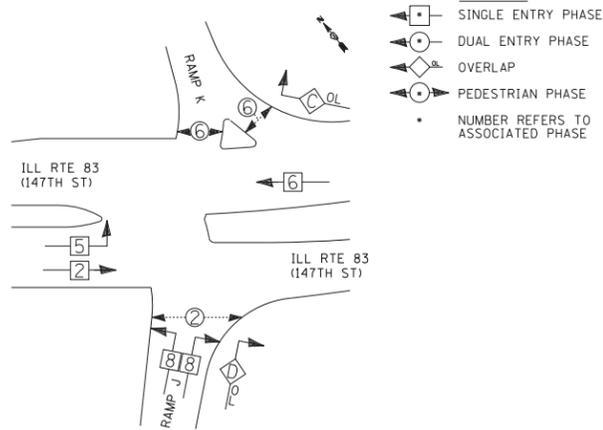


CONTROLLER SEQUENCE

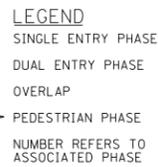
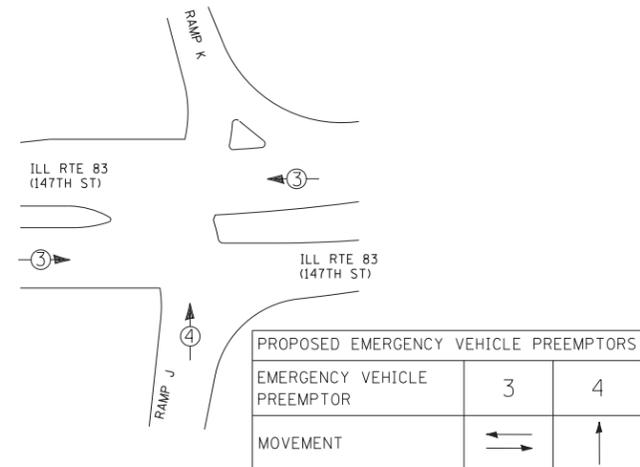


PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 8
D	= 8	+ 5

EMERGENCY VEHICLE PREEMPTION SEQUENCE



SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	I.D.O.T. POSEN
SIGN PANEL - TYPE 1	SQ FT	23
REMOVE SIGN PANEL - TYPE 2	SOFT	13
RELOCATE SIGN PANEL - TYPE 2	SOFT	13
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1177
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	146
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	208
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	588
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1358
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1400
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3807
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	595
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4726
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	429
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2091
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 72 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	14
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	25
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	11
INDUCTIVE LOOP DETECTOR	EACH	14
LIGHT DETECTOR	EACH	--
LIGHT DETECTOR AMPLIFIER	EACH	3
PEDESTRIAN PUSH-BUTTON	EACH	--
PEDESTRIAN PUSH-BUTTON	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	6
RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	7
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	6
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	EACH	1
	FOOT	757

SCHEDULE OF QUANTITIES FOR ALTERNATE PAVEMENT

PAY ITEM	UNIT	ALT "A"	ALT "B"
DETECTOR LOOP, TYPE I	FOOT	--	311
PREFORMED DETECTOR LOOP	FOOT	722	411

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

TYPE	NO. OF LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16		17	0.50	136.0
(YELLOW)	16		25	0.25	100.0
(GREEN)	16		15	0.25	60.0
ARROW	13		12	0.10	15.6
PED. SIGNAL	6		25	1.00	150.0
CONTROLLER	1		100	1.00	100.0
ILLUM. SIGN	0		25	0.05	0.0
FLASHER	0			0.05	0.0

ENERGY COSTS TO: TOTAL = 561.6

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

ENERGY SUPPLY: CONTACT: *KATHRYN SUGRUE *MAKE INITIAL CONTACT
PHONE: (708) 235-2337 WITH COMED NEW BUSINESS
COMPANY: COMED SERVICES AT (866) 639-3532

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

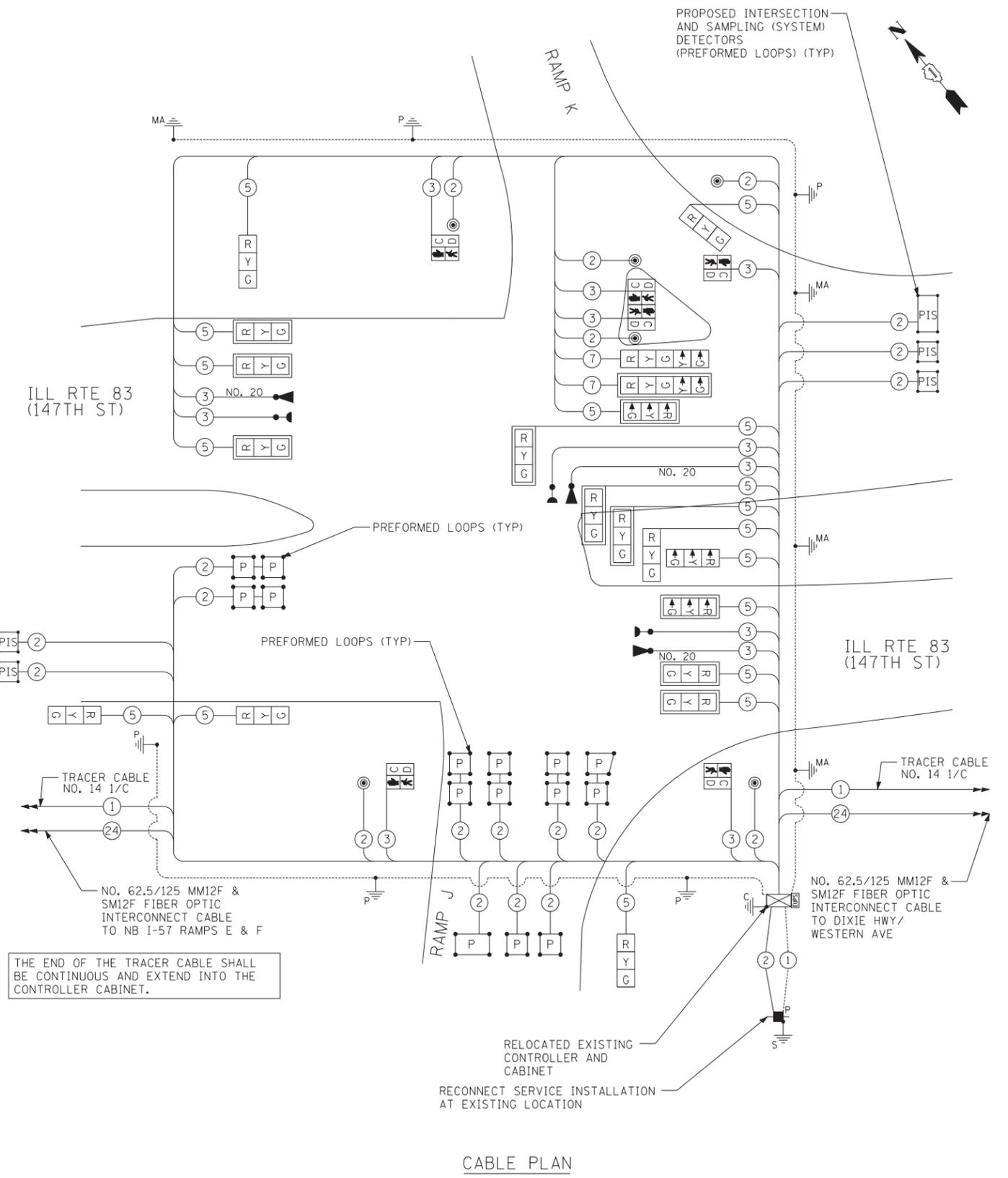
TYLIN INTERNATIONAL	USER NAME =	DESIGNED - MBR	REVISED -
	PLOT SCALE =	DRAWN - MBR	REVISED -
	PLOT DATE =	CHECKED - DAJ	REVISED -
		DATE - 5/23/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

147TH STREET PROJECT
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
ILL RTE 83 (147TH STREET) AND SB I-57 RAMPS J & K

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEET STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XX	(0405-1 & 0506-2) R-1	COOK	577	382
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60M57	



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

RELOCATED EXISTING CONTROLLER AND CABINET
RECONNECT SERVICE INSTALLATION AT EXISTING LOCATION

CABLE PLAN

NOTE: PREFORMED LOOPS ARE SHOWN ON ALL PERMANENT PAVEMENT LOCATIONS. IF AN ALTERNATE PAVEMENT (HMA) IS SELECTED BY THE CONTRACTOR, THEN TYPE I LOOPS SHALL BE USED IN ALL LOCATIONS WHERE HMA PAVEMENT IS SELECTED.