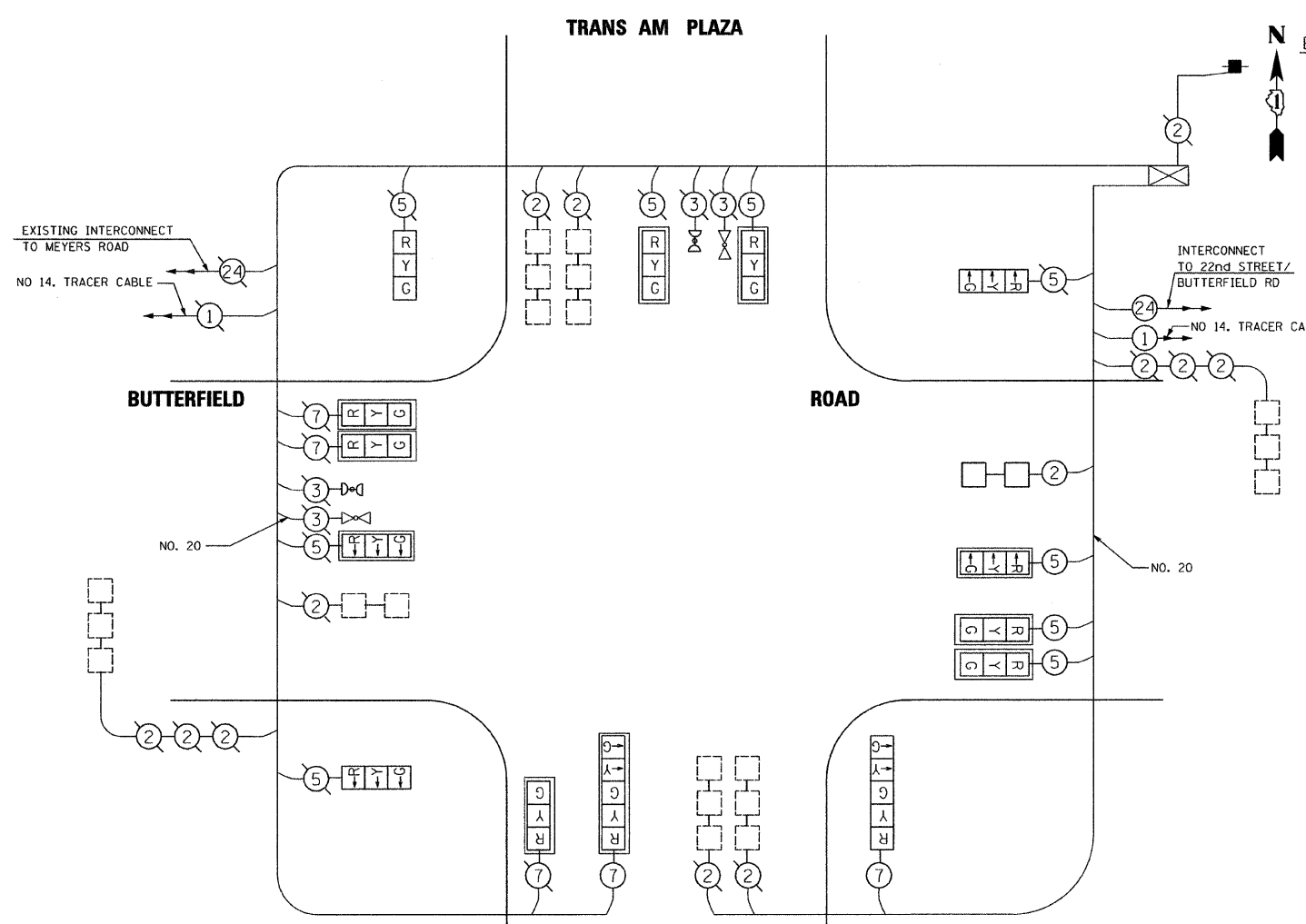


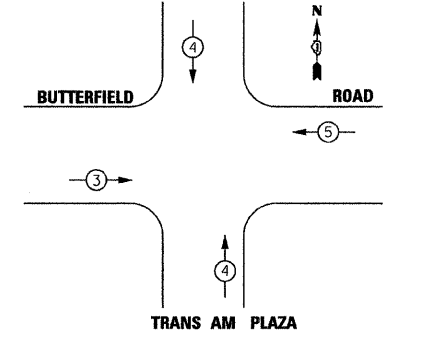
ITEM	UNIT	QUANTITY
HEAVY-DUTY HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	425
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	850
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	600
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
DETECTOR LOOP, TYPE 1	FOOT	70
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	1
REMOVE EXISTING SIGNAL HEAD	EACH	12



CABLE PLAN LEGEND		
EXISTING	PROPOSED	
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		DENOTES NUMBER OF CONDUCTORS.
		ALL CABLE NO. 14 EXCEPT AS INDICATED.
		ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		SIGNAL FACE WITH BACKPLATE
		"P" INDICATES PROGRAMMED HEAD.
		"E" RAILROAD CONTROL CABINET
		"E" ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
		"E" ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
		H/C GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
		P GROUND ROD AT POST OR MAST ARM POLE
		S GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
		UPS UNINTERRUPTIBLE POWER SUPPLY (UPS)
		P PREFORMED LOOP DETECTION

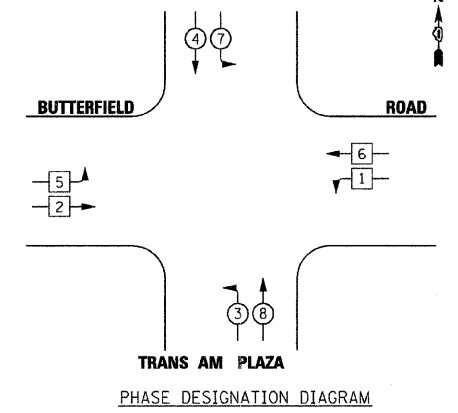
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS SIGNAL SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

PROPOSED CONTROLLER SEQUENCE



LEGEND	
	SINGLE ENTRY PHASE
	DUAL ENTRY PHASE
	OVERLAP
	PEDESTRIAN PHASE
	NUMBER REFERS TO ASSOCIATED PHASE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.7
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
VIDEO VEH. SENSOR		15	15	1.00	
FLASHER				0.50	
<b>TOTAL</b>					<b>304.2</b>

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 CENTER CT/SCHAUMBURG, IL 60196-1096  
 ENERGY SUPPLY - CONTACT: DEB RANKIN  
 PHONE: 630-691-4379  
 COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	(FEET) (m)	CABLE SLACK	(FEET) (m)	VERTICAL	(FEET) (m)
TYPE A - POST	4, (1.2)	HANDHOLE	6.5, (2.0)	ALL FOUNDATION	1.0, (0.3)
D - CONTROLLER	4, (1.2)	DOUBLE HANDHOLE	13, (4.0)	MAST ARM (1.) POLE	20'+L-2 = (6m+L-0.6m)
E - M. ARM POLE	( )	SIGNAL POST	2, (0.6)	BRACKET MOUNTED	13, (4.0)
24" (600mm)	10, (3.0)	CONTROLLER CAB.	1, (0.3)	PED. PUSHBOTTON	4, (1.2)
30" (600mm)	15, (4.5)	FIBER OPTIC	13, (4.0)	ELECTRIC SERVICE	13.5, (4.1)
42"	15, (4.5)	ELECTRIC SERVICE	1, (0.3)	SERVICE TO GROUND	13, (4.1)
		GROUND CABLE	1, (0.3)	POST MOUNTED	6, (1.8)

**MILLENNIA ENGINEERING**  
 200 22ND Street, Suite 216, Lombard, IL 60148  
 630.785.8118 voice, 630.839.2566 fax  
 www.millenniaeng.com

DESIGNED - TVN	REVISED -
DRAWN - TVN	REVISED -
CHECKED - RPD	REVISED -
DATE - 10/05/2009	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BUTTERFIELD ROAD (IL RTE 56) AT TRANS AM PLAZA  
 CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
 AND SCHEDULE OF QUANTITIES

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1453	55WRS	DUPAGE	362	193B
				CONTRACT NO. 60D12

FILE NAME = P:\2007\ME07081\_22nd.Street\Cadd\Shets\0160D12-SHT-TS02-TransAm-02.dgn  
 PLOT SCALE = 1/8" = 1'-0"  
 USER NAME = Millennium Engineering

SCALE: N/A SHEET NO. 193B OF 362 SHEETS STA. TO STA.

FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT  
 P:\2007\ME07081\_22nd.Street\Cadd\Shets\0160D12-SHT-TS02-TransAm-02.dgn