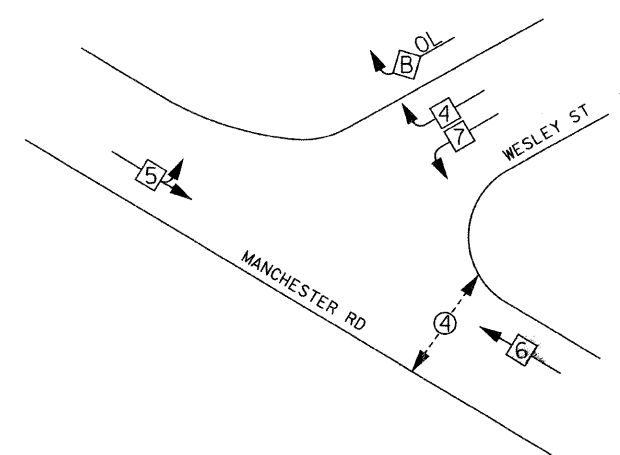
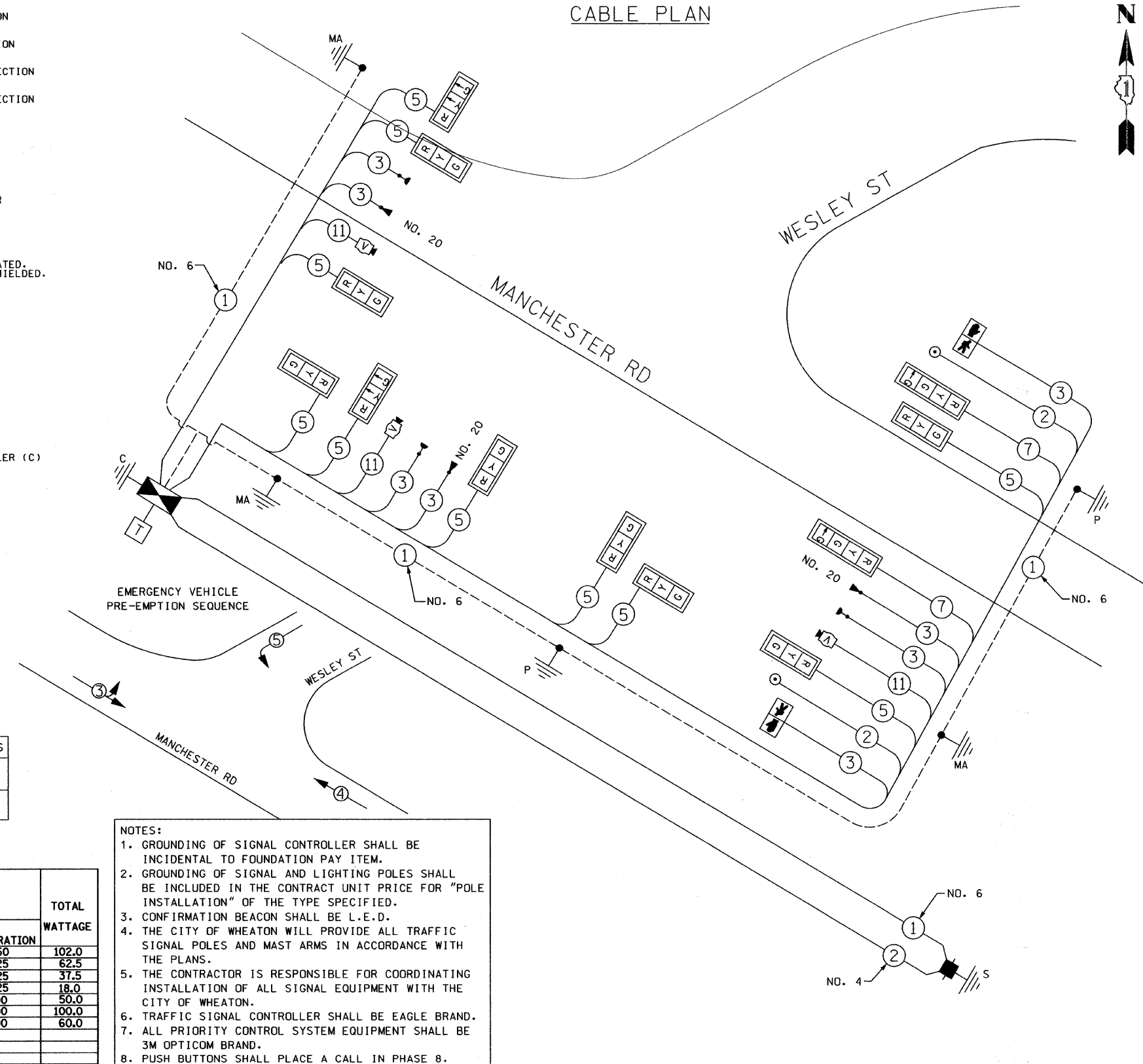


CABLE PLAN LEGEND

- PROPOSED**
- G** 8" (200mm) TRAFFIC SIGNAL SECTION
 - R** 12" (300mm) TRAFFIC SIGNAL SECTION
 - W** 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - [Symbol]** 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - [Symbol]** CONTROLLER
 - [Symbol]** SERVICE INSTALLATION
 - T** TELEPHONE INSTALLATION
 - [Symbol]** EMERGENCY VEHICLE LIGHT DETECTOR
 - [Symbol]** CONFIRMATION BEACON
 - [Symbol]** PUSHBUTTON DETECTOR
 - (2)** DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO.14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
 - (1)** GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
 - (24)** FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
 - [Symbol]** SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
 - [Symbol]** GROUND ROD AT HANDHOLE (H) DOUBLE HANDHOLE (H), OR CONTROLLER (C)
 - [Symbol]** GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
 - [Symbol]** GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - [Symbol]** VIDEO DETECTION CAMERA

CABLE PLAN



- PHASE DESIGNATION DIAGRAM**
- OVERLAP LETTER = PERMISSIVE PHASE + PROTECTED PHASE
- B = 4 + 5
- LEGEND**
- [Symbol]** DUAL ENTRY PHASE
 - [Symbol]** SINGLE ENTRY PHASE
 - [Symbol]** OVERLAP
 - [Symbol]** PEDESTRIAN PHASE
 - *** NUMBER REFERS TO ASSOCIATED PHASE

PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↓

SCHEDULE OF QUANTITIES

80500100	SERVICE INSTALLATION, TYPE A	EACH	1
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	377
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	75
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	19
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	263
81400100	HANDHOLE	EACH	3
81400200	HEAVY-DUTY HANDHOLE	EACH	1
81400300	DOUBLE HANDHOLE	EACH	3
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	2
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	664.5
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1464.5
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2419
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	664.5
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4
88030020	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
88030050	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
88000220	SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
88000230	SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	1
88102710	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	2
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	6
88700200	LIGHT DETECTOR	EACH	3
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1
88800100	PEDESTRIAN PUSH-BUTTON	EACH	2
X8730005	ELECTRIC CABLE IN CONDUIT, NO. 4 1/C	FOOT	752
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	855
X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	800
XX003982	VIDEO VEHICLE DETECTION SYSTEM LUMINAIRE INSTALLATION, TYPE 2	EACH	1
	MAST ARM INSTALLATION, TYPE 1	EACH	1
	MAST ARM INSTALLATION, TYPE 2	EACH	1
	MAST ARM INSTALLATION, TYPE 3	EACH	1
	POLE INSTALLATION, SIGNAL TYPE 1	EACH	1
	POLE INSTALLATION, COMBINATION TYPE 1	EACH	3
	POLE INSTALLATION, COMBINATION TYPE 2	EACH	1
	CONDUIT BEHIND RETAINING WALL, 2X4", GALVANIZED STEEL	FOOT	25

- NOTES:**
- GROUNDING OF SIGNAL CONTROLLER SHALL BE INCIDENTAL TO FOUNDATION PAY ITEM.
 - GROUNDING OF SIGNAL AND LIGHTING POLES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "POLE INSTALLATION" OF THE TYPE SPECIFIED.
 - CONFIRMATION BEACON SHALL BE L.E.D.
 - THE CITY OF WHEATON WILL PROVIDE ALL TRAFFIC SIGNAL POLES AND MAST ARMS IN ACCORDANCE WITH THE PLANS.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL SIGNAL EQUIPMENT WITH THE CITY OF WHEATON.
 - TRAFFIC SIGNAL CONTROLLER SHALL BE EAGLE BRAND.
 - ALL PRIORITY CONTROL SYSTEM EQUIPMENT SHALL BE 3M OPTICOM BRAND.
 - PUSH BUTTONS SHALL PLACE A CALL IN PHASE 8.

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

TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50		102.0
(YELLOW)	10	135	25	0.25		62.5
(GREEN)	10	135	15	0.25		37.5
ARROW	6	135	12	0.25		18.0
PED. SIGNAL	2	90	25	1.00		50.0
CONTROLLER	1	100		1.00		100.0
CAMERA	3	20		1.00		60.0
FLASHER						
TOTAL =						428.0

ENERGY COSTS TO: TOTAL = 428.0

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

ENERGY SUPPLY CONTACT:
PHONE: _____
COMPANY: _____

FOUNDATION (DEPTH)	FT.	(m)	CABLE SLACK	FT.	(m)	VERTICAL	FT.	(m)
TYPE A - POST	4	(1.2)	HANDHOLE	6.5	(2.0)	ALL FOUNDATIONS	3.5	(1.0)
D - CONTROLLER	4	(1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20' + L - 2' =	
E - M. ARM POLE			SIGNAL POST	2	(1.0)	(6m + L - 0.6m) =		
24" (600mm)	10	(3.0)	CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13	(4.0)
30" (750mm)	15	(4.6)	FIBER OPTIC	13	(4.0)	PEDESTRIAN PUSH BUTTON	4	(1.2)
			ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5	(4.0)
			GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5	(4.0)
						POST MOUNTED	6	(1.8)

REVISIONS

NAME	DATE

CITY OF WHEATON
MANCHESTER ROAD / WESLEY STREET
OVER UNION PACIFIC RAILROAD

SCHEDULE OF QUANTITIES,
CABLE PLAN & PHASE
DESIGNATION DIAGRAM

SCALE: VERT. _____
HORIZ. _____
DATE 6/4/2008

DRAWN BY LR
CHECKED BY MYP