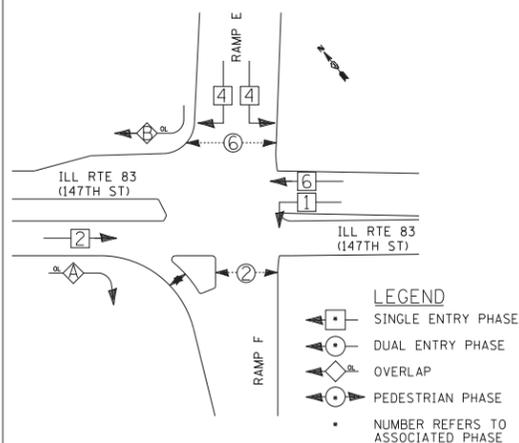


CONTROLLER SEQUENCE

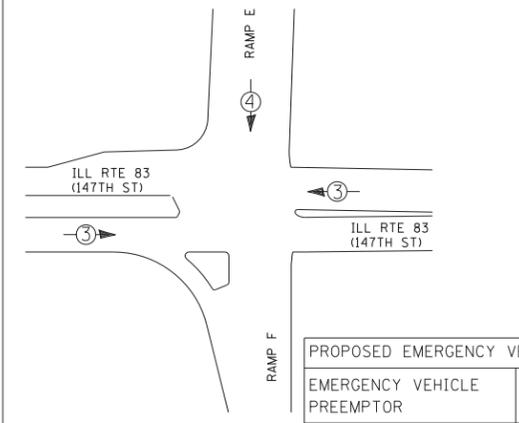


LEGEND
 ◀ SINGLE ENTRY PHASE
 ◀◀ DUAL ENTRY PHASE
 ◀◀◀ OVERLAP
 ◀◀◀◀ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 4
B	= 4	+ 1



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↓

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

TYPE	NO. OF LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
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 = 524.6

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

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	798	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	307	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	209	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	665	
HANDHOLE	EACH	7	
HEAVY-DUTY HANDHOLE	EACH	1	
DOUBLE HANDHOLE	EACH	2	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1038	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1080	824
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4150	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	97	
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	6949	
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	140	
ELECTRIC CABLE IN CONDUIT, EQUIPMENT	FOOT	2214	
GROUNDING CONDUCTOR, NO. 6 1C	FOOT		
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2	
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3	
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1	
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1	
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1	
STEEL MAST ARM ASSEMBLY AND POLE, 58 FT.	EACH	1	
CONCRETE FOUNDATION, TYPE A	FOOT	24	
CONCRETE FOUNDATION, TYPE C	FOOT	4	
CONCRETE FOUNDATION, TYPE E	FOOT	13	
36-INCH DIAMETER CONCRETE FOUNDATION, TYPE E	FOOT	42	
42-INCH DIAMETER CONCRETE FOUNDATION, TYPE E	FOOT	10	
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6	
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1	
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1	
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	10	
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	15	
INDUCTIVE LOOP DETECTOR	EACH	--	3
LIGHT DETECTOR	EACH	--	1
LIGHT DETECTOR AMPLIFIER	EACH	6	
PEDESTRIAN PUSH-BUTTON	EACH	1	
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	
RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1	
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	7	
REMOVE EXISTING HANDHOLE	EACH	1	
REMOVE EXISTING DOUBLE HANDHOLE	EACH	6	
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1	
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	
EMERGENCY VEHICLE PRIORITY SYSTEM LINE	FOOT	--	824
SENSOR CABLE, NO. 20 3/C	FOOT	--	

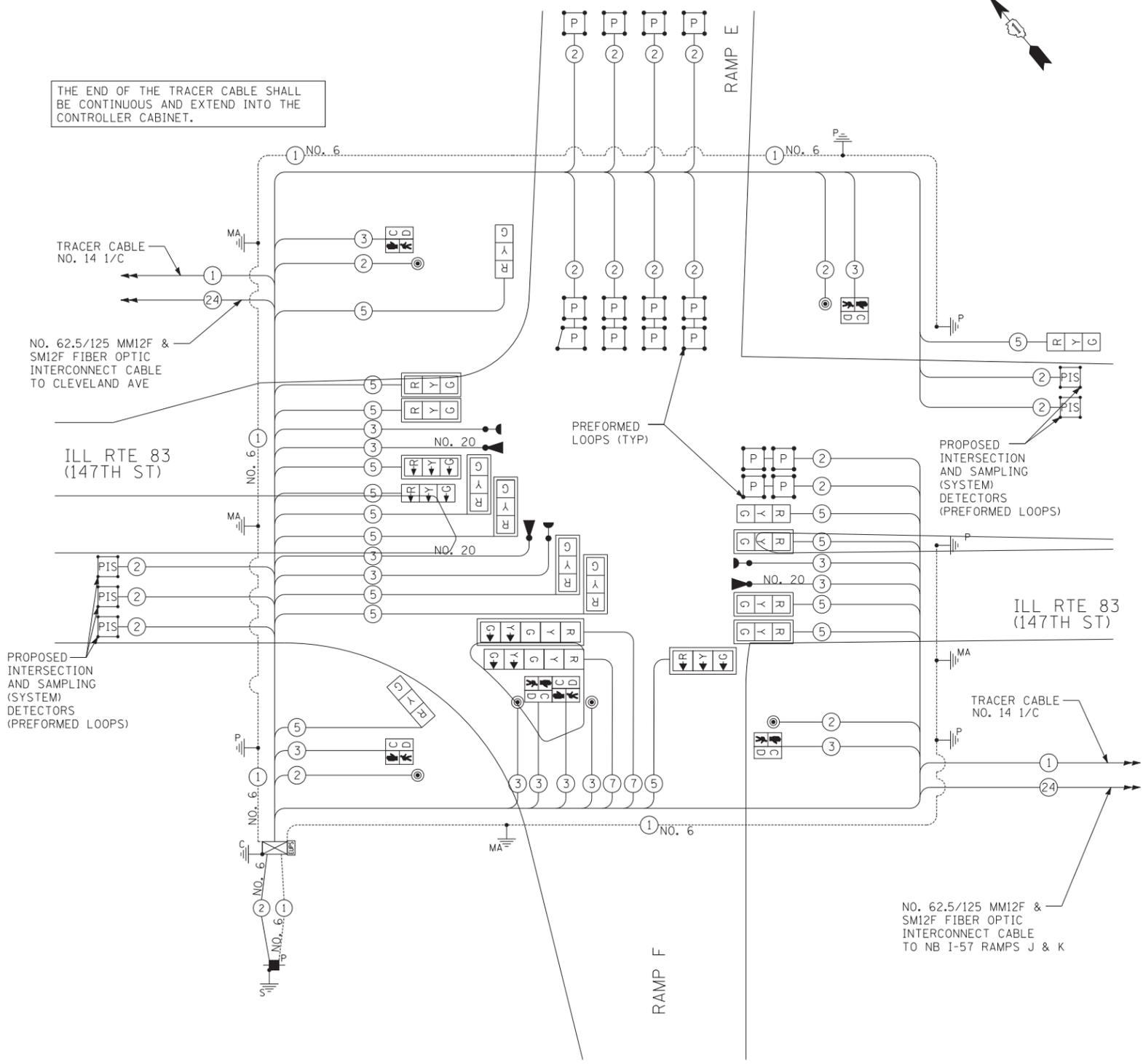
SCHEDULE OF QUANTITIES FOR ALTERNATE PAVEMENT

PAY ITEM	UNIT	ALT "A"	ALT "B"
DETECTOR LOOP, TYPE I	FOOT	--	476
PREFORMED DETECTOR LOOP	FOOT	785	309

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.

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



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.

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 & F

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XX	(0405-1 & 0506-2) R-1	COOK	577	378
CONTRACT NO.			60M57	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		