

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60F06		

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

## DISTRICT 1 CONGESTION MITIGATION AIR QUALITY FIBER OPTIC COMMUNICATIONS NETWORK

### IL. ROUTE 83 (147th STREET) FROM HOMAN AVENUE TO EAST OF I-57 RAMPS

**F.A.U. ROUTE 1602 /IL 83 (147th ST.)**  
**SECTION 2008-054 TS**  
**PROJECT NO: CMM-1602(014)**  
**COOK COUNTY**  
**C-91-575-08**

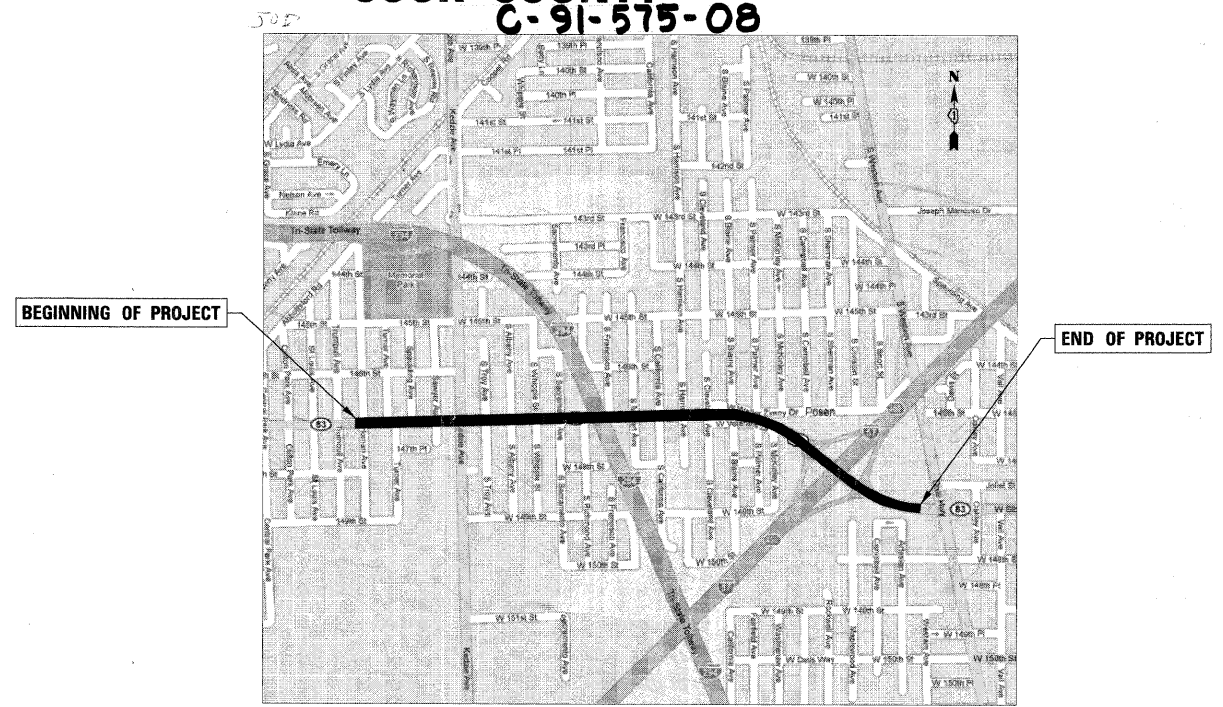


STD. No.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATION AND PATTERNS
001006	DECIMAL OF AN INCH AND A FOOT
424001-05	CURB RAMPS FOR SIDEWALKS
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	P.C. CONCRETE ISLANDS AND MEDIANS
606306-03	CORRUGATED P.C. CONCRETE MEDIAN
701006-03	OFF-RD OPERATIONS, 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-02	OFF-RD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-06	URBAN LANE CLOSURE, MULTILANE 1W OR 2W NON-TRAVERSABLE MEDIAN
701606-06	URBAN LANE CLOSURE, MULTILANE 1W OR 2W MOUNTABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARDS PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-04	STEEL MAST ARM ASSEMBLY AND POLE
878001-07	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATION

PREPARED BY: Star Tamrin *Del* Dec. 1, 2008  
 TRAFFIC ENGINEER DATE

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123  
 OR 811

**CONTRACT NO. 60F06**



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED Dec. 1, 2008  
Diana M. O'Keefe  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

January 30, 2009  
Charles J. Ingersoll  
 ENGINEER OF DESIGN AND ENVIRONMENT

January 30, 2009  
Christine M. Reed  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

DISTRICT 1 - BUREAU OF TRAFFIC: STEVE TRAVIA / DARLYN DREW (847) 705-4420

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<p><b>PROFILE</b></p> <p>SURVEYED _____</p> <p>PLOTTED _____</p> <p>GRANDS CHECKED _____</p> <p>STRUCTURE NOTATIONS OK'D _____</p> <p>NOTE BOOK NO. _____</p> <p>DATE _____</p>	<p><b>PLAN</b></p> <p>SURVEYED _____</p> <p>PLOTTED _____</p> <p>ALIGNMENT CHECKED _____</p> <p>FIELD FILE NAME _____</p> <p>NOTE BOOK NO. _____</p> <p>DATE _____</p>
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**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

<p><b>BY</b></p> <p>DATE _____</p>	<p>DATE _____</p>
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FILE NAME = N:\dot\080040\TASK 0 - IL 83\Traffic\INDEX_080040.dgn	USER NAME = FPAIONE	DESIGNED - ABR	REVISED -	<p><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p><b>INDEX OF SHEETS</b> <b>IL ROUTE 83 (147th ST.) FROM HOMAN AVENUE TO EAST OF I-57 RAMPS</b> <b>MIDLOTHIAN / POSEN, ILLINOIS</b></p>	F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 2
PLOT SCALE = N.T.S.	CHECKED - MJT	REVISIED -	REVISIED -	SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 60F06				
PLOT DATE = 11/24/2008	DATE -	REVISED -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						



DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 U.S. NOTES: \_\_\_\_\_  
 STRUCTURE NOTES: \_\_\_\_\_

PLAN: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

BY: \_\_\_\_\_

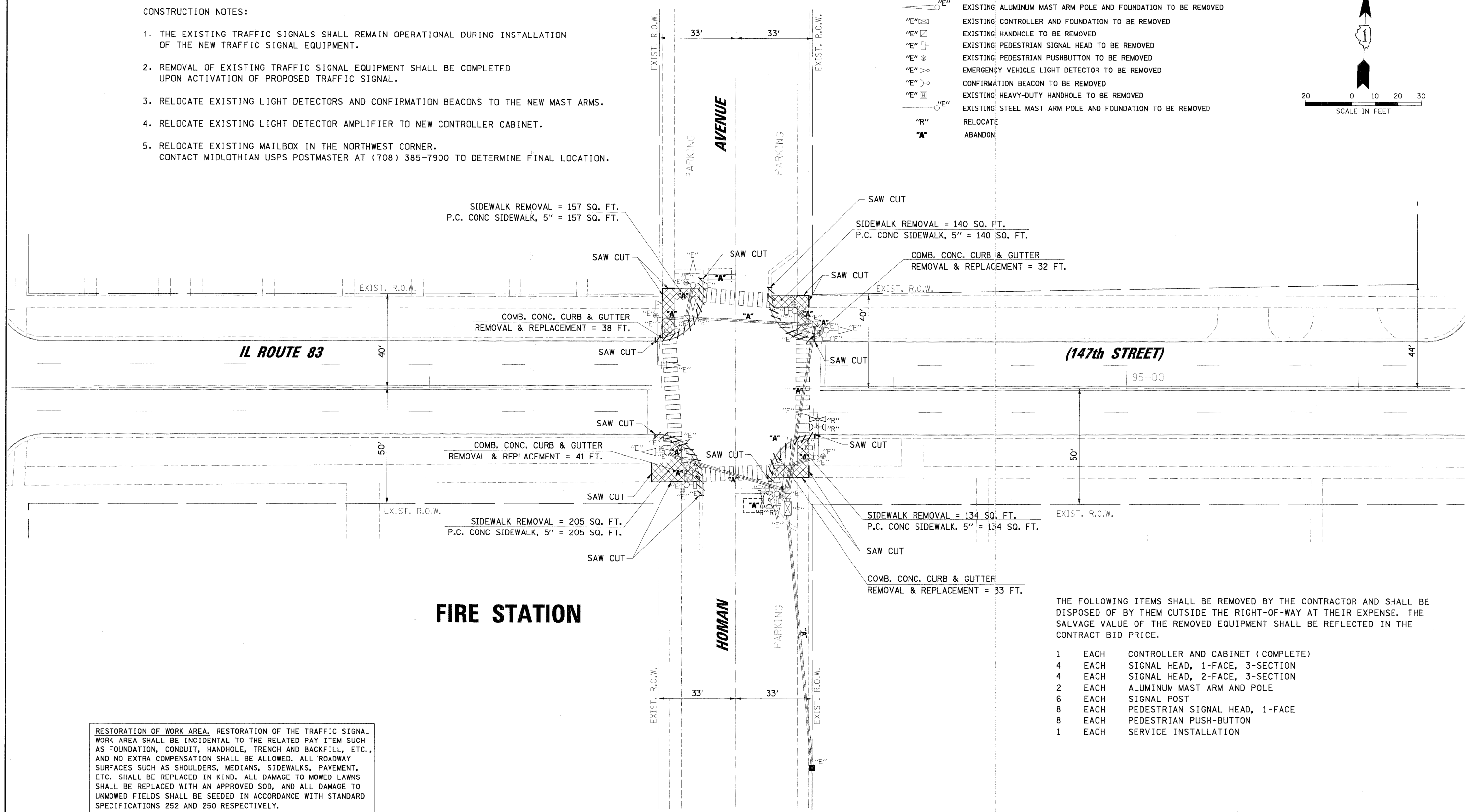
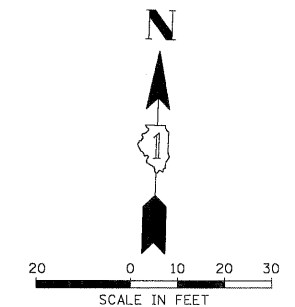
DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 U.S. NOTES: \_\_\_\_\_  
 STRUCTURE NOTES: \_\_\_\_\_

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 823-9500

**CONSTRUCTION NOTES:**

1. THE EXISTING TRAFFIC SIGNALS SHALL REMAIN OPERATIONAL DURING INSTALLATION OF THE NEW TRAFFIC SIGNAL EQUIPMENT.
2. REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE COMPLETED UPON ACTIVATION OF PROPOSED TRAFFIC SIGNAL.
3. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
4. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
5. RELOCATE EXISTING MAILBOX IN THE NORTHWEST CORNER. CONTACT MIDLOTHIAN USPS POSTMASTER AT (708) 385-7900 TO DETERMINE FINAL LOCATION.

- EXISTING EQUIPMENT TO BE REMOVED LEGEND**
- "E" EXISTING SIGNAL HEAD TO BE REMOVED
  - "E" EXISTING SERVICE INSTALLATION TO BE REMOVED
  - "E" EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
  - "E" EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
  - "E" EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
  - "E" EXISTING HANDHOLE TO BE REMOVED
  - "E" EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
  - "E" EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
  - "E" EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
  - "E" CONFIRMATION BEACON TO BE REMOVED
  - "E" EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
  - "E" EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
  - "R" RELOCATE
  - "A" ABANDON



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

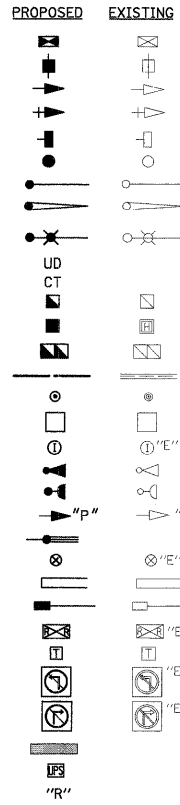
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- |   |      |                                   |
|---|------|-----------------------------------|
| 1 | EACH | CONTROLLER AND CABINET (COMPLETE) |
| 4 | EACH | SIGNAL HEAD, 1-FACE, 3-SECTION    |
| 4 | EACH | SIGNAL HEAD, 2-FACE, 3-SECTION    |
| 2 | EACH | ALUMINUM MAST ARM AND POLE        |
| 6 | EACH | SIGNAL POST                       |
| 8 | EACH | PEDESTRIAN SIGNAL HEAD, 1-FACE    |
| 8 | EACH | PEDESTRIAN PUSH-BUTTON            |
| 1 | EACH | SERVICE INSTALLATION              |



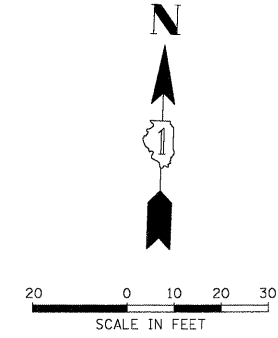
TRAFFIC SIGNAL LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
- UNIT DUCT
- COMMON TRENCH
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- TELEPHONE CONNECTION
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- DEPRESSED CURB
- UNINTERRUPTIBLE POWER SUPPLY RELOCATED

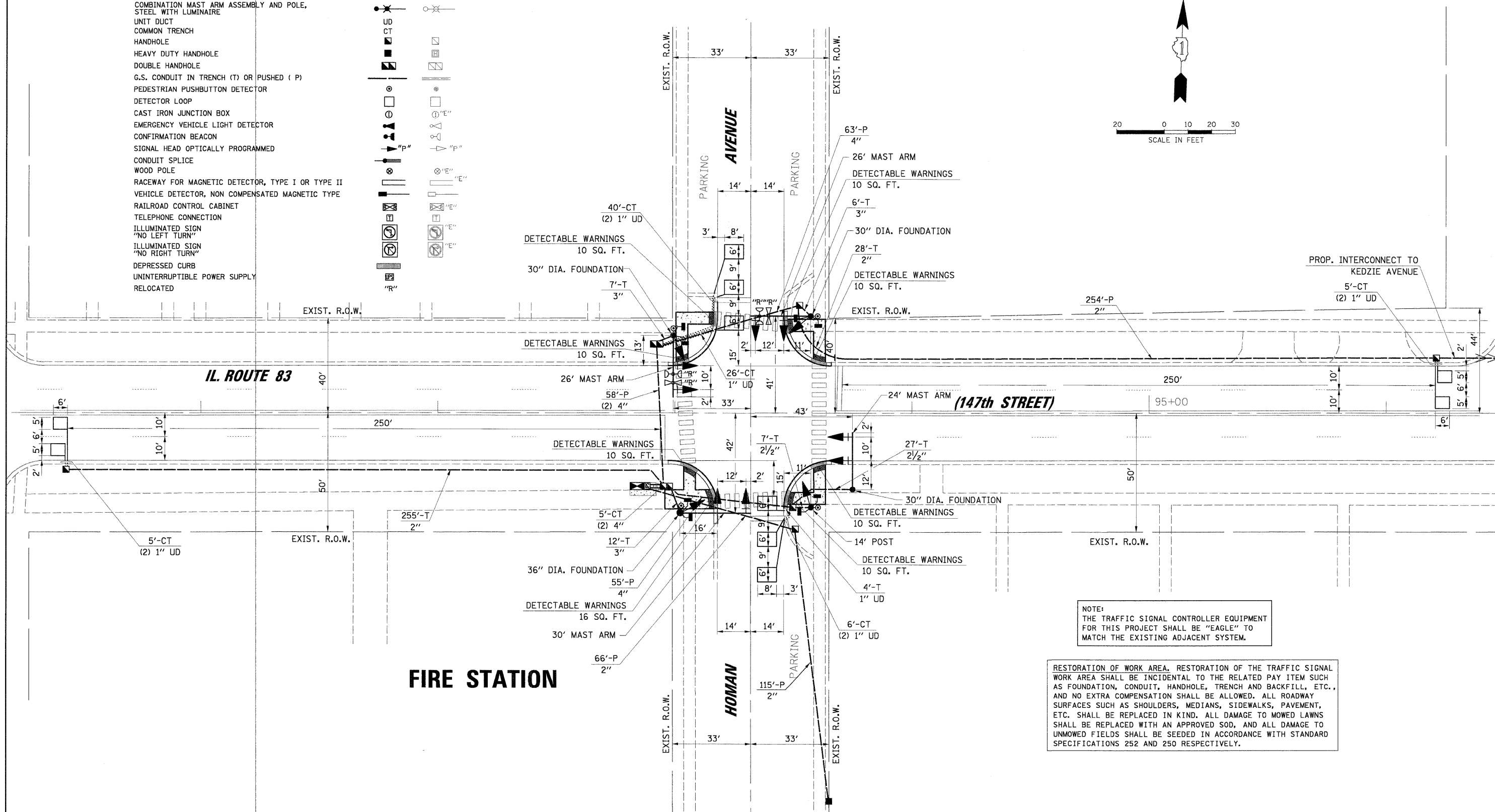


CONSTRUCTION NOTES:

- ① RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.



PROFILE SURVEYED GRADES CHECKED DATE NOTED BY: JUNE NOTARIS CHFD  
 PLAN NOTE BOOK NO. 18471 925-6580  
 SURVEYED ALIGNED CHECKED DATE NOTED BY: JUNE NOTARIS CHFD  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 925-6580  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**



NOTE:  
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME =	USER NAME = FPAICONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	<b>TRAFFIC SIGNAL MODERNIZATION PLAN</b> <b>IL ROUTE 83 (147th STREET) AND HOMAN AVENUE</b> <b>MIDLOTHIAN, ILLINOIS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\dot\090040\TASK 0 - IL 83\Traffic\MOD\Homan.dgn		DRAWN - FPB	REVISED -			1602	2008-054 TS	COOK	40	5	
PLOT SCALE = 2"		CHECKED - MJT	REVISED -			CONTRACT NO. 60F06					
PLOT DATE = 11/24/2008		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 ALIGNED: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 JOB FILE NAME: \_\_\_\_\_

PLAN: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 SIGNATURE: \_\_\_\_\_  
 NO.:

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 3575 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 823-0500

PROFILE: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

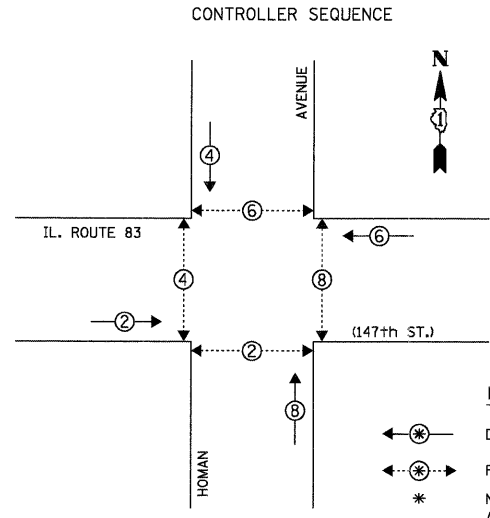
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50		102.00
(YELLOW)	12	25	0.25		75.00
(GREEN)	12	15	0.25		45.00
ARROW	-	12	0.10		-
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN	-	25	0.05		-
FLASHER	-	-	-	0.50	-
ENERGY COSTS TO:					TOTAL = 522.00

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' ± -2' =
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m ± -0.6m) =
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

FILE NAME = \_\_\_\_\_  
 USER NAME = FFAICONE  
 DESIGNED - ABR  
 REVISID - \_\_\_\_\_  
 DRAWN - FPB  
 REVISID - \_\_\_\_\_  
 PLOT SCALE = N.T.S.  
 CHECKED - MJT  
 REVISID - \_\_\_\_\_  
 PLOT DATE = 11/24/2008  
 DATE - \_\_\_\_\_  
 REVISID - \_\_\_\_\_

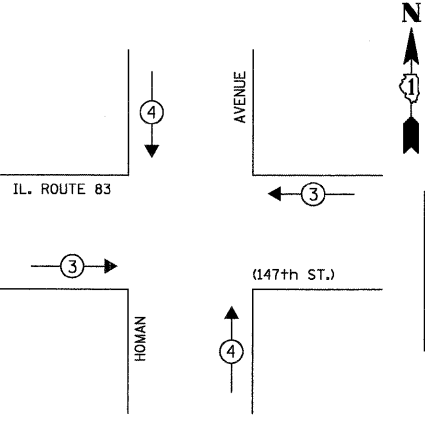
RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



**LEGEND**  
 ← ⊙ → DUAL ENTRY PHASE  
 ← ⊙ ⊙ → PEDESTRIAN PHASE  
 \* NUMBER REFERS TO ASSOCIATED PHASE

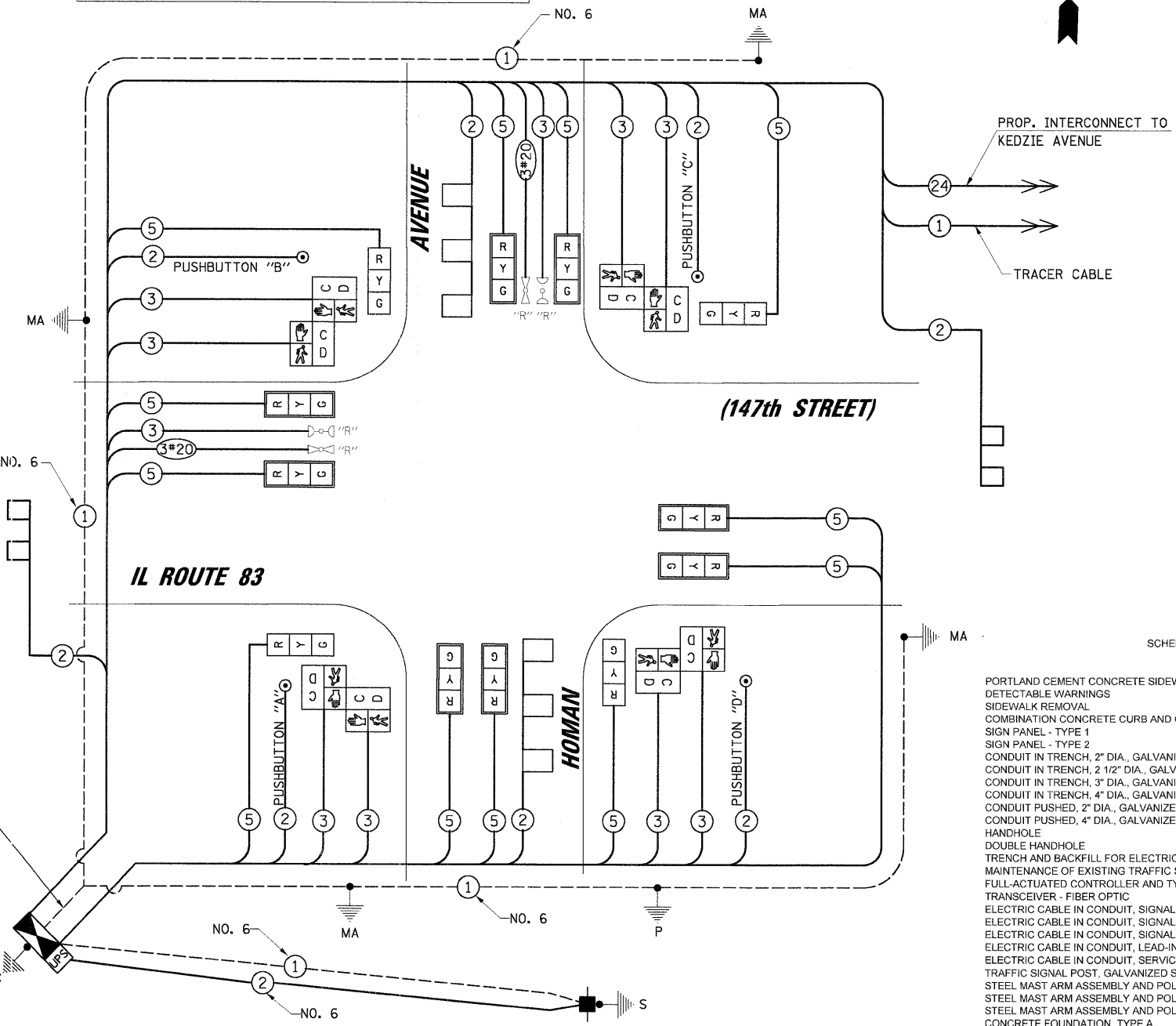
PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

NUMBER OF GROUND CABLES AS PER PLAN



**NOTE:**  
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

**CABLE PLAN**

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

**NOTE:**  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
⊙	⊙	8" (200mm) TRAFFIC SIGNAL SECTION
⊙	⊙	12" (300mm) TRAFFIC SIGNAL SECTION
⊙	⊙	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊙	⊙	PEDESTRIAN COUNTDOWN SIGNAL HEAD
⊙	⊙	CONTROLLER CABINET SERVICE INSTALLATION
⊙	⊙	TELEPHONE 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.
⊙	⊙	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
⊙	⊙	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
⊙	⊙	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
⊙	⊙	RAILROAD CONTROL CABINET
⊙	⊙	ILLUMINATED SIGN "NO LEFT TURN"
⊙	⊙	ILLUMINATED SIGN "NO RIGHT TURN"
⊙	⊙	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
⊙	⊙	UNINTERRUPTIBLE POWER SUPPLY
⊙	⊙	RELOCATED

**SCHEDULE OF QUANTITIES**

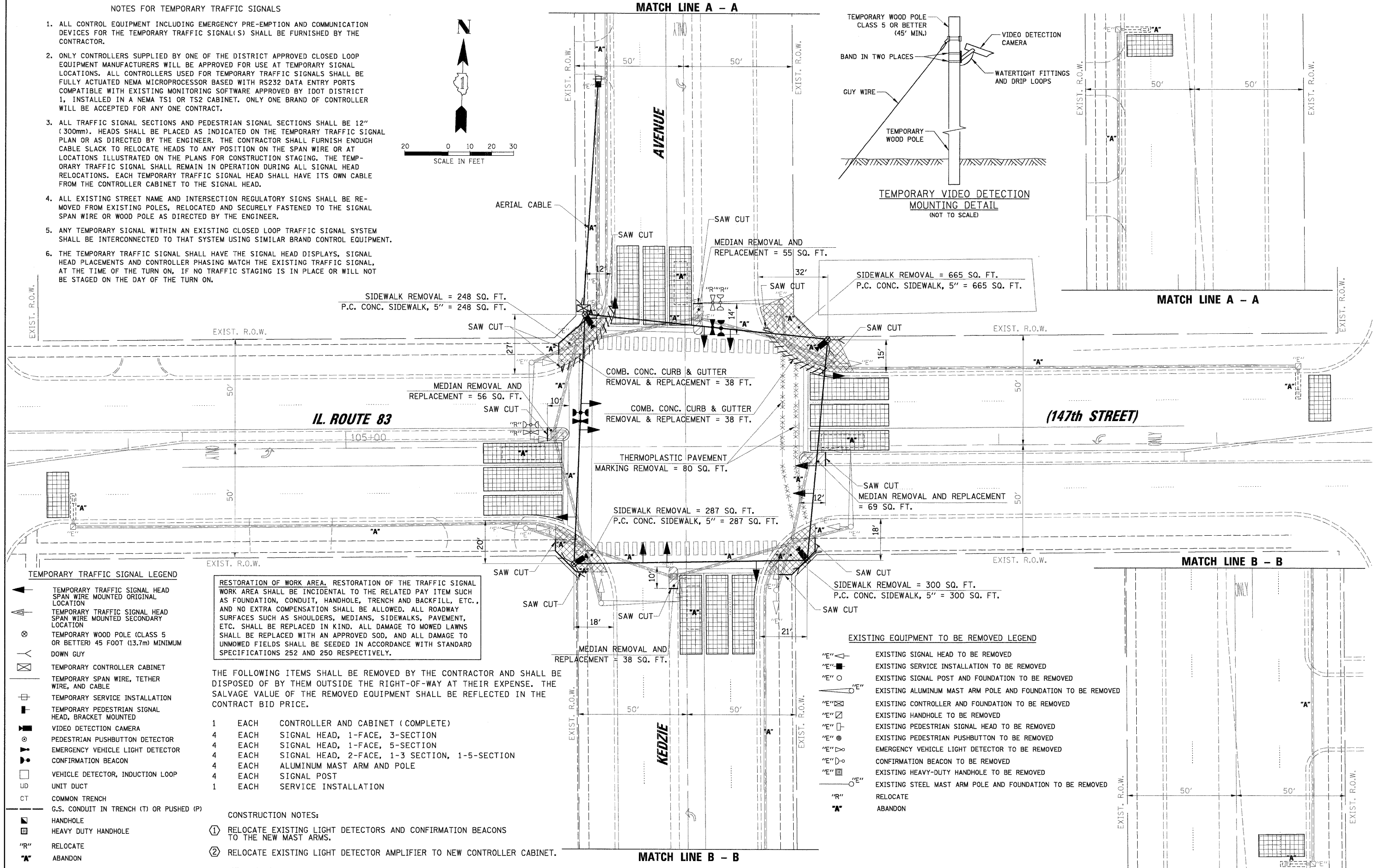
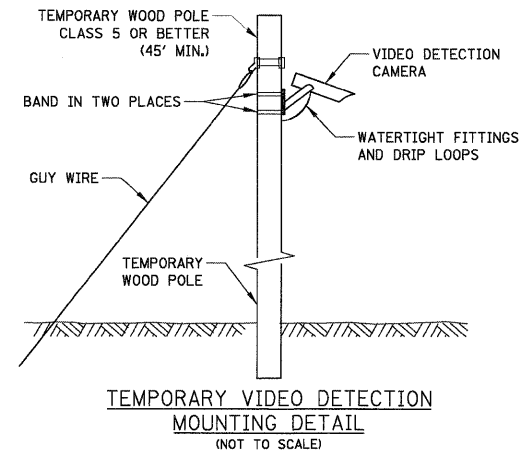
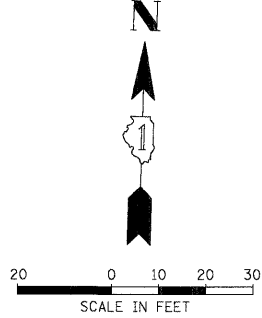
ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	836
DETECTABLE WARNINGS	SQ FT	86
SIDEWALK REMOVAL	SQ FT	836
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	144
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	25
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	283
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	34
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	25
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	435
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	234
HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	438
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	419
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1242
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 6C	FOOT	1603
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	899
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	202
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE I	FOOT	337
PEDESTRIAN PUSH-BUTTON	EACH	4
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	552
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	356

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL ROUTE 83 (147th STREET) AND HUMAN AVENUE MIDLOTHIAN, ILLINOIS				1602	2008-054 TS	COOK	40	6
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 60F06				
				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.



DATE	DATE
PL AN	NOTE BOOK
NO.	NO.

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 3575 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 823-0500

DATE	DATE
BY	BY
NO.	NO.

PROFILE  
 CHECKED  
 GRADES CHECKED  
 STRUC. CHECKED  
 NOTATIONS OK

TEMPORARY TRAFFIC SIGNAL LEGEND

- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM DOWN GUY
- ⊞ TEMPORARY CONTROLLER CABINET TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊞ TEMPORARY SERVICE INSTALLATION
- ⊞ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ⊞ VIDEO DETECTION CAMERA
- ⊞ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊞ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊞ CONFIRMATION BEACON
- ⊞ VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- CT COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- ⊞ HANDHOLE
- ⊞ HEAVY DUTY HANDHOLE
- "R" RELOCATE
- "A" ABANDON

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	CONTROLLER AND CABINET (COMPLETE)
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5-SECTION
4	EACH	ALUMINUM MAST ARM AND POLE
4	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION

- CONSTRUCTION NOTES:
- ① RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
  - ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.

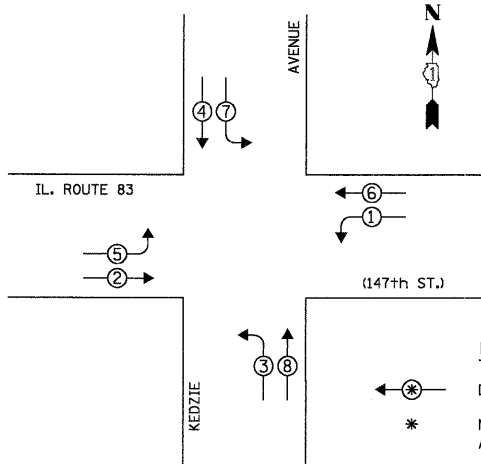
EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" ◁ EXISTING SIGNAL HEAD TO BE REMOVED
- "E" ◻ EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" ○ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ◁ "E" EXISTING ALUMINUM MAST ARM AND FOUNDATION TO BE REMOVED
- "E" ⊞ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" ⊞ EXISTING HANDHOLE TO BE REMOVED
- "E" ⊞ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" ⊞ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" ⊞ EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" ⊞ EXISTING CONFIRMATION BEACON TO BE REMOVED
- "E" ⊞ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" ⊞ EXISTING STEEL MAST ARM AND FOUNDATION TO BE REMOVED
- "R" RELOCATE
- "A" ABANDON

DATE: \_\_\_\_\_  
 SURVIVED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO.: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO.: \_\_\_\_\_

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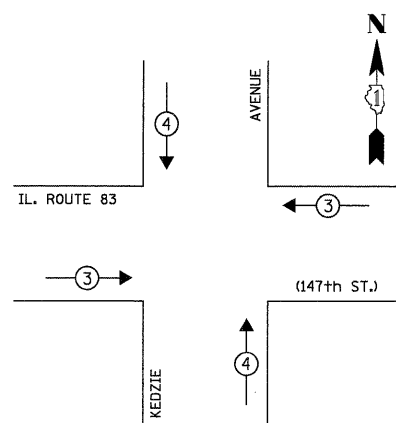
TEMPORARY CONTROLLER SEQUENCE



**LEGEND**  
 ⊕ DUAL ENTRY PHASE  
 \* NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

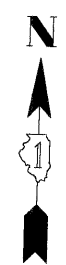
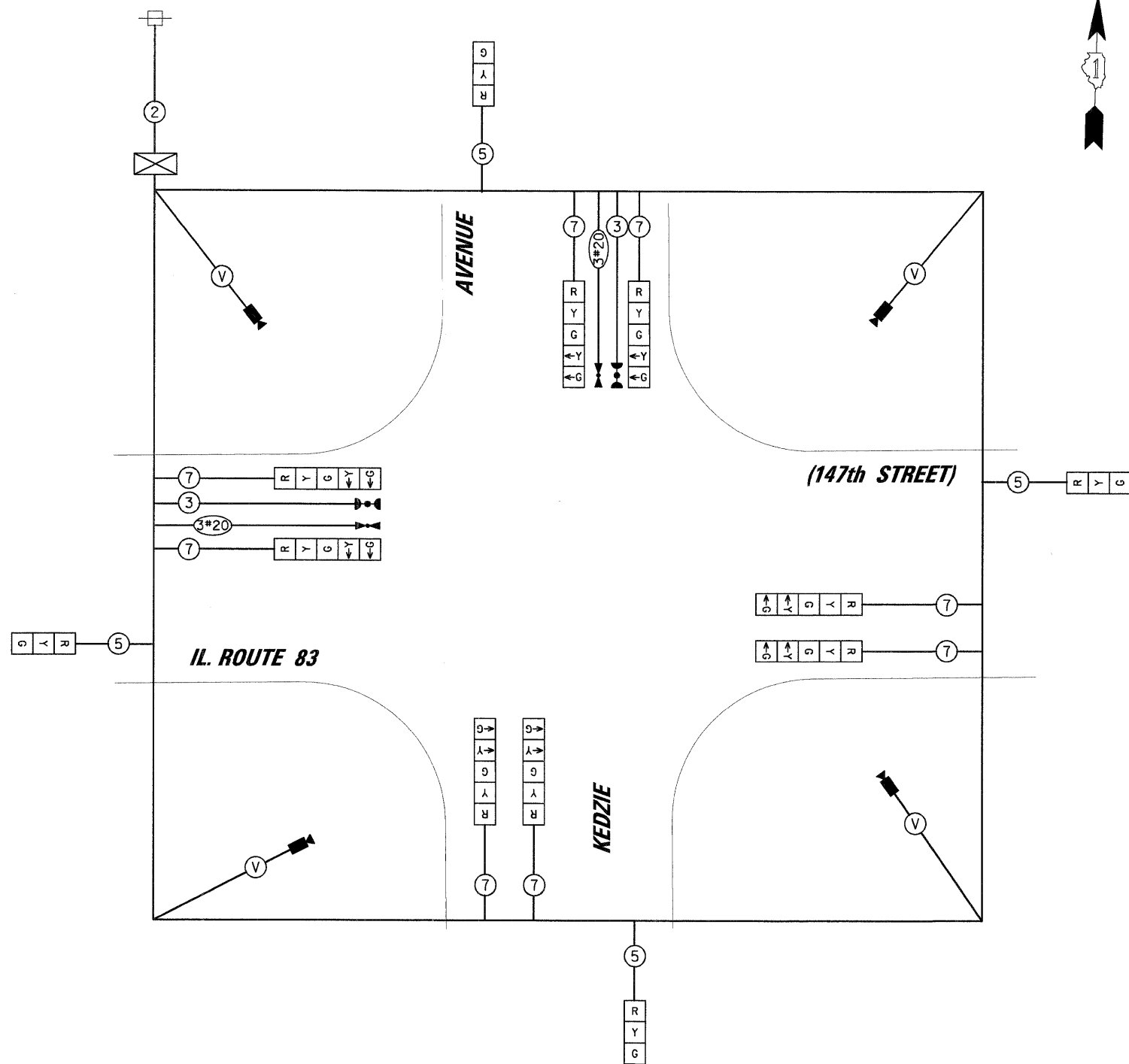
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

TEMPORARY CABLE DIAGRAM LEGEND

- ⊠ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊠ TEMPORARY CONTROLLER CABINET
- ⊠ TEMPORARY SERVICE INSTALLATION
- ⑤ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ▶ EMERGENCY VEHICLE LIGHT DETECTOR
- ▶ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊠ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ▶ VIDEO DETECTION CAMERA
- ⓪ VENDOR CABLE



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE XINCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.00
FLASHER				0.50	

ENERGY COSTS TO: TOTAL = 491.20  
**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

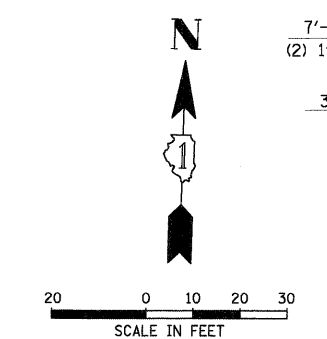
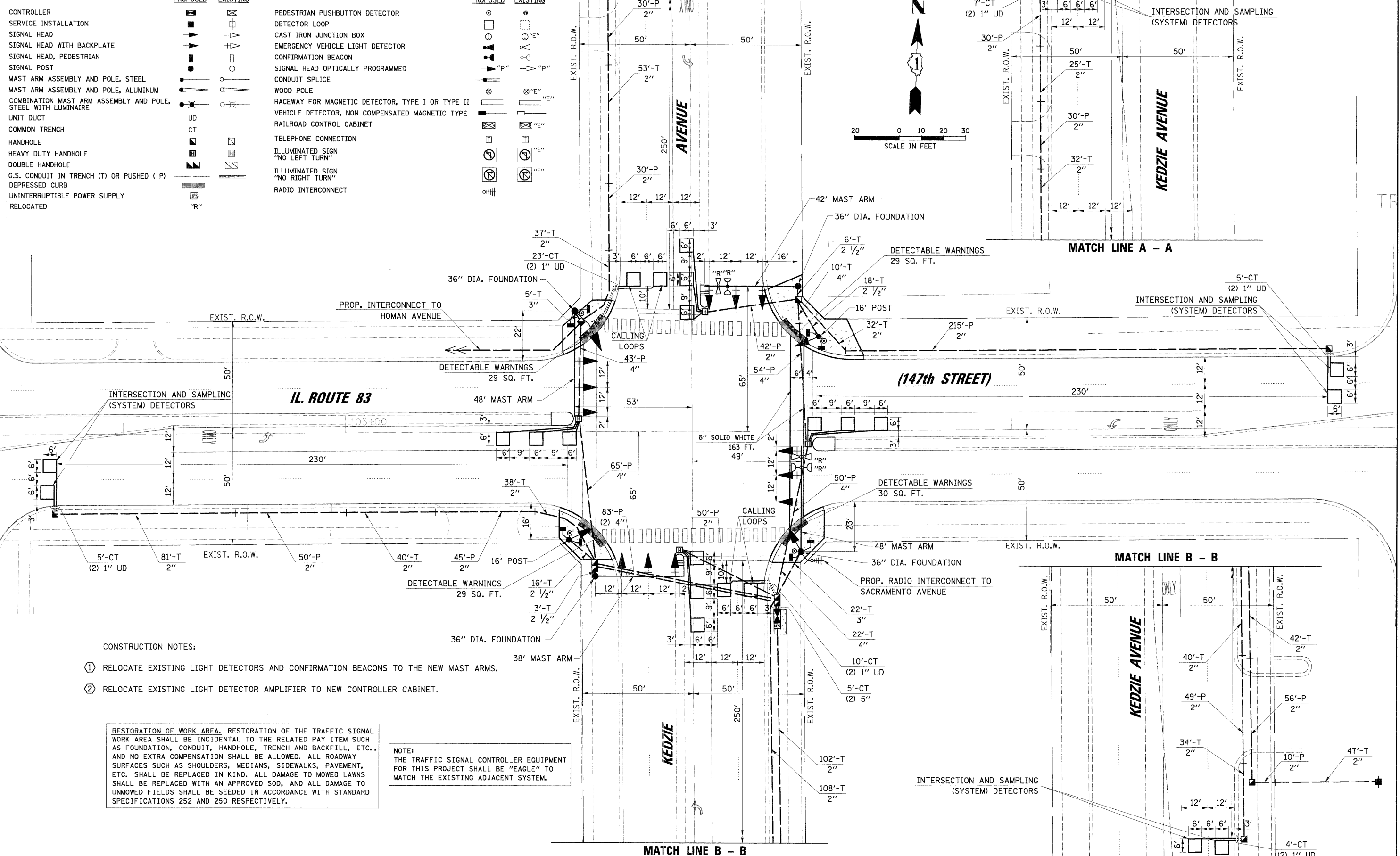
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2' = (6m+L-0.6m) =
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	6 (1.8)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**TRAFFIC SIGNAL LEGEND**

PROPOSED	EXISTING	PROPOSED	EXISTING

**MATCH LINE A - A**



**MATCH LINE A - A**

**MATCH LINE B - B**

- CONSTRUCTION NOTES:**
- RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
  - RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = N:\dot\08040\TASK 0 - IL 83\Traffic\MOD_Kedzie.dgn	USER NAME = FPAICONE	DESIGNED - ABR	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN IL. RTE. 83 (147th STREET) AND KEDZIE AVENUE MIDLOTHIAN, ILLINOIS</b>	F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 9	
PLOT SCALE = 20'	CHECKED - MJT	REVISED -	REVISED -			CONTRACT NO. 60F06					
PLOT DATE = 11/24/2008	DATE -	REVISED -	REVISED -			SCALE: 1"= 20' SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

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 Chicago, Illinois 60618  
 (847) 823-0580  
 SURVEYED, ALIGNED, CHECKED, P.L. OF WAY CHECKED, DDD FILE NAME  
 PLAN, NOTE BOOK NO.  
 PROFILE, SURVEYED, GRADES CHECKED, E.M. NOTED, PLYS USE NOTATIONS OK'D



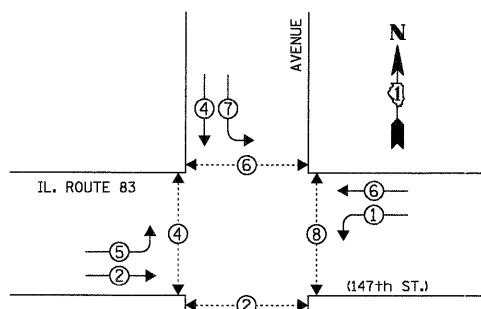
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 ALIGNMENT CHECKED: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 CADD FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

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 Rosemont, Illinois 60018  
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**CONTROLLER SEQUENCE**

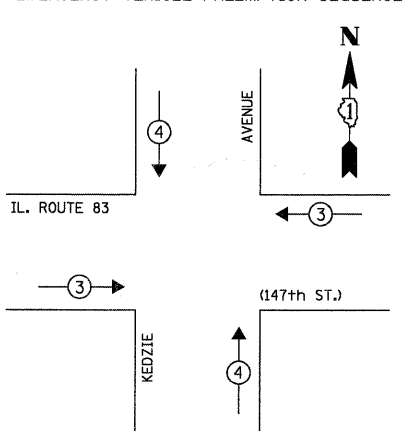


**LEGEND**

- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

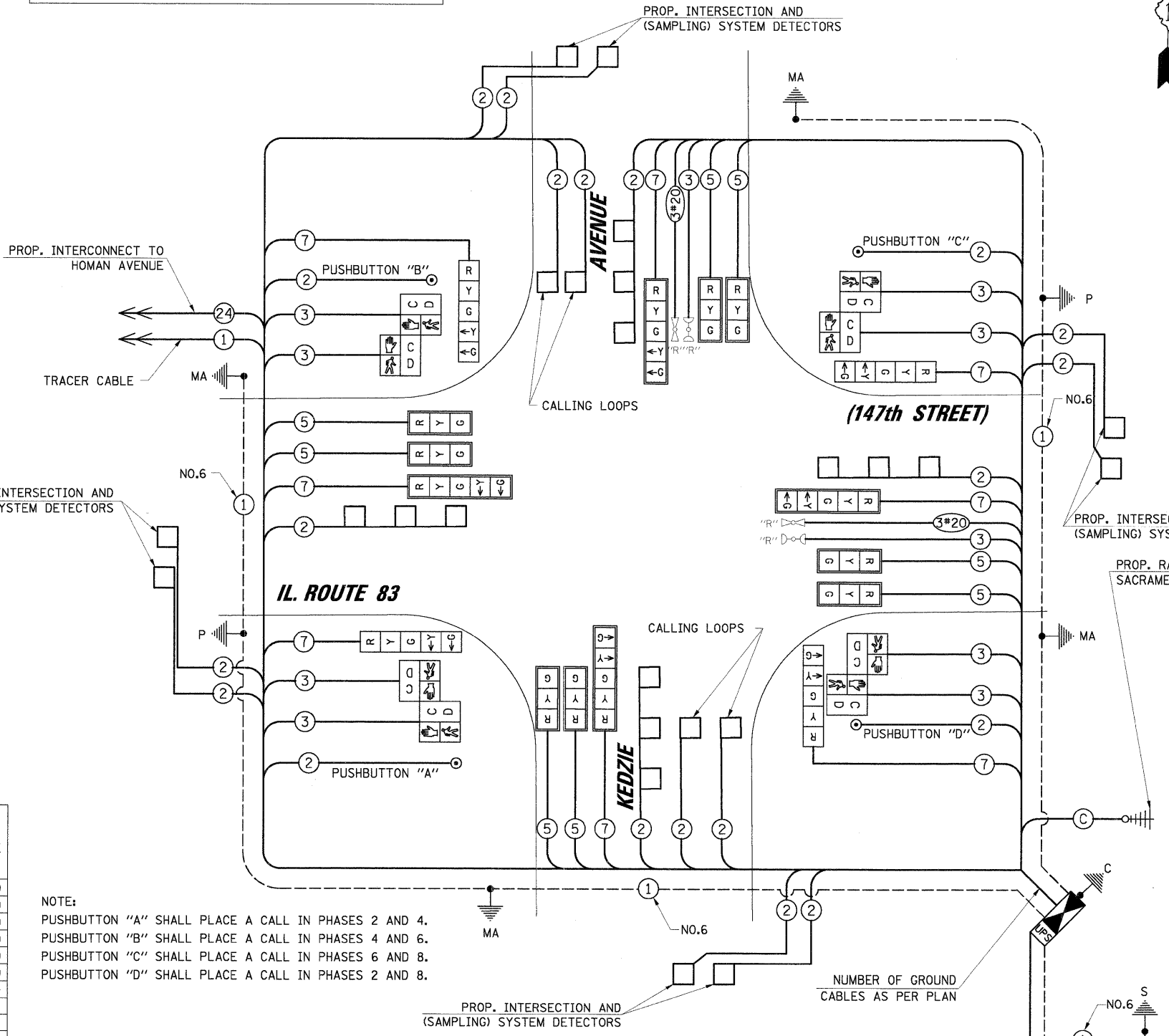
RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

**CABLE PLAN LEGEND**

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



NOTE: PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4. PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6. PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8. PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	17	0.50		136.00
(YELLOW)	16	25	0.25		100.00
(GREEN)	16	15	0.25		60.00
ARROW	16	12	0.10		19.20
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN	-	25	0.05		-
FLASHER	-	-	-	0.50	-

ENERGY COSTS TO: TOTAL = 615.20

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m±L-0.6m)±	
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1500
DETECTABLE WARNINGS	SQ FT	117
SIDEWALK REMOVAL	SQ FT	1500
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	76
MEDIAN REMOVAL AND REPLACEMENT, SPECIAL	SQ FT	218
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	163
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	80
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	711
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	43
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	27
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	32
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	637
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	378
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	872
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	653
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1676
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1528
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1501
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	4212
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	278
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	89
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	18
DETECTOR LOOP, TYPE I	FOOT	889
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE 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
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	820
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	346

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

FILE NAME	USER NAME	DESIGNED	REVISED	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\do\808040\TASK 0 - IL 83\Traffic\CAB_Kedzie.dgn	FPACIONE	ABR	-	ILL. ROUTE 83 (147th STREET) AND KEDZIE AVENUE MIDLOTHIAN, ILLINOIS	1602	2008-054 TS	COOK	40	10
		DRAWN	FPB						
		CHECKED	MJT						
		DATE							

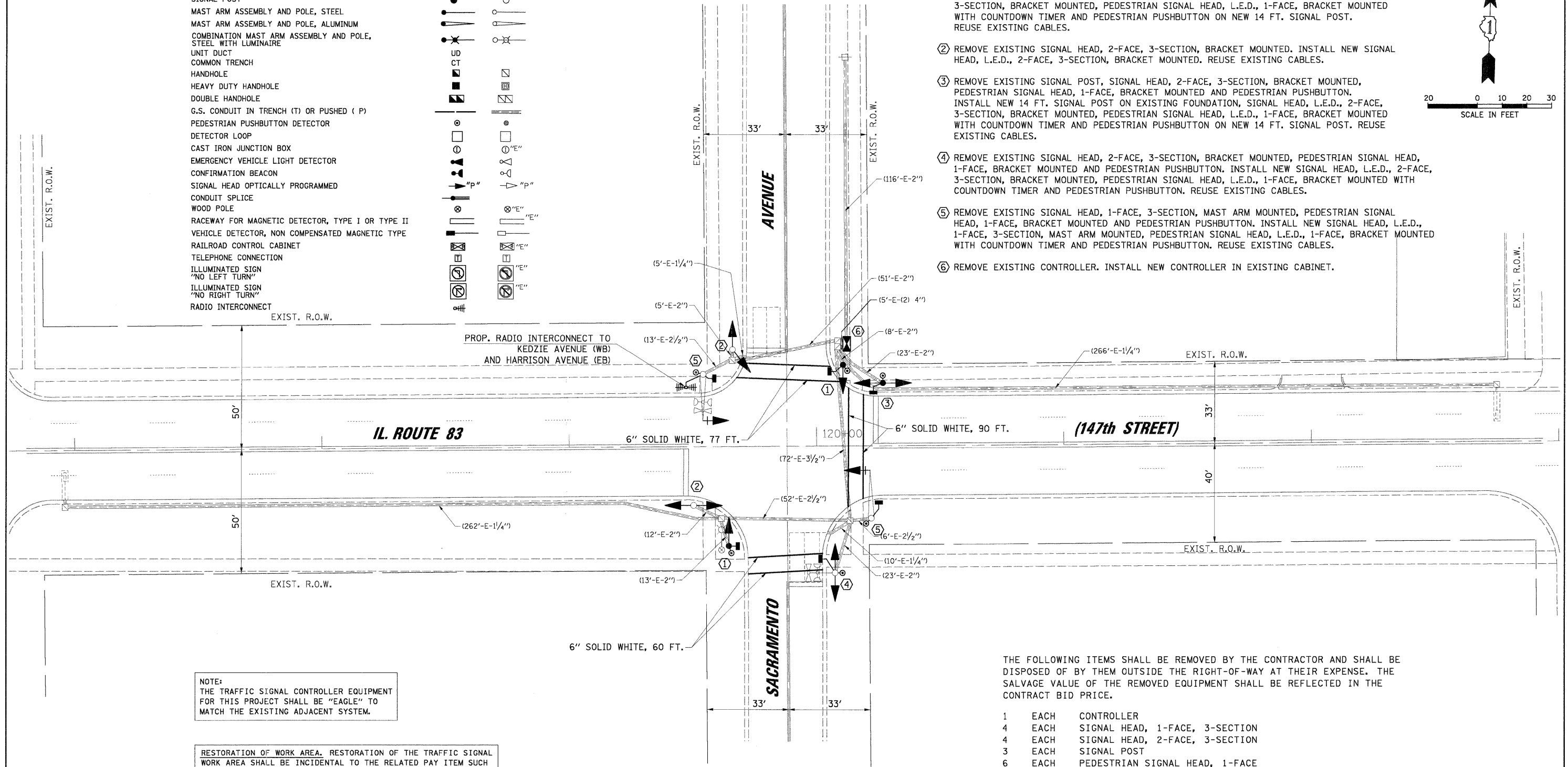
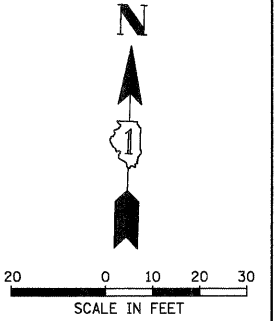
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA. CONTRACT NO. 60F06

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT		
COMMON TRENCH		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED		
CONDUIT SPLICE		
WOOD POLE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		
TELEPHONE CONNECTION		
ILLUMINATED SIGN "NO LEFT TURN"		
ILLUMINATED SIGN "NO RIGHT TURN"		
RADIO INTERCONNECT		

CONSTRUCTION NOTES:

- REMOVE EXISTING SIGNAL POST, SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED, PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED AND PEDESTRIAN PUSHBUTTON. INSTALL NEW 14 FT. SIGNAL POST ON EXISTING FOUNDATION, SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED, PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER AND PEDESTRIAN PUSHBUTTON ON NEW 14 FT. SIGNAL POST. REUSE EXISTING CABLES.
- REMOVE EXISTING SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED. REUSE EXISTING CABLES.
- REMOVE EXISTING SIGNAL POST, SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED, PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED AND PEDESTRIAN PUSHBUTTON. INSTALL NEW 14 FT. SIGNAL POST ON EXISTING FOUNDATION, SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED, PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER AND PEDESTRIAN PUSHBUTTON ON NEW 14 FT. SIGNAL POST. REUSE EXISTING CABLES.
- REMOVE EXISTING SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED, PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED AND PEDESTRIAN PUSHBUTTON. INSTALL NEW SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED, PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER AND PEDESTRIAN PUSHBUTTON. REUSE EXISTING CABLES.
- REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED, PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED AND PEDESTRIAN PUSHBUTTON. INSTALL NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED, PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER AND PEDESTRIAN PUSHBUTTON. REUSE EXISTING CABLES.
- REMOVE EXISTING CONTROLLER. INSTALL NEW CONTROLLER IN EXISTING CABINET.



NOTE:  
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- |   |      |                                |
|---|------|--------------------------------|
| 1 | EACH | CONTROLLER                     |
| 4 | EACH | SIGNAL HEAD, 1-FACE, 3-SECTION |
| 4 | EACH | SIGNAL HEAD, 2-FACE, 3-SECTION |
| 3 | EACH | SIGNAL POST                    |
| 6 | EACH | PEDESTRIAN SIGNAL HEAD, 1-FACE |
| 6 | EACH | PEDESTRIAN PUSH-BUTTON         |

DATE	BY	DATE
DATE	BY	DATE

PLAN  
NOTE BOOK NO. \_\_\_\_\_  
SURVEYED BY: \_\_\_\_\_  
GRADES CHECKED: \_\_\_\_\_  
ALIGNMENT CHECKED: \_\_\_\_\_  
RT. OF WAY CHECKED: \_\_\_\_\_  
FIELD FILE NAME: \_\_\_\_\_

ENGINEERING LTD.  
9575 West Higgins Road, Suite 600  
Chicago, Illinois 60638  
(847) 823-0500

PROFILE  
NOTE BOOK NO. \_\_\_\_\_  
SURVEYED BY: \_\_\_\_\_  
GRADES CHECKED: \_\_\_\_\_  
STRUCTURE NOTATION: \_\_\_\_\_

DATE: \_\_\_\_\_  
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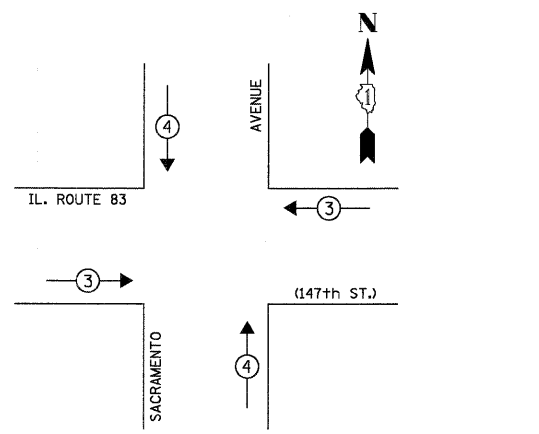
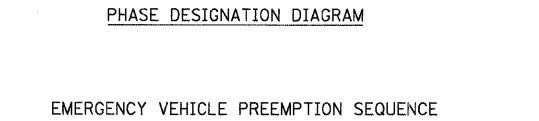
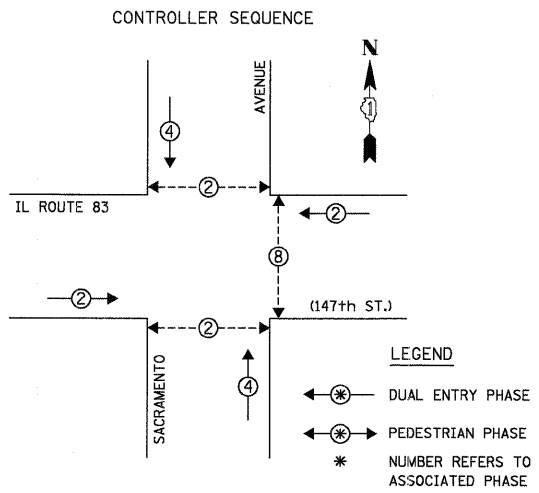
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 PLAN: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 STRUCTURE NOTATIONS OK'D: \_\_\_\_\_

BY: \_\_\_\_\_

DATE: \_\_\_\_\_

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 1515 West Higgins Road, Suite 600  
 Naperville, Illinois 60563  
 (847) 823-0500

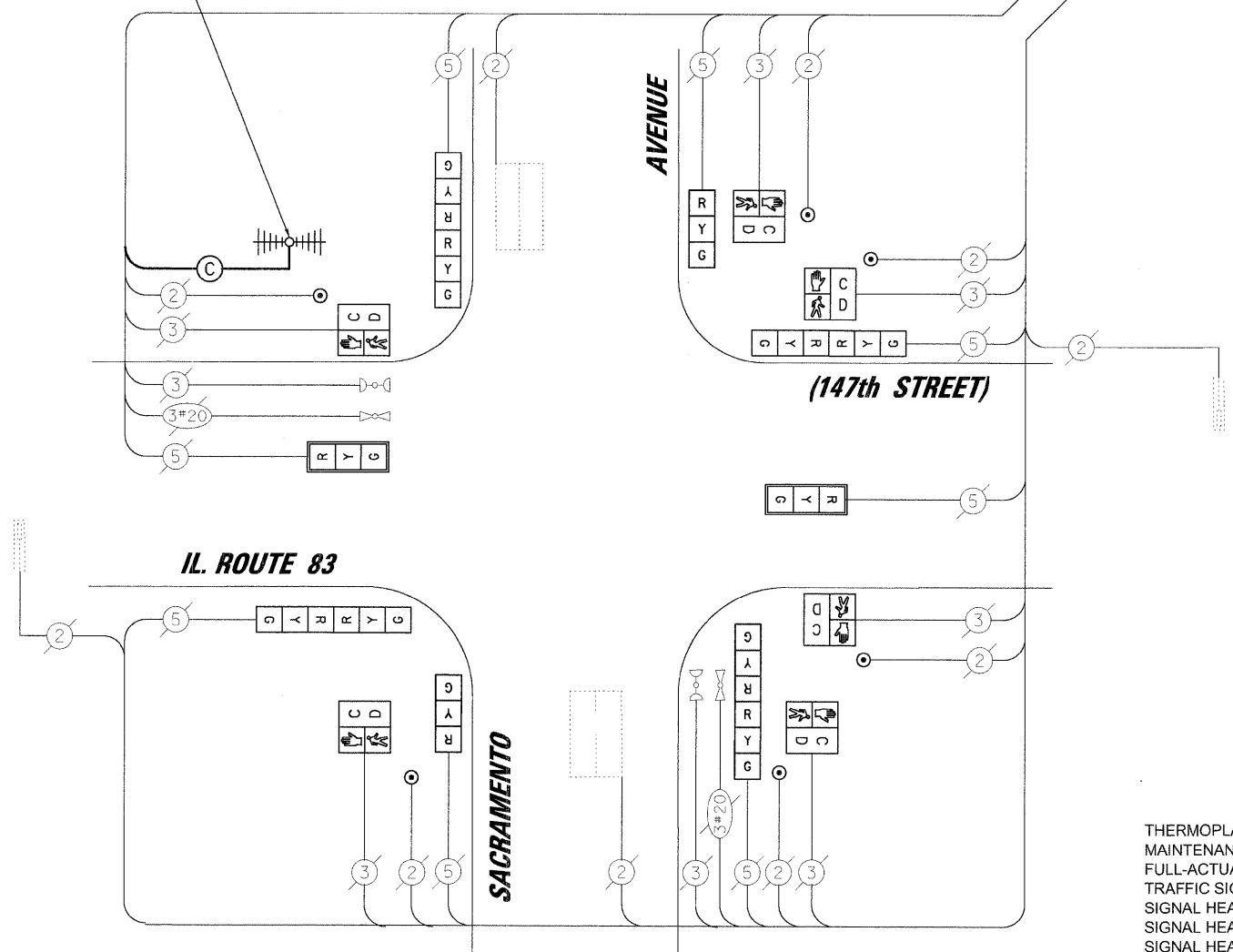


**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

RADIO INTERCONNECT TO KEDZIE AVENUE (WB) HARRISON AVENUE (EB)



- CABLE PLAN LEGEND**
- EXISTING PROPOSED
- 8" (200mm) TRAFFIC SIGNAL SECTION
  - 12" (300mm) TRAFFIC SIGNAL SECTION
  - 12" (300mm) PEDESTRIAN SIGNAL SECTION
  - PEDESTRIAN COUNTDOWN SIGNAL HEAD
  - CONTROLLER SERVICE INSTALLATION
  - TELEPHONE 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.
  - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
  - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
  - SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
  - RAILROAD CONTROL CABINET
  - ILLUMINATED SIGN "NO LEFT TURN"
  - ILLUMINATED SIGN "NO RIGHT TURN"
  - 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
  - UNINTERRUPTIBLE POWER SUPPLY
  - COAXIAL CABLE
  - RADIO INTERCONNECT

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

TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	17			0.50	102.00
(YELLOW)	12	25			0.25	75.00
(GREEN)	12	15			0.25	45.00
ARROW	-	12			0.10	-
PED. SIGNAL	6	25			1.00	150.00
CONTROLLER	1	100			1.00	100.00
ILLUM. SIGN	-	25			0.05	-
VIDEO SYSTEM	-	-			-	-
FLASHER	-	-			0.50	-

ENERGY COSTS TO: TOTAL = 472.00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m±L-0.6m)±	
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

NOTE:  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	227
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 ALIGNED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 FILE NO.: \_\_\_\_\_

PLAN: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 STATUS: \_\_\_\_\_

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 ALIGNED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 FILE NO.: \_\_\_\_\_

PROFILE: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

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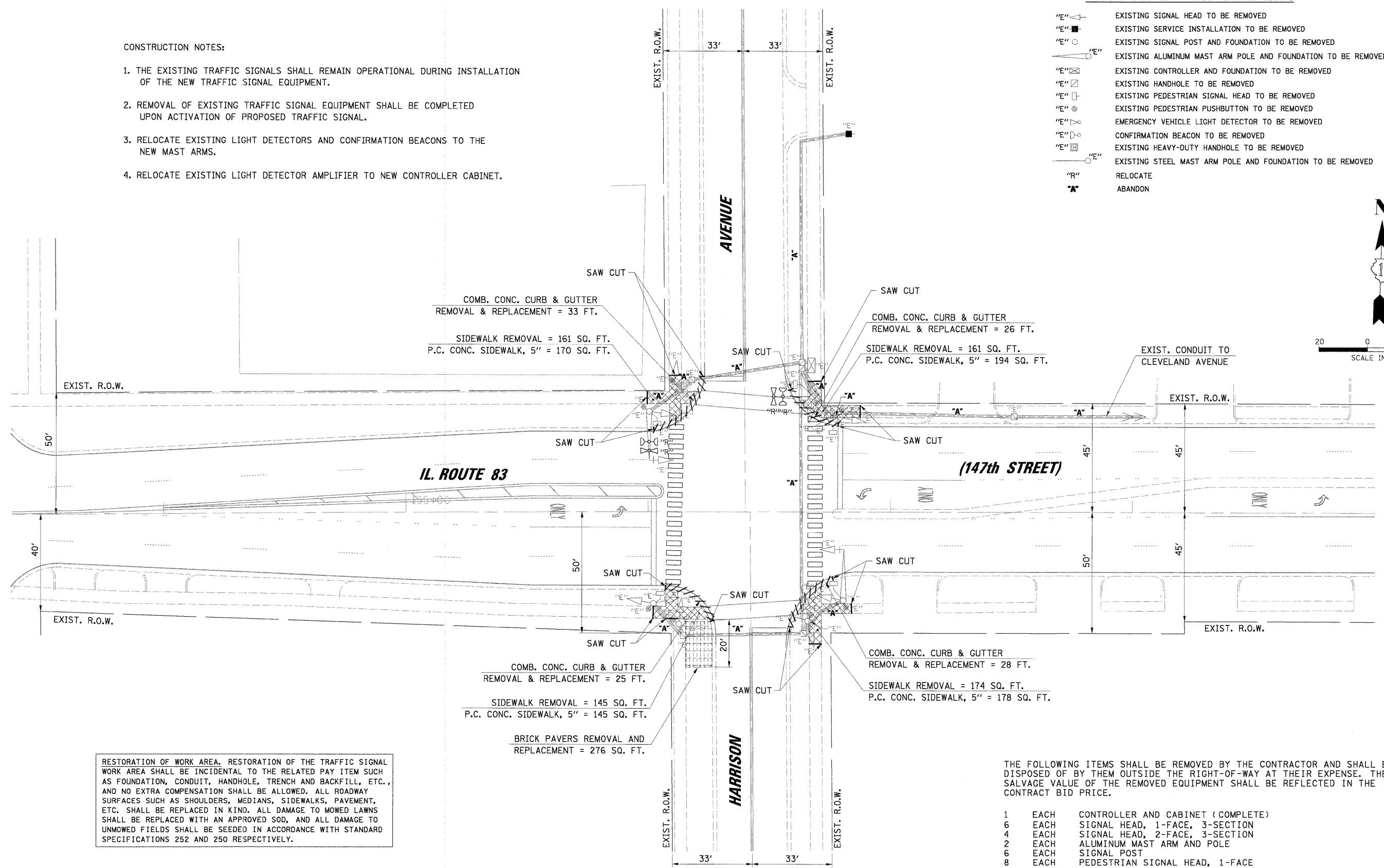
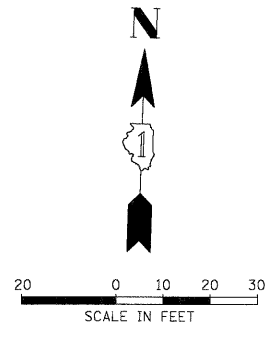
**CHRISTOPHER B. BURKE**  
 ENGINEERING LTD.  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60618  
 (847) 823-0500

**CONSTRUCTION NOTES:**

1. THE EXISTING TRAFFIC SIGNALS SHALL REMAIN OPERATIONAL DURING INSTALLATION OF THE NEW TRAFFIC SIGNAL EQUIPMENT.
2. REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE COMPLETED UPON ACTIVATION OF PROPOSED TRAFFIC SIGNAL.
3. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
4. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- "E" EXISTING SIGNAL HEAD TO BE REMOVED
- "E" EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" EXISTING HANDHOLE TO BE REMOVED
- "E" EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" CONFIRMATION BEACON TO BE REMOVED
- "E" EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "R" RELOCATE
- "A" ABANDON



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 6 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH ALUMINUM MAST ARM AND POLE
- 6 EACH SIGNAL POST
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SERVICE INSTALLATION

FILE NAME =	USER NAME = FPA010NE	DESIGNED - ABR	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL. ROUTE 83 (147th STREET) AND HARRISON AVENUE POSEN, ILLINOIS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\dot\080040\TASK 0 - IL 83\Traffic\REM Harrison.dgn	Harrison.dgn	DRAWN - FPB	REVISED -					1602	2008-054 TS	COOK	40	13
	PLOT SCALE = 2"	CHECKED - MJT	REVISED -		SCALE: 1"= 20'			SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 60F06	
	PLOT DATE = 11/24/2008	DATE -	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

DATE: \_\_\_\_\_  
 SURVISED: \_\_\_\_\_  
 ALIGNMENT CHECKED: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 FILE NAME: \_\_\_\_\_

PLAN: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

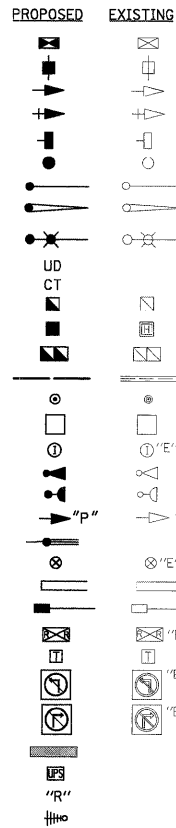
DATE: \_\_\_\_\_  
 SURVISED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 STRUCTURE NOTATIONS CHECKED: \_\_\_\_\_

PROFIT: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

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 Chicago, Illinois 60638  
 (847) 823-0500

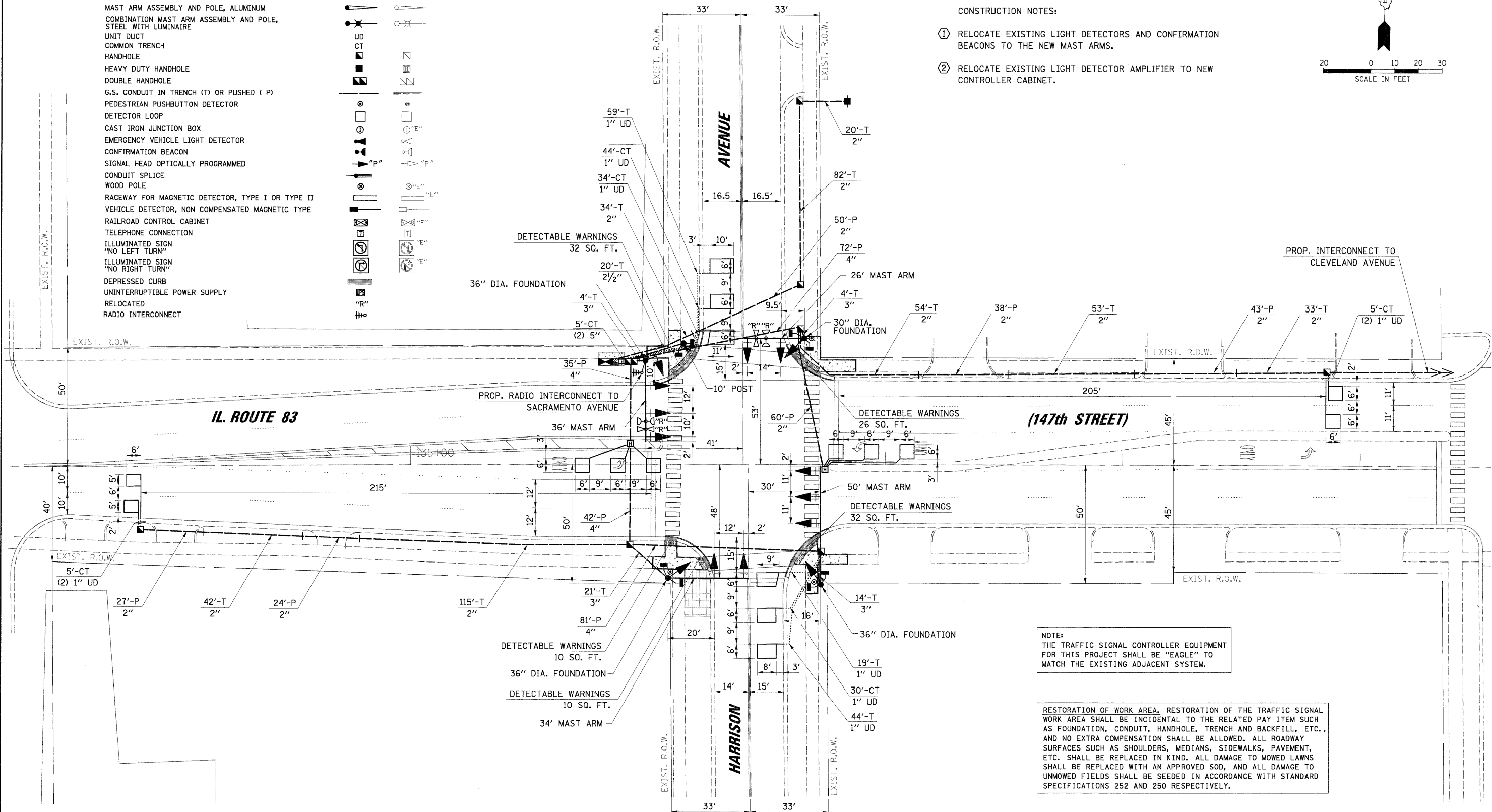
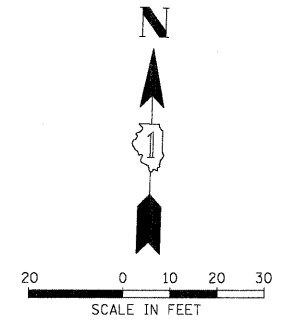
**TRAFFIC SIGNAL LEGEND**

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
- UNIT DUCT
- COMMON TRENCH
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- TELEPHONE CONNECTION
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- DEPRESSED CURB
- UNINTERRUPTIBLE POWER SUPPLY
- RELOCATED
- RADIO INTERCONNECT



**CONSTRUCTION NOTES:**

- ① RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.



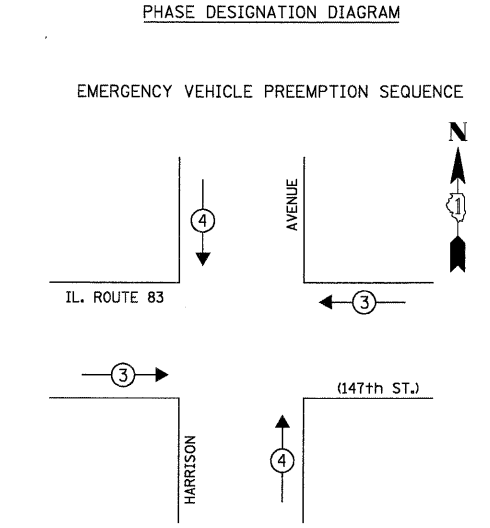
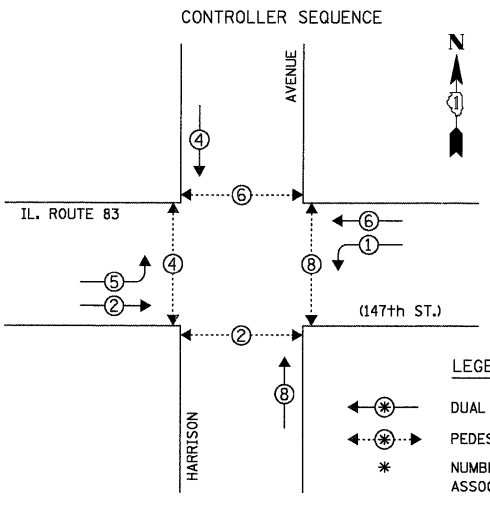
NOTE:  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME =	USER NAME = FPAICONE	DESIGNED - ABR	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN IL. ROUTE 83 (147th STREET) AND HARRISON AVENUE POSEN, ILLINOIS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\dot\080048\TASK 0 - IL 83\Traffic\MOD.Harrison.dgn	PLOT SCALE = 20'	DRAWN - FPB	REVISED -			1602	2008-054 TS	COOK	40	14	
	PLOT DATE = 11/24/2008	CHECKED - MJT	REVISED -			CONTRACT NO. 60F06					
		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				



DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60618  
 (847) 823-0500  
 DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_



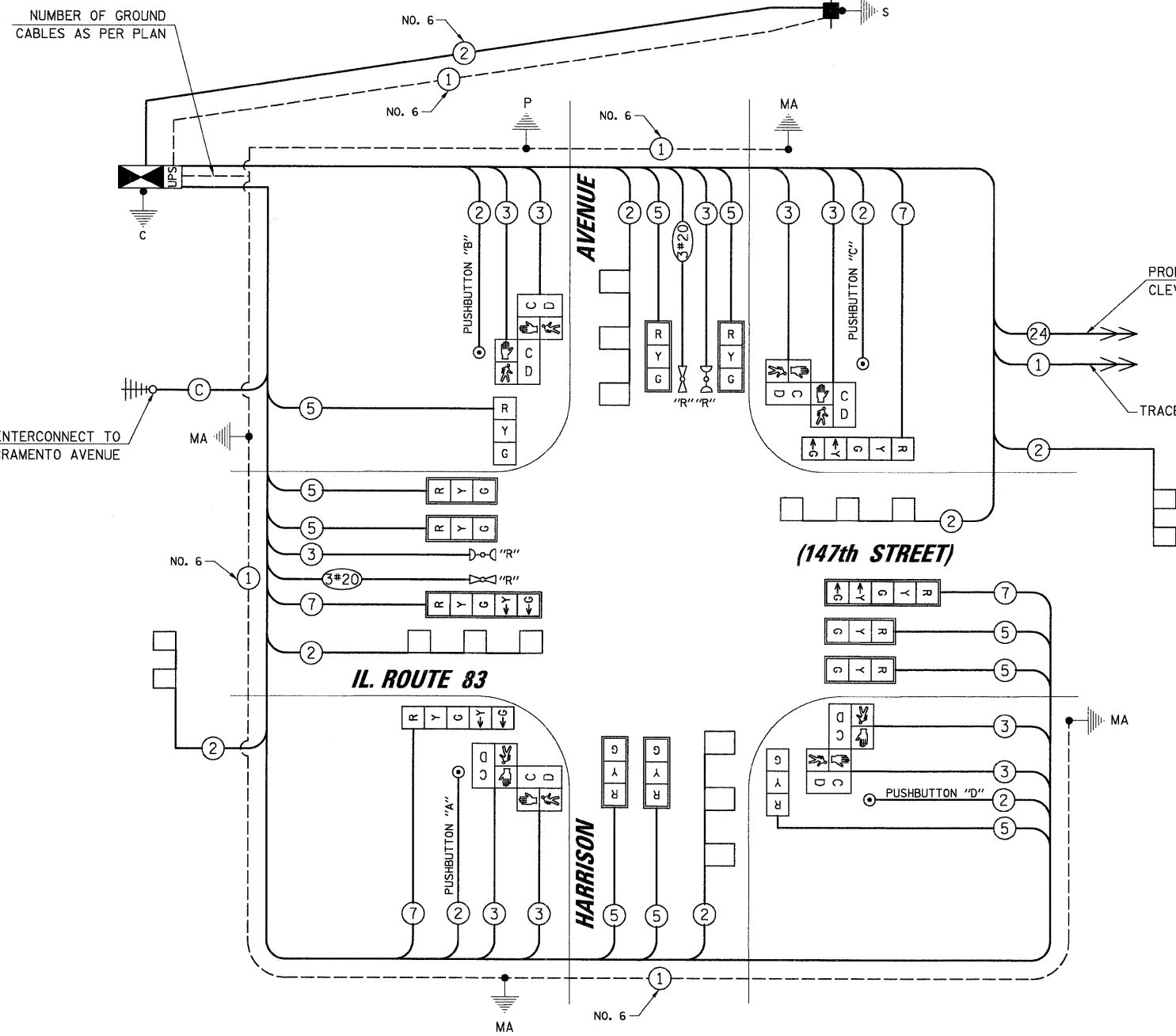
**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

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

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	17	0.50	119.00
(YELLOW)	14	25	0.25	87.50
(GREEN)	14	15	0.25	52.50
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	25	0.05	-
VIDEO SYSTEM	-	-	-	-
FLASHER	-	-	0.50	-
<b>ENERGY COSTS TO:</b>	<b>TOTAL =</b>			<b>568.60</b>

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**NOTE:**  
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

**NOTE:**  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
(Symbol)	(Symbol)	8" (200mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(Symbol)	(Symbol)	PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Symbol)	(Symbol)	CONTROLLER CABINET
(Symbol)	(Symbol)	SERVICE INSTALLATION
(Symbol)	(Symbol)	TELEPHONE INSTALLATION
(Symbol)	(Symbol)	VEHICLE DETECTOR, INDUCTION LOOP
(Symbol)	(Symbol)	MAGNETIC DETECTOR
(Symbol)	(Symbol)	EMERGENCY VEHICLE LIGHT DETECTOR
(Symbol)	(Symbol)	CONFIRMATION BEACON
(Symbol)	(Symbol)	PUSHBUTTON DETECTOR
(Symbol)	(Symbol)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(Symbol)	(Symbol)	GROUND CABLE IN CONDUIT
(Symbol)	(Symbol)	FIBER OPTIC CABLE IN CONDUIT
(Symbol)	(Symbol)	NO. 62.5/125 2-MM12F SM12F
(Symbol)	(Symbol)	SIGNAL FACE WITH BACKPLATE
(Symbol)	(Symbol)	"P" INDICATES PROGRAMMED HEAD.
(Symbol)	(Symbol)	RAILROAD CONTROL CABINET
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO LEFT TURN"
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO RIGHT TURN"
(Symbol)	(Symbol)	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
(Symbol)	(Symbol)	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
(Symbol)	(Symbol)	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(Symbol)	(Symbol)	UNINTERRUPTIBLE POWER SUPPLY
(Symbol)	(Symbol)	RELOCATED
(Symbol)	(Symbol)	COAXIAL CABLE
(Symbol)	(Symbol)	RADIO INTERCONNECT

**SCHEDULE OF QUANTITIES**

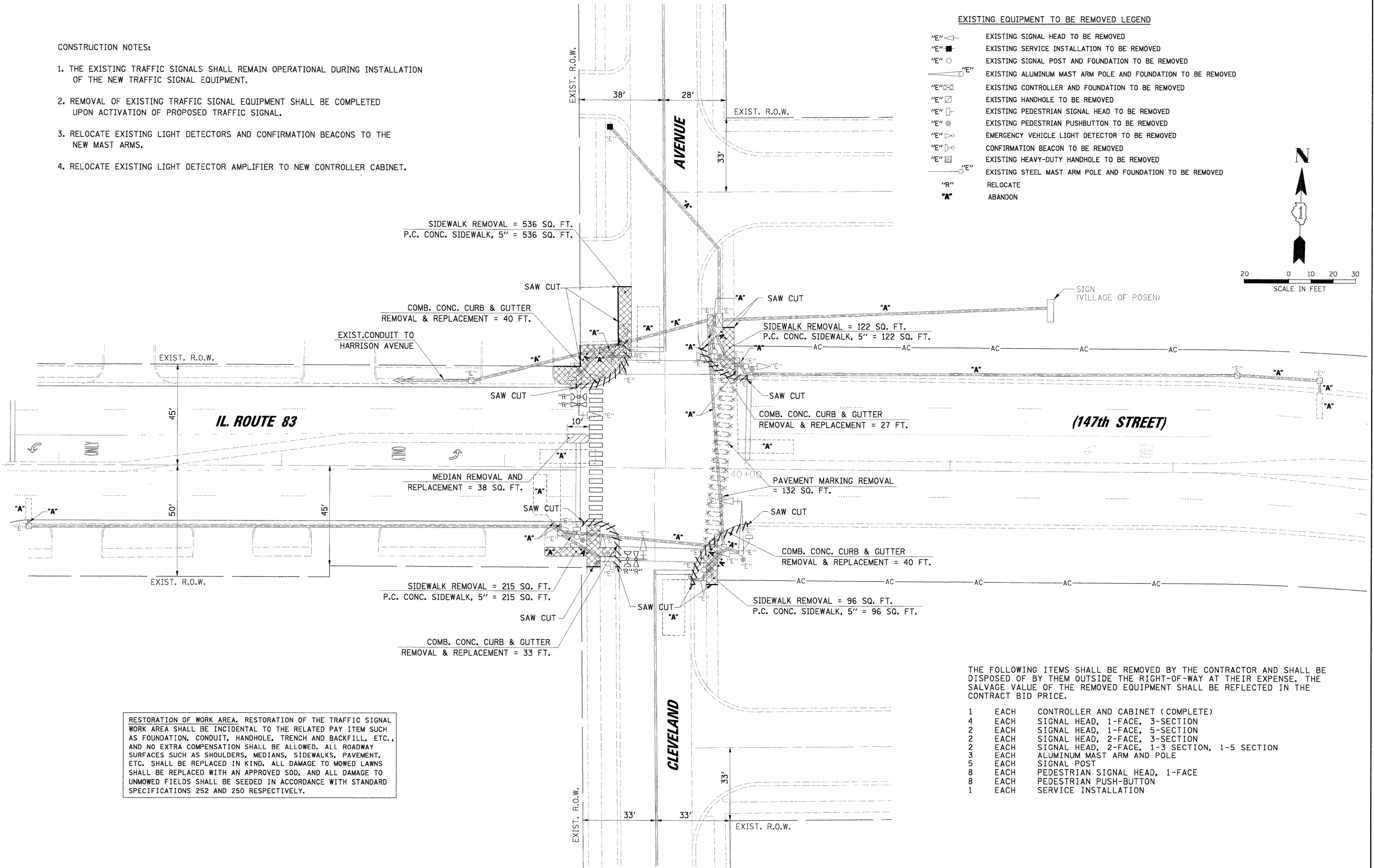
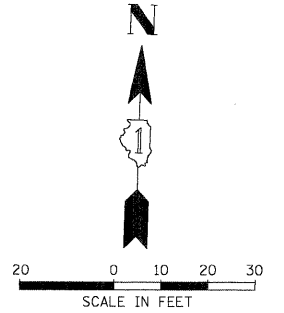
ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	687
DETECTABLE WARNINGS	SQ FT	110
SIDEWALK REMOVAL	SQ FT	641
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	112
SIGN PANEL - TYPE 1	SQ FT	18
SIGN PANEL - TYPE 2	SQ FT	25
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	433
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	43
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	242
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	230
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	638
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	519
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1322
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1579
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	623
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	1088
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	180
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	549
PEDESTRIAN PUSH-BUTTON	EACH	4
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	514
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	228
BRICK PAVEMENT REMOVAL AND REPLACEMENT	SQ FT	276

**CONSTRUCTION NOTES:**

1. THE EXISTING TRAFFIC SIGNALS SHALL REMAIN OPERATIONAL DURING INSTALLATION OF THE NEW TRAFFIC SIGNAL EQUIPMENT.
2. REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE COMPLETED UPON ACTIVATION OF PROPOSED TRAFFIC SIGNAL.
3. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
4. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- "E" EXISTING SIGNAL HEAD TO BE REMOVED
- "E" EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" EXISTING HANDHOLE TO BE REMOVED
- "E" EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" CONFIRMATION BEACON TO BE REMOVED
- "E" EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "R" RELOCATE
- "A" ABANDON



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

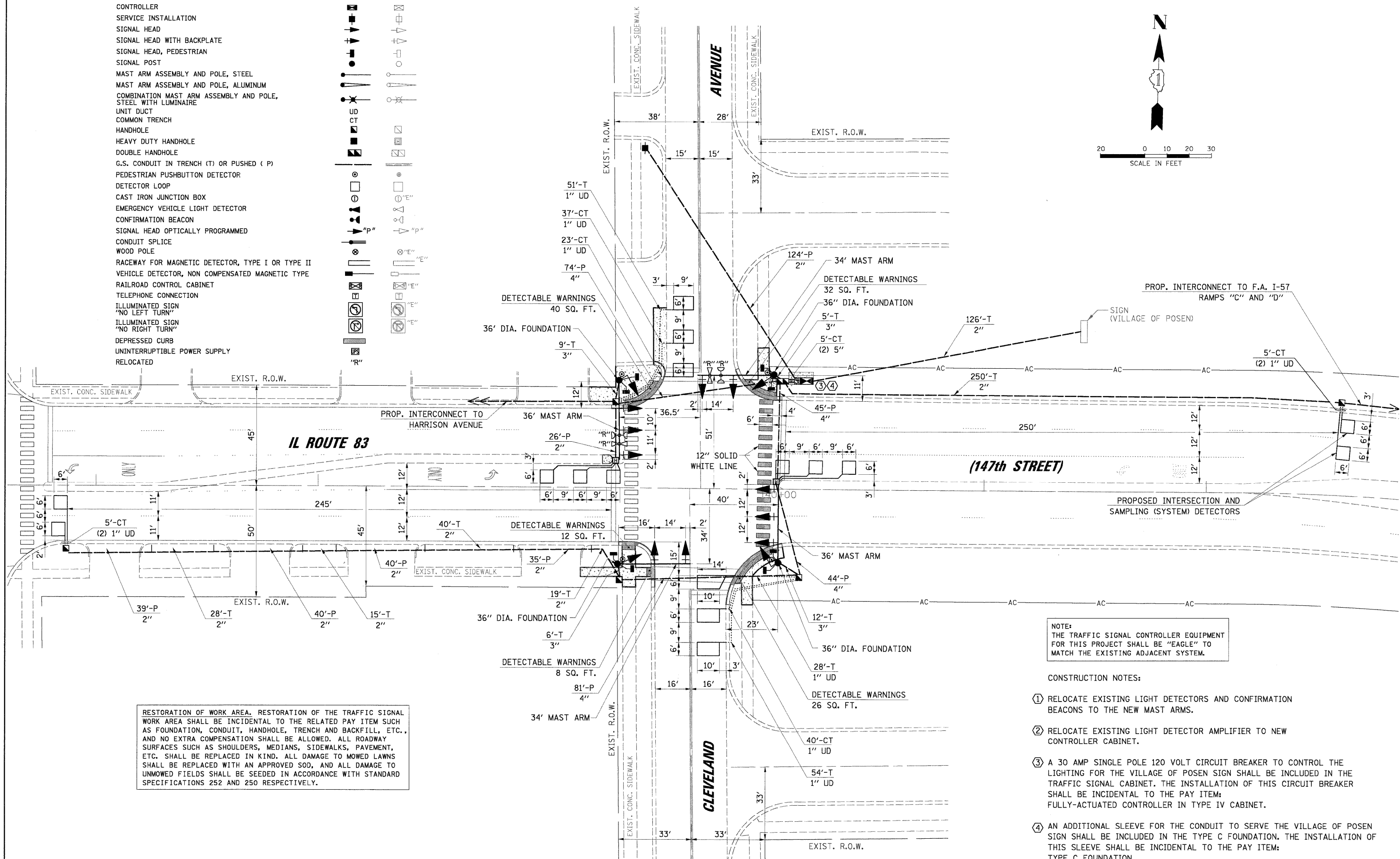
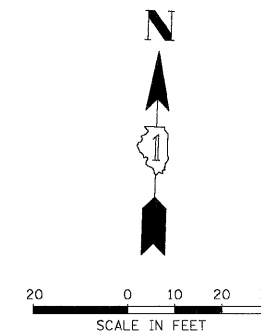
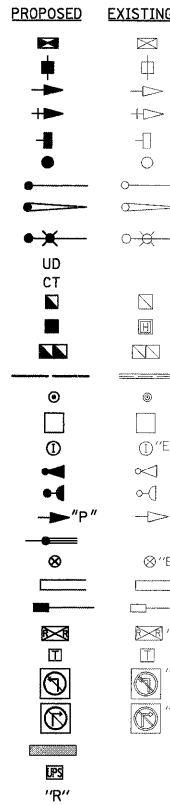
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 3 EACH ALUMINUM MAST ARM AND POLE
- 5 EACH SIGNAL POST
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SERVICE INSTALLATION

DATE	DATE
BY	BY
PROJECT	PROJECT
NOTE BOOK NO.	NOTE BOOK NO.
STRUCTURE NOTATIONS	STRUCTURE NOTATIONS
DATE	DATE
BY	BY
PROJECT	PROJECT
NOTE BOOK NO.	NOTE BOOK NO.
STRUCTURE NOTATIONS	STRUCTURE NOTATIONS

CHRISTOPHER B. BURKE ENGINEERING LTD.  
 3575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 825-0500

TRAFFIC SIGNAL LEGEND

- CONTROLLER  
 SERVICE INSTALLATION  
 SIGNAL HEAD  
 SIGNAL HEAD WITH BACKPLATE  
 SIGNAL HEAD, PEDESTRIAN  
 SIGNAL POST  
 MAST ARM ASSEMBLY AND POLE, STEEL  
 MAST ARM ASSEMBLY AND POLE, ALUMINUM  
 COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE  
 UNIT DUCT  
 COMMON TRENCH  
 HANDHOLE  
 HEAVY DUTY HANDHOLE  
 DOUBLE HANDHOLE  
 G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)  
 PEDESTRIAN PUSHBUTTON DETECTOR  
 DETECTOR LOOP  
 CAST IRON JUNCTION BOX  
 EMERGENCY VEHICLE LIGHT DETECTOR  
 CONFIRMATION BEACON  
 SIGNAL HEAD OPTICALLY PROGRAMMED  
 CONDUIT SPLICE  
 WOOD POLE  
 RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II  
 VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE  
 RAILROAD CONTROL CABINET  
 TELEPHONE CONNECTION  
 ILLUMINATED SIGN  
 "NO LEFT TURN"  
 ILLUMINATED SIGN  
 "NO RIGHT TURN"  
 DEPRESSED CURB  
 UNINTERRUPTIBLE POWER SUPPLY  
 RELOCATED



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

- CONSTRUCTION NOTES:
- RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS.
  - RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
  - A 30 AMP SINGLE POLE 120 VOLT CIRCUIT BREAKER TO CONTROL THE LIGHTING FOR THE VILLAGE OF POSEN SIGN SHALL BE INCLUDED IN THE TRAFFIC SIGNAL CABINET. THE INSTALLATION OF THIS CIRCUIT BREAKER SHALL BE INCIDENTAL TO THE PAY ITEM: FULLY-ACTUATED CONTROLLER IN TYPE IV CABINET.
  - AN ADDITIONAL SLEEVE FOR THE CONDUIT TO SERVE THE VILLAGE OF POSEN SIGN SHALL BE INCLUDED IN THE TYPE C FOUNDATION. THE INSTALLATION OF THIS SLEEVE SHALL BE INCIDENTAL TO THE PAY ITEM: TYPE C FOUNDATION.

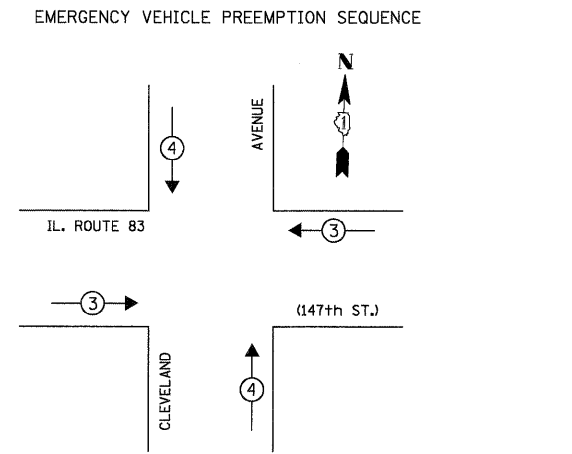
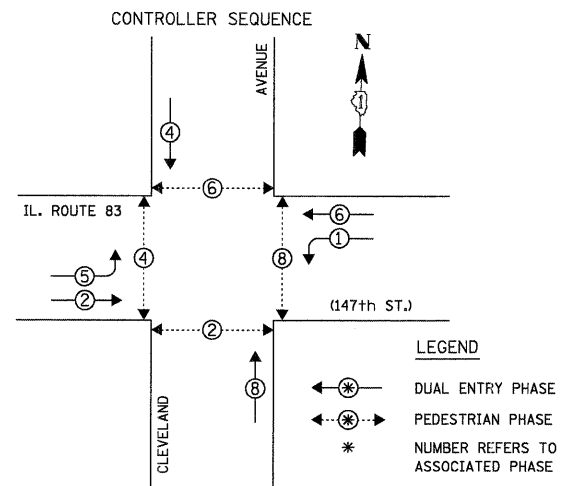
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 CHECKED: \_\_\_\_\_  
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CHRISTOPHER B. BURKE  
 ENGINEERING LTD.  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 823-0550

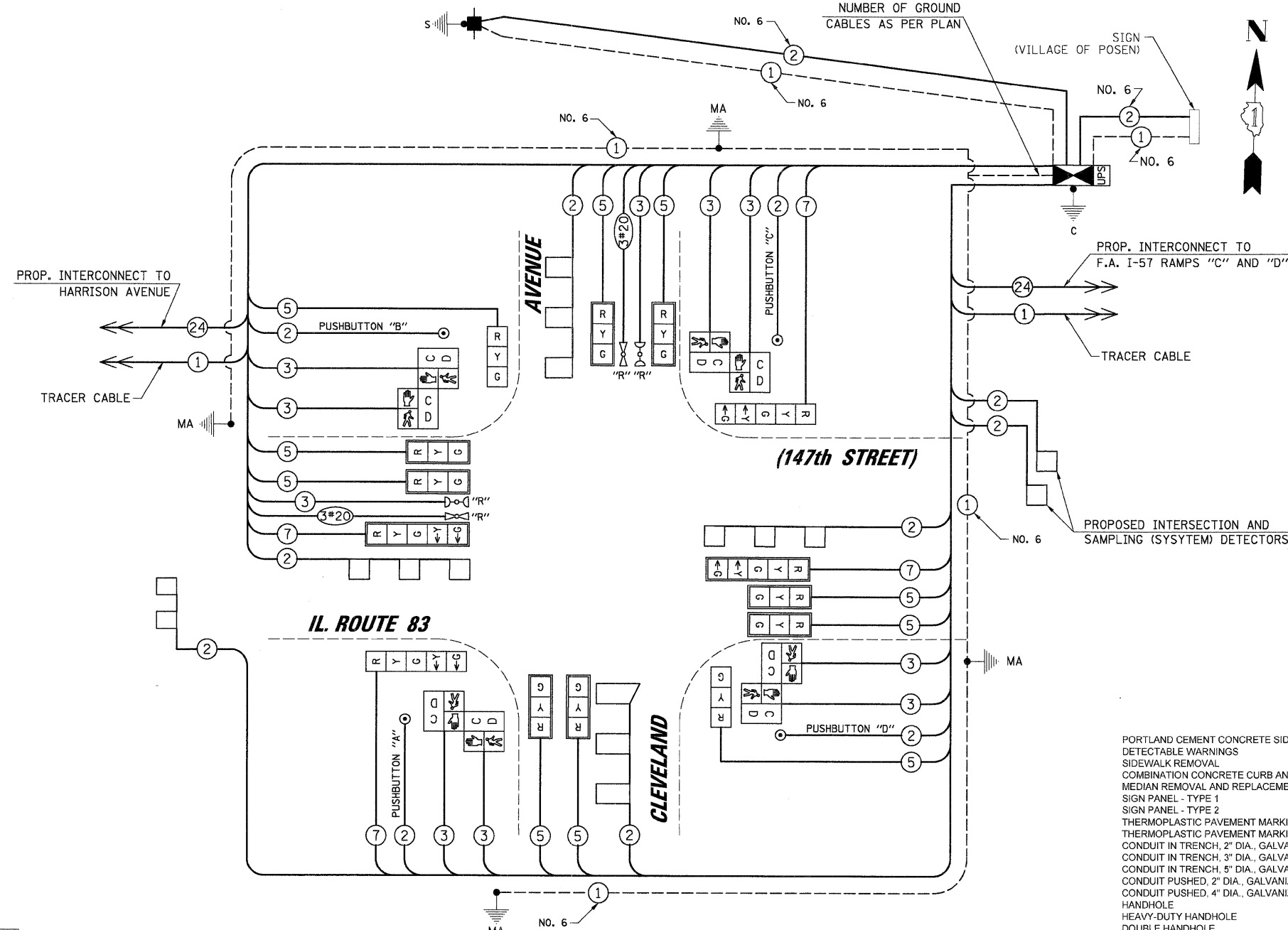
FILE NAME = N:\dot\080840\TASK 0 - IL 83\Traffic\HDD\Cleveland.dgn	USER NAME = FPACTIONE	DESIGNED - ABR	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN IL ROUTE 83 (147th STREET) AND CLEVELAND AVENUE POSEN, ILLINOIS</b>		F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 17	CONTRACT NO. 60F06
PLOT SCALE = 2"	CHECKED - MJT	DATE -	REVISED -		SCALE: 1"= 20'	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				

DATE: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 STRUCTURE: \_\_\_\_\_  
 NOTATIONS: \_\_\_\_\_  
 NO. \_\_\_\_\_

CHRISTOPHER B. BURKE ENGINEERING LTD.  
 2575 West Higgins Road, Suite 600  
 Naperville, IL 60563  
 (815) 823-0500



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	→	↑



**CABLE PLAN LEGEND**

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

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	989
DETECTABLE WARNINGS	SQ FT	118
SIDEWALK REMOVAL	SQ FT	969
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	140
MEDIAN REMOVAL AND REPLACEMENT, SPECIAL	SQ FT	38
SIGN PANEL - TYPE 1	SQ FT	18
SIGN PANEL - TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	102
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	132
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	478
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	32
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	304
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	244
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	663
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	518
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1332
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1513
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	625
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	1446
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	139
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	574
PEDESTRIAN PUSH-BUTTON	EACH	4
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	642
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	240

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

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	17	0.50	119.00
(YELLOW)	14	25	0.25	87.50
(GREEN)	14	15	0.25	52.50
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	1	200	0.05	200.00
VIDEO SYSTEM		150	1.00	-
FLASHER			0.50	-
ENERGY COSTS TO:				TOTAL = 768.60

**RESTORATION OF WORK AREA.** RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**NOTE:**  
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

**NOTE:**  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

FILE NAME	USER NAME	DESIGNED	REVISED
N:\dct\0804\TASK 0 - IL 83\Traffic\IB-Cleveland.dgn	FPACONE	ABR	-
		FPB	-
		MJT	-
			-

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**  
 IL ROUTE 83 (147th STREET) AND CLEVELAND AVENUE  
 POSEN, ILLINOIS

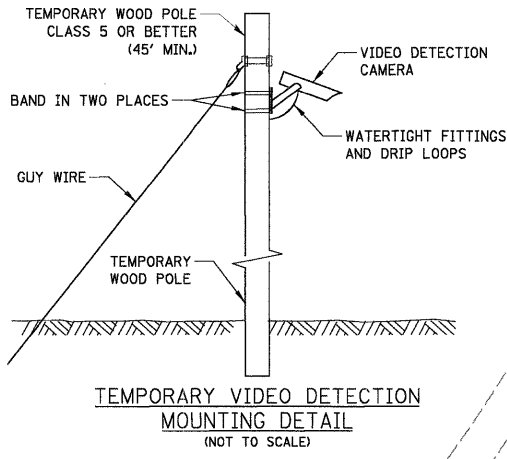
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	18
CONTRACT NO. 60F06				
SCALE: N.T.S.		SHEET NO. OF SHEETS		STA. TO STA.
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 DATE: \_\_\_\_\_

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 3515 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 823-0500

**TEMPORARY TRAFFIC SIGNAL LEGEND**

- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM DOWN GUY
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊕ TEMPORARY SERVICE INSTALLATION
- ⊖ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ⊙ VIDEO DETECTION CAMERA
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊙ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊙ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- ⊖ UNIT DUCT
- COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- ⊖ HANDHOLE
- ⊖ HEAVY DUTY HANDHOLE

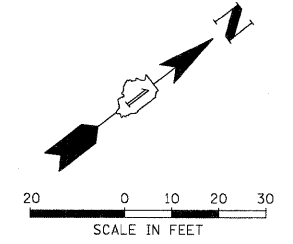


**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- ⊖ "E" EXISTING SIGNAL HEAD TO BE REMOVED
- ⊖ "E" EXISTING SERVICE INSTALLATION TO BE REMOVED
- ⊖ "E" EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ⊖ "E" EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊖ "E" EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- ⊖ "E" EXISTING HANDHOLE TO BE REMOVED
- ⊖ "E" EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊖ "E" EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- ⊖ "E" EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- ⊖ "E" CONFIRMATION BEACON TO BE REMOVED
- ⊖ "E" EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- ⊖ "E" EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊖ "A" ABANDON



R10-5  
 24" x 30"  
 1 REQUIRED  
 (INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL INSTALLATION)



**RAMP "C" TO F.A. I-57**

**IL ROUTE 83 (147th ST.)**

**RAMP "D" FROM F.A. I-57**

**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 10 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 3 EACH ALUMINUM MAST ARM AND POLE
- 3 EACH SIGNAL POST

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**MATCH LINE STA. 27+50 (SEE SHEET 21)**

FILE NAME = N:\dot\08040\TASK 0 - IL 83\T-traffic\TMP	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL ROUTE 83 (147th ST.) AND F.A. I-57 RAMPS "C" AND "D" POSEN, ILLINOIS</b>	F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 19
PLANT	NOTE BOOK	CHECKED - MJT	REVISED -			CONTRACT NO. 60F06				
DATE	DATE	DATE	DATE			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
SCALE: 1"= 20'	SHEET NO. OF SHEETS	STA. TO STA.								



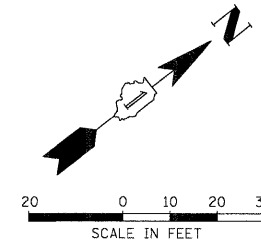
NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
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3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON. IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

MATCH LINE STA. 27+50 (SEE SHEET 20)

TEMPORARY TRAFFIC SIGNAL LEGEND

- ← TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ↖ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM DOWN GUY
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊞ TEMPORARY SERVICE INSTALLATION
- ⊞ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ▶ VIDEO DETECTION CAMERA
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ▶ EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- CT COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- ◻ HANDHOLE
- ◻ HEAVY DUTY HANDHOLE



DATE	BY	DATE	BY
DATE	BY	DATE	BY

CHRISTOPHER B. BURKE ENGINEERING LTD.  
315 West Higgins Road, Suite 600  
Chicago, Illinois 60608  
(847) 822-0500

PROFILE SURVEYED  
GRADES CHECKED  
BLM. NOTED  
PROPOSED INDENTATIONS CHECKED

F.A. I-57

IL ROUTE 83 (147th ST.)

F.A. I-57

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" ◁ EXISTING SIGNAL HEAD TO BE REMOVED
- "E" ◻ EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" ○ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ◁ "E" EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" ◻ EXISTING HANDHOLE TO BE REMOVED
- "E" ⊞ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" ▶ EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" ◻ EXISTING CONFIRMATION BEACON TO BE REMOVED
- "E" ◻ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- ◁ "E" EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⋈ ABANDON

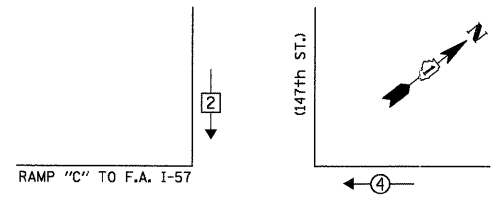
MATCH LINE STA. 31+30 (SEE SHEET 27)

FILE NAME = N:\dots\080940\TASK 0 - IL 83\Traffic\TMP	USER NAME = FPACIDNE	DESIGNED - ABR	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL ROUTE 83 (147th ST.) AND F.A. I-57 RAMPS POSEN, ILLINOIS</b>			F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 20
PLLOT SCALE = 20'	CHECKED - MJT	DATE -	REVISED -		SCALE: 1" = 20'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 60F06		
PLLOT DATE = 11/24/2009	DATE -	REVISED -	REVISED -		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT						

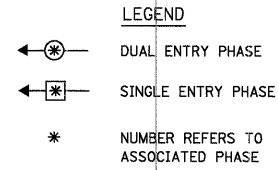
DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_  
 NO. OF SHEETS: \_\_\_\_\_  
 NO. OF THIS SHEET: \_\_\_\_\_

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 315 West Higgins Road, Suite 600  
 Schaumburg, Illinois 60196  
 (815) 823-0500

**TEMPORARY CONTROLLER SEQUENCE**



**TEMPORARY PHASE DESIGNATION DIAGRAM**



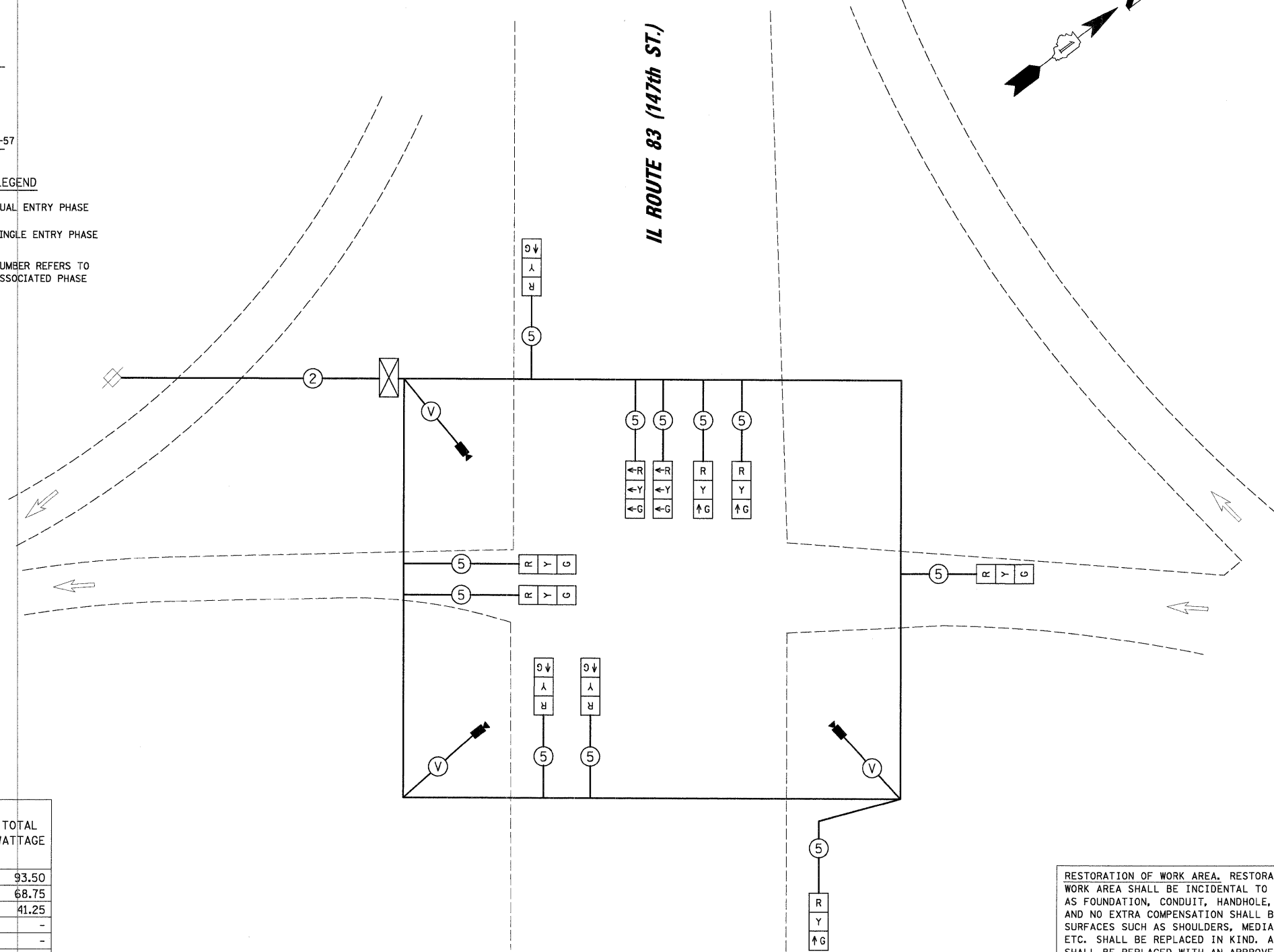
**TEMPORARY CABLE DIAGRAM LEGEND**

- R TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊗ TEMPORARY CONTROLLER CABINET
- ⊕ TEMPORARY SERVICE INSTALLATION
- 5 INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊠ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO DETECTION CAMERA
- V VENDOR CABLE

**RAMP "C" TO F.A. I-57**

**RAMP "D" FROM F.A. I-57**

**IL ROUTE 83 (147th ST.)**



**TEMPORARY CABLE PLAN**

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

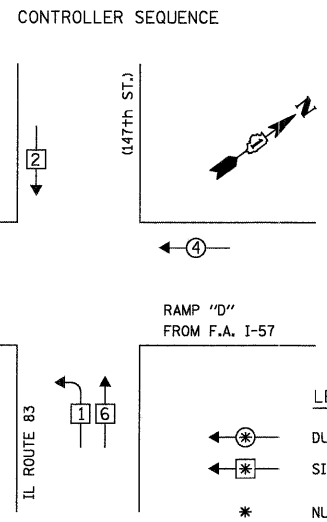
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	11	-	17	0.50	93.50
(YELLOW)	11	-	25	0.25	68.75
(GREEN)	11	-	15	0.25	41.25
ARROW	-	-	12	0.10	-
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	-	100	1.00	100.00
ILLUM. SIGN	-	-	25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.00
FLASHER	-	-	-	0.50	-
TOTAL =					453.50

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

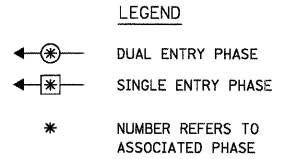
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m±L-0.6m)±	
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)



DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ GRADES CHECKED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_ ALIGNMENT CHECKED: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_ RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_ PLOTTING INSTRUCTIONS OK'D: \_\_\_\_\_  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 3575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500



CONTROLLER SEQUENCE

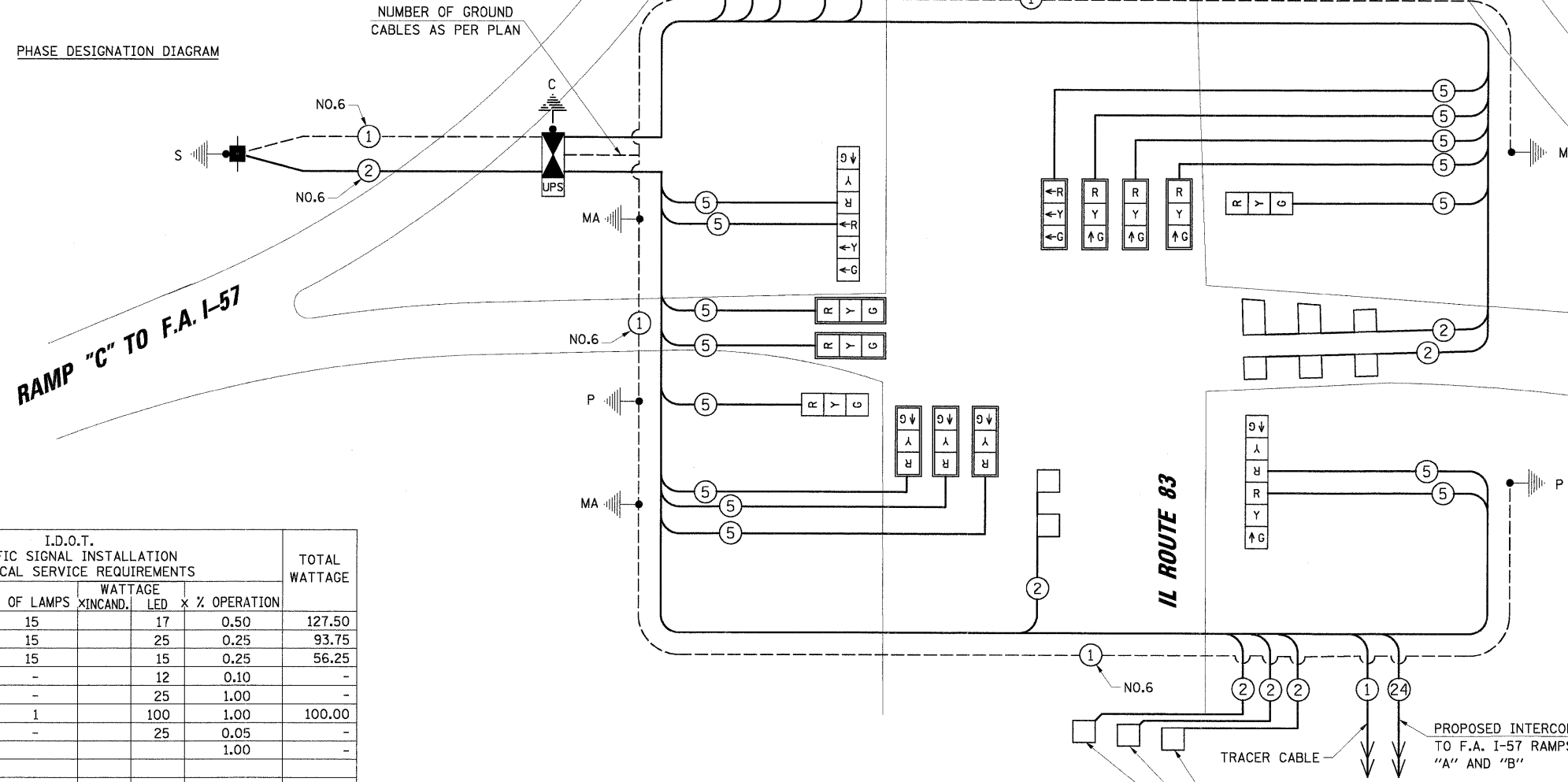


PHASE DESIGNATION DIAGRAM

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDD IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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



CABLE PLAN

**CABLE PLAN LEGEND**

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

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	25
SIDEWALK REMOVAL	SQ FT	25
SIGN PANEL - TYPE 1	SQ FT	10
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	497
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	154
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	128
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	50
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	236
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	801
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2918
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14, 1 PR	FOOT	2554
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	200
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	549
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	13
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	798

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

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	17	0.50	127.50
(YELLOW)	15	25	0.25	93.75
(GREEN)	15	15	0.25	56.25
ARROW	-	12	0.10	-
PED. SIGNAL	-	25	1.00	-
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	25	0.05	-
VIDEO SYSTEM	-	-	1.00	-
FLASHER	-	-	0.50	-
TOTAL =				377.50

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2'=(6m+L-0.6m)=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
E - M. ARM POLE	-	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	6 (1.8)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM  
 IL ROUTE 83 (147th ST.) AND F.A. I-57 RAMPS "C" AND "D"  
 POSEN, ILLINOIS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	23
CONTRACT NO. 60F06				

FILE NAME	USER NAME	DESIGNED	REVISED
N:\dot\080040\TASK 0 - IL 83\Traffic\CB-I-57 wRamps.dgn	FPACIONE	ABR	-
		FPB	-
		MJT	-
			-

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_

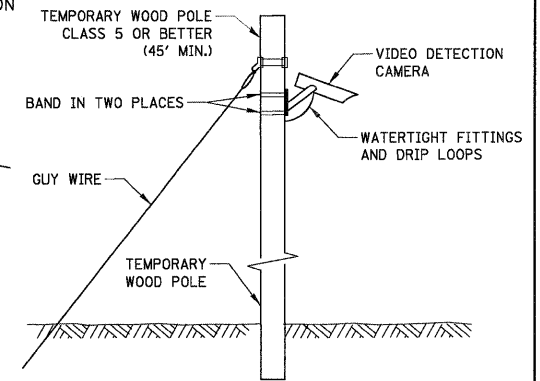
BY: \_\_\_\_\_

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 SAN. INT'D: \_\_\_\_\_  
 PROPOSED NOTATIONS OK'D: \_\_\_\_\_

CHRISTOPHER B. BURKE ENGINEERING LTD.  
 3575 West Higgins Road, Suite 600  
 Chicago, IL 60659  
 (847) 823-0500

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 9 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 3 EACH ALUMINUM MAST ARM AND POLE
- 3 EACH SIGNAL POST



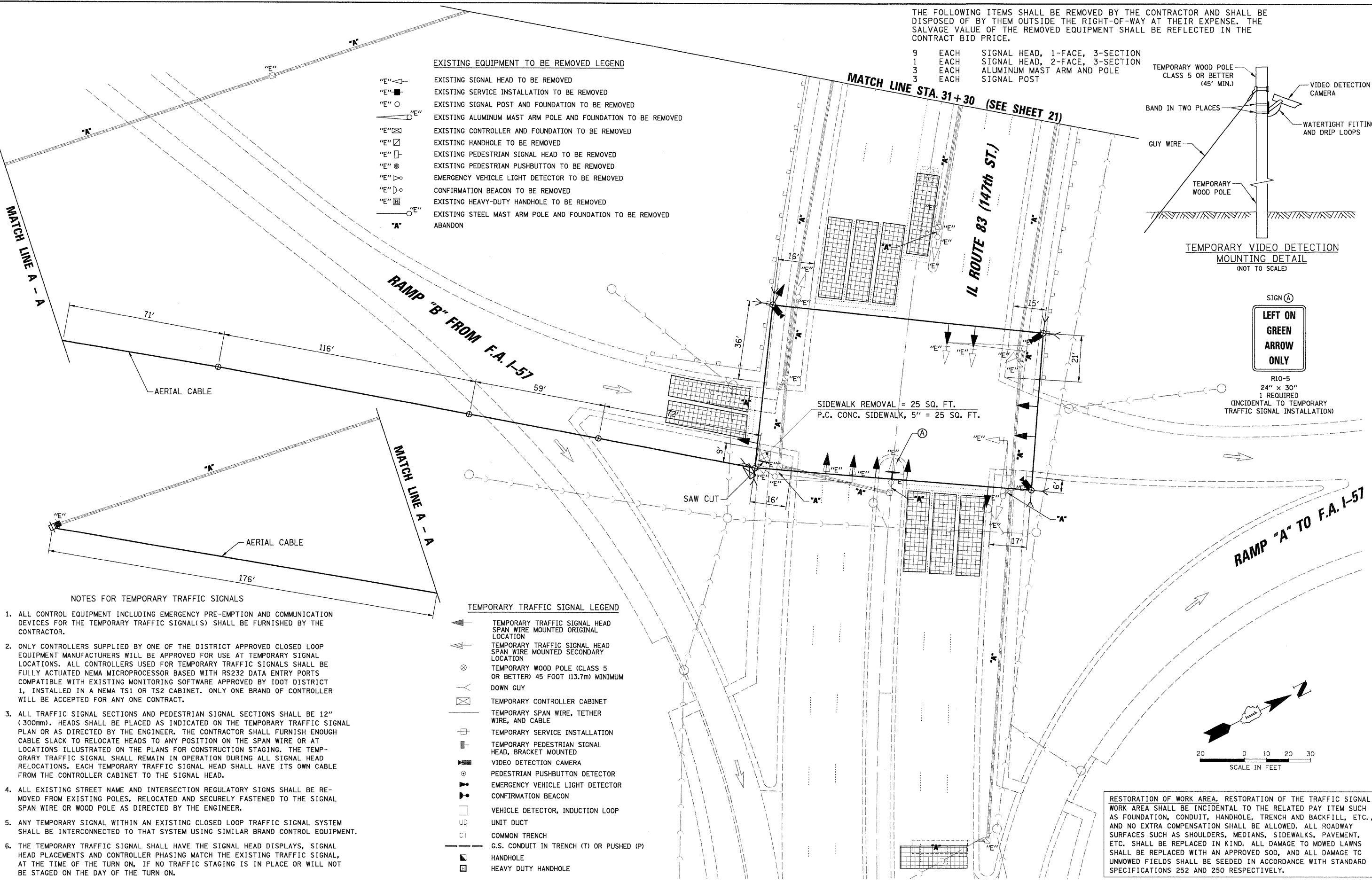
TEMPORARY VIDEO DETECTION MOUNTING DETAIL (NOT TO SCALE)

SIGN (A)  
**LEFT ON GREEN ARROW ONLY**

R10-5  
 24" x 30"  
 1 REQUIRED  
 (INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL INSTALLATION)

- EXISTING EQUIPMENT TO BE REMOVED LEGEND**
- "E" △ EXISTING SIGNAL HEAD TO BE REMOVED
  - "E" ■ EXISTING SERVICE INSTALLATION TO BE REMOVED
  - "E" ○ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
  - "E" □ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
  - "E" ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
  - "E" □ EXISTING HANDHOLE TO BE REMOVED
  - "E" □ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
  - "E" ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
  - "E" ⊙ EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
  - "E" ⊙ EXISTING CONFIRMATION BEACON TO BE REMOVED
  - "E" ⊙ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
  - "E" ⊙ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
  - "A" ABANDON

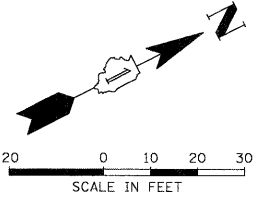
- TEMPORARY TRAFFIC SIGNAL LEGEND**
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
  - △ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
  - ⊙ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM DOWN GUY
  - ⊠ TEMPORARY CONTROLLER CABINET
  - TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
  - ⊠ TEMPORARY SERVICE INSTALLATION
  - ⊠ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
  - ⊙ VIDEO DETECTION CAMERA
  - ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
  - ⊙ EMERGENCY VEHICLE LIGHT DETECTOR
  - ⊙ CONFIRMATION BEACON
  - VEHICLE DETECTOR, INDUCTION LOOP
  - UD UNIT DUCT
  - CI COMMON TRENCH
  - G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
  - HANDHOLE
  - HEAVY DUTY HANDHOLE



**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



FILE NAME =	USER NAME = FPAIONE	DESIGNED - ABR	REVISED -
\\n\dot\888040\TASK 0 - IL 83\Traffic\TMP	I-57Ramp.dgn	DRAWN - FPB	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 11/24/2008	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN  
 IL ROUTE 83 (147th ST.) AND F.A. I-57 RAMPS "A" AND "B"  
 POSEN, ILLINOIS**

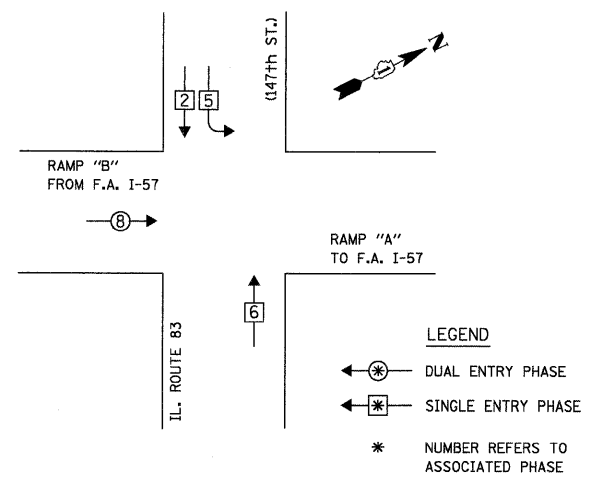
SCALE: 1"= 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	24
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 60F06				



DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ GRADES CHECKED: \_\_\_\_\_  
 ILL. INCTE: \_\_\_\_\_ STRUCTURE NOTATIONS CHECKED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_ NOTE BOOK NO. \_\_\_\_\_  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 8575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-9500

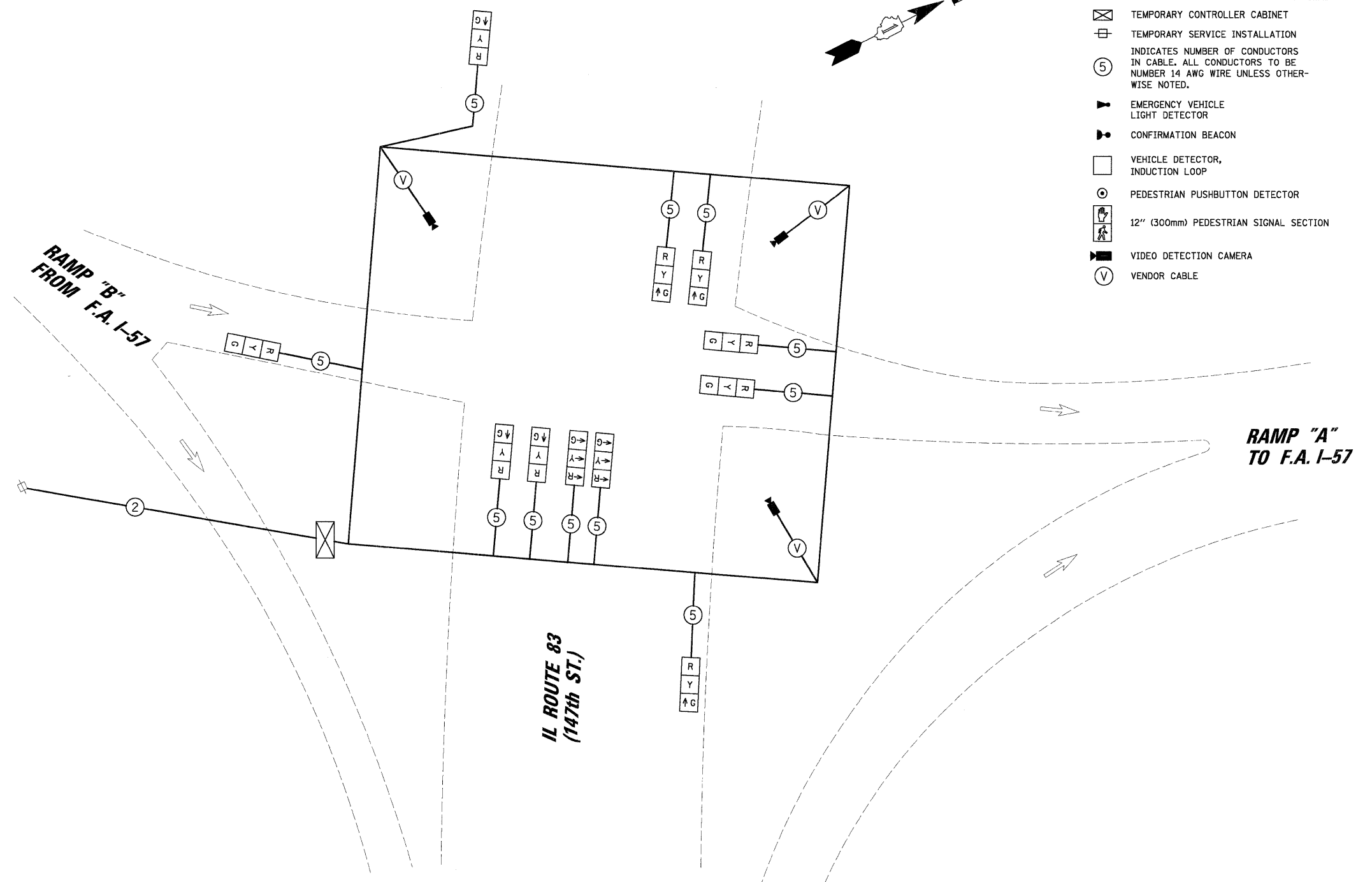
**TEMPORARY CONTROLLER SEQUENCE**



TEMPORARY PHASE DESIGNATION DIAGRAM

**TEMPORARY CABLE DIAGRAM LEGEND**

- R TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- X TEMPORARY CONTROLLER CABINET
- 5 TEMPORARY SERVICE INSTALLATION INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- 5 INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- V EMERGENCY VEHICLE LIGHT DETECTOR
- V CONFIRMATION BEACON
- V VEHICLE DETECTOR, INDUCTION LOOP
- V PEDESTRIAN PUSHBUTTON DETECTOR
- V 12" (300mm) PEDESTRIAN SIGNAL SECTION
- V VIDEO DETECTION CAMERA
- V VENDOR CABLE



**TEMPORARY CABLE PLAN**

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	11	-	17	0.50	93.50
(YELLOW)	11	-	25	0.25	68.75
(GREEN)	11	-	15	0.25	41.25
ARROW	-	-	12	0.10	-
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	-	100	1.00	100.00
ILLUM. SIGN	-	-	25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.00
FLASHER	-	-	-	0.50	-

ENERGY COSTS TO: TOTAL = 453.50  
**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m±L-0.6m)±	
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

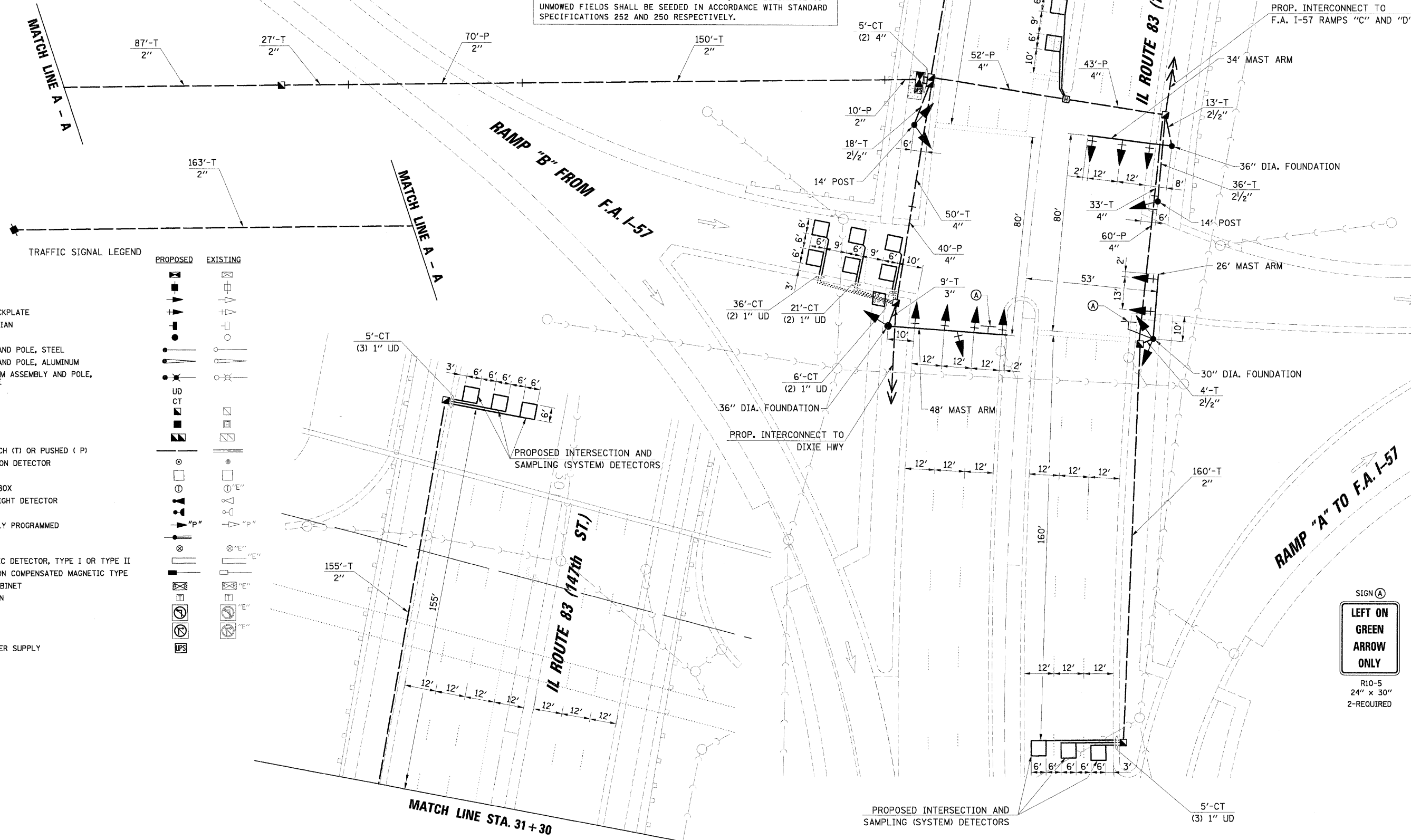
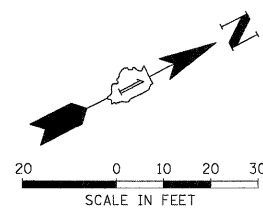
DATE	DATE
BY	BY
PROJECT	PROJECT
NOTE BOOK NO.	NOTE BOOK NO.
DATE	DATE
BY	BY
PROJECT	PROJECT
NOTE BOOK NO.	NOTE BOOK NO.

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 3575 West Higgins Road, Suite 600  
 Burr Ridge, Illinois 60089  
 (847) 823-0500

PROFIT  
 SURVEYED  
 GRADES CHECKED  
 SIGN NOTED  
 REVISIONS NOTATED

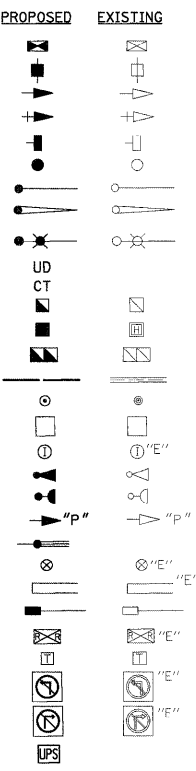
NOTE:  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



**TRAFFIC SIGNAL LEGEND**

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
- UNIT DUCT
- COMMON TRENCH
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- TELEPHONE CONNECTION
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- UNINTERRUPTIBLE POWER SUPPLY



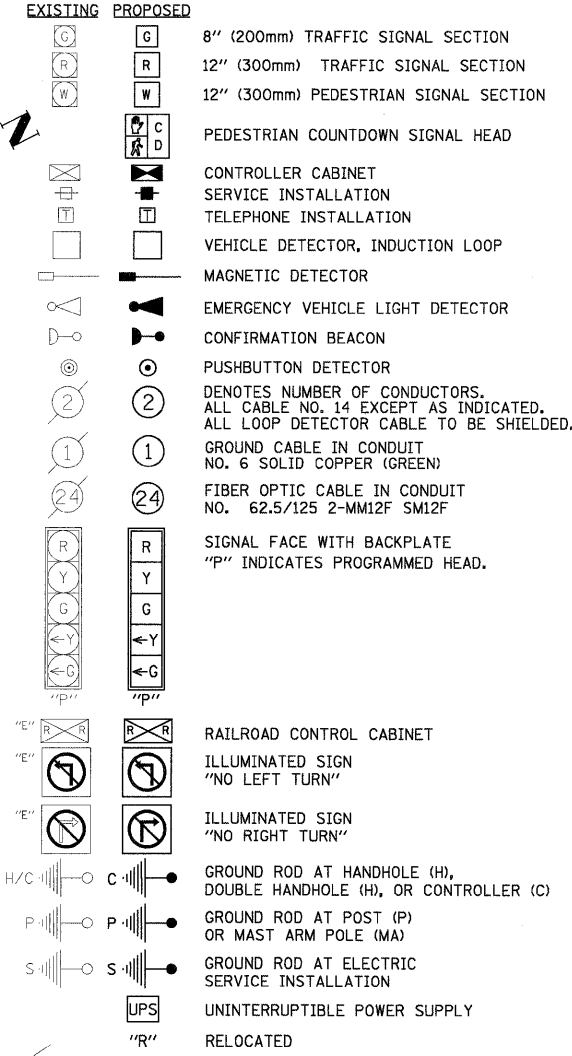
R10-5  
 24" x 30"  
 2-REQUIRED

FILE NAME =	USER NAME = FPACTIONE	DESIGNED - ABR	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN IL ROUTE 83 (147th ST.) AND F.A. I-57 RAMPS "A" AND "B" POSEN, ILLINOIS</b>		F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 26	
PLLOT SCALE = 2"	CHECKED - MJT	REVISIONS -	REVISIONS -		SCALE: 1"= 20'	SHEET NO. OF SHEETS	STA.	TO STA.	CONTRACT NO. 60F06			
PLLOT DATE = 11/24/2008	DATE -	REVISIONS -	REVISIONS -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_

**CHRISTOPHER B. BURKE**  
 ENGINEERING LTD.  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 823-0500

**CABLE PLAN LEGEND**

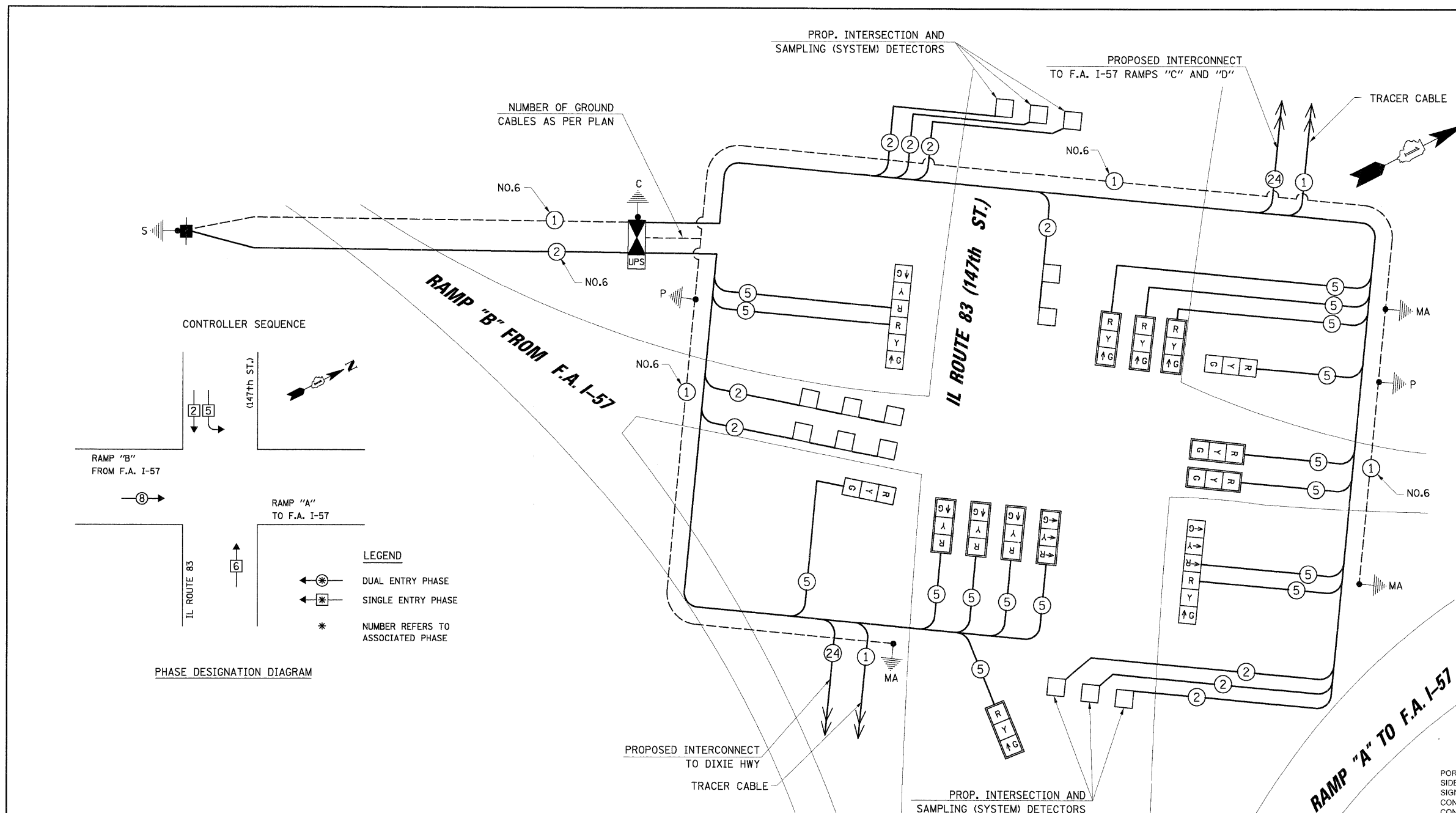


**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	25
SIDEWALK REMOVAL	SQ FT	25
SIGN PANEL - TYPE 1	SQ FT	10
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	822
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	71
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	9
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	93
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	80
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	195
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1047
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 SC	FOOT	2895
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	2269
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	528
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	537
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	7
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	993

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

TYPE	NO. OF LAMPS	WATTAGE XINCAND. LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	17	0.50	136.00
(YELLOW)	16	25	0.25	100.00
(GREEN)	16	15	0.25	60.00
ARROW	-	12	0.10	-
PED. SIGNAL	-	25	1.00	-
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	-	-
FLASHER	-	-	0.50	-

FLASHER TOTAL = 396.00

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m±L-0.6m)±	
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

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		CHECKED - MJT	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM**  
 IL ROUTE 83 (147th ST.) AND F.A. I-57 RAMPS "A" AND "B"  
 POSEN, ILLINOIS

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	27
				CONTRACT NO. 60F06
		ILLINOIS FED. AID PROJECT		



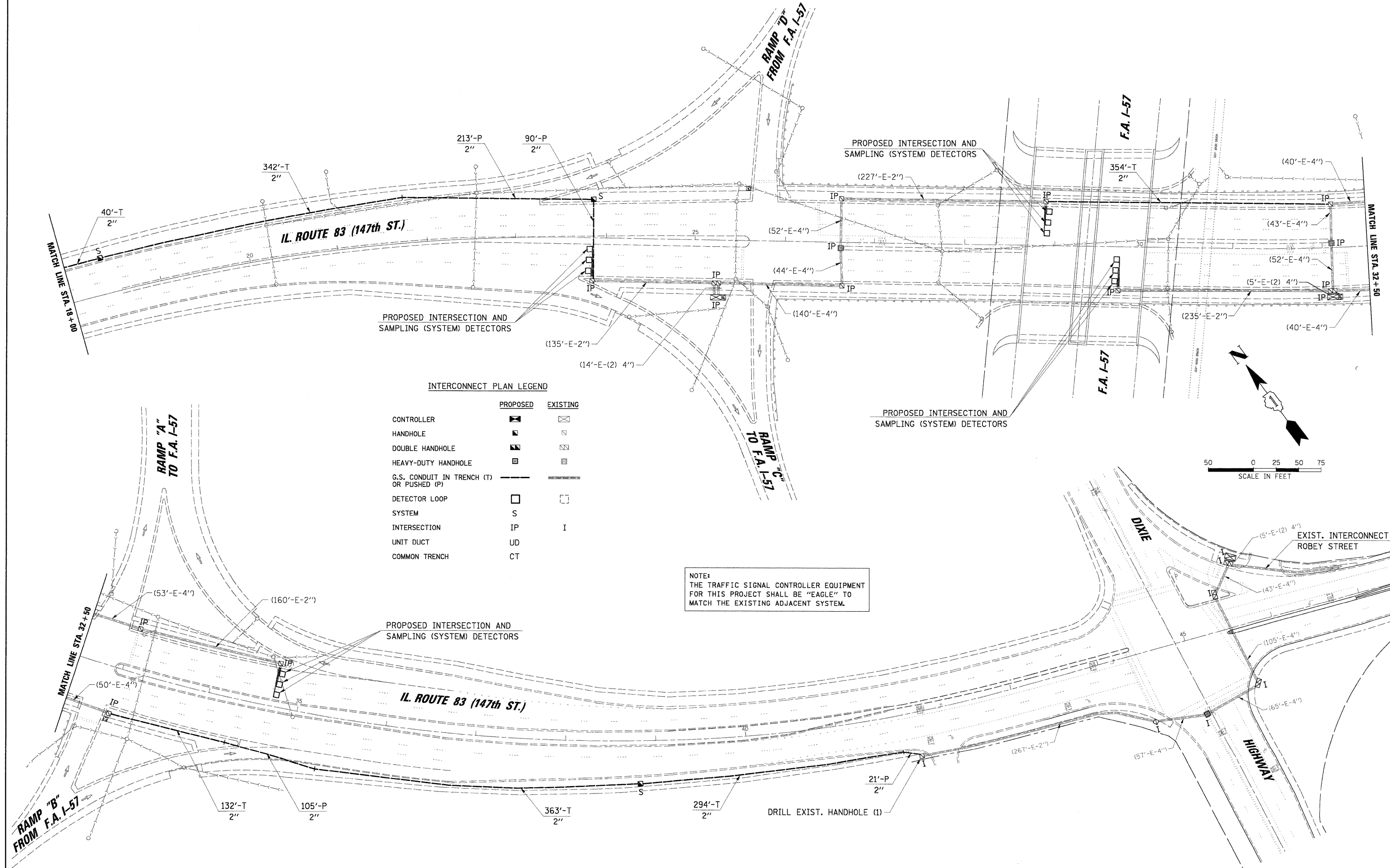




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 PLAN: \_\_\_\_\_  
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 BY: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
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 B.M. NOTED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 NO. OF: \_\_\_\_\_  
 STRUCTURE: \_\_\_\_\_  
 NOTATIONS: \_\_\_\_\_

CHRISTOPHER B. BURKE ENGINEERING LTD.  
 3575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (815) 823-9500



**INTERCONNECT PLAN LEGEND**

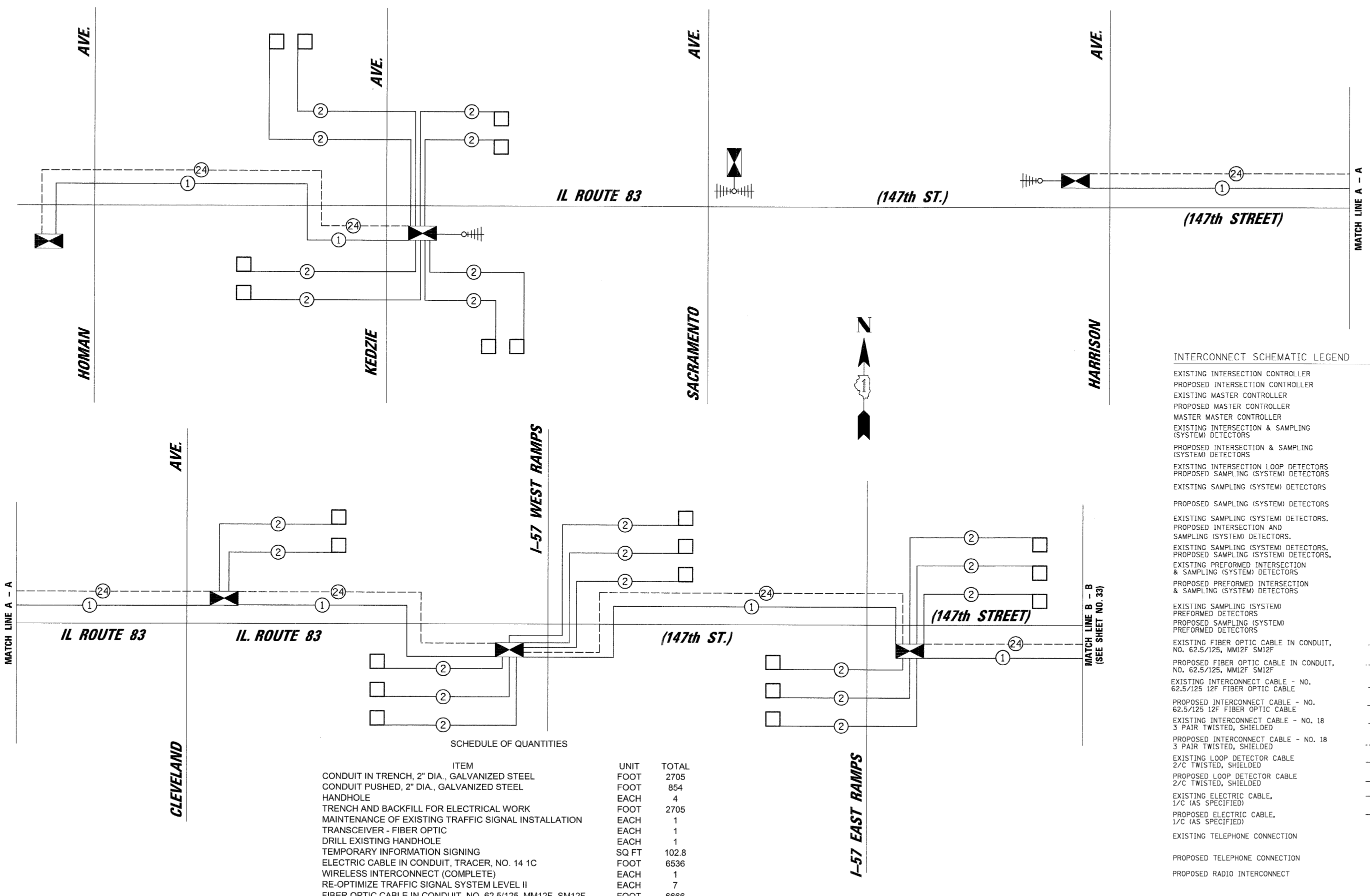
	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
SYSTEM	S	I
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	

NOTE:  
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PROFILE SURVEYED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 PLAN NO. \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STRUCTURE NOTATION CHRG. \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 PLAN NO. \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STRUCTURE NOTATION CHRG. \_\_\_\_\_

BY: \_\_\_\_\_  
 CHRISTOPHER B. BURKE ENGINEERING LTD.  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60618  
 (847) 823-0500

PLAN SURVEYED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
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 RT. OF WAY CHECKED: \_\_\_\_\_  
 PLOTTED FILE NAME: \_\_\_\_\_



**INTERCONNECT SCHEMATIC LEGEND**

EXISTING INTERSECTION CONTROLLER	
PROPOSED INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	
PROPOSED MASTER CONTROLLER	
MASTER MASTER CONTROLLER	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERSECTION LOOP DETECTORS	
PROPOSED SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) DETECTORS	
PROPOSED SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.	
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS	
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	
PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING TELEPHONE CONNECTION	
PROPOSED TELEPHONE CONNECTION	
PROPOSED RADIO INTERCONNECT	

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	2705
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	854
HANDHOLE	EACH	4
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	2705
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	6536
WIRELESS INTERCONNECT (COMPLETE)	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	7
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	6666

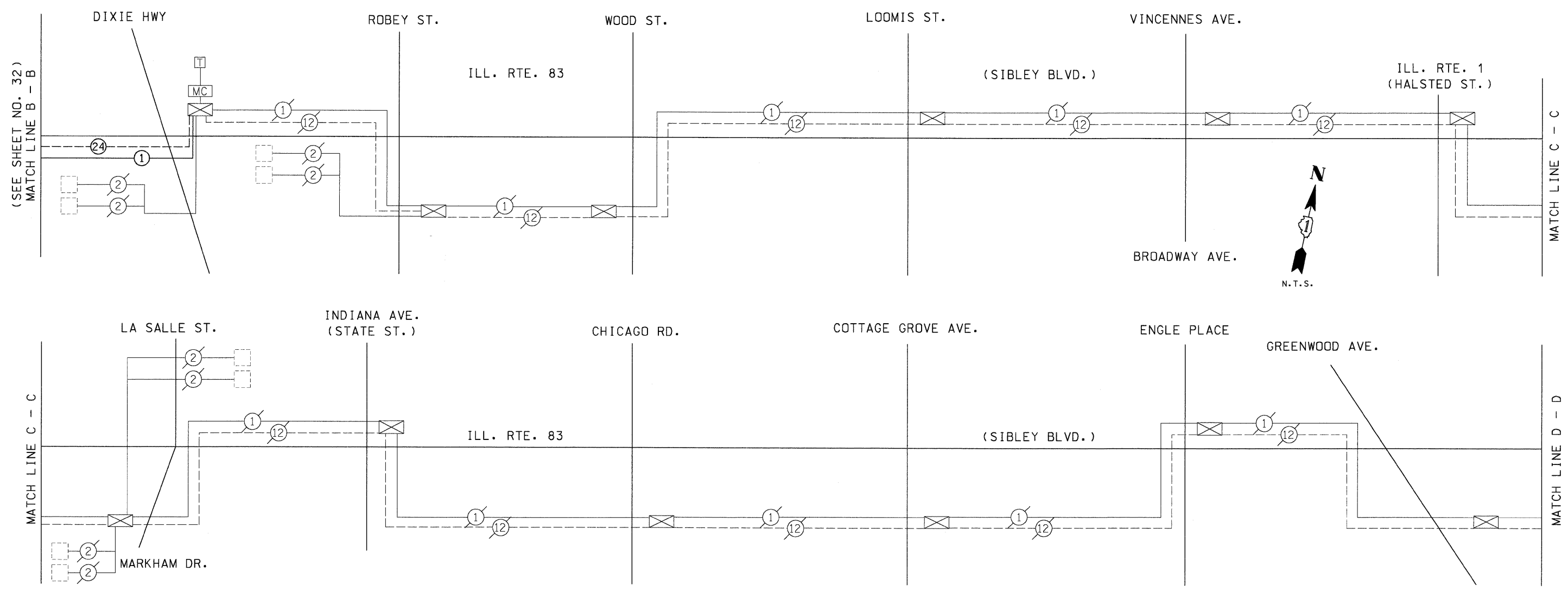
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PLAN  
NOTE BOOK NO.

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
3575 West Higgins Road, Suite 600  
Chicago, Illinois 60618  
(847) 823-0500

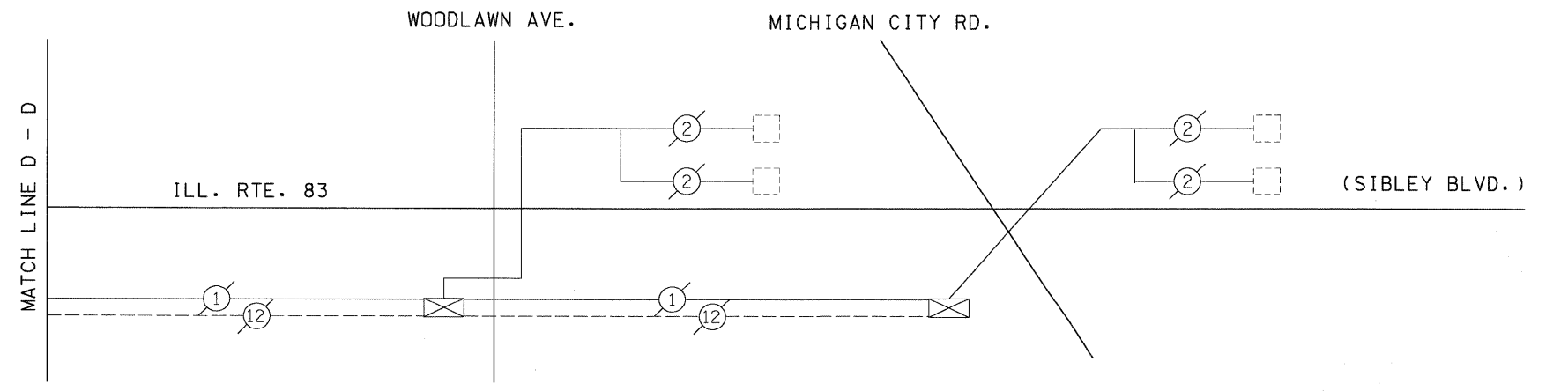
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GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	

PROFILE	
NOTE BOOK NO.	



**INTERCONNECT SCHEMATIC LEGEND**

EXISTING INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
PROPOSED INTERSECTION CONTROLLER		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
EXISTING MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
PROPOSED MASTER CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
MASTER MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING INTERSECTION LOOP DETECTORS		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS		PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	
PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS		EXISTING TELEPHONE CONNECTION	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS		PROPOSED TELEPHONE CONNECTION	
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS			
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS			
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS			
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS			



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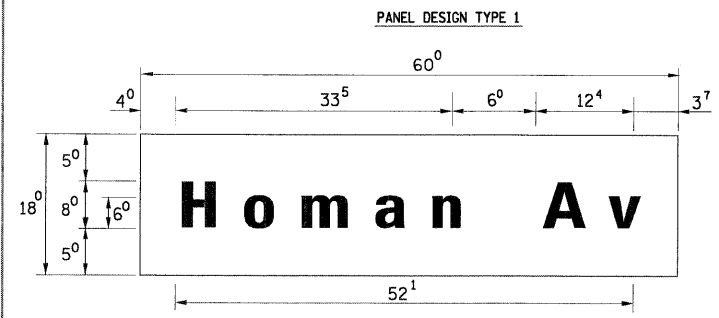
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC  
ILL. ROUTE 83 (SIBLEY BLVD.) FROM DIXIE HIGHWAY TO MICHIGAN CITY ROAD  
POSEN, ILLINOIS**

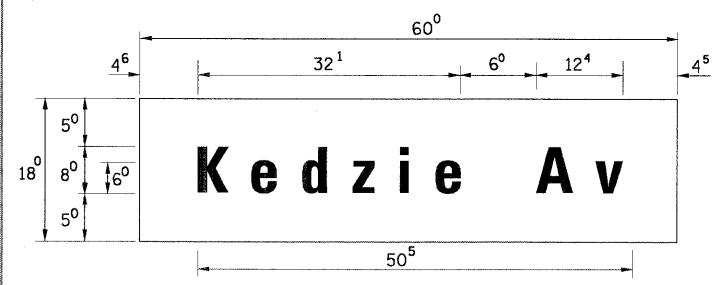
F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 32
SCALE: N.T.S.		SHEET NO. OF SHEETS		STA. TO STA.
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60F06

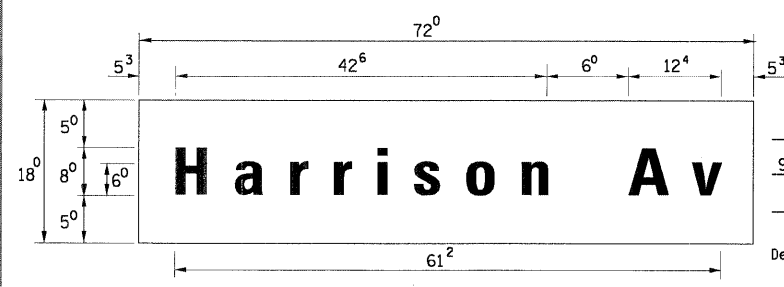
F.A.U. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	33
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



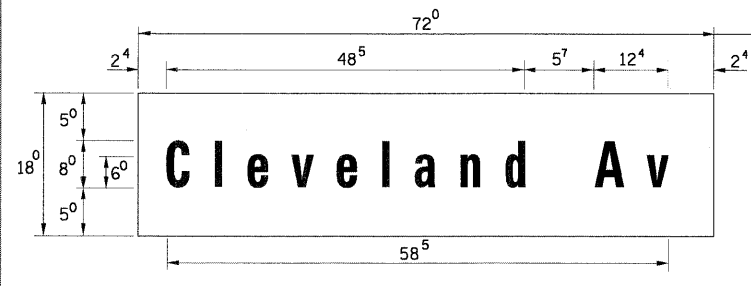
— Sq. M. each  
7.50 Sq. Ft. each  
2 Required  
Design Series D



— Sq. M. each  
7.50 Sq. Ft. each  
2 Required  
Design Series D



— Sq. M. each  
9.00 Sq. Ft. each  
2 Required  
Design Series D

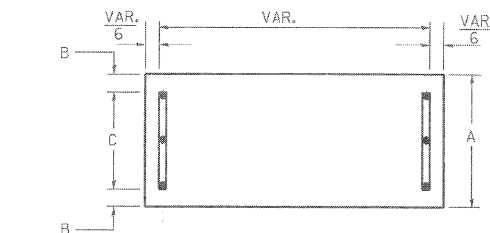


— Sq. M. each  
9.00 Sq. Ft. each  
2 Required  
Design Series D

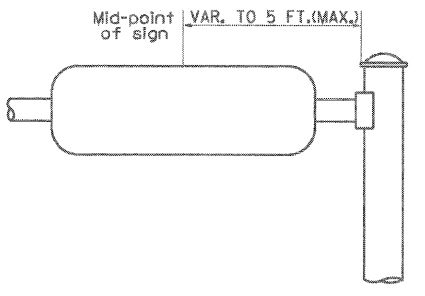
**GENERAL NOTES**

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
  - ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
  - THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
  - ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
  - SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
    - \* A.K.T. CORPORATION \* AMERICAN FABRICATION CO.
    - \* SCHAUMBURG, IL \* CHICAGO HEIGHTS, IL
    - \* TUCKER COMPANY, INC. \* WESTERN TRAFFIC CONTROL, INC.
    - \* WAUWATOSA, WI \* CICERO, IL
- PARTS LISTING**
- SIGN CHANNEL PART \*HPN03 (MED. CHANNEL)  
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
BRACKETS PART \*HPN034 (UNIVERSAL)  
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
- OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

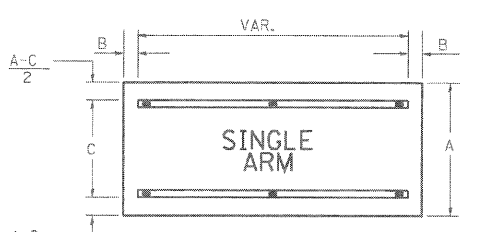
**SUPPORTING CHANNELS**



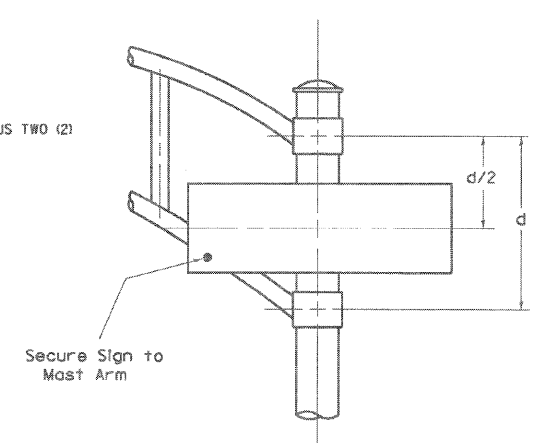
A	B	C
18"	2"	14"



**SUPPORTING CHANNELS**



A	B	C
18"	2"	12"
30"	2"	22"



**DUAL ARM**  
**SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM**  
Shall be used. See Note #5.

Upper Case to Lower Case  
Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2 <sup>3</sup> DENOTES 3/8"

FIRST LETTER	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	goq	mnpru														
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O O R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

Lower Case to Lower Case  
Spacing Chart 6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	goq	mnpru														
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
adhglj	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
imnqu																
bfkops	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

Number to Number  
Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER	SECOND NUMBER																				
	0		1		2		3		4		5		6		7		8		9		
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17	
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21	
2 3 4	14	15	14	15	14	15	12	14	14	15	14	15	11	12	16	17	14	15			
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15	
6	16	17	14	15	14	15	12	14	14	15	14	15	11	12	14	15	14	15			
7	12	14	12	14	14	15	12	14	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	14	14	15	16	17	12	14	16	17	14	15			

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				6 INCH LOWER CASE LETTERS			
	SERIES		SERIES		SERIES		SERIES		SERIES		SERIES	
	C	D	C	D	C	D	C	D	C	D	C	D
A	36	50	50	65	a	35	42					
B	32	40	43	53	b	35	42					
C	32	40	43	53	c	35	41					
D	32	40	43	53	d	35	42					
E	30	35	40	47	e	35	42					
F	30	35	40	47	f	23	26					
G	32	40	43	53	g	35	42					
H	32	40	43	53	h	35	42					
I	07	07	11	12	i	11	11					
J	30	36	40	50	j	20	22					
K	32	41	43	54	k	35	42					
L	30	35	40	47	l	11	11					
M	37	45	51	61	m	60	70					
N	32	40	43	53	n	35	42					
O	34	42	45	55	o	36	43					
P	32	40	43	53	p	35	42					
Q	34	42	45	55	q	35	42					
R	32	40	43	53	r	26	32					
S	32	40	43	53	s	36	42					
T	30	35	40	47	t	27	32					
U	32	40	43	53	u	35	42					
V	35	44	47	60	v	42	47					
W	44	52	60	70	w	55	64					
X	34	40	45	53	x	44	51					
Y	36	50	50	66	y	46	53					
Z	32	40	43	53	z	36	43					

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	12	14	15	20
2	32	40	43	53
3	32	40	43	53
4	35	43	47	57
5	32	40	43	53
6	32	40	43	53
7	32	40	43	53
8	32	40	43	53
9	32	40	43	53
0	34	42	45	55

REVISIONS	
NAME	DATE
CREATED	2/79
D.A.Z./ D.A.G.	11/90
	6/98
CADD	10/01/00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
MAST ARM MOUNTED  
STREET NAME SIGNS  
SCALE: NONE  
DRAWN BY TJR  
CHECKED BY RFK  
TS 2



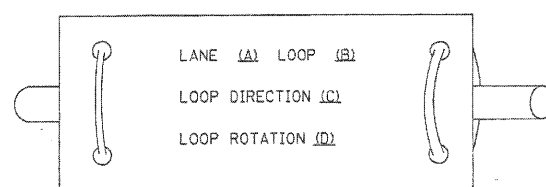


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEET NO.
1602	2008-054 TS	COOK	40
STA.	TO STA.		35
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

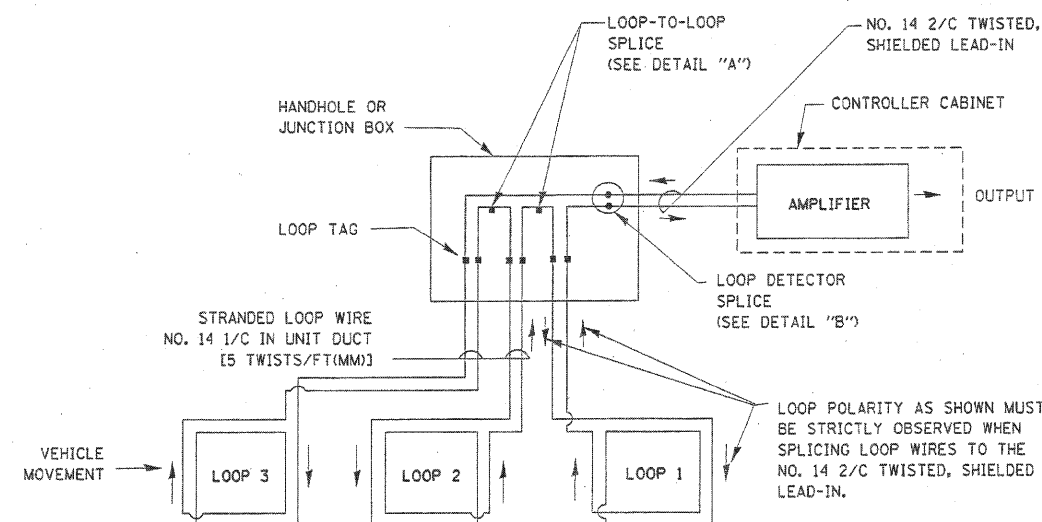
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

**LOOP LEAD-IN CABLE TAG**

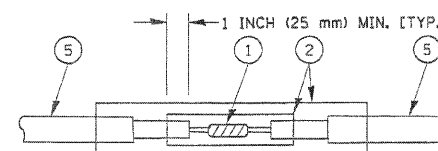


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

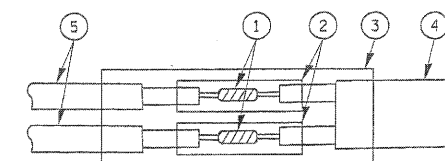


**DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



**DETAIL "A"  
LOOP-TO-LOOP SPLICE**



**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**LOOP DETECTOR SPLICE**

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

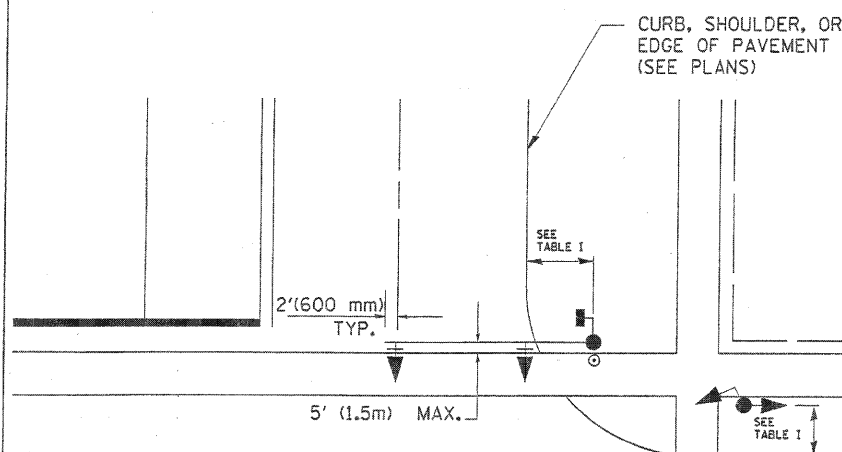
SCALE: VERT. NONE  
HORIZ. NONE  
DATE 1-01-02

DRAWN BY: RWP  
DESIGNED BY: DAZ  
CHECKED BY: DAZ  
SHEET 1 OF 4

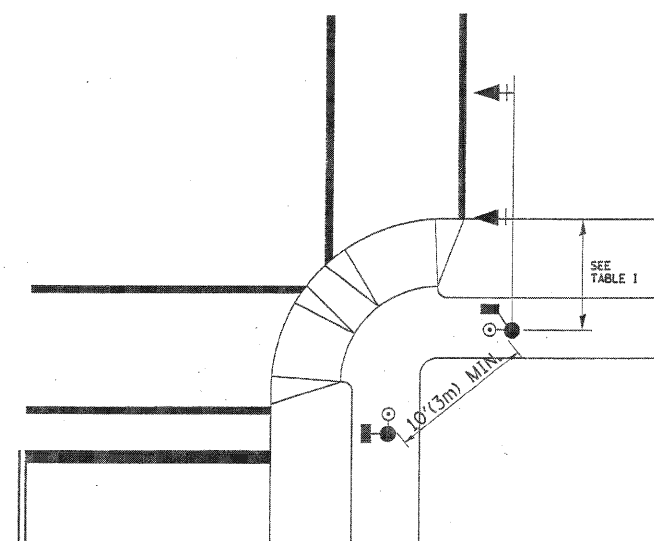
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	36
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**TRAFFIC SIGNAL MAST ARM AND POST**

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



**PEDESTRIAN SIGNAL PUSHBUTTON**



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**NOTES:**

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.  
  
AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.  
  
PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:  
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.  
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.  
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.  
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).  
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK.
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

**PEDESTRIAN SIGNAL POST**

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

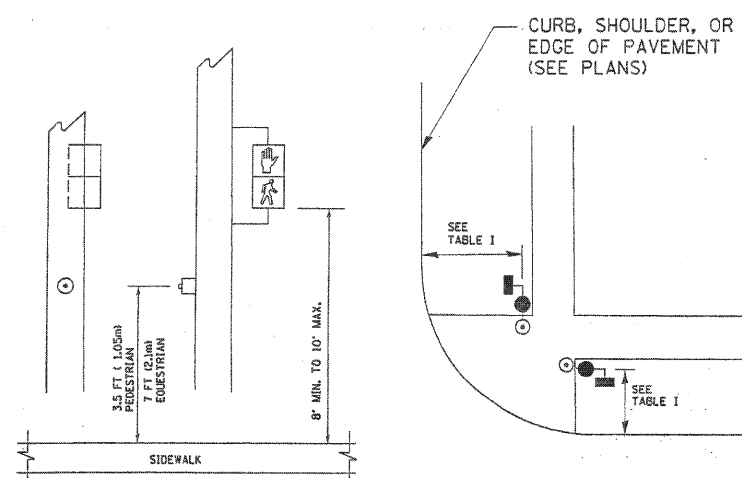


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE

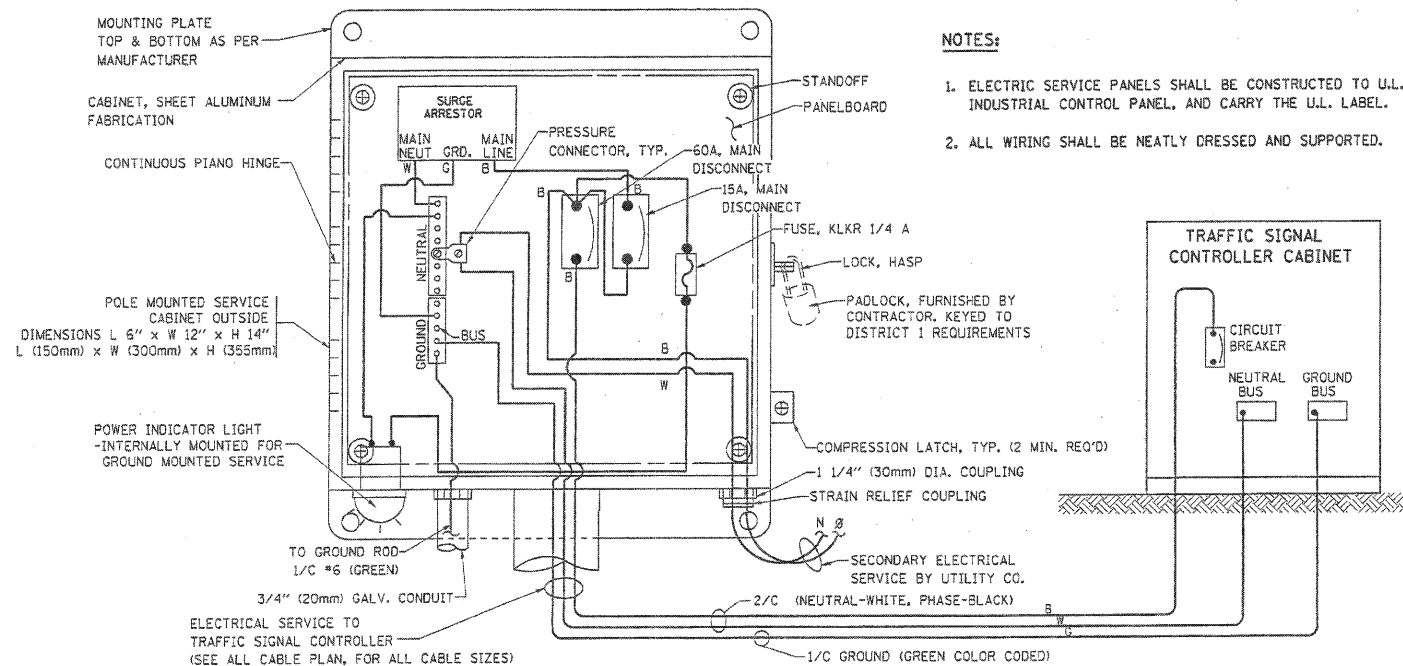
ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

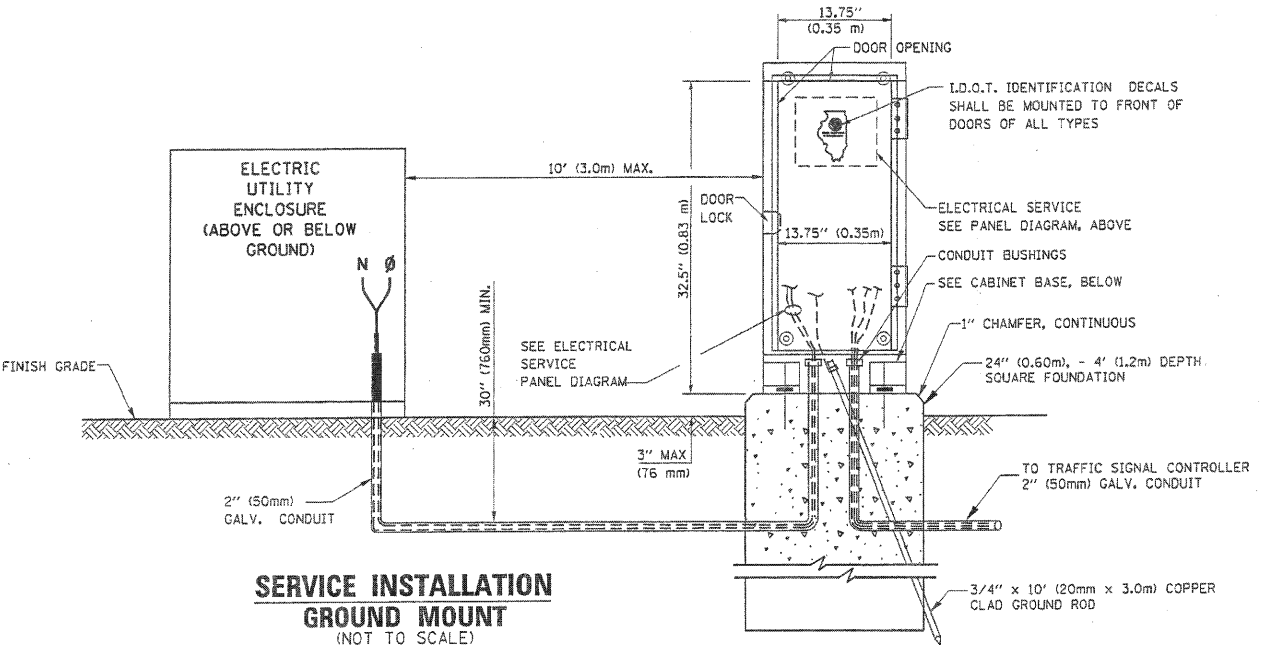
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HORIZ. DATE 1-01-02

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 2 OF 4

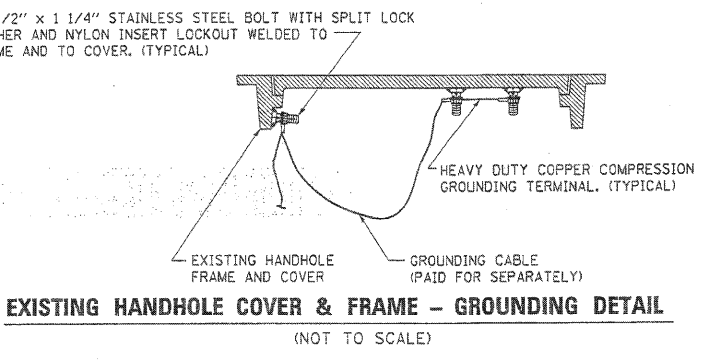
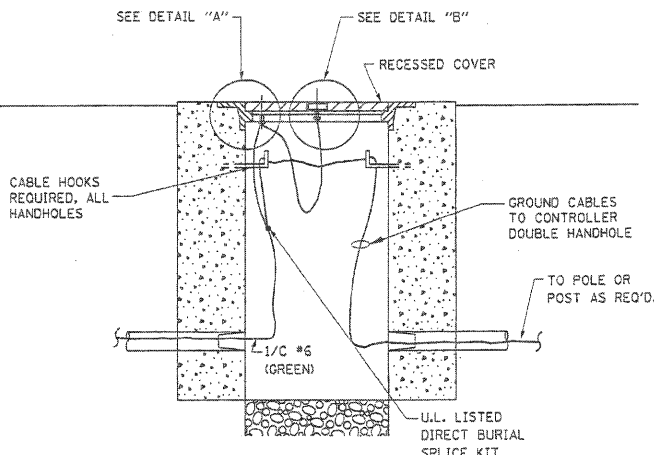
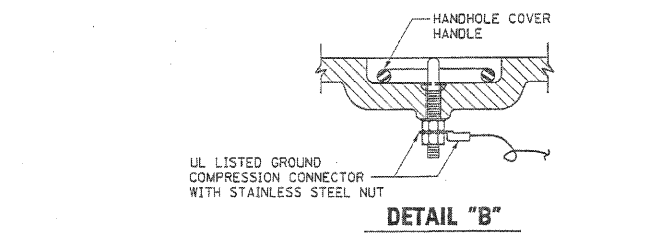
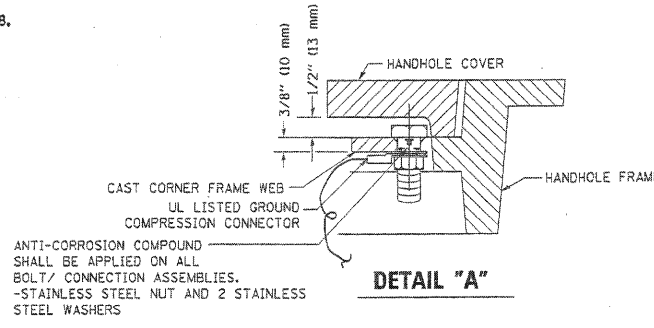
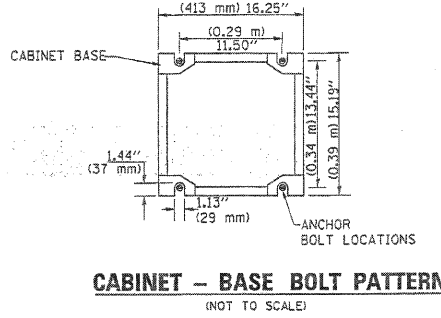
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	37
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)

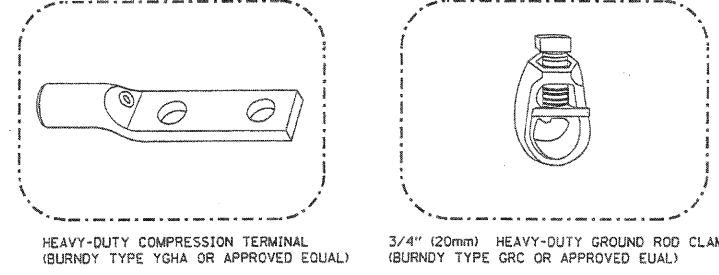


**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

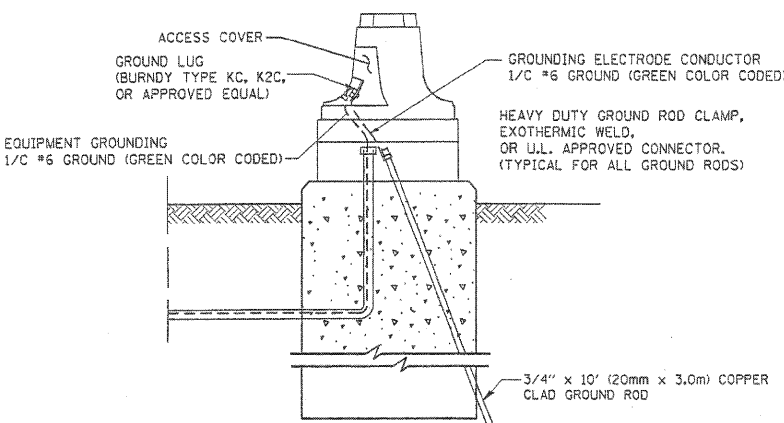


**GROUNDING SYSTEM**

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**MAST ARM POLE / POST-GROUNDING DETAIL**  
 (NOT TO SCALE)

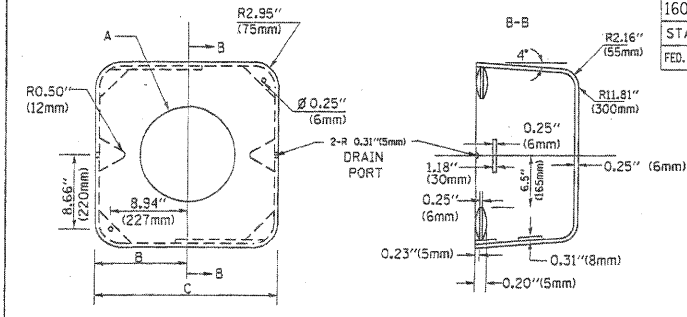
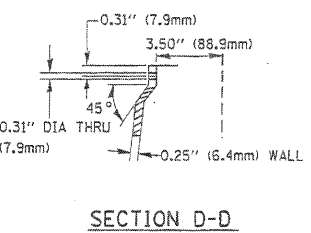
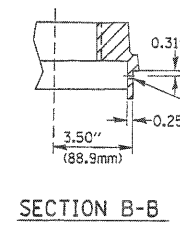
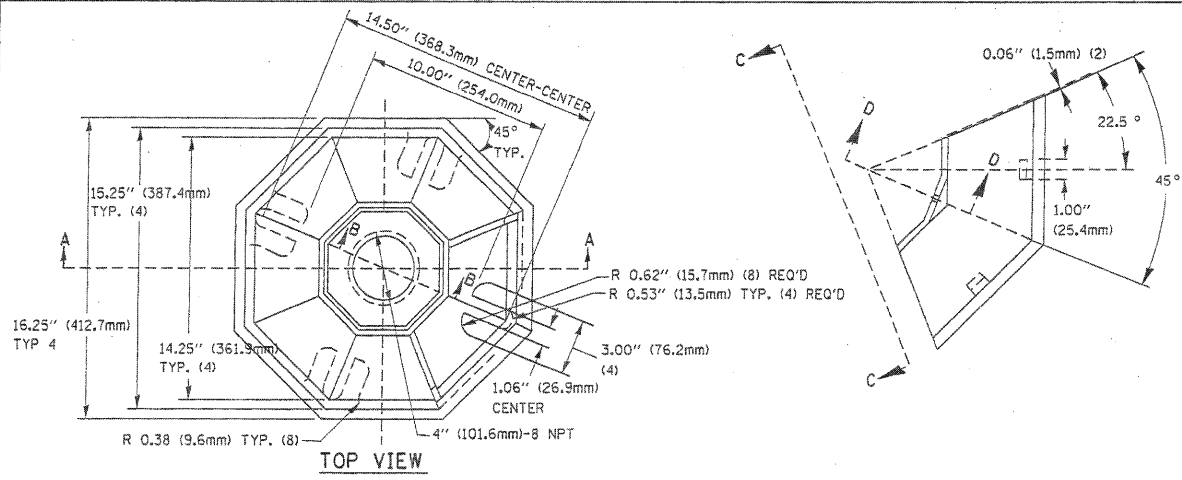
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
 STANDARD TRAFFIC SIGNAL  
 DESIGN DETAILS

VERT. NONE  
 SCALE: HORIZ. NONE  
 DATE 1-01-02

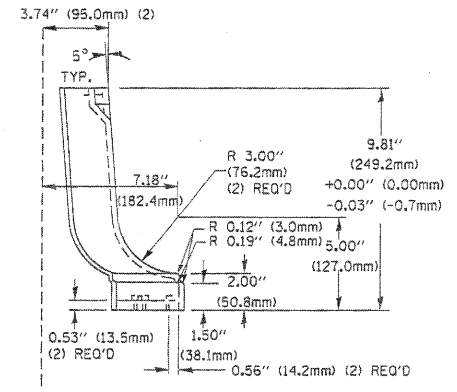
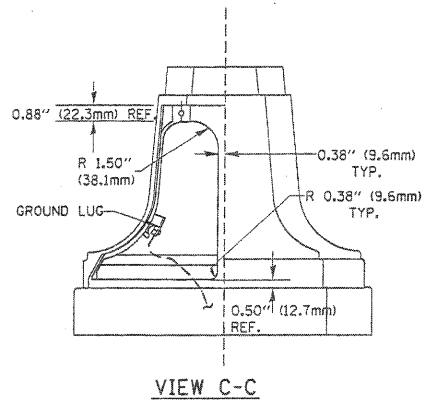
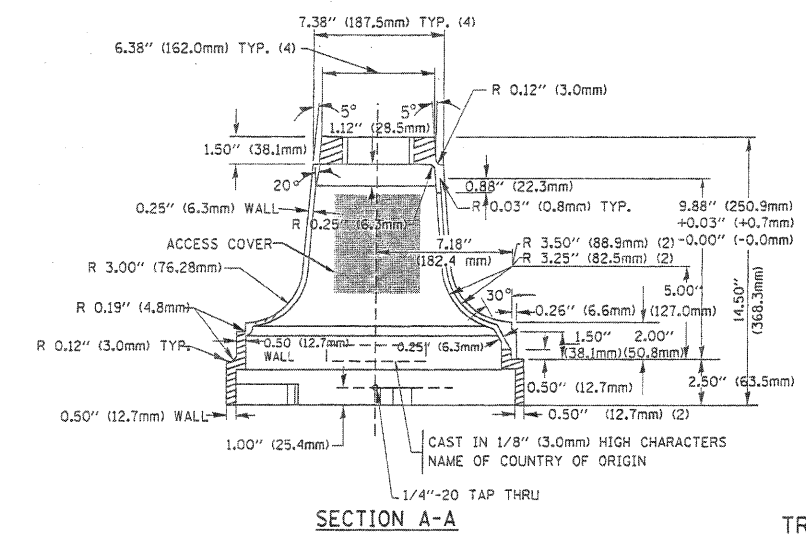
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 DESIGNED BY: DAZ  
 CHECKED BY: DAZ  
 SHEET 3 OF 4

F.A.U. RIE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	38
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

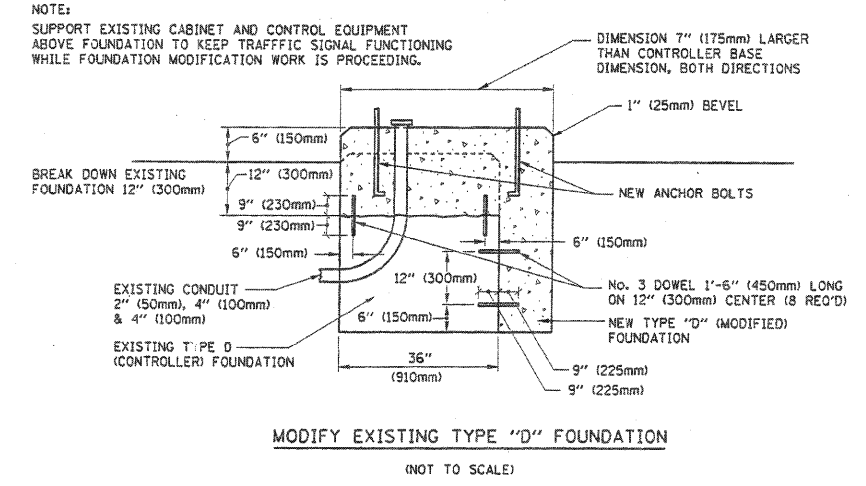


TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125" (257mm)	9.5" (241mm)	19" (483mm)	12" (300mm)	24kg
II	∅ 11.125" (283mm)	10.75" (273mm)	21.5" (546mm)	12" (300mm)	26kg

MATERIAL:  
 - ASTM A48 CLASS 30 GREY IRON  
 - ASTM A123 HOT DIPPED GALVANIZED

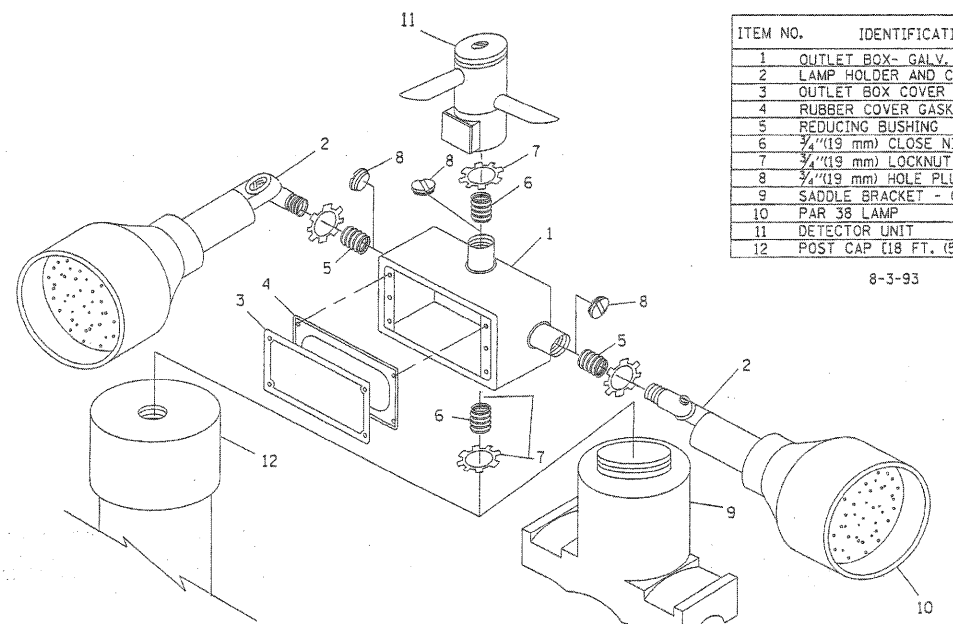


TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



NOTE:  
 SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.

MODIFY EXISTING TYPE "D" FOUNDATION

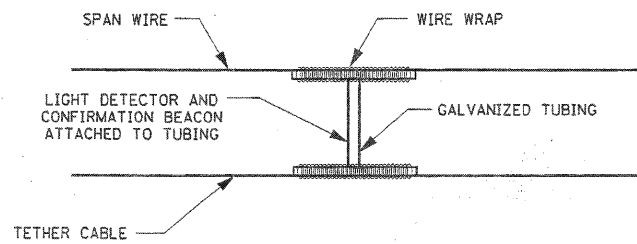


ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

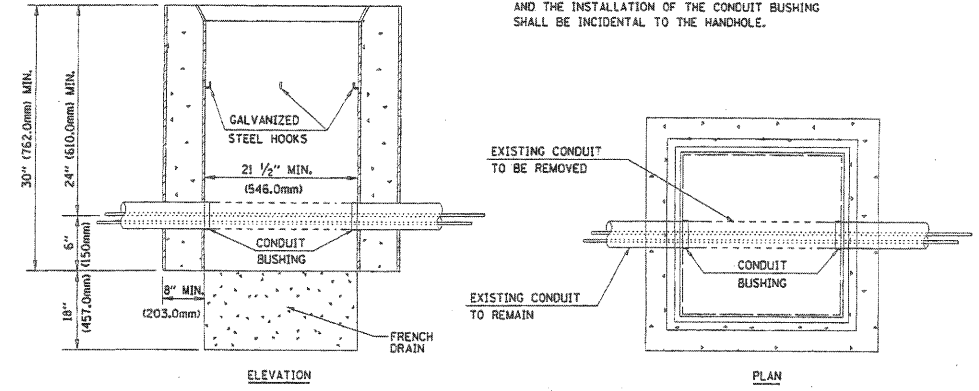
NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

POST CAP MOUNT  
 MAST ARM MOUNT  
 EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS (NOT TO SCALE)



NOTES:  
 1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.

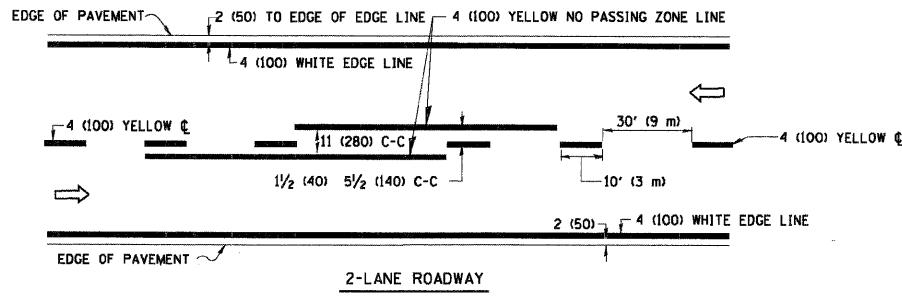
DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT N.T.S.

REVISIONS	
NAME	DATE

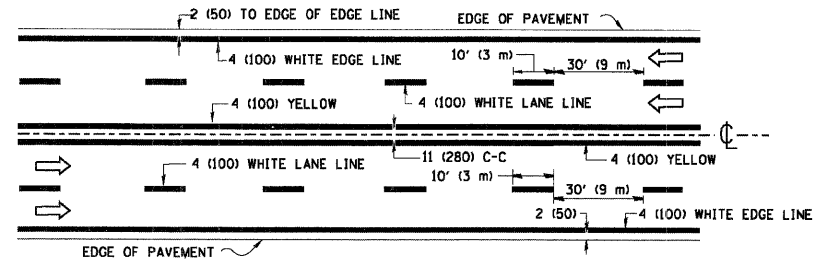
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE  
 HORIZ. 1-01-02  
 DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 4 OF 4

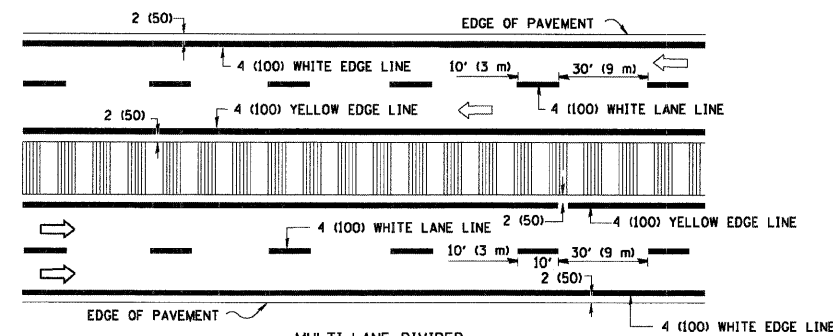
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	39
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



2-LANE ROADWAY



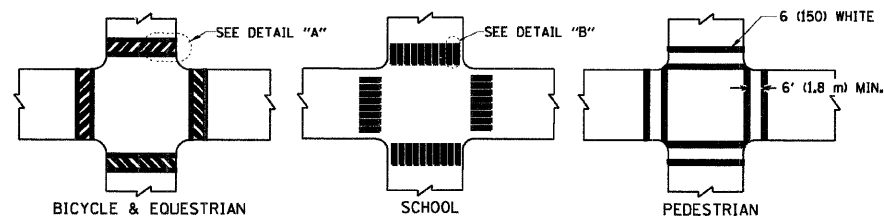
MULTI-LANE UNDIVIDED



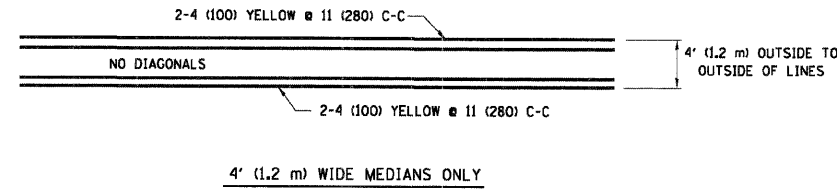
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIUM

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

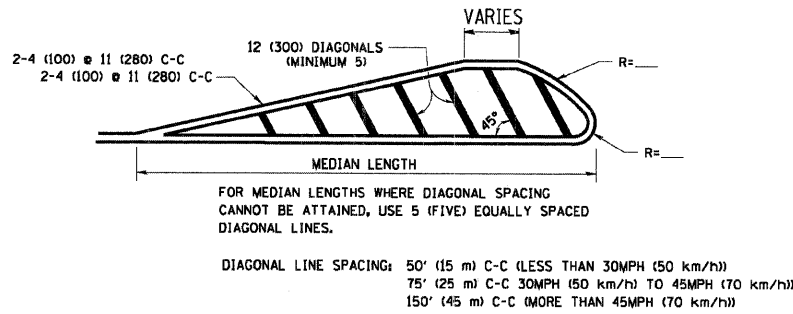
TYPICAL LANE AND EDGE LINE MARKING



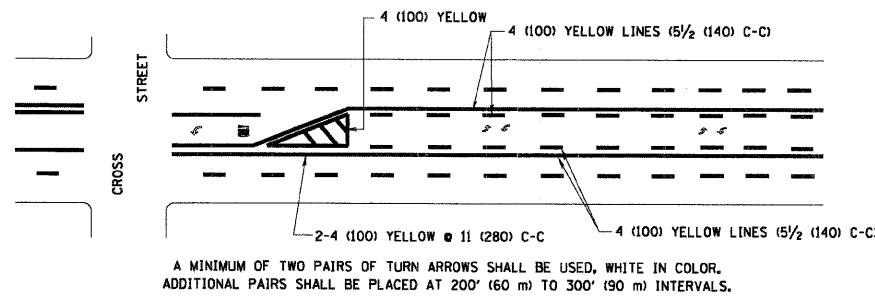
TYPICAL CROSSWALK MARKING



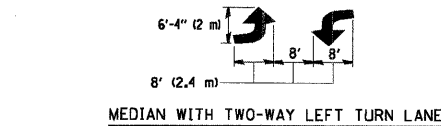
4' (1.2 m) WIDE MEDIANS ONLY



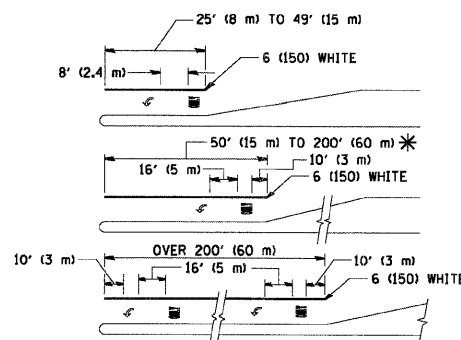
MEDIANS OVER 4' (1.2 m) WIDE



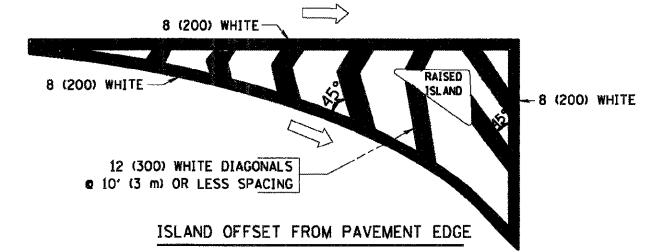
TYPICAL PAINTED MEDIAN MARKING



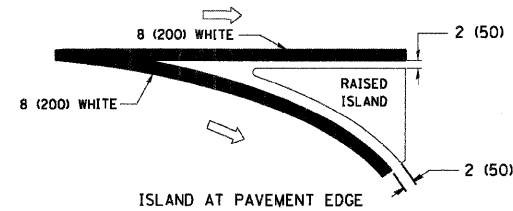
TYPICAL LEFT (OR RIGHT) TURN LANE



TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
TYPICAL PAVEMENT  
MARKINGS

SCALE: NONE

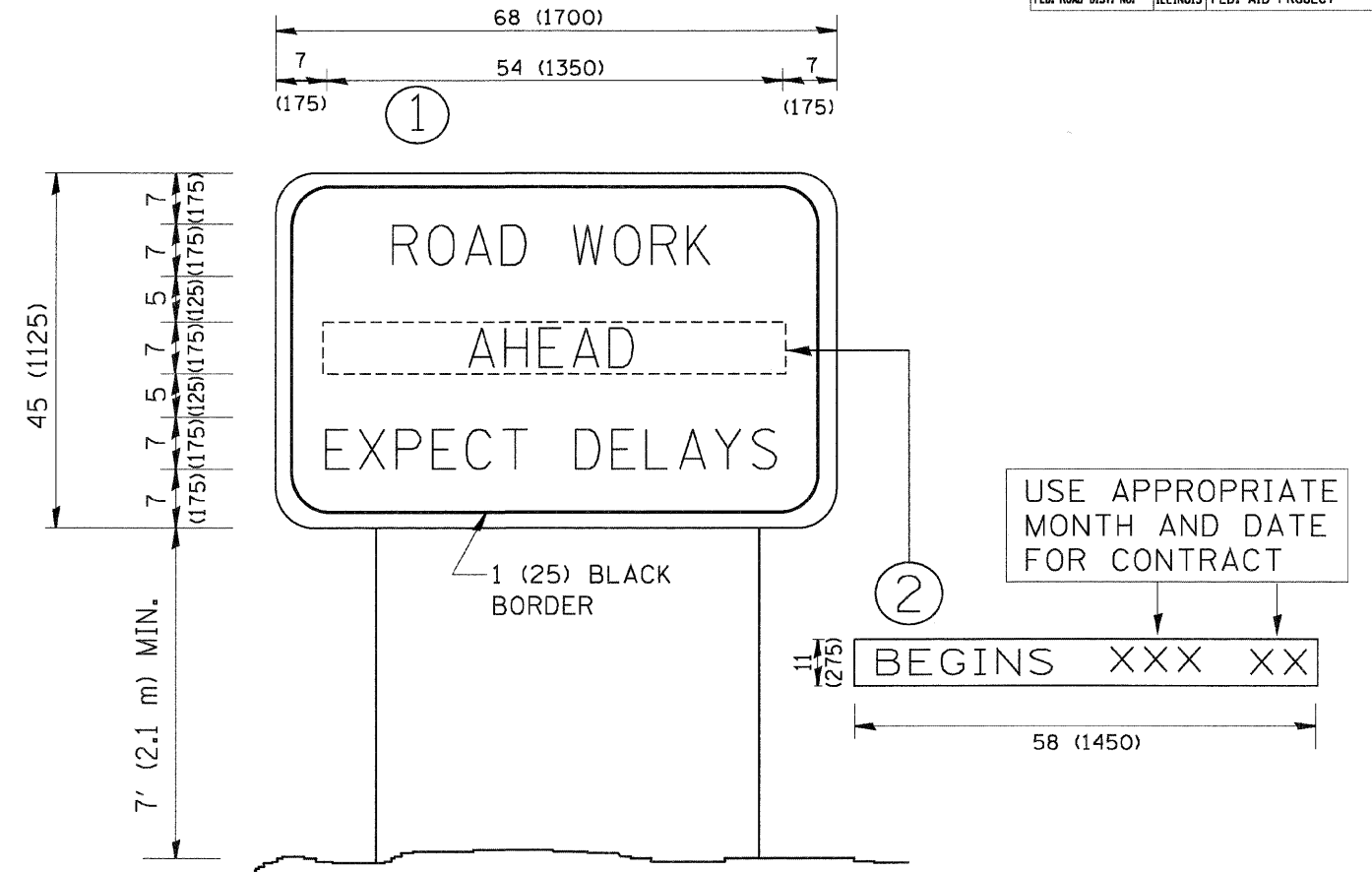
DRAWN BY CADD

CHECKED BY

TC-13



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	40
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. WIRS	9-15-97
R. WIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE

DRAWN BY DESIGN  
CHECKED BY

N:\B1\do\10080040\TASK 0 - IL 83\11-07\FIC\BDET-Ar-tr-dim.r.dgn