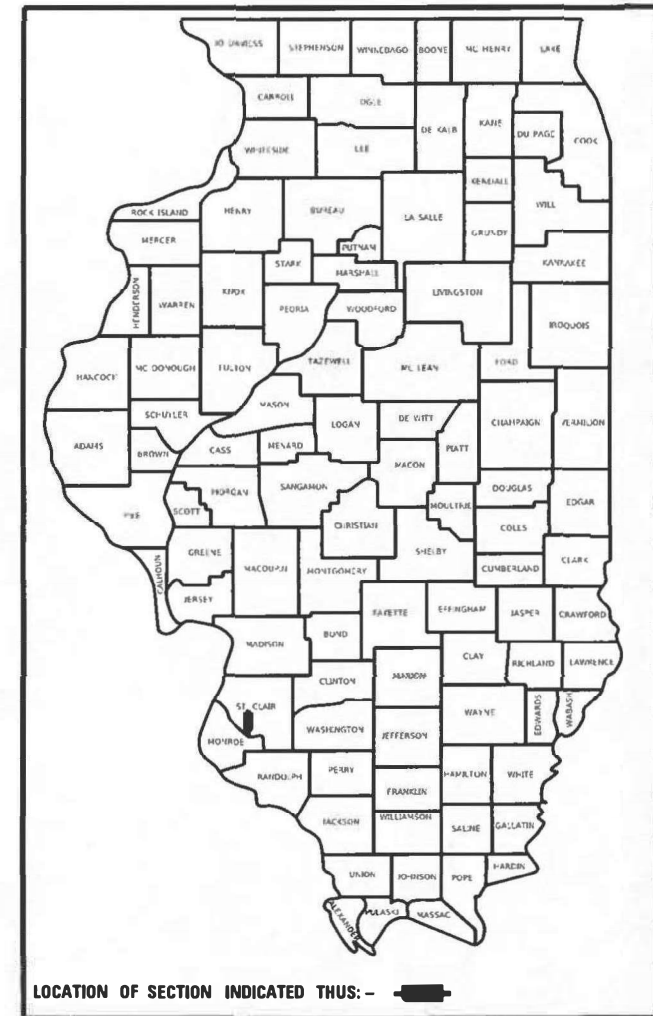


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

04-25-2025 LETTING ITEM 125

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2)TS-3, 82-5TS	ST. CLAIR	76	1
ILLINOIS		CONTRACT NO. 76R78		

D-98-121-22



LOCATION OF SECTION INDICATED THUS: -

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 5 - 11

TRAFFIC DATA

IL 159 NORTH OF LONGACRE/ASHLAND: 27,200

IL 159 SOUTH OF LONGACRE/ASHLAND: 23,700

TOWNSHIP

CASEYVILLE

POSTED SPEED

IL-159: 35 MPH, 45 MPH

I-64: 65 MPH



DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, CONSTRUCTION MANAGERS, SURVEYORS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145



SHEET NOS. 1-3, 5-11, 50-66, 75

MUHAMMAD ARIF DATE: 3-21-2024
LICENSE EXPIRES: 11-30-2025

iteris

ITERIS, INC.

319 W STATE STREET, SUITE 200
GENEVA, IL 60134

IL DESIGN FIRM NO: 184007145-0002



SHEETS 4, 12-49, 67-74

P. BRIEN FUNK II
EXPIRES: 11-30-2025

3-21-24
DATE

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

PROJECT ENGINEER: CHERYL KEPLAR
PROJECT MANAGER: RICHARD BARBEE

CONTRACT NO. 76R78

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 600 (IL 159)

FAI 064 (I-64)

SECTION: (130, 130-1, 130-2)TS-3, 82-5TS

PROJECT: CMAQ-HSIP-4U5N(249)

TRAFFIC SIGNAL IMPROVEMENT
ST. CLAIR COUNTY

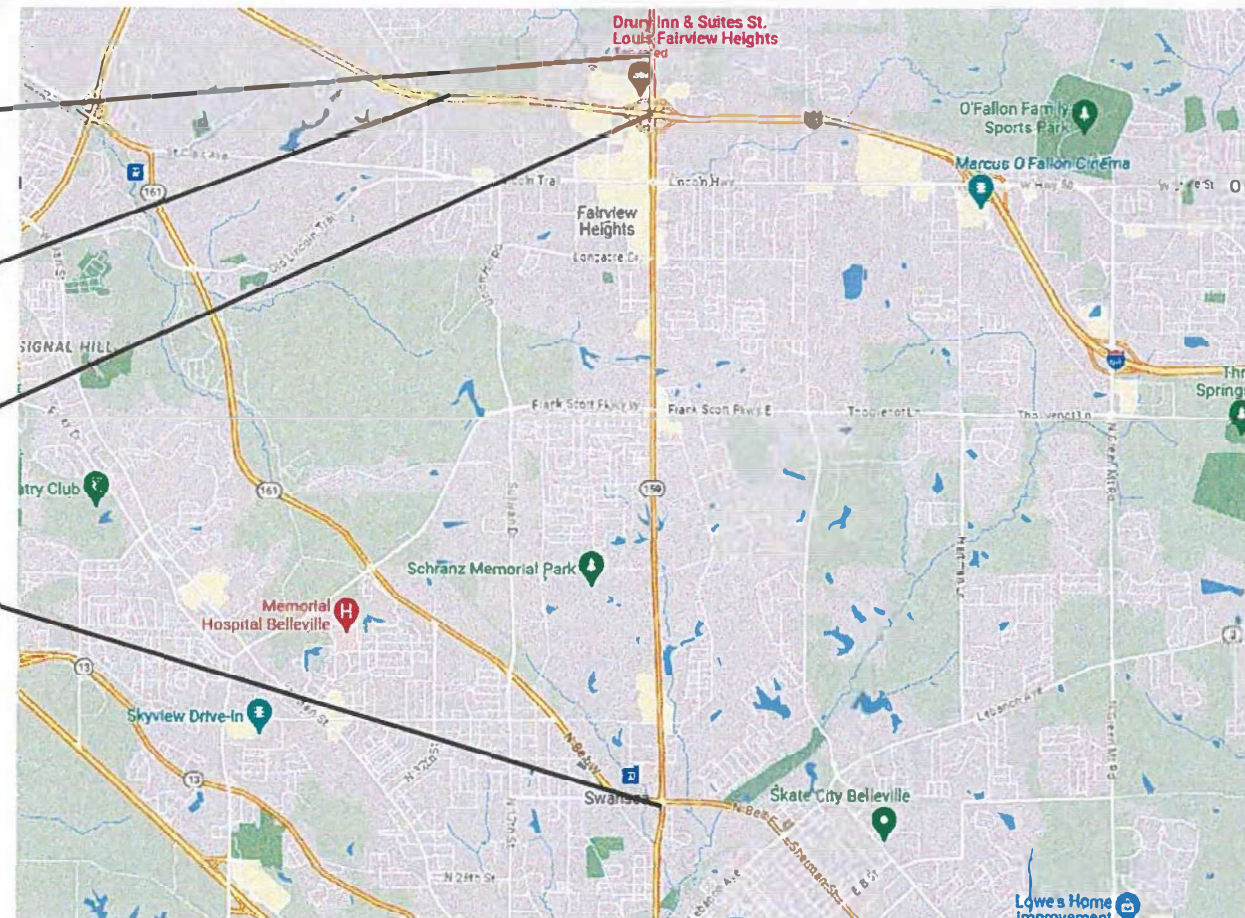
C-98-153-22

BEGIN PROJECT
INTERSECTION OF
IL 159 AND LUDWIGSALEM
LATITUDE: 38°36'7.76"N
LONGITUDE: 89°59'6.01"W

BEGIN PROJECT I-64
OVERHEAD SIGN STRUCTURE
LATITUDE: 38°35'59"N
LONGITUDE: 90°00'37"W

END PROJECT I-64
INTERSECTION OF IL 159
AND I-64 WB RAMP
LATITUDE: 38°35'56"N
LONGITUDE: 89°59'36"W

END PROJECT
INTERSECTION OF IL 159
AND IL 161 /N BELT WEST
LATITUDE: 38°32'00"N
LONGITUDE: 89°59'00"W



GROSS LENGTH = 11,616 FT = 2.2 MILES
NET LENGTH = 11,616 FT = 2.2 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 25, 2024

[Signature] REGIONAL ENGINEER

May 10, 2024 [Signature]

ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024 [Signature]

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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14-15	SOIL - IL 159 AND LUDWIG DRIVE/SALEM PLACE
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18	SOIL - IL 159 AND I-64 WB RAMPS
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21-23	SOIL - IL 159 AND I-64 EB RAMPS
24-25	TRAFFIC SIGNALS - IL 159 AND MARKET PLACE/ST. CLAIR SQUARE
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27-28	TRAFFIC SIGNALS - IL 159 AND FAIRVIEW HEIGHTS CENTER
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47	SOIL - IL 159 AND CHATEAU DRIVE
48-49	TRAFFIC SIGNALS - IL 159 AND FRANK SCOTT PARKWAY
50-51	TRAFFIC SIGNALS - IL 159 AND GREEN HAVEN DRIVE
52	SOIL - IL 159 AND GREEN HAVEN DRIVE
53-54	TRAFFIC SIGNALS - IL 159 AND HUNTWOOD ROAD
55	SOIL - IL 159 AND HUNTWOOD ROAD
56-57	TRAFFIC SIGNALS - IL 159 AND ROSEWOOD VILLAGE DRIVE
58	SOIL - IL 159 AND ROSEWOOD VILLAGE DRIVE
59-60	TRAFFIC SIGNALS - IL 159 AND FULLERTON ROAD
61	SOIL - IL 159 AND FULLERTON ROAD
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HIGHWAY STANDARDS

000001-08	701428-01	720016-04	814001-03
001001-02	701446-11	873001-02	814006-03
001006	701456-05	877001-08	857001-01
606301-04	701601-09	877002-04	862001-01
701001-02	701602-10	877006-06	
701006-05	701701-10	878001-11	
701106-02	701801-06	880006-01	
701301-04	701901-10		
701400-12	720001-01		
701401-13			

TRAFFIC SIGNAL LEGEND

	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. GROUNDING
	PROP. NO. OF CONDUCTORS IN CABLE
	PROP. 12" SIGNAL HEAD
	EX. VEHICLE DETECTOR, INDUCTION LOOP
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. GROUND MOUNT SERVICE
	EX. GROUNDING
	EX. EMERGENCY VEHICLE PREEMPTION

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
2. NO SURVEY WAS PERFORMED FOR THIS PROJECT AND THE PLANS WERE CREATED USING AERIAL IMAGERY AND FIELD MEASUREMENTS.
3. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY. ACCORDING TO THE ARTICLE 202.30 OF THE STANDARD SPECIFICATION AND AS DIRECTED BY THE ENGINEER, THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COSTS OF THE UNDERGROUND CONDUIT.
4. THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUBCONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION RELATED SKILLS, E.G. MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSE WORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLAN, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION. TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT (618) 346-3360 AND/OR THE HCCTP COORDINATOR AT (618) 874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
5. EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS WERE COMPILED FROM THE BEST AVAILABLE RECORDS. EXACT DISTANCES AND LOCATIONS OF UTILITIES TO BE RELOCATED HAVE NOT BEEN DETERMINED. ALL UTILITIES, EITHER SHOWN OR NOT SHOWN, IN DIRECT CONFLICT WITH THE CONSTRUCTION SHALL BE RELOCATED BY OTHERS (RESPECTIVE UTILITY COMPANY). CONTRACTORS SHALL COORDINATE WITH THE VARIOUS TO ESTABLISH EXACT LOCATIONS AND DEPTHS PRIOR TO EXCAVATING. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND SUPPORTING ALL UTILITIES DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL CONTACT THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) AT 1-800-892-0123 FOR LOCATING THE VARIOUS UTILITIES DURING CONSTRUCTION.
6. THE CONTRACTOR SHALL NOTIFY EACH AFFECTED PROPERTY OWNER A MINIMUM OF 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION AND/ OR GRADING.

LOCATION 1

IL ROUTE 159 AT LUDWIG DRIVE/ SALEM PLACE

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
EXTENENT SYSTEMS LLC
CITY OF FAIRVIEW HEIGHTS
MCI/ VERIZON
LEVEL 3/ LUMEN
CITY OF O'FALLON
BUCKEYE PARTNERS

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
SEWER & WATER
PIPELINE

LOCATION 2

IL ROUTE 159 AT I-64 WB RAMPS

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
EXTENENT SYSTEMS LLC
CITY OF FAIRVIEW HEIGHTS
MCI/ VERIZON
CITY OF O'FALLON
BUCKEYE PARTNERS

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
SEWER
COMMUNICATIONS
SEWER & WATER
PIPELINE

LOCATION 3

IL ROUTE 159 AT I-64 EB RAMPS

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
EXTENENT SYSTEMS LLC
CITY OF FAIRVIEW HEIGHTS
MCI/ VERIZON
CITY OF O'FALLON
BUCKEYE PARTNERS

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
SEWER & WATER
PIPELINE

LOCATION 4

IL ROUTE 159 AT MARKET PLACE/ ST. CLAIR SQUARE

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
EXTENENT SYSTEMS LLC
CITY OF FAIRVIEW HEIGHTS
MCI/ VERIZON
CITY OF O'FALLON
BUCKEYE PARTNERS

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
SEWER
COMMUNICATIONS
SEWER & WATER
PIPELINE

LOCATION 5

IL ROUTE 159 AT FAIRVIEW HEIGHTS CENTRE

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
EXTENENT SYSTEMS LLC
FIDELITY COMMUNICATIONS SERVICES INC
MCI/ VERIZON
CITY OF O'FALLON
BUCKEYE PARTNERS

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
SEWER & WATER
PIPELINE

LOCATION 6

IL ROUTE 159 AT LINCOLN HIGHWAY/LINCOLN TRAIL

AMEREN ILLINOIS
AT&T ILLINOIS
I-3 BROADBAND
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM
EXTENENT SYSTEMS LLC
FIDELITY COMMUNICATIONS SERVICES INC
CITY OF FAIRVIEW HEIGHTS
VERIZON
CITY OF O'FALLON
BUCKEYE PARTNERS

GAS & ELECTRIC
COMMUNICATIONS
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
SEWER
COMMUNICATIONS
SEWER & WATER
PIPELINE

REV - MS

MODEL: \$MODELNAME\$
FILE: \$NAME\$. \$FILE\$



DELTA ENGINEERING GROUP, LLC
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS\$	DESIGNED - MA	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATES\$	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEET HIGHWAY STANDARDS TRAFFIC SIGNALS LEGEND			
SCALE: NTS	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	((130,130-1,130-2) T5-3, 82-5TS	ST. CLAIR	75	2
				CONTRACT NO. 76R78
				ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)

LOCATION 7

IL ROUTE 159 AT LINCOLN PLACE SHOPPING CENTER

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EXTENENT SYSTEMS LLC
FIDELITY COMMUNICATIONS SERVICES INC
CITY OF FAIRVIEW HEIGHTS
MCI/ VERIZON
CITY OF O'FALLON
BUCKEYE PARTNERS

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
SEWER
COMMUNICATIONS
SEWER & WATER
PIPELINE

LOCATION 8

IL ROUTE 159 AT LONGACRE DRIVE/ ASHLAND AVENUE

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
FIDELITY COMMUNICATIONS SERVICES INC
CITY OF FAIRVIEW HEIGHTS
MCI/ VERIZON
CITY OF O'FALLON

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
SEWER
COMMUNICATIONS
SEWER & WATER

LOCATION 9

IL ROUTE 159 AT CHATEAU DRIVE

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
FIDELITY COMMUNICATIONS SERVICES INC
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI/ VERIZON
CITY OF O'FALLON
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
WATER
COMMUNICATIONS
SEWER & WATER
SEWER

LOCATION 10

IL ROUTE 159 AT FRANK SCOTT PARKWAY

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
CASEYVILLE TOWNSHIP SEWER SYSTEM
EVERSTREAM GLC HOLDING CO
FIDELITY COMMUNICATIONS SERVICES III INC
CITY OF FAIRVIEW HEIGHTS
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI/ VERIZON
ST CLAIR COUNTY HIGHWAY DEPT
ST CLAIR TOWNSHIP
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
SEWER
COMMUNICATIONS
COMMUNICATIONS
SEWER
WATER
COMMUNICATIONS
ELECTRIC & SEWER
SEWER
SEWER

LOCATION 11

IL ROUTE 159 & GREEN HAVEN DRIVE

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
EVERSTREAM GLC HOLDING CO
FIDELITY COMMUNICATION SERVICES ILL INC
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI / VERIZON
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
WATER
COMMUNICATIONS
SEWER

LOCATION 12

IL ROUTE 159 & HUNTWOOD ROAD

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
EVERSTREAM GLC HOLDING CO
FIDELITY COMMUNICATION SERVICES ILL INC
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI / VERIZON
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
WATER
COMMUNICATIONS
SEWER

LOCATION 13

IL ROUTE 159 & ROSEWOOD VILLAGE DRIVE

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
EVERSTREAM GLC HOLDING CO
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI / VERIZON
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
COMMUNICATIONS
WATER
COMMUNICATIONS
SEWER

LOCATION 14

IL ROUTE 159 & FULLERTON ROAD

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
EVERSTREAM GLC HOLDING CO
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI / VERIZON
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
COMMUNICATIONS
WATER
COMMUNICATIONS
SEWER

LOCATION 15

IL ROUTE 159 & METRO WAY

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
EVERSTREAM GLC HOLDING CO
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI / VERIZON
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
COMMUNICATIONS
WATER
COMMUNICATIONS
SEWER

LOCATION 16

IL ROUTE 159 & IL ROUTE 161 (N BELT WEST)

AMEREN ILLINOIS
AT&T ILLINOIS
CHARTER SPECTRUM
CLEARWAVE COMMUNICATIONS
EVERSTREAM GLC HOLDING CO
FIDELITY COMMUNICATION SERVICES ILL INC
ILLINOIS AMERICAN WATER-EAST ST LOUIS
MCI / VERIZON
VILLAGE OF SWANSEA

GAS & ELECTRIC
COMMUNICATIONS
CABLE TV
COMMUNICATIONS
COMMUNICATIONS
COMMUNICATIONS
WATER
COMMUNICATIONS
SEWER

MODEL & MODEL NAMES
FILE: 040125.DWG



DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, CONSTRUCTION MANAGERS, SURVEYORS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
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	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALES	CHECKED - MA	REVISED -
PLOT DATE = \$DATES	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEET
HIGHWAY STANDARDS
TRAFFIC SIGNALS LEGEND

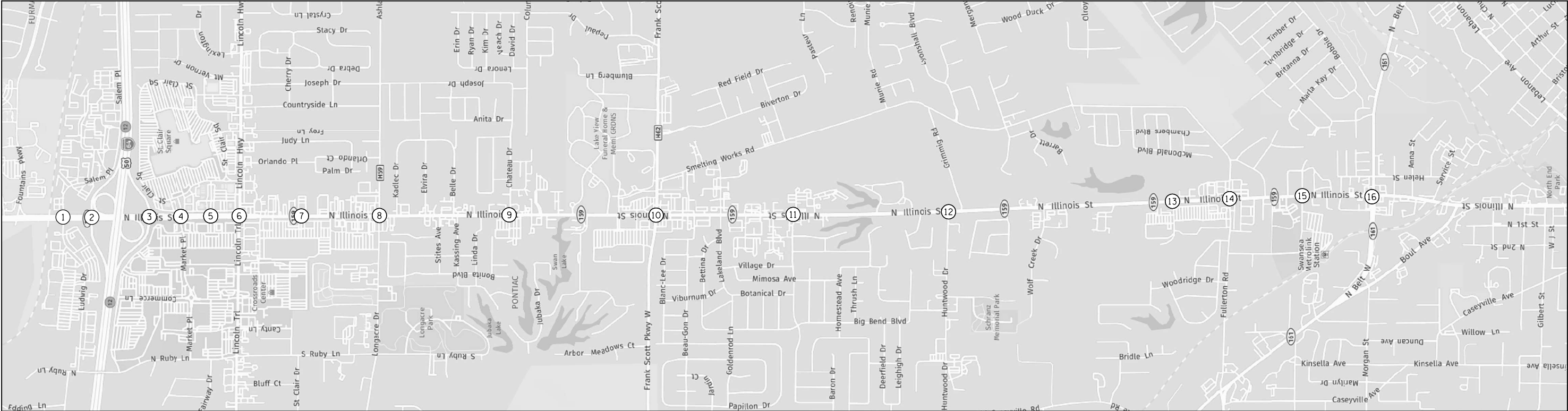
SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130,130-1,130-2) T5-3, 82-515	ST. CLAIR	74	3
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

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LOCATION MAP



SUMMARY OF LOCATIONS

NO.	SHEET	INTERSECTION/INTERCONNECT
1	11-14	IL ROUTE 159 AND LUDWIG DRIVE/SALEM PLACE
2	15-17	IL ROUTE 159 AND I-64 N RAMP
3	18-22	IL ROUTE 159 AND I-64 S RAMP
4	23-25	IL ROUTE 159 AND MARKET PLACE/ST CLAIR SQUARE
5	26-28	IL ROUTE 159 AND FAIRVIEW HEIGHTS CENTRE
6	29-33	IL ROUTE 159 AND LINCOLN HIGHWAY
7	34-38	IL ROUTE 159 AND LINCOLN PLACE SC
8	39-43	IL ROUTE 159 AND LONGACRE DRIVE/ASHLAND AVENUE
9	44-46	IL ROUTE 159 AND CHATEAU DRIVE
10	47-48	IL ROUTE 159 AND FRANK SCOTT PARKWAY
11	49-51	IL ROUTE 159 AND GREEN HAVEN DRIVE
12	52-54	IL ROUTE 159 AND HUNTWOOD ROAD
13	55-57	IL ROUTE 159 AND ROSEWOOD VILLAGE DRIVE
14	58-60	IL ROUTE 159 AND FULLERTON ROAD
15	61-63	IL ROUTE 159 AND METRO WAY
16	64-64	IL ROUTE 159 AND IL ROUTE 161 (N BELT WEST)



USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - AD	REVISED -
PLOT DATE = 2/27/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	4
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE			
				FAP 600	FAP 600	FAI 64	FAI 64
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	ROADWAY	ROADWAY
				0021	0021	0021	0021
				URBAN	URBAN	URBAN	URBAN
				CMAQ	HSIP	CMAQ	HSIP
* 66900200	NON-SPECIAL WASTE DISPOSAL	CUYD	74		44		30
* 66900210	HAZARDOUS WASTE DISPOSAL	CUYD	102		61		41
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	25		15		10
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1		0.6		0.4
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1		0.6		0.4
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DAYS	61		37		24
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12		10		2
67100100	MOBILIZATION	L SUM	1	0.1	0.6		0.3
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1			0.1	0.9
70100815	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	L SUM	1			0.1	0.9
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1			0.1	0.9
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.1	0.9		
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	0.1	0.9		
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.1	0.9		

* SPECIALTY ITEM

MODEL & MODEL NAMES
FILE: DRAWING.SHEET

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE			
				FAP 600	FAP 600	FAI 64	FAI 64
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	ROADWAY	ROADWAY
				0021	0021	0021	0021
				URBAN CMAQ	URBAN HSIP	URBAN CMAQ	URBAN HSIP
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.1	0.9		
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1		0.5		0.5
* 72000100	SIGN PANEL - TYPE 1	SQ FT	210		210		
* 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	340		340		
80300100	LOCATING UNDERGROUND CABLE	FOOT	80		80		
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	299		299		
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	714		714		
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	1097		1097		
81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	9597	2527		7070	
81400100	HANDHOLE	EACH	3		3		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	16		16		
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	14	14			
85700300	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1	1			
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	8		8		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

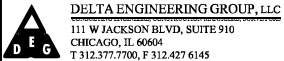
SUMMARY OF QUANTITY

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130,130-1,130-2) TS-3, 82-5TS	ST. CLAIR	75	6
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)				

REV. - MS

MODEL NUMBER\$
FILE NUMBER\$
FILE



USER NAME = \$USERS\$	DESIGNED - MA	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATES\$	DATE - 03/01/2024	REVISED -

MODEL & MODEL NAMES
FILE: C:\MSR\STL15



DELTA ENGINEERING GROUP, LLC
CONSULTING PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS	DESIGNED - MA	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATES	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITY			
SCALE: NTS	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130,130-1,130-2) T5-3, 82-515	ST. CLAIR	75	7
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)				

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE			
				FAP 600	FAP 600	FAI 64	FAI 64
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	ROADWAY	ROADWAY
				0021	0021	0021	0021
				URBAN	URBAN	URBAN	URBAN
				CMAQ	HSIP	CMAQ	HSIP
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4693		4693		
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	12631		12631		
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	29387		29387		
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	13899		13899		
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO.6 1C	FOOT	1981		1981		
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1		1		
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1		1		
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1		1		
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1		1		
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1		1		
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	6		6		
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	2		2		
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	10		10		
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	2		2		

80% FED
20% STATE

MODEL NAME
FILE NAME

DELTA ENGINEERING GROUP, LLC

CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS

CHICAGO, IL 60604

T 312.377.7700, F 312.427.6145

USER NAME = \$USERS	DESIGNED - MA	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATE\$	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITY			
SCALE: NTS	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130,130-1,130-2) T5-3, 82-515	ST. CLAIR	75	8
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)				

				CONSTRUCTION CODE			
				FAP 600	FAP 600	FAI 64	FAI 64
CODE NO.	ITEM	UNIT	TOTAL	TRAFFIC SIGNALS	TRAFFIC SIGNALS	ROADWAY	ROADWAY
				0021	0021	0021	0021
				URBAN	URBAN	URBAN	URBAN
				CMAQ	HSIP	CMAQ	HSIP
87700290	STEEL MAST ARM ASSEMBLY AND POLE , 50 FT.	EACH	1		1		
87700300	STEEL MAST ARM ASSEMBLY AND POLE , 52 FT.	EACH	4		4		
87700310	STEEL MAST ARM ASSEMBLY AND POLE , 54 FT.	EACH	2		2		
87700330	STEEL MAST ARM ASSEMBLY AND POLE , 56 FT.	EACH	3		3		
87700340	STEEL MAST ARM ASSEMBLY AND POLE , 58 FT.	EACH	1		1		
87700400	STEEL MAST ARM ASSEMBLY AND POLE , 60 FT.	EACH	2		2		
87700404	STEEL MAST ARM ASSEMBLY AND POLE , 62 FT.	EACH	1		1		
87700418	STEEL MAST ARM ASSEMBLY AND POLE , 68 FT.	EACH	2		2		
87700420	STEEL MAST ARM ASSEMBLY AND POLE , 70 FT.	EACH	1		1		
87700428	STEEL MAST ARM ASSEMBLY AND POLE , 74 FT.	EACH	1		1		
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	48		48		
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	393		393		
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	227		227		
87900100	DRILL EXISTING FOUNDATION	EACH	2	1		1	

* SPECIALTY ITEM

				CONSTRUCTION CODE			
				FAP 600	FAP 600	FAI 64	FAI 64
CODE NO.	ITEM	UNIT	TOTAL	TRAFFIC SIGNALS	TRAFFIC SIGNALS	ROADWAY	ROADWAY
				0021	0021	0021	0021
				URBAN	URBAN	URBAN	URBAN
				CMAQ	HSIP	CMAQ	HSIP
87900200	DRILL EXISTING HANDHOLE	EACH	86		86		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	97		97		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	45		45		
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	35		35		
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	34		34		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		2		
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	10		10		
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8		8		
88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	132		132		
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	14		14		
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1	1			
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7000		7000		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	16		16		

REV. - MS

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE			
				FAP 600	FAP 600	FAI 64	FAI 64
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	ROADWAY	ROADWAY
				0021	0021	0021	0021
				URBAN	URBAN	URBAN	URBAN
				CMAQ	HSIP	CMAQ	HSIP
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	47		47		
X0323917	CABINET, MODEL 334	EACH	1				1
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	9423		9423		
X8891007	VIDEO VEHICLE DETECTION SYSTEM COMPLETE	EACH	3		3		
X8710010	FIBER LAYOUT	L SUM	1	0.5		0.5	
X1400500	COMMUNICATIONS VAULT, 24"X36"	EACH	7			7	
X0325485	TRUSS MOUNTED LED DYNAMIC MESSAGE SIGN	EACH	1				1
X8710036	FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	525	525			
X8710039	FIBER OPTIC CABLE 144 FIBERS, SINGLE MODE	FOOT	14627	7157		7470	
X8710101	ETHERNET MANAGE SWITCH	EACH	1	1			
X8710103	ETHERNET SWITCH	EACH	7	7			
X8710304	FIBER OPTIC CABLE SPLICE - LATERAL	EACH	7	7			
X8710318	FIBER OPTIC UTILITY MARKER	EACH	25			25	
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	30		30		

REV. - MS

MODEL: \$MODELNAME\$
FILE: \$NAME\$. \$FILE\$

 DELTA ENGINEERING GROUP, LLC 111 W JACKSON BLVD, SUITE 910 CHICAGO, IL 60604 T 312.377.7700, F 312.427.6145	USER NAME = \$USERS\$	DESIGNED - MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITY				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - NS	DRAWN - NS	REVISED -						600	(130,130-1,130-2) TS-3, 82-5TS	ST. CLAIR	75	10
	PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -						CONTRACT NO. 76R78				
	PLOT DATE = \$DATE\$	DATE - 03/01/2024	REVISED -		SCALE: NTS	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)		

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE			
				FAP 600	FAP 600	FAI 64	FAI 64
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	ROADWAY	ROADWAY
				0021	0021	0021	0021
				URBAN	URBAN	URBAN	URBAN
				CMAQ	HSIP	CMAQ	HSIP
X8760201	PEDESTRIAN PUSH-BUTTON POST	EACH	21		21		
X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	104		104		
Ø Z0076600	TRAINEES	HOURL	1000	1000			
XP000212	CLOSED CIRCUIT TELEVISION DOME CAMERA, HD	EACH	2	2			
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOURL	1000	1000			

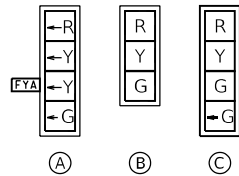
* SPECIALTY ITEM

Ø 0042

REV. - MS

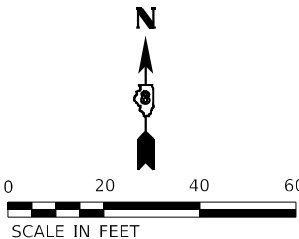
MODEL: \$MODELNAME\$
FILE: \$NAME\$. \$FILE\$

 DELTA ENGINEERING GROUP, LLC 111 W JACKSON BLVD, SUITE 910 CHICAGO, IL 60604 T 312.377.7700, F 312.427.6145	USER NAME = \$USERS\$	DESIGNED - MA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITY			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NS	REVISED -					600	(130,130-1,130-2) TS-3, 82-5TS	ST. CLAIR	75	10A
	PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -					CONTRACT NO. 76R78				
	PLOT DATE = \$DATES\$	DATE - 03/01/2024	REVISED -		SCALE: NTS	SHEET	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)		



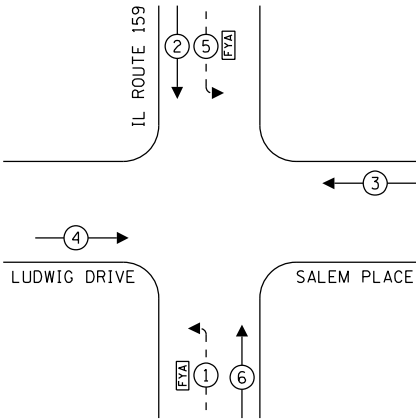
TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- CCTV CAMERA
- PROPOSED CONDUIT



PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NB LT	SB	WB	EB	SB LT	NB	NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2	NOT USED	NOT USED



REM EX TS CABINET - 1 EACH
PROP TS CABINET - 1 EACH
PROP ETHERNET SWITCH - 1 EACH

DRILL EXISTING HANDHOLE
11' - PVC-3"

REM EX MA ASSEMBLY & POLE - 1 EACH
REM EX SIG FDN - 1 EACH
REM EX SIG HEAD - 4 EACH

52' M.A.
36" DIAM FDN
15'-0" DEPTH
5' SOUTH OF EXISTING M.A.
6' WEST OF BACK OF CURB

EX. INTERCONNECT CONDUIT
(SEE FIBER OPTIC PLANS)

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MA FDN - 1 EACH
REM EX SIG HEAD - 4 EACH
REL EX EVP - 1 EACH

14' - PVC-3"

40' M.A.
36" DIAM FDN
13'-0" DEPTH
10' SOUTH OF EXISTING M.A.
7' WEST OF EXISTING M.A.
6' FROM BACK OF CURB

62'-E

4'-E

52'-E

48' M.A.
36" DIAM FDN
13'-0" DEPTH
6' NORTH OF EXISTING M.A.
7' WEST OF EXISTING M.A.
6' FROM BACK OF CURB

7' - PVC-3"

DRILL EXISTING HANDHOLE

14'-E

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MA FDN - 1 EACH
REM EX SIG HEAD - 4 EACH
REL EX EVP - 1 EACH

SALEM PL

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MA FDN - 1 EACH
REM EX SIG HEAD - 4 EACH
REL EX EVP - 1 EACH

55' M.A.
36" DIAM FDN
15'-0" DEPTH
5' EAST OF EXISTING M.A.
8' SOUTH OF EDGE OF PAVEMENT

30' - PVC-3"

DRILL EXISTING HANDHOLE

NOTES:

- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.

iteris

USER NAME = bfunck
DESIGNED - AD
DRAWN - AD
PLOT SCALE = 100,0000' / in.
CHECKED - BF
PLOT DATE = 2/27/2024

DESIGNED - AD
DRAWN - AD
CHECKED - BF
DATE - 2/26/24

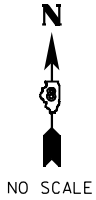
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND LUDWIG DRIVE / SALEM PLACE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	11
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

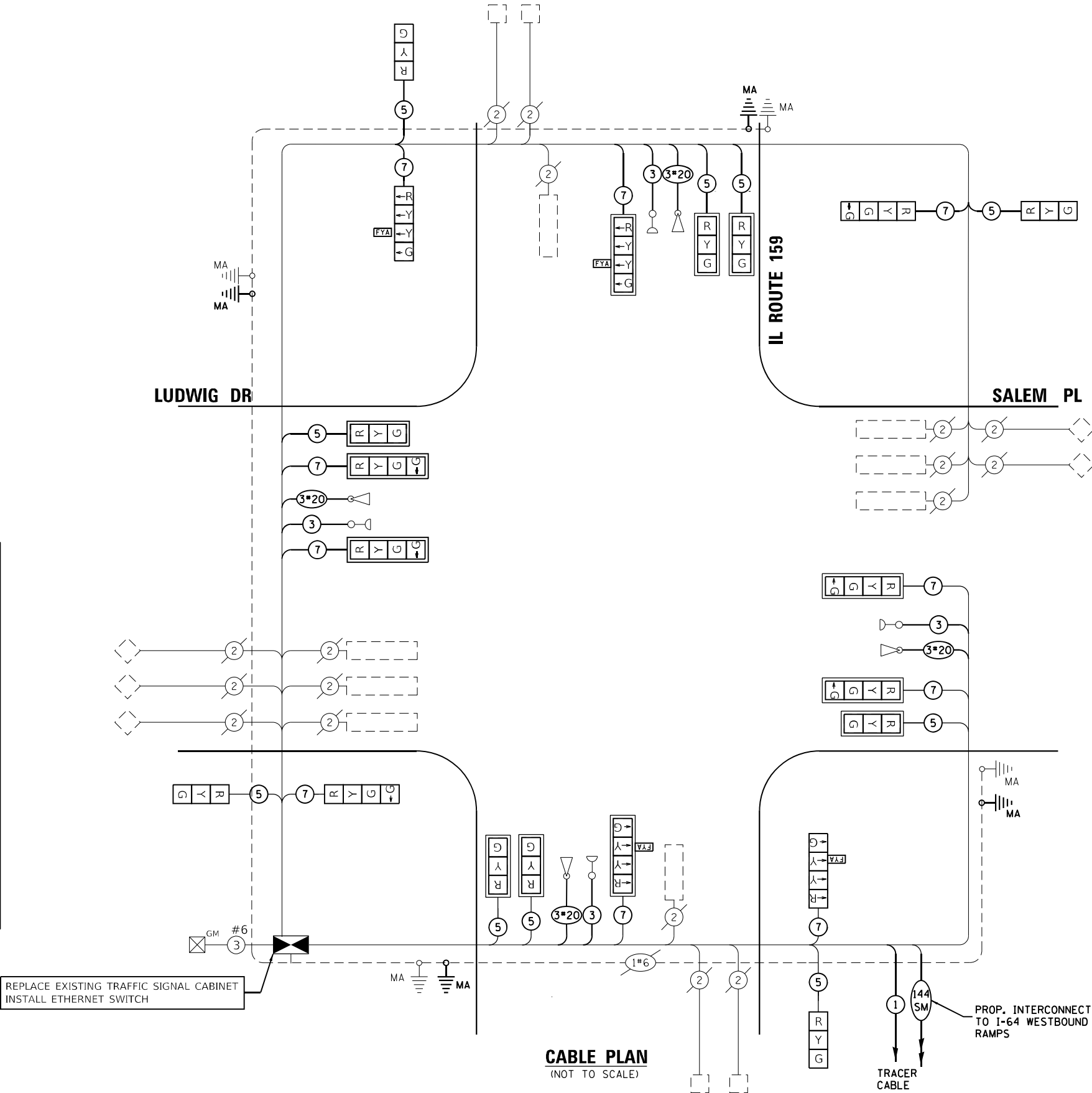


TRAFFIC SIGNAL LEGEND	
	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. CCTV CAMERA
	PROP. GROUNDING
	PROP. NO. OF CONDUCTORS IN CABLE
	PROP. CCTV CABLE
	PROP. 12" SIGNAL HEAD
	EX. VEHICLE DETECTOR, INDUCTION LOOP
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. GROUND MOUNT SERVICE
	EX. GROUNDING
	EX. EMERGENCY VEHICLE PREEMPTION
	EX. CONFIRMATION BEACON

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	30
RELOCATE SIGN PANEL - TYPE 1	SQ FT	32
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	62
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1182
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2635
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3004
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	105
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 58 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	56
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	6
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1182
ETHERNET SWITCH	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER



USER NAME = bfunck	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 2/27/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND LUDWIG DRIVE / SALEM PLACE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	12
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



SOIL BORING LOG

Page 1 of 1

Date 5/29/84

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Ludwig Dr / Salem Pl LOGGED BY J. King

SECTION 130TS LOCATION SE 1/4, SEC. 21, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO.	Station	DEPTH	BLOWS	UCS	MOIST	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After Hrs.
		(ft)	(/6")	(tsf)	(%)	ft	ft	ft	ft	ft	ft
BORING NO. 1	45+81										
Offset	57.00ft R										
Ground Surface Elev.	589.3										
Brown and Gray SILT						Brown and Gray SILT (continued)					
									8	1.5	28
										B	
									6	1.7	27
										B	
		33	5.4	19							
			S								
		584.8									
Brown and Gray Silty CLAY											
		19	3.0	20					8	2.0	28
			S							B	
		19	2.6	22							
			S								
		-10									
		18	2.5	21							
			S								
		24	4.8	21							
			S								
		-15									
		18	1.6	23							
			S								
		572.3									
Brown and Gray SILT											
		7	1.4	24							
			S								
		-20									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 5/29/84

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Ludwig Dr / Salem Pl LOGGED BY J. King

SECTION 130TS LOCATION SE 1/4, SEC. 21, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO.	Station	DEPTH	BLOWS	UCS	MOIST	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After Hrs.
		(ft)	(/6")	(tsf)	(%)	ft	ft	ft	ft	ft	ft
BORING NO. 2	44+98										
Offset	56.00ft R										
Ground Surface Elev.	488.5										
Brown and Gray Silty CLAY						Brown and Gray Clayey SILT (continued)					
									12	1.5	27
										B	
									7	1.2	28
										B	
		28	4.3	18							
			S								
		-5									
		22	3.1	15					8	1.5	27
			S							B	
		31	3.5	20							
			S								
		-10									
		35	3.7	21							
			S								
		24	3.0	22							
			S								
		474.5									
Brown and Gray Clayey SILT											
		12	1.2	21							
			S								
		7	0.7	28							
			B								
		-20									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODEL: Default
FILE NAME: C:\Sharepoint\ITBIS - INC\Systems - Midwest - Chicago Construction\DOT - P1B 201-041 D8 ITS\12082 - IL 159 Signal & Interconnect\CADD\Sheet Files\DOT12082 IL-Route 159 Soil Boring.sgn

iteris

USER NAME = bfunk	DESIGNED - BF	REVISED -
DRAWN - BF	REVISED -	
PLOT SCALE = 100,0000 ' / in.	CHECKED - AD	REVISED -
PLOT DATE = 12/21/2023	DATE - 11/10/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
IL ROUTE 159 AND LUDWIG DRIVE / SALEM PLACE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	13
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



SOIL BORING LOG

Page 1 of 1

Date 5/29/84

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Ludwig Dr / Salem Pl LOGGED BY J. King

SECTION 130TS LOCATION SE 1/4, SEC. 21, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After Hrs.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
		3	44+92	55.00ft L	588.3														
Brown and Gray Clayey SILT										Brown and Gray Clayey SILT (continued)									
																	10	2.0 S	26
							25	3.1 S	16								8	1.6 B	27
							25	2.7 S	17							562.0	6	1.3 B	27
										END OF BORING									
							32	3.2 S	16										
							35	3.9 S	19										
							23	3.7 S	24										
							11	2.6 S	23										
							8	0.8 S	27										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 5/29/84

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Ludwig Dr / Salem Pl LOGGED BY J. King

SECTION 130TS LOCATION SE 1/4, SEC. 21, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After Hrs.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
		4	45+81	55.00ft L	589.0														
Brown and Gray SILT										Brown and Gray SILT (continued)									
																	7	1.4 B	25
							7	1.3 S	23								13	1.5 B	29
							4	1.3 S	20							562.9	8	1.2 B	28
										END OF BORING									
							2	0.7 S	23										
							12	3.0 S	24										
							23	2.4 S	23										
							18	4.2 S	24										
							8	3.3 S	25										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODEL: Default
FILE NAME: C:\Sharepoint\ITBIS - INCL\Systems - Midwest - Chicago Construction\DOT - P1B 201-041 DB ITS\12082 - IL 159 Signal & Interconnect\CADD\Sheet Files\DOT12082 IL-Route 159 Soil Boring.dgn

iteris

USER NAME = bfunk	DESIGNED - BF	REVISED -
DRAWN - BF	REVISED -	
PLOT SCALE = 100,0000 ' / in.	CHECKED - AD	REVISED -
PLOT DATE = 12/21/2023	DATE - 11/10/23	REVISED -

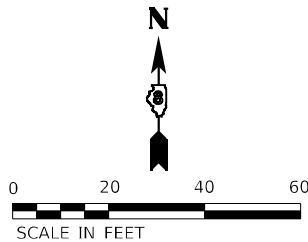
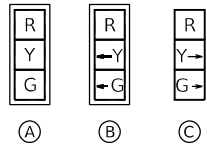
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL ROUTE 159 AND LUDWIG DRIVE / SALEM PLACE				600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	14
SCALE: SHEET OF SHEETS STA. TO STA.				CONTRACT NO. 76R78				
				ILLINOIS FED. AID PROJECT				

NOTES:

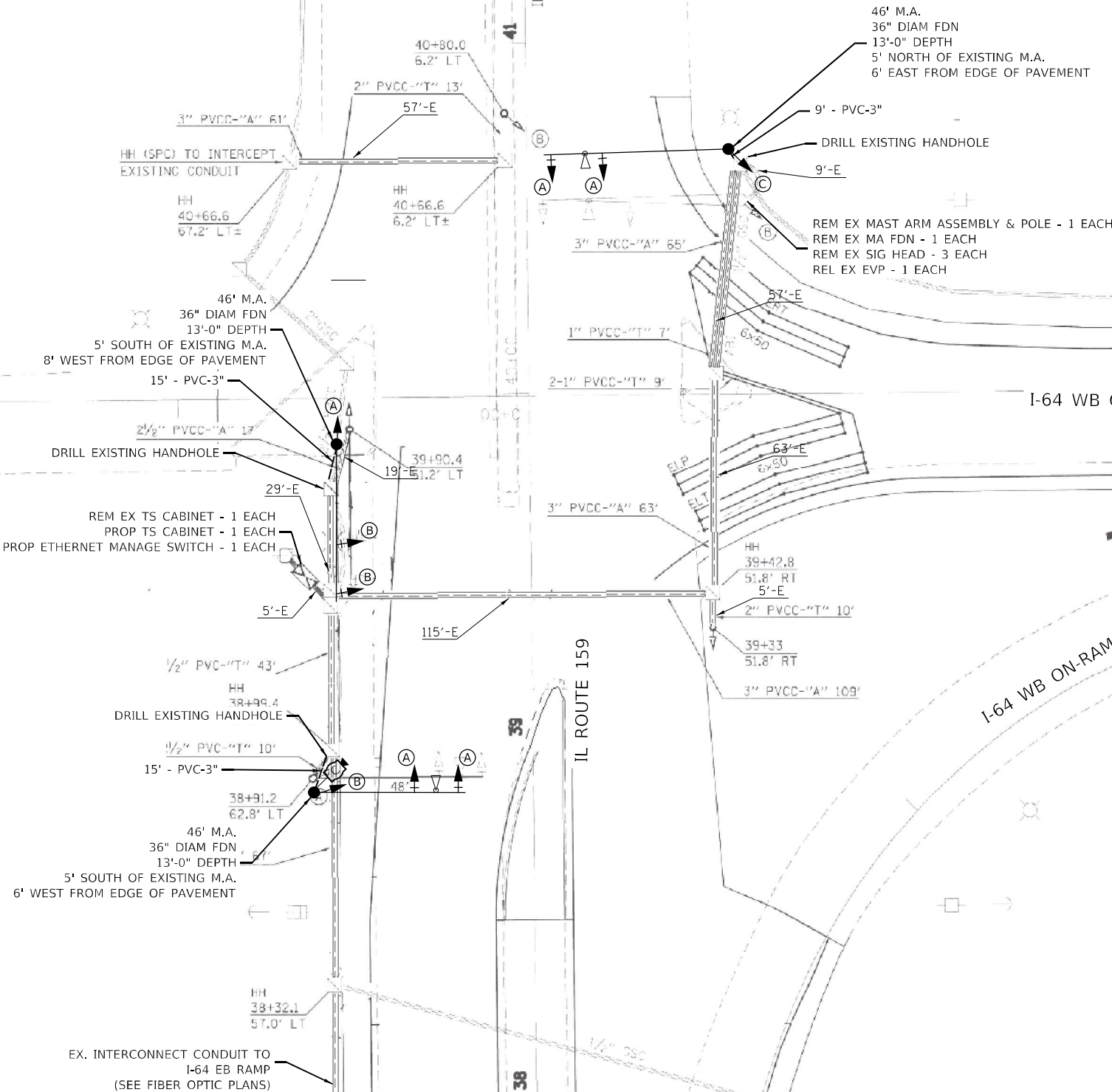
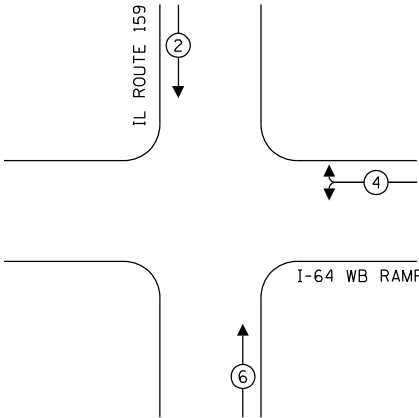
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.

EX. INTERCONNECT CONDUIT TO
LUDWIG DR / SALEM PL
(SEE FIBER OPTIC PLANS)



PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NOT USED	SB	NOT USED	WB	NOT USED	NB	NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	NOT USED	6	NOT USED	NONE	NOT USED	2	NOT USED	NOT USED



TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
PROPOSED CONDUIT

iteris

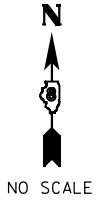
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	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - BF	REVISED -
PLOT DATE = 12/21/2023	DATE - 11/6/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND I-64 WB RAMPS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	15
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. CCTV CAMERA
	PROP. GROUNDING
	PROP. NO. OF CONDUCTORS IN CABLE
	PROP. CCTV CABLE
	PROP. 12" SIGNAL HEAD
	EX. VEHICLE DETECTOR, INDUCTION LOOP
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. GROUND MOUNT SERVICE
	EX. GROUNDING
	EX. EMERGENCY VEHICLE PREEMPTION
	EX. CONFIRMATION BEACON

I-64 WB ON RAMP

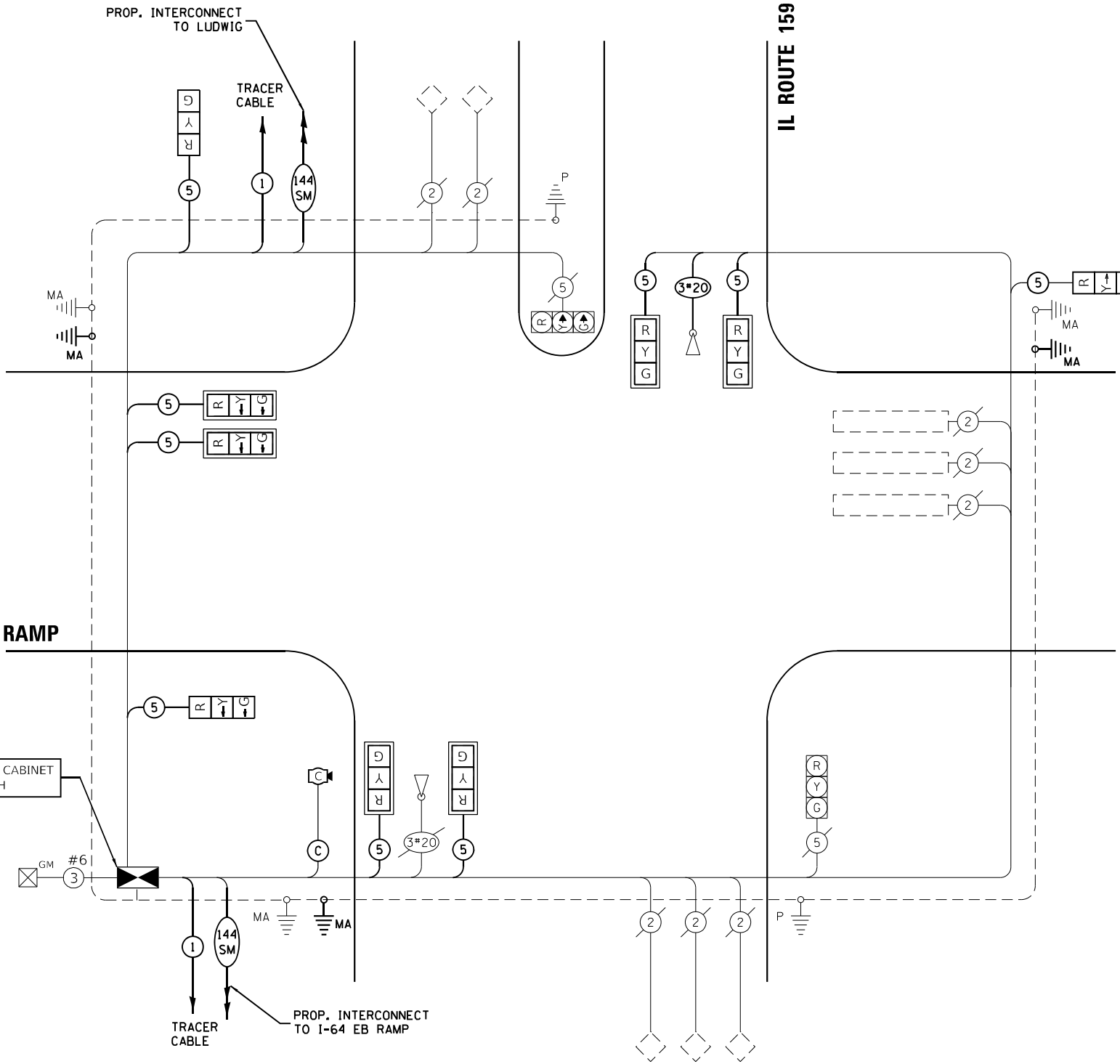
IL ROUTE 159

I-64 WB OFF RAMP

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	39
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1737
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	50
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	3
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	6
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	490
ETHERNET MANAGE SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION DOME CAMERA, HD	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER



CABLE PLAN
(NOT TO SCALE)

iteris

USER NAME = bfunk
PLOT SCALE = 100,0000 ' / in.
PLOT DATE = 12/22/2023

DESIGNED - AD	REVISED -
DRAWN - AD	REVISED -
CHECKED - BF	REVISED -
DATE - 12/22/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND I-64 WB RAMPS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	16
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



Page 1 of 1

Date 4/26/02

ROUTE	FAI 64	DESCRIPTION	Ramp F - IL 159 SB Ramp to I-64 EB	LOGGED BY	Larry Ford
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SECTION 82-5K-2 LOCATION NE 1/4, SEC. 28, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE _____

[illegible]

BBS, from 137 (Rev. 8-99)



Page 1 of 1

Date 4/26/02

ROUTE FAI 64 DESCRIPTION Ramp F - IL 159 SB Ramp to I-64 EB LOGGED BY Larry Ford

SECTION 82-5K-2 LOCATION NE 1/4, SEC. 28, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE _____

[illegible]

BBS, from 137 (Rev. 8-99)

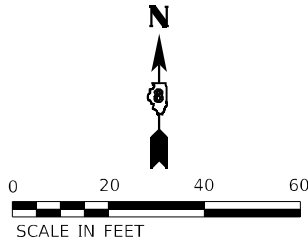
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NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS, PROPOSED WORK IS SHOWN IN BOLD.

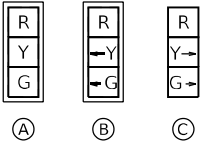
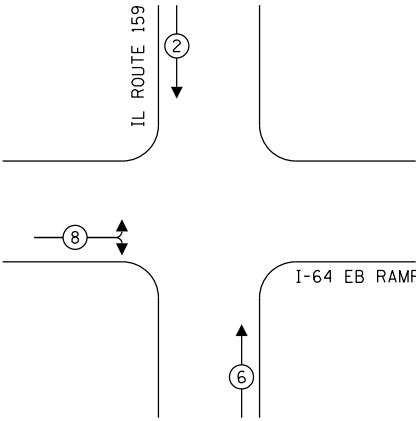
TRAFFIC SIGNAL LEGEND

-  PROPOSED CONTROLLER CABINET
 VIDEO DETECTION UNIT
 VIDEO/RADAR DETECTION ZONE
 PROPOSED CONDUIT



PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NOT USED	SB	NOT USED	NOT USED	NOT USED	NB	NOT USED	EB
CONCURRENT MOVEMENT ALLOWED	NOT USED	6	NOT USED	NOT USED	NOT USED	2	NOT USED	NONE



EX. INTERCONNECT CONDUIT
TO I-64 WB RAMP
(SEE FIBER OPTIC PLANS)

2" PVC-1" 152'

42' M.A.
36" DIAM FDN
13'-0" DEPTH
5' NORTH OF EXISTING M.A.
7' EAST OF EDGE OF PAVEMENT

REM EX MAST ARM ASSEMBLT & POLE - 1 EACH
REM EX MAS FDN - 1 EACH
REM EX SIG HEAD - 2 EACH
REL EX EVP - 1 EACH

85' - 3" PVC

69'-E

29+10.0
58.6' RT

2 1/2" PVCC-1" 10'

26' M.A.
30" DIAM FDN
10'-0" DEPTH
5' NORTH OF EXISTING M.A.
3' EAST OF EXISTING M.A.

8'-E

8' - 3" PVC

(2) DRILL EXISTING HANDHOLE

116'-E

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MA FDN - 1 EACH
REM EX SIG HEAD - 3 EACH

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MA FDN - 1 EACH
REM EX SIG HEAD - 3 EACH
REL EX EVP - 1 EACH

6' - 3" PVC-1" 10'

28+15.0
0.0' RT

IL ROUTE 159

27

46' M.A.
36" DIAM FDN
13'-0" DEPTH
5' SOUTH OF EXISTING M.A.
6' WEST OF BACK OF CURB

DRILL EXISTING HANDHOLE

5' - PVC-3"

5'-E

REM EX TS CABINET - 1 EACH
PROP TS CABINET - 1 EACH
PROP ETHERNET SWITCH - 1 EACH
PROP VIDEO DETECTION SYSTEM - 1 EACH

EX. INTERCONNECT CONDUIT
TO MARKET PL / ST CLAIRE SQ
(SEE FIBER OPTIC PLANS)

iteris

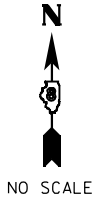
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	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 12/21/2023	DATE - 11/6/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND I-64 EB RAMPS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	18
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. CCTV CAMERA
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. CCTV CABLE
- PROP. 12" SIGNAL HEAD
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. GROUND MOUNT SERVICE
- EX. GROUNDING
- EX. EMERGENCY VEHICLE PREEMPTION
- EX. CONFIRMATION BEACON

I-64 EB OFF RAMP

IL ROUTE 159

TRACER CABLE
1 144 SM

PROP. INTERCONNECT TO I-64 WB RAMP

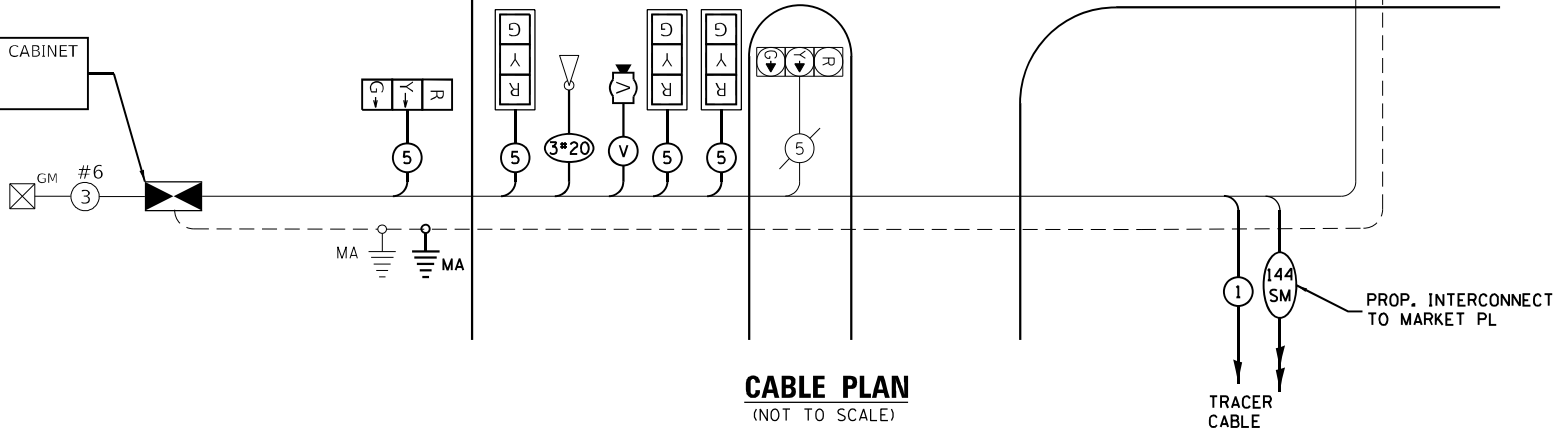
I-64 EB ON RAMP

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	98
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2433
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	133
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	8
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	504
VIDEO DETECTION SYSTEM	EACH	1
ETHERNET SWITCH	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER

REPLACE EXISTING TRAFFIC SIGNAL CABINET
INSTALL ETHERNET SWITCH
INSTALL VIDEO DETECTION SYSTEM



TRACER CABLE
1 144 SM

PROP. INTERCONNECT TO MARKET PL

iteris

USER NAME = bfunk	DESIGNED - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	DRAWN - AD	REVISED -
PLOT DATE = 2/27/2024	CHECKED - BF	REVISED -
	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN IL ROUTE 159 AND I-64 EB RAMPS			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	19
				CONTRACT NO. 76R78
		ILLINOIS	FED. AID PROJECT	

Bridge Foundation
Boring Log

PROJECT D-98-019-94 BRIDGE TRAFFIC SIGNAL/ Sh. 1 of 1
OVERHEAD SIGN TRUSS ON Date 04/20/88
 ROUTE FAI 64 FA 600 (IL 159) Bored By LARRY FORD
 SEC. 82-5K-1 SOUTH OF RAMP B & RAMP D STA. _____ Checked By MARY LAMIE

COUNTY <u>St. Clair</u>					Surf Wat El. _____					
Street. No. _____					Grndwater El. _____					
Boring No. <u>6</u>					at Compl _____					
Sta <u>0+854</u>			Qu	W				Qu	W	
O/S <u>19m LT. C.L.</u>	El.	N	kPa	%	At _____ Hrs	El.	N	kPa	%	

[illegible]

N 50 mm OD Sampler, Driven 305 mm
63.5Kg Hammer, 760 mm Fall (F.W.-Free Water B-Bulge S-Shear)

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Eight Materials Depth Increment = 152.5mm Bridge Foundation
NW 1/4 OF NW 1/4, SECTION 27, T 2 N, R 8 W, 3RD P.M. Boring Log

PROJECT BRIDGE FAP 600 (IL 159) Date Sh. 1 of 1
OVER FAI 64 08/17/93
 ROUTE FAI 64 Bored By LARRY FORD
 SEC. 82-5K-1 STA. 1+066.80 FAP 600 =
16+375.96 FAI 64 Checked By MARY LAMIE

COUNTY <u>St. Clair</u>					Surf Wat El. _____								
Strect. No. _____					Grndwater El. _____								
Boring No. <u>1.N.ABU</u>					at Compl _____								
Sta <u>1+088.44</u>													
O/S <u>30.48m RT.C.L.</u>	El.	N		Qu	W	At	Hrs		El.	N		Qu	W
				kPa	%							kPa	%

Ground Surface	175.47	0m
GRAY SILT WITH IRON OXIDE	11 P	3 S/20
	12	6 153.28 24
	8 344.88 21	1
	2	3 S/20
	4 S/15	4 143.70 26
	5 143.70 25	1
SEMI-SATURATED	2	3 S/20
	3 B	4 153.28 29
	3 47.90 29	2 B
	2	4 114.96 27
	3 76.64 27	4 S/10 25
171.82	2	38.32
	3 86.22 29	
GRAY CLAYEY SILT	1	
	2 S/20	
	2 67.06 29	
F.W.	1	
	2 S/20	
	4 76.64 31	
	1	
	2 B	
	4 134.12 27	
	1	
N 50 mm OD Sampler, Driven 305 mm		

N 50 mm OD Sampler, Driven 305 mm
63.5Kg Hammer, 760 mm Fall (F.W.-Free Water B-Bulge S-Shear)

TRAFFIC SIGNAL LEGEND

-  PROPOSED CONTROLLER CABINET
-  VIDEO DETECTION UNIT
-  VIDEO/RADAR DETECTION ZONE
-  PROPOSED CONDUIT

PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT							NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2	NOT USED	NOT USED

REM EX TS CABINET - 1 EACH
PROP TS CABINET - 1 EACH
PROP ETHERNET SWITCH - 1 EACH
PROP VIDEO DETECTION SYSTEM - 1 EACH

DRILL EXISTING HANDHOLE (2)

90' - PVC-4"

DRILL EXISTING HANDHOLE (2)

24' - PVC-3"

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MA FDN - 1 EACH
REM EX SIG HEAD - 5 EACH
REL EX EVP - 1 EACH

DRILL EXISTING HANDHOLE (2)

70' M.A.

42" DIAM FDN

25'-0" DEPTH

5' SOUTH OF EXISTING M.A.

6' WEST OF EDGE OF PAVEMENT

BUMP OUTS REMOVED BY OTHER PROJECT

ILL RTE. 159

1" PVCC

5'-T

1" PVCC

5'-T

1" PVCC

5'-T

1" PVCC

5'-T

1" PVCC

5'-T

1" PVCC

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1" PVCC

5'-T

1" PVCC

5'-T

1" PVCC

5'-T

1" PVCC

5'-T

1" PVCC

NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MAS FDN - 1 EACH
REM EX SIG HEAD - 3 EACH

54' M.A.
36" DIAM FDN
15'-0" DEPTH
10' EAST OF EXISTING M.A.

REM EX MAST ARM ASSEMBLY & POLE - 1 EACH
REM EX MA FDN - 1 EACH
REM EX SIG HEAD - 6 EACH
REL EX EVP - 1 EACH

60' M.A.
42" DIAM FDN
21'-0" DEPTH
6' NORTH OF EXISTING M.A.
7' EAST OF EDGE OF PAVEMENT

10' - PVC-3"

(2) DRILL EXISTING HANDHOLE

124' - PVC-4"

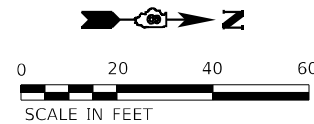
ST. CLAIR SQUARE ENT.

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USER NAME = bfunk

DESIGNED - AD

REVISED -

DRAWN - AD

REVISED -

PLOT SCALE = 100,0000' / in.

CHECKED - BF

REVISED -

PLOT DATE = 2/26/2024

DATE - 11/6/23

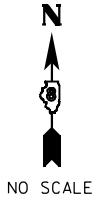
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND MARKET PLACE / ST. CLAIR SQUARE

SCALE: SHEET OF SHEETS STA. TO STA.

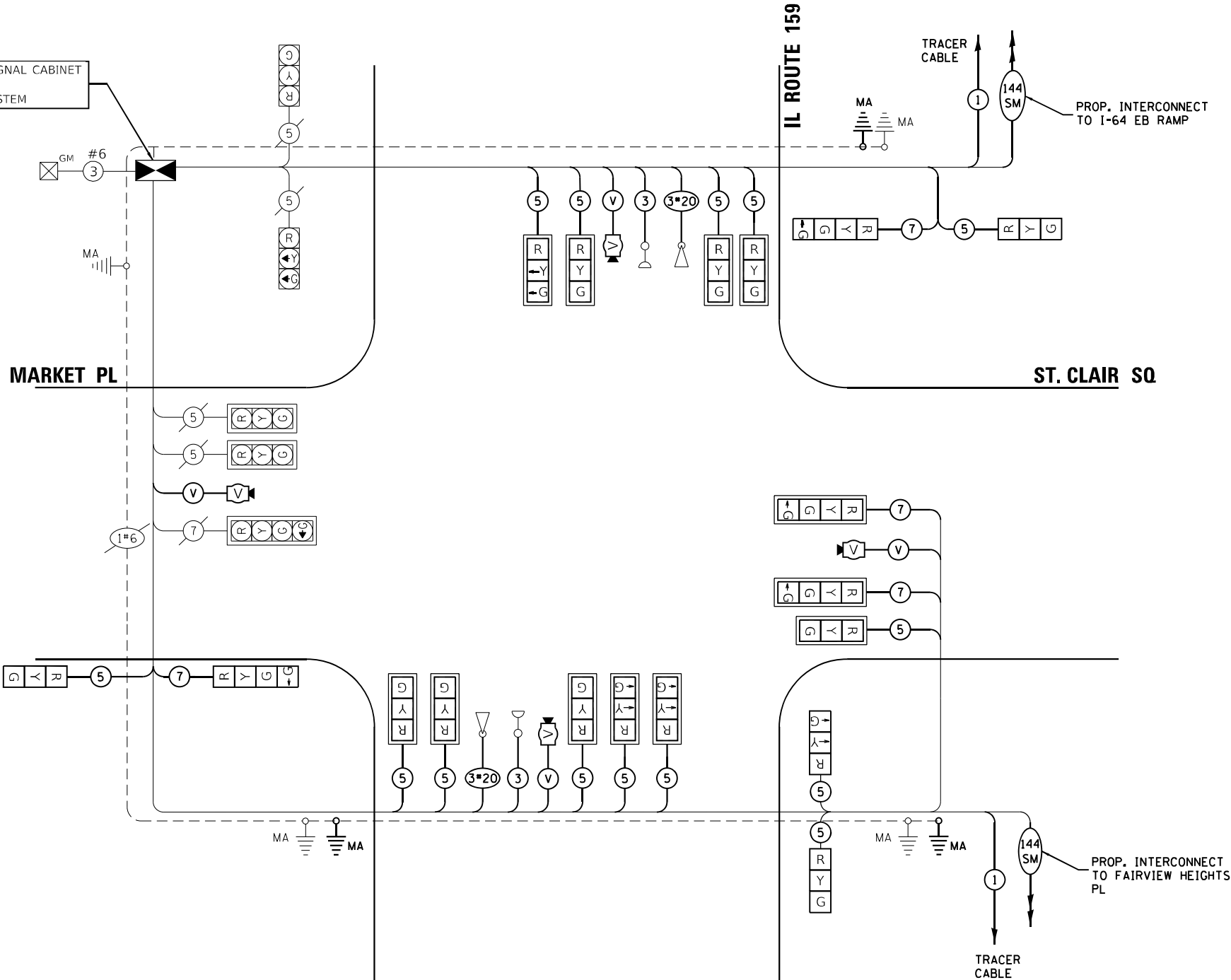
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	23
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. CCTV CAMERA
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. CCTV CABLE
- PROP. 12" SIGNAL HEAD
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. GROUND MOUNT SERVICE
- EX. GROUNDING
- EX. EMERGENCY VEHICLE PREEMPTION
- EX. CONFIRMATION BEACON

REPLACE EXISTING TRAFFIC SIGNAL CABINET
INSTALL ETHERNET SWITCH
INSTALL VIDEO DETECTION SYSTEM



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
RELOCATE SIGN PANEL - TYPE 1	SQ FT	36
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	34
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	374
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	472
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3506
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1161
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	193
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 70 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	46
DRILL EXISTING HANDHOLE	EACH	6
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, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	472
VIDEO DETECTION SYSTEM	EACH	1
ETHERNET SWITCH	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER

CABLE PLAN
(NOT TO SCALE)

iteris

USER NAME = bfunck	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 2/27/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN IL ROUTE 159 AND MARKET PLACE /ST. CLAIR SQUARE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	24
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

Page 1 of 1Date 1/22/01

ROUTE	FAP 600	DESCRIPTION	LOGGED BY
		Entrance in Fairview Heights	Brett Schwalb

SECTION 130-1RS, 130-1I-TS-2 **LOCATION** NW 1/4, SEC. 27, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE DCP

[illegible]

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



Page 1 of 1

Date 1/22/01

ROUTE	FAP 600	DESCRIPTION	Entrance in Fairview Heights	LOGGED BY	Brett Schwalb
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SECTION 130-1RS, 130-1I-TS-2 **LOCATION** NW 1/4, SEC. 27, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE DCP

STRUCT. NO. _____ Station _____	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft
BORING NO. HA 2 SW Quad Station 22+25 Offset 66.00ft Left Ground Surface Elev. 580.9 ft	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.: First Encounter 573.9 ft ▼ Upon Completion _____ ft After _____ Hrs. _____ ft
Brown/Yellow Silty LOAM 579.9			No	20	
Black LOAM 578.9		5	Test 0.75	25	
			2.0	27	
Brown/Yellow Clay LOAM 576.9		8	2.25	28	
			1.0	29	
Yellow Silty CLAY 574.9	-5	7	0.75	32	
			1.2	31	
Gray Yellow Silty CLAY 569.9	▼	9	1.2	29	
			1.0	30	
			1.25	30	
	-10	9	1.8	29	
Gray with Yellow Silty CLAY 567.9			1.5	29	
			1.25	30	
Black Silt LOAM with Gray SHALE 566.9			1.2	32	
End of Hand Auger -15				41	
Pocket Penetrometer used for Qu					
"N" values shown are calibrated from a curve converting dynamic cone N to SPT "N". Reference ASTM STP 399					
The blows to set the DCP are not included in the blow count.					

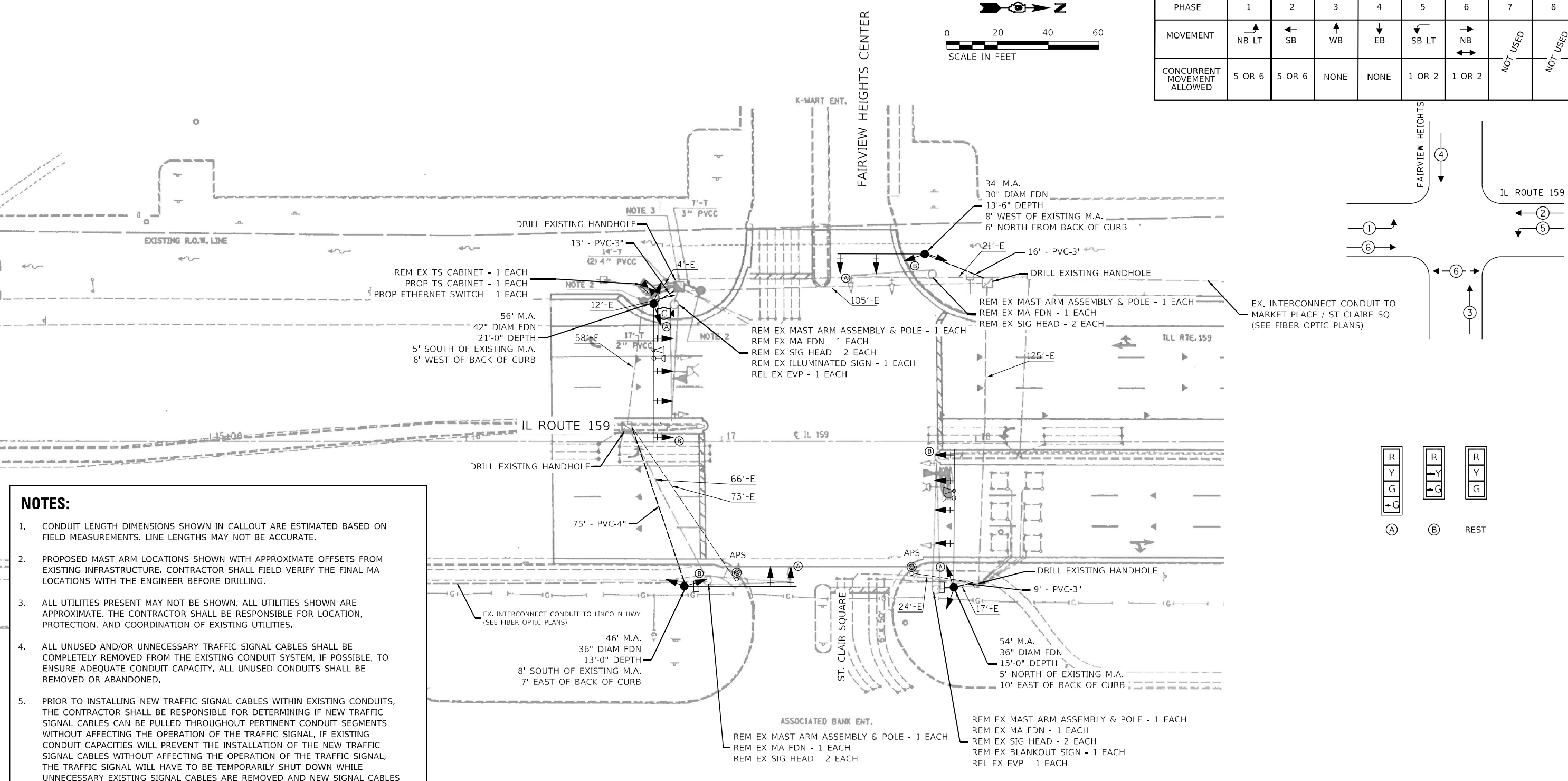
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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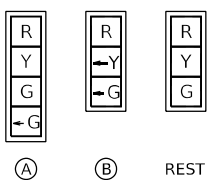
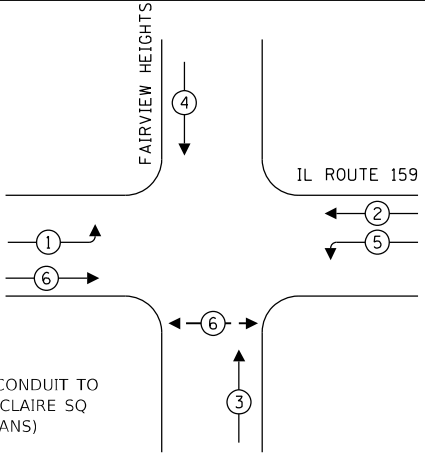
PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NB LT	SB	WB	EB	SB LT	NB	NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2	NOT USED	NOT USED



NOTES:

1. CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
2. PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
3. ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
4. ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
5. PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
6. DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
7. DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.
8. TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.



TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- CCTV CAMERA
- PROPOSED CONDUIT

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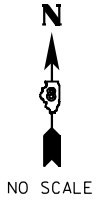
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	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 2/26/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND FAIRVIEW HEIGHTS CENTER

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	26
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

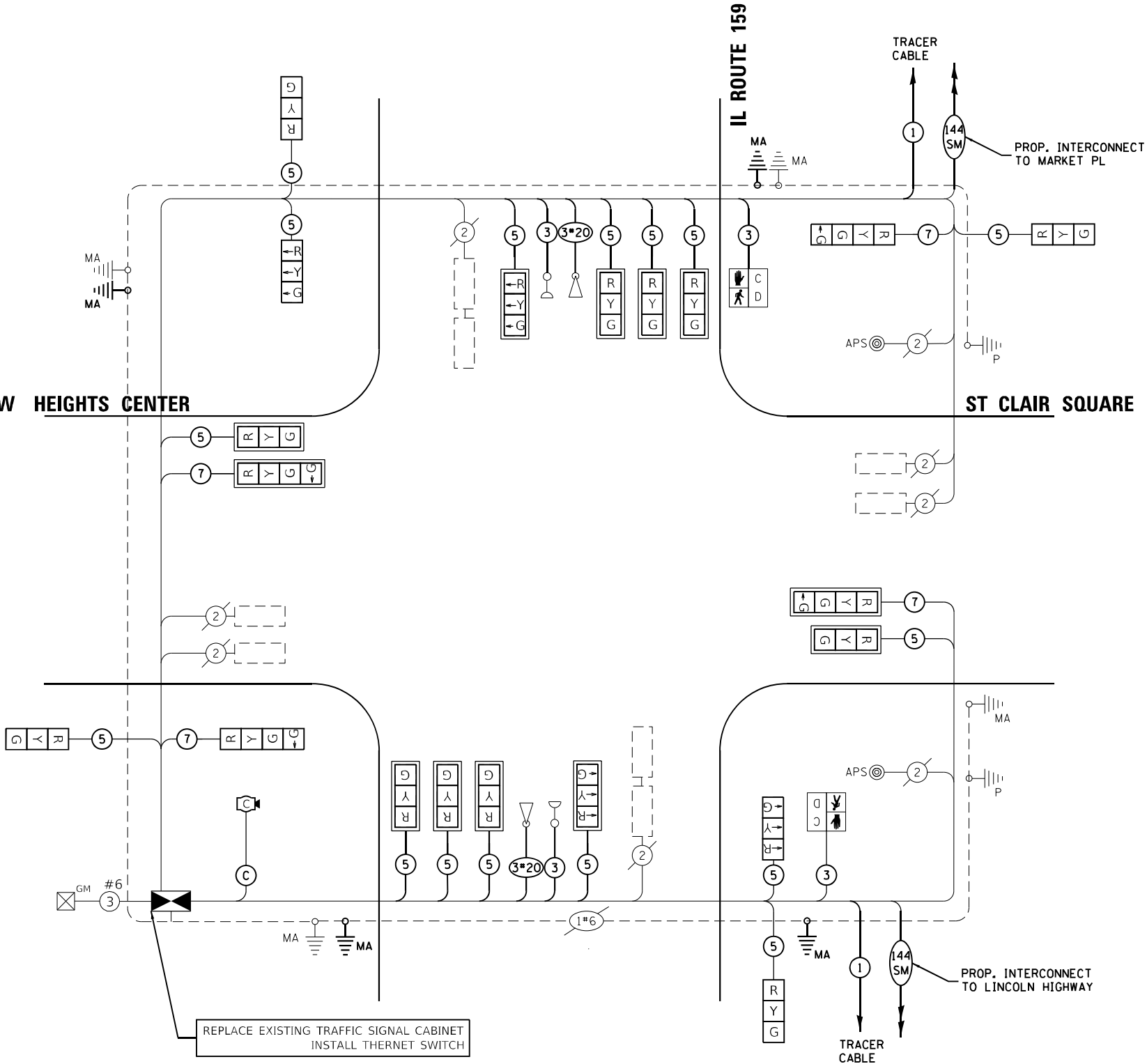
- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. CCTV CAMERA
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. CCTV CABLE
- PROP. 12" SIGNAL HEAD
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. GROUND MOUNT SERVICE
- EX. GROUNDING
- EX. EMERGENCY VEHICLE PREEMPTION
- EX. CONFIRMATION BEACON

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
RELOCATE SIGN PANEL - TYPE 1	SQ FT	10
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	38
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	75
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	883
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3102
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	754
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	159
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	14
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	424
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION DOME CAMERA, HD	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER

FAIRVIEW HEIGHTS CENTER



CABLE PLAN (NOT TO SCALE)

iteris

USER NAME = bfunk	DESIGNED - AD	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - AD	REVISED -
PLOT DATE = 2/26/2024	CHECKED - BF	REVISED -
	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN IL ROUTE 159 AND FAIRVIEW HEIGHTS CENTER

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	27
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



Page 1 of 1

Date 4/5/90

ROUTE FAP 600 DESCRIPTION IL 159 at St. Clair Square in Fairview Heights LOGGED BY L. Ford

SECTION 130-1-1-2 LOCATION NW 1/4, SEC. 27, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. _____	D	B	U	M	Surface Water Elev. _____ ft	D	B	U	M
Station _____	E	L	C	O	Stream Bed Elev. _____ ft	E	L	C	O
	P	O	S	I		T	W	S	S
BORING NO. 2 NE Quad	T	H	S	T	Groundwater Elev.:	H	S	Q	T
Station 23+52			Qu		First Encounter _____ ft				
Offset 55.00ft R					Upon Completion _____ ft				
Ground Surface Elev. 580.7 ft	(ft)	(/6")	(tsf)	(%)	After _____ ft	(ft)	(/6")	(tsf)	(%)
					Hrs. _____				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



Page 1 of 1

Date 4/5/90

ROUTE FAP 600 DESCRIPTION IL 159 at St. Clair Square in Fairview Heights LOGGED BY L. Ford

SECTION 130-1-1-2 **LOCATION** NW 1/4, SEC. 272, TWP. 2N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. _____ Station _____	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft	D E P T H	B L O W S	U C S	M O I S T
BORING NO. 1 NE Quad Station 17+62 Offset 41.00ft R Ground Surface Elev. 578.8 ft	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.: First Encounter 568.4 ft Upon Completion _____ ft After Hrs. _____ ft	▼ (ft)	(/6")	(tsf)	(%)

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODEL: Default
FILE NAME: C:\sharepoint\TERIS INC\Systems - Midwest - Chicago Construction\DOT PTB 210 -041 D8 IT5\12082 - IL 159 Signal & Interconnect\CAO\Sheet Files\D812082 IL-Route 159 Soll Borinos.dgn

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USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
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PLOT DATE = 12/21/2023	DATE - 11/10/23	REVISED -

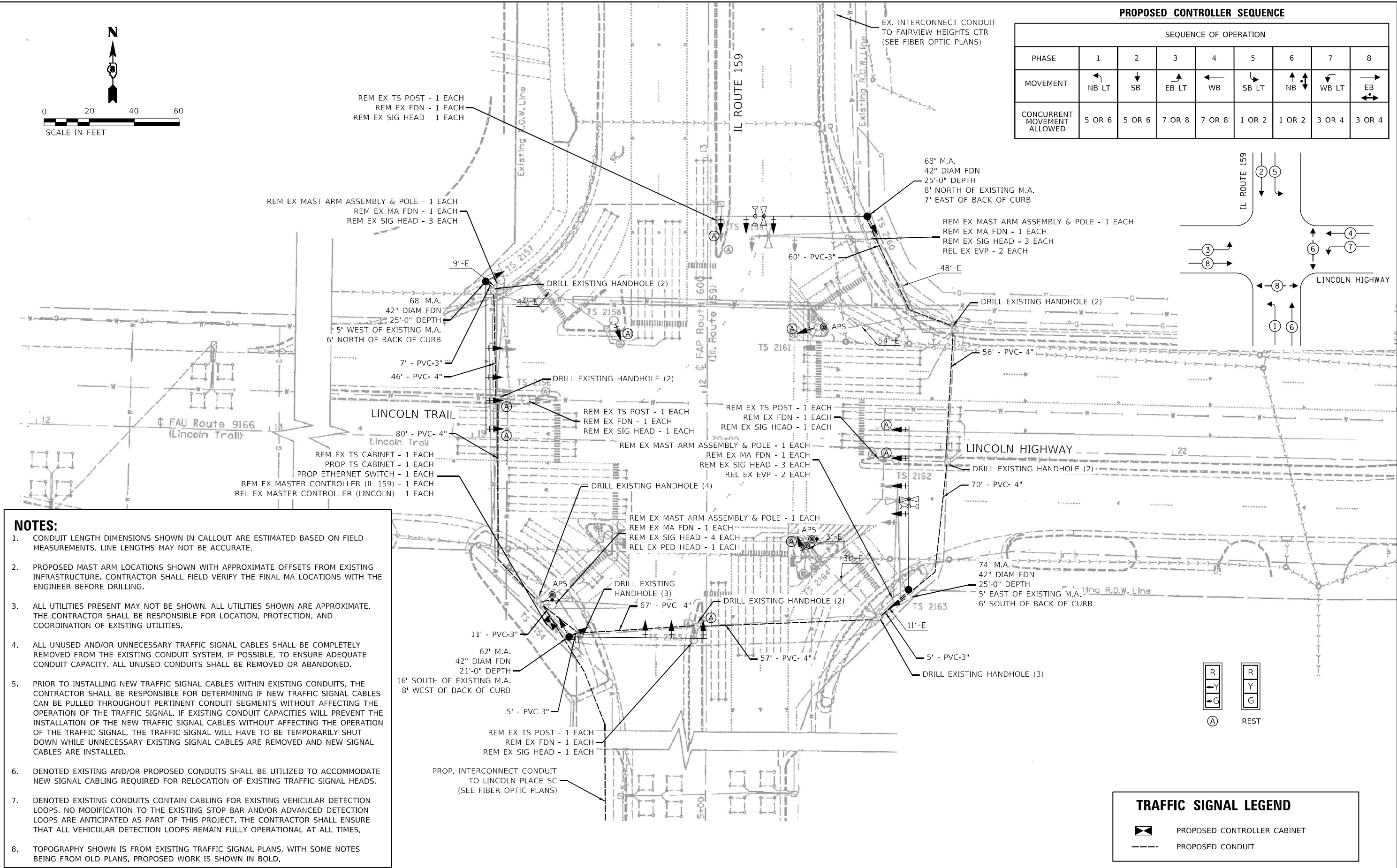
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SOIL BORING LOGS
IL ROUTE 159 AND FAIRVIEW HEIGHTS CENTER

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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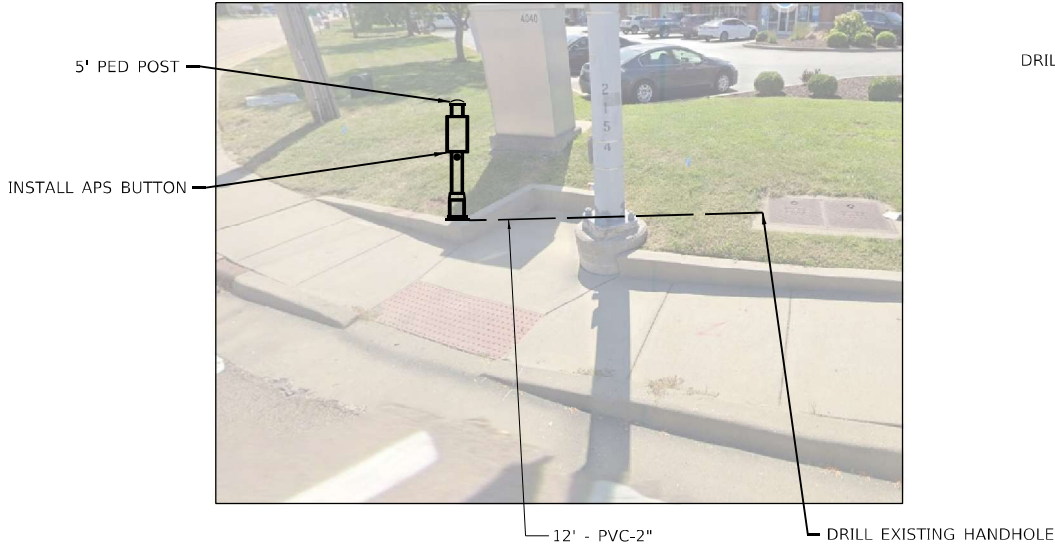
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	28
		CONTRACT NO. 76R78		
ILLINOIS		FED. AID PROJECT		

MODEL: Default
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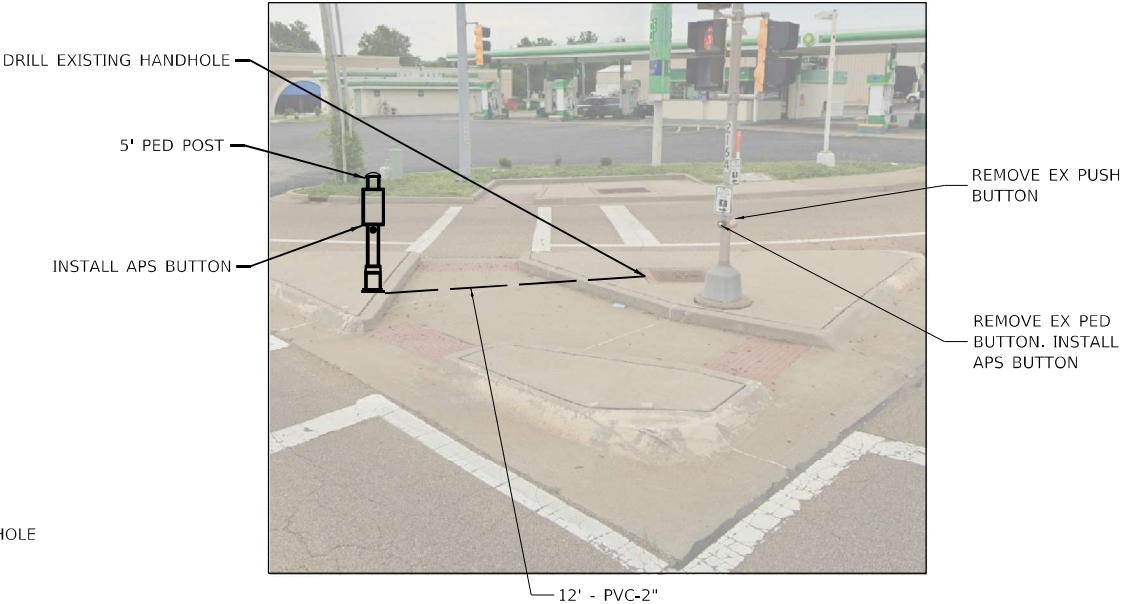


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SOUTHWEST CORNER



SOUTHEAST CORNER



NOTES:

1. PEDESTRIAN PUSH BUTTON POSTS TO BE FIELD-LOCATED IN COORDINATION WITH THE ENGINEER.



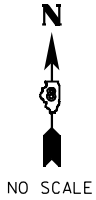
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	DRAWN - AD	REVISED -
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PLOT DATE = 3/5/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND LINCOLN HWY / LINCOLN TRAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	30
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. CCTV CAMERA
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. CCTV CABLE
- PROP. 12" SIGNAL HEAD
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. GROUND MOUNT SERVICE
- EX. GROUNDING
- EX. EMERGENCY VEHICLE PREEMPTION
- EX. CONFIRMATION BEACON

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
RELOCATE SIGN PANEL - TYPE 1	SQ FT	12
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	30
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	95
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	376
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	280
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	764
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4637
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	170
STEEL MAST ARM ASSEMBLY AND POLE, 62 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 68 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 74 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	97
DRILL EXISTING HANDHOLE	EACH	21
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	14
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	12
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	14
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	707
ETHERNET SWITCH	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
PEDESTRIAN PUSH-BUTTON POST	EACH	2
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER

LINCOLN TRAIL

LINCOLN HWY

IL ROUTE 159

CABLE PLAN
(NOT TO SCALE)

MODEL: Default
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USER NAME = bfunck	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 2/27/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND LINCOLN HWY /LINCOLN TRAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	31
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



Page 1 of 1

Date 7/11/91

ROUTE	FAP 600	DESCRIPTION	LOGGED BY
		Traffic Signals at IL 159 and Lincoln Trail in Fairview Heights	L. Ford

SECTION	130-1R	LOCATION	SW 1/4, SW 1/4, SEC. 22, TWP. 2N, RNG. 8W, 3 PM
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COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO.	D	B	U	M	Surface Water Elev.	ft	D	B	U	M
Station 20+00=11+78	E	L	C	O	Stream Bed Elev.	ft	E	L	C	O
	P	O	S	I			P	O	S	I
BORING NO. 1 SW Quad	T	W	Qu	T	Groundwater Elev.:		T	W	Qu	T
Station 19+25	H	S			First Encounter	557.5 ft	H	S		
Offset 58.00 ft R (Lincoln)					Upon Completion					
Ground Surface Elev. 574.6 ft	(ft)	(/6")	(tsf)	(%)	After	ft	(ft)	(/6")	(tsf)	(%)
					Hrs.					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Page 1 of 1

Date 7/11/91

ROUTE	EAP 600	DESCRIPTION	LOGGED BY
		Traffic Signals at IL 159 and Lincoln Trail in Fairview Heights	L. Ford

SECTION	130-1B	LOCATION	SW 1/4, SW 1/4, SEC. 22, TWP. 2N, RNG. 8W, 3 PM
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COUNTY	St. Clair	DRILLING METHOD	Hollow Stem Auger	HAMMER TYPE	140# Automatic
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STRUCT. NO.	D	B	U	M	Surface Water Elev.	ft	D	B	U	M
Station 20+00=11+78	E	L	C	O	Stream Bed Elev.	ft	E	L	C	O
	P	O	S	I			P	O	S	I
BORING NO. 2 SE Quad	T	W		S	Groundwater Elev.:		T	W		S
Station 20+89	H	S	Qu	T	First Encounter 567.8	ft	H	S	Qu	T
Offset 60.00ft R (Lincoln)					Upon Completion	ft				
Ground Surface Elev. 571.8	(ft)	(/6")	(tsf)	(%)	After	ft	(ft)	(/6")	(tsf)	(%)
					Hrs.	ft				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

Page 1 of 1Date 7/11/91

COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

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BBS, from 137 (Rev. 8-99)



Page 1 of 1

Date 7/11/91

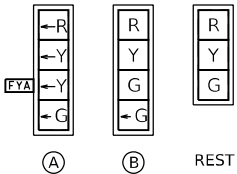
COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

Brown and Gray Very Silty CLAY (continued)				2	0.8	29
552.1				3	S	
END OF BORING						
Gray and Brown Sandy Very Silty CLAY	5					
	6	1.1	18			
	5	S/5				
569.1						
Brown and Gray Silty CLAY	1					
	2	0.9	28			
	2	S/15				
	1					
	2	1.0	28			
	3	S/15				
	1					
	2	1.3	28			
	3	S/15				
561.6						
Gray and Brown Clayey SILT END F.W.	1					
	2	0.4	33			
	2	S/10				
	2					
	4	1.1	30			
	4	S/10				
556.6						
Brown and Gray Very Silty CLAY	1					
	2	0.4	32			
	2	S/15				
	1					

BBS, from 137 (Rev. 8-99)

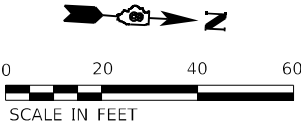
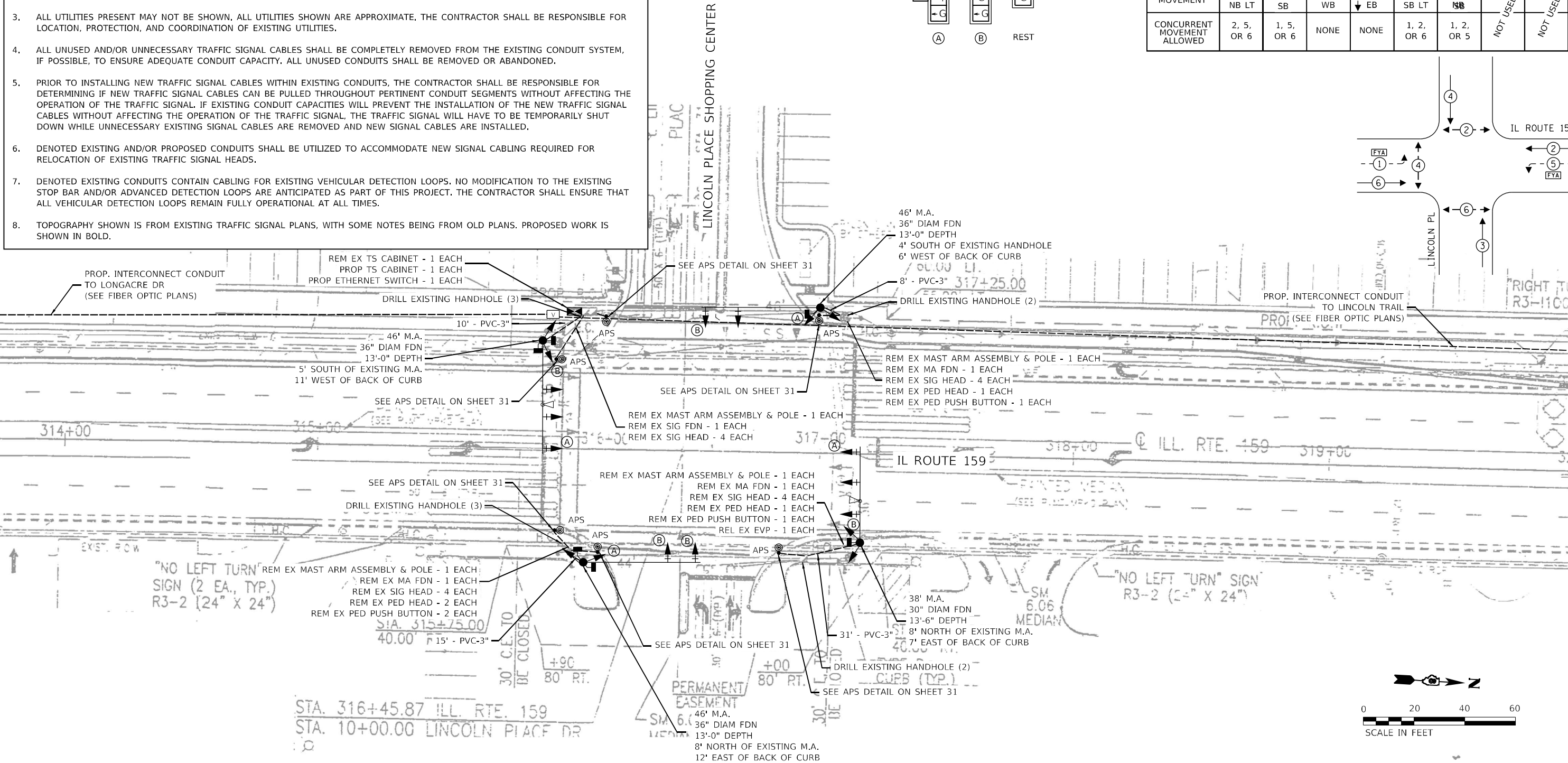
NOTES:

- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.



PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NB LT	SB	WB	EB	SB LT	NB	NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	2, 5, OR 6	1, 5, OR 6	NONE	NONE	1, 2, OR 6	1, 2, OR 5	NOT USED	NOT USED

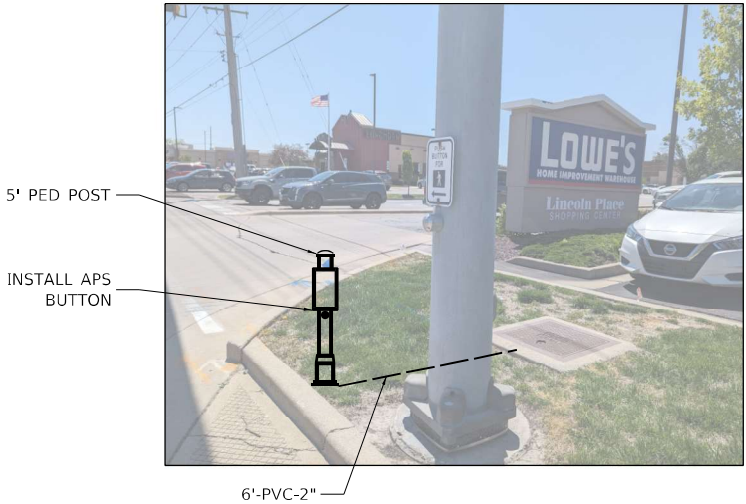


TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED CONDUIT
- FIBER OPTIC COMMUNICATIONS VAULT

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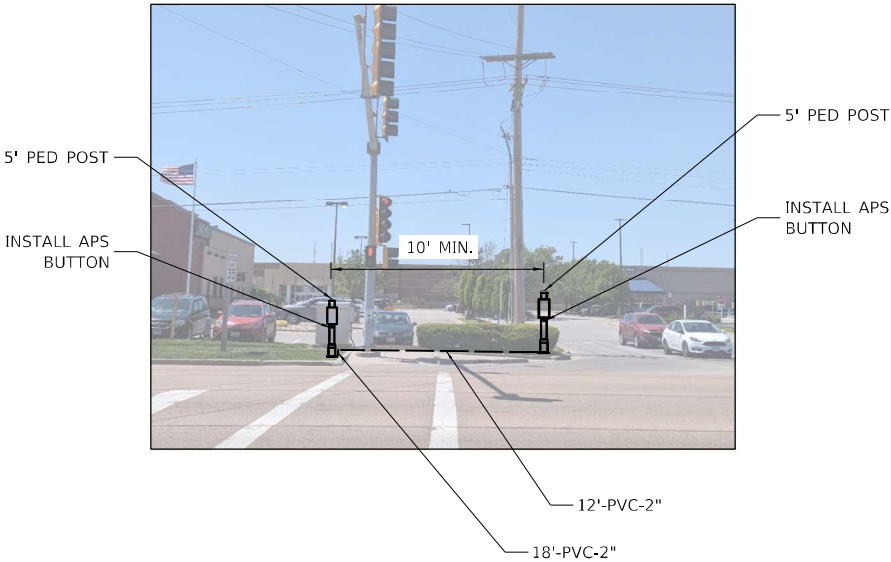
NORTHWEST CORNER



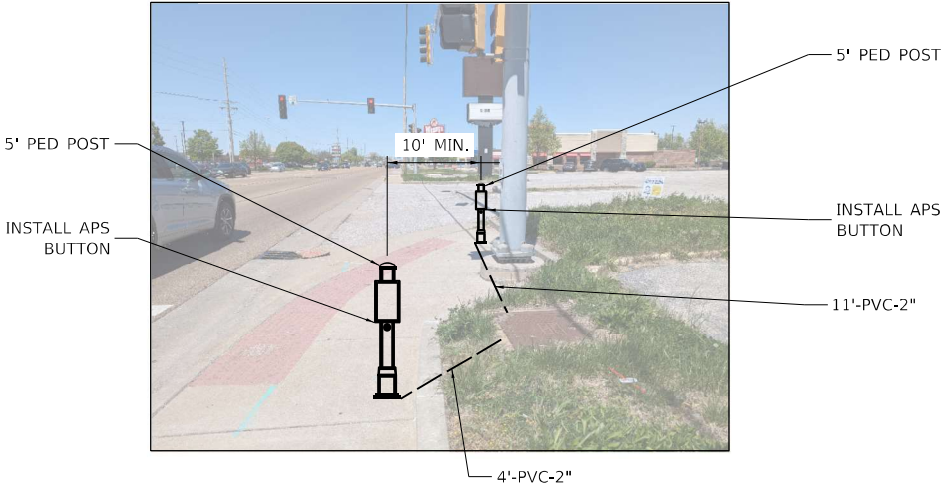
NORTHEAST CORNER



SOUTHWEST CORNER



SOUTHEAST CORNER



NOTES:

1. PEDESTRIAN PUSH BUTTON POSTS TO BE FIELD-LOCATED IN COORDINATION WITH THE ENGINEER.



USER NAME = bfunk	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 2/26/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND LINCOLN PL SHOPPING CTR

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	35
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

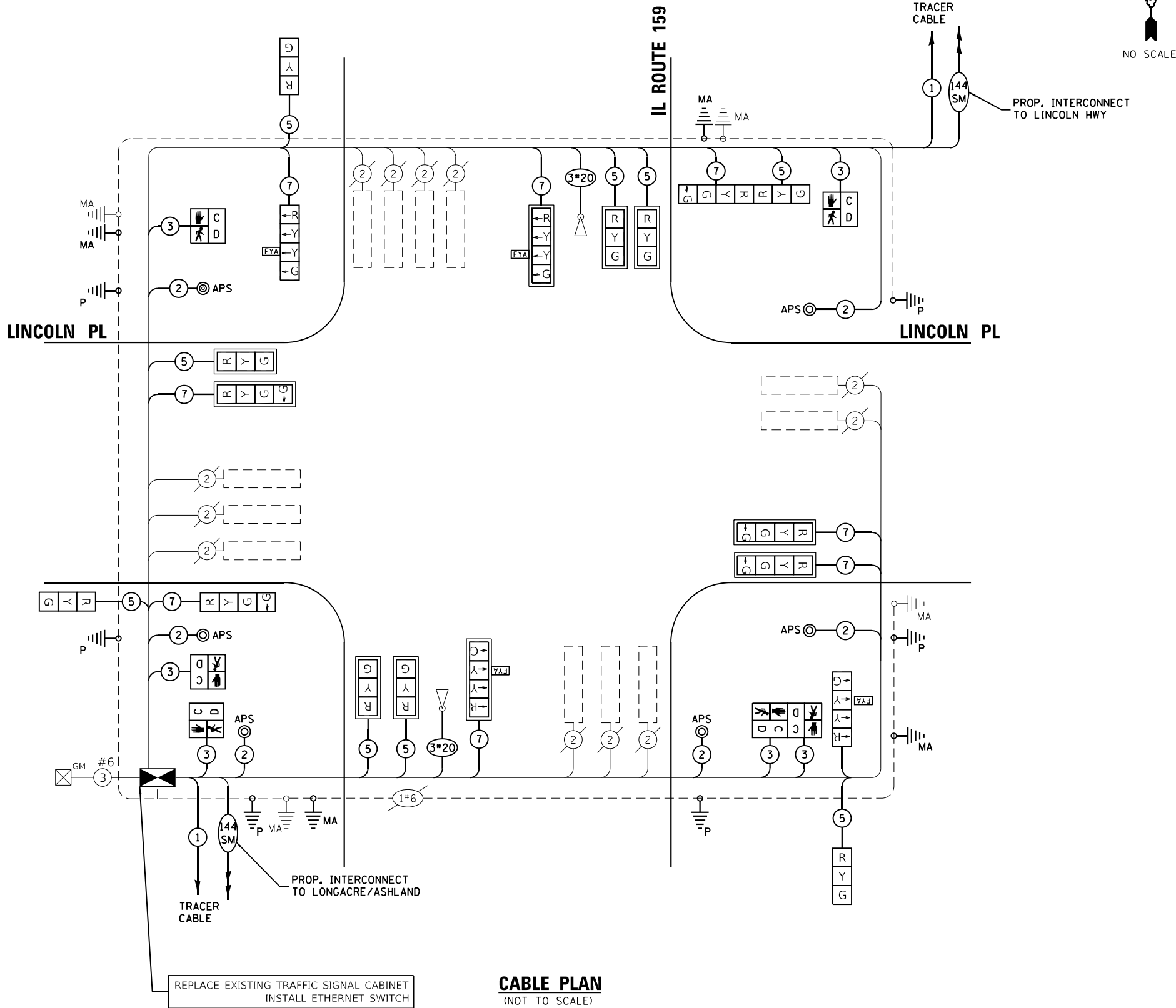
TRAFFIC SIGNAL LEGEND

	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. CCTV CAMERA
	PROP. GROUNDING
	PROP. NO. OF CONDUCTORS IN CABLE
	PROP. CCTV CABLE
	PROP. 12" SIGNAL HEAD
	EX. VEHICLE DETECTOR, INDUCTION LOOP
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. GROUND MOUNT SERVICE
	EX. GROUNDING
	EX. EMERGENCY VEHICLE PREEMPTION
	EX. CONFIRMATION BEACON

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	30
RELOCATE SIGN PANEL - TYPE 1	SQ FT	17
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	69
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	64
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	737
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	789
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1548
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1617
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	248
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	3
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	14
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39
DRILL EXISTING HANDHOLE	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	364
ETHERNET SWITCH	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
PEDESTRIAN PUSH-BUTTON POST	EACH	6
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	24

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER



CABLE PLAN
(NOT TO SCALE)

iteris

USER NAME = bfunck
PLOT SCALE = 100,0000 ' / in.
PLOT DATE = 2/26/2024

DESIGNED - AD	REVISED -
DRAWN - AD	REVISED -
CHECKED - BF	REVISED -
DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND LINCOLN PL SHOPPING CTR

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	36
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



SOIL BORING LOG

Page 1 of 1

Date 9/25/23

ROUTE FAP 600 (IL 159) DESCRIPTION IL 159 & Lincoln Place LOGGED BY KEG - MTH

SECTION (130, 130-1, 130-2)TS-3 LOCATION SEC. TWP. RNG. 3 PM

COUNTY St. Clair DRILLING METHOD HSA HAMMER TYPE Auto

STRUCT. NO. Station BORING NO. 8-1 NE Station Offset Ground Surface Elev. ft 100 ft

Surface Water Elev. n/a ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter n/a ft
Upon Completion ft
After Hrs. ft

8.5" Asphalt	99.3				
Dark Brown Silty Clay		1			
		4	2.25	23	
		3	P		
	96.0	WH			
Becomes Grayish Brown		1	2.5	28	
		2	P		
		WH			
		1	0.83	29	
		2	B		
		1			
		2	2	27	
		3	P		
	89.0				
Dark Brown Clayey Silt		WH			
		WH	2	66	
		WH	P		
	87.0				
becomes wet		2			
		2	2	57	
		3	P		
	85.0				
End of Boring					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 9/25/23

ROUTE FAP 600 (IL 159) DESCRIPTION IL 159 & Lincoln Place LOGGED BY KEG - MTH

SECTION (130, 130-1, 130-2)TS-3 LOCATION SEC. TWP. RNG. 3 PM

COUNTY St. Clair DRILLING METHOD HSA HAMMER TYPE Auto

STRUCT. NO. Station BORING NO. B-2 SE Station Offset Ground Surface Elev. ft 100 ft

Surface Water Elev. n/a ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter n/a ft
Upon Completion ft
After Hrs. ft

5" Asphalt	99.6				
Grayish brown Silty Clay		2			
		2	2.25	25	
		4	P		
	96.0	1			
becomes very soft		1	1.25	28	
		2	P		
		WH			
		2	0.44	27	
		2	B		
		2			
		2	0.57	27	
		3	B		
	89.0				
Dark Brown Clayey Silt w/ organics		1			
		2	1.75	68	
		3	P		
	86.5				
becomes wet		2			
		3	1	59	
		4	P		
	85.0				
End of Boring					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - AD	REVISED -
PLOT DATE = 12/21/2023	DATE - 11/10/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
IL ROUTE 159 AND LINCOLN PL SHOPPING CTR

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2)TS-3, 82-5TS	ST. CLAIR	74	37
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



Page 1 of 1

Date 9/21/23

SECTION (130, 130-1,
130-2)TS-3 LOCATION SEC. TWP. RNG. 3 PM

STRUCT. NO. _____	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. _____ n/a ft
Station _____					Stream Bed Elev. _____ ft
BORING NO. _____ B-3 SW					Groundwater Elev.: _____
Station _____					First Encounter _____ n/a ft
Offset _____					Upon Completion _____ ft
Ground Surface Elev. ft 100 ft	(ft)	((6")	(tsf)	(%)	After _____ Hrs. _____ ft

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Page 1 of 1

Date 9/21/23

SECTION	(130, 130-1, 130-2)TS-3	LOCATION	SEC. TWP. RNG. 3 PM
---------	----------------------------	----------	---------------------

STRUCT. NO. _____ Station _____	D E P T H	B L O W S	U C S Qu	M O I S T T	Surface Water Elev. _____ n/a ft Stream Bed Elev. _____ ft
BORING NO. _____ B-4 NW Station _____ Offset _____ Ground Surface Elev. _____ ft 100 ft	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.: First Encounter _____ n/a ft Upon Completion _____ ft After _____ Hrs. _____ ft

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99) X

MODEL: Default
FILE NAME: C:\Sharepoint\ITRIS\INCISystems - Midwest - Chicago Construction\IDOT_PIB_201-041_D8 ITS\12082 - IL 159 Signal & Interconnect\CADD\Sheet Files\08112082 IL Route 159 TS_SHT_08112082-Ashland.dgn

NOTES:

- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.
- CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND THE CONTRACTOR RESPONSIBLE FOR IDOT PROJECT 97808 ALONG FAU 9163, LONGACRE DRIVE, SECTION 20-0004-00-R5, ST. CLAIR COUNTY, STATE JOB C-98-013-24.

iteris

USER NAME = bfunck	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 2/26/2024	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND LONGACRE DRIVE / ASHLAND AVENUE

SCALE: SHEET OF SHEETS STA. TO STA.

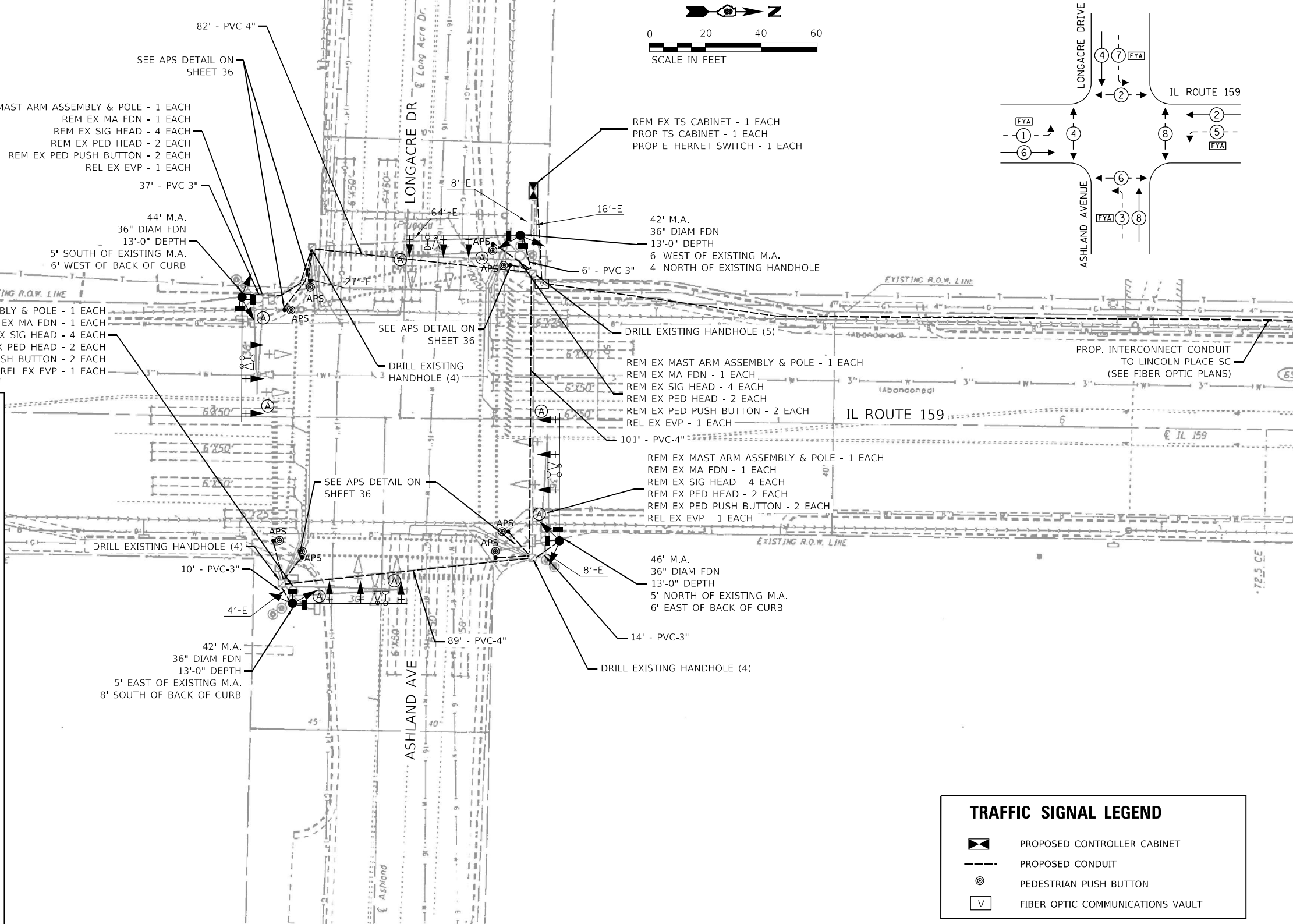
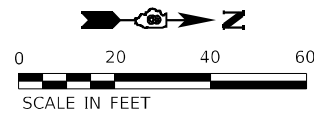
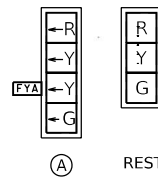
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	39
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

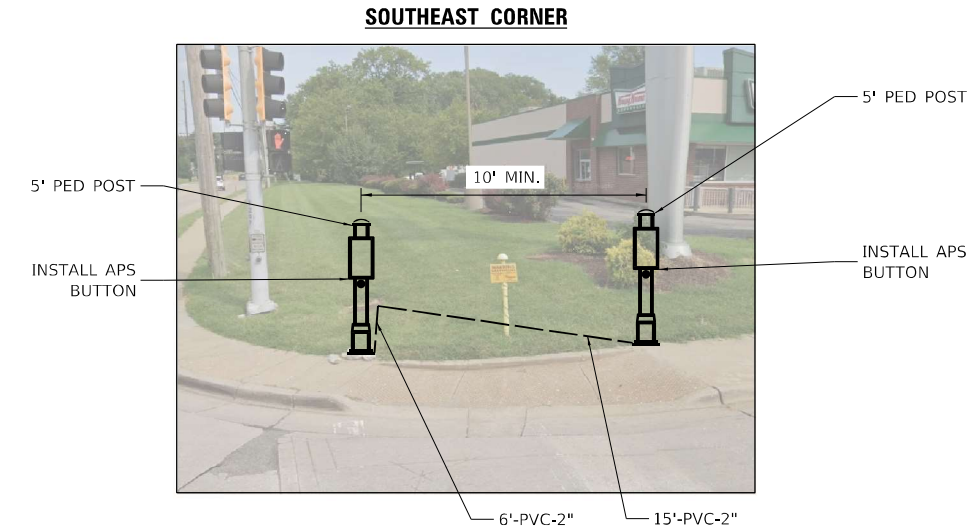
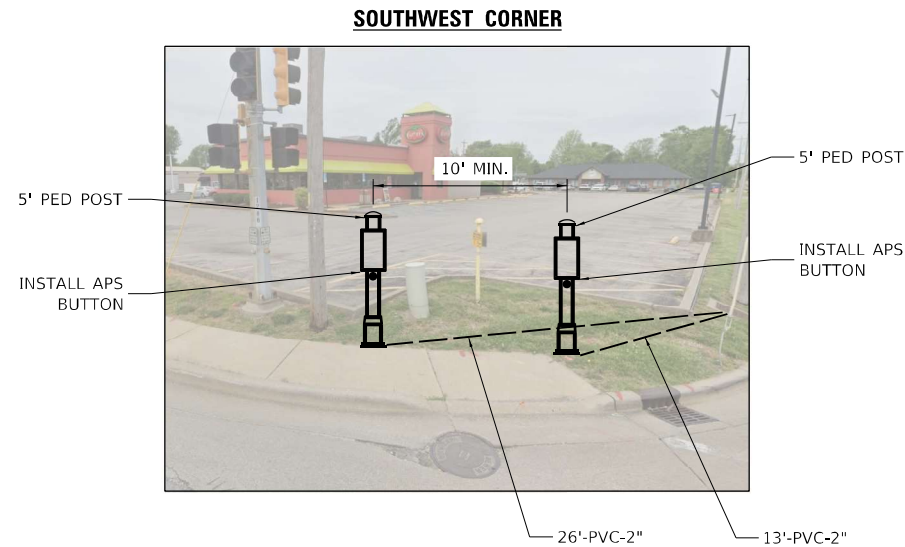
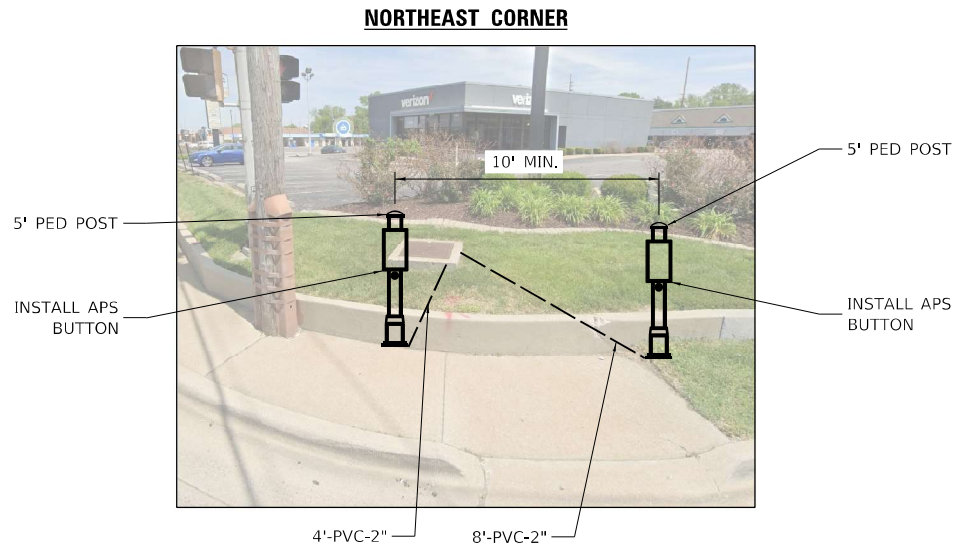
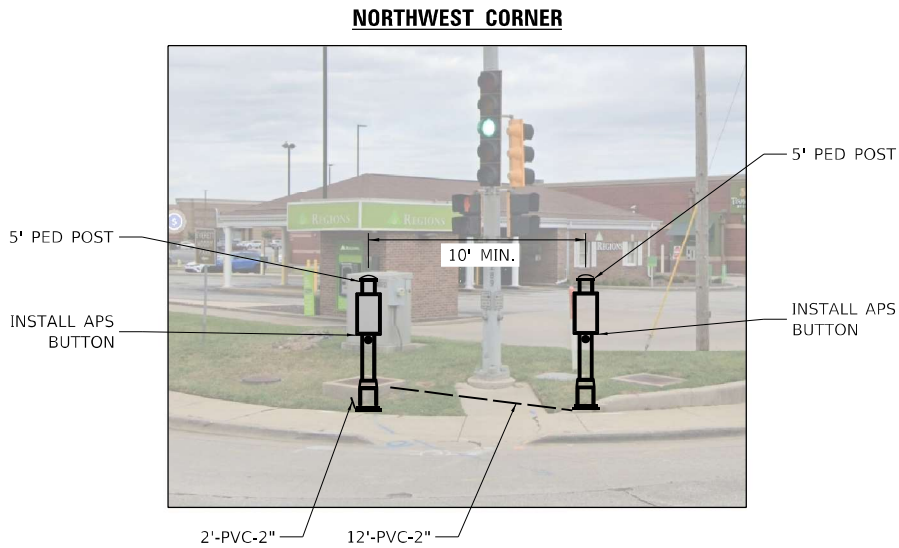
	PROPOSED CONTROLLER CABINET
	PROPOSED CONDUIT
	PEDESTRIAN PUSH BUTTON
	FIBER OPTIC COMMUNICATIONS VAULT

PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NB LT	SB	WB LT	EB	SB LT	WB	EB LT	WB
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6	7 OR 8	7 OR 8	1 OE 2	1 OR 2	3 OR 4	3 OR 4



MODEL: Default
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NOTES:

1. PEDESTRIAN PUSH BUTTON POSTS TO BE FIELD-LOCATED IN COORDINATION WITH THE ENGINEER.

iteris

USER NAME	= bfunk
PLOT SCALE	= 100,0000 ' / in.
PLOT DATE	= 2/26/2024

DESIGNED	-	AD
DRAWN	-	AD
CHECKED	-	BF
DATE	-	2/26/24

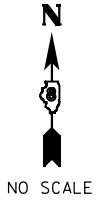
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REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND LONGACRE DRIVE / ASHLAND AVENUE**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	40
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



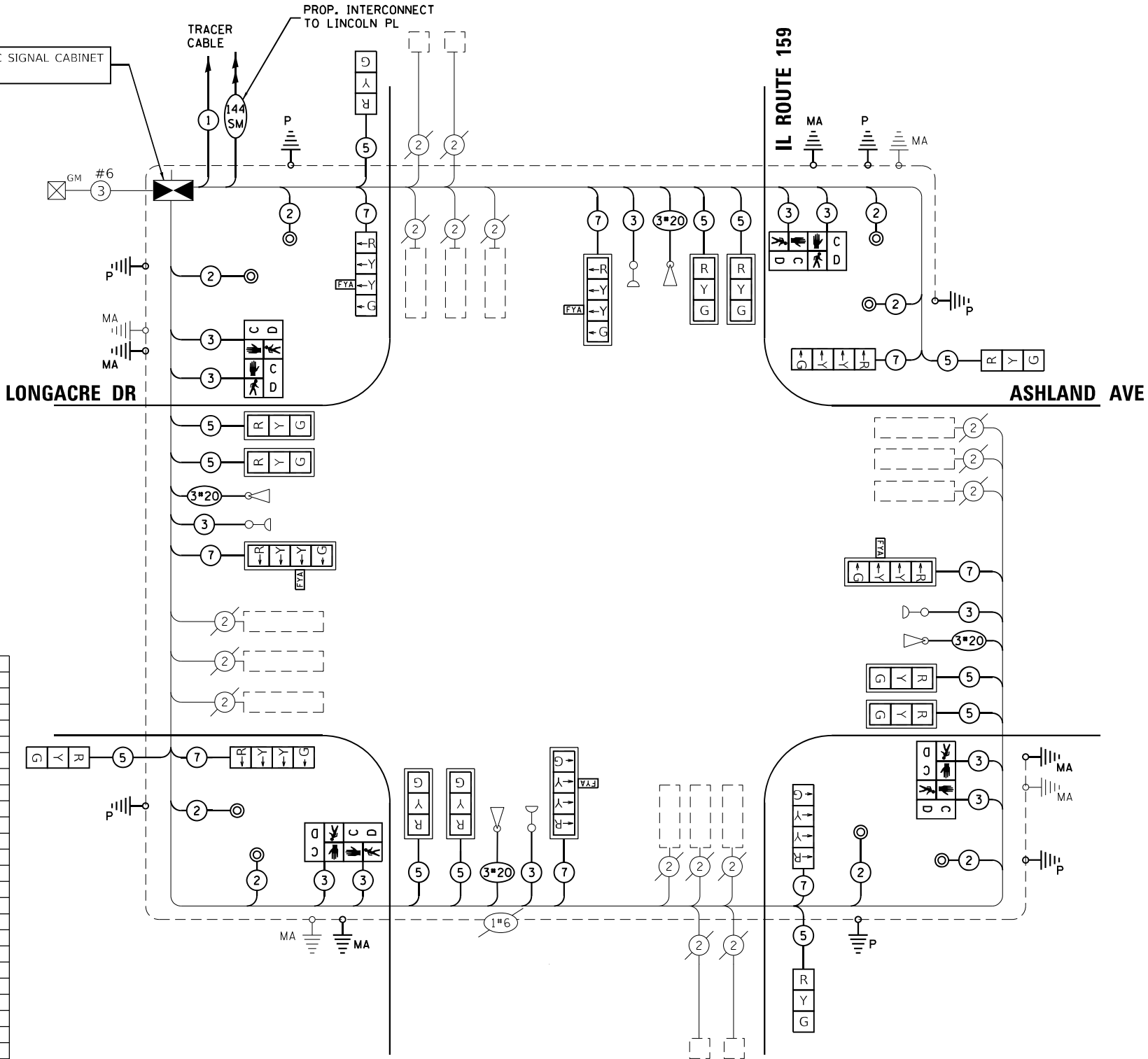
TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. CCTV CAMERA
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. CCTV CABLE
- PROP. 12" SIGNAL HEAD
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. GROUND MOUNT SERVICE
- EX. GROUNDING
- EX. EMERGENCY VEHICLE PREEMPTION
- EX. CONFIRMATION BEACON

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	60
RELOCATE SIGN PANEL - TYPE 1	SQ FT	26
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	110
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	67
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	272
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1158
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2007
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2161
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1472
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	323
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
DRILL EXISTING HANDHOLE	EACH	17
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	13
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
* REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	761
ETHERNET SWITCH	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
PEDESTRIAN PUSH-BUTTON POST	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	32

*NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER



CABLE PLAN
(NOT TO SCALE)

iteris

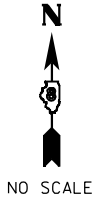
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PLOT DATE = 2/26/2024	CHECKED - BF	REVISED -
	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND LONGACRE DRIVE /ASHLAND AVENUE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	41
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



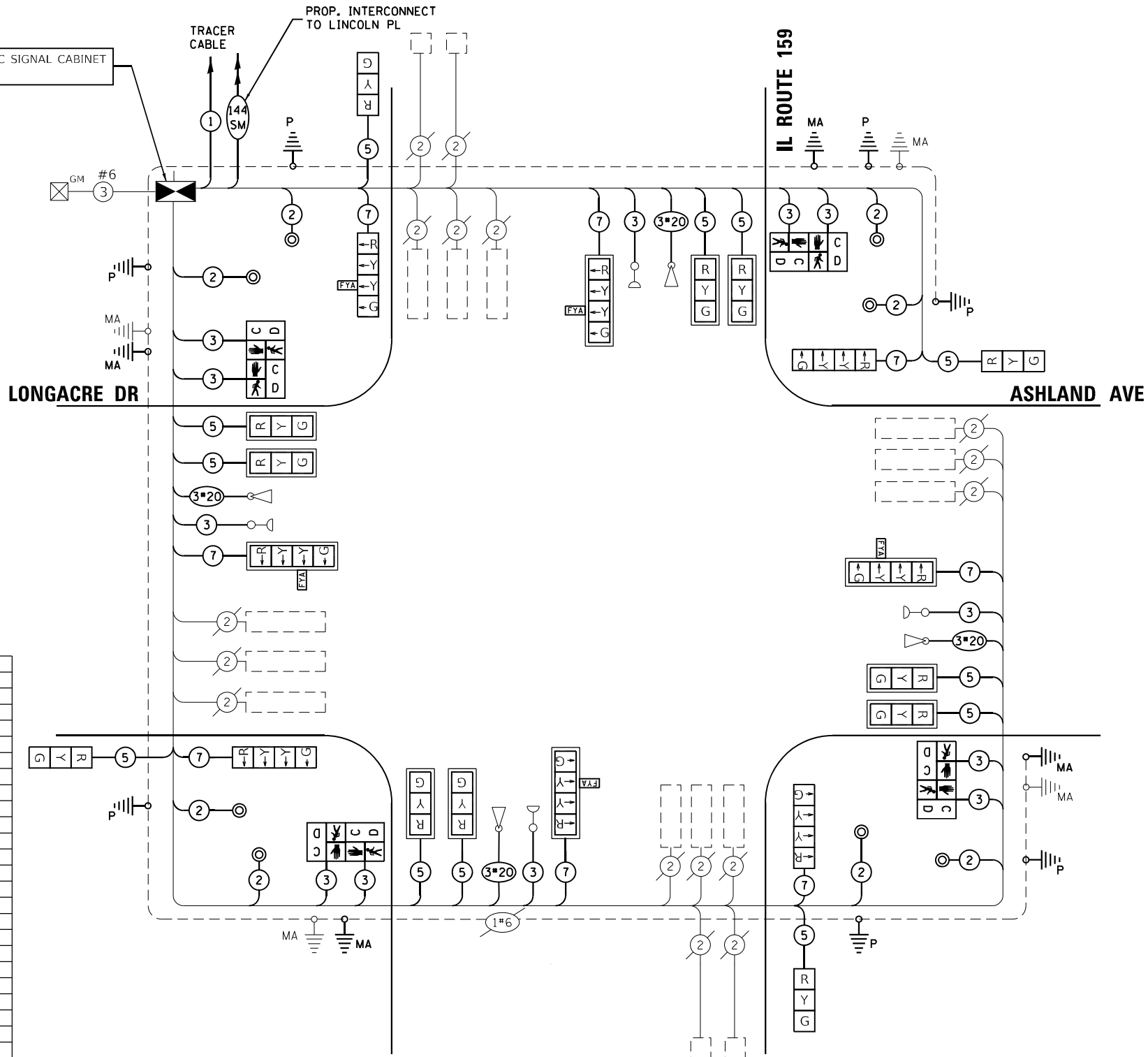
TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. CCTV CAMERA
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. CCTV CABLE
-

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	60
RELOCATE SIGN PANEL - TYPE 1	SQ FT	26
LOCATING UNDERGROUND CABLE	FOOT	10
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	110
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	67
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	272
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1158
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2007
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2161
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1472
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	323
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
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DRILL EXISTING HANDHOLE	EACH	17
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
* REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	761
ETHERNET SWITCH	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
PEDESTRIAN PUSH-BUTTON POST	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	32

*NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER



CABLE PLAN
(NOT TO SCALE)

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USER NAME = bflunk	DESIGNED - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	DRAWN - AD	REVISED -
PLOT DATE = 6/20/2024	CHECKED - BF	REVISED -
	DATE - 6/20/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND LONGACRE DRIVE /ASHLAND AVENUE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2)TS-3	ST. CLAIR	75	42
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

PROJECT P-98-041-87 BRIDGE FA Route 600 Traffic Signal Date April 21, 1988
ROUTE FA 600 (ILL.159) @ Longacre Drive Bored By Larry Ford
SEC. 130I STA. 301+54.5 = 36+90 Checked By Robert Nebelsick

COUNTY <u>St. Clair</u>		Elevation	N	Qu t/s.f.	w (%)	Surface Water El.	Elevation	N	Qu t/s.f.	w (%)
Boring No. <u>3</u>	Station <u>301+47</u>					Offset <u>42' Lt. E</u>				
Ground Surface <u>584.7</u>		<u>0</u>	POCKET PENETROMETER							
BROWN AND GRAY CLAYEY SILT W/LIMESTONE ROCK				<u>1.8</u>	<u>15</u>					
<u>581.7</u>				<u>2.0</u>	<u>14</u>					
BROWN SILTY CLAY				<u>2.0</u>	<u>22</u>		<u>-25</u>			
<u>578.7</u> GW				<u>1.5</u>	<u>26</u>					
BROWN AND GRAY CLAYEY SILT				<u>1.2</u>	<u>29</u>					
<u>572.7</u>				<u>0.8</u>	<u>32</u>					
END OF BORING				<u>0.2</u>	<u>31</u>					
				<u>0.7</u>	<u>32</u>		<u>-30</u>			
				<u>1.2</u>	<u>31</u>					
		<u>-10</u>	<u>1.5</u>	<u>31</u>						
			<u>1.5</u>	<u>33</u>						
			<u>1.7</u>	<u>33</u>						
						<u>-35</u>				
		<u>-15</u>								
						<u>-40</u>				
		<u>-20</u>								
						<u>-45</u>				

N-Standard Penetration Test-
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140 No. hammer falling 30".

Qu-Unconfined Compressive
Strength - t/sf

w - Water Content - percentage
of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

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MODEL: Default
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PROJECT P-98-041-87 BRIDGE FA Route 600 Traffic Signal Date April 21, 1988
ROUTE FA 600 (I11.159) @ Longacre Drive Bored By Larry Ford
SEC. 130I STA. 301+85 = 10+00 Checked By Robert Nebelsick

COUNTY	St. Clair								
Boring No.	4								
Station	302+36								
Offset	43' Rt.E								
Elevation	N	Qu t/s.f.	w (%)	Surface Water El.	Groundwater El. at Completion	Elevation	N	Qu t/s.f.	w (%)
After	Hours								
Ground Surface	585.8	0							
BROWN AND GRAY CLAYEY SILT W/ROCK			0.8	19					
583.8			1.0	16					
BROWN AND GRAY SILTY CLAY W/ROCK			2.5	23		-25			
582.8			1.5	25					
DARK GRAY CLAYEY SILT			1.5	28					
581.3	-5		1.5	26					
BROWN SILTY CLAY			1.5	29					
578.0			1.3	29		-30			
577.3 GW			0.5	32					
BROWN AND GRAY CLAYEY SILT	-10		0.5	30					
573.8			0.7	30					
			1.1	33					
END OF BORING						-35			
	-15								
						-40			
	-20								
						-45			

N-Standard Penetration Test-
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140 No. hammer falling 30".

Qu-Unconfined Compressive
Strength - t/sf

w - Water Content - percentage
of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

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	DRAWN - BF
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PLOT DATE = 12/21/2023	DATE - 11/10/23

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REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
IL ROUTE 159 AND LONGACRE DRIVE / ASHLAND AVENUE

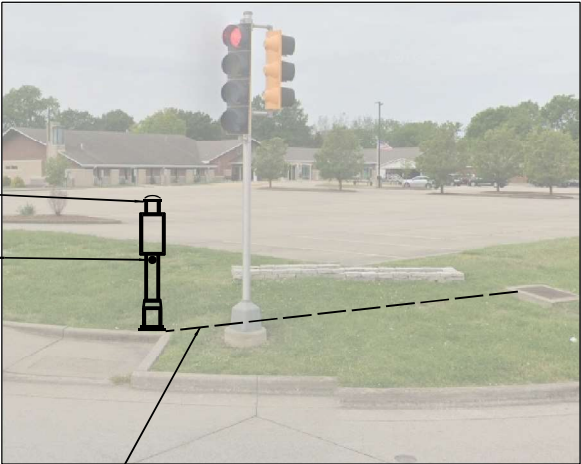
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	43
		CONTRACT NO. 76R78		
ILLINOIS		FED. AID PROJECT		

SOUTHEAST CORNER DETAIL

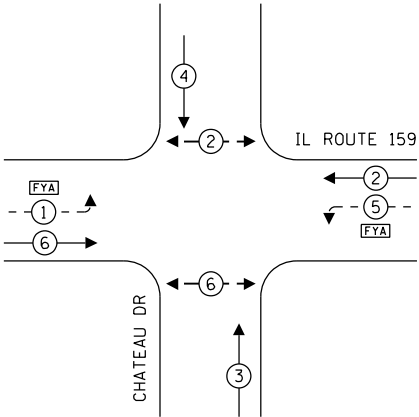
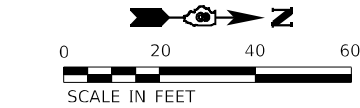


SOUTHWEST CORNER DETAIL



PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NB LT	SB	WB	EB	SB LT	NB	NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2	NOT USED	NOT USED



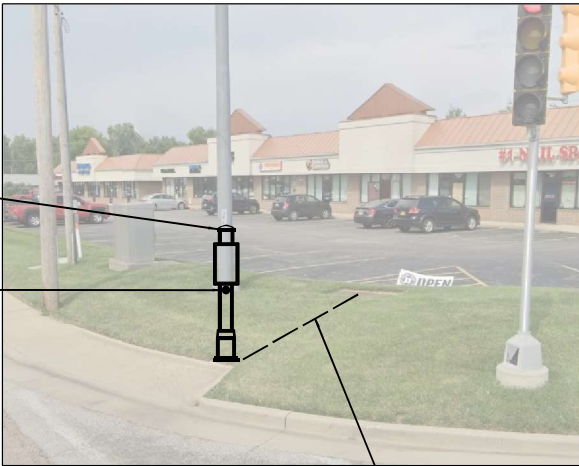
NOTES:

- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MAST ARM LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
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- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS, NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.
- PEDESTRIAN PUSH BUTTON POSTS TO BE FIELD-LOCATED IN COORDINATION WITH THE ENGINEER.

TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED CONDUIT

NORTHEAST CORNER DETAIL



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USER NAME = bfunk	DESIGNED - AD	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - AD	REVISED -
PLOT DATE = 2/27/2024	CHECKED - BF	REVISED -
	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND CHATEAU DRIVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	44
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

-
- PROP. TRAFFIC SIGNAL CONTROLLER

5

PROP. NO. OF CONDUCTORS IN CABLE

C

R

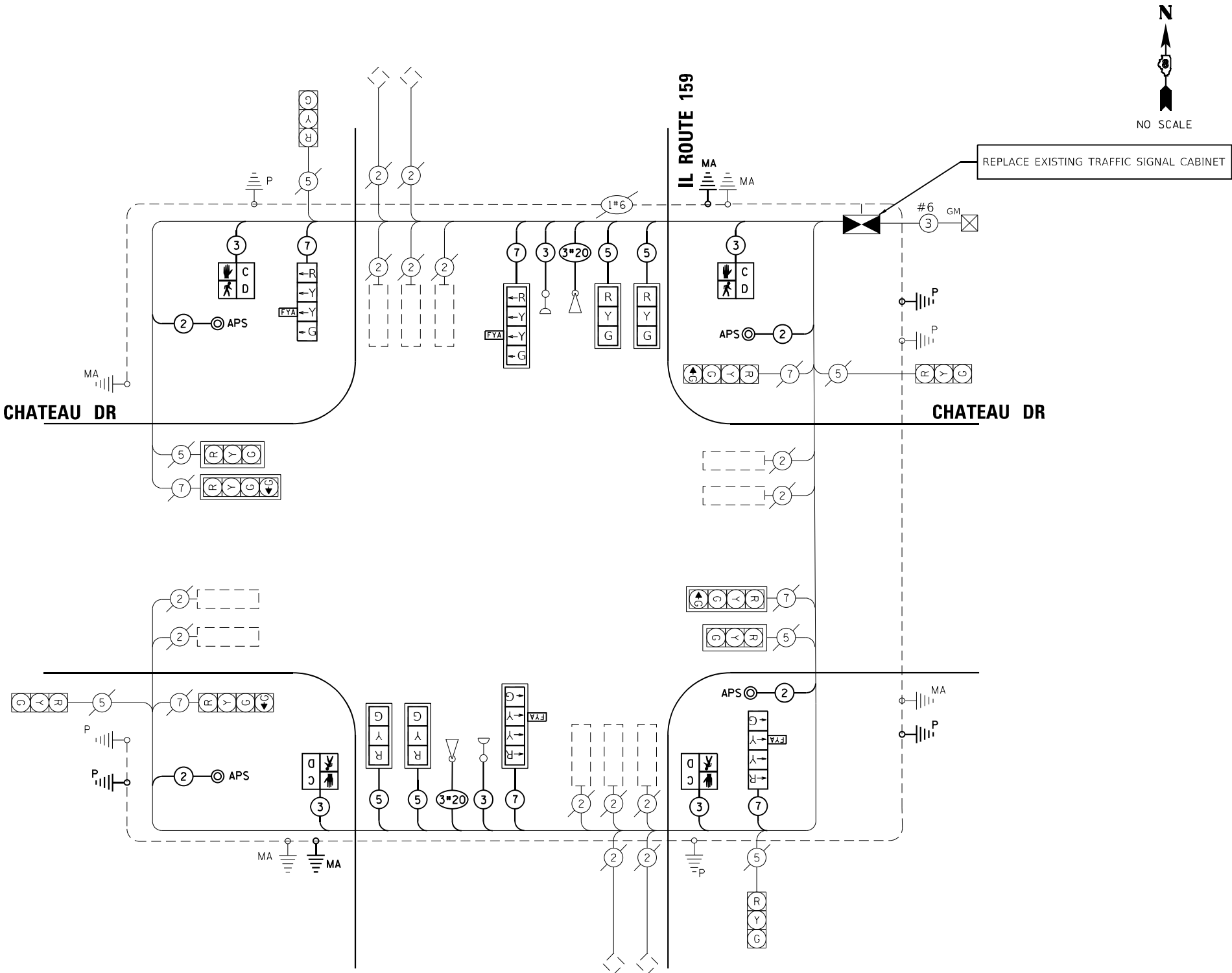
5

R

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	30
RELOCATE SIGN PANEL - TYPE 1	SQ FT	22
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	45
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	30
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	753
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1179
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	838
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	811
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	250
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	6
* RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	419
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
PEDESTRIAN PUSH-BUTTON POST	EACH	3
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY ENGINEER



CABLE PLAN
(NOT TO SCALE)

iteris

USER NAME = bfunck	DESIGNED - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	DRAWN - AD	REVISED -
PLOT DATE = 2/27/2024	CHECKED - BF	REVISED -
	DATE - 2/26/24	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND CHATEAU DRIVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	45
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



Page 1 of 1

Date 9/22/23

SECTION	(130, 130-1, 130-2)TS-3	LOCATION	SEC.	TWP.	RNG.	3 PM
---------	----------------------------	----------	------	------	------	------

STRUCT. NO. _____ Station _____	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. _____ n/a ft
					Stream Bed Elev. _____ ft
BORING NO. _____ B-5 NE Station _____ Offset _____					Groundwater Elev.: _____
Ground Surface Elev. ft 100 ft					First Encounter _____ n/a ft Upon Completion _____ ft After Hrs. _____ ft
	(ft)	(/6")	(tsf)	(%)	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



Page 1 of 1

Date 9/21/23

SECTION (130, 130-1, 130-2)TS-3 LOCATION SEC. TWP. RNG. 3 PM

STRUCT. NO. _____ Station _____	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. _____ n/a ft Stream Bed Elev. _____ ft
BORING NO. _____ B-6 SW Station _____ Offset _____ Ground Surface Elev. ft 100 ft	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.: _____ First Encounter _____ n/a ft Upon Completion _____ ft After _____ Hrs. _____ ft

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99) X

MODEL: Default
FILE NAME: C:\Sharepoint\ITERIS Inc\Systems - Midwest - Chicago Construction\DOT PTH 201-041 DB ITS\12082 - IL 159 Signal & Interconnect\CADD\Sheet Files\DB12082 IL Route 159 TS SHT 106 Frank Scott.dgn

NOTES:

- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE ESTIMATED BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.
- TOPOGRAPHY SHOWN IS FROM EXISTING TRAFFIC SIGNAL PLANS, WITH SOME NOTES BEING FROM OLD PLANS. PROPOSED WORK IS SHOWN IN BOLD.

iteris

USER NAME = bfunk	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - BF	REVISED -
PLOT DATE = 12/21/2023	DATE - 12/21/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

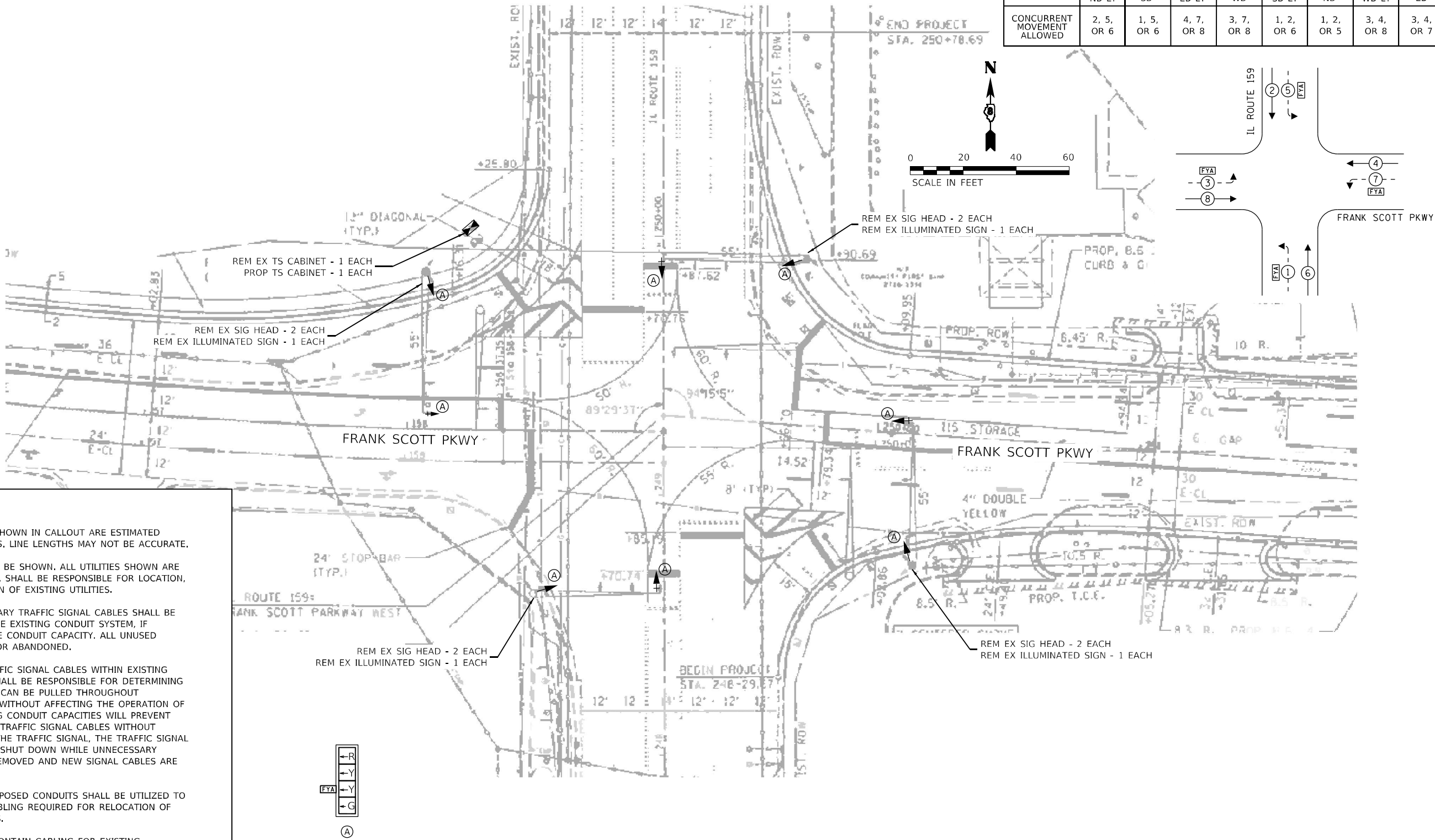
TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND FRANK SCOTT PARKWAY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	47
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

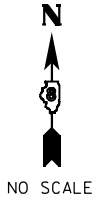
PROPOSED CONTROLLER SEQUENCE

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT								
CONCURRENT MOVEMENT ALLOWED	NB LT 2, 5, OR 6	SB 1, 5, OR 6	EB LT 4, 7, OR 8	WB 3, 7, OR 8	SB LT 1, 2, OR 6	NB 1, 2, OR 5	WB LT 3, 4, OR 8	EB 3, 4, OR 7



TRAFFIC SIGNAL LEGEND

PROPOSED CONTROLLER CABINET



TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. CCTV CAMERA
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. CCTV CABLE
- PROP. 12" SIGNAL HEAD
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. GROUND MOUNT SERVICE
- EX. GROUNDING
- EX. EMERGENCY VEHICLE PREEMPTION
- EX. CONFIRMATION BEACON

REPLACE EXISTING TRAFFIC SIGNAL CABINET

FRANK SCOTT PKWY

IL ROUTE 159

FRANK SCOTT PKWY

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SO FT	60
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

CABLE PLAN
(NOT TO SCALE)

iteris

USER NAME = bfunck

DESIGNED - AD

REVISED -

DRAWN - AD

REVISED -

PLOT SCALE = 100,0000 ' / in.

CHECKED - BF

REVISED -

PLOT DATE = 2/27/2024

DATE - 2/24/24

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND FRANK SCOTT PARKWAY

SCALE:

SHEET

OF

SHEETS

STA.

TO STA.

F.A.P.

RTE.

SECTION

COUNTY

TOTAL

SHEETS

SHEET

NO.

600

(130, 130-1, 130-2) TS-3, 82-5TS

ST. CLAIR

74

48

CONTRACT NO. 76R78

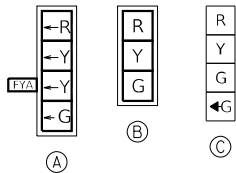
ILLINOIS FED. AID PROJECT

MODEL Default
FILE Name C:\Sharepoint\ITERIS - Midwest - Chicago Construction\DOT PTH 201-041 D8 ITS\12082 - IL 159 Signal & Interconnect\CADD\Sheet Files\DOT12082 IL-Route 159 Cable SHT.dgn
bfunck

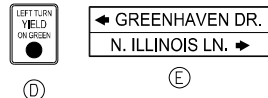
NOTES:

1. CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
2. PROPOSED MA LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
3. ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
4. ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
5. PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
6. DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
7. DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.

PROPOSED TRAFFIC
SIGNAL FACES



EXISTING TRAFFIC
SIGNAL FACES



NOTE:

RL: EXISTING SIGNAL ITEM RELOCATED FROM EXISTING INSTALLATION TO PROPOSED MA OR POST.

MODEL NAME
FILE NAME

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS	DESIGNED - MA	REVISED -
DRAWN - NS	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATE\$	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND GREEN HAVEN DRIVE

SCALE: NTS SHEET OF SHEETS STA. TO STA.

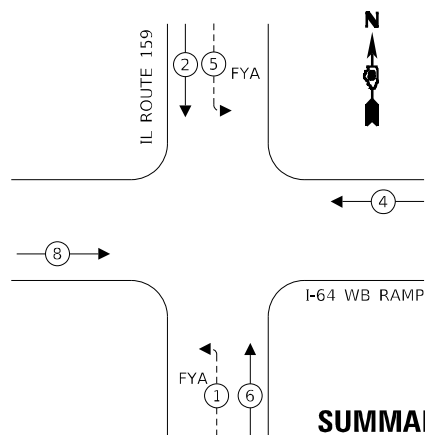
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	49
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

TRAFFIC SIGNAL LEGEND

	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. GROUNDING
	PROP. NO. OF CONDUCTORS IN CABLE
	PROP. 12" SIGNAL HEAD
	EX. VEHICLE DETECTOR, INDUCTION LOOP
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. GROUND MOUNT SERVICE
	EX. GROUNDING
	EX. EMERGENCY VEHICLE PREEMPTION

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT			NOT USED				NOT USED	
CONCURRENT MOVEMENT ALLOWED	2,5 OR 6	1,5 OR 6	NOT USED	8	1,2 OR 6	1,2 OR 5	NOT USED	4

EXISTING CONTROLLER SEQUENCE

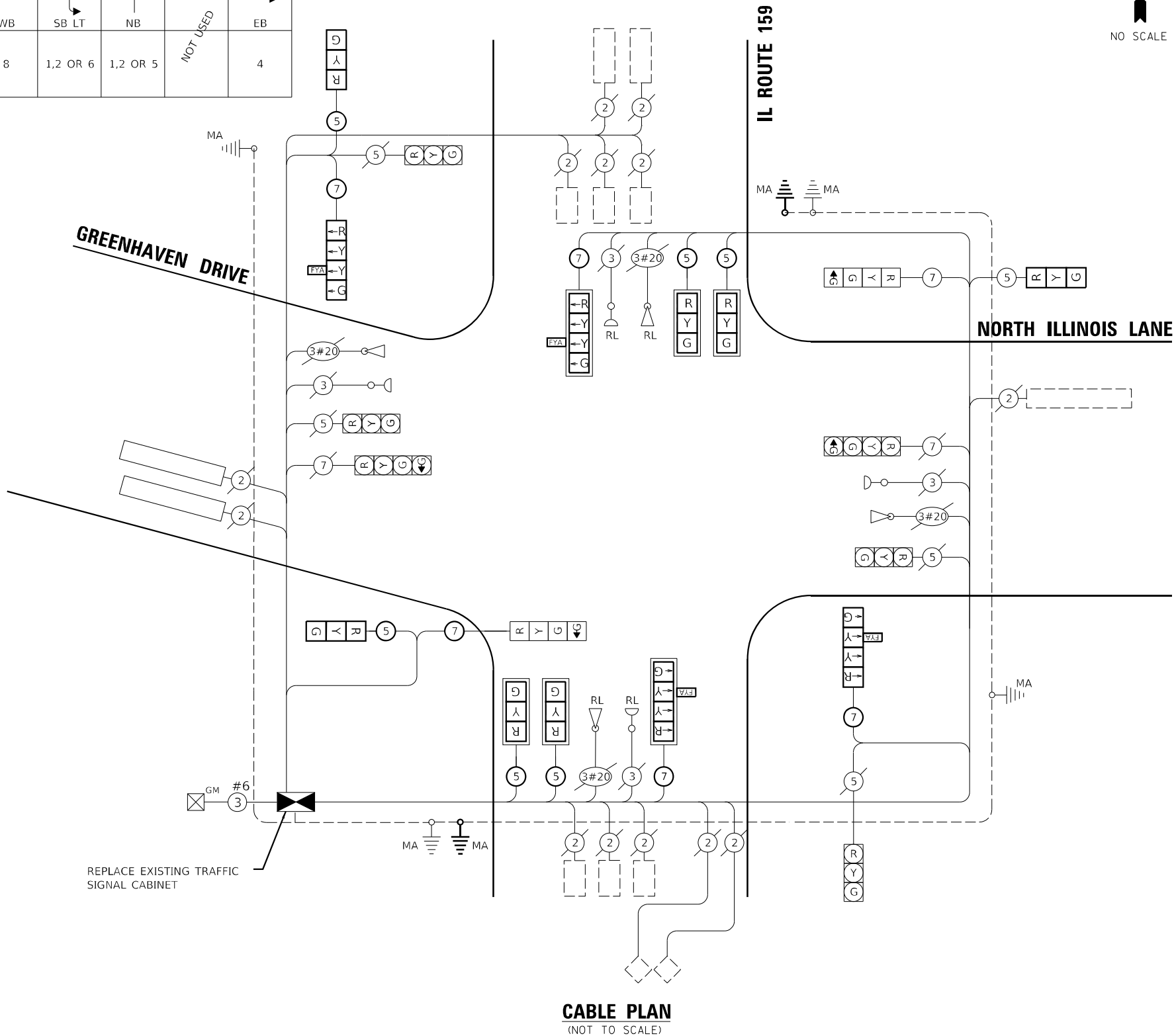
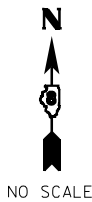


LEGEND:

	PROTECTED PHASE
	PROTECTED/PERMITTED PHASE
	PEDESTRIAN PHASE
	OVERLAP

SUMMARY OF QUANTITIES

ITEM	UNIT	TOTAL
RELOCATE SIGN PANEL - TYPE 1	SQ FT	50
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	9
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1350
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1035
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	860
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	25
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	6
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CABLE FROM CONDUIT	EACH	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	700

CABLE PLAN
(NOT TO SCALE)MODEL & MODEL NAMES
FILE: 76R78.DWGDELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145USER NAME = \$USER\$
PLOT SCALE = \$SCALE\$
PLOT DATE = \$DATE\$DESIGNED - MA
DRAWN - NS
CHECKED - MA
DATE - 03/01/2024REVISED -
REVISED -
REVISED -
REVISED -STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATIONTRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND GREEN HAVEN DRIVE

SCALE: NTS

SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	50
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				



**Illinois Department
of Transportation**
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/22/23

ROUTE FAP 600 (IL 159) DESCRIPTION IL 159 & Green Haven Drive LOGGED BY KEG - MTH

SECTION (130, 130-1, 130-2) TS-3 LOCATION SEC. TWP. RNG. 3 PM

COUNTY St. Clair DRILLING METHOD HSA HAMMER TYPE Auto

STRUCT. NO.	D	B	U	M	Surface Water Elev.	n/a	ft	D	B	U	M
Station	E	L	C	O	Stream Bed Elev.		ft	E	L	C	O
	P	O	S	I				P	O	S	I
BORING NO. B-7 SW	T	W	Qu	T	Groundwater Elev.:			T	W	Qu	T
Station	H	S			First Encounter	n/a	ft	H	S		
Offset					Upon Completion		ft				
Ground Surface Elev. 100 ft	(ft)	(/8")	(tsf)	(%)	After Hrs.		ft	(ft)	(/8")	(tsf)	(%)
Brown hard Silty Clay											
		5							WH		
		7	4.5	18					1	1.18	27
		7	P		as above	77.5			2	B	
					End of Boring						
		1									
		2	0.61	25							
		3	B								
		-5									
94.0											
		WH									
Brownish gray Silty Clay		1	0.25	30							
moist, very soft		1	P								
		WH									
		WH	0.25	32							
		1	P								
		-10									
89.0											
		1									
becomes moist, stiff		2	0.92	27							
		1	B								
		1									
		2	1.31	28							
		2	B								
		-15									
84.5											
		WH									
becomes wet		1	1.5	28							
		2	P								
82.0											
		1									
Gray Silty Clay, med stiff		1	1.18	26							
		2	B								
		-20									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

SOIL BORING NO. 1

MODEL 340 MODEL NAMES
FILE 340101 340101



DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

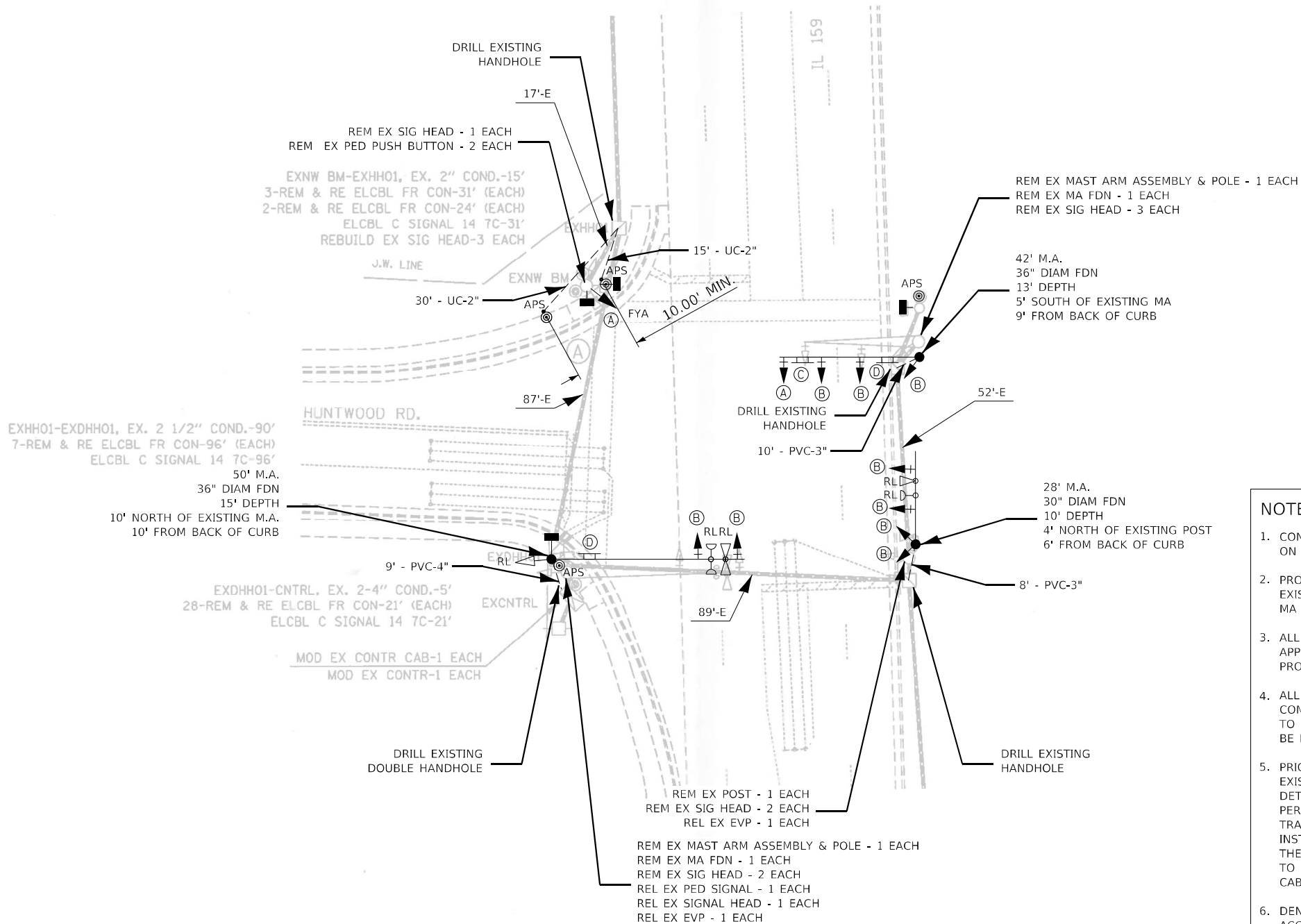
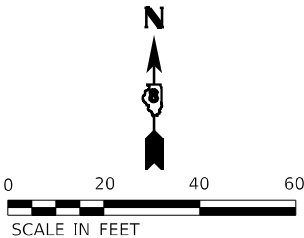
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	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALES	CHECKED - MA	REVISED -
PLOT DATE = \$DATES	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

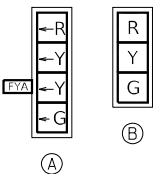
SOIL BORING
IL ROUTE 159 AND GREEN HAVEN DRIVE

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	51
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				



PROPOSED TRAFFIC
SIGNAL FACES



(A)

EXISTING TRAFFIC
SIGNAL FACES



(C)



(D)

NOTES:

1. CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
2. PROPOSED MA LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
3. ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
4. ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
5. PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
6. DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
7. DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.

NOTE:

RL: EXISTING SIGNAL ITEM RELOCATED FROM EXISTING INSTALLATION TO PROPOSED MA OR POST.

MODEL: 3-MODEL NAMES
FILE: 3-MODEL STYLES

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS	DESIGNED - MA	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATE\$	DATE - 03/01/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND HUNTWOOD ROAD**

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	52
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

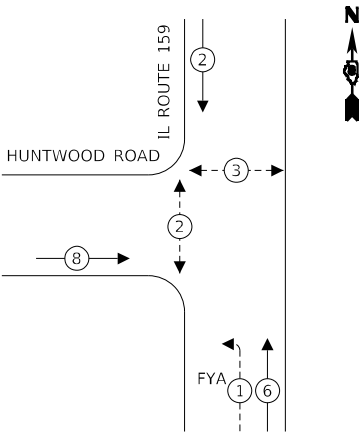
TRAFFIC SIGNAL LEGEND

-  PROP. TRAFFIC SIGNAL CONTROLLER
-  PROP. GROUNDING
-  PROP. NO. OF CONDUCTORS IN CABLE
-  PROP. 12" SIGNAL HEAD
-  EX. VEHICLE DETECTOR, INDUCTION LOOP
-  EX. NO. OF CONDUCTORS IN CABLE
-  EX. 12" SIGNAL HEAD
-  EX. GROUND MOUNT SERVICE
-  EX. GROUNDING
-  EX. EMERGENCY VEHICLE PREEMPTION

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NB LT	SB ↓ ↑	NOT USED	NOT USED	NOT USED	NB	NOT USED	EB ← →
CONCURRENT MOVEMENT ALLOWED	2 OR 6	1 OR 6	NOT USED	NOT USED	NOT USED	1 OR 2	NOT USED	3

* PEDESTRIAN MOVEMENT DISPLAYED UPON ACTIVATION ONLY

EXISTING CONTROLLER SEQUENCE



LEGEND:

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

SUMMARY OF QUANTITIES

ITEM	UNIT	TOTAL
RELOCATE SIGN PANEL - TYPE 1	SQ FT	25
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	45
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	30
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	340
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	510
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1370
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	390
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	125
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	7
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CABLE FROM CONDUIT	EACH	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	155
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
PEDESTRIAN PUSH-BUTTON POST	EACH	2
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	24

HUNTWOOD ROAD

IL ROUTE 159

CABLE PLAN
(NOT TO SCALE)



MODEL & MODEL NAMES
FILE & USER STYLES

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS	DESIGNED - MA	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATE\$	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND HUNTWOOD ROAD

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	53
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

**Illinois Department
of Transportation**
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/13/88

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Huntwood Rd in Swansea LOGGED BY L. Ford

SECTION 130TS-2 LOCATION N 1/2, SEC. 9, TWP. 1N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE

STRUCT. NO. _____
Station _____

BORING NO. 1
Station 193+53
Offset 42.00ft L
Ground Surface Elev. 571.2 ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/ft)	(tsf)	(%)

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft
Groundwater Elev.:
First Encounter _____ ft
Upon Completion _____ ft
After Hrs. _____ ft

Brown Silty CLAY

2.5 10

3.5 11

4.5 14

4.5 14

-5 4.5+ 13

565.2 3.5 15

Brown and Gray Silty CLAY

3.7 16

563.2 3.2 15

Gray Silty CLAY (Smells Organic)
(Tree Roots and Wood)

3.3 16

-10 3.3 16

2.0 17

1.0 18

558.2 1.5 19

END OF BORING

-15

-10

-5

0

5

10

15

20

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department
of Transportation

Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/13/88

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Huntwood Rd in Swansea LOGGED BY L. Ford

SECTION 130TS-2 LOCATION N 1/2, SEC. 9, TWP. 1N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE

STRUCT. NO.
Station

BORING NO. 2
Station 194+43
Offset 40.00ft R
Ground Surface Elev. 589.6 ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/ft")	(tsf)	(%)

Surface Water Elev.	ft
Stream Bed Elev.	ft
Groundwater Elev.:	
First Encounter	ft
Upon Completion	ft
After Hrs.	ft

Brown Silty CLAY with Rock

1.3 9

2.0 9

3.0 9

4.5+ 10

-5 4.5+ 10

3.0 13

563.1

2.0 18

Gray Silty CLAY (with Tree Roots)
(Smells Organic)

2.5 18

2.0 18

-10 2.0 18

559.1

2.0 18

Brown and Gray Silty CLAY (with
Some Roots)

2.2 17

556.6

2.5 16

END OF BORING

Qu values determined by pocket
penetrometer

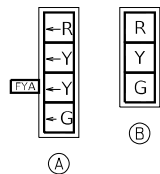
-19

-20

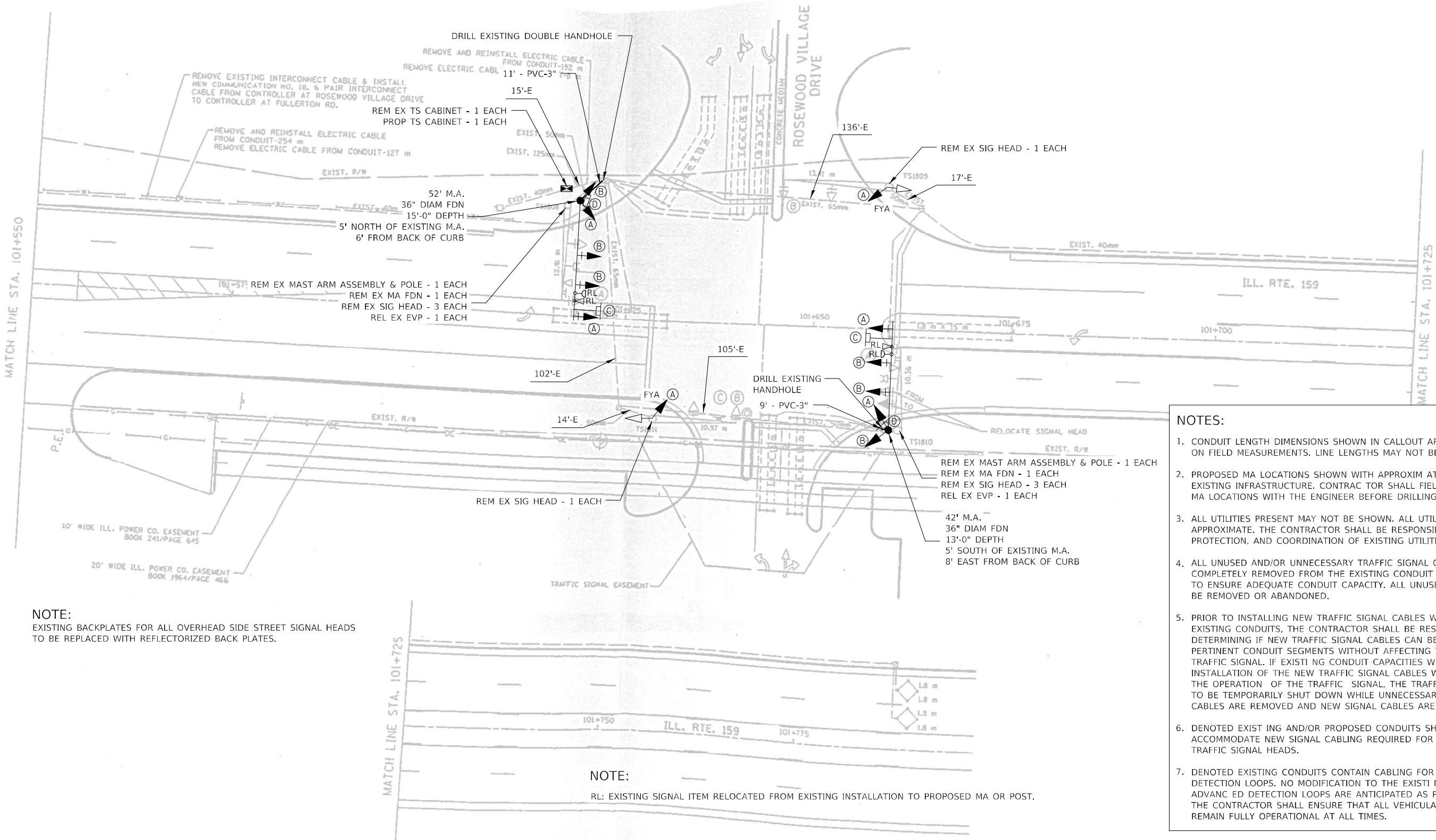
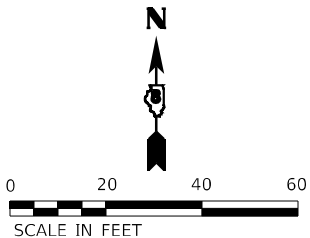
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

PROPOSED TRAFFIC
SIGNAL FACES



EXISTING TRAFFIC
SIGNAL FACES



NOTE:
EXISTING BACKPLATES FOR ALL OVERHEAD SIDE STREET SIGNAL HEADS
TO BE REPLACED WITH REFLECTORIZED BACK PLATES.

NOTES:

- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- PROPOSED MA LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
- DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.

NOTE:

RL: EXISTING SIGNAL ITEM RELOCATED FROM EXISTING INSTALLATION TO PROPOSED MA OR POST.

MODEL NUMBER
FILE NAME

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

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PLOT DATE = \$DATES	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND ROSEWOOD VILLAGE DRIVE

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	55
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

TRAFFIC SIGNAL LEGEND

-  PROP. TRAFFIC SIGNAL CONTROLLER
-  PROP. GROUNDING
- 5

 PROP. NO. OF CONDUCTORS IN CABLE
- R
- PROP. 12" SIGNAL HEAD

5

R

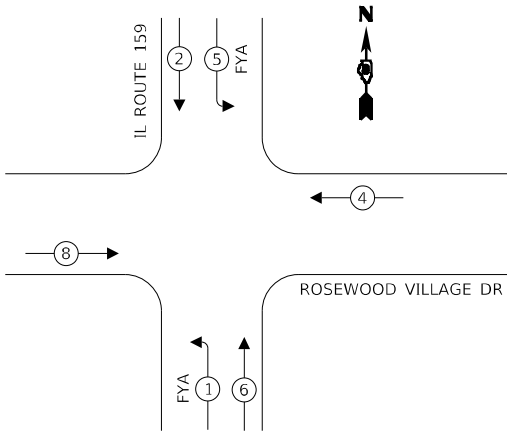






SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT			NOT USED				NOT USED	
CONCURRENT MOVEMENT ALLOWED	2,5 OR 6	1,5 OR 6	NOT USED	8	1,2 OR 6	1,2 OR 5	NOT USED	4

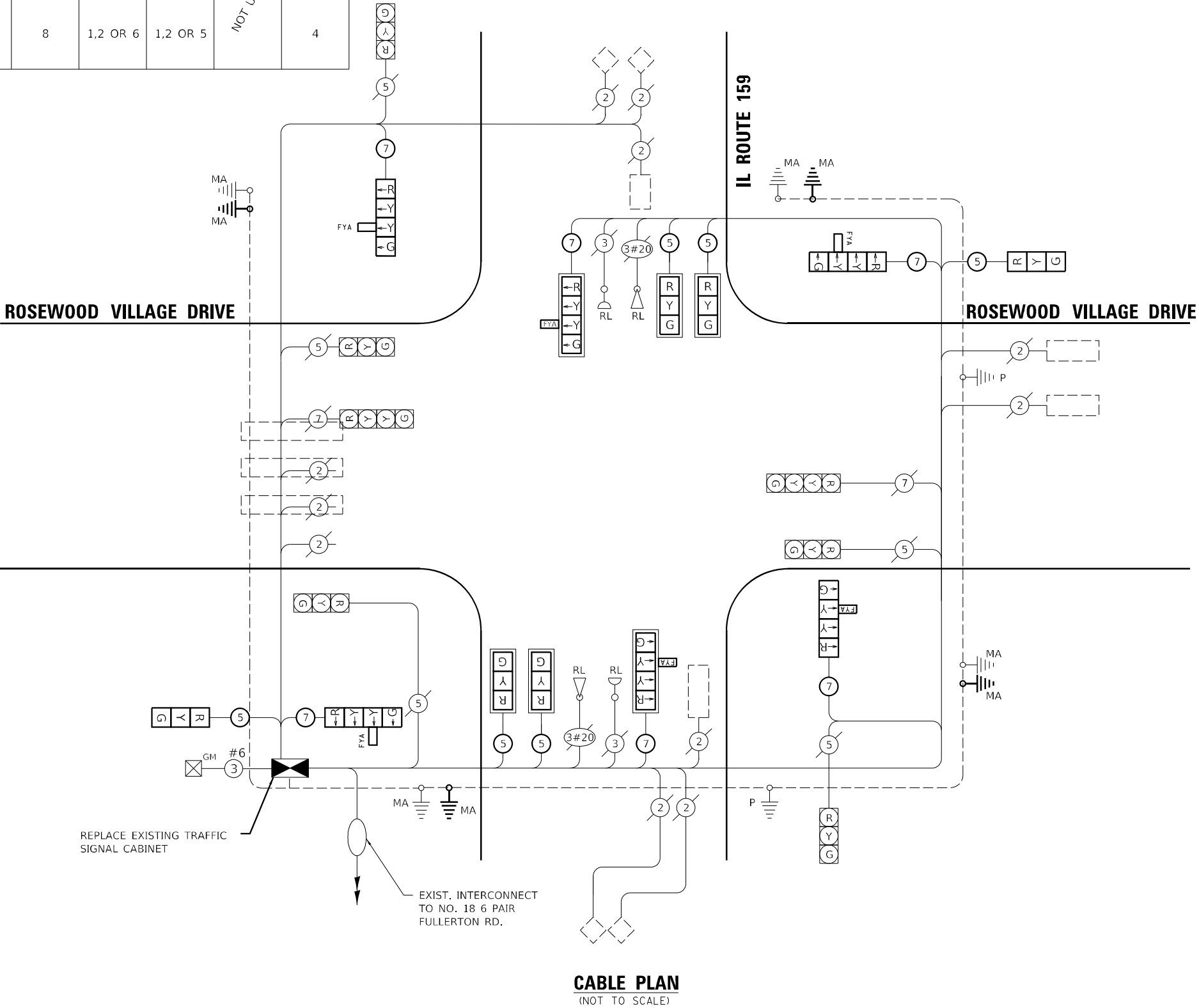
EXISTING CONTROLLER SEQUENCE



SUMMARY OF QUANTITIES

ITEM	UNIT	TOTAL
RELOCATE SIGN PANEL - TYPE 1	SQ FT	35
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	20
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	840
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1100
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1155
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	35
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	6
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CABLE FROM CONDUIT	EACH	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	815

ROSEWOOD VILLAGE DRIVE



CABLE PLAN
(NOT TO SCALE)



MODEL & MODEL NAMES
FILE & USER STYLES

DELTA ENGINEERING GROUP, LLC
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND ROSEWOOD VILLAGE DRIVE

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	56
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

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Illinois Department of Transportation

Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/22/23

ROUTE FAP 600 (IL 159) DESCRIPTION IL 159 & Rosewood Village Drive LOGGED BY KEG - MTH

SECTION (130, 130-1, 130-2)IS-3 LOCATION SEC. TWP. RING. 3 PM

COUNTY St. Clair DRILLING METHOD HSA HAMMER TYPE Auto

STRUCT. NO. Station

BORING NO. B-9 SW
Station
Offset
Ground Surface Elev. ft 100 ft

DEPTH H F T	BLOW S Qu	UCS (tsf)	MOIST T (%)
5	7	2	20
6	6	P	
1			
3		1.25	17
4		P	
-5			
1			
2		1.25	22
2		P	
91.0			
1			
2		1.25	22
3		P	
-10			
1			
1		2.5	23
2		P	
86.5			
1			
1		1.18	21
2		B	
-15			
84.0			
1			
2		1.4	20
4		B	
82.5			
End of Boring			
-20			

Surface Water Elev. n/a ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter n/a ft
Upon Completion ft
After Hrs. ft

2.5" Asphalt 99.8
8.5" Concrete 99.1

Brown Silt

as above

Brown Clayey Silt

Brown Silty Clay

End of Boring

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

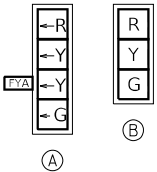
SOIL BORING No. 1

SOIL BORING No. 2

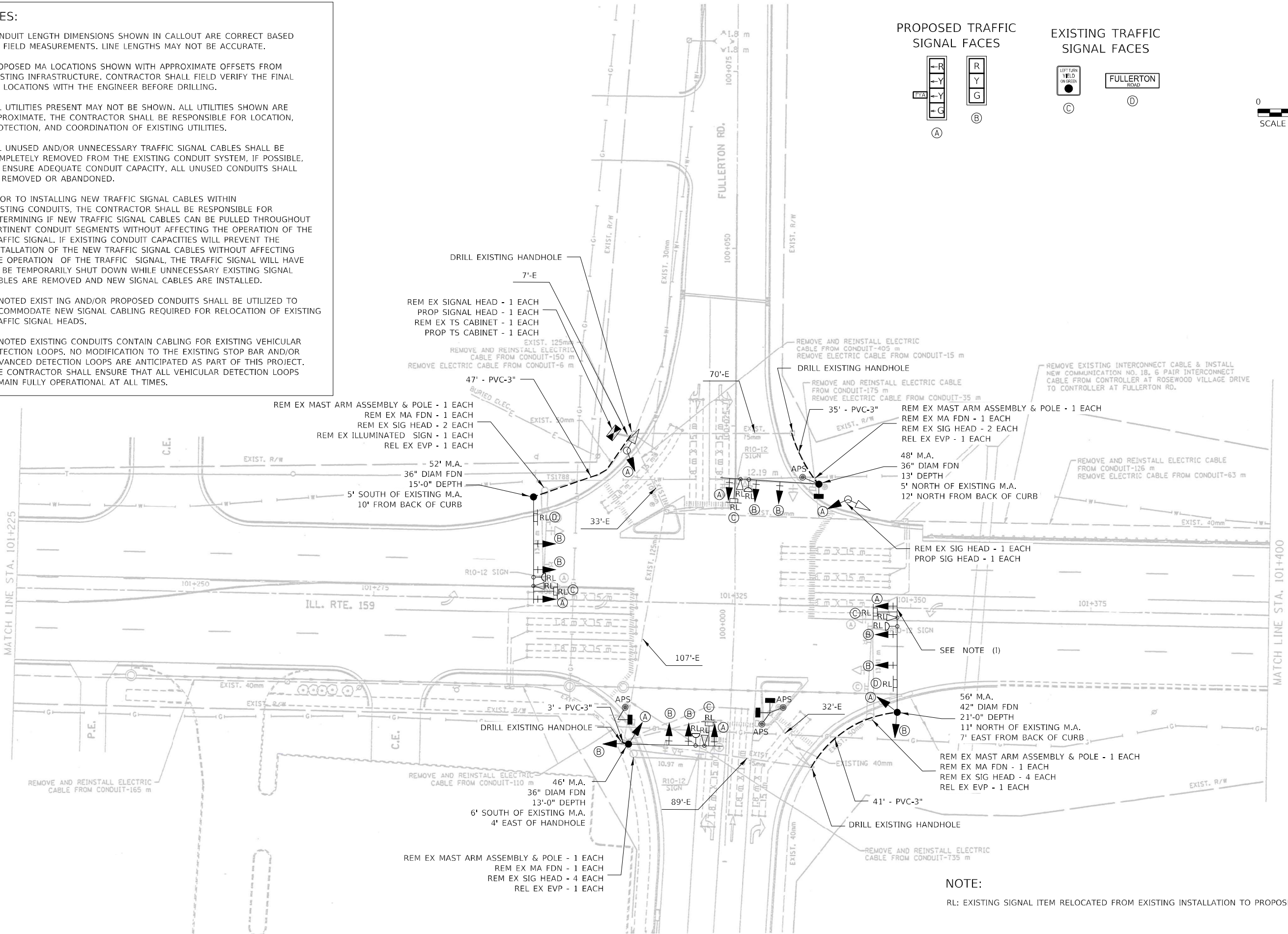
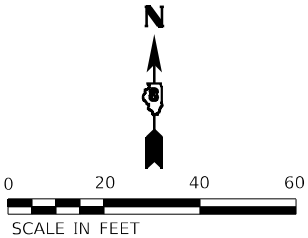
NOTES:

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6. DENOTED EXIST ING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
7. DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.

PROPOSED TRAFFIC
SIGNAL FACES



EXISTING TRAFFIC
SIGNAL FACES



NOTE:

RL: EXISTING SIGNAL ITEM RELOCATED FROM EXISTING INSTALLATION TO PROPOSED MA OR POST.

MODEL: 3/20/2024
FILE: 3/20/2024

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS
PLOT SCALE = \$SCALES
PLOT DATE = \$DATES

DESIGNED - MA
DRAWN - NS
CHECKED - MA
DATE - 03/01/2024

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND FULLERTON ROAD

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	58
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)				

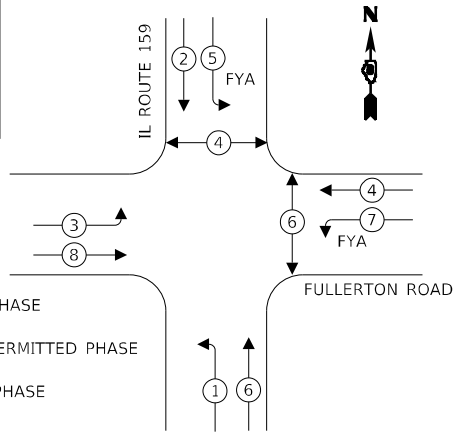
TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. GROUNDING
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. 12" SIGNAL HEAD
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. GROUND MOUNT SERVICE
- EX. GROUNDING
- EX. EMERGENCY VEHICLE PREEMPTION

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	NB LT	SB	EB LT	WB	SB LT	NB	WB LT	EB
CONCURRENT MOVEMENT ALLOWED	2,5 OR 6	1,5 OR 6	4,7 OR 8	3,7 OR 8	1,2 OR 6	1,2 OR 5	3,4 OR 8	3,4 OR 7

* PEDESTRIAN MOVEMENT DISPLAYED UPON ACTIVATION ONLY

EXISTING CONTROLLER SEQUENCE



LEGEND:

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

SUMMARY OF QUANTITIES

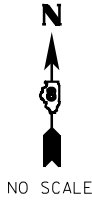
ITEM	UNIT	TOTAL
RELOCATE SIGN PANEL - TYPE 1	SQ FT	50
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	126
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1200
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1900
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2300
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1700
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	150
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	41
CONCRFTF FOUNDATION, TYPE F 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CABLE FROM CONDUIT	EACH	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1900
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4

EXIST. INTERCONNECT TO ROSEWOOD VILLAGE DRIVE, #18, 6 PAIR

FULLERTON ROAD

CABLE PLAN

(NOT TO SCALE)



MODEL & MODEL NAMES
FILE: 000001.DWG

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS, SURVEYORS
111 W JACKSON BLVD, SUITE 910
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USER NAME = \$USERS	DESIGNED - MA	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - NS	REVISED -
PLOT DATE = \$DATE\$	CHECKED - MA	REVISED -
	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND FULLERTON ROAD

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	59
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

**Illinois Department
of Transportation**
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 5/14/86

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Fullerton Rd in Swansea LOGGED BY J. King

SECTION 130TS-1 LOCATION NE 1/4, SEC. 16, TWP. 1N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE

STRUCT. NO. _____
Station _____

BORING NO. 1
Station 99+48
Offset 43.00ft L
Ground Surface Elev. 532.5 ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev.	ft
Stream Bed Elev.	ft
Groundwater Elev.:	
First Encounter	ft
Upon Completion	ft
After Hrs.	ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Brown and Gray SILT (FILL)

1.0 17

1.0 19

1.0 22

524.5

Gray and Brown SILT

0.75 26

0.75 24

519.5

Brown and Gray Clay TILL

1.5 19

516.5

END OF BORING

NOTE:
Due to the terrain and utilities in the area, hand augered borings were made. Therefore, no "N" values are available.

Qu values determined by pocket penetrometer

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)

BBS, from 137 (Rev. 8-99)

**Illinois Department
of Transportation**
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 5/14/86

ROUTE FAP 600 DESCRIPTION Traffic Signals at IL 159 and Fullerton Rd in Swansea LOGGED BY J. King

SECTION 130TS-1 LOCATION NE 1/4, SEC. 16, TWP. 1N, RNG. 8W, 3 PM

COUNTY St. Clair DRILLING METHOD Hand Auger HAMMER TYPE

STRUCT. NO. _____
Station _____

BORING NO. 1
Station 99+48
Offset 43.00ft L
Ground Surface Elev. 532.5 ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev.	_____ ft
Stream Bed Elev.	_____ ft
Groundwater Elev.:	
First Encounter	_____ ft
Upon Completion	_____ ft
After _____ Hrs.	_____ ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Qu values determined by pocket penetrometer

Brown and Gray SILT (FILL)

1.0 17

1.0 19

1.0 22

524.6

0.75 26

Gray and Brown SILT

0.75 24

519.5

1.5 19

Brown and Gray Clay TILL

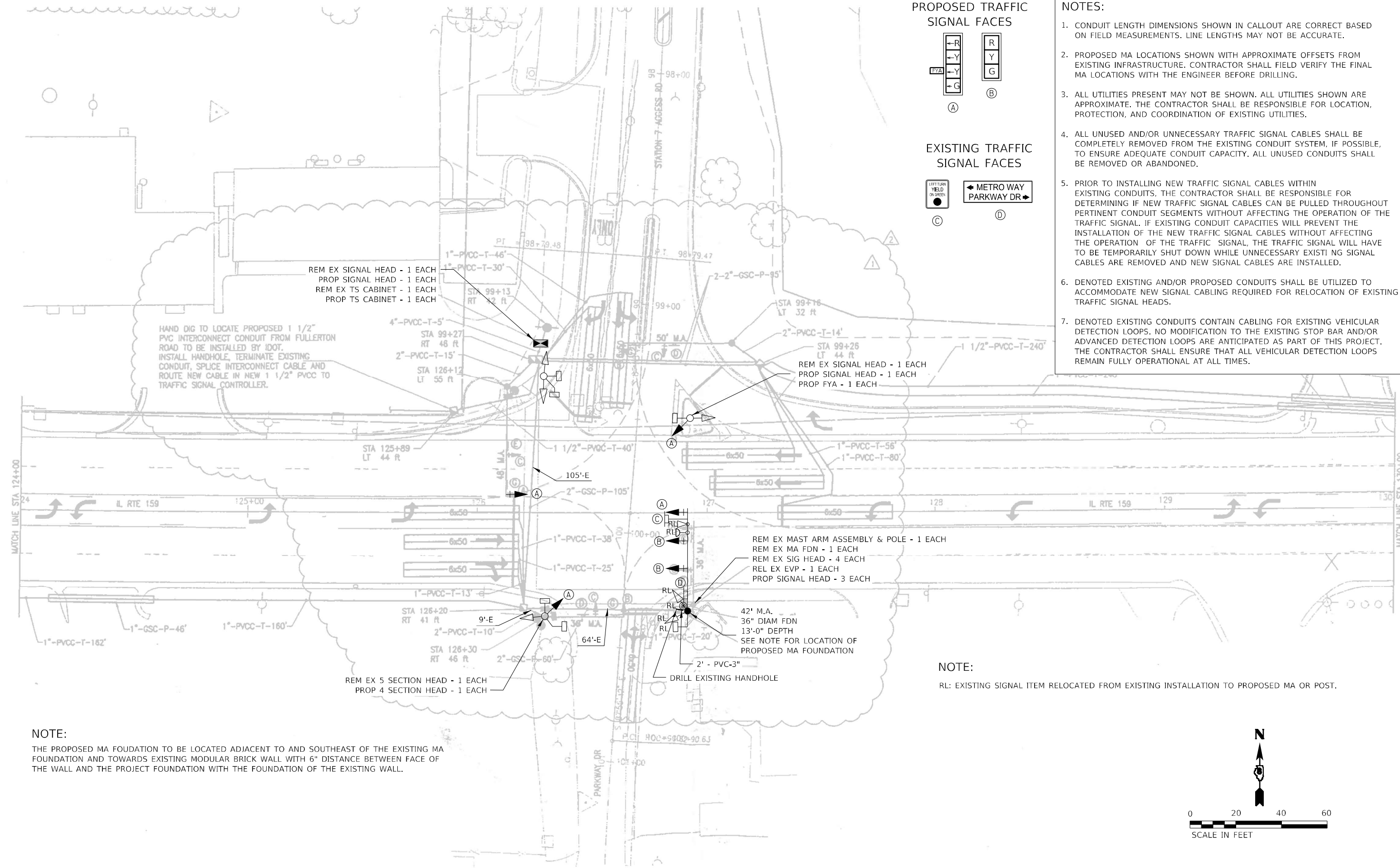
516.5

END OF BORING

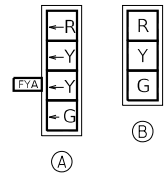
NOTE:
Due to the terrain and utilities in the area, hand augered borings were made. Therefore, no "N" values are available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



PROPOSED TRAFFIC
SIGNAL FACES



EXISTING TRAFFIC
SIGNAL FACES



NOTES:

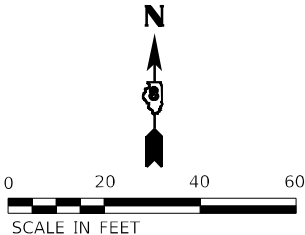
1. CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
2. PROPOSED MA LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
3. ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
4. ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED OR ABANDONED.
5. PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW SIGNAL CABLES ARE INSTALLED.
6. DENOTED EXISTING AND/OR PROPOSED CONDUITS SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS.
7. DENOTED EXISTING CONDUITS CONTAIN CABLING FOR EXISTING VEHICULAR DETECTION LOOPS. NO MODIFICATION TO THE EXISTING STOP BAR AND/OR ADVANCED DETECTION LOOPS ARE ANTICIPATED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT ALL VEHICULAR DETECTION LOOPS REMAIN FULLY OPERATIONAL AT ALL TIMES.

NOTE:

THE PROPOSED MA FOUNDATION TO BE LOCATED ADJACENT TO AND SOUTHEAST OF THE EXISTING MA FOUNDATION AND TOWARDS EXISTING MODULAR BRICK WALL WITH 6" DISTANCE BETWEEN FACE OF THE WALL AND THE PROJECT FOUNDATION WITH THE FOUNDATION OF THE EXISTING WALL.

NOTE:

RL: EXISTING SIGNAL ITEM RELOCATED FROM EXISTING INSTALLATION TO PROPOSED MA OR POST.



MODEL: 3 MODEL NAMES
FILE: 3 MODEL STYLES

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, CONSTRUCTION MANAGERS, SURVEYORS
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USER NAME = \$USERS	DESIGNED - MA	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = \$SCALES	CHECKED - MA	REVISED -
PLOT DATE = \$DATES	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 159 AND METRO WAY

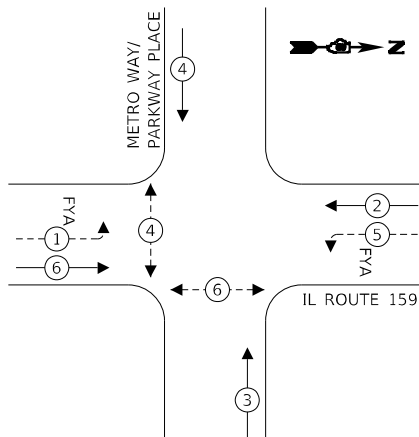
SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	61
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)				

TRAFFIC SIGNAL LEGEND

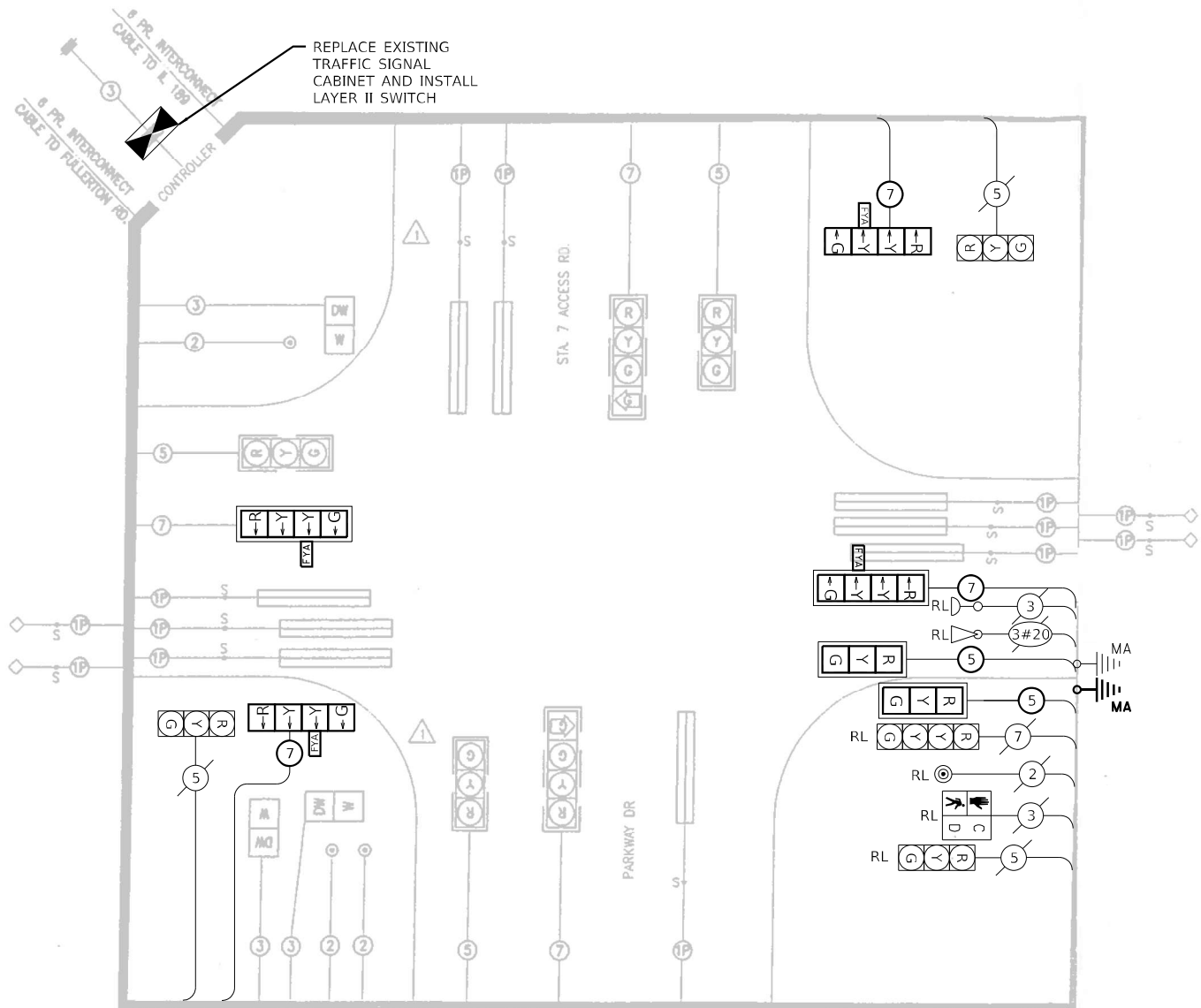
	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. GROUNDING
	PROP. NO. OF CONDUCTORS IN CABLE
	PROP. 12" SIGNAL HEAD
	EX. VEHICLE DETECTOR, INDUCTION LOOP
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. GROUND MOUNT SERVICE
	EX. GROUNDING
	EX. EMERGENCY VEHICLE PREEMPTION

EXISTING CONTROLLER SEQUENCE



SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT							NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	2,5 OR 6	1,5 OR 6	4	3	1,2 OR 6	1,2 OR 5	NOT USED	NOT USED

* PEDESTRIAN MOVEMENT DISPLAYED UPON ACTIVATION ONLY



SUMMARY OF QUANTITIES

ITEM	UNIT	TOTAL
RELOCATE SIGN PANEL - TYPE 1	SQ FT	25
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	225
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	755
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	725
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	975
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	15
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	4
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CABLE FROM CONDUIT	EACH	500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	530

RL: EXISTING SIGNAL ITEM RELOCATED FROM EXISTING INSTALLATION TO PROPOSED MA OR POST.

MODEL & MODEL NAMES
FILE: 76R78.DWG

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, DESIGNERS
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CHICAGO, IL 60604
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USER NAME = \$USERS

DESIGNED - MA

REVISED -

DRAWN - NS

REVISED -

PLOT SCALE = \$SCALE\$

CHECKED - MA

REVISED -

PLOT DATE = \$DATE\$

DATE - 03/01/2024

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 159 AND METRO WAY/PARKWAY PLACE

SCALE: NTS

SHEET

OF

SHEETS

STA.

TO STA.

F.A.P.

RTE.

SECTION

COUNTY

TOTAL

SHEETS

SHEET

NO.

600

(130, 130-1, 130-2) TS-3, 82-5TS

ST. CLAIR

74

62

CONTRACT NO. 76R78

ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)

Surface Elevation: 539Completion Date: 1/27/21

Datum: WGS84 EGM96Geoid

DEPTH IN FEET

DESCRIPTION OF MATERIAL

GRAPHIC LOG

DRY UNIT WEIGHT (pcf)SPT BLOW COUNTS CORE RECOVERED

SAMPLES

SHEAR STRENGTH, tsf

STANDARD PENETRATION RESISTANCE

WATER CONTENT, %

PL

LL

5

10

15

20

25

30

35

GROUNDWATER DATA

DRILLING DATA

REMARKS:

LOG OF BORING: B-1

Project No. J038163.01

Surface Elevation: 545Completion Date: 1/27/21

Datum: WGS84 EGM96Geoid

DEPTH IN FEET

DESCRIPTION OF MATERIAL

GRAPHIC LOG

DRY UNIT WEIGHT (pcf)SPT BLOW COUNTS CORE RECOVERED

SAMPLES

SHEAR STRENGTH, tsf

STANDARD PENETRATION RESISTANCE

WATER CONTENT, %

PL

LL

5

10

15

20

25

30

35

GROUNDWATER DATA

DRILLING DATA

REMARKS:

LOG OF BORING: B-2

Project No. J038163.01

BORING LOG: TERMS AND SYMBOLS

LEGEND

Plasticity Chart

SOIL GRAIN SIZE

US STANDARD SIEVE

BOULDERS

COBBLES

GRAVEL

SAND

SILT

CLAY

SOIL GRAIN SIZE IN MILLIMETERS

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions

Symbol

Description

Coarse-Grained Soils (More than 50% Larger than No. 200 Sieve Size)

Fine-Grained Soils (More than 50% Smaller than No. 200 Sieve Size)

Highly Organic Soils

STRENGTH OF COHESIVE SOILS

DENSITY OF GRANULAR SOILS

Consistency

Undrained Shear Strength (tsf)

Unconfined Comp. Strength (tsf)

Descriptive Term

Approximate N₆₀-Value Range

RELATIVE COMPOSITION

OTHER TERMS

Geotechnology

Relative composition and Unified Soil Classification System (USCS) designations are based on visual descriptions and are approximate only. If laboratory tests were performed to classify the soil, the USCS designation is shown in parenthesis.

SOIL BORING No. 1

SOIL BORING No. 2

NOTES:

1. CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
2. PROPOSED MA LOCATIONS SHOWN WITH APPROXIMATE OFFSETS FROM EXISTING INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY THE FINAL MA LOCATIONS WITH THE ENGINEER BEFORE DRILLING.
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN IL ROUTE 159 AND IL 161

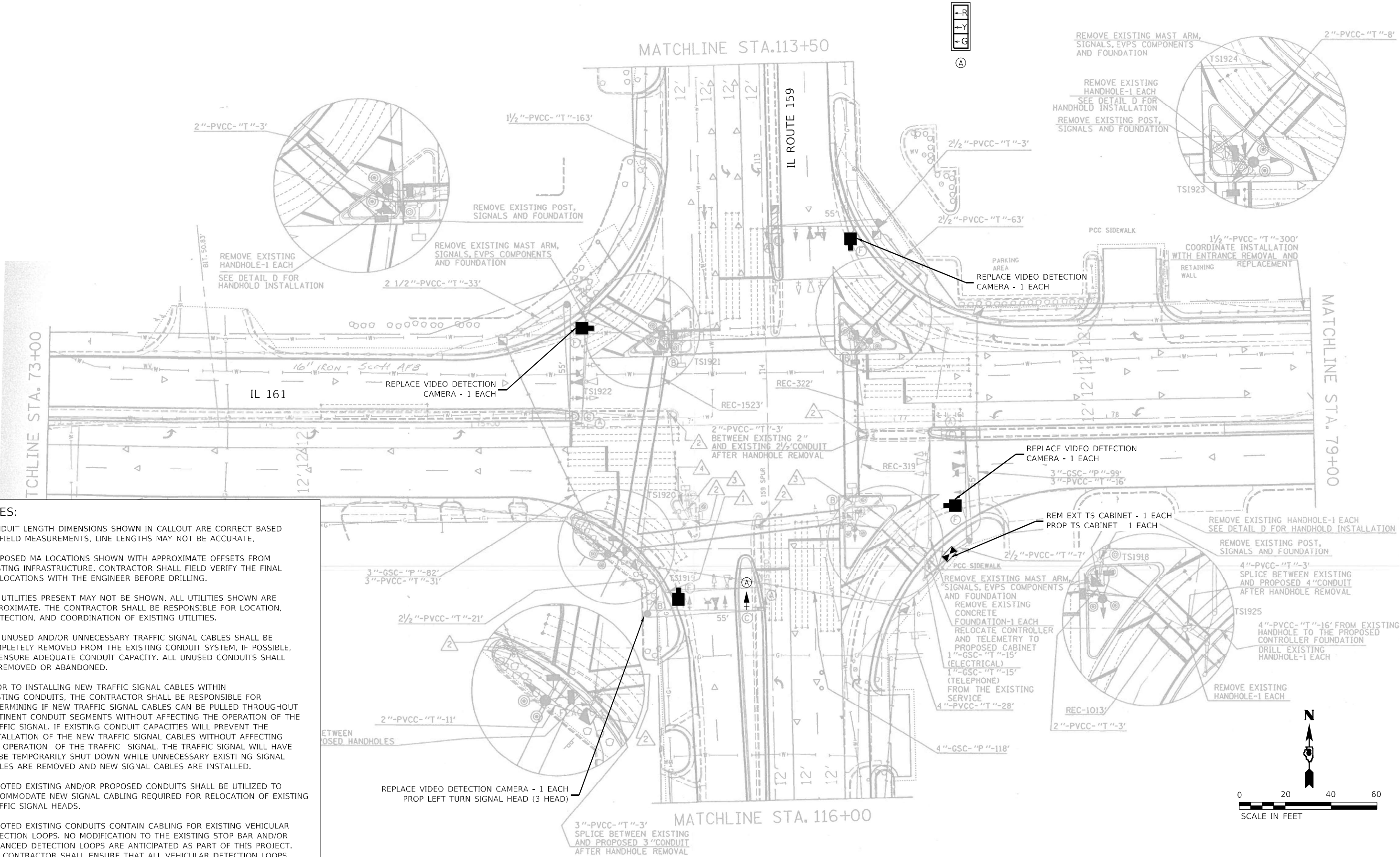
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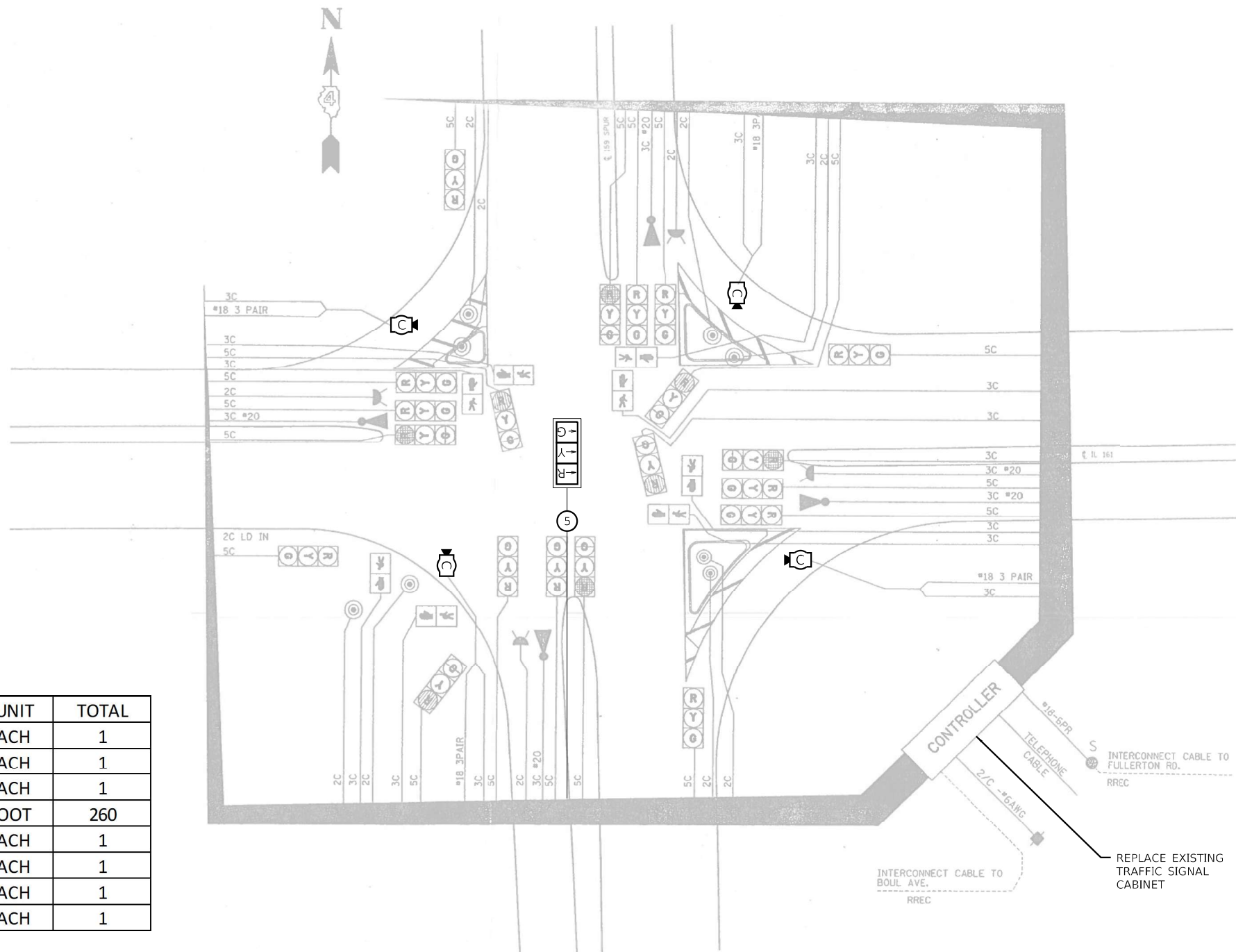
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	64
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				

MODEL & MODEL NAMES
FILE: 000001.DWG

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS	DESIGNED - MA	REVISED -
DRAWN - NS	REVISED -	
PLOT SCALE = \$SCALES	CHECKED - MA	REVISED -
PLOT DATE = \$DATES	DATE - 03/01/2024	REVISED -





SUMMARY OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	260
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO DETECTION SYSTEM	EACH	1

MODEL: 3/10/2015
FILE: 3/10/2015

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

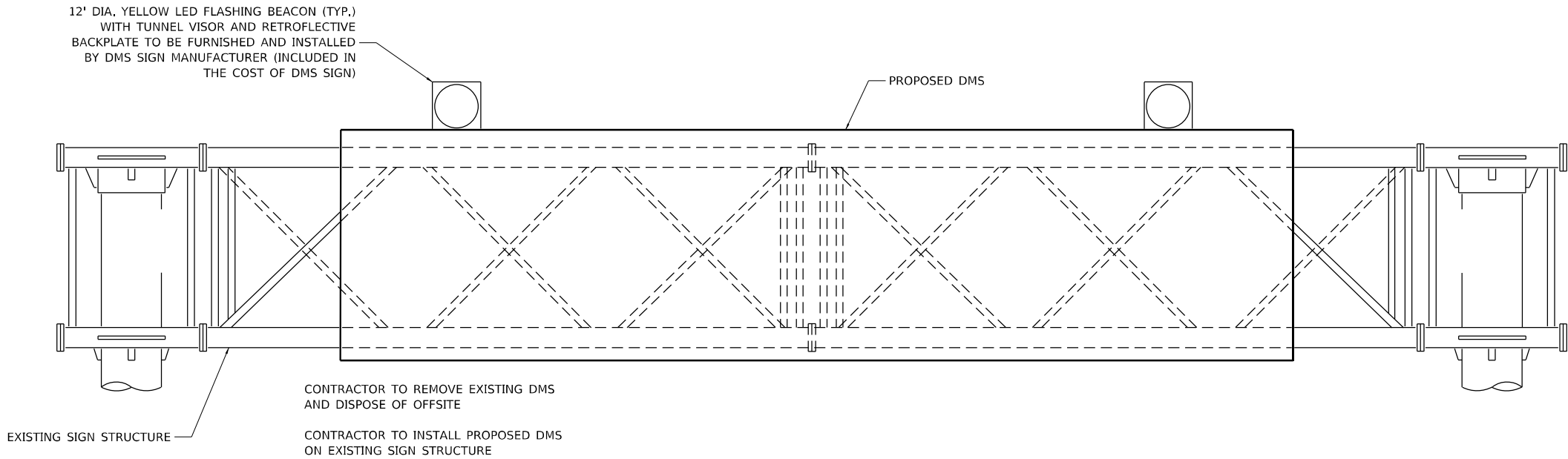
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PLOT DATE = \$DATE\$	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN IL ROUTE 159 AND IL 161			
SCALE: NTS	SHEET	OF	SHEETS
STA.	TO STA.		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	65
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSIP-445N (249)				

MODEL: Default
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ELEVATION

NOTE:
THE CONTRACTOR SHALL SUBMIT COMPLETE ELECTRICAL DESIGN DETAILS
AND CALCULATE SEALED BY AN ILLINOIS LICENSED ELECTRICAL AND
STRUCTURAL ENGINEER TO THE RESIDENT ENGINEER FOR REVIEW AND
APPROVAL PRIOR TO THE ORDERING OF ANY MATERIALS.

**SIGN STRUCTURES - ALTERNATIVE TRUSS DETAILS FOR DMS
ALUMINUM TRUSS AND STEEL POST**



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
CABINET, MODEL 334	EACH	1
TRUSS MOUNTED LED DYNAMIC MESSAGE SIGN	EACH	1

iteris

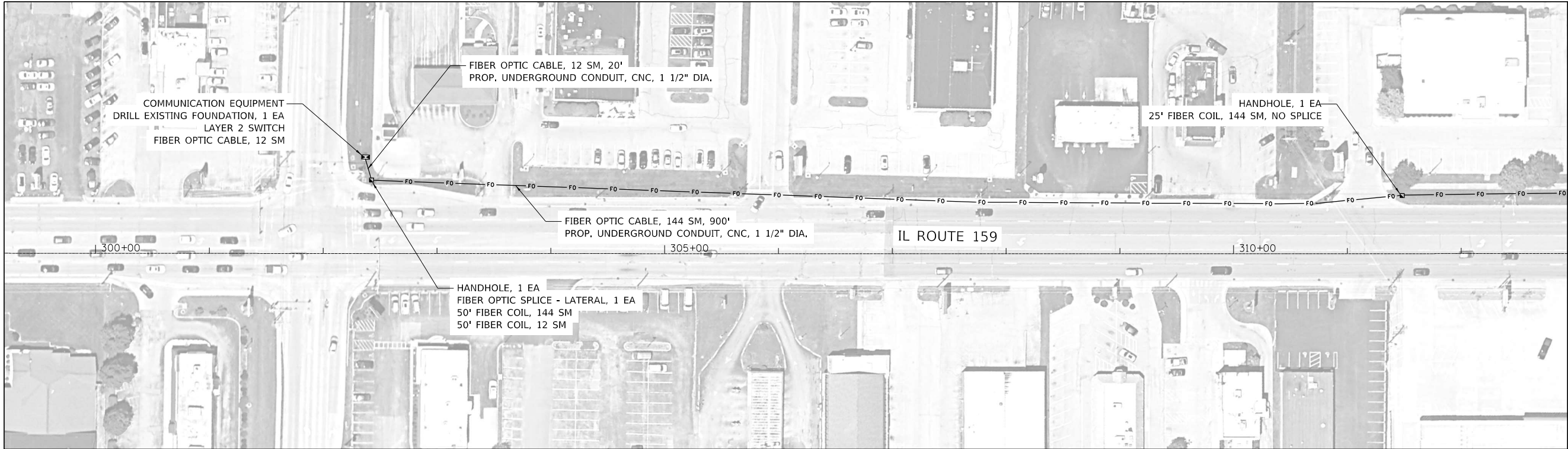
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	DRAWN - BF	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

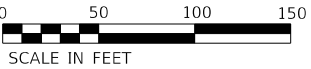
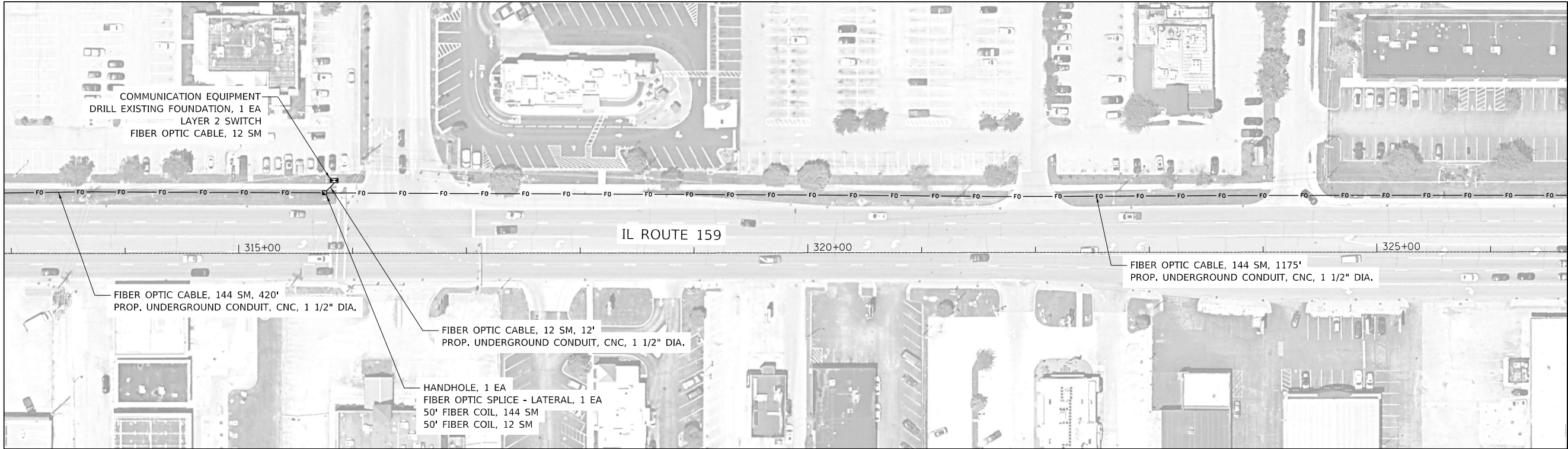
**TRUSS MOUNTED LED DYNAMIC MESSAGE SIGN (DMS)
WB I-64 MP 10.8**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	66
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



LONGACRE DR / ASHLAND AV



USER NAME	= adanczyk	DESIGNED -	BF	REVISED -	
		DRAWN -	BF	REVISED -	
PLOT SCALE	= 100,0000 ' / in.	CHECKED -	ASG	REVISED -	
PLOT DATE	= 2/27/2024	DATE	= 11/6/23	REVISED -	

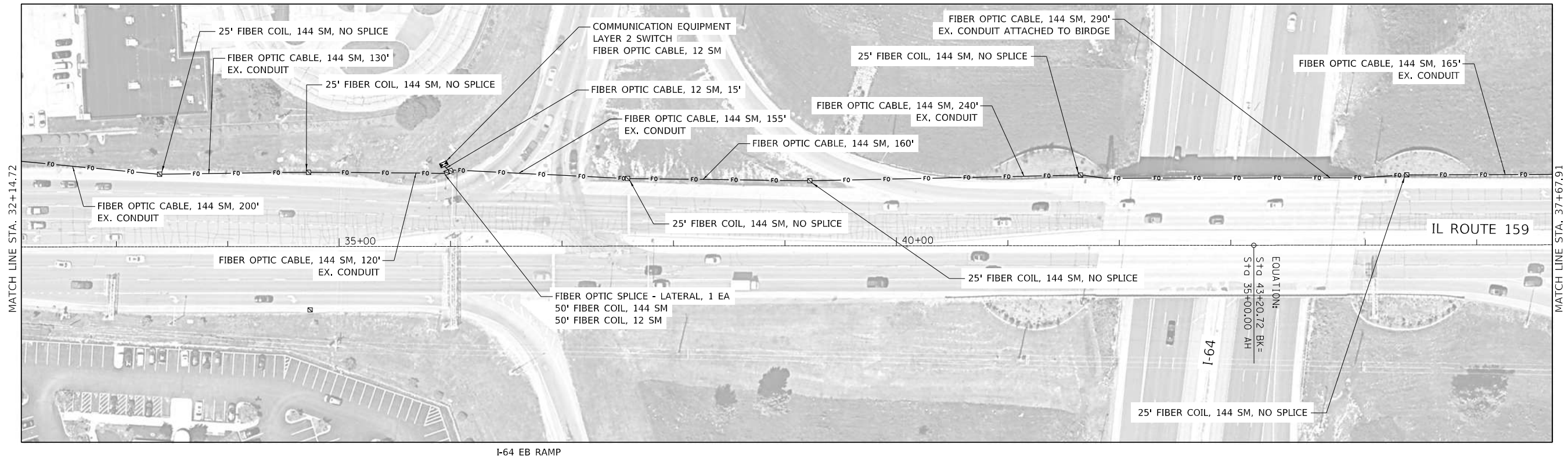
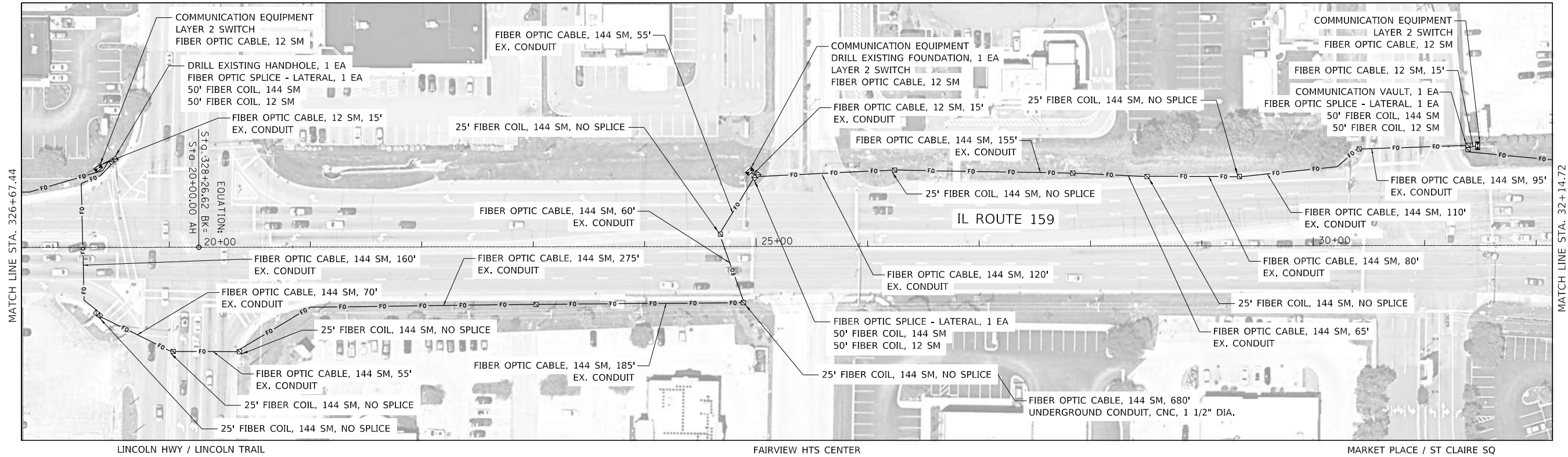
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN
IL ROUTE 159

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	67
CONTRACT NO. 76R78				
ILLINOIS		FED. AID PROJECT		

MODEL: Default
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MODEL: Default
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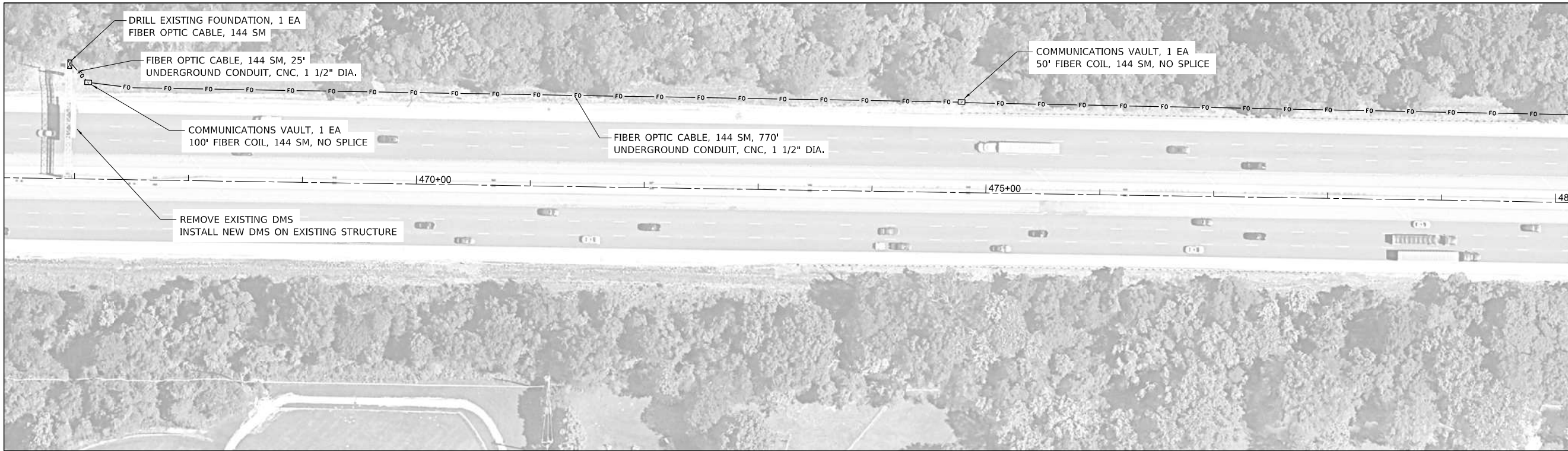
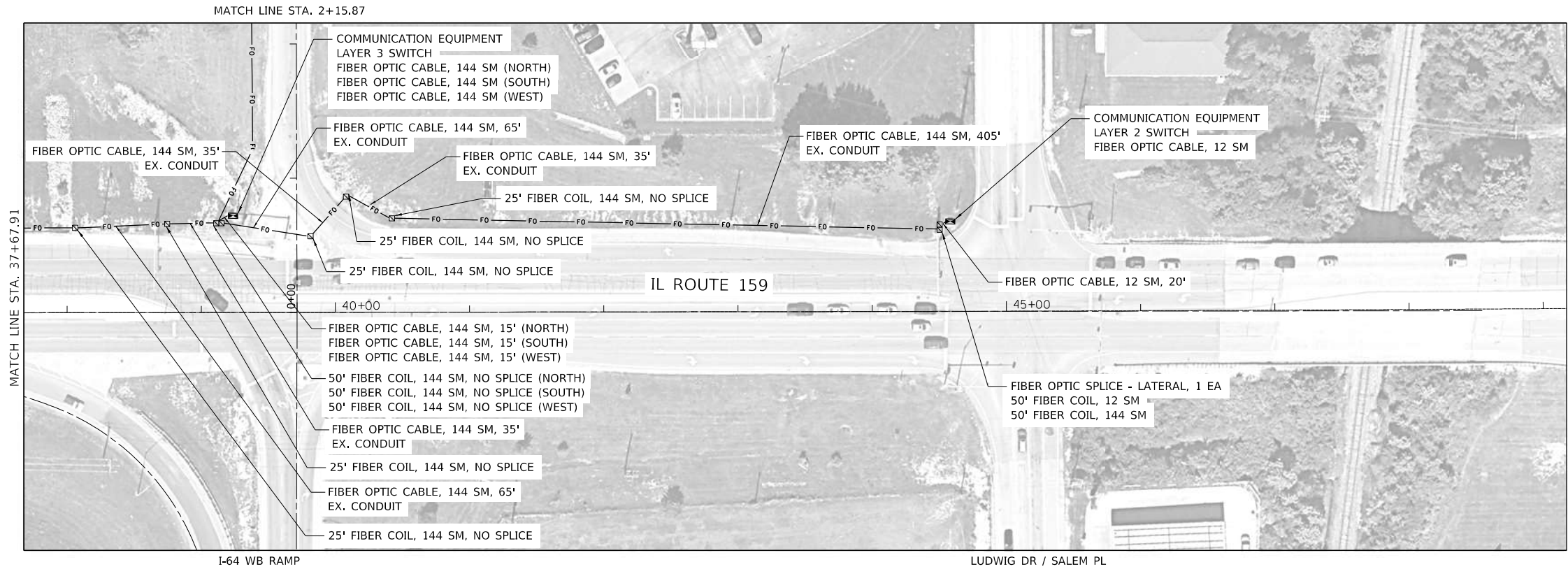
USER NAME	= adanczyk	DESIGNED -	BF	REVISED -	
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PLOT DATE	= 2/6/2024	DATE -	2/1/24	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN
IL ROUTE 159

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	68
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



iteris

USER NAME	= adanczyk	DESIGNED -	BF	REVISED -	
		DRAWN -	BF	REVISED -	
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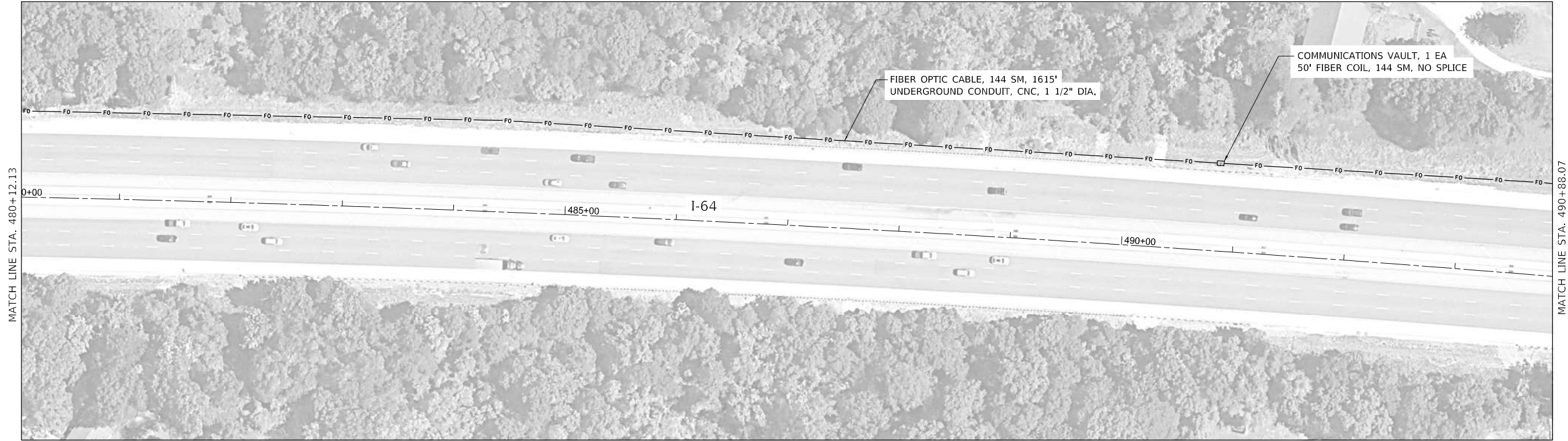
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN
IL ROUTE 159 - I-64

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	69
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

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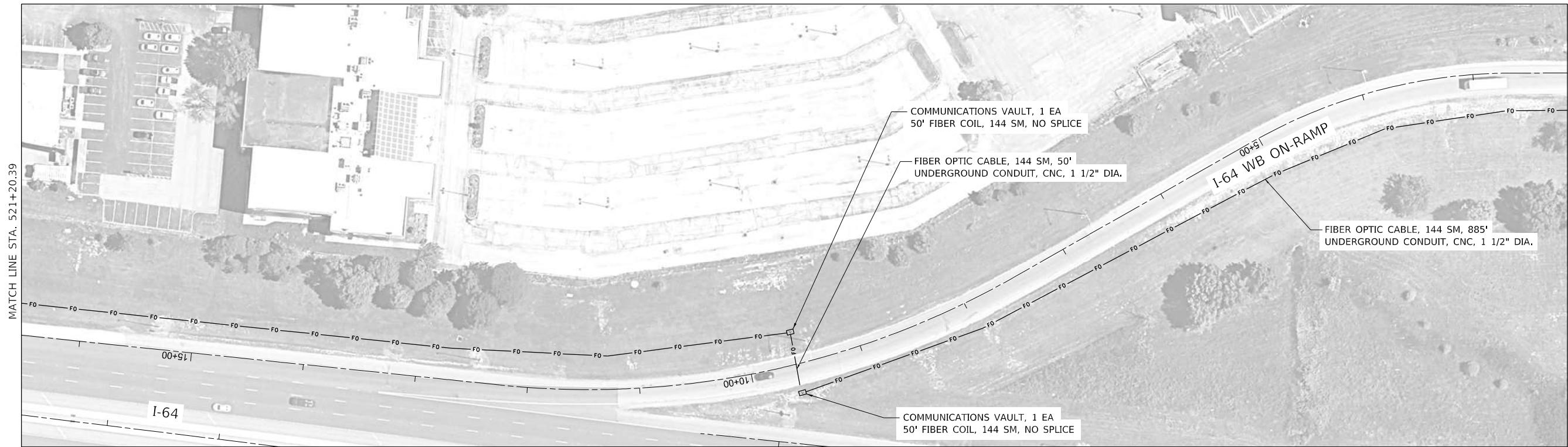
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN
I-64

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	70
CONTRACT NO. 76R78				
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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iteris

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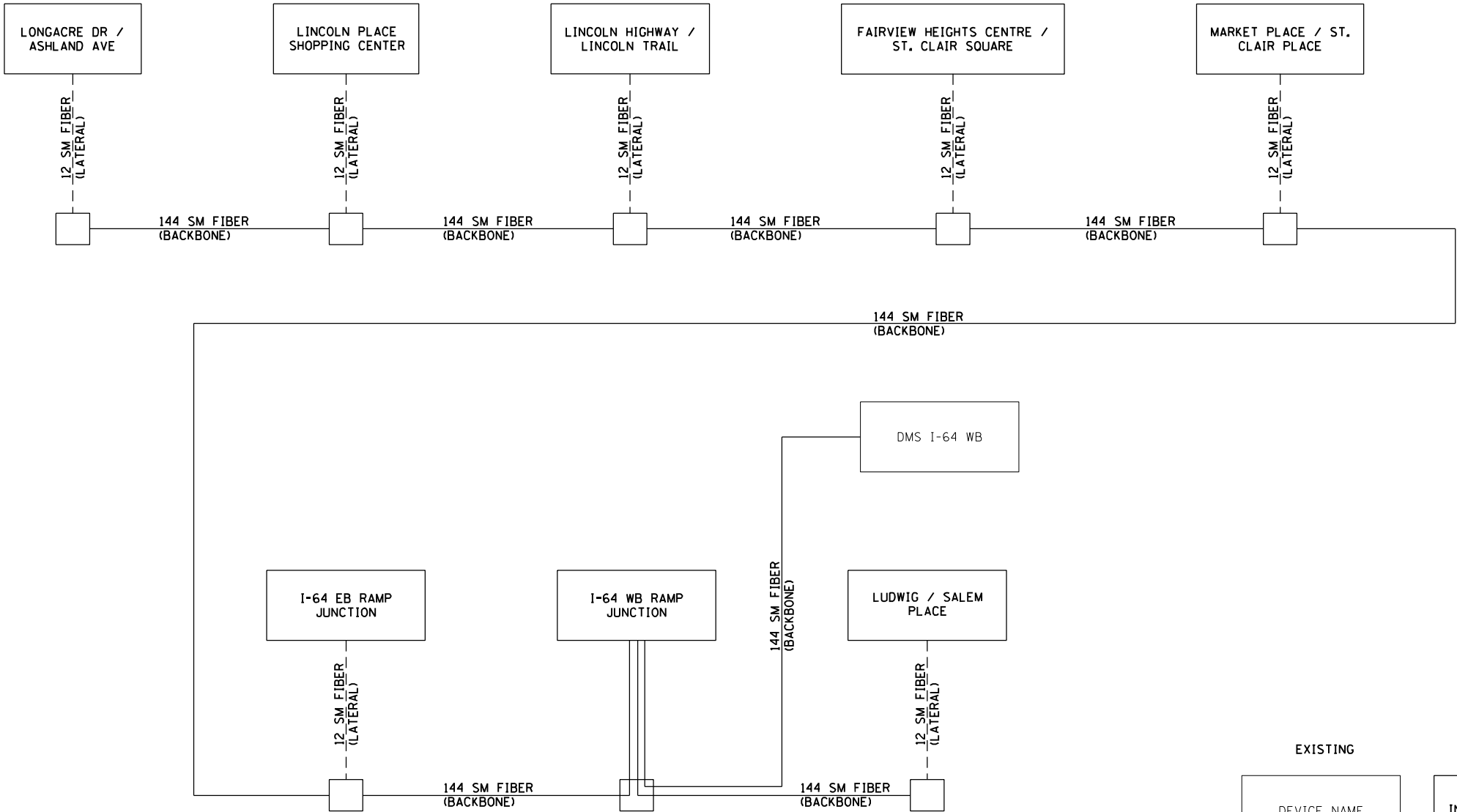
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN
I-64

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	71
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

MODEL: Default
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LEGEND

EXISTING

PROPOSED

DEVICE NAME

INTERSECTION NAME

INTERSECTION STREET
NAME OR DEVICE NAME



COMMUNICATIONS
VAULT



12 STRAND SINGLE
MODE FIBER (LATERAL)
CABLE



144 STRAND SINGLE
MODE FIBER
(BACKBONE) CABLE



USER NAME = bfunck	DESIGNED -	REVISED -
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PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/22/2023	DATE -	REVISED -

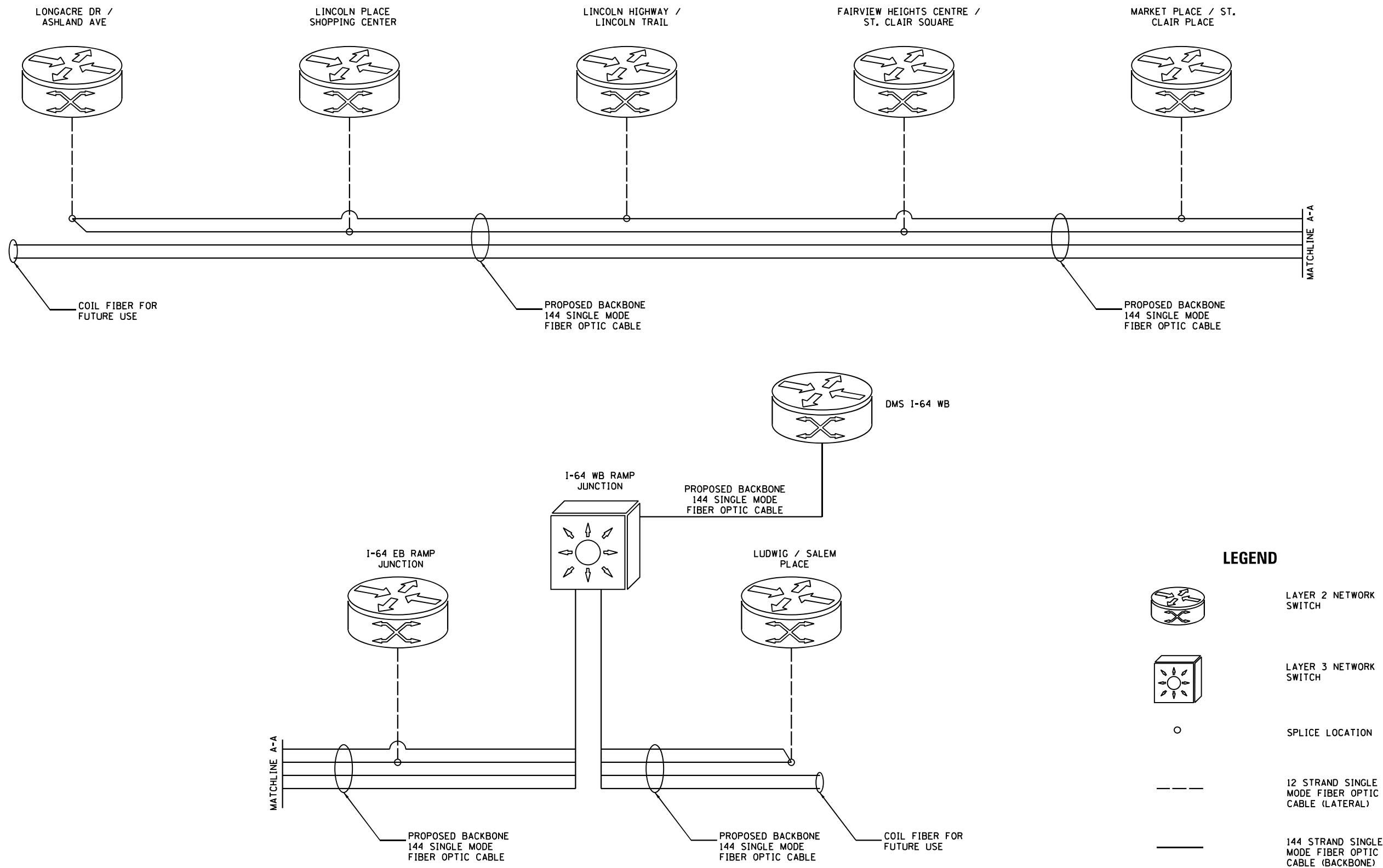
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER COMMUNICATIONS SYSTEM TOPOLOGY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	72
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				

MODEL: Default
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iteris

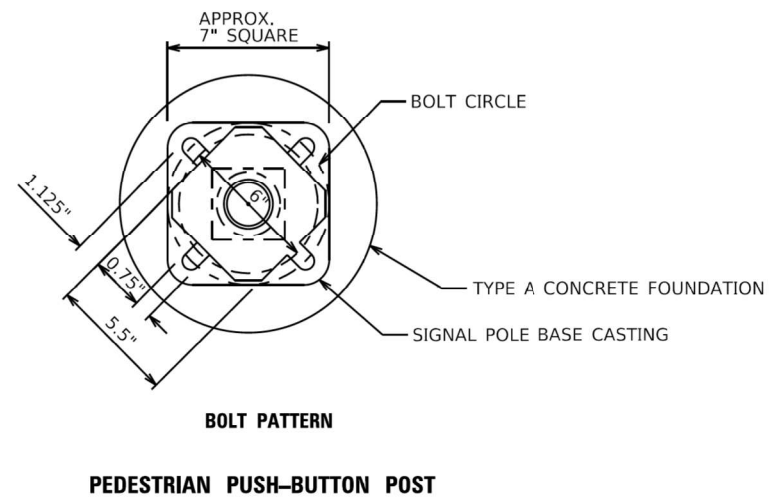
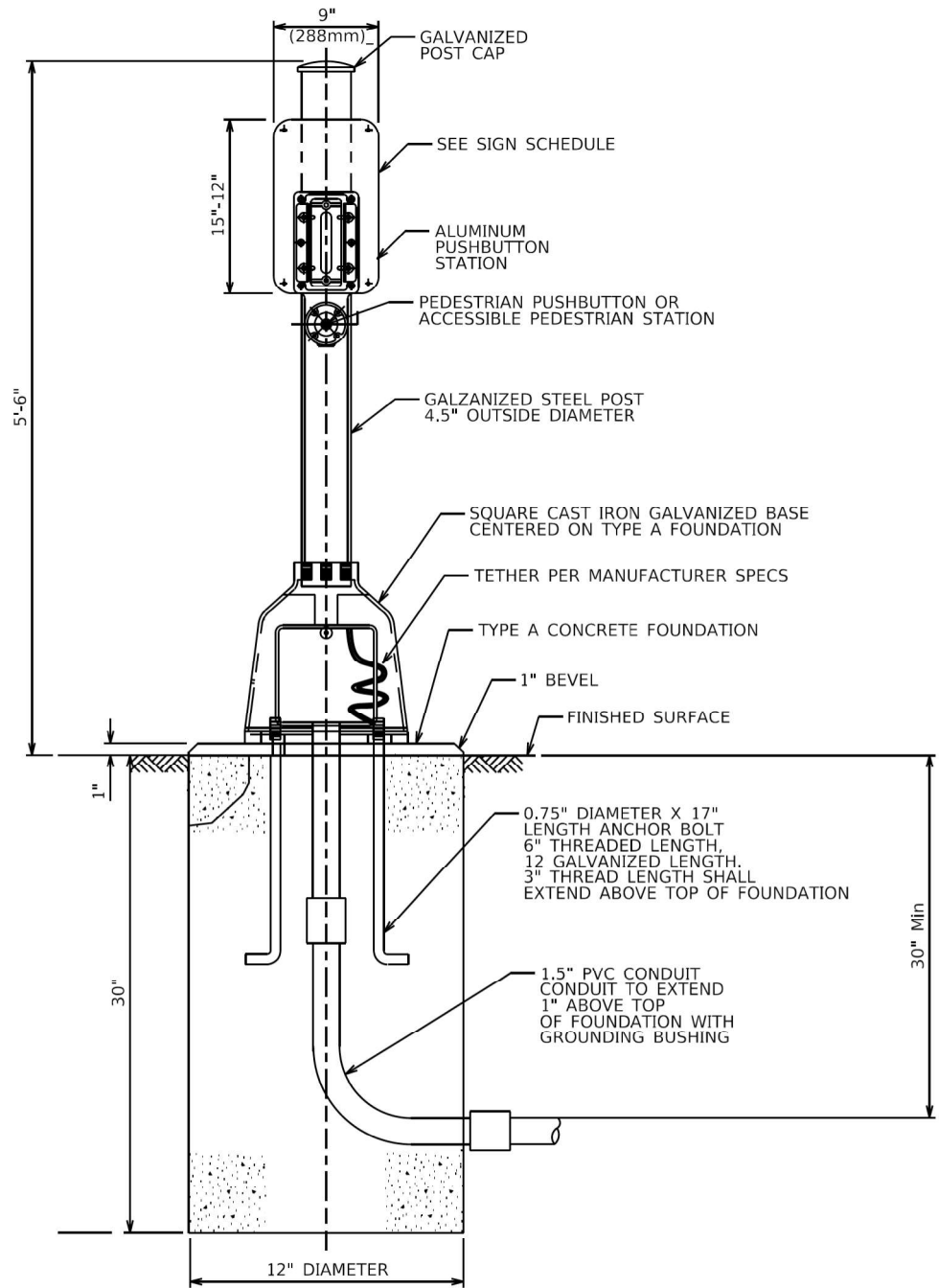
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PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/22/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER COMMUNICATIONS SYSTEM SCHEMATIC

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	73
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT				



MODEL & MODEL NAMES
FILE NAMES & STYLES

DELTA ENGINEERING GROUP, LLC
CONSULTING ENGINEERS, ARCHITECTS, PLANNERS, ENVIRONMENTAL SCIENTISTS
111 W JACKSON BLVD, SUITE 910
CHICAGO, IL 60604
T 312.377.7700, F 312.427.6145

USER NAME = \$USERS	DESIGNED - MA	REVISED -
DRAWN - NS	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED - MA	REVISED -
PLOT DATE = \$DATE\$	DATE - 03/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PEDESTRIAN PUSH BUTTON
POST DETAIL

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	(130, 130-1, 130-2) TS-3, 82-5TS	ST. CLAIR	74	74
CONTRACT NO. 76R78				
ILLINOIS FED. AID PROJECT CMAQ-HSR-445N (249)				