

62906

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	1

D-91-110-05

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

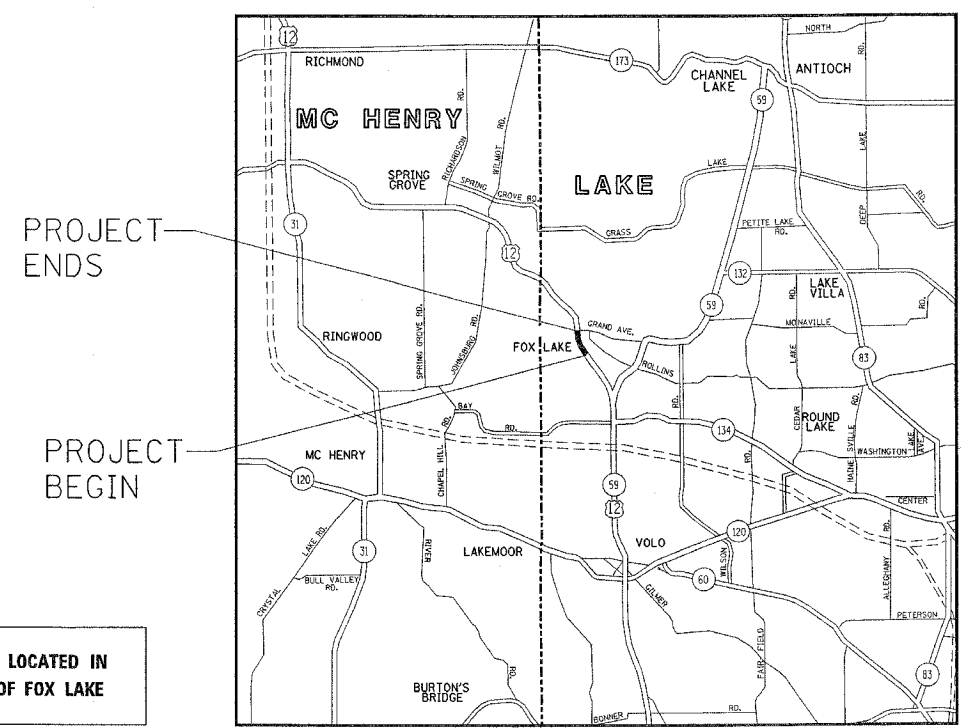
**DISTRICT 1
CONGESTION MITIGATION AIR QUALITY
FIBER OPTIC COMMUNICATION NETWORKS
FAP ROUTE 334 - US 12 (RAND RD.) FROM
SAYTON RD./EAGLE POINT RD. TO GRAND AVE.
SECTION 2005-002 TS
LAKE COUNTY
C-91-110-05
PROJECT: CMM-0334(015)**

INDEX OF SHEETS

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- US 12 (RAND RD.) AT SAYTON RD./EAGLE POINT RD.
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 - PHASE DESIGNATION DIAGRAM
 - EMERGENCY VEHICLE PREEMPTION SEQUENCE
 - SCHEDULE OF QUANTITIES
- US 12 (RAND RD.) AT GRAND AVE. TRAFFIC SIGNAL IMPROVEMENT PLAN
- US 12 (RAND RD.) AT GRAND AVE.
 - CABLE PLAN
 - PHASE DESIGNATION DIAGRAM
 - EMERGENCY VEHICLE PREEMPTION SEQUENCE
 - SCHEDULE OF QUANTITIES
- INTERCONNECT PLAN
- INTERCONNECT SCHEMATIC PLAN



LOCATION MAP
(NOT TO SCALE)



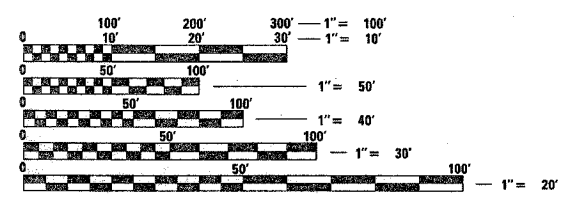
IMPROVEMENT LOCATED IN
THE VILLAGE OF FOX LAKE



STANDARD DRAWINGS

701006	701011	701101	701301	702001
424001	720001	813001	814001	814006
857001	877001	877006	877011	878001
880001	880006	886001	805001	
701201	701316	701321	701406	701501
701502	701606	701601	701701	701801

NOTE: STANDARD DRAWINGS REQUIRED (CIRCLED).



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.

Prepared by Terry Rammacher Traffic Engineer Date June 24, 2005

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 24 2005

Deane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 19, 20 05
Mike Hine
ENGINEER OF DESIGN AND ENVIRONMENT

August 19, 20 05
Victor Moders
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

CONTRACT NO. 62906

DISTRICT ONE - BUREAU OF TRAFFIC - TERRY RAMMACHER/DARYLE DREW (847) 705-4420

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	2
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT NO. 62906				

SUMMARY OF QUANTITIES		CONSTRUCTION TYPE CODE				
LOCATION OF WORK			URBAN 80% FED. 20% STATE	Grand Ave.	Eagle Point/ Sayton Rd.	Interconnect From Grand to Sayton
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	Y 031-1F	Y 031-1F	Y 031-1F
67100100	MOBILIZATION	L SUM	1	.25	.25	.50
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	.25	.25	.50
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	.25	.25	.50
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	.25	.25	.50
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	.25	.25	.50
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	.25	.25	.50
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	834		8	826
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	428			428
81400100	HANDHOLE	EACH	1			1
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	834		8	826
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	1	1	
86000105	MASTER CONTROLLER (SPECIAL)	EACH	1			1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	2			2
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	730	340	390	
87900200	DRILL EXISTING HANDHOLE	EACH	3		1	2
88500100	INDUCTIVE LOOP DETECTOR	EACH	2			2
88700200	LIGHT DETECTOR	EACH	2		2	
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	8	8		
88100200	PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	6	4	2	
88100400	PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	2	2		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	1	1	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4	4		
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	4	4		
89502200	MODIFY EXISTING CONTROLLER	EACH	2	1	1	

SUMMARY OF QUANTITIES		CONSTRUCTION TYPE CODE				
LOCATION OF WORK			URBAN 80% FED. 20% STATE	Grand Ave.	Eagle Point/ Sayton Rd.	Interconnect From Grand to Sayton
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	Y 031-1F	Y 031-1F	Y 031-1F
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1770			1770
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	2	1	1	
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1770			1770
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	90	70	20	
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	500			500
XX002856	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1			1

* 100% COST TO VILLAGE OF FOX LAKE
Y031-3D

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
US 12 (RAND ROAD) FROM
SAYTON RD./EAGLE PT. RD. TO GRAND AVE.

PLOT DATE: 6/21/2005

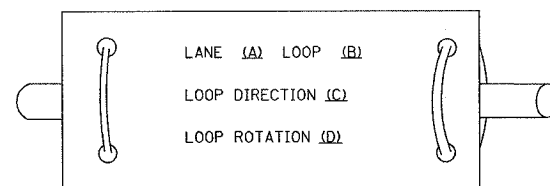
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F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 62906				

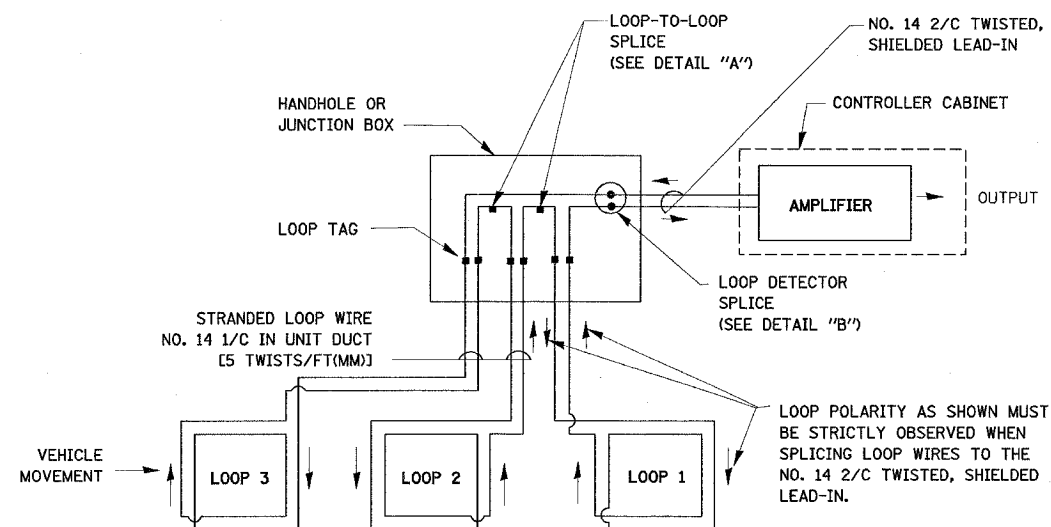
LOOP DETECTOR NOTES

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

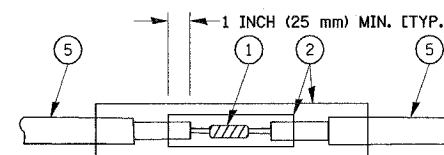


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

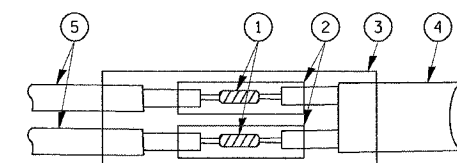


DETECTOR LOOP WIRING SCHEMATIC

- 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

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

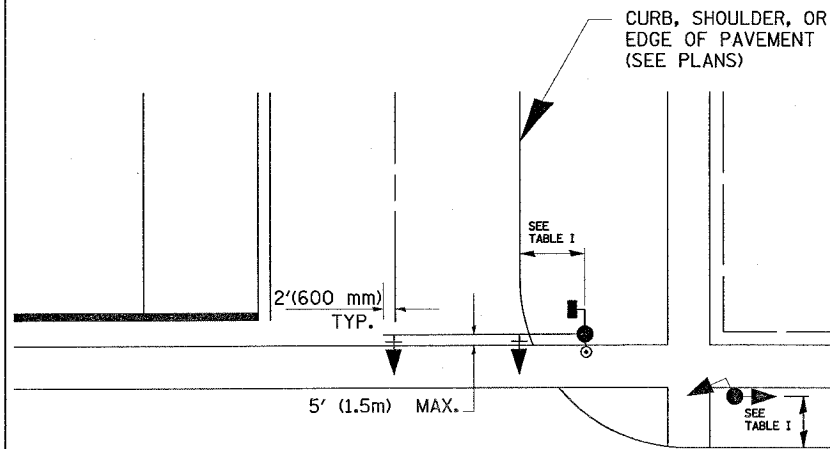
SCALE: VERT. NONE
HORIZ. NONE
DATE 1-01-02

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

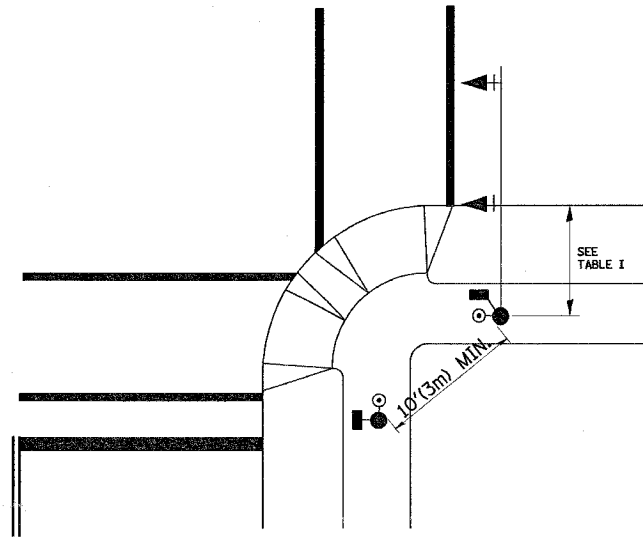
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62906				

TRAFFIC SIGNAL MAST ARM AND POST

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



PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 - A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 - B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 - C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 - D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 - E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

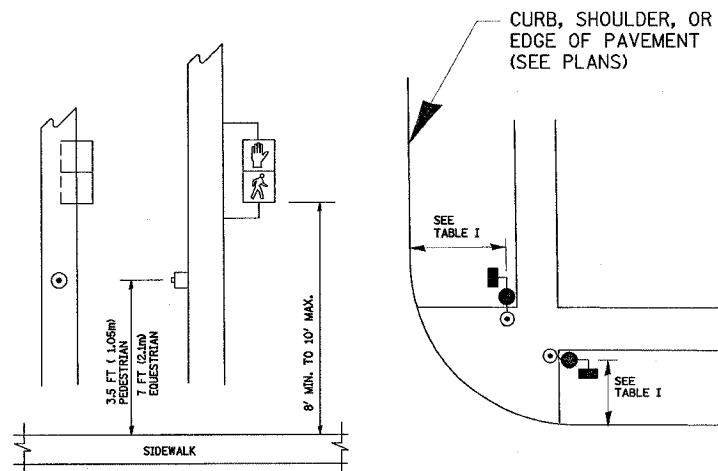


TABLE I

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

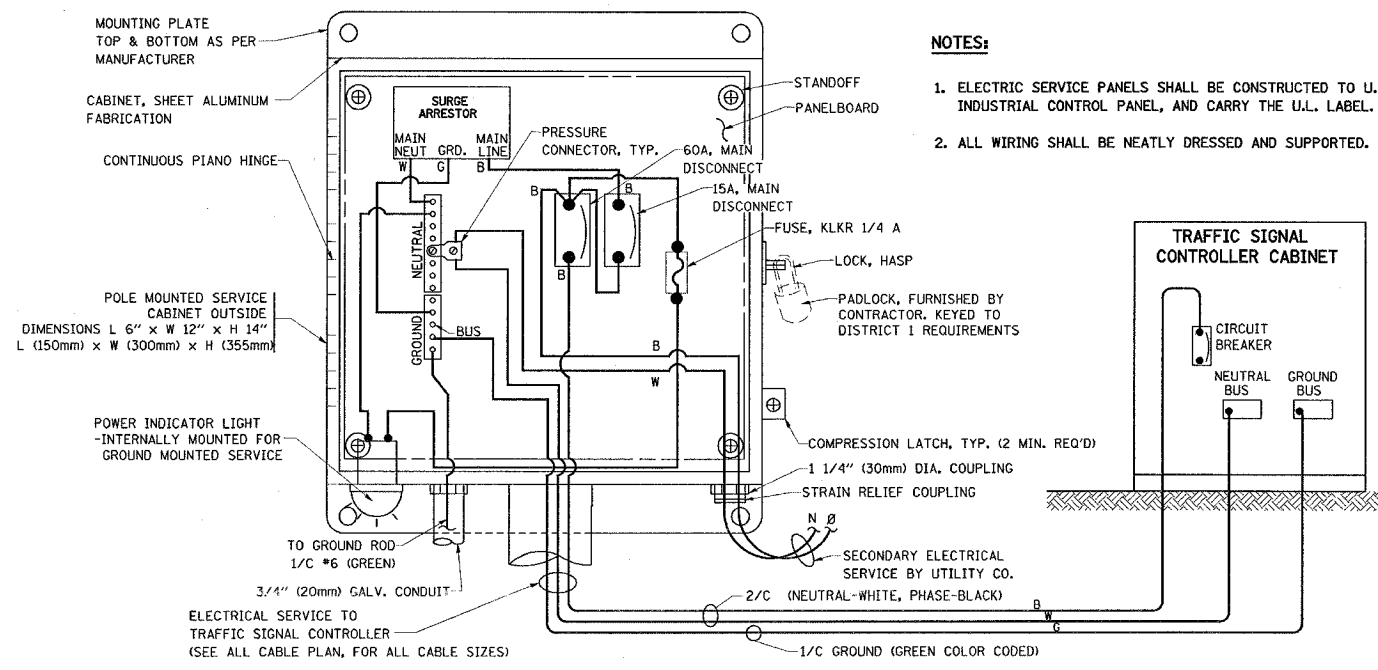
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

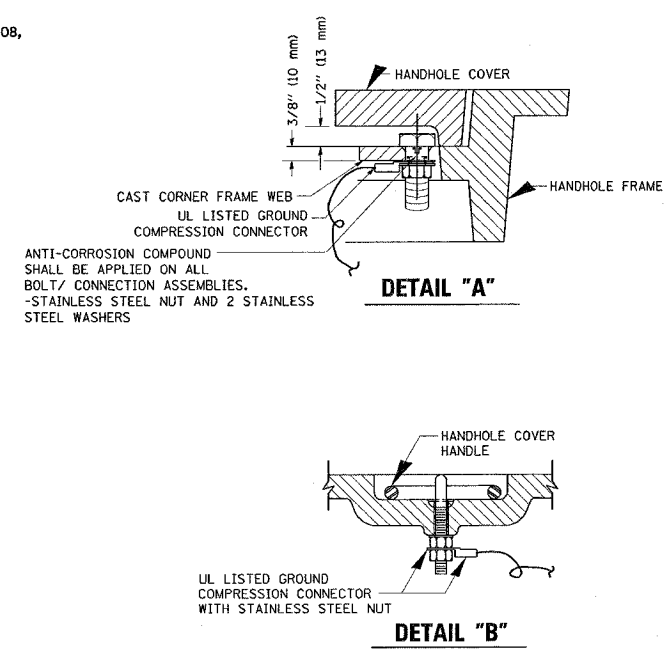
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HORIZ. NONE
DATE 1-01-02

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

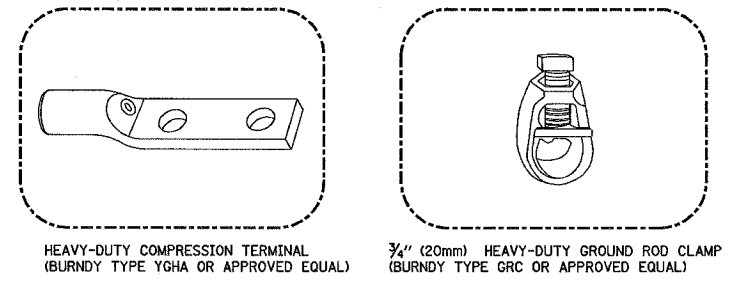
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62906				



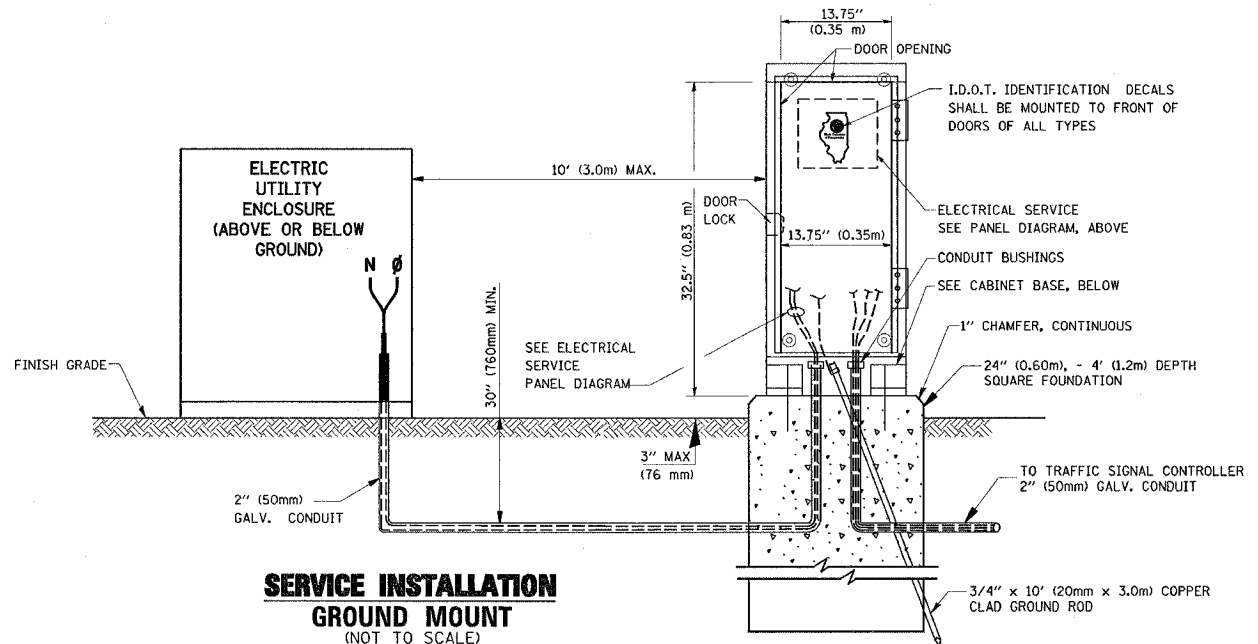
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



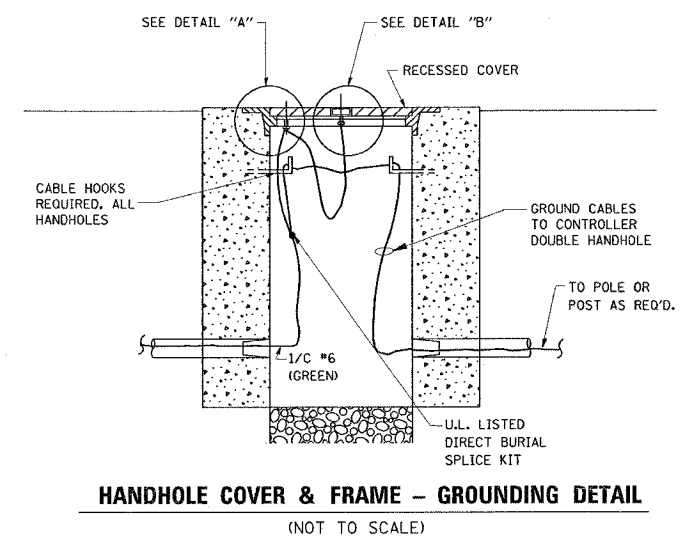
- NOTES:**
- GROUNDING SYSTEM**
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED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



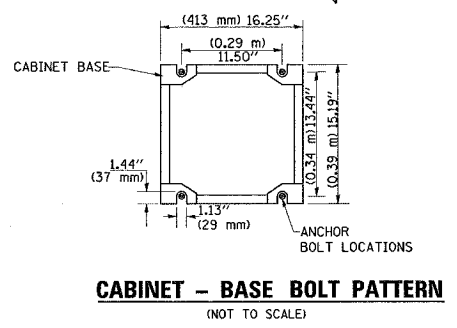
- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



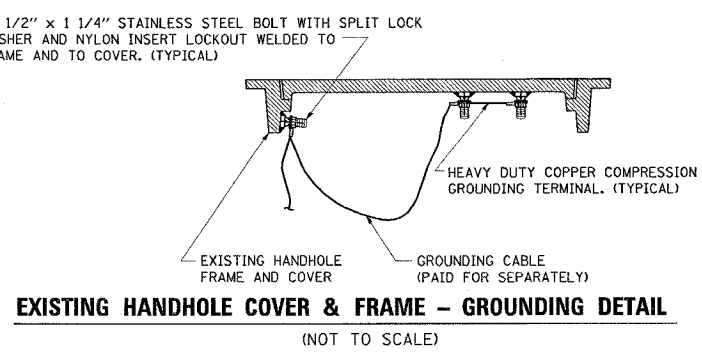
SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)



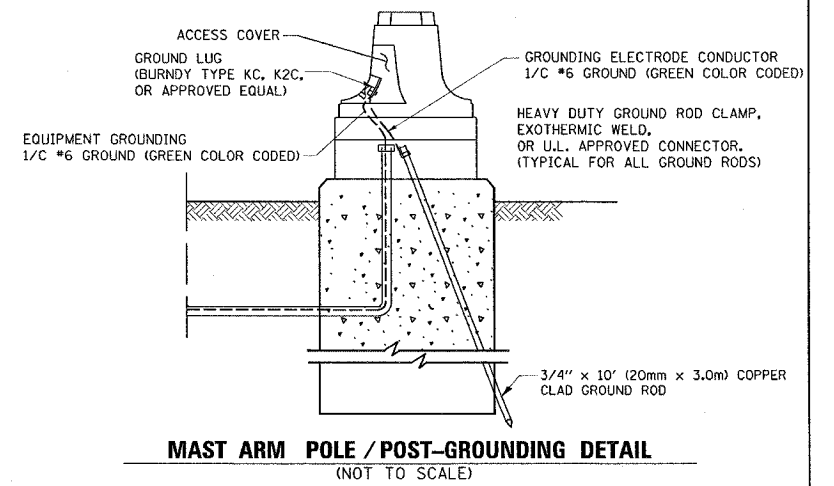
HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



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

REVISIONS	
NAME	DATE

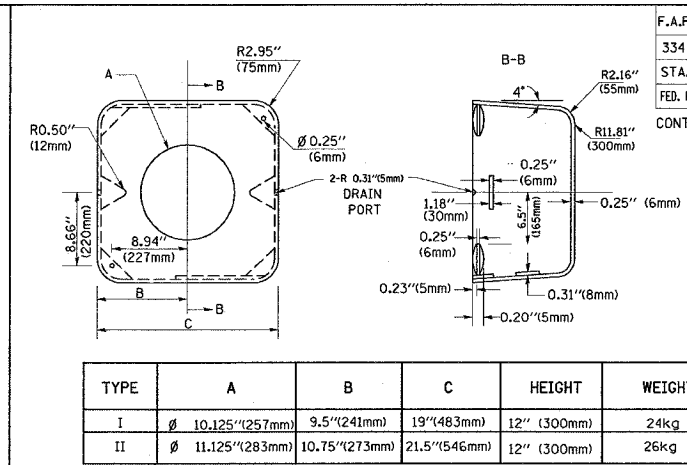
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

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

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	6
STA. TO STA.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62906				

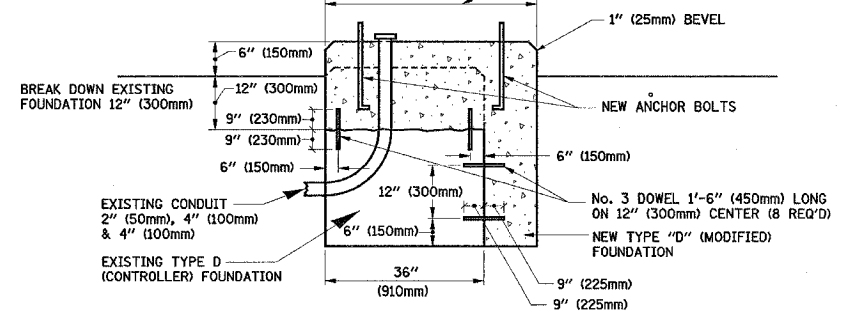
MATERIAL:
 - ASTM A48 CLASS 30 GREY IRON
 - ASTM A123 HOT DIPPED GALVANIZED



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

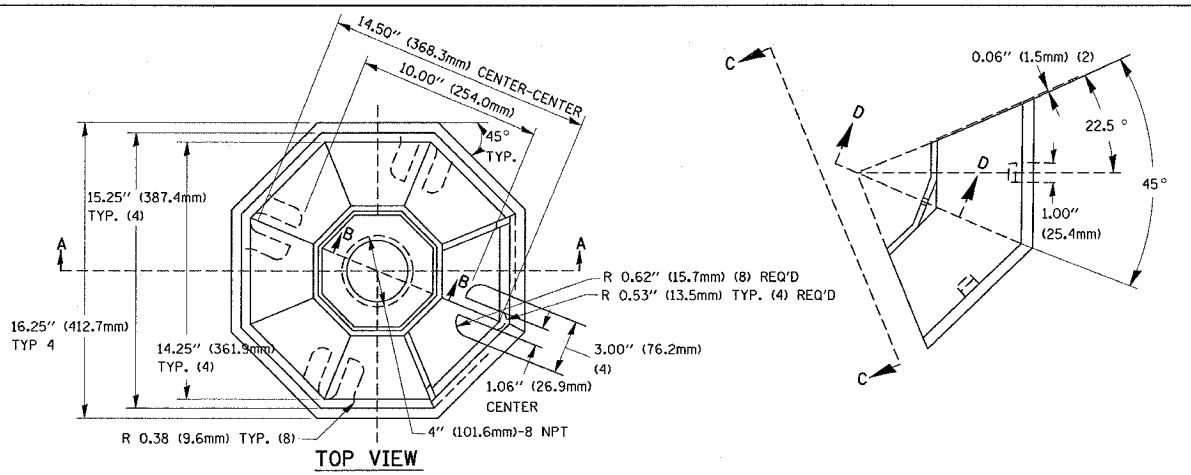
SHROUD DETAIL

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

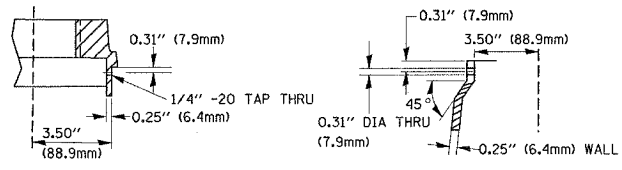


MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

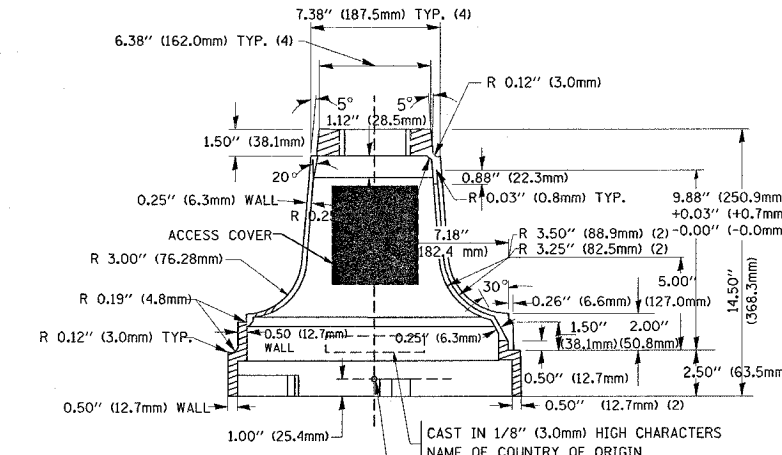


TOP VIEW

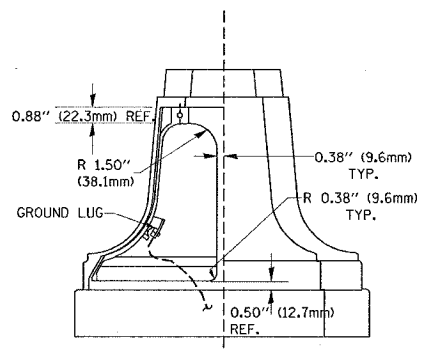


SECTION B-B

SECTION D-D

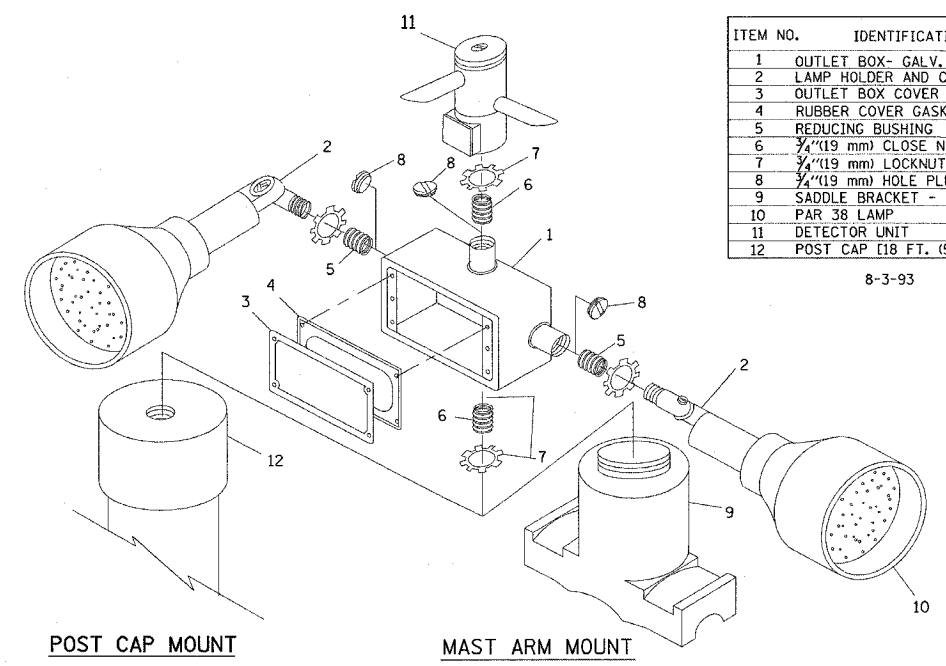


SECTION A-A



VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT

MAST ARM MOUNT

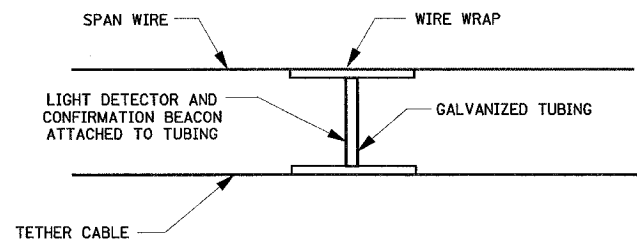
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

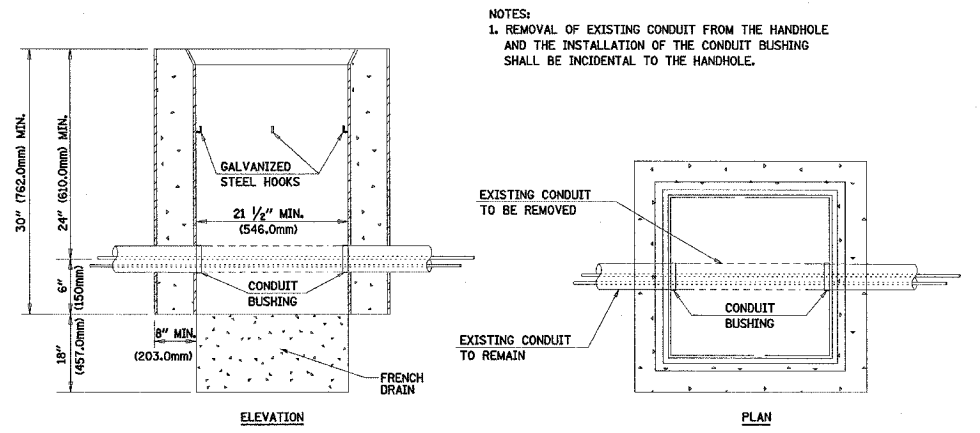
NOTES:

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



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)



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

REVISIONS	
NAME	DATE

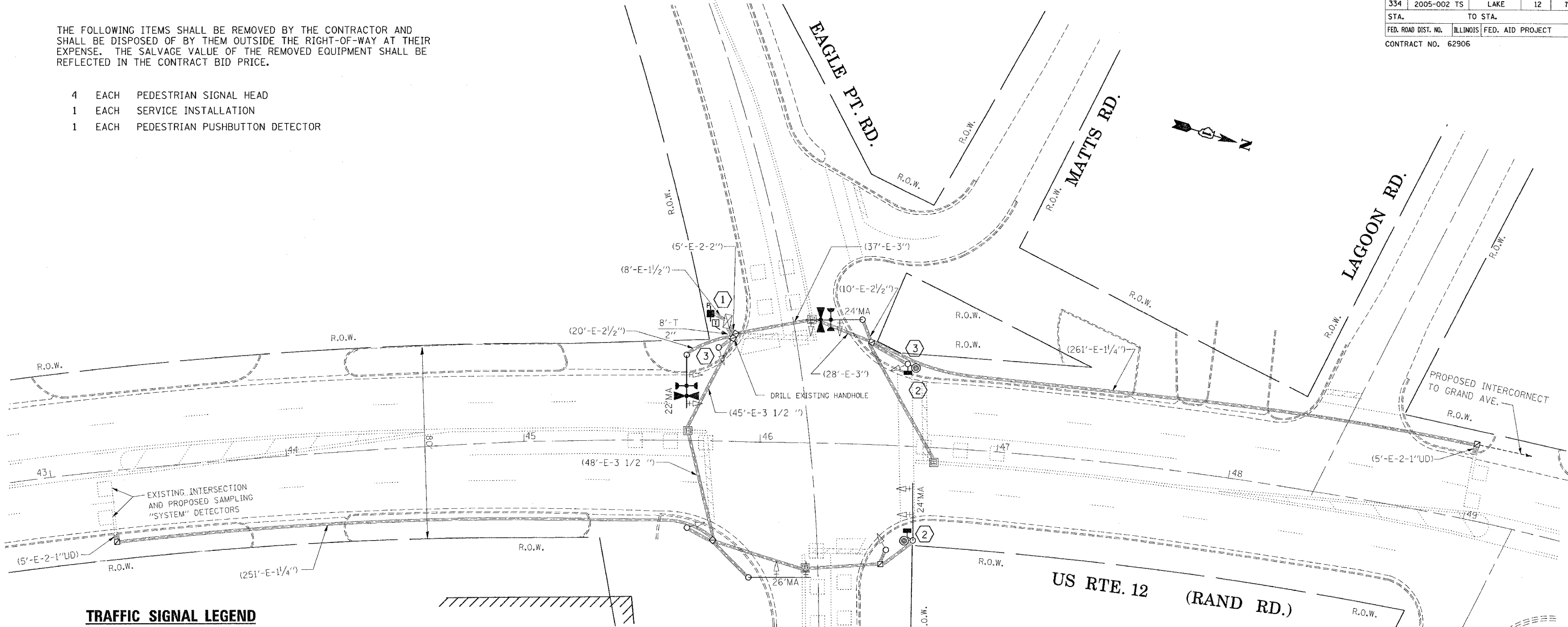
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62906				

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

- 4 EACH PEDESTRIAN SIGNAL HEAD
- 1 EACH SERVICE INSTALLATION
- 1 EACH PEDESTRIAN PUSHBUTTON DETECTOR



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER CABINET			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
RAILROAD CONTROL CABINET			JUNCTION BOX		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT			HANDHOLE		
TELEPHONE CONNECTION			HEAVY DUTY HANDHOLE		
SIGNAL HEAD			DOUBLE HANDHOLE		
SIGNAL HEAD WITH BACKPLATE			G.S. CONDUIT IN TRENCH OR PUSHED		
SIGNAL HEAD OPTICALLY PROGRAMMED			COMMON TRENCH		
SIGNAL HEAD PEDESTRIAN			UNIT DUCT		
SIGNAL HEAD PEDESTRIAN WITH COUNT-DOWN			PEDESTRIAN PUSHBUTTON DETECTOR		
ILLUMINATED SIGN "NO LEFT TURN"			ACCESSIBLE PEDESTRIAN PUSHBUTTON		
ILLUMINATED SIGN "NO RIGHT TURN"			DETECTOR LOOP, TYPE I		
SIGNAL POST			PREFORMED DETECTOR LOOP		
WOOD POLE			MICROWAVE VEHICLE SENSOR		
STEEL MAST ARM ASSEMBLY AND POLE			VIDEO DETECTOR		
ALUMINUM MAST ARM ASSEMBLY AND POLE			CLOSED CIRCUIT TV		
			EMERGENCY VEHICLE SYSTEM DETECTOR		
			CONFIRMATION BEACON		

NOTES:

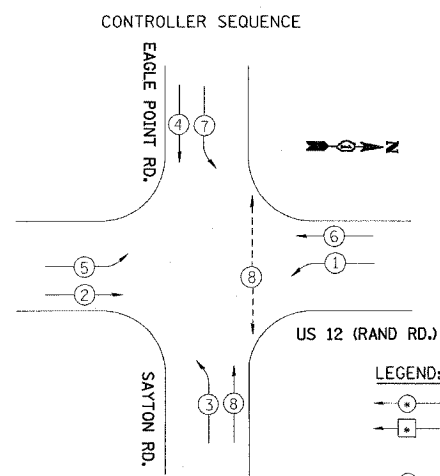
- 1 PROPOSED MASTER CONTROLLER TO BE INSTALLED WITH LOCAL CONTROLLER IN EXISTING TYPE IV CABINET
- 2 REUSE EXISTING CABLE FOR ALL NEW PEDESTRIAN SIGNAL HEADS INSTALLATION
- 3 PEDESTRIAN HEADS AND PUSHBUTTON AT SW AND 1 NW CORNER SHALL BE REMOVED AND NOT RELOCATED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL IMPROVEMENT
 US 12 & EAGLE PT. RD./SAYTON RD.
 SCALE: 1"=20'
 DATE 05/05
 DRAWN BY: SN
 DESIGNED BY: SN
 CHECKED BY: DD

PLOT DATE = 6/8/2005
 FILE NAME = c:\projects\ts\eff\ts\ts002265\ts12.mxd
 PLOT SCALE = 20.00000 / 1 IN.
 REFERENCE = 98EFS

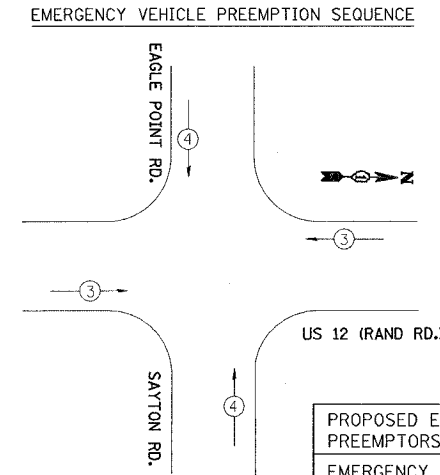
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	8
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62906				



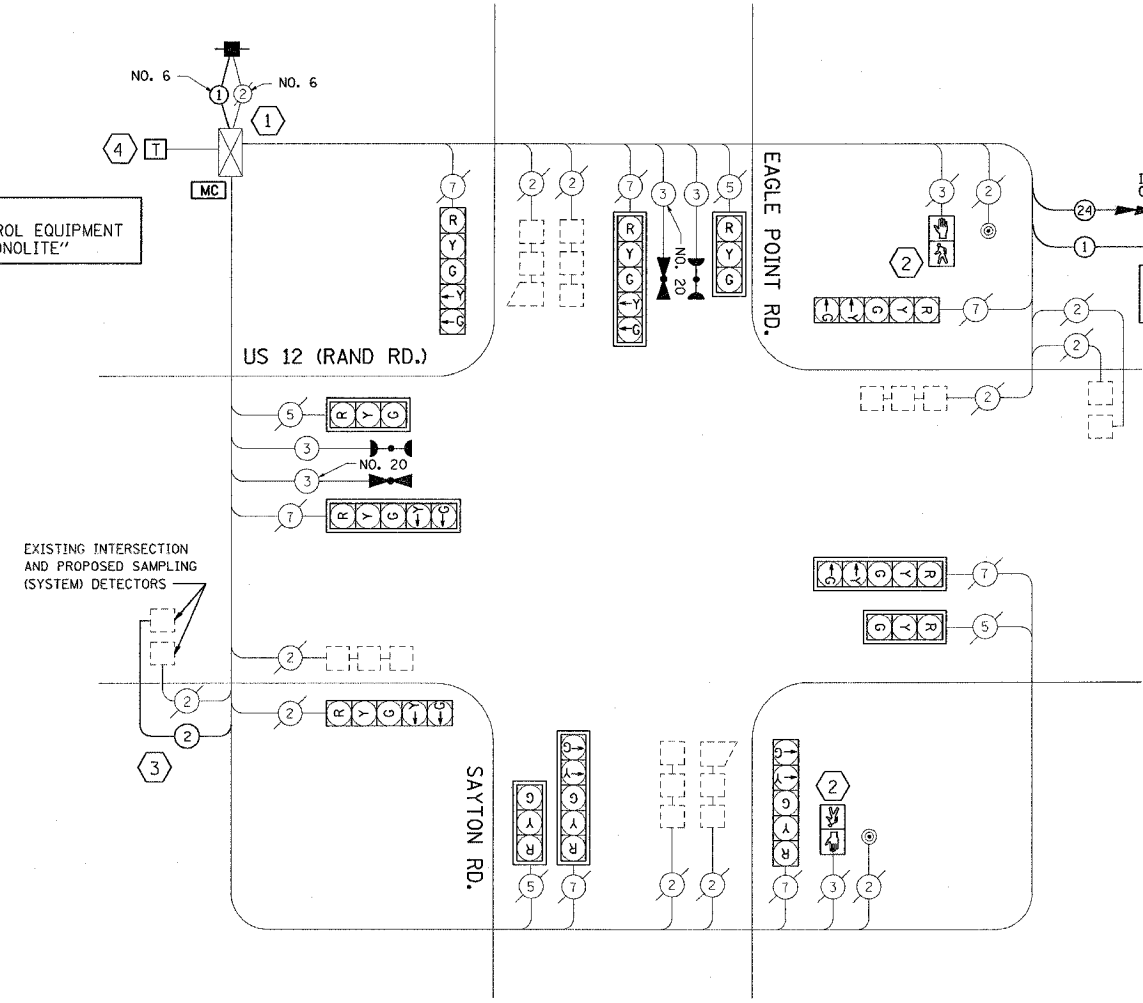
NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "ECONOLITE"

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑



CABLE PLAN
NOT TO SCALE

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		TELEPHONE INSTALLATION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION

* 100% COST TO VILLAGE OF FOX LAKE

NOTES:

- PROPOSED MASTER CONTROLLER TO BE INSTALLED WITH LOCAL CONTROLLER IN EXISTING TYPE IV CABINET
- REUSE EXISTING CABLE FOR ALL NEW PEDESTRIAN SIGNAL HEADS INSTALLATION
- INSTALL NEW ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14, 1 PAIR
- INSTALL 1" UNIT DUCT FOR THE AMERITECH SERVICE FROM THE POINT OF ENTRY OF THE TELEPHONE CONDUIT IN THE DOUBLE HANDHOLE THROUGH THE CONTROLLER CABINET FOUNDATION. THIS WORK SHALL BE INCLUDED TO THE MASTER CONTROLLER PAY ITEM

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
 US 12 (RAND RD.) AT EAGLE PT. RD./SAYTON RD.
 SCALE: NONE
 DATE: 05/05
 DRAWN BY: SN
 DESIGNED BY: SN
 CHECKED BY: DD

SUMMARY OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
MODIFY EXISTING CONTROLLER	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	FOOT	390
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	20
DRILL EXISTING HANDHOLE	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	8
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	8
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	2
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
* ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	500

TYPE	NO. LAMPS	WATTAGE INCAND	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	810
(YELLOW)	12	135	25	0.25	405
(GREEN)	12	135	15	0.25	405
ARROW	16	135	12	0.10	216
PED. SIGNAL	2	90	25	1.00	180
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	35	0.05	
TOTAL =					2116

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 WEST CENTER COURT
 SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY CONTACT: JUDY SCHOMER
 PHONE: 847-870-2063
 COMPANY: COMMONWEALTH EDISON

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

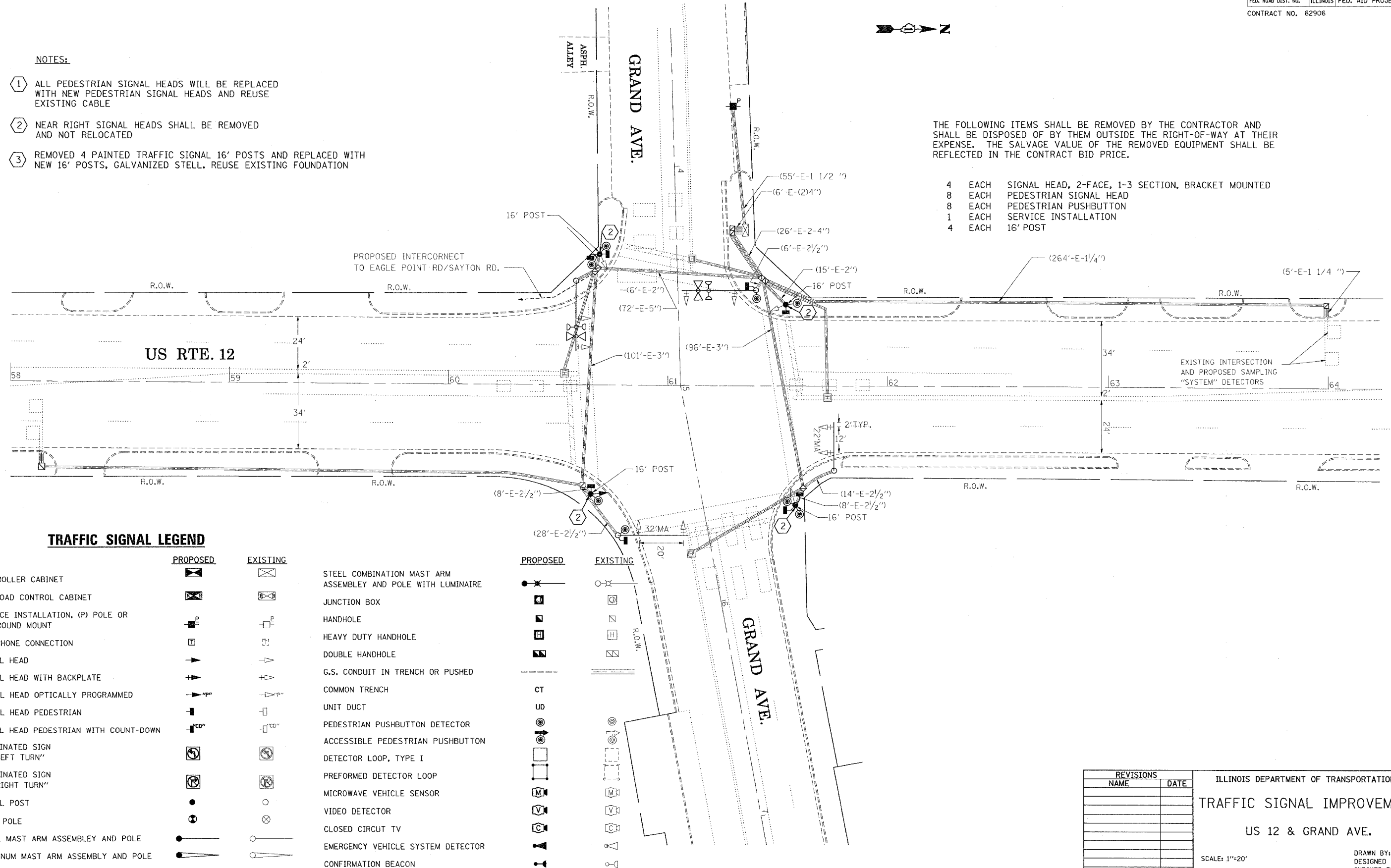
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	9
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62906				

NOTES:

- 1 ALL PEDESTRIAN SIGNAL HEADS WILL BE REPLACED WITH NEW PEDESTRIAN SIGNAL HEADS AND REUSE EXISTING CABLE
- 2 NEAR RIGHT SIGNAL HEADS SHALL BE REMOVED AND NOT RELOCATED
- 3 REMOVED 4 PAINTED TRAFFIC SIGNAL 16' POSTS AND REPLACED WITH NEW 16' POSTS, GALVANIZED STEEL. REUSE EXISTING FOUNDATION

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

- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, BRACKET MOUNTED
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 8 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH SERVICE INSTALLATION
- 4 EACH 16' POST



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING	
CONTROLLER CABINET	[Symbol]	[Symbol]	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE
RAILROAD CONTROL CABINET	[Symbol]	[Symbol]	JUNCTION BOX
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]	[Symbol]	HANDHOLE
TELEPHONE CONNECTION	[Symbol]	[Symbol]	HEAVY DUTY HANDHOLE
SIGNAL HEAD	[Symbol]	[Symbol]	DOUBLE HANDHOLE
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	G.S. CONDUIT IN TRENCH OR PUSHED
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]	COMMON TRENCH
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]	UNIT DUCT
SIGNAL HEAD PEDESTRIAN WITH COUNT-DOWN	[Symbol]	[Symbol]	PEDESTRIAN PUSHBUTTON DETECTOR
ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]	ACCESSIBLE PEDESTRIAN PUSHBUTTON
ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]	DETECTOR LOOP, TYPE I
SIGNAL POST	[Symbol]	[Symbol]	PERFORMED DETECTOR LOOP
WOOD POLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR
STEEL MAST ARM ASSEMBLY AND POLE	[Symbol]	[Symbol]	VIDEO DETECTOR
ALUMINUM MAST ARM ASSEMBLY AND POLE	[Symbol]	[Symbol]	CLOSED CIRCUIT TV
			EMERGENCY VEHICLE SYSTEM DETECTOR
			CONFIRMATION BEACON

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL IMPROVEMENT
 US 12 & GRAND AVE.
 SCALE: 1"=20'
 DATE 05/05
 DRAWN BY: SN
 DESIGNED BY: SN
 CHECKED BY: DD

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62906				

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "ECONOLITE"

SUMMARY OF QUANTITIES

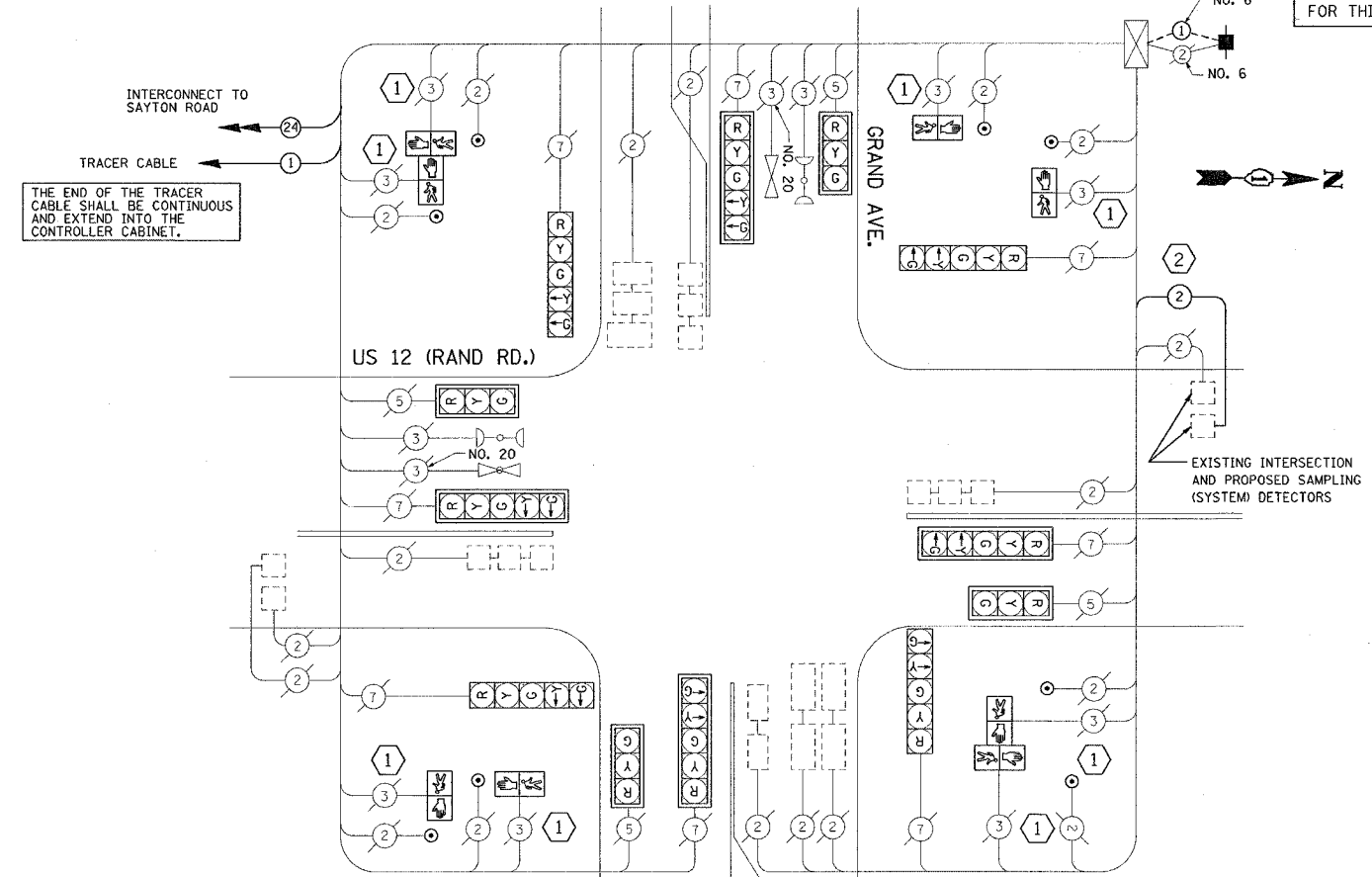
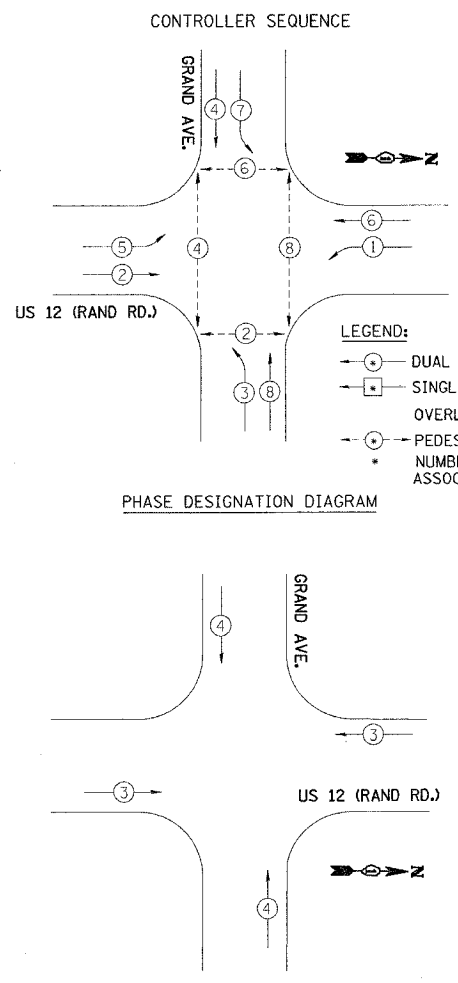
PAY ITEM	UNIT	QUANTITY
MODIFY EXISTING CONTROLLER	EACH	1
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	0.25
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	340
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	2
SERVICE INSTALLATION, POLE-MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	70
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16'	EACH	4
RELOCATE EXISTING SIGNAL HEAD	EACH	4

- NOTES:
- ① REUSE EXISTING CABLE FOR ALL NEW PEDESTRIAN SIGNAL HEADS INSTALLATION
 - ② INSTALL NEW ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14, 1 PAIR

NOTES: REMOVE ALL NEAR RIGHT SIGNAL HEADS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM,
EMERGENCY VEHICLE PREEMPTION SEQUENCE
AND SCHEDULE OF QUANTITIES
US 12 (RAND RD.) AT GRAND AVE.
SCALE: NONE
DATE: 05/05
DRAWN BY: SN
DESIGNED BY: SN
CHECKED BY: DD



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		TELEPHONE INSTALLATION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	CABLE SLACK	(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'-H/-2' = (6m-H/-0.6m)
E - M. ARM POLE	2 (0.6)	SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.3)	POST MOUNTED	6 (1.8)

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

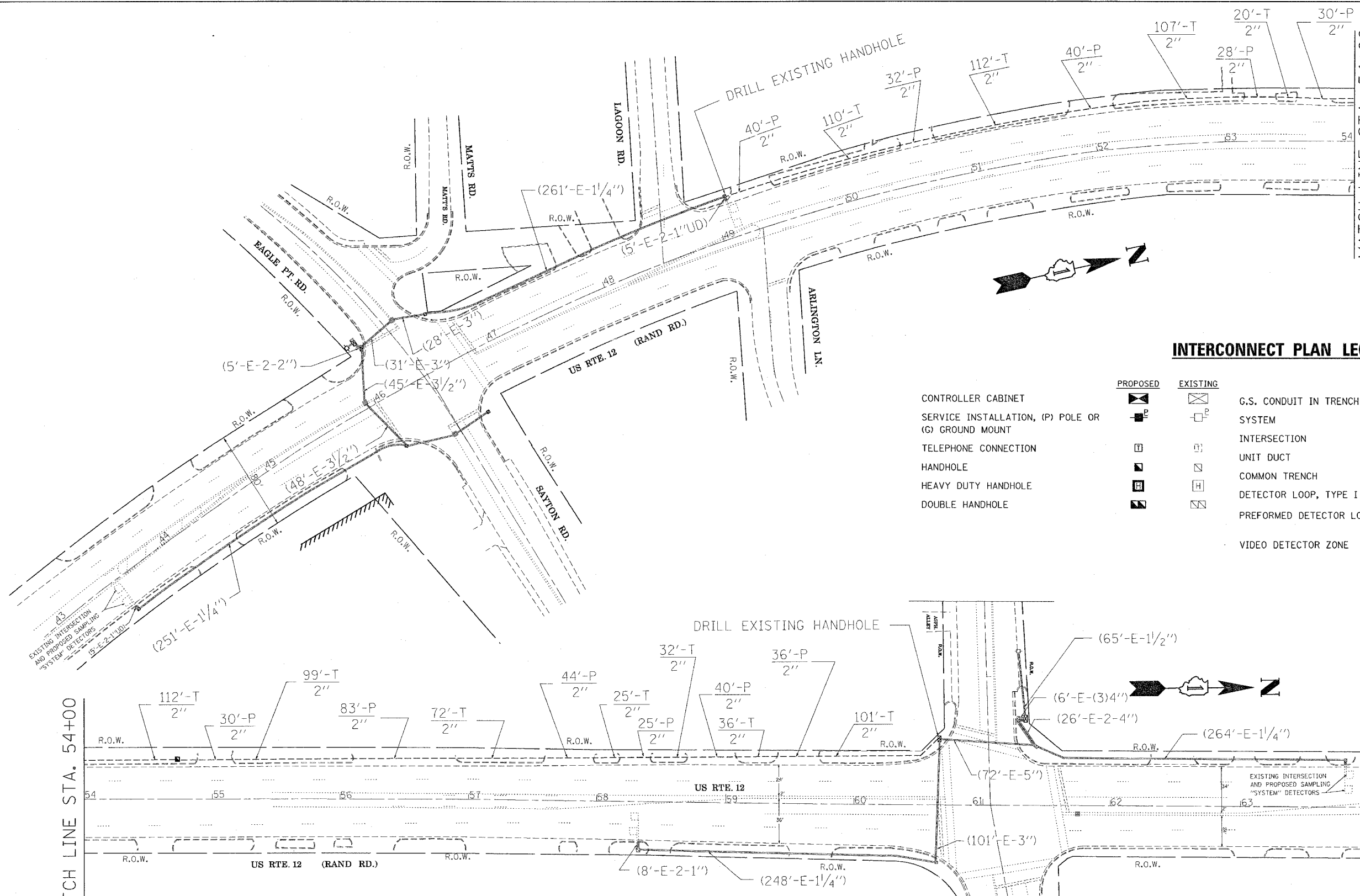
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND	LED		
SIGNAL (RED)	12	135	17	0.50	810
(YELLOW)	12	135	25	0.25	405
(GREEN)	12	135	15	0.25	405
ARROW	16	135	12	0.10	216
PED. SIGNAL	8	90	25	1.00	720
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	35	0.05	
TOTAL =					2656

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: JUDY SCHOMER
PHONE: 847-870-2063
COMPANY: COMMONWEALTH EDISON

PLOT DATE = 6/23/2005
FILE NAME = c:\projects\traffic\1200205\us12.mxd
PLOT SCALE = 26.8273 / IN.
REFERENCE = #REF9

11:30:04 06/23/2005

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	11
STA.	TO STA.			
	ILLINOIS		FED. AID PROJECT	
CONTRACT NO. 62906				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER CABINET			G.S. CONDUIT IN TRENCH OR PUSHED SYSTEM		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT			INTERSECTION	IP	I
TELEPHONE CONNECTION			UNIT DUCT	UD	
HANDHOLE			COMMON TRENCH	CT	
HEAVY DUTY HANDHOLE			DETECTOR LOOP, TYPE I		
DOUBLE HANDHOLE			PERFORMED DETECTOR LOOP		
			VIDEO DETECTOR ZONE		

MATCH LINE STA. 54+00

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, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
 US ROUTE 12 FROM
 SAYTON RD/EAGLE PT. RD. TO GRAND AVE.

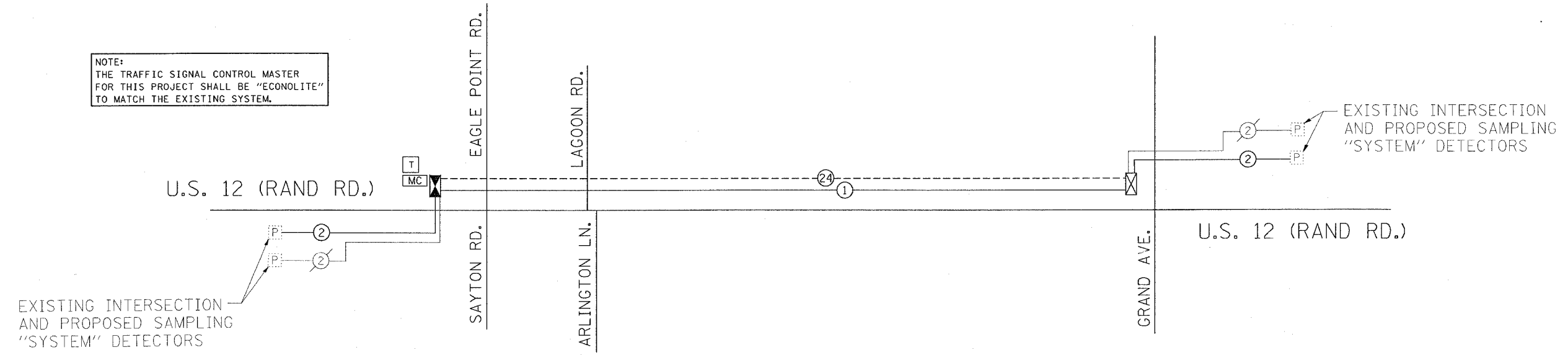
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 DATE: 05/2005

DRAWN BY: SN
 DESIGN BY: SN
 CHECKED BY: DD

PLOT DATE = 6/8/2005
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 PLOT SCALE = 37.800000 / IN.
 USER NAME = pgsunam

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2005-002 TS	LAKE	12	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62906				

NOTE:
THE TRAFFIC SIGNAL CONTROL MASTER FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING SYSTEM.



SCHEDULE OF QUANTITIES

INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER	☒	PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	PSPD
PROPOSED INTERSECTION CONTROLLER	☒	EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
EXISTING MASTER CONTROLLER	EMC	PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
PROPOSED MASTER CONTROLLER	MC	EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
MASTER MASTER CONTROLLER	MMC	PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	☐	EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	☐	PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
EXISTING INTERSECTION LOOP DETECTORS	P	EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
PROPOSED SAMPLING (SYSTEM) DETECTORS	PS	PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
EXISTING SAMPLING (SYSTEM) DETECTORS	ES	EXISTING ELECTRIC CABLE, 1/C NO. 10	1
PROPOSED SAMPLING (SYSTEM) DETECTORS	PS	PROPOSED ELECTRIC CABLE, 1/C NO. 14	1
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.	ESPD	EXISTING TELEPHONE CONNECTION	T
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.	ESPS	PROPOSED TELEPHONE CONNECTION	T
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD		
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD		
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS	ESPD		

ITEM

MASTER CONTROLLER (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	2
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3
INDUCTIVE LOOP DETECTOR	EACH	2
HANDHOLE	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	826
CONDUIT IN PUSH, 2" DIA., GALVANIZED STEEL	FOOT	428
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	826
DRILL EXISTING HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1770
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1770
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM (2 INTERSECTIONS)	L SUM	1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT SCHEMATIC
 US ROUTE 12 FROM
 SAYTON RD./EAGLE PT. RD. TO GRAND AVE.

SCALE: NONE
 DATE: 05/2005
 DRAWN BY: SN
 DESIGN BY: SN
 CHECKED BY: DD

PLOT DATE = 6/16/2005
 FILE NAME = c:\p\proj\2005\trf\12\12-332
 PLOT SCALE = 50,000% / IN.
 USER NAME = rjguyen