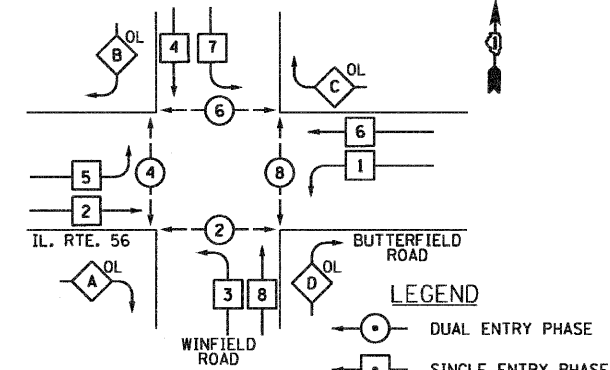


PROPOSED CONTROLLER SEQUENCE



LEGEND

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

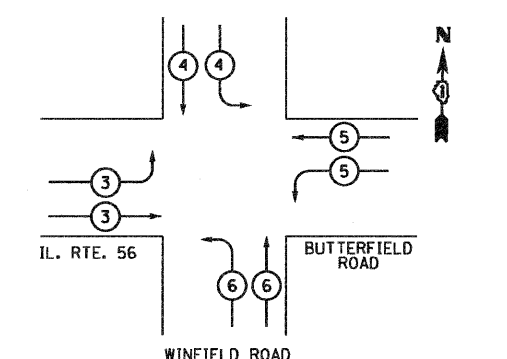
PHASE DESIGNATION DIAGRAM

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

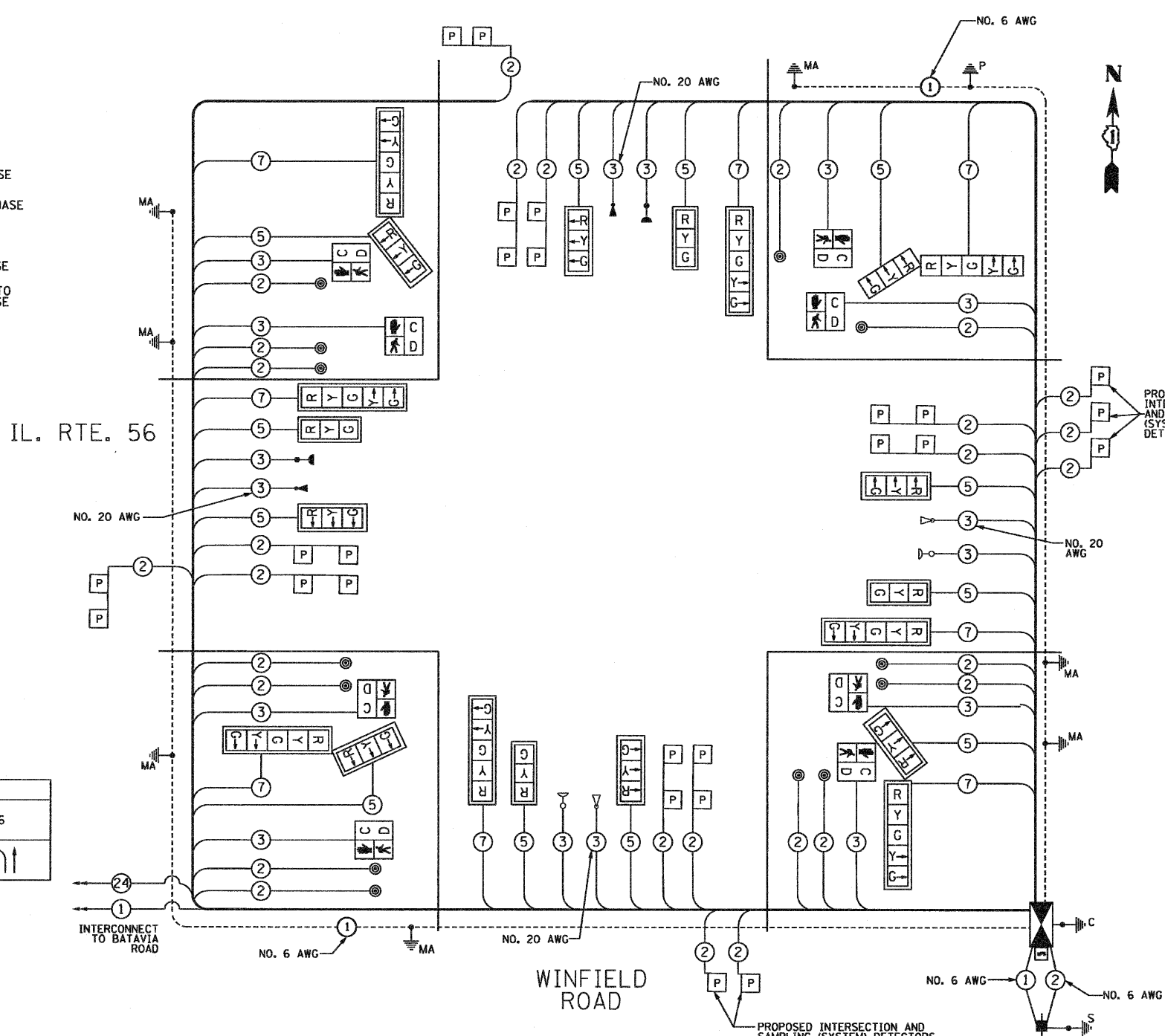


PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↘	↙	↗	↖

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	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 / SCHAUMBURG, IL 60196-1096

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



CABLE PLAN

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	1208
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	85
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	46
CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	72
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	256
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	5/3
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	3
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1391
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2548
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2908
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3215
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2030
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4551
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, 18 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 58 FT.	EACH	2
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	92
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, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	18
INDUCTIVE LOOP DETECTOR	EACH	15
LIGHT DETECTOR	EACH	2"
LIGHT DETECTOR AMPLIFIER	EACH	1"
PEDESTRIAN PUSH-BUTTON	EACH	13
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
PREFORMED DETECTOR LOOP	FOOT	978
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	886
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	1116

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

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.

FILE NAME = TS-3I.dgn
 PLOT DATE = 8/13/2010

SPAAN Tech, Inc.
 311 S. Wacker Drive, Suite 2400
 Chicago, IL 60605

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

REVISED -
 REVISED -
 REVISED -
 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.

F.A.P. RTE. 365 SECTION (58&59) WRS-3 COUNTY DuPAGE TOTAL SHEETS 466 SHEET NO. 307 CONTRACT NO. 62420

FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT

TS-24