F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60F98		

D-91-312-09

INDEX OF SHEETS

IDOT STANDARDS:

424001-05	CURB RAMPS FOR SIDEWALKS
701001-02	OFF-RD OPERATIONS, 2L, 2W MORE THAN 15' (4.5m) AWAY
701011-02	OFF-RD OPERATIONS, 2L, 2W, DAY ONLY
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, 2L, 2W,, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701421-02	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS > 45 MPH TO 55 MPH
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-03	URBAN LANE CLOSURE, 2L, 2W, BIDIRECTIONAL LEFT TURN LANE
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	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
886001-01	DETECTOR LOOP INSTALLATION
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
877001-03	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877011-04	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-07	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

0 100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 60F98

BUREAU OF TRAFFIC, DISTRICT ONE: STEPHEN TRAVIA / DARYLE DREW (847) 705-4420

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

DISTRICT 1
HIGHWAY SAFETY IMPROVEMENT PROJECT

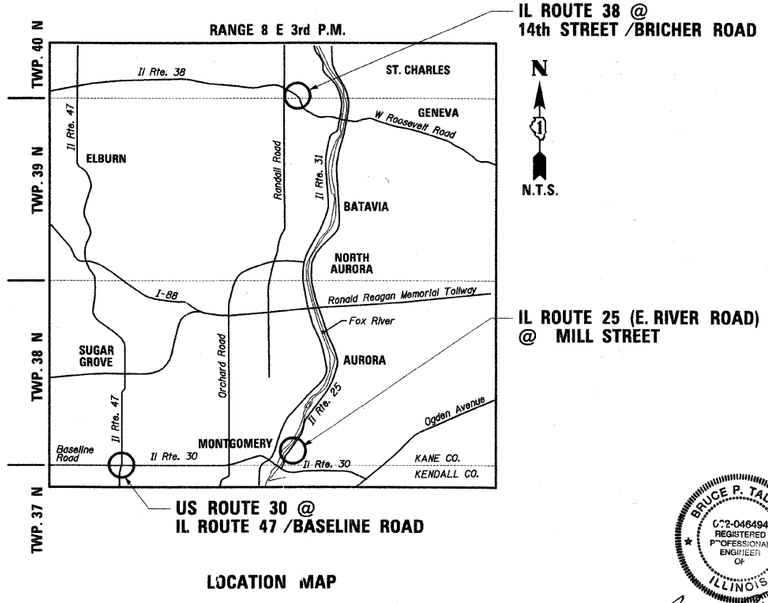
FAU 2503 (IL ROUTE 25- EAST RIVER ROAD) @ MILL STREET
FAP 347 (IL ROUTE 38)@ 14TH STREET/BRICHER ROAD
FAP 349 (US ROUTE 30)@ IL ROUTE 47/BASELINE ROAD

KANE COUNTY

PROJECT: HSIP-0005(669)

SECTION 2009-003 TS

C-91-312-09



LOCATION MAP

LOCATION OF SECTION INDICATED THUS: –■–

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Jan. 30 20 09
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 27, 20 09
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT
March 27, 20 09
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

BRUCE P. TALBOT
062-046494
REGISTERED PROFESSIONAL ENGINEER
OF
ILLINOIS
Bruce Talbot 01-26-09
Expires 11-30-09

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 (HEREINAFTER REFEREED TO AS THE "STANDARD SPECIFICATIONS"); THE LATEST "SUPPLEMENTAL SPECIFICATIONS" AND "RECURRING SPECIAL PROVISIONS"; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

2. ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

3. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. (1-800-892-0123) AT LEAST 10 DAYS PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. ALL UTILITIES MUST BE NOTIFIED AND STAKED PRIOR TO CONSTRUCTION.

4. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL NOTIFY THE ENGINEER AT ONCE OF ANY DISCREPANCIES.

5. THE CONTRACTOR IS REQUIRED TO ATTEND AN ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) PRECONSTRUCT ION MEETING AND SHALL INFORM THE IDOT TRAFFIC ENGINEER BEFORE WORK COMMENCES.

6. THE CONTRACTOR SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING SAFE AND HEALTHFUL CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE INCURRED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

9. THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

10. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS AND 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 THE STANDARD SPECIFICATIONS 252 AND 250, RESPECTIVELY.

11. CONTROLLER CABINETS SHALL BE PLACED SO THAT a) THE DOORS OPEN AWAY FROM THE CURB OR TRAVEL WAY., b) AND THE TRAFFIC MOVEMENTS AT THE INTERSECTION ARE VISIBLE FROM THE CONTROLLER.

12. ANY CONTROLLER CABINET WHETHER NEW OR EXISTING TO RECIEVE UPS, WILL HAVE A "L" SHAPED 4 FEET CONCRETE MAINTENANCE PAD INSTALLED. SEE PLANS FOR DETAIL. THE COST OF INSTALLATION OF CONCRETE PAD IS INCIDENTAL TO NEW CONTROLLER AND OR UPS INSTALLATIONS.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352069\ 02-GENNOTES.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	2
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

				CONSTRUCTION TYPE CODE (1)	(2)	(3) YD31-1F
PAY CODE NUMBER	SUMMARY OF TRAFFIC SIGNAL QUANTITIES ITEM	UNIT	TOTAL QUANTITY URBAN	IL 25 @ MILL ST. QTY FAU 2503	IL 38 @ 14TH ST. QTY FAP 347	U.S. 30 @ IL 47 QTY FAP 349
67100100	MOBILIZATION	L SUM	1	0.33	0.33	0.34
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.33	0.33	0.34
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	0.33	0.33	0.34
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.33	0.33	0.34
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.33	0.33	0.34
⊛ 72000200	SIGN PANEL, TYPE 2	SQ FT	55	30		25
⊛ 72400710	RELOCATE SIGN PANEL- TYPE 1	SQ FT	45.5	28.5		17
⊛ 72400720	RELOCATE SIGN PANEL- TYPE 2	SQ FT	25		25	
⊛ 78000200	THERMOPLASTIC PAVEMENT MARKING- LINE 4"	FOOT	2190			2190
⊛ 78000400	THERMOPLASTIC PAVEMENT MARKING- LINE 6"	FOOT	100			100
⊛ 78000600	THERMOPLASTIC PAVEMENT MARKING- LINE 12"	FOOT	1296	951	272	73
⊛ 78000650	THERMOPLASTIC PAVEMENT MARKING- LINE 24"	FOOT	214	93	71	50
⊛ 78300400	THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	1517	254	419	844
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	393	393		
81000700	CONCUIT IN TRENCH, 2½" DIA., GALVANIZED STEEL	FOOT	132	25	47	60
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20	20		
81018500	CONDUIT PUSHED, 2 " DIA., GALVANIZED STEEL	FOOT	153	153		
81018600	CONDUIT PUSHED, 2½" DIA., GALVANIZED STEEL	FOOT	66	66		
81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	86	86		
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	184	184		
81400100	HANDHOLE	EACH	3	3		
81400200	HEAVY-DUTY HANDHOLE	EACH	2	2		
81400300	DOUBLE HANDHOLE	EACH	1	1		
81603035	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	114		114	
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	545	438	47	60
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1	
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	820	632	188	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1904	838	419	647
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3842	1708	923	1211
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1404	537	426	441
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	977	977		
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	49	49		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1	1		
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2	2		
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	3	1		2
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1			1
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1	1		
87700230	STEEL MAST ARM ASSEMBLY AND POLE,38 FT.	EACH	1			1
87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	2		2	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12	12		
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4		
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45	15		30
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	75	15	30	30
87900200	DRILL EXISTING HANDHOLE	EACH	8	2	2	4
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	14	6	6	2
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2	2		
88030080	SIGNAL HEAD, L.E.D, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4			4
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	2	2	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	8	2	4	2
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1			1
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3		2	1
88030320	SIGNAL HEAD, L.E.D, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED	EACH	1			1
88102717	PEDESTRIAN SIGNAL HEAD, L.E.D, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4	2	2	
88102747	PEDESTRIAN SIGNAL HEAD L.E.D, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3	2	1	
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	26	8	10	8
88500100	INDUCTIVE LOOP DETECTOR	EACH	4	4		
88600100	DETECTOR LOOP, TYPE I	FOOT	287	287		
* 88700200	LIGHT DETECTOR	EACH	3			3
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1			1
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	1		1
89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	5	4	1	
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2		2	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	8173	5182	1700	1291
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3	1	1	1
89502380	REMOVE EXISTING HANDHOLE	EACH	5	5		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	18	12	2	4
XX006958	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1			1
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	102.8	34.3	34.2	34.3
X0323986	RELOCATE EXISTING VIDEO VEHICLE DETECTOR	EACH	1			1
X0322881	TREE TRIMMING	EACH	2	2		
X0323412	REMOVE EXISTING SERVICE INSTALLATION	EACH	1	1		
X0325705	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	2		1	1
X8440102	RELOCATE EXISTING LUMINAIRE	EACH	2		2	
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1544	433	688	423
** X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	876		231	645
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	3	1	1	1
67000400	ENGINEERS FIELD OFFICE, TYPE A	CAL MO	6	2	2	2

⊛ Specialty Items

• 100% COST TO THE CITY OF YORKVILLE - YD31-3D

** 100% COST TO THE CITY OF YORKVILLE ONLY FOR IMPROVEMENTS AT US ROUTE 30 AND IL RTE 47 - YD31-3D

(1) 90% FED./5% STATE/5% MONTGOMERY FAU 2503

(2) 90% FED/5% STATE/2.5% ST. CHARES/2.5% GENEVA FAP 347

(3) 90% FED/7.5% STATE/2.5%/YORKVILLE

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352069\ 03-SUMMARY.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	3
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.		TO STA.		
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.

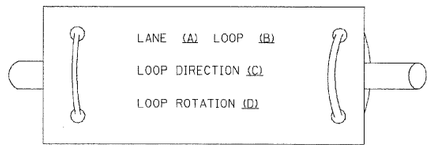
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

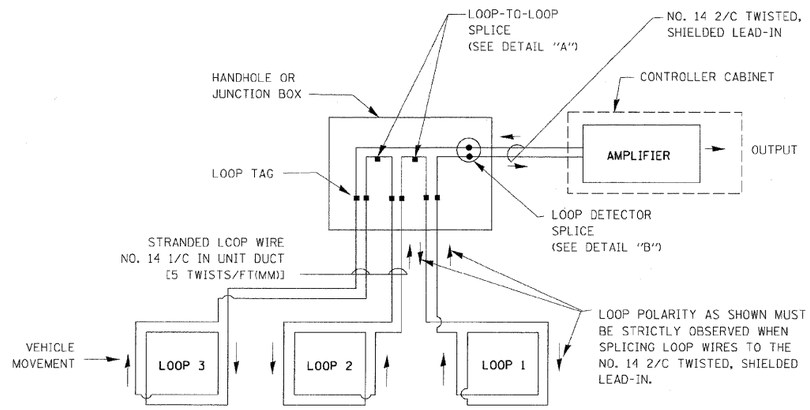


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

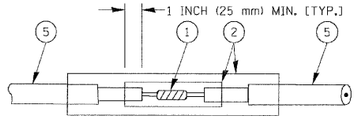
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

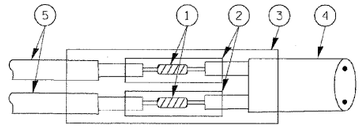


DETECTOR LOOP WIRING SCHEMATIC

- 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 LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
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ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 10/18/2002

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

10/18/2002
c:\projects\distsfd\ts05.dgn
VI-TS05

REVISION DATE: 01/01/02

FILE NAME = \MICROST\352069\ 04-TS05A.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

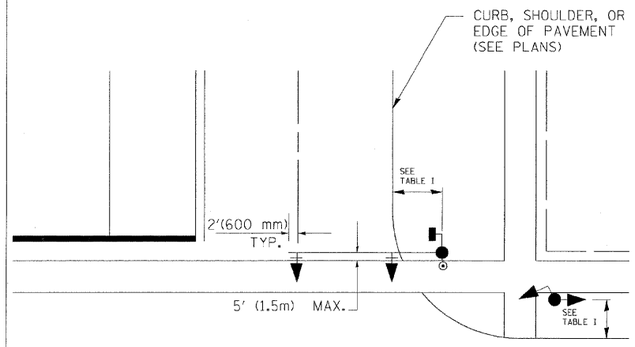
DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

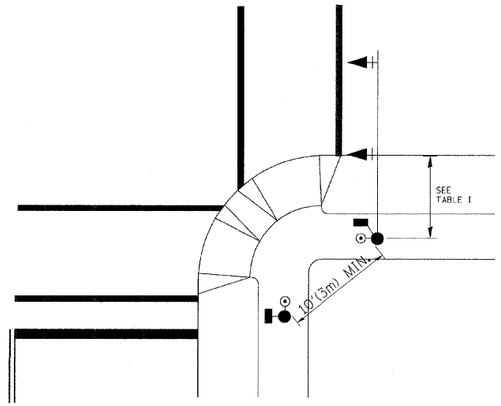
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	4
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES:

1. 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

2. 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.

3. 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.

4. 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

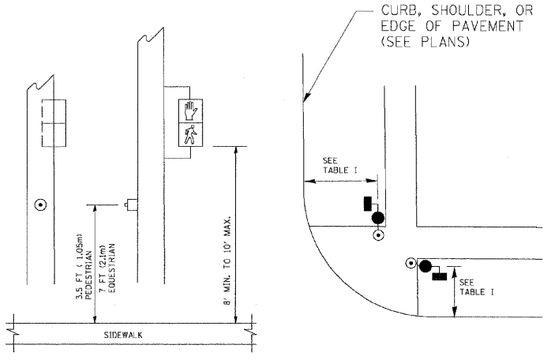


TABLE I

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
BUREAU OF TRAFFIC	1/01/02

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 10/18/2002

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

TS05

REVISION DATE: 01/01/02

10/18/2002
c:\projects\dist\std\ts05.dgn
V1-TS05

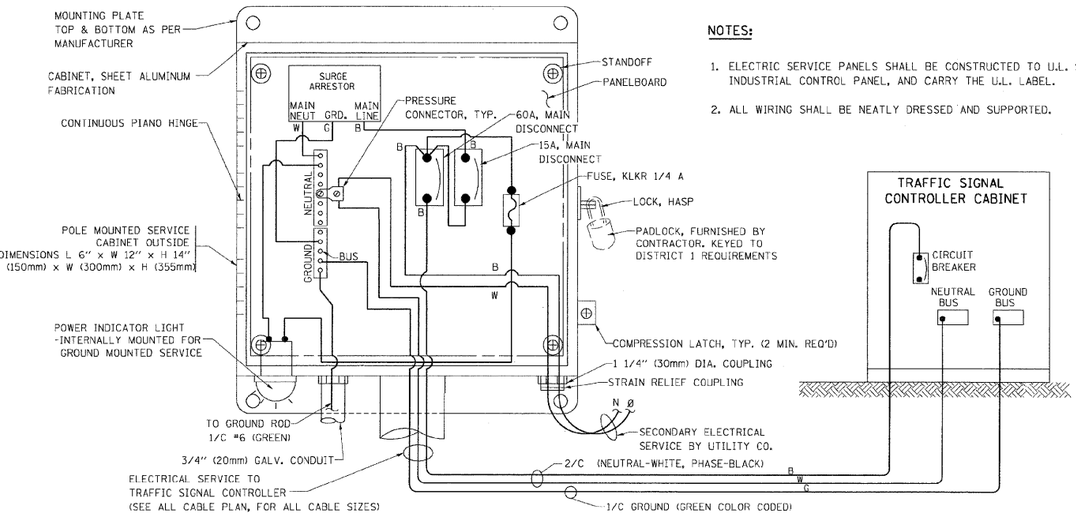
FILE NAME =	USER NAME = JGC	DESIGNED - KK	REVISED -
\MICROST\352069\ 05-TS05B.DGN		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	5
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



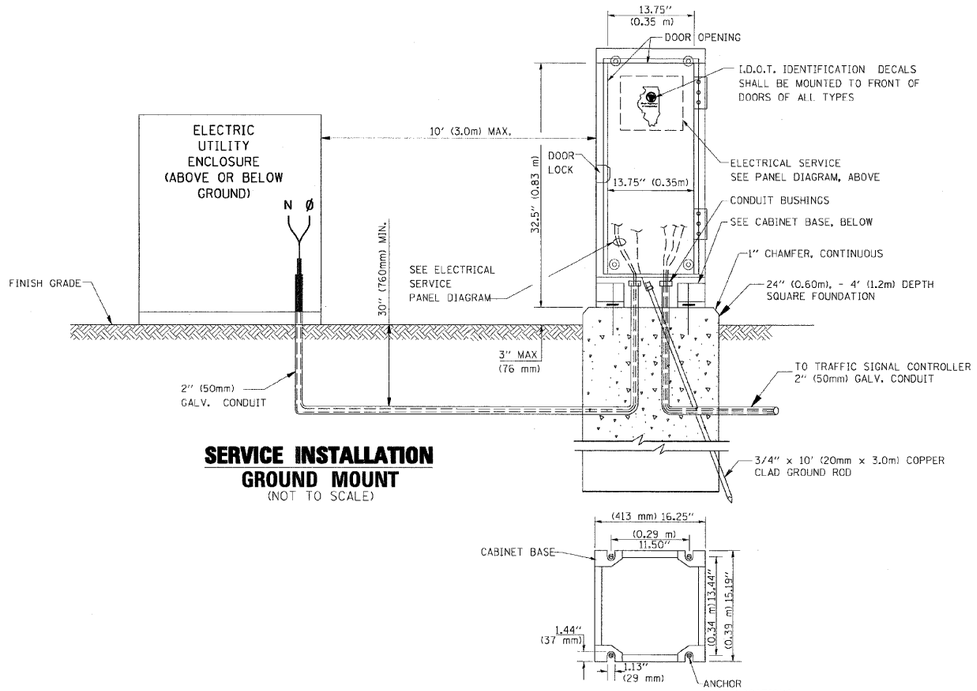
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

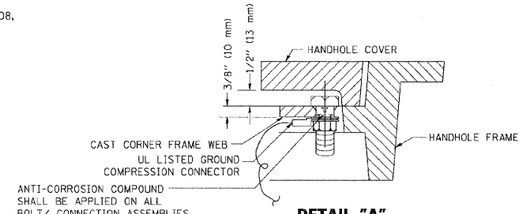


SERVICE INSTALLATION GROUND MOUNT

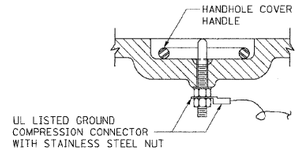
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



DETAIL "A"



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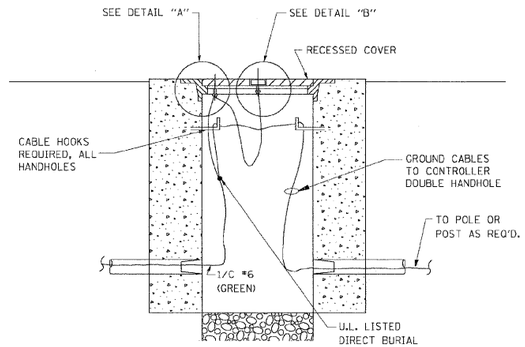
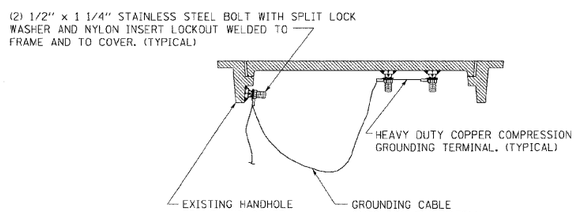


HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



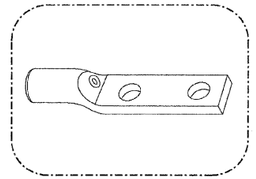
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

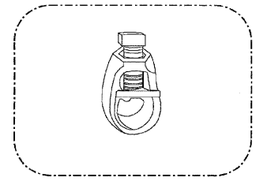
NOTES:

GROUNDING SYSTEM

1. 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.
2. 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.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



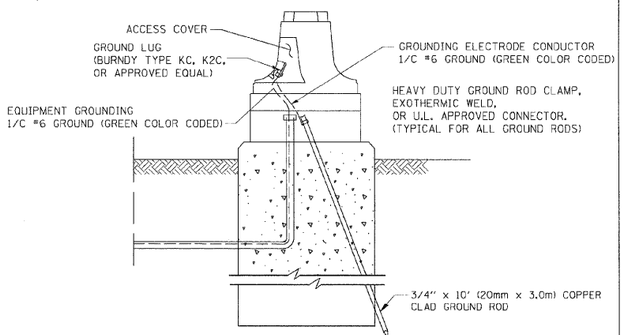
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

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
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 10/18/2002

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 3 OF 4

TS05

REVISION DATE: 01/01/02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

10/18/2002
c:\pro_jects\d1stst\ts05.dgn
VI-TS05

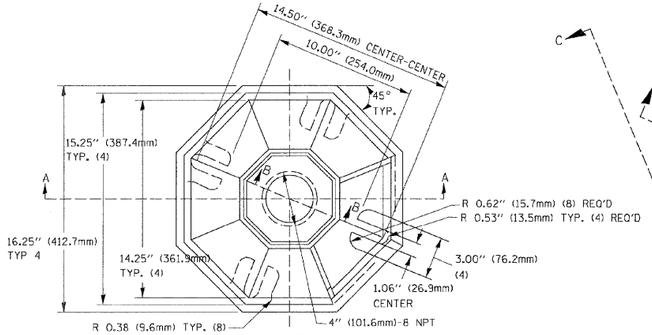
FILE NAME =	USER NAME = JGC	DESIGNED - KK	REVISED -
\MICROST\352069\ 06-TS05C.DGN		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

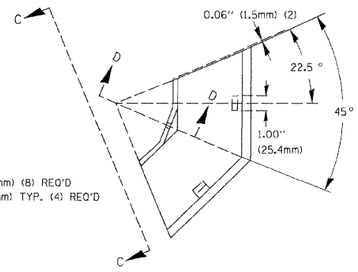
DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

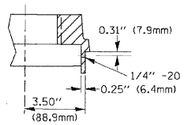
SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	6
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

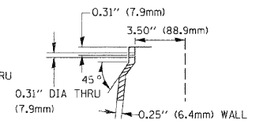


TOP VIEW

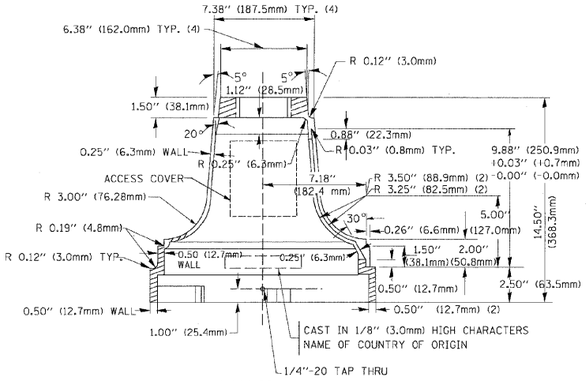




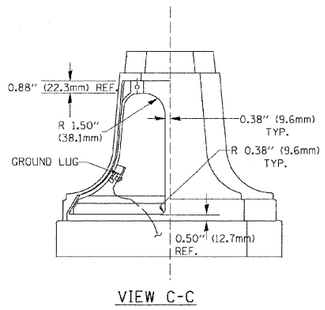
SECTION B-B



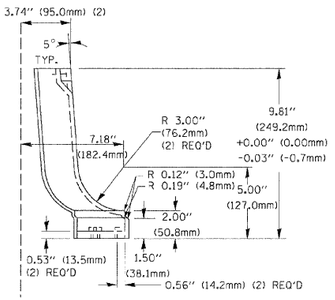
SECTION D-D



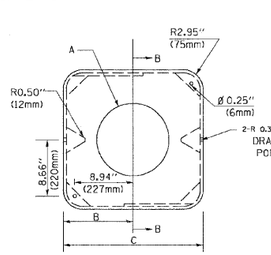
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



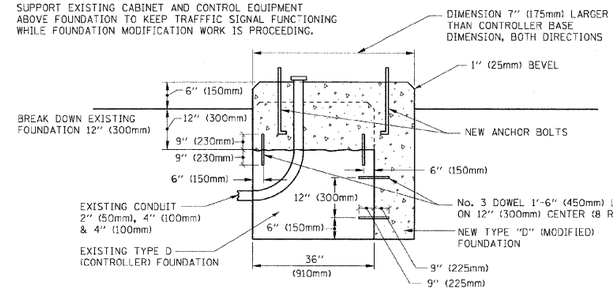
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

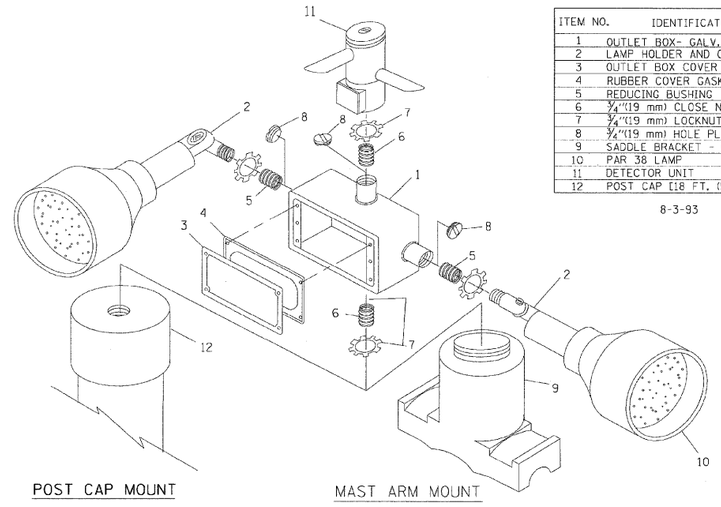
SHROUD DETAIL

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



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



POST CAP MOUNT

MAST ARM MOUNT

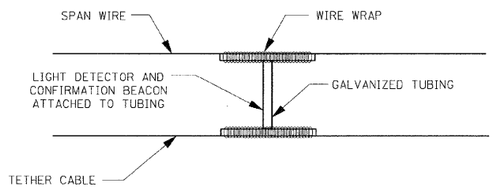
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(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.]

8-3-93

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. 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
3. 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 ¾"(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.

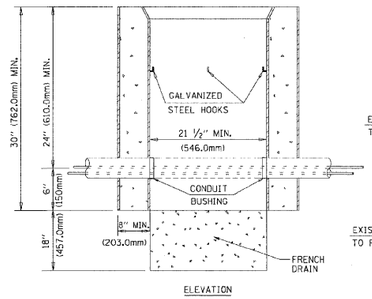


LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(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
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 10/18/2002

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

TS05

REVISION DATE: 01/01/02

10/18/2002
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V1-TS05

FILE NAME =	USER NAME = JGC	DESIGNED - KK	REVISED -
\MICROST\352069\ 07-TS050.DGN		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	7
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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.

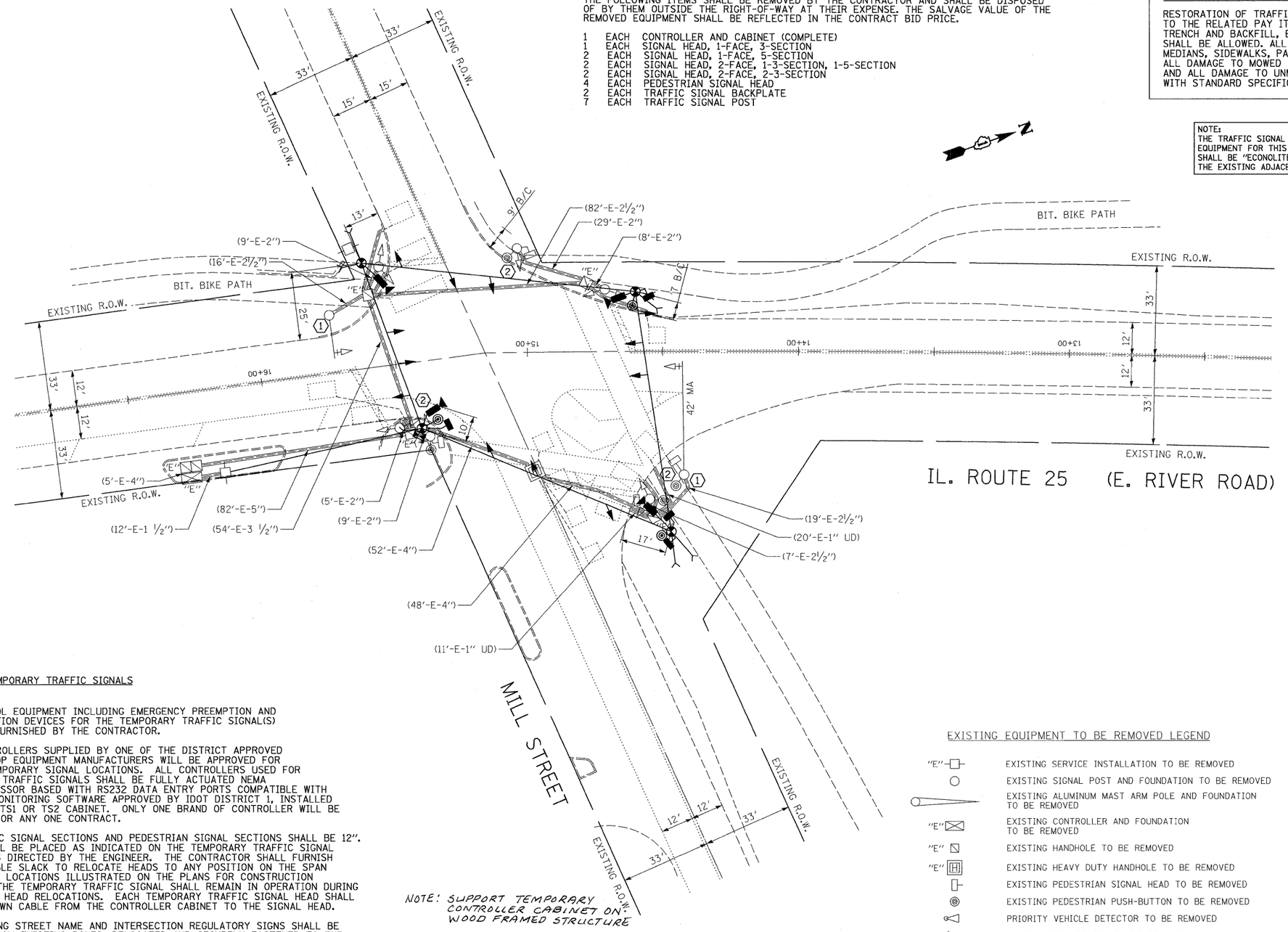
1	EACH	CONTROLLER AND CABINET (COMPLETE)
1	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 2-3-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	TRAFFIC SIGNAL BACKPLATE
7	EACH	TRAFFIC SIGNAL POST

RESTORATION OF WORK AREA

RESTORATION OF 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 CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:
ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).



NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PREEMPTION 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". 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.

NOTE: SUPPORT TEMPORARY CONTROLLER CABINET ON WOOD FRAMED STRUCTURE

CONSTRUCTION NOTES:

(1) MAINTAIN EXISTING STEEL MAST ARM ASSEMBLY AND POLE. COVER EXISTING SIGNAL HEADS WHEN TEMPORARY SIGNALS ARE IN USE AND UNTIL ALL PROPOSED SIGNAL INSTALLATION IS COMPLETED AND FUNCTIONAL.

(2) REMOVE EXISTING PEDESTRIAN PUSHBUTTON. REINSTALL PEDESTRIAN PUSHBUTTON AT PROPOSED LOCATION AS SHOWN ON SHEET 10 OF 23.

(3) ALL EXISTING CONDUITS SHALL BE ABANDONED.

EXISTING EQUIPMENT TO BE REMOVED LEGEND

"E"	EXISTING SERVICE INSTALLATION TO BE REMOVED
	EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
	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" H	EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED
	EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
	EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
	PRIORITY VEHICLE DETECTOR TO BE REMOVED
	CONFIRMATION BEACON TO BE REMOVED
	EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
	EXISTING TRAFFIC SIGNAL HEAD WITH BACKPLATE TO BE REMOVED
	EXISTING TRAFFIC SIGNAL HEAD TO BE REMOVED

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
	TEMPORARY CONTROLLER CABINET
	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
	TEMPORARY SERVICE INSTALLATION
	TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
	VIDEO VEHICLE SENSOR
	PEDESTRIAN PUSH-BUTTON DETECTOR
	EMERGENCY VEHICLE LIGHT DETECTOR
	CONFIRMATION BEACON
	VEHICLE DETECTOR, INDUCTION LOOP
UD	UNIT DUCT
	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
	HANDHOLE
H	HEAVY DUTY HANDHOLE
CT	COMMON TRENCH
	RADIO ANTENNA (TRANSMITTER/RECEIVER)

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

Rev.

FILE NAME = \MICROST\352069\ IL 25 @ MIL RD TEMP SIG.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

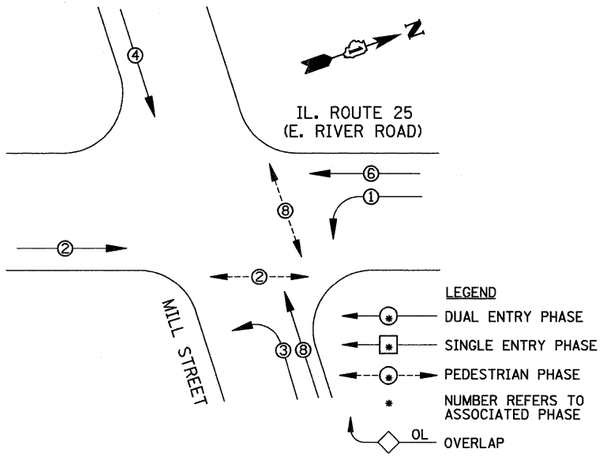
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN
IL. ROUTE 25 (E. RIVER ROAD) AT MILL STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	8
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

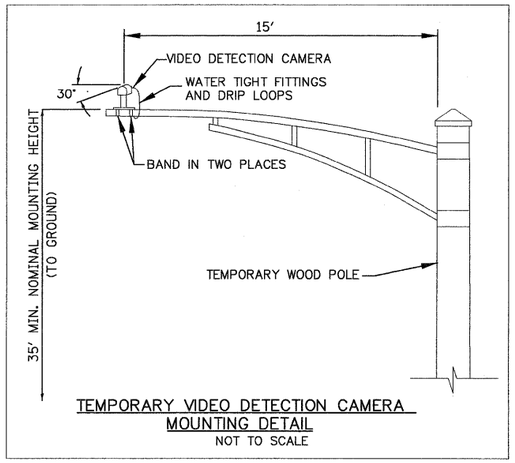
TEMPORARY CONTROLLER SEQUENCE



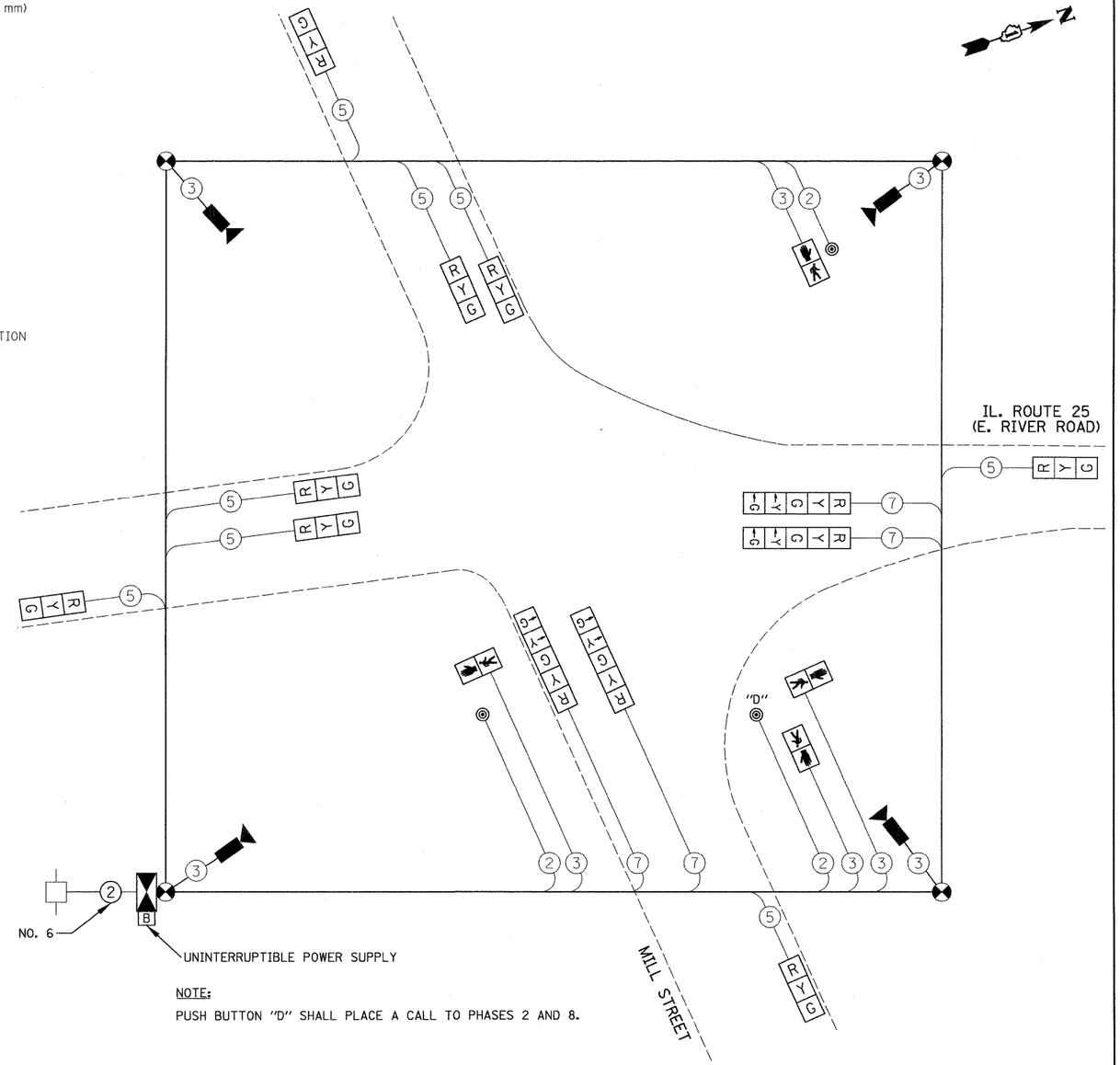
PHASE DESIGNATION DIAGRAM

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- 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
- PEDESTRIAN PUSH-BUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO VEHICLE SENSOR
- TEMPORARY WOOD POLE
- [B] UNINTERRUPTIBLE POWER SUPPLY



TEMPORARY VIDEO DETECTION CAMERA MOUNTING DETAIL
NOT TO SCALE



NOTE:
PUSH BUTTON "D" SHALL PLACE A CALL TO PHASES 2 AND 8.

TEMPORARY CABLE PLAN

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	336.1

VILLAGE OF MONTGOMERY

ENERGY SUPPLY CONTACT: MARK SCHEIBEL
PHONE: (630) 723-2128
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	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROSTA\352069\IL 25 @ MIL RD TEMP CAB.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL. ROUTE 25 (E. RIVER ROAD) AT MILL STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	9
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

RESTORATION OF WORK AREA

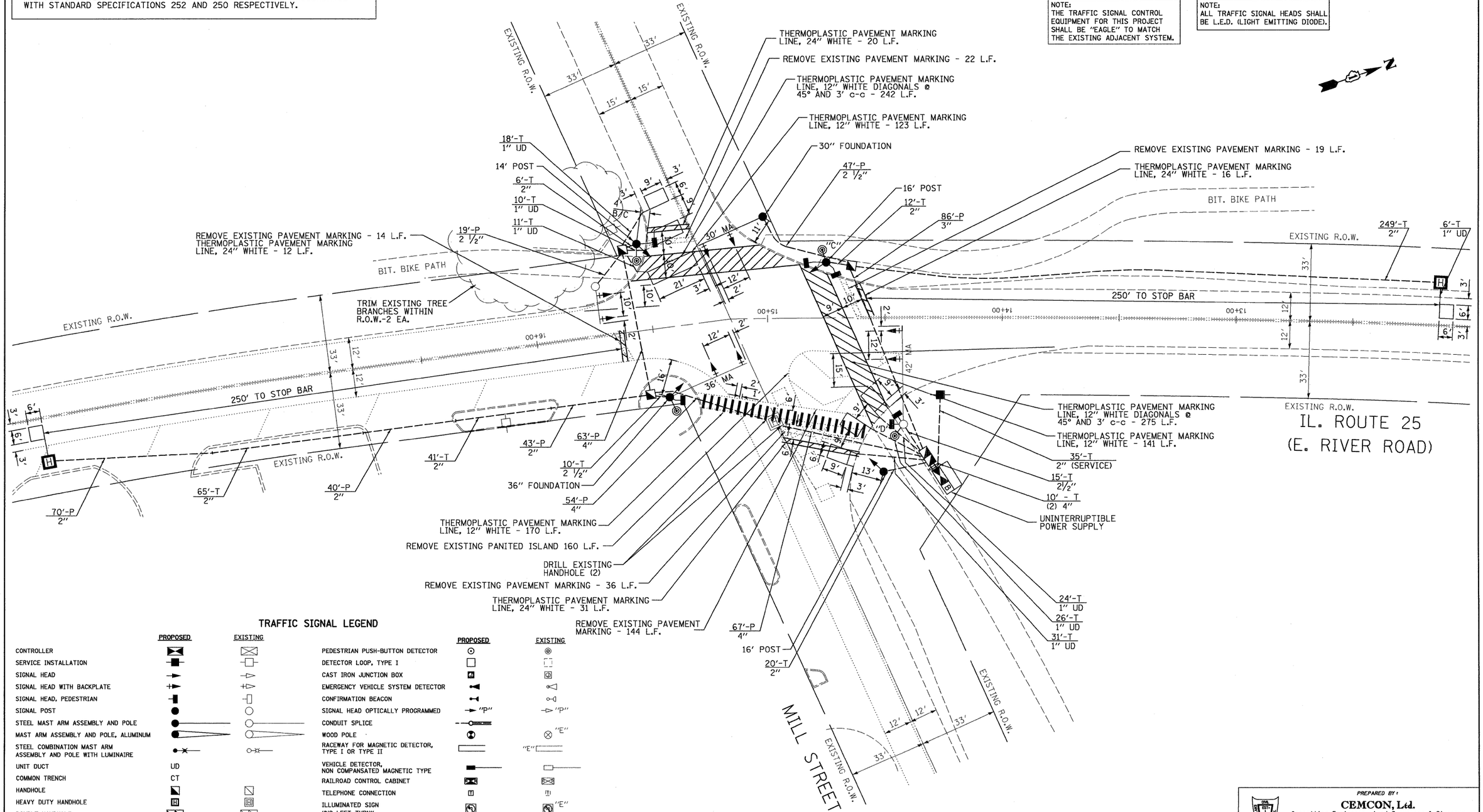
RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE 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.

NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

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

NOTE:
ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
STEEL MAST ARM ASSEMBLY AND POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE		
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		

	PROPOSED	EXISTING
PEDESTRIAN PUSH-BUTTON DETECTOR		
DETECTOR LOOP, TYPE I		
CAST IRON JUNCTION BOX		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		
WOOD POLE		"E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		"E"
VEHICLE DETECTOR, NON COMPANSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		
TELEPHONE CONNECTION	T	T
ILLUMINATED SIGN "NO LEFT TURN"		"E"
ILLUMINATED SIGN "NO RIGHT TURN"		"E"
UNINTERRUPTIBLE POWER SUPPLY	B	B

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	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

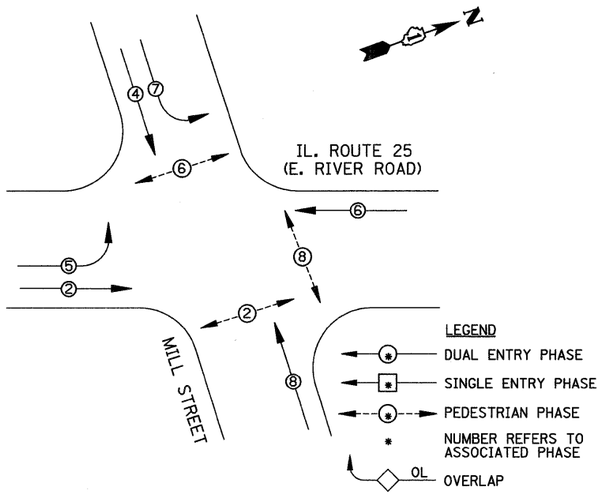
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL. ROUTE 25 (E. RIVER ROAD) AT MILL STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	10
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

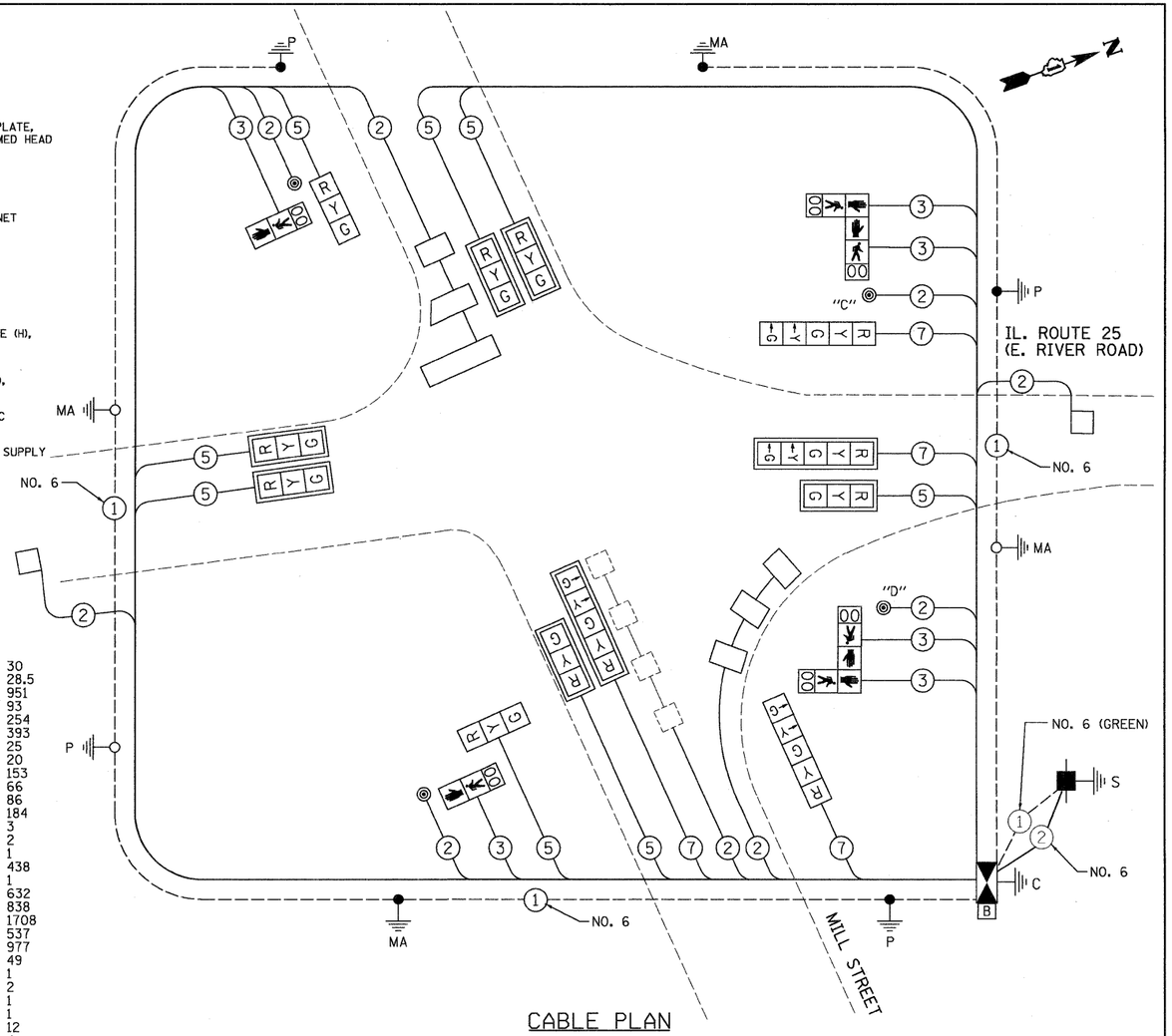


PHASE DESIGNATION DIAGRAM

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
R Y G "P"	R Y G "P"	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"	"E"	RAILROAD CONTROL CABINET
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSH-BUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
(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

EXISTING	PROPOSED	
"E"	"E"	ILLUMINATED SIGN "NO LEFT TURN"
"E"	"E"	ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	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
B	B	UNINTERRUPTIBLE POWER SUPPLY



CABLE PLAN

NOTE:

1. PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
2. PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

SCHEDULE OF QUANTITIES

SIGN PANEL, TYPE 2	SQ FT	30
RELOCATE SIGN PANEL, TYPE 1	SQ FT	28.5
THERMOPLASTIC PAVEMENT MARKING, LINE-12"	FOOT	951
THERMOPLASTIC PAVEMENT MARKING, LINE-24"	FOOT	93
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	254
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	393
CONDUIT IN TRENCH, 2½" DIA., GALVANIZED STEEL	FOOT	25
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2 " DIA., GALVANIZED STEEL	FOOT	153
CONDUIT PUSHED, 2½" DIA., GALVANIZED STEEL	FOOT	66
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	86
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	184
HANDHOLE	EACH	3
HEAVY DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	438
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	632
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	838
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1708
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	537
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	977
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	49
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	
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, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE 1	FOOT	287
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	5182
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	12
TREE TRIMMING	EACH	2
REMOVE EXISTING SERVICE INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	433
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	481.6

VILLAGE OF MONTGOMERY

ENERGY SUPPLY CONTACT: MARK SCHEIBEL
PHONE: (630) 723-2128
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	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

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FILE NAME = \MICROST\352069\IL 25 @ MIL RD CAB.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL. ROUTE 25 (E. RIVER ROAD) AT MILL STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	11
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES:

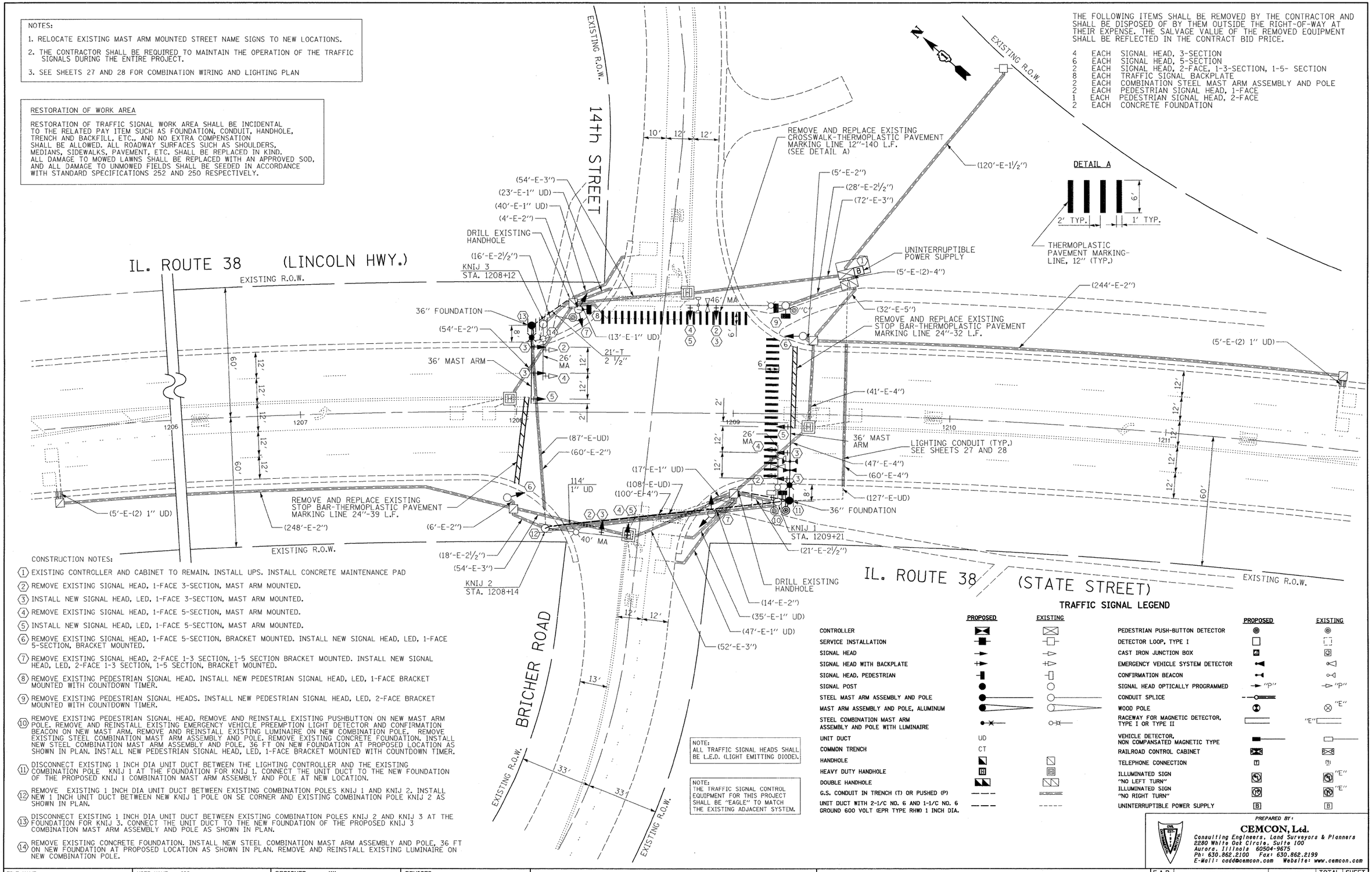
1. RELOCATE EXISTING MAST ARM MOUNTED STREET NAME SIGNS TO NEW LOCATIONS.
2. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.
3. SEE SHEETS 27 AND 28 FOR COMBINATION WIRING AND LIGHTING PLAN

RESTORATION OF WORK AREA

RESTORATION OF 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.

4	EACH	SIGNAL HEAD, 3-SECTION
6	EACH	SIGNAL HEAD, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5- SECTION
8	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	COMBINATION STEEL MAST ARM ASSEMBLY AND POLE
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
2	EACH	CONCRETE FOUNDATION



CONSTRUCTION NOTES:

1. EXISTING CONTROLLER AND CABINET TO REMAIN. INSTALL UPS. INSTALL CONCRETE MAINTENANCE PAD
2. REMOVE EXISTING SIGNAL HEAD, 1-FACE 3-SECTION, MAST ARM MOUNTED.
3. INSTALL NEW SIGNAL HEAD, LED, 1-FACE 3-SECTION, MAST ARM MOUNTED.
4. REMOVE EXISTING SIGNAL HEAD, 1-FACE 5-SECTION, MAST ARM MOUNTED.
5. INSTALL NEW SIGNAL HEAD, LED, 1-FACE 5-SECTION, MAST ARM MOUNTED.
6. REMOVE EXISTING SIGNAL HEAD, 1-FACE 5-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, LED, 1-FACE 5-SECTION, BRACKET MOUNTED.
7. REMOVE EXISTING SIGNAL HEAD, 2-FACE 1-3 SECTION, 1-5 SECTION BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, LED, 2-FACE 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED.
8. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD. INSTALL NEW PEDESTRIAN SIGNAL HEAD, LED, 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER.
9. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. INSTALL NEW PEDESTRIAN SIGNAL HEAD, LED, 2-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER.
10. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD. REMOVE AND REINSTALL EXISTING PUSHBUTTON ON NEW MAST ARM POLE. REMOVE AND REINSTALL EXISTING EMERGENCY VEHICLE PREEMPTION LIGHT DETECTOR AND CONFIRMATION BEACON ON NEW MAST ARM. REMOVE AND REINSTALL EXISTING LUMINAIRE ON NEW COMBINATION POLE. REMOVE EXISTING STEEL COMBINATION MAST ARM ASSEMBLY AND POLE. REMOVE EXISTING CONCRETE FOUNDATION. INSTALL NEW STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 36 FT ON NEW FOUNDATION AT PROPOSED LOCATION AS SHOWN IN PLAN. INSTALL NEW PEDESTRIAN SIGNAL HEAD, LED, 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER.
11. DISCONNECT EXISTING 1 INCH DIA UNIT DUCT BETWEEN THE LIGHTING CONTROLLER AND THE EXISTING COMBINATION POLE KNIJ 1 AT THE FOUNDATION FOR KNIJ 1. CONNECT THE UNIT DUCT TO THE NEW FOUNDATION OF THE PROPOSED KNIJ 1 COMBINATION MAST ARM ASSEMBLY AND POLE AT NEW LOCATION.
12. REMOVE EXISTING 1 INCH DIA UNIT DUCT BETWEEN EXISTING COMBINATION POLES KNIJ 1 AND KNIJ 2. INSTALL NEW 1 INCH UNIT DUCT BETWEEN NEW KNIJ 1 POLE ON SE CORNER AND EXISTING COMBINATION POLE KNIJ 2 AS SHOWN IN PLAN.
13. DISCONNECT EXISTING 1 INCH DIA UNIT DUCT BETWEEN EXISTING COMBINATION POLES KNIJ 2 AND KNIJ 3 AT THE FOUNDATION FOR KNIJ 3. CONNECT THE UNIT DUCT TO THE NEW FOUNDATION OF THE PROPOSED KNIJ 3 COMBINATION MAST ARM ASSEMBLY AND POLE AS SHOWN IN PLAN.
14. REMOVE EXISTING CONCRETE FOUNDATION. INSTALL NEW STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 36 FT ON NEW FOUNDATION AT PROPOSED LOCATION AS SHOWN IN PLAN. REMOVE AND REINSTALL EXISTING LUMINAIRE ON NEW COMBINATION POLE.

NOTE:
ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).

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

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
STEEL MAST ARM ASSEMBLY AND POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE		
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
UNIT DUCT WITH 2-1/C NO. 6 AND 1-1/C NO. 6 GROUND 600 VOLT (EPR TYPE RHW) 1 INCH DIA.		

	PROPOSED	EXISTING
PEDESTRIAN PUSH-BUTTON DETECTOR		
DETECTOR LOOP, TYPE I		
CAST IRON JUNCTION BOX		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		
WOOD POLE		"E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		"E"
VEHICLE DETECTOR, NON COMPANSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		
TELEPHONE CONNECTION	T	T
ILLUMINATED SIGN "NO LEFT TURN"		"E"
ILLUMINATED SIGN "NO RIGHT TURN"		"E"
UNINTERRUPTIBLE POWER SUPPLY	B	B

PREPARED BY:
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FILE NAME = \MICROST\352070\ IL 38 @ 14TH SIG.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

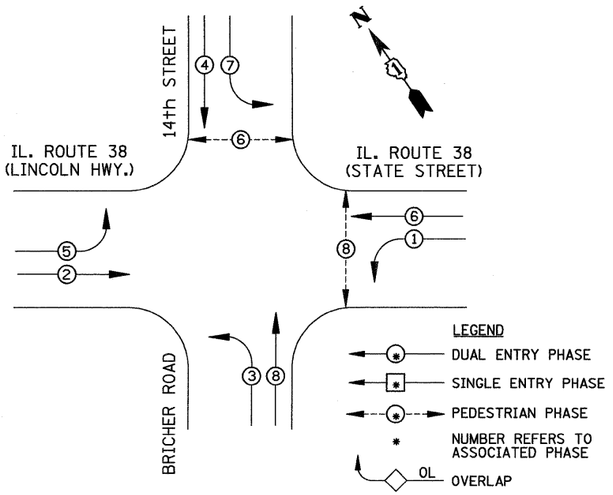
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL. ROUTE 38 AND 14th STREET / BRICHER ROAD

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	2009-003 TS	KANE	28	12
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

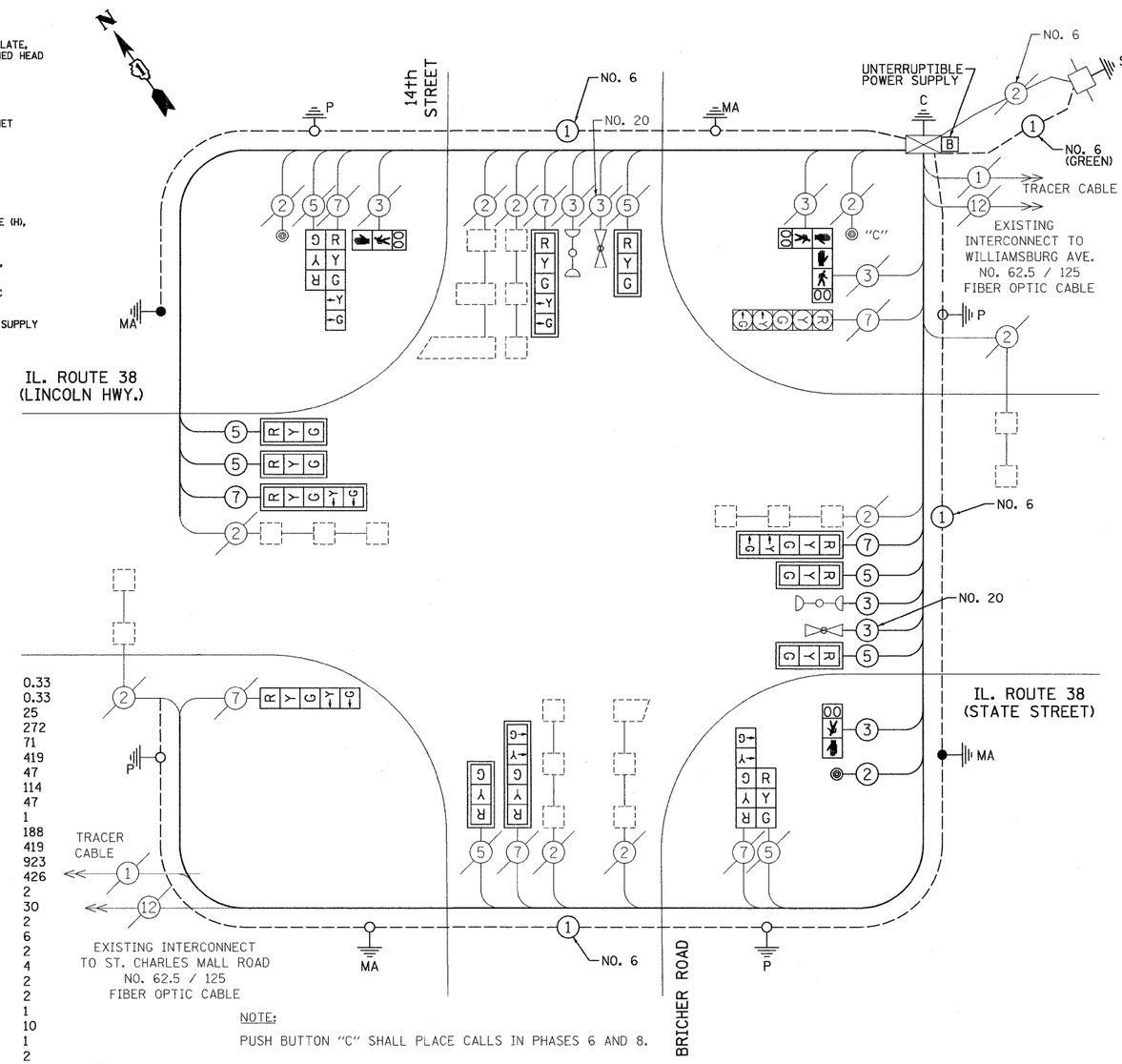


PHASE DESIGNATION DIAGRAM

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
	00	12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
	T	TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSH-BUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
(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

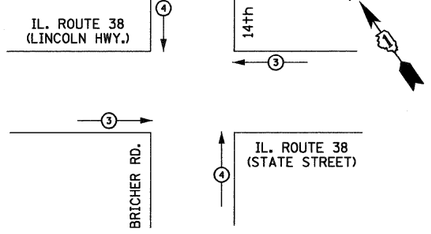
EXISTING	PROPOSED	
R Y G ←Y ←G "P"	R Y G ←Y ←G "P"	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"	"E"	RAILROAD CONTROL CABINET
"E"	"E"	ILLUMINATED SIGN "NO LEFT TURN"
"E"	"E"	ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
B	B	UNINTERRUPTIBLE POWER SUPPLY



NOTE:
PUSH BUTTON "C" SHALL PLACE CALLS IN PHASES 6 AND 8.

CABLE PLAN

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇄	⇅

SCHEDULE OF QUANTITIES

MOBILIZATION	L SUM	0.33
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.33
RELOCATE SIGN PANEL, TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING, LINE-12"	FOOT	272
THERMOPLASTIC PAVEMENT MARKING, LINE-24"	FOOT	71
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	419
CONDUIT IN TRENCH, 2½" DIA., GALVANIZED STEEL	FOOT	47
UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	114
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	47
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	188
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	419
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	923
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	426
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1700
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
TEMPORARY INFORMATION SIGNING	SQ FT	34.3
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II (per Intersection)	EACH	1
RELOCATE EXISTING LUMINAIRE	EACH	2
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	688
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	231
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =		515.2

50% TO CITY OF GENEVA
50% TO CITY OF ST. CHARLES

ENERGY SUPPLY CONTACT: MARTY RUBIN
PHONE: (847) 608-2400
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	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352070\ IL 38 @ 14TH CAB.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

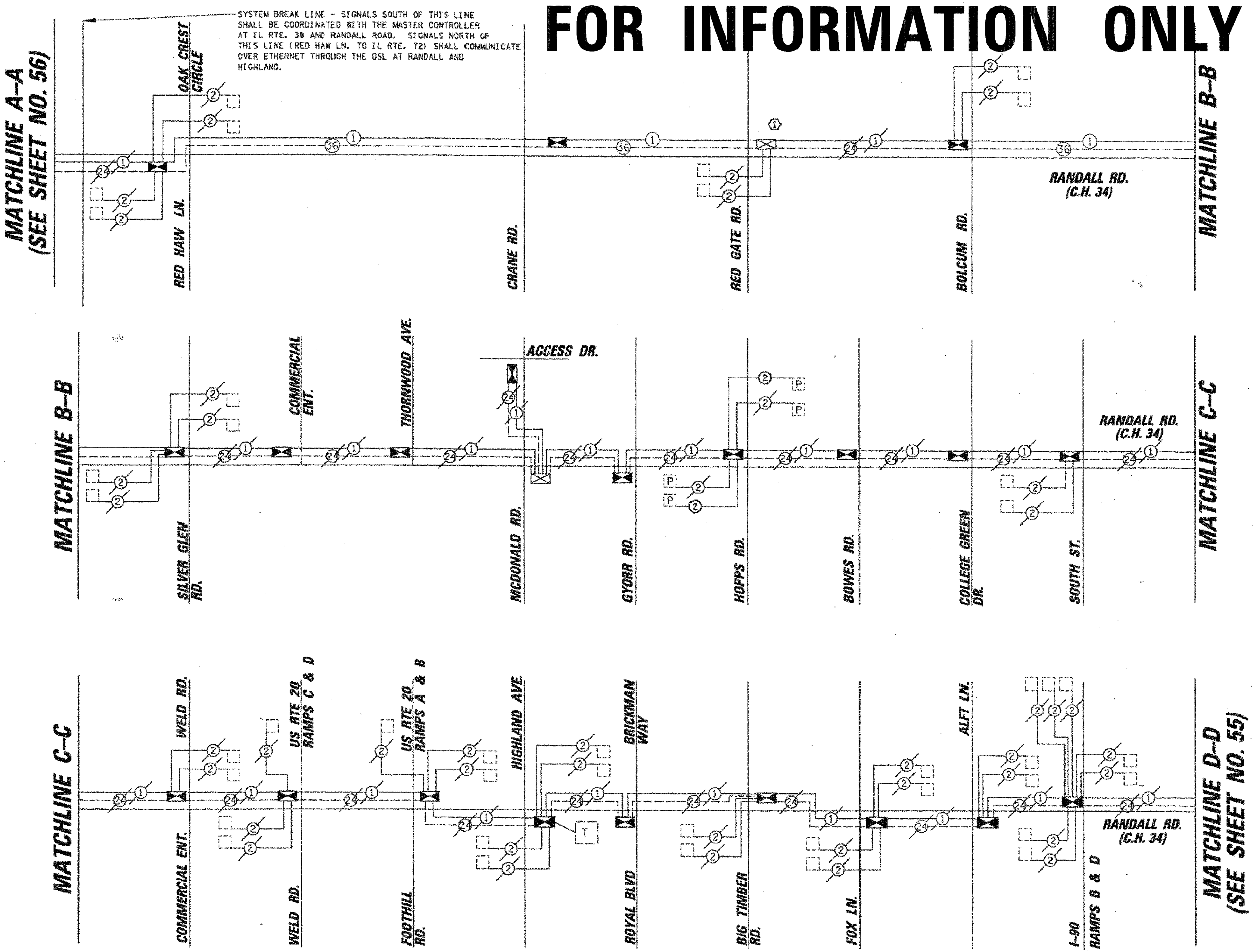
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL. ROUTE 38 AND 14th STREET /BRICHER ROAD

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	2009-003 TS	KANE	28	13
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY



INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER
- PROPOSED INTERSECTION CONTROLLER
- EXISTING MASTER CONTROLLER — EMC
- PROPOSED MASTER CONTROLLER — MC
- MASTER MASTER CONTROLLER — MMC
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS — P
- EXISTING SAMPLING (SYSTEM) DETECTORS — ES
- PROPOSED SAMPLING (SYSTEM) DETECTORS — PS
- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. — ESP
- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS. — ESPS
- EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS — PD
- PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS — PD
- EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS — ESPD
- PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS — PSPD
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F — 36
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F — 36
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F — 24
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F — 24
- EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE — 12
- PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE — 12
- EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED — 6
- PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED — 6
- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED — 2
- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED — 2
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- EXISTING TELEPHONE CONNECTION — T
- PROPOSED TELEPHONE CONNECTION — T

CONSTRUCTION NOTES:

(1) INTERCONNECTION AND INSTALLATION OF FIBER OPTIC CABLE TO RED GATE CABINET BY OTHERS.

PREPARED BY: CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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Aurora, Illinois 60504-9675
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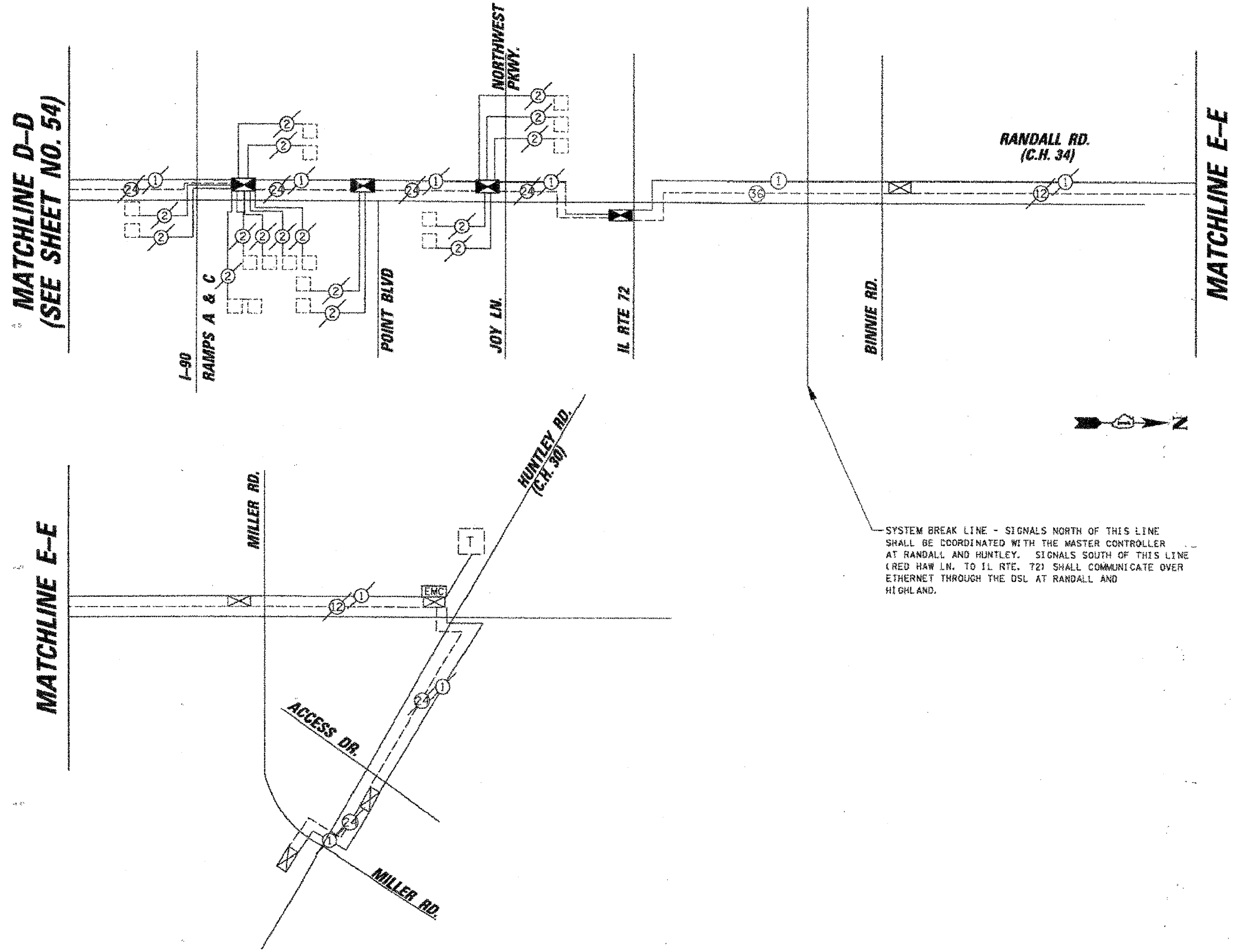
CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME =	USER NAME = MWILLIAM	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT SCHEMATIC RANDALL ROAD FROM RED HAW LN. TO IL ROUTE 72	F.A.P. RTE. 336	SECTION 06-00346-00-TL	COUNTY KANE	TOTAL SHEETS 69	SHEET NO. 54
	PLOT SCALE = 20'	DRAWN	REVISED		SCALE:	CONTRACT NO. 63011				
	PLOT DATE = 1/30/2008	CHECKED / DATE	REVISED			FED. ROAD DIST. NO. / ILLINOIS / FED. AID PROJECT				

FILE NAME = J:\MICROST\352069\XX-INTERCONNECT01.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT SCHEMATIC RANDALL ROAD	F.A.P. RTE.	SECTION 2009-003 TS	COUNTY KANE	TOTAL SHEETS 28	SHEET NO. 14
		DRAWN - JGC	REVISED -			CONTRACT NO. 60F98				
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -		SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.					
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -			FED. ROAD DIST. NO. / ILLINOIS / FED. AID PROJECT				

FOR INFORMATION ONLY



INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER
- PROPOSED INTERSECTION CONTROLLER
- EXISTING MASTER CONTROLLER — EMC
- PROPOSED MASTER CONTROLLER — MC
- MASTER MASTER CONTROLLER — MMC
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS
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- EXISTING SAMPLING (SYSTEM) DETECTORS — ES
- PROPOSED SAMPLING (SYSTEM) DETECTORS — PS
- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. — ESP
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- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED — 2
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- EXISTING TELEPHONE CONNECTION — T
- PROPOSED TELEPHONE CONNECTION — T

PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com

CHRISTOPHER B. BURKE ENGINEERING LTD. 9575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (847) 823-0500

FILE NAME = N:\kanecounty\070616\Traffic\SCH2.dgn	USER NAME = MWILLIAM	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
	PLOT SCALE = 20'	CHECKED -	REVISED -	
	PLOT DATE = 1/28/2008	DATE -	REVISED -	

INTERCONNECT SCHEMATIC
RANDALL ROAD FROM RED HAW LN. TO IL ROUTE 72
SCALE:

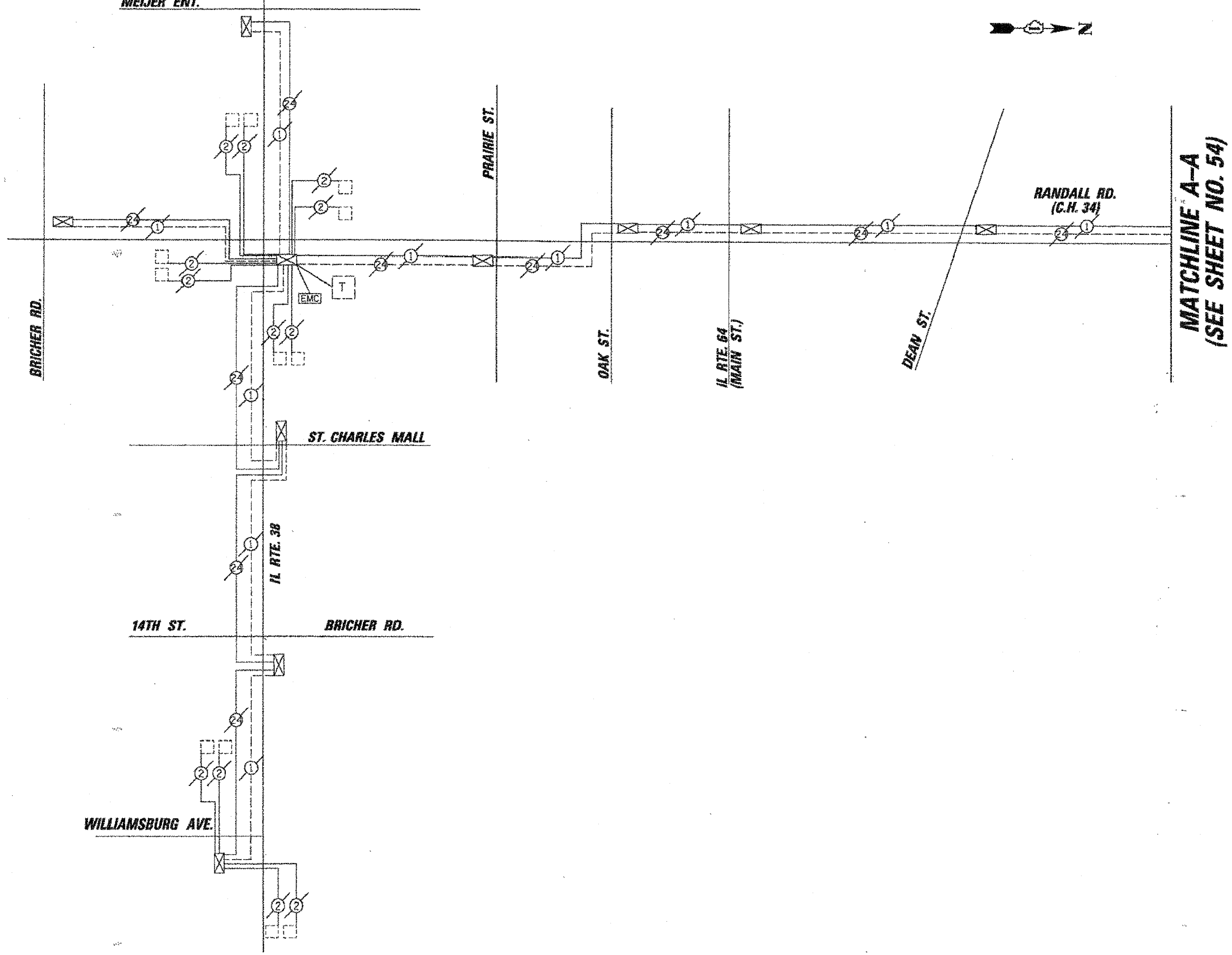
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	06-00346-00-TL	KANE	69	55
		CONTRACT NO. 63011		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FILE NAME = J:\MICROST\352069\XX-INTERCONNECT02.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - JGC	REVISED -	
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -	
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -	

INTERCONNECT SCHEMATIC
RANDALL ROAD FROM RED HAW LN. TO IL. ROUTE 72
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	15
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY



INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER	
PROPOSED INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	EMC
PROPOSED MASTER CONTROLLER	MC
MASTER MASTER CONTROLLER	MMC
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS	P
EXISTING SAMPLING (SYSTEM) DETECTORS	ES
PROPOSED SAMPLING (SYSTEM) DETECTORS	PS
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.	ESP
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS.	ESPS
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS	ESPD
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	PSPD
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	36
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	36
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	1
PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	1
EXISTING TELEPHONE CONNECTION	T
PROPOSED TELEPHONE CONNECTION	T

FOR INFORMATION ONLY

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\kanecounty\070616\Traffic\SCH3.dgn	USER NAME = MWILLIAM	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT SCHEMATIC IL RTE. 38 AT RANDALL ROAD SYSTEM	F.A.P. RTE. 336	SECTION 06-00346-00-TL	COUNTY KANE	TOTAL SHEETS 69	SHEET NO. 56
		DRAWN -	REVISED -					CONTRACT NO. 63011		
	PLOT SCALE = 20'	CHECKED -	REVISED -		SCALE:	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
	PLOT DATE = 1/29/2008	DATE -	REVISED -							

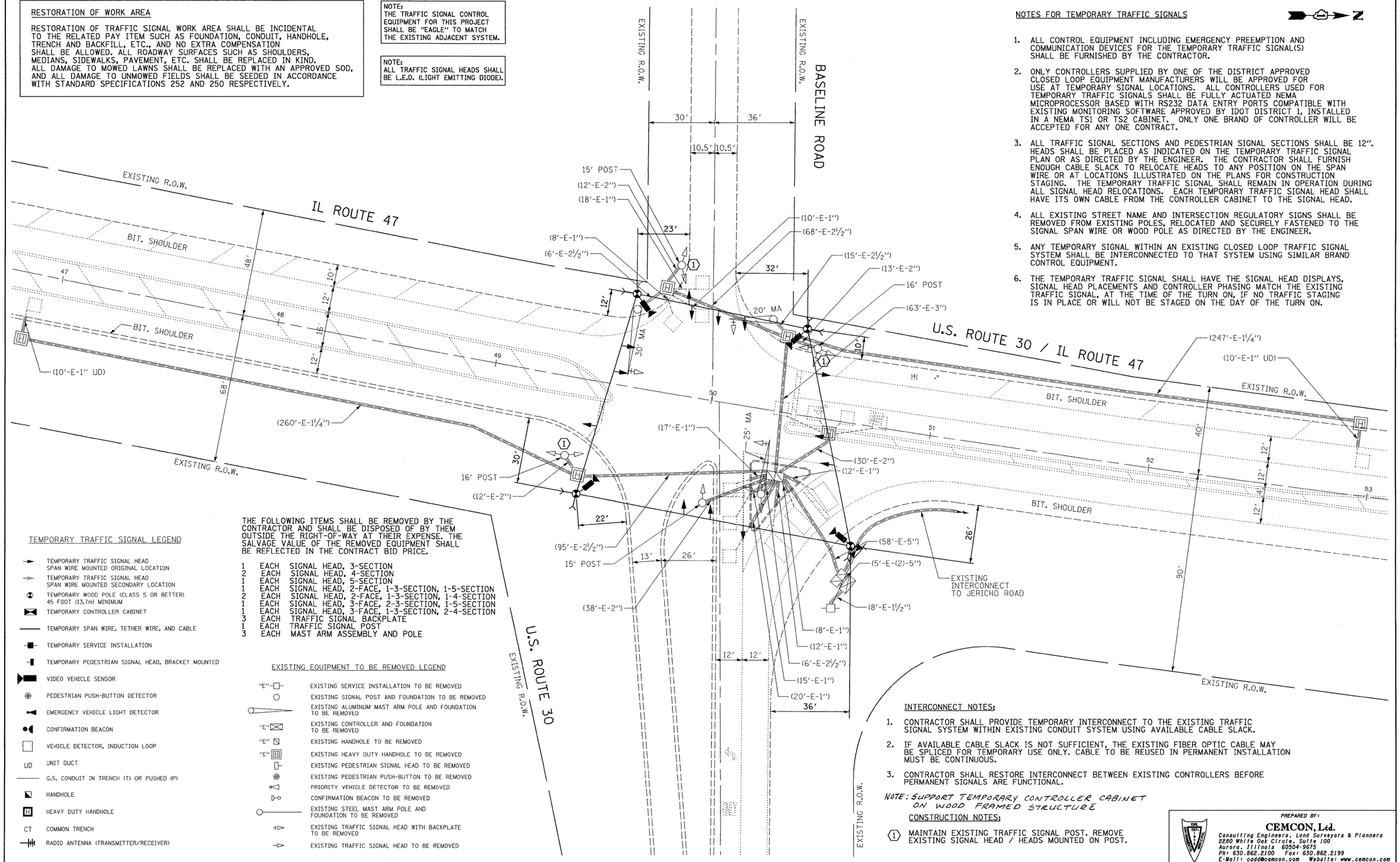
FILE NAME = J:\MICROST\352069\XX-INTERCONNECT03.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT SCHEMATIC IL ROUTE 38 AT RANDALL ROAD SYSTEM	F.A.P. RTE.	SECTION 2009-003 TS	COUNTY KANE	TOTAL SHEETS 28	SHEET NO. 16
		DRAWN - JGC	REVISED -					CONTRACT NO. 60F98		
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -		SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -							

RESTORATION OF WORK AREA

RESTORATION OF 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 CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:
ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).



NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PREEMPTION 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". 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.

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
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- VIDEO VEHICLE SENSOR
- PEDESTRIAN PUSH-BUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD — UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- CT — COMMON TRENCH
- RADIO ANTENNA (TRANSMITTER/RECEIVER)

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	SIGNAL HEAD, 3-SECTION
2	EACH	SIGNAL HEAD, 4-SECTION
1	EACH	SIGNAL HEAD, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-4-SECTION
1	EACH	SIGNAL HEAD, 3-FACE, 2-3-SECTION, 1-5-SECTION
1	EACH	SIGNAL HEAD, 3-FACE, 1-3-SECTION, 2-4-SECTION
3	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	TRAFFIC SIGNAL POST
3	EACH	MAST ARM ASSEMBLY AND POLE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E"-□ — EXISTING SERVICE INSTALLATION TO BE REMOVED
- ○ — EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- 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 HEAVY DUTY HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- PRIORITY VEHICLE DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING TRAFFIC SIGNAL HEAD WITH BACKPLATE TO BE REMOVED
- EXISTING TRAFFIC SIGNAL HEAD TO BE REMOVED

INTERCONNECT NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY INTERCONNECT TO THE EXISTING TRAFFIC SIGNAL SYSTEM WITHIN EXISTING CONDUIT SYSTEM USING AVAILABLE CABLE SLACK.
2. IF AVAILABLE CABLE SLACK IS NOT SUFFICIENT, THE EXISTING FIBER OPTIC CABLE MAY BE SPLICED FOR TEMPORARY USE ONLY. CABLE TO BE REUSED IN PERMANENT INSTALLATION MUST BE CONTINUOUS.
3. CONTRACTOR SHALL RESTORE INTERCONNECT BETWEEN EXISTING CONTROLLERS BEFORE PERMANENT SIGNALS ARE FUNCTIONAL.

NOTE: SUPPORT TEMPORARY CONTROLLER CABINET ON WOOD FRAMED STRUCTURE

CONSTRUCTION NOTES:

① MAINTAIN EXISTING TRAFFIC SIGNAL POST. REMOVE EXISTING SIGNAL HEAD / HEADS MOUNTED ON POST.

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Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROSTA\352071\US 30 @ IL 47 TEMP SIG.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

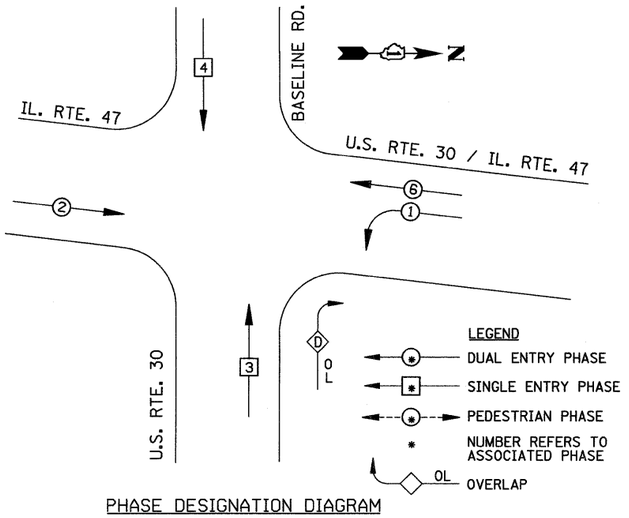
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN
U.S. ROUTE 30 AT IL. ROUTE 47 (BASELINE ROAD)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	17
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Rev.

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

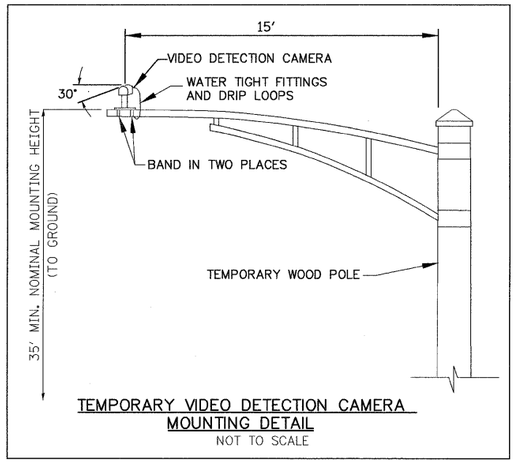
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

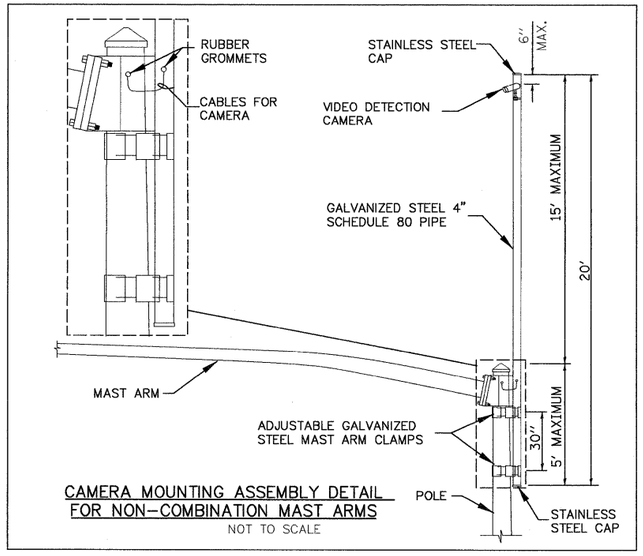
TEMPORARY CABLE DIAGRAM LEGEND

- R — TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- 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
- PEDESTRIAN PUSH-BUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO VEHICLE SENSOR
- TEMPORARY WOOD POLE
- B — UNINTERRUPTIBLE POWER SUPPLY

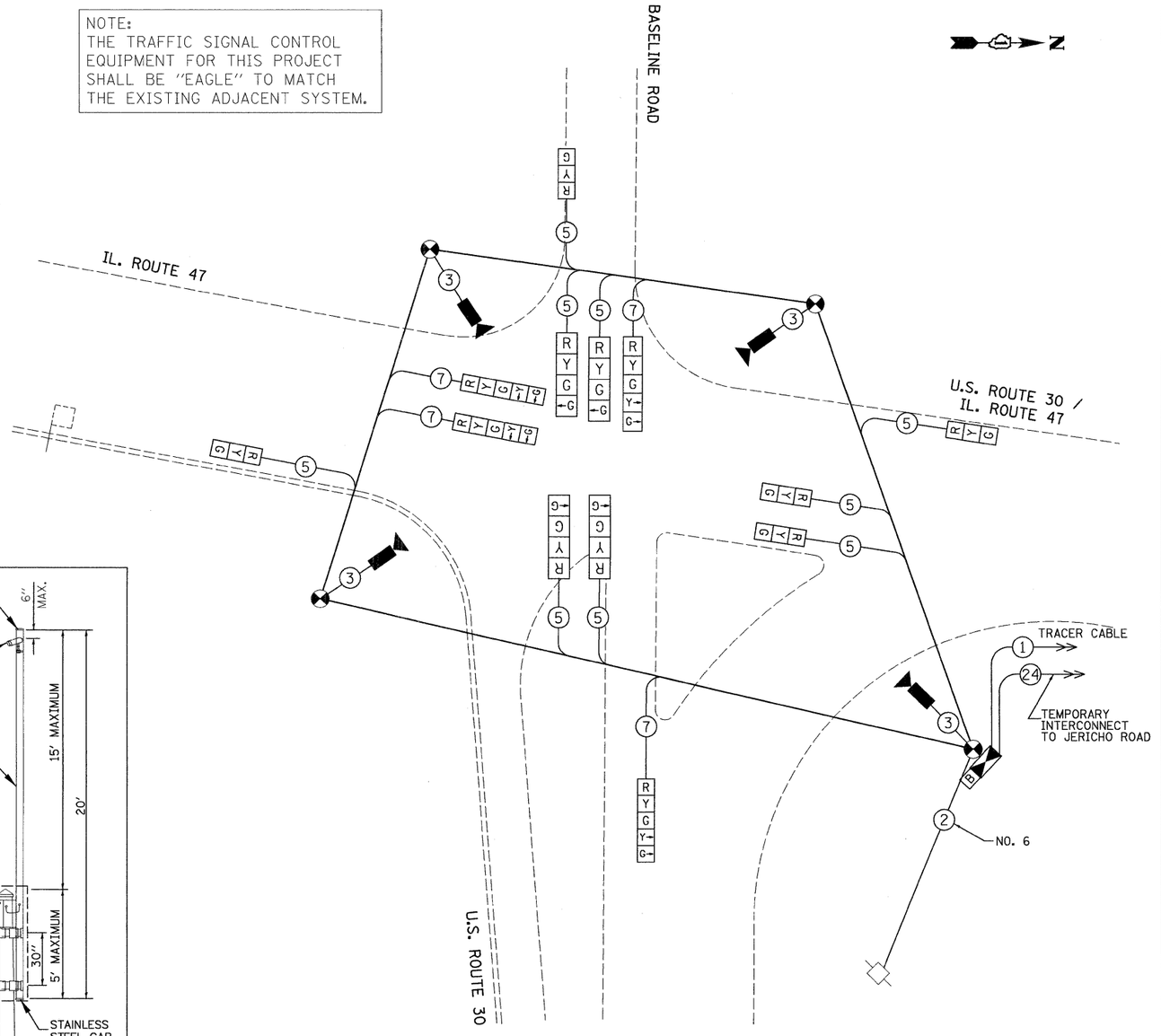
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



TEMPORARY VIDEO DETECTION CAMERA MOUNTING DETAIL
NOT TO SCALE



CAMERA MOUNTING ASSEMBLY DETAIL FOR NON-COMBINATION MAST ARMS
NOT TO SCALE



TEMPORARY CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	12	135	12	0.10	14.4
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	344.9

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY CONTACT: MARK SCHEIBEL
PHONE: (630) 723-2128
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	3.0	(1.0)
D - CONTROLLER	4	(1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20.0	(6.0)
E - M. ARM POLE			SIGNAL POST	0	(0.0)	BRACKET MOUNTED	13	(4.0)
24" (600mm)	10	(3.0)	CONTROLLER CAB.	0	(0.0)	PED. PUSH-BUTTON	6	(2.0)
30" (750mm)	15	(4.6)	FIBER OPTIC	13	(4.0)	ELECTRIC SERVICE	13.5	(4.1)
			ELECTRIC SERVICE	1	(0.5)	SERVICE TO GROUND	13.5	(4.1)
			GROUND CABLE	1	(0.5)	POST MOUNTED	13	(4.0)

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FILE NAME = \MICROST\352071\ US 30 @ IL 47 TEMP CAB.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND PHASE DESIGNATION DIAGRAM
U.S. ROUTE 30 AT IL. ROUTE 47 (BASELINE ROAD)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	18
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES:

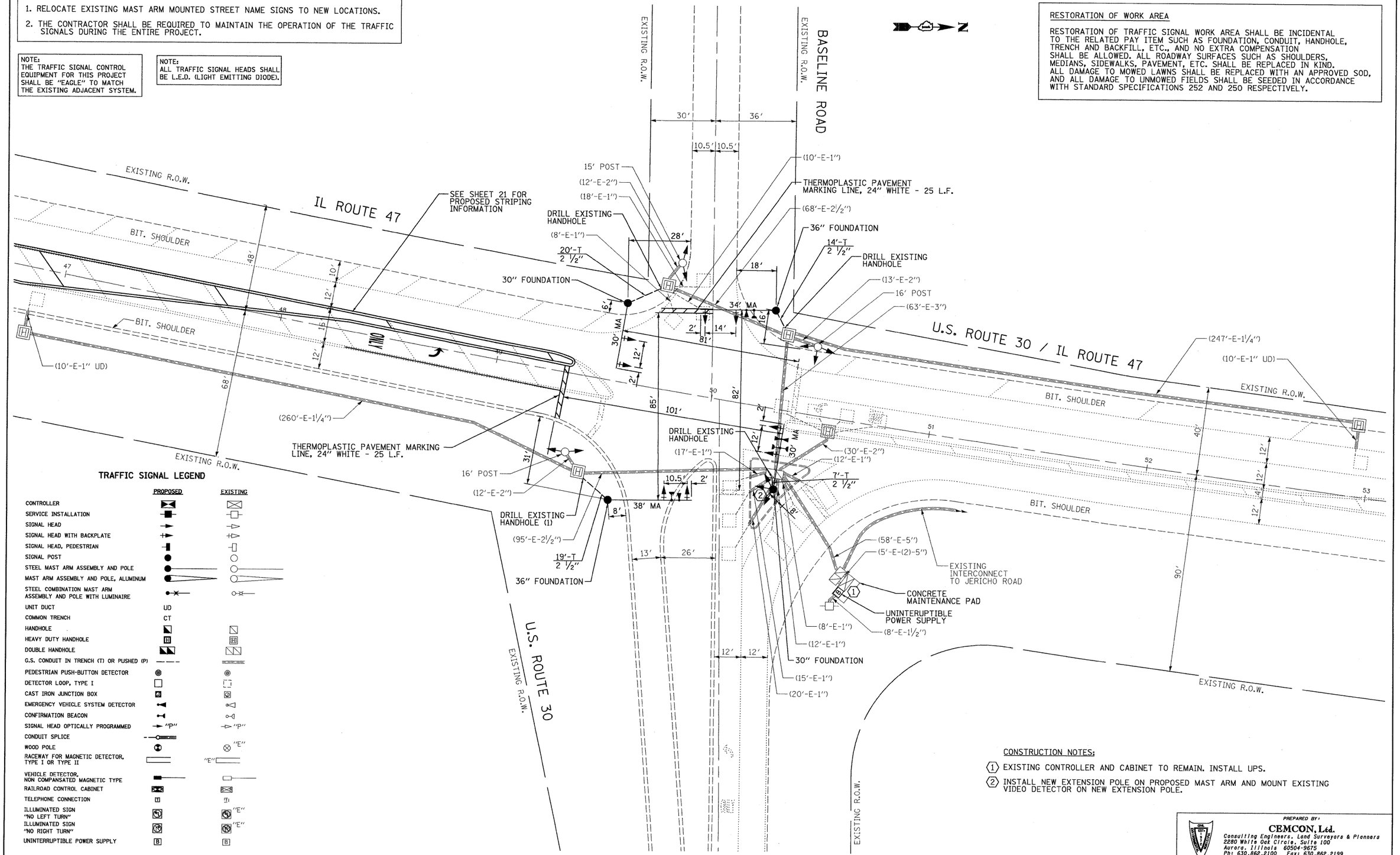
1. RELOCATE EXISTING MAST ARM MOUNTED STREET NAME SIGNS TO NEW LOCATIONS.
2. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

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

NOTE:
ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).

RESTORATION OF WORK AREA

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

CONSTRUCTION NOTES:

(1) EXISTING CONTROLLER AND CABINET TO REMAIN. INSTALL UPS.

(2) INSTALL NEW EXTENSION POLE ON PROPOSED MAST ARM AND MOUNT EXISTING VIDEO DETECTOR ON NEW EXTENSION POLE.

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Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
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FILE NAME = \MICROST\352071\US 30 @ IL 47 SIG.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

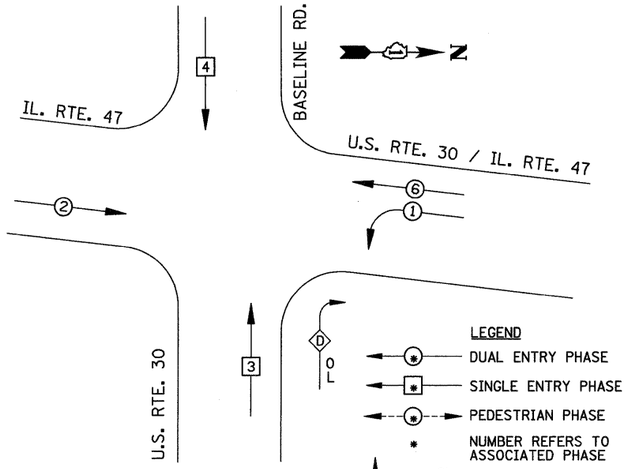
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
U.S. ROUTE 30 AT IL. ROUTE 47 (BASELINE ROAD)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2009-003 TS	KANE	28	19
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

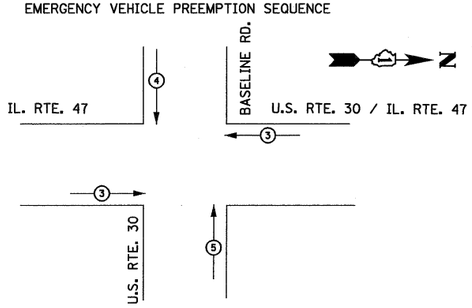


PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

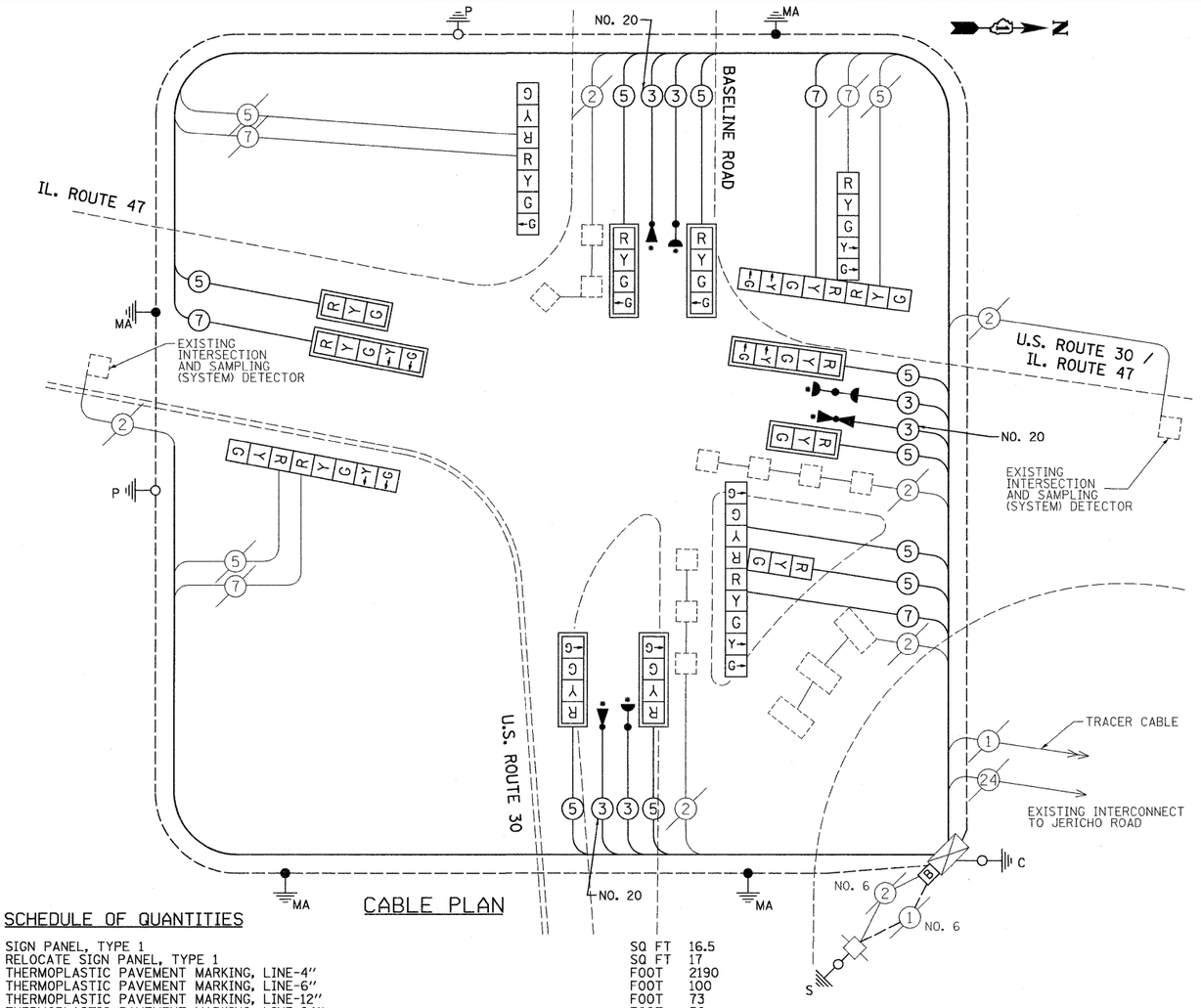
EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTOR			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	⇄	↓	↑

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSH-BUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
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 Y G ←Y ←G "P"	R Y G ←Y ←G "P"	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"	"E"	RAILROAD CONTROL CABINET
"E"	"E"	ILLUMINATED SIGN "NO LEFT TURN"
"E"	"E"	ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	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
B	B	UNINTERRUPTIBLE POWER SUPPLY



CABLE PLAN

SCHEDULE OF QUANTITIES

SIGN PANEL, TYPE 1	SQ FT	16.5
RELOCATE SIGN PANEL, TYPE 1	SQ FT	17
THERMOPLASTIC PAVEMENT MARKING, LINE-4"	FOOT	2190
THERMOPLASTIC PAVEMENT MARKING, LINE-6"	FOOT	100
THERMOPLASTIC PAVEMENT MARKING, LINE-12"	FOOT	73
THERMOPLASTIC PAVEMENT MARKING, LINE-24"	FOOT	50
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	844
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	60
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	60
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	647
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1211
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	441
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE,38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
*LIGHT DETECTOR	EACH	3
*LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1291
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
RELOCATE EXISTING VIDEO VEHICLE DETECTOR	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II (per Intersection)	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	423
*ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	645
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

* 100% COST TO THE CITY OF YORKVILLE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	XOPERATION	
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	19	135	12	0.10	22.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
				TOTAL =	455.8

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

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY CONTACT: MARK SCHEIBEL
PHONE: (630) 723-2128
COMPANY: COMED

FOUNDATION (DEPTH)	FT.	(m)
TYPE A - POST	4	(1.2)
D - CONTROLLER	4	(1.2)
E - M. ARM POLE		
24" (600mm)	10	(3.0)
30" (750mm)	15	(4.6)

CABLE SLACK	FT.	(m)
HANDHOLE	6.5	(2.0)
DOUBLE HANDHOLE	13	(4.0)
SIGNAL POST	0	(0.0)
CONTROLLER CAB.	0	(0.0)
FIBER OPTIC	13	(4.0)
ELECTRIC SERVICE	1	(0.5)
GROUND CABLE	1	(0.5)

VERTICAL	FT.	(m)
ALL FOUNDATIONS	3.0	(1.0)
MAST ARM (L) POLE	20.0	(6.0)
BRACKET MOUNTED	13	(4.0)
PED. PUSH-BUTTON	6	(2.0)
ELECTRIC SERVICE	13.5	(4.1)
SERVICE TO GROUND	13.5	(4.1)
POST MOUNTED	13	(4.0)

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

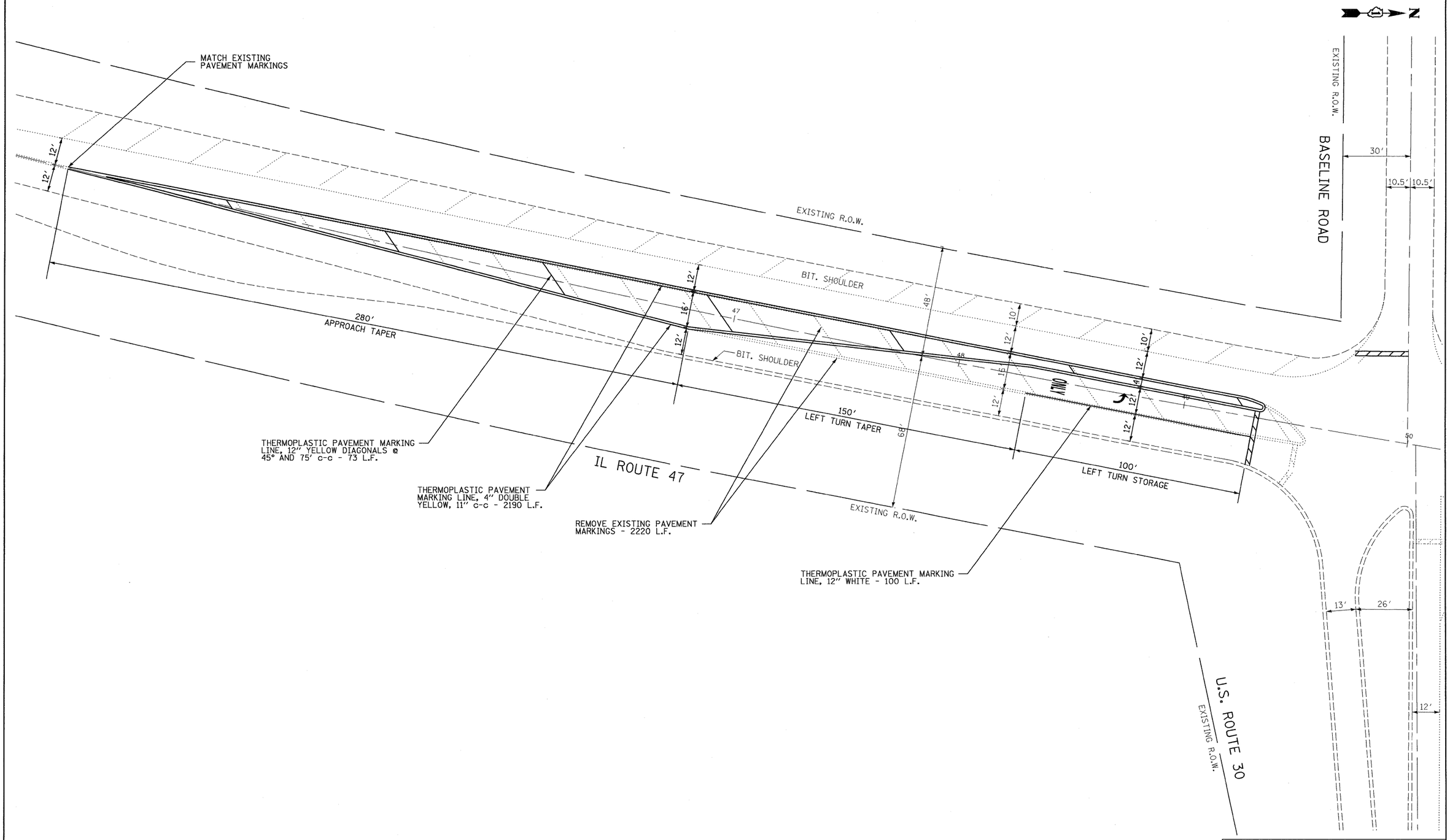
FILE NAME = \MICROST\352071\ US 30 @ IL 47 CAB.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
U.S. ROUTE 30 AT IL. ROUTE 47 (BASELINE ROAD)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2009-003 TS	KANE	28	20
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PREPARED BY:
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2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352071\US 30 @ IL47 STRIPE.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL. ROUTE 47 STRIPING PLAN
U.S. ROUTE 30 AT IL. ROUTE 47 (BASELINE ROAD)

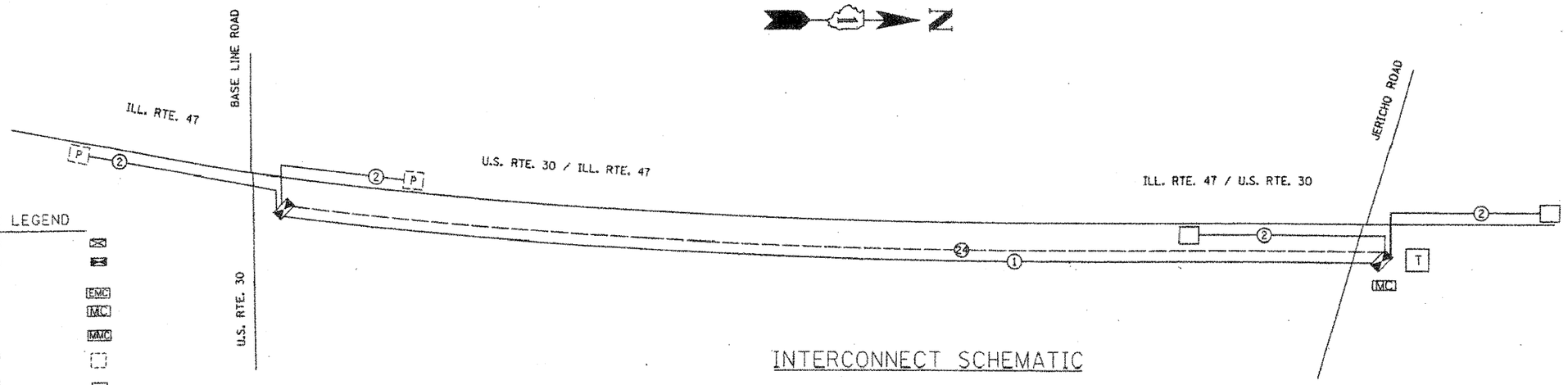
SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2009-003 TS	KANE	28	21
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2001-110 TS	KANE	12	12
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



INTERCONNECT SCHEMATIC

INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER
- PROPOSED INTERSECTION CONTROLLER
- EXISTING MASTER CONTROLLER — EMC
- PROPOSED MASTER CONTROLLER — MC
- MASTER MASTER CONTROLLER — MMC
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- EXISTING INTERSECTION LOOP DETECTORS / PROPOSED SAMPLING (SYSTEM) DETECTORS — P
- EXISTING SAMPLING (SYSTEM) DETECTORS — ES
- PROPOSED SAMPLING (SYSTEM) DETECTORS — PS
- EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. — ESP
- EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS. — ESPS
- EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS — PD
- PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS — PD
- EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS — ESPD
- PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS — PSPD
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F — 24
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F — 24
- EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE — 12
- PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE — 12
- EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED — 6
- PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED — 6
- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED — 2
- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED — 2
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- EXISTING TELEPHONE CONNECTION — T
- PROPOSED TELEPHONE CONNECTION — T

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
INTERCONNECT SCHEDULE OF QUANTITIES

ILL. RTE. 47 FROM
BASE LINE RD./U.S. RTE. 30 JUNCTION
TO JERICHO RD.

SCALE: 1" = 50'
DATE 02-03-2004

DRAWN BY: CJS
DESIGNED BY: MF
CHECKED BY: JPK

01-075

FILE NAME = J:\MICROST\352069\XX-INTERCONNECT04.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1'=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

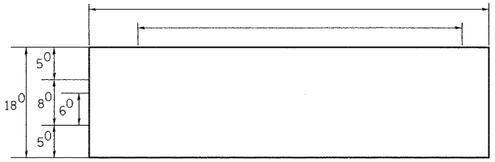
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL. RTE. 47 FROM BASE LINE RD./U.S. RTE. 30 JUNCTION TO JERICHO RD.

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

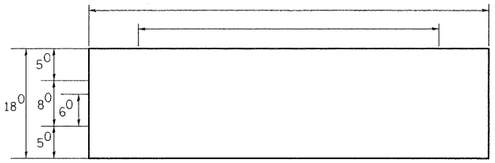
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	22
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1



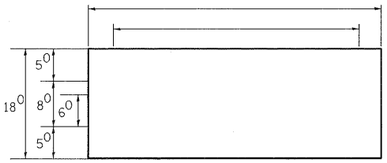
___ Sq. M. each
___ Sq. Ft. each
___ Required

Design Series __



___ Sq. M. each
___ Sq. Ft. each
___ Required

Design Series __

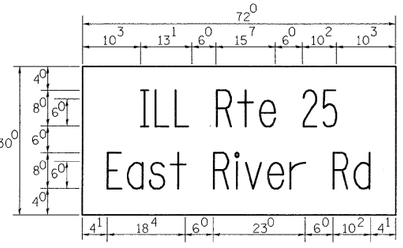


___ Sq. M. each
___ Sq. Ft. each
___ Required

Design Series __

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2



___ Sq. M. each
15 Sq. Ft. each
2 Required

Design Series C

GENERAL NOTES

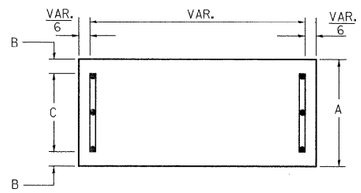
1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS 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.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
5. 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, SCHAUMBURG, IL
   - * TUCKER COMPANY, INC., WAUWATOSA, WI
   - * AMERICAN FABRICATION CO., CHICAGO HEIGHTS, IL
   - * WESTERN TRAFFIC CONTROL INC., CICERO, IL

PARTS LISTING:

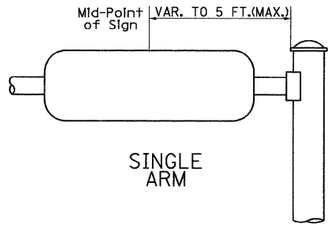
SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

SUPPORTING CHANNELS

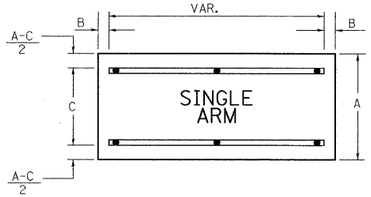


A	B	C
18"	2"	14"



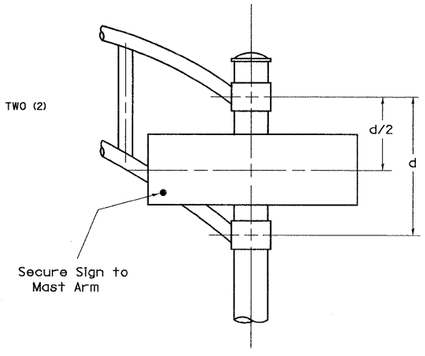
SINGLE ARM

SUPPORTING CHANNELS



SINGLE ARM

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 (3) DENOTES 3/8"

FIRST LETTER	SECOND LETTER: a c d e g o q		SECOND LETTER: b h i k l m n p r u		SECOND LETTER: f w		SECOND LETTER: j		SECOND LETTER: s t		SECOND LETTER: v y		SECOND LETTER: x		SECOND LETTER: z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^2	1^4	1^4	1^5	1^2	1^4	0^6	1^0	1^1	1^4	0^6	1^0	1^1	1^2	1^2	1^4
B	1^4	1^5	2^0	2^1	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4	1^2	1^4	1^6	1^7
C E G	1^4	1^5	2^0	2^1	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
D O Q R	1^4	1^5	2^0	2^1	1^4	1^5	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
F	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^6	1^0	0^6	1^0	0^6	1^0	1^1	1^2
H I M N	2^0	2^1	2^2	2^4	2^0	2^1	1^4	1^5	1^6	1^7	1^6	1^7	2^0	2^1	2^0	2^1
J U	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1
K L	1^1	1^2	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
P	1^2	1^4	1^4	1^5	1^2	1^4	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
S	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
T	1^1	1^2	1^6	1^7	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
V	0^6	1^0	1^4	1^5	1^1	1^2	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
Y	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^5	0^7	0^5	0^6	0^6	1^0	1^1	1^2
Z	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1

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

FIRST LETTER	SECOND LETTER: a c d e g o q		SECOND LETTER: b h i k l m n p r u		SECOND LETTER: f w		SECOND LETTER: j		SECOND LETTER: s t		SECOND LETTER: v y		SECOND LETTER: x		SECOND LETTER: z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^6	1^7
b f k o p s	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
c e	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
r	0^6	1^0	1^2	1^4	0^6	1^0	0^3	0^3	0^5	0^6	0^5	0^6	0^6	1^0	0^6	1^0
t z	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
v y	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2
w	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
x	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4

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	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7
1	2^0	2^1	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	2^0	2^1	2^0	2^1	1^4	1^5	2^0	2^1	2^0	2^1
2 3 4	1^4	1^5	1^4	1^5	1^4	1^5	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^6	1^7	1^4	1^5
5	1^4	1^5	1^4	1^5	1^4	1^5	1^1	1^2	1^1	1^2	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
6	1^6	1^7	1^4	1^5	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
7	1^2	1^4	1^2	1^4	1^4	1^5	1^2	1^5	0^5	0^6	1^2	1^4	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4
8	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^4	1^5

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS, SERIES C	6 INCH UPPER CASE LETTERS, SERIES D	8 INCH UPPER CASE LETTERS, SERIES C	8 INCH UPPER CASE LETTERS, SERIES D	LETTERS	6 INCH LOWER CASE LETTERS, SERIES C	6 INCH LOWER CASE LETTERS, SERIES D
A	3^6	5^0	5^0	6^5	a	3^5	4^2
B	3^2	4^0	4^3	5^3	b	3^5	4^2
C	3^2	4^0	4^3	5^3	c	3^5	4^1
D	3^2	4^0	4^3	5^3	d	3^5	4^2
E	3^0	3^5	4^0	4^7	e	3^5	4^2
F	3^0	3^5	4^0	4^7	f	2^3	2^6
G	3^2	4^0	4^3	5^3	g	3^5	4^2
H	3^2	4^0	4^3	5^3	h	3^5	4^2
I	0^7	0^7	1^1	1^2	i	1^1	1^1
J	3^0	3^6	4^0	5^0	j	2^0	2^2
K	3^2	4^1	4^3	5^4	k	3^5	4^2
L	3^0	3^5	4^0	4^7	l	1^1	1^1
M	3^7	4^5	5^1	6^1	m	6^0	7^0
N	3^2	4^0	4^3	5^3	n	3^5	4^2
O	3^4	4^2	4^5	5^5	o	3^6	4^3
P	3^2	4^0	4^3	5^3	p	3^5	4^2
Q	3^4	4^2	4^5	5^5	q	3^5	4^2
R	3^2	4^0	4^3	5^3	r	2^6	3^2
S	3^2	4^0	4^3	5^3	s	3^6	4^2
T	3^0	3^5	4^0	4^7	t	2^7	3^2
U	3^2	4^0	4^3	5^3	u	3^5	4^2
V	3^5	4^4	4^7	6^0	v	4^2	4^7
W	4^4	5^2	6^0	7^0	w	5^5	6^4
X	3^4	4^0	4^5	5^3	x	4^4	5^1
Y	3^6	5^0	5^0	6^6	y	4^6	5^3
Z	3^2	4^0	4^3	5^3	z	3^6	4^3

NUMBER	6 INCH SERIES, C	6 INCH SERIES, D	8 INCH SERIES, C	8 INCH SERIES, D
1	1^2	1^4	1^5	2^0
2	3^2	4^0	4^3	5^3
3	3^2	4^0	4^3	5^3
4	3^5	4^3	4^7	5^7
5	3^2	4^0	4^3	5^3
6	3^2	4^0	4^3	5^3
7	3^2	4^0	4^3	5^3
8	3^2	4^0	4^3	5^3
9	3^2	4^0	4^3	5^3
0	3^4	4^2	4^5	5^5

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352069\ STREET NAME 25.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

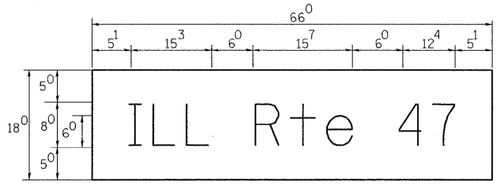
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGN
IL. ROUTE 25 (E. RIVER ROAD) AT MILL STREET

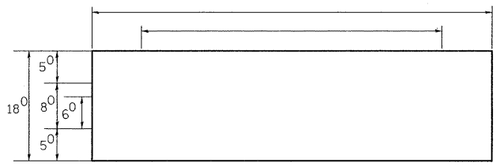
SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	23
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

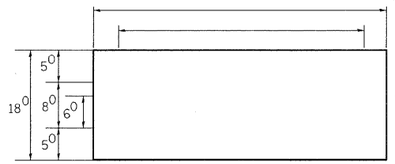
PANEL SIGN DESIGN TYPE 1



___ Sq. M. each
8.25 Sq. Ft. each
2 Required
Design Series ___



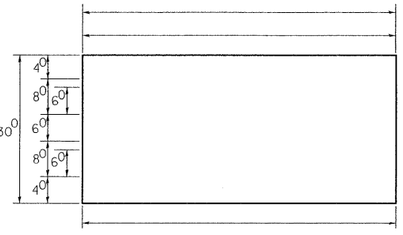
___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___



___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___

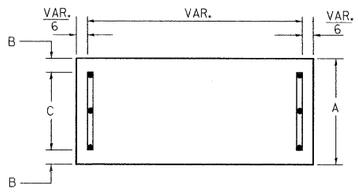
NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2

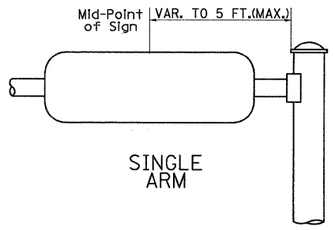


___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series C

SUPPORTING CHANNELS

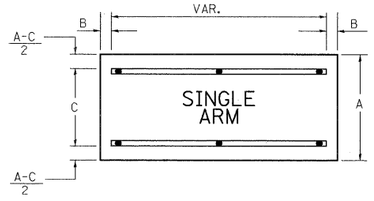


A	B	C
18″	2″	14″



SINGLE ARM

SUPPORTING CHANNELS



A	B	C
18″	2″	12″
30″	2″	22″

___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series C

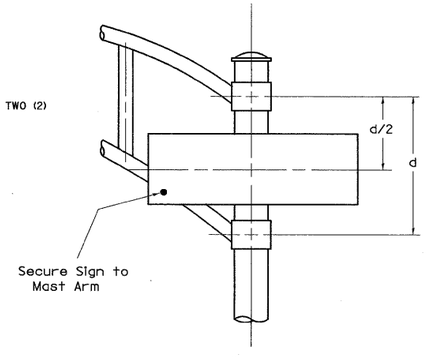
GENERAL NOTES

1. 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.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6′-0″.
4. ALL BORDERS SHALL BE ¾″ WIDE AND CORNER RADIUS SHALL BE 2-1/4 ″.
5. 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 SCHAUMBURG, IL
   - ✱ TUCKER COMPANY, INC. WAUWATOSA, WI
   - ✱ AMERICAN FABRICATION CO. CHICAGO HEIGHTS, IL
   - ✱ WESTERN TRAFFIC CONTROL INC. CICERO, IL

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼″ x 14 x 1″ H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
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/BRACKET OF THE ABOVE PRODUCT.



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"

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^2	1^4	1^4	1^5	1^2	1^4	0^6	1^0	1^1	1^4	0^6	1^0	1^1	1^2	1^2	1^4
B	1^4	1^5	2^0	2^1	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4	1^2	1^4	1^6	1^7
C E G	1^4	1^5	2^0	2^1	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
D O Q R	1^4	1^5	2^0	2^1	1^4	1^5	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
F	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^6	1^0	0^6	1^0	0^6	1^0	1^1	1^2
H I M N	2^0	2^1	2^2	2^4	2^0	2^1	1^4	1^5	1^6	1^7	1^6	1^7	2^0	2^1	2^0	2^1
J U	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1
K L	1^1	1^2	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
P	1^2	1^4	1^4	1^5	1^2	1^4	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
S	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
T	1^1	1^2	1^6	1^7	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
V	0^6	1^0	1^4	1^5	1^1	1^2	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
Y	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^5	0^7	0^5	0^6	0^6	1^0	1^1	1^2
Z	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1

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

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^6	1^7
b f k o p s	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
c e	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
r	0^6	1^0	1^2	1^4	0^6	1^0	0^3	0^3	0^5	0^6	0^5	0^6	0^6	1^0	0^6	1^0
t z	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
v y	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2
w	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
x	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4

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	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7
1	2^0	2^1	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	2^0	2^1	2^0	2^1	1^4	1^5	2^0	2^1	2^0	2^1
2 3 4	1^4	1^5	1^4	1^5	1^4	1^5	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^6	1^7	1^4	1^5
5	1^4	1^5	1^4	1^5	1^4	1^5	1^1	1^2	1^1	1^2	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
6	1^6	1^7	1^4	1^5	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
7	1^2	1^4	1^2	1^4	1^4	1^5	1^2	1^5	0^5	0^6	1^2	1^4	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4
8	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^4	1^5

EXAMPLE, 2 (3) DENOTES 3″/8

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	SERIES D	8 INCH UPPER CASE LETTERS SERIES C	SERIES D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	SERIES D
A	3^6	5^0	5^0	6^5	a	3^5	4^2
B	3^2	4^0	4^3	5^3	b	3^5	4^2
C	3^2	4^0	4^3	5^3	c	3^5	4^1
D	3^2	4^0	4^3	5^3	d	3^5	4^2
E	3^0	3^5	4^0	4^7	e	3^5	4^2
F	3^0	3^5	4^0	4^7	f	2^3	2^6
G	3^2	4^0	4^3	5^3	g	3^5	4^2
H	3^2	4^0	4^3	5^3	h	3^5	4^2
I	0^7	0^7	1^1	1^2	i	1^1	1^1
J	3^0	3^6	4^0	5^0	j	2^0	2^2
K	3^2	4^1	4^3	5^4	k	3^5	4^2
L	3^0	3^5	4^0	4^7	l	1^1	1^1
M	3^7	4^5	5^1	6^1	m	6^0	7^0
N	3^2	4^0	4^3	5^3	n	3^5	4^2
O	3^4	4^2	4^5	5^5	o	3^6	4^3
P	3^2	4^0	4^3	5^3	p	3^5	4^2
Q	3^4	4^2	4^5	5^5	q	3^5	4^2
R	3^2	4^0	4^3	5^3	r	2^6	3^2
S	3^2	4^0	4^3	5^3	s	3^6	4^2
T	3^0	3^5	4^0	4^7	t	2^7	3^2
U	3^2	4^0	4^3	5^3	u	3^5	4^2
V	3^5	4^4	4^7	6^0	v	4^2	4^7
W	4^4	5^2	6^0	7^0	w	5^5	6^4
X	3^4	4^0	4^5	5^3	x	4^4	5^1
Y	3^6	5^0	5^0	6^6	y	4^6	5^3
Z	3^2	4^0	4^3	5^3	z	3^6	4^3

NUMBER	6 INCH SERIES C	6 INCH SERIES D	8 INCH SERIES C	8 INCH SERIES D
1	1^2	1^4	1^5	2^0
2	3^2	4^0	4^3	5^3
3	3^2	4^0	4^3	5^3
4	3^5	4^3	4^7	5^7
5	3^2	4^0	4^3	5^3
6	3^2	4^0	4^3	5^3
7	3^2	4^0	4^3	5^3
8	3^2	4^0	4^3	5^3
9	3^2	4^0	4^3	5^3
0	3^4	4^2	4^5	5^5

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

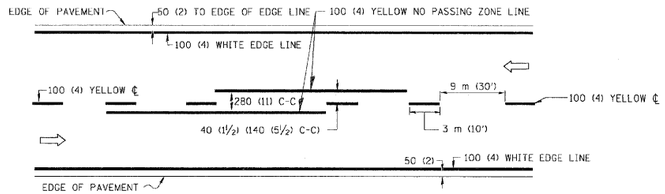
FILE NAME = \MICROST\352069\ STREET NAME 47.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1′=20′	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

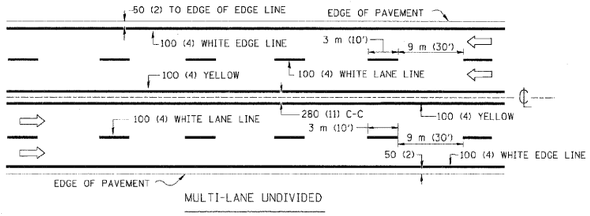
MAST ARM MOUNTED STREET NAME SIGN
U.S. ROUTE 30 AT IL. ROUTE 47 (BASELINE ROAD)

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

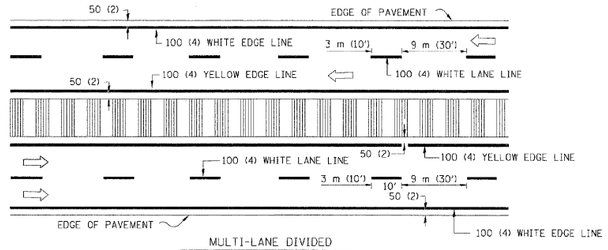
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	24
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



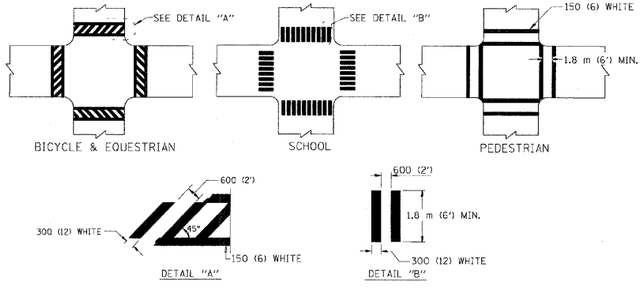
MULTI-LANE UNDIVIDED



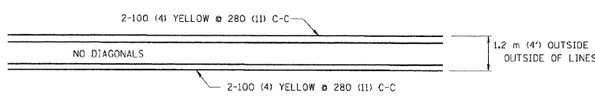
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

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

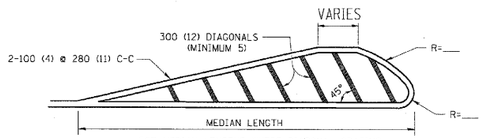
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



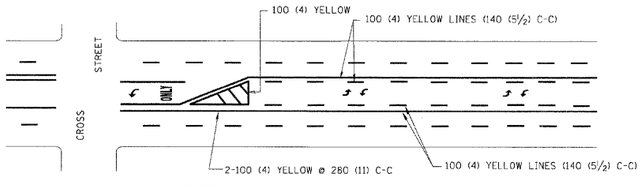
1.2 m (4') WIDE MEDIANS ONLY



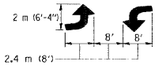
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

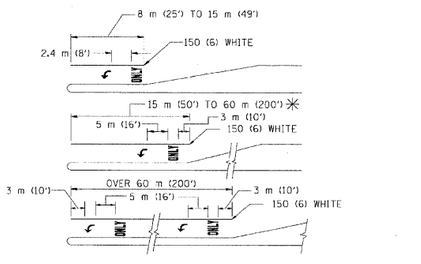


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

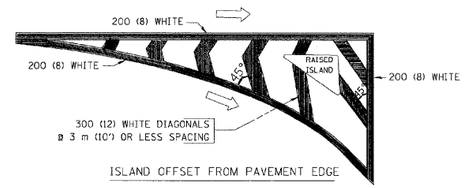


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
↰ AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)

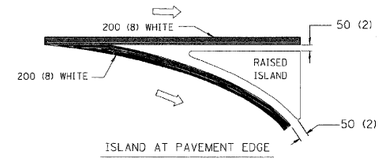
✳ TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5½) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5½) 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 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m² (3.6 SQ. FT.) EACH "X"=5.0 m² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

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

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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
DATE 10/18/2002
CHECKED BY TC-13

REVISION DATE: 01/06/00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DATE-TIME
DGN-SPEC
VHTC13

FILE NAME = \MICROST\352069\ 25-TC13.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

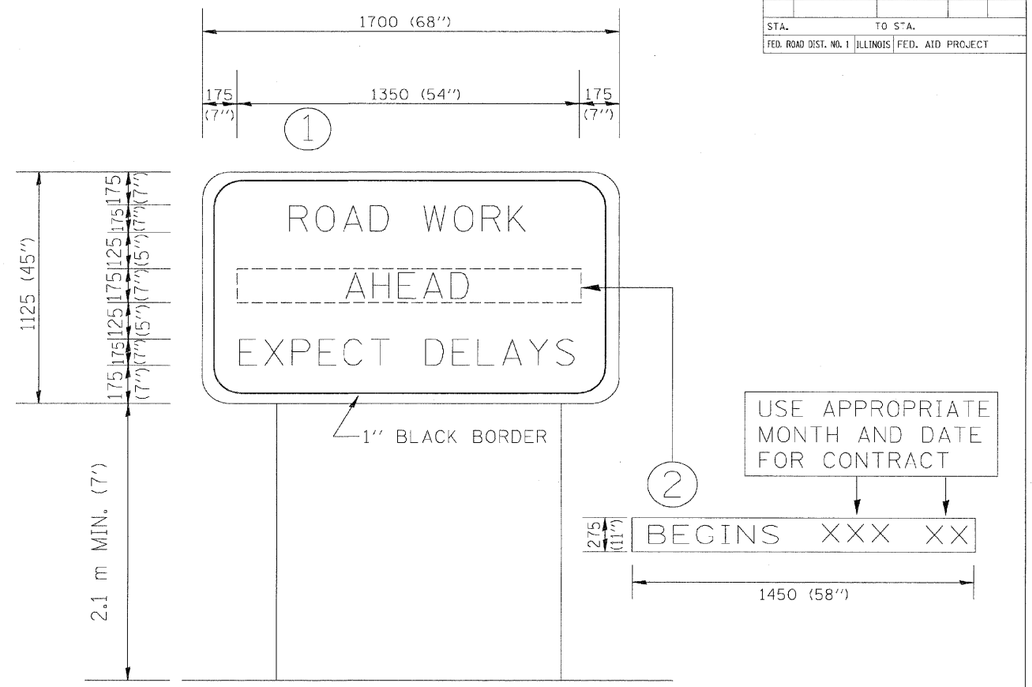
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS DEPARTMENT OF TRANSPORTATION DETAILS
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	25
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO. 1	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 2.3 SQ. M. (25.70 SQ. FT.)

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY INFORMATION SIGNING

SCALE: DRAWN BY: BUR. OF DESIGN

DATE 10/18/2002 CHECKED BY

TC22

REVISION DATE: 02/02/99

Friday October 18, 2002 @ 10:25:17 AM
d:\projects\distatd\tc22.dgn LV=35,63
VI=TC22

FILE NAME = \MICROST\352069\ 26-TC13.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS DEPARTMENT OF TRANSPORTATION DETAILS
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

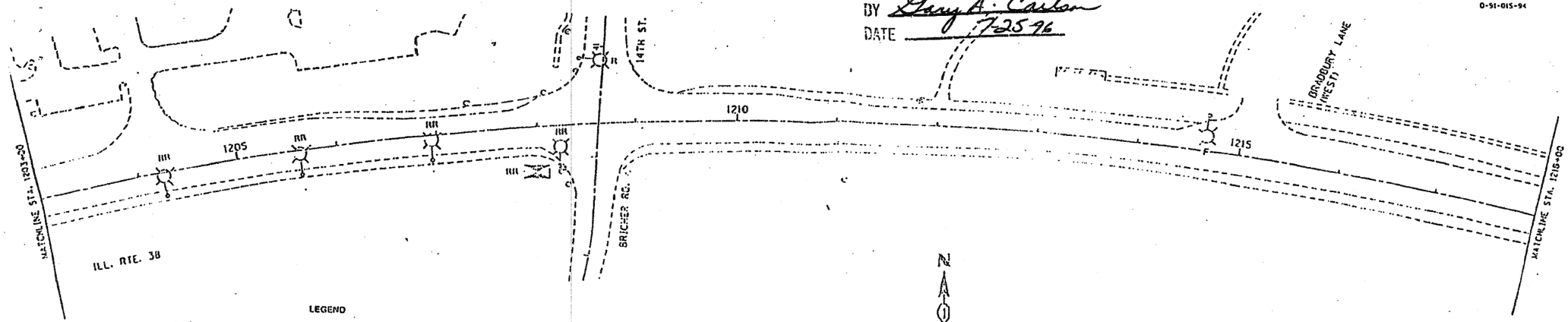
SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	26
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

RECORD DRAWING
APPROVED
VIRGIL COOK & SON, INC.
BY Gary A. Carlson
DATE 7-25-96

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	L-RRS-1	KANE		
STA. 1203	TO STA. 1218			
SEE PLANS SHT. NO.	REMARKS	FED. AID PROJECT		

0-91-015-94



LEGEND

- F PARTIAL FOUNDATION REMOVAL ONLY.
- R EXISTING LIGHTING UNIT TO BE REMOVED.
- RR EXISTING LIGHTING UNIT TO BE REMOVED AND RELOCATED.
- RR EXISTING LIGHTING CONTROLLER TO BE REMOVED BY OTHERS.

PREPARED BY:
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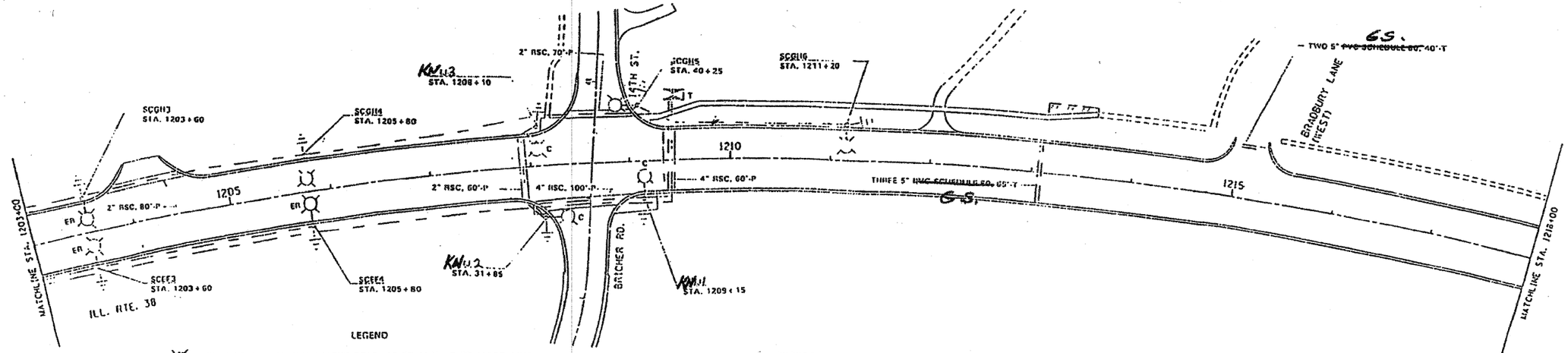


LEGEND

- PROPOSED ALUMINUM LIGHT POLE, 40 FT M.H., 8 FT MAST ARM, 310W LUMINAIRE WITH 3 FT SET BACK UNLESS OTHERWISE NOTED.
- ER EXISTING LIGHTING UNIT RELOCATED, 40 FT M.H., 8 FT MAST ARM, NEW 310W LUMINAIRE WITH 3 FT SET BACK UNLESS OTHERWISE NOTED.
- C LUMINAIRE MOUNTED ON COMBINATION TRAFFIC SIGNAL/LIGHT POLE, 40 FT M.H., 8 FT MAST ARM, 310W LUMINAIRE.
- ISEO UNIT DUCT WITH 2-1/C NO. 6 & 1-1/C NO. 8 GROUND, 600 VOLT (EPR-TYPE RHW) 1 INCH DIA.
- PROPOSED CONDUIT, GALVANIZED STEEL, TRENCH (T) OR PUSHED (P), UNIT DUCT WITHIN, SIZE AND LENGTH INDICATED ON PLANS.
- PROPOSED CONDUIT, ~~PVC SCHEDULE 80, ENCASED~~ G.S. IN CONCRETE (T), SIZE AND LENGTH INDICATED ON PLANS.
- T PROPOSED TRAFFIC CONTROLLER.
- GROUND ROD.

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED STREET LIGHTING F.A.P. 347
(ILL. RTE. 38 @ 14TH ST.)

REVISIONS	
NAME	DATE

SCALE: VERT. 1"=50'
HORIZ.
DATE 10/5/94

DRAWN BY M.S
CHECKED BY C.B

FOR INFORMATION ONLY

FILE NAME =	USER NAME = JGC	DESIGNED - KK	REVISED -
\MICROSTA\352069\ 27-REC LIGHTING.DGN		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD LIGHTING PLAN – IL ROUTE 38 @ 14th STREET
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	27
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

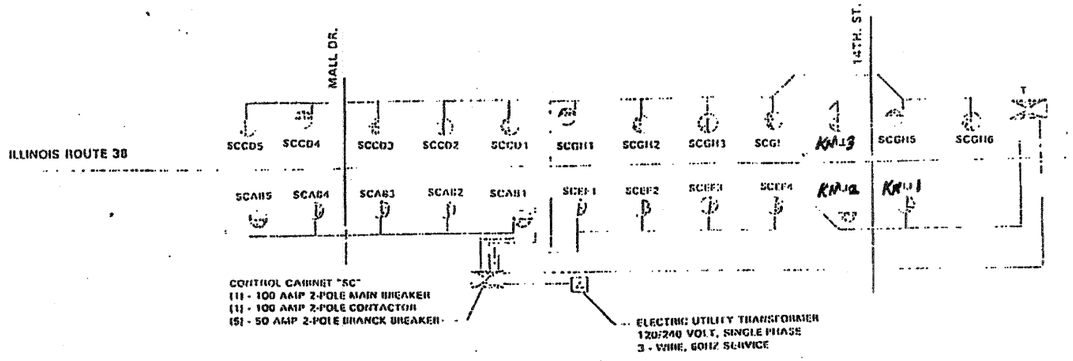
RECORD DRAWING

APPROVED
VIRGIL COOK & SON, INC.
BY Gary A. Carlson
DATE 7-25-96

NOTE.

1) ST. CHARLES "SC" UNIT ID WILL BE BLACK ON YELLOW.

2) STATE OF ILLINOIS "KN" UNIT ID WILL BE BLACK ON SILVER.



LEGEND

- LUMINAIRE, 310W H.P.S. CONNECTED TO RED AND BLACK WIRE
- T TRAFFIC CONTROLLER
- LIGHTING CONTROLLER
- ELECTRIC UTILITY PAD MOUNTED TRANSFORMER

LOAD TABLE FOR LIGHTING CONTROLLER "SC"	
CIRCUITS	PROPOSED LOAD(AMPS)
SCAB	7.5
SCCD	7.5
SCEF	6
SCGH	9
KN1J	4.5

PREPARED BY:
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Consulting Engineers, Land Surveyors & Planners
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Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

REVISIONS	
NAME	DATE

E10

ILLINOIS DEPARTMENT OF TRANSPORTATION

WIRING DIAGRAM F.A.P. 347
(ILL. RTE. 38)

SCALE: VERT. NONE, HORIZ.
DRAWN BY M.S
DATE 10/5/94
CHECKED BY C.B

FOR INFORMATION ONLY

FILE NAME = \MICROST\352069\ 28-WIRING DIAGRAM.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIRING DIAGRAM – IL. ROUTE 38 @ 14th STREET
KANE COUNTY TRAFFIC SIGNAL MODERNIZATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-003 TS	KANE	28	28
		CONTRACT NO. 60F98		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		