8-5-05 Letting, Item 048

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	1

83792

INDEX OF SHEETS

VILLAGE OF OAK PARK

ADT MADISON STREET (2004) 28,639

ADT MADISON STREET (2014) 31,951

POSTED SPEED LIMIT MADISON STREET 30 mph

0 10' 20' 30' — 1"= 10'

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 LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

CONTRACT NO. 83792

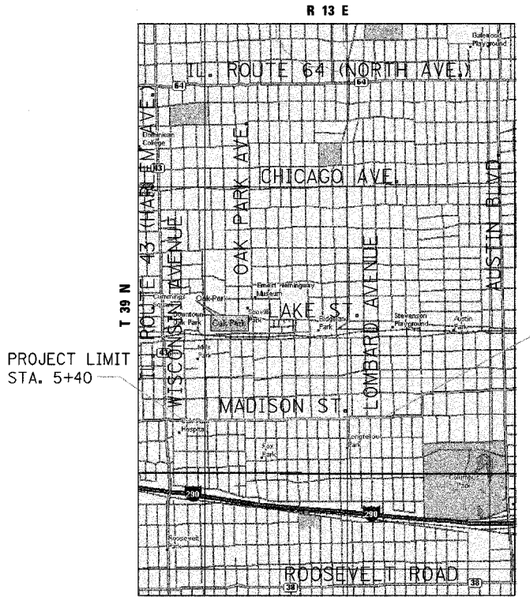
FEDERAL AID ENGINEER: PHIL MARCYN 847 7054189
OAK PARK PROJECT ENGINEER - JIM BUDRICK (708) 358-5722 STRAND ASSOCIATES, INC. PROJECT MANAGER - JASON R. MARTIN, P.E. (815) 744-4200

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

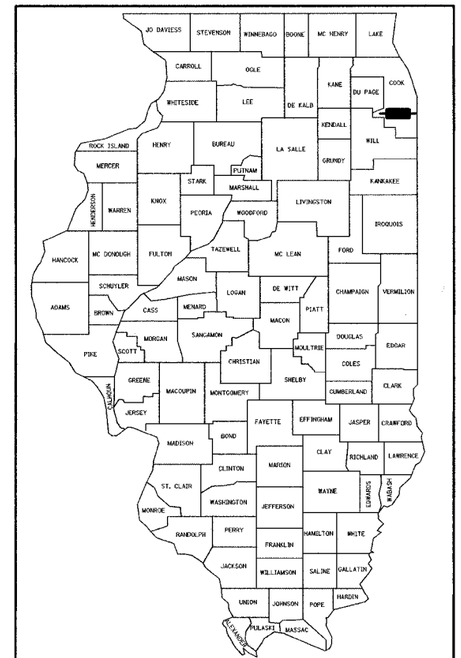
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU ROUTE 1419 (MADISON STREET)
FROM WISCONSIN AVENUE TO LOMBARD AVENUE
CMAQ TRAFFIC SIGNAL INTERCONNECTION PLAN
SECTION 04-00239-00-TL
PROJECT NO. CMM-8003 (449)
JOB NO.: C-91-369-04

COOK COUNTY
VILLAGE OF OAK PARK



GROSS PROJECT LENGTH: 6,609 FEET = 1.25 MILES
NET PROJECT LENGTH: 6,609 FEET = 1.25 MILES



LOCATION OF SECTION INDICATED THUS: –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

JAMES A. BUDRICK 62-39749 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

APPROVED JUNE 3 **20** 05
VILLAGE ENGINEER

APPROVED June 6 **20** 05
DISTRICT ENGINEER OF LOCAL ROADS AND STREETS

APPROVED June 6, **20** 05
DISTRICT ENGINEER

JASON R. MARTIN 062-055773 REGISTERED PROFESSIONAL ENGINEER STATE OF ILLINOIS cal 8/05 exp 11/06

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

STRAND ASSOCIATES, INC.® ENGINEERS
1170 SOUTH HOUBOLT ROAD
JOLIET, IL 60431

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

GENERAL NOTES

1. THE LOCATIONS OF THE VARIOUS UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE.

2. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AND THE VILLAGE OF OAK PARK PUBLIC WORKS (708-358-5700) FOR FIELD LOCATIONS OF VARIOUS UTILITIES.

3. THE CONTRACTOR SHALL COORDINATE VARIOUS CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

4. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKER MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT, OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DISRUPTED BY HIS/HER OPERATIONS.

5. BARRICADES: ALL UNBALLASTED TYPE I AND TYPE II BARRICADES SHALL HAVE TWO (2) SANDBAGS ON THE BOTTOM RAIL. A TYPE III BARRICADE SHALL REQUIRE A MINIMUM OF FOUR (4) SANDBAGS.

6. THE CONTRACTOR SHALL ENSURE THAT POSITIVE DRAINAGE IS MAINTAINED AT ALL TIMES DURING AND AFTER REPLACEMENT OF COMBINATION CONCRETE CURB AND GUTTER. THE CONTRACTOR SHALL DETERMINE THE PROPOSED GRADE OF THE GUTTER LINE TO ENSURE POSITIVE DRAINAGE.

7. TEN FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS TO EXISTING CURBS AND GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO THE CONTRACT.

8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.

9. CONTRACTOR SHALL TAKE CARE TO PROTECT EXISTING LANDSCAPING AT LOCATIONS NOT SHOWN IN THE PLANS TO BE REMOVED AND AS DIRECTED BY THE ENGINEER. LANDSCAPING TO BE PROTECTED THAT IS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN KIND AT HIS/HER EXPENSE.

10. ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE VILLAGE OF OAK PARK.

11. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN PEDESTRIAN AND VEHICULAR ACCESS AT ALL TIMES TO ALL PRIVATE AND COMMERCIAL PROPERTIES DURING THE CONSTRUCTION OF THIS PROJECT.

12. THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL PARKING METERS ALONG THE PROJECT CORRIDOR. IF THE PARKING METERS ARE FOUND TO INTERFERE WITH CONSTRUCTION ACITIVITY, THEY SHALL BE CAREFULLY REMOVED FROM THEIR METAL SUPPORT POST, STORED, AND IMMEDIATELY REINSTALLED WHEN THE HAZARD NO LONGER EXISTS, OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE THE SUPPORT OR FOUNDATION WHEN REMOVING THE ADJACENT SIDEWALK. ANY DAMAGE TO OR LOSS OF ANY COMPONENT SHALL BE REPLACED OR REPAIRED AT NO EXTRA COST.

13. THE VILLAGE OF OAK PARK WATER DEPARTMENT (708-445-3340 EXT. 3375) SHALL BE RESPONSIBLE FOR TURNING THE WATER MAIN VALVES ON AND OFF. THE CONTRACTOR IS NOT ALLOWED TO TURN THE VILLAGE OF OAK PARK OWNED WATER MAIN VALVES ON AND OFF. THE CONTRACTOR SHALL CONTACT THE VILLAGE OF OAK PARK FOR A WATER METER IF NECESSARY.

HIGHWAY STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-04	CURB RAMPS FOR SIDEWALKS
442201-01	CLASS C AND D PATCHES
606001-02	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701301-02	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701601-04	URBAN LANE CLOSURE MULTILANE 1W OR 2W WITH NON-TRANSVERSABLE MEDIAN
701606-04	URBAN LANE CLOSURE MULTILANE 2W WITH MOUNTABLE MEDIAN
701701-04	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-03	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
702001-05	TRAFFIC CONTROL DEVICES
814001	CONCRETE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
877001-02	STEEL MAST ARM ASSEMBLY AND POLE
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATION
886006	TYPICAL LAYOUTS FOR DETECTION LOOPS

DISTRICT STANDARDS

BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC-22	TEMPORARY INFORMATION SIGNING
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAIL (4 SHEETS)

TIME: 10:52:34 PM
DATE: 06/6/2005
FILENAME: s:\@sal\751—800\784\432\micros\sheets\gennotes.dgn

STRAND ASSOCIATES, INC.® ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
GENERAL NOTES, HIGHWAY STANDARDS, AND DISTRICT DETAILS

SCALE: VERT.
HORIZ.
DATE 06/05/2005
DRAWN BY RCB
CHECKED BY RKK

SUMMARY OF QUANTITIES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-	COOK	34	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

LOCATION OF WORK			CONSTRUCTION CODE		FAU ROUTE 1419 (MADISON STREET) ⊠						
SUMMARY OF QUANTITIES				TOTAL	Y031-1F 1	Y031-1F 2	Y031-1F 3	Y031-1F 4	Y031-1F 5	Y031-1F 6	Y031-1F 7
SP	CODE NO.	ITEM	UNIT		WISCONSIN AVE.	HOME AVE.	OAK PARK AVE.	EAST AVE.	RIDGELAND AVE.	LOMBARD AVE.	INTERCONNECT
	67100100	MOBILIZATION	L. SUM	1							1
*	70102625	TRAFFIC CONTROL AND PROTECTION STANDARD 701606	L. SUM	1	0.15	0.15	0.15	0.15	0.15	0.15	0.1
*	70102630	TRAFFIC CONTROL AND PROTECTION STANDARD 701601	L. SUM	1	0.15	0.15	0.15	0.15	0.15	0.15	0.1
*	70102635	TRAFFIC CONTROL AND PROTECTION STANDARD 701701	L. SUM	1	0.15	0.15	0.15	0.15	0.15	0.15	0.1
*	70102640	TRAFFIC CONTROL AND PROTECTION STANDARD 701801	L. SUM	1	0.15	0.15	0.15	0.15	0.15	0.15	0.1
	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FT	5235		173		357	166		4539
	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FT	304		104		68	72	60	
	81400100	HANDHOLE	EACH	6							6
	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	6	1	1	1	1	1	1	
	85700500	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	2				1		1	
	86400100	TRANSCEIVER - FIBER OPTIC	EACH	2							2
	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	320		320					
	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FT	3253	677	592		660	647	677	
	87900200	DRILL EXISTING HANDHOLE	EACH	62	2	8	8	14	12	10	8
	88200100	TRAFFIC SIGNAL BACKPLATE	EACH	32	4	4		8	8	8	
	88500100	INDUCTIVE LOOP DETECTOR	EACH	10	2	2		2	2	2	
	88600100	DETECTOR LOOP, TYPE I	FT	1673	152	152	341	350	346	332	
	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1	1		1	1	1	
	X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO 14/1C	FOOT	6342							6342
	X8800020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	24	4	4		6	4	6	
	X8800035	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	16	6	6		2		2	
	X8800040	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	8				2	4	2	
	X8800045	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	8				2	4	2	
	X8810610	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	26	6			8	4	8	
	X8810620	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	7	1	4			2		
*	XX004980	REOPTIMIZE TRAFFIC SIGNAL SYSTEM	L. SUM	1							1
	XX003660	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM24F SM 12F	FT	6342							6342
	Z0013798	CONSTRUCTION LAYOUT	L. SUM	1							1

REVISIONS	
NAME	DATE

STRAND ASSOCIATES, INC.® ENGINEERS

ILLINOIS DEPARTMENT OF TRANSPORTATION

MADISON STREET CMAQ

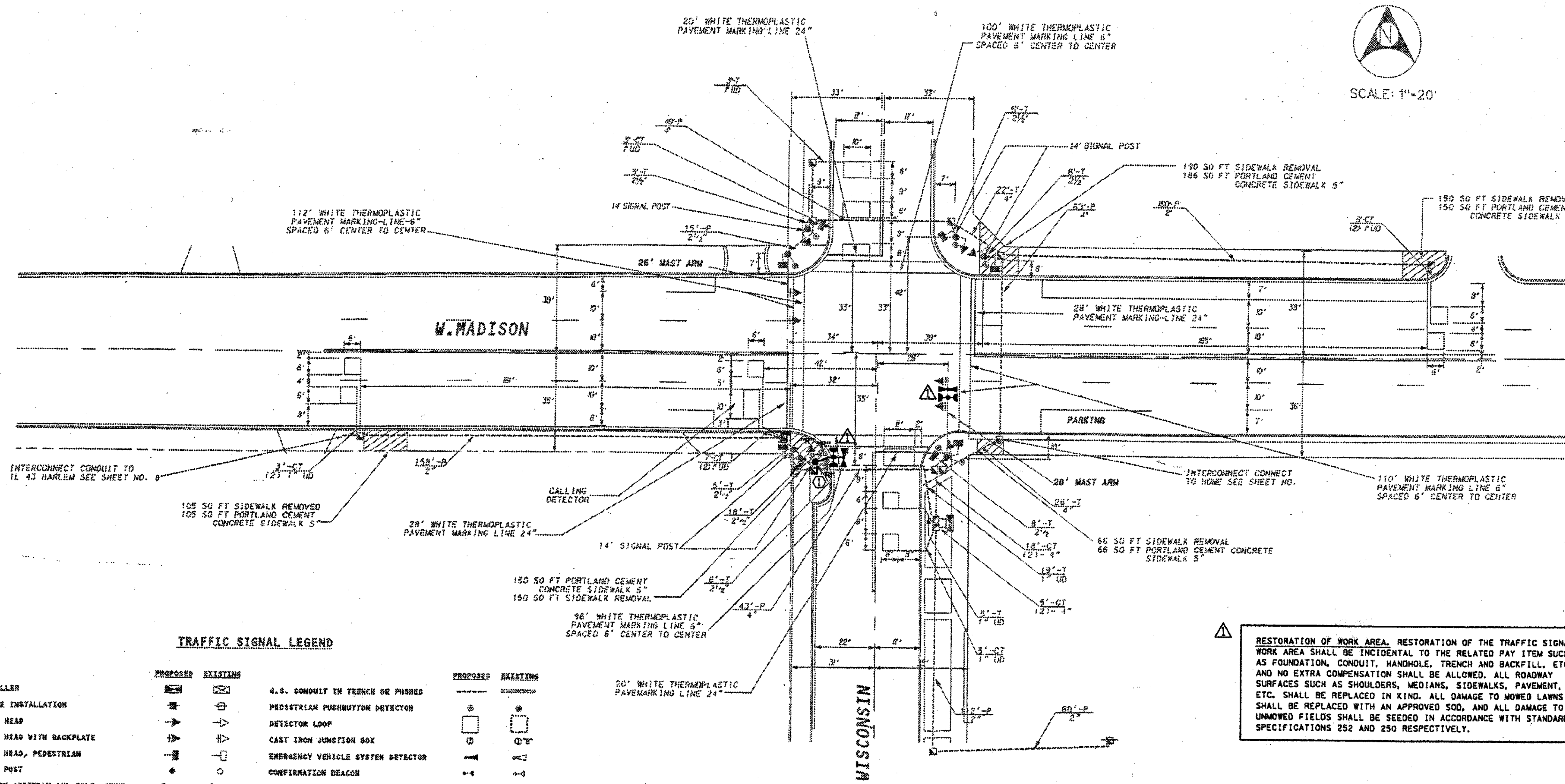
SUMMARY OF QUANTITIES

SCALE: VERT. NONE HORIZ.
DATE 06/06/2005
DRAWN BY RCB
CHECKED BY RKK

SUMMARY OF QUANTITIES SHEET 1

TIME: 09:50:09 AM
DATE: 06062005
FILENAME: s:\@SAI\791—800\784\432\micros\Sheets\SOQ.dgn

FOR INFORMATION ONLY



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMMON TRENCH	CT	
UNIT DUCT	UD	
HANDHOLE		
HEAVY DUTY HANDHOLE		"E"
DOUBLE HANDHOLE		

	PROPOSED	EXISTING
G.S. CONDUIT IN TRENCH OR PUSHED		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		"E"
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 COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		"E"
STREET LIGHT		
REMOVE AND REPLACE EXISTING SIDEWALK		
⚠ RELOCATED	"R"	

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

⚠ CONSTRUCTION NOTE:

(1) REMOVE EXISTING 14' TRAFFIC SIGNAL POST. INSTALL NEW 18' TRAFFIC SIGNAL POST ON EXISTING FOUNDATION AND RELOCATE EXISTING TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON TO NEW POST. REUSE EXISTING CABLES. INSTALL NEW LIGHT DETECTOR ON NEW POST AND INSTALL NO. 20 3/C AND NO. 14 3/C CABLES.

⚠ REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, EACH 1

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 TRAFFIC SIGNAL POST 14'

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

FOR INFORMATION ONLY

⚠ INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 6-03-02

OAK PARK-SHEET 252 OF 365

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

METRO

METRO TRANSPORTATION GROUP, INC.
TRANSPORTATION PLANNING, ENGINEERING AND DESIGN
1300 GREENBROOK, HANOVER PARK, IL 60103 PH# 630 213-1000

REVISIONS

NO.	DATE	DESCRIPTION
⚠1	6-03-02	ADDITION OF EVP

GEOMETRIC PLAN AND SIGNAL INSTALLATION PLAN

MADISON @ WISCONSIN
OAKPARK, ILLINOIS

FILE NAME: 06_30.dgn
DATE: NOV. 6, 2000
PROJECT NO.: H0004-04
SHEET NO.: 4 OF 34

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

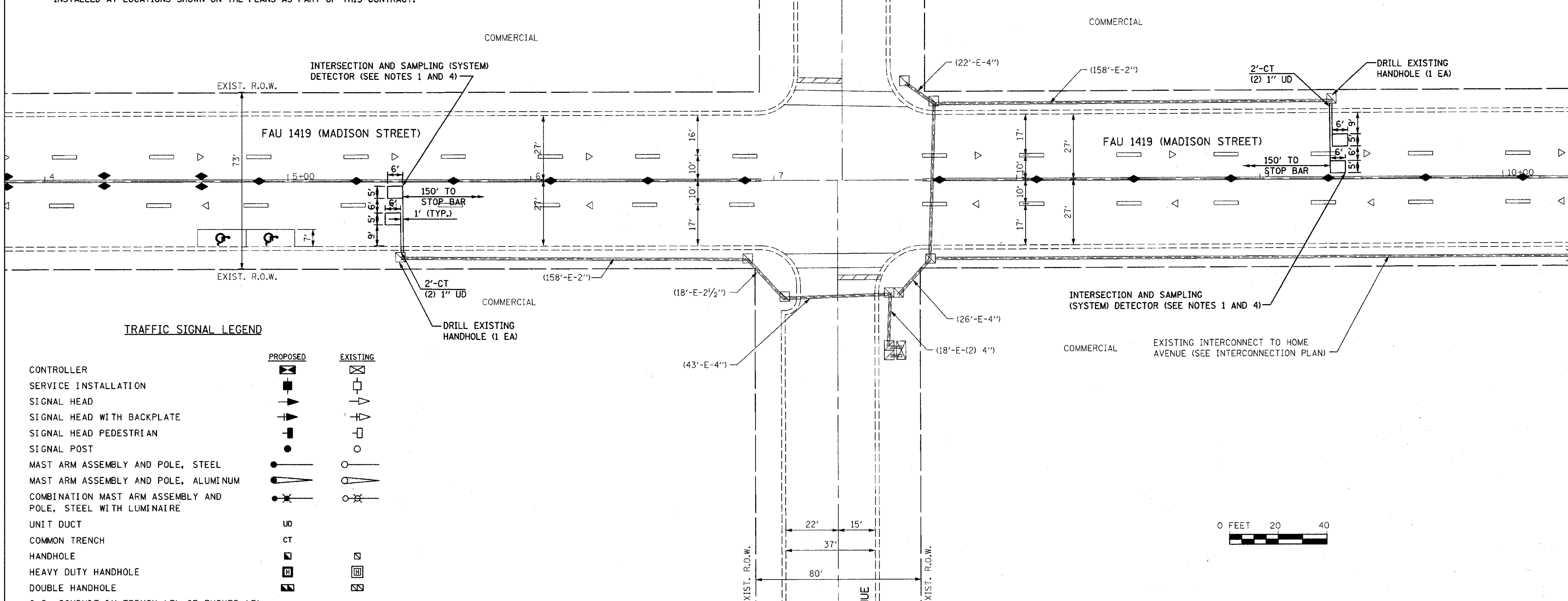
83792

RESTORATION OF WORK AREA

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

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

1. INTERSECTION AND SAMPLING (SYSTEM) DETECTOR LOOPS SHALL BE INSTALLED ACCORDING TO DISTRICT ONE STANDARDS.
2. EXISTING CONDUIT AND CABLE SHALL REMAIN IN PLACE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS. NO COMPENSATION WILL BE MADE FOR AREAS WHERE CONDUIT IS TRENCHED INSTEAD OF PUSHED. ALL CONDUIT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR CONDUIT, PUSHED UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ALL RESTORATION REQUIRED ABOVE THE BORED OR TRENCHED AREA SHALL BE INCIDENTAL TO THE CONDUIT REGARDLESS OF THE INSTALLATION METHOD. BID PRICES SHALL REFLECT THE CONTRACTOR'S DESIRED METHOD OF INSTALLATION.
4. TRAFFIC SIGNAL LOOPS WILL BE REMOVED BY OTHERS DURING THE MADISON STREET RESURFACING PROJECT PRIOR TO CONSTRUCTION. DETECTOR LOOPS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS AS PART OF THIS CONTRACT.



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		"E"
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
TRAFFIC SIGNAL MODIFICATION PLAN
MADISON STREET & WISCONSIN AVENUE

SCALE: VERT. HORIZ. 1"=20'
DATE 06/06/2005
DRAWN BY KCV
CHECKED BY

TRAFFIC SIGNAL PLAN

FILENAME: s:\@sal\751--800\784\432\micros\modernization\wisconsin.dgn DATE: 06/06/2005 TIME: 07:59:34 AM

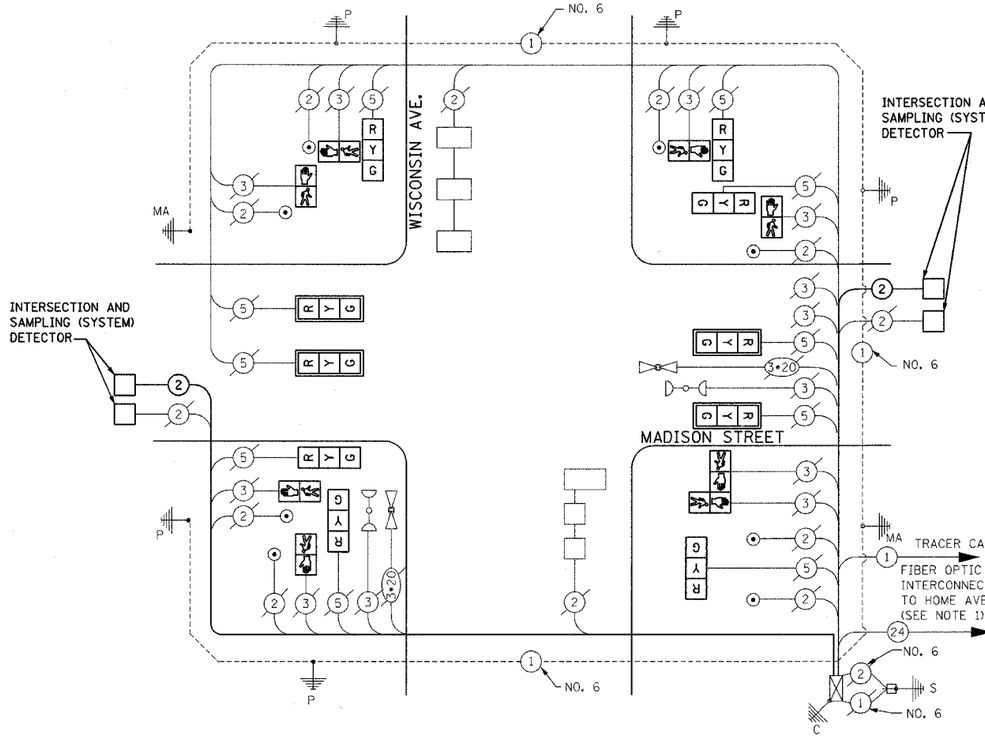
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	677
DRILL EXISTING HANDHOLE	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	152
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1

THE CONTRACTOR SHALL REPLACE ALL EXISTING SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS WITH L.E.D. (LIGHT EMITTING DIODE) SIGNAL HEADS.

1. THE CONTRACTOR SHALL RE-CONNECT THE EXISTING FIBER OPTIC CABLE IN PLACE BETWEEN WISCONSIN AVENUE AND HOME AVENUE TO THE CONTROLLER AT WISCONSIN AVENUE.

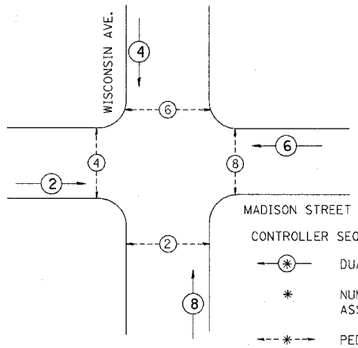


N

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 (LETTERS)
		12" (300mm) PEDESTRIAN SIGNAL SECTION (SYMBOLS)
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTIVE LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
36	36	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
R Y G ← ↑ → "P"	R Y G ← ↑ → "P"	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
H/C	C	GROUND CABLE 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

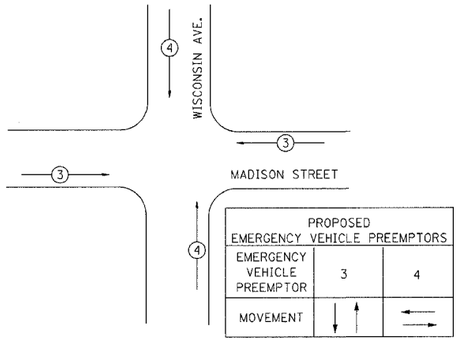
EXISTING AND PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

N

EXIST. AND PROP. EMERGENCY VEHICLE PREEMPTION DIAGRAM



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

(DRAWING NOT TO SCALE)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	10		17	0.50	85
(YELLOW)	10		25	0.25	62.5
(GREEN)	10		15	0.25	37.5
ARROW	0		12	0.10	0
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	0
FLASHER	1			0.50	0
ENERGY COSTS TO:			TOTAL =		485

VILLAGE OF OAK PARK

ENERGY SUPPLY CONTACT:

PHONE:

COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)
E - M. ARM POLE		SIGNAL POST	2 (1.0)		
24" (600 mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750 mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRICAL SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
CABLE PLAN
MADISON STREET & WISCONSIN AVENUE

SCALE: VERT.
HORIZ.
DRAWN BY RCB
DATE 06/06/2005
CHECKED BY

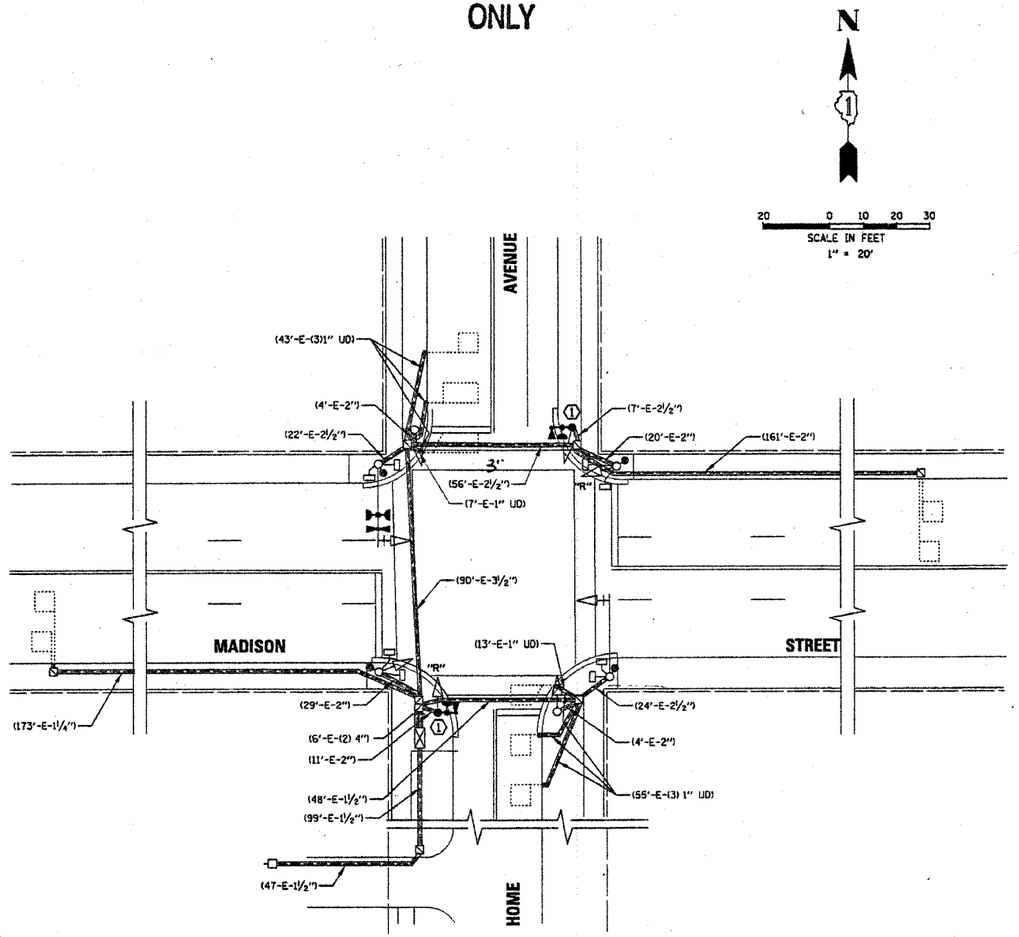
TRAFFIC SIGNAL PLAN

TIME: 07:59:31 AM
DATE: 06/06/2005
FILENAME: s:\@eat\751—800\784\432\micros\cable plans\wisconsin.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	00-00037-00-TL	COOK	34 ~~365~~	2487
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792 OAK PARK

FOR INFORMATION ONLY



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	⊠
SERVICE INSTALLATION	■	▯
SIGNAL HEAD	→	▷
SIGNAL HEAD WITH BACKPLATE	+→	+▷
SIGNAL HEAD, PEDESTRIAN	▮→	▯▷
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●———	○———
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●———	○———
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●—✕	○—✕
UNIT DUCT	UD	
HANDHOLE	◪	◪
HEAVY DUTY HANDHOLE	▣	▣
DOUBLE HANDHOLE	◪◪	◪◪
C.S. CONDUIT IN GROUND (CIG)	———	———
PEDESTRIAN PUSHBUTTON DETECTOR	⊛	●
DETECTOR LOOP	□	□
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 COMPENSATED MAGNETIC TYPE	■———	□———
RAILROAD CONTROL CABINET	⊠	⊠"E"

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

CONSTRUCTION NOTE:

① REMOVE EXISTING 14' TRAFFIC SIGNAL POST. INSTALL NEW 14' TRAFFIC SIGNAL POST ON EXISTING FOUNDATION AND RELOCATE EXISTING TRAFFIC SIGNAL HEAD, 1-FACE, 3 SECTION TO NEW POST. REUSE EXISTING CABLES. INSTALL NEW LIGHT DETECTOR ON NEW POST AND INSTALL NO. 20 3/C AND NO. 14 3/C CABLES. 14' POST DUE TO TREE CANOPY AT THIS LOCATION.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, EACH 1

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.

2 EACH TRAFFIC SIGNAL POST 14'

FOR INFORMATION ONLY

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN

MADISON STREET AT HOME AVENUE
OAK PARK, ILLINOIS

SCALE: 1" = 20'
DATE: 6-03-02

DRAWN BY: FPB
DESIGNED BY: SJP
CHECKED BY: GWZ

h:\evp\01-604\I - Oak Park\EVP_madison&home.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

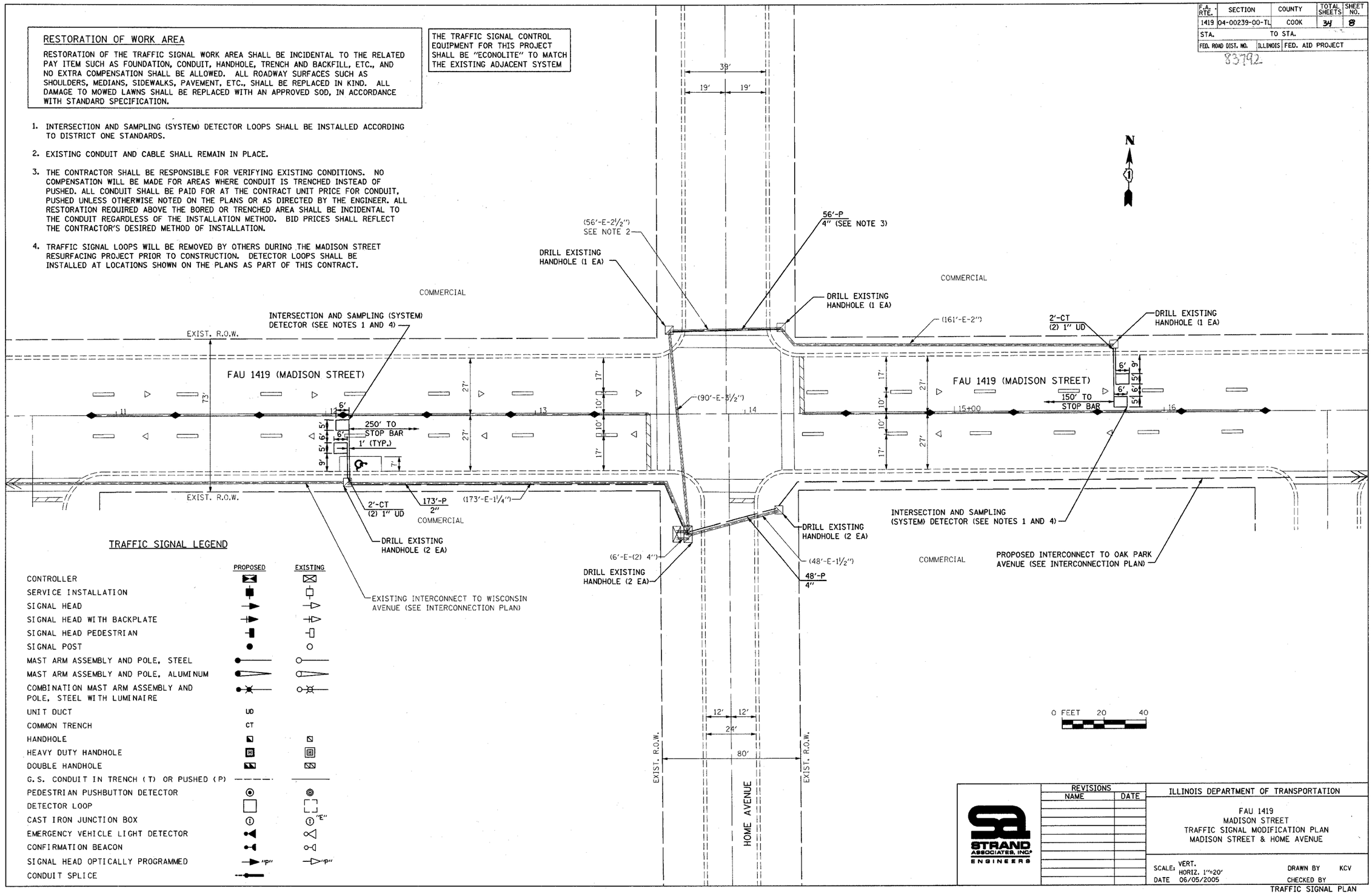
83792

RESTORATION OF WORK AREA

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

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

1. INTERSECTION AND SAMPLING (SYSTEM) DETECTOR LOOPS SHALL BE INSTALLED ACCORDING TO DISTRICT ONE STANDARDS.
2. EXISTING CONDUIT AND CABLE SHALL REMAIN IN PLACE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS. NO COMPENSATION WILL BE MADE FOR AREAS WHERE CONDUIT IS TRENCHED INSTEAD OF PUSHED. ALL CONDUIT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR CONDUIT, PUSHED UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ALL RESTORATION REQUIRED ABOVE THE BORED OR TRENCHED AREA SHALL BE INCIDENTAL TO THE CONDUIT REGARDLESS OF THE INSTALLATION METHOD. BID PRICES SHALL REFLECT THE CONTRACTOR'S DESIRED METHOD OF INSTALLATION.
4. TRAFFIC SIGNAL LOOPS WILL BE REMOVED BY OTHERS DURING THE MADISON STREET RESURFACING PROJECT PRIOR TO CONSTRUCTION. DETECTOR LOOPS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS AS PART OF THIS CONTRACT.



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	⊠
SERVICE INSTALLATION	■	□
SIGNAL HEAD	→	▷
SIGNAL HEAD WITH BACKPLATE	→	▷
SIGNAL HEAD PEDESTRIAN	■	□
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●	○
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●	○
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●	○
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE	◪	◪
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	◪	◪
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR	◉	◉
DETECTOR LOOP	□	[ ]
CAST IRON JUNCTION BOX	①	① "E"
EMERGENCY VEHICLE LIGHT DETECTOR	●◀	◁
CONFIRMATION BEACON	●◀	○◁
SIGNAL HEAD OPTICALLY PROGRAMMED	→ "P"	▷ "P"
CONDUIT SPLICE	●—	

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
TRAFFIC SIGNAL MODIFICATION PLAN
MADISON STREET & HOME AVENUE

SCALE: VERT.
HORIZ. 1"=20'
DATE 06/05/2005

DRAWN BY KCV
CHECKED BY

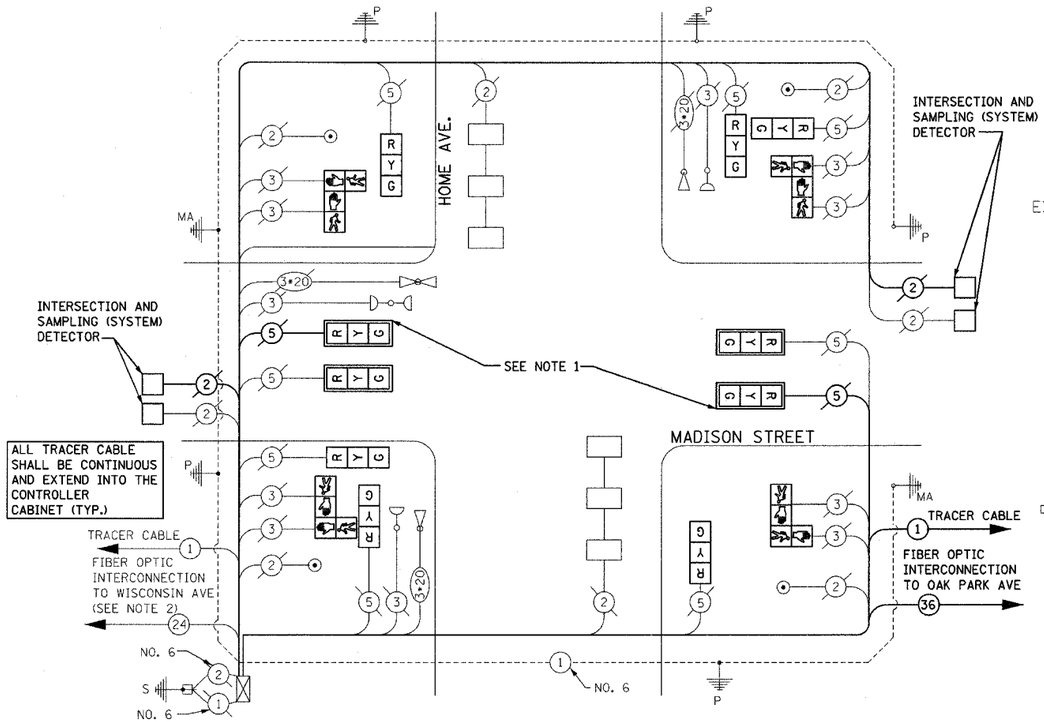
TRAFFIC SIGNAL PLAN

TIME: 10:52:27 PM
DATE: 06/05/2005
FILENAME: s:\@sai\751—800\784\432\micros\modernization\home.dgn

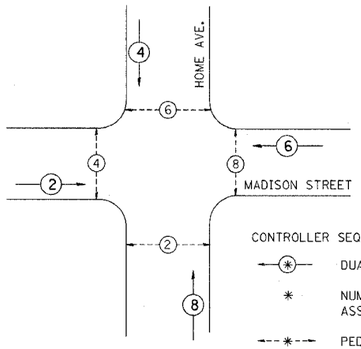
ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	173
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	104
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	320
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	592
DRILL EXISTING HANDHOLE	EACH	8
TRAFFIC SIGNAL BACKPLATE	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	152
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4

THE CONTRACTOR SHALL REPLACE ALL EXISTING SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS WITH L.E.D. (LIGHT EMITTING DIODE) SIGNAL HEADS.

1. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGNAL HEADS AT A NEW LOCATION ON THE MAST ARM. THE SIGNAL HEAD SHALL ALIGN WITH THE PARKING BAY DELINEATION LOCATED 7' FROM THE EDGE OF PAVEMENT. THE EXISTING STREET NAME SIGN SHALL BE RELOCATED TO ACCOMODATE THE NEW SIGNAL HEAD ACCORDING TO HIGHWAY STANDARD 877001-01 STEEL MAST ARM ASSEMBLY AND POLE. RELOCATION OF THE STREET NAME SIGN SHALL BE INCIDENTAL TO SIGNAL HEAD INSTALLATION AND SHALL NOT BE PAID FOR SEPARATELY.
2. THE CONTRACTOR SHALL RE-CONNECT THE EXISTING FIBER OPTIC CABLE IN PLACE BETWEEN WISCONSIN AVENUE AND HOME AVENUE TO THE CONTROLLER AT HOME AVENUE.

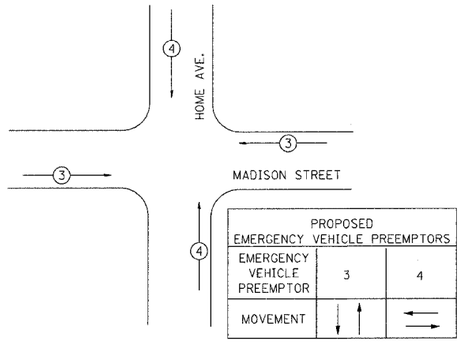


EXISTING AND PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EXIST. AND PROP. EMERGENCY VEHICLE PREEMPTION DIAGRAM



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

(DRAWING NOT TO SCALE)

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 (LETTERS)
		12" (300mm) PEDESTRIAN SIGNAL SECTION (SYMBOLS)
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTIVE LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
36	36	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
P Y C ←Y ←G	R Y G ←Y ←G	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"P"	"P"	
H/C	C	GROUND CABLE 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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	8		17	0.50	68
(YELLOW)	8		25	0.25	50
(GREEN)	8		15	0.25	30
ARROW	0		12	0.10	0
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	0
FLASHER	1			0.50	0
ENERGY COSTS TO:			TOTAL =		448

VILLAGE OF OAK PARK

ENERGY SUPPLY CONTACT:
PHONE:
COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)
E - M. ARM POLE		SIGNAL POST	2 (1.0)		
24" (600 mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750 mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRICAL SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

53792

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
CABLE PLAN
MADISON STREET & HOME AVENUE

SCALE: VERT.
HORIZ.
DATE 06/06/2005
DRAWN BY KCV
CHECKED BY

TRAFFIC SIGNAL PLAN

TIME: 07:59:30 AM
DATE: 06/06/2005
FILENAME: s:\@sai\751-800\784\432\micros\cable plans\home.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2775	99-00235-00-RS	COOK	~~168~~ 77	
STA.	TO STA.		34	10
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

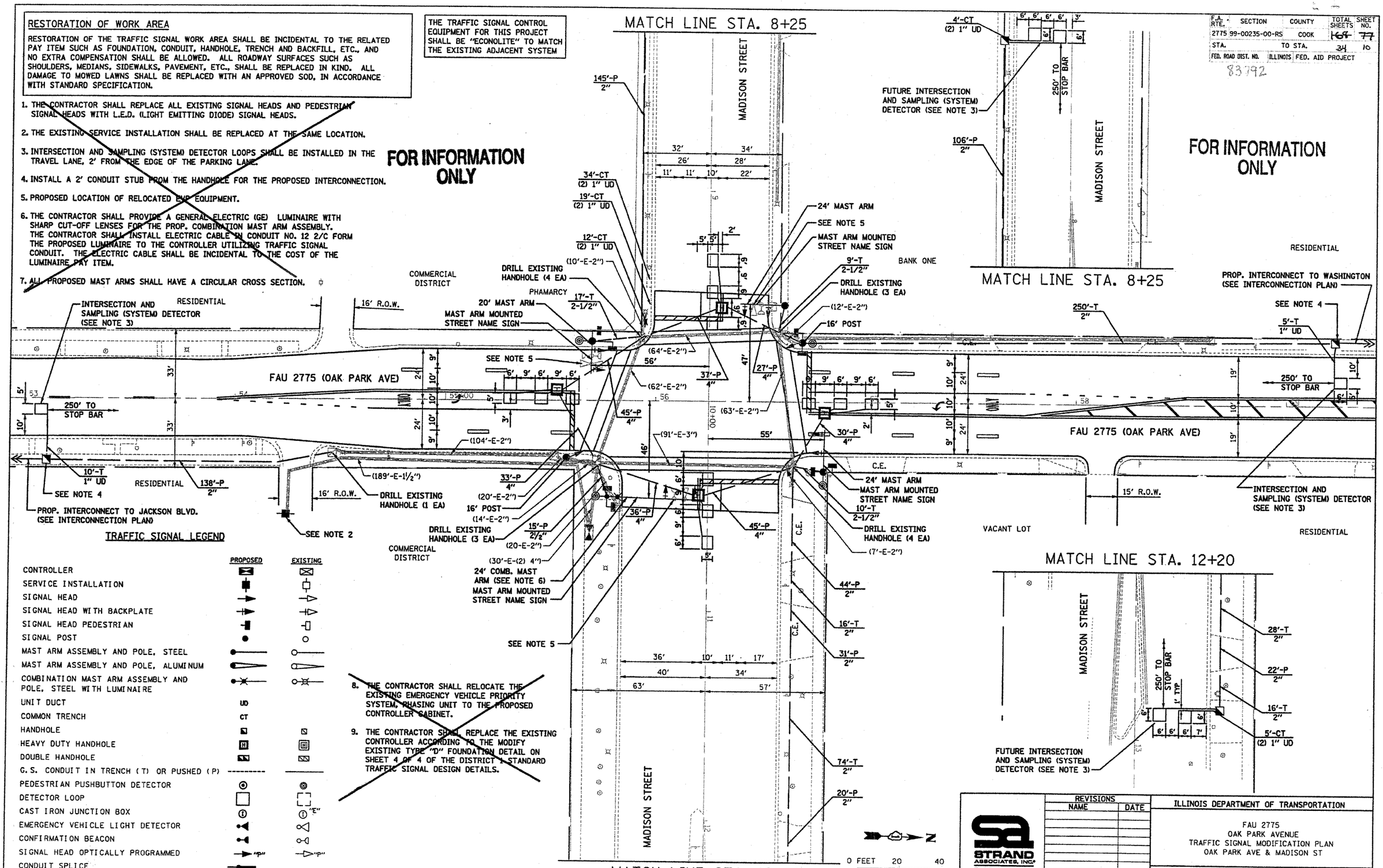
RESTORATION OF WORK AREA

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

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

1. THE CONTRACTOR SHALL REPLACE ALL EXISTING SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS WITH L.E.D. (LIGHT EMITTING DIODE) SIGNAL HEADS.
2. THE EXISTING SERVICE INSTALLATION SHALL BE REPLACED AT THE SAME LOCATION.
3. INTERSECTION AND SAMPLING (SYSTEM) DETECTOR LOOPS SHALL BE INSTALLED IN THE TRAVEL LANE, 2' FROM THE EDGE OF THE PARKING LANE.
4. INSTALL A 2' CONDUIT STUB FROM THE HANDHOLE FOR THE PROPOSED INTERCONNECTION.
5. PROPOSED LOCATION OF RELOCATED EVP EQUIPMENT.
6. THE CONTRACTOR SHALL PROVIDE A GENERAL ELECTRIC (GE) LUMINAIRE WITH SHARP CUT-OFF LENSES FOR THE PROP. COMBINATION MAST ARM ASSEMBLY. THE CONTRACTOR SHALL INSTALL ELECTRIC CABLE IN CONDUIT NO. 12 2/C FORM THE PROPOSED LUMINAIRE TO THE CONTROLLER UTILIZING TRAFFIC SIGNAL CONDUIT. THE ELECTRIC CABLE SHALL BE INCIDENTAL TO THE COST OF THE LUMINAIRE PAY ITEM.
7. ALL PROPOSED MAST ARMS SHALL HAVE A CIRCULAR CROSS SECTION.
8. THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO THE PROPOSED CONTROLLER CABINET.
9. THE CONTRACTOR SHALL REPLACE THE EXISTING CONTROLLER ACCORDING TO THE MODIFY EXISTING TYPE "D" FOUNDATION DETAIL ON SHEET 4 OF 4 OF THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS.

FOR INFORMATION ONLY



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE		
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		"E"
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		

REVISIONS NAME	DATE

STRAND ASSOCIATES, INC. ENGINEERS

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 2775
OAK PARK AVENUE
TRAFFIC SIGNAL MODIFICATION PLAN
OAK PARK AVE & MADISON ST

SCALE: VERT.
HORIZ.
DATE 04/04/2004
DRAWN BY DJB
CHECKED BY JRM

TRAFFIC SIGNAL PLAN 8

TIME: 04:32:51 PM
DATE: 04/04/2004

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

RESTORATION OF WORK AREA

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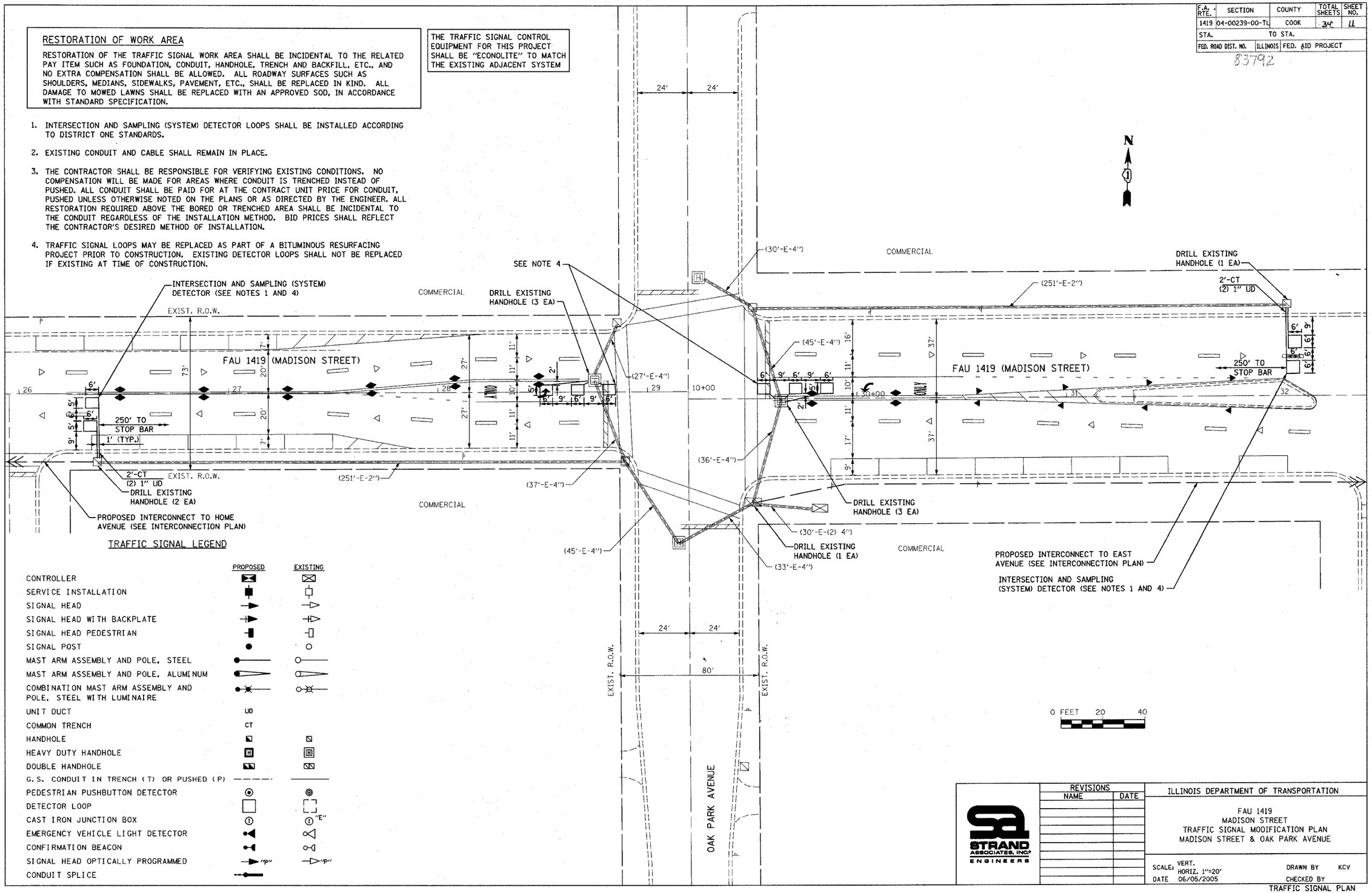
4. TRAFFIC SIGNAL LOOPS MAY BE REPLACED AS PART OF A BITUMINOUS RESURFACING PROJECT PRIOR TO CONSTRUCTION. EXISTING DETECTOR LOOPS SHALL NOT BE REPLACED IF EXISTING AT TIME OF CONSTRUCTION.



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE		
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		"E"
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		

STRAND ASSOCIATES, INC.® ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

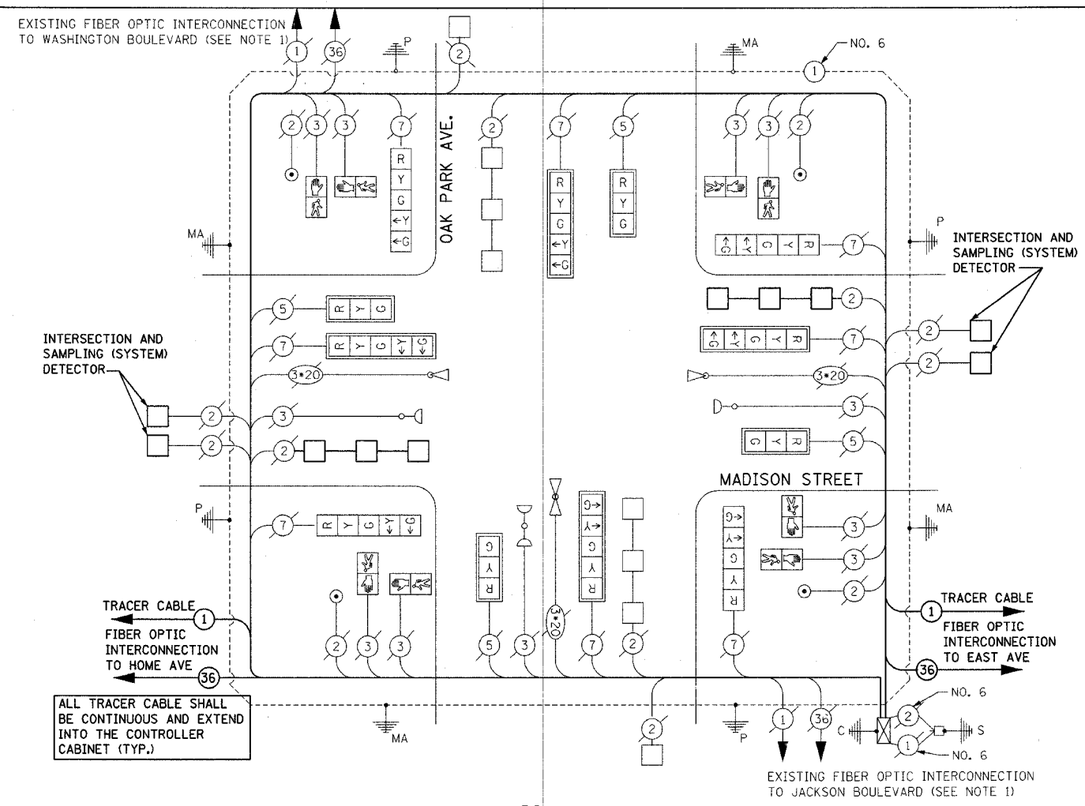
FAU 1419
MADISON STREET
TRAFFIC SIGNAL MODIFICATION PLAN
MADISON STREET & OAK PARK AVENUE

SCALE: VERT.
HORIZ. 1"=20'
DATE 06/05/2005
DRAWN BY KCV
CHECKED BY

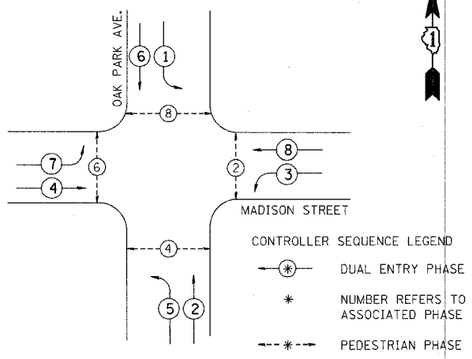
TRAFFIC SIGNAL PLAN

TIME: 10:52:23 PM
DATE: 06/05/2005
FILENAME: s:\@sal\751—800\784\132\micros\modernization\oak park.dgn

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	8
DETECTOR LOOP, TYPE I	FOOT	341

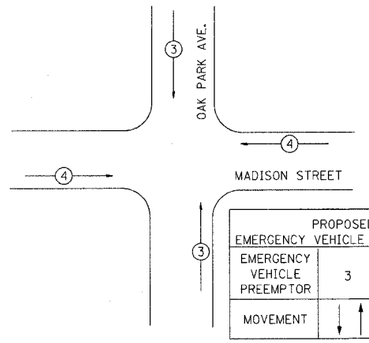


EXISTING AND PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EXIST. AND PROP. EMERGENCY VEHICLE PREEMPTION DIAGRAM



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

(DRAWING NOT TO SCALE)

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 (LETTERS)
		12" (300mm) PEDESTRIAN SIGNAL SECTION (SYMBOLS)
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTIVE LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
36	36	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
H/C	C	GROUND CABLE 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

NOTE
1. EXISTING FIBER OPTIC INTERCONNECT ALONG OAK PARK AVENUE FROM GARFIELD STREET AT THE SOUTH TO DIVISION STREET AT THE NORTH.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	19.2
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	0
FLASHER	1			0.50	0
ENERGY COSTS TO:			TOTAL =		541.2

VILLAGE OF OAK PARK

ENERGY SUPPLY CONTACT:
PHONE:
COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)
E - M. ARM POLE		SIGNAL POST	2 (1.0)		
24" (600 mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750 mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRICAL SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

REVISIONS NAME	DATE

STRAND ASSOCIATES, INC. ENGINEERS

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
CABLE PLAN
MADISON STREET & OAK PARK AVENUE

SCALE: VERT.
HORIZ.
DRAWN BY RCB
DATE 06/06/2005
CHECKED BY

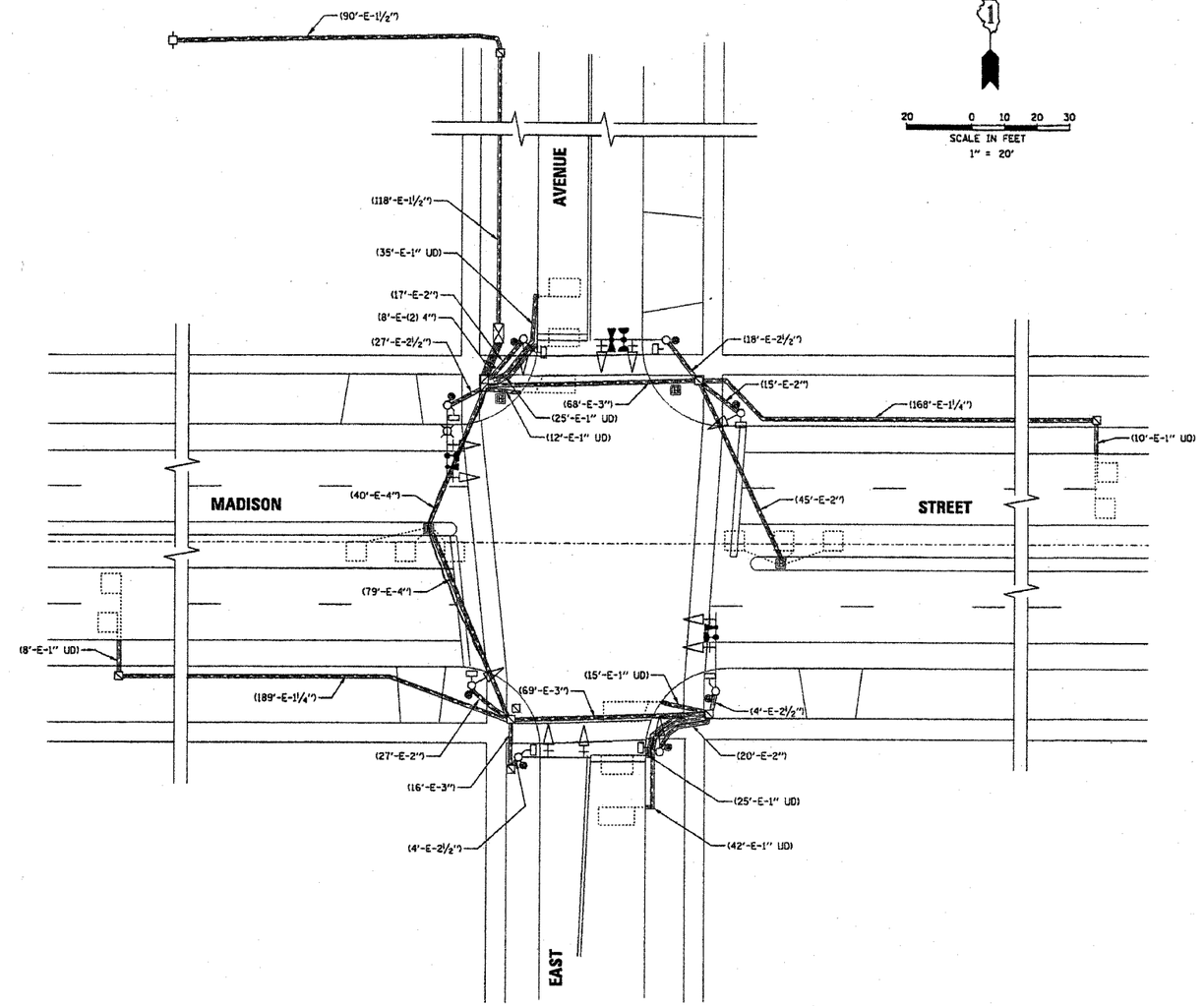
TRAFFIC SIGNAL PLAN

TIME: 07:59:28 AM
DATE: 06/06/2005
FILENAME: s:\@sai\751—000\7841\432\micros\cable plans\oak park.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	00-00037-00-TU	COOK	365	248
STA.		TO STA.	34	13
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

OAK PARK 93792

FOR INFORMATION ONLY



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	■	⊠
SERVICE INSTALLATION	■	⊡
SIGNAL HEAD	→	→
SIGNAL HEAD WITH BACKPLATE	+→	+→
SIGNAL HEAD, PEDESTRIAN	■	⊡
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●—	○—
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●—	○—
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●—⊗	○—⊗
UNIT DUCT	UD	
HANDHOLE	■	⊠
HEAVY DUTY HANDHOLE	■	⊠
DOUBLE HANDHOLE	■■	⊠⊠
G.S. CONDUIT IN GROUND (CIG)	———	———
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊙
DETECTOR LOOP	□	□
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 COMPENSATED MAGNETIC TYPE	▬	▭
RAILROAD CONTROL CABINET	⊠	⊠"E"

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

FOR INFORMATION ONLY

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN

MADISON STREET AT EAST AVENUE
OAK PARK, ILLINOIS

SCALE: 1" = 20'
DATE: 6-03-02

DRAWN BY: FPB
DESIGNED BY: SJP
CHECKED BY: GMZ

h:\evp\01-604\l - Oak Park\EVP_madison&east.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	14
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

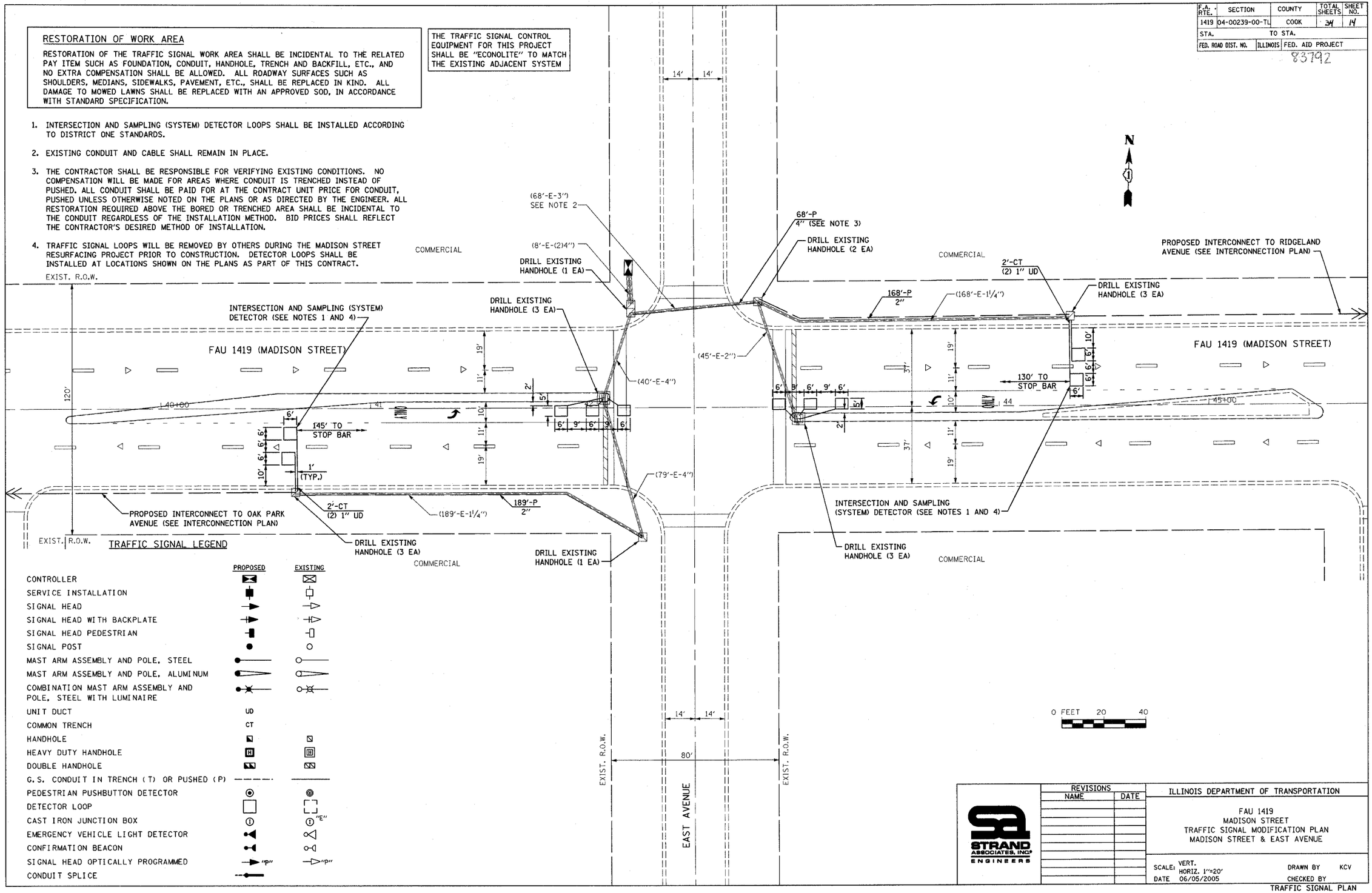
83792

RESTORATION OF WORK AREA

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

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

1. INTERSECTION AND SAMPLING (SYSTEM) DETECTOR LOOPS SHALL BE INSTALLED ACCORDING TO DISTRICT ONE STANDARDS.
2. EXISTING CONDUIT AND CABLE SHALL REMAIN IN PLACE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS. NO COMPENSATION WILL BE MADE FOR AREAS WHERE CONDUIT IS TRENCHED INSTEAD OF PUSHED. ALL CONDUIT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR CONDUIT, PUSHED UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ALL RESTORATION REQUIRED ABOVE THE BORED OR TRENCHED AREA SHALL BE INCIDENTAL TO THE CONDUIT REGARDLESS OF THE INSTALLATION METHOD. BID PRICES SHALL REFLECT THE CONTRACTOR'S DESIRED METHOD OF INSTALLATION.
4. TRAFFIC SIGNAL LOOPS WILL BE REMOVED BY OTHERS DURING THE MADISON STREET RESURFACING PROJECT PRIOR TO CONSTRUCTION. DETECTOR LOOPS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS AS PART OF THIS CONTRACT.



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE		
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		"E"
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
TRAFFIC SIGNAL MODIFICATION PLAN
MADISON STREET & EAST AVENUE

SCALE: VERT.
HORIZ. 1"=20'
DATE 06/05/2005
DRAWN BY KCV
CHECKED BY

TRAFFIC SIGNAL PLAN

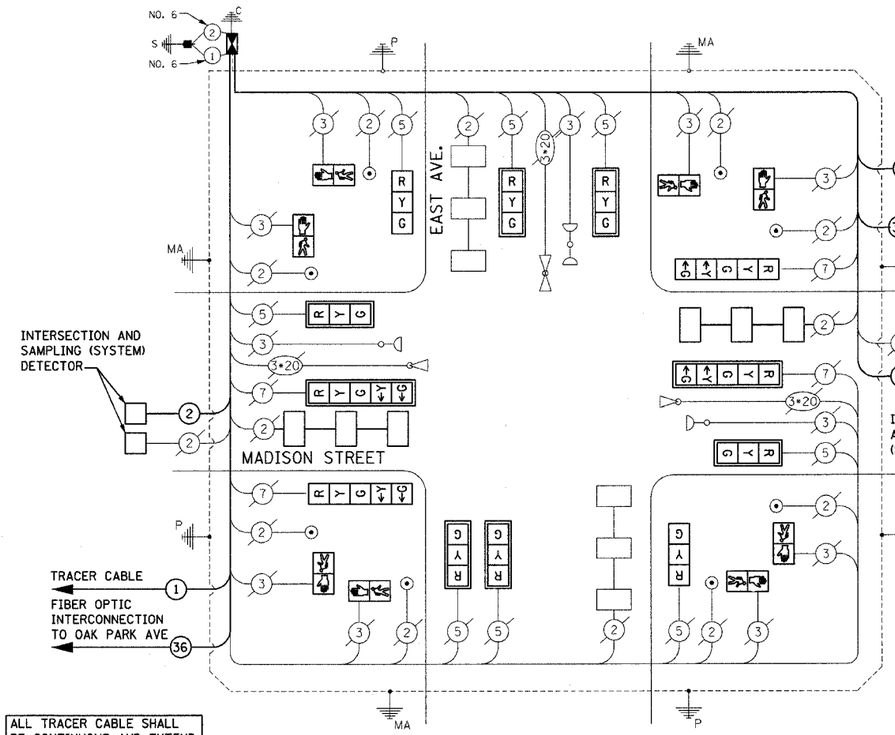
TIME: 10:52:18 PM
DATE: 06/05/2005
FILENAME: s:\@mail\751—6800\7841\432\micros\modernization\east.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	357
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	68
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL- ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	660
DRILL EXISTING HANDHOLE	EACH	14
TRAFFIC SIGNAL BACKPLATE	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	350
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
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, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	8

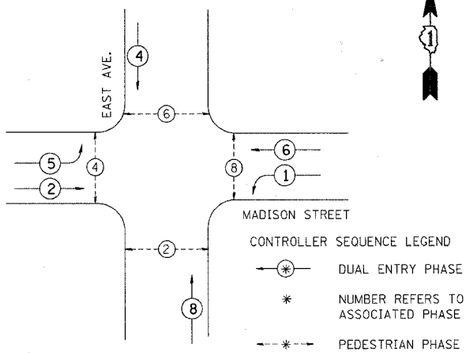
THE CONTRACTOR SHALL REPLACE ALL EXISTING SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS WITH L.E.D. (LIGHT EMITTING DIODE) SIGNAL HEADS.



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 (LETTERS)
		12" (300mm) PEDESTRIAN SIGNAL SECTION (SYMBOLS)
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTIVE LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
36	36	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.
H/C	C	GROUND CABLE 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

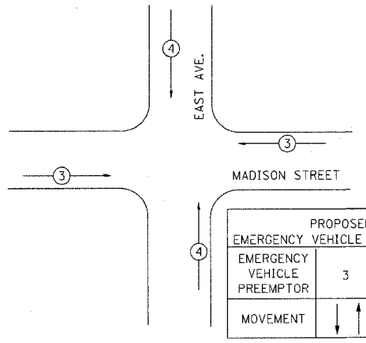
EXISTING AND PROPOSED CONTROLLER SEQUENCE



CONTROLLER SEQUENCE LEGEND

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

EXIST. AND PROP. EMERGENCY VEHICLE PREEMPTION DIAGRAM



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

(DRAWING NOT TO SCALE)

PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	8		12	0.10	9.6
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	0
FLASHER	1			0.50	0
ENERGY COSTS TO:			TOTAL =		531.6

VILLAGE OF OAK PARK

ENERGY SUPPLY CONTACT:

PHONE:

COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)
24" (600 mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750 mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRICAL SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
CABLE PLAN
MADISON STREET & EAST AVE.

SCALE: VERT.
HORIZ.
DRAWN BY RCB
DATE 06/06/2005
CHECKED BY

TRAFFIC SIGNAL PLAN

TIME: 07:59:26 AM
DATE: 06/06/2005
FILENAME: s:\@sal\751—800\784\432\micros\cable plans\east.dgn

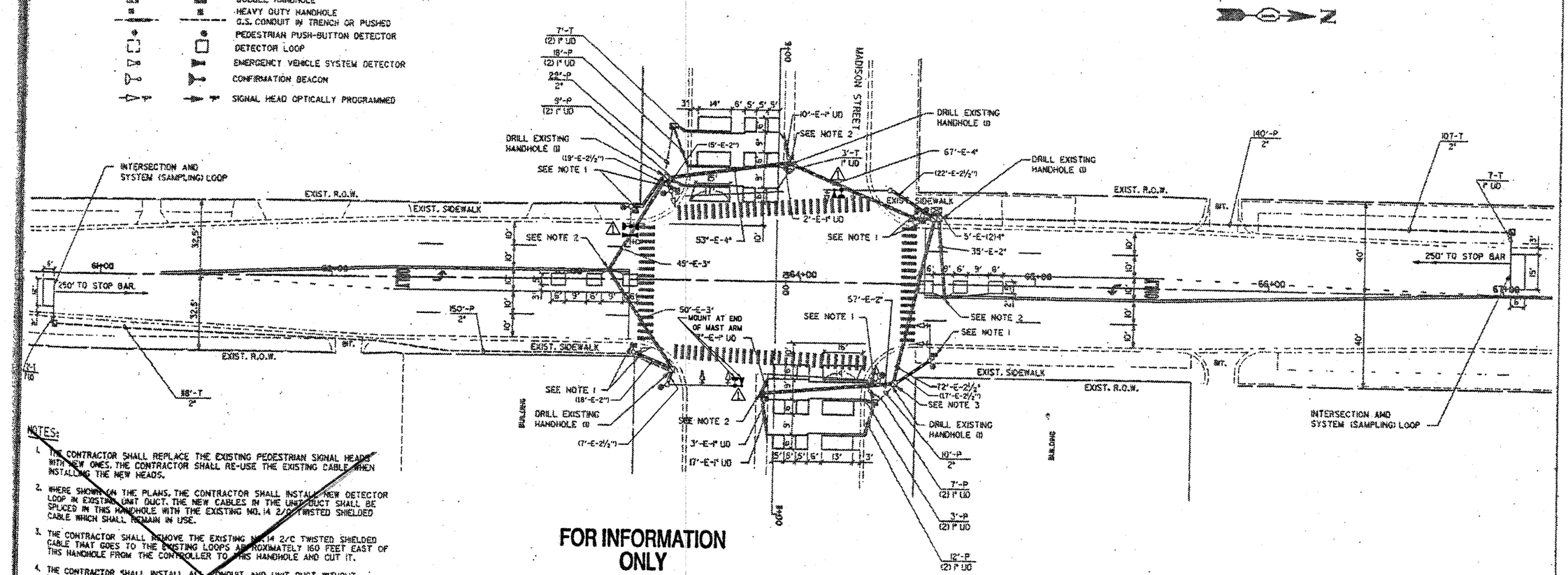
2783-93-00216-00-PV	COOK	34	16
STA.	TO STA.		

83792

TRAFFIC SIGNAL LEGEND

EXIST.	PROP.	
▭	▭	CONTROLLER
⊸	⊸	SERVICE INSTALLATION
⊸	⊸	SIGNAL HEAD
⊸	⊸	SIGNAL HEAD WITH BACKPLATE
⊸	⊸	SIGNAL HEAD, PEDESTRIAN
○	●	SIGNAL POST
——○	——●	MAST ARM ASSEMBLY AND POLE, STEEL
——○	——●	MAST ARM ASSEMBLY AND POLE, ALUMINUM
		COMMON TRENCH
		UNIT DUCT
H	H	HANDHOLE
HH	HH	DOUBLE HANDHOLE
H	H	HEAVY DUTY HANDHOLE
———	———	G.S. CONDUIT IN TRENCH OR PUSHED
●	●	PEDESTRIAN PUSH-BUTTON DETECTOR
▭	▭	DETECTOR LOOP
▷⊸	▶⊸	EMERGENCY VEHICLE SYSTEM DETECTOR
⊸	⊸	CONFIRMATION BEACON
⊸	⊸	SIGNAL HEAD OPTICALLY PROGRAMMED

FOR INFORMATION ONLY



FOR INFORMATION ONLY

NOTES:

1. THE CONTRACTOR SHALL REPLACE THE EXISTING PEDESTRIAN SIGNAL HEADS WITH NEW ONES. THE CONTRACTOR SHALL RE-USE THE EXISTING CABLE WHEN INSTALLING THE NEW HEADS.
2. WHERE SHOWN ON THE PLANS, THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP IN EXISTING UNIT DUCT. THE NEW CABLES IN THE UNIT DUCT SHALL BE SPLICED IN THIS HANDHOLE WITH THE EXISTING NO. 14 2/C TWISTED SHIELDED CABLE WHICH SHALL REMAIN IN USE.
3. THE CONTRACTOR SHALL REMOVE THE EXISTING NO. 14 2/C TWISTED SHIELDED CABLE THAT GOES TO THE EXISTING LOOPS APPROXIMATELY 150 FEET EAST OF THIS HANDHOLE FROM THE CONTROLLER TO THIS HANDHOLE AND CUT IT.
4. THE CONTRACTOR SHALL INSTALL ALL CONDUIT AND UNIT DUCT WITHOUT DAMAGING ANY OF THE EXISTING SIDEWALK. IF ANY SIDEWALK GETS DAMAGED, THE CONTRACTOR SHALL REMOVE AND REPLACE THE SIDEWALK AT NO ADDITIONAL COST, AS DIRECTED BY THE ENGINEER.
5. THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND RETURNED TO THE VILLAGE OF OAK PARK:

   4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
   2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE

   ALL WORK ASSOCIATED WITH THE REMOVAL AND STORAGE OF ALL OF THE ABOVE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT".
6. THE CONTRACTOR SHALL ASSURE THAT THE INSTALLATION OF ALL PROPOSED CONDUIT SHALL MEET THE "PARKWAY AUGERING SPECIFICATIONS" (SEE TRAFFIC SIGNAL SPECIFICATIONS).

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREAS 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 280 RESPECTIVELY.

⚠ INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 6-03-02

OAK PARK-SHEET 291 OF 365

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

TS-14

REVISIONS		
NAME	DATE	
CBBEL	6-03-02	

KAM ENGINEERING, INC.
CONSULTING ENGINEERS
7077A Davis Road, Suite 206
Elgin, Illinois 60123-1362

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION
RIDGELAND AVE. @ MADISON ST.

SCALE: 1"=20'
DRAWN BY: CSL/RV
DATE: 09-04-98
CHECKED BY: WSA

h:\evp\01-604\1 - Oak Park\EVP_rdgind&mad.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

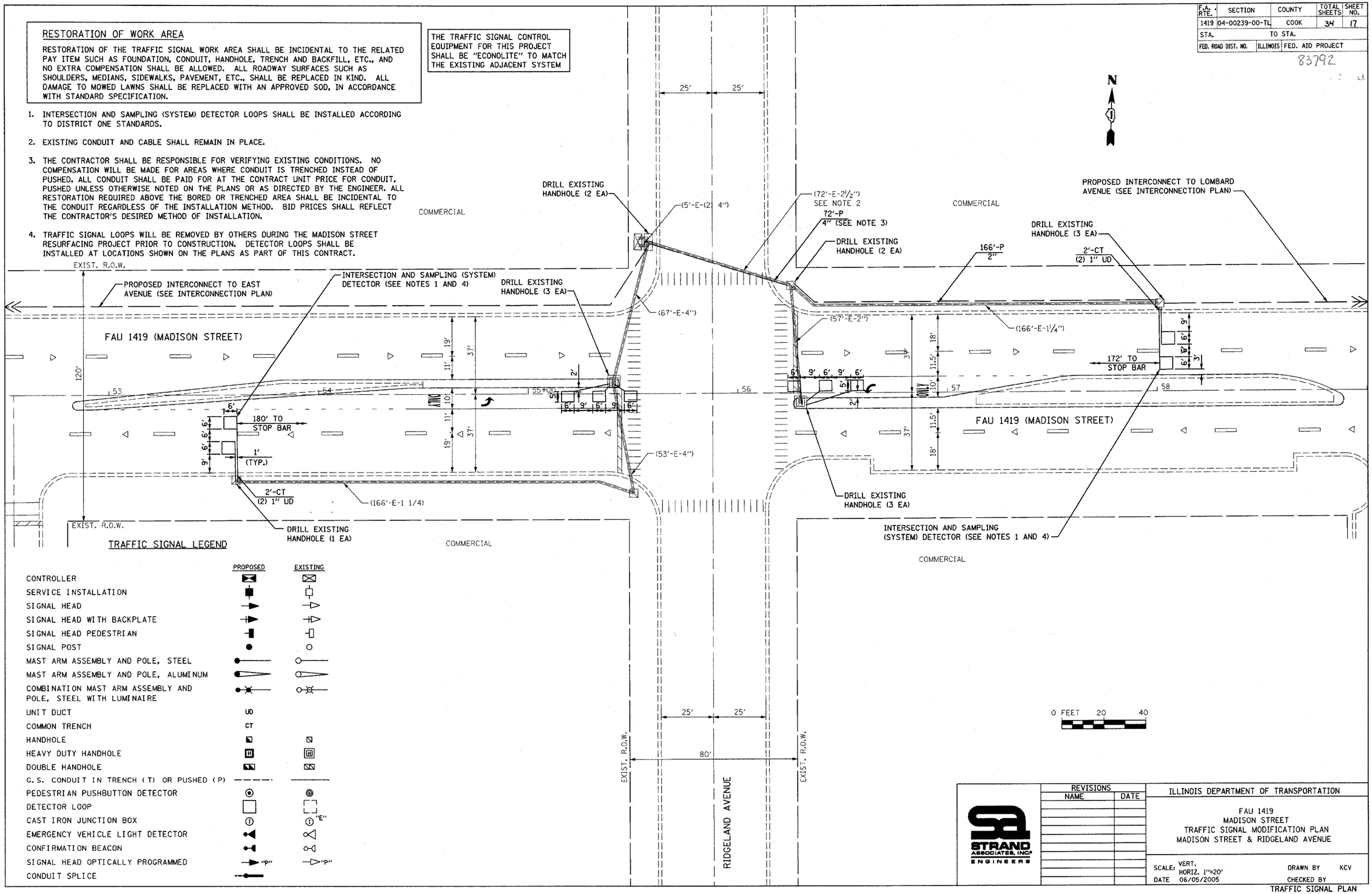
83792

RESTORATION OF WORK AREA

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

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

1. INTERSECTION AND SAMPLING (SYSTEM) DETECTOR LOOPS SHALL BE INSTALLED ACCORDING TO DISTRICT ONE STANDARDS.
2. EXISTING CONDUIT AND CABLE SHALL REMAIN IN PLACE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS. NO COMPENSATION WILL BE MADE FOR AREAS WHERE CONDUIT IS TRENCHED INSTEAD OF PUSHED. ALL CONDUIT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR CONDUIT, PUSHED UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ALL RESTORATION REQUIRED ABOVE THE BORED OR TRENCHED AREA SHALL BE INCIDENTAL TO THE CONDUIT REGARDLESS OF THE INSTALLATION METHOD. BID PRICES SHALL REFLECT THE CONTRACTOR'S DESIRED METHOD OF INSTALLATION.
4. TRAFFIC SIGNAL LOOPS WILL BE REMOVED BY OTHERS DURING THE MADISON STREET RESURFACING PROJECT PRIOR TO CONSTRUCTION. DETECTOR LOOPS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS AS PART OF THIS CONTRACT.



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE		
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		"E"
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
TRAFFIC SIGNAL MODIFICATION PLAN
MADISON STREET & RIDGELAND AVENUE

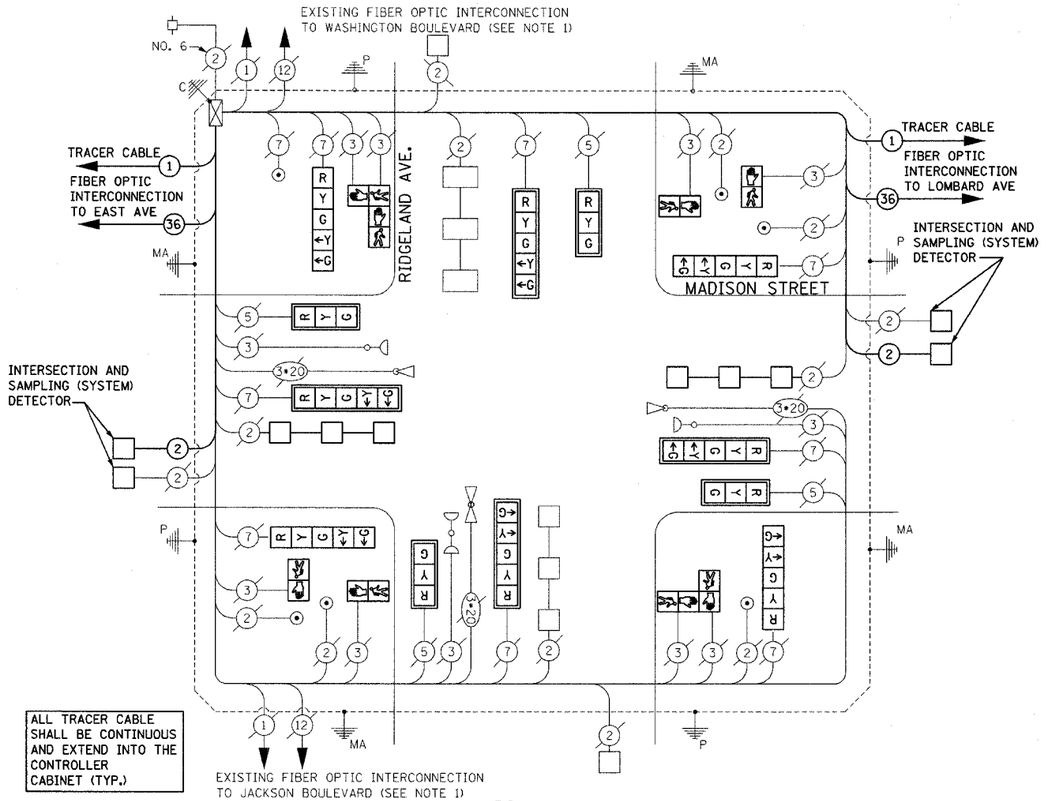
SCALE: VERT.
HORIZ. 1"=20'
DATE 06/05/2005
DRAWN BY KCV
CHECKED BY

TRAFFIC SIGNAL PLAN

TIME: 10:52:13 PM
DATE: 06/05/2005
FILENAME: s:\@esal\751—800\794\432\micros\modernization\ridgeland.dgn

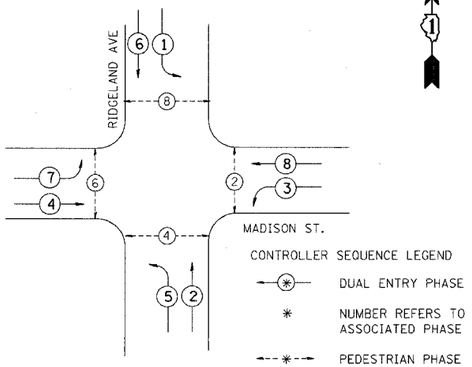
ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	166
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	72
HANDHOLE	EACH	0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL- ACTUATED CONTROLLER IN EXISTING CABINET	EACH	0
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	647
DRILL EXISTING HANDHOLE	EACH	12
TRAFFIC SIGNAL BACKPLATE	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	346
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2

THE CONTRACTOR SHALL REPLACE ALL EXISTING SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS WITH L.E.D. (LIGHT EMITTING DIODE) SIGNAL HEADS.



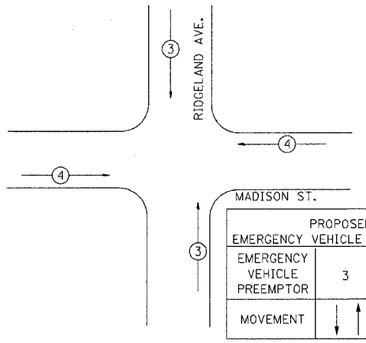
ALL TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET (TYP.)

EXISTING AND PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EXIST. AND PROP. EMERGENCY VEHICLE PREEMPTION DIAGRAM



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

(DRAWING NOT TO SCALE)

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 (LETTERS)
		12" (300mm) PEDESTRIAN SIGNAL SECTION (SYMBOLS)
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTIVE LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
36	36	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R	R	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
		GROUND CABLE ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION

NOTE
1. EXISTING FIBER OPTIC INTERCONNECT ALONG RIDGELAND AVENUE FROM GARFIELD STREET AT THE SOUTH TO DIVISION STREET AT THE NORTH.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	19.2
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	0
FLASHER	1			0.50	0
ENERGY COSTS TO:			TOTAL =		541.2

VILLAGE OF OAK PARK

ENERGY SUPPLY CONTACT:
PHONE:
COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)
E - M. ARM POLE		SIGNAL POST	2 (1.0)		
24" (600 mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750 mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRICAL SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
CABLE PLAN
MADISON STREET & RIDGELAND AVENUE

SCALE: VERT.
HORIZ.
DATE 06/06/2005
DRAWN BY RCB
CHECKED BY

TRAFFIC SIGNAL PLAN

STRAND ASSOCIATES, INC. ENGINEERS

TIME: 07:59:24 AM
DATE: 06062005
FILENAME: s:\@asal\751—800\7841\432\micros\cable plans\ridgeland.dgn

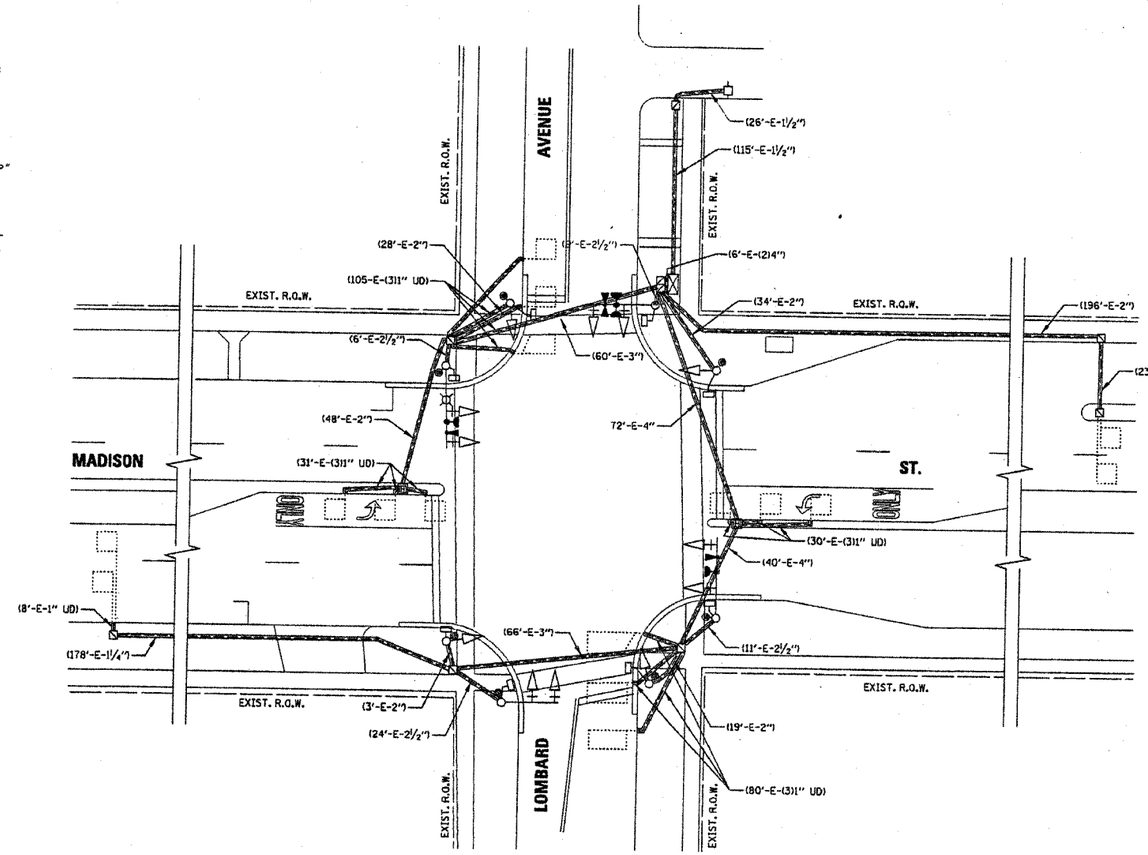
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	00-00037-00-TL	COOK	~~365~~	~~256~~
STA.	TO STA.		34	19
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

OAK PARK 83792

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	⊠
SERVICE INSTALLATION	■	⊟
SIGNAL HEAD	→	⇢
SIGNAL HEAD WITH BACKPLATE	→	⇢
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT	UD	
HANDHOLE	◪	▨
HEAVY DUTY HANDHOLE	▣	▩
DOUBLE HANDHOLE	◪	▨
G.S. CONDUIT IN GROUND (CIG)		
PEDESTRIAN PUSHBUTTON DETECTOR	⊛	•
DETECTOR LOOP		
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"	"E"
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET	⊠	⊠ "E"

FOR INFORMATION ONLY



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20 0 10 20 30

SCALE IN FEET
1" = 20'

FOR INFORMATION ONLY

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN

MADISON STREET AT LOMBARD AVENUE
OAK PARK, ILLINOIS

SCALE: 1" = 20'
DATE: 6-03-02

DRAWN BY: FPB
DESIGNED BY: SJP
CHECKED BY: GMZ

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	20
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

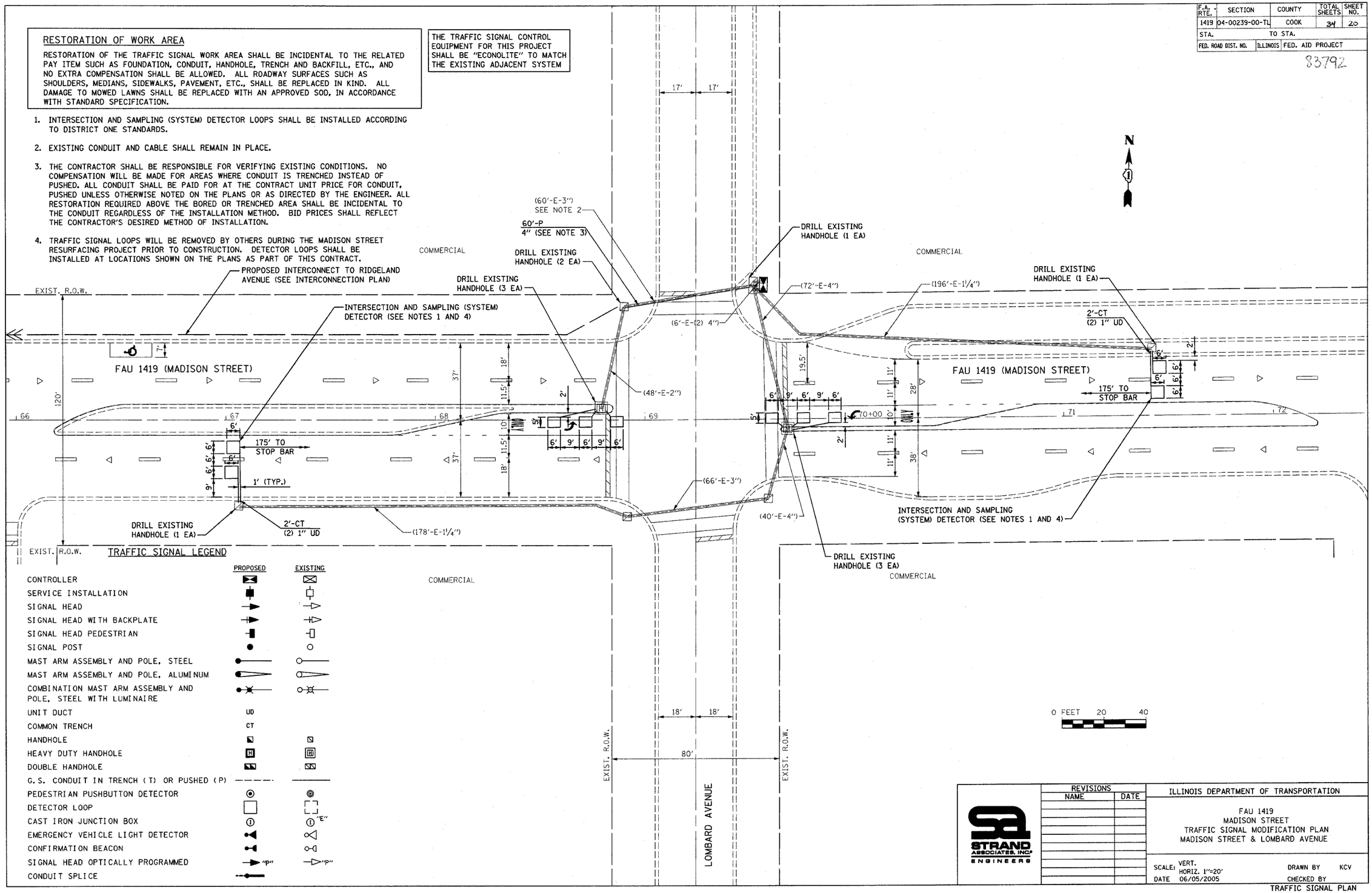
83792

RESTORATION OF WORK AREA

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

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

1. INTERSECTION AND SAMPLING (SYSTEM) DETECTOR LOOPS SHALL BE INSTALLED ACCORDING TO DISTRICT ONE STANDARDS.
2. EXISTING CONDUIT AND CABLE SHALL REMAIN IN PLACE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS. NO COMPENSATION WILL BE MADE FOR AREAS WHERE CONDUIT IS TRENCHED INSTEAD OF PUSHED. ALL CONDUIT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR CONDUIT, PUSHED UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ALL RESTORATION REQUIRED ABOVE THE BORED OR TRENCHED AREA SHALL BE INCIDENTAL TO THE CONDUIT REGARDLESS OF THE INSTALLATION METHOD. BID PRICES SHALL REFLECT THE CONTRACTOR'S DESIRED METHOD OF INSTALLATION.
4. TRAFFIC SIGNAL LOOPS WILL BE REMOVED BY OTHERS DURING THE MADISON STREET RESURFACING PROJECT PRIOR TO CONSTRUCTION. DETECTOR LOOPS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS AS PART OF THIS CONTRACT.



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	▣
SERVICE INSTALLATION	■	□
SIGNAL HEAD	→	⇨
SIGNAL HEAD WITH BACKPLATE	⊣→	⊣⇨
SIGNAL HEAD PEDESTRIAN	⊣■	⊣□
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●—	○—
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●—	○—
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●—✳	○—✳
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE	◪	◪
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	◪◪	◪◪
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	———	———
PEDESTRIAN PUSHBUTTON DETECTOR	◉	◎
DETECTOR LOOP	□	⌐¬ "E"
CAST IRON JUNCTION BOX	Ⓘ	Ⓘ "E"
EMERGENCY VEHICLE LIGHT DETECTOR	◀	◁
CONFIRMATION BEACON	●◀	○◁
SIGNAL HEAD OPTICALLY PROGRAMMED	→ "P"	⇨ "P"
CONDUIT SPLICE	—●	

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
TRAFFIC SIGNAL MODIFICATION PLAN
MADISON STREET & LOMBARD AVENUE

SCALE: VERT.
HORIZ. 1"=20'
DATE 06/05/2005

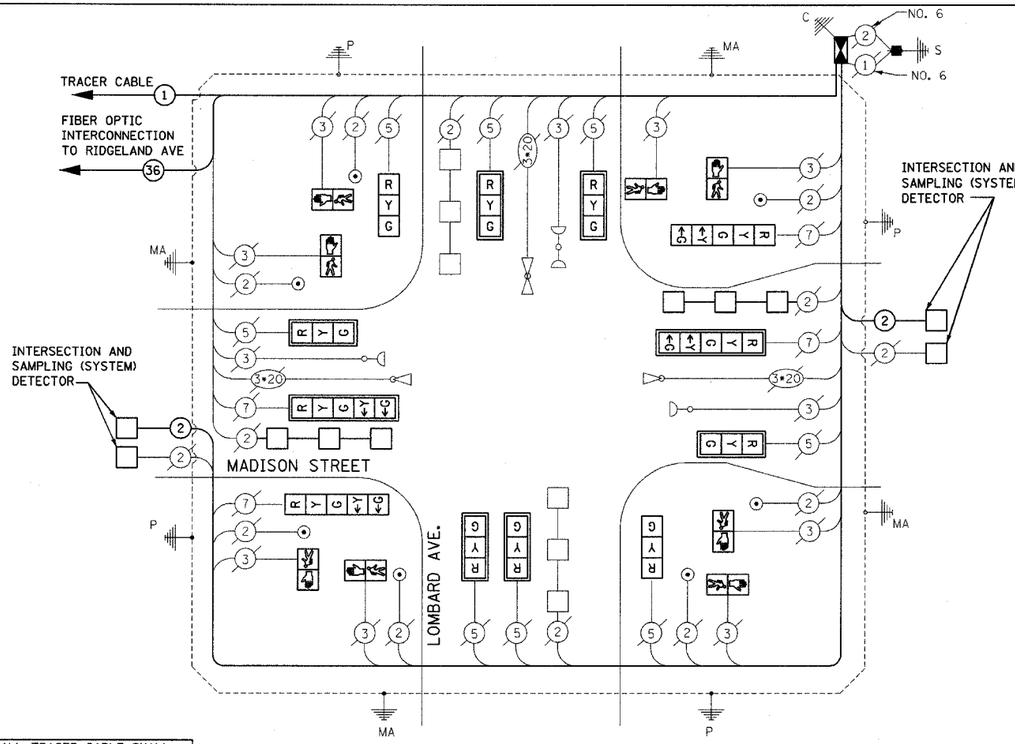
DRAWN BY KCV
CHECKED BY

TRAFFIC SIGNAL PLAN

TIME: 10:52:09 PM
DATE: 06/05/2005
FILENAME: s:\@oak\751—800\784\432\micros\modernization\lombard.dgn

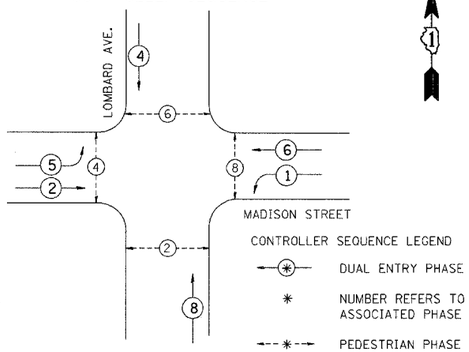
ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	60
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL- ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	677
DRILL EXISTING HANDHOLE	EACH	10
TRAFFIC SIGNAL BACKPLATE	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	332
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
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, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	8

THE CONTRACTOR SHALL REPLACE ALL EXISTING SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS WITH L.E.D. (LIGHT EMITTING DIODE) SIGNAL HEADS.

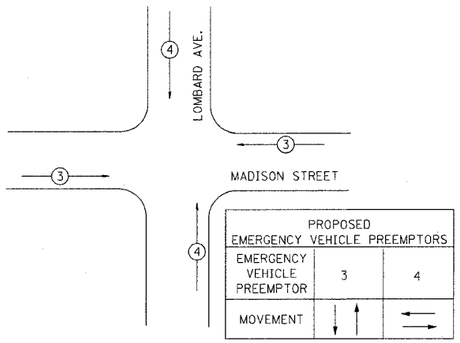


ALL TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET (TYP.)

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXIST. AND PROP. EMERGENCY VEHICLE PREEMPTION DIAGRAM



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

(DRAWING NOT TO SCALE)

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 (LETTERS)
		12" (300mm) PEDESTRIAN SIGNAL SECTION (SYMBOLS)
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTIVE LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
36	36	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G ↑Y ↑G	R Y G ↑Y ↑G	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"P"	"P"	
H/C	C	GROUND CABLE 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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	8		12	0.10	9.6
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	0
FLASHER	1			0.50	0
ENERGY COSTS TO:			TOTAL =		531.6

VILLAGE OF OAK PARK

ENERGY SUPPLY CONTACT:

PHONE:

COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)
24" (600 mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750 mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRICAL SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	2L
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
CABLE PLAN
MADISON STREET & LOMBARD AVENUE

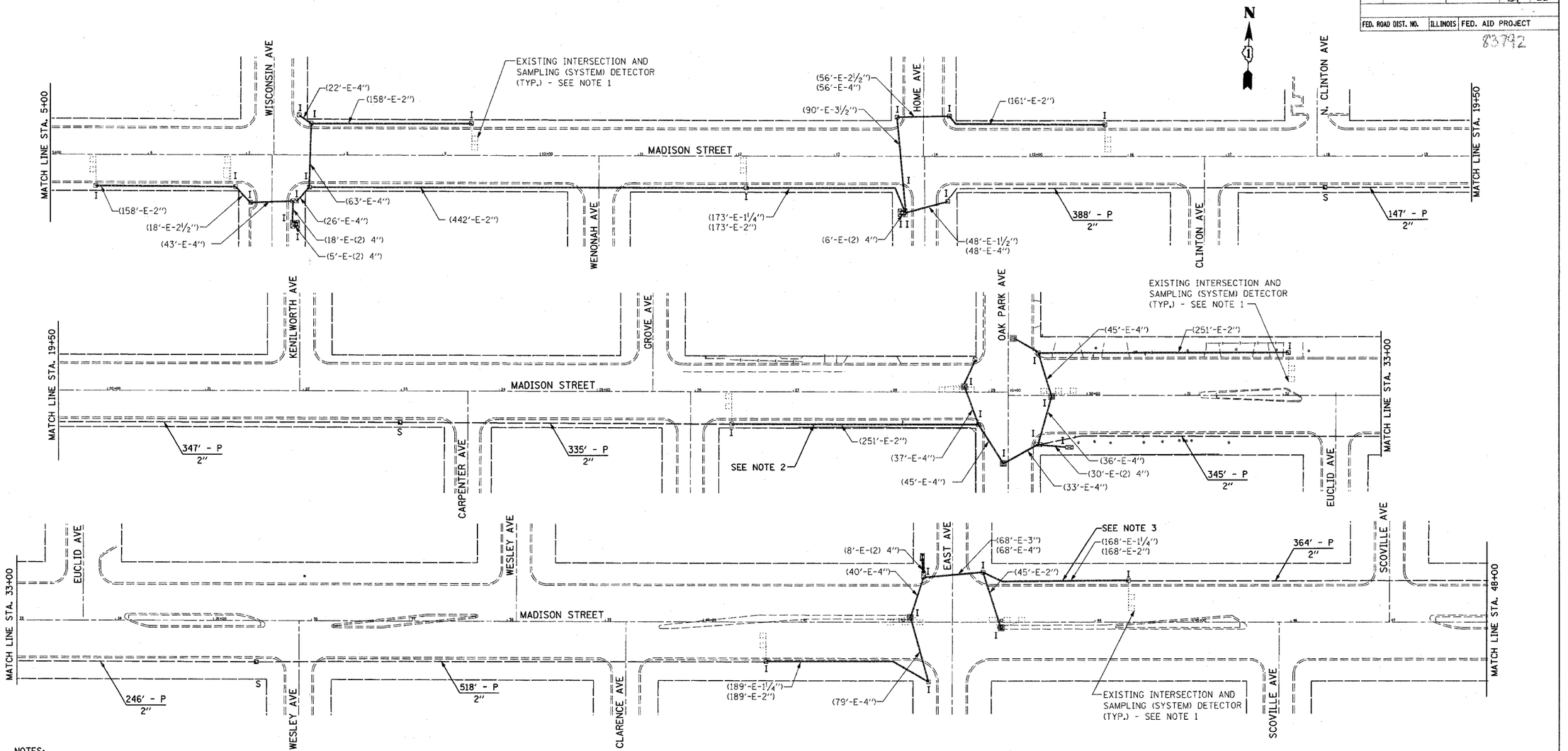
SCALE: VERT. HORIZ. DRAWN BY RCB
DATE 06/06/2005 CHECKED BY

TRAFFIC SIGNAL PLAN

TIME: 07:59:22 AM
DATE: 06/06/2005
FILENAME: s:\@SAI\751—800\784\432\micros\Cable Plans\lombard.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	22
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792



NOTES:

1. EXISTING INTERSECTION DETECTOR LOOPS WILL BE REMOVED BY OTHERS DURING THE MADISON STREET RESURFACING PROJECT PRIOR TO CONSTRUCTION. DETECTOR LOOPS SHALL BE REPLACED WHERE INDICATED BY PLANS.
2. THE CONTRACTOR SHALL PULL THE PROPOSED FIBER OPTIC CABLE AND TRACER CABLE THROUGH THE EXISTING CONDUIT ON THE SOUTH SIDE OF MADISON STREET BETWEEN HOME AVENUE AND OAK PARK AVENUE AND BETWEEN OAK PARK AVENUE AND EAST AVENUE. IF THE EXISTING CONDUIT IS DAMAGED PRIOR TO THE START OF CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL PUSH NEW CONDUIT OF THE ADEQUATE SIZE, AS DETERMINED BY THE ENGINEER, ADJACENT TO THE EXISTING CONDUIT AND PULL THE PROPOSED FIBER OPTIC CABLE AND TRACER CABLE THROUGH THE NEW CONDUIT. IF THE EXISTING CABLE IS DAMAGED, THE CONTRACTOR SHALL REMOVE THE DAMAGED CABLE AND REPLACE, IN KIND, WITH NEW CABLE.
3. THE CONTRACTOR SHALL PULL THE PROPOSED FIBER OPTIC CABLE AND TRACER CABLE THROUGH THE EXISTING CONDUIT ON THE NORTH SIDE OF MADISON STREET BETWEEN EAST AVENUE AND RIDGELAND AVENUE. IF THE CONDUIT IS DAMAGED PRIOR TO THE START OF CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL PUSH NEW CONDUIT OF THE ADEQUATE SIZE, AS DETERMINED BY THE ENGINEER, ADJACENT TO THE EXISTING CONDUIT AND PULL THE PROPOSED FIBER OPTIC CABLE AND TRACER CABLE THROUGH THE NEW CONDUIT. IF THE EXISTING CABLE IS DAMAGED, THE CONTRACTOR SHALL REMOVE THE DAMAGED CABLE AND REPLACE, IN KIND, WITH NEW CABLE.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▬	▭
HANDHOLE	■	▯
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	■■	▯▯
G.S. CONDUIT IN GROUND (CIG)	-----	———
DETECTOR LOOP	□	[ ]
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
STAINLESS STEEL JUNCTION BOX	ⓘ	

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS CONTROLLER, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, BRICK PAVER, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, IN ACCORDANCE WITH STANDARD SPECIFICATION.

0 FEET 25 50

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

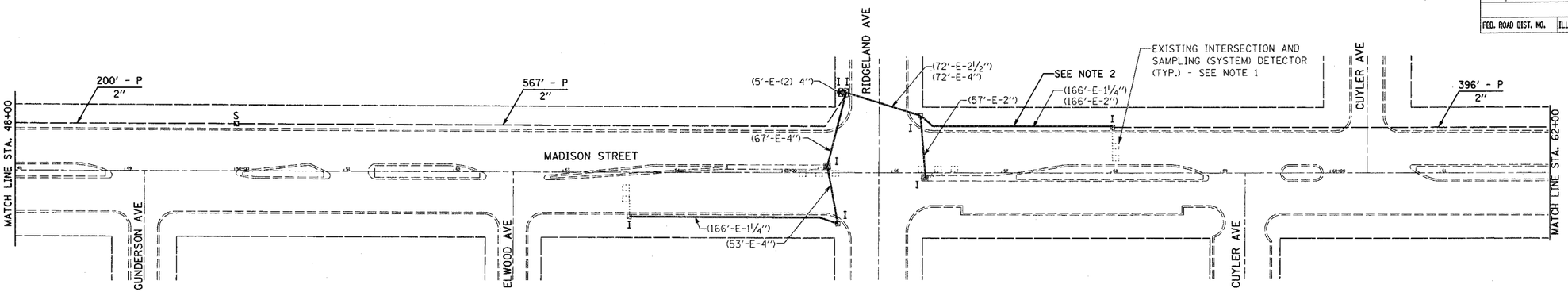
FAU 1419
MADISON STREET
INTERCONNECTION PLAN

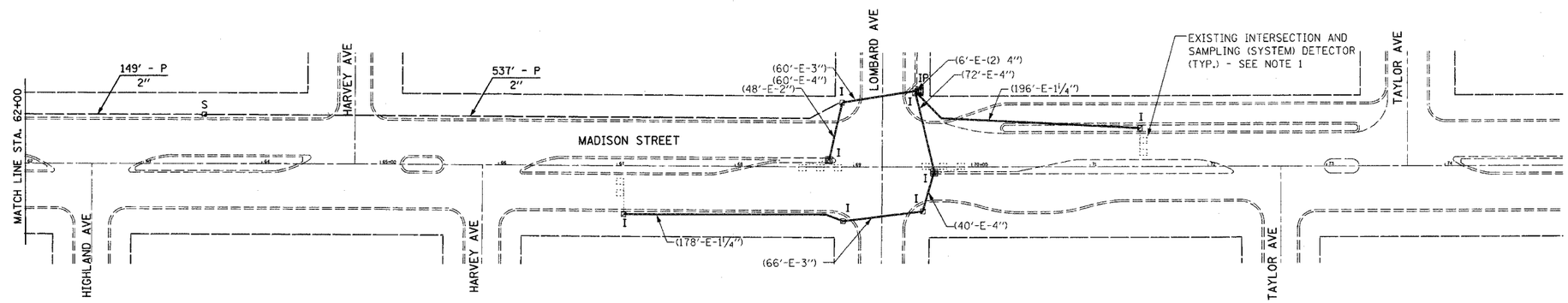
SCALE: VERT.
HORIZ.
DATE 06/05/2005
DRAWN BY KCV
CHECKED BY

TIME: 10:52:03 PM
DATE: 06/05/2005
FILENAME: s:\@sai\751—400\7841\432\micros\interconnect plans\interconnect1.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	23
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792





NOTES:

1. EXISTING INTERSECTION DETECTOR LOOPS WILL BE REMOVED BY OTHERS DURING THE MADISON STREET RESURFACING PROJECT PRIOR TO CONSTRUCTION. DETECTOR LOOPS SHALL BE REPLACED WHERE INDICATED BY PLANS.
2. THE CONTRACTOR SHALL PULL THE PROPOSED FIBER OPTIC CABLE AND TRACER CABLE THROUGH THE EXISTING CONDUIT ON THE NORTH SIDE OF MADISON STREET BETWEEN RIDGELAND AVENUE AND CUYLER AVENUE. IF THE CONDUIT IS DAMAGED PRIOR TO THE START OF CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL PUSH NEW CONDUIT OF THE ADEQUATE SIZE, AS DETERMINED BY THE ENGINEER, ADJACENT TO THE EXISTING CONDUIT AND PULL THE PROPOSED FIBER OPTIC CABLE AND TRACER CABLE THROUGH THE NEW CONDUIT. IF THE EXISTING CABLE IS DAMAGED, THE CONTRACTOR SHALL REMOVE THE DAMAGED CABLE AND REPLACE, IN KIND, WITH NEW CABLE.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	▣
HANDHOLE	◪	◪
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	◪◪	◪◪
G.S. CONDUIT IN GROUND (CIG)	------	═══
DETECTOR LOOP	□	[ ]
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
STAINLESS STEEL JUNCTION BOX	Ⓙ	

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS CONTROLLER, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, BRICK PAVER, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, IN ACCORDANCE WITH STANDARD SPECIFICATION.

0 FEET 25 50

STRAND ASSOCIATES, INC.® ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

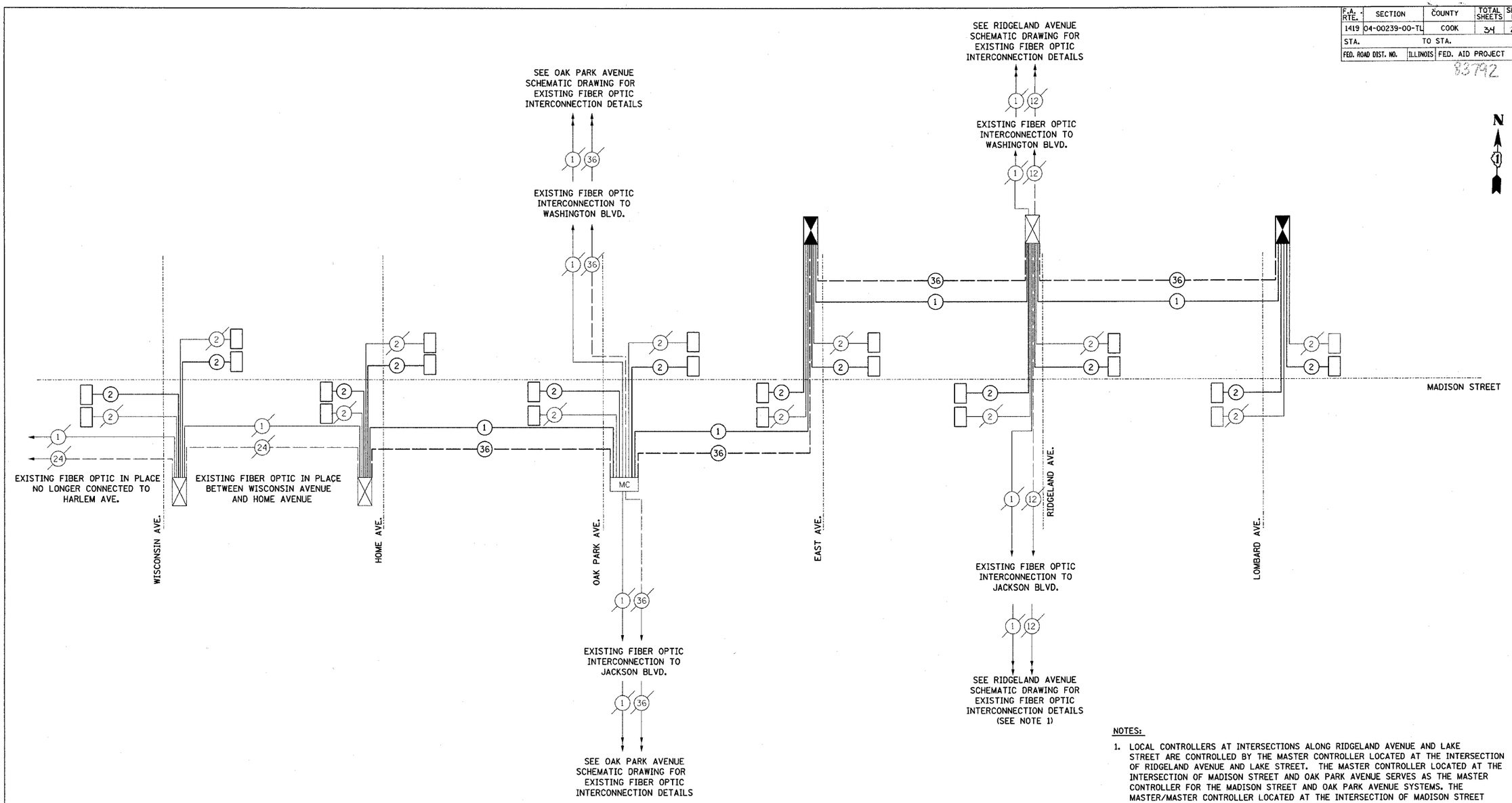
FAU 1419
MADISON STREET
INTERCONNECTION PLAN

SCALE: VERT.
HORIZ.
DATE 06/05/2005
DRAWN BY KCV
CHECKED BY

TIME: 10:52:01 PM
DATE: 06/05/2005
FILENAME: s:\@rail\751-8100\7841\432\micros\interconnect plans\interconnect2.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	24
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792



ITEM	UNIT	TOTAL
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	4539
HANDHOLE	EACH	6
TRANSCEIVER - FIBER OPTIC	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO 14/1C	FOOT	6342
REOPTIMIZE EXISTING SIGNAL SYSTEM	L SUM	1
FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM24F SM 12F	FOOT	6342

NOTES:

1. LOCAL CONTROLLERS AT INTERSECTIONS ALONG RIDGELAND AVENUE AND LAKE STREET ARE CONTROLLED BY THE MASTER CONTROLLER LOCATED AT THE INTERSECTION OF RIDGELAND AVENUE AND LAKE STREET. THE MASTER CONTROLLER LOCATED AT THE INTERSECTION OF MADISON STREET AND OAK PARK AVENUE SERVES AS THE MASTER CONTROLLER FOR THE MADISON STREET AND OAK PARK AVENUE SYSTEMS. THE MASTER/MASTER CONTROLLER LOCATED AT THE INTERSECTION OF MADISON STREET AND OAK PARK AVENUE IS LINKED TO THE SUB/MASTER CONTROLLER LOCATED AT THE INTERSECTION OF RIDGELAND AVENUE AND LAKE STREET.

STRAND ASSOCIATES, INC.® ENGINEERS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 1419
MADISON STREET
INTERCONNECT SCHEMATIC

SCALE: VERT. NONE
HORIZ.
DATE 06/05/2005

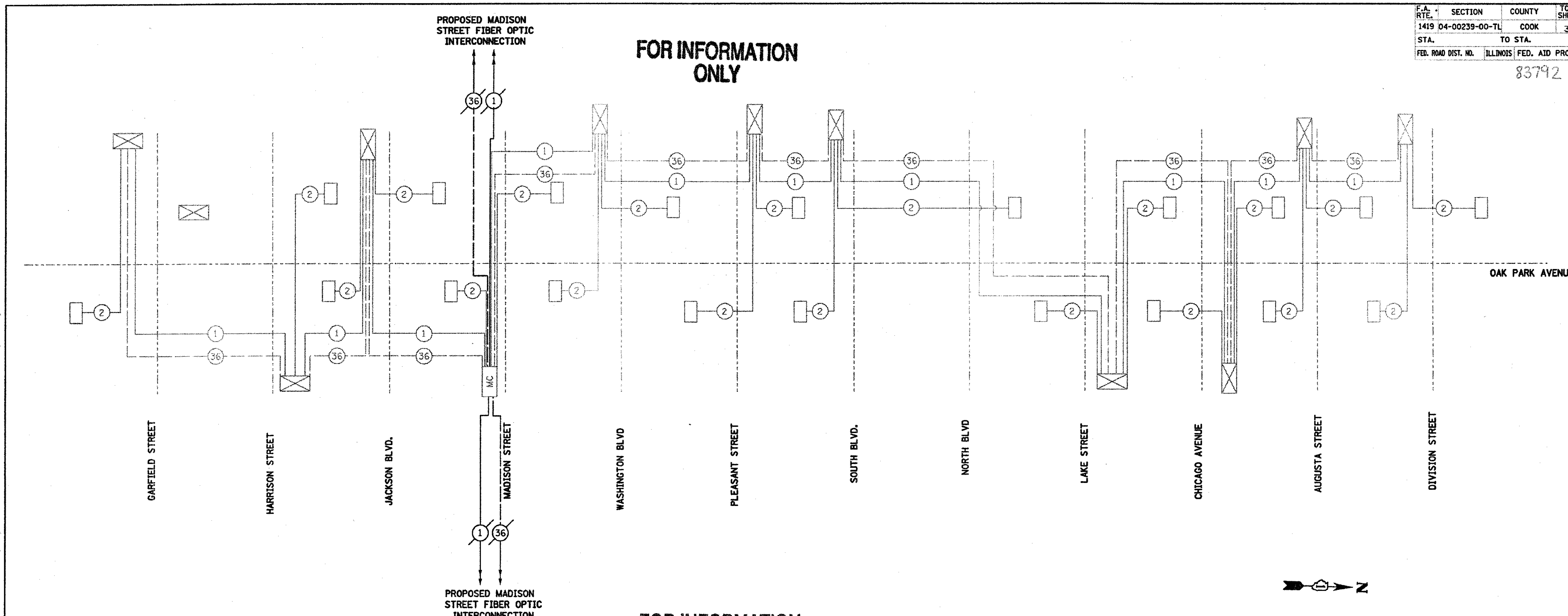
DRAWN BY RKK
CHECKED BY JRM

FILENAME: s:\@SAA\751-8000\784\432\micros\Sheets\madison-schematic.dgn
DATE: 06/05/2005
TIME: 10:51:58 PM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1419	04-00239-00-TL	COOK	34	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792

FOR INFORMATION ONLY



FOR INFORMATION ONLY

STRAND ASSOCIATES, INC. ENGINEERS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
OAK PARK AVENUE
GARFIELD STREET TO DIVISION STREET

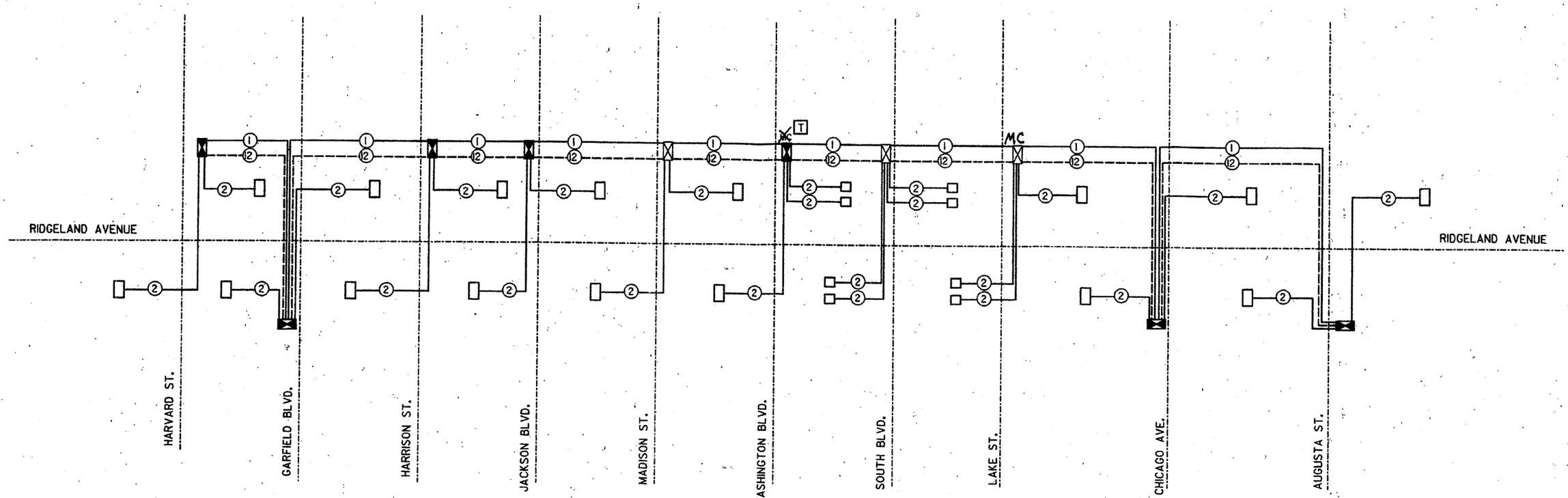
SCALE: VERT. NONE HORIZ.
DATE 05/02/2005
DRAWN BY KCV
CHECKED BY

FILENAME: s:\@SAI\351--200\786\432\micros\Strands\OPA-schematic.dgn DATE: 05/02/2005 TIME: 04:14:18 PM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	93-00216-00-PV	COOK	111	97
STA.		TO STA.	34	26
FED. ROAD DIST. NO.		STATE	FED. AID PROJECT	

83792

FOR INFORMATION ONLY



FOR INFORMATION ONLY

INTERCONNECT SCHEMATIC LEGEND

EXIST.	PROP.	
⊠	⊠	CONTROLLER
		G.S. CONDUIT IN TRENCH OR PUSHED
□	□	INTERSECTION AND SAMPLING (SYSTEM) DETECTORS
②/	②	INTERCONNECT CABLE NO. 62.5/125 I2F FIBER OPTIC CABLE
②/	②	LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
①/	①	TRACER CABLE NO. 10 1/C
EMC	MC	MASTER CONTROLLER
T	T	TELEPHONE CONNECTION

NOTES:

1.) INTERCONNECT SYSTEM CONDUITS, HANDHOLES AND LOOPS ARE SHOWN IN DETAIL IN SYSTEM INTERCONNECT PLAN.

2.) THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

F:\DGN\J0897-2\INTSCHEM.DGN

96

TS-33

REVISIONS	
NAME	DATE

KAM ENGINEERING, INC.
CONSULTING ENGINEERS
707A Davis Road, Suite 205
Elgin, Illinois 60123-1369

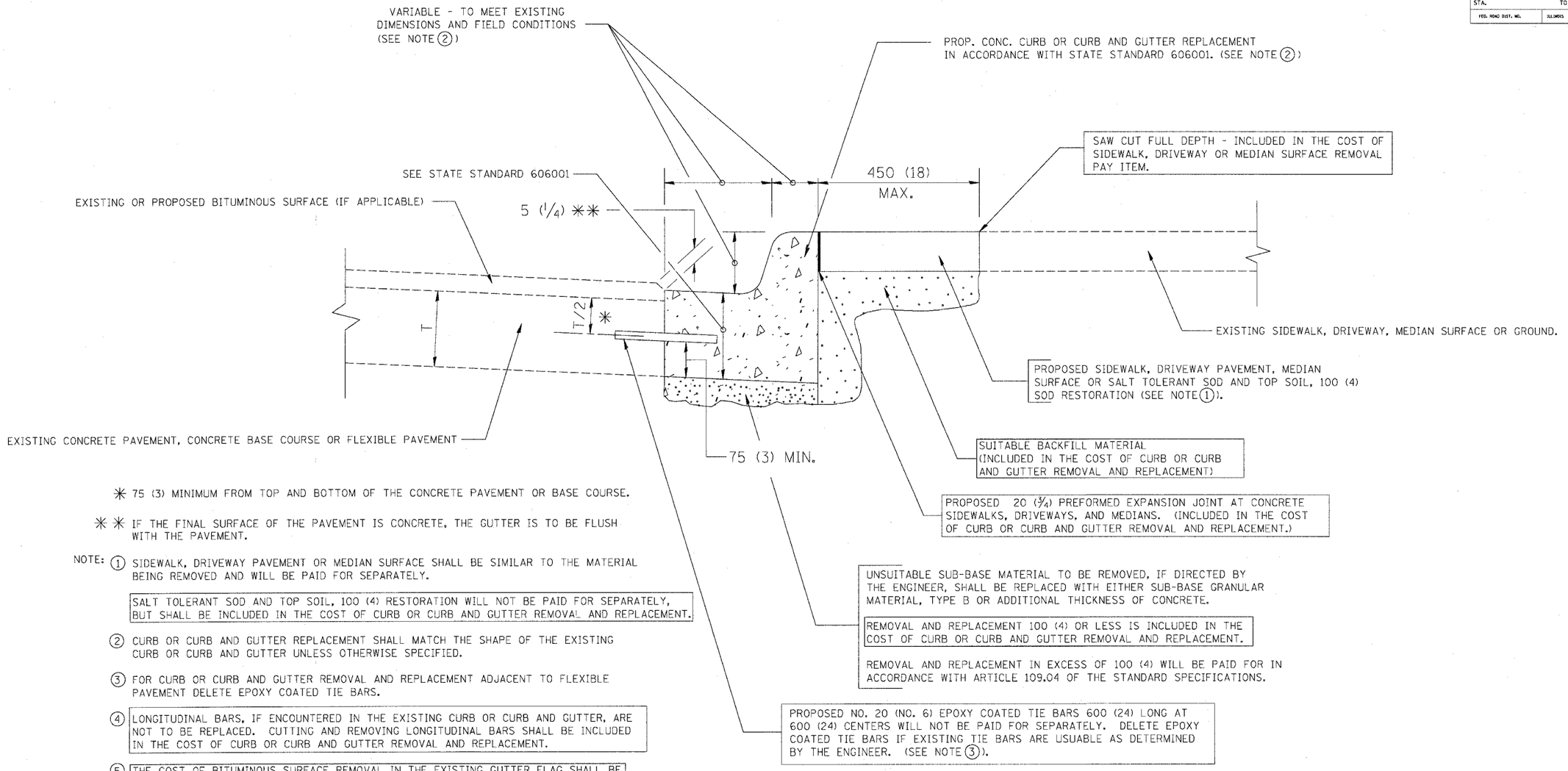
ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
RIDGELAND AVENUE
HARVARD ST. TO AUGUSTA ST.

SCALE: NONE
DATE: 09-04-98
DRAWN BY: CSL
CHECKED BY: WSA

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
			34	27
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792



* 75 (3) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: (1) SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 100 (4) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

(2) CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

(3) FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

(4) LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

(5) THE COST OF BITUMINOUS SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

(6) THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

(7) THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (FOOT) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

REVISIONS	
NAME	DATE
M. DE YONG	05/28/91
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: NONE

DRAWN BY

DATE 10/18/2002

CHECKED BY

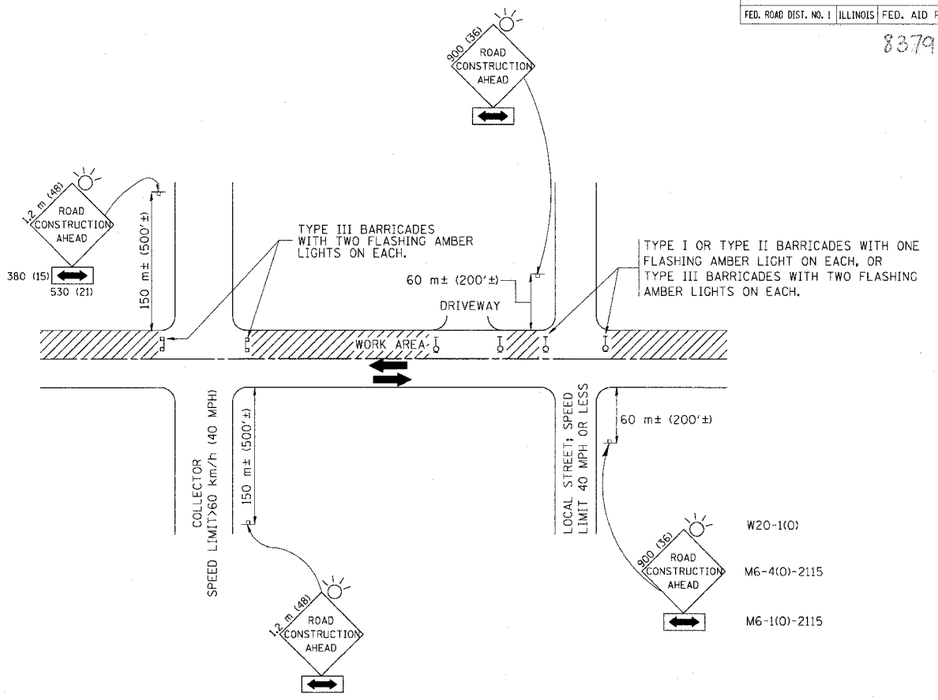
BD600-06 (BD-24)

REVISION DATE: 12/06/88

10/18/2002
c:\projects\diststd\bd24.dgn
V1=BD24

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			34	28
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

83792



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: VERT.
HORIZ.
DATE 10/18/2002

DRAWN BY
CHECKED BY

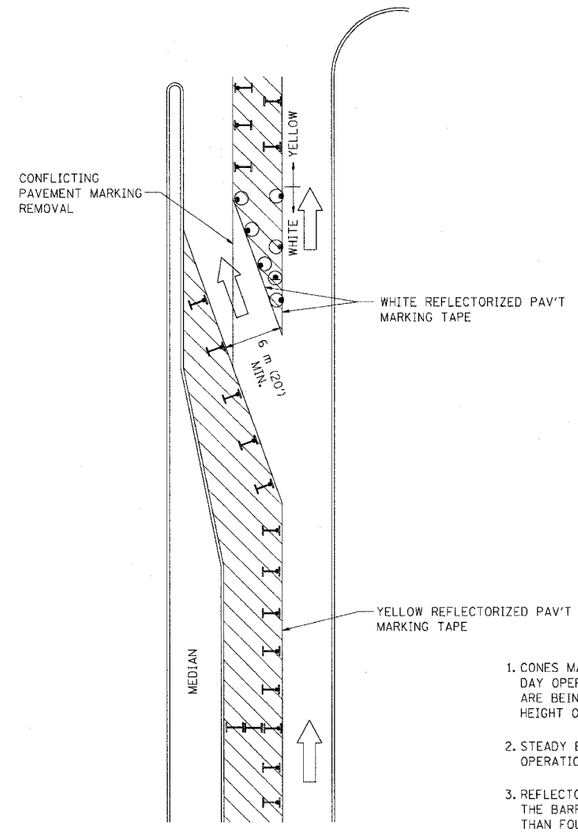
TC-10

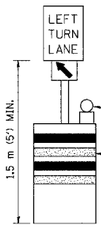
REVISION DATE: 01/06/00

Friday October 18, 2002 @ 10:20:23 AM
c:\projects\dtststd\tc10.dgn LV=35,63
USER

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
			34	29
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792





R 3-1100L 600 x 600 (24 x 24)

M6-2L 530 x 380 (21 x 15)

OPTIONAL FLASHING LIGHT

STANDARD 702001
DRUM FILLED WITH ENOUGH
SAND (BAGS) FOR STABILIZATION

GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5').
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 600 x 600 (24 x 24) AND M6-2R 530 x 380 (21 x 15) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

WORK AREA

LANE OPEN TO TRAFFIC

TYPE I OR II BARRICADE WITH
STEADY BURN LIGHT

DRUM WITH STEADY BURN LIGHT

DRUM WITH SIGN (WITH OPTIONAL FLASHING
LIGHT) SEE DETAIL

TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION
AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)

SCALE: NONE

DATE: 10/18/2002

DRAWN BY

CHECKED BY LHA

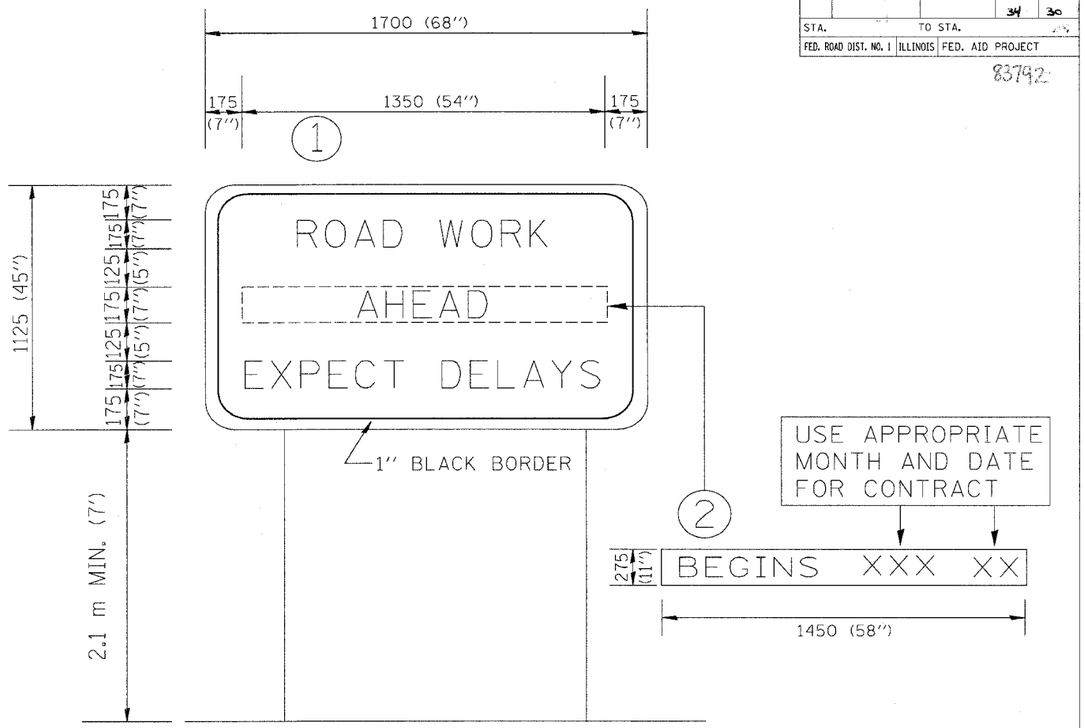
TC-14

REVISION DATE: 01/06/00

DATE-TIME
DGN-SPEC
VI-TC14

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			34	30
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

83792



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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY INFORMATION SIGNING

SCALE:

DATE 10/18/2002

DRAWN BY: BUR. OF DESIGN

CHECKED BY

TC22

REVISION DATE: 02/02/99

Friday October 18, 2002 @ 10:25:17 AM
c:\projects\diststd\tc22.dgn LV=35.63
VI=TC22

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			34	31
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

83797

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.

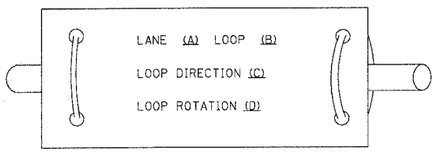
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

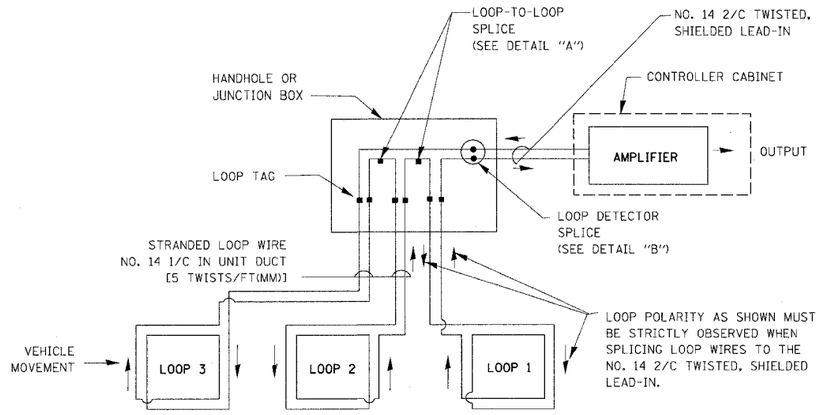


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

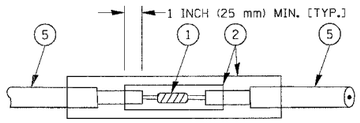
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

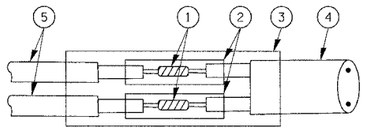


DETECTOR LOOP WIRING SCHEMATIC

- 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

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\d1stdtls05.dgn
VHTS05

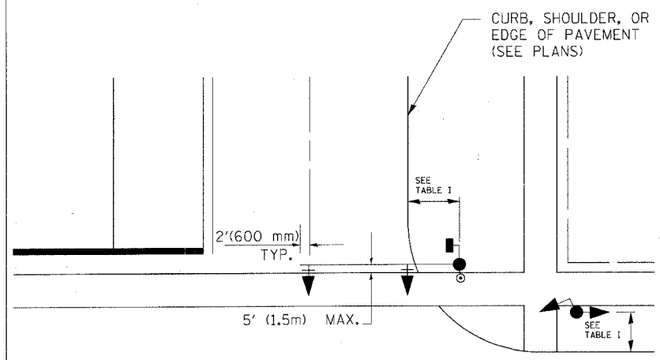
REVISION DATE: 01/01/02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			84	32
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

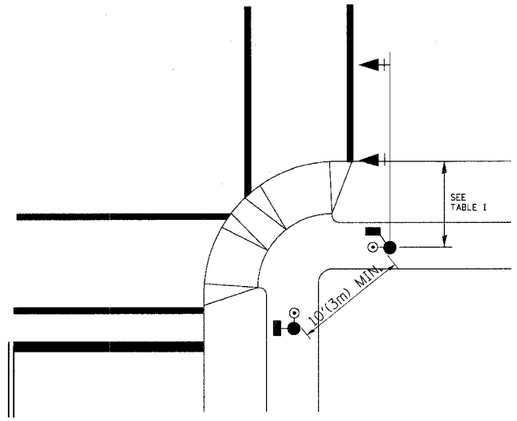
83792

TRAFFIC SIGNAL MAST ARM AND POST

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



PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

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

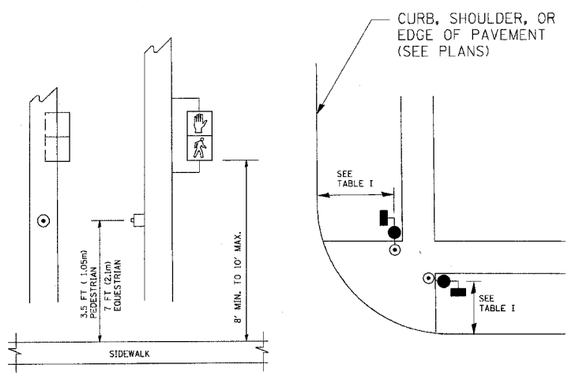


TABLE I

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

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

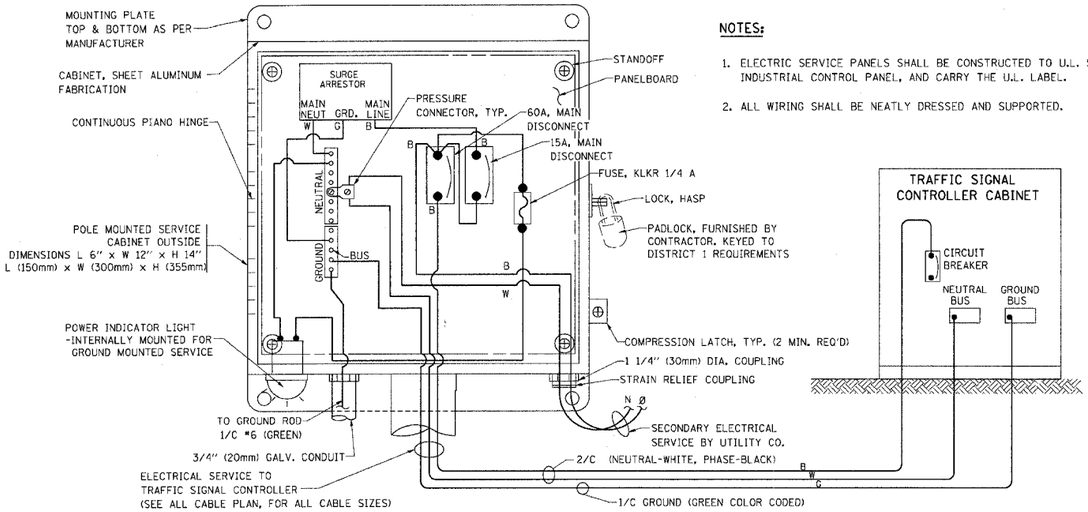
10/18/2002
c:\projects\dist1std\ts05.dgn
V1-TS05

TS05

REVISION DATE: 01/01/02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			34	33
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83792



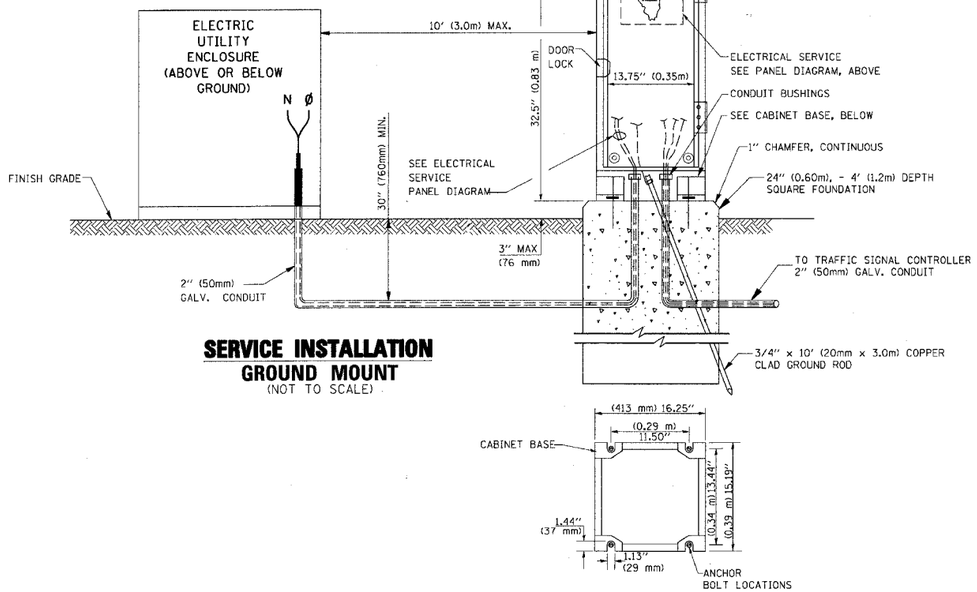
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

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.

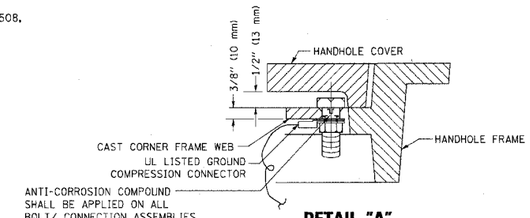


SERVICE INSTALLATION GROUND MOUNT

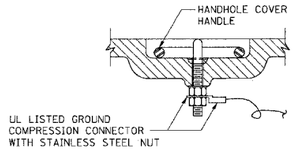
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

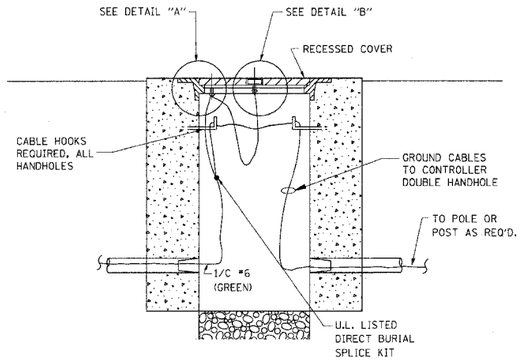
(NOT TO SCALE)



DETAIL "A"

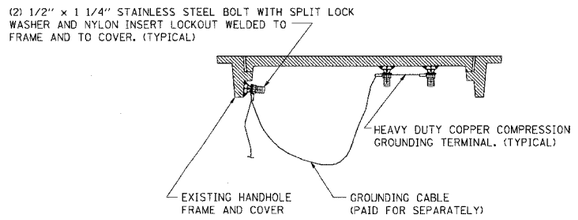


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



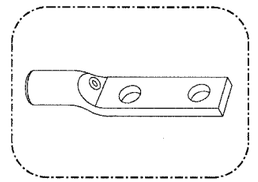
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

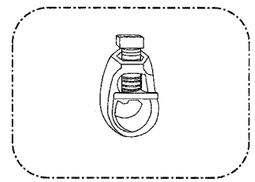
NOTES:

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.



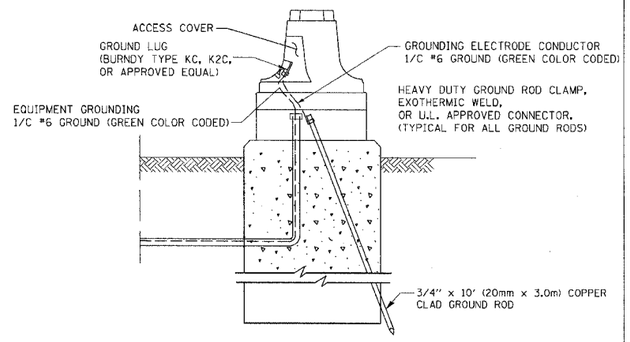
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

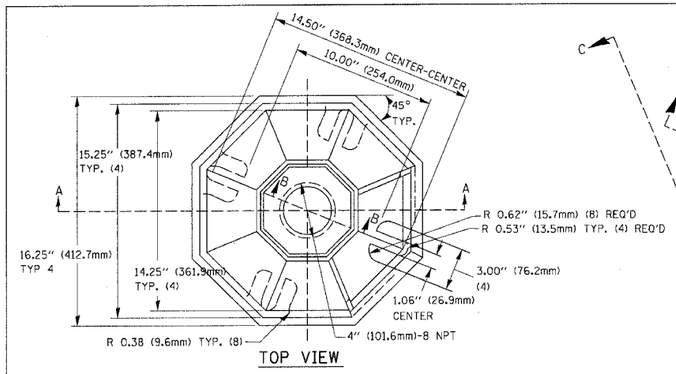
SCALE: VERT. NONE
HORIZ.
DATE 10/18/2002

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

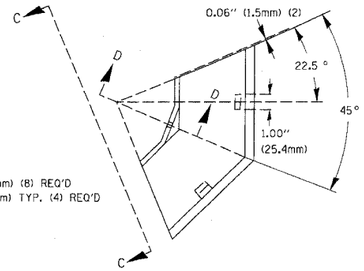
TS05

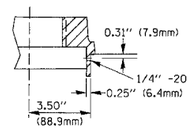
REVISION DATE: 01/01/02

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

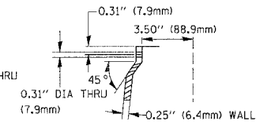


TOP VIEW

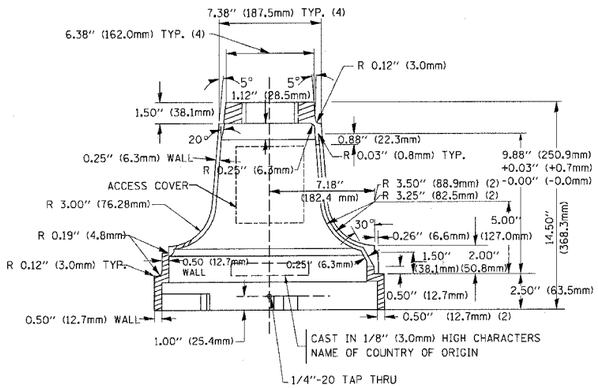




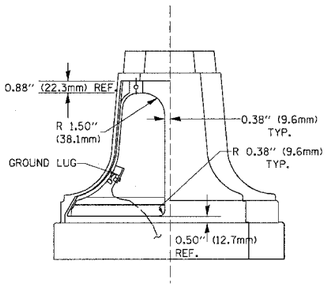
SECTION B-B



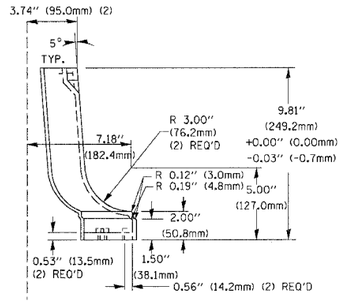
SECTION D-D



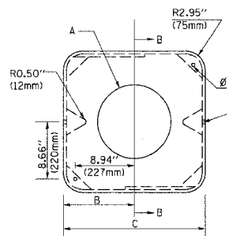
SECTION A-A

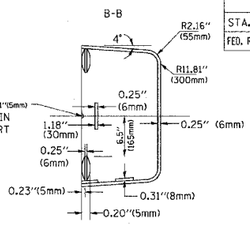


VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A





F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			34	34
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

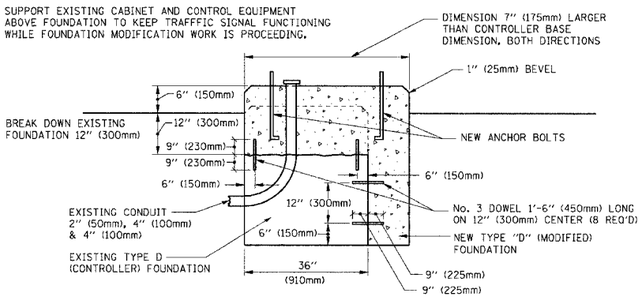
83792

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

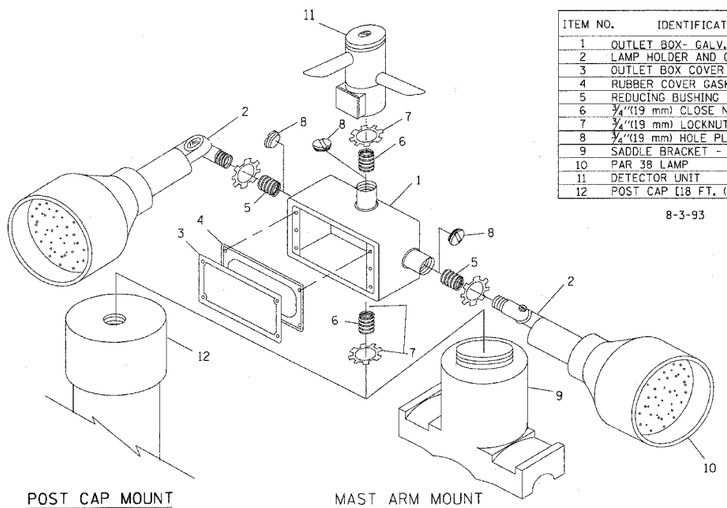
SHROUD DETAIL

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

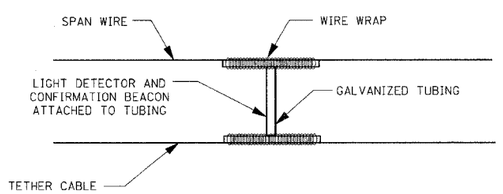
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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.

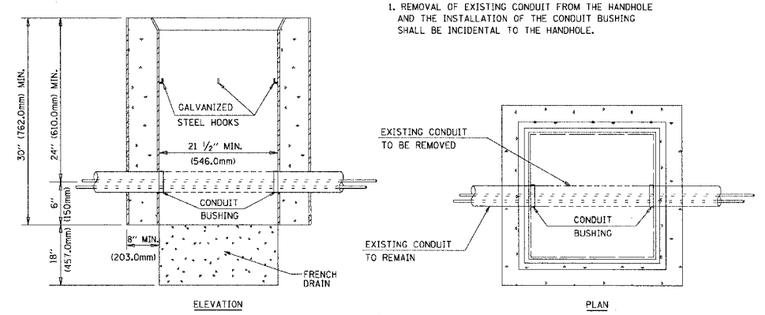


LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(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

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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