

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	(108)MRK	KENDALL	7	1
		ILLINOIS	CONTRACT NO. 66H64	

D-93-001-18

INDEX OF SHEETS

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- 5 TRAFFIC SIGNAL INSTALLATION PLAN
- 6 CABLE PLAN AND PHASE DESIGNATION DIAGRAM
- 7 DETAILS
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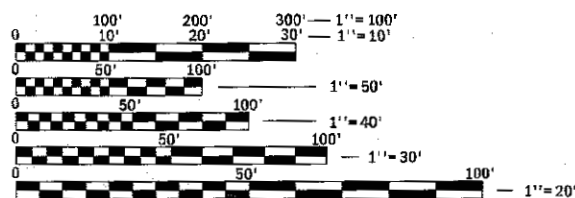
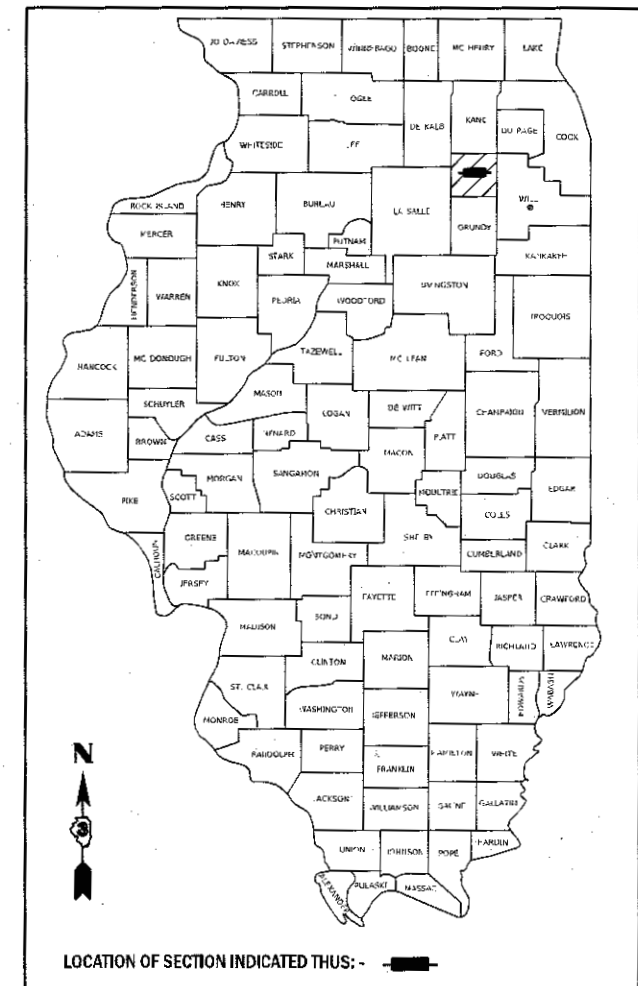
PROPOSED
HIGHWAY PLANS

FAP ROUTE 326 (IL 47)
SECTION (108)MRK

PAVEMENT MARKING AND SIGNAL MODIFICATION
KENDALL COUNTY

C-93-001-18

SPOT IMPROVEMENT
PAVEMENT MARKING AND
SIGNAL MODIFICATION
IL 47 & GALENA RD



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

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

PROJECT ENGINEER : SCOTT A. FERGUSON
PROJECT MANAGER : JOE KANNEL

CONTRACT NO. 66H64

GROSS LENGTH = 300 FT. = 0.06 MILE
NET LENGTH = 300 FT. = 0.06 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED July 13 2017
K. Stambek
REGIONAL ENGINEER

Aug 18 2017
Marwan M. Addis
ENGINEER OF DESIGN AND ENVIRONMENT

Aug 10 2017
Amelle O. O.
DIRECTOR OF PROGRAM DEVELOPMENT

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OF THE STATE OF ILLINOIS

TRAFFIC SIGNAL GENERAL NOTES

GENERAL NOTES

FOR STABILIZATION, ALL TYPE III BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES (100 MILLIMETERS) IN AREAS TO BE SEEDED OR SOODED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE ASSOCIATED SIDEWALK PAY ITEMS.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF THE ASSOCIATED REMOVAL ITEMS.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815-434-8417) TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) SYSTEM.

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE WILL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.

A 1/4" DIAMETER CONTINUOUS RODENT RESISTANT NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OR CONTROLLER. THIS COST SHALL BE INCLUDED WITH THE COST OF CONDUIT PAY ITEM.

ALL CONDUIT IN TRENCH SHALL BE P.V.C. ALL PUSHED CONDUIT MAY BE P.V.C. OR GALVANIZED STEEL. CONDUIT ATTACHED TO STRUCTURES SHALL BE GALVANIZED STEEL.

NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT A GREATER THAN 2' MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.

ALL THREADS OF BOLTS USED IN THE ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.

ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED, CABLES SHALL BE NEATLY WOUND IN HANDHOLES. CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.

ALL TRAFFIC SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL. SPLICES IN JUNCTION BOXES WILL NOT BE ALLOWED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL SERVICE FOR THE TRAFFIC SIGNALS. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY PRIOR TO BEGINNING WORK TO OBTAIN THE UTILITY COMPANY REQUIREMENTS FOR THE SERVICE INSTALLATION.

ALL GROUNDING MATERIALS FOR CONCRETE FOUNDATIONS SHALL REFER TO SECTION 807 OF THE STANDARD SPECIFICATIONS.

ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED WITH SEED OR SOD TO THE SATISFACTION OF THE ENGINEER. SEEDING OR SODDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION.

THE TRAFFIC SIGNAL SECTION AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE NOTIFIED AT (815) 434-6131 AT LEAST 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNITS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE TRAFFIC SIGNAL INSTALLATION FOR THE DURATION OF THE SIGNAL WORK, FOR THIRTY (30) DAYS FOLLOWING THE FINAL INSPECTION, AND AS DESCRIBED IN SECTION 801.19 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

ALL SIGNAL BASES SHALL BE LOCATED A MINIMUM OF (6 FEET) FROM THE BACK OF CURB UNLESS OTHERWISE DIRECTED BY ENGINEER.

ALL TRAFFIC SIGNAL HEADS SHALL BE (12 INCH) POLYCARBONATE.

ALL BACKPLATES SHALL BE VACUUM-FORMED POLYCARBONATE WITH A DEEP BACK FLANGE.

A DOUBLE HANDHOLE SHALL CONTAIN 13 FEET OF SLACK. HANDHOLE SHALL CONTAIN 6.5 FEET OF SLACK. J-BOX SHALL CONTAIN 1.5 FEET OF SLACK. EACH CABLE NEATLY WOUND ON THE HOOKS WITH TIE WRAPS. CABLES SHALL EACH BE LABELLED WITH PLASTIC TAGS THE CABLE SHALL BE PAID FOR AT ITS INDIVIDUAL UNIT PRICE.

THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.

ALL DETECTOR LOOP HARNESSSES SHALL BE FURNISHED WITH PLASTIC TAGS LABELED WITH RESPECTIVE PHASE DIRECTION OF TRAFFIC AND LANE. ALL DETECTOR AMPLIFIERS SHALL BE LABELED THE SAME AS THE HARNESSSES WITH A REMOVABLE TAG. THE AMPLIFIER TAG SHALL BE MOUNTED DIRECTLY BELOW EACH AMPLIFIER ON THE RACK. LABELING SHALL BE MADE IN A 16 POINT FONT SIZE UTILIZING A CLEAR AND LEGIBLE FONT.

THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY, INCIDENTAL TO THE CONDUIT PAY ITEM.

ALL THREADS OF BOLTS USED IN ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.

GROUND RODS SHALL BE SOLID COPPER ALLOY OR COPPER CLAD STEEL.

ALL CONDUIT IN TRENCH SHALL BE PVC. ALL CONDUIT PUSHED MAY BE GALVANIZED STEEL OR PVC. CONDUIT ATTACHED TO STRUCTURES SHALL BE GALVANIZED STEEL.

CONDUITS SHALL BE PLACED AT A MINIMUM DEPTH OF 0.60 METERS (2 FEET).

ALL DETECTOR AMPLIFIERS SHALL BE SINGLE CHANNEL AND SHELF MOUNTED.

COMMITMENTS: NONE

ALL EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE IDOT RIGHT OF WAY DUE TO ENVIRONMENTAL DOCUMENTATION REQUIREMENTS.

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS **e" 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-06	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
878001-10	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

SUPERVISING CONSTRUCTION FIELD ENGINEER

RESIDENT ENGINEER / TECHNICIAN

START & END DATES
OF CONSTRUCTION:

INSPECTORS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: *Don Benil*
DISTRICT STUDIES & PLANS ENGINEER

DATE: *July 13, 2017*

EXAMINED BY: *John A. Smith*
DISTRICT CONSTRUCTION ENGINEER

Wanda A. Shulz
DISTRICT MATERIALS ENGINEER

Ron H. Jones
DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = ferguson	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES, STANDARDS, AND SIGNATURE SHEET	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
path: \\IL084EBIDINTEG\illinois.gov\PIDOT\Documents\IDOT\Office\District 3\Projects\EP030\RAWData\GAD\sheet\EP01307_topo.dgn		CHECKED -	REVISED -			326	(108)MRK	KENDALL	7	2	
PLOT SCALE = 40,0000' / in.		DATE -	REVISED -			CONTRACT NO. 66H64					
PLOT DATE = 7/13/2017						SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE TRAFFIC SIGNALS 0021 ✓ URBAN
67100100	MOBILIZATION	LSUM	1	1
70100450	TRAFFIC CONTRDL AND PROTECTION, STANDARD 701201	LSUM	1	1
* 72000100	SIGN PANEL - TYPE 1	SQ FT	6	6
* 72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	6	6
73000100	WOOD SIGN SUPPORT	FOOT	15	15
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	200	200
* 78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	225	225
* 78008240	POLYUREA PAVEMENT MARKING TYPE I - LINE 8"	FOOT	225	225
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	24	24
81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	25	25
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	25	25
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	160	160
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	330	330

* SPECIALTY ITEMS

MODEL: I:\MODEL\IAMES
FILE: IAMES.PLOT

USER NAME = ferguson	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 7/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	(108)MRK	KENDALL	7	3
CONTRACT NO. 66H64				
ILLINOIS FFD. AID PROJECT				

REV

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE TRAFFIC SIGNALS 0021 URBAN
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	160	160
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	3	3
87900200	DRILL EXISTING HANDHOLE	EACH	6	6
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1	1
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	1	1
88600100	DETECTOR LOOP, TYPE I	FOOT	400	400
89502200	MODIFY EXISTING CONTROLLER	EACH	1	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	200	200
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	50	50

MODEL: SMODELINARES
 FILE NAME: 411E13

USER NAME = forgasorda	DESIGNED -	REVISED -
PLOT SCALE = 30.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 7/11/2017	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

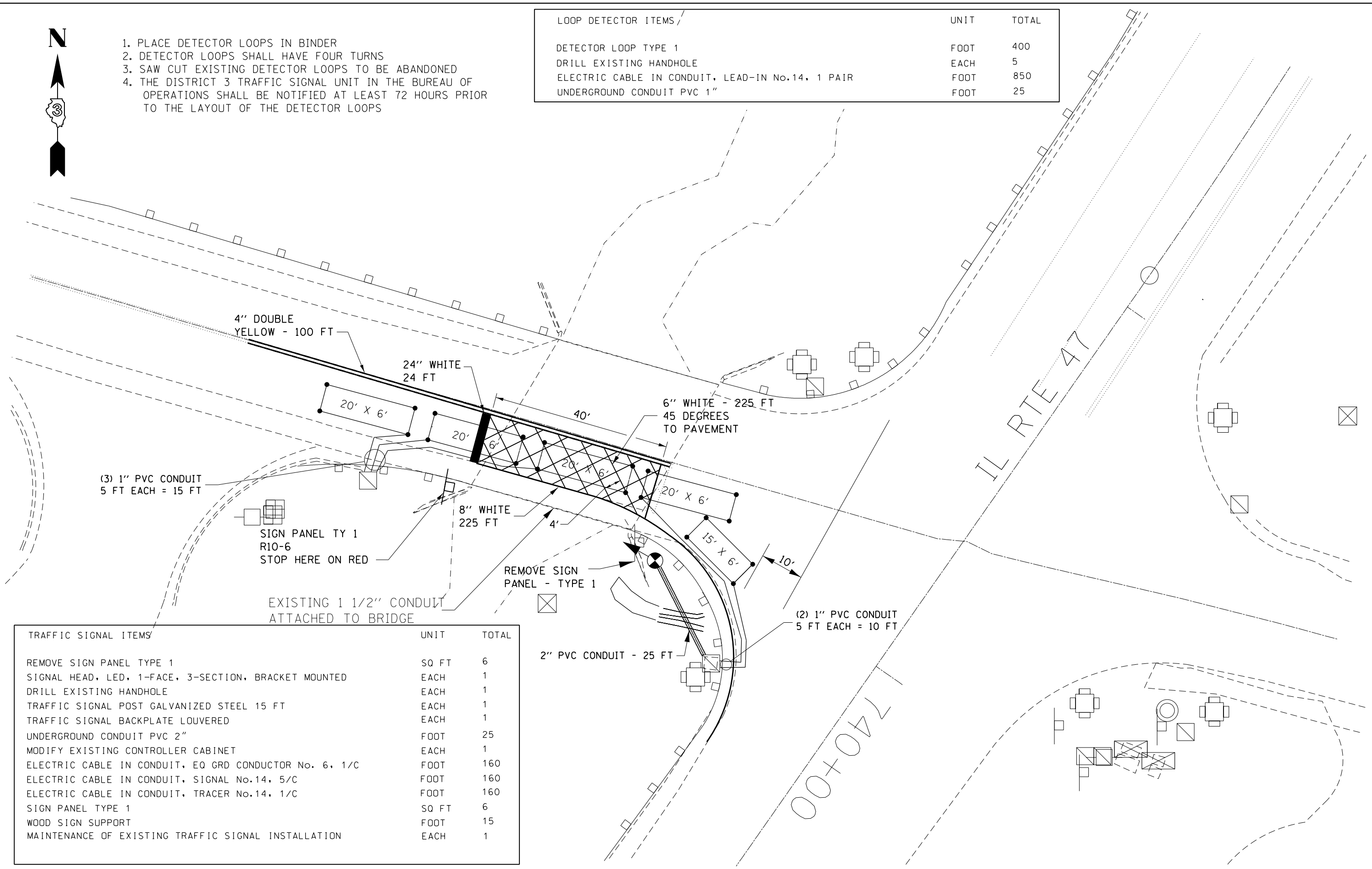
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	(108)MRK	KENDALL	7	4
			CONTRACT NO. 66H64	
ILLINOIS FFD. AID PROJECT				

REV



1. PLACE DETECTOR LOOPS IN BINDER
2. DETECTOR LOOPS SHALL HAVE FOUR TURNS
3. SAW CUT EXISTING DETECTOR LOOPS TO BE ABANDONED
4. THE DISTRICT 3 TRAFFIC SIGNAL UNIT IN THE BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO THE LAYOUT OF THE DETECTOR LOOPS

LOOP DETECTOR ITEMS /	UNIT	TOTAL
DETECTOR LOOP TYPE 1	FOOT	400
DRILL EXISTING HANDHOLE	EACH	5
ELECTRIC CABLE IN CONDUIT, LEAD-IN No.14, 1 PAIR	FOOT	850
UNDERGROUND CONDUIT PVC 1"	FOOT	25



TRAFFIC SIGNAL ITEMS	UNIT	TOTAL
REMOVE SIGN PANEL TYPE 1	SQ FT	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
TRAFFIC SIGNAL POST GALVANIZED STEEL 15 FT	EACH	1
TRAFFIC SIGNAL BACKPLATE LOUVERED	EACH	1
UNDERGROUND CONDUIT PVC 2"	FOOT	25
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, EQ GRD CONDUCTOR No. 6, 1/C	FOOT	160
ELECTRIC CABLE IN CONDUIT, SIGNAL No.14, 5/C	FOOT	160
ELECTRIC CABLE IN CONDUIT, TRACER No.14, 1/C	FOOT	160
SIGN PANEL TYPE 1	SQ FT	6
WOOD SIGN SUPPORT	FOOT	15
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1

MODEL: MODELNAMES
FILE NAMES: FILES

USER NAME = fergusonsa	DESIGNED -	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 7/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

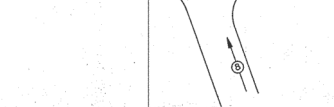
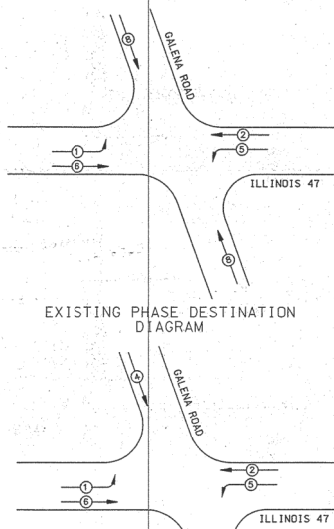
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PROPOSED PLAN SHEET

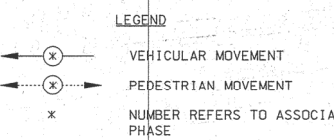
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE. 326	SECTION (108)MRK	COUNTY KENDALL	TOTAL SHEETS 9	SHEET NO. 5
CONTRACT NO. 66H64				
ILLINOIS FED. AID PROJECT				

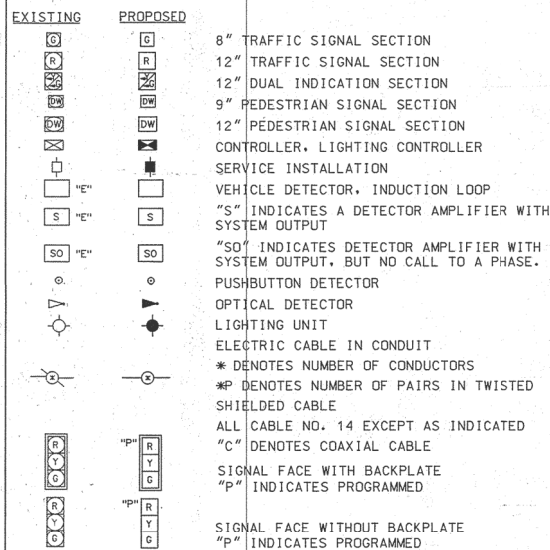
REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW



LEGEND



CABLE PLAN LEGEND



ELECTRICAL LOAD INFORMATION

STREET NAME	COMPONENT	NUMBER	WATTAGE	BURN TIME (%) EACH
IL ROUTE 47	RED	6	135	45
	YELLOW	6	135	50
	GREEN	4	135	5
	YELLOW AR. GREEN AR.	4	135	5
GALENA ROAD	RED	4	135	65
	YELLOW	4	135	5
	GREEN	4	135	30
	CONTROLLER	1	6	100
	VEHICLE DETECTOR	20	4	100
	LUMINAIRE	2	310	235 HRS/MO.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	WEEK	6
HANDHOLE	EACH	3
SIGNAL HEAD, POLYCARBONATE, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, POLYCARBONATE, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP TYPE 1	METER	204
MODIFY EXISTING CONTROLLER CABINET	EACH	1
FULL-ACTUATED CONTROLLER, 8-PHASES, IN EXISTING CABINET	EACH	1
CONDUIT IN TRENCH 40mm (1.5") Dia PVC	METER	16.7
CONDUIT ATTACHED TO STRUCTURE 40mm (1.5") RGS	METER	13.0
CONDUIT ATTACHED TO STRUCTURE 40mm (1.5") (SPECIAL)	METER	6.0
JUNCTION BOX (SPECIAL)	EACH	4
CONDUIT IN TRENCH 30mm (1.25") Dia PVC	METER	69.4
CONDUIT IN TRENCH 50mm (2.0") Dia PVC	METER	143.2
CONDUIT IN TRENCH 65mm (2.5") Dia PVC	METER	8.8
ELECTRIC CABLE IN CONDUIT, SIGNAL No.14, 5/C	METER	186.3
ELECTRIC CABLE IN CONDUIT, SERVICE No.14, 1 PAIR	METER	674.4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 7.92m	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 8.53m	EACH	1
CONCRETE FOUNDATION TYPE-E, 0.60m (24" Diam.)	METER	6.8
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	234.0
DRILL EXISTING HANDHOLE	EACH	9
REMOVE ELECTRIC CABLE FROM CONDUIT	METER	162.7
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	10
PULL AND REINSTALL ELECTRIC CABLE FROM CONDUIT	METER	368.2
SIGN PANEL TYPE 1	SO. MET.	1.7
REMOVE GROUND MOUNTED SIGN SUPPORT	EACH	1
REMOVE SIGN PANEL, TYPE 1	SO. MET.	0.1

LIGHTING

LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2
LIGHTING CONTROLLER	EACH	1
CONCRETE FOUNDATION TYPE-A	METER	0.9
SERVICE INSTALLATION TYPE-B (NO METER)	EACH	1
CONDUIT IN TRENCH 40mm (1.5") Dia PVC	METER	5.7
CONDUIT IN TRENCH 50mm (2.0") Dia PVC	METER	4.2
CONDUIT PUSHED 75mm (3.0") Dia RGS	METER	46.6
ELECTRIC CABLE IN CONDUIT, SERVICE No. 6, 2/C	METER	7.7
ELECTRIC CABLE IN CONDUIT, 600V (XLP - TYPE USE) 1/C No. 12	METER	60.8
ELECTRIC CABLE IN CONDUIT, 600V (XLP - TYPE USE) 1/C No. 8	METER	151.6
ELECTRIC CABLE IN CONDUIT, 600V (XLP - TYPE USE) 1/C No. 6	METER	75.8
REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	1
DRILL EXISTING HANDHOLE OR DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	4.2

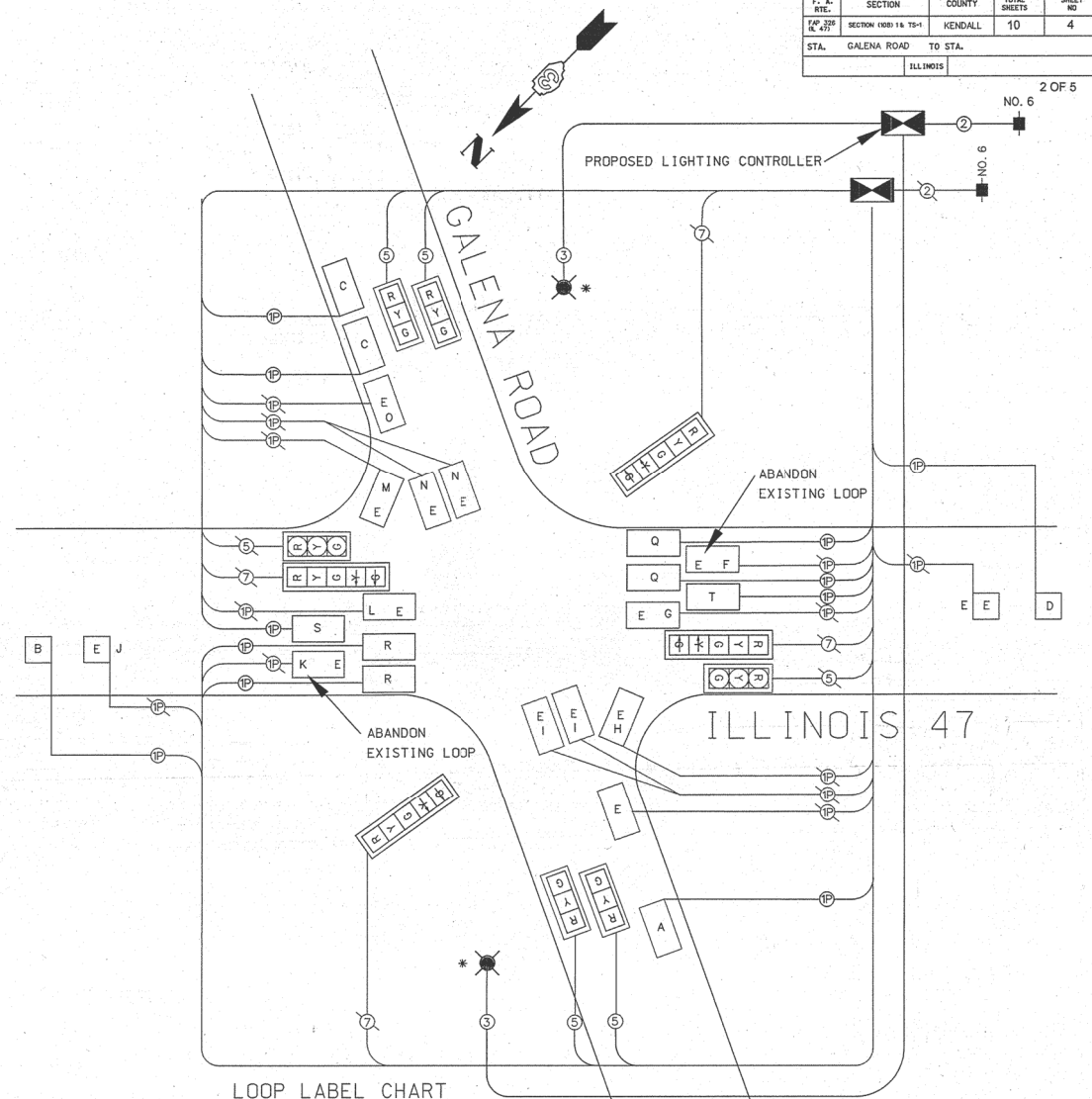
STRIPING

PAINT PAVEMENT MARKING REMOVAL	SO. MET.	6.3
THERMOPLASTIC PAVEMENT MARKING - ALKYD - LINE 0.1m (4")	METER	23.4
THERMOPLASTIC PAVEMENT MARKING - ALKYD - LINE 0.15m (6")	METER	11.7
THERMOPLASTIC PAVEMENT MARKING - ALKYD - LINE 0.6m (24")	METER	3.7

NOTE: ALL CABLES NO. 14 CONDUCTORS UNLESS NOTED OTHERWISE.
 * - LIGHTING CABLE SHALL CONSISTS OF TWO 600 VOLT (XLP - TYPE USE) 1/C No. 8 & ONE 600 VOLT (XLP - TYPE USE) 1/C No. 6; MAST ARM SHALL CONSISTS OF TWO 600 VOLT (XLP - TYPE USE) 1/C No. 12
 PROPOSED LIGHT SYSTEM SHALL BE 240V

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
47	SECTION 1000 1/4 TS-1	KENDALL	10	4
STA.	GALENA ROAD	TO STA.		
	ILLINOIS			

2 OF 5



LOOP LABEL CHART

LOOP SYSTEM	LABEL	NO. OF TURNS	INDUCTANCE (uH)	FREQUENCY (HERTZ)	J PIN STATUS
A	ø 8 EB FR	4	418.4	29818	ON
B	ø 6 SB FAR	6	424.1	29617	ON
C(2)	ø 4 WB FR	4	298.2	35320	ON
D	ø 2 NB FAR	6	387	31004	ON
E	ø 2 NB FAR	-	-	-	-
F	ø 2 NB STBR (ABANDON)	-	-	-	-
G	ø 5 NB LT	-	-	-	-
H	ø 8 EB RL	-	-	-	-
I(2)	ø 8 EB LL	-	-	-	-
J	ø 6 SB FAR	-	-	-	-
K	ø 6 SB STBR (ABANDON)	-	-	-	-
L	ø 1 SB LT	-	-	-	-
M	ø 4 WB RL	-	-	-	-
N(2)	ø 4 WB STBR	-	-	-	-
O	ø 4 WB STBR	-	-	-	-
P	ø 8 EB STBR	-	-	-	-
Q(2)	ø 2 NB STBR	4	274.8	36793	ON
R(2)	ø 6 SB STBR	4	311.7	34546	ON
S	ø 1 SB LT	4	242.2	39191	OFF
T	ø 5 NB LT	4	236.6	39652	OFF

J PIN STATUS : "ON" MEANS STANDARD DETECTOR SETUP. "OFF" MEANS J WIRE HAS BEEN DISCONNECTED, BUT INTACT. AT THE HARNESS PANEL WITH THE NECESSARY SPADE CONNECTION ATTACHED, MARKED, AND INSULATED.

NO.	DATE	REVISIONS	BY	CHECKED
ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 3, KENDALL COUNTY, ILLINOIS				
IL RTE. 47 & GALENA ROAD CABLE PLAN				
BUCHER WILLIS & RATLIFF CORPORATION				
75 EXECUTIVE DRIVE SUITE 103 AURORA, ILLINOIS 60504 630-898-0010				
DESIGNED BY	CS	DATE	03/98	PROJECT NO.
DRAWN BY	CS	DATE	03/98	JOB NO. 9534.31
CHECKED BY	JHL	DATE	03/98	SCALE NONE SHEET 2 OF 5

FOR INFORMATION ONLY

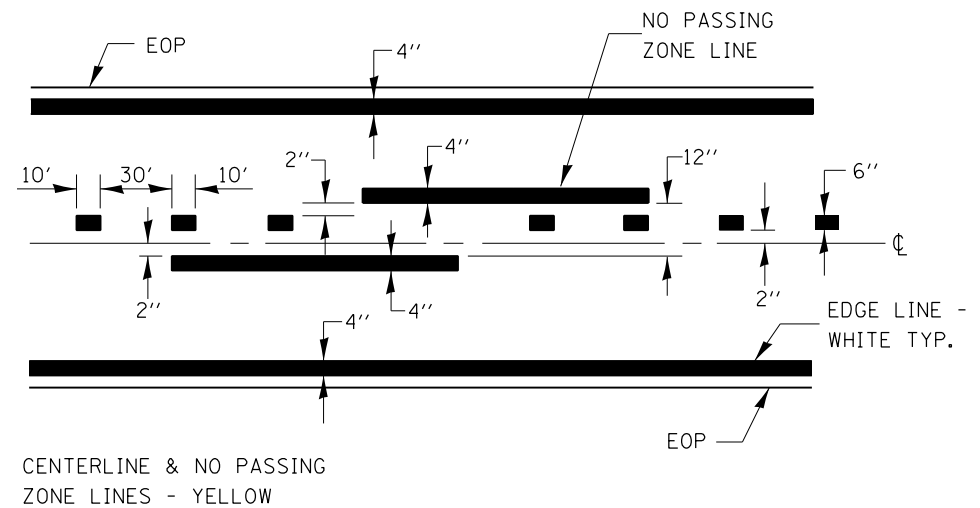
MODEL AND FILE NAMES
FILE NAMES: JFILES

USER NAME = fergusonsa	DESIGNED -	REVISED -	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -	326	(108)MRK	KENDALL	9	6
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	CONTRACT NO. 66H64				
PLOT DATE = 7/7/2017	DATE -	REVISED -	ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN SHEET

SCALE: SHEET OF SHEETS STA. TO STA.



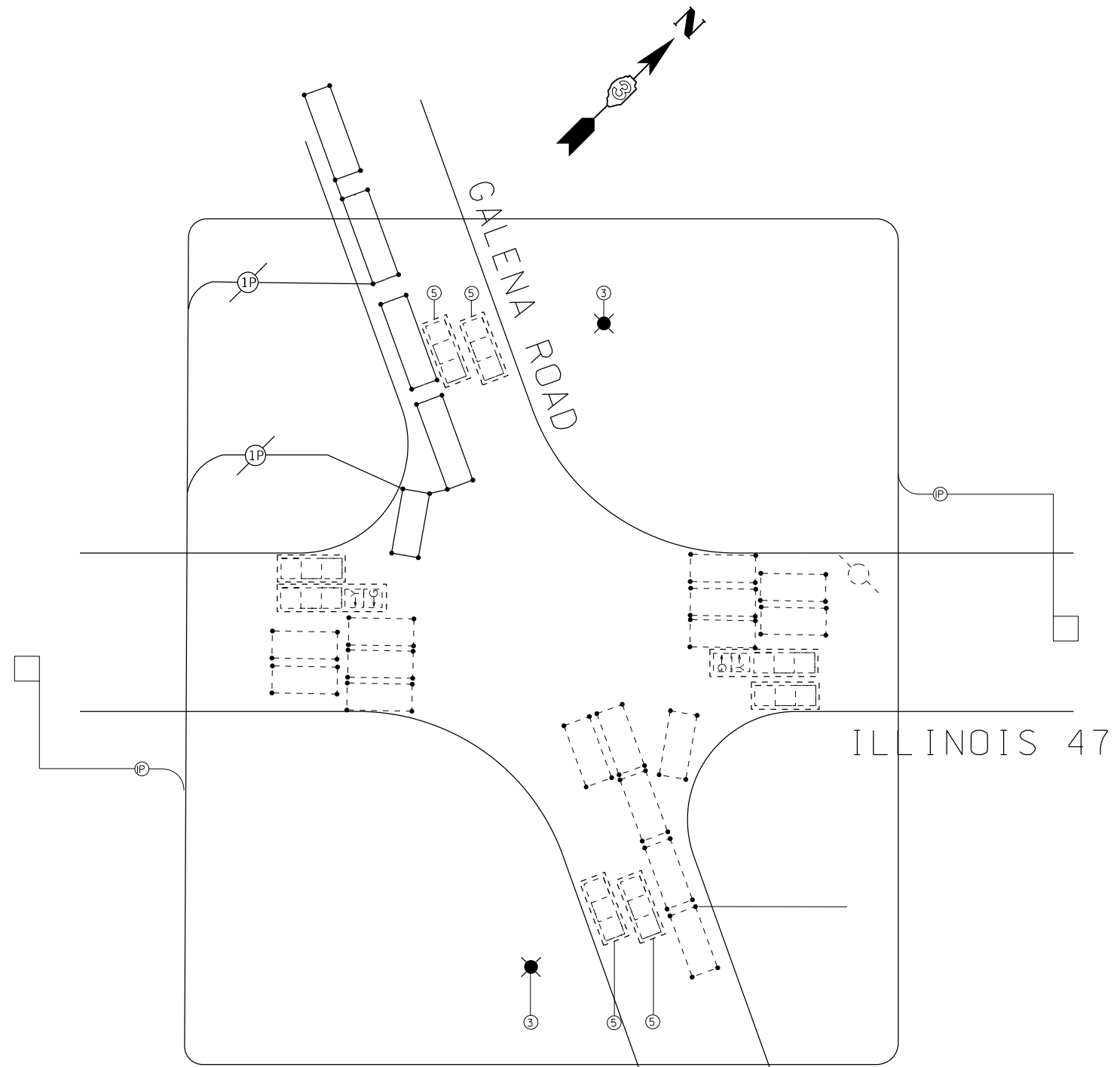
PAVEMENT MARKING

CABLE PLAN LEGEND

EXISTING

PROPOSED

- | | | |
|--|--|---|
| | | 8" TRAFFIC SIGNAL SECTION |
| | | 12" TRAFFIC SIGNAL SECTION |
| | | 12" DUAL INDICATION SECTION |
| | | 9" PEDESTRIAN SIGNAL SECTION |
| | | 12" PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | "S" INDICATES A DETECTOR AMPLIFIER WITH SYSTEM OUTPUT |
| | | "SO" INDICATES DETECTOR AMPLIFIER WITH SYSTEM OUTPUT, BUT NO CALL TO A PHASE. |
| | | PUSHBUTTON DETECTOR |
| | | OPTICAL DETECTOR |
| | | ELECTRIC CABLE IN CONDUIT |
| | | * DENOTES NUMBER OF CONDUCTORS |
| | | *P DENOTES NUMBER OF PAIRS IN TWISTED SHIELDED CABLE |
| | | ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | "C" DENOTES COAXIAL CABLE |
| | | SIGNAL FACE WITH BACKPLATE |
| | | "P" INDICATES PROGRAMMED |
| | | SIGNAL FACE WITHOUT BACKPLATE |
| | | "P" INDICATES PROGRAMMED |



SEE FOR INFORMATION ONLY SHEET FOR MORE EXISTING DETAIL

MODEL NUMBER NAMES
FILE NUMBER, SHEETS

USER NAME = fergusonsa	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	(108)MRK	KENDALL	7	7
			CONTRACT NO. 66H64	
ILLINOIS FED. AID PROJECT				