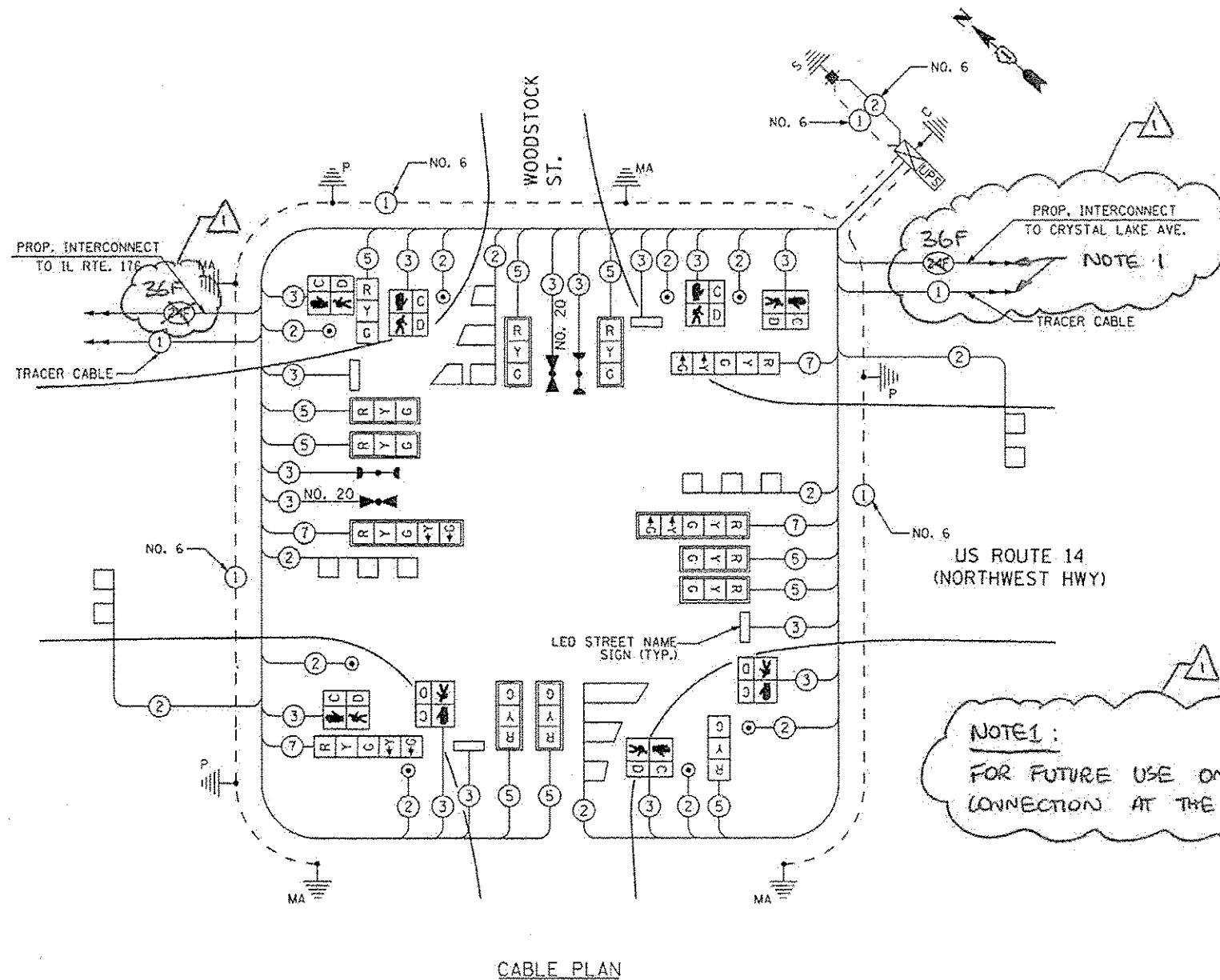


SCHEDULE OF QUANTITIES

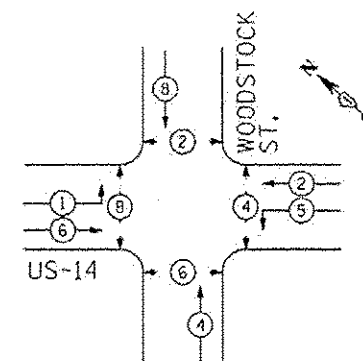
ITEM	UNIT	QTY
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EA	4
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FT	610
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FT	16
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FT	47
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FT	452
HANDHOLE	EA	4
HEAVY-DUTY HANDHOLE	EA	2
DOUBLE HANDHOLE	EA	2
RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER AND CABINET, COMPLETE	EA	1
TRANSCIVER - FIBER OPTIC	EA	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FT	1356
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FT	2165
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FT	1852
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FT	816
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FT	1353
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2/C	FT	44
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EA	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EA	2
PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE I	EA	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EA	2
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EA	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EA	1
CONCRETE FOUNDATION, TYPE A	FT	12
CONCRETE FOUNDATION, TYPE C	FT	4
CONCRETE FOUNDATION, TYPE E 36 INCH DIAMETER	FT	48
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EA	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EA	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EA	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EA	2
PEDESTRIAN SIGNAL HEAD, 1-FACE, LED, BRACKET MOUNTED WITH COUNTDOWN TIMER	EA	6
PEDESTRIAN SIGNAL HEAD, 2-FACE, LED, BRACKET MOUNTED WITH COUNTDOWN TIMER	EA	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM	EA	30
INDUCTIVE LOOP DETECTOR	EA	6
LIGHT DETECTOR	EA	2
LIGHT DETECTOR AMPLIFIER	EA	1
PEDESTRIAN PUSH-BUTTON	EA	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EA	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EA	1
REMOVE EXISTING HANDHOLE	EA	7
REMOVE EXISTING CONCRETE FOUNDATION	EA	30
DETECTOR LOOP, TYPE I	FT	632
TEMPORARY TRAFFIC SIGNAL TIMING	EA	1
SERVICE INSTALLATION - POLE MOUNTED	EA	1
UNINTERRUPTIBLE POWER SUPPLY SPECIAL	EA	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FT	573
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FT	353

100% LOCAL AGENCY COST

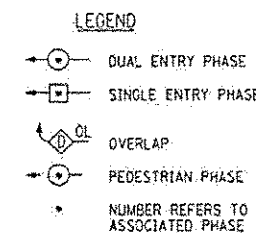


CABLE PLAN

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



NOTE 1:
FOR FUTURE USE ONLY. NO CONNECTION AT THE CONTROLLER.

EMERGENCY VEHICLE PREEMPTION SEQUENCE

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	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
FLASHER			25	0.50	
LED SIGN	2		90	0.50	90.00
LED SIGN (6'+)	2		120	0.50	120.00

ENERGY COSTS TO: TOTAL = 778.6

CITY OF CRYSTAL LAKE

100 WEST WOODSTOCK ST
CRYSTAL LAKE, ILLINOIS 60014

ENERGY SUPPLY: CONTACT: MIKE WIDHALL
PHONE: (815) 263-5624
COMPANY: COMED

NOTE:
THE EMERGENCY PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" BRAND TO MATCH THE EXISTING CITY SYSTEM.

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

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

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC WORK AREA SHALL BE INCLUDED IN THE COST OF 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 SOO, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

FILE NAME: ...ND162017-SHT-TS04A.dgn	USER NAME: ryan@ejm.com	DESIGNED: JW	REVISED: LP 11/10/14
		DRAWN: JW	REVISED:
		CHECKED: RS	REVISED:
		DATE: 10/15/2013	REVISED:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US RTE. 14 AND WOODSTOCK ST.

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 305	SECTION 2TR-3	COUNTY MCHEENRY	TOTAL SHEETS 431	SHEET NO. 308
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62517	