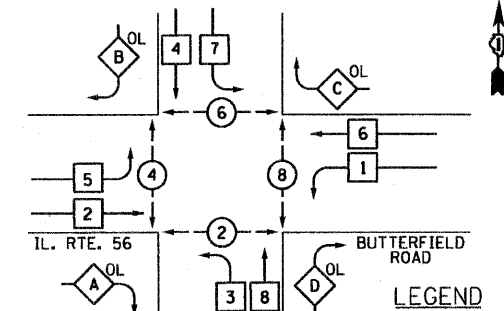


PROPOSED CONTROLLER SEQUENCE



LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- ◇ OVERLAP
- PEDESTRIAN PHASE

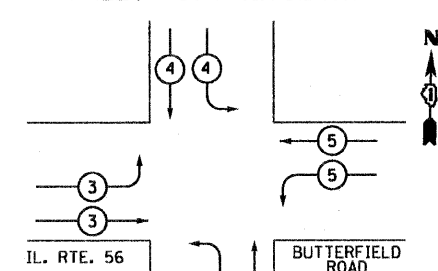
PHASE DESIGNATION DIAGRAM

OVERLAP LETTER = PERMISSIVE PHASE + PROTECTED PHASE

A	=	2	+	3
B	=	4	+	5
C	=	6	+	7
D	=	8	+	1

NUMBER REFERS TO ASSOCIATED PHASE

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↘	↙	↗	↖

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED & % OPERATION	
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	689.2

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

ENERGY SUPPLY CONTACT: MS. MIKKI WILLIAMS
PHONE: (630) 691-4721
COMPANY: COMED

FILE NAME = TS-31.dgn
PLOT DATE = 12/21/2010

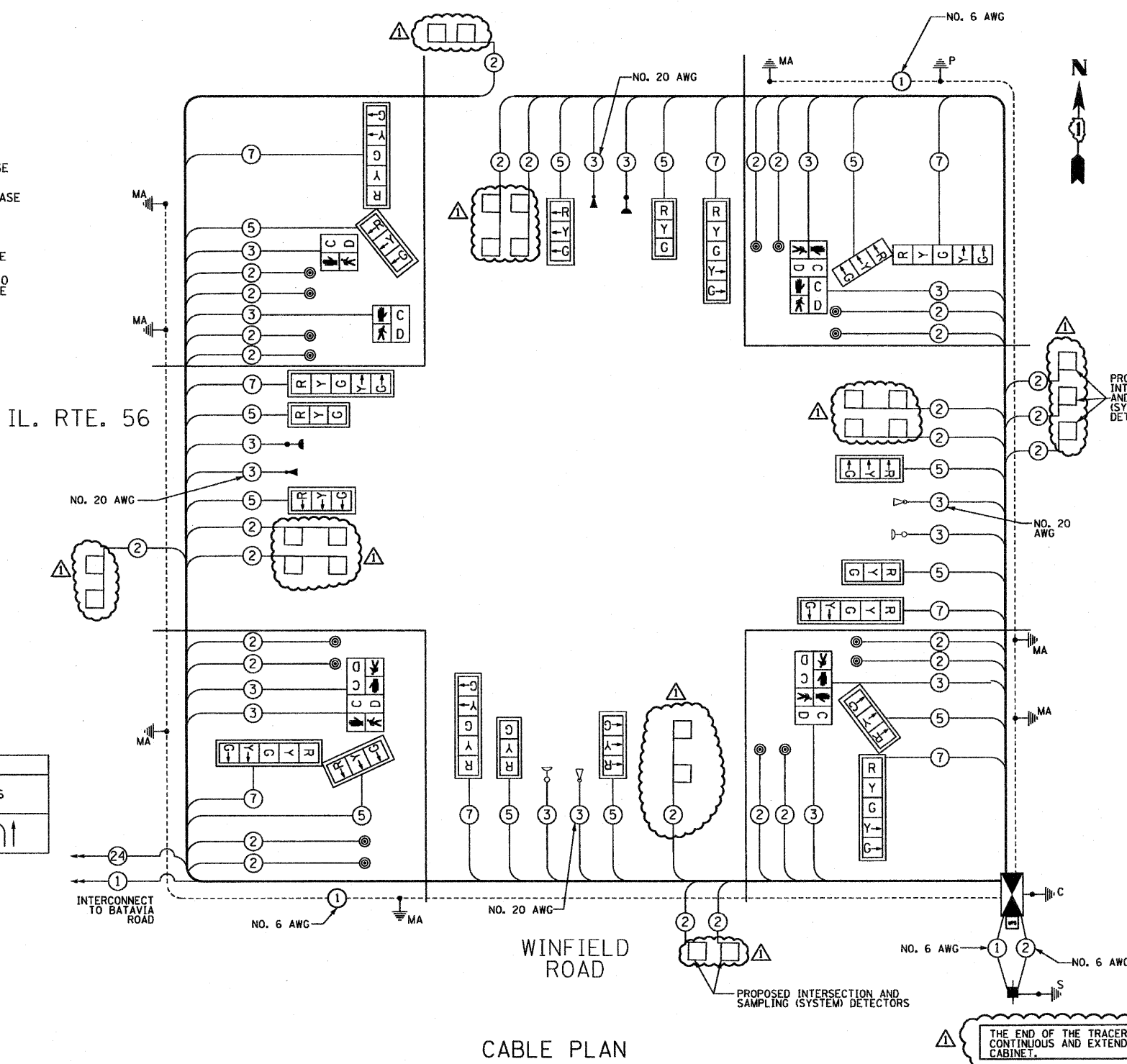
SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, IL 60606

DESIGNED - R.A.S.	REVISED -
DRAWN - D.L.	REVISED -
CHECKED - A.D.O.	REVISED -
DATE - AUGUST 2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
IL ROUTE 56 (BUTTERFIELD ROAD) AND WINFIELD ROAD

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

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	56.5
SIGN PANEL - TYPE 2	SQ FT	30
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	1120
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	112
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	52
CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	92
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	236
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	601
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	3
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1427
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	3278
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2832
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3221
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2076
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4464
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	32
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 66 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 66 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 74 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	96
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	11
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET 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	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	16
INDUCTIVE LOOP DETECTOR	EACH	14
DETECTOR LOOP, TYPE 1	EACH	924
LIGHT DETECTOR	EACH	2**
LIGHT DETECTOR AMPLIFIER	EACH	1**
PEDESTRIAN PUSH-BUTTON	EACH	16
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2**
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1**
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	12
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	986
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	1128

** DENOTES 100% OF COST TO WARRENVILLE FIRE PROTECTION DISTRICT

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

NOTE:
THE NEW EMERGENCY PREEMPTION EQUIPMENT TO BE INSTALLED AT THIS INTERSECTION MUST BE "OPTICOM" BRAND TO MATCH THE EXISTING EQUIPMENT TO REMAIN IN PLACE.

REVISED 12-20-10

TS-24

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(58&59) WRS-3	DUPAGE	466	307
CONTRACT NO. 62420			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	