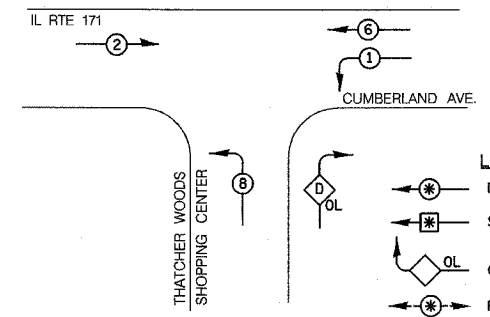


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60001				



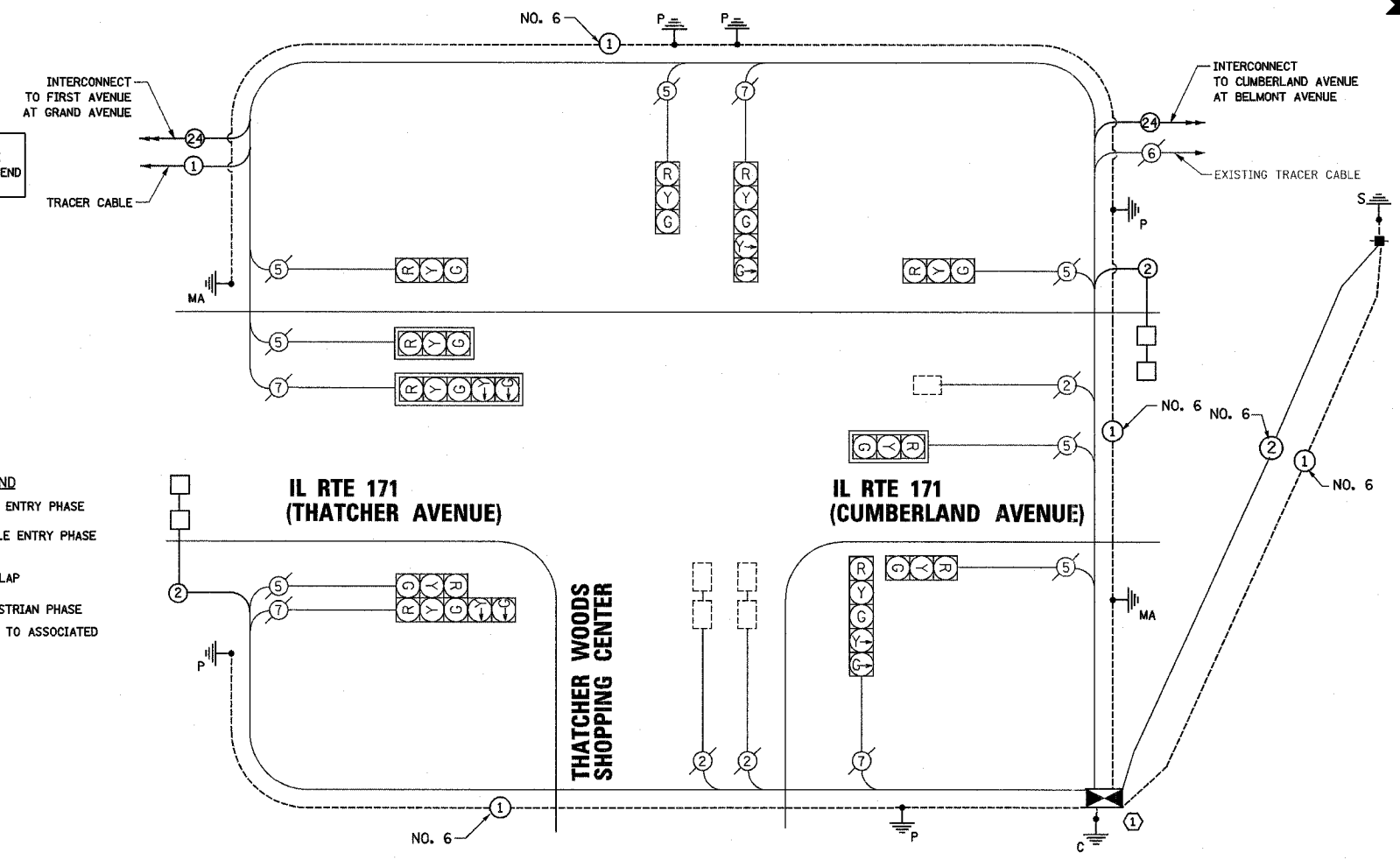
NOTE:  
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

CONTROLLER SEQUENCE



- LEGEND**
- DUAL ENTRY PHASE
  - SINGLE ENTRY PHASE
  - OVERLAP
  - PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



CABLE PLAN

- CONSTRUCTION NOTES:**
- 1 REMOVE EXISTING CONTROLLER AND CABINET, INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
  - 2 THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

- | EXISTING | PROPOSED | EXISTING | PROPOSED |   |
|----------|----------|----------|----------|---|
|          |          |          |          | 8" (200mm) TRAFFIC SIGNAL SECTION                                   |
|          |          |          |          | 12" (300mm) TRAFFIC SIGNAL SECTION                                  |
|          |          |          |          | 12" (300mm) PEDESTRIAN SIGNAL SECTION                               |
|          |          |          |          | 12" (300mm) PEDESTRIAN SIGNAL SECTION                               |
|          |          |          |          | CONTROLLER CABINET  |
|          |          |          |          | SERVICE INSTALLATION  |
|          |          |          |          | TELEPHONE CONNECTION  |
|          |          |          |          | VEHICLE DETECTOR, INDUCTION LOOP                                    |
|          |          |          |          | MAGNETIC DETECTOR   |
|          |          |          |          | EMERGENCY VEHICLE LIGHT DETECTOR                                    |
|          |          |          |          | CONFIRMATION BEACON   |
|          |          |          |          | PUSHBUTTON DETECTOR   |
|          |          |          |          | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |
|          |          |          |          | GROUND ROD AT POST (P), OR MAST ARM POLE (MA).                      |
|          |          |          |          | GROUND ROD AT ELECTRIC SERVICE INSTALLATION                         |
|          |          |          |          | MICROWAVE VEHICLE SENSOR  |

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	448
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	138
HANDHOLE	EACH	2
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER, FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	101
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	627
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	753
DRILL EXISTING HANDHOLE	EACH	4
DETECTOR LOOP, TYPE 1	FOOT	141
INDUCTIVE LOOP DETECTOR	EACH	4
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	WATTAGE	X% OPERATION	
SIGNAL (RED)	11	135	135	0.50	1080
(YELLOW)	11	135	135	0.25	540
(GREEN)	11	135	135	0.25	540
ARROW	8	135	135	0.10	216
PED. SIGNAL	-	90	90	1.00	-
CONTROLLER	1	100	100	1.00	100
TOTAL =					3296

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 - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)=
C - M. ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

NOTE:  
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

**STON ENGINEERING**  
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19 S. BOTHWELL STREET  
PALATINE, ILLINOIS 60067  
PHONE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**CABLE PLAN**  
PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES  
IL RTE 171 (THATCHER AVENUE) AT THATCHER WOODS SHOPPING CENTER RIVER GROVE, ILLINOIS

SCALE: N.T.S.  
DATE: 10-23-06

DRAWN BY: CWC, BR  
DESIGNED BY: VO  
CHECKED BY: TJM