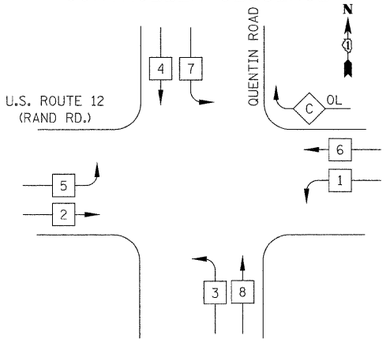
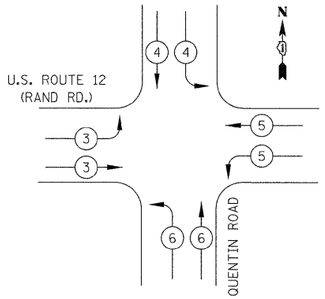
PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT				

LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

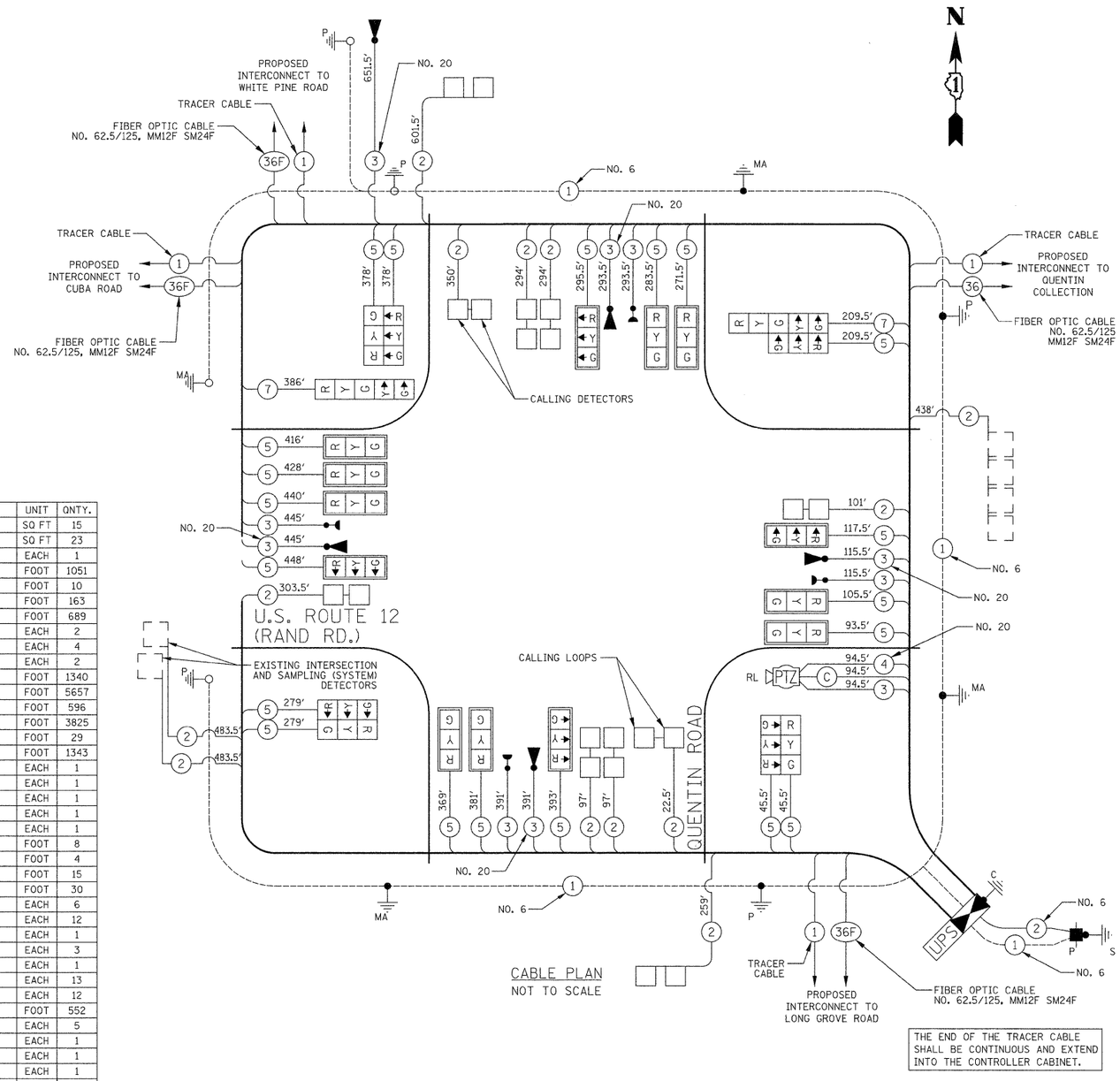
OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
C	=	6	+	7

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
SIGN PANEL, TYPE 1	SQ FT	15
SIGN PANEL, TYPE 2	SQ FT	23
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1051
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2.5" DIA.	FOOT	10
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3.5" DIA.	FOOT	163
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	689
HANDHOLE	EACH	2
HEAVY DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1340
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5657
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	596
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3825
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	29
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1343
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	6
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	12
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	13
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE I	FOOT	552
LIGHT DETECTOR	EACH	5
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	513
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	10
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1897
RELOCATE EXISTING SWITCH (SPECIAL)	EACH	2
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	95
RELOCATE EXISTING REMOTE CONTROLLED VIDEO SYSTEM	EACH	2
COAXIAL CABLE IN CONDUIT	FOOT	95
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
RELOCATE EXISTING ENCODER	EACH	2

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	22		17	0.50	187
(YELLOW)	22		25	0.25	138
(GREEN)	22		15	0.25	83
ARROW	4		12	0.10	5
PED. SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100
BATTERY BACK UP UNIT	1			1.00	
FLASHER				0.50	
				TOTAL =	513

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY: CONTACT: DONALD PESCE
PHONE: (847) 870-2057
COMPANY: COM ED



CABLE PLAN
NOT TO SCALE

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AND "NTCIP" COMPLIANT TO MATCH THE EXISTING ADJACENT SYSTEM.

FINAL SURVEY / ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — ITEMS SITE — AREAS CHECKED

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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DESIGNED	- BRD	REVISED	- 11/14/2011
DRAWN	- BRD	REVISED	- 5/16/2012
CHECKED	- JJE	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

CABLE PLAN, SEQUENCE OF OPERATION, EMERGENCY VEHICLE PREEMPTION SEQUENCE & SCHEDULE OF QUANTITIES
U.S. ROUTE 12 (RAND RD.) AT QUENTIN ROAD
SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	101
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING VIDEO DETECTION, EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.

2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.

3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISHENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.

4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.

5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRANDCONTROL EQUIPMENT.

6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON. IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

7. ALL STATIONS AND OFFSETS ARE DIMENSIONED FROM THE CENTERLINE OF QUENTIN ROAD.

8. THE EXISTING IFS EQUIPMENT AT THIS LOCATION SHALL BE RELOCATED FROM THE EXISTING CONTROLLER CABINET TO THE TEMPORARY CONTROLLER CABINET.

9. THE LEFT TURN SECTIONS OF THESE SIGNAL HEADS SHALL BE BAGGED AND DISCONNECTED UPON THE COMPLETION OF S.O.C. STAGE II.

10. THESE SIGNAL HEADS SHALL BE BAGGED AND DISCONNECTED UNTIL THE START OF S.O.C. STAGE III.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF LCDOT AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1	EACH	CONTROLLER AND CABINET, COMPLETE

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.

8	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN PUSH BUTTON
4	EACH	LUMINAIRE
4	EACH	WOOD POLE
2	EACH	TEMPORARY PEDESTRIAN WOOD POST
426	FEET	SPAN AND TETHER WIRE
1	EACH	SERVICE INSTALLATION

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE LAKE ZURICH RURAL FIRE PROTECTION DISTRICT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LAKE ZURICH RURAL FIRE PROTECTION DISTRICT AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

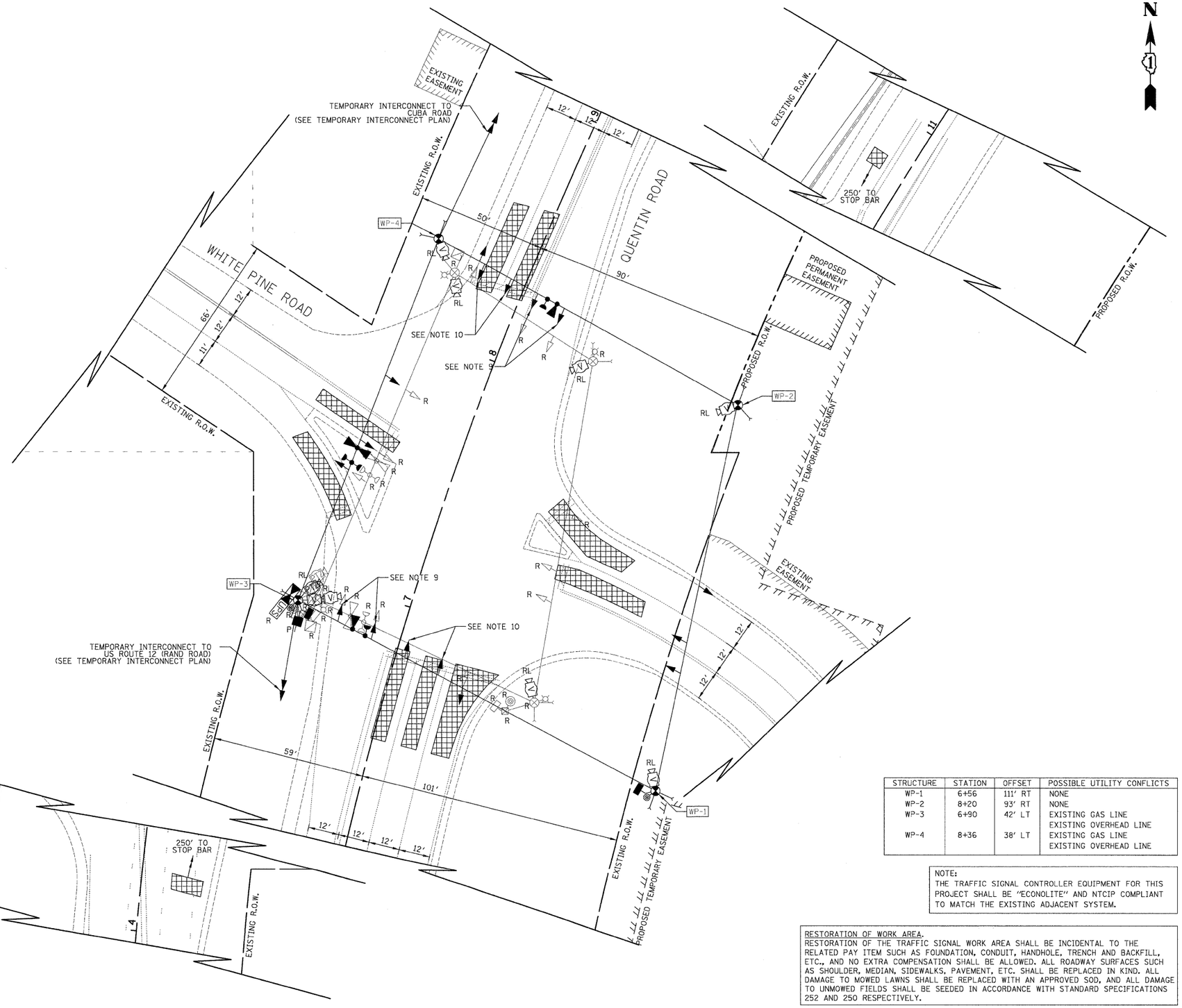
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RELOCATED TO THE TEMPORARY SIGNAL. ANY EQUIPMENT DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THEIR EXPENSE. UPON COMPLETION OF THE PROPOSED SIGNAL THIS EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF LAKE COUNTY DIVISION OF TRANSPORTATION AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

4	EACH	VIDEO VEHICLE DETECTOR
1	EACH	VIDEO SWITCH
2	EACH	VIDEO ENCODER

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RELOCATED TO THE TEMPORARY SIGNAL. UPON COMPLETION OF THE PROPOSED SIGNAL, THIS EQUIPMENT SHALL BE RELOCATED TO THE PERMANENT SIGNAL. ANY EQUIPMENT DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THEIR EXPENSE.

1	EACH	REMOTE-CONTROLLED VIDEO SYSTEM



STRUCTURE	STATION	OFFSET	POSSIBLE UTILITY CONFLICTS
WP-1	6+56	111' RT	NONE
WP-2	8+20	93' RT	NONE
WP-3	6+90	42' LT	EXISTING GAS LINE
			EXISTING OVERHEAD LINE
WP-4	8+36	38' LT	EXISTING GAS LINE
			EXISTING OVERHEAD LINE

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AND NTCIP COMPLIANT TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ORIGINAL SURVEY		FINAL SURVEY	
NOTE BOOK		SURVEYED	
NO.		PLOTTED	
		TEMPLATE	
		AREAS	
		AREAS CHECKED	
BY	DATE		

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DESIGNED	BRD	REVISED -
DRAWN	BRD	REVISED -
CHECKED	JJE	REVISED -
DATE	10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

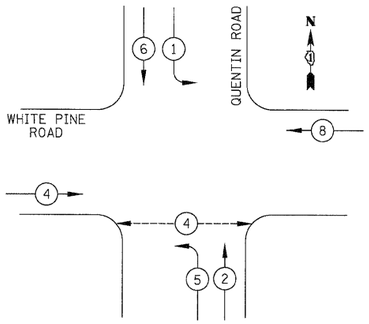
HORIZ. 0 20 40

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN
QUENTIN ROAD AT WHITE PINE ROAD
SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	102
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

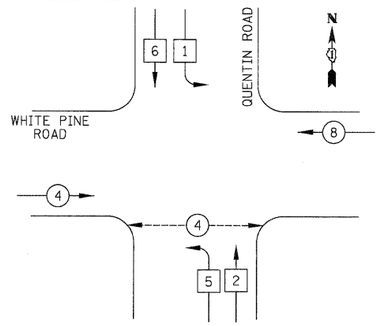
TEMPORARY CONTROLLER SEQUENCE

EXISTING CONDITIONS THROUGH S.O.C. PHASE II

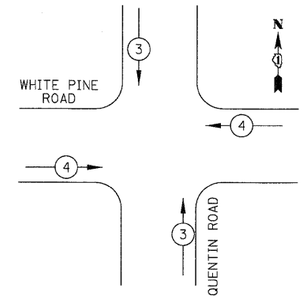


TEMPORARY CONTROLLER SEQUENCE

S.O.C. PHASE III THROUGH PROPOSED CONDITIONS



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



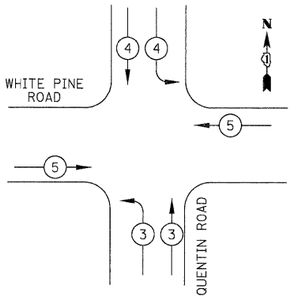
PROPOSED TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

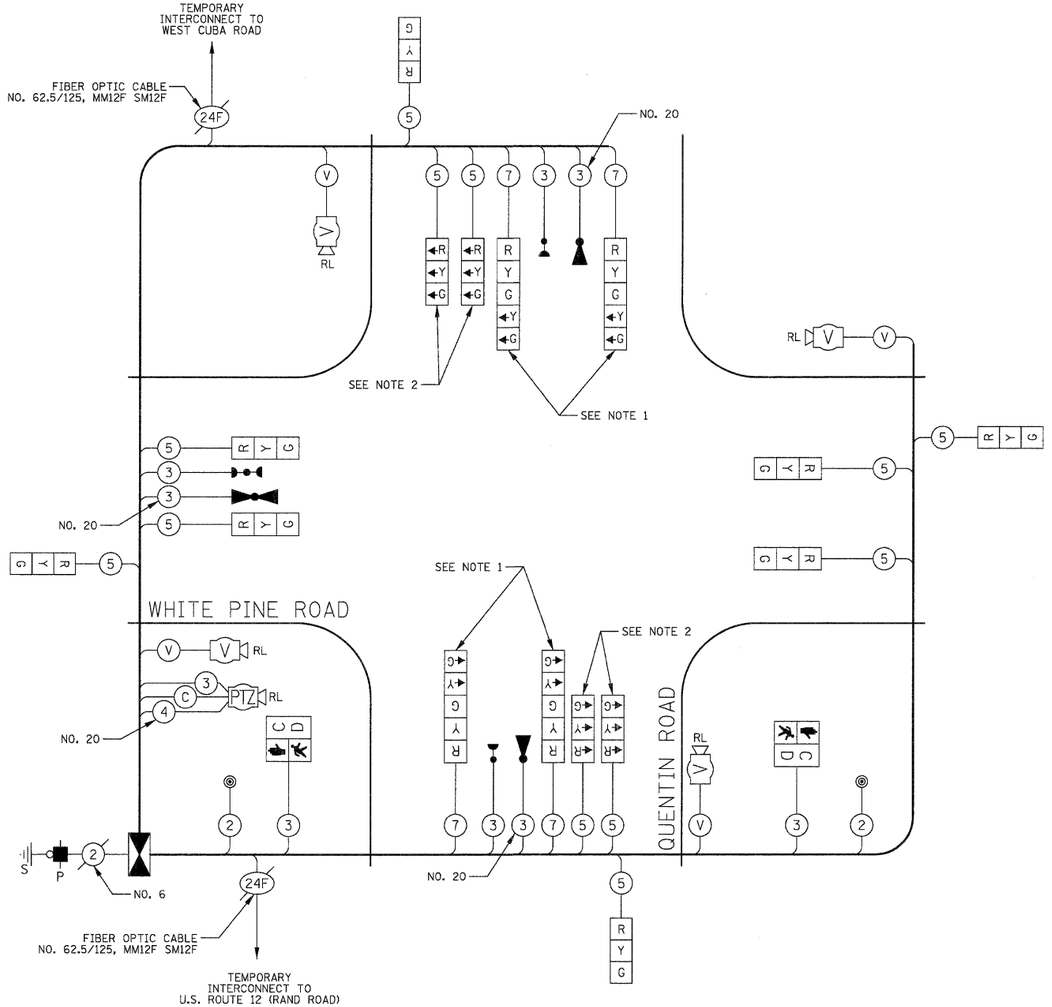
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

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	10
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
VIDEO SYSTEMS	1		150	1.00	150
FLASHER				0.50	
				TOTAL =	532

ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION
600 WEST WINCHESTER ROAD
LIBERTYVILLE, IL 60048
ENERGY SUPPLY: CONTACT: DONALD PESCE
PHONE: (847) 870-2057
COMPANY: COM ED



TEMPORARY CABLE PLAN

NOT TO SCALE

TEMPORARY CABLE PLAN NOTES

1. THE LEFT TURN SECTIONS OF THESE SIGNAL HEADS SHALL BE BAGGED AND THE PHASES DISCONNECTED UNTIL THE BEGINNING OF S.O.C. PHASE II.
2. THESE HEADS SHALL BE TURNED ON AND THE PHASES ACTIVE UPON THE START OF S.O.C. PHASE III.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AND NTCIP COMPLIANT TO MATCH THE EXISTING ADJACENT SYSTEM.

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRANSMITTAL — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRANSMITTAL — AREAS — AREAS CHECKED — BY — DATE

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Itasca, Illinois 60143
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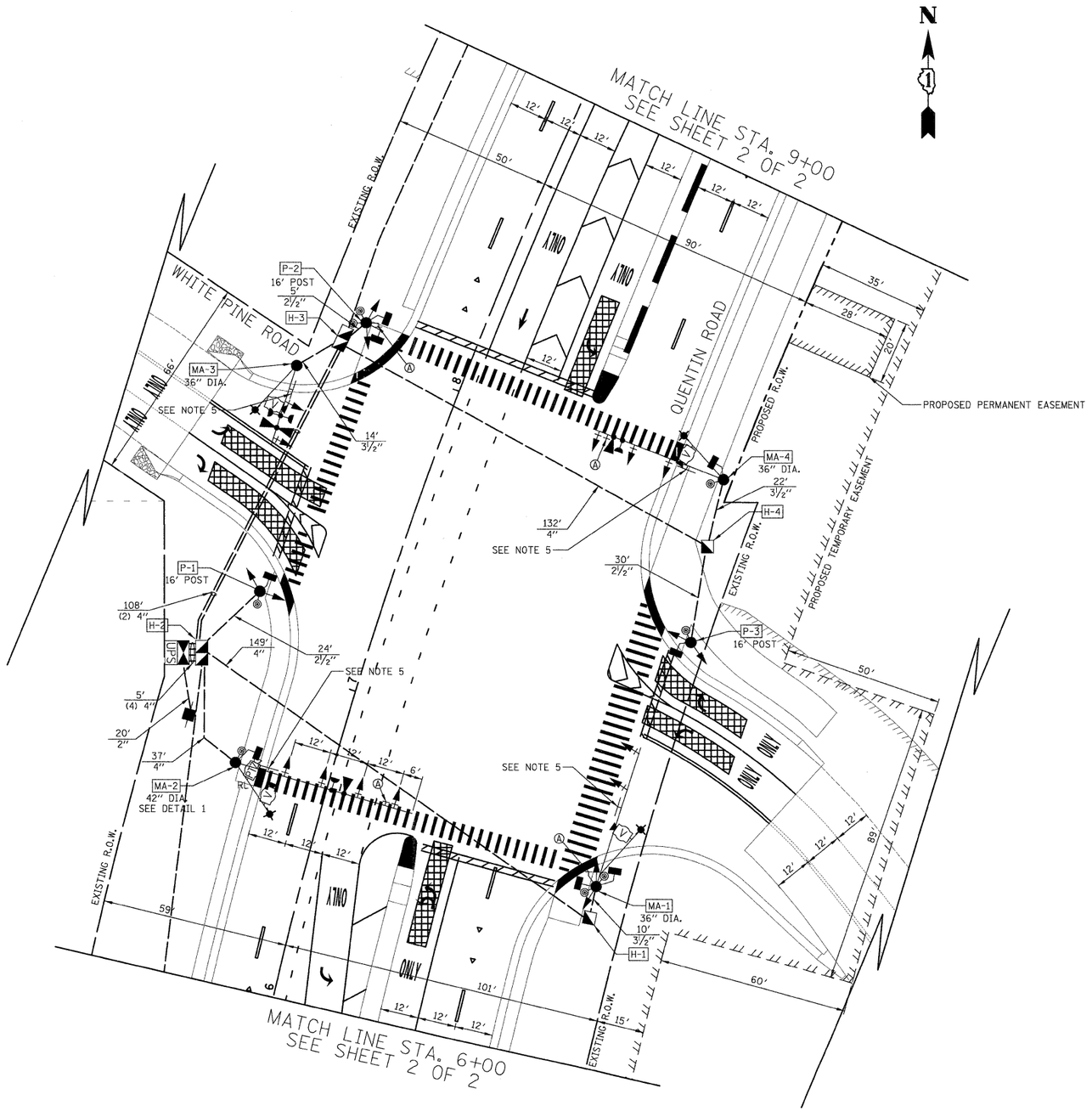
DESIGNED - BRD	REVISED -
DRAWN - BRD	REVISED -
CHECKED - JJE	REVISED -
DATE - 10/24/2011	REVISED -

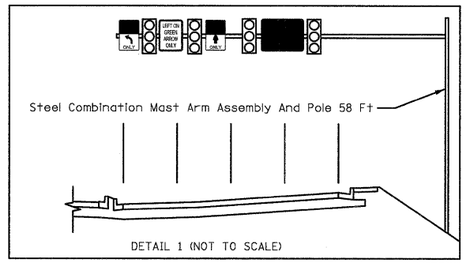
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

TEMPORARY CABLE PLAN, TEMPORARY SEQUENCE OF OPERATION, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
QUENTIN ROAD AT WHITE PINE ROAD
SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	103
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





SEE PAVEMENT MARKING AND SIGNING PLAN FOR MORE INFORMATION

R 10-5
24"x30"
(TYP.)
SIGN PANEL
TYPE 1
(4 REQUIRED)

R 10-3e
9"x15"
(TYP.)
SIGN PANEL
(REQUIRED AT
EACH PEDESTRIAN
PUSH BUTTON)
(SEE NOTE 6)

TRAFFIC SIGNAL NOTES

1. ALL STATIONS AND OFFSETS ARE DIMENSIONED FROM THE CENTERLINE OF QUENTIN ROAD.
2. THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN ALL CABLE TERMINATIONS.
3. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT BY LAKE COUNTY DIVISION OF TRANSPORTATION PERSONNEL.
4. THE EXISTING REMOTE-CONTROLLED VIDEO SYSTEM SHALL BE RELOCATED TO THE PROPOSED SIGNAL.
5. L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN.
6. THE R10-3E PEDESTRIAN PUSH BUTTON SIGNS ARE TO BE INCLUDED IN THE PAY ITEM "PEDESTRIAN PUSH-BUTTON".

STRUCTURE	STATION	OFFSET	POSSIBLE UTILITY CONFLICTS
H-1	6+50	91' RT	NONE
H-2	6+97	50' LT	NONE
H-3	8+03	40' LT	EXISTING GAS LINE
H-4	7+81	91' RT	NONE
P-1	7+21	38' LT	EXISTING GAS LINE
P-2	8+10	35' LT	EXISTING GAS LINE
P-3	7+49	96' RT	NONE
MA-1	6+61	90' RT	NONE
MA-2	6+68	30' LT	NONE
MA-3	7+90	51' LT	EXISTING OVERHEAD LINES
MA-4	8+04	88' RT	NONE

SCHEDULE OF COMBINATION MAST ARM ASSEMBLY AND POLES	
MA-1	46' MAST ARM, 20' LUMINAIRE ARM, 45' LUMINAIRE MOUNTING HEIGHT
MA-2	58' MAST ARM, 20' LUMINAIRE ARM, 45' LUMINAIRE MOUNTING HEIGHT
MA-3	26' MAST ARM, 20' LUMINAIRE ARM, 45' LUMINAIRE MOUNTING HEIGHT
MA-4	44' MAST ARM, 20' LUMINAIRE ARM, 45' LUMINAIRE MOUNTING HEIGHT

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AND NTCIP COMPLIANT TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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Itasca, Illinois 60143
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DESIGNED	BRD	REVISED	-
DRAWN	BRD	REVISED	-
CHECKED	JJE	REVISED	-
DATE	10/24/2011	REVISED	-

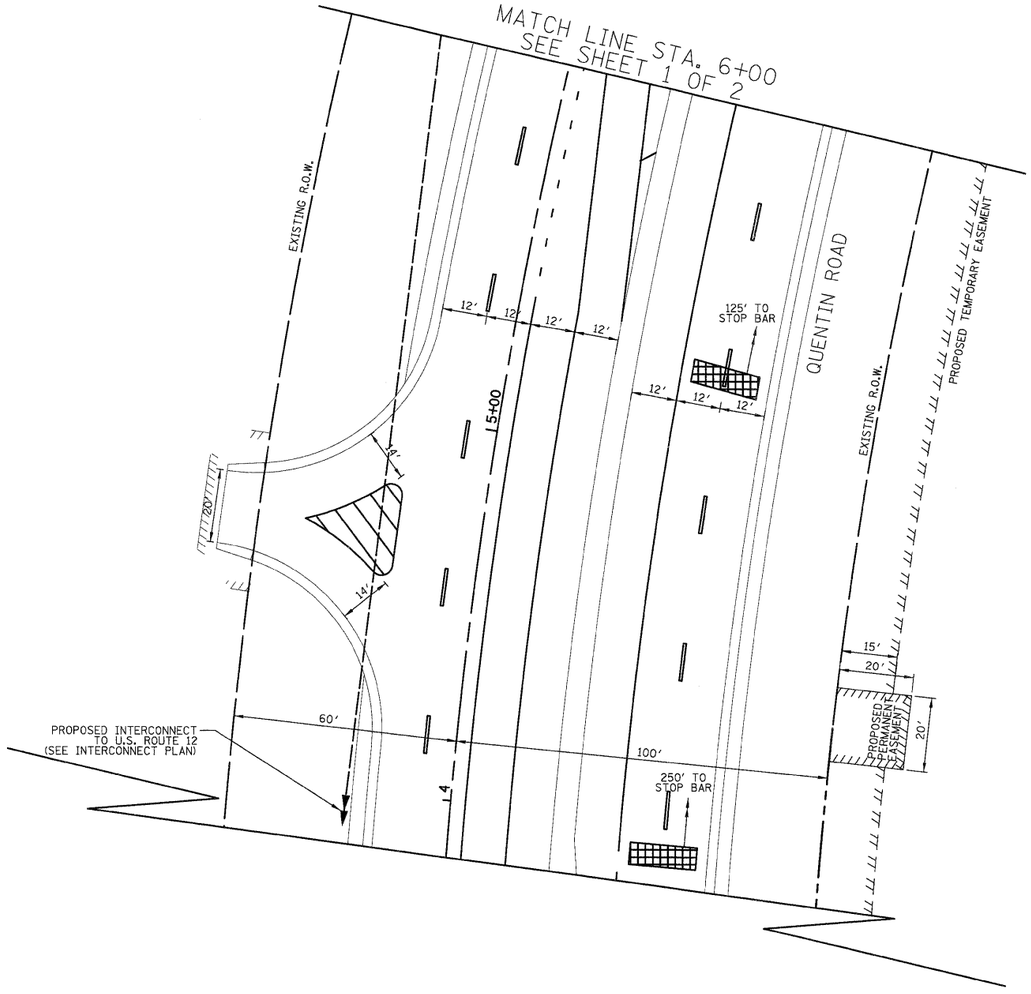
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

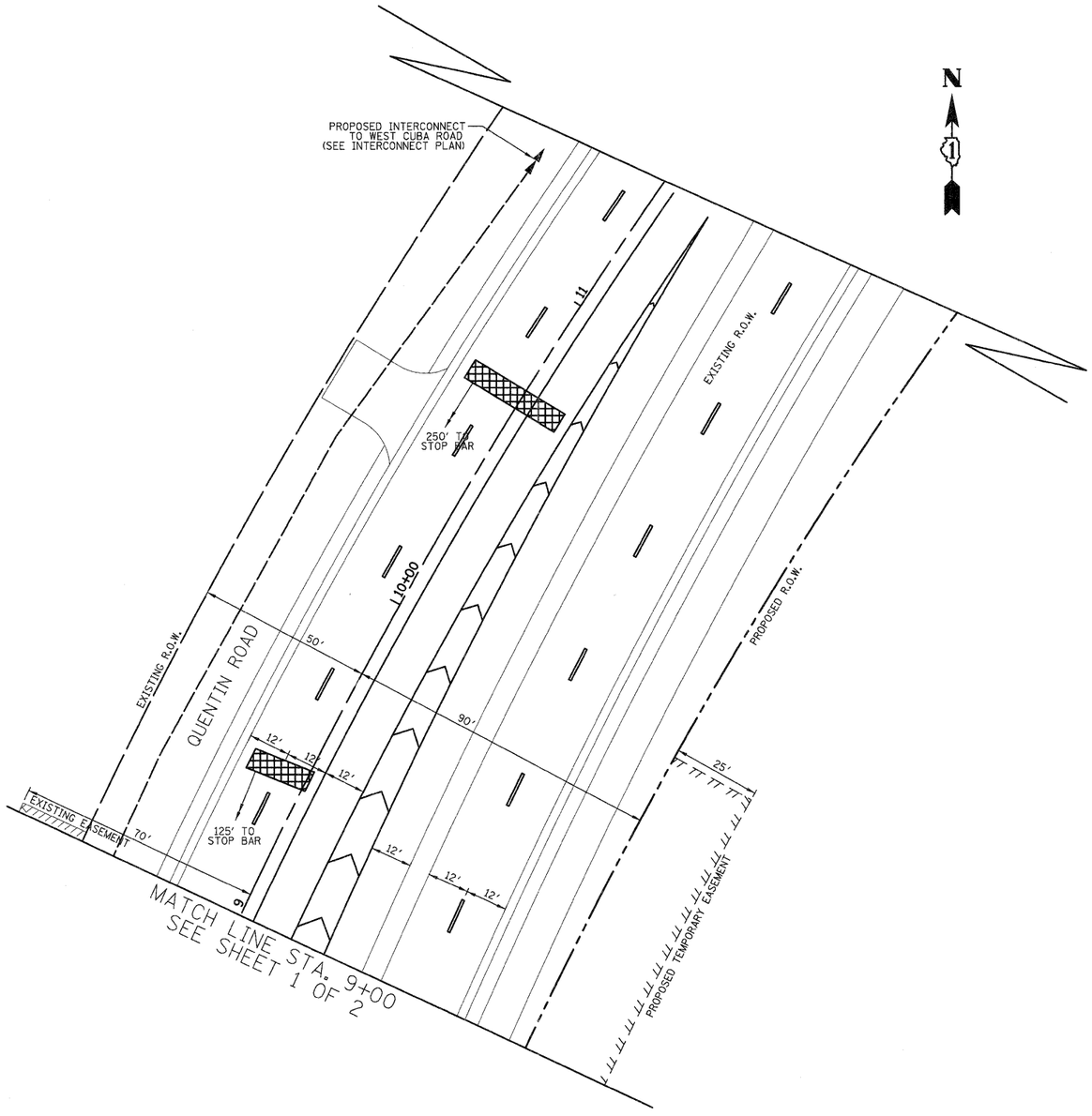
HORIZ.0 20 40

TRAFFIC SIGNAL MODERNIZATION PLAN
QUENTIN ROAD AT WHITE PINE ROAD

SHEET NO. 1 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	104
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AND NTCIP COMPLIANT TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FINAL SURVEY	BY	DATE
	SURVEYED	
	PLOTTED	
NOTE BOOK	TRANSLATE	
	AREAS	
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
	SURVEYED	
	PLOTTED	
NOTE BOOK	TRANSLATE	
	AREAS	
NO.	AREAS CHECKED	

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DRAWN	BRD	REVISED -
CHECKED	JJE	REVISED -
DATE	10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

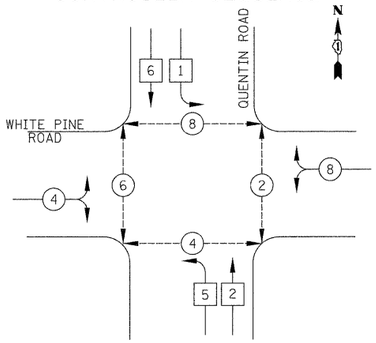
HORIZ.0 20 40

TRAFFIC SIGNAL MODERNIZATION PLAN
QUENTIN ROAD AT WHITE PINE ROAD

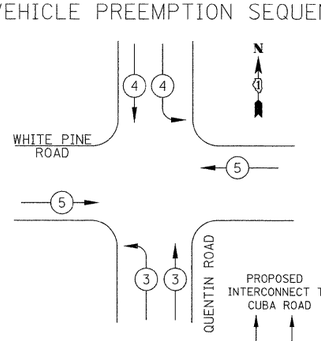
SHEET NO. 2 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	105
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

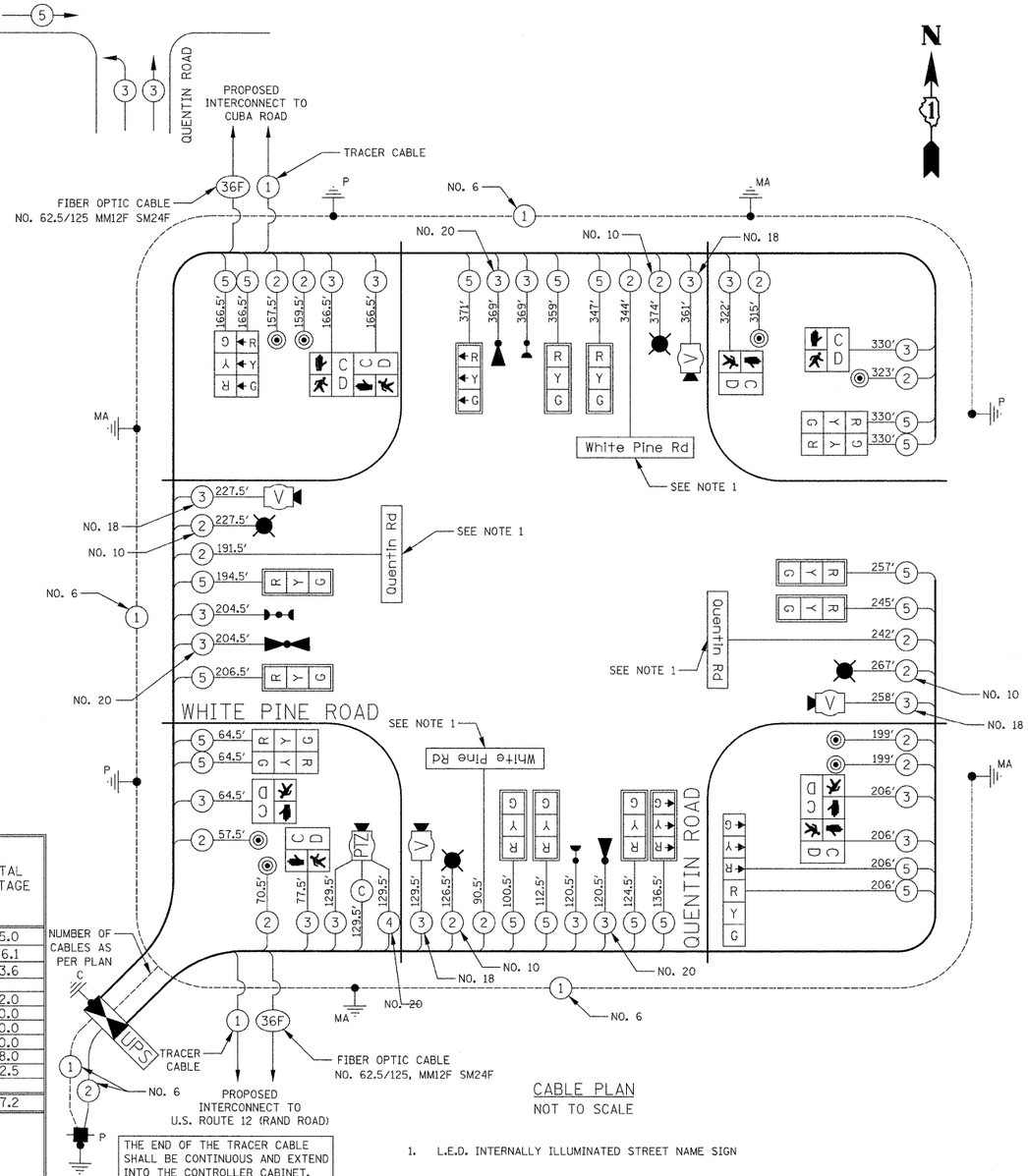


PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

LEGEND

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

PHASE DESIGNATION DIAGRAM



CABLE PLAN
NOT TO SCALE

1. L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	19		10	0.50	95.0
(YELLOW)	19		19	0.10	36.1
(GREEN)	19		11	0.40	83.6
ARROW			9	0.10	
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
VIDEO SYSTEM	1		150	1.00	150.0
LUMINAIRES	4	250		0.50	500.0
L.E.D. STREET NAME SIGNS	4		64	0.50	128.0
BATTERY BACKUP	1		25	0.50	12.5
FLASHER				0.50	
				TOTAL =	1177.2

ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION
600 W. WINCHESTER ROAD
LIBERTYVILLE, IL 60048

ENERGY SUPPLY: CONTACT: DONALD PESCE
PHONE: (847) 870-2057
COMPANY: COM ED

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2.5" DIA.	FOOT	59
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3.5" DIA.	FOOT	46
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	554
HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, 600 V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	995
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2358
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2363
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3988
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	44
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	857
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 58 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	40
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	11
SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	11
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	694
RELOCATE EXISTING SWITCH (SPECIAL)	EACH	1
VIDEO DETECTION SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	130
TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	3
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
LAYER II (DATALINK) SWITCH	EACH	1
RELOCATE EXISTING VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 18 3C	FOOT	981
RELOCATE EXISTING REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
VIDEO ENCODER	EACH	1
COAXIAL CABLE IN CONDUIT	FOOT	130
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
RELOCATE EXISTING ENCODER	EACH	2

NOTE:
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FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK | SURVEYED | PLOTTED | TYPED | AREAS | AREAS CHECKED | BY | DATE | NO.

CIVILTECH
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Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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DESIGNED	- BRD	REVISED	- 11/14/2011
DRAWN	- BRD	REVISED	- 5/16/2012
CHECKED	- JJE	REVISED	-
DATE	- 10/24/2011	REVISED	-

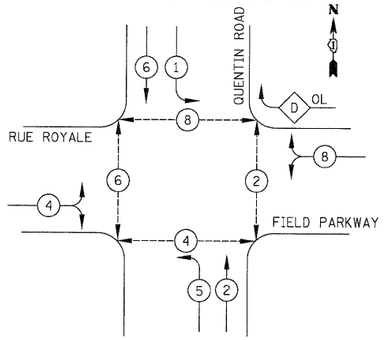
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

CABLE PLAN, SEQUENCE OF OPERATION, EMERGENCY VEHICLE PREEMPTION SEQUENCE & SCHEDULE OF QUANTITIES
QUENTIN ROAD AT WHITE PINE ROAD/FIELD PARKWAY
SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	106
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND

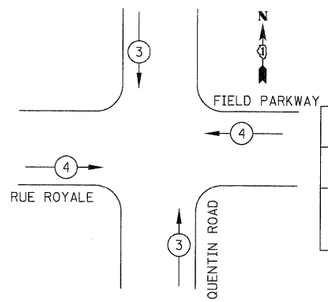
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DISIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



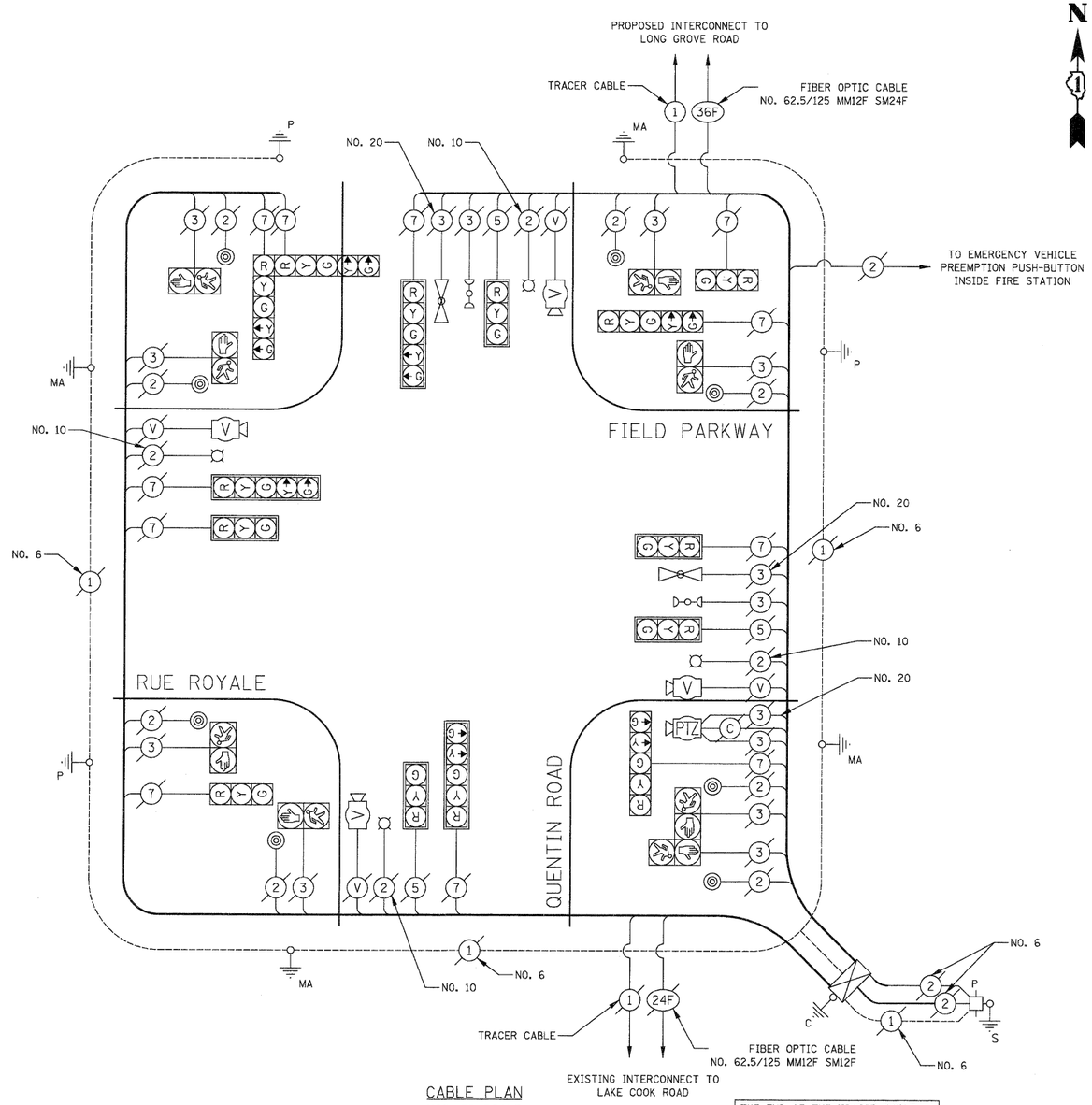
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←
	↓	→

NOTE: THE EMERGENCY VEHICLE PREEMPTION PUSH-BUTTON LOCATED INSIDE THE FIRE STATION SHALL PLACE A CALL TO EMERGENCY VEHICLE PREEMPTION SEQUENCE NUMBER 4.

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		10	0.50	70.0
(YELLOW)	14		19	0.25	66.5
(GREEN)	14		11	0.25	157.5
ARROW	14		9	0.10	17.0
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
VIDEO SYSTEMS	1		150	1.00	150.0
LUMINAIRE	4	250		0.50	500.0
FLASHER				0.50	
				TOTAL =	1133.0

ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION
600 W. WINCHESTER ROAD
LIBERTYVILLE, IL 60048
ENERGY SUPPLY: CONTACT: DONALD PESCE
PHONE: (847) 870-2057
COMPANY: COM ED



CABLE PLAN
NOT TO SCALE

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

NOTE:
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FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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www.civiltechinc.com

DESIGNED	- BRD	REVISED -
DRAWN	- BRD	REVISED -
CHECKED	- JJE	REVISED -
DATE	- 10/24/2011	REVISED -

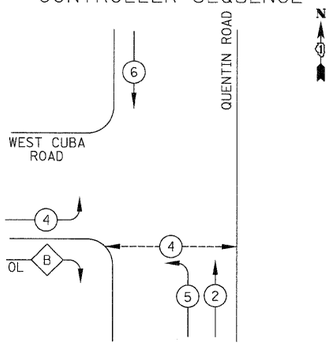
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

CABLE PLAN, SEQUENCE OF OPERATION & EMERGENCY VEHICLE PREEMPTION SEQUENCE
QUENTIN ROAD AT RUE ROYALE/FIELD PARKWAY
SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	107
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND

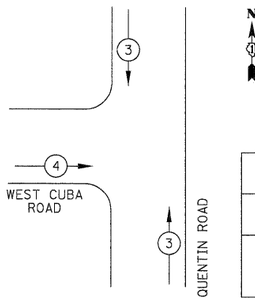
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- • — NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DISIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

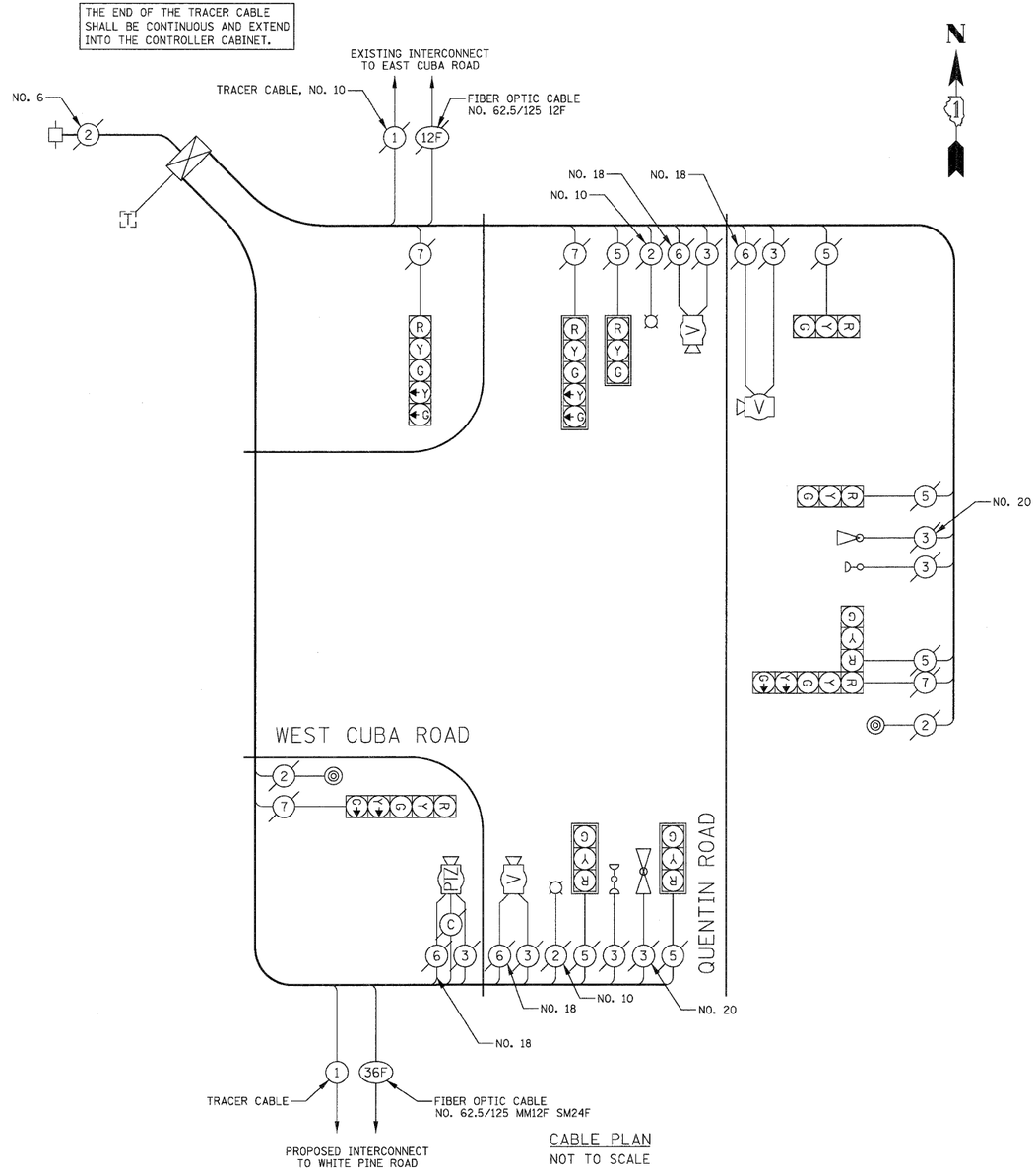


EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑↓	→

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	10		10	0.50	50.0
(YELLOW)	10		19	0.25	47.5
(GREEN)	10		11	0.25	27.5
ARROW	8		9	0.10	7.2
PED. SIGNAL			9	1.00	
CONTROLLER	1		100	1.00	100.0
VIDEO SYSTEMS	1		150	1.00	150.0
LUMINAIRE	2	400		1.00	800.0
FLASHER				0.50	
				TOTAL =	1182.2

ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION
600 W. WINCHESTER ROAD
LIBERTYVILLE, IL 60048
ENERGY SUPPLY: CONTACT: DONALD PESCE
PHONE: (847) 870-2057
COMPANY: COM ED

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



CABLE PLAN
NOT TO SCALE

NOTE:
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FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED — BY — DATE

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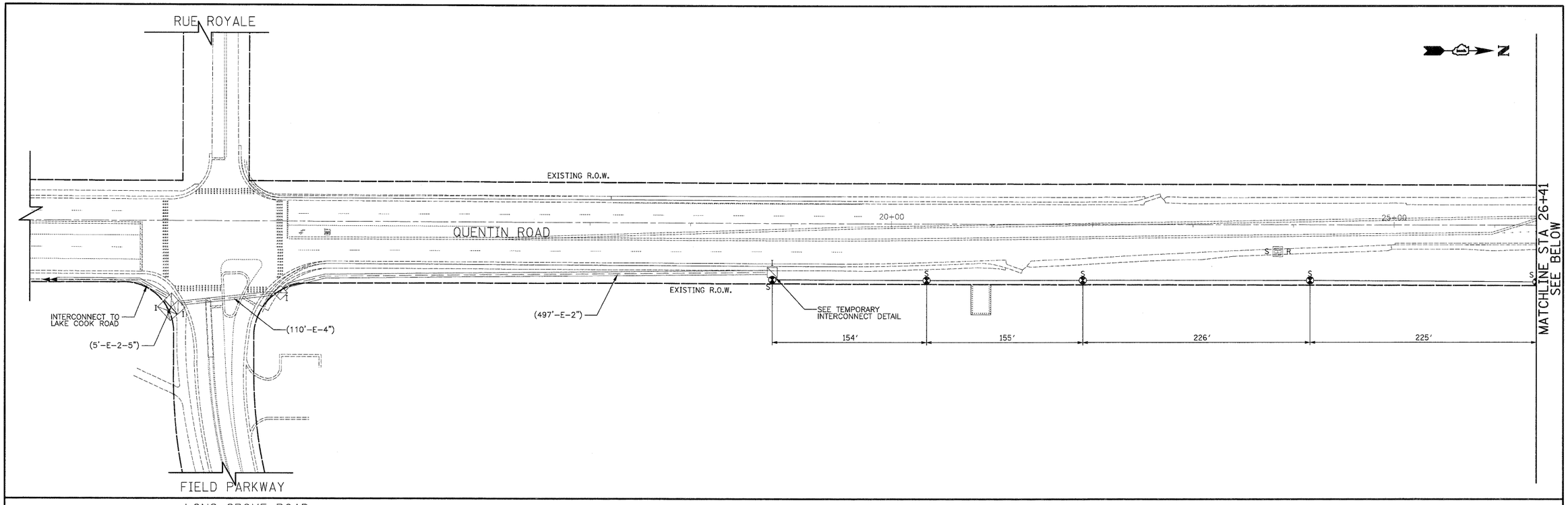
DATE	- 10/24/2011	REVISED -

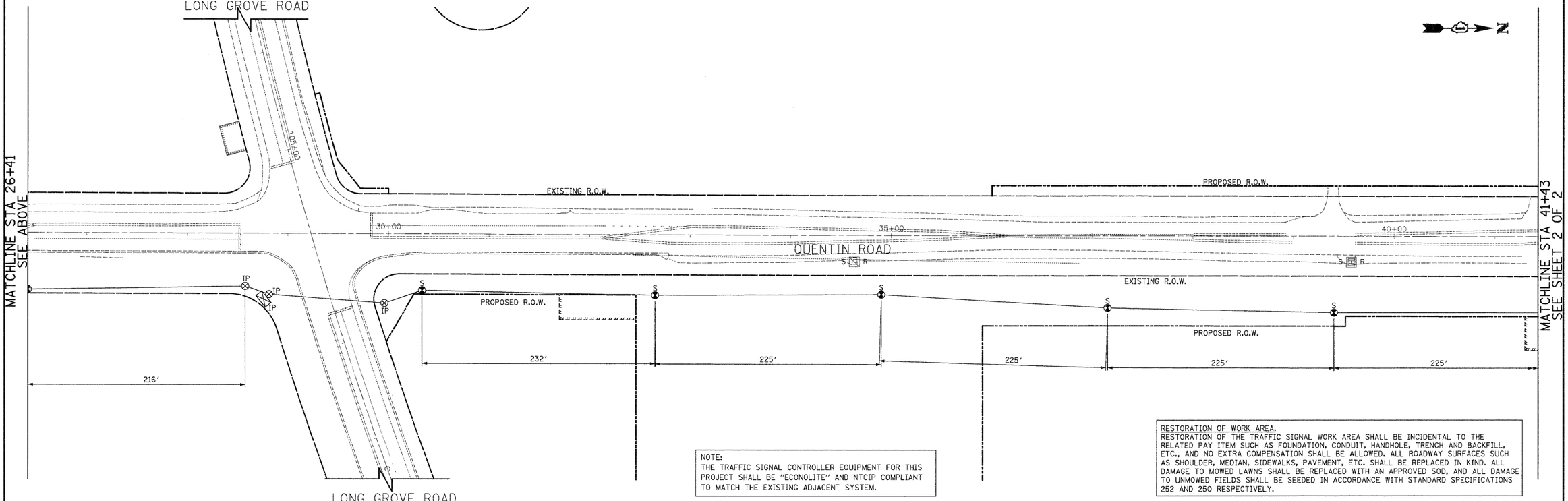
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

CABLE PLAN, SEQUENCE OF OPERATION & EMERGENCY VEHICLE PREEMPTION SEQUENCE
QUENTIN ROAD AT WEST CUBA ROAD
SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	108
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





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RESTORATION OF WORK AREA.
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FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

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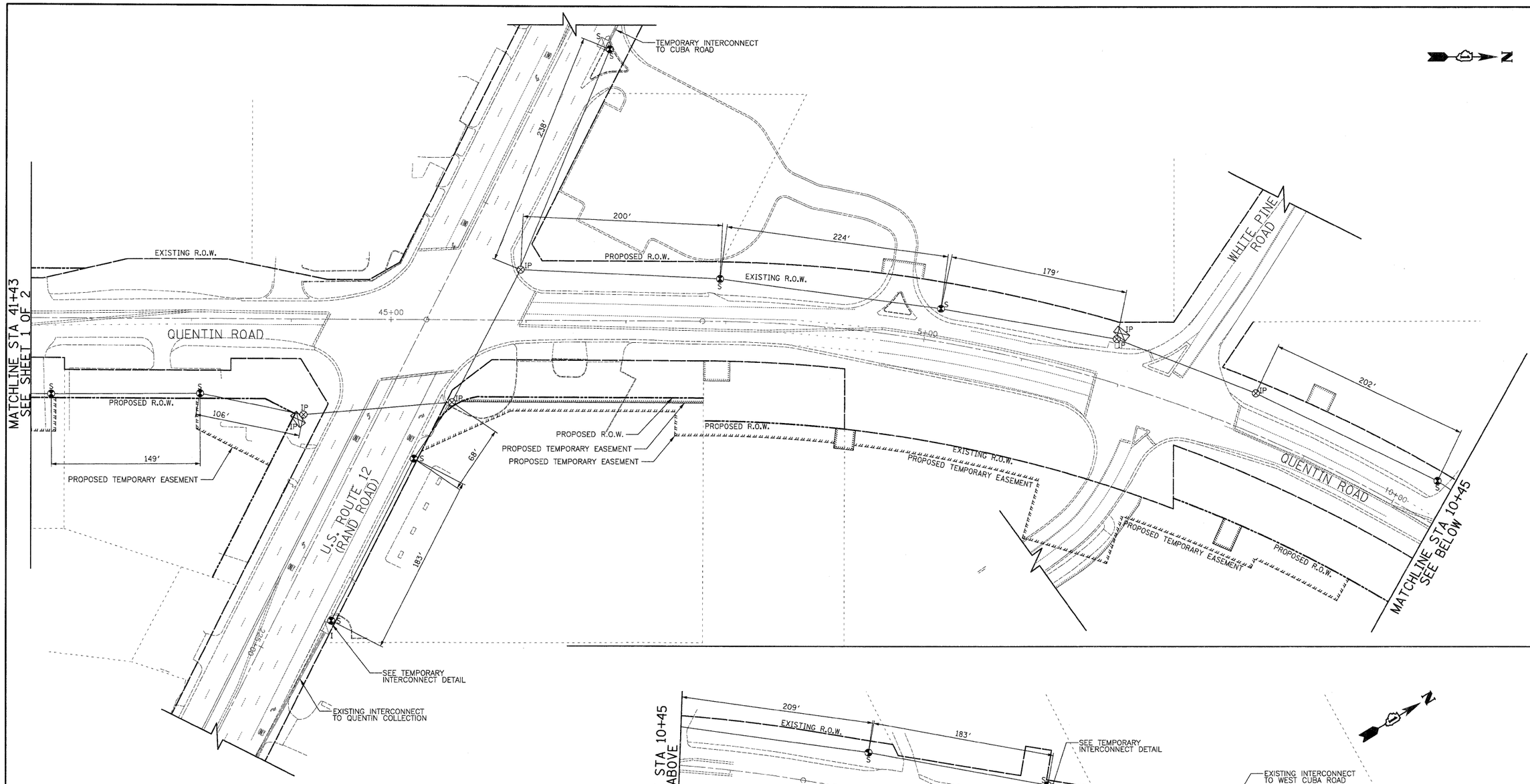
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZ.0 50 100

TEMPORARY INTERCONNECT PLAN
QUENTIN ROAD
RUE ROYALE/FIELD PARKWAY TO WEST CUBA ROAD
SHEET NO. 1 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	109
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED	DATE	
TRAVERSE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	NOTE BOOK	NO.
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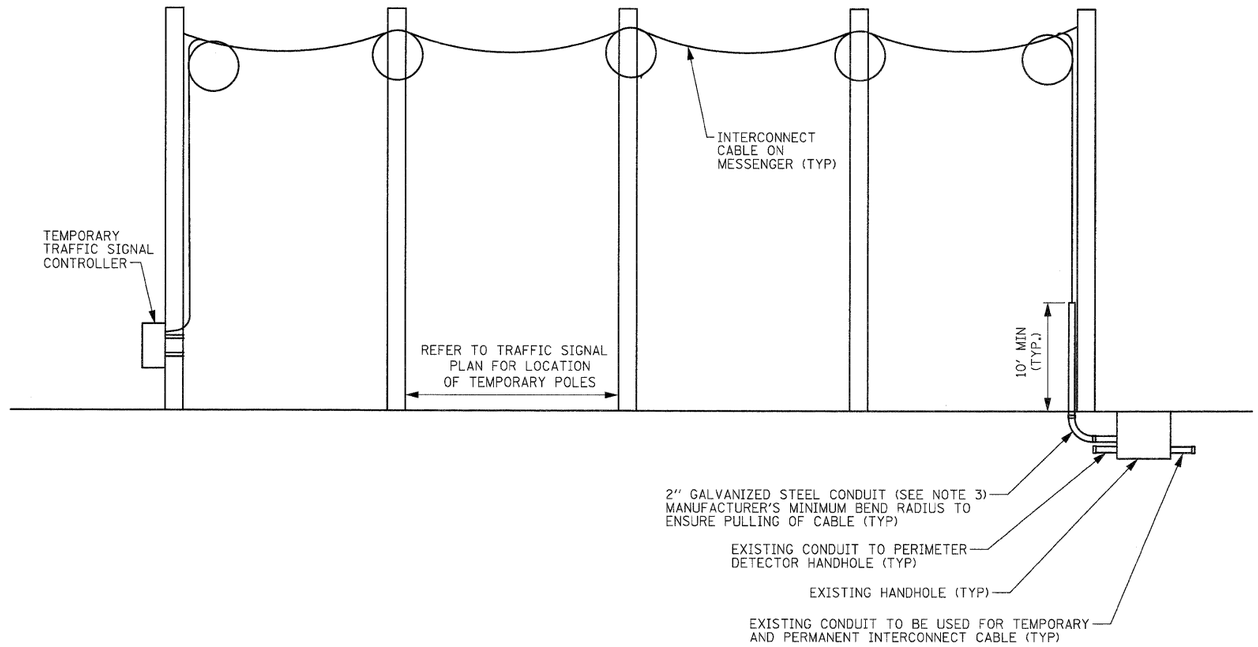
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZ.0 50 100

TEMPORARY INTERCONNECT PLAN
QUENTIN ROAD
RUE ROYALE/FIELD PARKWAY TO WEST CUBA ROAD
SHEET NO. 2 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	110
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



QUENTIN ROAD
AERIALLY SUPPORTED INTERCONNECT CABLE

(NOT TO SCALE)

1) TRANSFER OF EXISTING TO TEMPORARY INTERCONNECT CABLE AND TEMPORARY INTERCONNECT CABLE TO PROPOSED MUST BE COMPLETED IN ONE (1) WORKING DAY DURING NON-PEAK HOURS OR AS DIRECTED BY THE ENGINEER.

2) AFTER PROPOSED INTERCONNECT IS TURNED ON, THE EXISTING INTERCONNECT CABLE SHALL BE REMOVED.

3) THE 2" CONDUIT USED FOR THE TEMPORARY INTERCONNECT CABLE SHALL BE REMOVED TO BELOW THE GROUND LEVEL AND CAPPED AT THE TIME THE TEMPORARY TRAFFIC SIGNAL IS REMOVED. THE CONDUIT, AS WELL AS ALL WORK ASSOCIATED WITH THE INSTALLATION AND REMOVAL OF IT, SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM, "TEMPORARY TRAFFIC SIGNAL SYSTEM".

4) CONTRACTOR MUST NOTIFY IDOT AND LCDOT SIGNAL SYSTEM ENGINEERS A MINIMUM OF SEVEN (7) WORKING DAYS PRIOR TO THE START OF ANY WORK ON THE INTERCONNECT SIGNAL SYSTEM.

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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DESIGNED	- BRD	REVISED -
DRAWN	- BRD	REVISED -
CHECKED	- JJE	REVISED -
DATE	- 10/24/2011	REVISED -

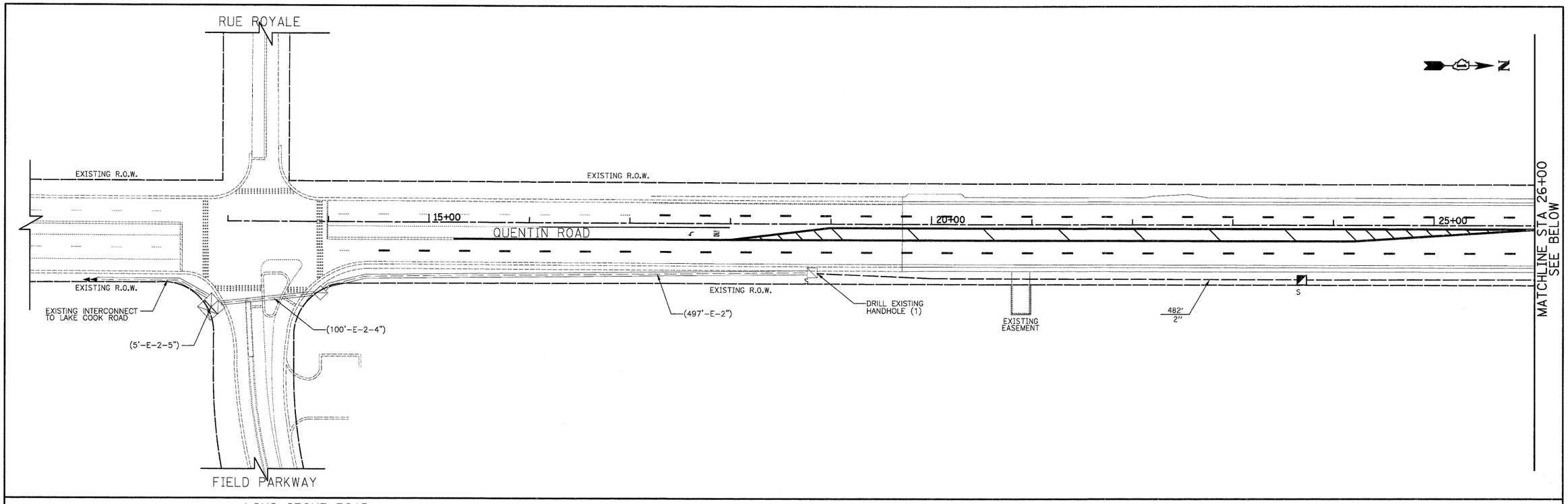
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

TEMPORARY INTERCONNECT DETAIL
QUENTIN ROAD

SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	111
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTE:
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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 SHOULDER, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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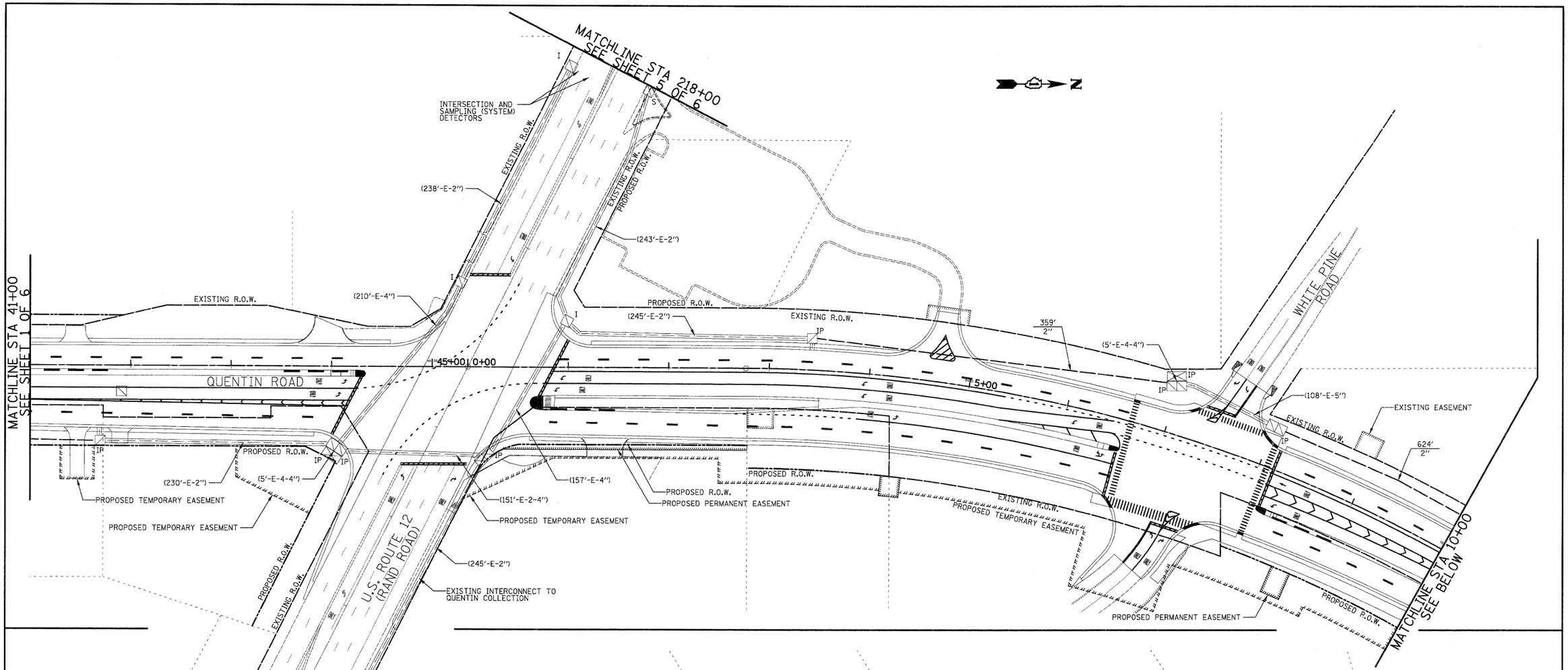
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

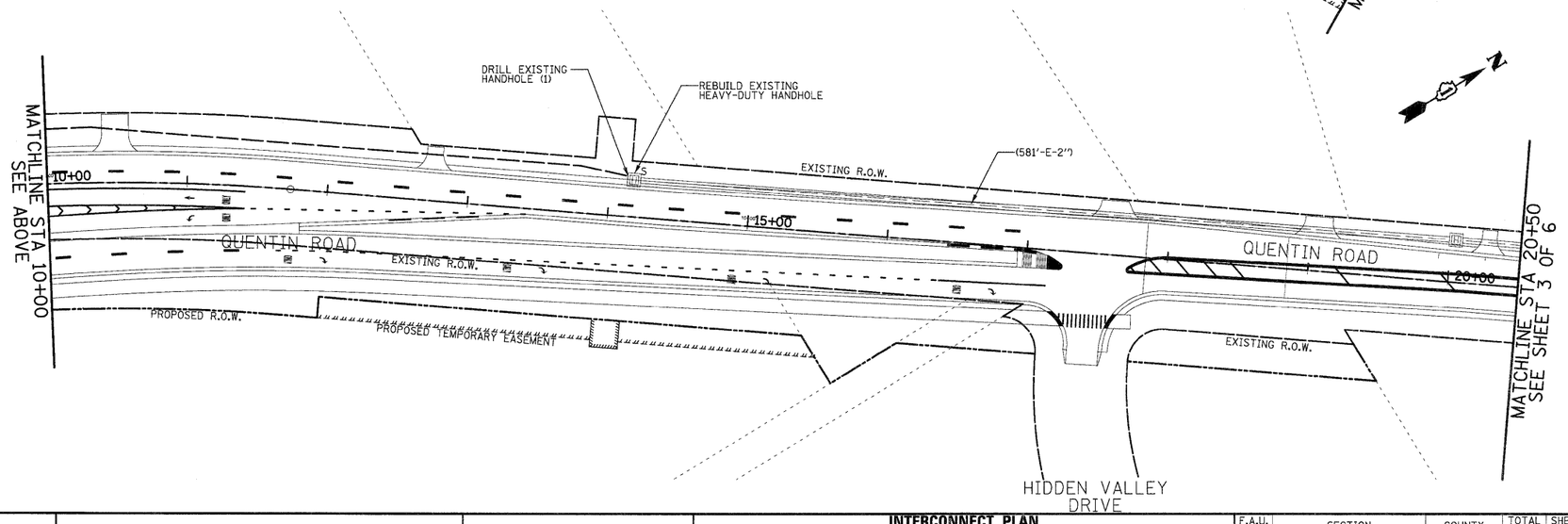
HORIZ.0 50 100

INTERCONNECT PLAN
QUENTIN ROAD
RUE ROYALE/FIELD PARKWAY TO WEST CUBA ROAD
SHEET NO. 1 OF 6 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	112
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
	TEMPLATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		





ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
	TEMPLATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		

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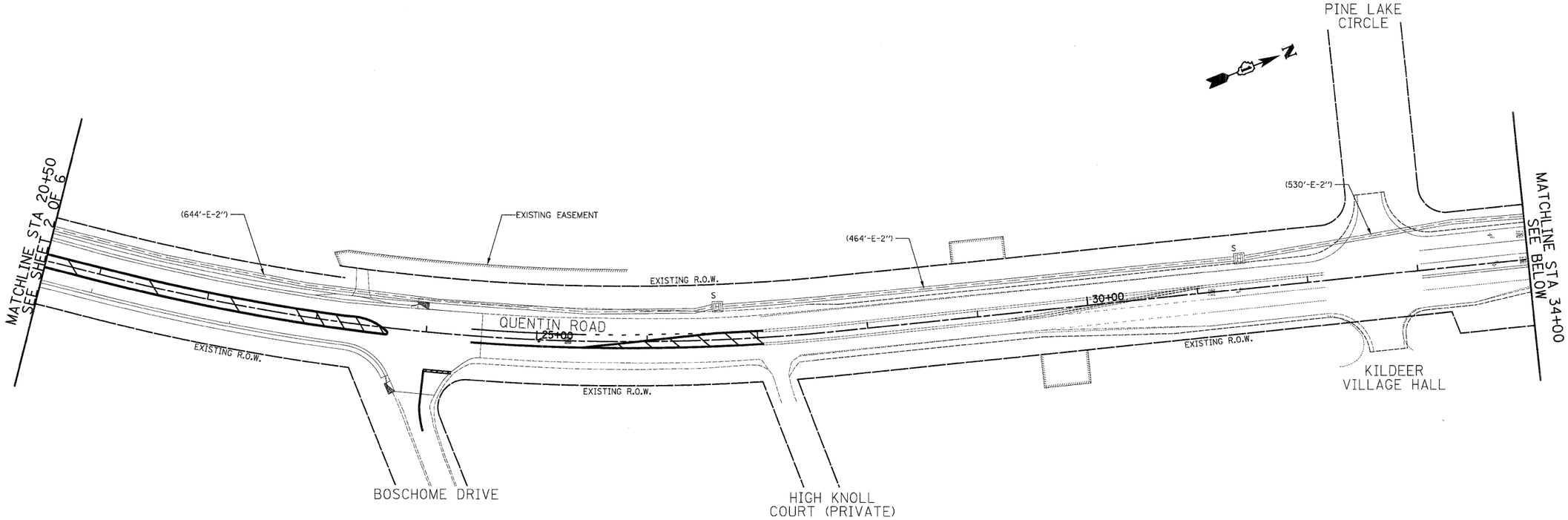
DATE - 10/24/2011	REVISED -	

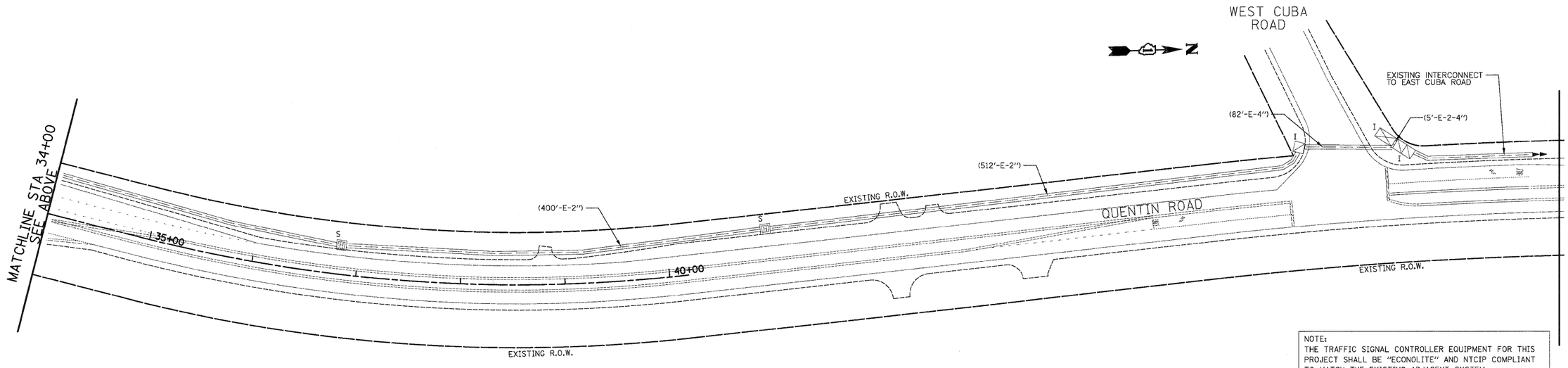
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZ.0 50 100

INTERCONNECT PLAN
QUENTIN ROAD
RUE ROYALE/FIELD PARKWAY TO WEST CUBA ROAD
SHEET NO. 2 OF 6 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	113
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





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FINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / NO. — BY / DATE — TEMPLATE / AREAS / AREAS CHECKED

ORIGINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / NO. — BY / DATE — TEMPLATE / AREAS / AREAS CHECKED

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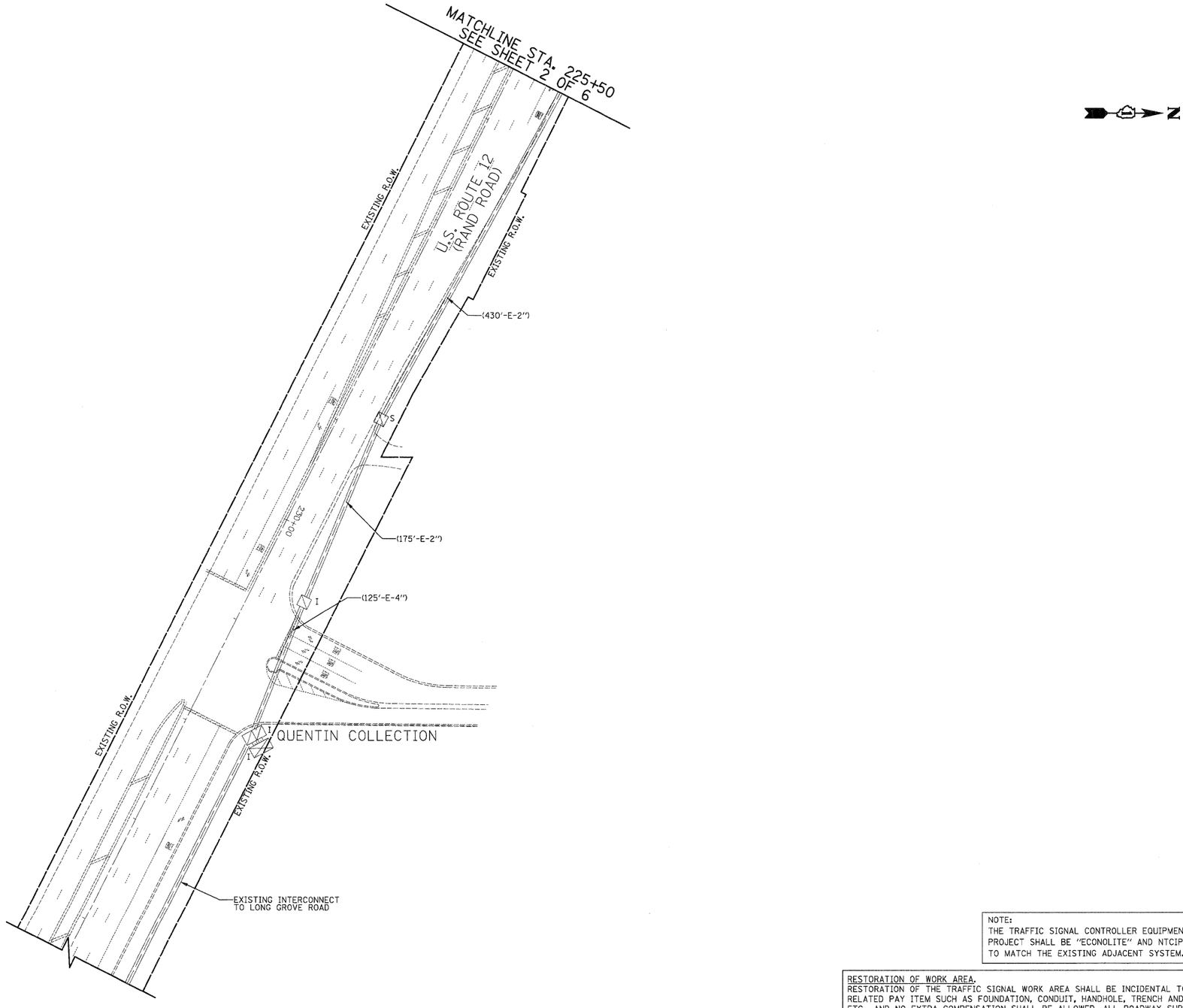
CHECKED - JJE	REVISED -	
DATE - 10/24/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZ.0 50 100

INTERCONNECT PLAN
QUENTIN ROAD
RUE ROYALE/FIELD PARKWAY TO WEST CUBA ROAD
SHEET NO. 3 OF 6 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	114
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
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NOTE BOOK	TEMPLATE	
NO.	AREAS	
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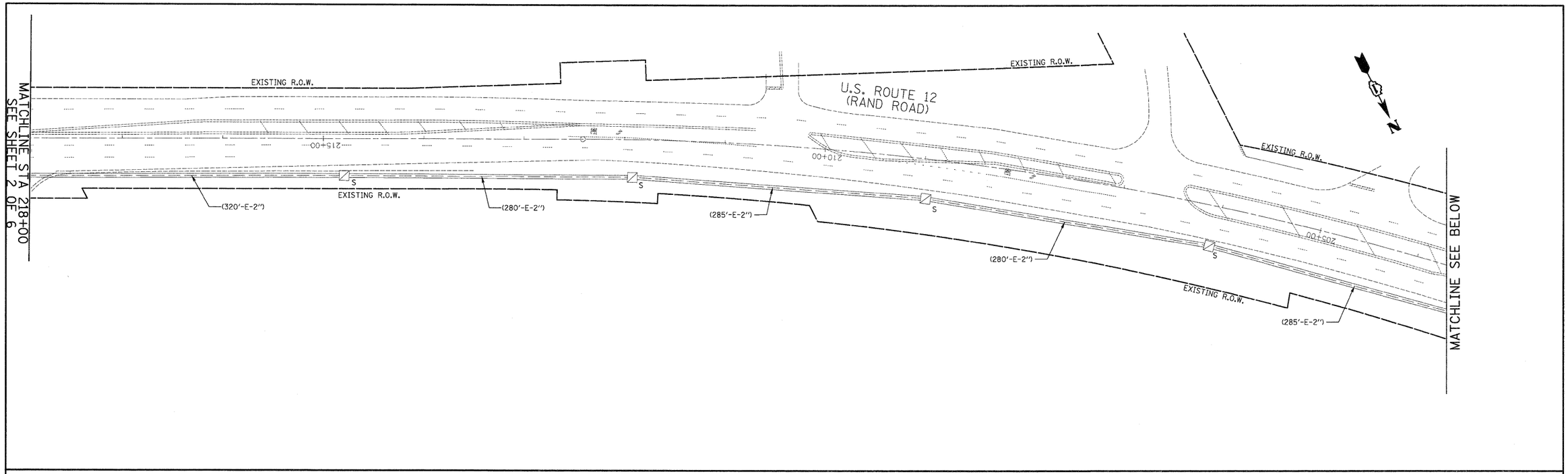
DATE	- 10/24/2011	REVISED	-

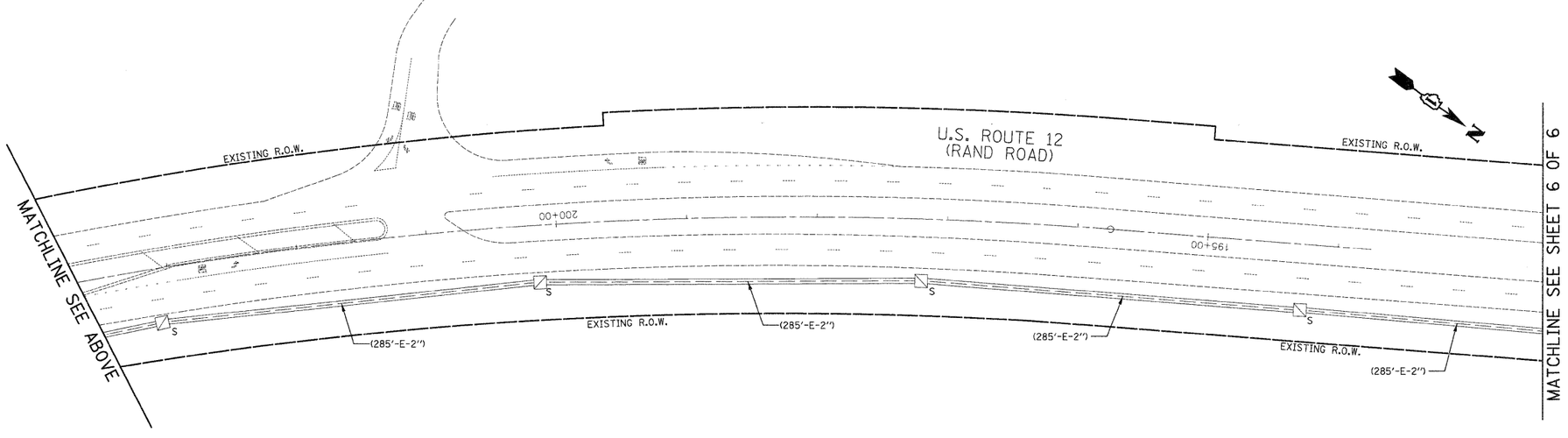
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZ.0 50 100

INTERCONNECT PLAN
U.S. ROUTE 12 (RAND ROAD)
QUENTIN COLLECTION TO WEST CUBA ROAD
SHEET NO. 4 OF 6 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	115
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





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FINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK		
TEMPLATE		
AREAS		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK		
TEMPLATE		
AREAS		
AREAS CHECKED		
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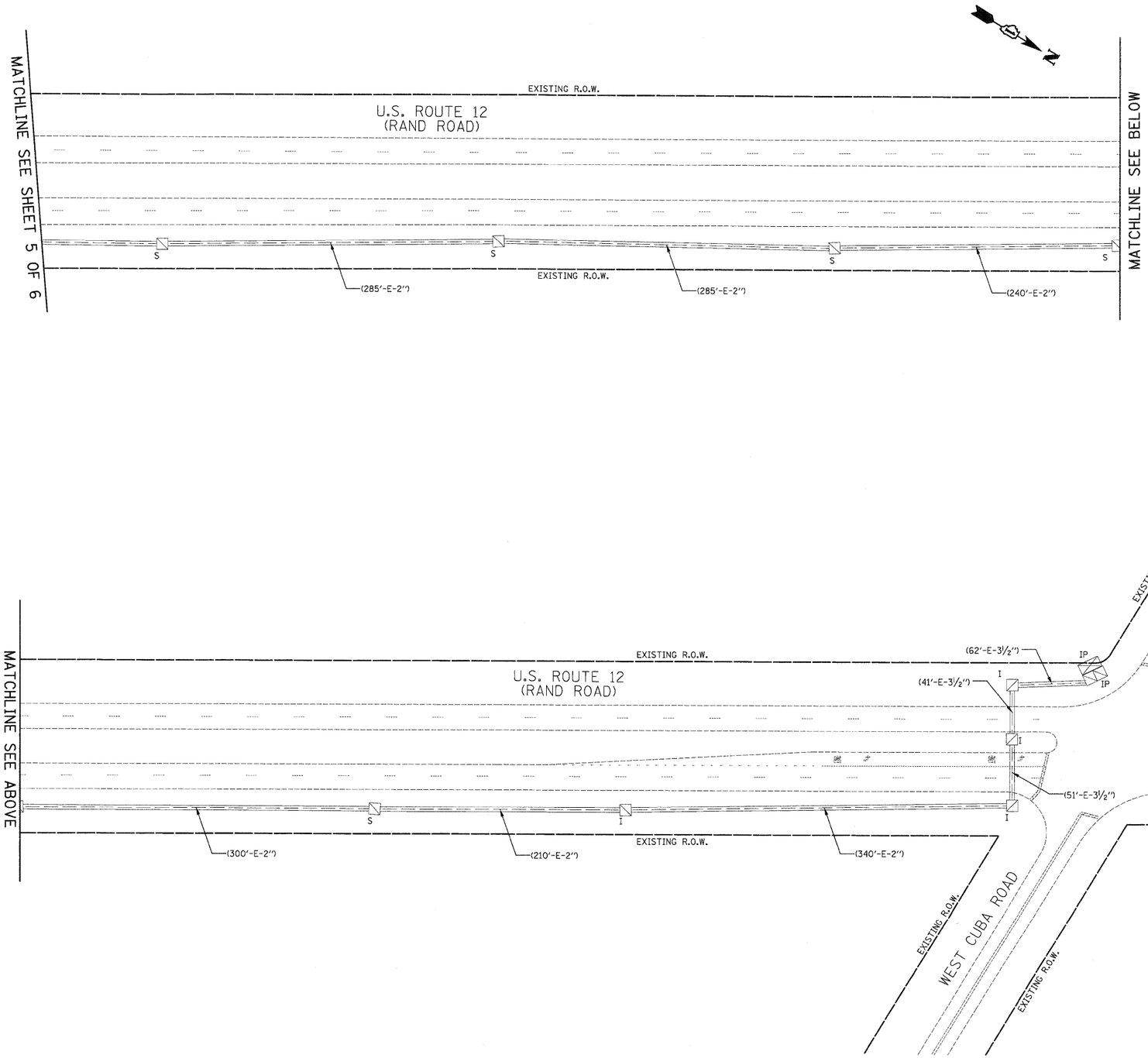
DRAWN	BRD	REVISED	-
CHECKED	JJE	REVISED	-
DATE	10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZ.0 50 100

INTERCONNECT PLAN
U.S. ROUTE 12 (RAND ROAD)
QUENTIN COLLECTION TO WEST CUBA ROAD
SHEET NO. 5 OF 6 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	116
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS	AREAS CHECKED

ORIGINAL SURVEY	BY	DATE
SURVEYED		
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NOTE BOOK	TEMPLATE	
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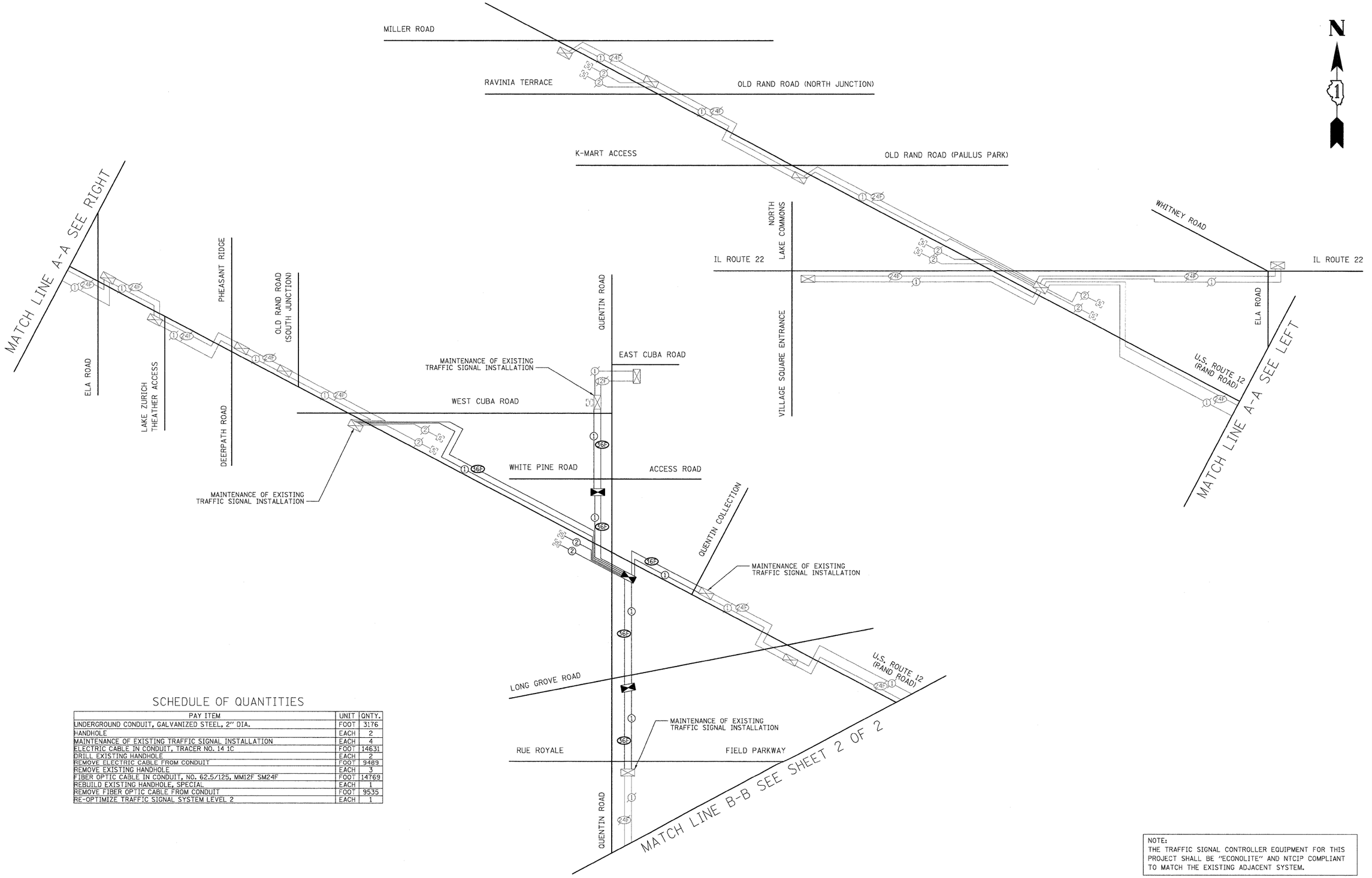
DATE	10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZ.0 50 100

INTERCONNECT PLAN
U.S. ROUTE 12 (RAND ROAD)
QUENTIN COLLECTION TO WEST CUBA ROAD
SHEET NO. 6 OF 6 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	117
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	3176
HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	14631
DRILL EXISTING HANDHOLE	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	9489
REMOVE EXISTING HANDHOLE	EACH	3
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	14769
REBUILD EXISTING HANDHOLE, SPECIAL	EACH	1
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	9535
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1

NOTE:
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FINAL SURVEY / ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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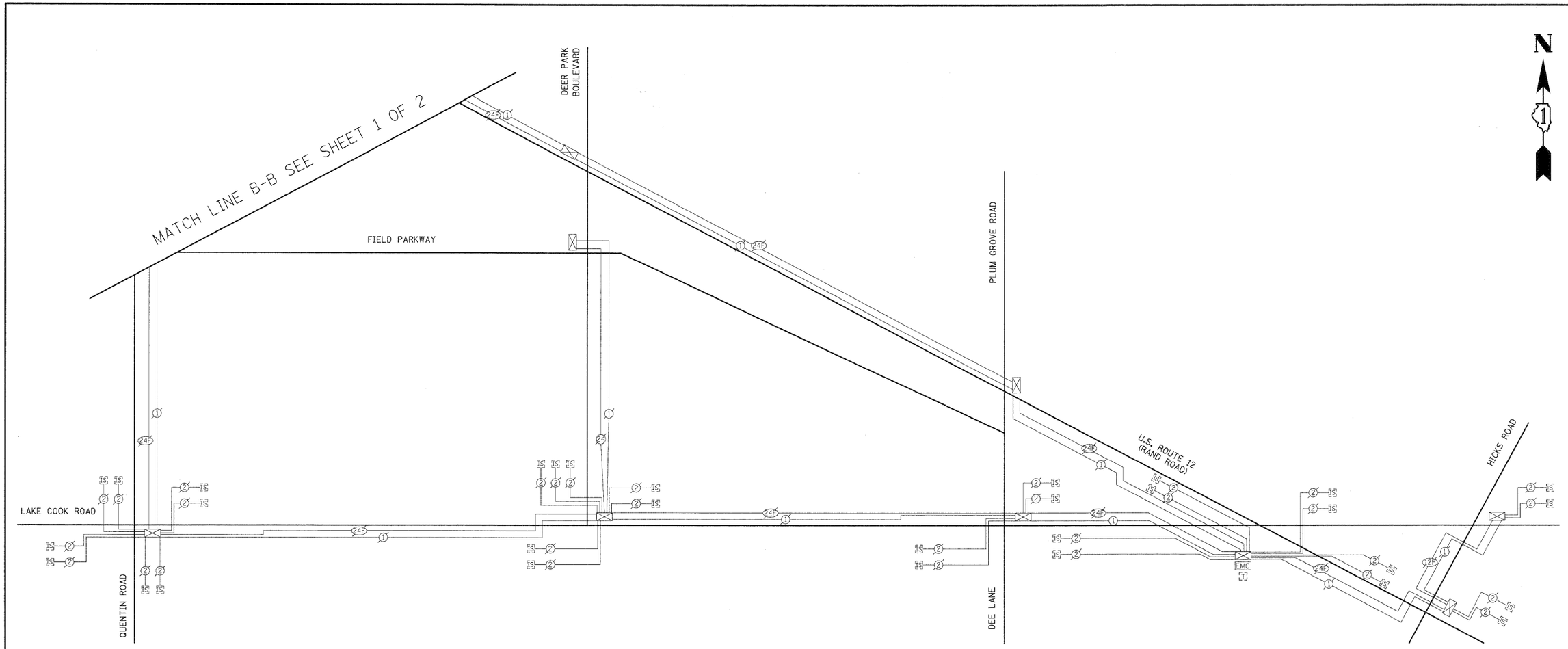
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

INTERCONNECT SCHEMATIC & SCHEDULE OF QUANTITIES
QUENTIN ROAD
U.S. ROUTE 12 (RAND ROAD)
SHEET NO. 1 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	118
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
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DATE - 10/24/2011		REVISED -

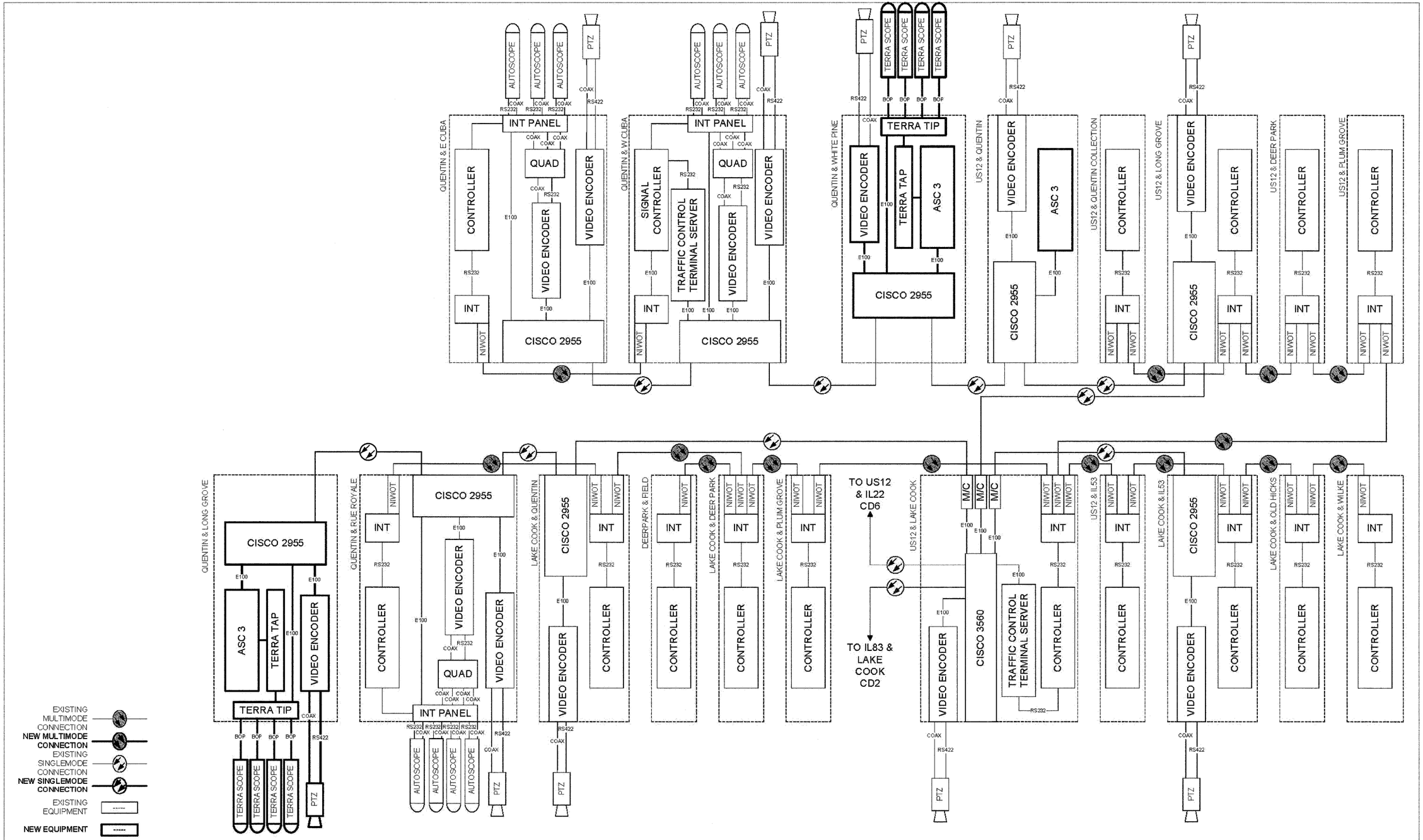
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

INTERCONNECT SCHEMATIC
QUENTIN ROAD
U.S. ROUTE 12 (RAND ROAD)

SHEET NO. 2 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	119
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



V5.7	2/10	QUENTIN / US12 WIDENING	DESIGN	DJG	1/10
			DRAWN	SM/YM	1/10
			CHECKED	DJG	2/10
			SCALE	NOT TO SCALE	
NO.	DATE		DATE	2/17/10	
FILE NAME	$FILE$				

Delcan — TRANSPORTATION • INFORMATION TECHNOLOGY • WATER

CLIENT: LakeCounty Division of Transportation

TITLE: LAKE COUNTY ATMS FINAL DESIGN AND INTEGRATION

CABINET DETAIL 1
US12 & LAKE COOK

PROJECT NO.

SHEET 312 OF

DRAWING NO.

CIVILTECH
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DRAWN	-	REVISED -
CHECKED	-	REVISED -
DATE	- 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

LAKE COUNTY ATMS
TRAFFIC SIGNAL CABINET DETAIL
U.S. ROUTE 12 & LAKE COOK ROAD
SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	120
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY / ORIGINAL SURVEY
SURVEYED
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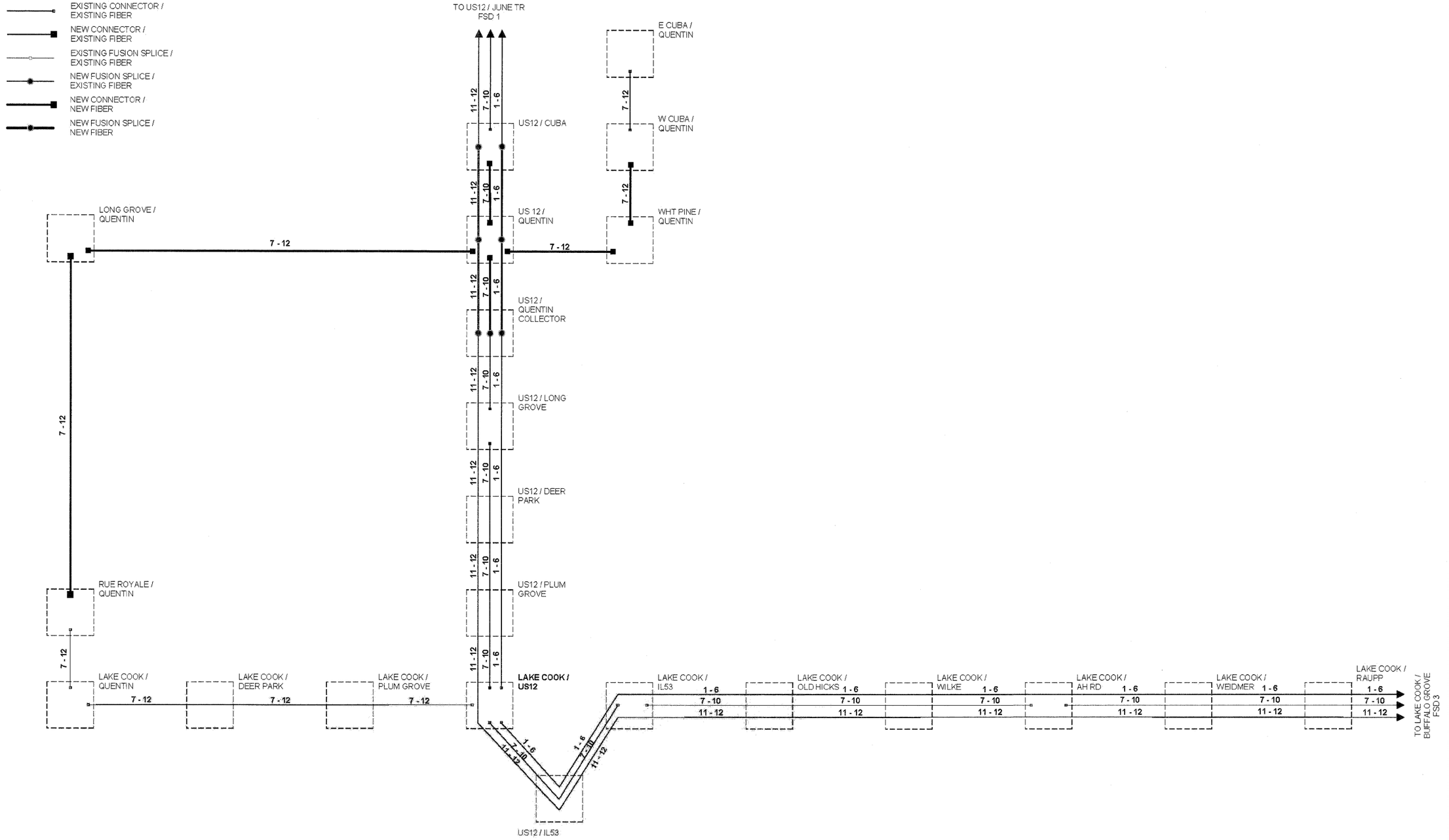

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CLIENT: LakeCounty Division of Transportation

NO.	DATE	
V5.7	2/10	QUENTIN / US12 WIDENING
FILE NAME		$FILE$

DESIGN	DJG	1/10
DRAWN	SM/YM	1/10
CHECKED	DJG	2/10
SCALE	NOT TO SCALE	
DATE	2/17/10	

TITLE: LAKE COUNTY ATMS FINAL DESIGN AND INTEGRATION

FIBER SPLICING DIAGRAM - 2
US 12 / LAKE COOK

PROJECT NO.
SHEET 293 OF
DRAWING NO.

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DEPARTMENT OF TRANSPORTATION

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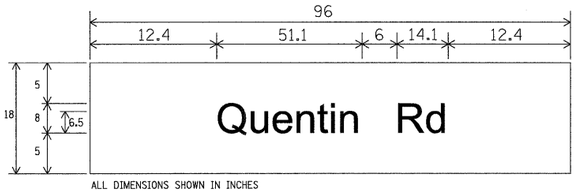
FIBER SPLICING DIAGRAM

SHEET NO. 1 OF 1 SHEETS

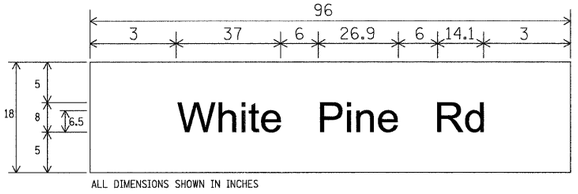
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	121
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1



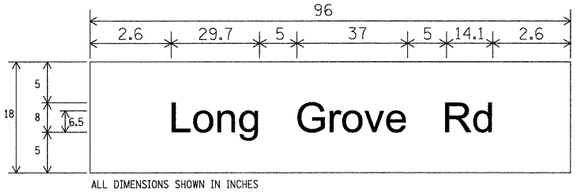
ALL DIMENSIONS SHOWN IN INCHES

12.0 SQ. FT. EACH
4 REQUIRED (DOUBLE SIDED)
____ REQUIRED (SINGLE SIDED)
CLEARVIEW HWY 5-W FONT



ALL DIMENSIONS SHOWN IN INCHES

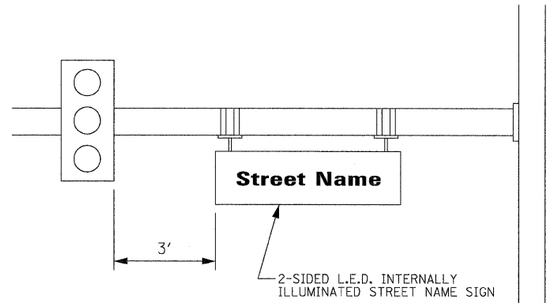
12.0 SQ. FT. EACH
2 REQUIRED (DOUBLE SIDED)
____ REQUIRED (SINGLE SIDED)
CLEARVIEW HWY 5-W FONT



ALL DIMENSIONS SHOWN IN INCHES

12.0 SQ. FT. EACH
2 REQUIRED (DOUBLE SIDED)
____ REQUIRED (SINGLE SIDED)
CLEARVIEW HWY 5-W FONT

NOTE: L.E.D. ILLUMINATED STREET NAME SIGNS AVAILABLE ONLY IN 2 FOOT INCREMENTS



FINAL SURVEY	DATE
	BY
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
NOTE BOOK	AREAS CHECKED
NO.	

ORIGINAL SURVEY	DATE
	BY
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
NOTE BOOK	AREAS CHECKED
NO.	

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DESIGNED	- BRD	REVISED	-
DRAWN	- BRD	REVISED	-
CHECKED	- JJE	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

L.E.D. ILLUMINATED STREET NAME SIGNS
QUENTIN ROAD

SHEET NO. 1 OF 2 SHEETS

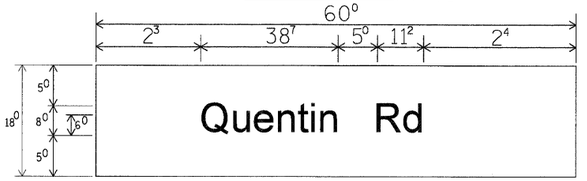
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	122

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

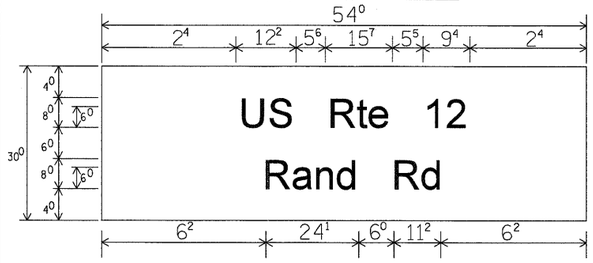
EXAMPLE, 2③ — DENOTES 3/8"

PANEL SIGN DESIGN TYPE 1



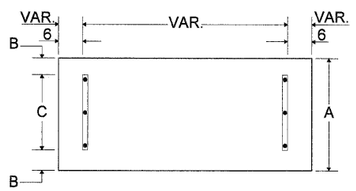
____ Sq. M Each 7.5 Sq. Ft. Each 2 Required Design Series D

PANEL SIGN DESIGN TYPE 2

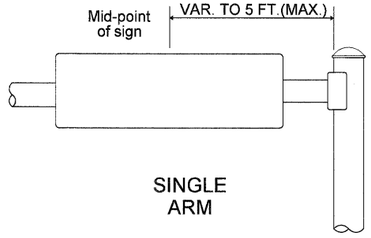


____ Sq. M Each 11.25 Sq. Ft. Each 2 Required Design Series D

SUPPORTING CHANNELS



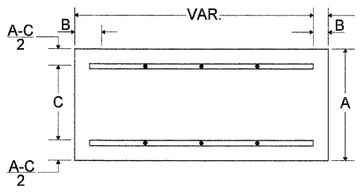
A	B	C
18"	2"	14"



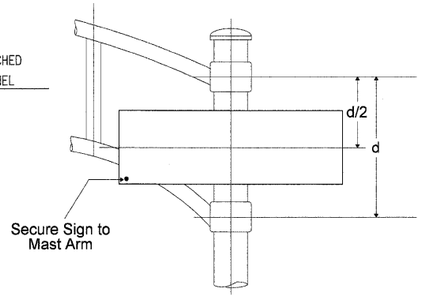
SINGLE ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

SUPPORTING CHANNELS



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



DUAL ARM

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS.

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" X 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
4. ALL BORDERS SHALL BE 3/4 " WIDE AND CORNER RADIUS SHALL BE 2-1/4".
5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
   - * A.K.T. CORPORATION SCHAUMBURG, IL
   - * AMERICAN FABRICATION CO. CHICAGO HEIGHTS, IL
   - * TUCKER COMPANY, INC. WAUWATOSA, WI
   - * WESTERN TRAFFIC CONTROL, INC. CICERO, IL

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	1/4 " x 14 x 1" H.W.H #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

UPPER TO LOWER CASE

SPACING CHART 8-6 INCH SERIES "C & D"

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

LOWER CASE TO LOWER CASE

SPACING CHART 6 INCH SERIES "C" & "D"

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

NUMBER TO NUMBER

SPACING CHART 8 INCH SERIES "C" & "D"

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

EXAMPLE, 2③ — DENOTES 3/8"

UPPER AND LOWER CASE LETTER WIDTHS

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

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

FINAL SURVEY — ORIGINAL SURVEY
NOTE BOOK — SURVEYED / PLOTTED / TEMPLATE — AREAS CHECKED
NO. — BY — DATE

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Itasca, Illinois 60143
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DESIGNED	- BRD	REVISED -
DRAWN	- BRD	REVISED -
CHECKED	- JJE	REVISED -
DATE	- 10/24/2011	REVISED -

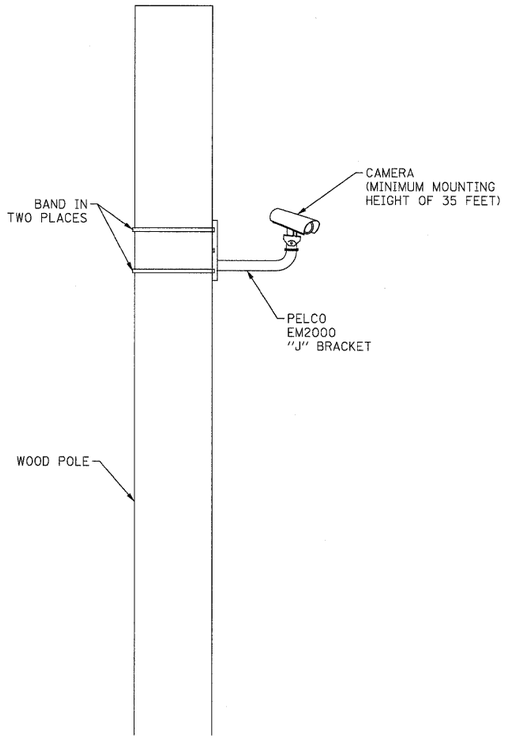
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

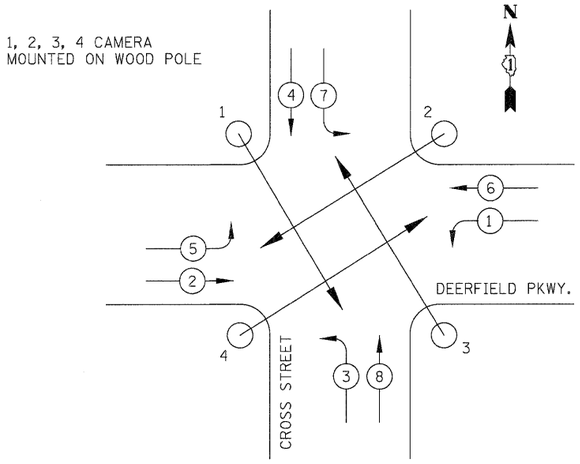
NO SCALE

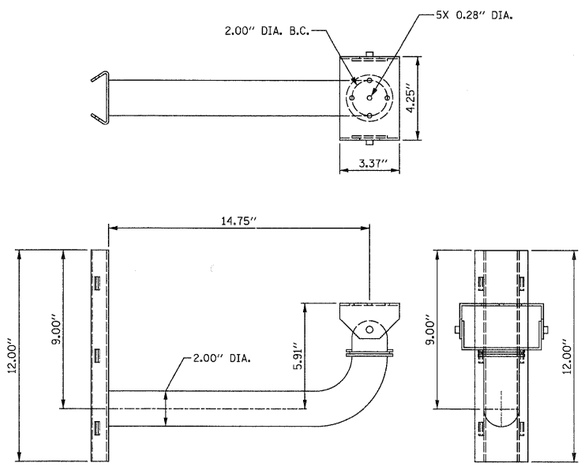
L.E.D. ILLUMINATED STREET NAME SIGNS

SHEET NO. 2 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	123
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		







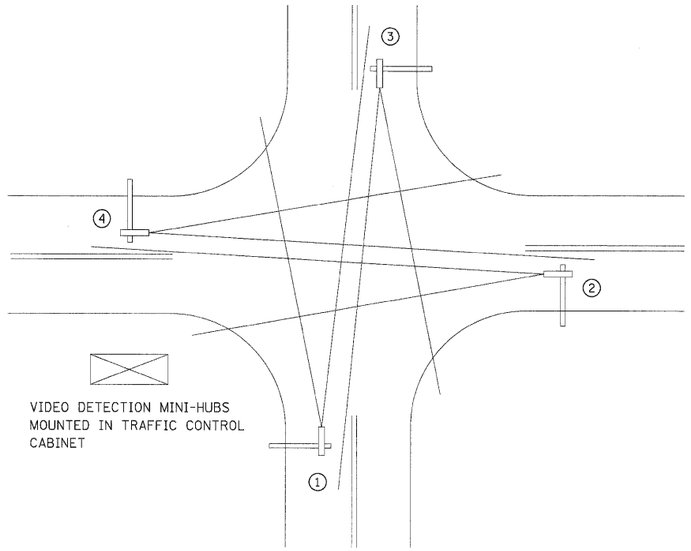
EM2000 DIMENSION DRAWING

TEMPORARY CAMERA MOUNTING DETAILS
(NOT TO SCALE)

CIVILTECH	450 E Devon Ave, Suite 300 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - BRD DRAWN - BRD CHECKED - JJE DATE - 10/24/2011	REVISED - REVISED - REVISED - REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	NO SCALE	**TEMPORARY VIDEO CONNECTION DETAILS** SHEET NO. 1 OF 1 SHEETS	F.A.U. RTE. 364 · SECTION 02-00051-08-WR · COUNTY LAKE · TOTAL SHEETS 188 · SHEET NO. 124 CONTRACT NO. 63649 FED. ROAD DIST. NO. 1 · ILLINOIS · FED. AID PROJECT

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
TEMPLATE		
AREAS		
AREAS CHECKED		
NO.		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
TEMPLATE		
AREAS		
AREAS CHECKED		
NO.		



TYPICAL VIDEO VEHICLE DETECTION SYSTEM

(NOT TO SCALE)

(4) MACHINE VISION PROCESSOR ASSEMBLIES AND BRACKETS ① ② ③ ④
POWER CABLE TO EACH MACHINE VISION PROCESSOR (24 VAC)

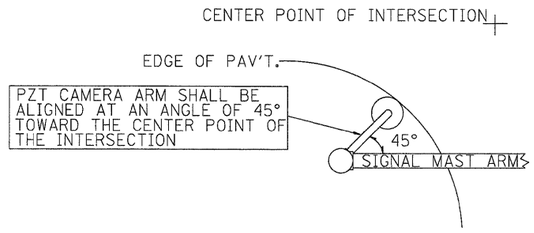
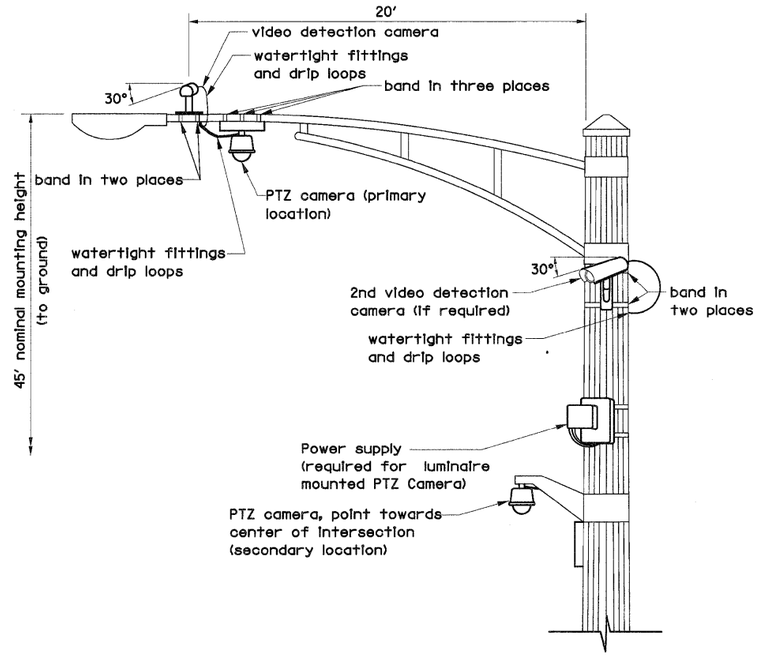


IMAGE SENSOR MOUN ING DE AILS

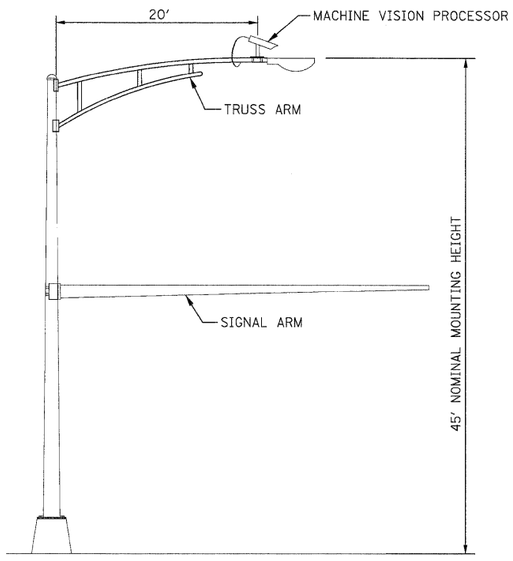
(NO SCALE)



VIDEO DETECTION CAMERA(S) AND DOME (PTZ) CAMERA MOUNTING DETAIL

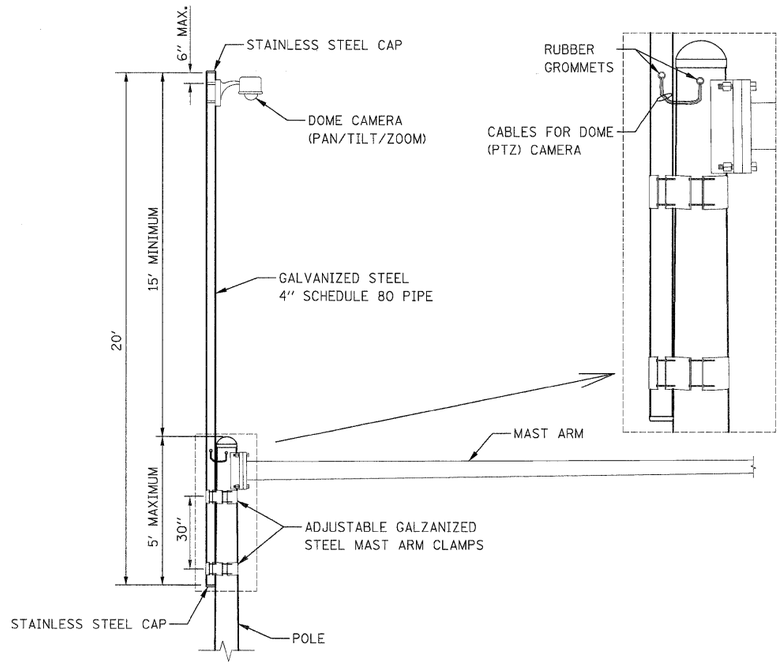
(NOT TO SCALE)

NOTES FOR SINGLE, DUAL AND MULTIPLE MVP MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
- AIM BRACKET TOWARD DIRECTION OF TRAFFIC TO BE DETECTED.
- MOUNT MACHINE VISION PROCESSOR AIMING DOWN AT 30 DEGREE ANGLE.



COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS

(NOT TO SCALE)



CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)

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	DRAWN - BRD	REVISED -
	CHECKED - JJE	REVISED -
	DATE - 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

VIDEO DETECTION DETAILS

SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	125

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED
BY
DATE

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT 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.

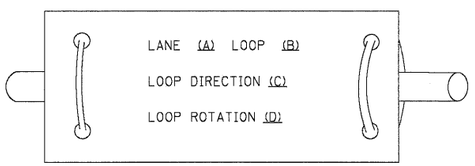
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

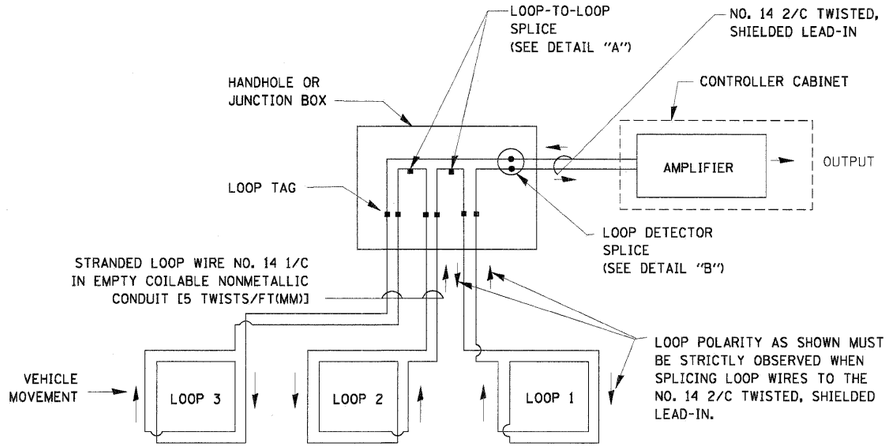


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

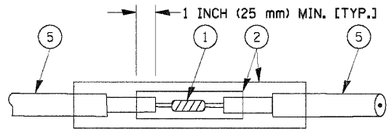
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

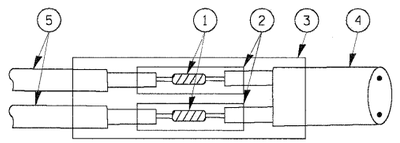


DETECTOR LOOP WIRING SCHEMATIC

- 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.

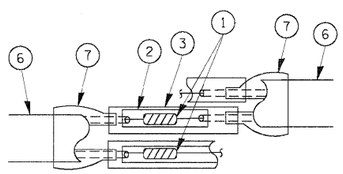


DETAIL "A"
LOOP-TO-LOOP SPLICE



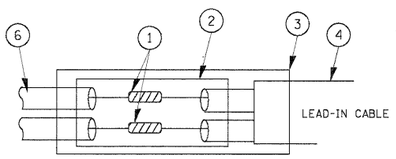
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



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.

(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

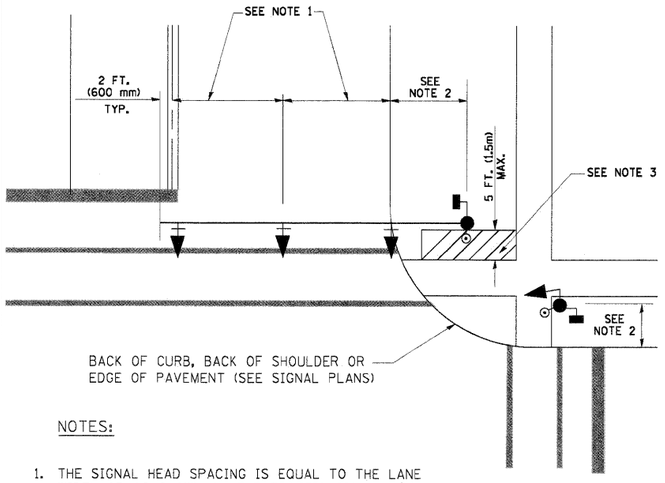
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	126
		CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

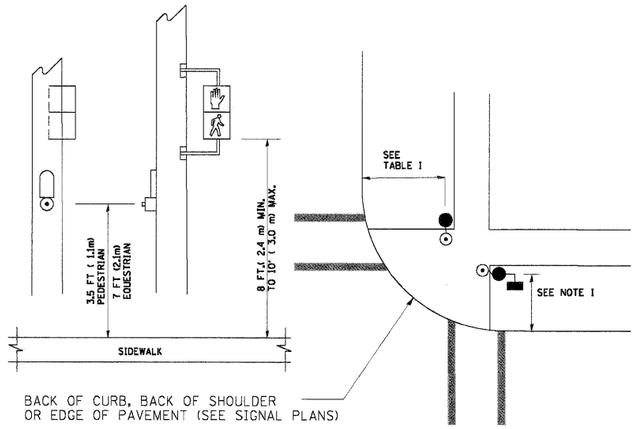
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

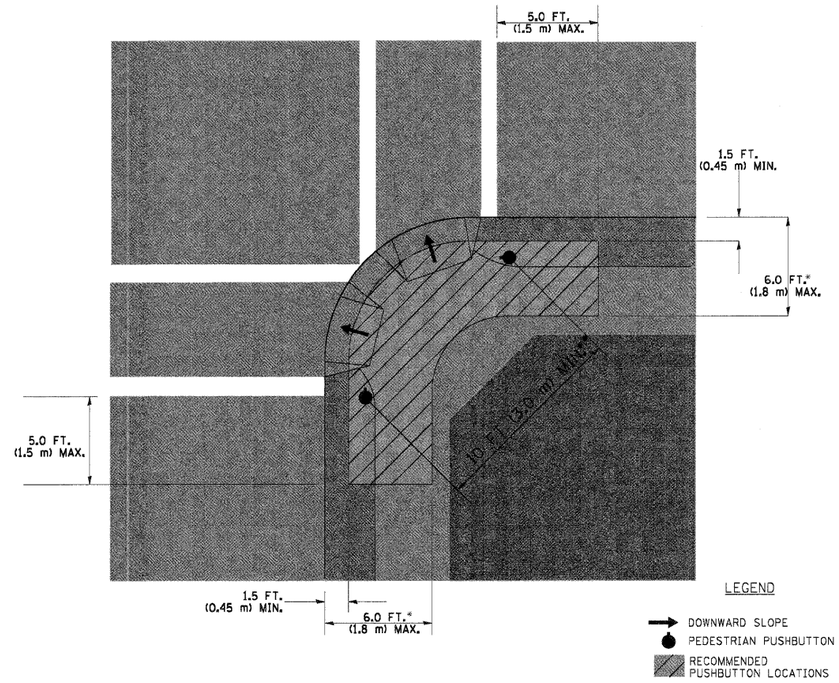
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	127
		CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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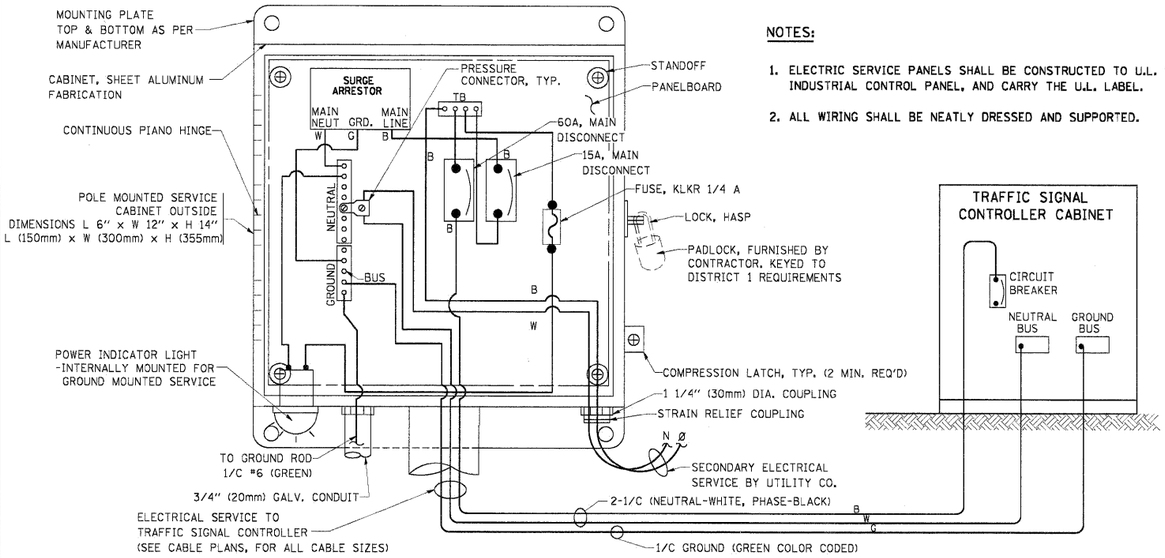


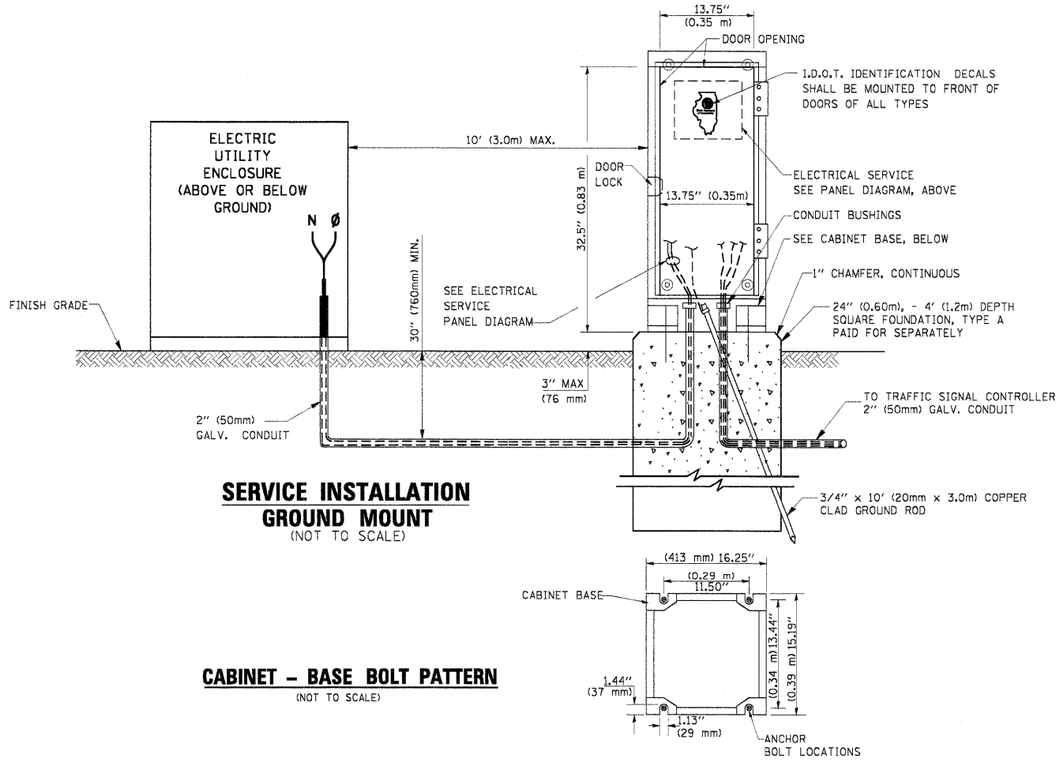
NOTES:

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.

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

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

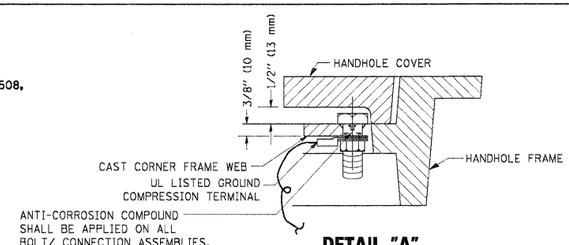


SERVICE INSTALLATION GROUND MOUNT

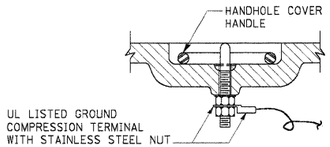
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



DETAIL "A"

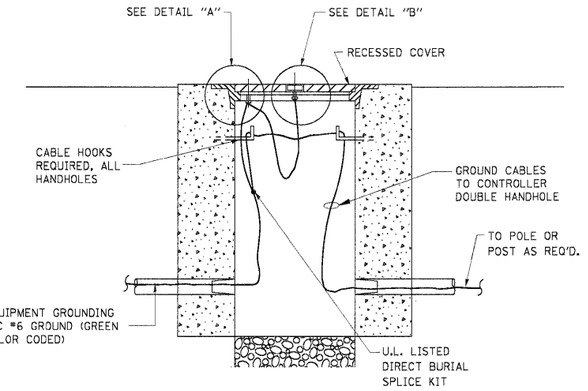


DETAIL "B"

NOTES:

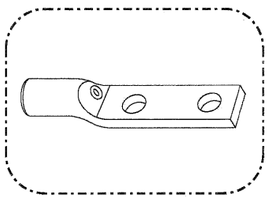
GROUNDING SYSTEM

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.

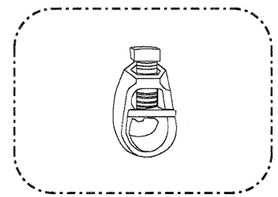


HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



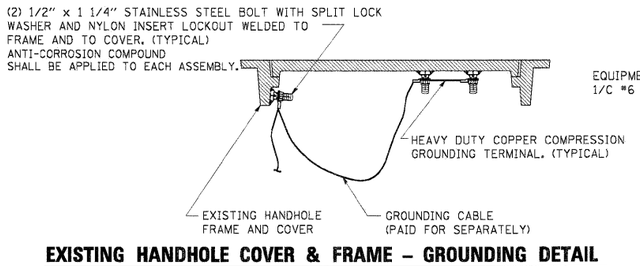
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

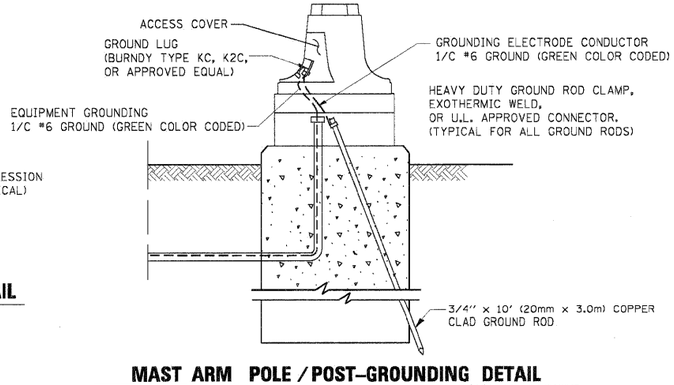
NOTES:

- 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.



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

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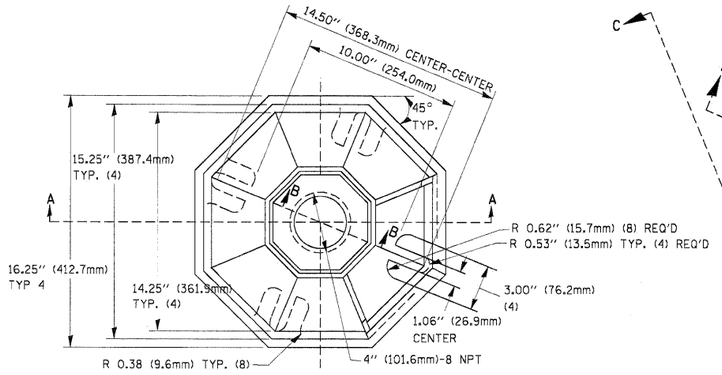
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

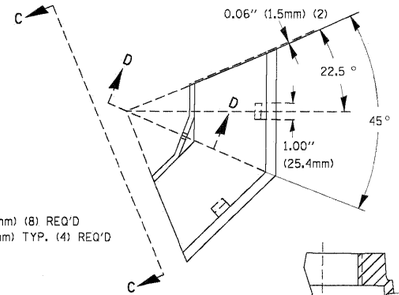
DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

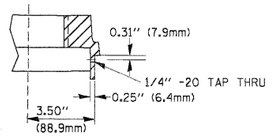
SCALE: | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	128
		CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

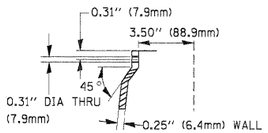


TOP VIEW





SECTION B-B



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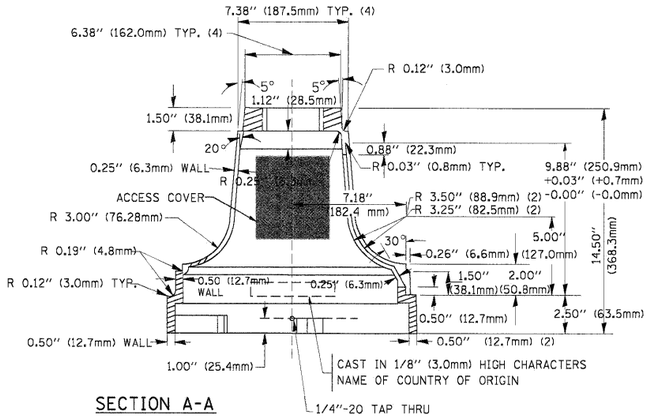
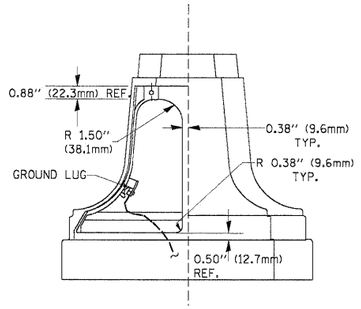
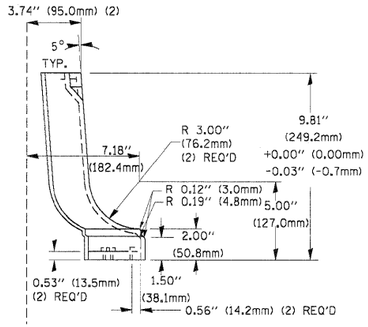


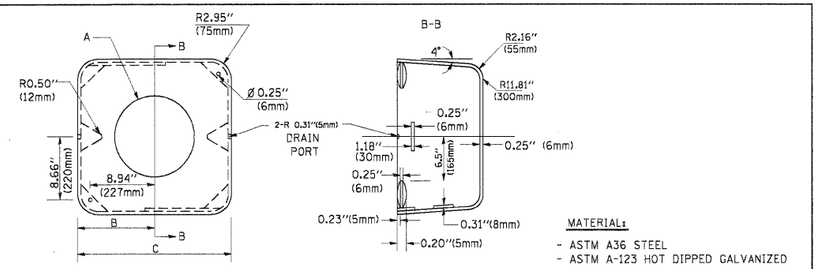
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

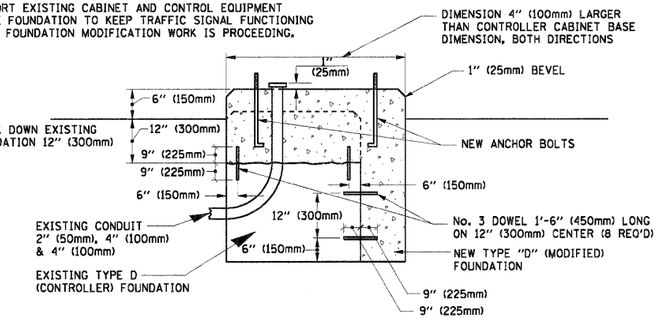
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

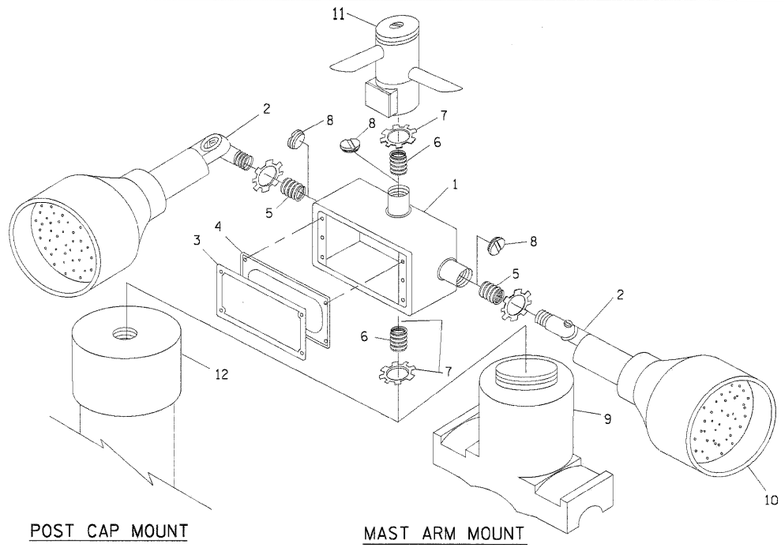
NOTES:

1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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



POST CAP MOUNT

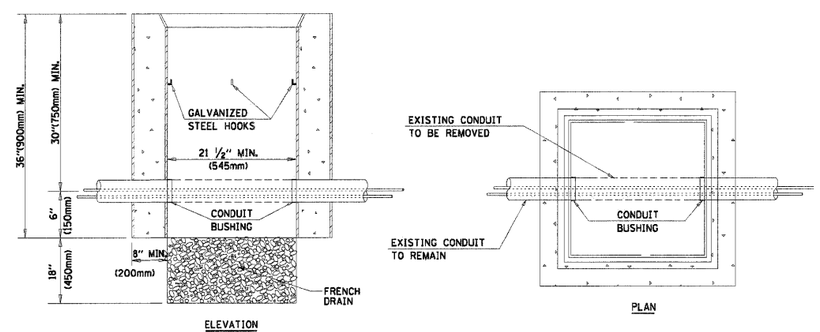
MAST ARM MOUNT

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	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

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.



ELEVATION

PLAN

NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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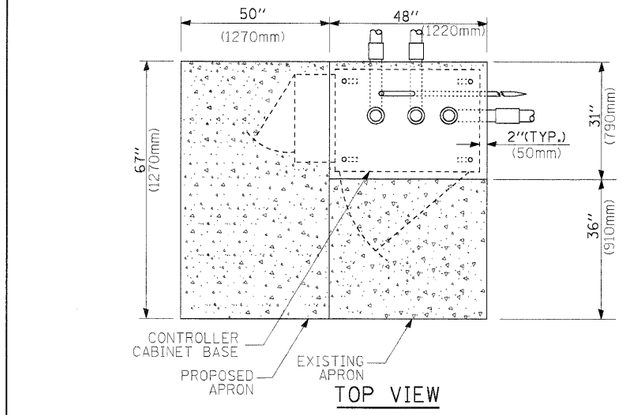
		DRAWN - BCK	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

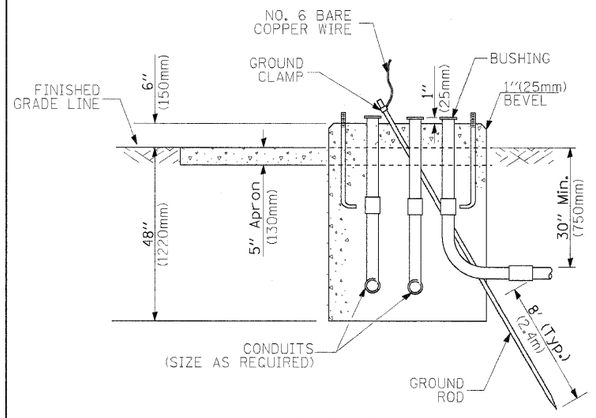
DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

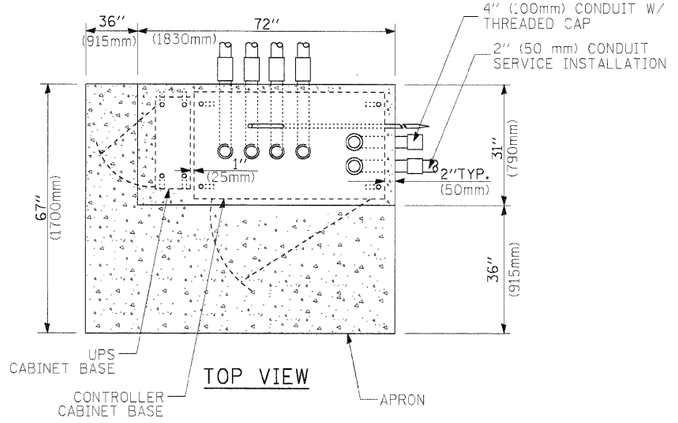
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	129
		CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



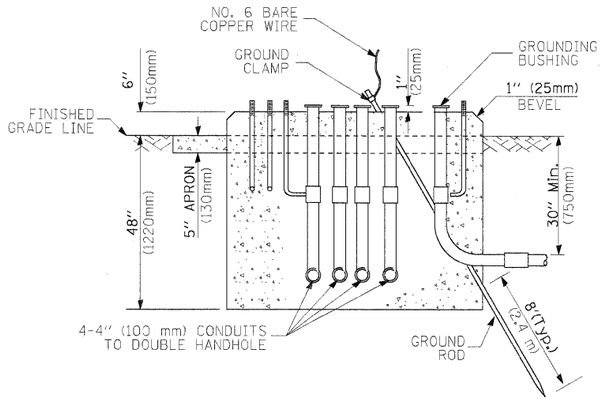
TOP VIEW



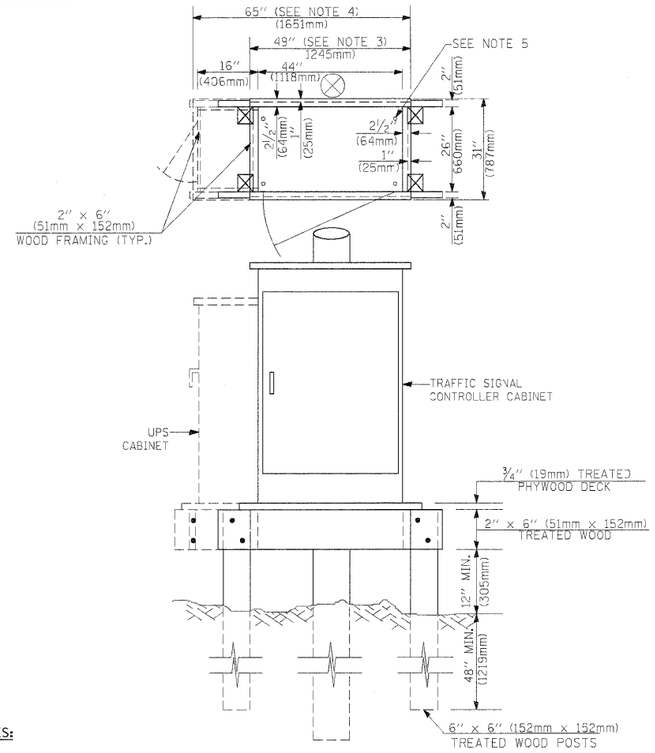
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



TOP VIEW



TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	02-00051-08-WR	LAKE	188	130
		CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET		R R	R R
COMMUNICATIONS CABINET	R CC	E.C.C	CC
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTIBLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	P H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G ◄Y ◄G	R Y G ◄Y ◄G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		R Y G ◄Y ◄G "P"	R Y G ◄Y ◄G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		5	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		1	1
COAXIAL CABLE		C	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		P	
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PP	
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET	R R	R R
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

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		DRAWN - BCK	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 12/6/2009	DATE - 10/28/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	131
		CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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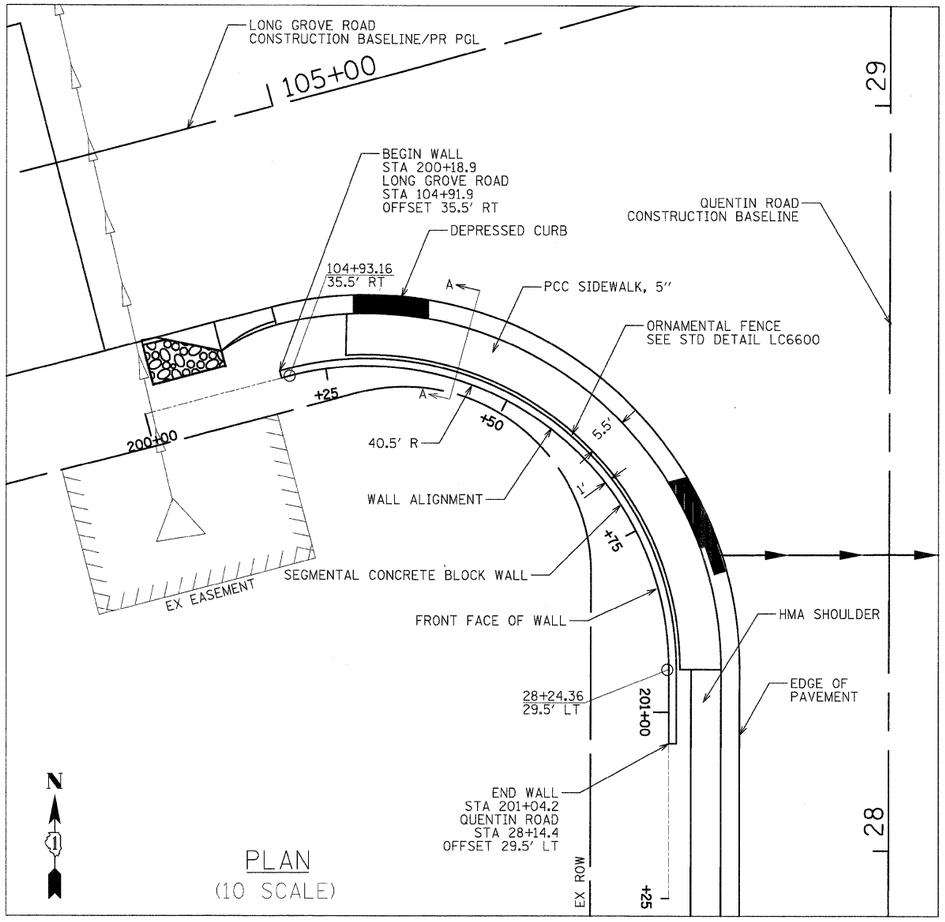
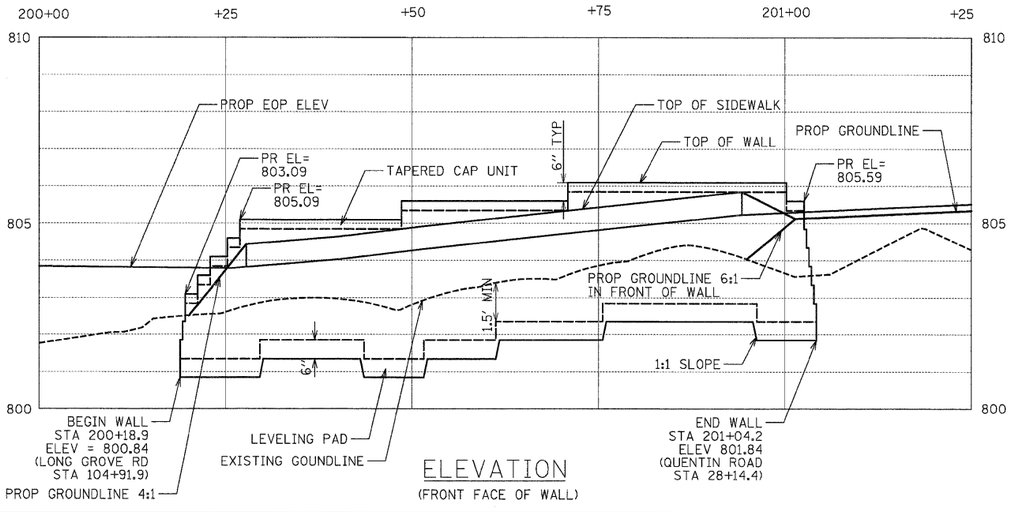
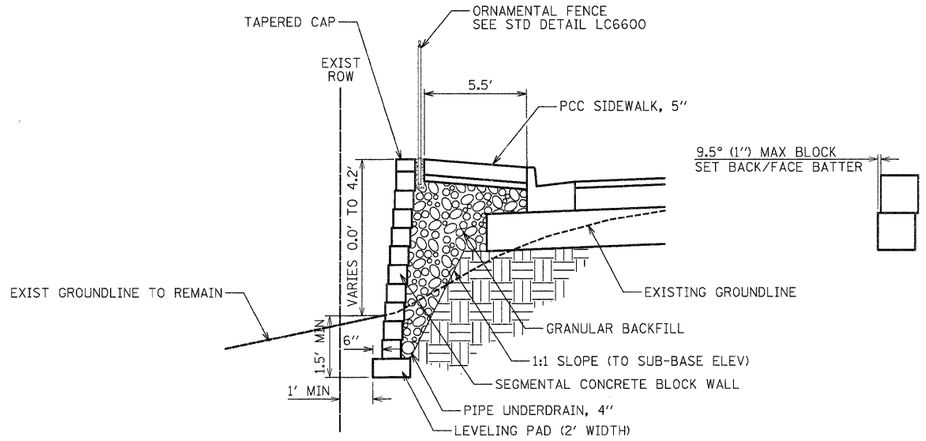


PLAN
(10 SCALE)



ELEVATION
(FRONT FACE OF WALL)

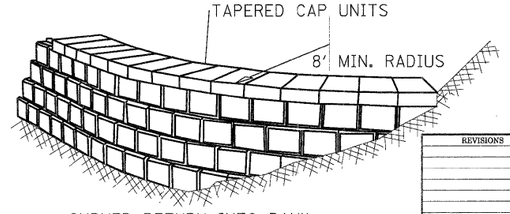


SECTION A-A
(NOT TO SCALE)

1. BLOCK FACING IS SPLIT FACE
2. CAP UNITS TO BE APPLIED WITH ADHESIVE. APPLICATION RATE IS ONE 10.5 OZ TUBE PER 18 FEET OF CAP LENGTH.
3. PLACEMENT METHOD IS BY HAND
4. STACKING ALIGNMENT MAY BE EITHER BATTERED OR VERTICAL
5. MINIMUM FACE RADIUS IN CURVE = 8'
6. DESIGN NOTE: MAX HEIGHT GRAVITY ONLY = 5 FEET
7. RETAINING WALL BLOCKS MUST BE CERTIFIED BY IDOT'S QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

SEGMENTAL CONCRETE BLOCK DETAILS

	FACE WIDTH	BACK WIDTH	HEIGHT	DEPTH	WEIGHT
STANDARD UNIT	8"	8"	6"	12"	45 LBS
TAPERED UNIT	8"	6 7/8"	6"	12"	43 LBS
TAPERED CAP	8"	7"	3"	14"	22 LBS
RECTANGULAR CAP	24"	24"	3"	12"	68 LBS



CURVED RETURN INTO BANK

REVISIONS	DATE

LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

SEGMENTAL CONCRETE BLOCK WALL

LC2101

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

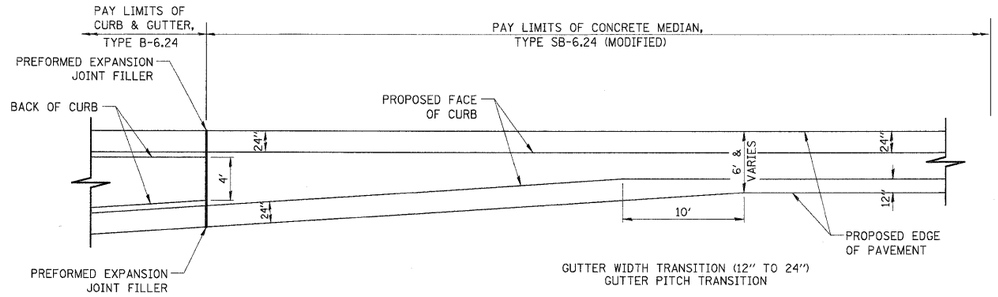
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

MODULAR RETAINING SYSTEM DETAILS

SHEET NO. 1 OF 1 SHEETS

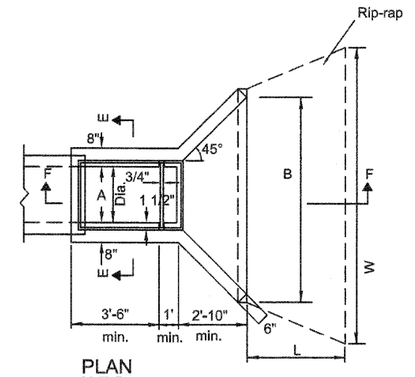
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	132
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



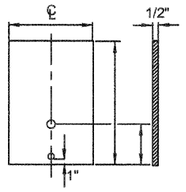
CONCRETE MEDIAN TYPE SB-6.24 (MODIFIED)

AT SINGLE LEFT TURN BAYS

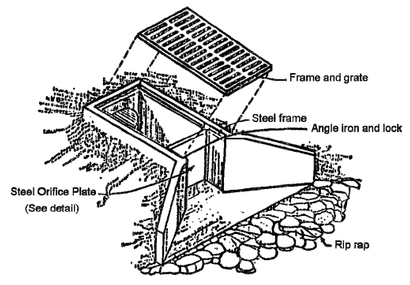
NOTE: CONCRETE MEDIAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE PORTIONS OF STANDARD 606301



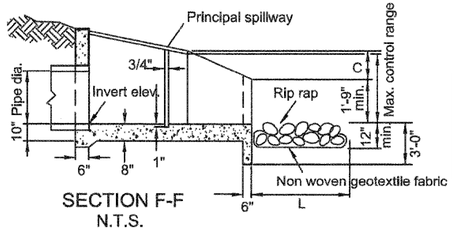
PLAN
N.T.S.



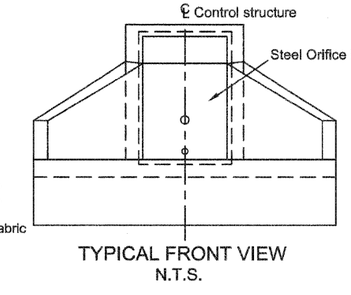
STEEL ORIFICE PLATE DETAIL
N.T.S.



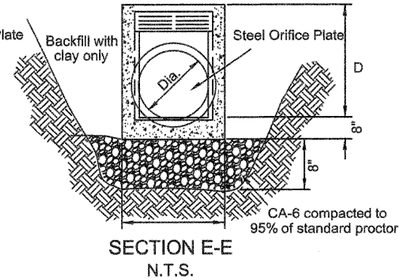
ISOMETRIC VIEW
N.T.S.



SECTION F-F
N.T.S.



TYPICAL FRONT VIEW
N.T.S.



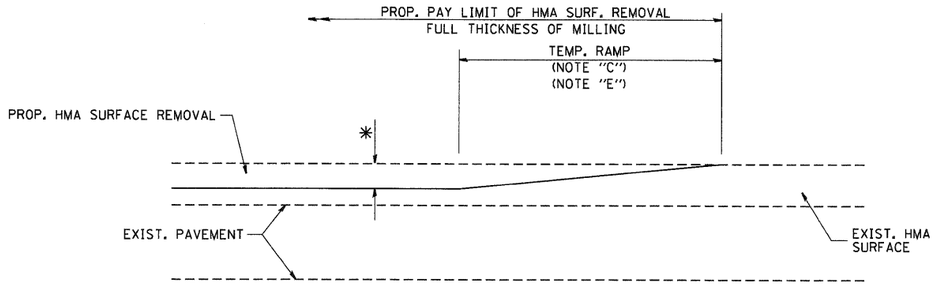
SECTION E-E
N.T.S.

OUTLET CONTROL STRUCTURE

CIVILTECH	450 E Devon Ave, Suite 300 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - JRR DRAWN - JRR CHECKED - RTM DATE - 10/24/2011	REVISED - REVISED - REVISED - REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	NO SCALE	**CONSTRUCTION DETAILS** SHEET NO. 1 OF 1 SHEETS	F.A.U. RTE. 364	SECTION 02-00051-08-WR	COUNTY LAKE	TOTAL SHEETS 188	SHEET NO. 133
							FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 63649	

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

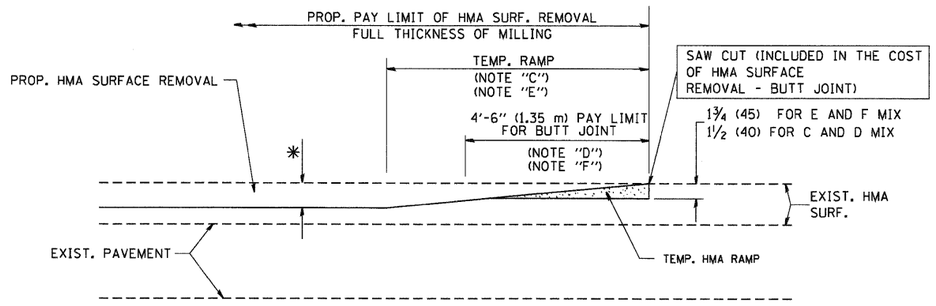
ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

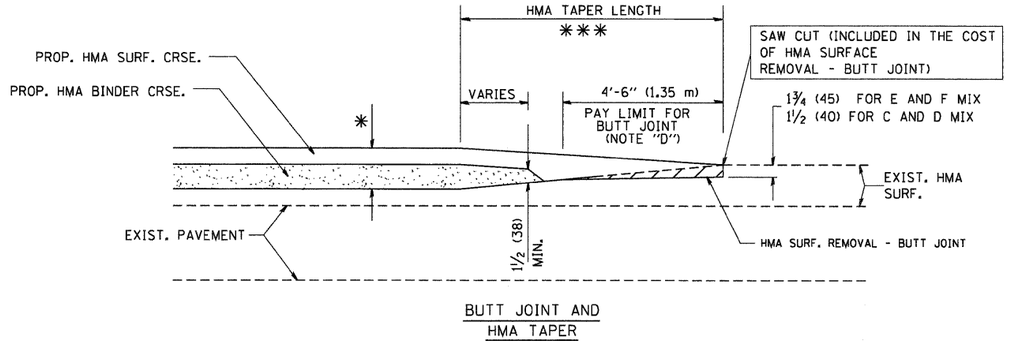


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

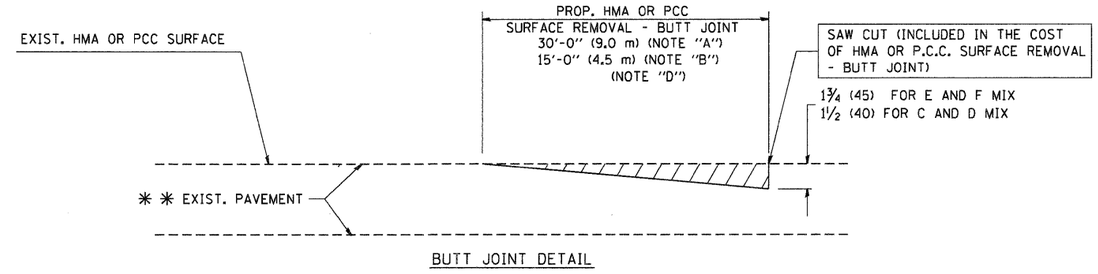
OPTION 2

TYPICAL TEMPORARY RAMP

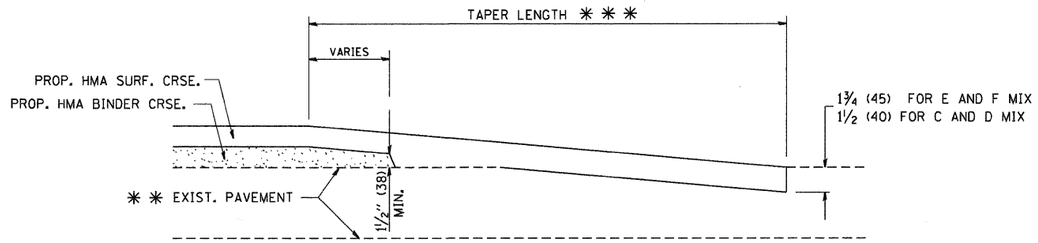


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

* * * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

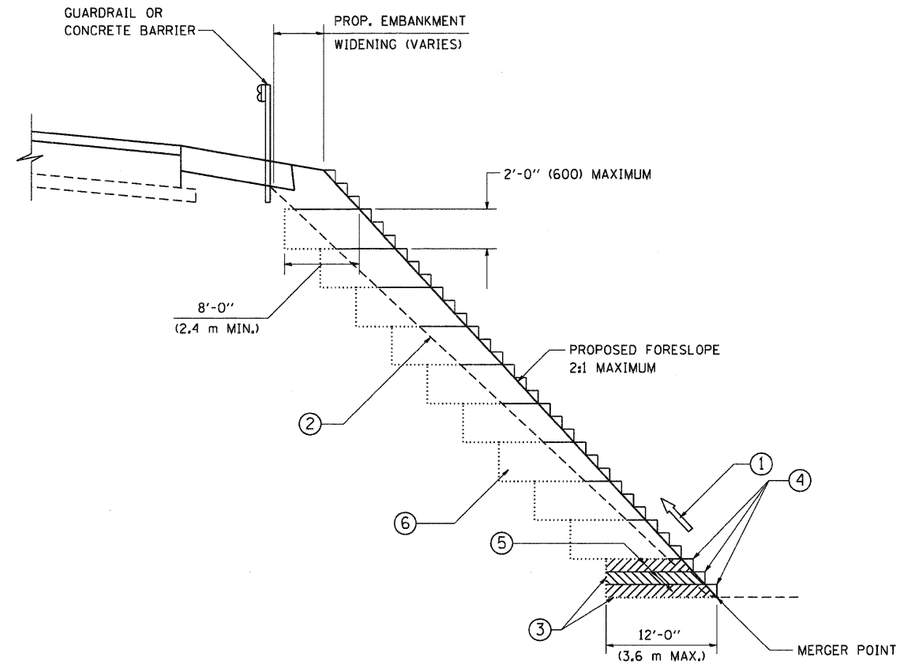
BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = geglienobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS
		DRAWN -	REVISED - A. ABBAS 03-21-97		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01		
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	134
	BD400-05 BD32	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

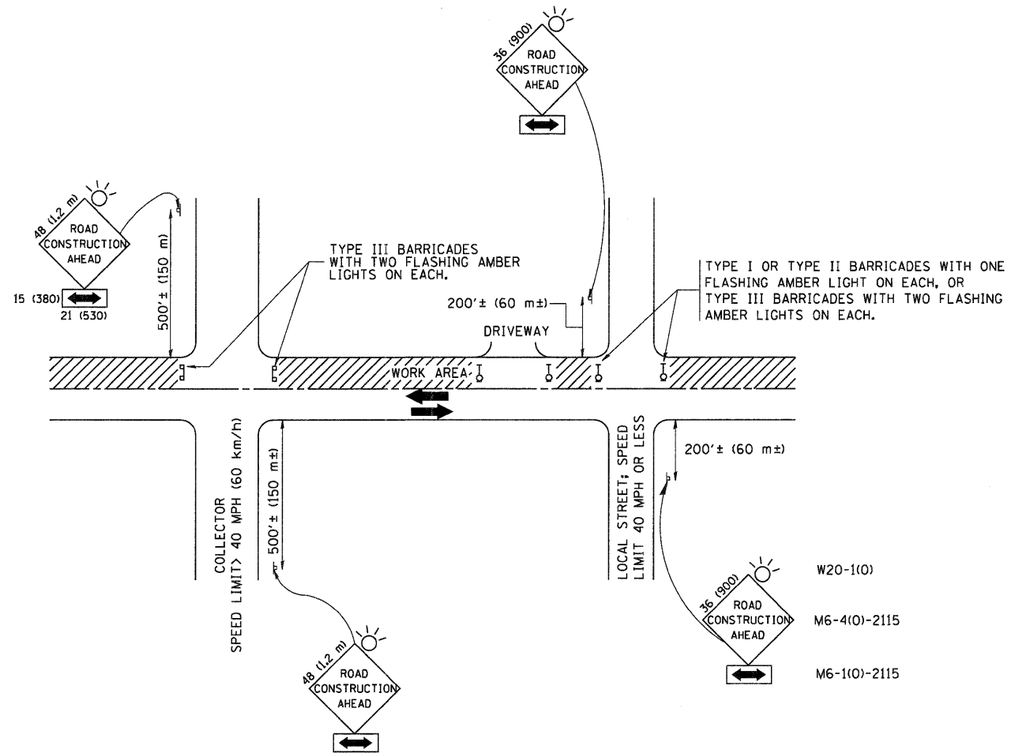
FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT WIDENING

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	135
	BD-51	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) 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 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) 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.

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

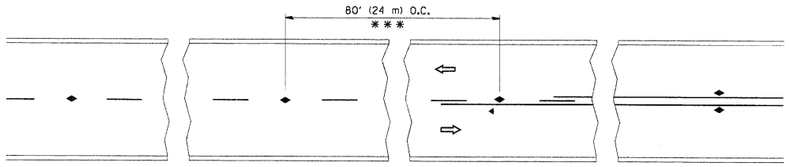
FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

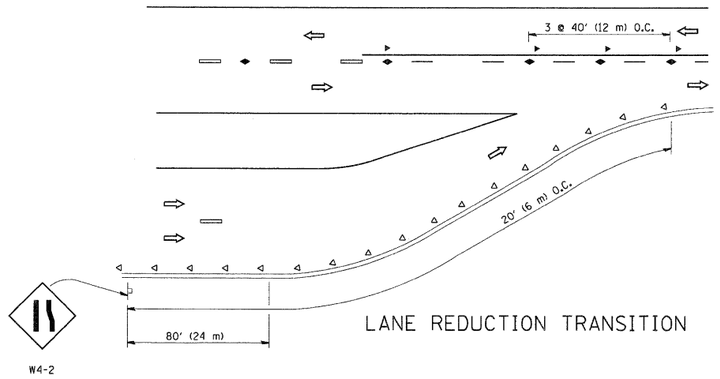
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	136
	TC-10	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

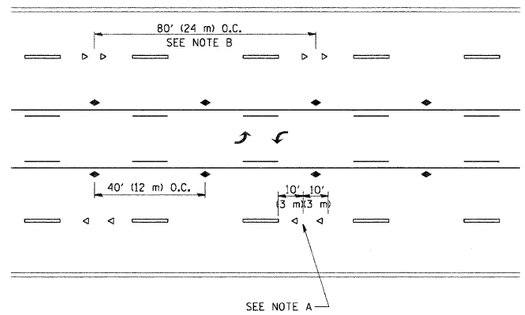


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

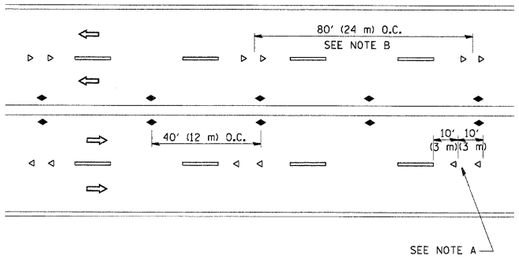
TWO-LANE/TWO-WAY



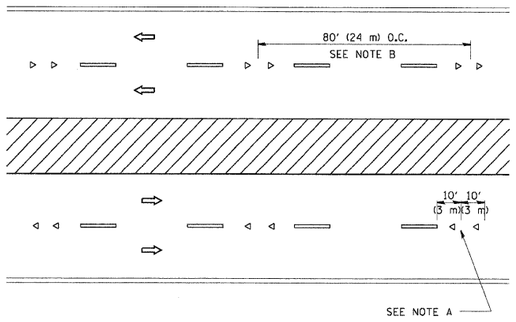
LANE REDUCTION TRANSITION



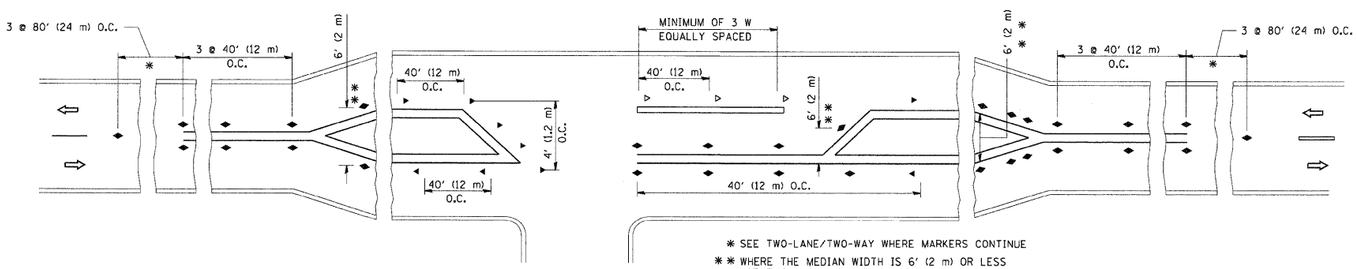
TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

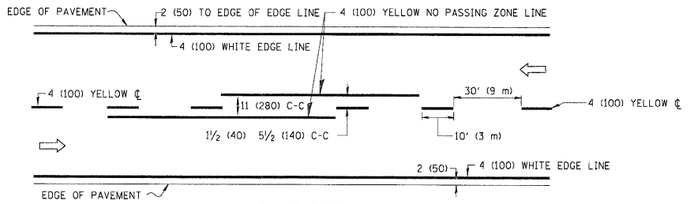
FILE NAME = c:\pw_work\pwidot\leysa\d0108315\tc11.dgn	USER NAME = leysa	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

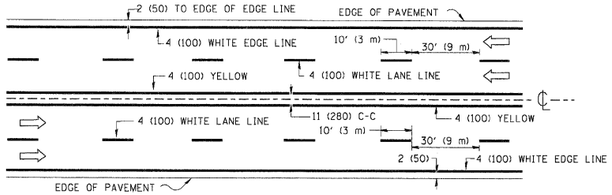
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

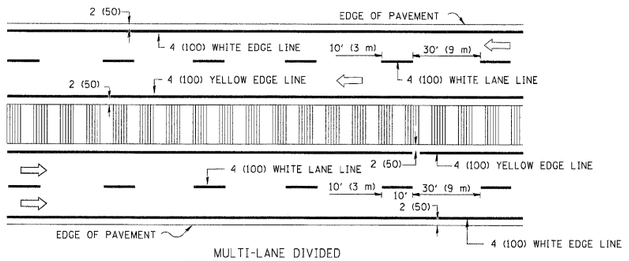
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	137
	TC-11	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



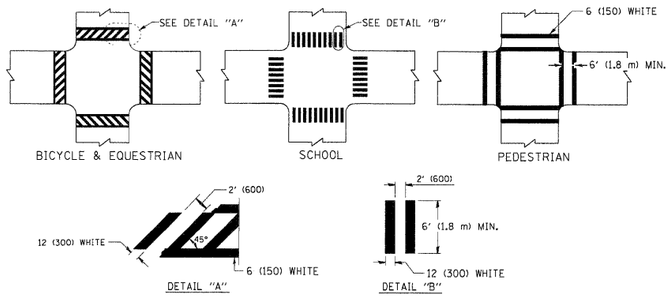
MULTI-LANE UNDIVIDED



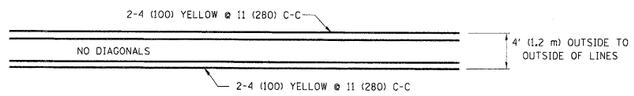
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

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

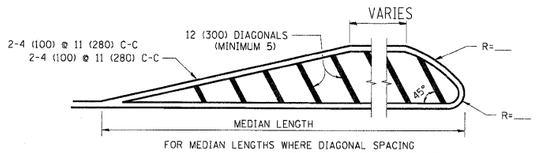
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



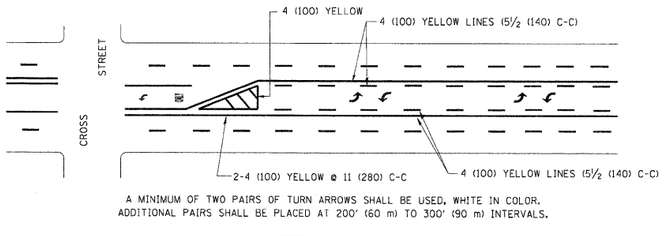
4' (1.2 m) WIDE MEDIANS ONLY



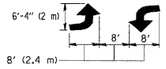
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

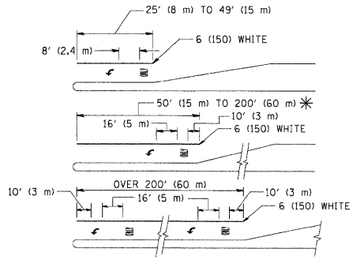


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

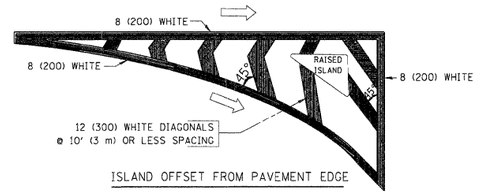


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

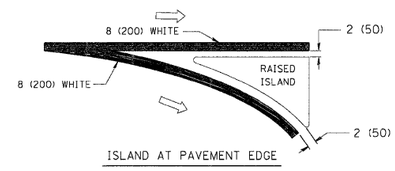
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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

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

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

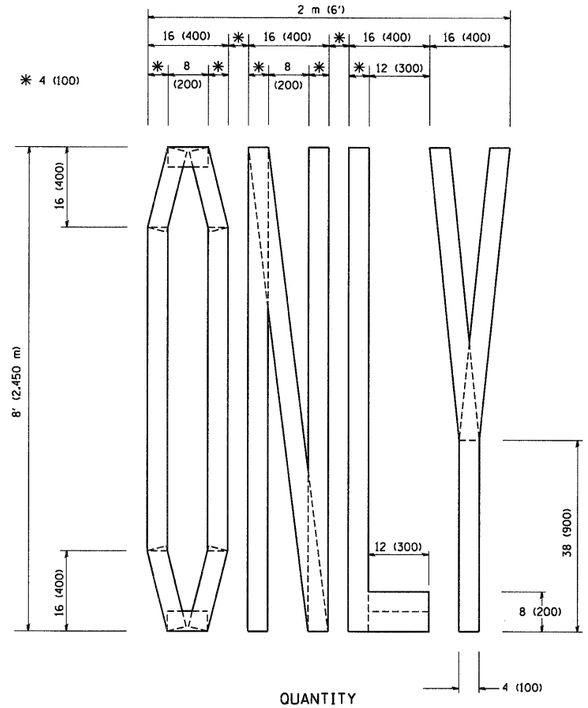
FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\tc13.dgn	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
	PLOT SCALE = 50.000 ' / IN.	DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT DATE = 9/9/2009	CHECKED -	REVISED -
		DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

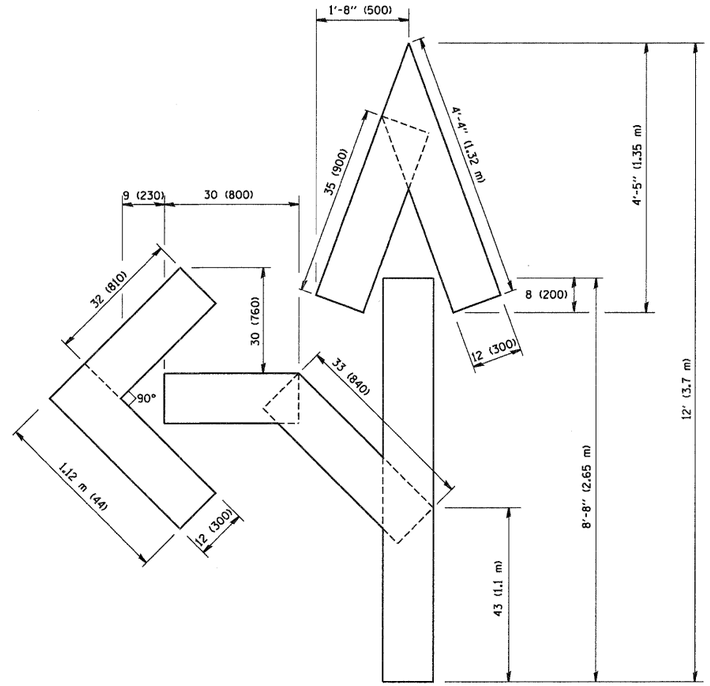
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

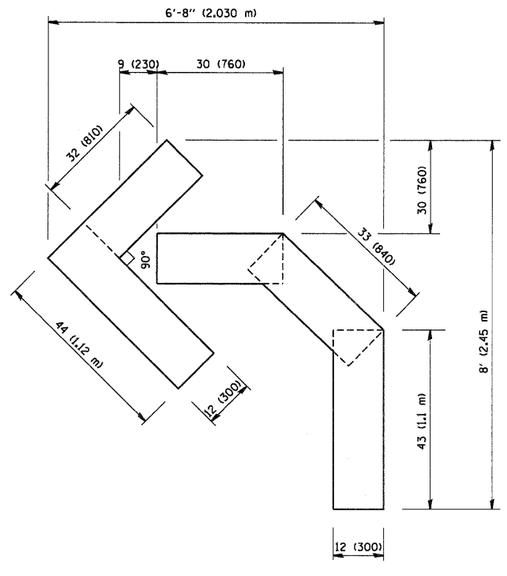
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	138
	TC-13	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



QUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)



QUANTITY
4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.39 sq. m)

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

FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

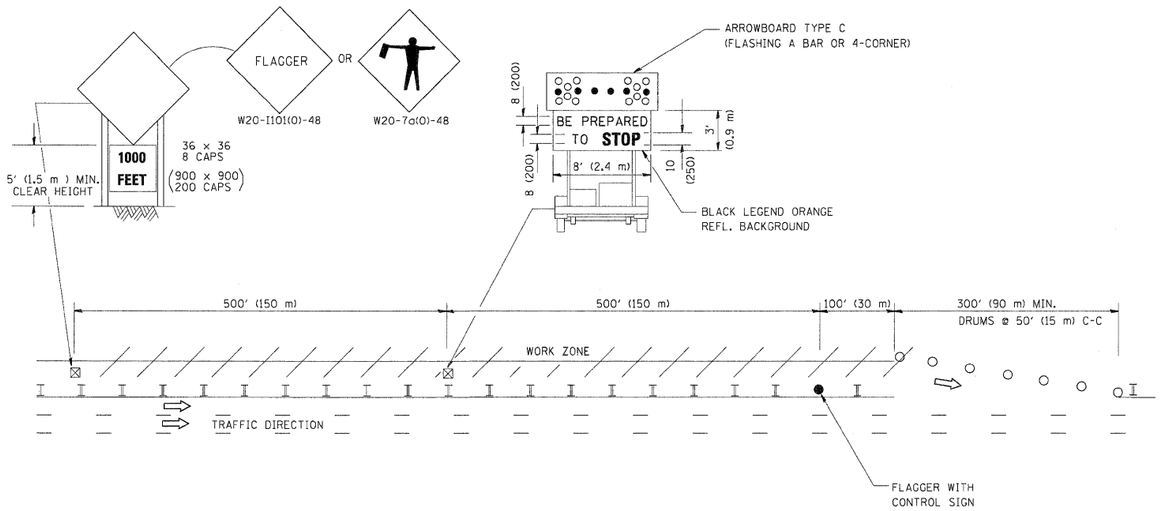
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

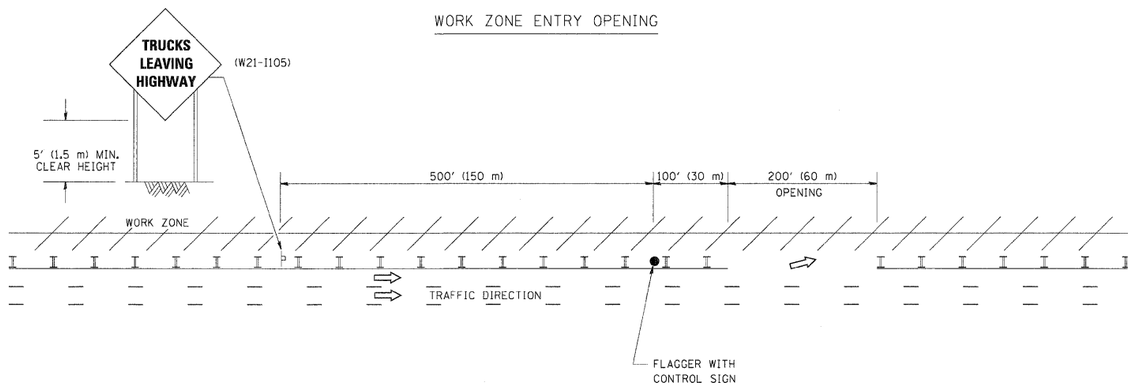
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	139
	TC-16	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. THE ARROWBOARD, THE FLAGGER AHEAD SIGN AND THE TRUCKS LEAVING HIGHWAY SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE EXIT OPENINGS SHOULD BE A MINIMUM OF ONE HALF MILE APART.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

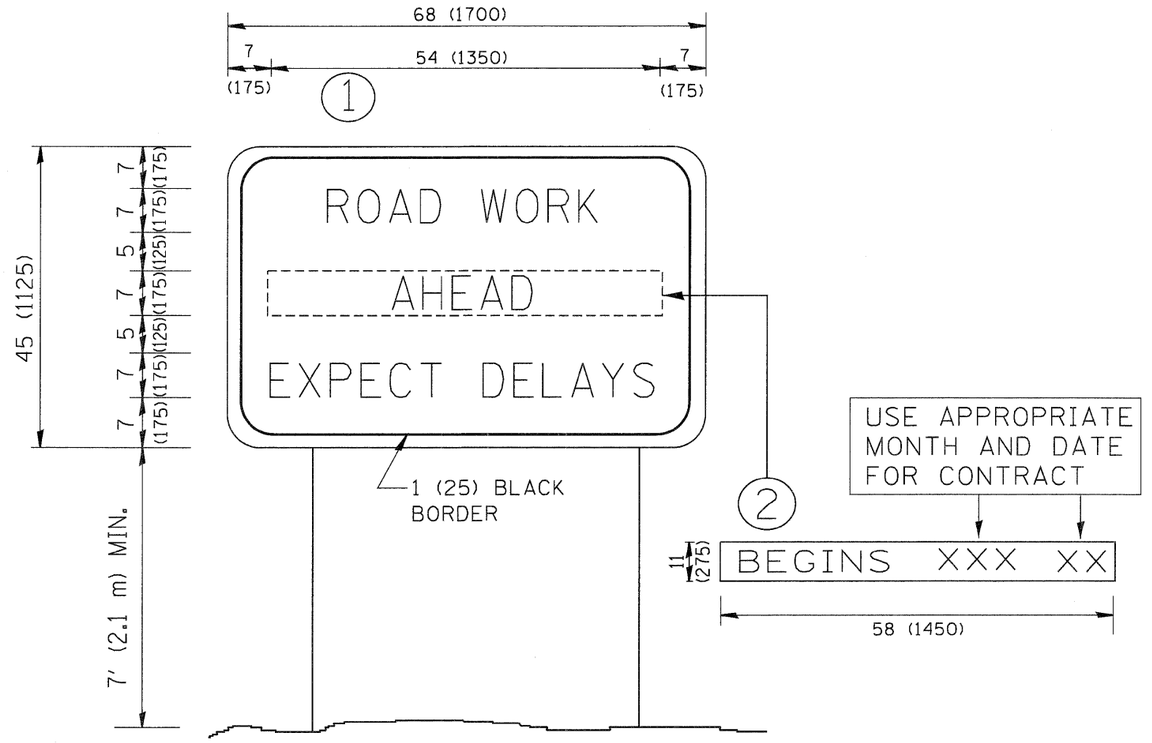
FILE NAME = W:\diststd\22x34\tc18.dgn	USER NAME = leysa	DESIGNED -	REVISED - J.A.F. 04-03
		DRAWN -	REVISED - J.A.F. 02-06
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/26/2012	DATE -	REVISED - S.P.B. 12-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	140
	TC-18	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

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

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

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

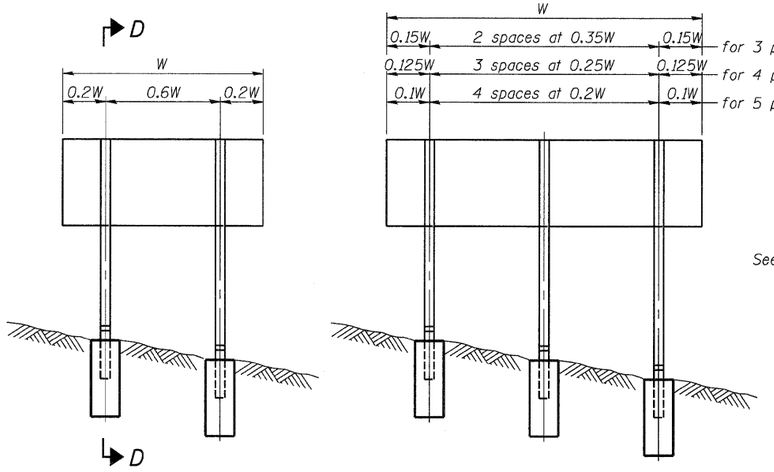
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD
INFORMATION SIGN

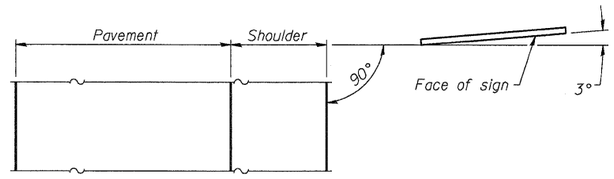
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	141
	TC-22	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

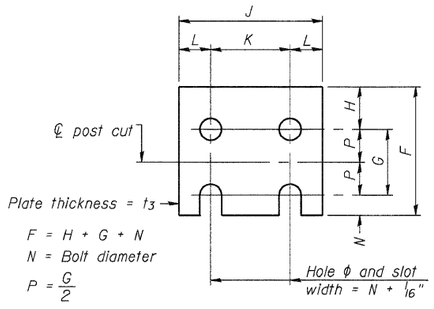
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION

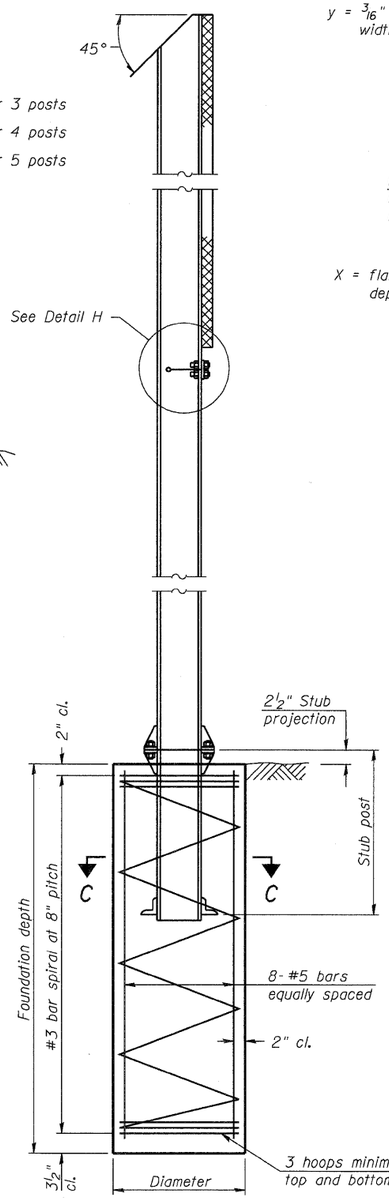


LOCATION SKETCH

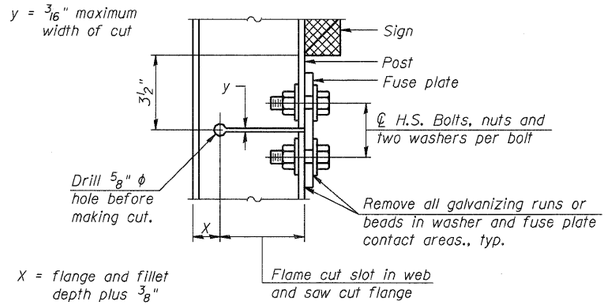


FUSE PLATE DETAIL
(Install with notches down.)

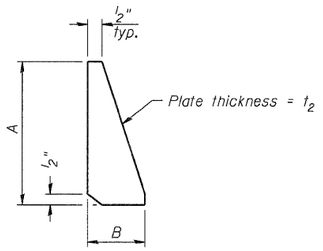
FUSE PLATE DATA		
N = Bolt Diameter	G	H
1/2"	2"	1 1/8"
5/8"	2 1/4"	1 1/4"
3/4"	2 1/2"	1 3/8"
7/8"	2 3/4"	1 1/2"
1"	3"	1 5/8"
1 1/8"	3 1/4"	1 3/4"



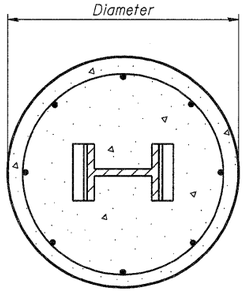
SECTION D-D



DETAIL H



STIFFENER PLATE DETAIL
(See table for dimensions.)



SECTION C-C

GENERAL NOTES

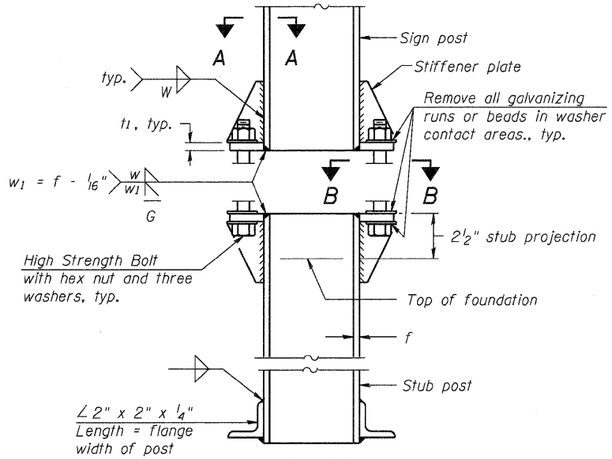
Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

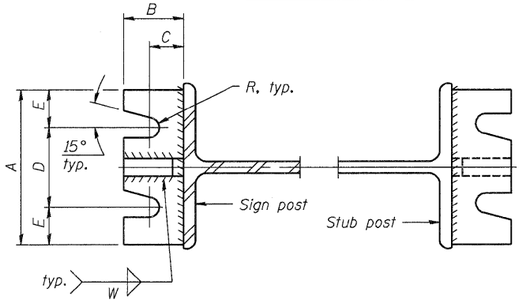
DESIGN STRESSES:
Structural steel - 20,000 p.s.i.
Reinforcing steel - 20,000 p.s.i.
Concrete - 1,400 p.s.i.
Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.

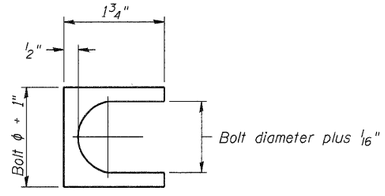


ELEVATION
SIGN POST & STUB POST



SECTION A-A

SECTION B-B



SHIM DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

NUMBER	REVISION	DATE

DESIGNED -
CHECKED -
DRAWN -
CHECKED -

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

BAW-A-1 5/16/08

BREAK-AWAY WIDE FLANGE STEEL SIGN POST DETAILS

SHEET NO. 1
2 SHEETS

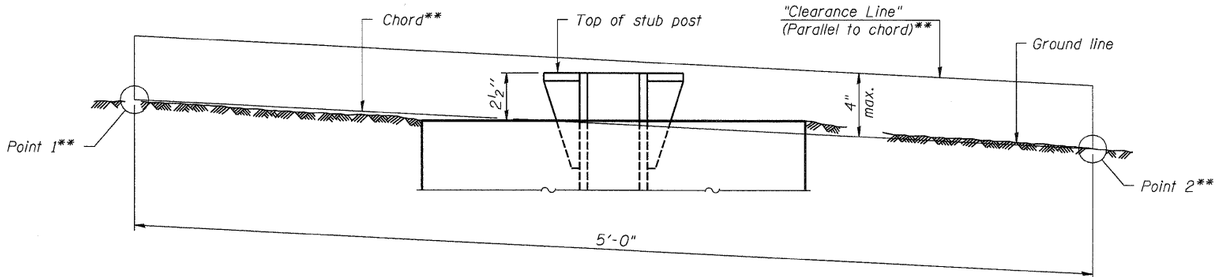
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	142
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

POST	CONCRETE FOUNDATION TABLE							POST TO STUB POST CONNECTION DATA										FUSE PLATE DATA			
	Foundation			Reinforcement			Stub Post														
	Diameter	* Minimum Depth	Concrete (1) cu. yds.)	Vertical Bars Length	Bar Spirals Diameter	Bar Spirals Length	lbs. (2)	Length	Bolt Size	A	B	C	D	E	t_1	t_2	R	W	J	K	L	t_3
W6x9	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-3"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	11/32"	1/4"	4"	2 1/4"	7/8"	1/4"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	11/32"	1/4"	6"	3 1/2"	1 1/4"	3/8"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	13/32"	5/16"	5 1/4"	2 3/4"	1 1/4"	3/8"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2 1/2"	105'-0"	92	3'-0"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	13/32"	5/16"	5 3/4"	2 3/4"	1 1/2"	1/2"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2 1/2"	112'-0"	98	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	15/32"	3/8"	5 3/4"	2 3/4"	1 1/2"	5/8"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2 1/2"	119'-0"	107	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	15/32"	3/8"	6 1/2"	3 1/2"	1 1/2"	5/8"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8 1/2"	145'-0"	113	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	15/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8 1/2"	153'-0"	122	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	17/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8 1/2"	162'-0"	130	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	17/32"	3/8"	7"	3 1/2"	1 3/4"	1/2"

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

POST	FUSE PLATE BOLT SIZE — Sign Depth												
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"
W6x9	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	5/8" x 1 3/4"	5/8" x 1 3/4"	5/8" x 1 3/4"	——	——	——	——	——	——	——
W6x15	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	7/8" x 2"	7/8" x 2"	——	——	——
W8x18	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"
W10x22	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/4"	7/8" x 2 1/2"	1" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"
W10x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1 1/8" x 3"
W12x26	——	——	——	——	——	5/8" x 2 1/4"	——	——	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"
W14x30	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	7/8" x 2 1/2"	1" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"
W14x38	——	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 1/2"	1" x 2 3/4"
W16x45	——	——	——	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"



ELEVATION
GROUND LINE & STUB POST

** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

(1) Quantity includes all concrete necessary for one foundation.

(2) Includes reinforcement bars and spiral hooping for one foundation.

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

BAW-A-2 5/16/08

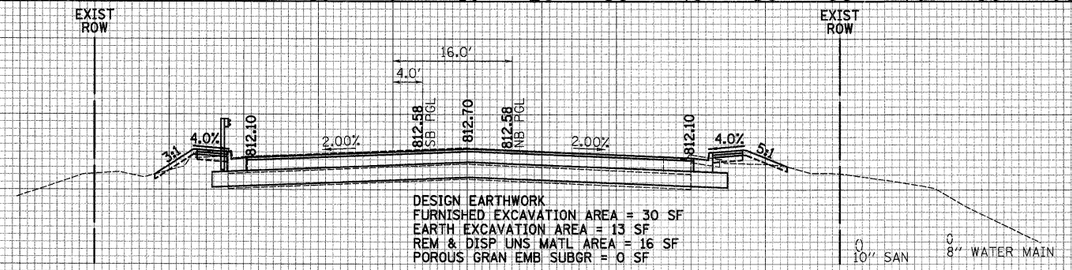
NUMBER	REVISION	DATE

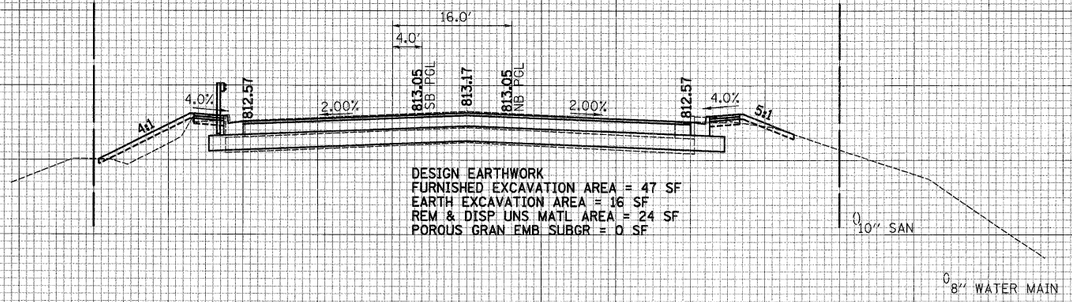
BREAK-AWAY WIDE FLANGE
STEEL SIGN POST TABLES

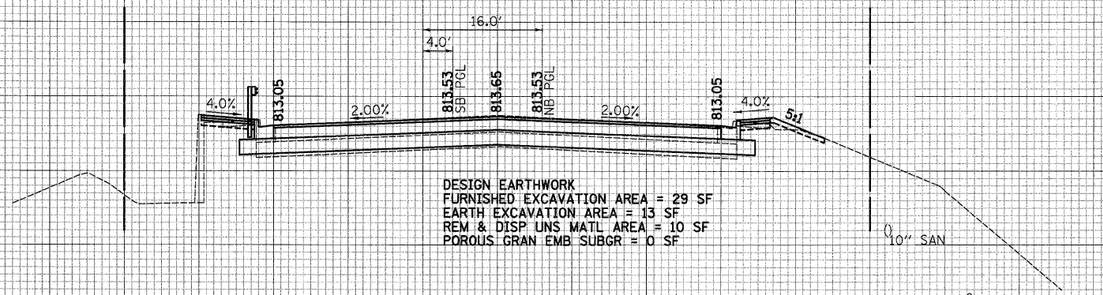
SHEET NO. 2
2 SHEETS

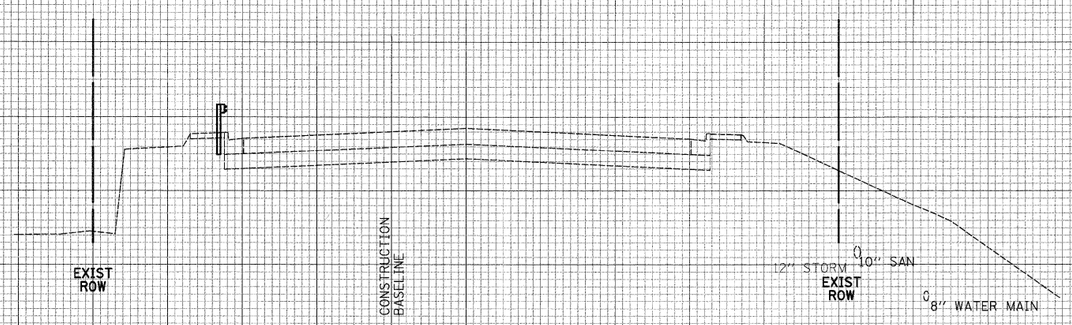
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	143
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150









21 + 00 — 815 / 810 / 805

20 + 50 — 815 / 810 / 805

20 + 00 — 815 / 810 / 805

19 + 50 — 815 / 810 / 805

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 1 OF 36 SHEETS | STA. 19+50 | TO STA. 21+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	144
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

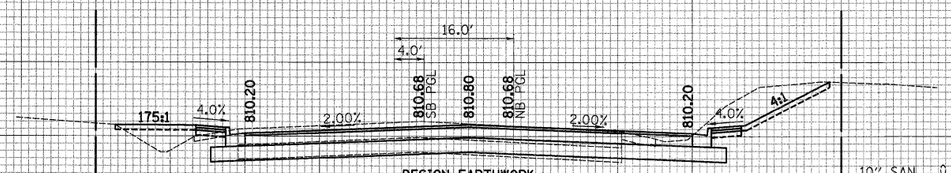
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EXIST ROW

EXIST ROW

815
810
805

23 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 33 SF
EARTH EXCAVATION AREA = 41 SF
REM & DISP UNS MATL AREA = 38 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 15" STORM

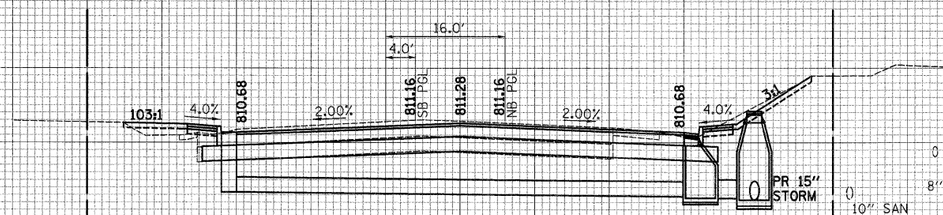
10" SAN 0
0 8" WATER MAIN

815
810
805

23 + 00

815
810
805

22 + 50



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 26 SF
EARTH EXCAVATION AREA = 20 SF
REM & DISP UNS MATL AREA = 30 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 15" STORM

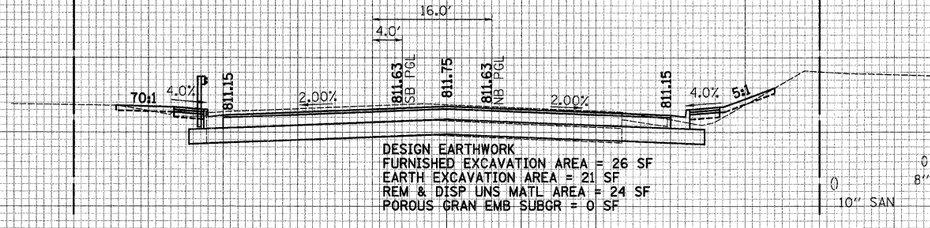
0
8" WATER MAIN
0
10" SAN

815
810
805

22 + 50

815
810
805

22 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 26 SF
EARTH EXCAVATION AREA = 21 SF
REM & DISP UNS MATL AREA = 24 SF
POROUS GRAN EMB SUBGR = 0 SF

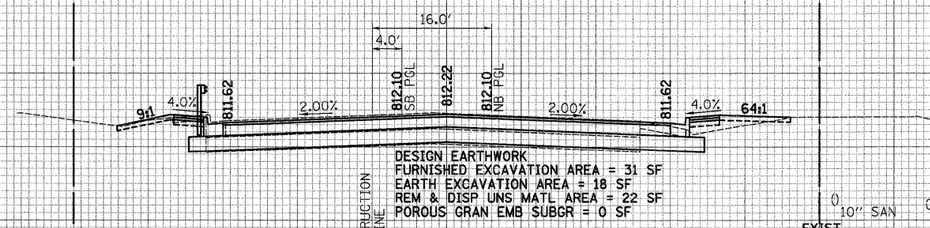
0
8" WATER MAIN
0
10" SAN

815
810
805

22 + 00

815
810
805

21 + 50



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 31 SF
EARTH EXCAVATION AREA = 18 SF
REM & DISP UNS MATL AREA = 22 SF
POROUS GRAN EMB SUBGR = 0 SF

0
10" SAN
0
8" WATER MAIN

815
810
805

21 + 50

EXIST ROW

CONSTRUCTION BASELINE

EXIST ROW

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

DATE	BY	
		SURVEYED
		PLOTTED
		TEMPLATE
		AREAS
		AREAS CHECKED

FINAL SURVEY — NOTE BOOK — NO.

ORIGINAL SURVEY — NOTE BOOK — NO.

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DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 2 OF 36 SHEETS | STA. 21+50 | TO STA. 21+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	145

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

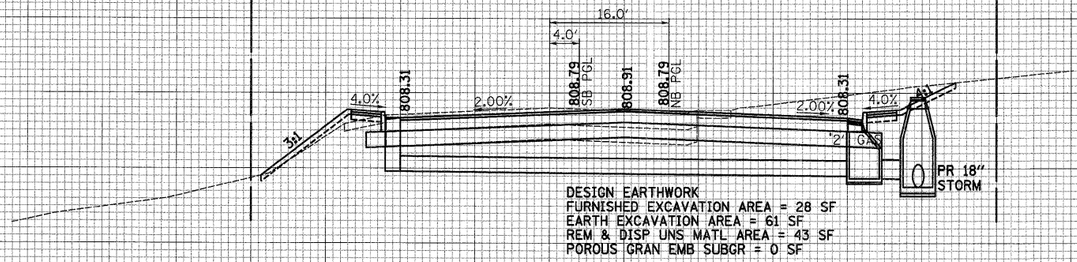
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EXIST ROW

EXIST ROW

815
810
805

25 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 28 SF
EARTH EXCAVATION AREA = 61 SF
REM & DISP UNS MATL AREA = 43 SF
POROUS GRAN EMB SUBGR = 0 SF

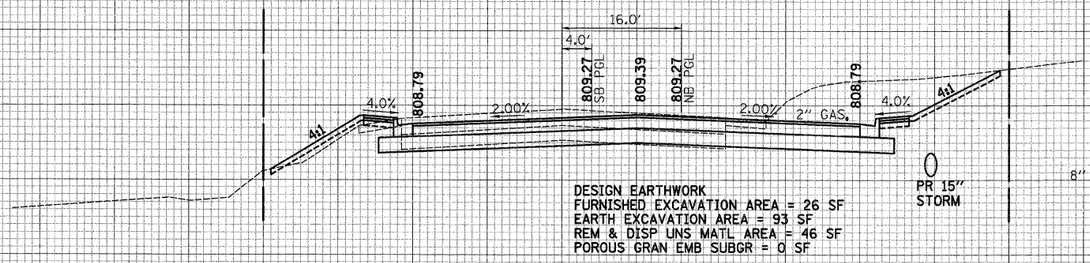
0
8" WATER MAIN

815
810
805

25 + 00

815
810
805

24 + 50



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 26 SF
EARTH EXCAVATION AREA = 93 SF
REM & DISP UNS MATL AREA = 46 SF
POROUS GRAN EMB SUBGR = 0 SF

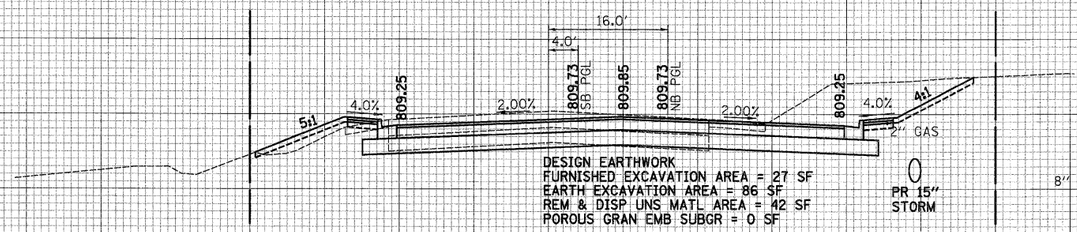
0
8" WATER MAIN

815
810
805

24 + 50

815
810
805

24 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 27 SF
EARTH EXCAVATION AREA = 86 SF
REM & DISP UNS MATL AREA = 42 SF
POROUS GRAN EMB SUBGR = 0 SF

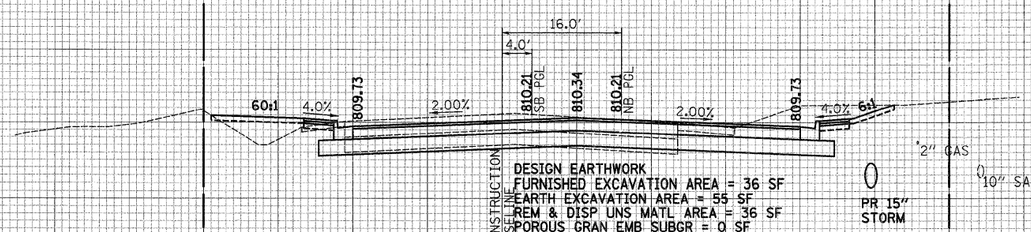
0
8" WATER MAIN

815
810
805

24 + 00

815
810
805

23 + 50



CONSTRUCTION BASELINE

DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 36 SF
EARTH EXCAVATION AREA = 55 SF
REM & DISP UNS MATL AREA = 36 SF
POROUS GRAN EMB SUBGR = 0 SF

0
10" SAN
0
8" WATER MAIN

815
810
805

23 + 50

EXIST ROW

EXIST ROW

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

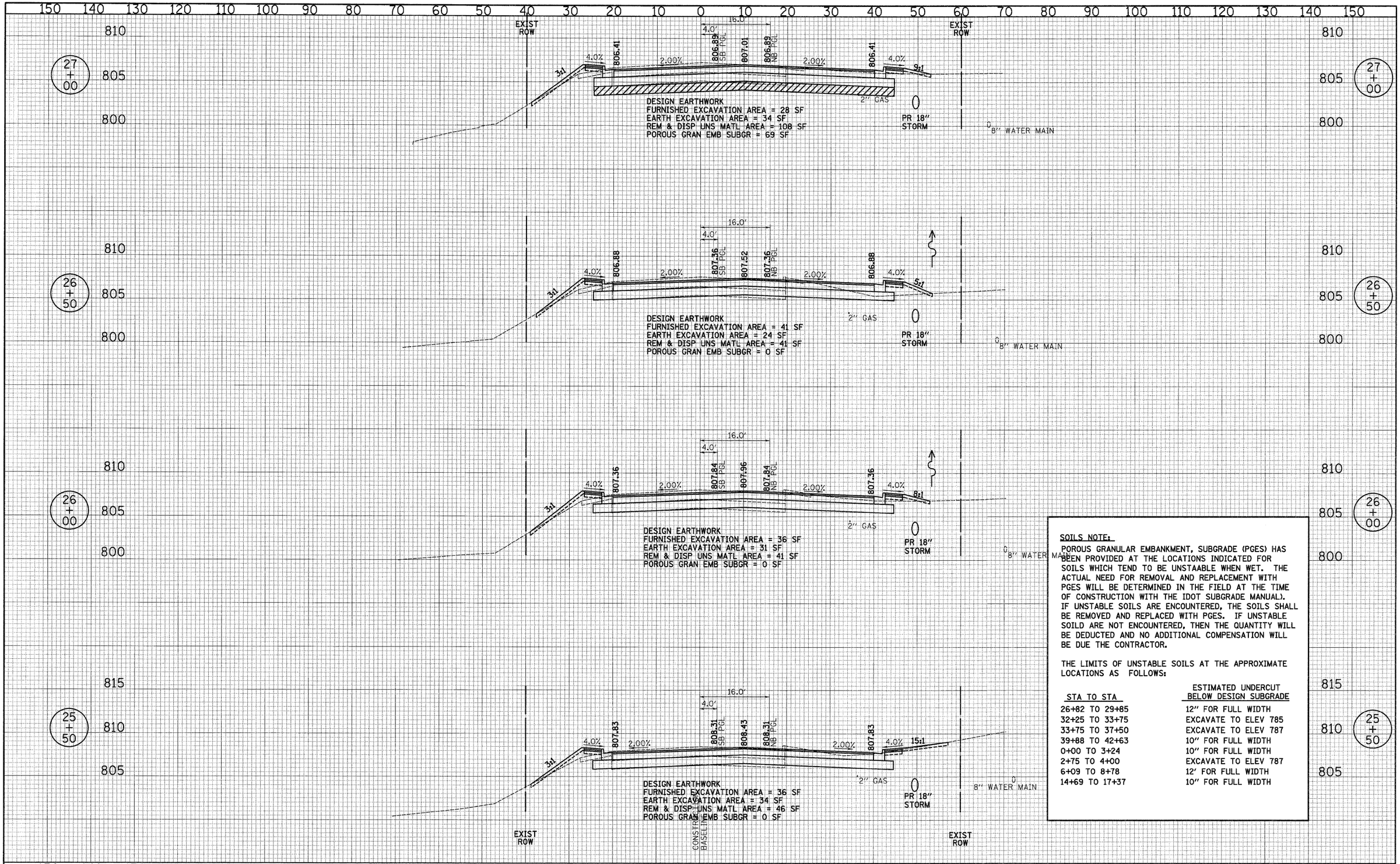
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 3 OF 36 SHEETS | STA. 23+50 | TO STA. 21+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	146
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SOILS NOTE:

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED AT THE LOCATIONS INDICATED FOR SOILS WHICH TEND TO BE UNSTAABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. IF UNSTABLE SOILD ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

THE LIMITS OF UNSTABLE SOILS AT THE APPROXIMATE LOCATIONS AS FOLLOWS:

STA TO STA	ESTIMATED UNDERCUT BELOW DESIGN SUBGRADE
26+82 TO 29+85	12" FOR FULL WIDTH
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY — SURVEYED / PLOTTED / TEMPLATE / AREAS CHECKED — NOTE BOOK — NO. — BY — DATE

ORIGINAL SURVEY — SURVEYED / PLOTTED / TEMPLATE / AREAS CHECKED — NOTE BOOK — NO. — BY — DATE

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DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 4 OF 36 SHEETS | STA. 25+50 TO STA. 27+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	147

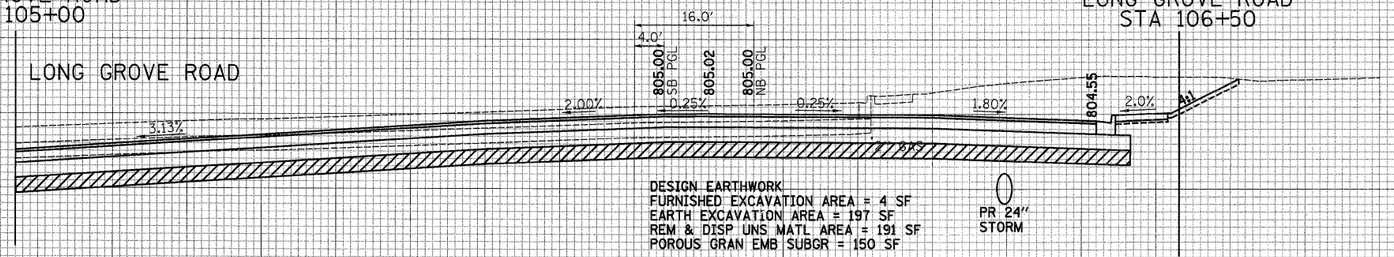
CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

MATCH LINE
LONG GROVE ROAD
STA 105+00

LONG GROVE ROAD



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 4 SF
EARTH EXCAVATION AREA = 197 SF
REM & DISP UNS MATL AREA = 191 SF
POROUS GRAN EMB SUBGR = 150 SF

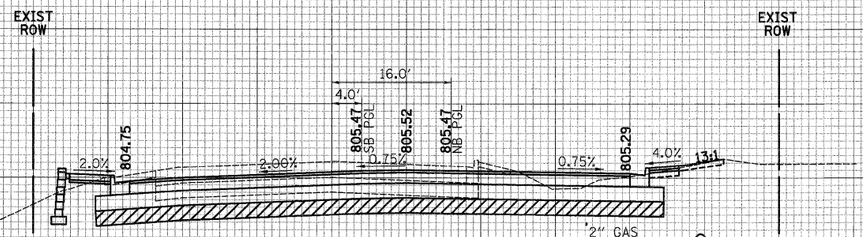
PR 24"
STORM

MATCH LINE
LONG GROVE ROAD
STA 106+50

29 + 00

EXIST
ROW

MATCH LINE
LONG GROVE ROAD
STA 105+00

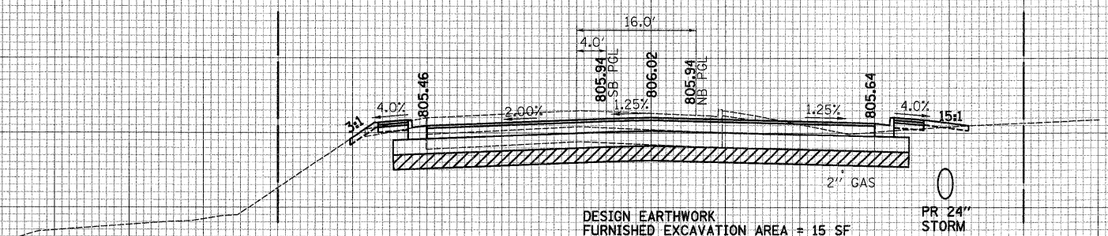


DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 18 SF
EARTH EXCAVATION AREA = 54 SF
REM & DISP UNS MATL AREA = 114 SF
POROUS GRAN EMB SUBGR = 76 SF

PR 24"
STORM

EXIST
ROW

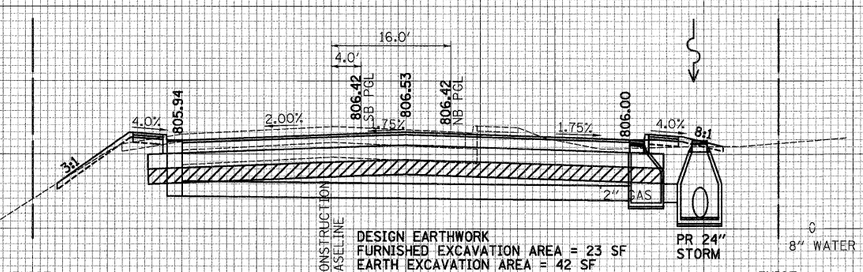
28 + 50



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 15 SF
EARTH EXCAVATION AREA = 44 SF
REM & DISP UNS MATL AREA = 101 SF
POROUS GRAN EMB SUBGR = 69 SF

PR 24"
STORM

28 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 23 SF
EARTH EXCAVATION AREA = 42 SF
REM & DISP UNS MATL AREA = 107 SF
POROUS GRAN EMB SUBGR = 69 SF

PR 24"
STORM

8" WATER MAIN

EXIST
ROW

CONSTRUCTION BASELINE

EXIST
ROW

27 + 50

SOILS NOTE:

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED AT THE LOCATIONS INDICATED FOR SOILS WHICH TEND TO BE UNSTAABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. IF UNSTABLE SOILD ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

THE LIMITS OF UNSTABLE SOILS AT THE APPROXIMATE LOCATIONS AS FOLLOWS:

STA TO STA	ESTIMATED UNDERCUT BELOW DESIGN SUBGRADE
26+82 TO 29+85	12" FOR FULL WIDTH
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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		DRAWN - JRR	REVISED -
		CHECKED - RTM	REVISED -
		DATE - 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 5 OF 36 SHEETS | STA. 27+50 TO STA. 29+00

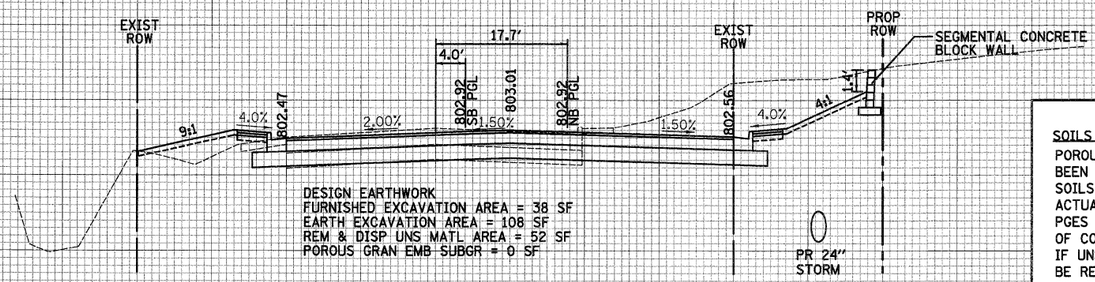
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	148

CONTRACT NO. 63649

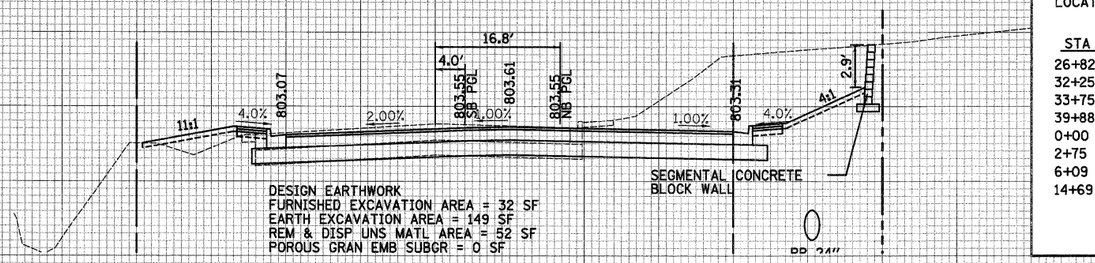
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED — DATE



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 38 SF
EARTH EXCAVATION AREA = 108 SF
REM & DISP UNS MATL AREA = 52 SF
POROUS GRAN EMB SUBGR = 0 SF



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 32 SF
EARTH EXCAVATION AREA = 149 SF
REM & DISP UNS MATL AREA = 52 SF
POROUS GRAN EMB SUBGR = 0 SF

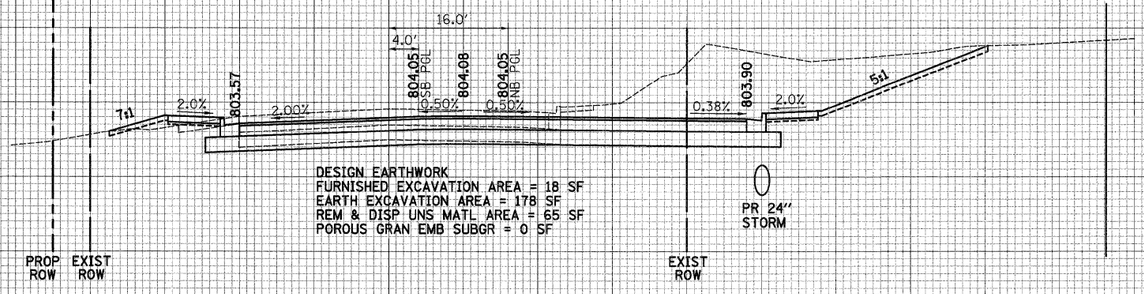
SOILS NOTE:

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED AT THE LOCATIONS INDICATED FOR SOILS WHICH TEND TO BE UNSTAABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. IF UNSTABLE SOILD ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

THE LIMITS OF UNSTABLE SOILS AT THE APPROXIMATE LOCATIONS AS FOLLOWS:

STA TO STA	ESTIMATED UNDERCUT BELOW DESIGN SUBGRADE
26+82 TO 29+85	12" FOR FULL WIDTH
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

MATCH LINE
LONG GROVE ROAD
STA 107+00

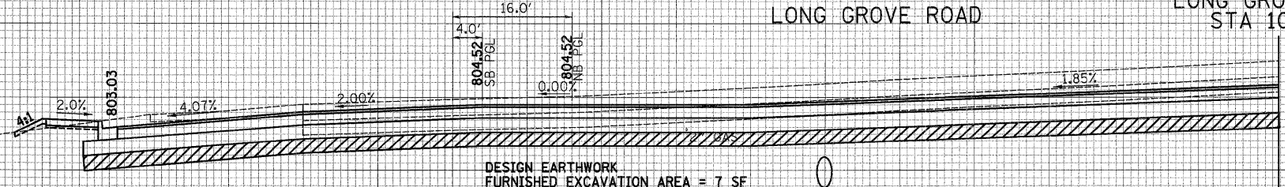


DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 18 SF
EARTH EXCAVATION AREA = 178 SF
REM & DISP UNS MATL AREA = 65 SF
POROUS GRAN EMB SUBGR = 0 SF

MATCH LINE
LONG GROVE ROAD
STA 105+00

LONG GROVE ROAD

MATCH LINE
LONG GROVE ROAD
STA 107+00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 7 SF
EARTH EXCAVATION AREA = 170 SF
REM & DISP UNS MATL AREA = 175 SF
POROUS GRAN EMB SUBGR = 160 SF

DESIGNED - JRR	REVISED -	**STATE OF ILLINOIS**	SCALES	**CROSS SECTIONS – QUENTIN ROAD**	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN - JRR	REVISED -	**DEPARTMENT OF TRANSPORTATION**	VERT. 0 5 10		364	02-00051-08-WR	LAKE	188	149
CHECKED - RTM	REVISED -		HORIZ. 0 10 20	SHEET NO. 6 OF 36 SHEETS STA. 29+50 TO STA. 31+00			CONTRACT NO. 63649		
DATE - 10/24/2011	REVISED -				FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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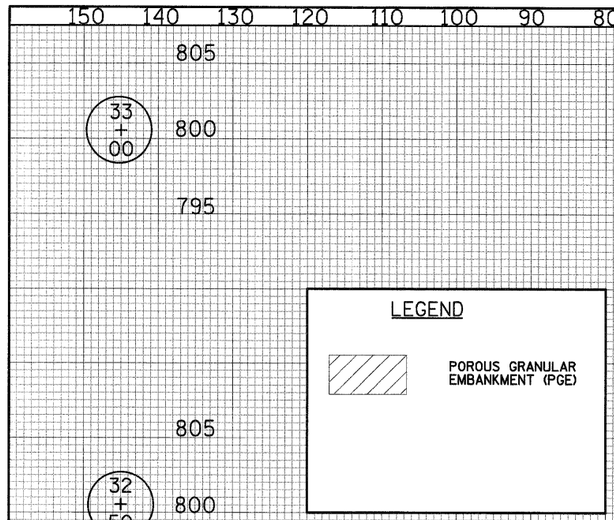
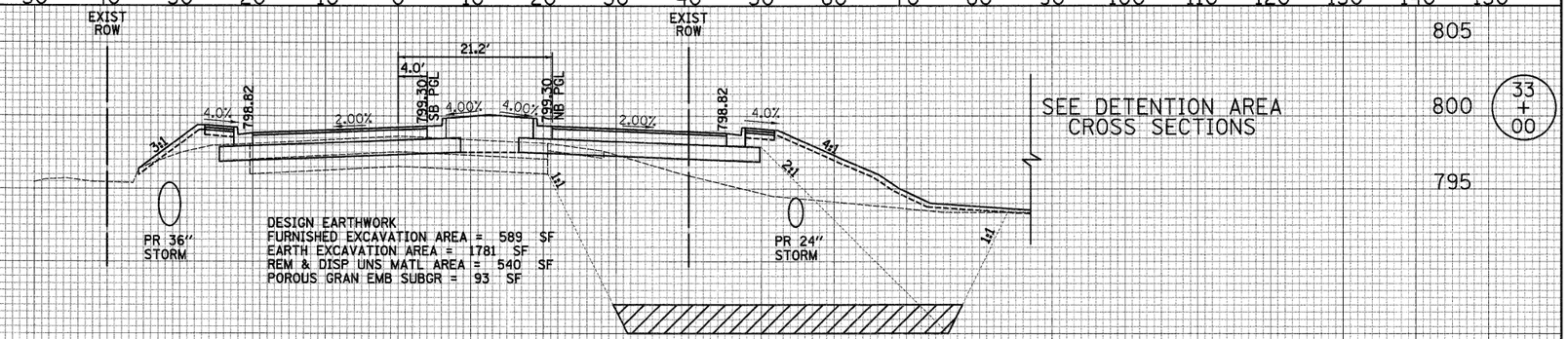
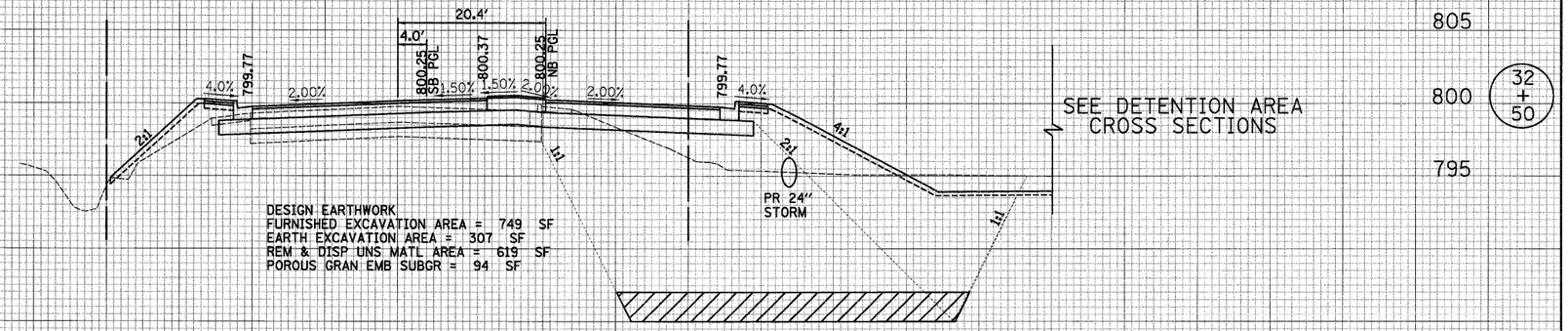
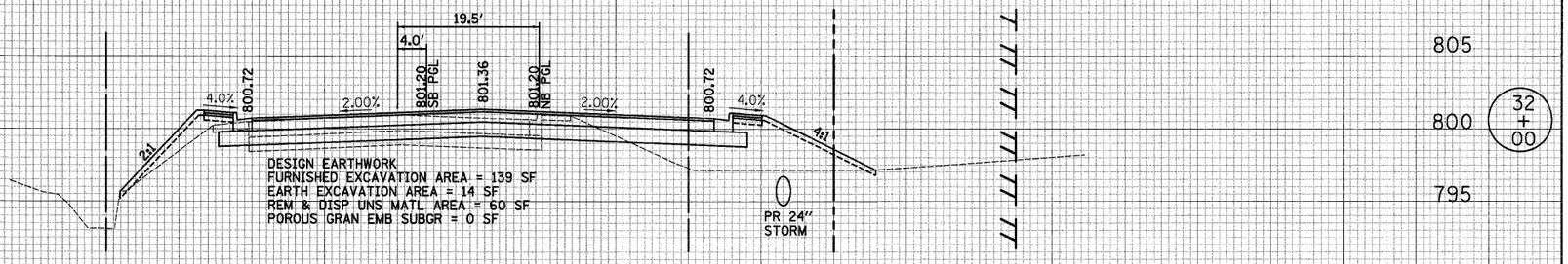
FINAL SURVEY — SURVEYED — PLOTTED — TEMPLATE — NOTE BOOK — AREAS — NO. — AREAS CHECKED — BY — DATE

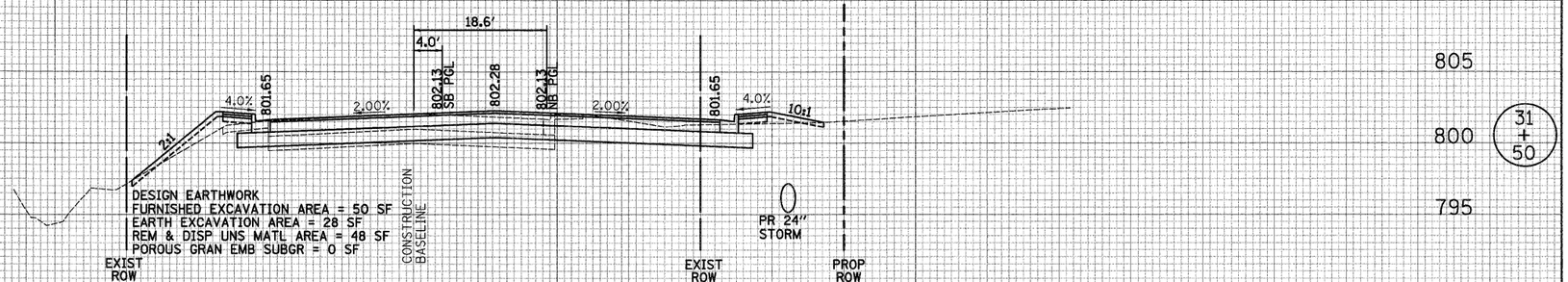
ORIGINAL SURVEY — SURVEYED — PLOTTED — TEMPLATE — NOTE BOOK — AREAS — NO. — AREAS CHECKED — BY — DATE











SOILS NOTE:

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39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY	ORIGINAL SURVEY
NOTE BOOK	SURVEYED
NO.	PLOTTED
	TEMPLATE
	AREAS
	AREAS CHECKED
	BY
	DATE

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DRAWN - JRR	REVISED -
CHECKED - RTM	REVISED -
DATE - 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ.0 10 20

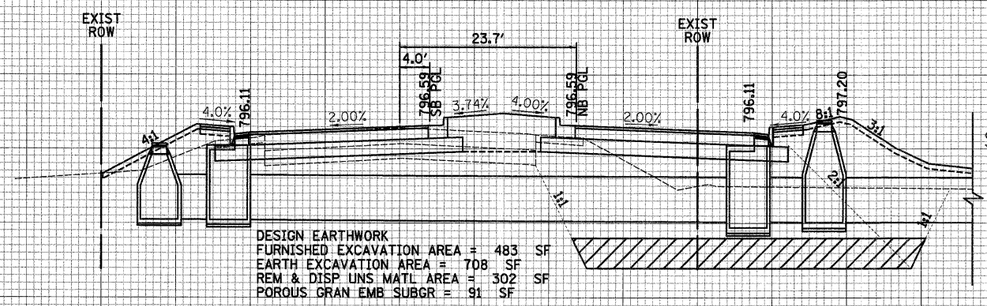
CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 7 OF 36 SHEETS | STA. 31+50 | TO STA. 33+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	150

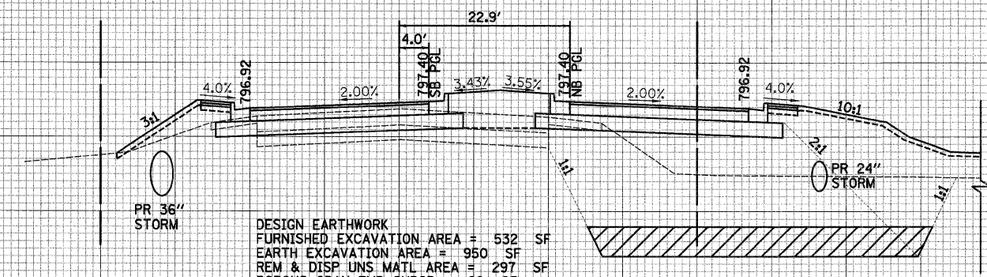
CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



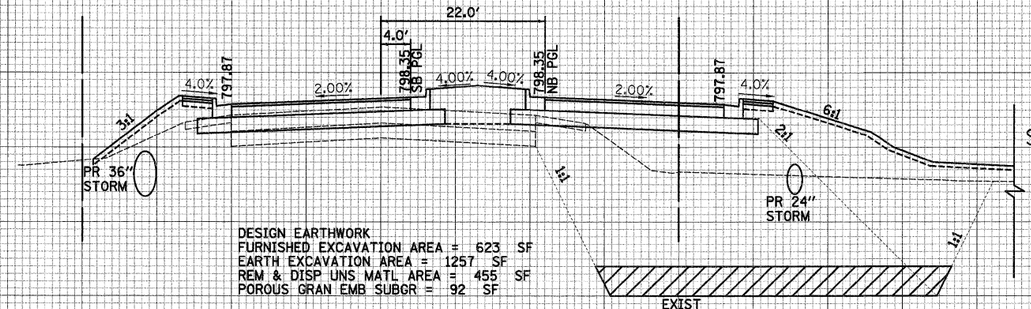
DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 483 SF
EARTH EXCAVATION AREA = 708 SF
REM & DISP UNS MATL AREA = 302 SF
POROUS GRAN EMB SUBGR = 91 SF

SEE DETENTION AREA CROSS SECTIONS



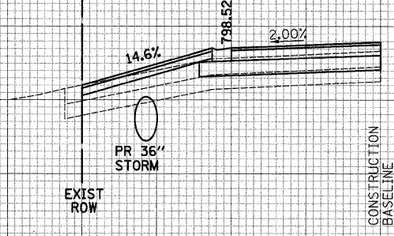
DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 532 SF
EARTH EXCAVATION AREA = 950 SF
REM & DISP UNS MATL AREA = 297 SF
POROUS GRAN EMB SUBGR = 89 SF

SEE DETENTION AREA CROSS SECTIONS



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 623 SF
EARTH EXCAVATION AREA = 1257 SF
REM & DISP UNS MATL AREA = 455 SF
POROUS GRAN EMB SUBGR = 92 SF

SEE DETENTION AREA CROSS SECTIONS



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39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
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ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
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DRAWN	JRR	REVISED	-
CHECKED	RTM	REVISED	-
DATE	10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

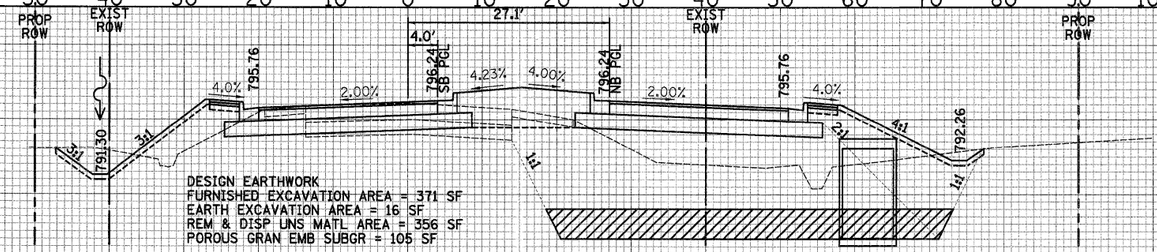
CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 8 OF 36 SHEETS | STA. 33+14 | TO STA. 34+50

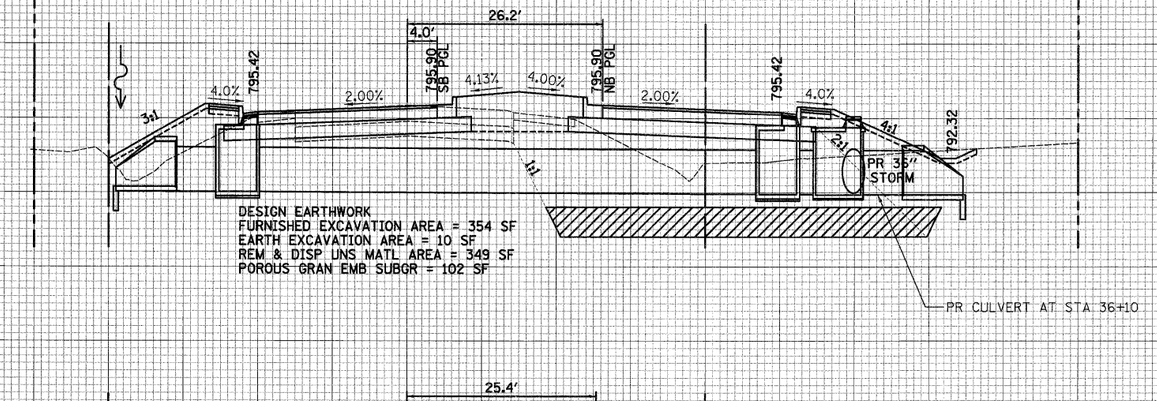
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	151

CONTRACT NO. 63649

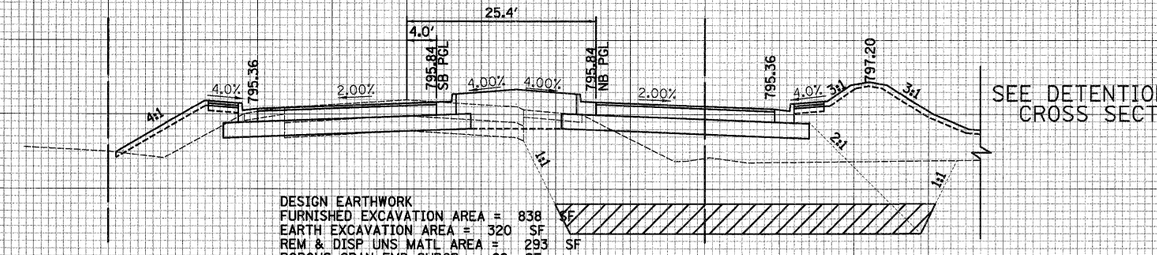
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 371 SF
EARTH EXCAVATION AREA = 16 SF
REM & DISP UNS MATL AREA = 356 SF
POROUS GRAN EMB SUBGR = 105 SF

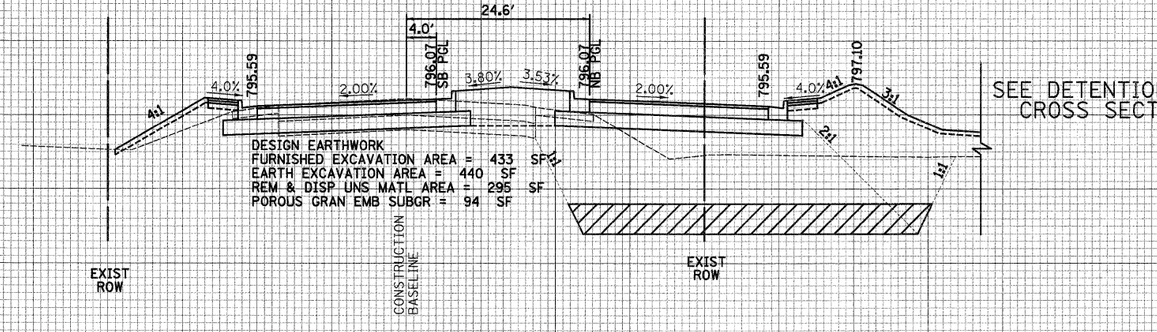


DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 354 SF
EARTH EXCAVATION AREA = 10 SF
REM & DISP UNS MATL AREA = 349 SF
POROUS GRAN EMB SUBGR = 102 SF



SEE DETENTION AREA CROSS SECTIONS

DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 838 SF
EARTH EXCAVATION AREA = 320 SF
REM & DISP UNS MATL AREA = 293 SF
POROUS GRAN EMB SUBGR = 99 SF



SEE DETENTION AREA CROSS SECTIONS

DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 433 SF
EARTH EXCAVATION AREA = 440 SF
REM & DISP UNS MATL AREA = 295 SF
POROUS GRAN EMB SUBGR = 94 SF

SOILS NOTE:

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2+75 TO 4+00	EXCAVATE TO ELEV 787
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14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY: SURVEYED, PLOTTED, NOTE BOOK, NO., DATE, BY, TEMPLATE, AREAS, AREAS CHECKED

ORIGINAL SURVEY: SURVEYED, PLOTTED, NOTE BOOK, NO., DATE, BY, TEMPLATE, AREAS, AREAS CHECKED

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DRAWN - JRR	REVISED -	
CHECKED - RTM	REVISED -	
DATE - 10/24/2011	REVISED -	

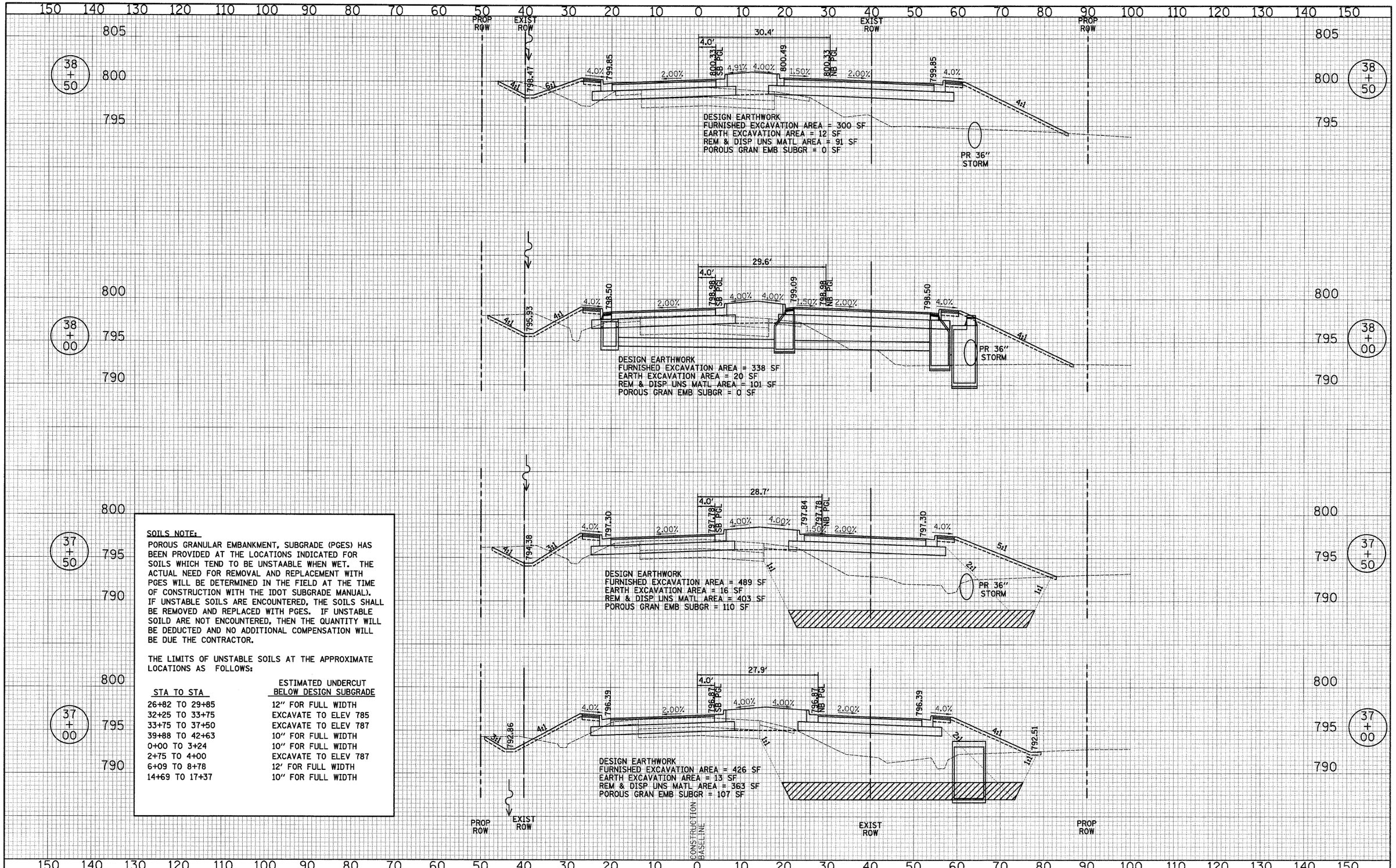
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 9 OF 36 SHEETS | STA. 35+00 | TO STA. 36+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	152
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

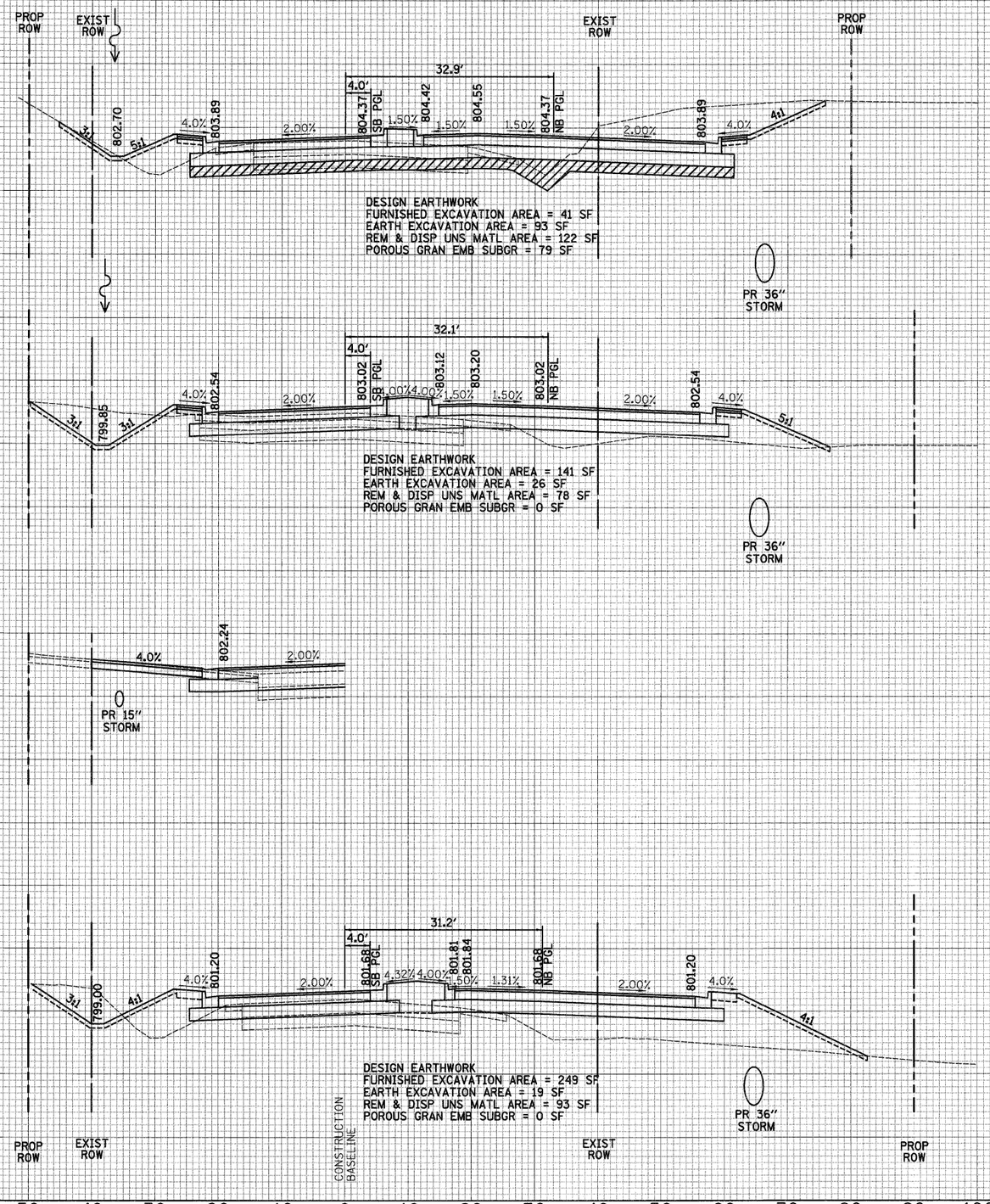
CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 10 OF 36 SHEETS | STA. 37+00 TO STA. 38+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	153

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DATE - 10/24/2011	REVISED -	

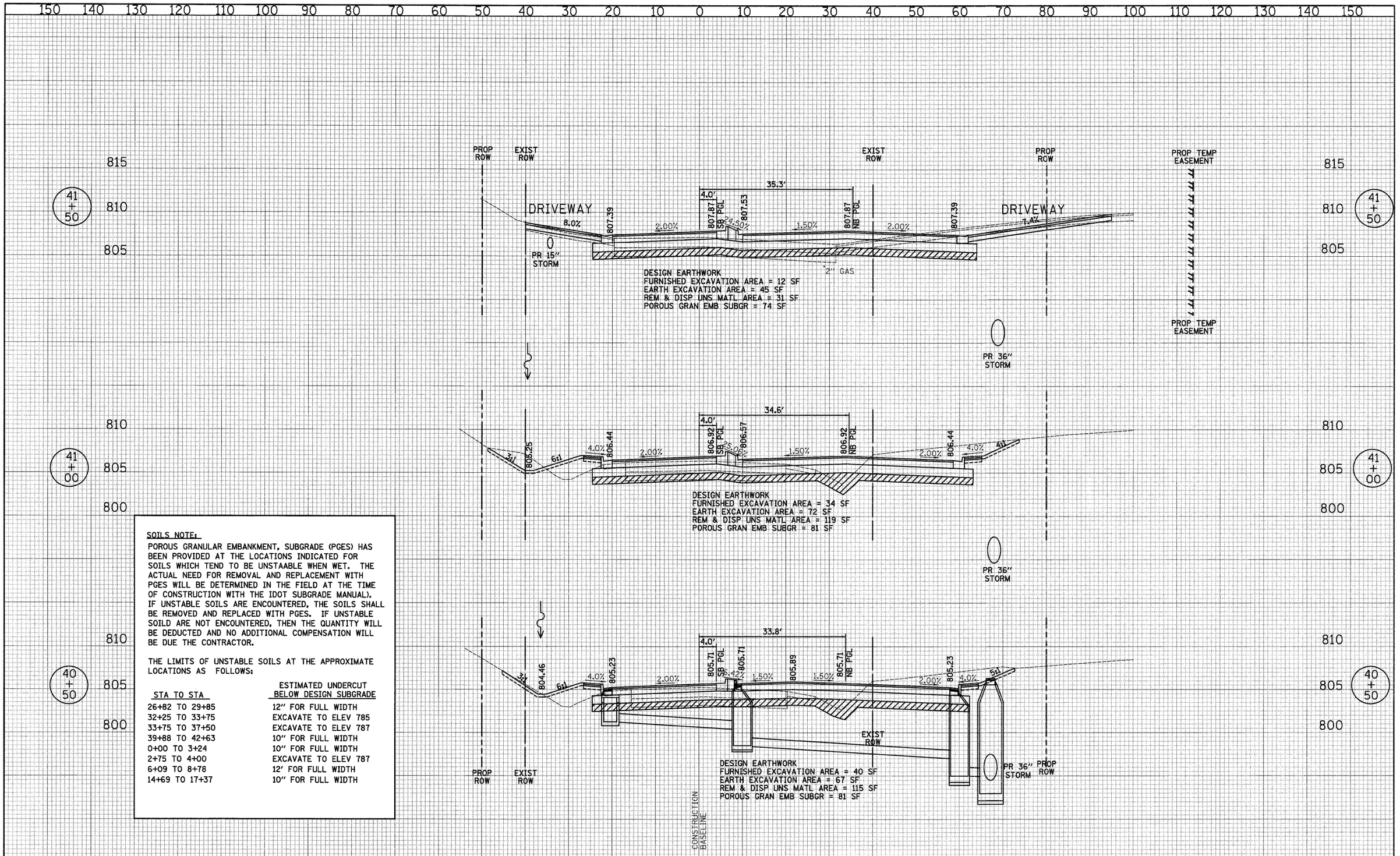
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 11 OF 36 SHEETS | STA. 39+00 TO STA. 40+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	154
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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FINAL SURVEY — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED — NOTE BOOK — NO. — BY — DATE

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HORIZ. 0 10 20

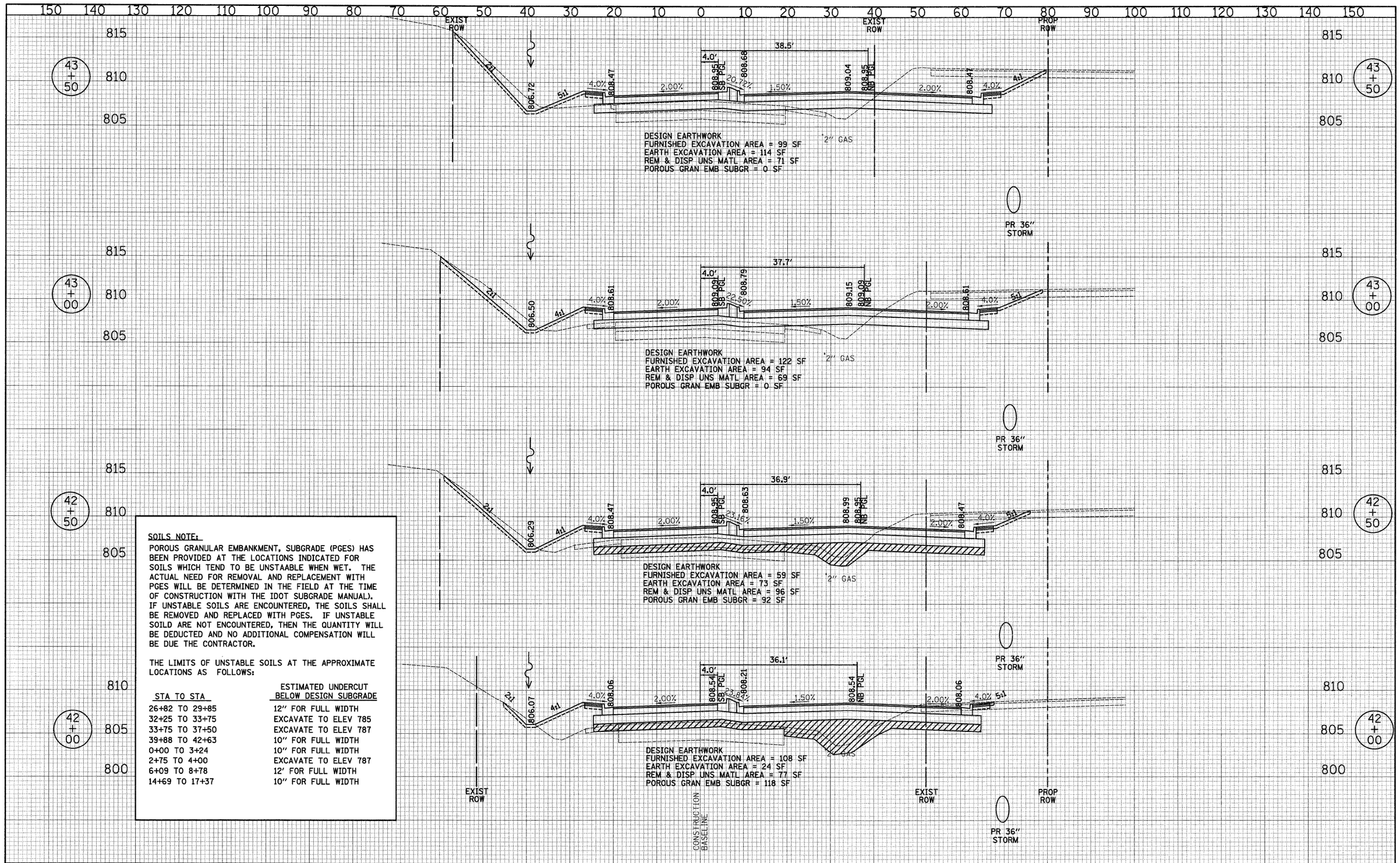
CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 12 OF 36 SHEETS | STA. 40+50 | TO STA. 41+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	155

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



SOILS NOTE:

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED AT THE LOCATIONS INDICATED FOR SOILS WHICH TEND TO BE UNSTAABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. IF UNSTABLE SOILD ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

THE LIMITS OF UNSTABLE SOILS AT THE APPROXIMATE LOCATIONS AS FOLLOWS:

STA TO STA	ESTIMATED UNDERCUT BELOW DESIGN SUBGRADE
26+82 TO 29+85	12" FOR FULL WIDTH
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	- JRR	REVISED -
DRAWN	- JRR	REVISED -
CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 13 OF 36 SHEETS | STA. 42+00 | TO STA. 43+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	156

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

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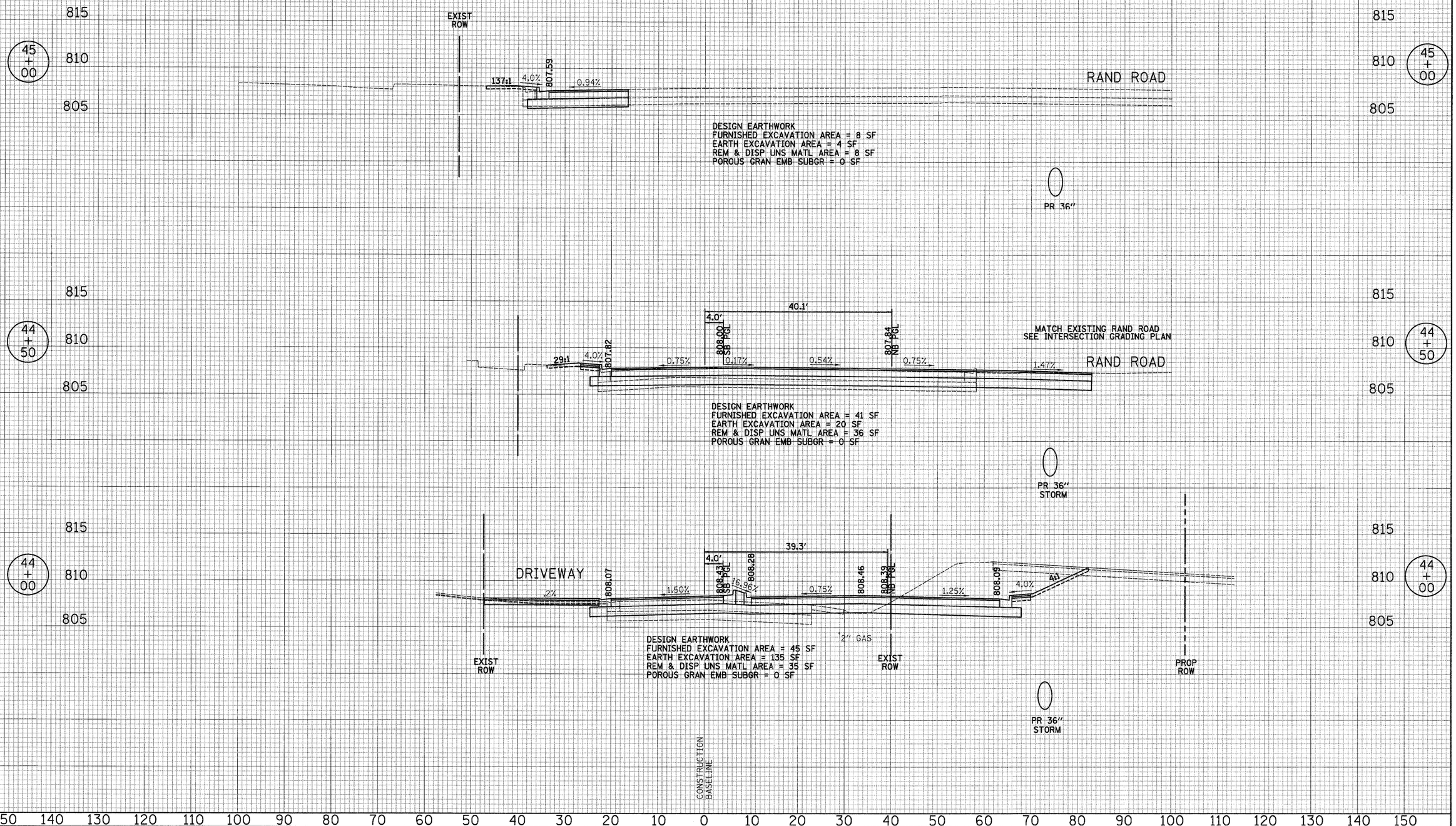

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FINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / NO. — DATE / BY / TEMPLATE / AREAS / AREAS CHECKED

ORIGINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / NO. — DATE / BY / TEMPLATE / AREAS / AREAS CHECKED

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DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 14 OF 36 SHEETS | STA. 44+00 | TO STA. 45+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	157

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SOILS NOTE:

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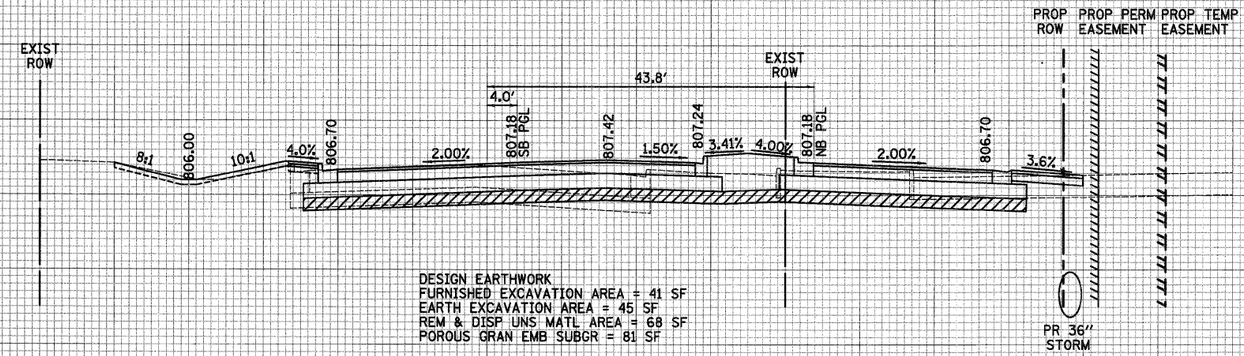
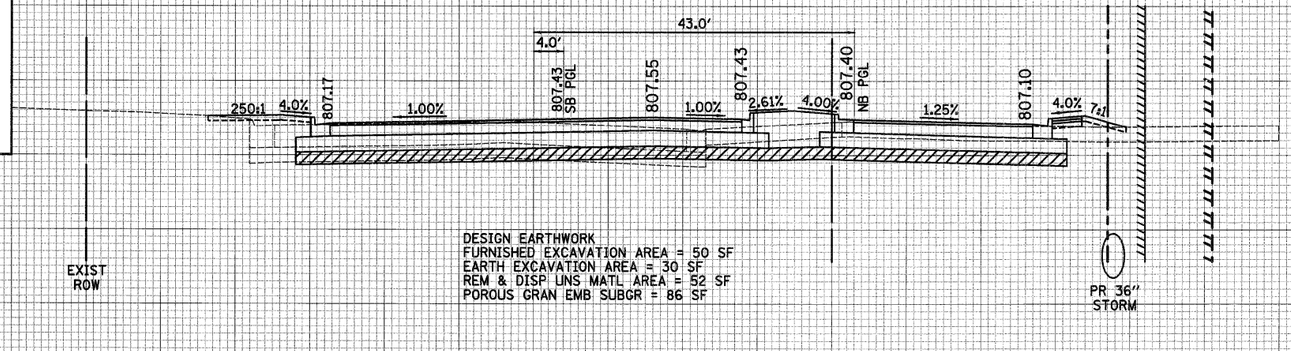
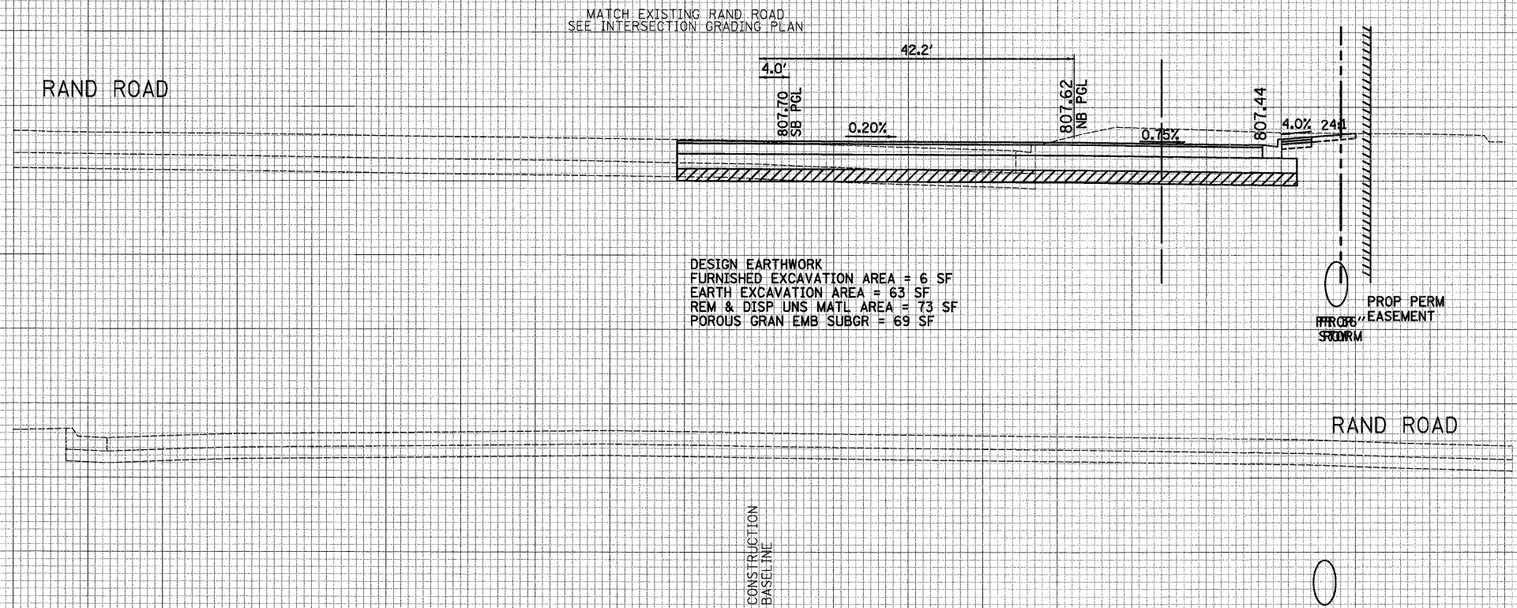
STA TO STA	ESTIMATED UNDERCUT BELOW DESIGN SUBGRADE
26+82 TO 29+85	12" FOR FULL WIDTH
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH







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		DRAWN - JRR	REVISED -
		CHECKED - RTM	REVISED -
		DATE - 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 15 OF 36 SHEETS | STA. 0+00 | TO STA. 1+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	158
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

SOILS NOTE:

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26+82 TO 29+85	12" FOR FULL WIDTH
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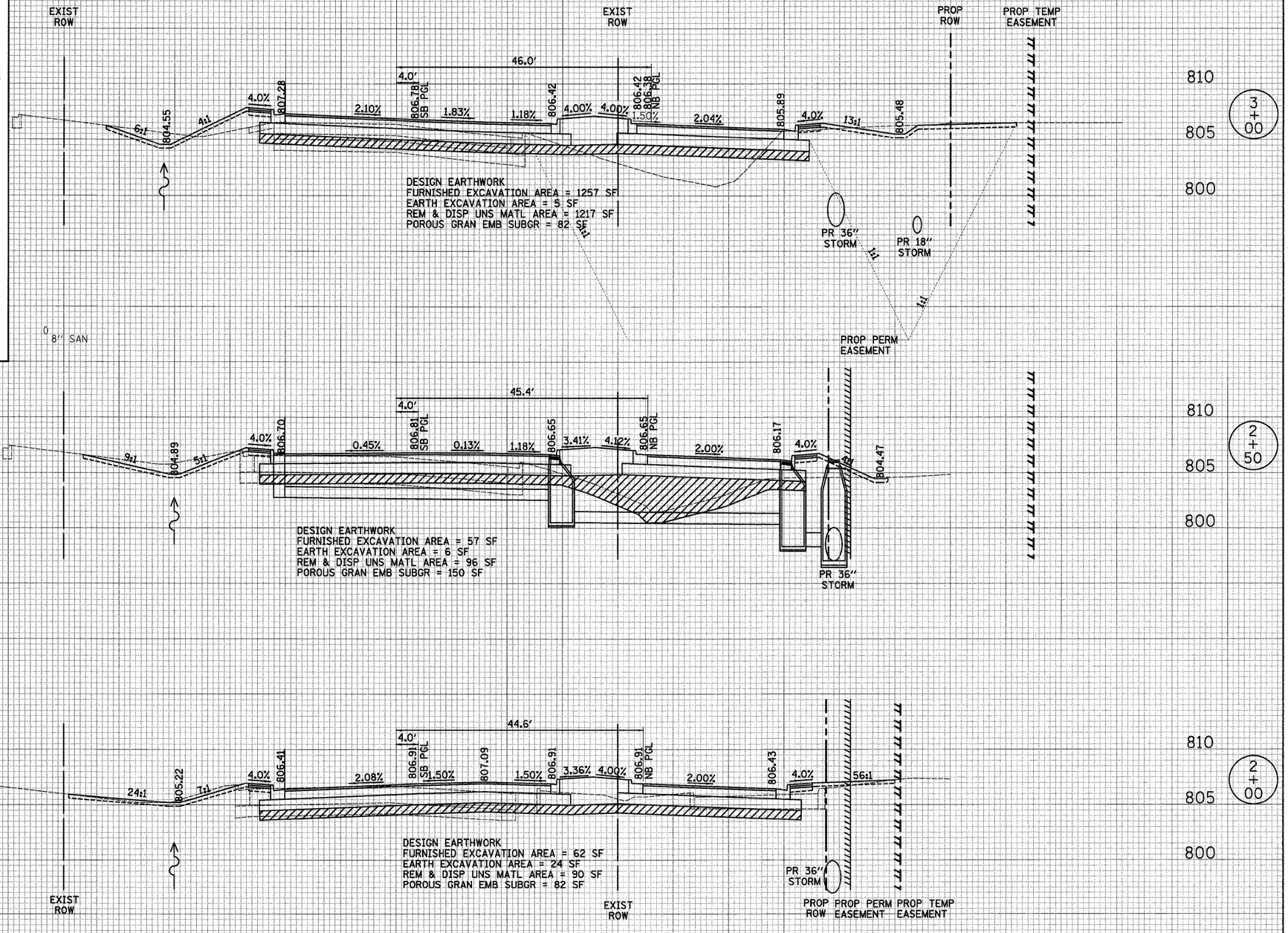
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

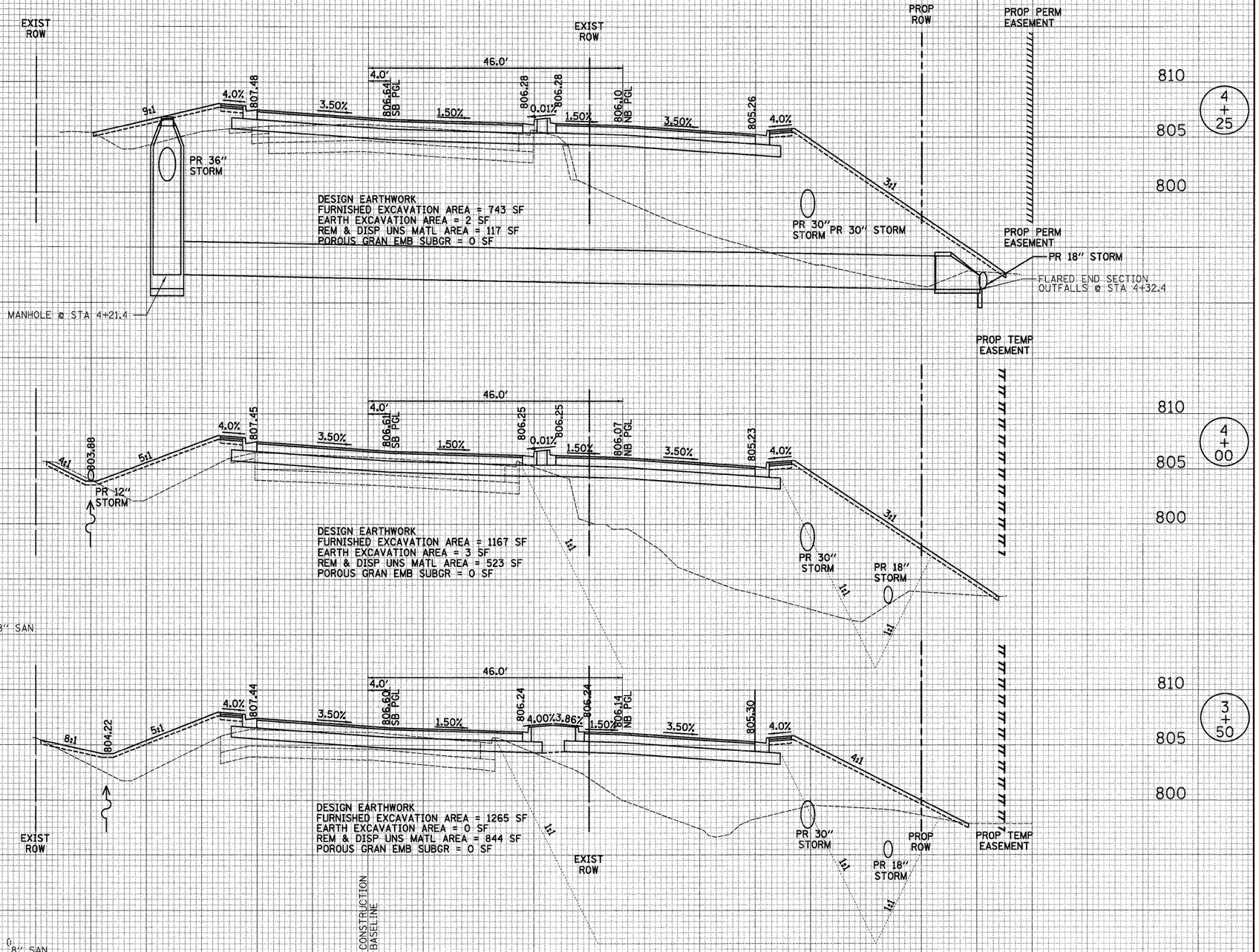
CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 16 OF 36 SHEETS | STA. 2+00 | TO STA. 3+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	159
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE



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39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DATE - 10/24/2011	REVISED -	

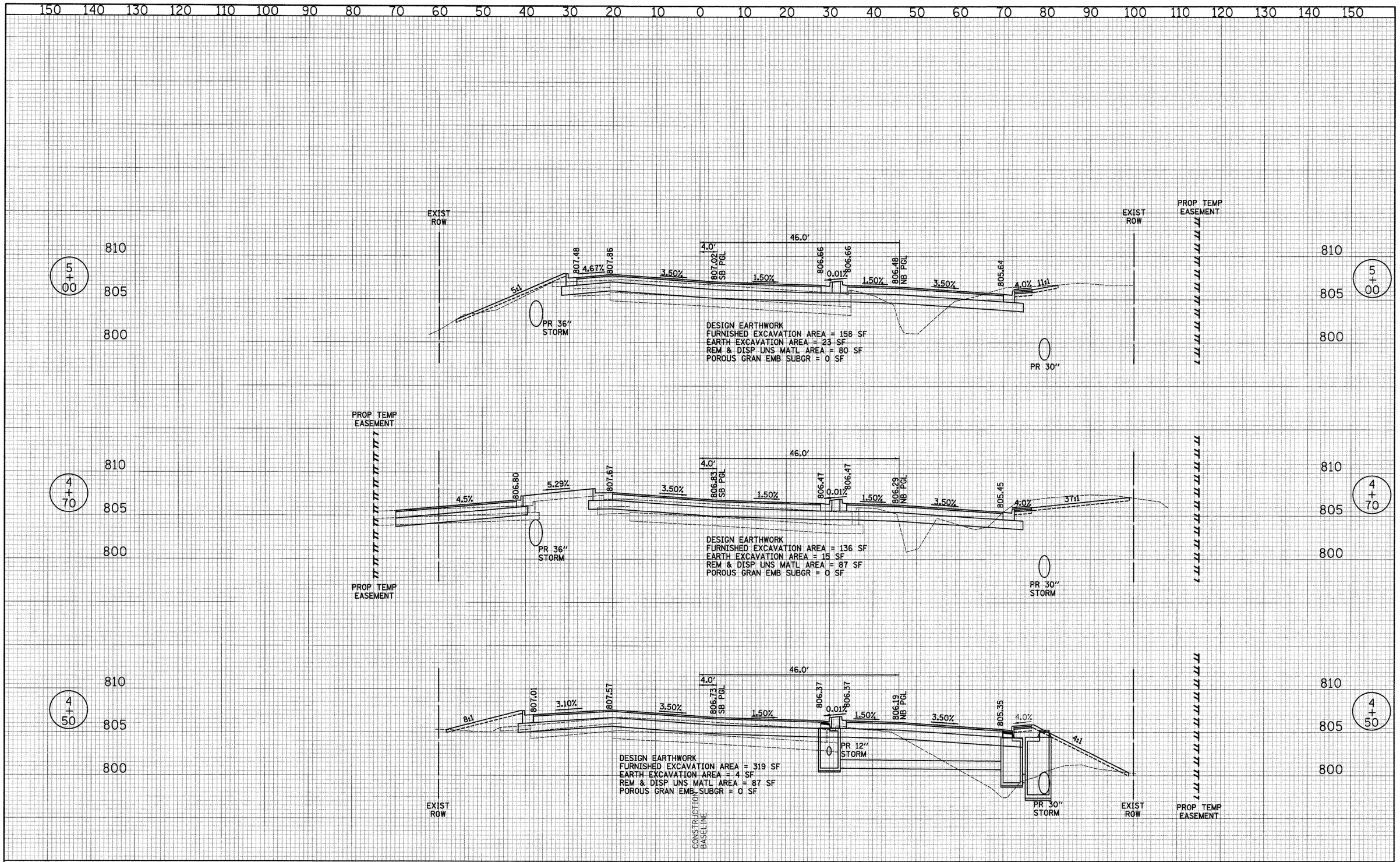
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 17 OF 36 SHEETS | STA. 3+50 | TO STA. 4+25

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	160
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / NO. — DATE / BY / TEMPLATE / AREAS / AREAS CHECKED

ORIGINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / NO. — DATE / BY / TEMPLATE / AREAS / AREAS CHECKED

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DATE - 10/24/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 18 OF 36 SHEETS | STA. 0+00 | TO STA. 01+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	161

CONTRACT NO. 63649

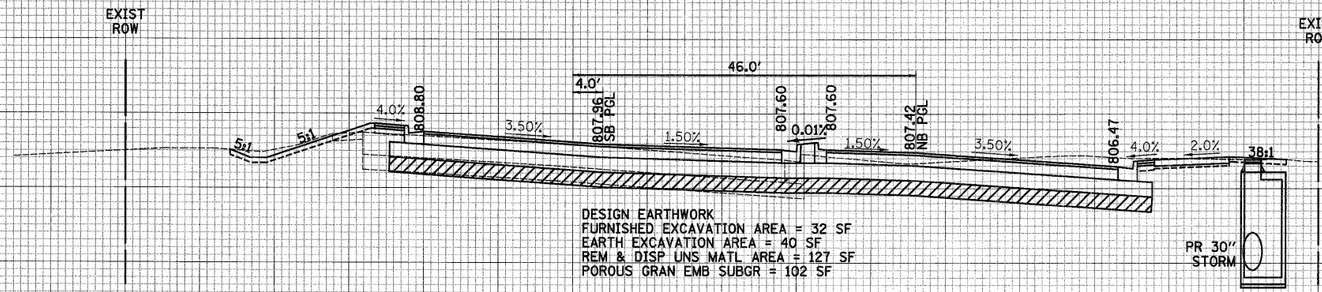
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

6+50

815
810
805

EXIST ROW



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 32 SF
EARTH EXCAVATION AREA = 40 SF
REM & DISP UNS MATL AREA = 127 SF
POROUS GRAN EMB SUBGR = 102 SF

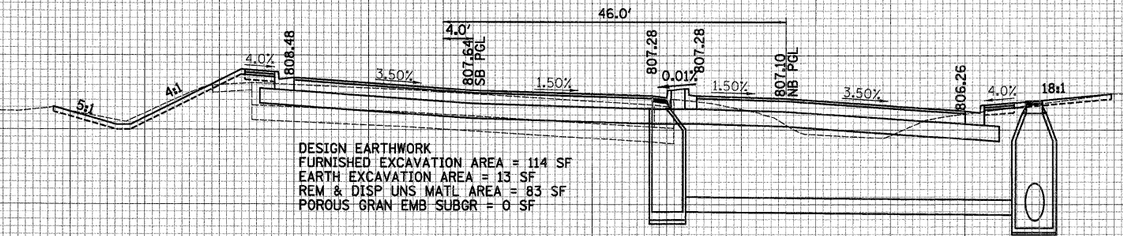
EXIST ROW

PR 30" STORM

PROP TEMP EASEMENT

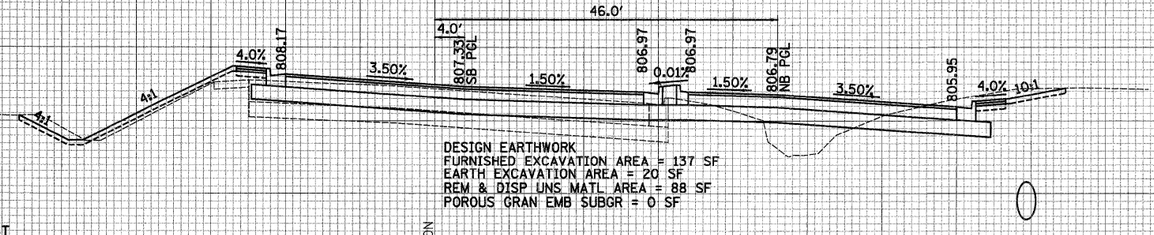
6+00

810
805
800



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 114 SF
EARTH EXCAVATION AREA = 13 SF
REM & DISP UNS MATL AREA = 83 SF
POROUS GRAN EMB SUBGR = 0 SF

5+50



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 137 SF
EARTH EXCAVATION AREA = 20 SF
REM & DISP UNS MATL AREA = 88 SF
POROUS GRAN EMB SUBGR = 0 SF

EXIST ROW

CONSTRUCTION BASELINE

EXIST ROW

PROP TEMP EASEMENT

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0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
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14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY	ORIGINAL SURVEY	BY	DATE
SURVEYED	SURVEYED		
PLOTTED	PLOTTED		
TEMPLATE	TEMPLATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 19 OF 36 SHEETS | STA. 5+50 | TO STA. 6+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	162

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SOILS NOTE:

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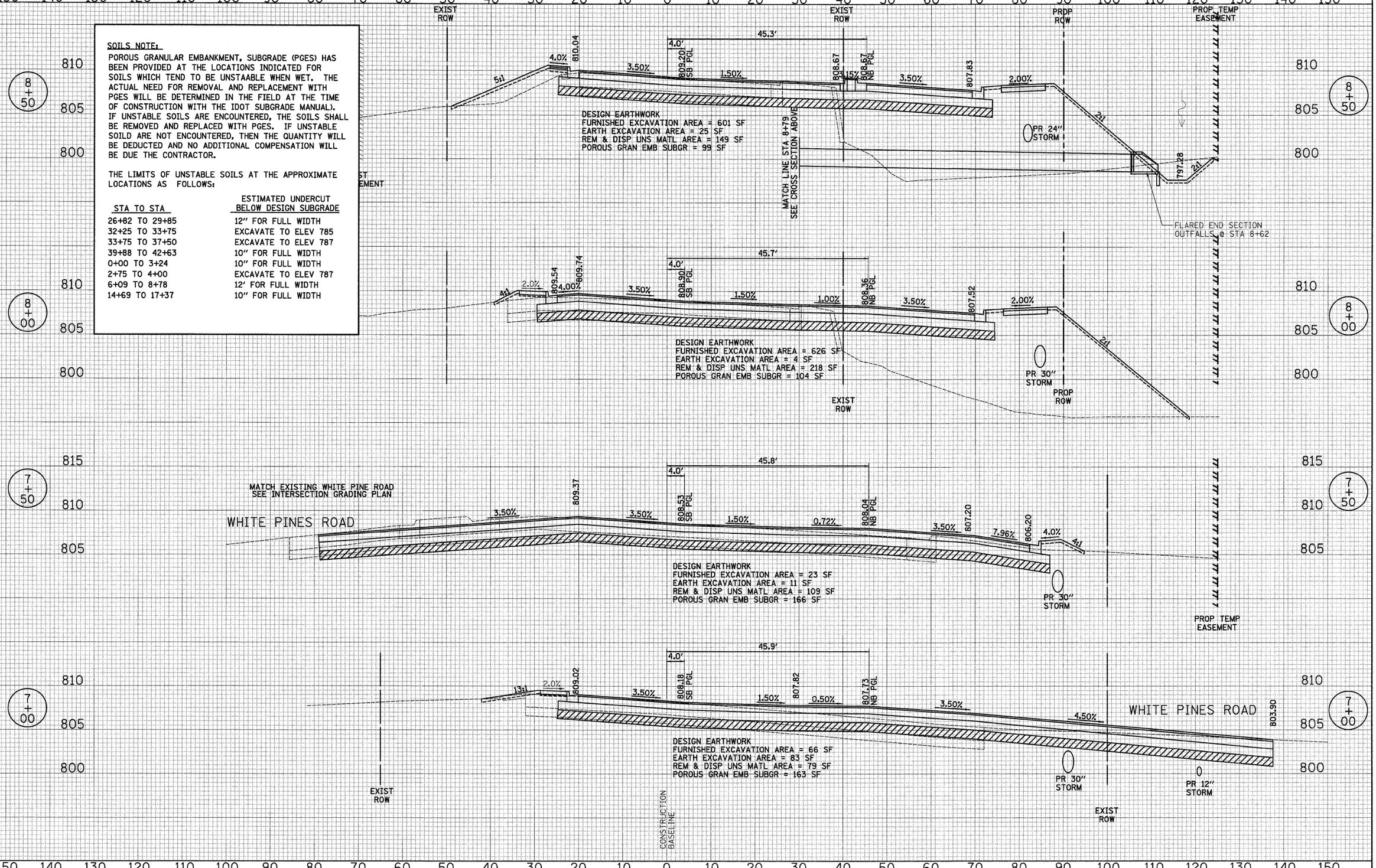
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH



ORIGINAL SURVEY	DATE
NOTE BOOK	BY
NO.	AREAS CHECKED

FINAL SURVEY	DATE
NOTE BOOK	BY
NO.	AREAS CHECKED

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DATE	- 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

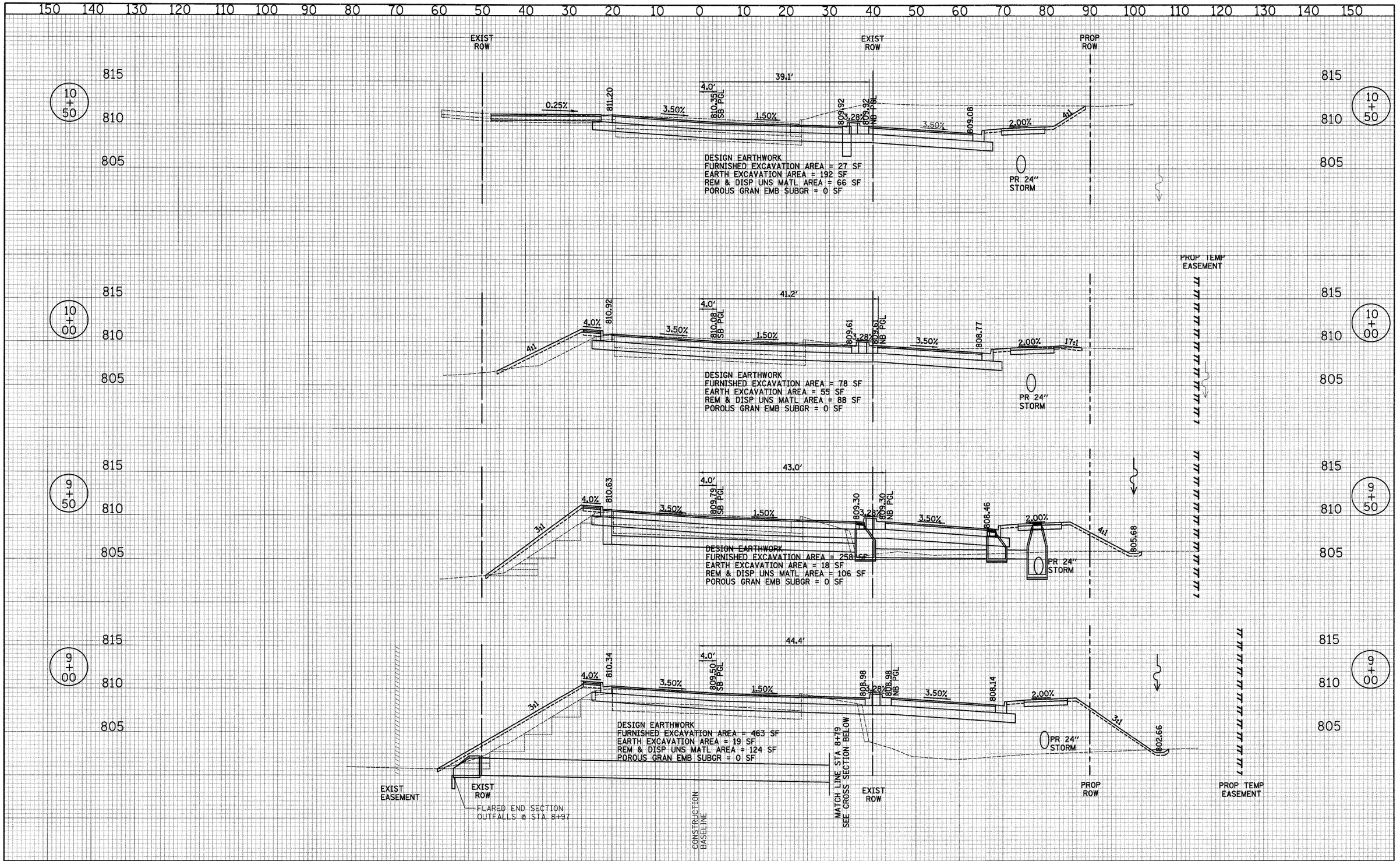
CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 20 OF 36 SHEETS | STA. 7+00 | TO STA. 8+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	163

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 21 OF 36 SHEETS | STA. 9+00 | TO STA. 10+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	164

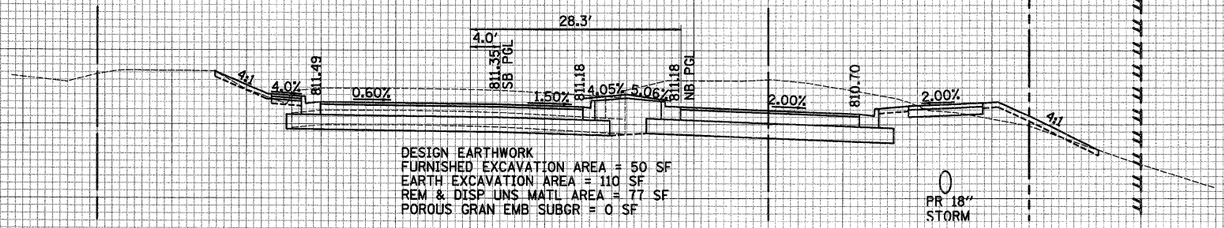
CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EXIST ROW | EXIST ROW | PROP ROW | PROP PERM EASEMENT

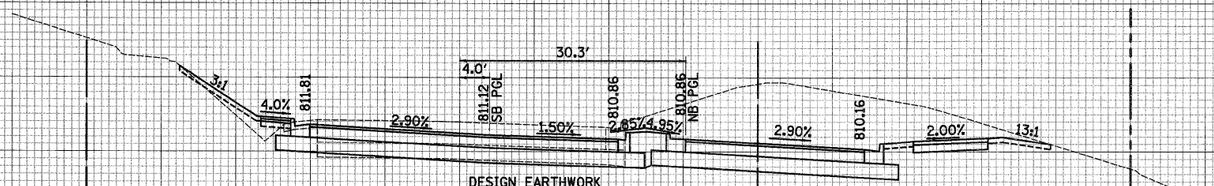
12 + 50



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 50 SF
EARTH EXCAVATION AREA = 110 SF
REM & DISP UNS MATL AREA = 77 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 18" STORM

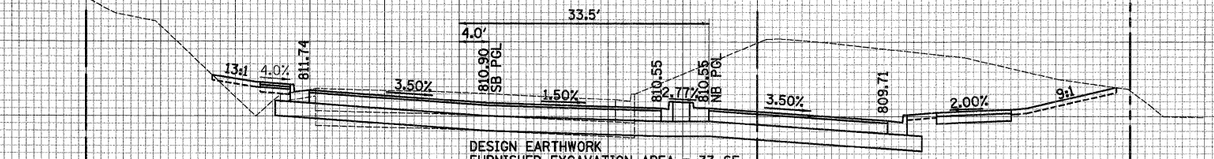
12 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 34 SF
EARTH EXCAVATION AREA = 185 SF
REM & DISP UNS MATL AREA = 78 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 18"

11 + 50

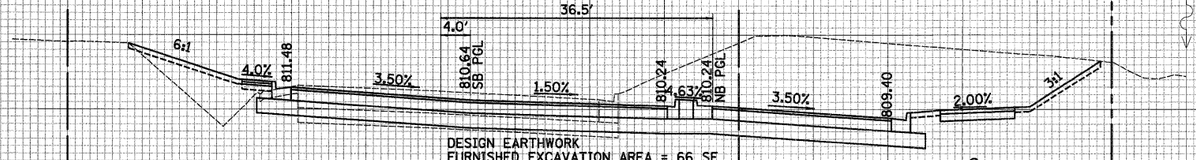


DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 33 SF
EARTH EXCAVATION AREA = 244 SF
REM & DISP UNS MATL AREA = 79 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 18" STORM

PROP PERM EASEMENT

11 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 66 SF
EARTH EXCAVATION AREA = 273 SF
REM & DISP UNS MATL AREA = 90 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 24" STORM

EXIST ROW | CONSTRUCTION BASELINE | EXIST ROW | PROP ROW

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

DATE	BY	
		SURVEYED
		PLOTTED
		TEMPLATE
		AREAS
		AREAS CHECKED

FINAL SURVEY — NOTE BOOK — NO.

ORIGINAL SURVEY — NOTE BOOK — NO.

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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DESIGNED - JRR	REVISED -
DRAWN - JRR	REVISED -
CHECKED - RTM	REVISED -
DATE - 10/24/2011	REVISED -

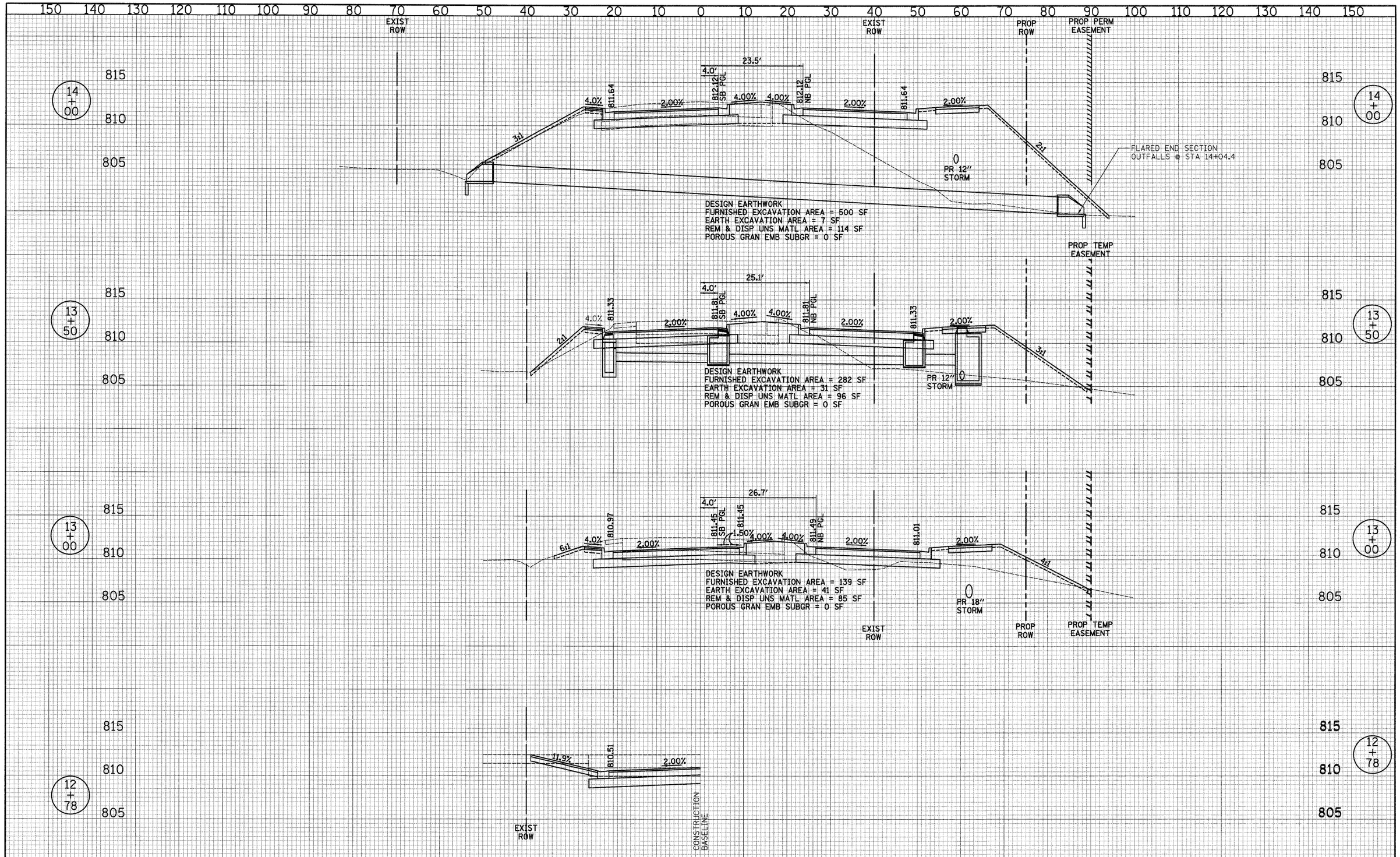
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 22 OF 36 SHEETS | STA. 11+00 | TO STA. 12+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	165
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS	AREAS CHECKED

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS	AREAS CHECKED

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DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 23 OF 36 SHEETS | STA. 12+78 | TO STA. 14+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	166

CONTRACT NO. 63649

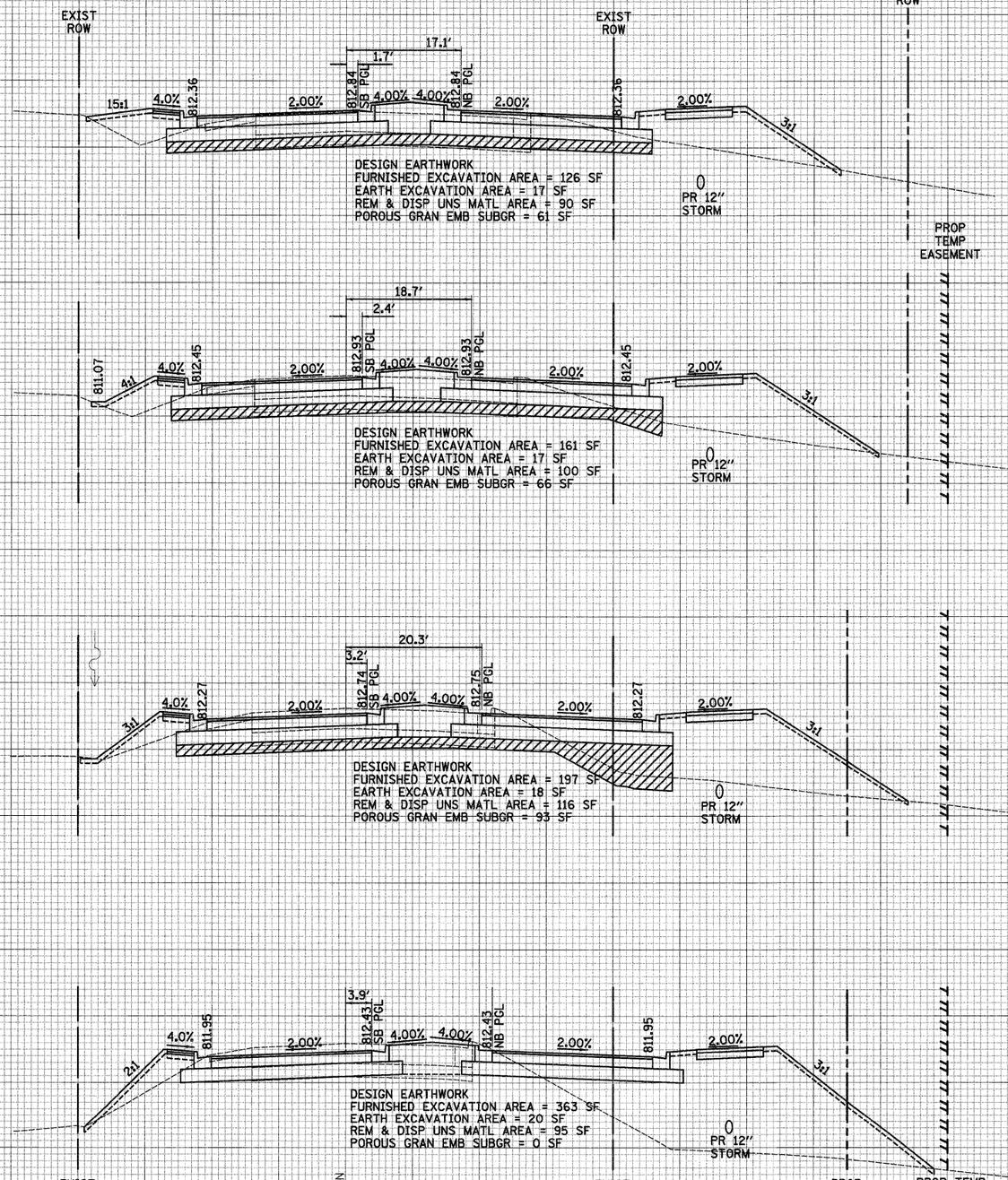
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SOILS NOTE:

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED AT THE LOCATIONS INDICATED FOR SOILS WHICH TEND TO BE UNSTAABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. IF UNSTABLE SOILD ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

THE LIMITS OF UNSTABLE SOILS AT THE APPROXIMATE LOCATIONS AS FOLLOWS:

STA TO STA	ESTIMATED UNDERCUT BELOW DESIGN SUBGRADE
26+82 TO 29+85	12" FOR FULL WIDTH
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH



FINAL SURVEY	BY	DATE
NOTE BOOK		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
SURVEYED		
PLOTTED		
ILLIN.A.I.E.		
AREAS		
AREAS CHECKED		
NO.		

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DATE - 10/24/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

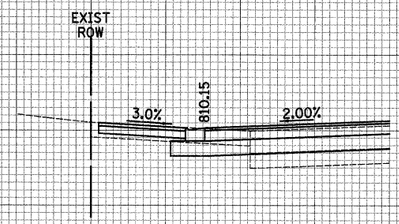
CROSS SECTIONS – QUENTIN ROAD

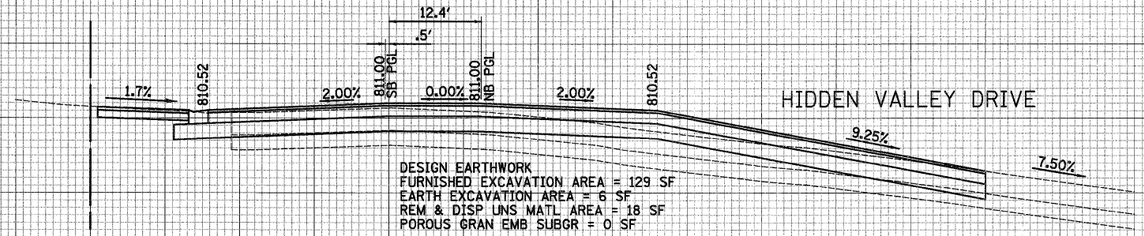
SHEET NO. 24 OF 36 SHEETS | STA. 14+00 TO STA. 16+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	167

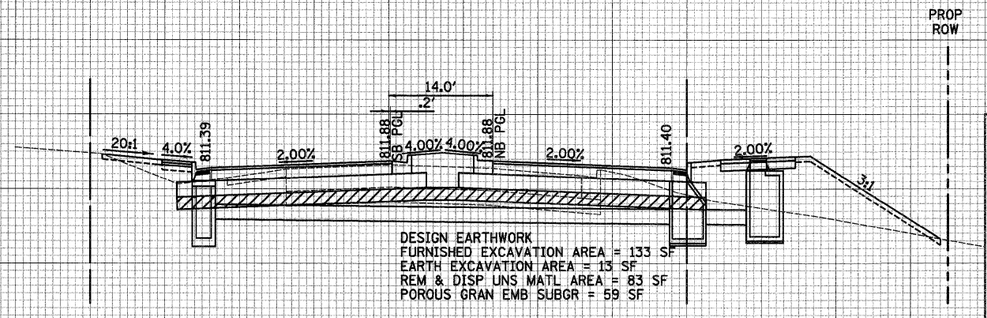
CONTRACT NO. 63649

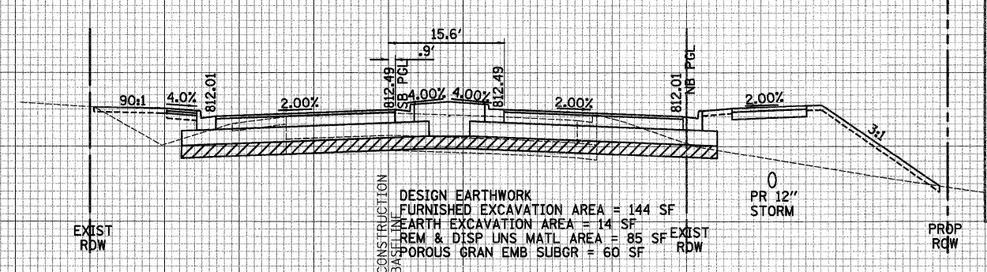
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT





HIDDEN VALLEY DRIVE





SOILS NOTE:

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED AT THE LOCATIONS INDICATED FOR SOILS WHICH TEND TO BE UNSTAABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. IF UNSTABLE SOILD ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

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26+82 TO 29+85	12" FOR FULL WIDTH
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787
39+88 TO 42+63	10" FOR FULL WIDTH
0+00 TO 3+24	10" FOR FULL WIDTH
2+75 TO 4+00	EXCAVATE TO ELEV 787
6+09 TO 8+78	12' FOR FULL WIDTH
14+69 TO 17+37	10" FOR FULL WIDTH

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DRAWN	JRR	REVISED -
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DATE	10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

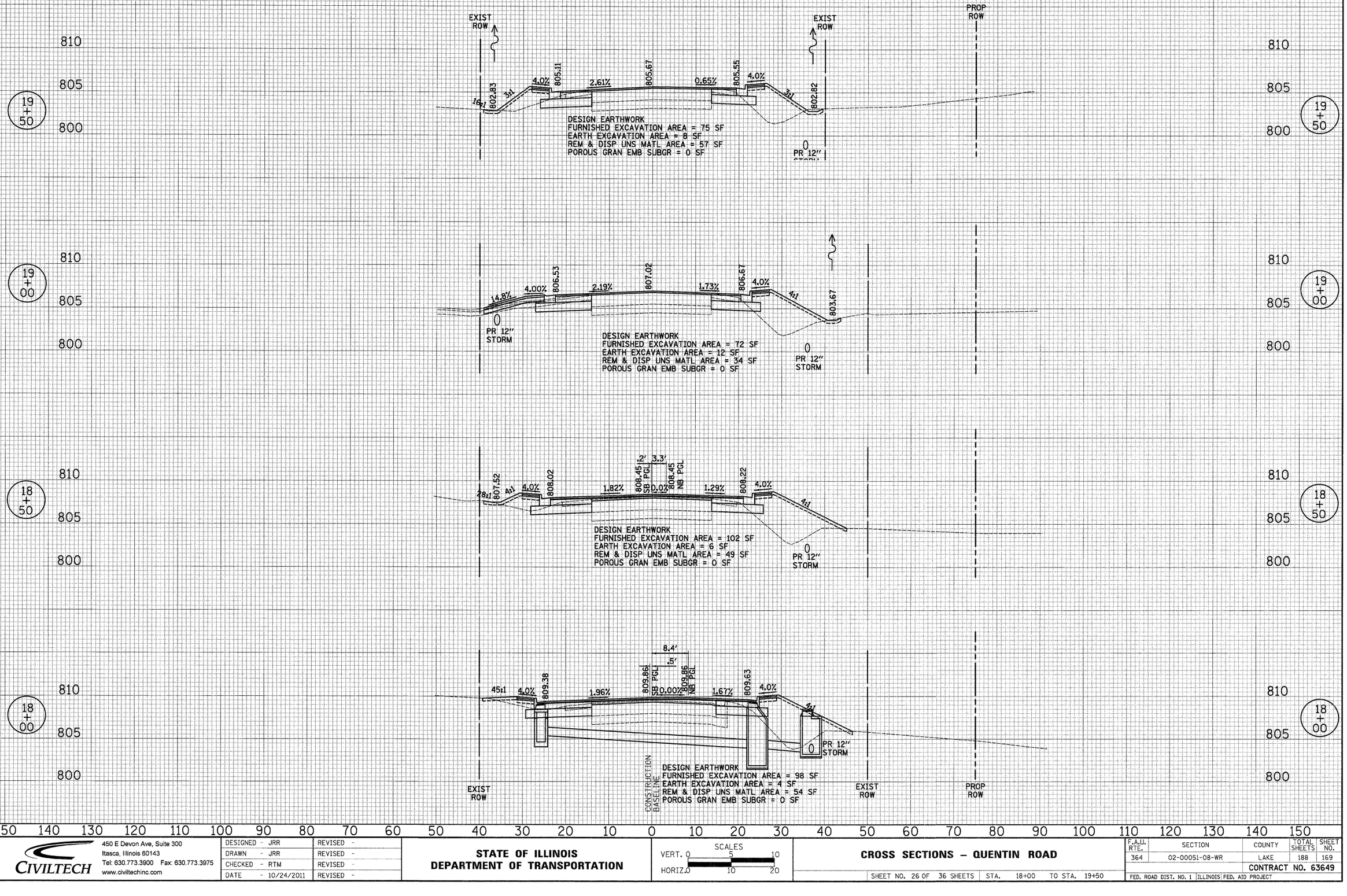
SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 25 OF 36 SHEETS | STA. 16+50 | TO STA. 17+66

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	168
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 26 OF 36 SHEETS | STA. 18+00 | TO STA. 19+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	169
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

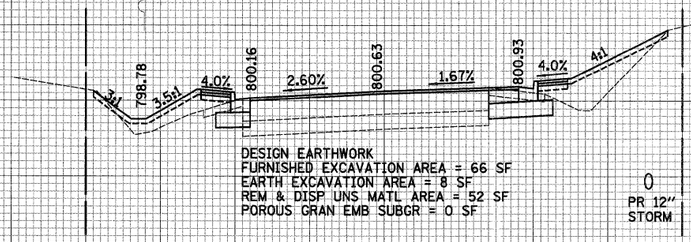
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EXIST ROW

EXIST ROW

805
800
795

21 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 66 SF
EARTH EXCAVATION AREA = 8 SF
REM & DISP UNS MATL AREA = 52 SF
POROUS GRAN EMB SUBGR = 0 SF

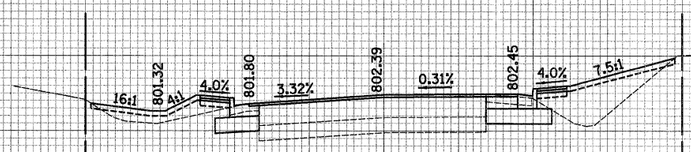
0
PR 12" STORM

805
800
795

21 + 00

805
800
795

20 + 50



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 72 SF
EARTH EXCAVATION AREA = 10 SF
REM & DISP UNS MATL AREA = 53 SF
POROUS GRAN EMB SUBGR = 0 SF

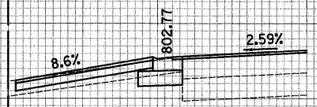
0
PR 12" STORM

805
800
795

20 + 50

805
800
795

20 + 28

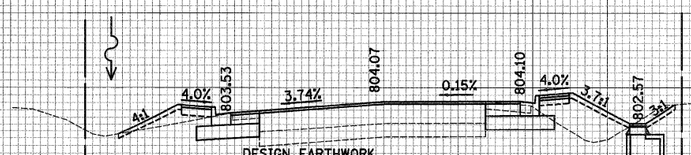


805
800
795

20 + 28

810
805
800

20 + 00



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 47 SF
EARTH EXCAVATION AREA = 12 SF
REM & DISP UNS MATL AREA = 48 SF
POROUS GRAN EMB SUBGR = 0 SF

PR 12" STORM

0

EXIST ROW

CONS PROJ BASELINE

EXIST ROW

810
805
800

20 + 00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

DATE	BY	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED	NOTE BOOK	NO.

FINAL SURVEY

DATE	BY	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED	NOTE BOOK	NO.

ORIGINAL SURVEY

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450 E Devon Ave, Suite 300
Itasca, Illinois 60143
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DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 27 OF 36 SHEETS | STA. 20+00 | TO STA. 21+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	170

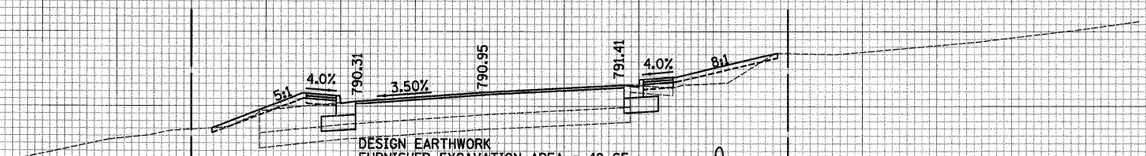
CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

23 + 00

795
790
785



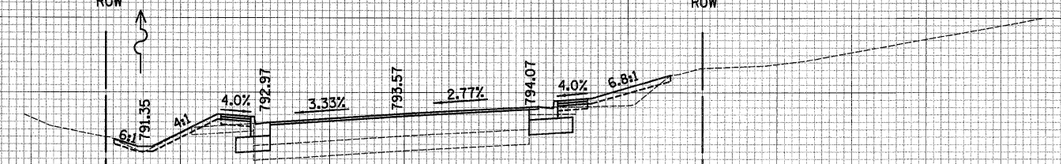
DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 48 SF
EARTH EXCAVATION AREA = 4 SF
REM & DISP UNS MATL AREA = 41 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 12" STORM

22 + 50

EXIST ROW

800
795
790

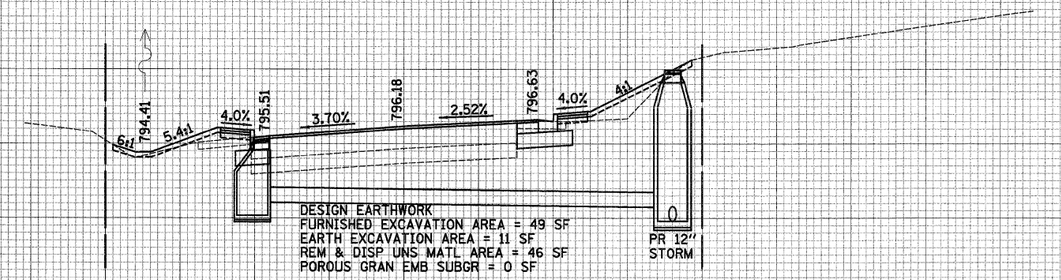


DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 37 SF
EARTH EXCAVATION AREA = 9 SF
REM & DISP UNS MATL AREA = 40 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 12" STORM

22 + 00

800
795
790

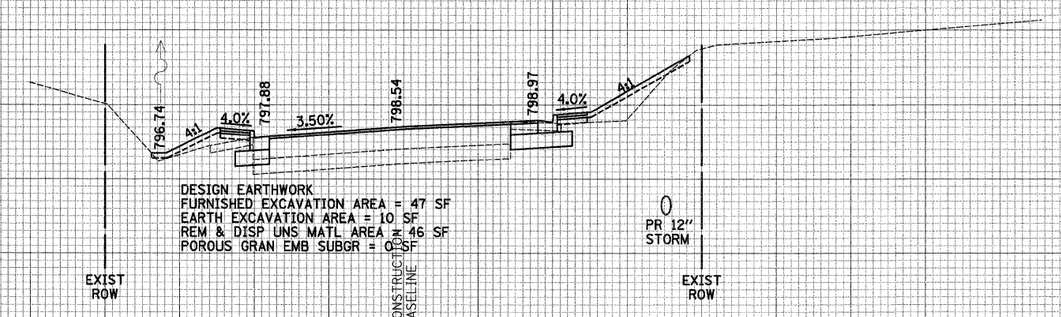


DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 49 SF
EARTH EXCAVATION AREA = 11 SF
REM & DISP UNS MATL AREA = 46 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 12" STORM

21 + 50

805
800
795



DESIGN EARTHWORK
FURNISHED EXCAVATION AREA = 47 SF
EARTH EXCAVATION AREA = 10 SF
REM & DISP UNS MATL AREA = 46 SF
POROUS GRAN EMB SUBGR = 0 SF

0
PR 12" STORM

EXIST ROW

EXIST ROW

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

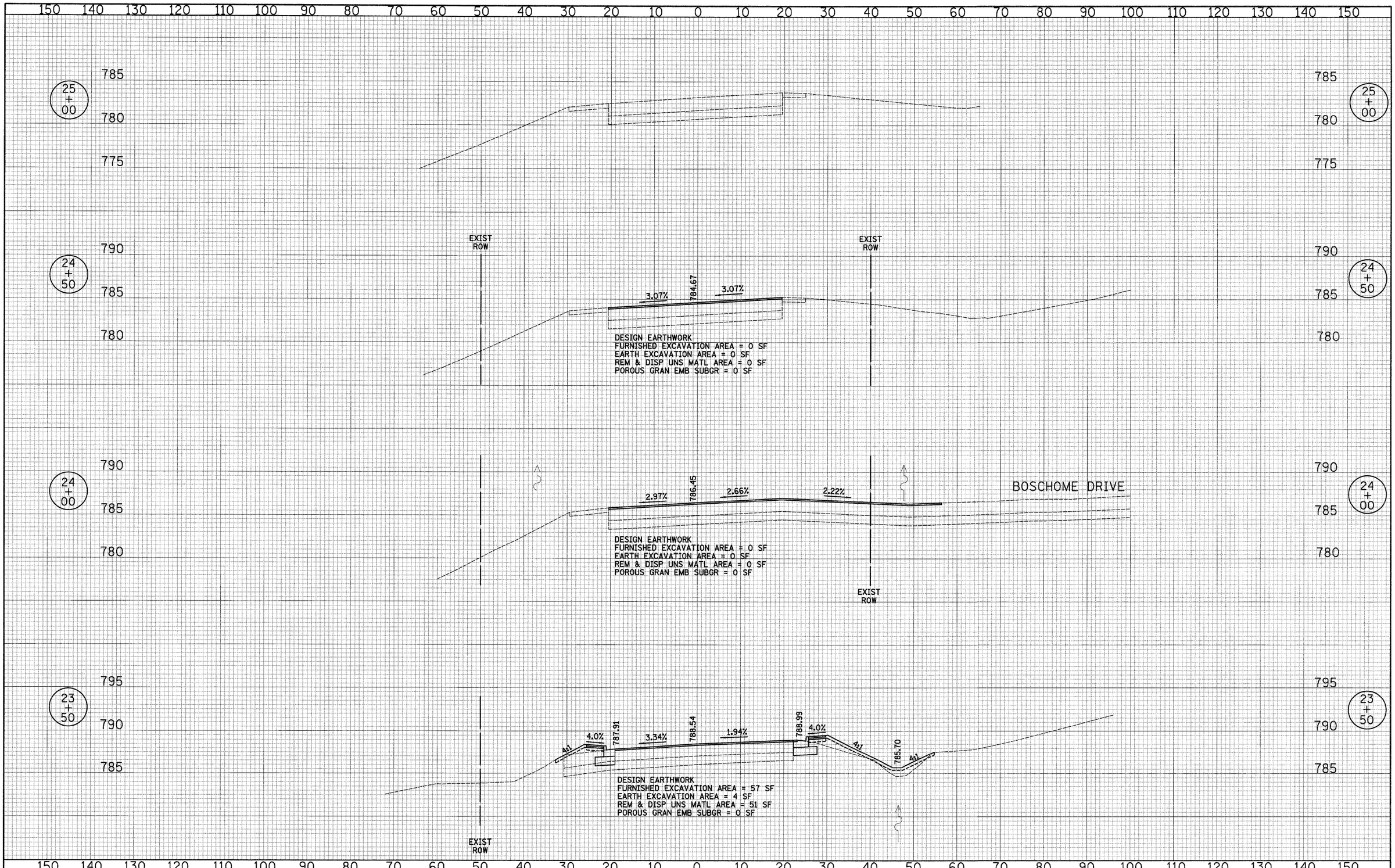
CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 28 OF 36 SHEETS | STA. 21+50 | TO STA. 22+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	171

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	

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CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

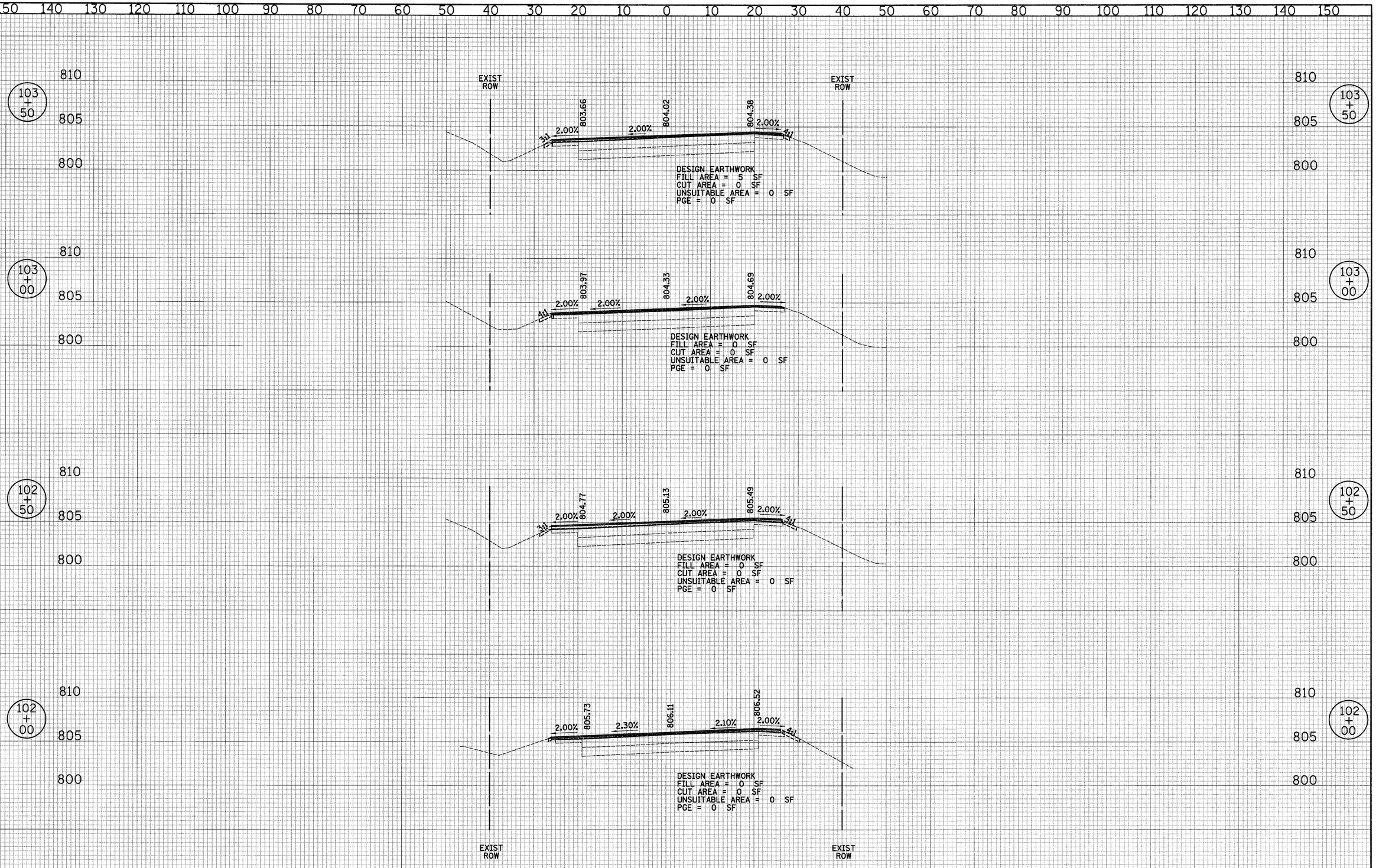
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – QUENTIN ROAD

SHEET NO. 29 OF 36 SHEETS | STA. 23+00 TO STA. 24+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	172
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE — NO.

ORIGINAL SURVEY — SURVEYED / PLOTTED / NOTE BOOK / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE — NO.

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DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – LONG GROVE ROAD

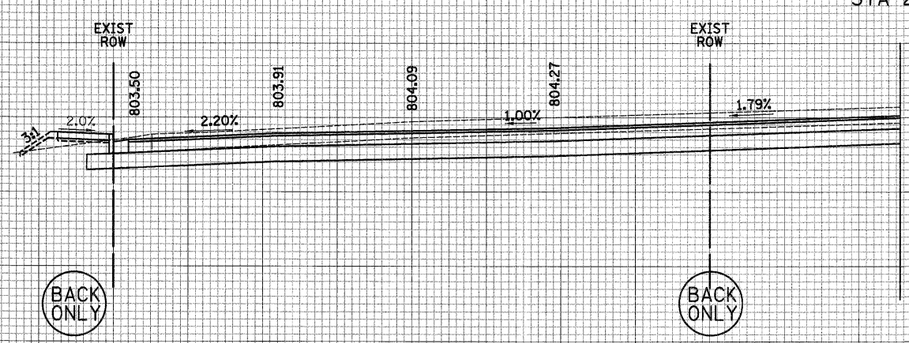
SHEET NO. 30 OF 36 SHEETS | STA. 102+00 TO STA. 103+50

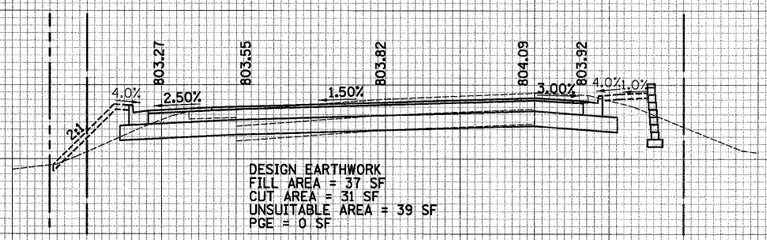
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	173

CONTRACT NO. 63649

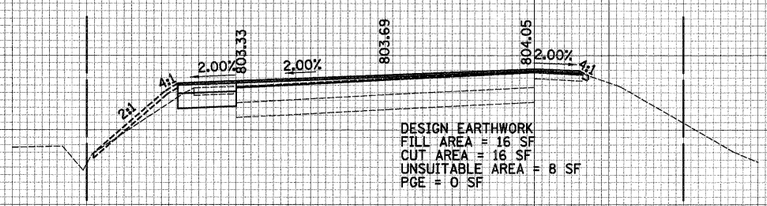
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

MATCH LINE
QUENTIN AVENUE
STA 28+50

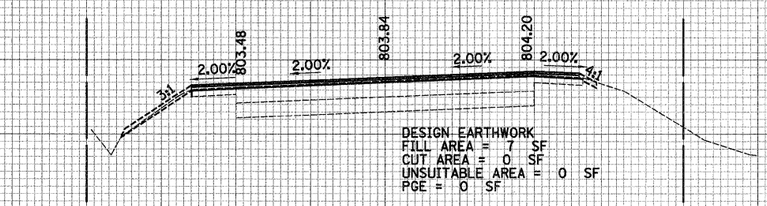




DESIGN EARTHWORK
FILL AREA = 37 SF
CUT AREA = 31 SF
UNSUITABLE AREA = 39 SF
PGE = 0 SF



DESIGN EARTHWORK
FILL AREA = 16 SF
CUT AREA = 16 SF
UNSUITABLE AREA = 8 SF
PGE = 0 SF



DESIGN EARTHWORK
FILL AREA = 7 SF
CUT AREA = 0 SF
UNSUITABLE AREA = 0 SF
PGE = 0 SF

EXIST ROW

EXIST ROW

105+50

105+00

104+50

104+00

810

805

800

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

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DRAWN	- JRR	REVISED -
CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – LONG GROVE ROAD

SHEET NO. 31 OF 36 SHEETS | STA. 104+00 TO STA. 105+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	174

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

107 + 50

810
805
800

EXIST ROW

AHEAD ONLY

DESIGN EARTHWORK
FILL AREA = 17 SF
CUT AREA = 65 SF
UNSUITABLE AREA = 34 SF
PGE = 0 SF

EXIST ROW

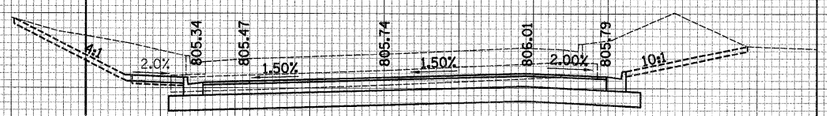
AHEAD ONLY

MATCH LINE
QUENTIN AVENUE
STA 30+00

MATCH LINE
QUENTIN AVENUE
STA 29+00

107 + 00

PROP ROW



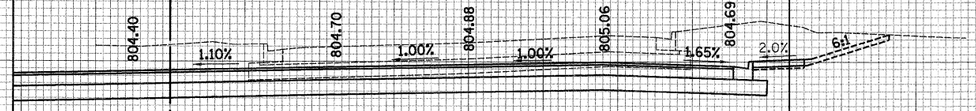
DESIGN EARTHWORK
FILL AREA = 14 SF
CUT AREA = 141 SF
UNSUITABLE AREA = 37 SF
PGE = 0 SF

PROP ROW PR 15" STORM

MATCH LINE
QUENTIN AVENUE
STA 30+00

MATCH LINE
QUENTIN AVENUE
STA 29+00

106 + 50



EXIST ROW

MATCH LINE
QUENTIN AVENUE
STA 29+50

MATCH LINE
QUENTIN AVENUE
STA 29+00

106 + 00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DRAWN	- JRR	REVISED -
CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

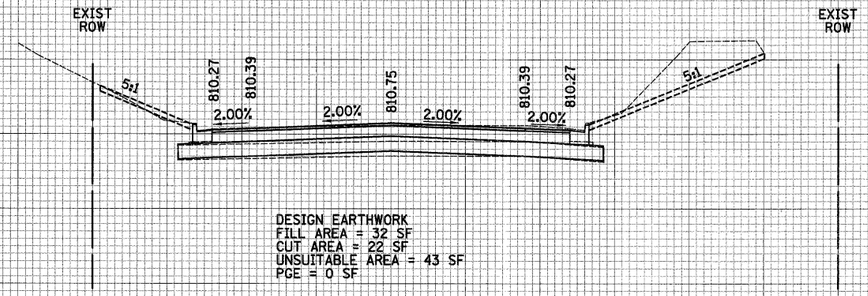
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – LONG GROVE ROAD

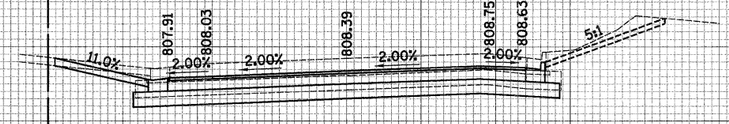
SHEET NO. 32 OF 36 SHEETS | STA. 106+00 TO STA. 107+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	175
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



DESIGN EARTHWORK
FILL AREA = 32 SF
CUT AREA = 22 SF
UNSUITABLE AREA = 43 SF
PGE = 0 SF

DESIGN EARTHWORK
FILL AREA = 26 SF
CUT AREA = 16 SF
UNSUITABLE AREA = 39 SF
PGE = 0 SF



DESIGN EARTHWORK
FILL AREA = 19 SF
CUT AREA = 41 SF
UNSUITABLE AREA = 18 SF
PGE = 0 SF

EXIST ROW

EXIST ROW

CIVILTECH	450 E Devon Ave, Suite 300 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - JRR DRAWN - JRR CHECKED - RTM DATE - 10/24/2011	REVISED - REVISED - REVISED - REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – LONG GROVE ROAD

SHEET NO. 33 OF 36 SHEETS STA. 108+00 TO STA. 109+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	176
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — SURVEYED — PLOTTED — NOTE BOOK — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE — NO.

ORIGINAL SURVEY — SURVEYED — PLOTTED — NOTE BOOK — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE — NO.

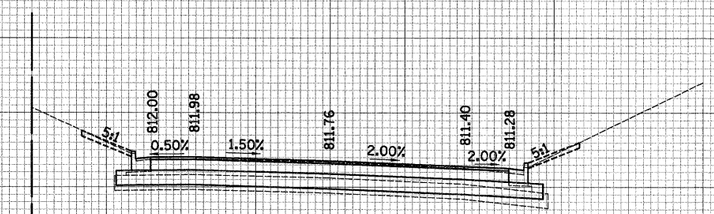
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EXIST ROW

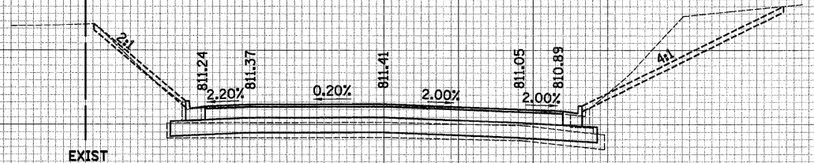
EXIST ROW

815
810
805

110 + 50



DESIGN EARTHWORK
FILL AREA = 35 SF
CUT AREA = 6 SF
UNSUITABLE AREA = 15 SF
PGE = 0 SF



EXIST ROW

EXIST ROW

DESIGN EARTHWORK
FILL AREA = 44 SF
CUT AREA = 9 SF
UNSUITABLE AREA = 41 SF
PGE = 0 SF

109 + 50

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

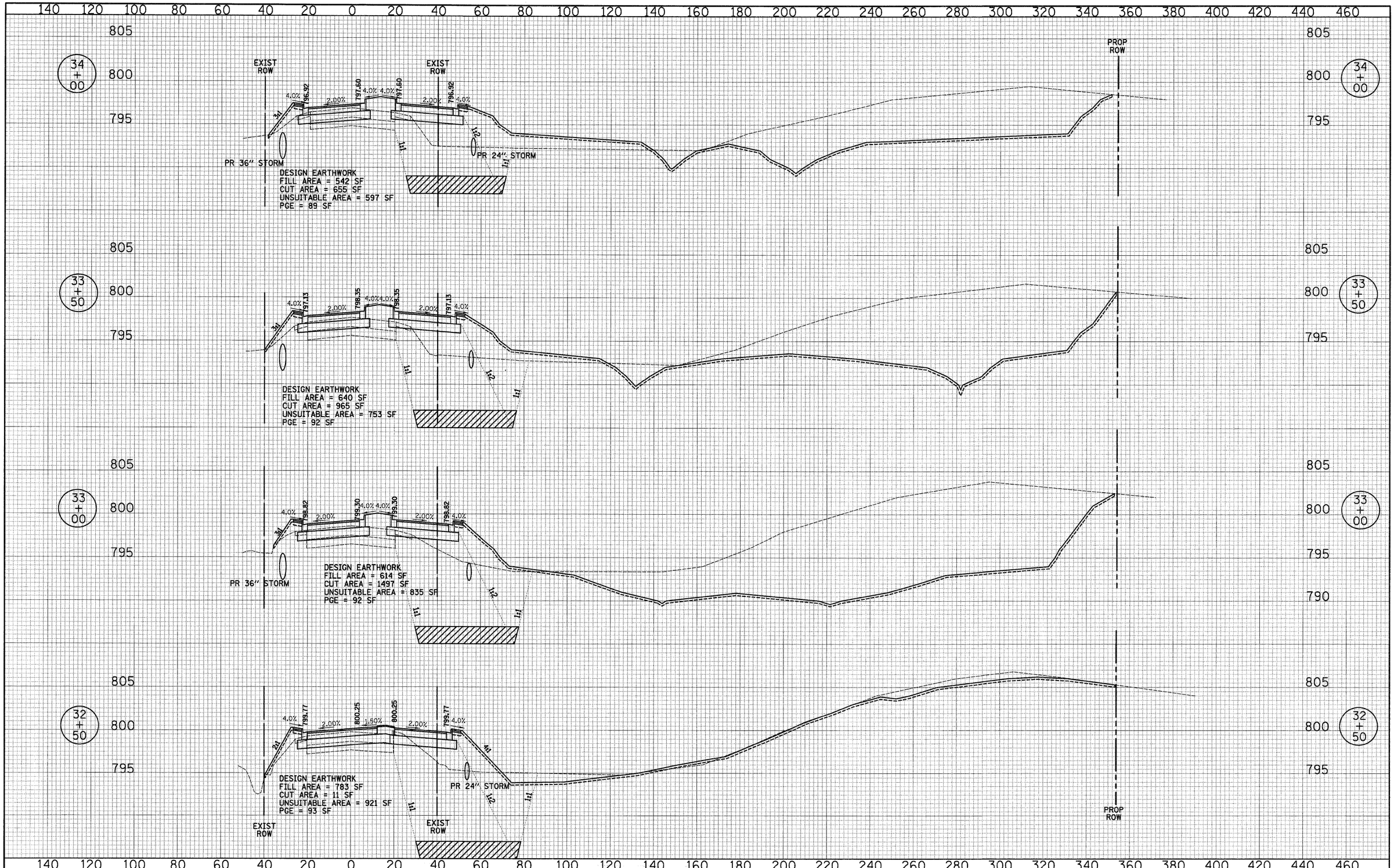
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 10 20

CROSS SECTIONS – LONG GROVE ROAD

SHEET NO. 34 OF 36 SHEETS STA. 109+50 TO STA. 110+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	177
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
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DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

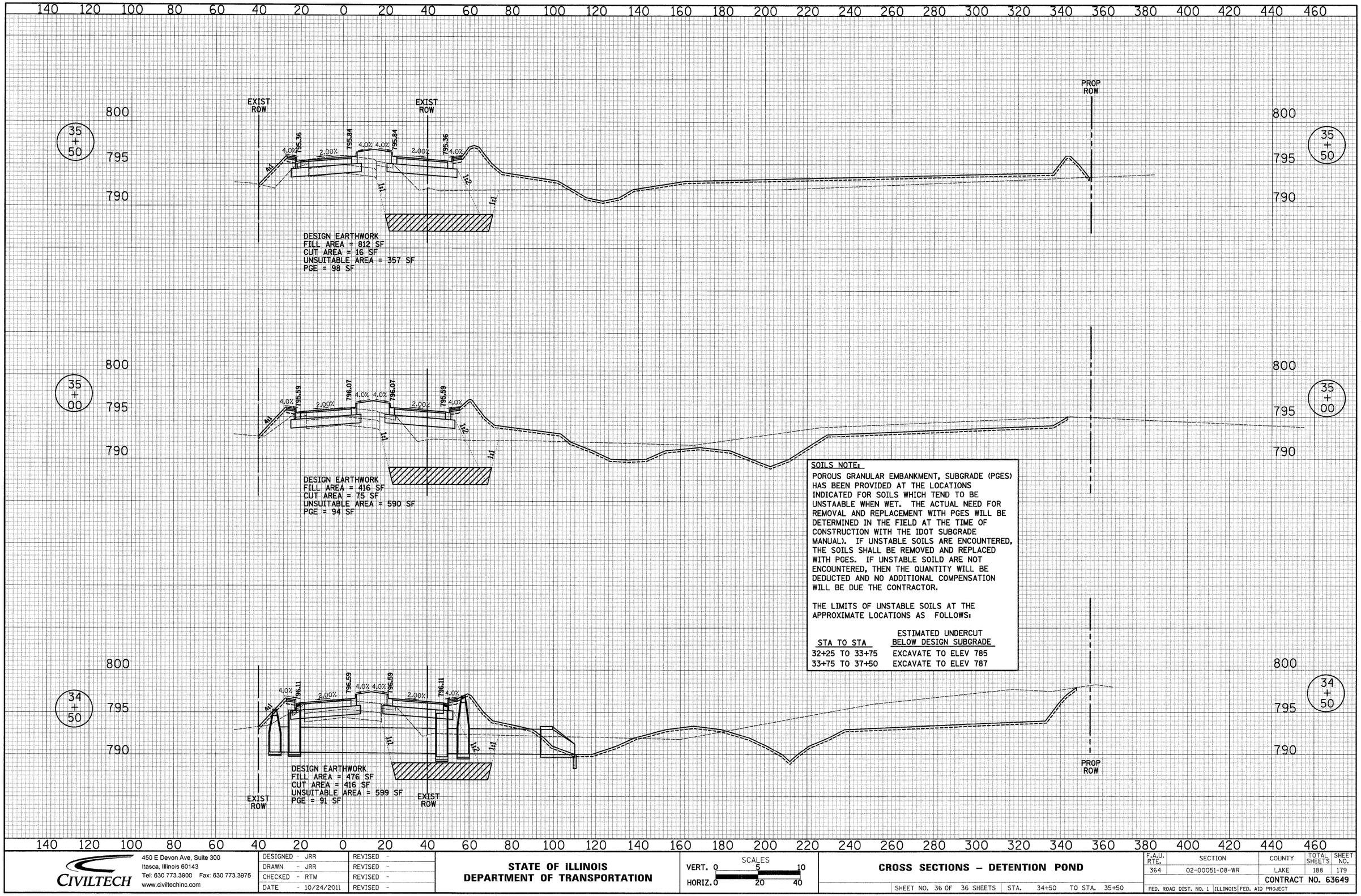
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES
VERT. 0 5 10
HORIZ. 0 20 40

CROSS SECTIONS – DETENTION POND

SHEET NO. 35 OF 36 SHEETS STA. 32+50 TO STA. 34+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	178
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SOILS NOTE:

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED AT THE LOCATIONS INDICATED FOR SOILS WHICH TEND TO BE UNSTAABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION WITH THE IDOT SUBGRADE MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. IF UNSTABLE SOILD ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

THE LIMITS OF UNSTABLE SOILS AT THE APPROXIMATE LOCATIONS AS FOLLOWS:

STA TO STA	ESTIMATED UNDERCUT BELOW DESIGN SUBGRADE
32+25 TO 33+75	EXCAVATE TO ELEV 785
33+75 TO 37+50	EXCAVATE TO ELEV 787

DATE			
BY			
SURVEYED			
PLOTTED			
TEMPLATE			
AREAS			
AREAS CHECKED			
FINAL SURVEY			
NOTE BOOK			
NO.			

DATE			
BY			
SURVEYED			
PLOTTED			
TEMPLATE			
AREAS			
AREAS CHECKED			
ORIGINAL SURVEY			
NOTE BOOK			
NO.			

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DATE - 10/24/2011	REVISED -

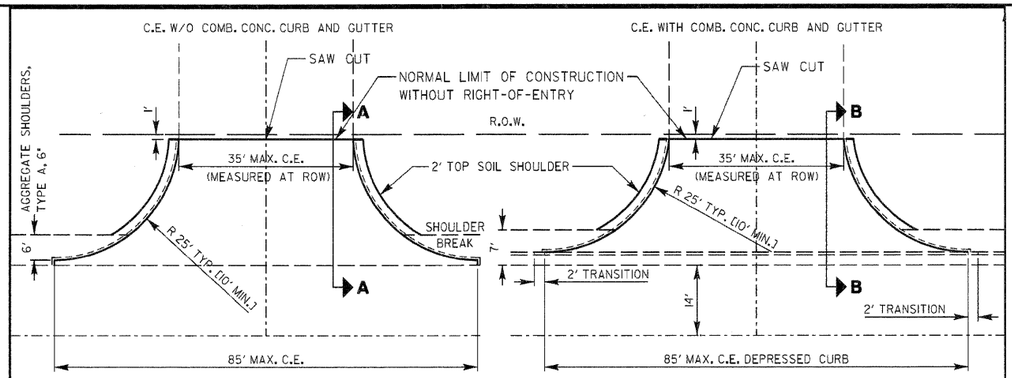
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

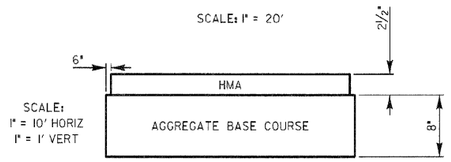
SCALES
VERT. 0 5 10
HORIZ. 0 20 40

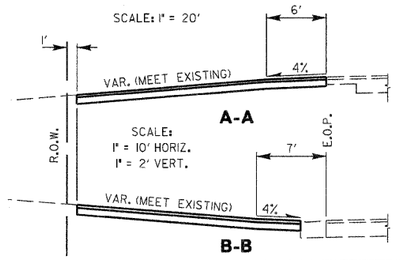
CROSS SECTIONS – DETENTION POND

SHEET NO. 36 OF 36 SHEETS | STA. 34+50 TO STA. 35+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	179
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		







CEs: 2 1/2 " HOT-MIX ASPHALT CONCRETE SURFACE COURSE on 8" AGGREGATE BASE COURSE, TYPE A
Calculated Quantities for COMMERCIAL ENTRANCE w/o Curb & Gutter above:
1. HMA Surface Course Weight Used = 112 lbs/Sq Yd/Inch thickness
Area = 132.58 Sq Yd
132.58 Sq Yd x 112 lb/Sq Yd/Inch x 2.5 Inches = 37122.4 lb
Converting to Tons = 37122.4 lb/2000 lb/Ton = 18.56 Ton
Round to = **19 Ton**
2. Aggregate Base Course Weight Used = 2 Ton/Cu Yd
136.94 Sq Yd x 2 Ton/Cu Yd x 0.22 Yd thickness = 60.25 Ton
Round to = **60 TON**

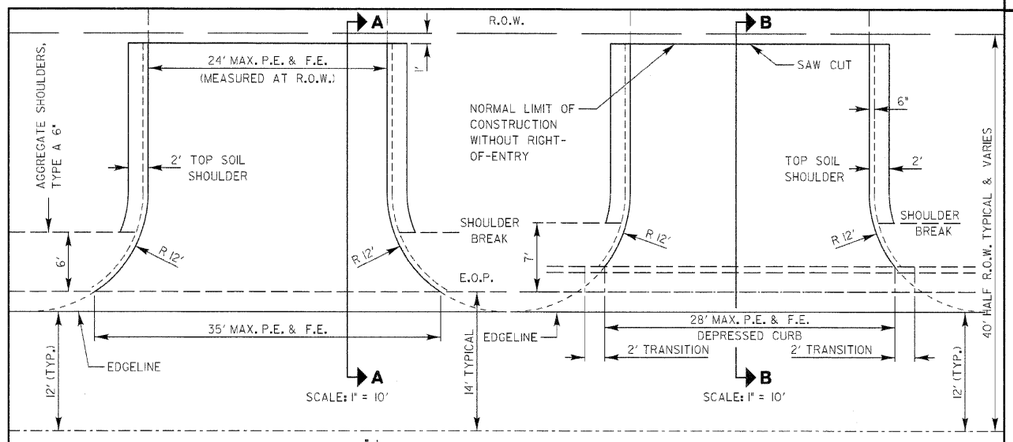
REVISIONS	DATE
Removed Prime Coat Qty	5/20/08

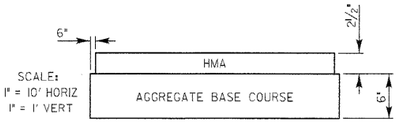
LakeCounty Division of Transportation

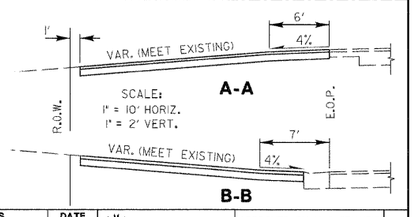
APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

TYPICAL MAJOR ACCESS (COMMERCIAL ENTRANCE)

LC4101







PEs: 2 1/2 " HOT-MIX ASPHALT SURFACE COURSE on 6" AGGREGATE BASE COURSE, TYPE A
FEs: 6" AGGREGATE BASE COURSE, TYPE A
Calculated Quantities for PRIVATE ENTRANCE w/o Curb and Gutter above:
1. HMA Surface Course Weight Used = 112 lbs/Sq Yd/Inch thickness
Area = 72.6 Sq Yd
72.6 Sq Yd X 112 lb/Sq Yd/Inch x 2.5 Inches = 20,328.0 lb
Converting to Tons = 20,328.0 lb/2000 lb/Ton = 10.16 Ton
Round to = **10 Ton**
2. Aggregate Base Course Weight Used = 2 Ton/Cu Yd
75.63 Sq Yd x 2 Ton/Cu Yd x 0.1667 Yd thickness = 25.22 Ton
Round to = **25 Ton**

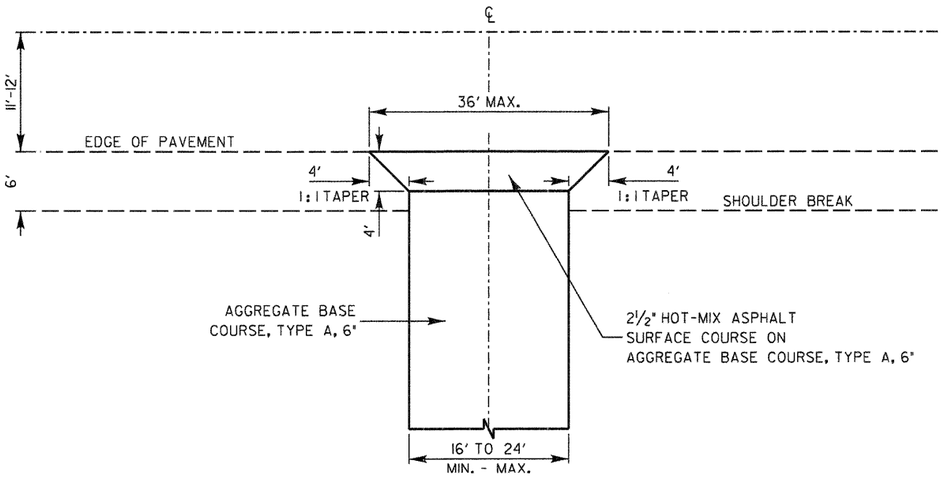
REVISIONS	DATE
Removed Prime Coat Qty	5/20/08
Revise Entrance EOP Radius	6/4/10

LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

TYPICAL MINOR ACCESS (PRIVATE ENTRANCE)

LC4100



DESIGN NOTE:

The Hot-Mix Asphalt apron will not be included on roads with a 2' (or wider) paved shoulder. The apron will be constructed behind curb & gutter only when a hot-mix asphalt shoulder is not included.

SCALE: 1" = 10'

REVISIONS	DATE

LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

HOT-MIX ASPHALT APRON FOR AGGREGATE FIELD ENTRANCE

LC4103

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CHECKED - RTM	REVISED -	
DATE - 10/24/2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGHWAY STANDARDS

SHEET NO. 1 OF 9 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	180
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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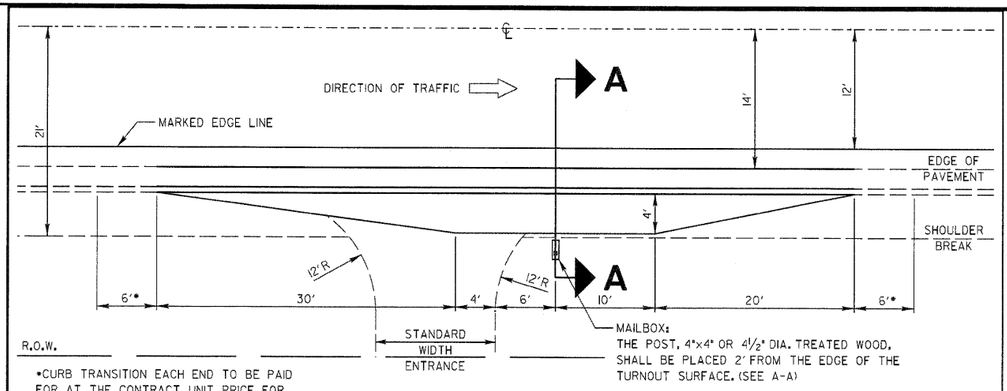
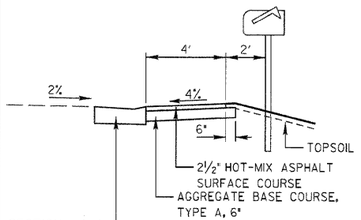


*CURB TRANSITION EACH END TO BE PAID FOR AT THE CONTRACT UNIT PRICE FOR COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24.



SECTION A-A
SCALE: 1" = 5'

DESIGN NOTES:

1. The Resident Engineer shall contact the local postmaster prior to installing the new mailbox posts for the local mounting height of the mailbox. The standard mounting height is 3½"; however, local post- masters may vary this height.
2. The standard mailbox post is a 4"x4" or a 4½" dia. treated wood post. The standard bury length of the post is 2'. Do not shorten or exceed this bury length.
3. Depending on the location of the shoulder break with respect to the edge of the mailbox turnout the overall post length may vary from 5' 8" to 6' 4" to maintain the 2' bury length and the 3½" mounting height.

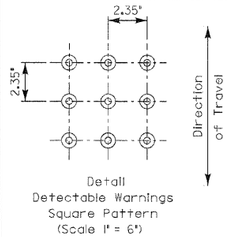
REVISIONS	DATE

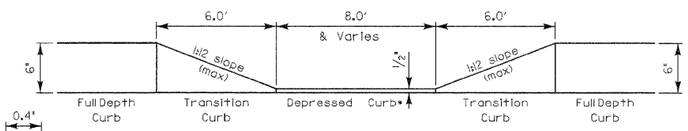
LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

MAILBOX TURNOUT ALONG CURBED ROADS

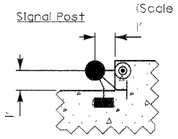
LC4121



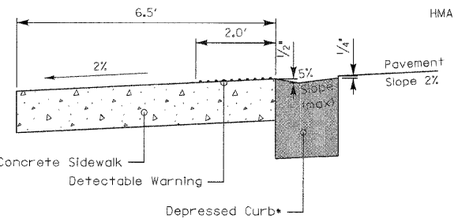


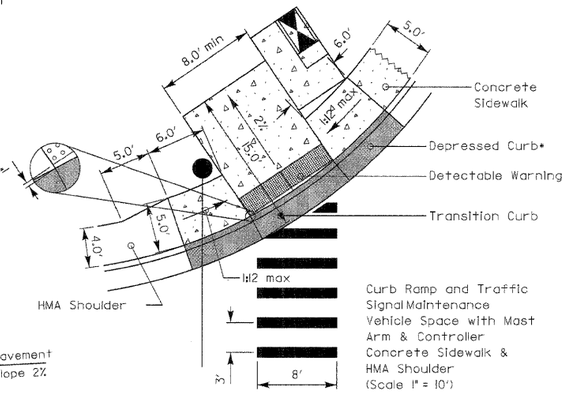
Section B-B
Curb Ramp - Face of Curb
(Scale 1" = 2.5' Horiz ; 1" = 1' Vert)

Location Details
Signal Post & Mast Arm
(Scale 1" = 5')



Section A-A
Curb Ramp with B-6.12 C&G
(Scale 1" = 2.5' Horiz ; 1" = 1' Vert)





Curb Ramp and Traffic Signal Maintenance Vehicle Space with Mast Arm & Controller Concrete Sidewalk & HMA Shoulder
(Scale 1" = 10')

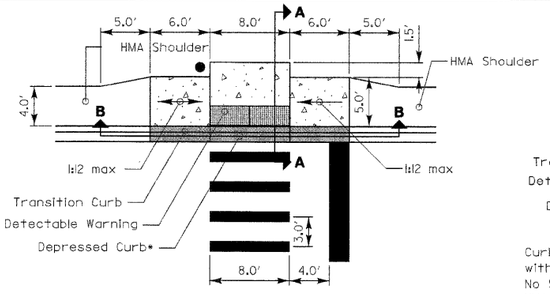
REVISIONS	DATE
Added Warning Details	8/1/2009

LakeCounty Division of Transportation

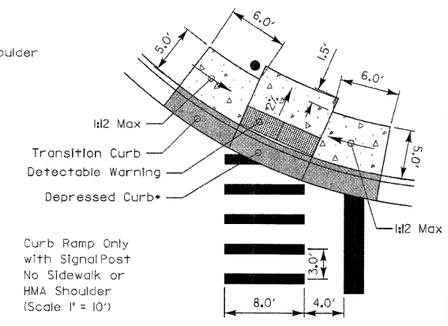
APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

CURB RAMPS with TRAFFIC SIGNAL POSTS & MAST ARMS
(SHEET 2 OF 2)

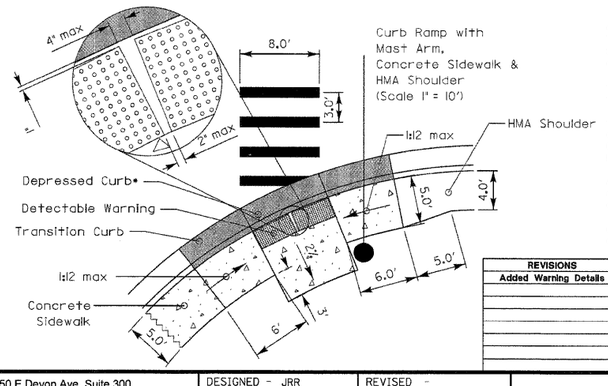
LC4201



Curb Ramp with Signal Post & Transitions to HMA Shoulders
(Scale 1" = 10')



Curb Ramp Only with Signal Post No Sidewalk or HMA Shoulder
(Scale 1" = 10')



*GENERAL NOTES:

1. The gutter slope for the DEPRESSED CURB adjacent to the curb ramp is a maximum of 5% (standard curb and gutter is 6%). The back of curb rise is ½" (standard depressed curb is 1½"). See Section A-A (Sheet 2) and IDOT standard 606001 for the different curb dimensions.
2. The Depressed Curb and the Transition Curb will be paid for as COMBINATION CONCRETE CURB AND GUTTER of the type adjacent to the curb ramp.
3. The concrete area consisting of the landing (2% slope) and the side ramps (behind the transition curb) along with the continuation of the 5' concrete between adjacent ramps (if any) will be measured in square feet and paid for as PORTLAND CEMENT CONCRETE SIDEWALK of the thickness specified.
4. The detectable warnings shall be installed in accordance with Article 424.09 of the IDOT Standard Specifications and the LCDOT specification 42400800 DETECTABLE WARNINGS and shall be measured and paid for per square foot.
5. Since the width of the flag doesn't affect the construction of the ramp, both B-6.12 and B-6.24 Curb & Gutter are portrayed in this standard.

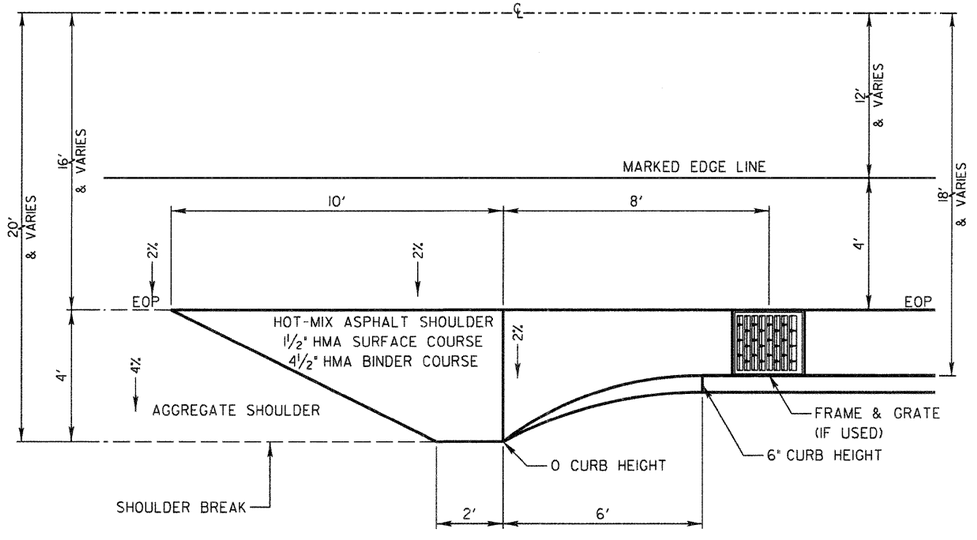
REVISIONS	DATE
Added Warning Details	8/1/2009

LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

CURB RAMPS with TRAFFIC SIGNAL POSTS & MAST ARMS
(SHEET 1 OF 2)

LC4201



SCALE: 1" = 3'

REVISIONS	DATE

LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

TRANSITION FROM AGGREGATE SHOULDER TO B-6.24 FOR 18' OFFSET TO FACE

LC4801

FINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED	TEMPLATE	AREAS		
PLOTTED	AREAS	CHECKED		

ORIGINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED	TEMPLATE	AREAS		
PLOTTED	AREAS	CHECKED		

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

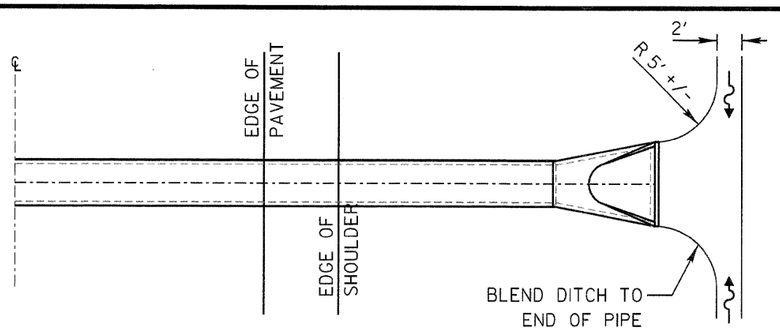
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

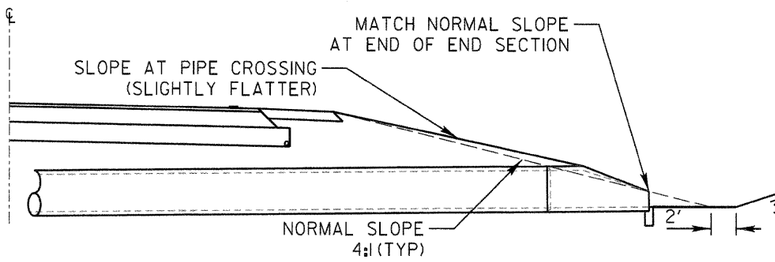
SHEET NO. 2 OF 9 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	181

CONTRACT NO. 63649

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT





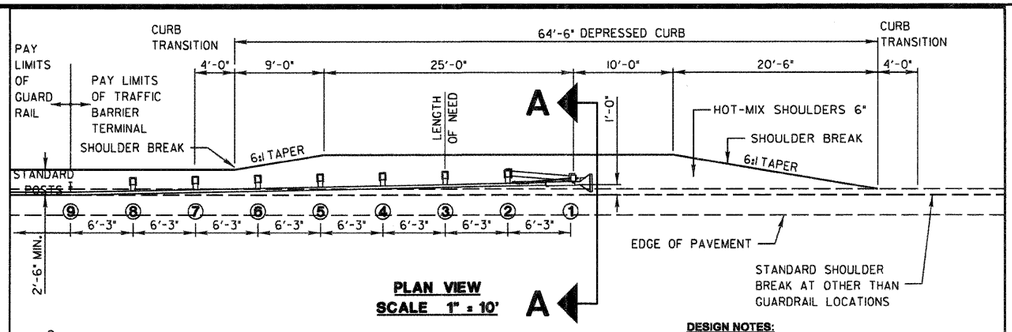
REVISIONS	DATE

LakeCounty Division of Transportation

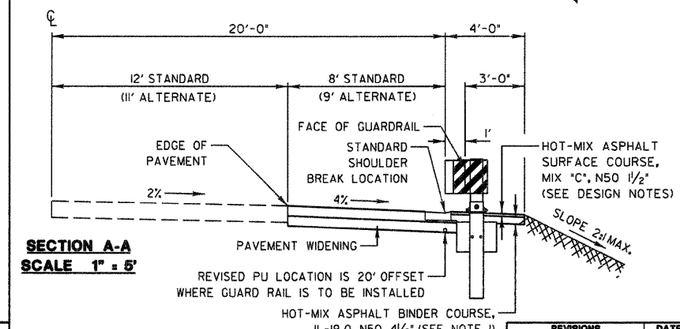
APPROVED BY: M. G. ZEMAITIS
DATE: JANUARY 19, 2009

TYPICAL PLACEMENT OF PRECAST END SECTIONS ON CROSSROAD CULVERTS

LC5401



PLAN VIEW
SCALE 1" = 10'



SECTION A-A
SCALE 1" = 5'

DESIGN NOTES:

This detail is based on a traffic barrier terminal with the following characteristics:

Offset: 1' at post #1
Length: 50'
Post Spacing: 6' 3"
Length of need: 37' 6"
Set back ratio: 1:50

Any IDOT approved TRAFFIC BARRIER TERMINAL, Type I, SPECIAL, (TANGENT), may be substituted with the approval of the Engineer. However, a different terminal configuration may require modifications to this standard.

If the paved shoulder is being constructed in conjunction with a road improvement, the hot-mix asphalt surface and binder courses shall be the same as those used on the roadway.

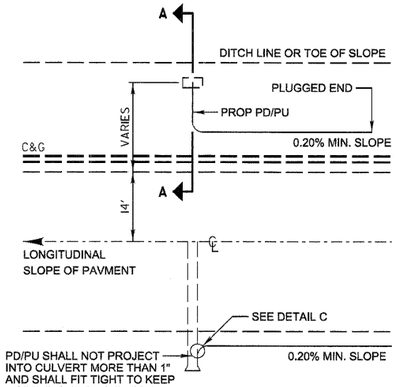
REVISIONS	DATE

LakeCounty Division of Transportation

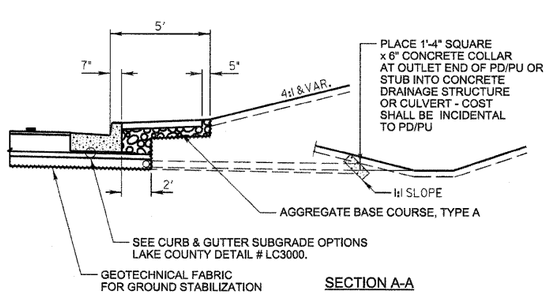
APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

SHOULDER BREAK AT TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT) W/COMB. C&G

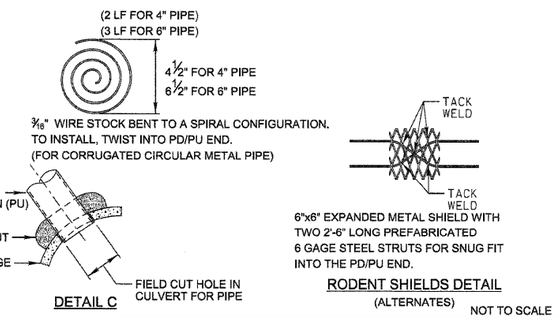
LC6300



TYPICAL PIPE DRAIN/ PIPE UNDERDRAIN OUTLET



SECTION A-A



DETAIL C

RODENT SHIELDS DETAIL

(ALTERNATES)

NOT TO SCALE

DESIGN NOTES:

All work shall be according to the applicable portions of the "Standard Specifications" except as modified hereon.

In addition to the requirements of Article 601.08 of the "Standard Specifications", the contract unit price per foot for pipe drains 4" & 6" and pipe underdrains 4" shall include the cost of furnishing and placing the rodent shield.

The removable rodent shield shall be furnished and installed in accordance with one of the configurations shown. The shield shall be fabricated from steel wire, or expanded metal, as detailed above and shall be galvanized after fabrication in accordance with AASHTO M-111. Other submitted designs for a removable rodent shield will be allowed with the approval of the Engineer.

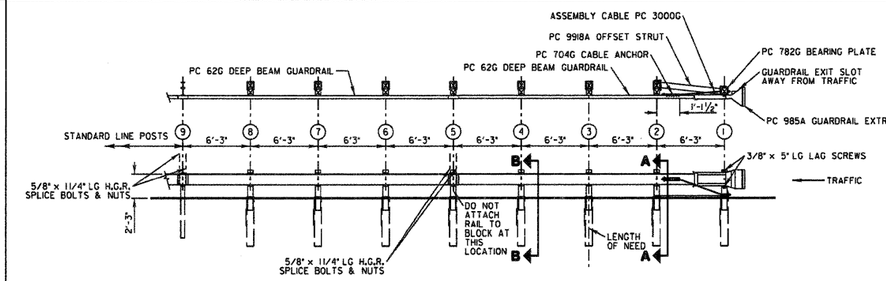
REVISIONS	DATE
Pipe Drain Added to Labels	5/19/2009

LakeCounty Division of Transportation

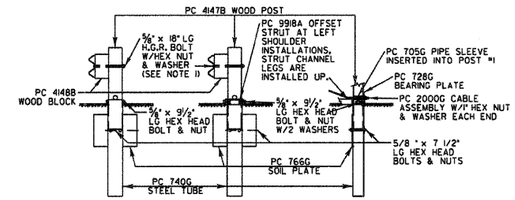
APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

SUB-SURFACE DRAINS

LC6020



SCALE: 1"= 6'



SECTION "B-B" (TYP @ POSTS #3, 4, 6, 7 & 8)

SECTION "A-A" (@ POST #2)

PARTIAL VIEW (@ POST #1)

SCALE: 1" = 3'

NOTE: SECTION "B-B" IS SIMILAR @ POST #5 EXCEPT RAIL IS NOT ATTACHED.

BILL OF MATERIAL

PC	QTY	DESCRIPTION
600	1	DEEP BEAM GUARD RAIL (12GA)
62G	1	DEEP BEAM GUARD RAIL (12GA)
705G	1	PIPE SLEEVE
766G	8	SOIL PLATE
414BB	7	WOOD BLOCK
414TB	8	WOOD POST
740G	8	STEEL TUBE
782G	1	BEARING PLATE
704A	1	CABLE ANCHOR
3000G	1	CABLE ASSEMBLY
9918G	1	OFFSET STRUT
985A	1	GUARDRAIL EXTRUDER
		HARDWARE
3497G	8	5/8"ø x 9 1/2" HEX HD BOLT
3580G	7	5/8"ø x 18" H.G.R. POST BOLT
3560G	16	5/8"ø x 1 1/4" H.G.R. SPLICE BOLT
3478G	15	5/8"ø x 7 1/2" HEX HD BOLT
3340G	47	5/8" H.G.R. NUT
3500G	11	5/8" WASHER
3264D	2	3/8"ø x 5" LAG SCREW
3910G	2	1" HEX NUT
3900G	2	1" WASHER

NOTES:

1. THE 5/8" FLAT WASHER IS USED UNDER THE NUT, BEHIND THE POST ONLY. NO WASHER IS USED AT THE RAIL
2. THE BREAKAWAY POSTS @ LOCATIONS #5, 6, 7 & 8 MAY BE AS SHOWN OR MAY UTILIZE POSTS AS SHOWN IN OPTION "B" WITHOUT FOUNDATION TUBES. (SEE DRAWING NO SS 24L) POSTS @ LOCATIONS #1, 2, 3 & 4 MUST USE FOUNDATION TUBES.
3. THE ER-2000 WAS TESTED ON FLAT & LEVEL TERRAIN. IT IS NOT RECOMMENDED ON SLOPES.
4. MANUFACTURER SUGGESTS CUSTOMER TO PROVIDE REFLECTORIZATION OF TERMINAL.

ET-2000 PLAN, ELEVATION & SECTIONS OPTION "A" 1994 EDITION SYRO, INC. SS 240

REVISIONS	DATE

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)

LC6310

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	- JRR	REVISED -
DRAWN	- JRR	REVISED -
CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

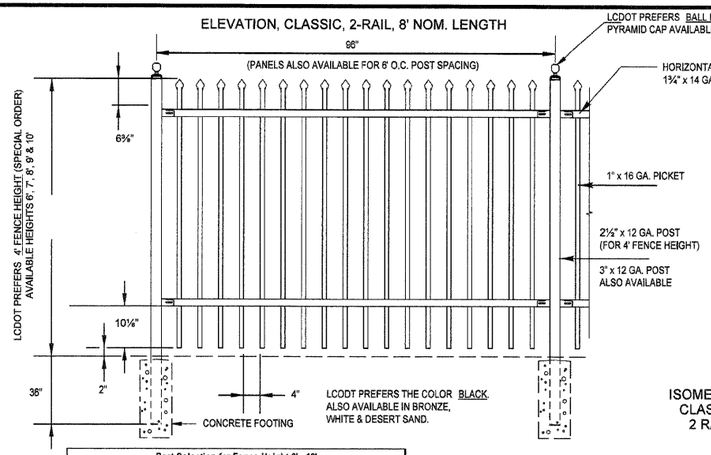
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

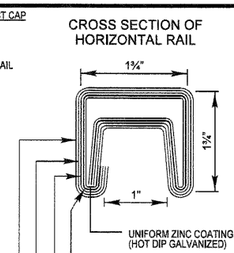
SHEET NO. 3 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	182
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

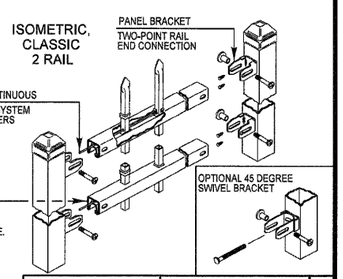
FINAL SURVEY — NOTE BOOK — NO. — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED





Post Selection for Fence Height 6' - 10'				
Wind Loading				
Fence Height (FT)	Rail Length (FT)	Post Size	Wind Load Capacity Factor (PSF)	Typical Wind Load Capacity (mph)
6	6	2 ½" x 12 GA.	45.5	133.0
		3" x 12 GA.	54.6	146.0
	8	2 ½" x 12 GA.	34.2	116.0
		3" x 12 GA.	41.0	127.0
7	6	2 ½" x 12 GA.	33.4	114.0
		3" x 12 GA.	40.0	125.0
	8	2 ½" x 12 GA.	25.0	99.0
		3" x 12 GA.	30.0	108.0
8	6	2 ½" x 12 GA.	25.6	100.0
		3" x 12 GA.	30.7	110.0
	8	2 ½" x 12 GA.	19.2	87.0
		3" x 12 GA.	23.0	95.0
		4" x 12 GA.	30.6	110.0
9	6	4" x 12 GA.	32.0	113.0
10	6	4" x 12 GA.	28.7	107.0



GATES: SPECIFY OPENING WIDTHS
SINGLE _____ QUANTITY_____
DOUBLE _____ QUANTITY_____

REVISIONS	DATE
Text Update	7/15/11

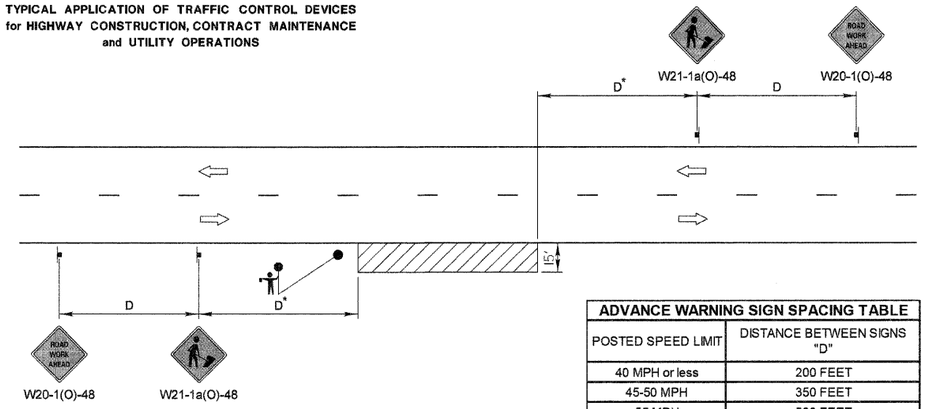
LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

ORNAMENTAL FENCE CLASSIC TWO RAIL (ONE MFGR'S DETAILS)

LC6600

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES for HIGHWAY CONSTRUCTION, CONTRACT MAINTENANCE and UTILITY OPERATIONS



ADVANCE WARNING SIGN SPACING TABLE	
POSTED SPEED LIMIT	DISTANCE BETWEEN SIGNS "D"
40 MPH or less	200 FEET
45-50 MPH	350 FEET
55 MPH	500 FEET

GENERAL NOTES:

This special detail is used at any time, any vehicle, equipment, workers or their activities require a stationary, intermittent or continuous moving operation within 15 feet of the traffic lane, where the average speed is 1 mph or less.

* Minimum distance "D" is shown in the Advance Warning Sign Spacing Table. If the work is a moving operation, the maximum distance "D" may be extended to ½ the length required for one normal working day's operation or 4 miles, whichever is less.

If the work operation does not exceed 60 minutes, traffic control may be according to I.D.O.T. Highway Standard 701301.

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH TRAFFIC CONTROL SIGN WHEN REQUIRED

NOT TO SCALE

MODIFIED IDOT STANDARD 701011-02

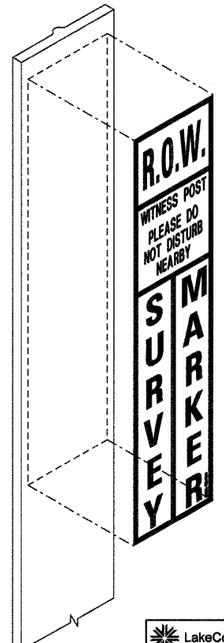
REVISIONS	DATE
Title Block Revision	8/1/09
Reformat LCDOT Standard	7/15/10

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TWO LANE, TWO WAY, OFF-ROAD OPERATIONS DAY OPERATIONS ONLY

LC7000



REVISIONS	DATE

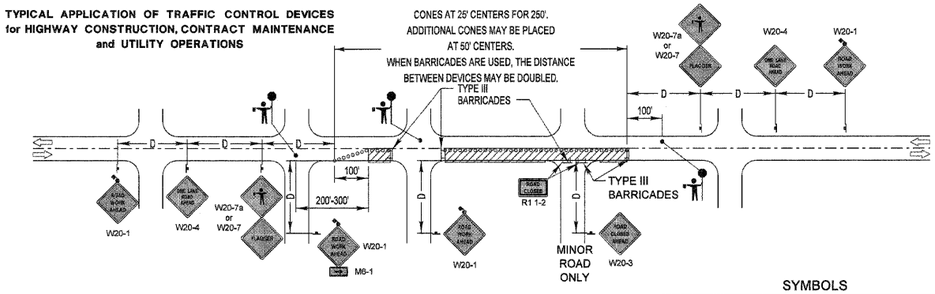
LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

WITNESS POST

LC6650

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES for HIGHWAY CONSTRUCTION, CONTRACT MAINTENANCE and UTILITY OPERATIONS



DESIGN NOTES:

1. All warning signs shall have minimum dimensions of 48"x48". The Engineer may approve signs measuring 36"x36" when the posted speed limit is 30 mph or less.
2. All signs not on the traveled way shall be post mounted if the closure time exceeds four calendar days. All signs shall be posted with the bottom of the sign not less than 7' above the edge of pavement. "NO PARKING" signs shall be installed throughout the work area at the discretion of the Engineer.
3. The flagger shall be in sight of each other or in direct communication at all times. When no work is being performed, the flaggers will not be required. If the flaggers are not present, the flagger sign shall be removed, covered or turned away from traffic.
4. Barricades with Type C steady burning lights shall be used in lieu of cones for night operation. All cones and barricades shall be according to IDOT Standard 701901.
5. When necessary, additional flaggers shall be positioned so as to regulate side street traffic.
6. Construction operations shall be confined to one lane, leaving the opposite lane open to traffic.
7. If the work operation is performed between 9:00 am and 3:00 pm and the work does not exceed 15 minutes, the traffic protection shall be as shown for IDOT Standard 701301. Signs, when required, shall be at the spacing specified in the Advance Warning Sign Spacing Table.
8. If the work area is in the parking lane and the parking exists during work hours, a "ROAD WORK AHEAD" sign shall be installed in advance of the work area at the spacing specified in the Advance Warning Sign Spacing Table and the area protected with cones or barricades.
9. Type A flashing lights shall be used on each approach in advance of the work area during hours of darkness and installed above the first two signs in each series and the high level warning devices.
10. Longitudinal dimensions may be adjusted to fit field conditions.
11. The location of the construction warning signs shall be determined by the speed limit posted on the road or street on which the construction warning signs are installed.
12. Form BT 725 is required.

ADVANCE WARNING SIGN SPACING TABLE	
POSTED SPEED LIMIT	DISTANCE BETWEEN SIGNS "D"
40 MPH or less	200 FEET
45-50 MPH	350 FEET
55 MPH	500 FEET

SYMBOLS

- WORK AREA
- CONE OR BARRICADE
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- ARROW BOARD
- TYPE III BARRICADE W/TYPE A FLASHING LIGHT
- FLAGGER WITH TRAFFIC CONTROL SIGN

GENERAL NOTE

This Standard is used where at anytime, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

NOT TO SCALE

MODIFIED IDOT STANDARD 701501-05

REVISIONS	DATE
Revised IDOT Reference	2/1/08
Title Block Revision	8/1/09
Reformat LCDOT Standard	7/15/10

LakeCounty Division of Transportation

APPROVED BY: ANTHONY KHAWAJA
DATE: APRIL 1, 2007

TWO LANE, TWO WAY, UNDIVIDED, URBAN LANE CLOSURE

LC7001

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	- JRR	REVISED -
DRAWN	- JRR	REVISED -
CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

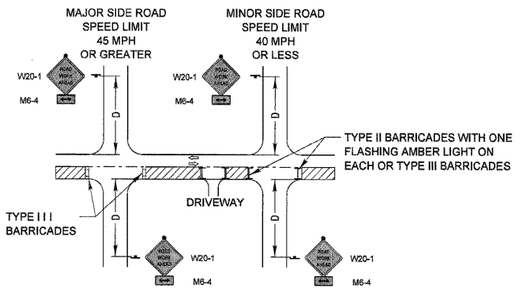
SHEET NO. 4 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	183
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES for HIGHWAY CONSTRUCTION, CONTRACT MAINTENANCE and UTILITY OPERATIONS



GENERAL NOTE:

This Standard is used where at anytime, day or night, any vehicle, equipment, workers or their activities encroach on the pavement or where construction requires lane closures.

DESIGN NOTES:

1. For a side road with a speed limit of 40 mph or less, the closed portion of the main route shall be protected by blocking with Type II or Type III barricades, ⅓ of the cross section of the closed portion of the roadway.
2. For a side road with a speed limit of 45 mph or greater, the closed portion of the main route shall be protected by blocking with Type III barricades, ⅓ of the cross section of the closed portion of the roadway.
3. All W20-1 "ROADWORK AHEAD" signs shall be 48" x 48" with fluorescent orange reflective sheeting with an amber Type A flashing light mounted on the sign.
4. When the side road lies between the beginning of the mainline signing and the work zone, a M6-1 Single Headed Arrow shall be used in lieu of the M6-4 Double Headed Arrow.
5. For a lane closure on a side road or driveway, use the applicable portions of the appropriate Highway Standard or Traffic Control Detail. The spacing of the 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.
6. Advance warning signs shall be omitted on driveways unless otherwise noted.
7. The traffic control and protection for side roads and intersections shall be included in the contract unit lump sum price for "TRAFFIC CONTROL AND PROTECTION."

SYMBOLS

WORK AREA
SIGN ON PORTABLE OR PERMANENT SUPPORT
TYPE II BARRICADE W/TYPE A FLASHING LIGHT
TYPE III BARRICADE

ADVANCE WARNING SIGN SPACING TABLE	
POSTED SPEED LIMIT	DISTANCE BETWEEN SIGNS "D"
40 MPH or less	200 FEET
45-50 MPH	350 FEET
55 MPH	500 FEET

NOT TO SCALE

MODIFIED IDOT DISTRICT ONE SIDE ROAD DETAIL

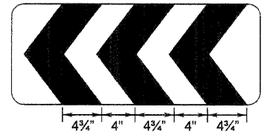
REVISIONS	DATE
Title Block Revision	8/1/09
Reformat LCDOT Standard	7/15/10

LakeCounty Division of Transportation — APPROVED BY: ANTHONY KHAWAJA — DATE: APRIL 1, 2007

TRAFFIC CONTROL and PROTECTION for SIDEROADS, INTERSECTIONS and DRIVEWAYS

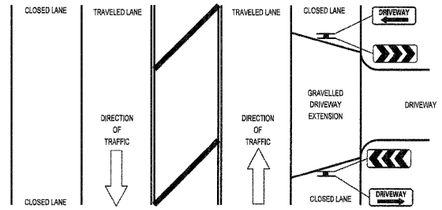
LC7004

30" X 12" WHITE ON GREEN REFLECTIVE BACKGROUND, ◈" BORDER, LETTER SIZE 4C



30" X 12" BLACK ON FLOURESCENT ORANGE CHEVRONS

EXAMPLE OF DRIVEWAY SIGN ASSEMBLY INSTALLATION



TEMPORARY CONSTRUCTION INFORMATION SIGNING NOTES:

1. The driveway and chevron signs shall be mounted back to back on the near side of the roadway where the entrance is located. There will be two sign assemblies per driveway.
2. Temporary construction information signs shall be post mounted 7' above the near edge of pavement and shall be a minimum of 6' beyond the edge of the nearest traveled lane, or as directed by the Engineer.
3. The retroreflective sign face shall be a minimum of Type "A" material.
4. The temporary construction information signs shall be removed or relocated when the Engineer determines the signs to be no longer necessary.
5. Existing traffic control signs and messages that are in conflict with the proposed maintenance of traffic shall be covered or modified with a temporary overlay as shown in the plans and/or as directed by the Engineer.
6. Install additional temporary sign panel assemblies as shown in the plans and/or directed by the Engineer.

REVISIONS	DATE
Revised Signs & Text	1/1/09
Text Update	7/15/11

LakeCounty Division of Transportation — APPROVED BY: A. KHAWAJA — DATE: APRIL 1, 2007

TEMPORARY CONSTRUCTION INFORMATION SIGNS

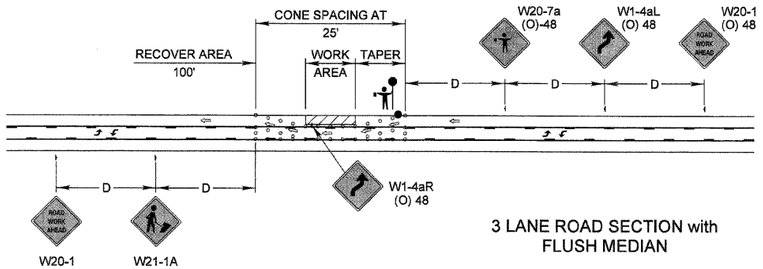
SHEET 1 OF 2

LC7201

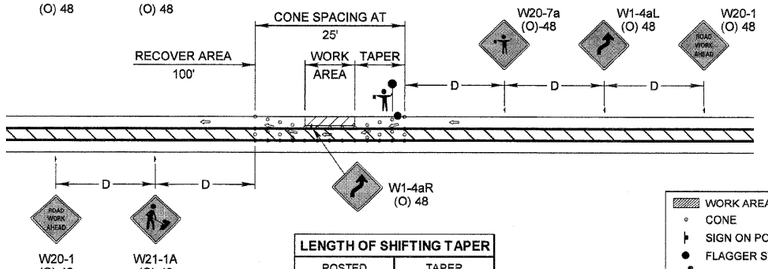
TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES for HIGHWAY CONSTRUCTION, CONTRACT MAINTENANCE and UTILITY OPERATIONS

3 LANE ROAD SECTION with 2-WAY LEFT TURN LANE

NOT TO SCALE



3 LANE ROAD SECTION with FLUSH MEDIAN



GENERAL NOTE:

This Standard is used where during the day only, any vehicle, equipment, workers or their activities encroach on a 3 lane, two way pavement requiring the closure of one traffic lane.

ADVANCE WARNING SIGN SPACING TABLE	
POSTED SPEED LIMIT	DISTANCE BETWEEN SIGNS "D"
40 MPH or less	200 FEET
45-50 MPH	350 FEET
55 MPH	500 FEET

LENGTH OF SHIFTING TAPER	
POSTED SPEED LIMIT	TAPER LENGTH
30 MPH	100'
35 MPH	125'
40 MPH	150'
45 MPH	275'
50 MPH	300'
55 MPH	325'

SYMBOLS

WORK AREA
CONE
SIGN ON PORTABLE OR PERMANENT SUPPORT
FLAGGER STATION
FLAGGER WITH SLOW PADDLE

REVISIONS	DATE
Title Block Revision	8/1/09
Reformat LCDOT Standard	7/15/10

LakeCounty Division of Transportation — APPROVED BY: A. KHAWAJA — DATE: APRIL 1, 2007

TYPICAL LANE CLOSURE 3 LANE ROAD SECTION

LC7005

48" X 36"
BLACK ON FLUORESCENT ORANGE
REFLECTIVE BACKGROUND
1" BORDER WITH ⅝"INSET
LETTER SIZE 6D
*LETTER SIZE 6E BOLD

REVISIONS	DATE
Revised Signs & Text	1/1/09
Text Update	7/15/11

LakeCounty Division of Transportation — APPROVED BY: A KHAWAJA — DATE: APRIL 1, 2007

TEMPORARY CONSTRUCTION INFORMATION SIGNS

SHEET 2 OF 2

LC7201

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED - JRR	REVISED -
DRAWN - JRR	REVISED -
CHECKED - RTM	REVISED -
DATE - 10/24/2011	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET NO. 5 OF 9 SHEETS | STA. | TO STA.

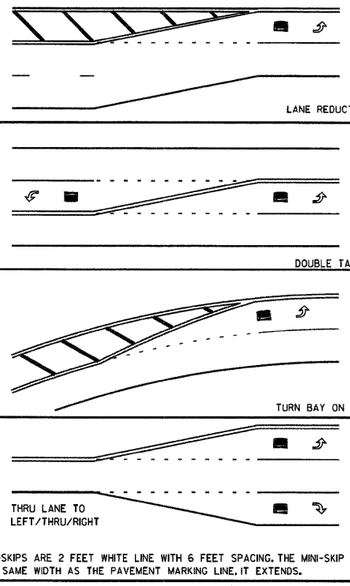
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	184
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE — NO.

ORIGINAL SURVEY — NOTE BOOK — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

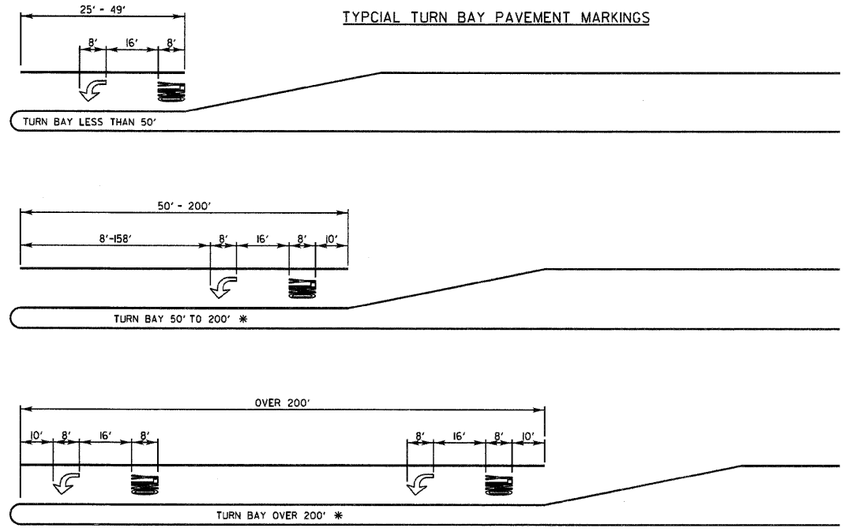
TYPICAL PAVEMENT MARKINGS

TYPICAL MINI-SKIP PAVEMENT MARKINGS



MINI-SKIPS ARE 2 FEET WHITE LINE WITH 6 FEET SPACING. THE MINI-SKIP IS THE SAME WIDTH AS THE PAVEMENT MARKING LINE, IT EXTENDS.

TYPCIAL TURN BAY PAVEMENT MARKINGS



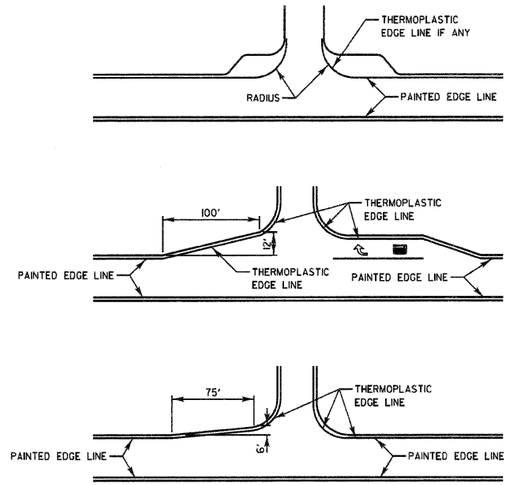
AREA = 15.6 SQ. FT.

AREA = 20.8 SQ FT.

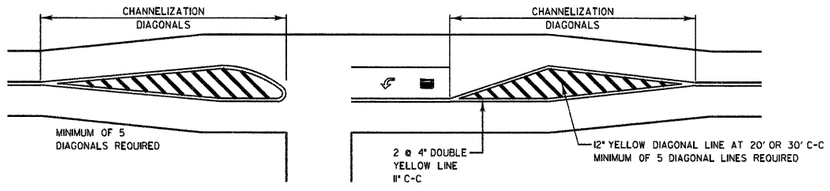
* AT INTERSECTIONS WITH VIDEO DETECTION, THE ARROW AND ONLY PAVEMENT MARKINGS SHALL BE A MINIMUM OF 30' BEHIND THE STOP BAR.

FULL SIZE LETTERS (8') AND ARROWS SHALL BE USED. TURN LANES IN EXCESS OF 400' IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW W/ "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW W/ "ONLY".

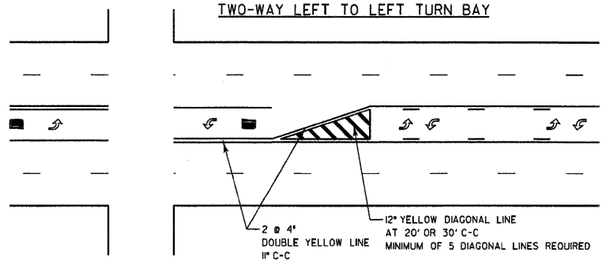
EDGE LINE RADII AT SIDE STREETS



TWO LANE ROAD



TWO-WAY LEFT TO LEFT TURN BAY



TYPICAL DIAGONAL SPACING

DIAGONAL SPACING

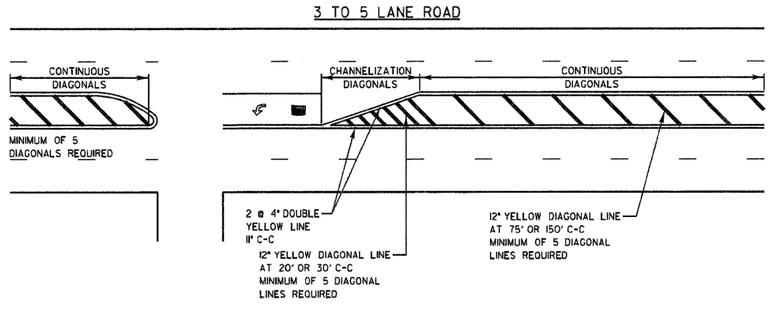
SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION
30-45 MPH	75 FT.	20 FT.
OVER 45 MPH	150 FT.	30 FT.

DUAL LEFT TURN ARROWS

312 SQ. FT. MINIMUM
OF 2 SETS REQUIRED

A MINIMUM OF TWO PAIRS OF DUAL LEFT TURN ARROWS SHALL BE USED. THE DUAL LEFT TURN ARROWS SHALL BE WHITE IN COLOR. THE INTERVAL BETWEEN SETS OF DUAL LEFT TURN ARROWS SHOULD BE 200' AND 300'.

3 TO 5 LANE ROAD



REVISIONS	DATE
Separated Railroad Sheet	06/02/08

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS
SHEET 1 OF 2

LC7800

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	hdmgs 5/23/2011

LakeCounty Division of Transportation

PROJECT NAME
LAKE COUNTY STANDARDS & DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CHXX	XXX	XX-XXXXX-XX-XX	XXX	XXX

FILE NAME: C:\Documents and Settings\hdmgs\My Documents\LCDOT DETAILS\LC7800 TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS.dgn

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS	AREAS CHECKED

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS	AREAS CHECKED

CIVILTECH
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DESIGNED	- JRR	REVISED -
DRAWN	- JRR	REVISED -
CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

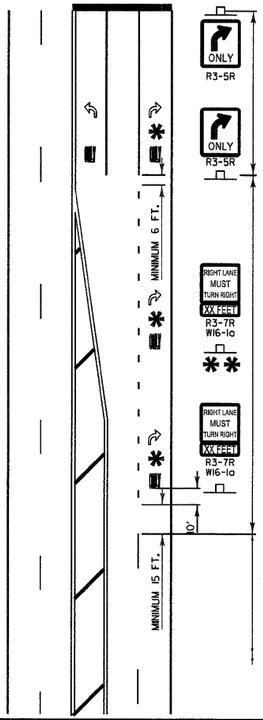
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 6 OF 9 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	185
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS

THRU LANE TO TURN LANE CONVERSION



TURN BAY
6" WHITE LINE
(ADDITIONAL PAV'T MARKINGS AS SHOWN ON SHEET ONE OF THE L.C.D.O.T PAV'T MARKINGS DETAIL SHEETS)

TRANSITION ZONE
6" WHITE 3'/12' SKIP DASH LANE LINE

THRU LANE
4 " WHITE 10'/30' SKIP DASH LANE LINE

MINIMUM TRANSITION ZONE LENGTH

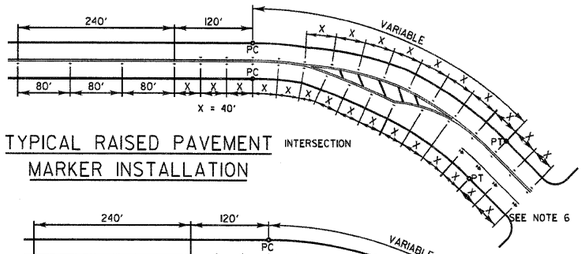
POSTED SPEED	LENGTH
25 M.P.H.	255 FT.
30 M.P.H.	330 FT.
35 M.P.H.	405 FT.
40 M.P.H.	480 FT.
45 M.P.H.	555 FT.
50 M.P.H.	630 FT.
55 M.P.H.	705 FT.

* LOCATION OF PAV'T MARKINGS

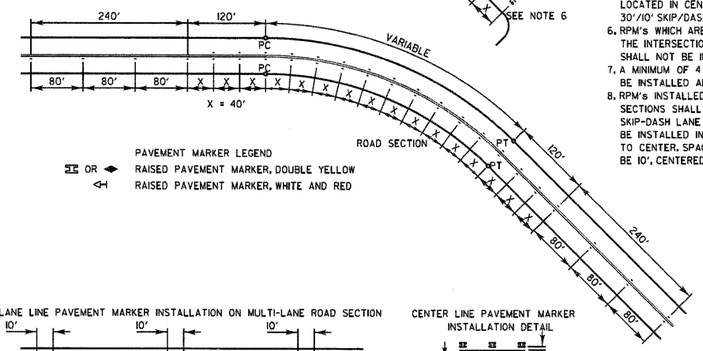
(MEASURED FROM BEGINNING OF TRANSITION ZONE)

POSTED SPEED	LOCATION OF PAV'T MARKINGS
25 M.P.H.	10 FT., 260 FT.
30 M.P.H.	10 FT., 170 FT., 340 FT.
35 M.P.H.	10 FT., 210 FT., 410 FT.
40 M.P.H.	10 FT., 170FT., 330 FT., 490 FT.
45 M.P.H.	10 FT., 190 FT., 370 FT., 560 FT.
50 M.P.H.	10 FT., 170 FT., 330 FT., 490 FT., 640 FT.
55 M.P.H.	10 FT., 180 FT., 350 FT., 520 FT., 710 FT.

FOR POSTED SPEEDS 40 M.P.H. OR GREATER A SECOND R3-7/W16-1a SIGN INSTALLATION SHALL BE LOCATED HALFWAY BETWEEN THE BEGINNING OF THE TRANSITION ZONE AND THE BEGINNING OF THE TURN LANE



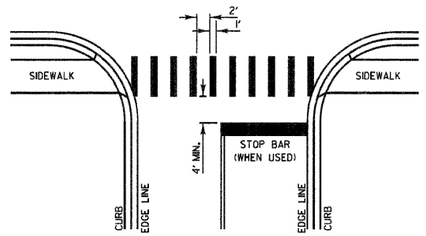
TYPICAL RAISED PAVEMENT MARKER INSTALLATION INTERSECTION



PAVEMENT MARKER LEGEND
OR RAISED PAVEMENT MARKER, DOUBLE YELLOW
RAISED PAVEMENT MARKER, WHITE AND RED

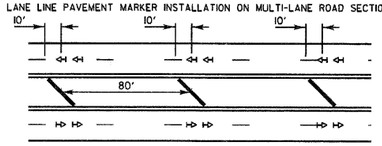
NOTES:
1. CENTERLINE RAISED PAVEMENT MARKERS (RPM's) SHALL BE PLACED ON ALL CURVES OVER 3 1/2 DEGREES ON ALL TWO AND THREE LANE HIGHWAYS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER..
2. SPACING = 40' FOR CENTERLINE MARKERS.
3. ALL RPM's ON CENTERLINE ARE 2-WAY YELLOW. LANE LINE MARKERS ARE WHITE/RED.
4. MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH F.H.W.A. MEMORANDUM HIO-21.
5. MARKERS SHALL BE FIELD ADJUSTED TO BE LOCATED IN CENTER OF THE 30' GAP OF A 30'/10' SKIP/DASH CENTERLINE.
6. RPM's WHICH ARE TO BE LOCATED WITHIN THE INTERSECTION OF A CROSS STREET, SHALL NOT BE INSTALLED.
7. A MINIMUM OF 4 WHITE/RED MARKERS SHALL BE INSTALLED ALONG THE TURN LANE LINE.
8. RPM's INSTALLED ON MULTI-LANE ROAD SECTIONS SHALL BE INSTALLED ON THE WHITE SKIP-DASH LANE LINE ONLY. THESE RPM'S SHALL BE INSTALLED IN PAIRS AND SHALL BE 80' CENTER TO CENTER. SPACING WITHIN EACH PAIR SHALL BE 10', CENTERED WITHIN THE 30' SKIP.

CROSSWALKS

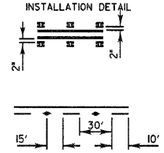


1. WIDTH OF THE CROSSWALK IS GENERALLY 6' EXCEPT AT SCHOOL CROSSINGS AND BICYCLE CROSSINGS, WHICH CAN BE 8'.
2. THE STOP BAR SHOULD BE INSTALLED A MINIMUM OF 4' IN ADVANCE OF THE CROSSWALK.

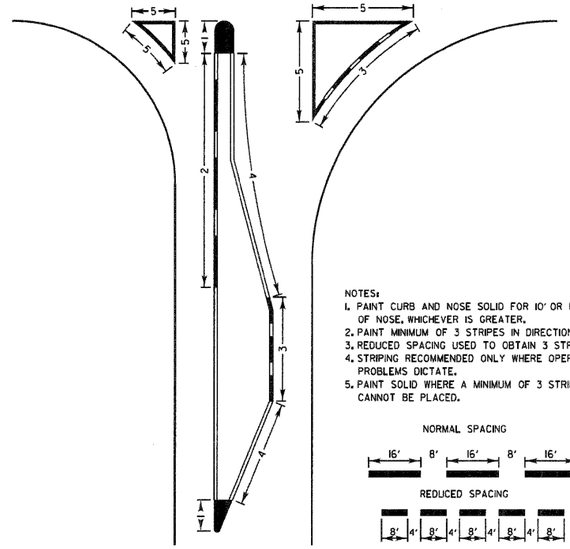
LANE LINE PAVEMENT MARKER INSTALLATION ON MULTI-LANE ROAD SECTION



CENTER LINE PAVEMENT MARKER INSTALLATION DETAIL



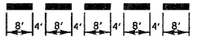
CURB MARKING



NOTES:
1. PAINT CURB AND NOSE SOLID FOR 10' OR RADIUS OF NOSE, WHICHEVER IS GREATER.
2. PAINT MINIMUM OF 3 STRIPES IN DIRECTION OF TRAFFIC.
3. REDUCED SPACING USED TO OBTAIN 3 STRIPE MINIMUM.
4. STRIPING RECOMMENDED ONLY WHERE OPERATIONAL PROBLEMS DICTATE.
5. PAINT SOLID WHERE A MINIMUM OF 3 STRIPES CANNOT BE PLACED.

NORMAL SPACING

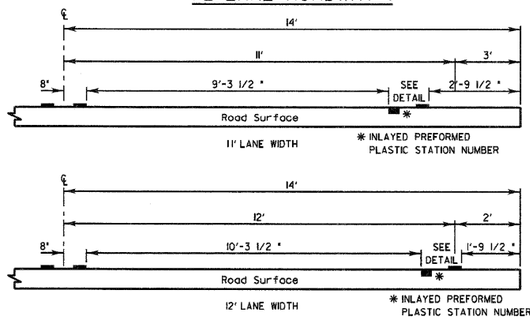
REDUCED SPACING

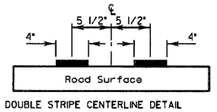


PAVEMENT MARKING GUIDELINES				
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE OF 2 LANE PAVEMENT	4 IN.	SKIP-DASH	YELLOW	10 FT. LINE WITH 30 FT. SPACE
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 IN. 2 @ 4 IN.	SOLID SOLID	YELLOW YELLOW	5 1/2 IN. C-C FROM SKIP-DASH CENTERLINE 11 IN. C-C (OMIT SKIP-DASH CENTERLINE BETWEEN)
CENTERLINE ON MULTI-LANE UNDIVIDED	2 @ 4 IN.	SOLID	YELLOW	11 IN. C-C
LANE LINES	4 IN.	SKIP-DASH	WHITE	10 FT. LINE WITH 30 FT. SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2 FT. LINE WITH 6 FT. SPACE
EDGE LINES	5 IN. WHITE 4 IN. YELLOW	SOLID	WHITE - RIGHT YELLOW - LEFT	OUTLINE RAISED MEDIANS IN YELLOW
TURN LANE MARKINGS	6 IN. LINE FULL SIZE LETTERS AND SYMBOLS (8 FT.)	SOLID	WHITE	TURN ARROW 156 SQ.FT. STRAIGHT ARROW 115 SQ.FT. ONLY 208 SQ.FT. COMB. ARROW 260 SQ.FT.
TWO WAY LEFT TURN MARKING	2 @ 4 IN. EACH DIRECTION 8 FT. LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10 FT. LINE WITH 30 FT. SPACE FOR SKIP-DASH 5 1/2 IN. C-C BETWEEN SKIP-DASH LINE AND SOLID LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK	12 IN. @ 90°	SOLID	WHITE	12 IN. LONGITUDINAL BAR WITH 24 IN. SPACE 6 FT. TO 12 FT. WIDE SEE TYPICAL CROSSWALK MARKING DETAIL
STOP BARS	24 IN.	SOLID	WHITE	PLACE 4 FT. IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE PLACE AT DESIRED STOPPING POINT.
PAINTED MEDIANS	2 @ 4 IN. WITH 11 IN. DIAGONALS @ 45° NO DIAGONALS USED FOR 4 FT. WIDE MEDIAN	SOLID	YELLOW - 2-WAY TRAFFIC WHITE - 1-WAY TRAFFIC	11 IN. C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING DETAIL MINIMUM OF 5 DIAGONALS
GORE MARKING AND CHANNELIZING LINES	8 IN. WITH 12 IN. DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS 15 FT. C-C (LESS THAN 30 M.P.H.) 20 FT. C-C (30 TO 45 M.P.H.) 30 FT. C-C (OVER 45 M.P.H.) MINIMUM OF 5 DIAGONALS
RR. CROSSING	24 IN. TRANSVERSE LINES RR IS 6 FT. LETTER 16 IN. LINE FOR "X"	SOLID	WHITE	SEE I.D.O.T. STD. 780001 SQ.FT. AREA OF: "R" = 36 SQ.FT. / "R" "X" = 54.0 SQ.FT.
SHOULDER DIAGONALS	12 IN. @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50 FT. C-C (LESS THAN 30 M.P.H.) 75 FT. C-C (30 TO 45 M.P.H.) 150 FT. C-C (OVER 45 M.P.H.) MINIMUM OF 5 DIAGONALS
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO PART III "MARKINGS" IN THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND I.D.O.T. HIGHWAY STANDARD 780001 EFFECTIVE JAN. 9, 1998.				

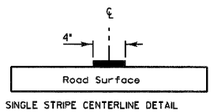
PAVEMENT CROSS SECTION SHOWING TYPICAL PAVEMENT MARKINGS

(2-LANE ROADWAY)



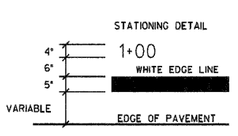


DOUBLE STRIPE CENTERLINE DETAIL



SINGLE STRIPE CENTERLINE DETAIL

Note:
Centerline markings are 4" lines at 11' centers.



REVISIONS	DATE
Separated Railroad Sheet	06/02/08

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS
SHEET 2 OF 2

LC7800

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY		
		/ /		SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	hdmgs 5/23/2011

LakeCounty Division of Transportation

PROJECT NAME
LAKE COUNTY STANDARDS & DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CHXX	XXX	XX-XXXXX-XX-XX	XXX	XXX

FILE NAME: C:\Documents and Settings\hdmgs\My Documents\LCDOT DETAILS\LC7800 TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS.dgn

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	- JRR	REVISED	-
DRAWN	- JRR	REVISED	-
CHECKED	- RTM	REVISED	-
DATE	- 10/24/2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 7 OF 9 SHEETS STA. TO STA.

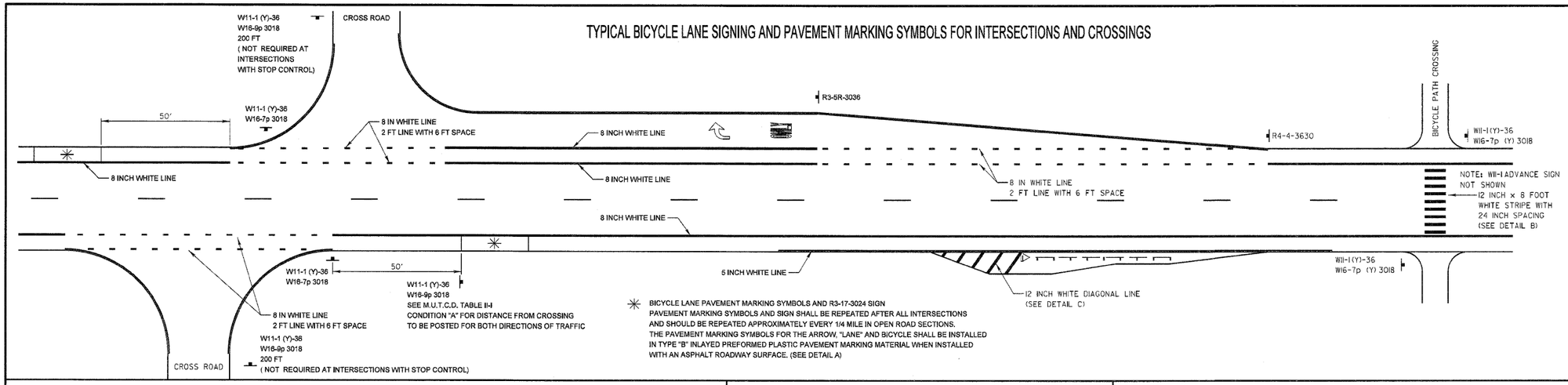
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	186

CONTRACT NO. 63649
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

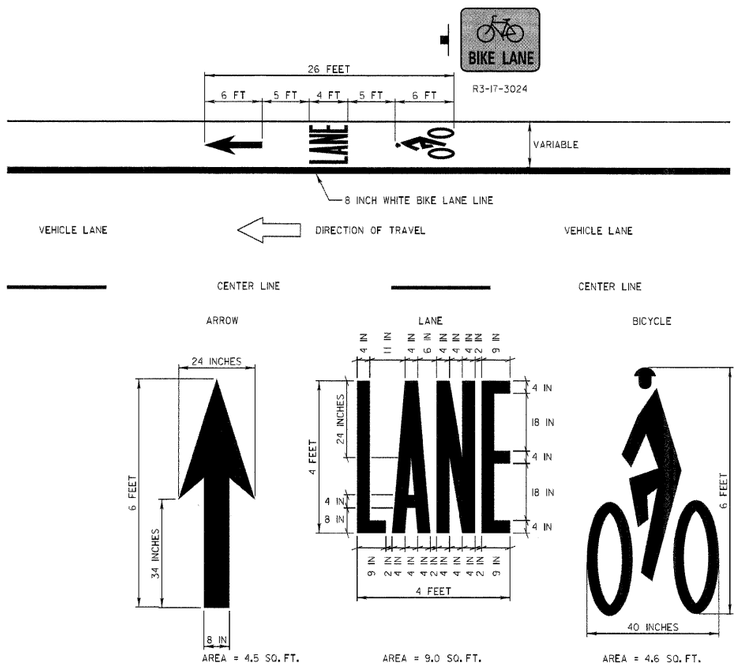
FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

TYPICAL BICYCLE LANE SIGNING AND PAVEMENT MARKING SYMBOLS FOR INTERSECTIONS AND CROSSINGS

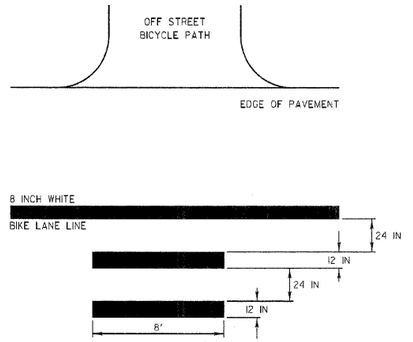


✳ BICYCLE LANE PAVEMENT MARKING SYMBOLS AND R3-17-3024 SIGN PAVEMENT MARKING SYMBOLS AND SIGN SHALL BE REPEATED AFTER ALL INTERSECTIONS AND SHOULD BE REPEATED APPROXIMATELY EVERY 1/4 MILE IN OPEN ROAD SECTIONS. THE PAVEMENT MARKING SYMBOLS FOR THE ARROW, "LANE" AND BICYCLE SHALL BE INSTALLED IN TYPE "B" INLAYED PREFORMED PLASTIC PAVEMENT MARKING MATERIAL WHEN INSTALLED WITH AN ASPHALT ROADWAY SURFACE. (SEE DETAIL A)

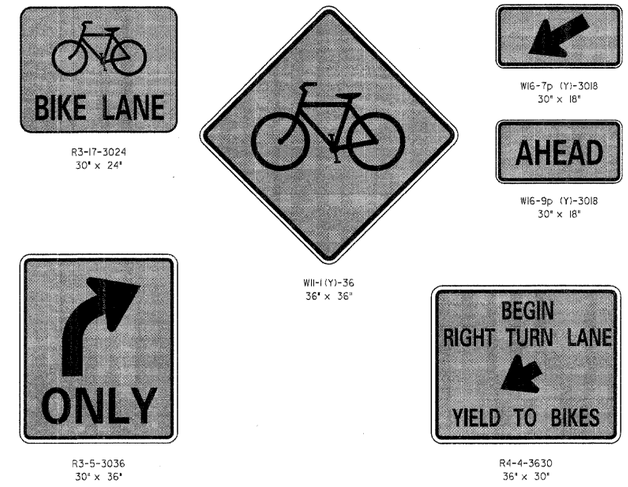
BICYCLE LANE PAVEMENT MARKINGS
DETAIL A

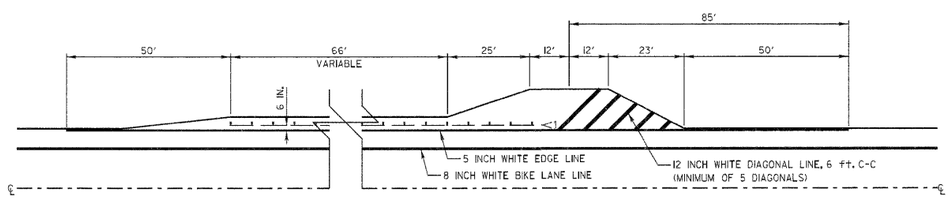


TYPICAL BICYCLE PATH CROSSING
DETAIL B



TYPICAL BICYCLE LANE SIGNS





BICYCLE LANE PAVEMENT MARKINGS AT GUARD RAIL SECTIONS
DETAIL C

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	hdrmc 7/21/2010

FILE NAME: U:\DOT\To ITS\LC7801ON STREET BICYCLE LANE PAVEMENT MARKING AND SIGNING DETAILS.dgn

REVISIONS	DATE
Reformat LCDOT Standard	7/15/10

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

ON STREET BICYCLE LANE PAVEMENT MARKING AND SIGNING DETAILS
SHEET 1 OF 1

LC7801

LakeCounty Division of Transportation

PROJECT NAME	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
LAKE COUNTY STANDARDS & DETAILS	CHXX	XXX	XX-XXXXX-XX-XX	XXX	XXX

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	JRR	REVISED -
DRAWN	JRR	REVISED -
CHECKED	RTM	REVISED -
DATE	10/24/2011	REVISED -

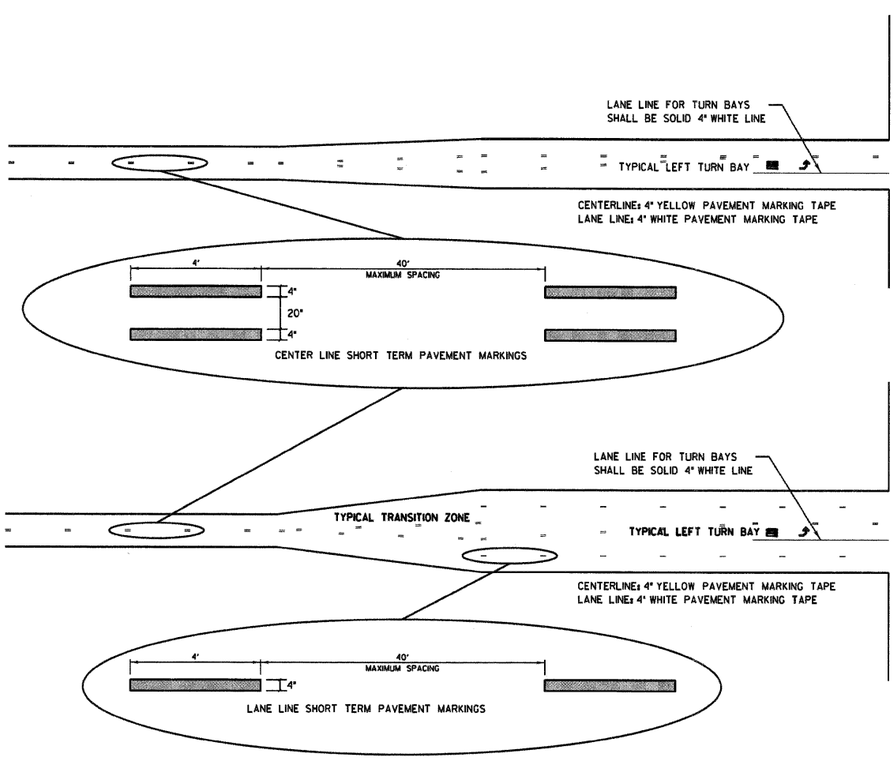
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

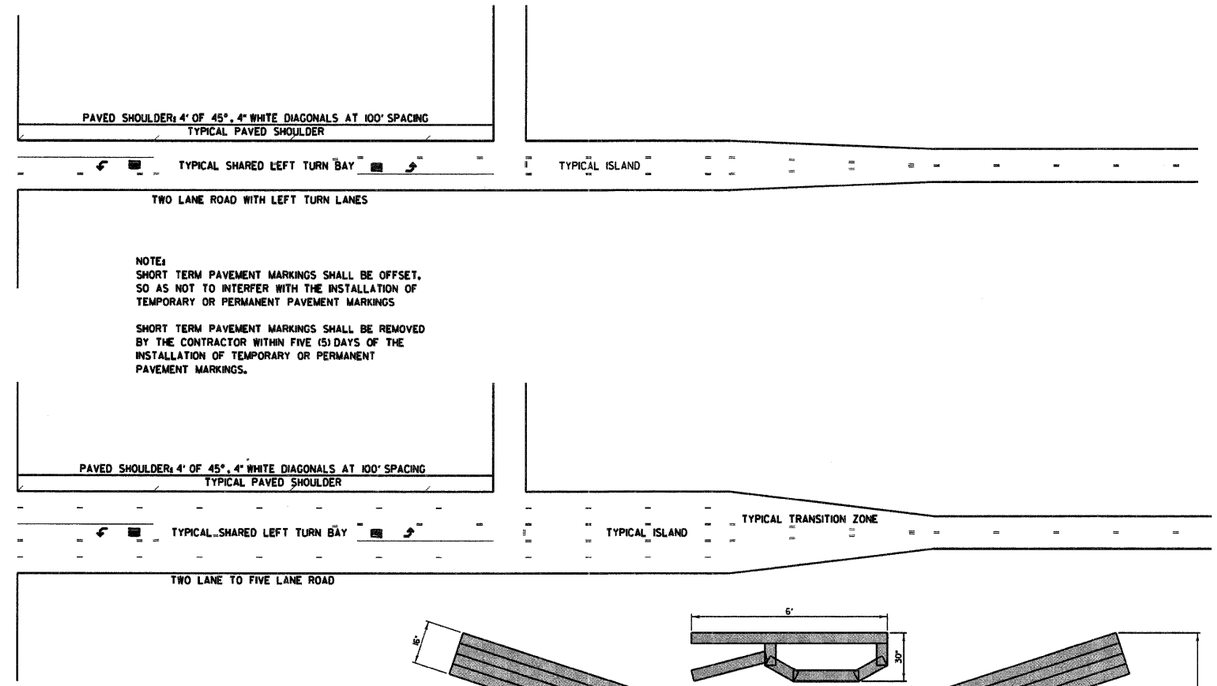
SHEET NO. 8 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	187
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

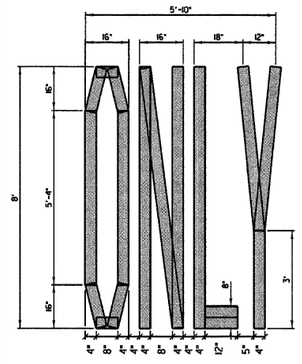
TYPICAL SHORT TERM PAVEMENT MARKINGS



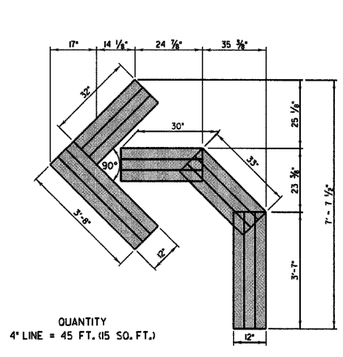


NOTE:
SHORT TERM PAVEMENT MARKINGS SHALL BE OFFSET, SO AS NOT TO INTERFER WITH THE INSTALLATION OF TEMPORARY OR PERMANENT PAVEMENT MARKINGS

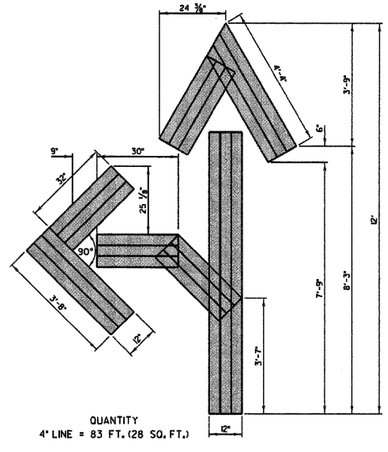
SHORT TERM PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WITHIN FIVE (5) DAYS OF THE INSTALLATION OF TEMPORARY OR PERMANENT PAVEMENT MARKINGS.



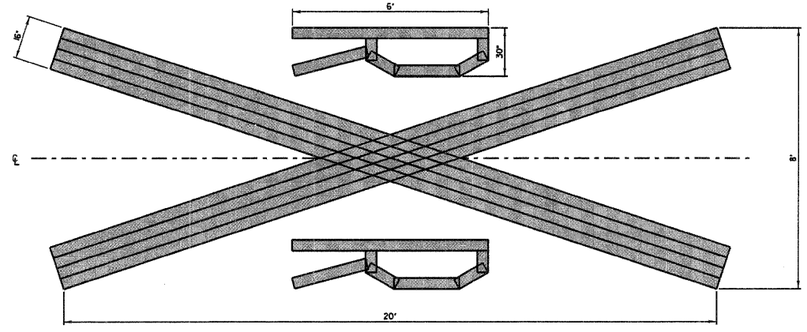
QUANTITY:
4" LINE = 64 FT. (21 SQ. FT.)

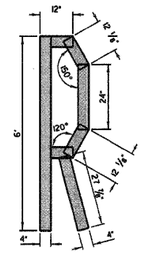


QUANTITY
4" LINE = 45 FT. (15 SQ. FT.)



QUANTITY
4" LINE = 83 FT. (28 SQ. FT.)





QUANTITY
4" LINE = 200 FT. (67 SQ. FT.)
("X" = 172 FT.)
("R" = 14 FT.)

REVISIONS	DATE
REMOVE DUAL DIMENSIONS	2/18/08

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

SHORT TERM PAVEMENT MARKINGS

LC7802

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	hdmgs 5/23/2011

LakeCounty Division of Transportation

PROJECT NAME
LAKE COUNTY STANDARDS & DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CHXX	XXX	XX-XXXXX-XX-XX	XX	XX

FILE NAME: C:\Documents and Settings\hdmgs\My Documents\LCDOT DETAILS\LC7802 SHORT TERM PAVEMENT MARKINGS.dgn

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	- JRR	REVISED -
DRAWN	- JRR	REVISED -
CHECKED	- RTM	REVISED -
DATE	- 10/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 9 OF 9 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	188
		CONTRACT NO. 63649		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED
BY
DATE