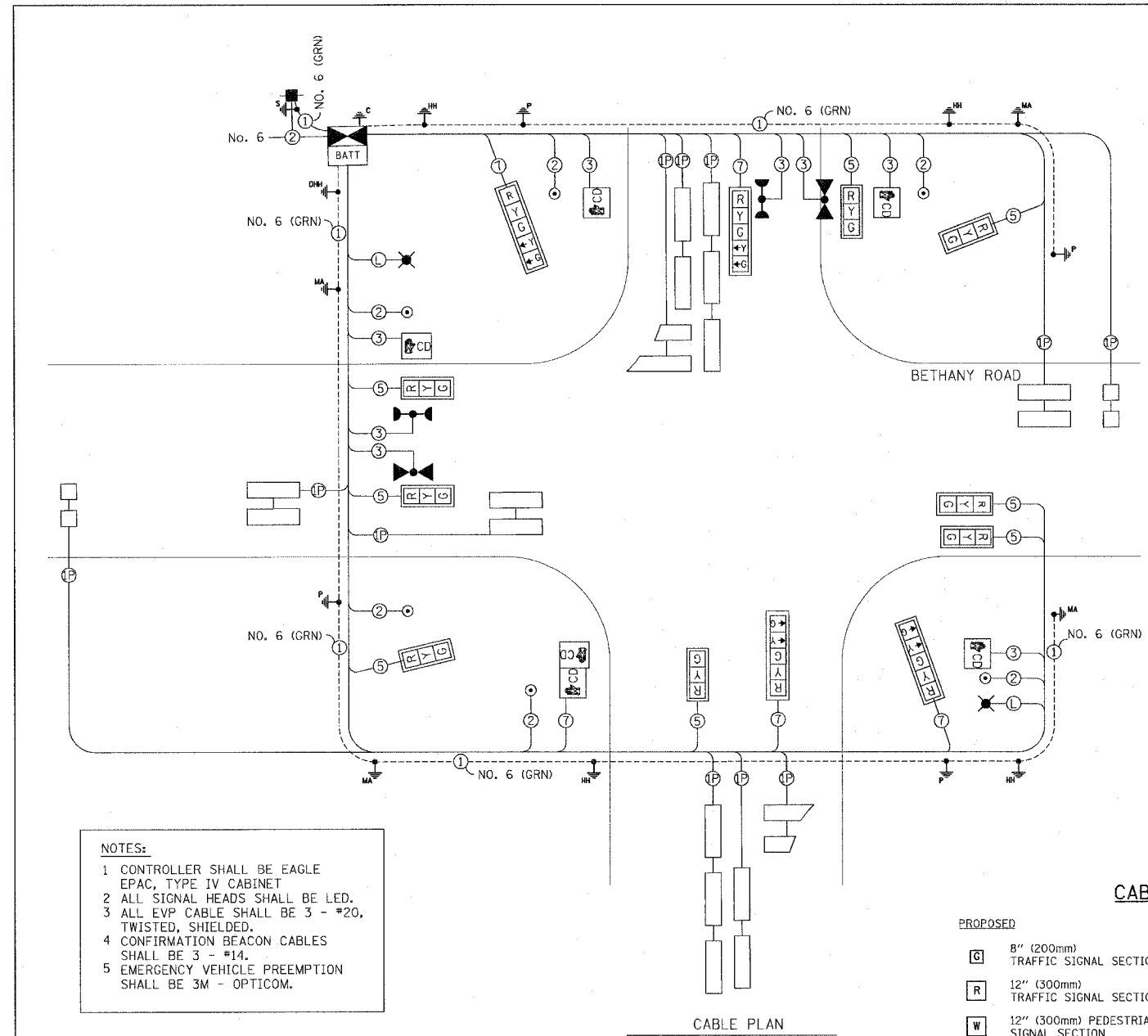
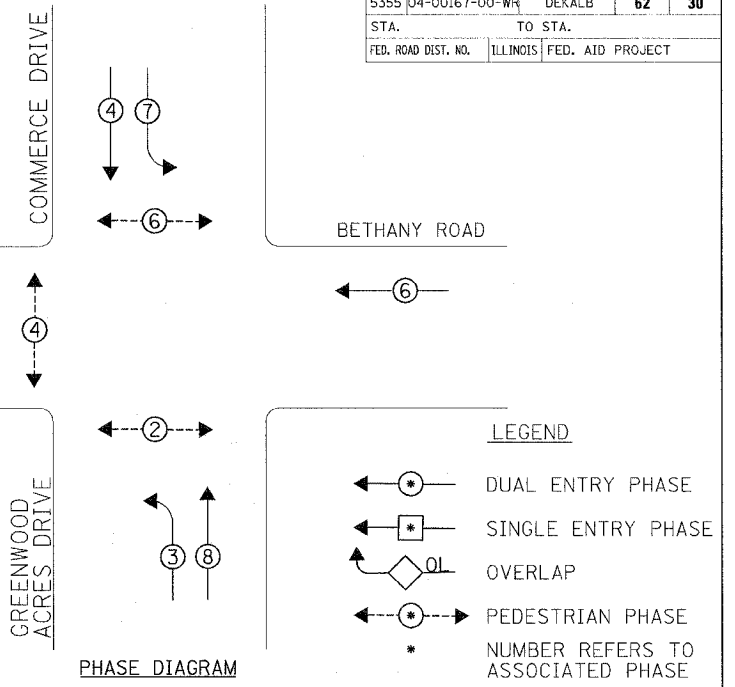
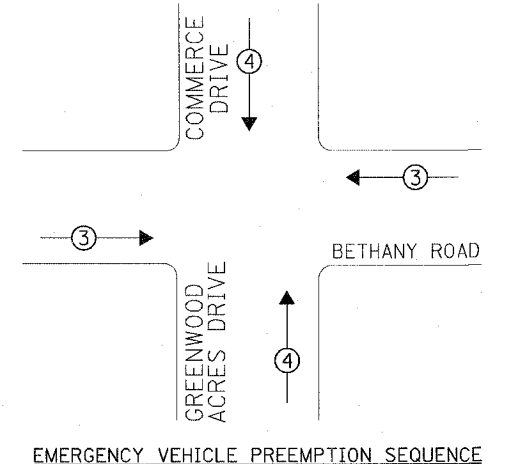
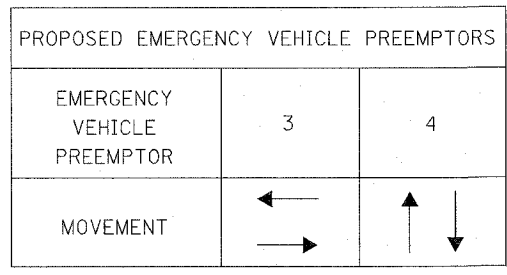


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5355	04-00167-00-WR	DEKALB	62	30
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**NOTES:**

- 1 CONTROLLER SHALL BE EAGLE EPAC, TYPE IV CABINET
- 2 ALL SIGNAL HEADS SHALL BE LED.
- 3 ALL EVP CABLE SHALL BE 3 - #20, TWISTED, SHIELDED.
- 4 CONFIRMATION BEACON CABLES SHALL BE 3 - #14.
- 5 EMERGENCY VEHICLE PREEMPTION SHALL BE 3M - OPTICOM.



I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE (LED)	% OPERATION	
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	8		12	0.25	24
PED. SIGNAL	6		25	1.00	150
CONTROLLER	1	100		1.00	100
LOOP DETECTORS	10	4		1.00	40
UPS	1	50		1.00	50
<b>TOTAL =</b>					<b>586</b>

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TY A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
TY C - CONTR. W/UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2'=(6m+L-0.6m)=
TY E (36")- M.A. POLE		SIGNAL POST	2 (1.0)		
COMBO. POLES	15 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
SIGNAL MAST ARM	14 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

**CABLE PLAN LEGEND**

- PROPOSED**
- 8" (200mm) TRAFFIC SIGNAL SECTION
  - 12" (300mm) TRAFFIC SIGNAL SECTION
  - 12" (300mm) PEDESTRIAN SIGNAL SECTION
  - 16"x18" PEDESTRIAN SIGNAL SECTION
  - CONTROLLER CABINET
  - SERVICE INSTALLATION
  - TELEPHONE CONNECTION
  - MAGNETIC DETECTOR
  - EMERGENCY VEHICLE LIGHT DETECTOR
  - CONFIRMATION BEACON
  - PUSHBUTTON DETECTOR
  - VEHICLE DETECTOR, INDUCTION LOOP
  - MICROWAVE VEHICLE SENSOR
  - BATTERY BACKUP
  - LUMINAIRE, 250 W
- PROPOSED**
- SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
  - RAILROAD CONTROL CABINET
  - ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
  - ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
  - GROUND ROD AT HANDHOLE (H), OR MAST ARM POLE (MA)
  - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
  - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
  - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM24F SM12F
  - LEAD IN CABLE, 1 PAIR
  - ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/2 NO. 8 (3 CABLES)

CODE	DESCRIPTION	UNIT	TOTAL QUANTITY
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2
72000100	SIGN PANEL, TYPE 1	SQ FT	20
72000200	SIGN PANEL, TYPE 2	SQ FT	85
80500200	SERVICE INSTALLATION, TYPE B	EACH	1
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	778
81012700	CONDUIT IN TRENCH, 2-1/2" DIA., PVC	FOOT	75
81012800	CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	76
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	97
81018900	CONDUIT, PUSHED 4" DIA., GALVANIZED STEEL	FOOT	138
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	5
81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/2 NO. 8	FOOT	1,000
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	851
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	2
82500605	LIGHTING CONTROLLER PHOTOCELL RELAY	EACH	1
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	700
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	500
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,300
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	700
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,800
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	125
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
87601100	PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE I	EACH	3
87700250	STEEL MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1
87700280	STEEL MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
87702860	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
87702880	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	58
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
88040150	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
88500100	INDUCTIVE LOOP DETECTOR	EACH	12
88600100	DETECTOR LOOP, TYPE I	FOOT	1,092
88700200	LIGHT DETECTOR	EACH	4
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1
88800100	PEDESTRIAN PUSH-BUTTON	EACH	6
X0323885	TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	500

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 Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 BETHANY ROAD WIDENING  
 FAIRWAY OAKS DRIVE TO RESOURCE PARKWAY  
 CITY OF DEKALB

CABLE PLAN  
 BETHANY RD. & COMMERCE DRIVE /  
 GREENWOOD OAKS DRIVE

SCALE: N.T.S. DRAWN BY KJ  
 DATE 8/17/07 CHECKED BY BP

PLOT DATE = 8/16/2007  
 FILE NAME = H:\Dekalb\157203-BethanyRoad\157203.dgn  
 PLOT SCALE = N.T.S.  
 USER NAME = USER