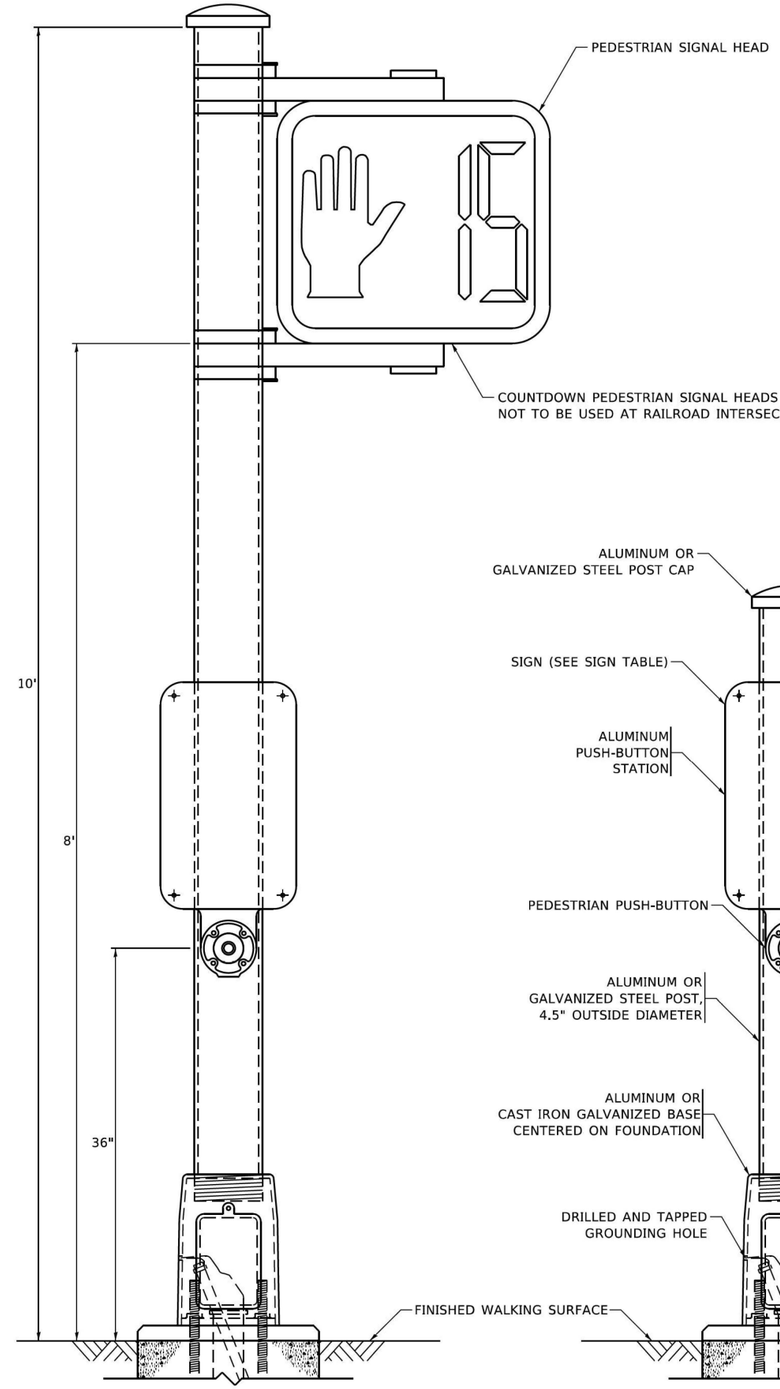
BOLT PATTERN

NOTE:

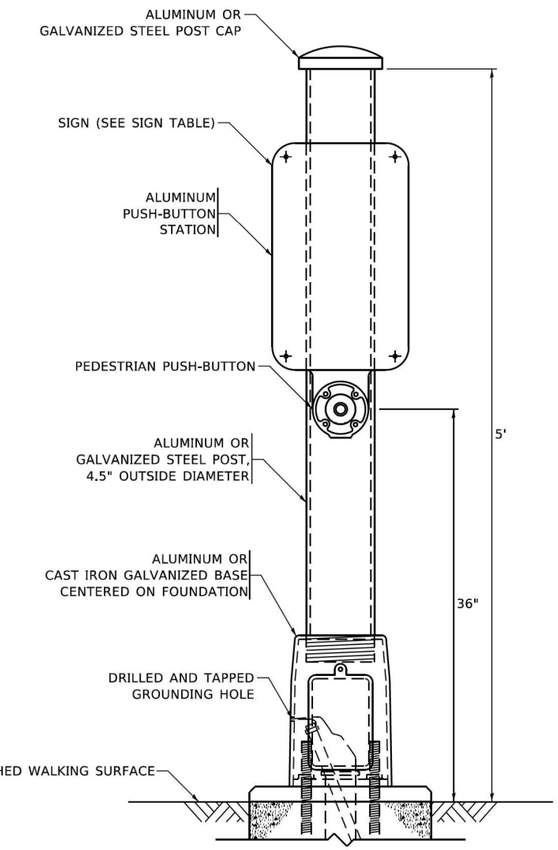
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



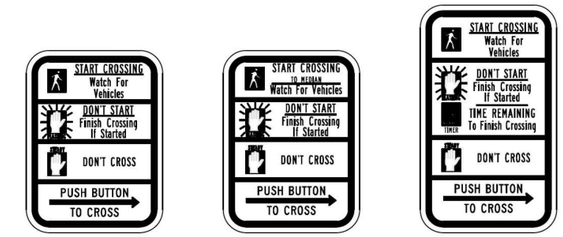
CONCRETE FOUNDATION, TYPE A 12–INCH DIAMETER



PEDESTRIAN SIGNAL POST, 10 FT.



PEDESTRIAN SIGNAL POST, 5 FT.



R10–3b **R10–3d** **R10–3e**

SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

NOTES:

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

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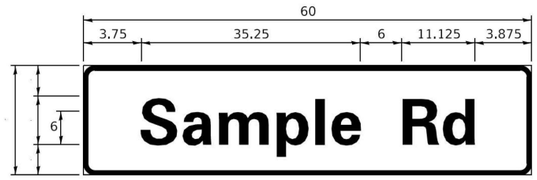
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

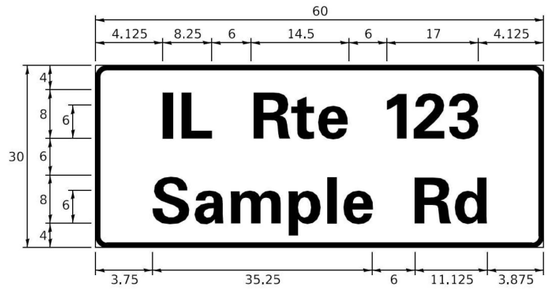
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

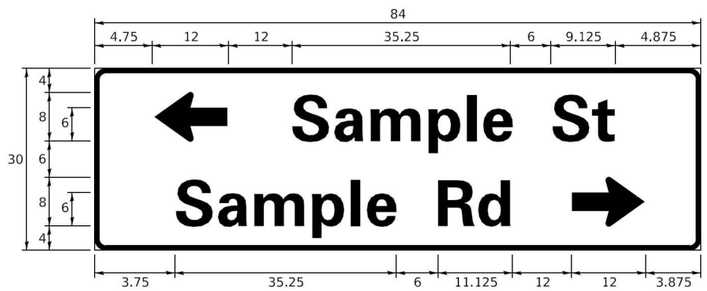
SCALE: NONE | SHEET 7 OF 7 SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	741
	TS–05	CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

SIGN PANEL – TYPE 1 OR TYPE 2







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

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

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

GENERAL NOTES

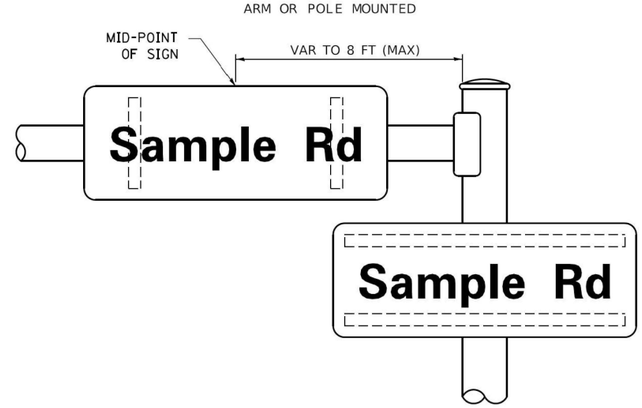
1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE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

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

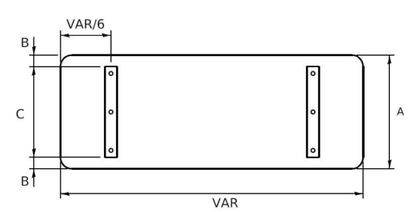
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

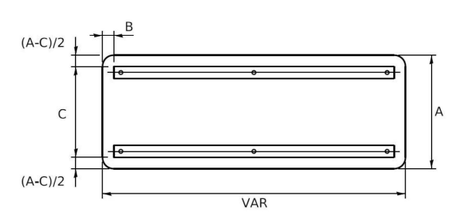
ARM OR POLE MOUNTED



SUPPORTING CHANNELS



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



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

STANDARD ALPHABETS SPACING CHART

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

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

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DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

SCALE: SHEET OF SHEETS STA. TO STA.

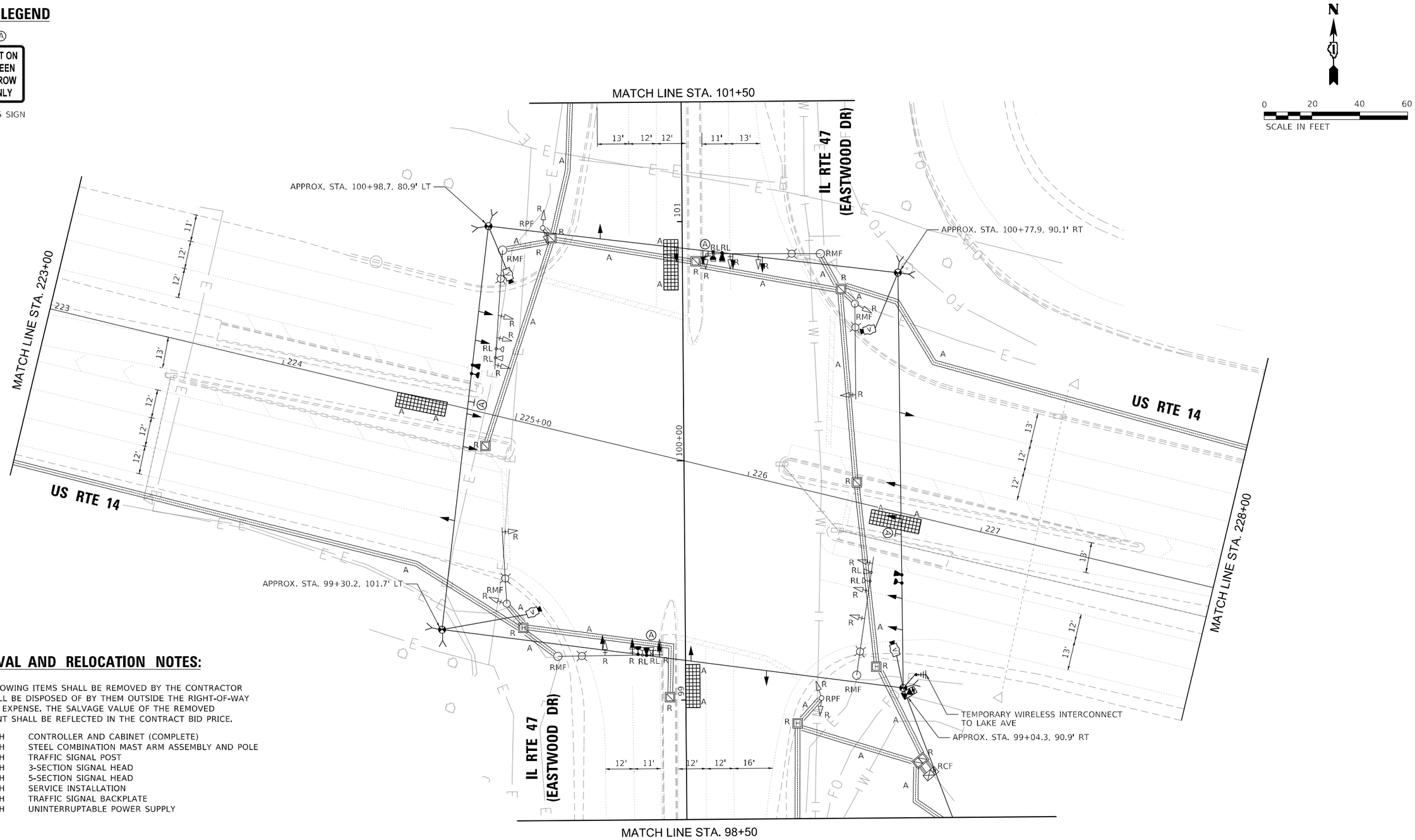
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2024-1052-N,C,SW,FL.	MCHENRY	941	742
	TS-02	CONTRACT NO. 62X94		
	ILLINOIS	FED. AID PROJECT		

SIGN LEGEND

Ⓐ

LEFT ON GREEN ARROW ONLY

R10-5 SIGN



REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER AND CABINET (COMPLETE)
6	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
2	EACH	TRAFFIC SIGNAL POST
16	EACH	3-SECTION SIGNAL HEAD
4	EACH	5-SECTION SIGNAL HEAD
1	EACH	SERVICE INSTALLATION
14	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CABINET:

4	EACH	CONFIRMATION BEACON
4	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

TS SHT NO. 9

TS 7235

ECON 195

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

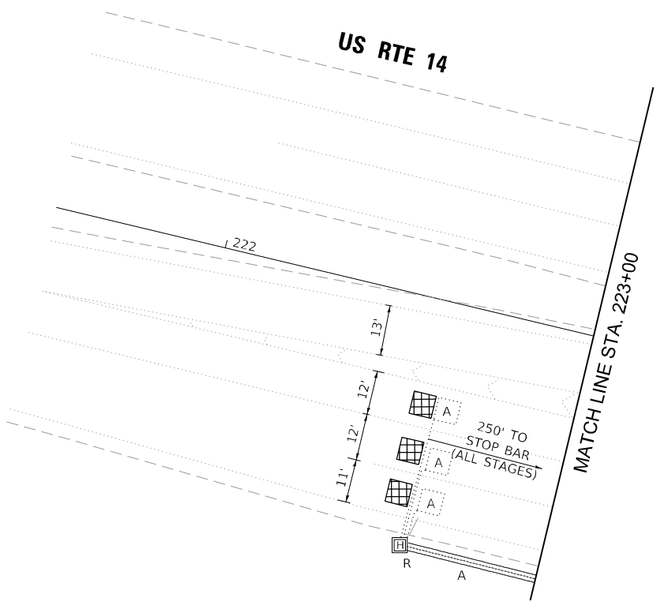
USER NAME = msalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

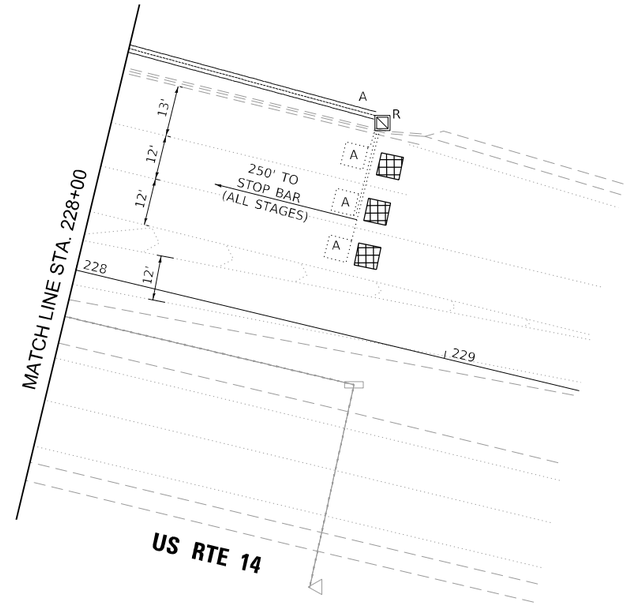
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

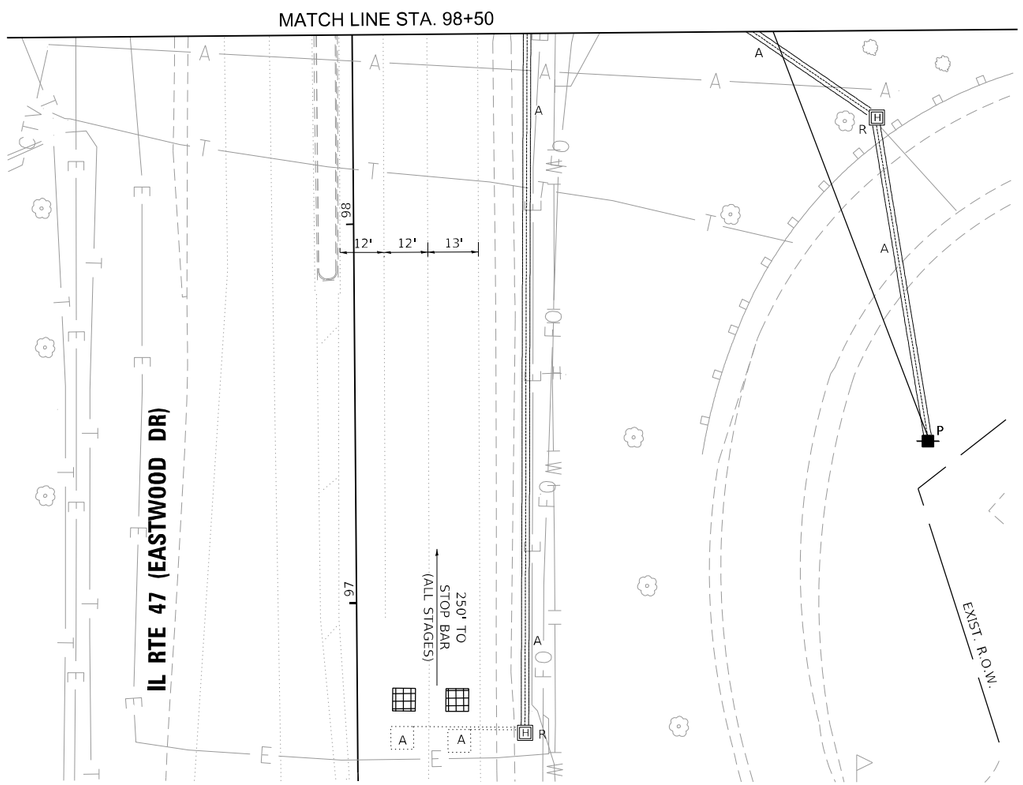
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL RTE 47 (EASTWOOD DR) AND US RTE 14

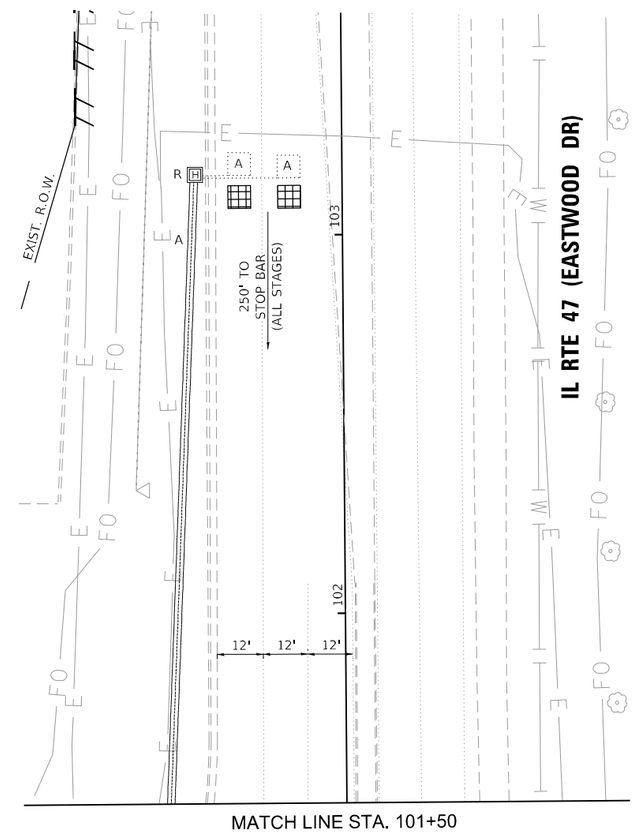
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	743
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		









MATCH LINE STA. 101+50

N

0 20 40 60
SCALE IN FEET

TS SHT NO. 10

TS 7235
ECON 195

MODEL: Default
FILE NAME: pw:\\accom-as-pw.bentley.com:AECOM DS2 - NA 2020\Documents\60632011-IL-47900-CAD\10-CAD\03-SHEETS\Traffic Signal\IL-47_US-14 Rem & Temp-2.dgn

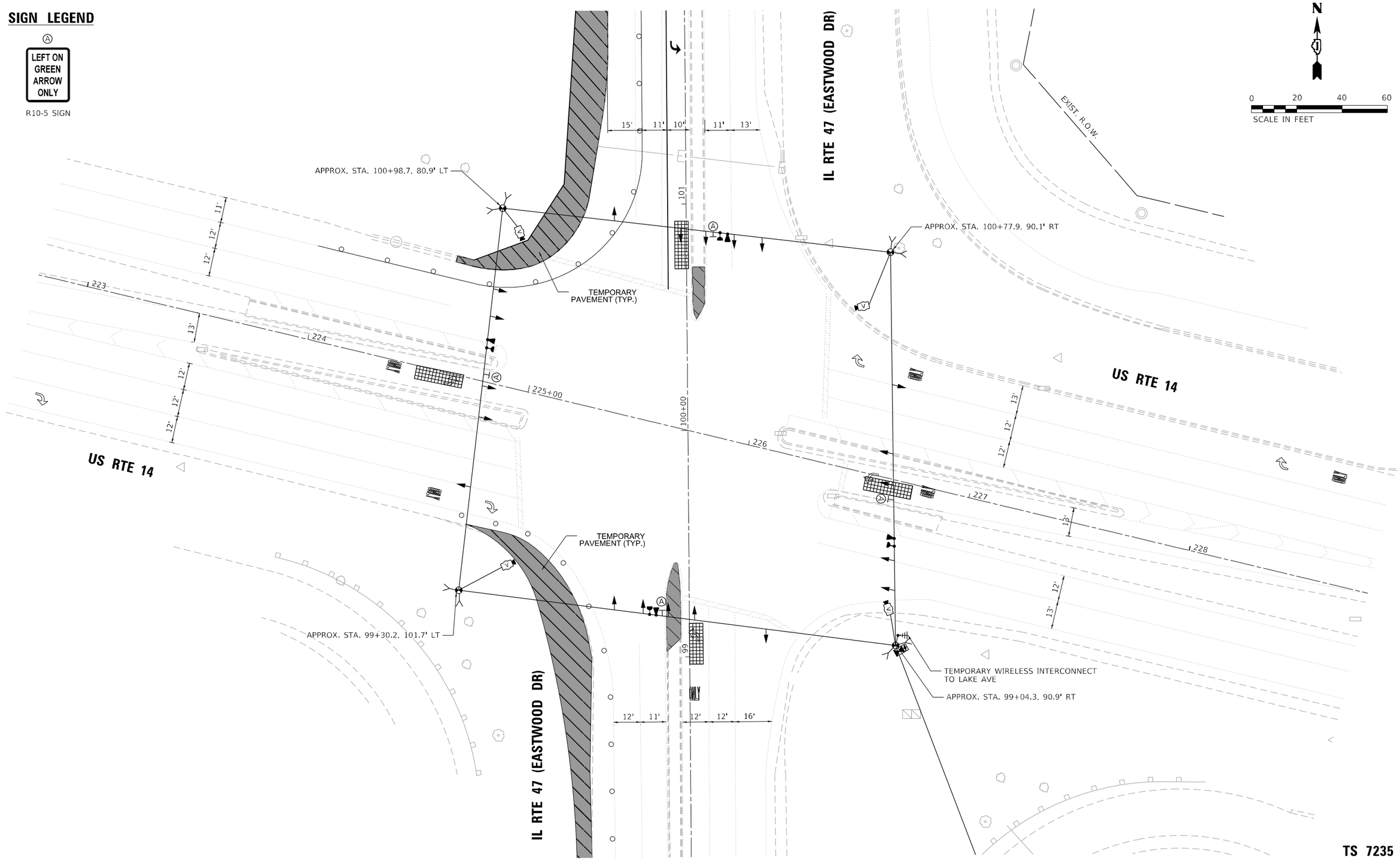
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL RTE 47 (EASTWOOD DR) AND US RTE 14	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941	744
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT		

SIGN LEGEND

Ⓐ

LEFT ON GREEN ARROW ONLY

R10-5 SIGN



TS SHT NO. 11

TS 7235

ECON 195

MODEL: Default
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ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – PRESTAGE B IL RTE 47 (EASTWOOD DR) AND US RTE 14
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

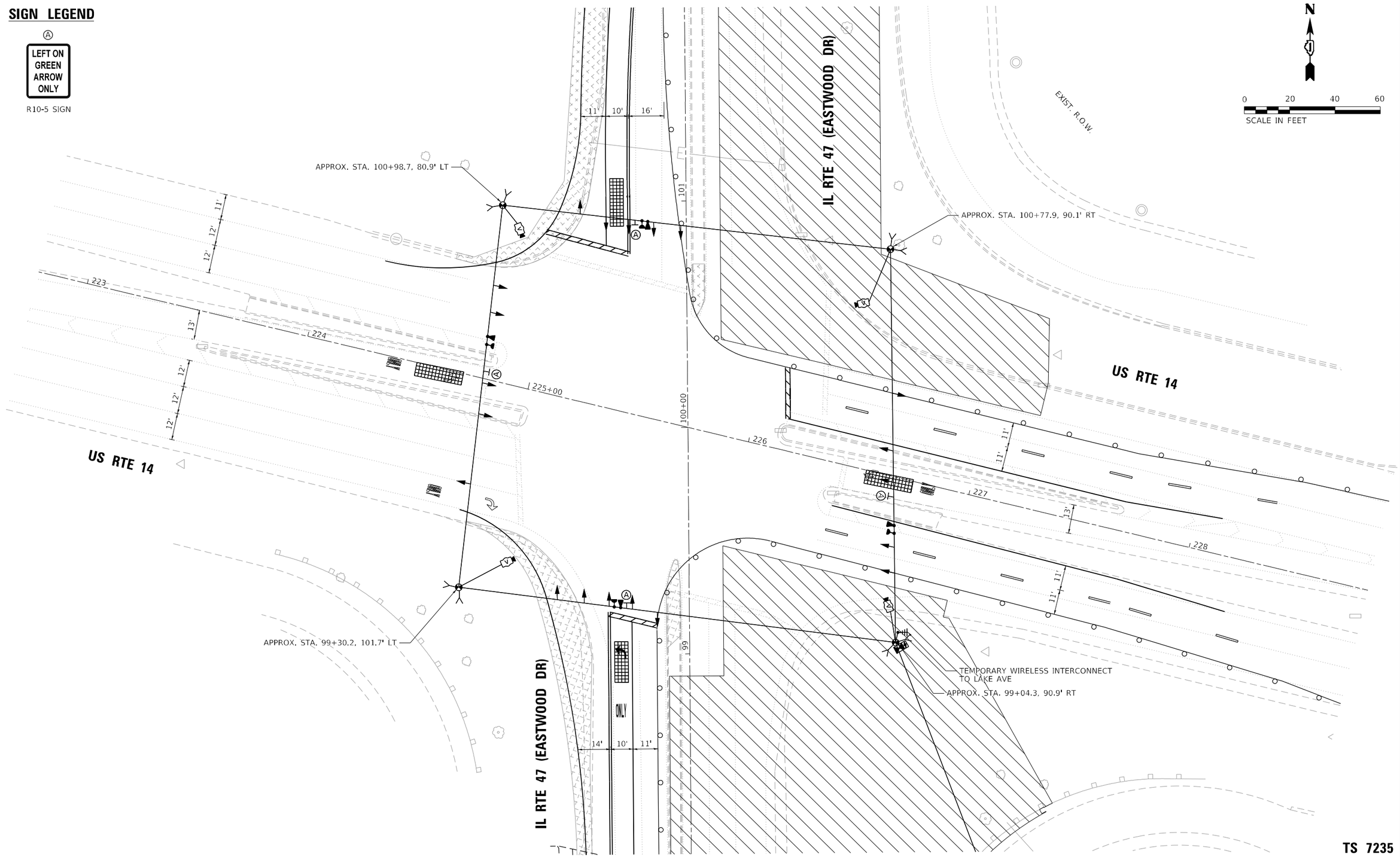
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	745
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

SIGN LEGEND

Ⓐ

LEFT ON GREEN ARROW ONLY

R10-5 SIGN



TS SHT NO. 12

TS 7235

ECON 195

MODEL: Default
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ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1A & 1B IL RTE 47 (EASTWOOD DR) AND US RTE 14
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

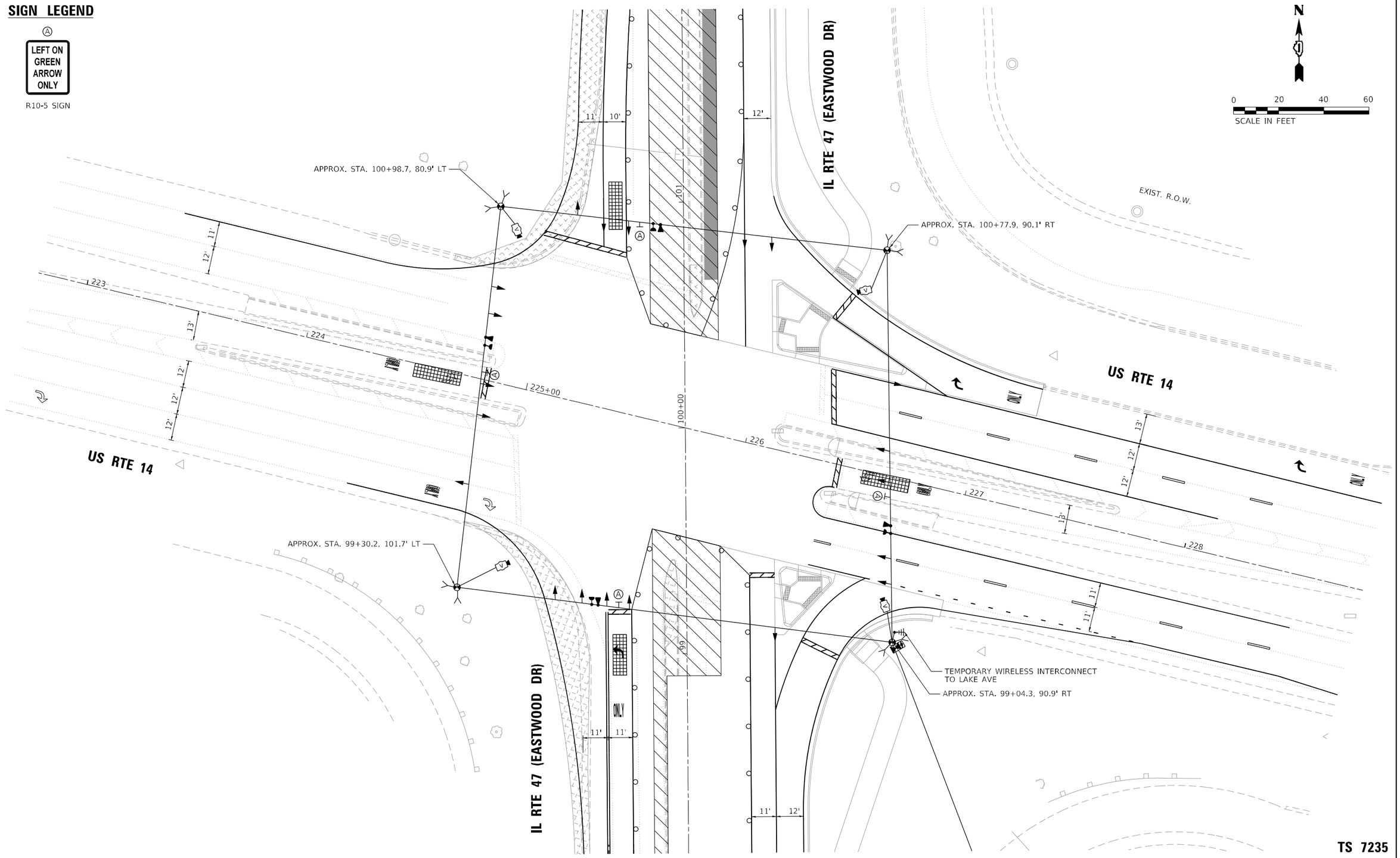
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	746
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

SIGN LEGEND

Ⓐ

LEFT ON GREEN ARROW ONLY

R10-5 SIGN



TS SHT NO. 13

TS 7235

ECON 195

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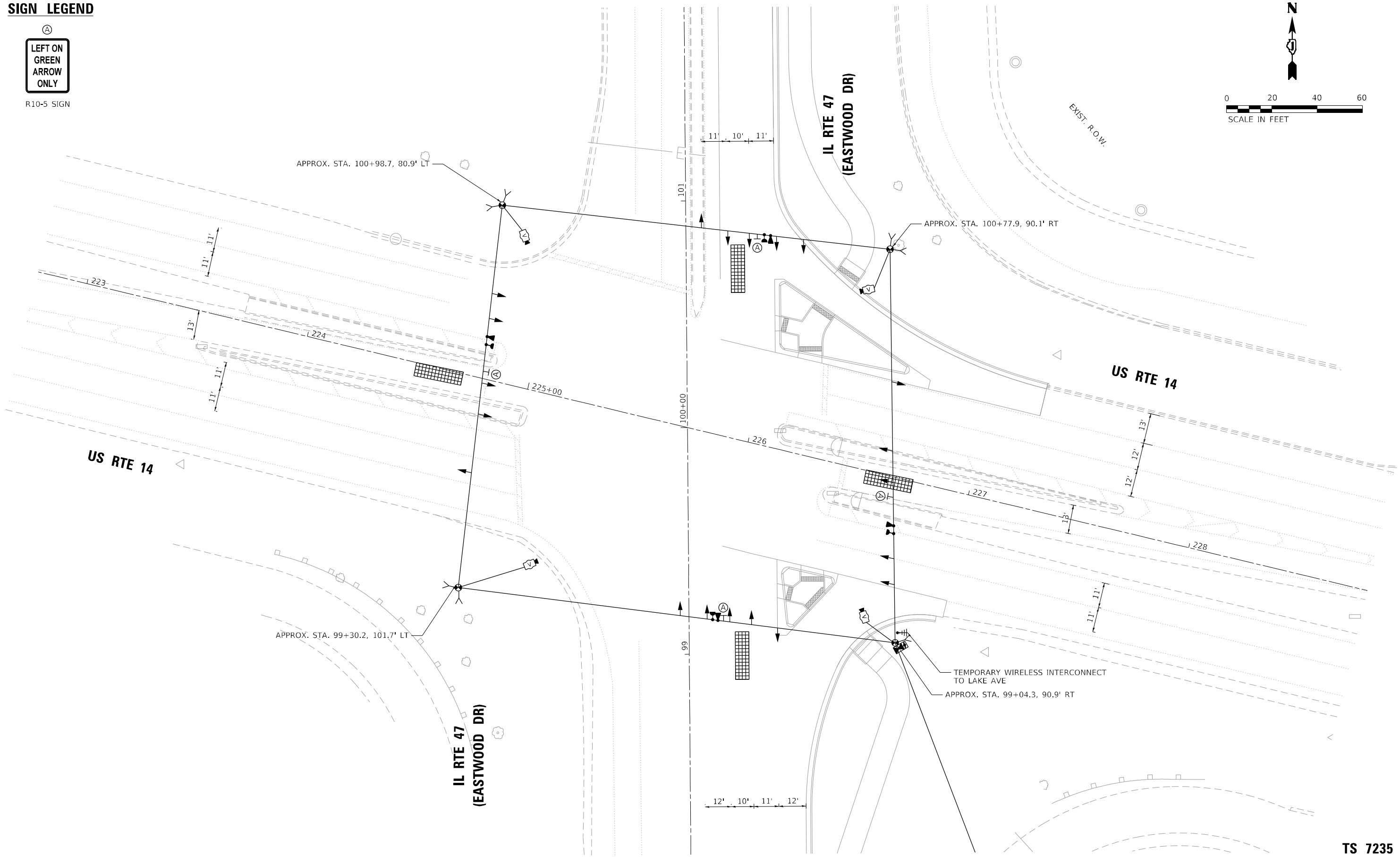
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1C IL RTE 47 (EASTWOOD DR) AND US RTE 14	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 747
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	

SIGN LEGEND

Ⓐ

LEFT ON GREEN ARROW ONLY

R10-5 SIGN



TS SHT NO. 14

TS 7235

ECON 195

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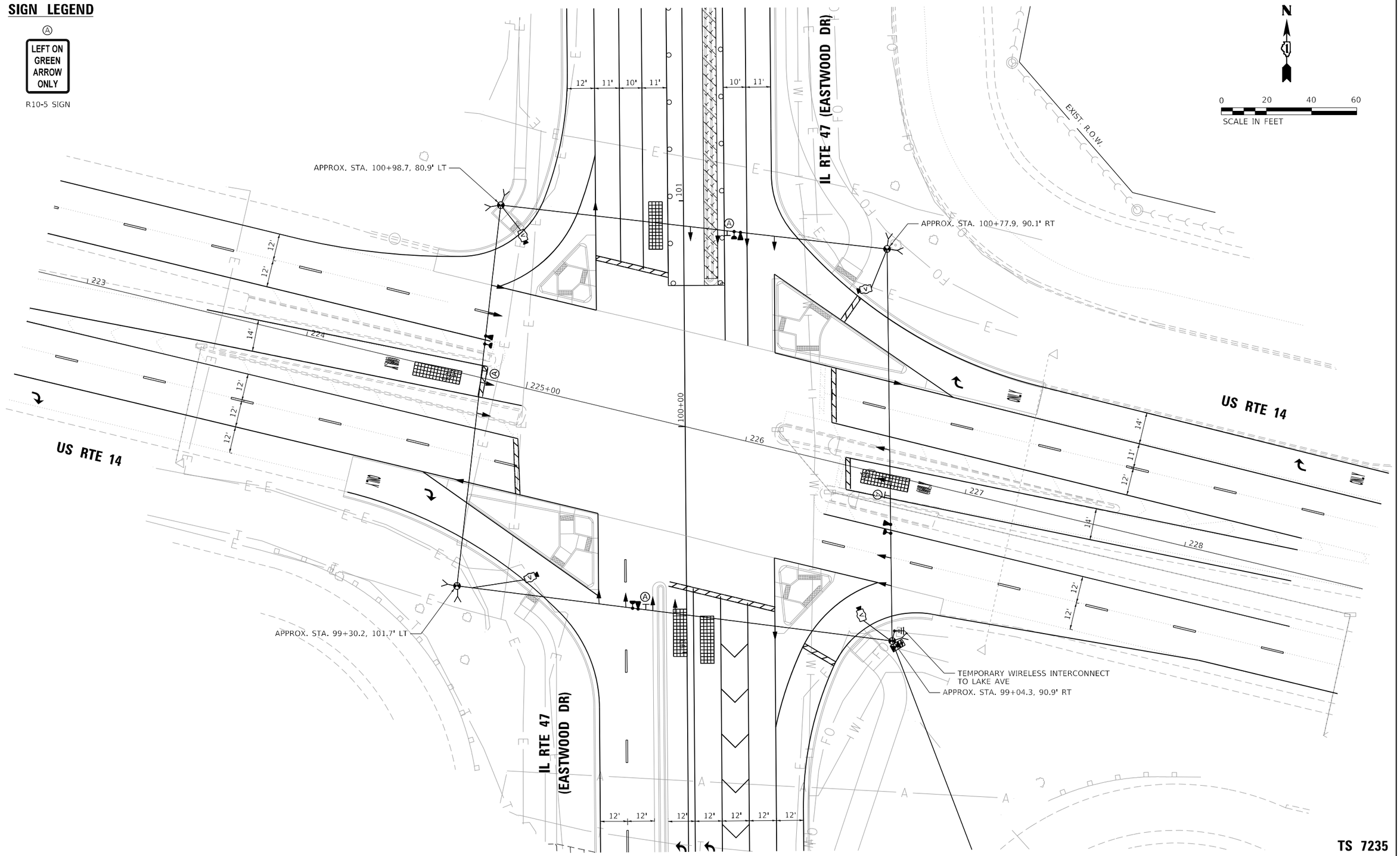
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 2A & 2B IL RTE 47 (EASTWOOD DR) AND IL RTE 47	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 748
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	

SIGN LEGEND

Ⓐ

LEFT ON GREEN ARROW ONLY

R10-5 SIGN



TS SHT NO. 15

TS 7235

ECON 195

MODEL: Default
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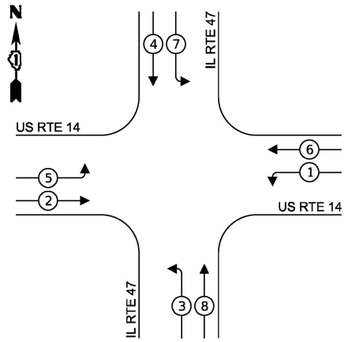
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 3 IL RTE 47 (EASTWOOD DR) AND US RTE 14	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 749
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	

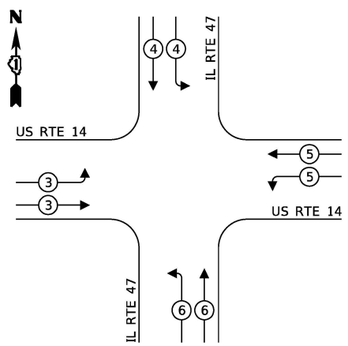
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

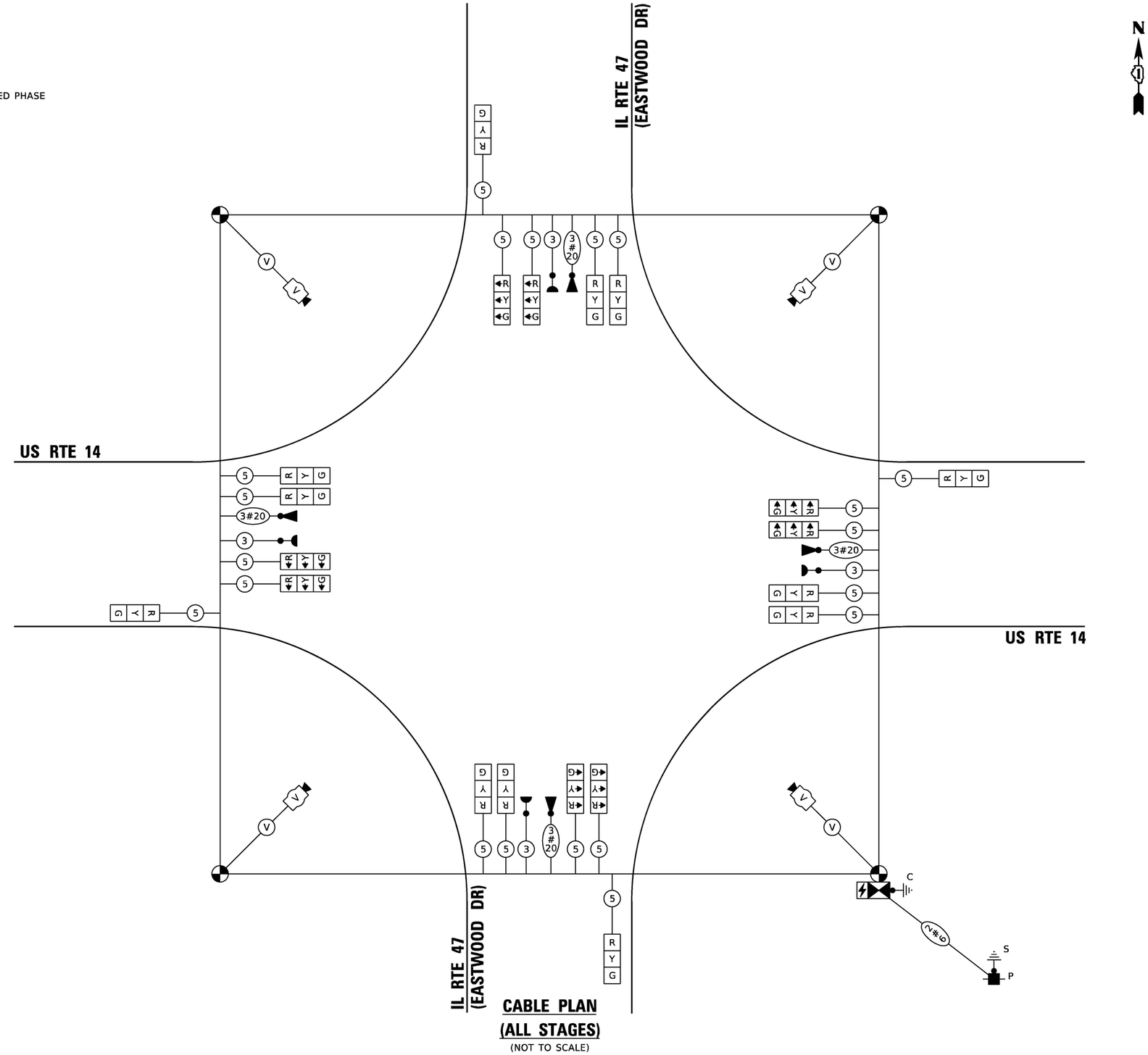
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	20	11	220
4 - SECTION		14	
5 - SECTION		13	
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			415
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			1035

ENERGY COST TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: 72900-1800



CABLE PLAN (ALL STAGES)

(NOT TO SCALE)

TS 7235
ECON 195

TS SHT NO. 16

MODEL: Default
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ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

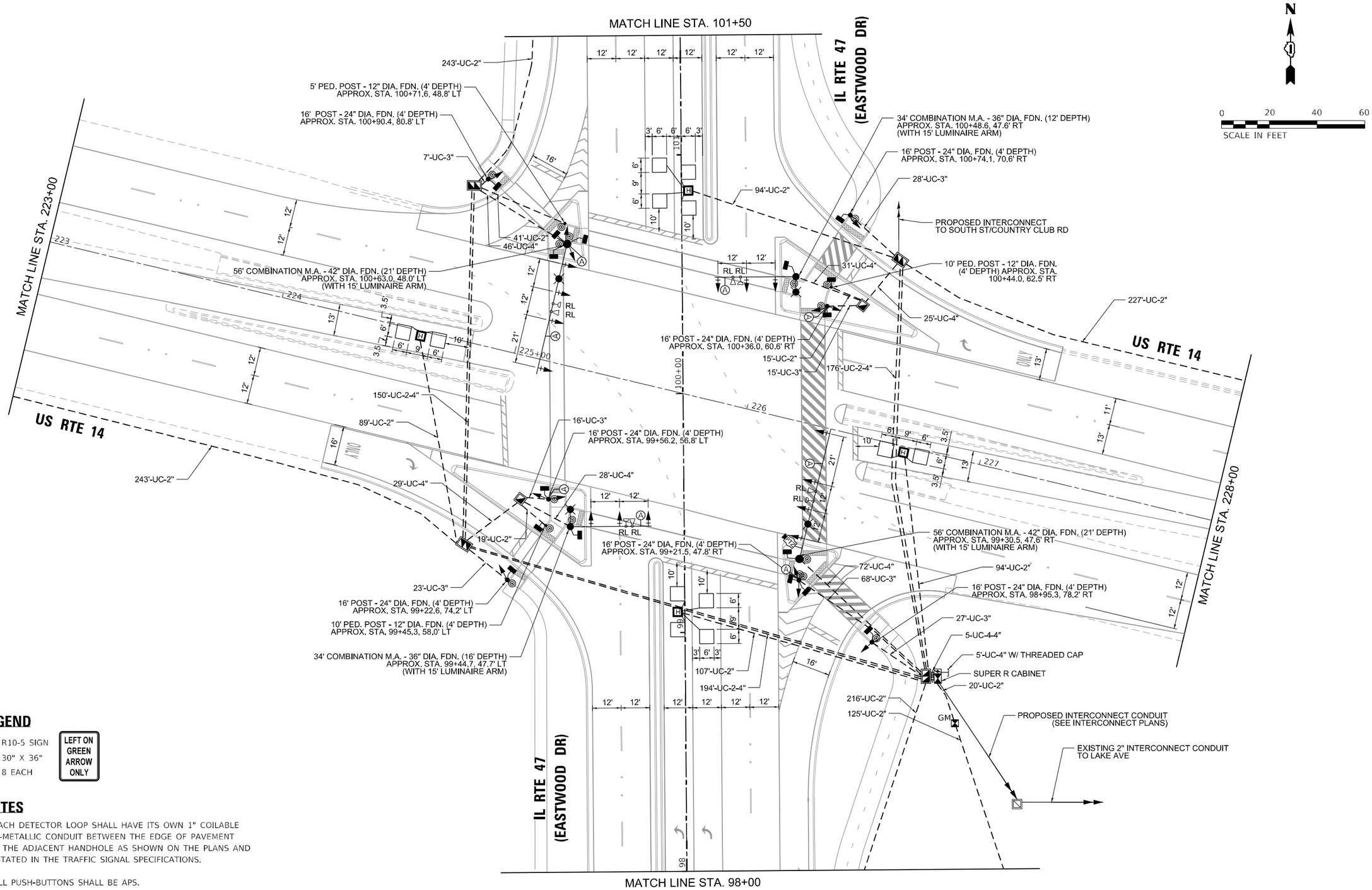
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 47 (EASTWOOD DR) AND US RTE 14

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	750
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



LEGEND

Ⓐ R10-5 SIGN
30" X 36"
8 EACH

LEFT ON GREEN ARROW ONLY

NOTES

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

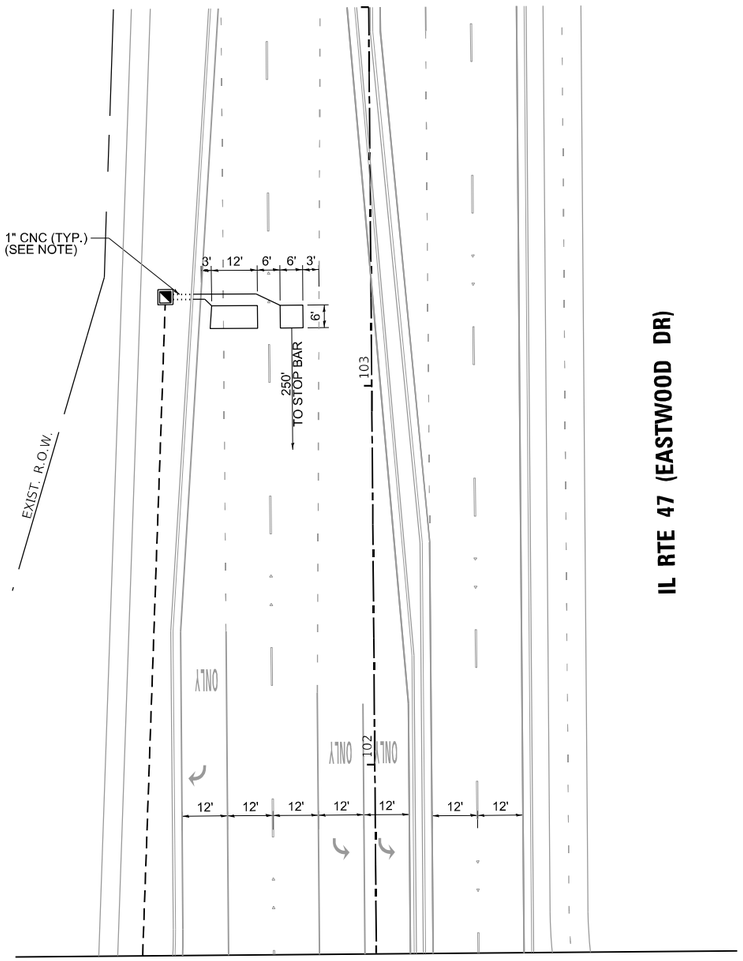
2. ALL PUSH-BUTTONS SHALL BE APS.

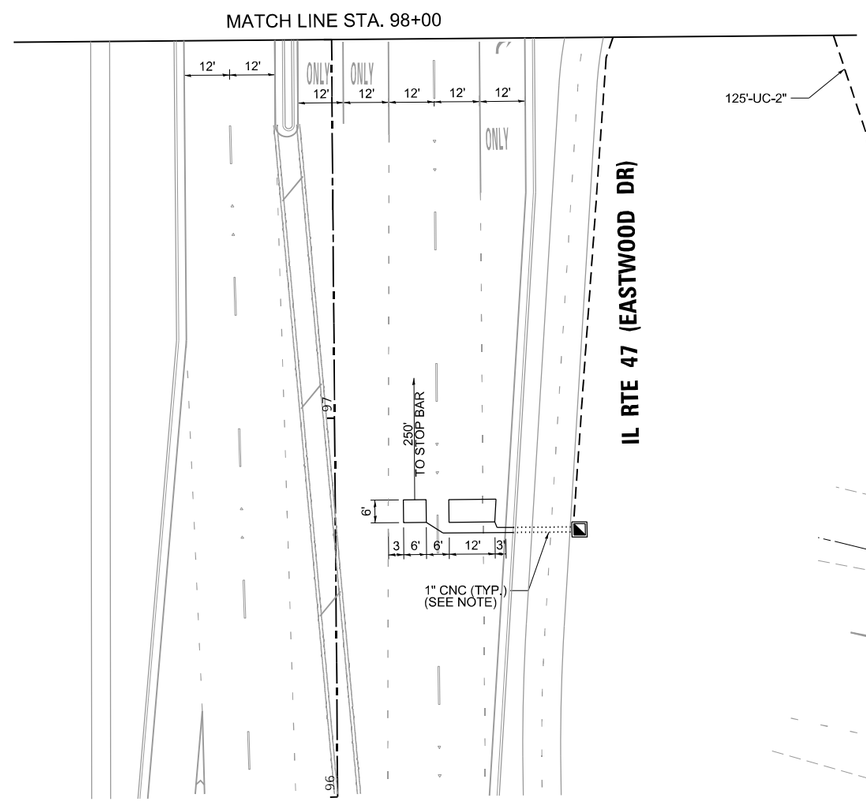
TS SHT NO. 17

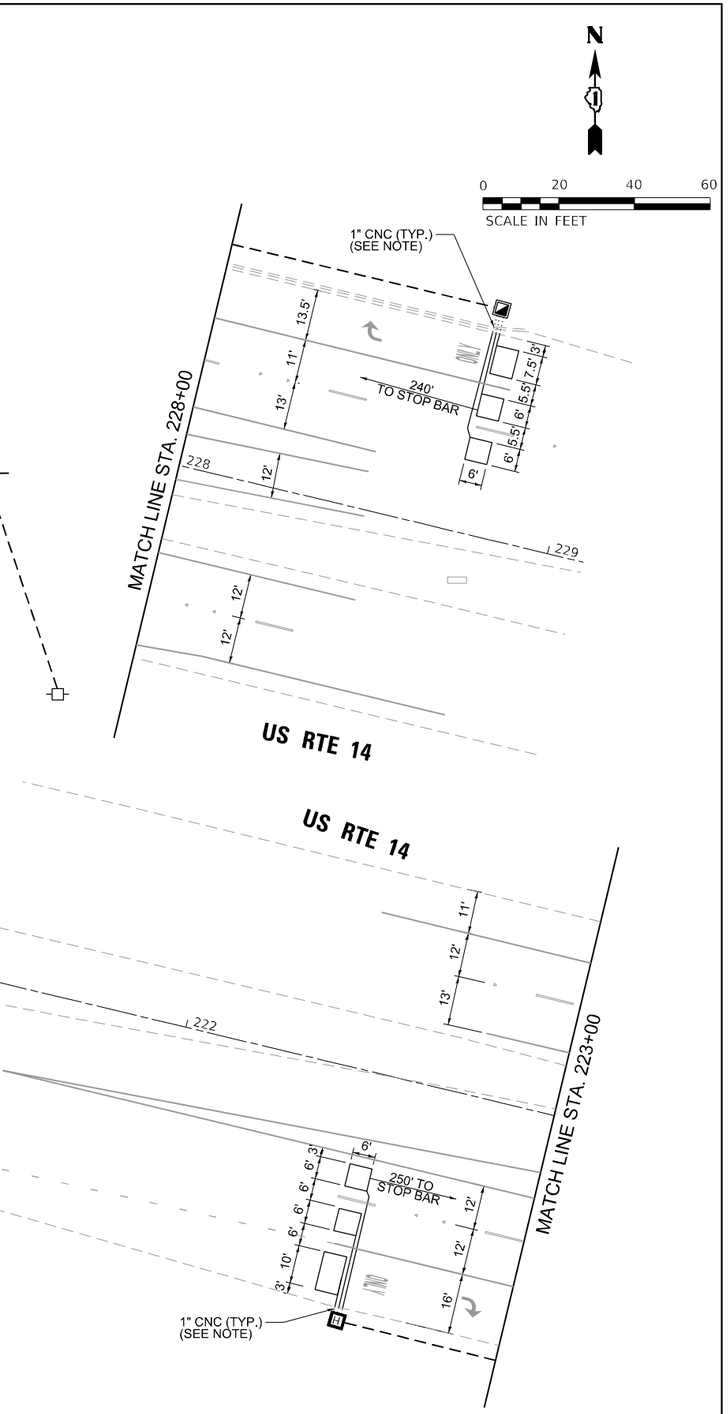
TS 7235
ECON 195

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM DS2 - NA 2020\Documents\60632011-IL-47900-CAD\03-CAD\10-SHEETS\Traffic Signals\Ill-47_US-14_signal.dgn

ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL RTE 47 (EASTWOOD DR) AND US RTE 14 (SHEET 1 OF 2)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941	751
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT			







NOTES

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

TS SHT NO. 18

TS 7235
ECON 195

MODEL: Default
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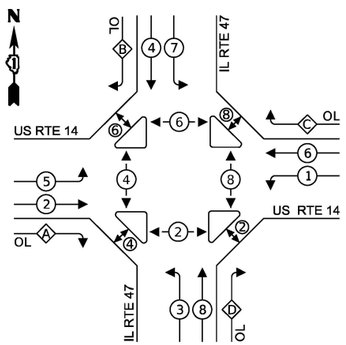
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL RTE 47 (EASTWOOD DR) AND US RTE 14 (SHEET 2 OF 2)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 752
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	

PROPOSED CONTROLLER SEQUENCE



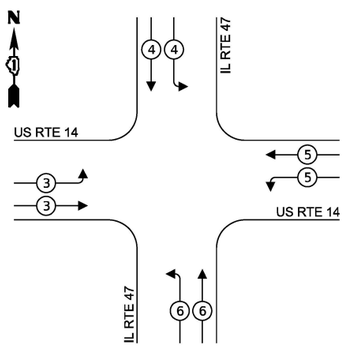
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

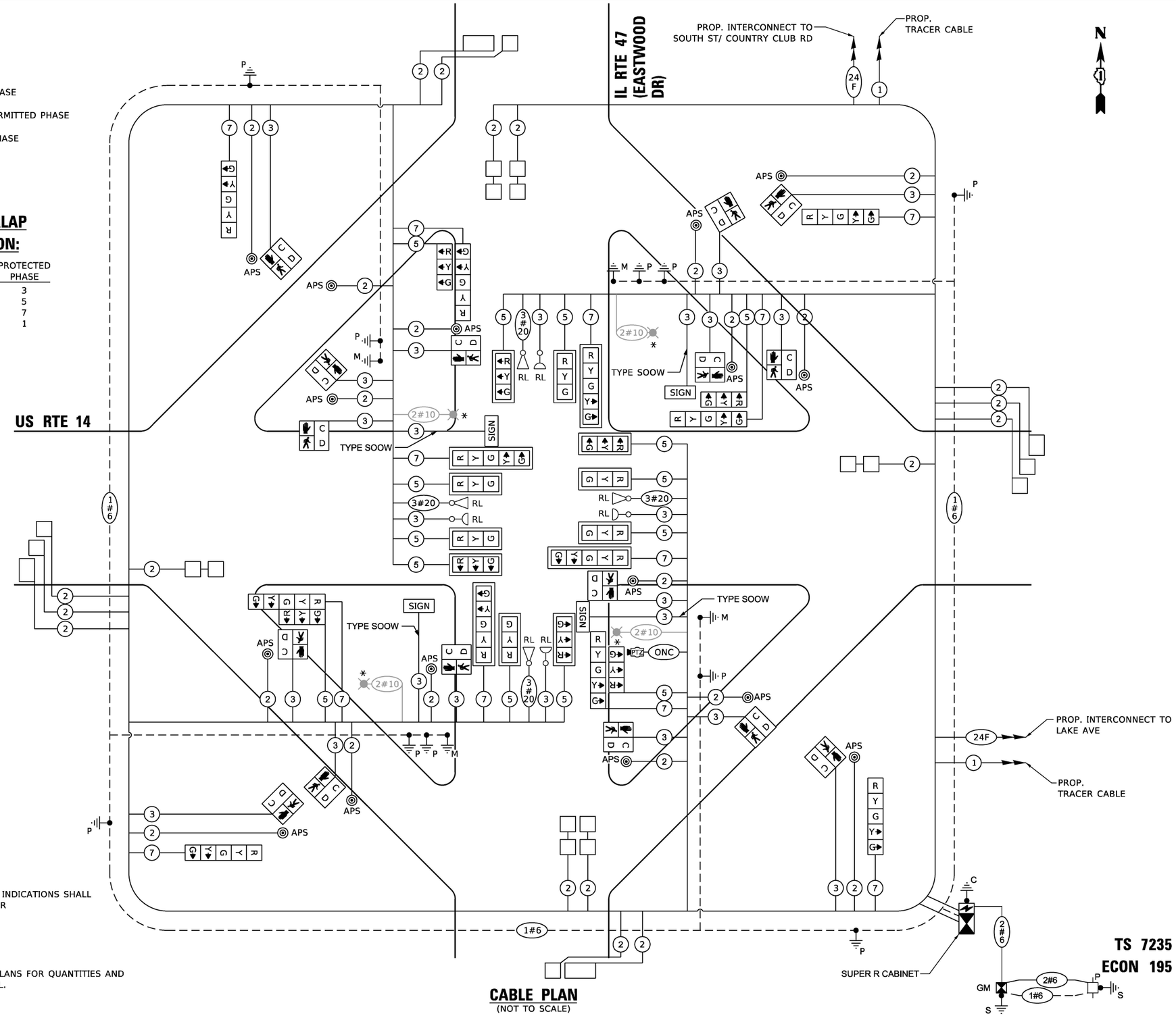
OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5
C	=	6	+	7
D	=	8	+	1

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	14	11	154
4 - SECTION		14	
5 - SECTION	12	13	156
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL	12	15	180
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO		20	
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING			715
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN	4	120	480
LUMINAIRE	4	240	960
TOTAL SERVICE WIRE SIZING			2775

ENERGY COST TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: 72900-1800



NOTE:

1. ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER

* SEE LIGHTING PLANS FOR QUANTITIES AND FURTHER DETAIL.

CABLE PLAN
(NOT TO SCALE)

TS 7235
ECON 195

TS SHT NO. 19

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS21_NA_2020\Documents\60632011-IL-47900-CAD\910_CAD\03_SHEETS\Traffic Signals\IL-47_US-14_cable.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 47 (EASTWOOD DR) AND US RTE 14

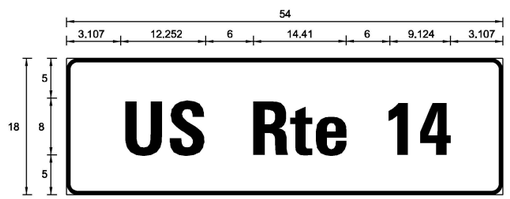
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	753
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

LED INTERNALLY ILLUMINATED STREET NAME SIGN

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE

DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	15	2	ZZ	2



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

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1535
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	196
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1298
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	4
PAINT NEW TRAFFIC SIGNAL POST	EACH	7
PAINT NEW COMBINATION MAST ARM AND POLE, UNDER 40 FOOT	EACH	2
PAINT NEW COMBINATION MAST ARM AND POLE, 40 FOOT AND OVER	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4234
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	5517
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4270
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3265
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	5046
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	178
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2513
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	7
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	32
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	16
TRAFFIC SIGNAL BACKPLATE	EACH	14
INDUCTIVE LOOP DETECTOR	EACH	16
DETECTOR LOOP, TYPE I	FOOT	893
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	4
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	14
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1230
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	137
FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	6
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	1
LAYER III (NETWORK) SWITCH	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	1161
PAINT NEW PEDESTRIAN PUSH-BUTTON POST	EACH	3
UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	16
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	26
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

TS SHT NO. 20

TS 7235

ECON 195

MODEL: Default
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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

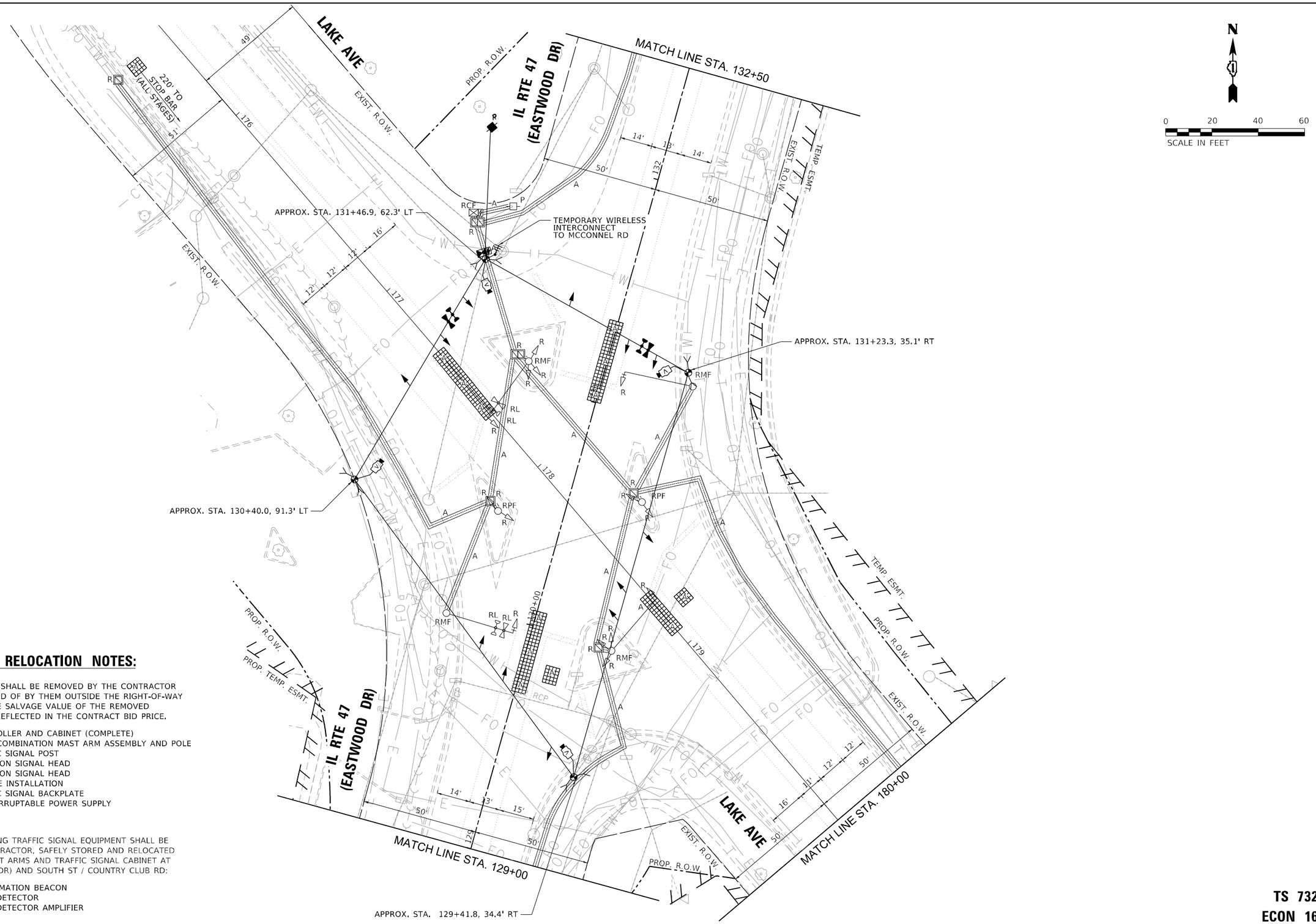
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 3/13/2025	DATE - 03/07/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL RTE 47 (EASTWOOD DR) AND US RTE 14

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	754
		CONTRACT NO. 62X94		
	ILLINOIS	FED. AID PROJECT		



REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER AND CABINET (COMPLETE)
4	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
2	EACH	TRAFFIC SIGNAL POST
6	EACH	3-SECTION SIGNAL HEAD
8	EACH	5-SECTION SIGNAL HEAD
1	EACH	SERVICE INSTALLATION
4	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CABINET AT IL RTR 47 (EASTWOOD DR) AND SOUTH ST / COUNTRY CLUB RD:

2	EACH	CONFIRMATION BEACON
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

TS SHT NO. 21

TS 7325
ECON 167

MODEL: Default
FILE NAME: pw:\\becom-pw.bentley.com:AFCOM DS2 - NA_2020\Documents\6063201-IL-47900-CAD\03_SHEETS\Traffic Signal\IL-47 Lake Rem & Temp-1.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

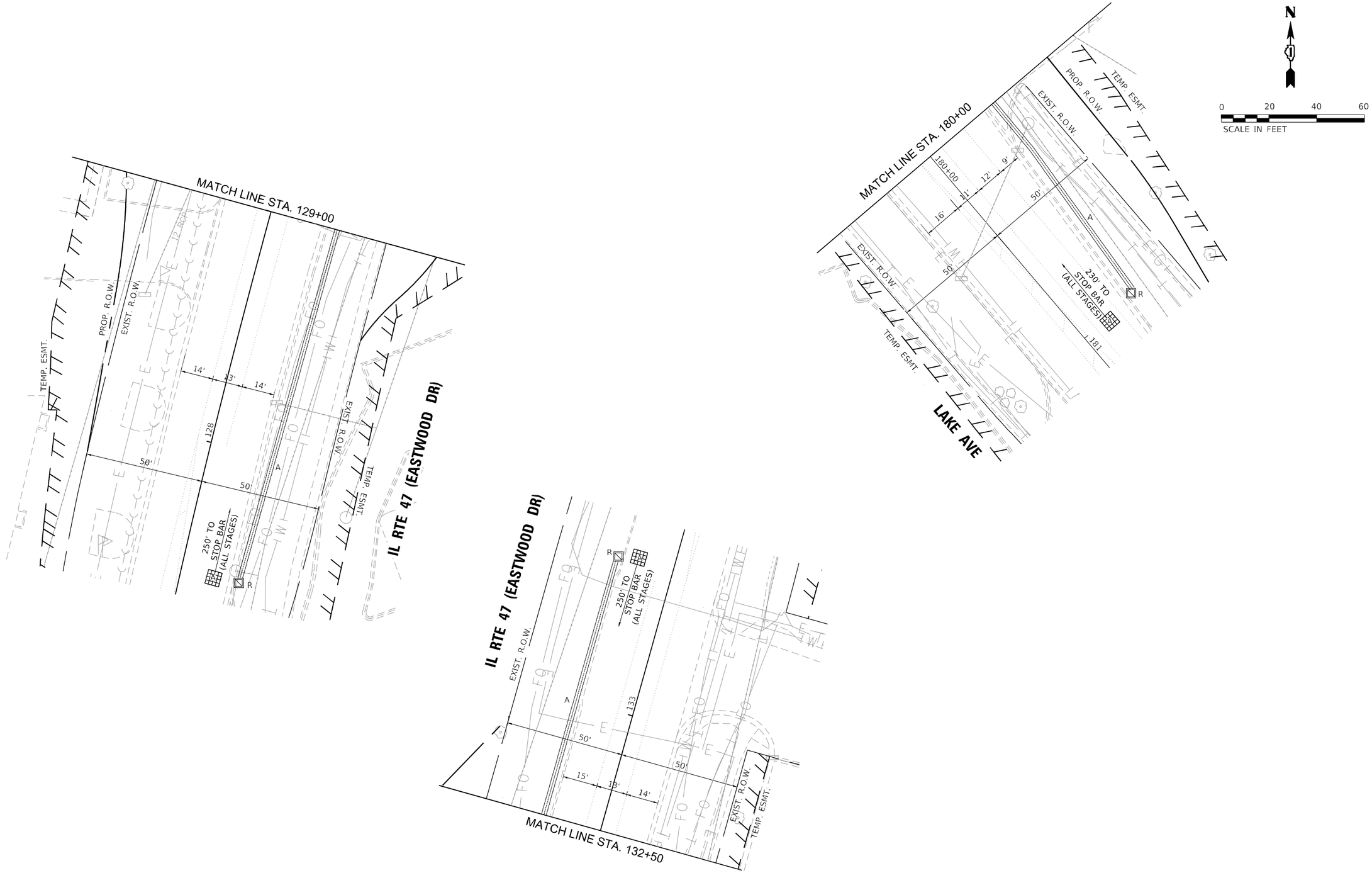
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL RTE 47 (EASTWOOD DR) AND LAKE AVE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	755
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 22

TS 7325
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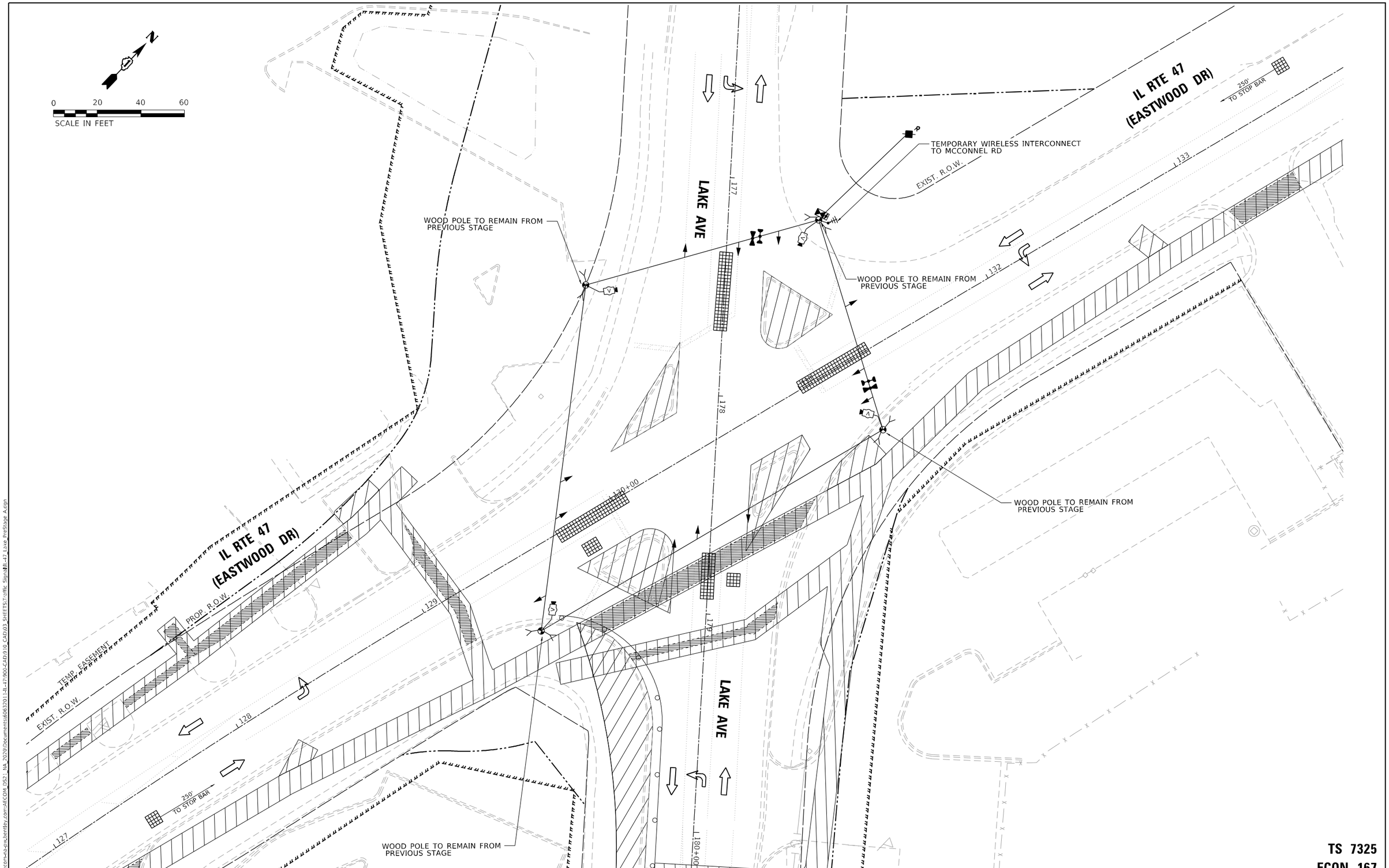
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL RTE 47 (EASTWOOD DR) AND LAKE AVE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 756
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 22-A

TS 7325
ECON 167

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

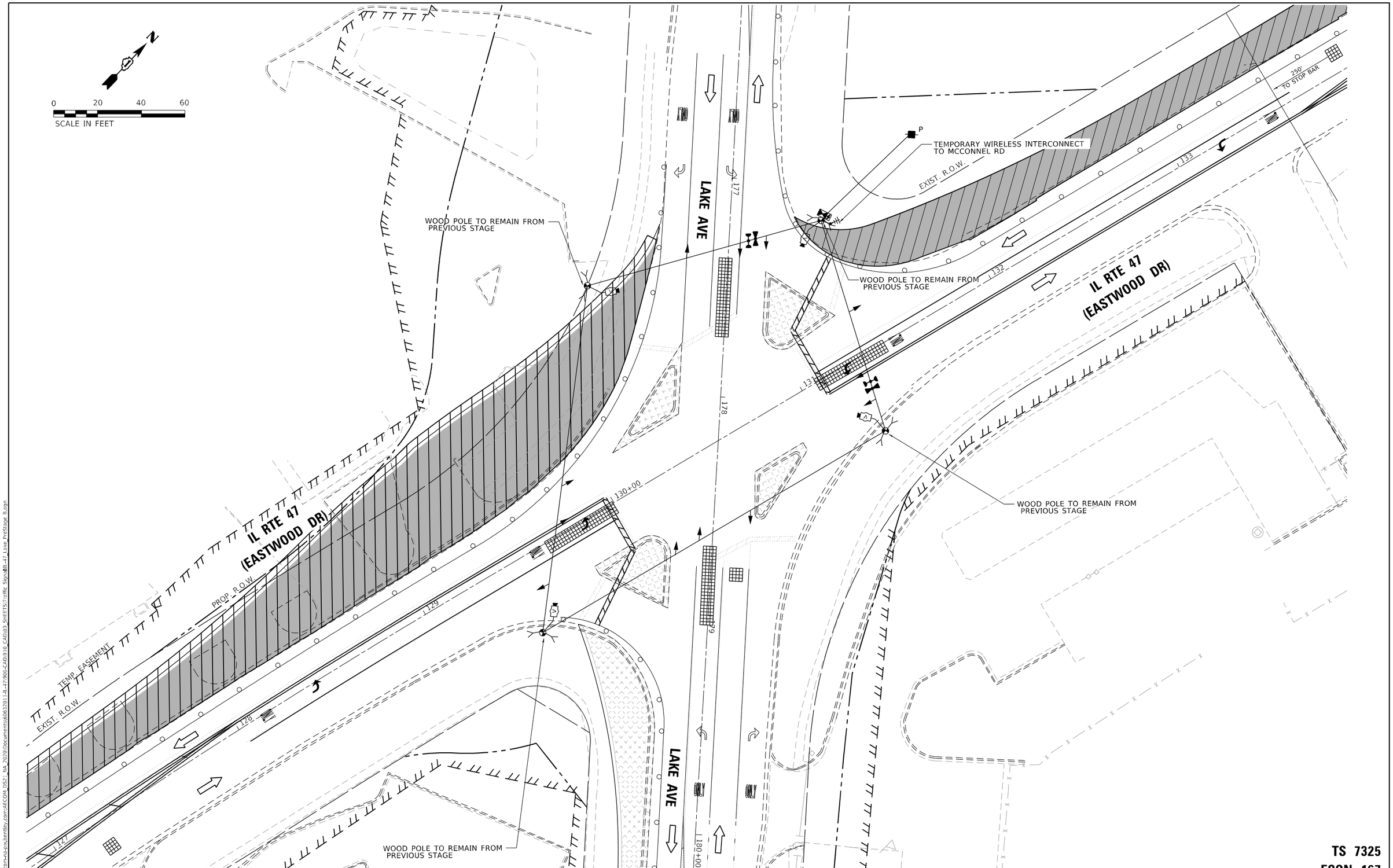
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – PRESTAGE A
IL RTE 47 (EASTWOOD DR) AND LAKE AVE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	757
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



TS SHT NO. 23

TS 7325
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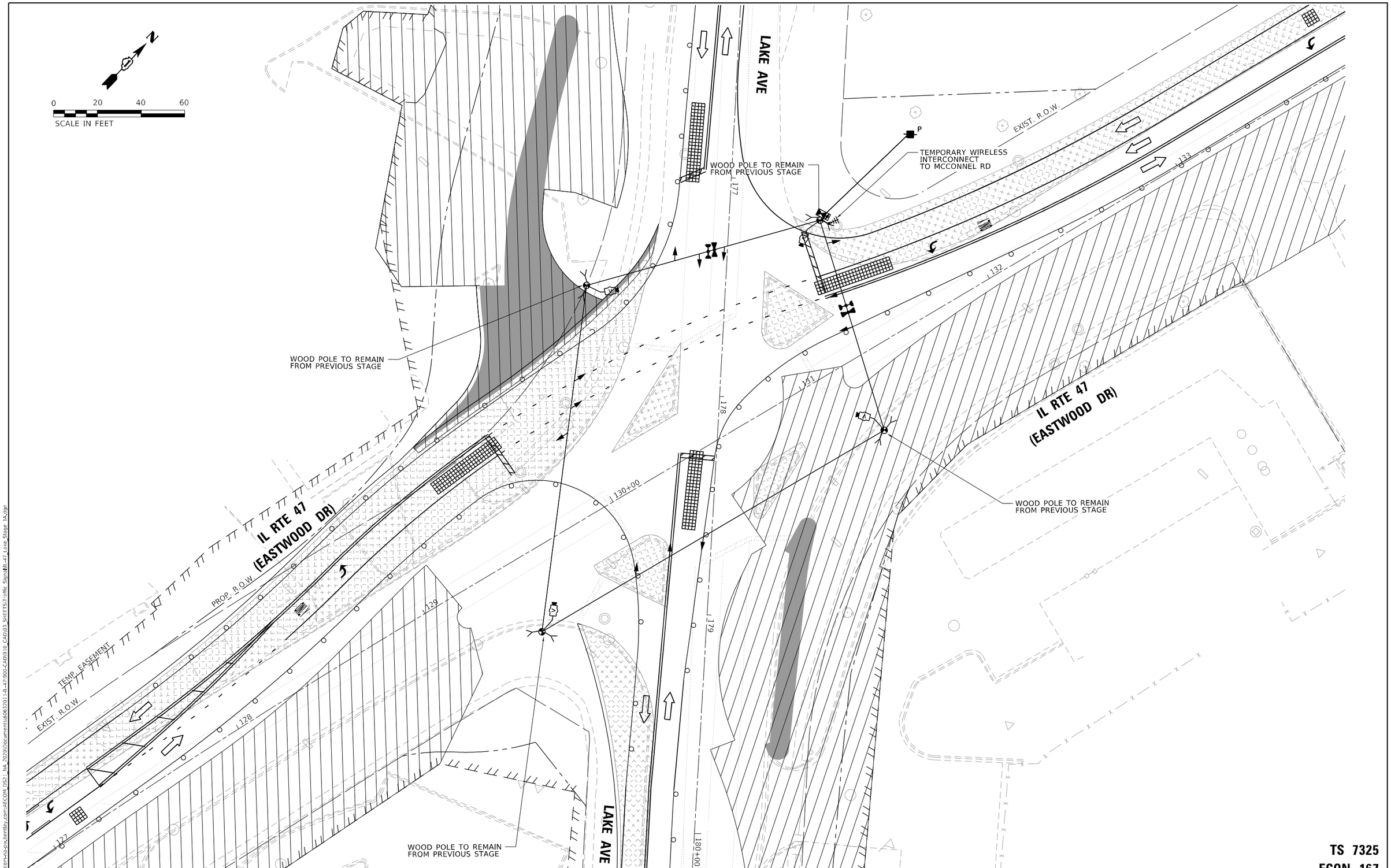
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – PRESTAGE B IL RTE 47 (EASTWOOD DR) AND LAKE AVE
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: 1":20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	758
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 24

TS 7325
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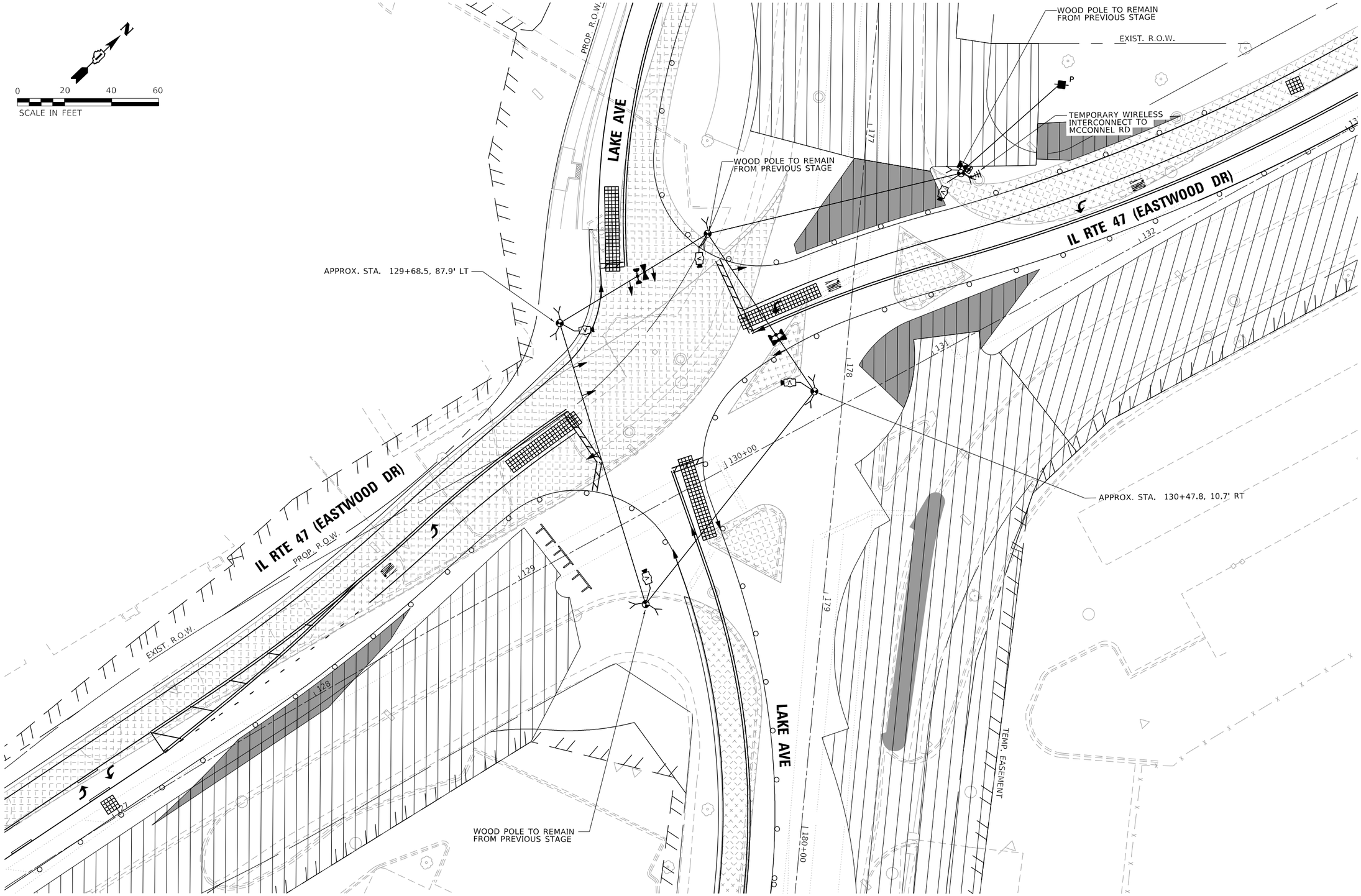
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1A IL RTE 47 (EASTWOOD DR) AND LAKE AVE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941	759
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: 1":20' SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT		



TS SHT NO. 25

TS 7325

ECON 167

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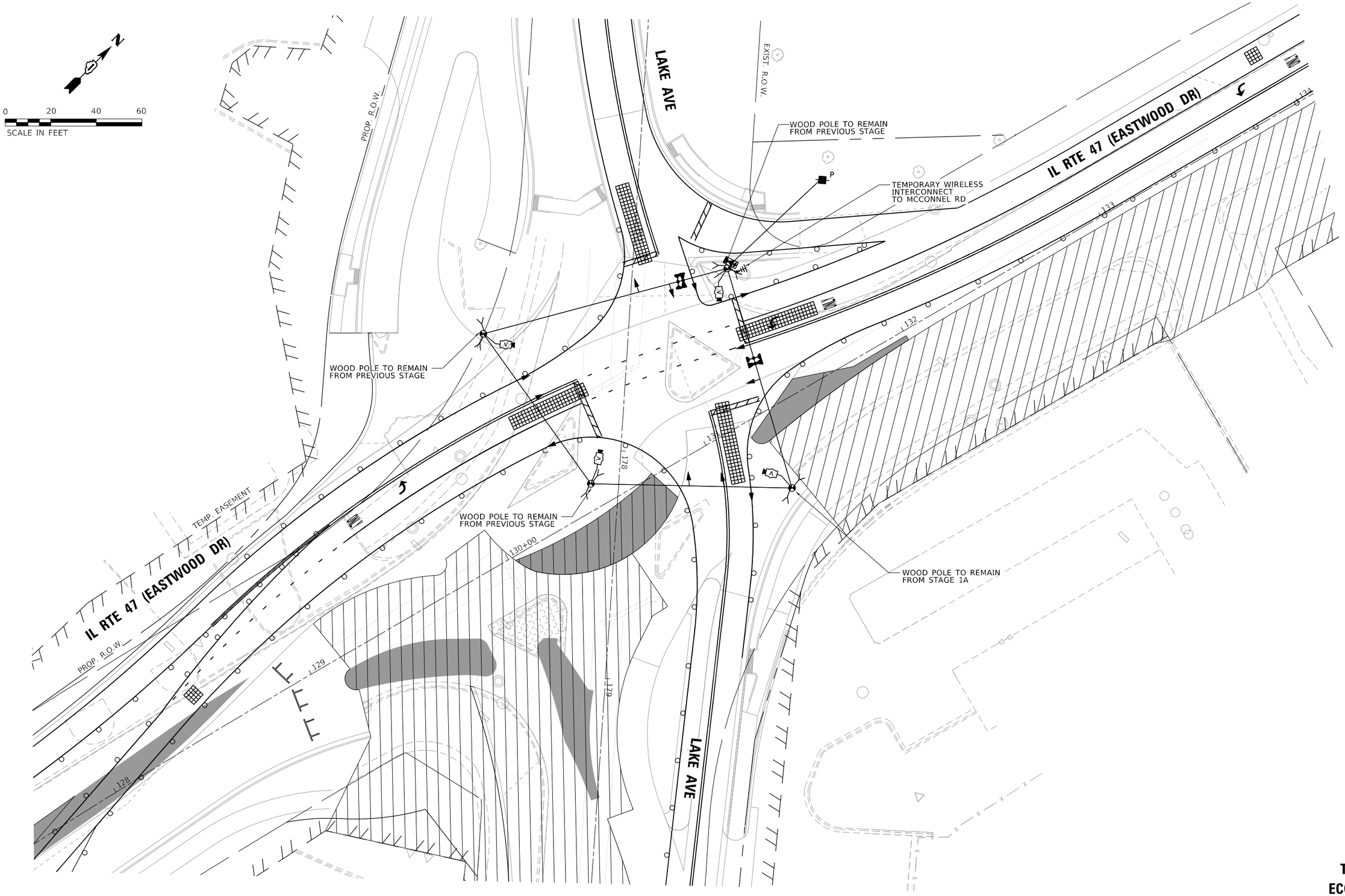
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - NS	REVISED -	
	PLOT SCALE = 40.0037 ' / in.	CHECKED - TS	REVISED -	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1B
IL RTE 47 (EASTWOOD DR) AND LAKE AVE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	760
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 26

TS 7325
ECON 167

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

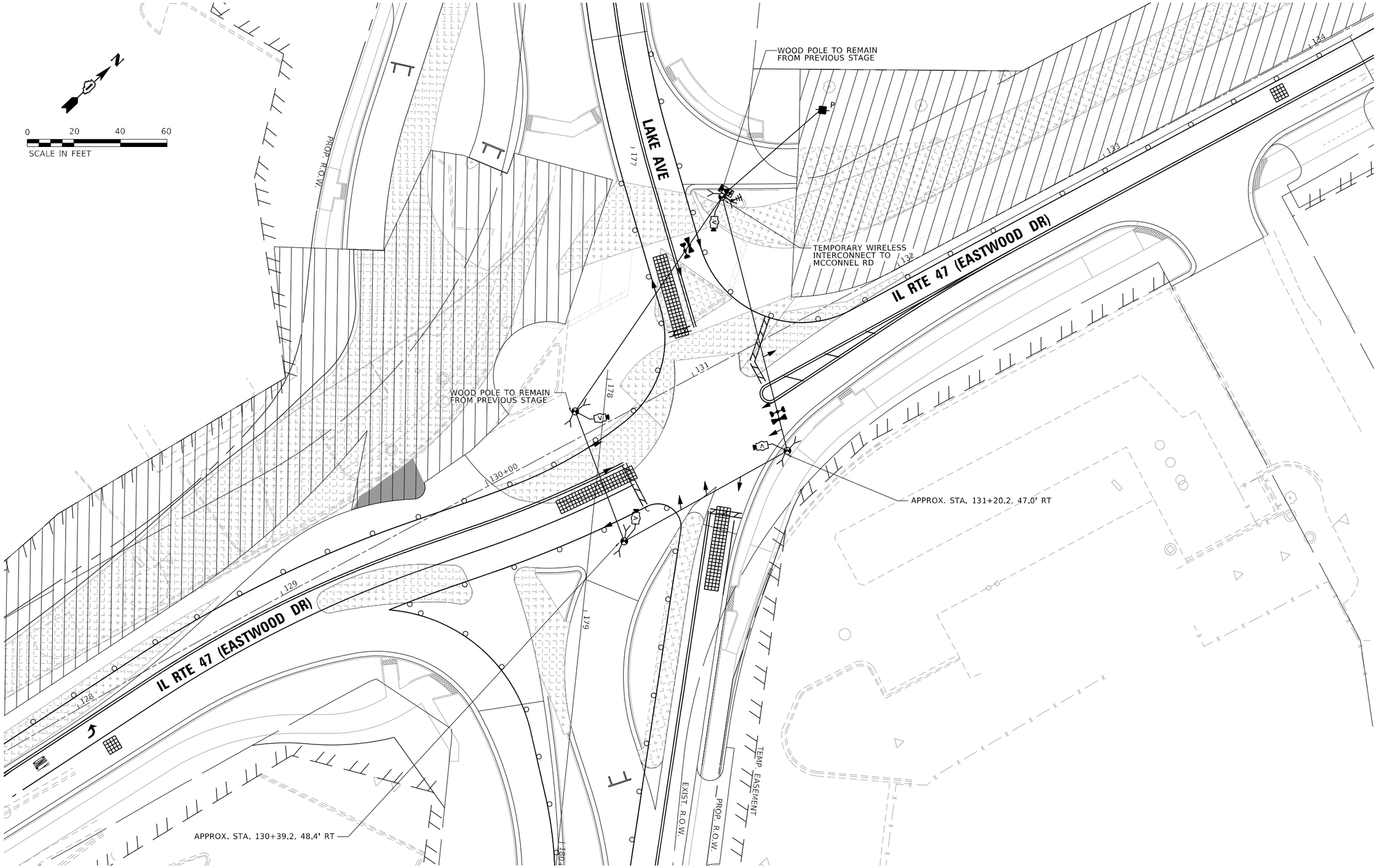
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1C
IL RTE 47 (EASTWOOD DR) AND LAKE AVE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	761
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 27

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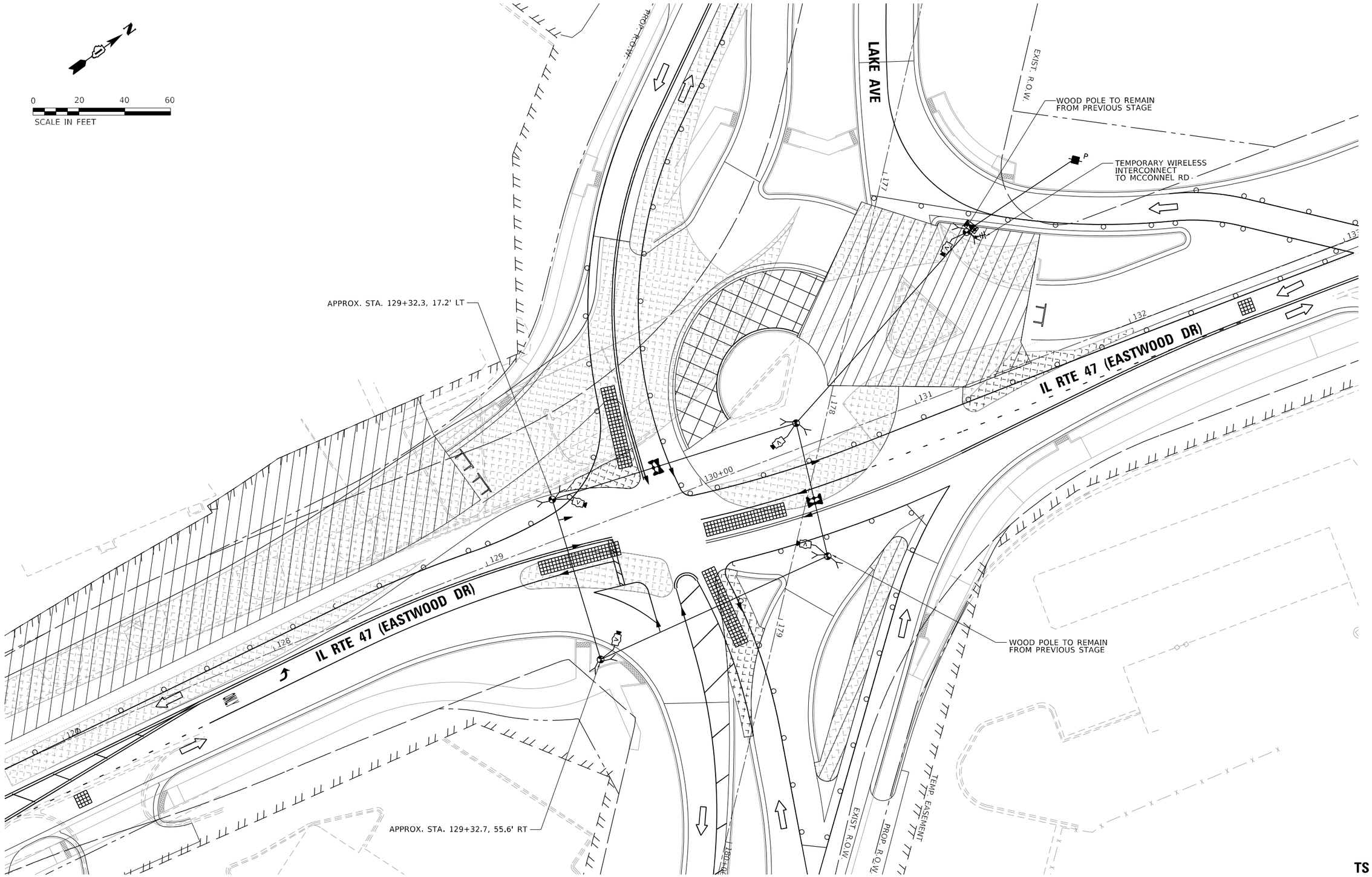
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 2A IL RTE 47 (EASTWOOD DR) AND LAKE AVE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 762
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 28

TS 7325
ECON 167

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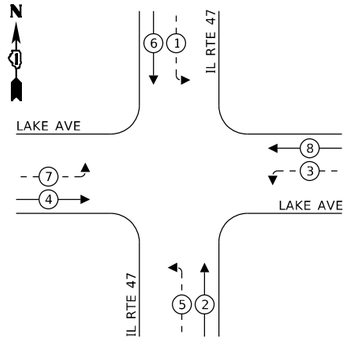
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 2B IL RTE 47 (EASTWOOD DR) AND LAKE AVE
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: 1":20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	763
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

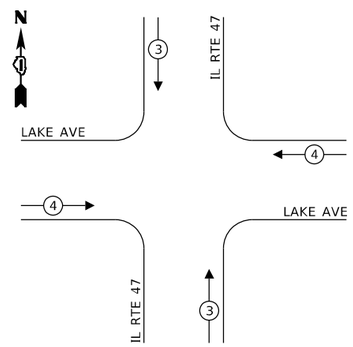
TEMPORARY CONTROLLER SEQUENCE (PRESTAGE A & B)



LEGEND:

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (PRESTAGE A & B)

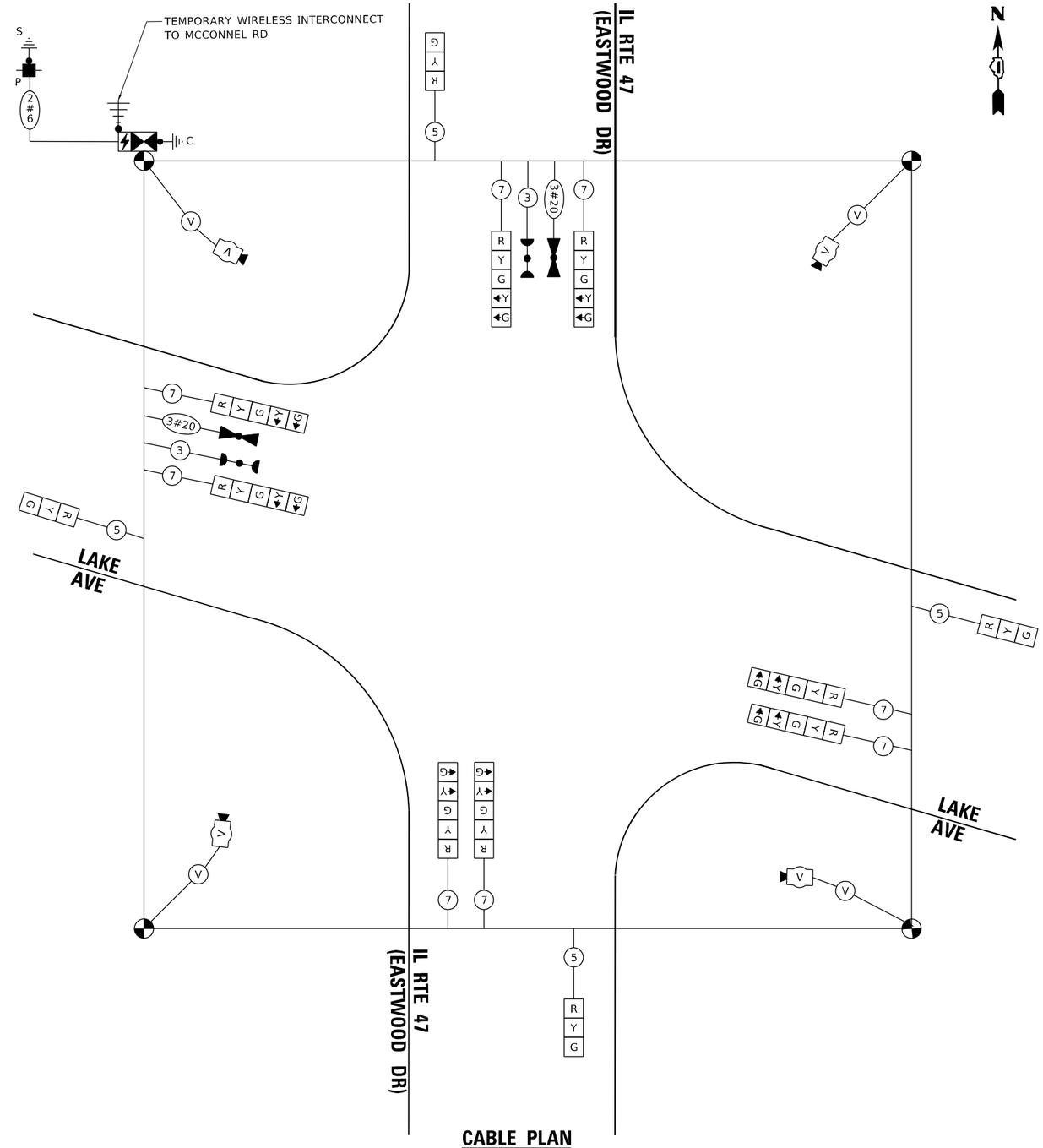


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	4	11	44.0
	4 - SECTION	-	14	-
	5 - SECTION	8	13	104.0
PROGRAMMABLE SIGNALS				-
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL		-	15	-
CONTROLLER		1	150	150.0
MASTER CONTROLLER		-	100	
UPS		1	25	25.0
DETECTION	RADAR	-	20	-
	VIDEO	1	20	20.0
BLANK-OUT SIGN		-	25	-
NETWORK SWITH II OR III		-	35	-
CELLULAR MODEM		-	15	-
	TOTAL UPS SIZING =			343.0
UPS CHARGING		1	225	225
BATTERY HEATER MAT		1	180	180
CABINET HEATER		1	200	200
FLASHER		1	15	15
LED STREET NAME SIGN		-	120	-
LUMINAIRE		-	240	-
				963.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN (PRESTAGE A & B)

(NOT TO SCALE)

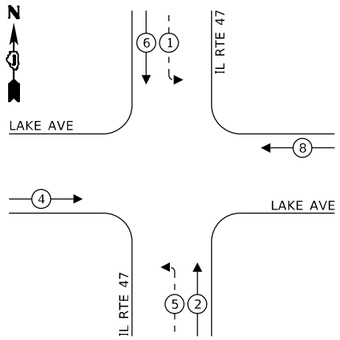
TS SHT NO. 29

TS 7325
ECON 167

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_US2_NA_2020\Documents\60632011-IL-17-900-CAD-910_CAD\03_SHEETS\Traffic Signal\IL-47 Lake_temp-cable 0.dgn

ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 1 OF 3) IL RTE 47 (EASTWOOD DR) AND LAKE AVE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941	764
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT			

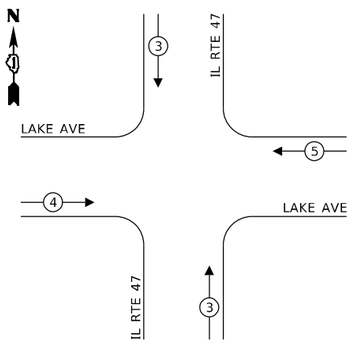
TEMPORARY CONTROLLER SEQUENCE (STAGE 1B AND 2B)



LEGEND:

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 1B AND 2B)

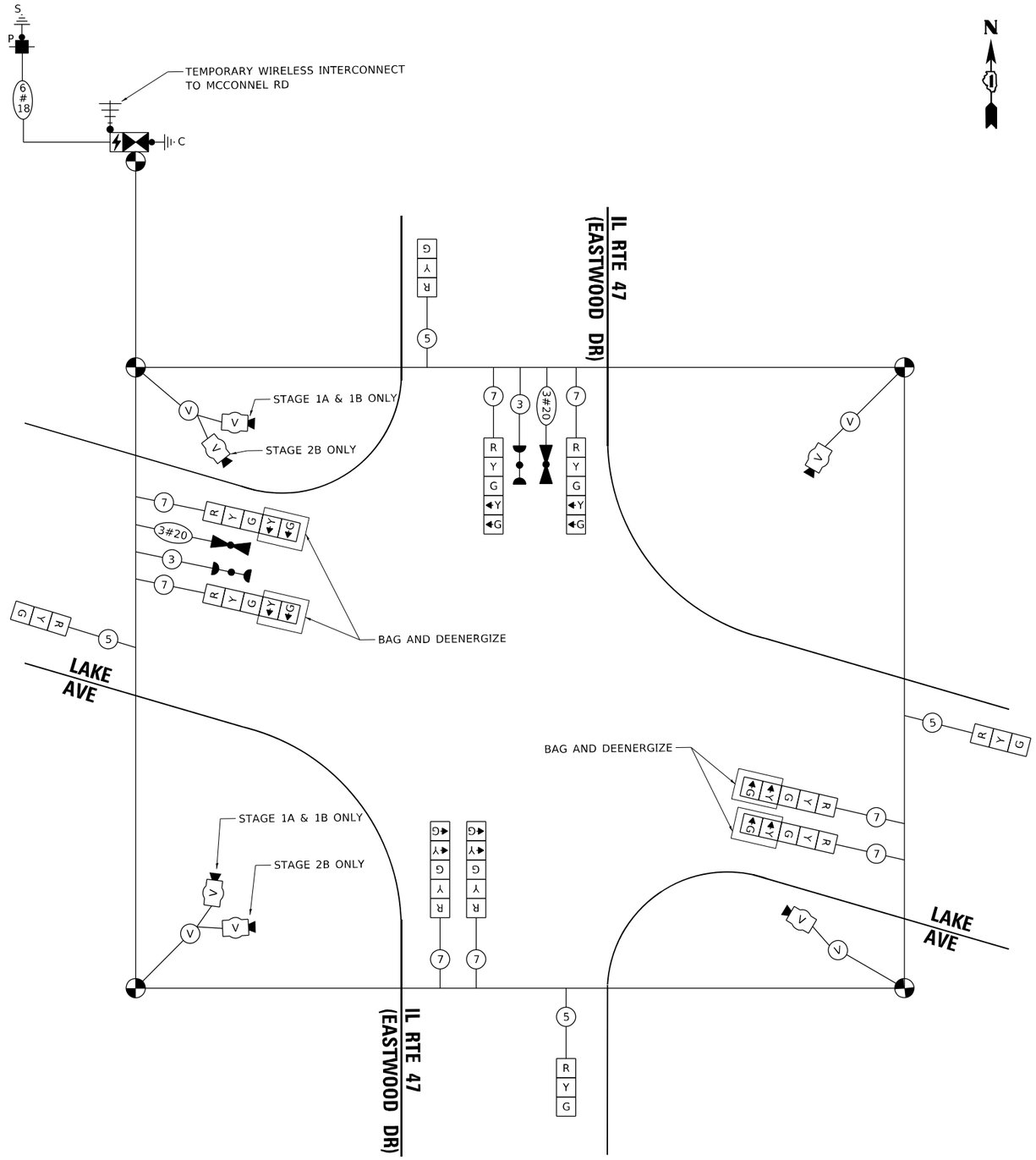


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 3 - SECTION	8	11	88.0
4 - SECTION	-	14	-
5 - SECTION	4	13	52.0
PROGRAMMABLE SIGNALS			-
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150.0
MASTER CONTROLLER	-	100	
UPS	1	25	25.0
DETECTION RADAR	-	20	-
VIDEO	1	20	20.0
BLANK-OUT SIGN	-	25	-
NETWORK SWITH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			335.0
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
			955.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN (STAGE 1B AND 2B)

(NOT TO SCALE)

TS 7325
ECON 167

TS SHT NO. 30

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_US21_NA_2020\Documents\60632011-11-1900-CAD\10_CAD\03-SHEETS\Traffic Signal\Ill-47 Lake_temp-cable.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -

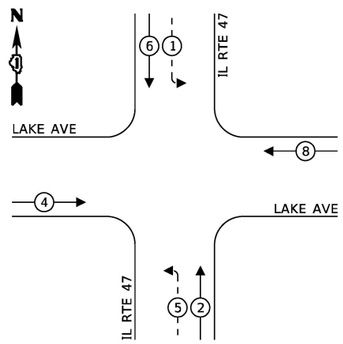
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 2 OF 3)
IL RTE 47 (EASTWOOD DR) AND LAKE AVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	765
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

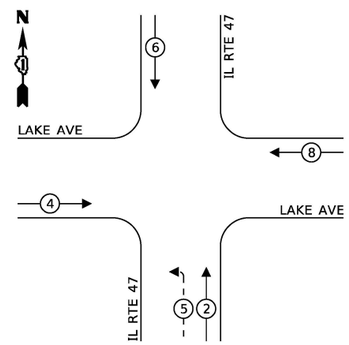
TEMPORARY CONTROLLER SEQUENCE (STAGE 1A AND 1C)



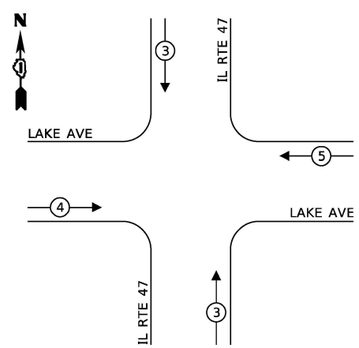
LEGEND:

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

TEMPORARY CONTROLLER SEQUENCE (STAGE 2A)



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 1A, 1C AND 2A)

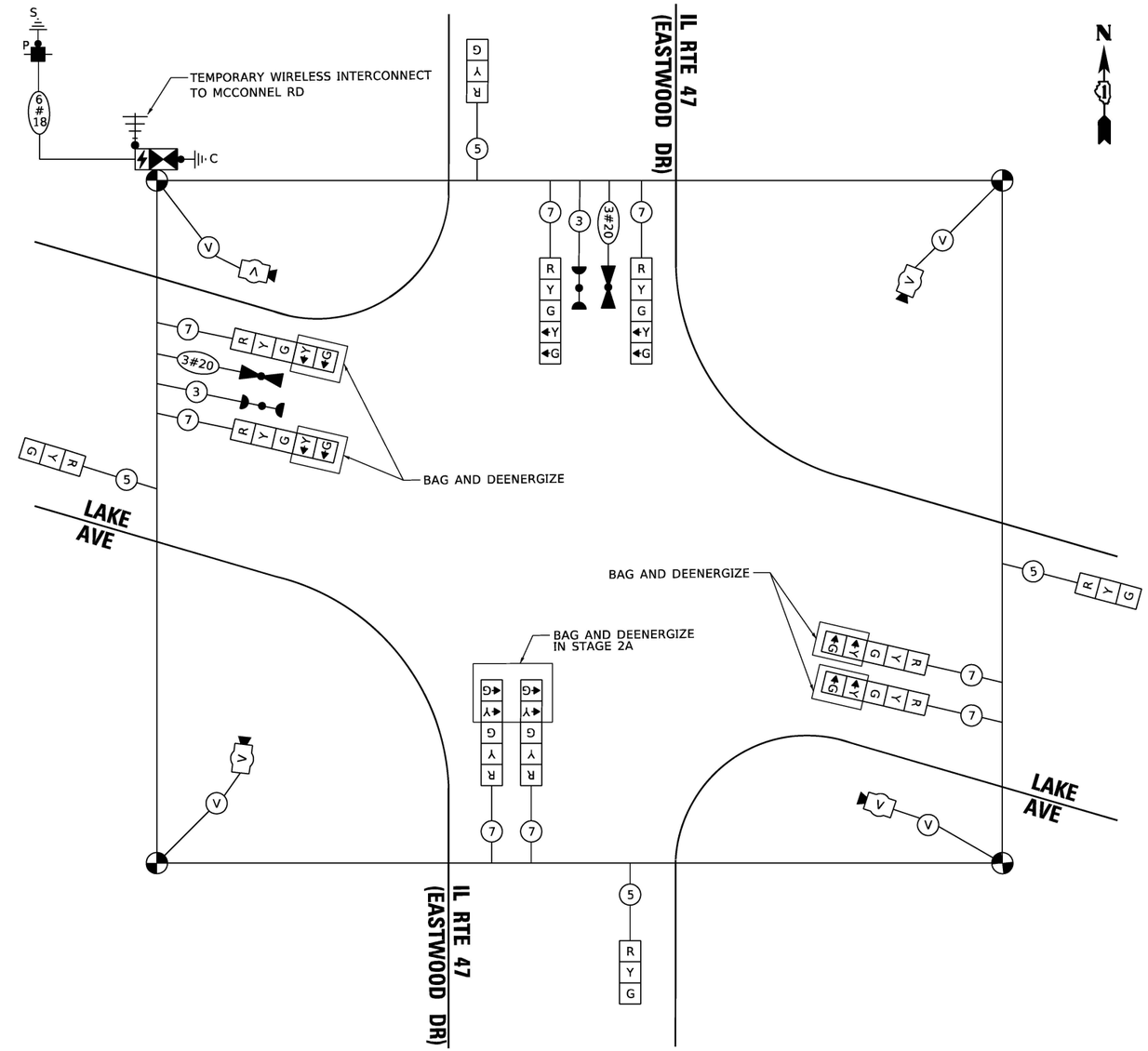


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	8	11	88.0
	4 - SECTION	-	14	-
	5 - SECTION	4	13	52.0
PROGRAMMABLE SIGNALS				-
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL		-	15	-
CONTROLLER		1	150	150.0
MASTER CONTROLLER		-	100	
UPS		1	25	25.0
DETECTION	RADAR	-	20	-
	VIDEO	1	20	20.0
BLANK-OUT SIGN		-	25	-
NETWORK SWITCH II OR III		-	35	-
CELLULAR MODEM		-	15	-
	TOTAL UPS SIZING =			335.0
UPS CHARGING		1	225	225
BATTERY HEATER MAT		1	180	180
CABINET HEATER		1	200	200
FLASHER		1	15	15
LED STREET NAME SIGN		-	120	-
LUMINAIRE		-	240	-
				955.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN (STAGE 1A, 1C AND 2A)

(NOT TO SCALE)

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY
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 EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	7
REMOVE EXISTING DOUBLE HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

TS SHT NO. 31

TS 7325
ECON 167

MODEL: Default
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ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 3 OF 3)
IL RTE 47 (EASTWOOD DR) AND LAKE AVE

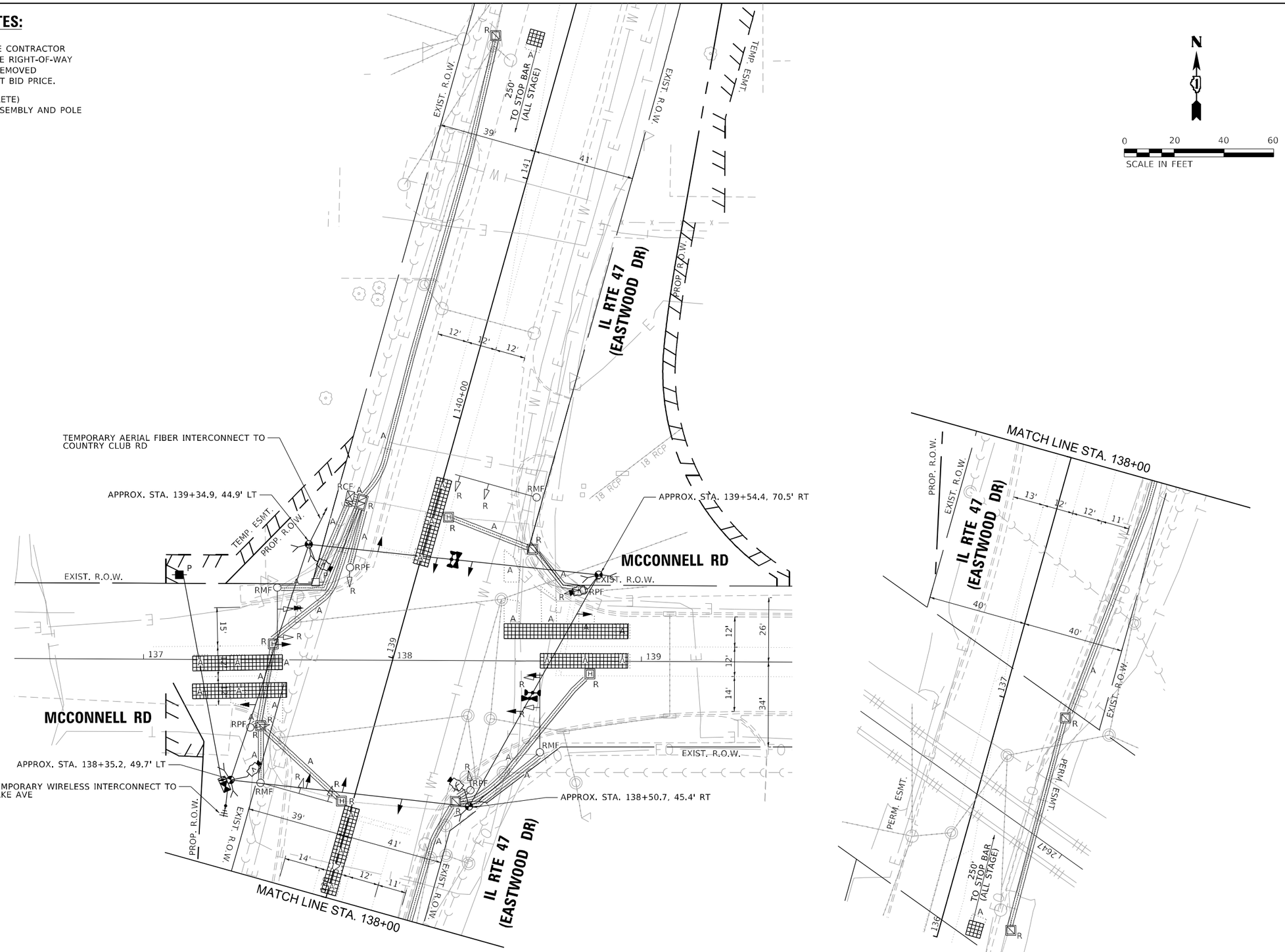
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	766
		CONTRACT NO. 62X94		
	ILLINOIS	FED. AID PROJECT		

REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER AND CABINET (COMPLETE)
4	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
4	EACH	TRAFFIC SIGNAL POST
4	EACH	3-SECTION SIGNAL HEAD
8	EACH	5-SECTION SIGNAL HEAD
1	EACH	SERVICE INSTALLATION
8	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	UNINTERRUPTABLE POWER SUPPLY



TS SHT NO. 32

TS 7323

ECON 167

MODEL: Default
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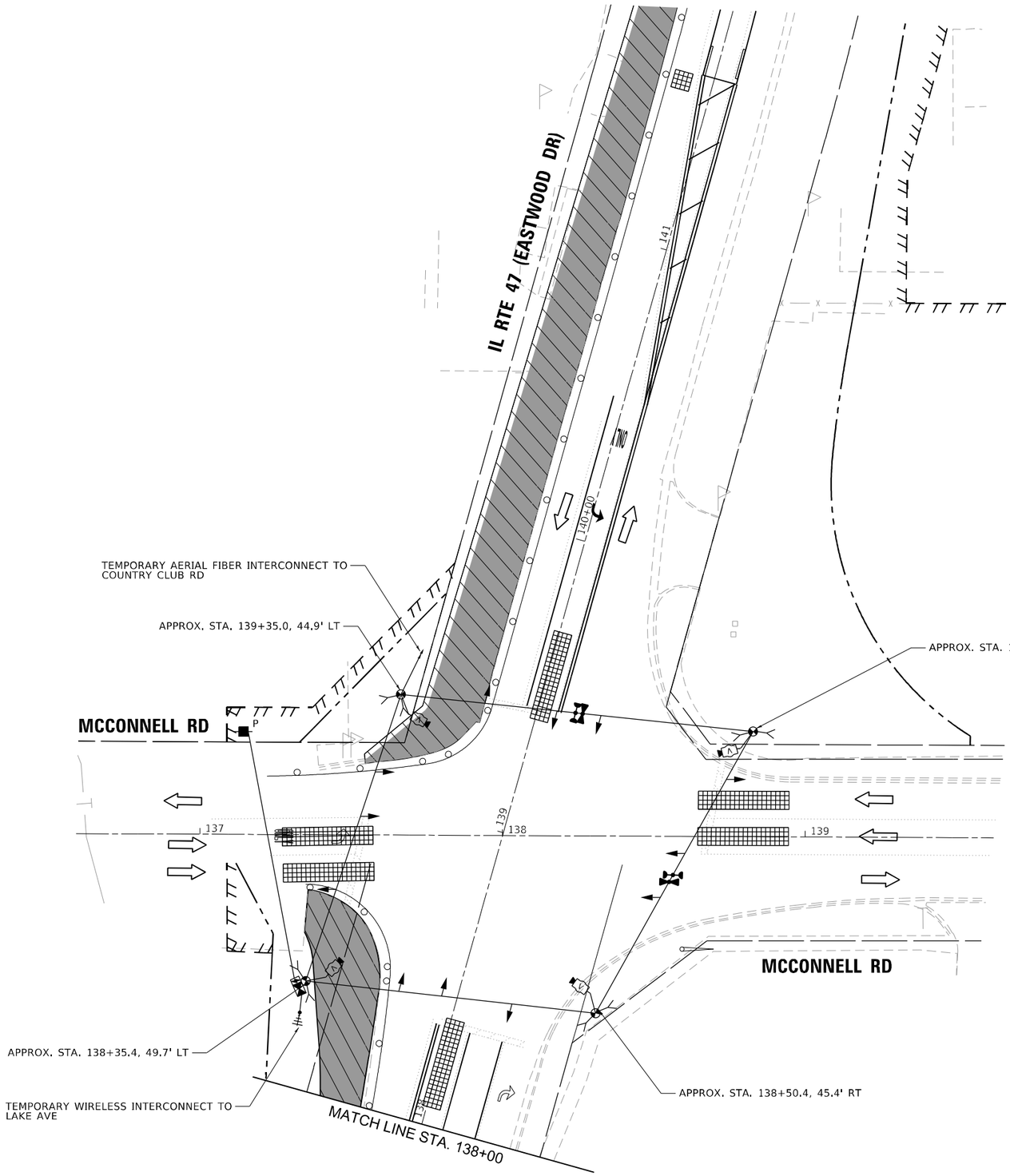
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -
		DRAWN - NS	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -

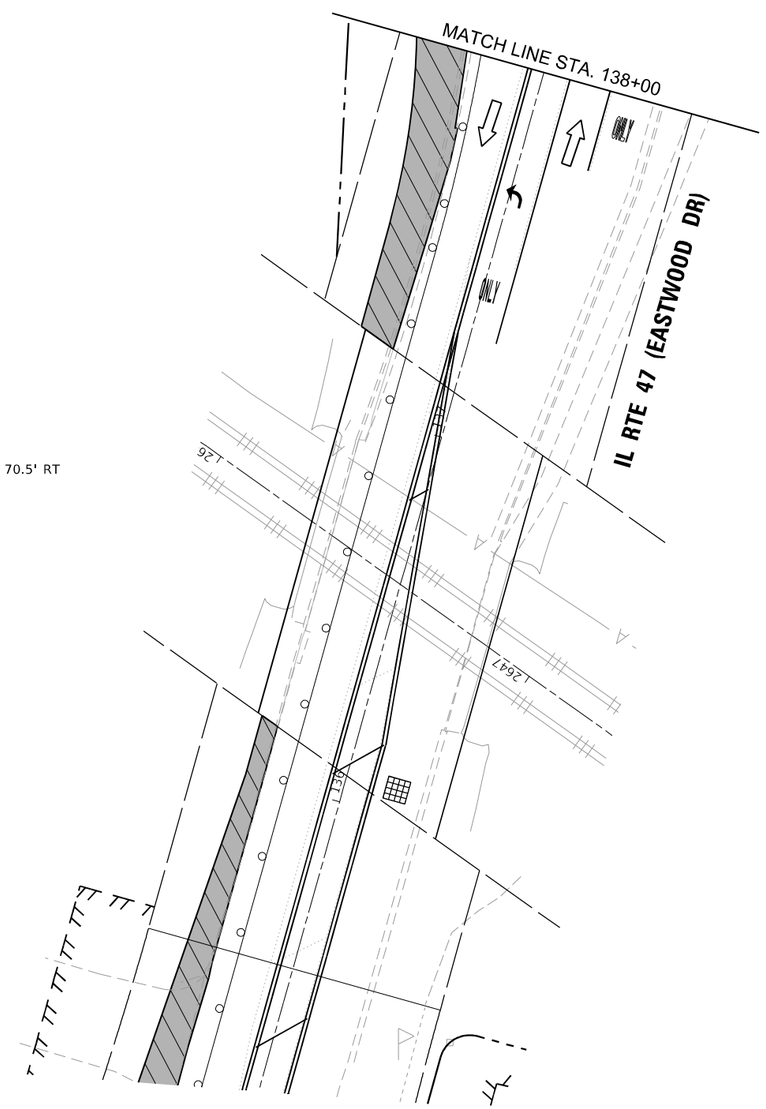
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL RTE 47 (EASTWOOD DR) AND MCCONNELL RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	767
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	





TS SHT NO. 33

TS 7323
ECON 167

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

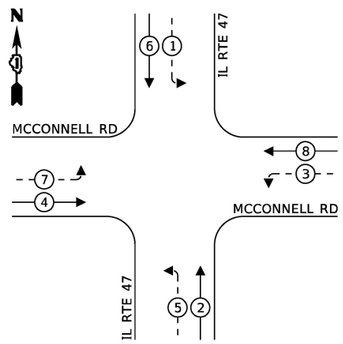
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – PRESTAGE B
IL RTE 47 (EASTWOOD DR) AND MCCONNELL RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	768
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

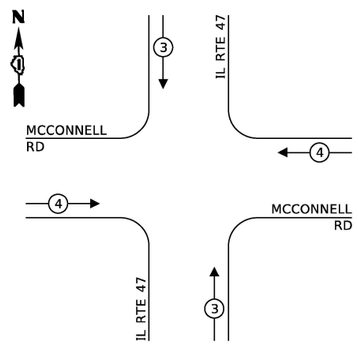
TEMPORARY CONTROLLER SEQUENCE (PRESTAGE B)



LEGEND:

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (PRESTAGE B)

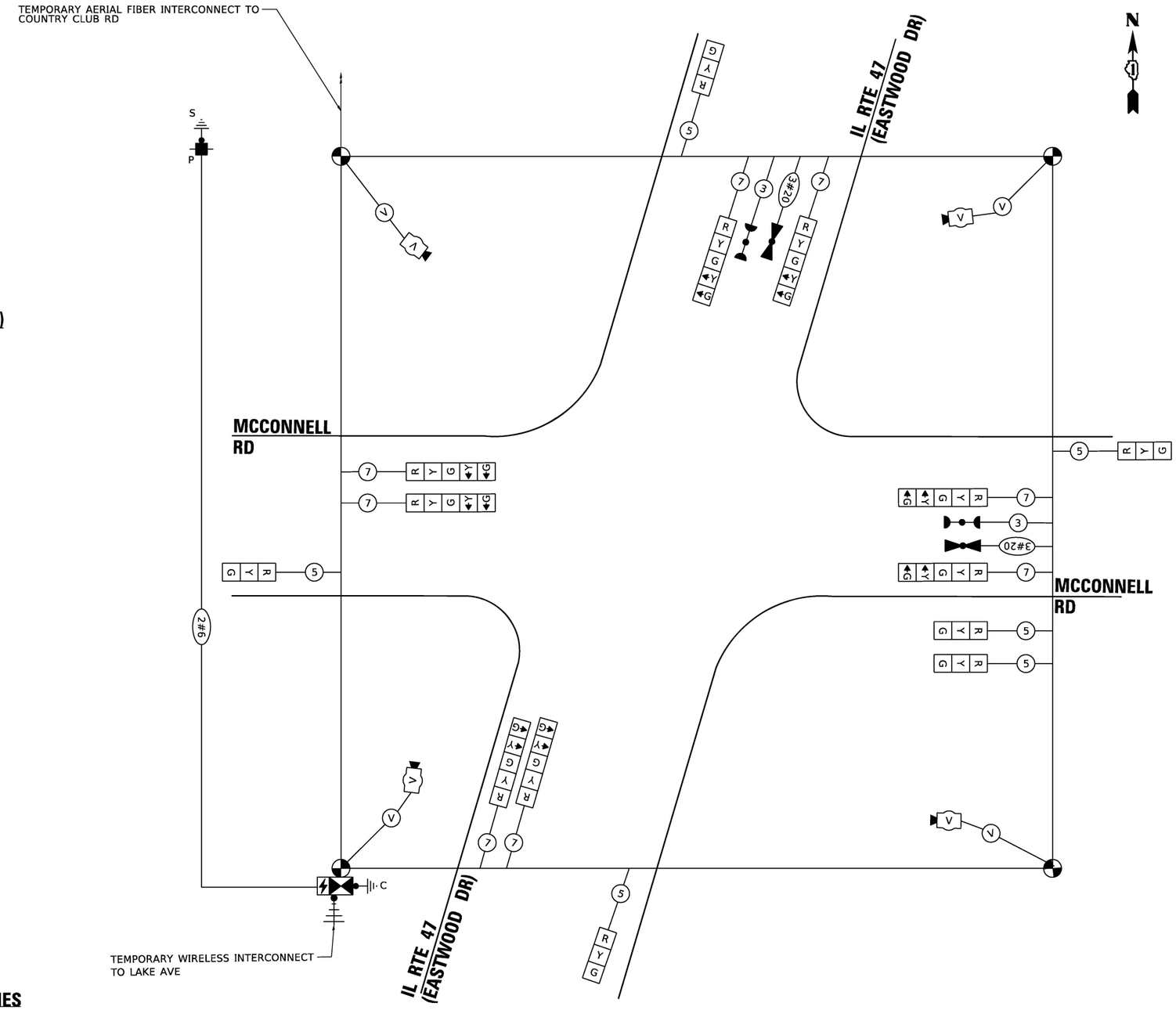


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	4	11	44.0
	4 - SECTION	-	14	-
	5 - SECTION	8	13	104.0
PROGRAMMABLE SIGNALS				-
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL		-	15	-
CONTROLLER		1	150	150.0
MASTER CONTROLLER		-	100	
UPS		1	25	25.0
DETECTION	RADAR	-	20	-
	VIDEO	1	20	20.0
BLANK-OUT SIGN		-	25	-
NETWORK SWITCH II OR III		-	35	-
CELLULAR MODEM		-	15	-
	TOTAL UPS SIZING =			343.0
UPS CHARGING		1	225	225.0
BATTERY HEATER MAT		1	180	180.0
CABINET HEATER		1	200	200.0
FLASHER		1	15	15.0
LED STREET NAME SIGN		-	120	-
LUMINAIRE		-	240	-
				963.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	10
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

CABLE PLAN (PRESTAGE B)

(NOT TO SCALE)

TS SHT NO. 34

TS 7325
ECON 167

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM DS21 - NA 2020\Documents\60632011-IL-47\900-CAD\10 CAD\03 SHEETS\Traffic Signal\IL-47 Mcconnell temp-cable.dgn

ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

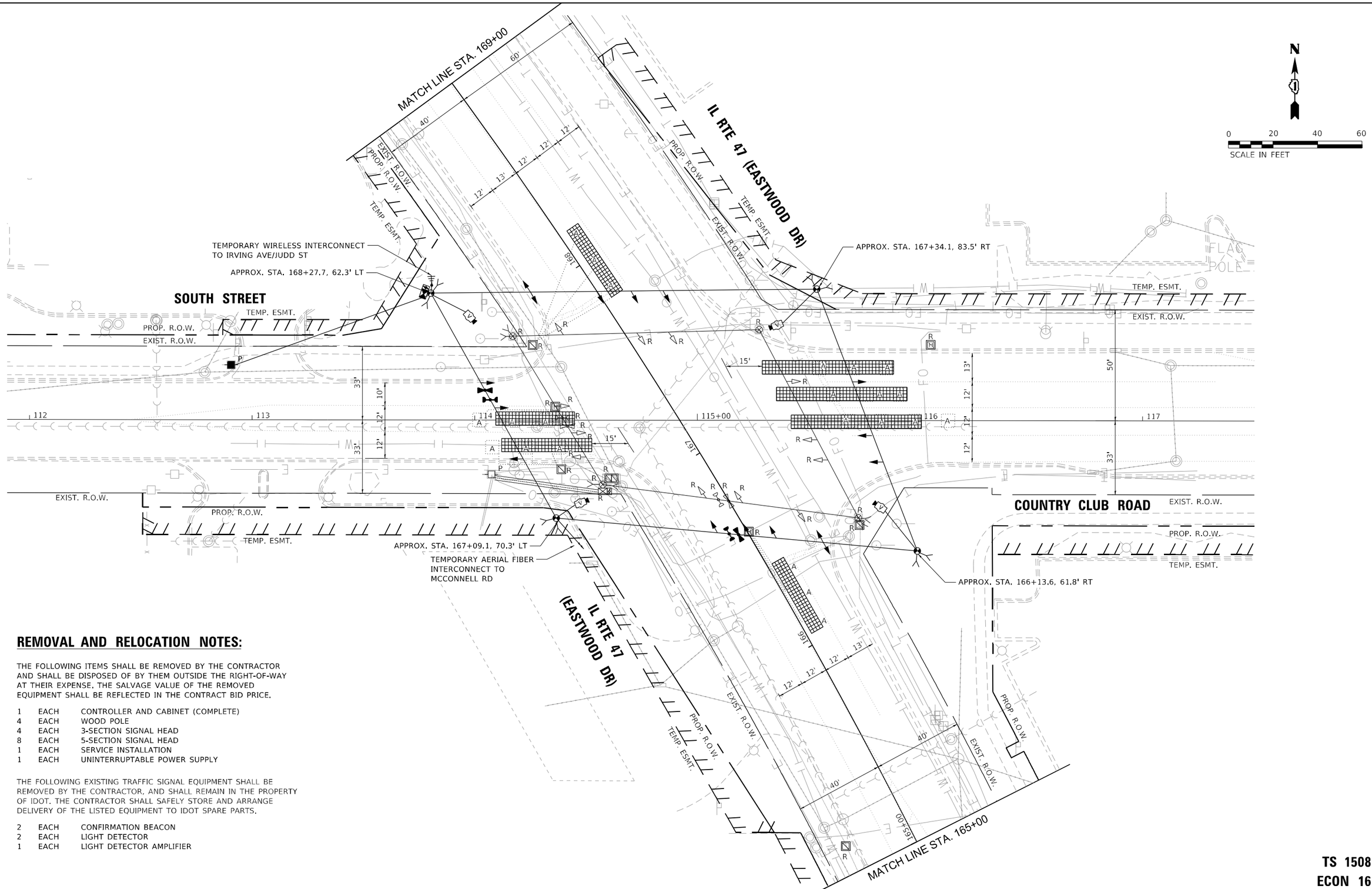
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 47 (EASTWOOD DR) AND MCCONNELL RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	769
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER AND CABINET (COMPLETE)
4	EACH	WOOD POLE
4	EACH	3-SECTION SIGNAL HEAD
8	EACH	5-SECTION SIGNAL HEAD
1	EACH	SERVICE INSTALLATION
1	EACH	UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND SHALL REMAIN IN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE DELIVERY OF THE LISTED EQUIPMENT TO IDOT SPARE PARTS.

2	EACH	CONFIRMATION BEACON
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

TS SHT NO. 35

TS 15085
ECON 167

MODEL: Default
FILE NAME: pw:\\becom-pw.bentley.com:AFCOM DS2 - NA 2020\Documents\6063201-IL-47\900-CAD\10 CAD\03 SHEETS\Traffic Signal\IL-47 Country Club Rem & Temp-1.dgn

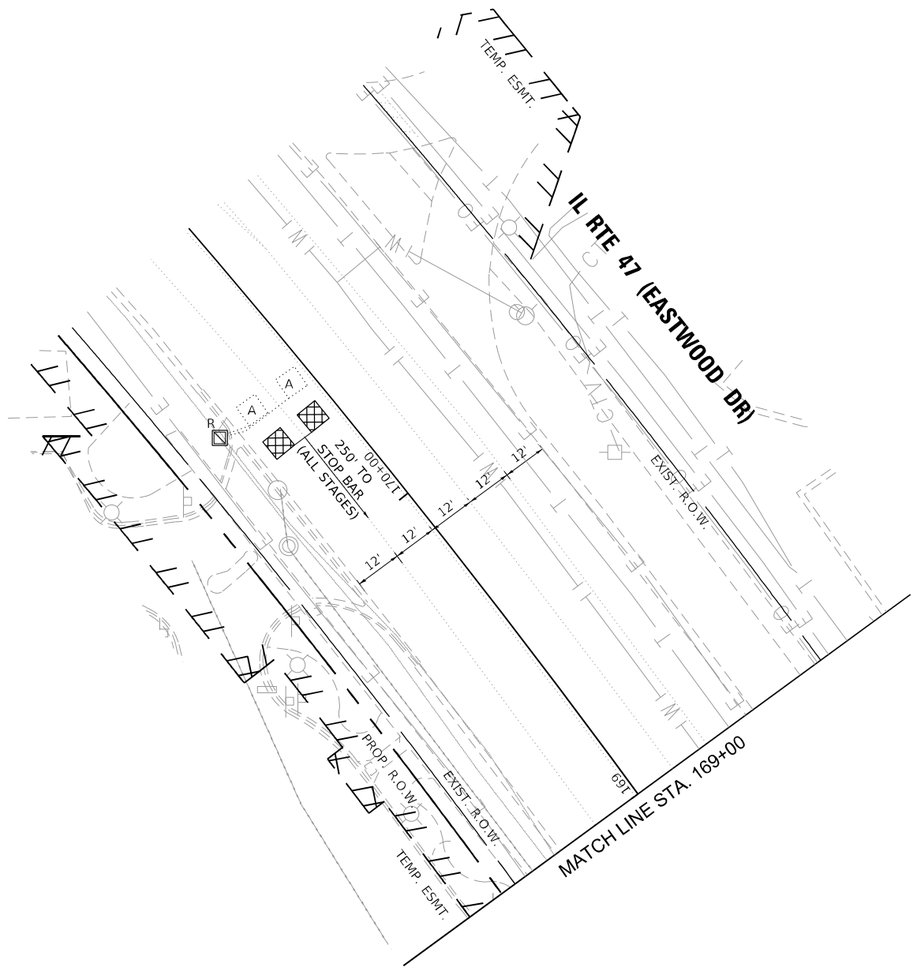
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -
		DRAWN - NS	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -

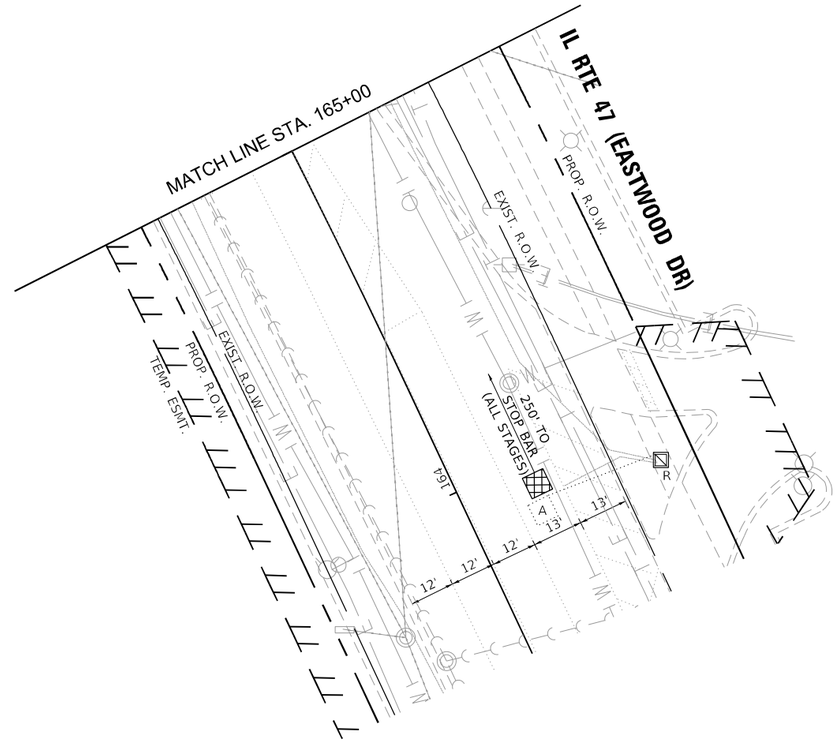
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

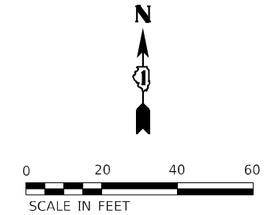
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	770
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		







TS SHT NO. 36

TS 15085
ECON 167

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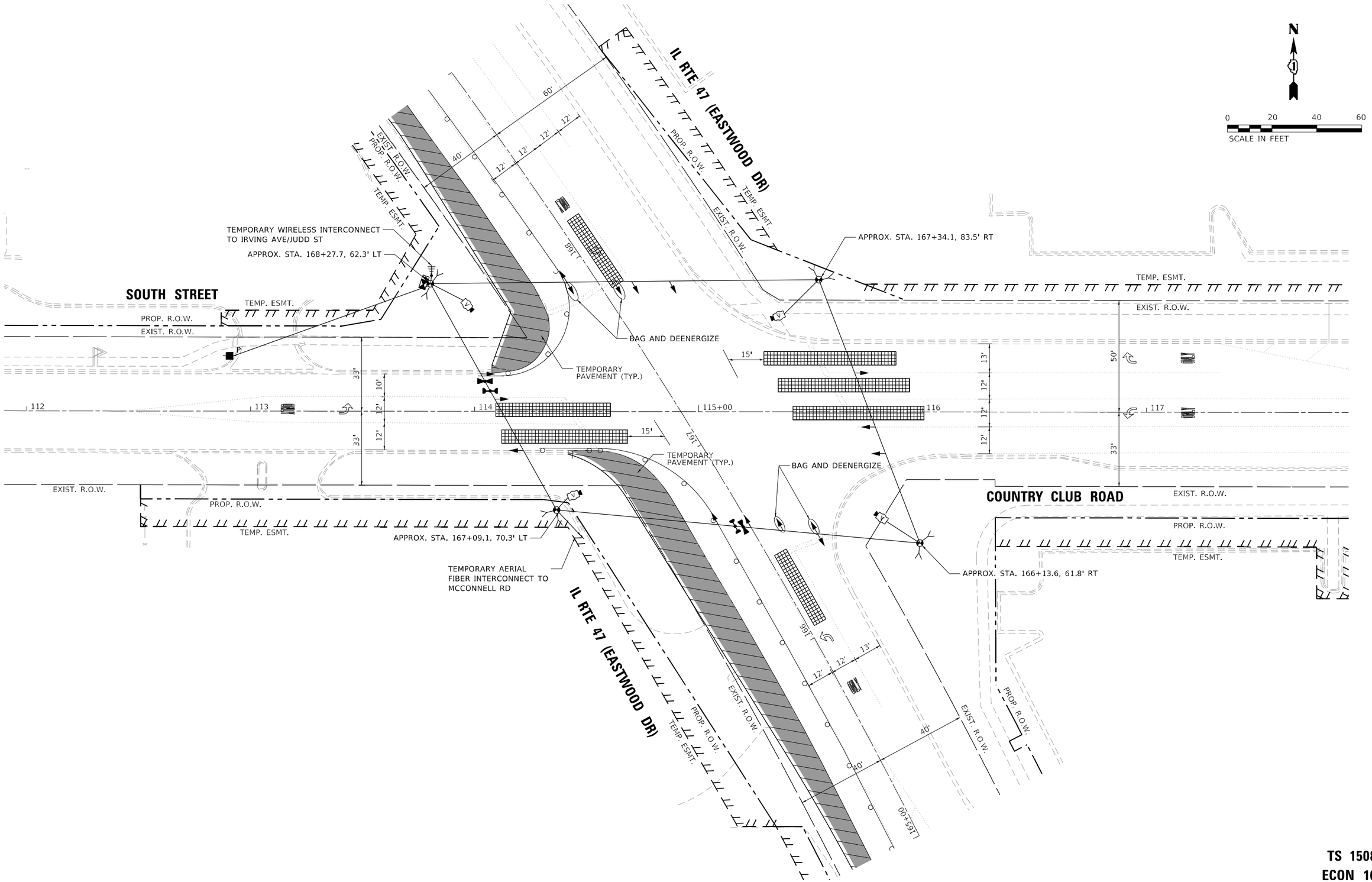
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 771
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT		



TS SHT NO. 37

TS 15085
ECON 167

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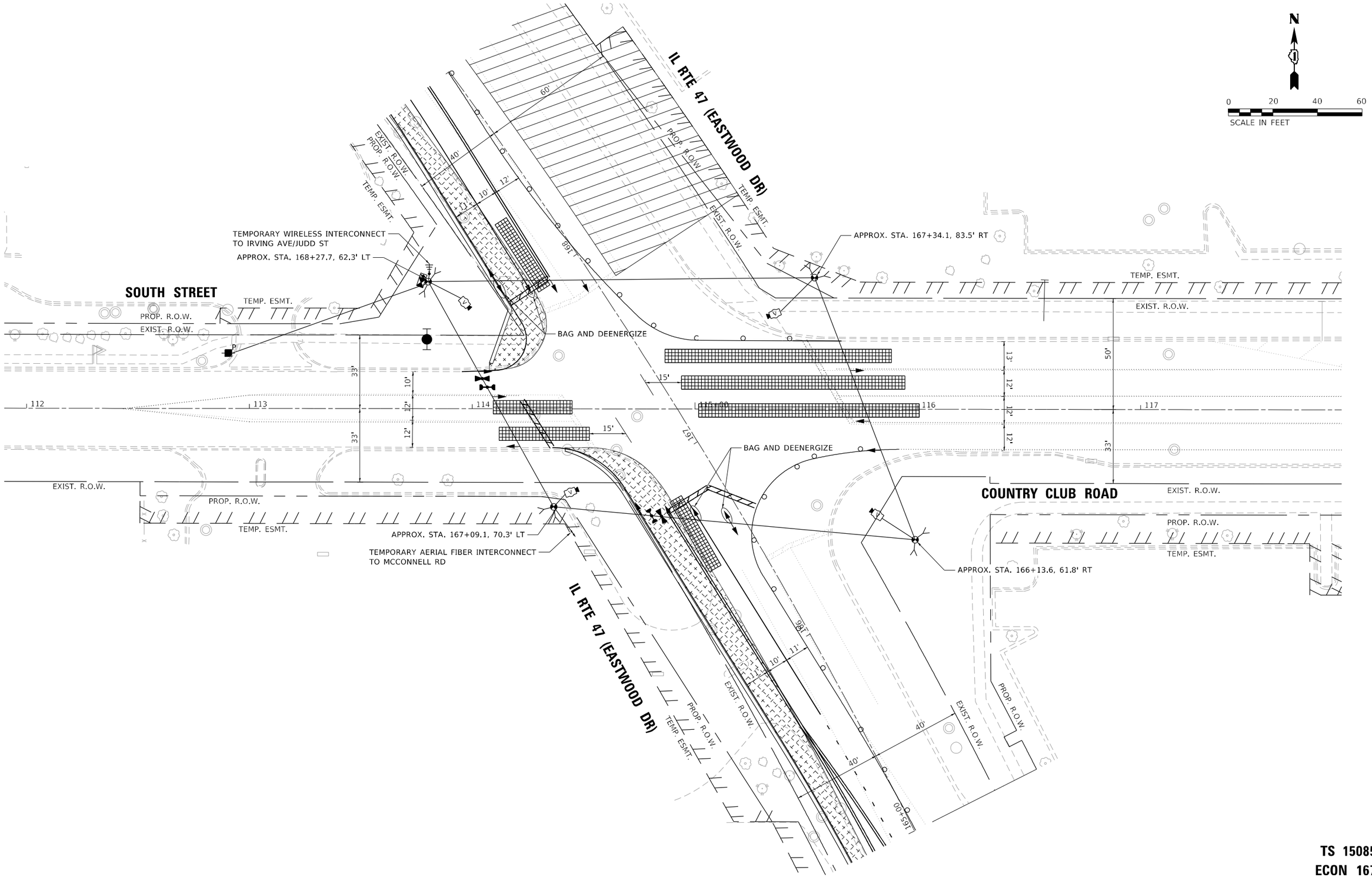
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – PRESTAGE B IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941	772
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT		



TS SHT NO. 38

TS 15085
ECON 167

MODEL: Default
FILE NAME: pw:\\aecom-us-pw.bentley.com:AECOM DST - NA 2020\Documents\60632011-IL-47\900-CAD\03_SHEETS\Traffic Signal\Il-47 Country Club Temp Stage 1A.dgn

ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

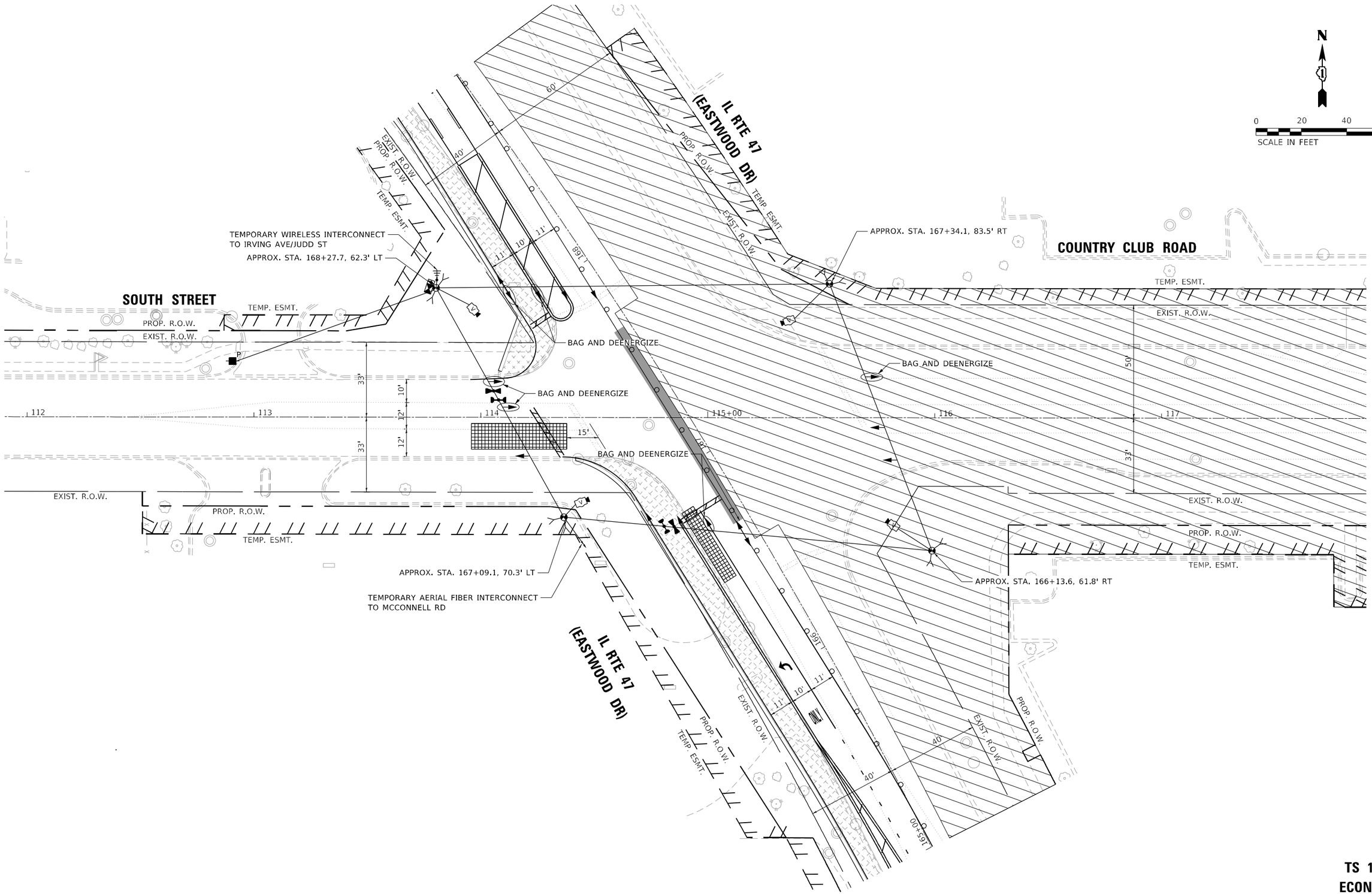
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1A
IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	773
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 39

TS 15085

ECON 167

MODEL: Default
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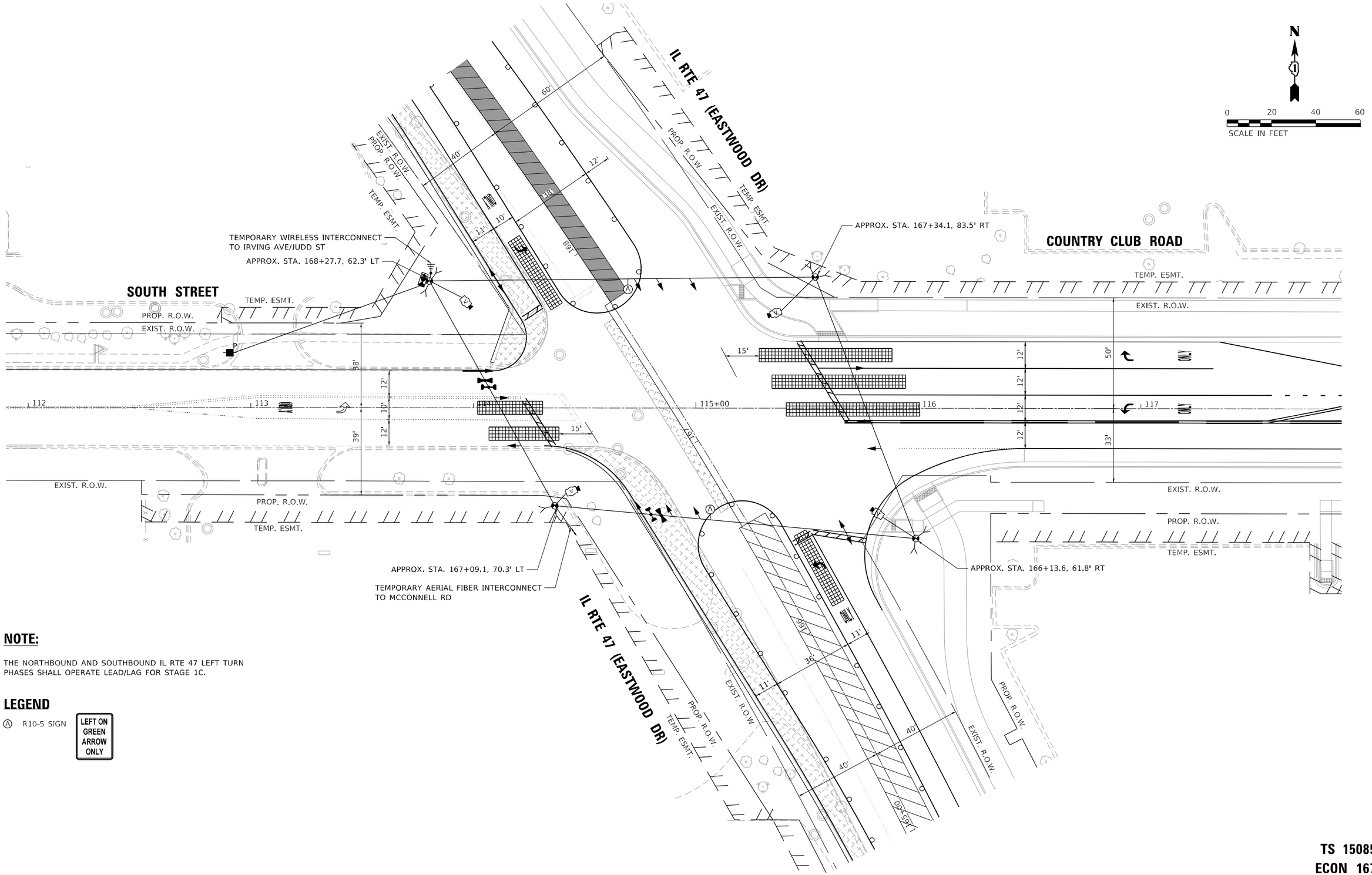
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1B IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 774
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	



NOTE:

THE NORTHBOUND AND SOUTHBOUND IL RTE 47 LEFT TURN PHASES SHALL OPERATE LEAD/LAG FOR STAGE 1C.

LEGEND

Ⓐ R10-5 SIGN

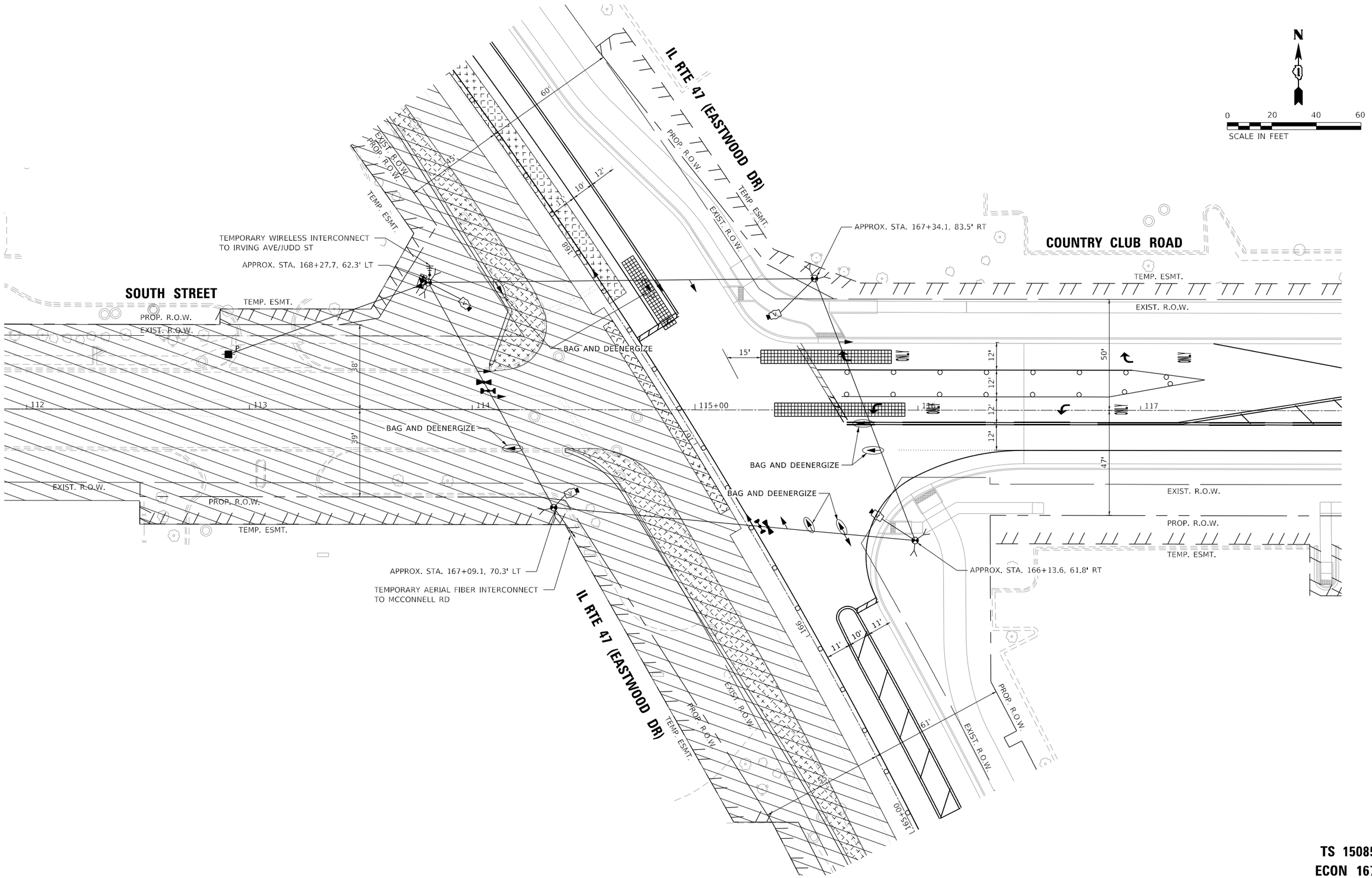
LEFT ON GREEN ARROW ONLY

TS 15085
ECON 167

TS SHT NO. 40

MODEL: Default
FILE NAME: pw:\\aecom-us-pw.bentley.com:AECOM DS2 - NA 2020\Documents\60632011-IL-47\900-CAD\03 CAD\03_SHEETS\Traffic Signals\Il-47_Country Club Temp Stage 1C.dgn

ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1C IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 775
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 41

TS 15085
ECON 167

MODEL: Default
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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

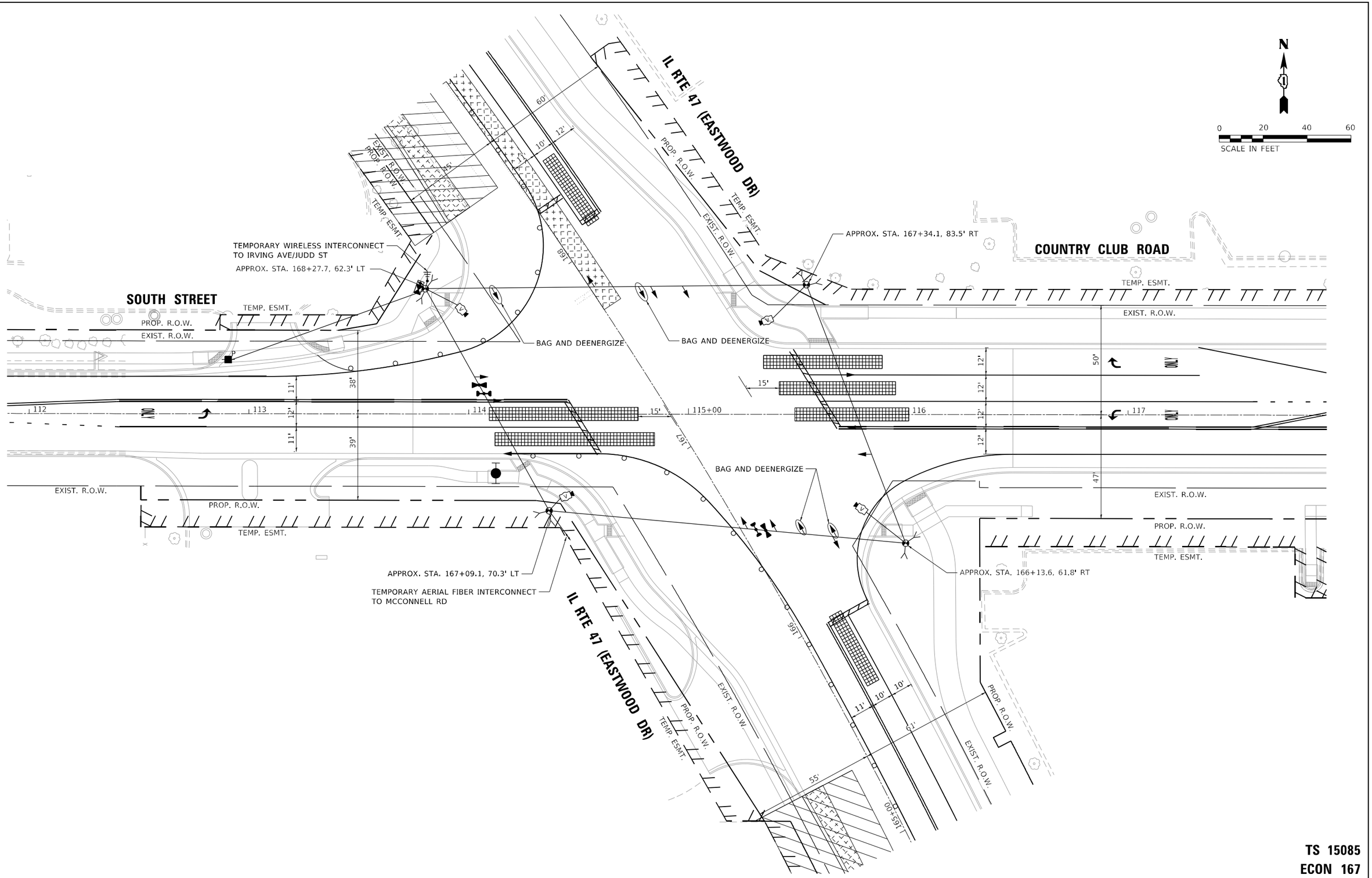
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 2A
IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	776

CONTRACT NO. 62X94

ILLINOIS | FED. AID PROJECT



TS SHT NO. 42

TS 15085
ECON 167

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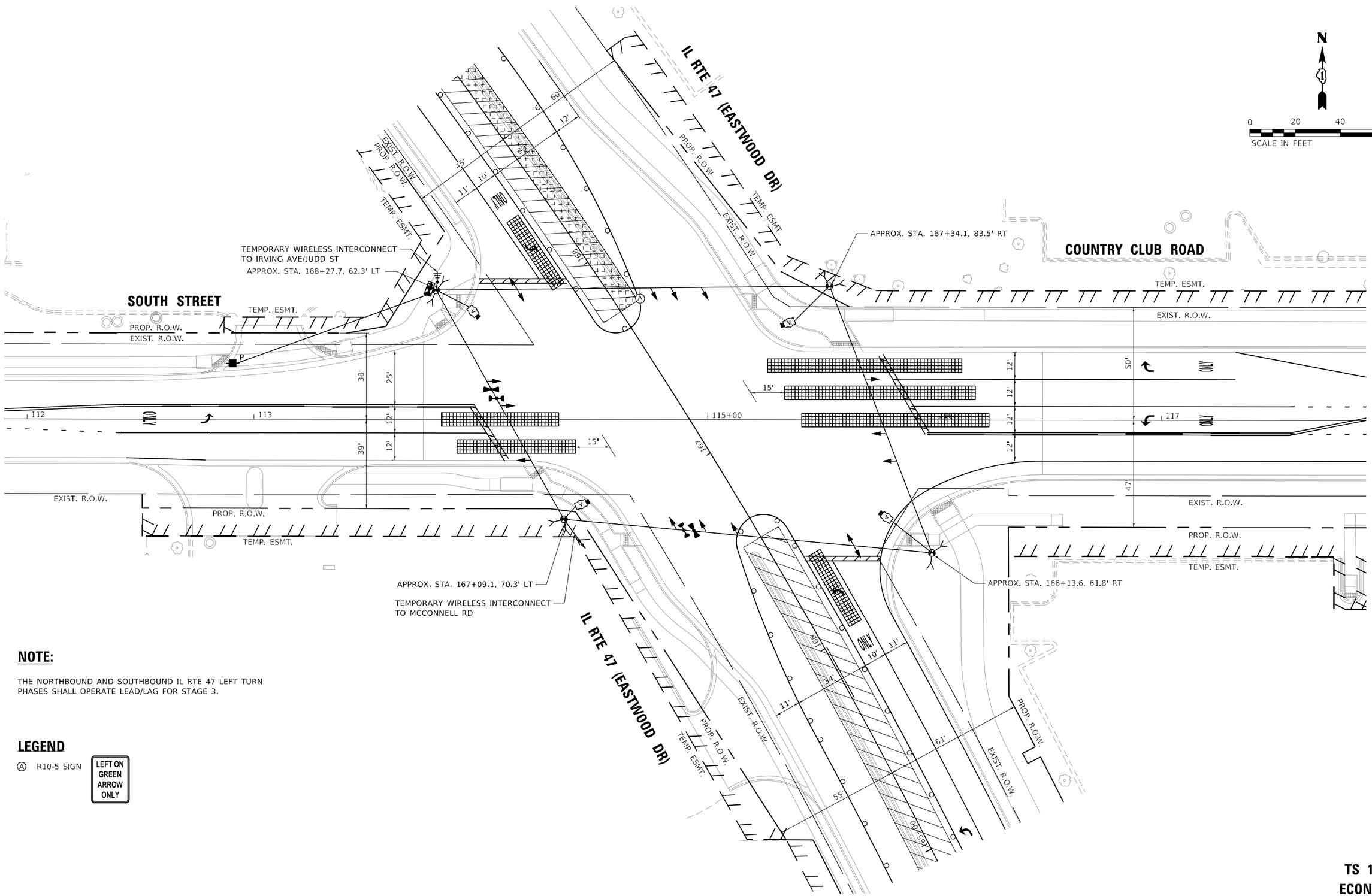
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 2B IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 777
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	



NOTE:

THE NORTHBOUND AND SOUTHBOUND IL RTE 47 LEFT TURN PHASES SHALL OPERATE LEAD/LAG FOR STAGE 3.

LEGEND

Ⓐ R10-5 SIGN — LEFT ON GREEN ARROW ONLY

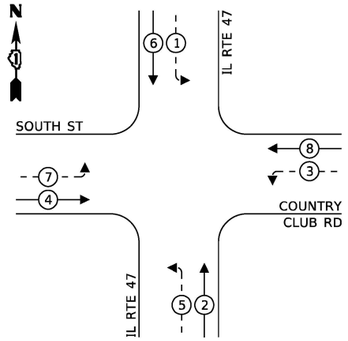
TS SHT NO. 43

TS 15085
ECON 167

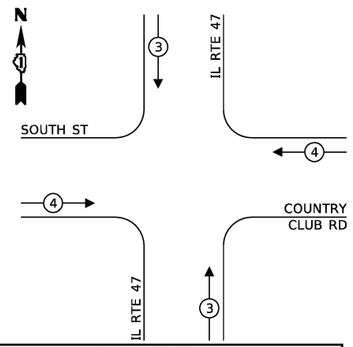
MODEL: Default
FILE NAME: pw:\\bcecom-pw.bentley.com:AECOM DS2 - NA 2020\Documents\60632011-IL-47-900-CAD\03 CAD\03 SHEETS\Traffic Signal\IL-47 Country Club Temp Stage 3.dgn

ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 3 IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NS	REVISED -						326	2024-1052-N,C,SW,FL.	MCHENRY	941	778
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -								CONTRACT NO. 62X94		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE:	SHEET OF SHEETS	STA.	TO STA.		ILLINOIS	FED. AID PROJECT		

TEMPORARY CONTROLLER SEQUENCE
(PRE STAGE A & B, STAGE 1A, & 2B)



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
(PRE STAGE A & B, STAGE 1A, & 2B)

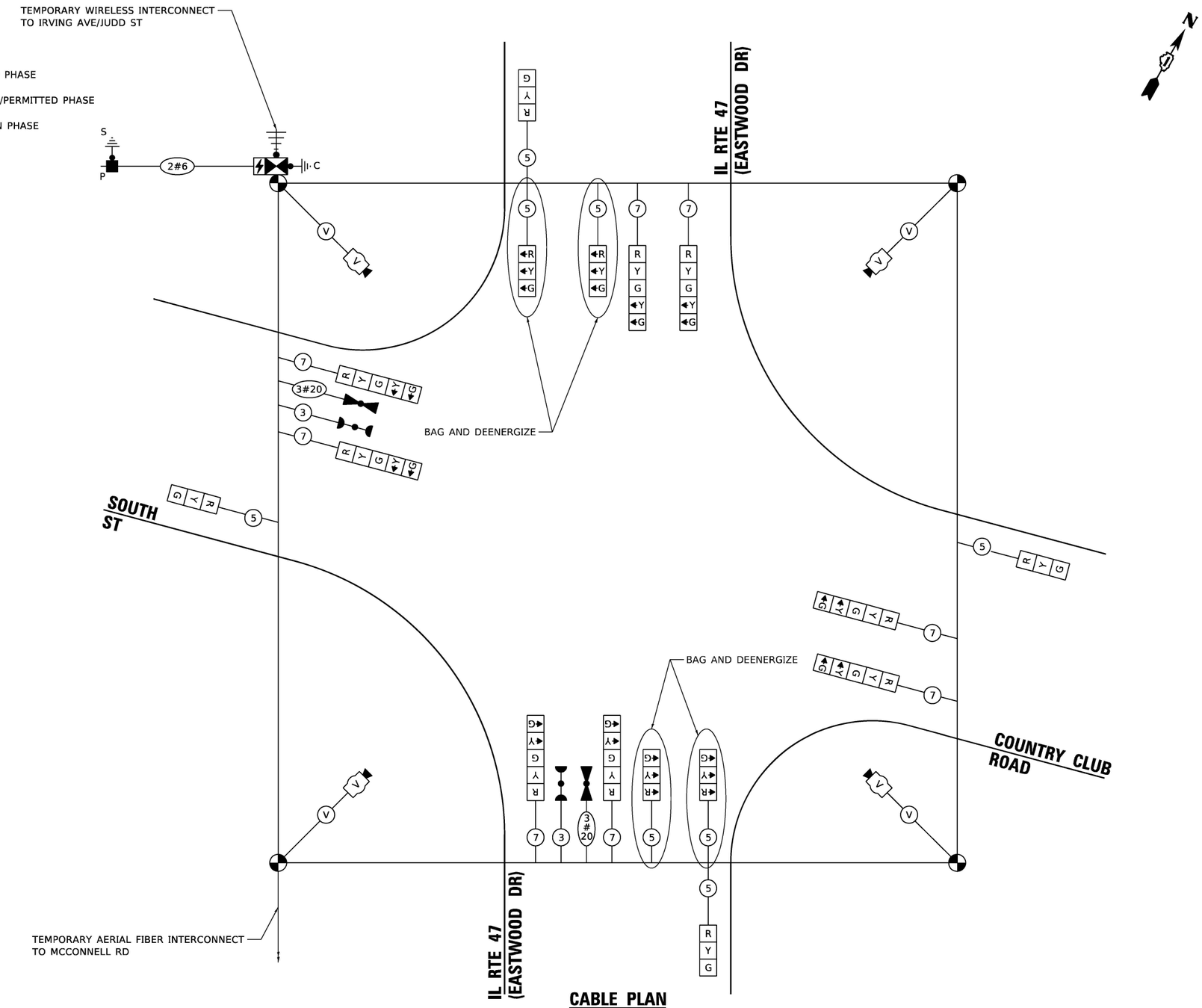


TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	4	11	44
4 - SECTION		14	
5 - SECTION	8	13	104
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			343
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			963

ENERGY COST TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: 72900-1800

LEGEND:

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



CABLE PLAN
(PRE STAGE A & B, STAGE 1A, & 2B)
(NOT TO SCALE)

TS SHT NO. 44

TS 15085
ECON 167

MODEL: Default
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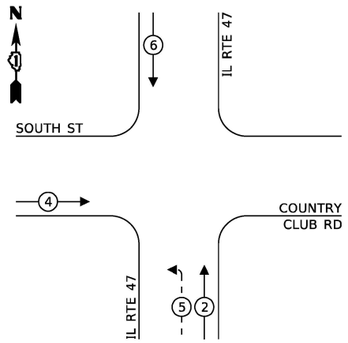
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	779
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

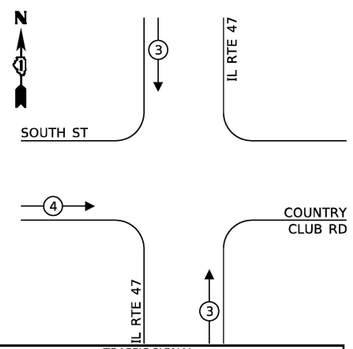
TEMPORARY CONTROLLER SEQUENCE (STAGE 1B)



LEGEND:

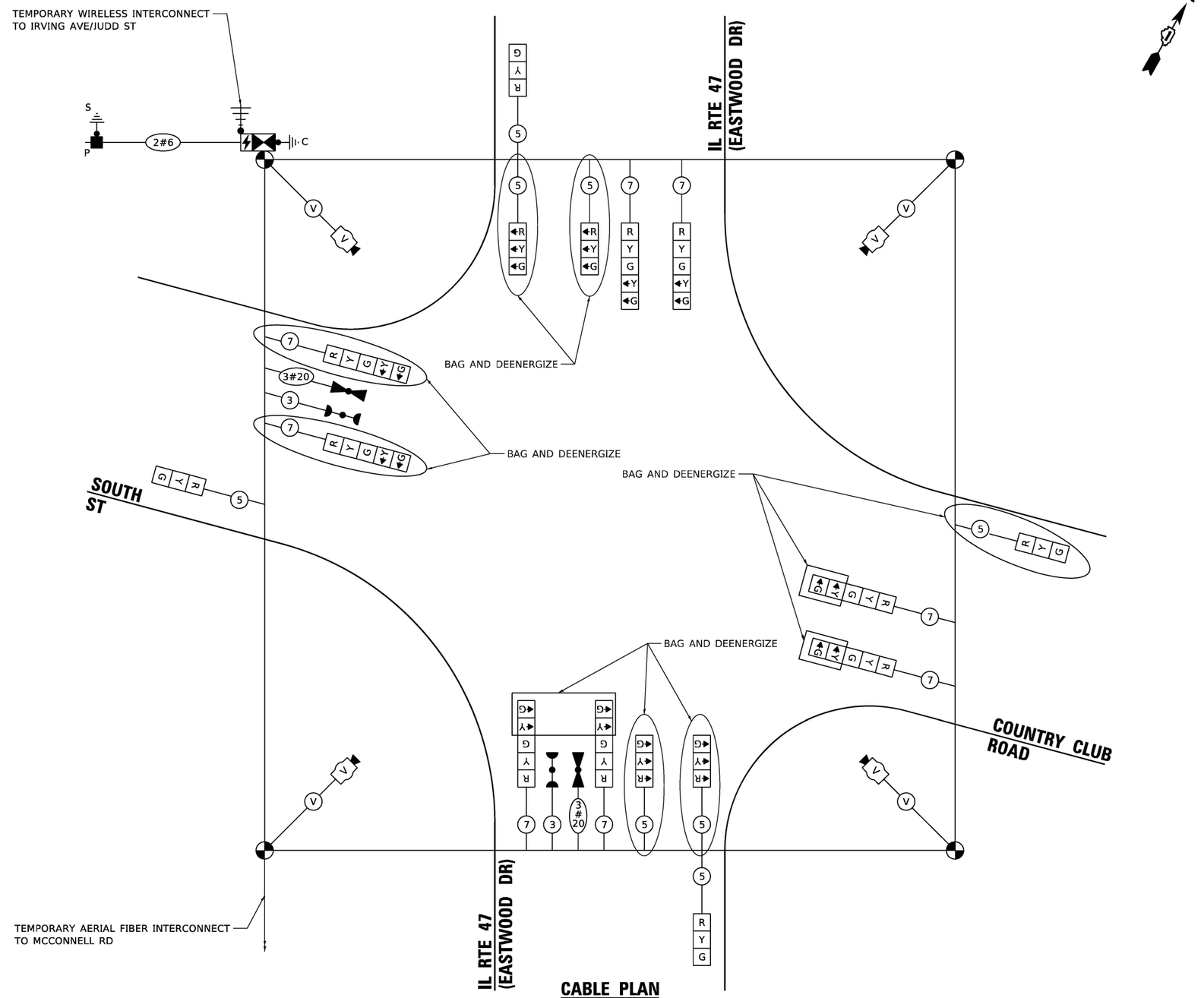
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 1B)



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	7	11	77
4 - SECTION		14	
5 - SECTION	2	13	26
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			298
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			918

ENERGY COST TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: 72900-1800



CABLE PLAN (STAGE 1B)

(NOT TO SCALE)

TS SHT NO. 45

TS 15085
ECON 167

MODEL: Default
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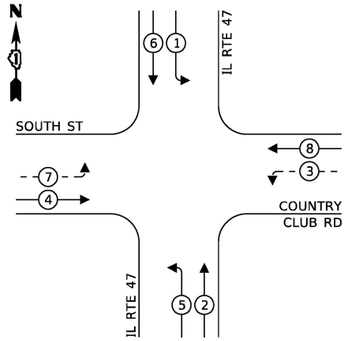
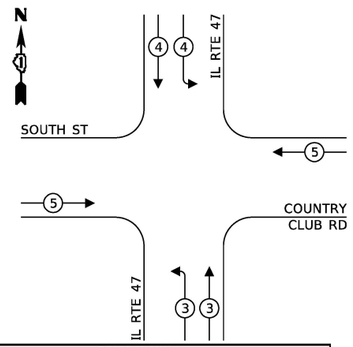
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	780
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

TEMPORARY CONTROLLER SEQUENCE (STAGE 1C & 3)

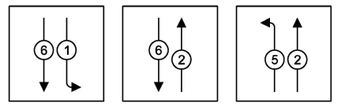


TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 1C & 3)



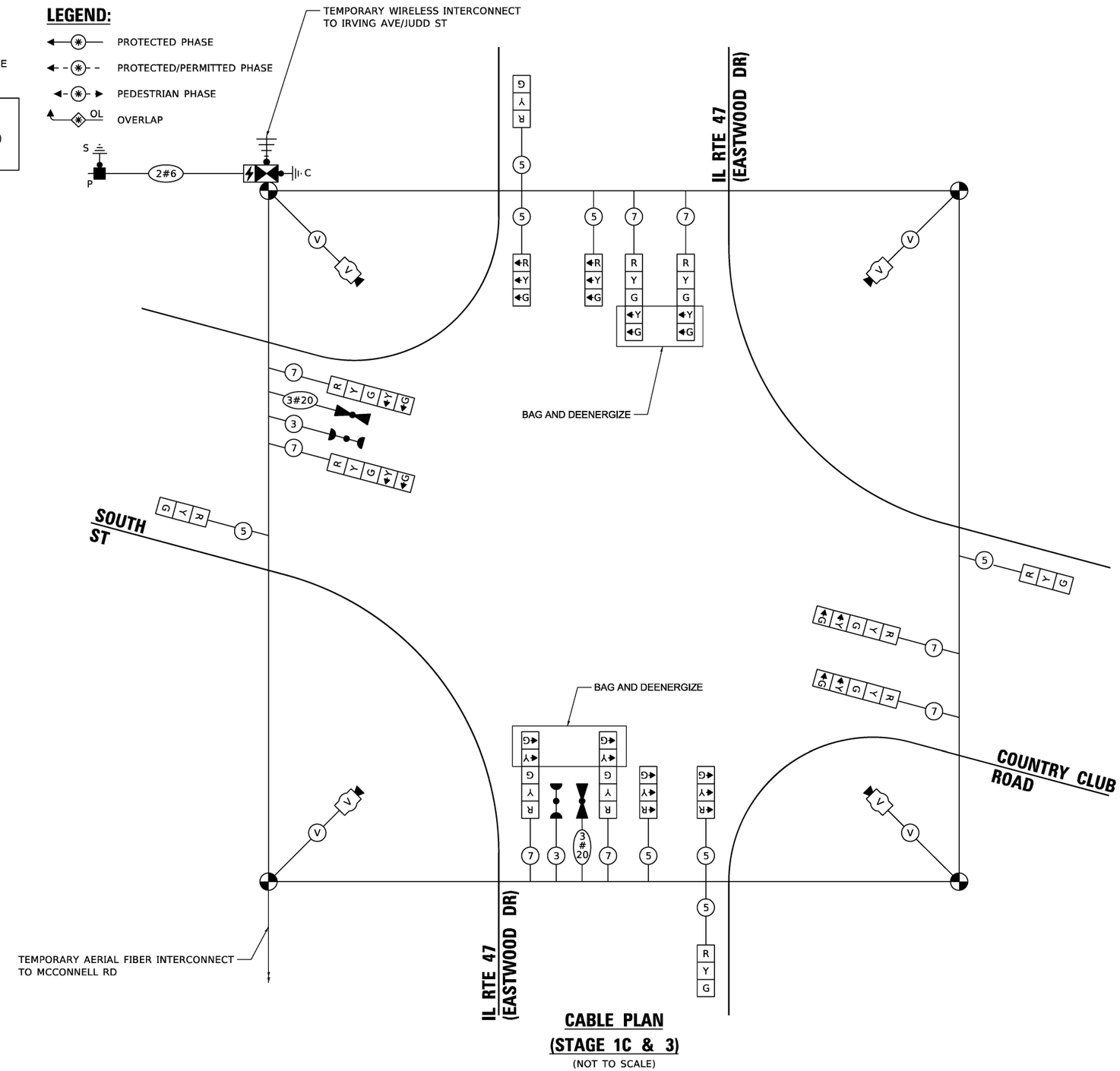
PHASE DESIGNATION DIAGRAM:

FOR PHASES 1, 2, 5, & 6 IN THE PHASE DESIGNATION DIAGRAM SHOWN TO THE LEFT, THE FOLLOWING PHASE SEQUENCE SHALL BE FOLLOWED:



LEGEND:

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



CABLE PLAN (STAGE 1C & 3)

(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	12	11	132
4 - SECTION		14	
5 - SECTION	4	13	52
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			379
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			999

ENERGY COST TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON

TS 15085
ECON 167

TS SHT NO. 46

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM DS21 - NA 2020\Documents\60632011-IL-47\900-CAD\910 CAD\03 SHEETS\Traffic Signal\IL-47 Country Club temp-cabe-4.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

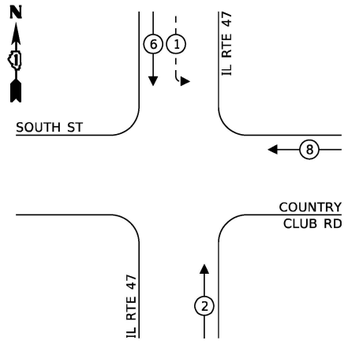
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	781
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

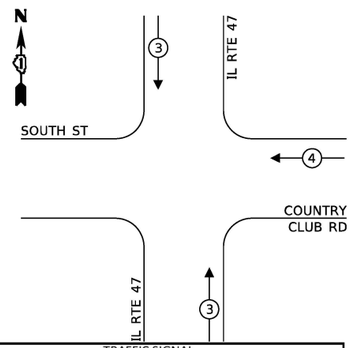
TEMPORARY CONTROLLER SEQUENCE (STAGE 2A)



LEGEND:

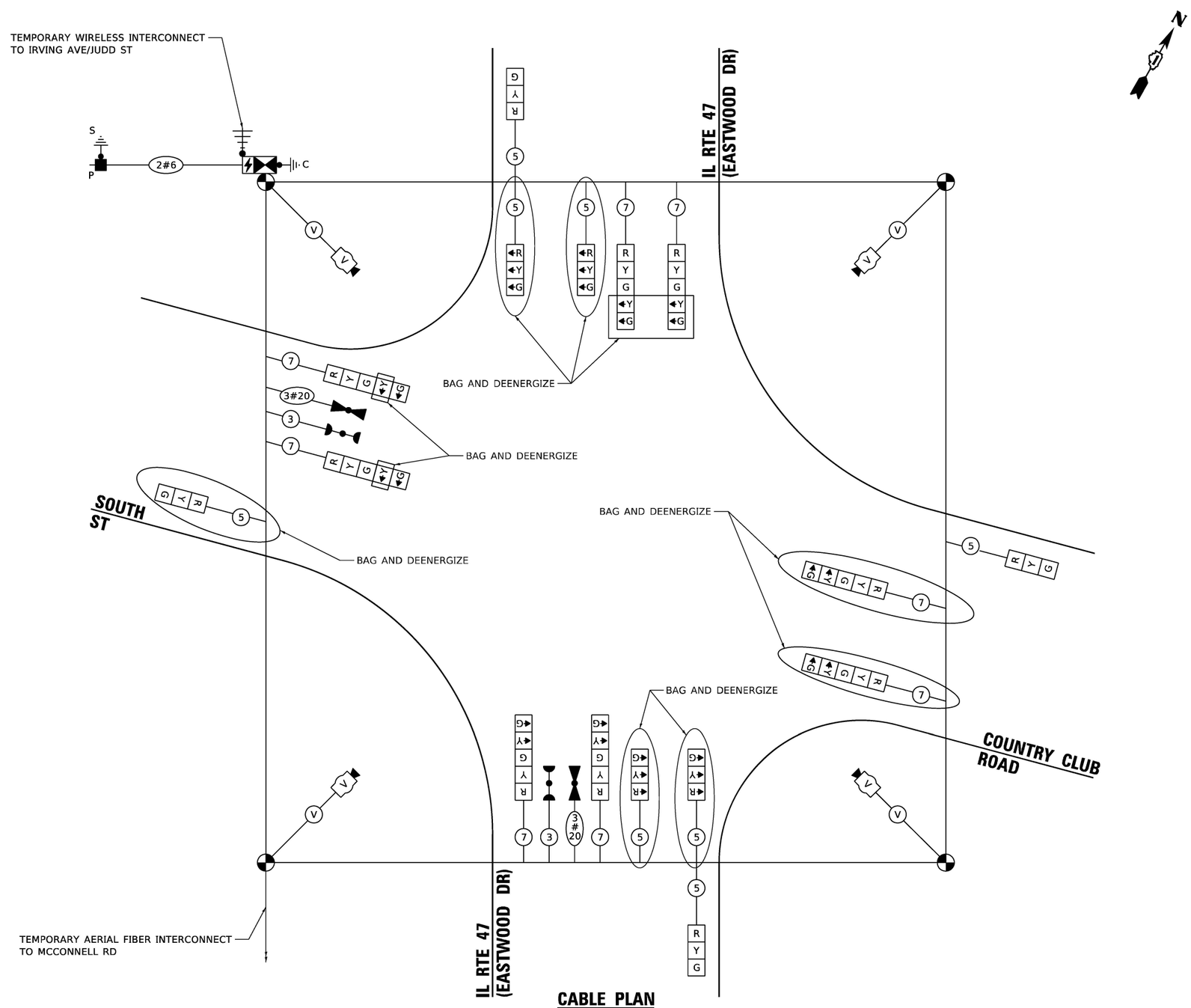
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 2A)



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	5	11	55
4 - SECTION		14	
5 - SECTION	4	13	52
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			302
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			922

ENERGY COST TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: 72900-1800



CABLE PLAN (STAGE 2A)

(NOT TO SCALE)

TS SHT NO. 47

TS 15085
ECON 167

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM DS21 NA 2020\Documents\60632011-IL-47\900-CAD\910 CAD\03 SHEETS\Traffic Signal\IL-47 Country Club temp-cable-3.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

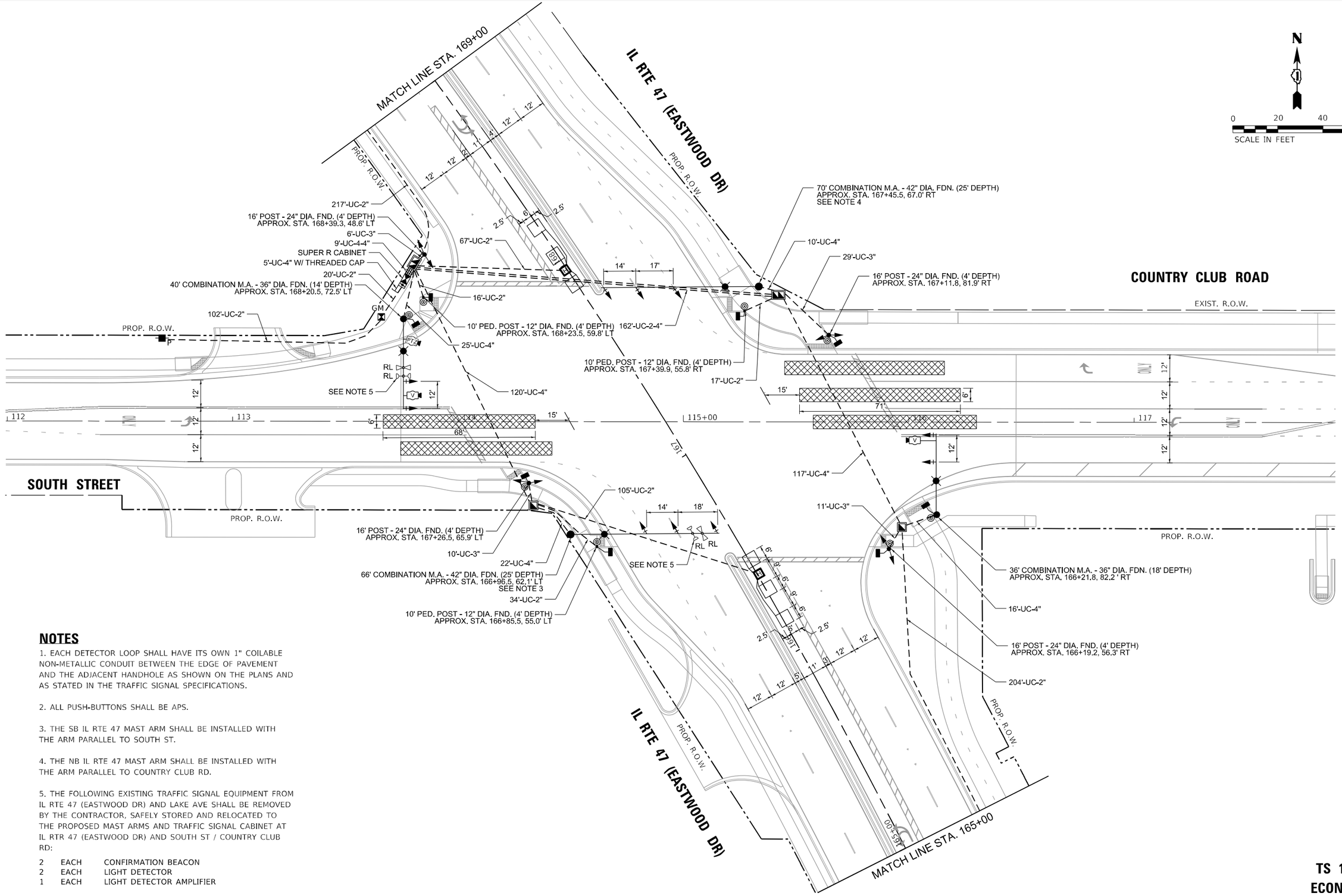
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	782
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	



NOTES

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

2. ALL PUSH-BUTTONS SHALL BE APS.

3. THE SB IL RTE 47 MAST ARM SHALL BE INSTALLED WITH THE ARM PARALLEL TO SOUTH ST.

4. THE NB IL RTE 47 MAST ARM SHALL BE INSTALLED WITH THE ARM PARALLEL TO COUNTRY CLUB RD.

5. THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT FROM IL RTE 47 (EASTWOOD DR) AND LAKE AVE SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CABINET AT IL RTR 47 (EASTWOOD DR) AND SOUTH ST / COUNTRY CLUB RD:

2	EACH	CONFIRMATION BEACON
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

TS SHT NO. 48

TS 15085
ECON 167

MODEL: Default
FILE NAME: pw:\\pbecom-ia-pw.bentley.com:AECOM_DS2_NA_2020\Documents\60613011-IL-47-900-CAD\03_CAD\03_SHEETS\Traffic Signal\IL-47_Country Club_signal.dgn

ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

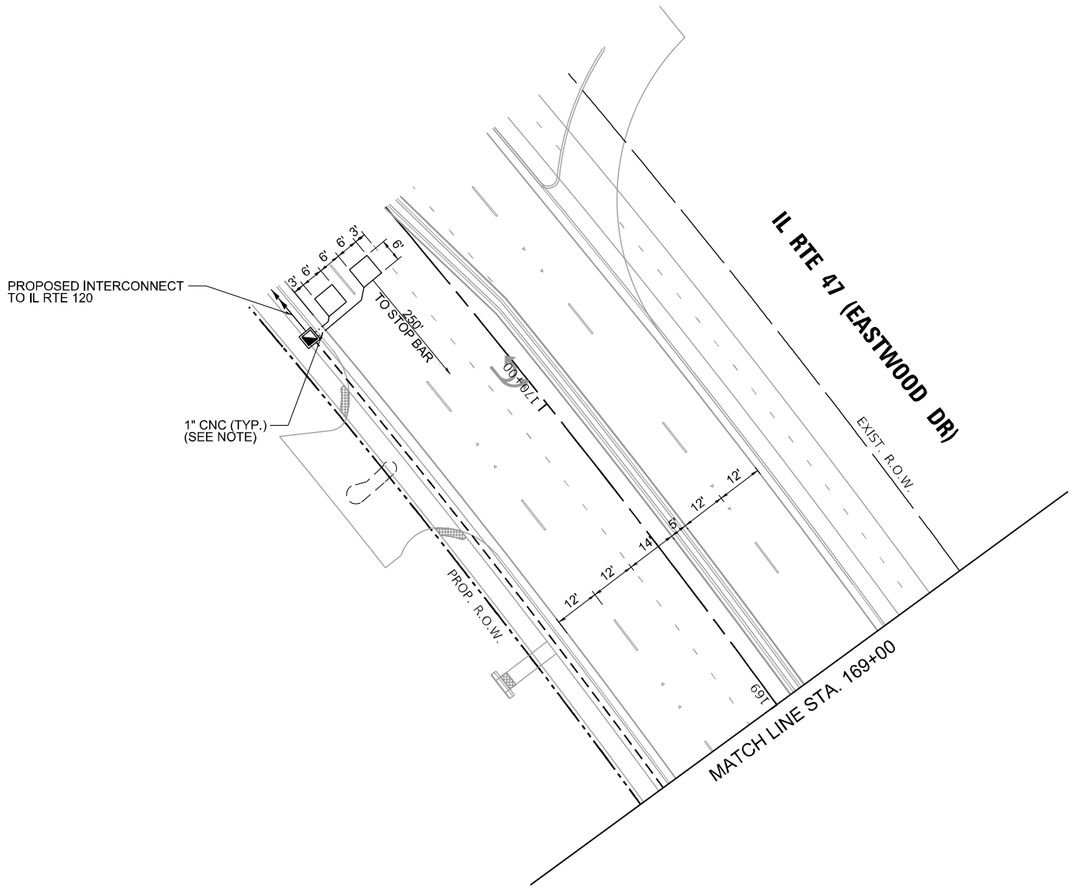
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

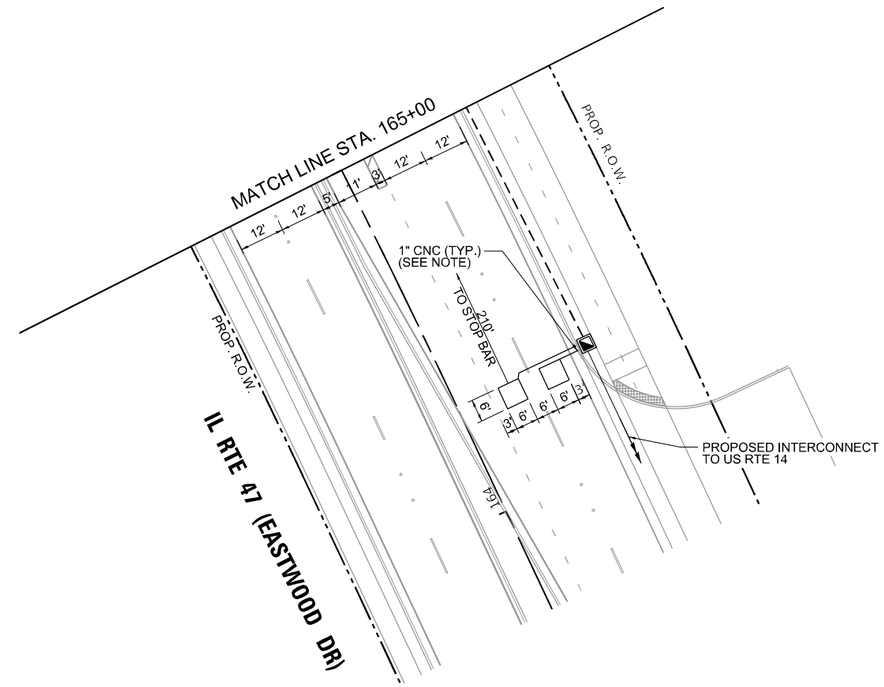
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD
(SHEET 1 OF 2)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	783
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		





N

0 20 40 60

SCALE IN FEET

NOTES

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

TS SHT NO. 49

TS 15085

ECON 167

MODEL: Default
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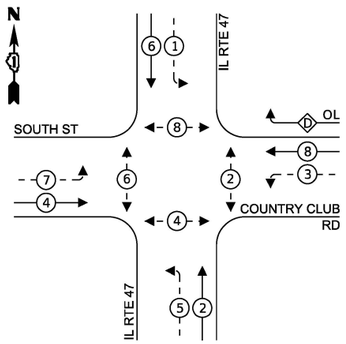
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD (SHEET 2 OF 2)
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	784
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

PROPOSED CONTROLLER SEQUENCE



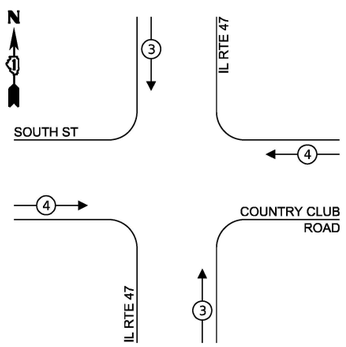
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



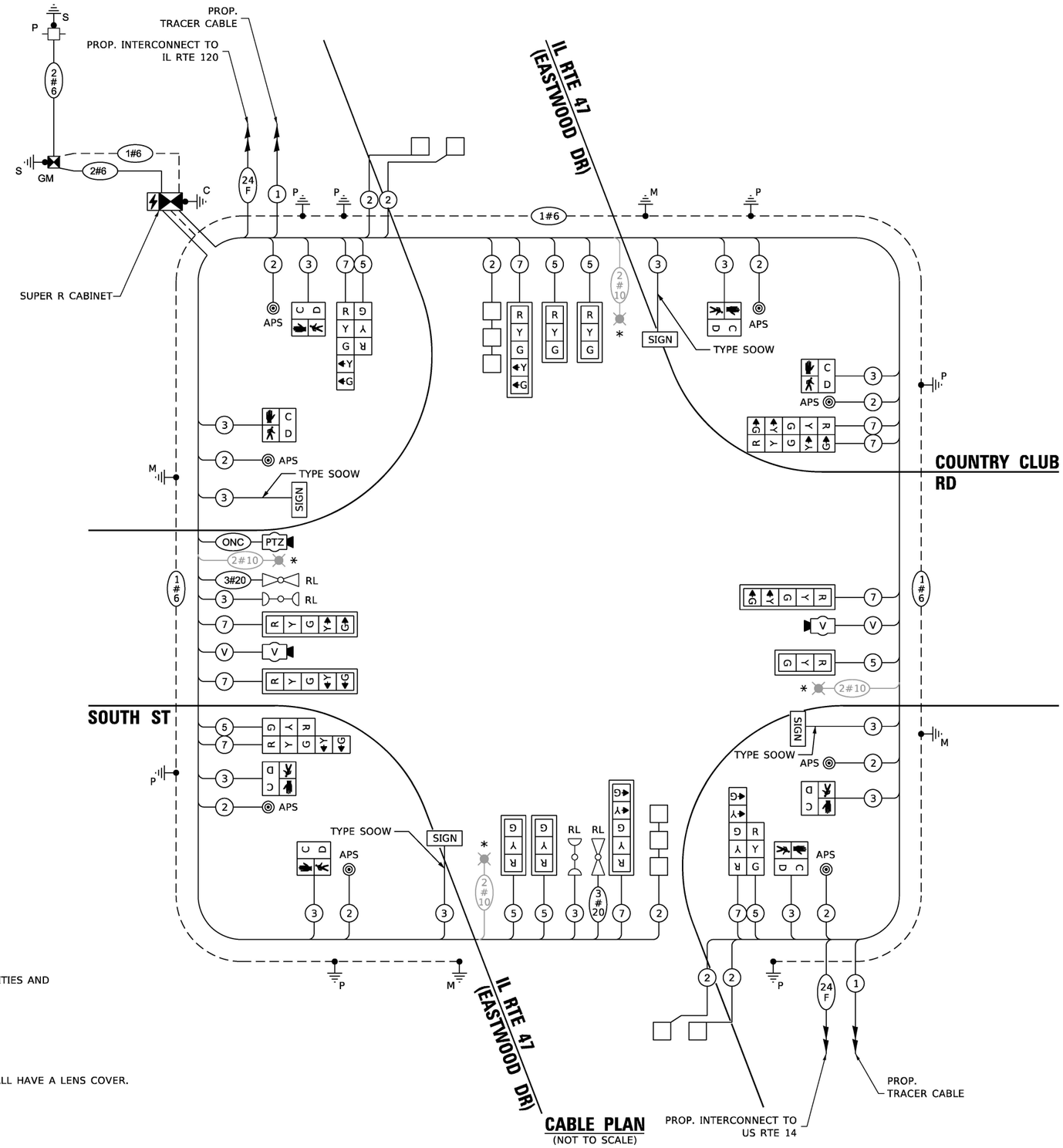
TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	8	11	88
4 - SECTION		14	
5 - SECTION	10	13	130
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			533
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	1	15	15
LED STREET NAME SIGN	4	120	480
LUMINAIRE	4	240	960
TOTAL SERVICE WIRE SIZING			2593

ENERGY COST TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: 72900-1800

* SEE LIGHTING PLANS FOR QUANTITIES AND FURTHER DETAIL.

NOTE:

1. ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER.



CABLE PLAN
(NOT TO SCALE)

TS SHT NO. 50

TS 15085
ECON 167

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM DS21 - NA 2020\Documents\60632011-IL-47\900-CAD\910 CAD\03 SHEETS\Traffic Signals\IL-47 Country Club cable.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 47 (EASTWOOD DR) AND SOUTH ST /COUNTRY CLUB RD

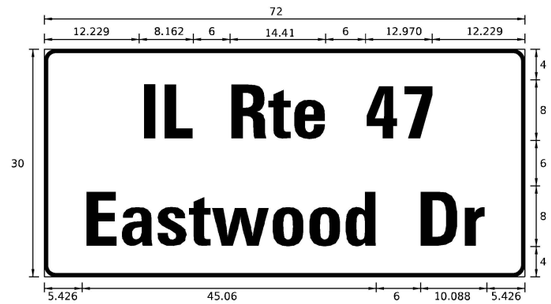
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	785

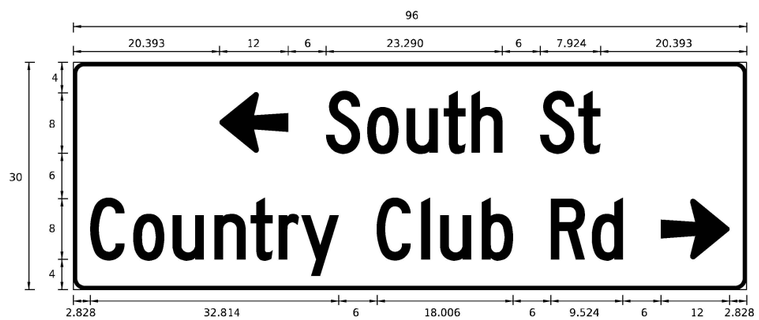
CONTRACT NO. 62X94
ILLINOIS FED. AID PROJECT

LED INTERNALLY ILLUMINATED STREET NAME SIGN

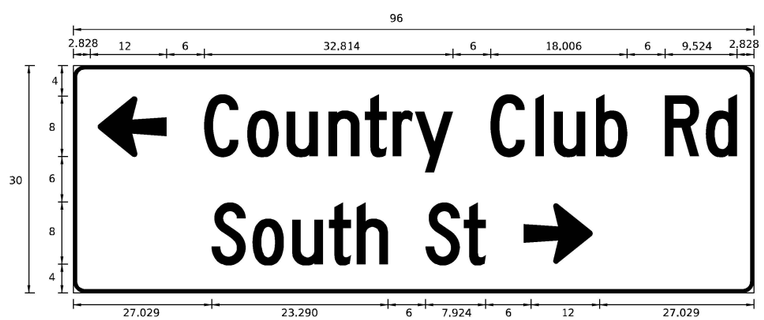
ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	15	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
C	20	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
C	20	2	ZZ	1

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	680
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	56
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	675
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
PAINT NEW TRAFFIC SIGNAL POST	EACH	4
PAINT NEW COMBINATION MAST ARM AND POLE, UNDER 40 FOOT	EACH	1
PAINT NEW COMBINATION MAST ARM AND POLE, 40 FOOT AND OVER	EACH	3
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1489
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1905
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1890
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1742
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1689
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	143
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1384
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 66 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 70 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	14
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	50
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	207
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	357
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	92
FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	6
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
LAYER II (DATALINK) SWITCH	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	900
PAINT NEW PEDESTRIAN PUSH-BUTTON POST	EACH	3
UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	18
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

TS 15085

ECON 167

TS SHT NO. 51

MODEL: Default
FILE NAME: pw:\\becom-na-pw.bentley.com:AECOM DS21 NA 2020\Documents\60632011-IL-47\900-CAD\910 CAD\03 SHEETS\Traffic Signal\IL-47 Country Club sos-sign.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

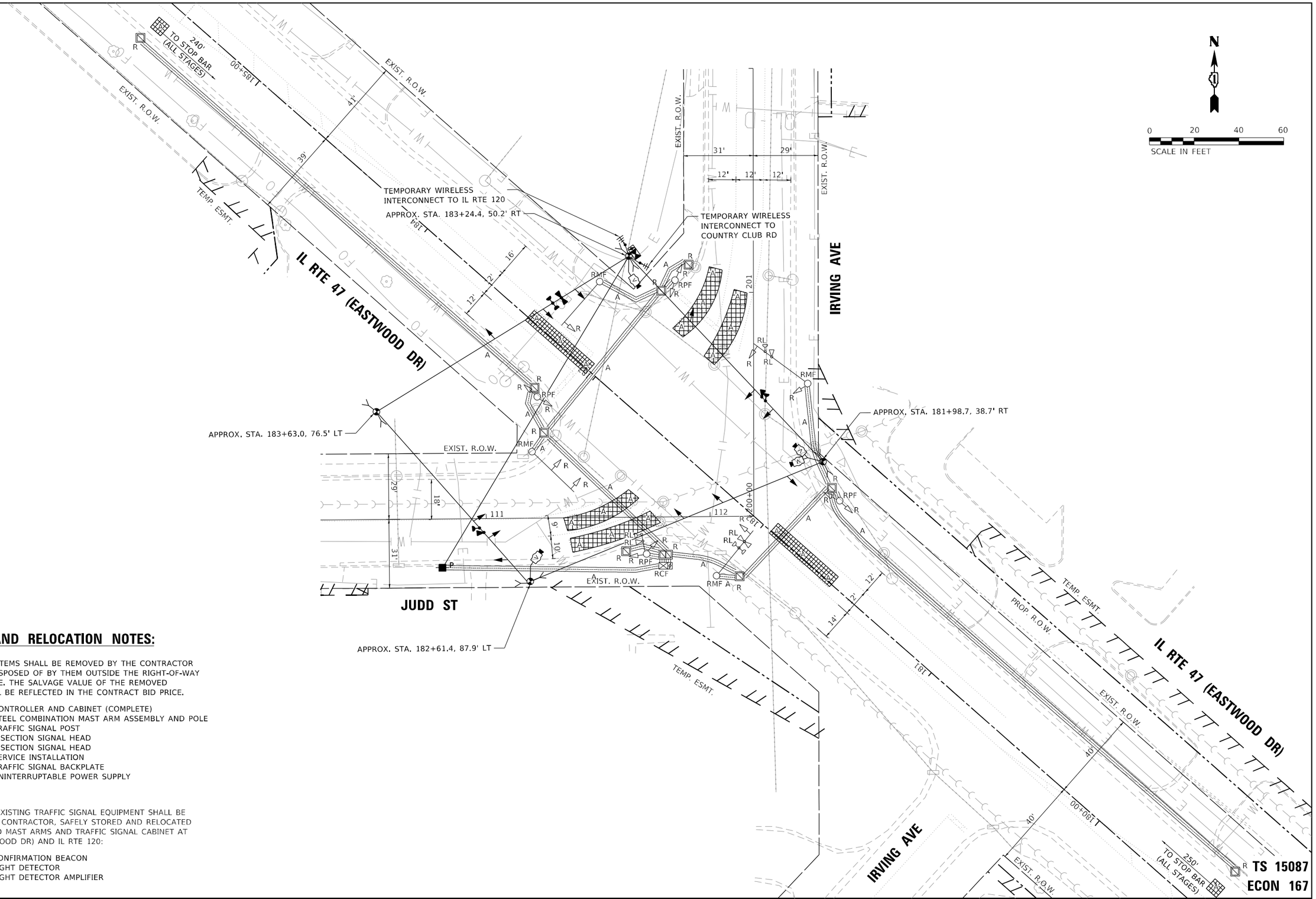
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 3/13/2025	DATE - 03/07/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
ILLINOIS 47 AND SOUTH ST /COUNTRY CLUB RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	786
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER AND CABINET (COMPLETE)
4	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
4	EACH	TRAFFIC SIGNAL POST
8	EACH	3-SECTION SIGNAL HEAD
6	EACH	5-SECTION SIGNAL HEAD
1	EACH	SERVICE INSTALLATION
5	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CABINET AT IL RTR 47 (EASTWOOD DR) AND IL RTE 120:

3	EACH	CONFIRMATION BEACON
3	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

TS SHT NO. 52

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

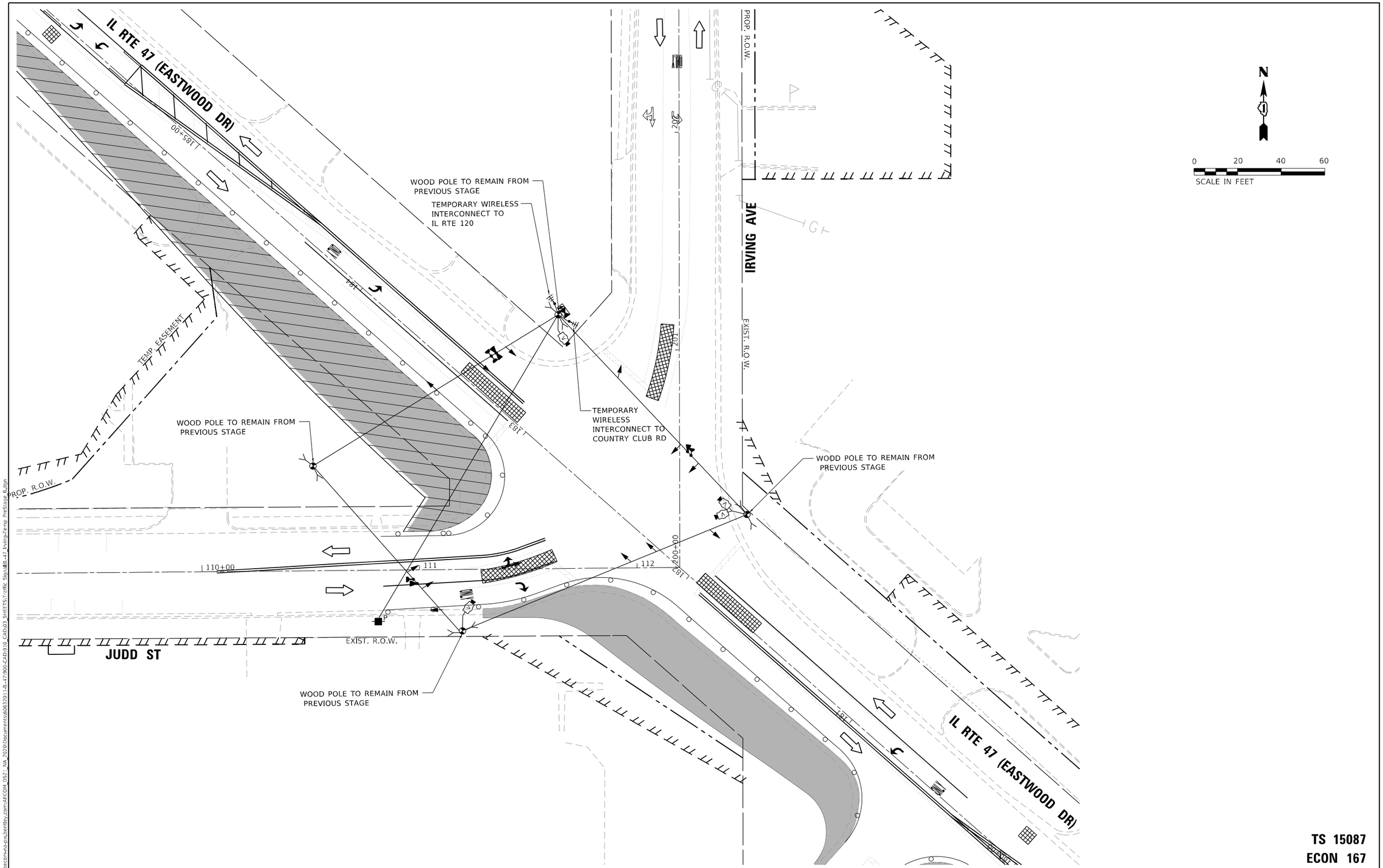
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL RTE 47 (EASTWOOD DR) AND IRVING AVE /JUDD ST

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	787
		CONTRACT NO. 62X94		
	ILLINOIS	FED. AID PROJECT		



TS SHT NO. 53

TS 15087
ECON 167

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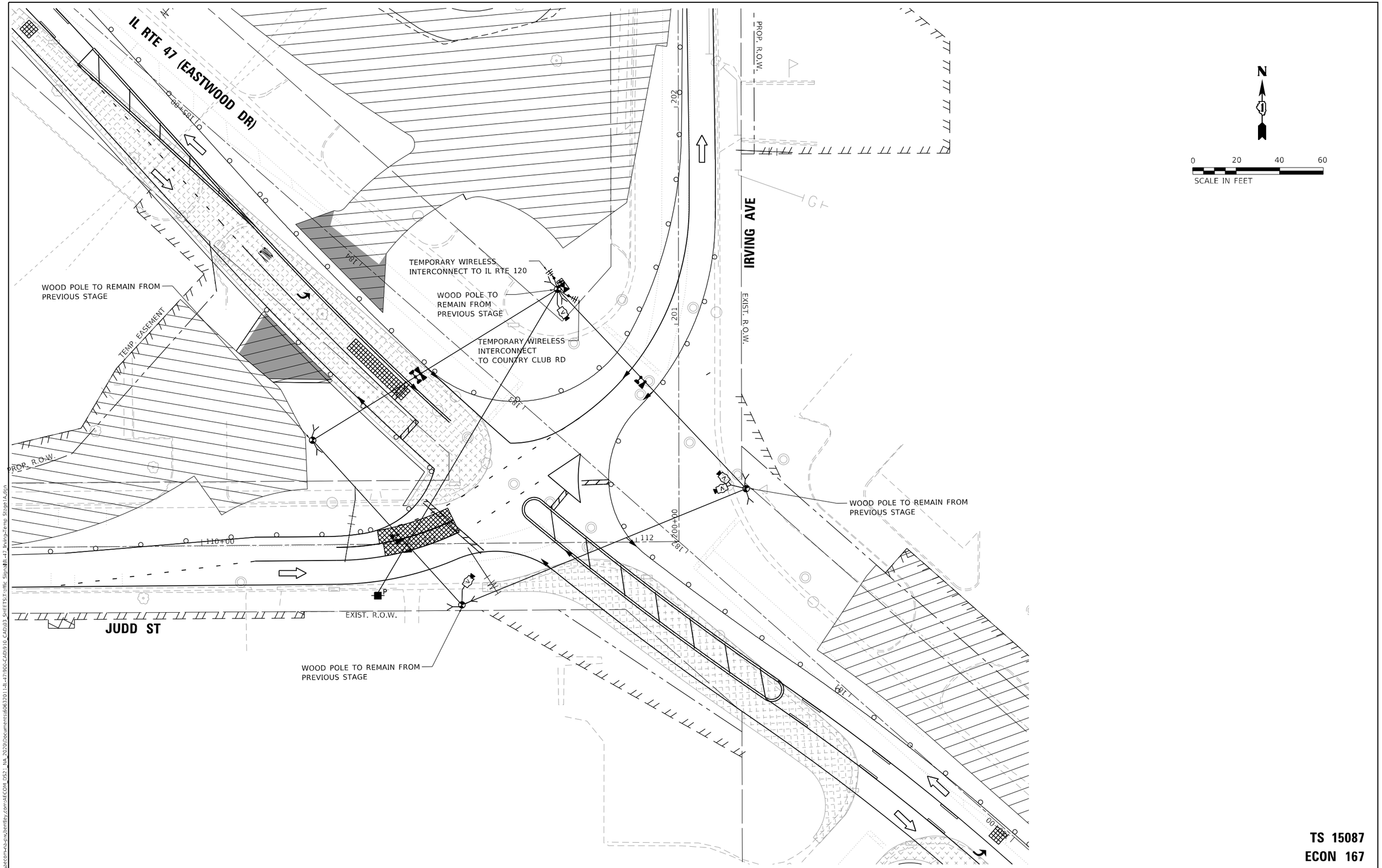
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – PRESTAGE B IL RTE 47 (EASTWOOD DR) AND IRVING AVE /JUDD ST	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 788
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 54

TS 15087
ECON 167

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

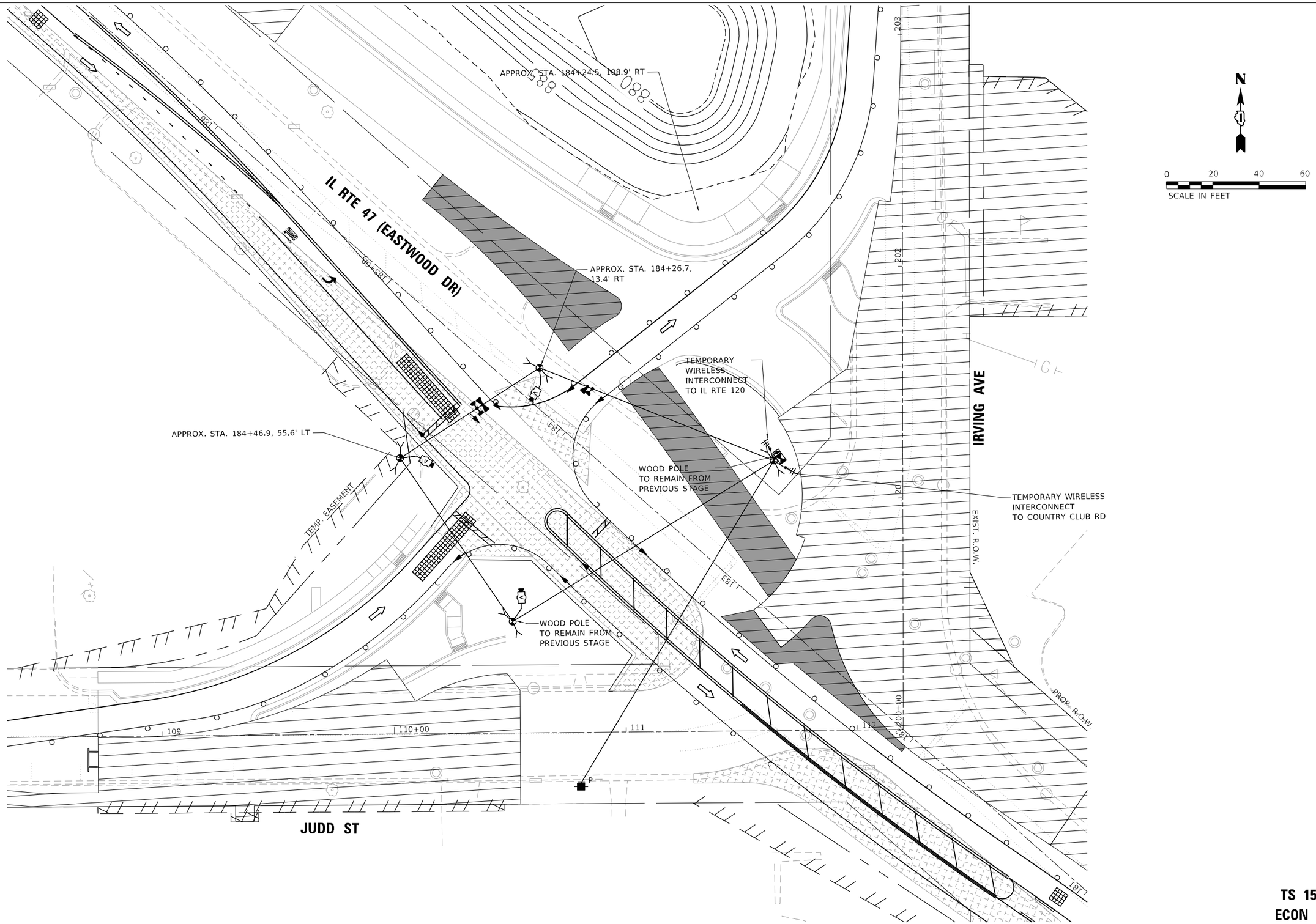
USER NAME = nsalehian	DESIGNED - NS	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1A
IL RTE 47 (EASTWOOD DR) AND IRVING AVE /JUDD ST

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	789
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



TS SHT NO. 55

TS 15087
ECON 167

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

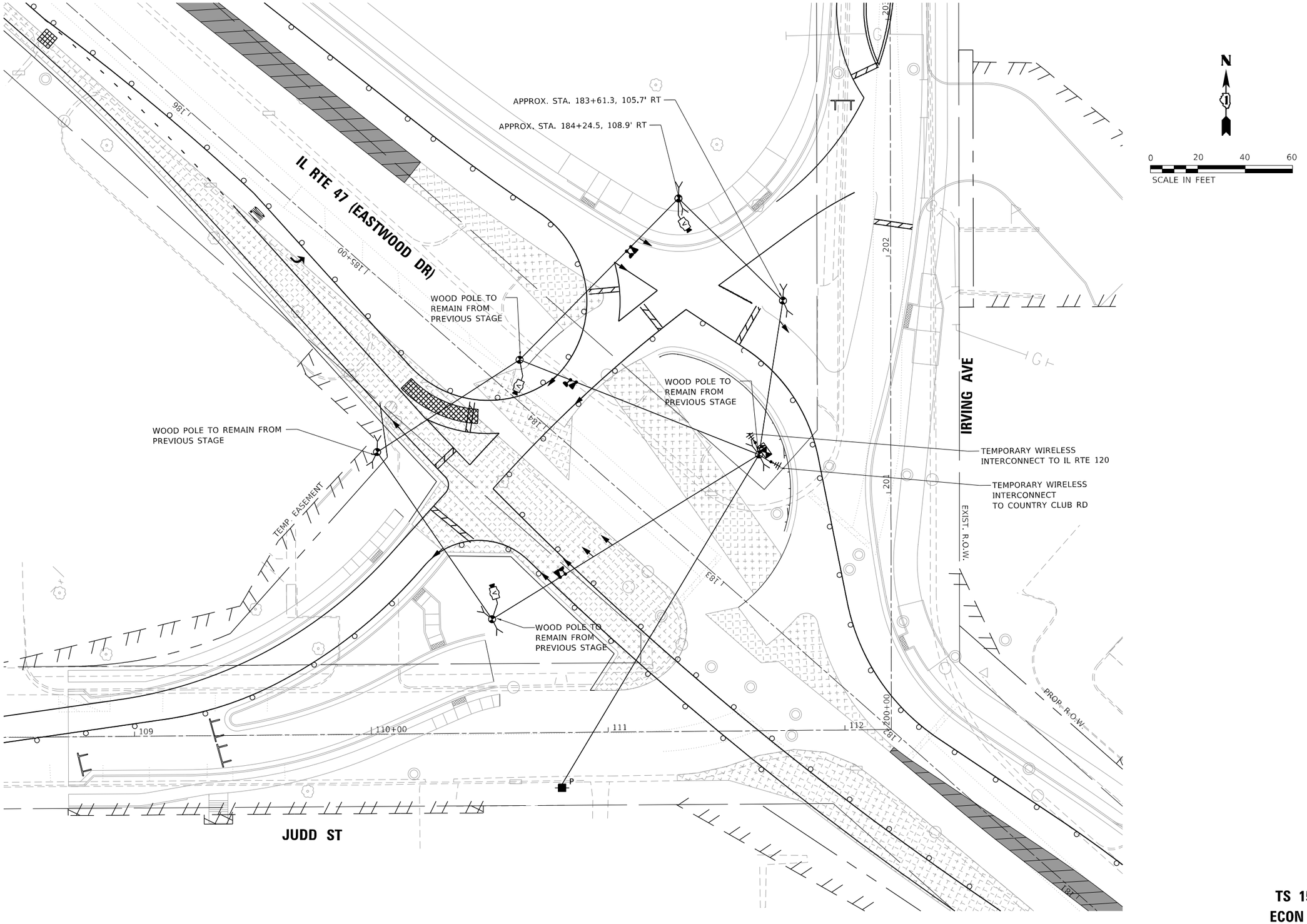
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1B
IL RTE 47 (EASTWOOD DR) AND IRVING AVE /JUDD ST

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	790
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



TS SHT NO. 56

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ECON 167

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

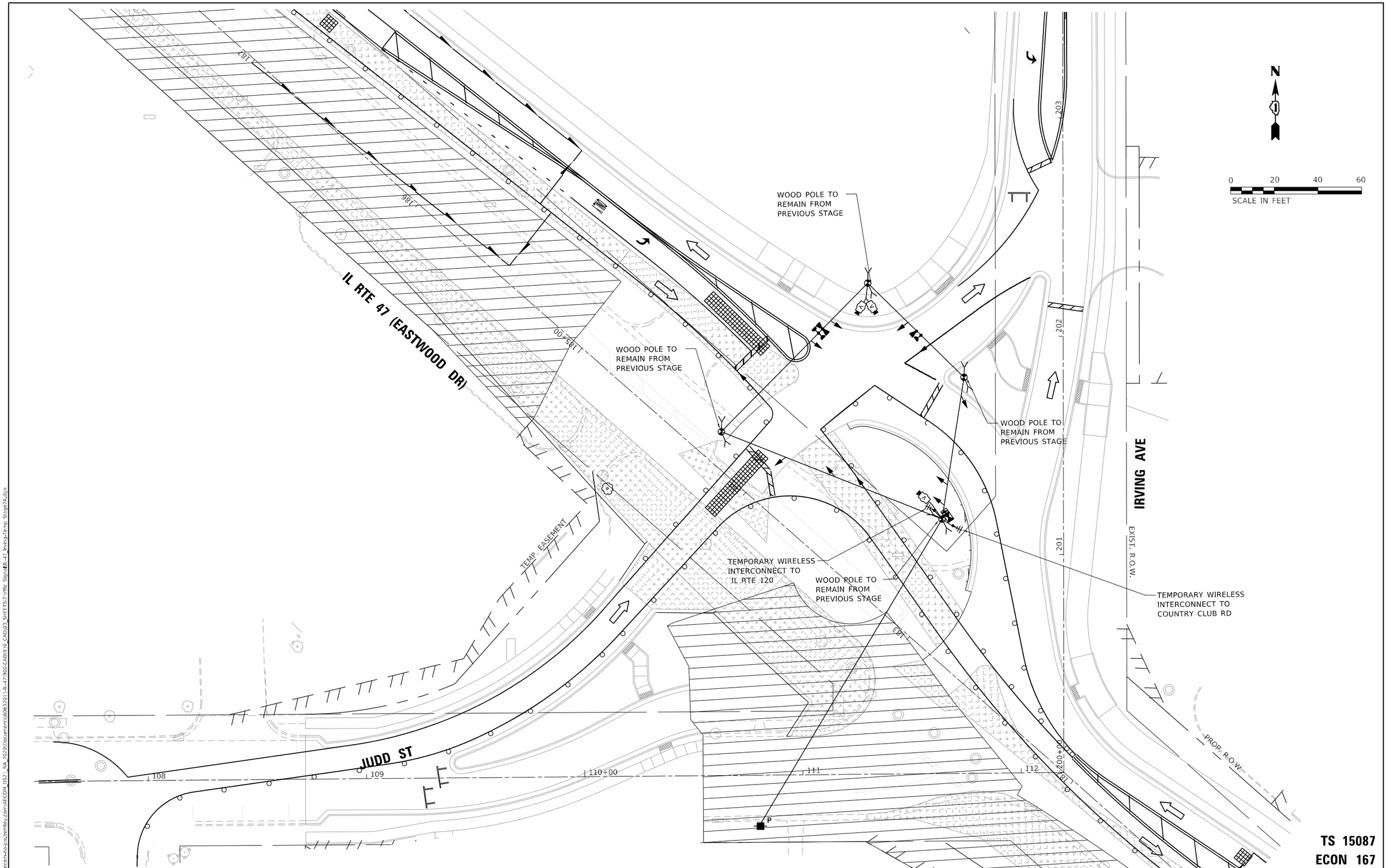
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 1C
IL RTE 47 (EASTWOOD DR) AND IRVING AVE /JUDD ST

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	791

CONTRACT NO. 62X94

ILLINOIS | FED. AID PROJECT



TS SHT NO. 57

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

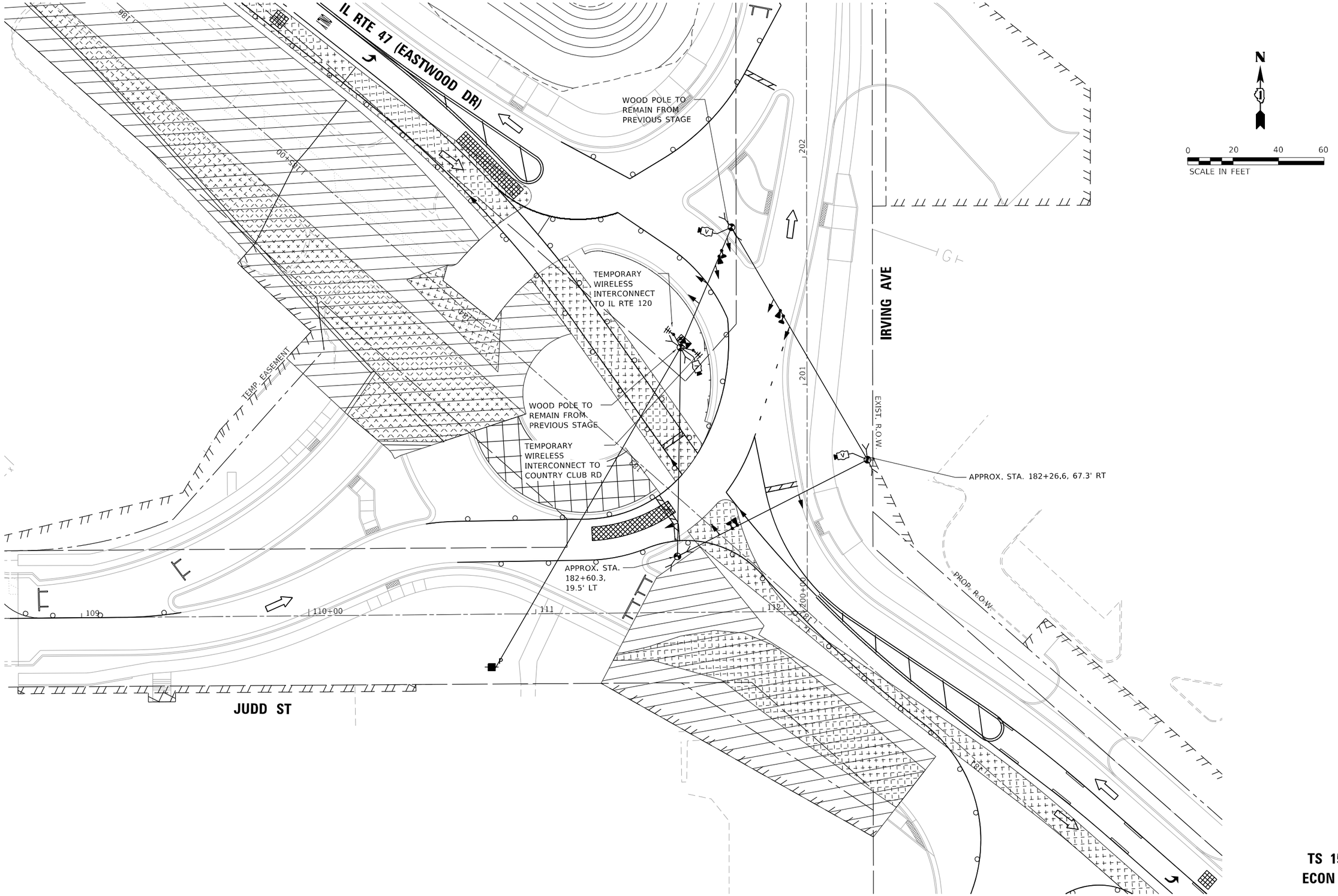
USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 2A
IL RTE 47 (EASTWOOD DR) AND IRVING AVE /JUDD ST

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	792
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



TS SHT NO. 58

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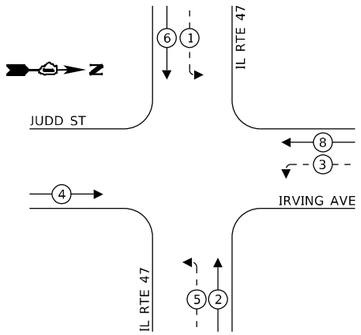
ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN – STAGE 2B IL RTE 47 (EASTWOOD DR) AND IRVING AVE /JUDD ST	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - NS	REVISED -			326	2024-1052-N,C,SW,FL.	MCHENRY	941 / 793
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -					CONTRACT NO. 62X94	
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: 1'=20" SHEET OF SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT	

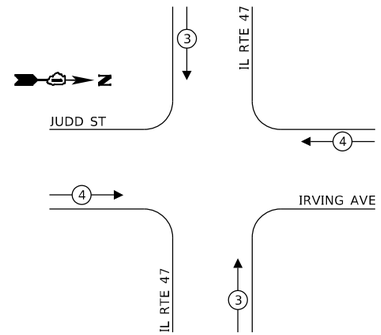
TEMPORARY CONTROLLER SEQUENCE (PRE STAGE B)



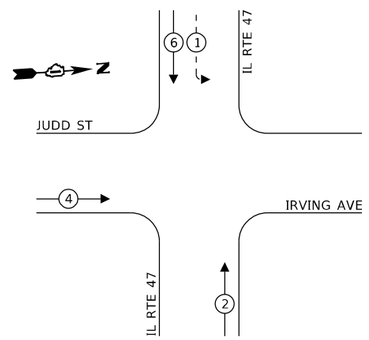
LEGEND:

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

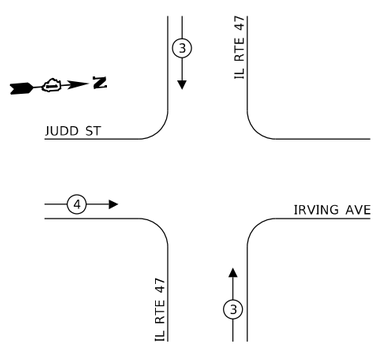
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (PRE STAGE B)



TEMPORARY CONTROLLER SEQUENCE (STAGE 1A)



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 1A)

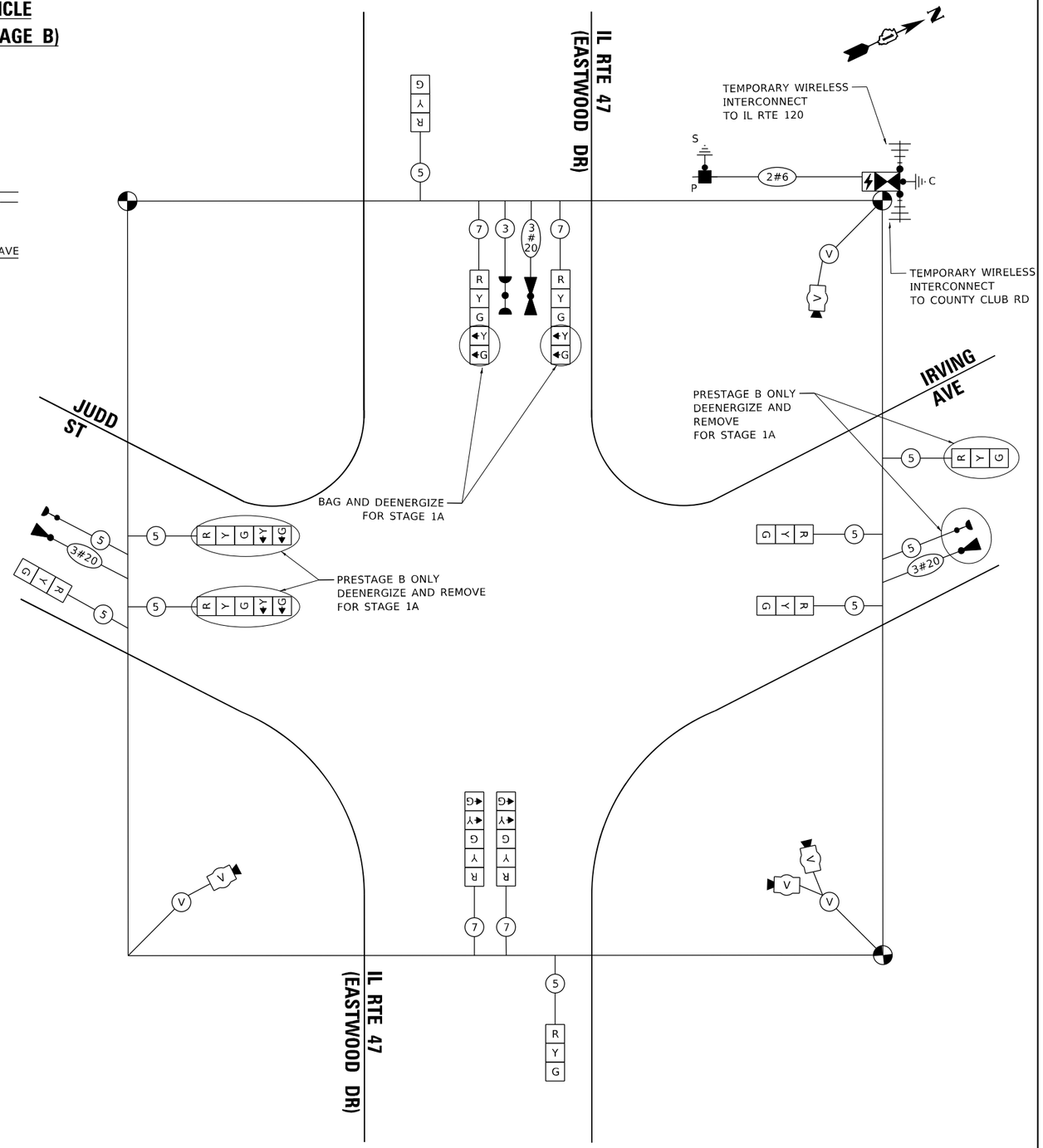


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	6	11	66.0
	4 - SECTION	-	14	-
	5 - SECTION	6	13	78.0
PROGRAMMABLE SIGNALS				-
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL		-	15	-
CONTROLLER		1	150	150.0
MASTER CONTROLLER		-	100	
UPS		1	25	25.0
DETECTION	RADAR	-	20	-
	VIDEO	1	20	20.0
BLANK-OUT SIGN		-	25	-
NETWORK SWITH II OR III		-	35	-
CELLULAR MODEM		-	15	-
		TOTAL UPS SIZING =		339.0
UPS CHARGING		-	225	-
BATTERY HEATER MAT		-	180	-
CABINET HEATER		-	200	-
FLASHER		-	15	-
LED STREET NAME SIGN		-	120	-
LUMINAIRE		-	240	-
				339.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN (PRE STAGE B & STAGE 1A)

(NOT TO SCALE)

TS 15087
ECON 167

TS SHT NO. 59

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ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

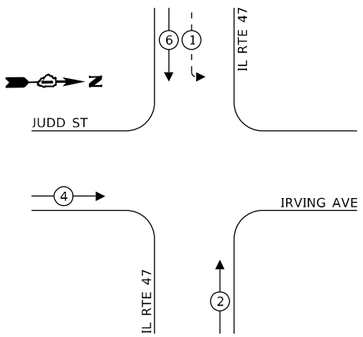
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 1 OF 5)
IL RTE 47 (EASTWOOD DR) AND JUDD ST /IRVING AVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	794
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

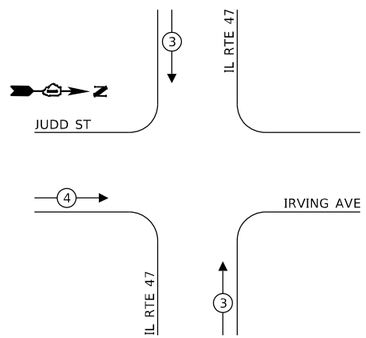
TEMPORARY CONTROLLER SEQUENCE (STAGE 1B)

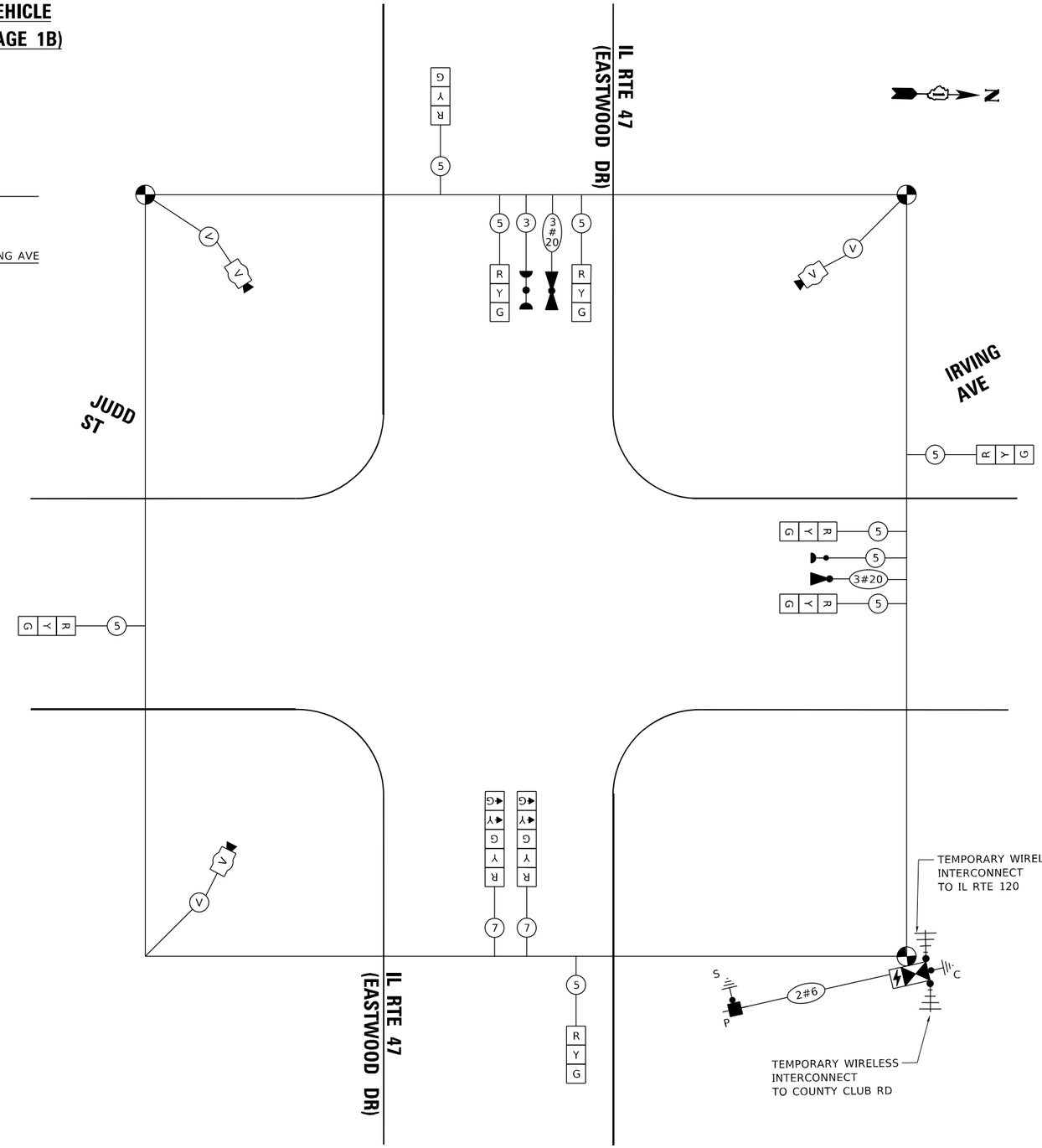


LEGEND:

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 1B)





CABLE PLAN (STAGE 1B)

(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 3 - SECTION	7	11	77.0
4 - SECTION	-	14	-
5 - SECTION	2	13	26.0
PROGRAMMABLE SIGNALS			-
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150.0
MASTER CONTROLLER	-	100	
UPS	1	25	25.0
DETECTION RADAR	-	20	-
VIDEO	1	20	20.0
BLANK-OUT SIGN	-	25	-
NETWORK SWITH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			298.0
UPS CHARGING	-	225	-
BATTERY HEATER MAT	-	180	-
CABINET HEATER	-	200	-
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
			298.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 60

TS 15087
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ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

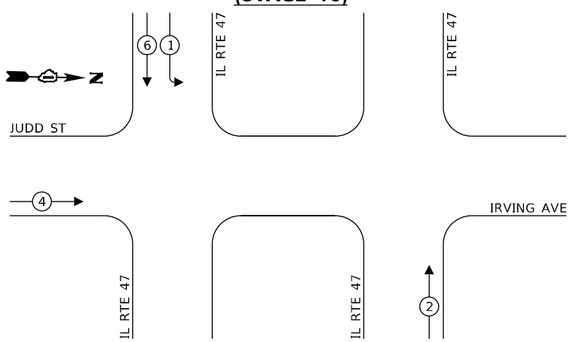
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 2 OF 5)
IL RTE 47 (EASTWOOD DR) AND JUDD ST /IRVING AVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	795
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

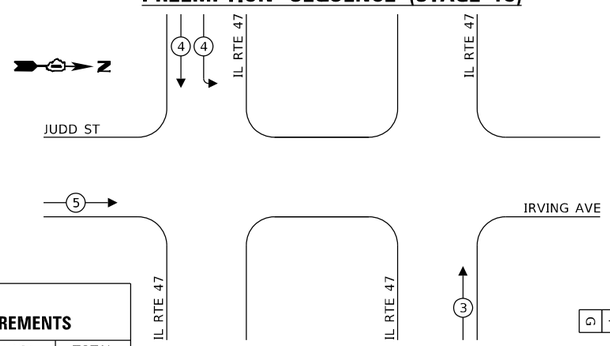
TEMPORARY CONTROLLER SEQUENCE (STAGE 1C)



LEGEND:

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 1C)

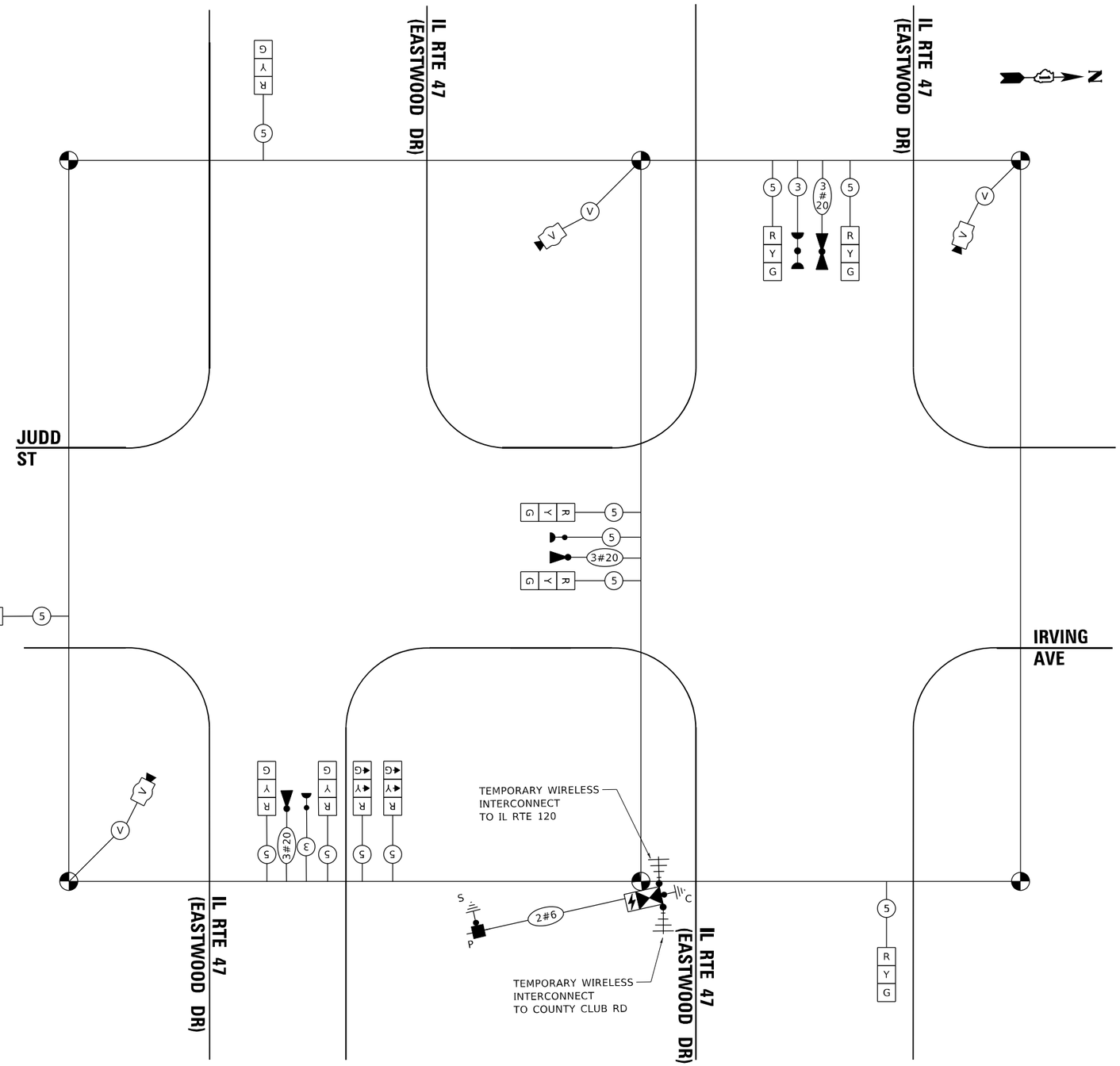


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	11	11	121.0
	4 - SECTION	-	14	-
	5 - SECTION	-	13	-
PROGRAMMABLE SIGNALS				-
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL		-	15	-
CONTROLLER		1	150	150.0
MASTER CONTROLLER		-	100	
UPS		1	25	25.0
DETECTION	RADAR	-	20	-
	VIDEO	1	20	20.0
BLANK-OUT SIGN		-	25	-
NETWORK SWITH II OR III		-	35	-
CELLULAR MODEM		-	15	-
		TOTAL UPS SIZING =		316.0
UPS CHARGING		-	225	-
BATTERY HEATER MAT		-	180	-
CABINET HEATER		-	200	-
FLASHER		-	15	-
LED STREET NAME SIGN		-	120	-
LUMINAIRE		-	240	-
				316.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN (STAGE 1C)

(NOT TO SCALE)

TS 15087
ECON 167

TS SHT NO. 61

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ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -
		DRAWN - NS	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -

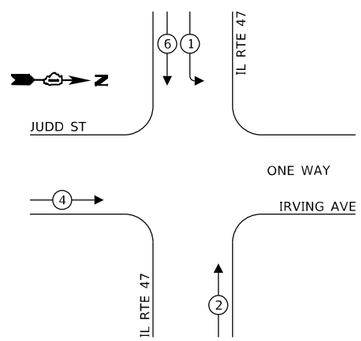
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 3 OF 5)
IL RTE 47 (EASTWOOD DR) AND JUDD ST /IRVING AVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	796
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		

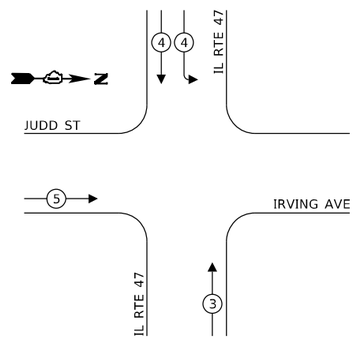
TEMPORARY CONTROLLER SEQUENCE (STAGE 2A)

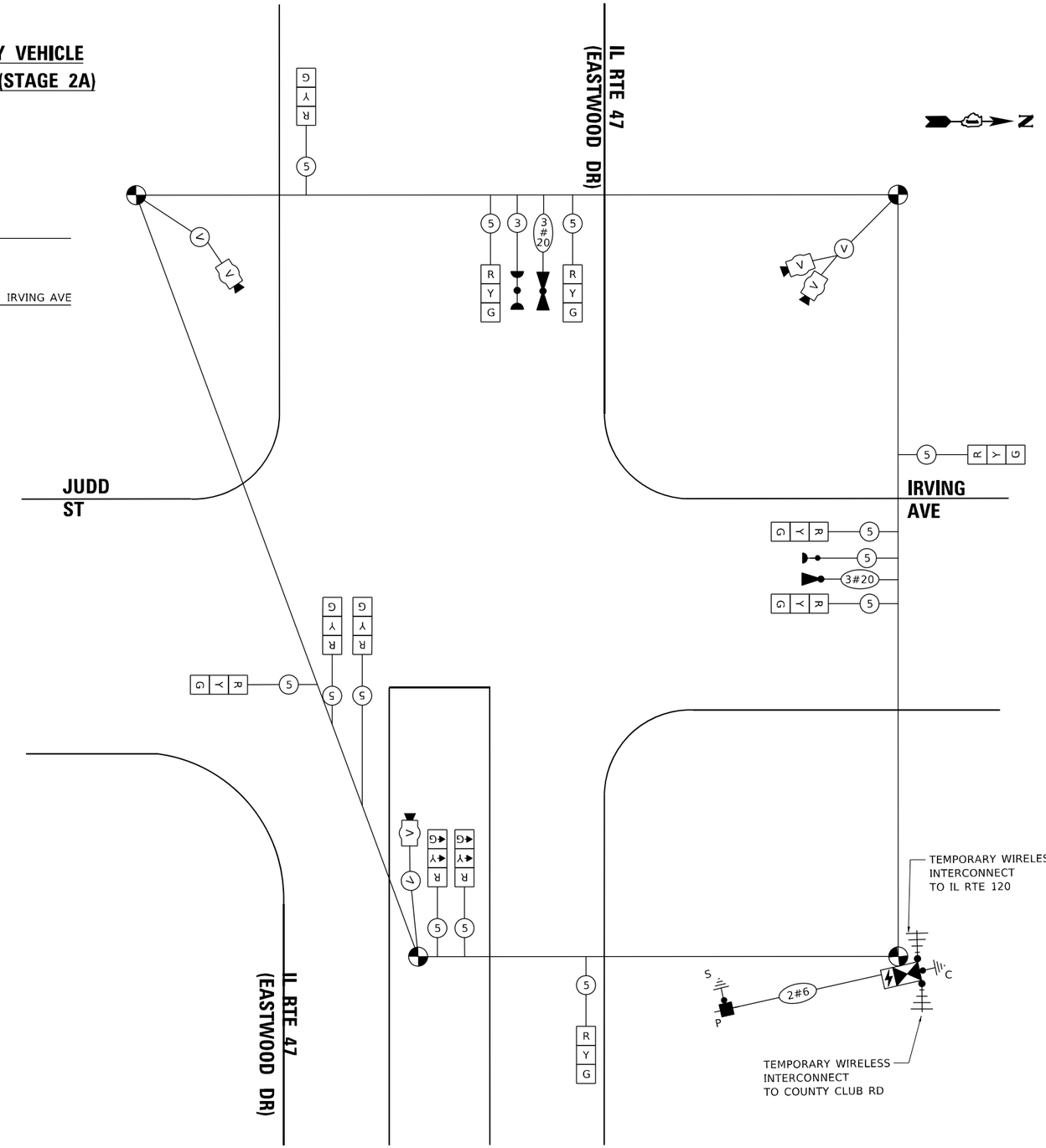


LEGEND:

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 2A)





CABLE PLAN (STAGE 2A)

(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	11	11	121.0
	4 - SECTION	-	14	-
	5 - SECTION	-	13	-
PROGRAMMABLE SIGNALS				-
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL		-	15	-
CONTROLLER		1	150	150.0
MASTER CONTROLLER		-	100	
UPS		1	25	25.0
DETECTION	RADAR	-	20	-
	VIDEO	1	20	20.0
BLANK-OUT SIGN		-	25	-
NETWORK SWITH II OR III		-	35	-
CELLULAR MODEM		-	15	-
		TOTAL UPS SIZING =		316.0
UPS CHARGING		-	225	-
BATTERY HEATER MAT		-	180	-
CABINET HEATER		-	200	-
FLASHER		-	15	-
LED STREET NAME SIGN		-	120	-
LUMINAIRE		-	240	-
				316.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS 15087
ECON 167

TS SHT NO. 62

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ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

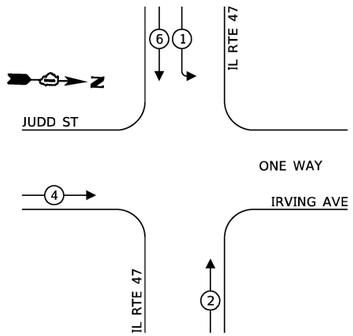
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 4 OF 5)
IL RTE 47 (EASTWOOD DR) AND JUDD ST /IRVING AVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	797
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	

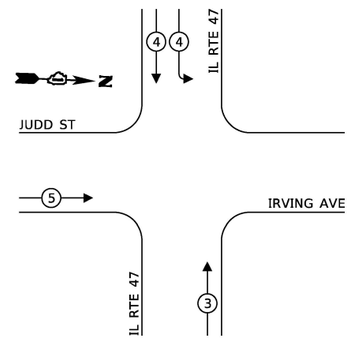
TEMPORARY CONTROLLER SEQUENCE (STAGE 2B)

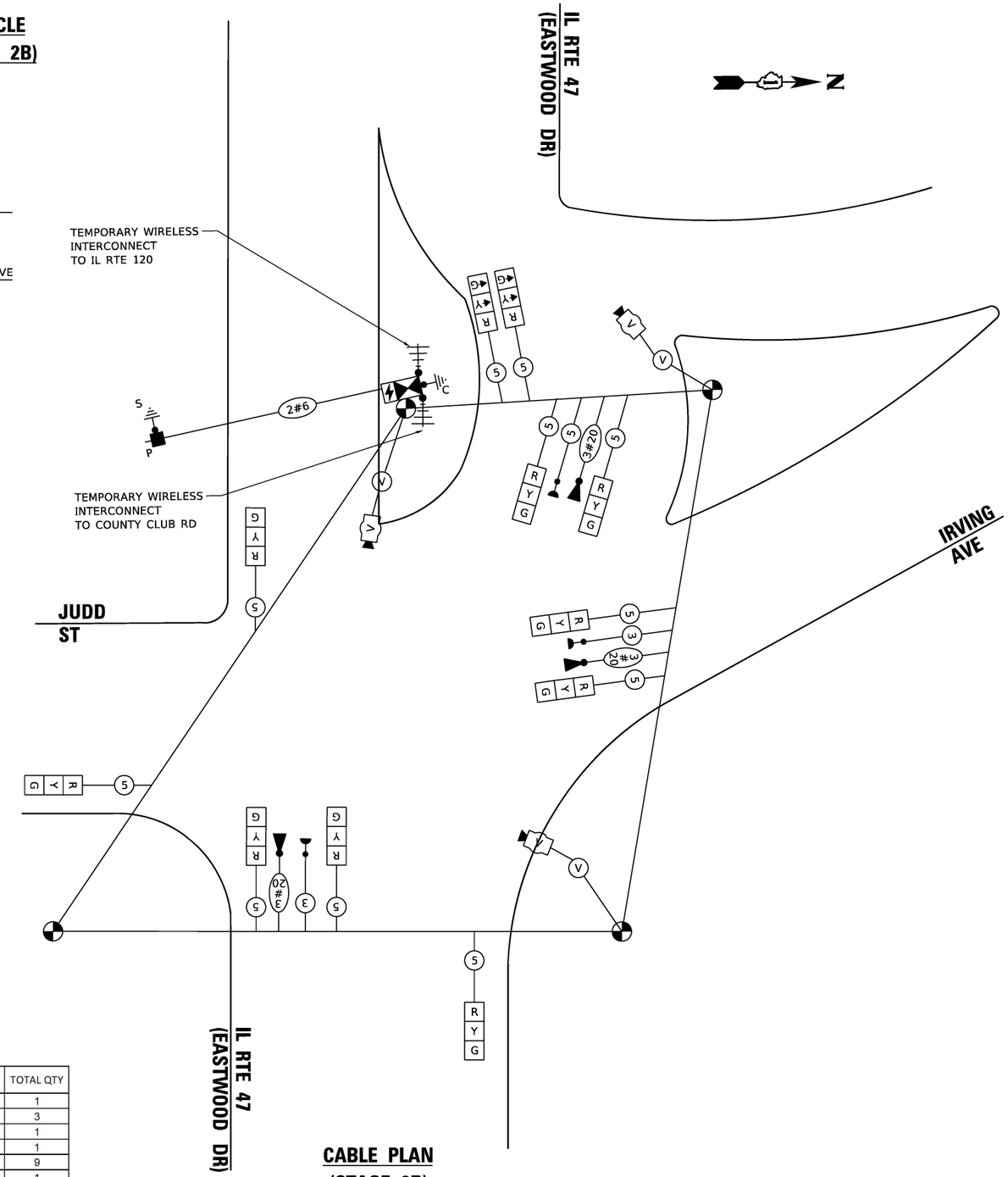


LEGEND:

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE (STAGE 2B)





CABLE PLAN (STAGE 2B)

(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	11	11	121.0
	4 - SECTION	-	14	-
	5 - SECTION	-	13	-
PROGRAMMABLE SIGNALS				-
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL		-	15	-
CONTROLLER		1	150	150.0
MASTER CONTROLLER		-	100	
UPS		1	25	25.0
DETECTION	RADAR	-	20	-
	VIDEO	1	20	20.0
BLANK-OUT SIGN		-	25	-
NETWORK SWITH II OR III		-	35	-
CELLULAR MODEM		-	15	-
	TOTAL UPS SIZING =			316.0
UPS CHARGING		-	225	-
BATTERY HEATER MAT		-	180	-
CABINET HEATER		-	200	-
FLASHER		-	15	-
LED STREET NAME SIGN		-	120	-
LUMINAIRE		-	240	-
				316.0

ENERGY COSTS TO:
CITY OF WOODSTOCK
121 W. CALHOUN STREET
WOODSTOCK, IL 60098

ENERGY SUPPLY: CONTACT: COMED NEW BUSINESS
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY
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 EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

TS SHT NO. 63

TS 15087
ECON 167

MODEL: Default
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM DS21 - NA 2020\Documents\60632011-IL-47\900-CAD\10_CAD\03_SHEETS\Traffic_Signal\IL-47_Irving_temp-cable4.dgn

ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -	
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE (SHEET 5 OF 5)
IL RTE 47 (EASTWOOD DR) AND JUDD ST /IRVING AVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	798

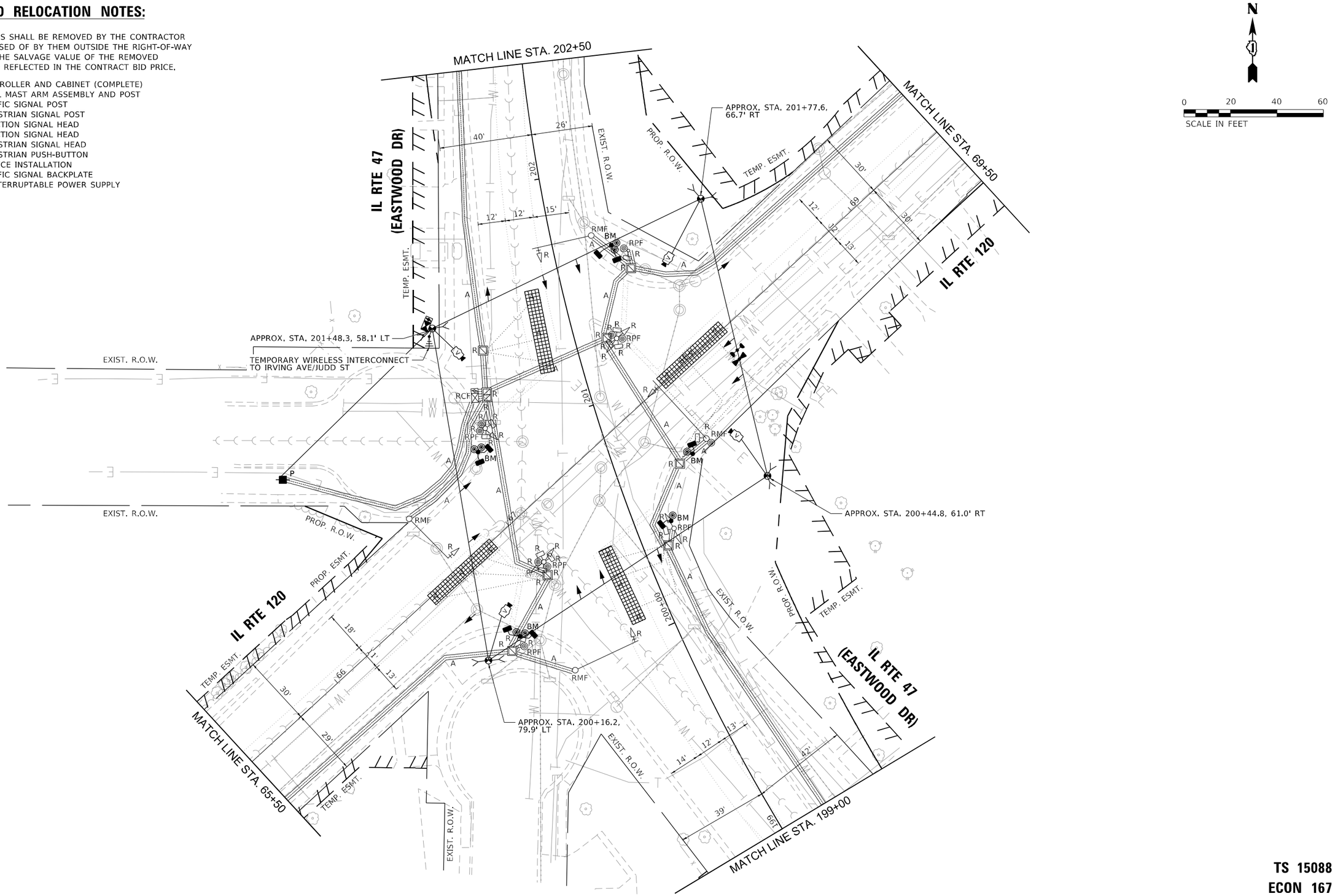
CONTRACT NO. 62X94

ILLINOIS FED. AID PROJECT

REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER AND CABINET (COMPLETE)
4	EACH	STEEL MAST ARM ASSEMBLY AND POST
4	EACH	TRAFFIC SIGNAL POST
2	EACH	PEDESTRIAN SIGNAL POST
4	EACH	3-SECTION SIGNAL HEAD
8	EACH	5-SECTION SIGNAL HEAD
12	EACH	PEDESTRIAN SIGNAL HEAD
10	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	SERVICE INSTALLATION
4	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	UNINTERRUPTABLE POWER SUPPLY



TS SHT NO. 64

TS 15088
ECON 167

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ATLAS
ATLAS TECHNICAL CONSULTANTS, LLC
100 S. WACKER DRIVE, SUITE 400
CHICAGO, IL 60606

USER NAME = nsalehian	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
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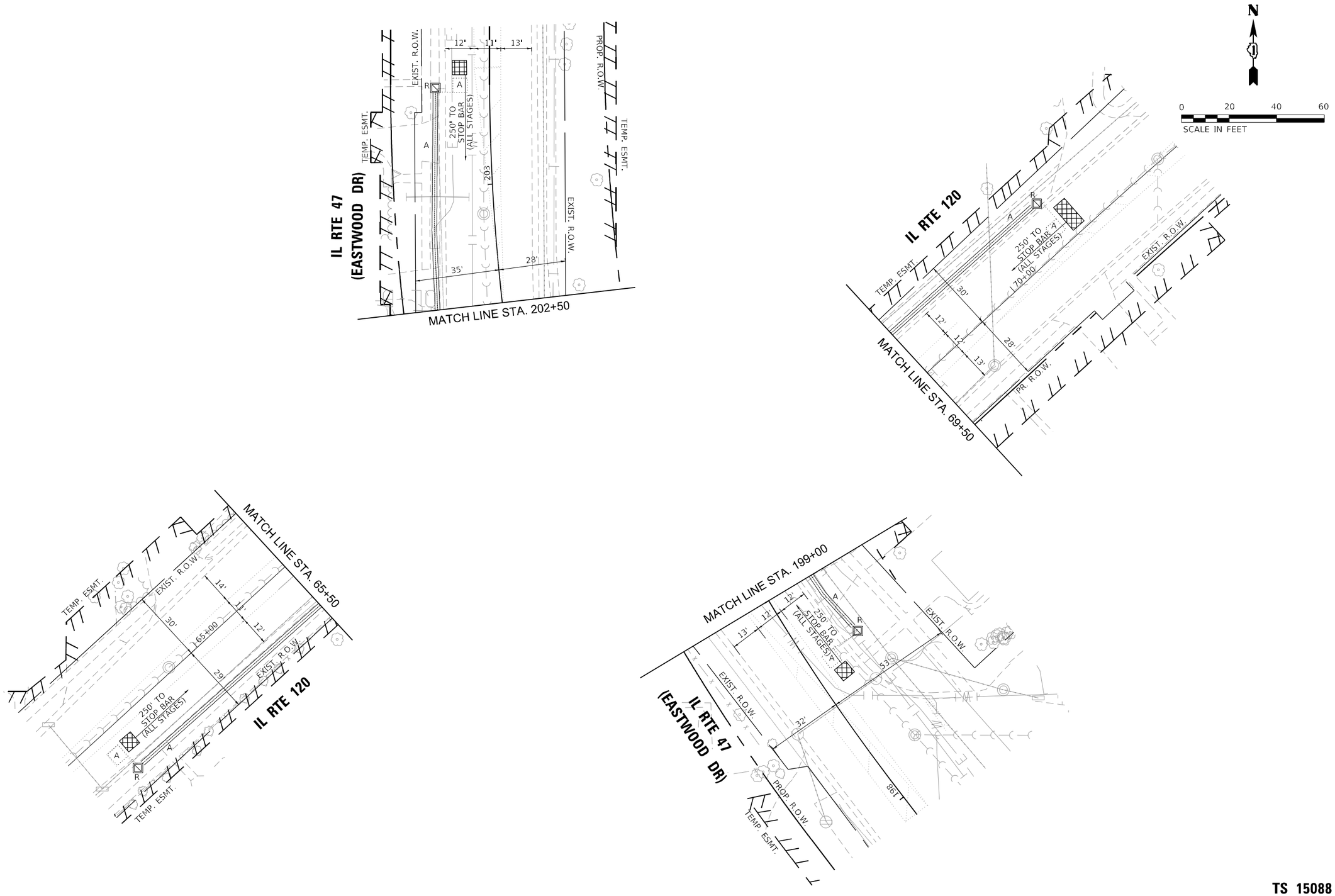
PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL RTE 47 (EASTWOOD DR) AND IL RTE 120

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	799
		CONTRACT NO. 62X94		
		ILLINOIS FED. AID PROJECT		



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ATLAS TECHNICAL CONSULTANTS, LLC 100 S. WACKER DRIVE, SUITE 400 CHICAGO, IL 60606	USER NAME = nsalehian	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL RTE 47 (EASTWOOD DR) AND IL RTE 120
		DRAWN - NS	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - TS	REVISED -		
	PLOT DATE = 2/6/2025	DATE - 02/06/2025	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2024-1052-N,C,SW,FL.	MCHENRY	941	800
		CONTRACT NO. 62X94		
		ILLINOIS	FED. AID PROJECT	