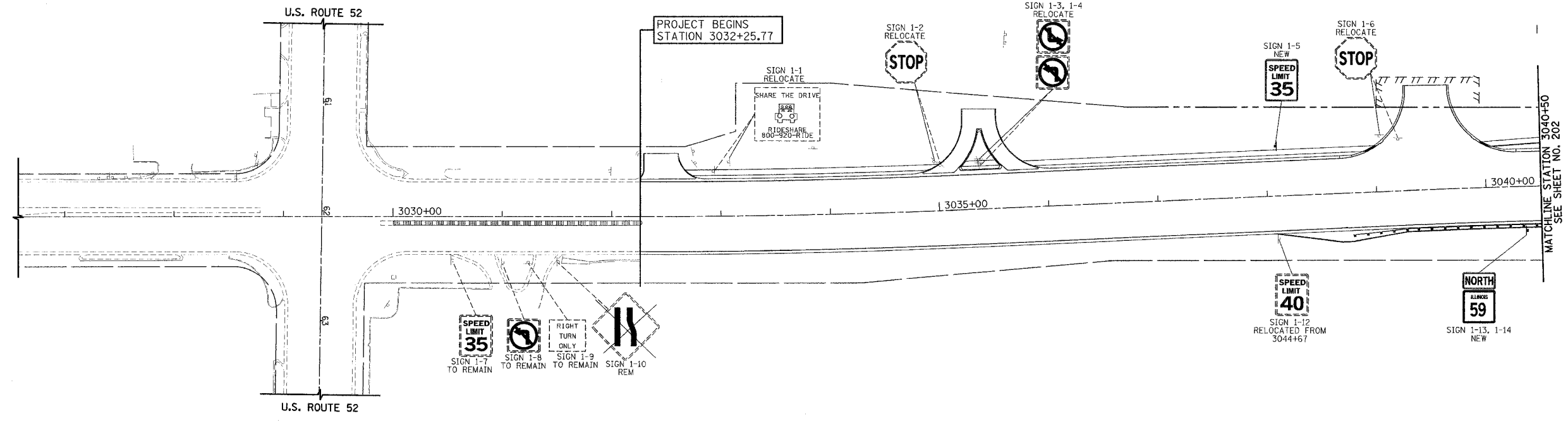


RTE	SECTION	COUNTY	TOTAL SHEET
338	114R-1	WILL	355
STA. 3032+25.77		TO STA. 3040+50	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			



DATE	BY
DATE	BY

DATE	BY
DATE	BY

LEGEND

EXISTING SIGN POST
 PROPOSED SIGN POST TYPE "A"
 OR "B" PER HIGHWAY STD 729001
 PROPOSED SIGN PANEL TYPE "1"



EXISTING SIGN PANEL TYPE "1"



NOTES

SEE SHEET 22 TO 25 FOR THE SIGNING SCHEDULE.

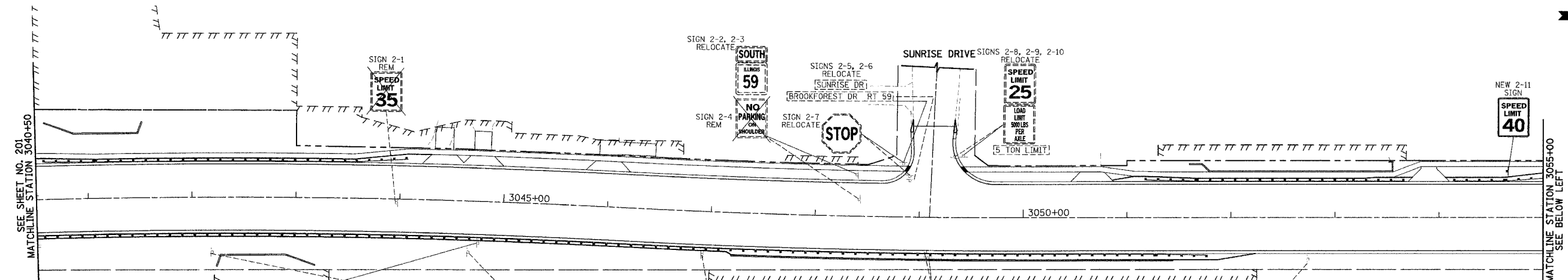
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGNING PLAN
 ILLINOIS ROUTE 59
 STATION 3032+25.77 TO STATION 3040+50

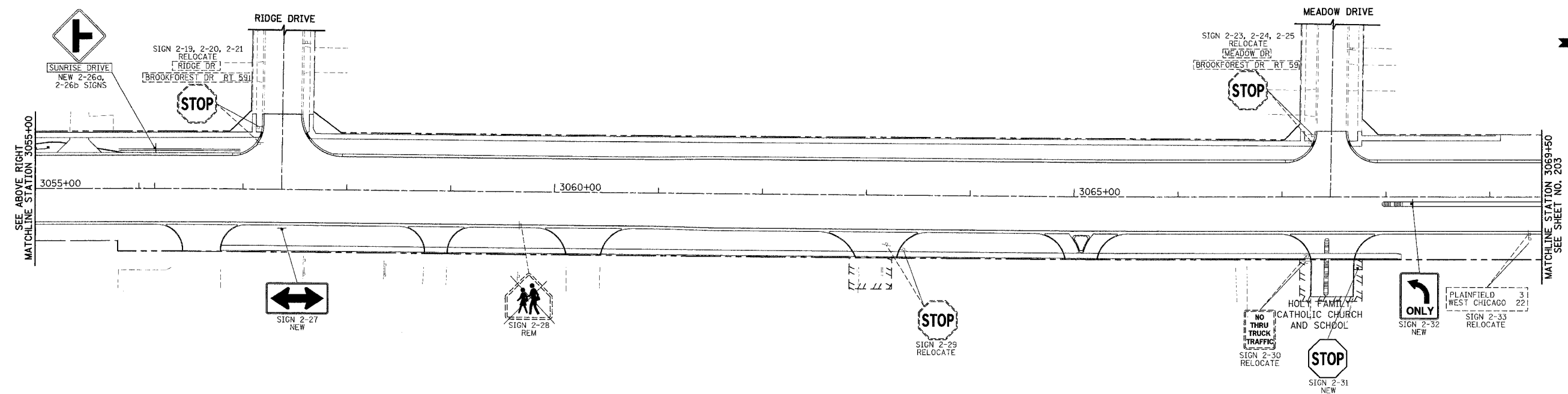
DATE 3/18/08
 DRAWN BY KB
 CHECKED BY VJD

50 0 50
 SCALE IN FEET

RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	202
STA. 3040+50		TO STA. 3069+50		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



FOR LEGEND AND NOTES
SEE SHEET NO. 201



PLAN	DATE
BY	
CHECKED	
APPROVED	
DATE	

PROFILE	DATE
BY	
CHECKED	
APPROVED	
DATE	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN

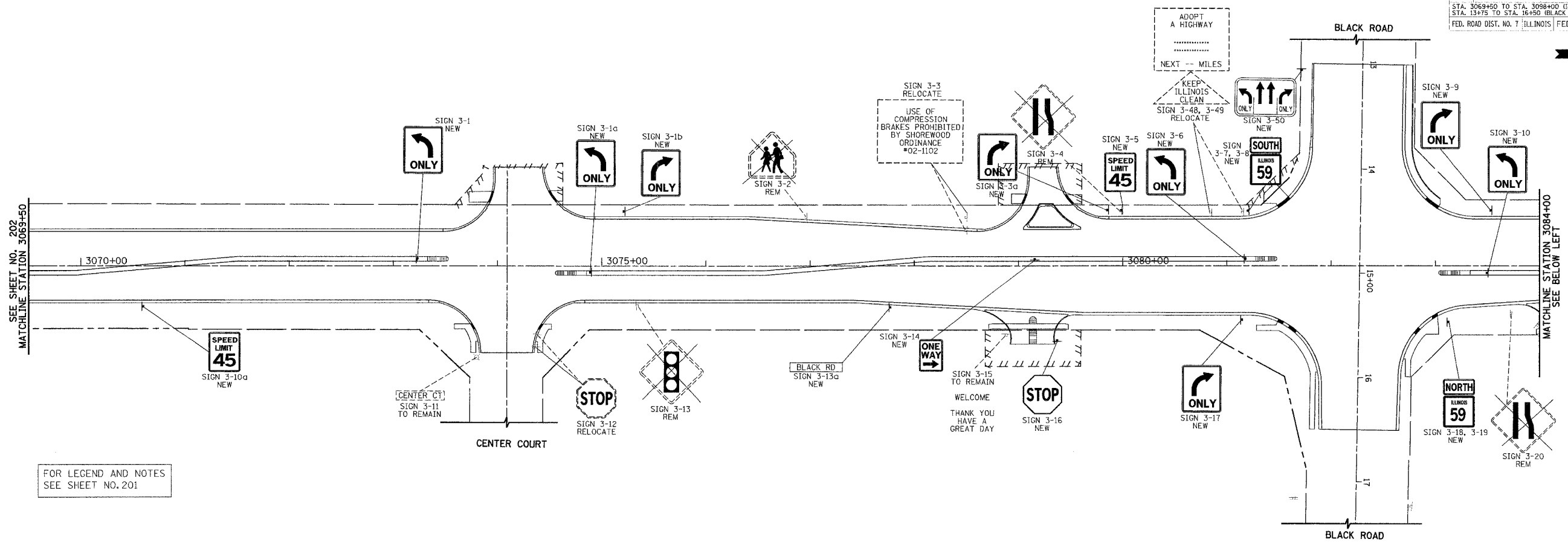
ILLINOIS ROUTE 59

STATION 3040+50 TO STATION 3069+50

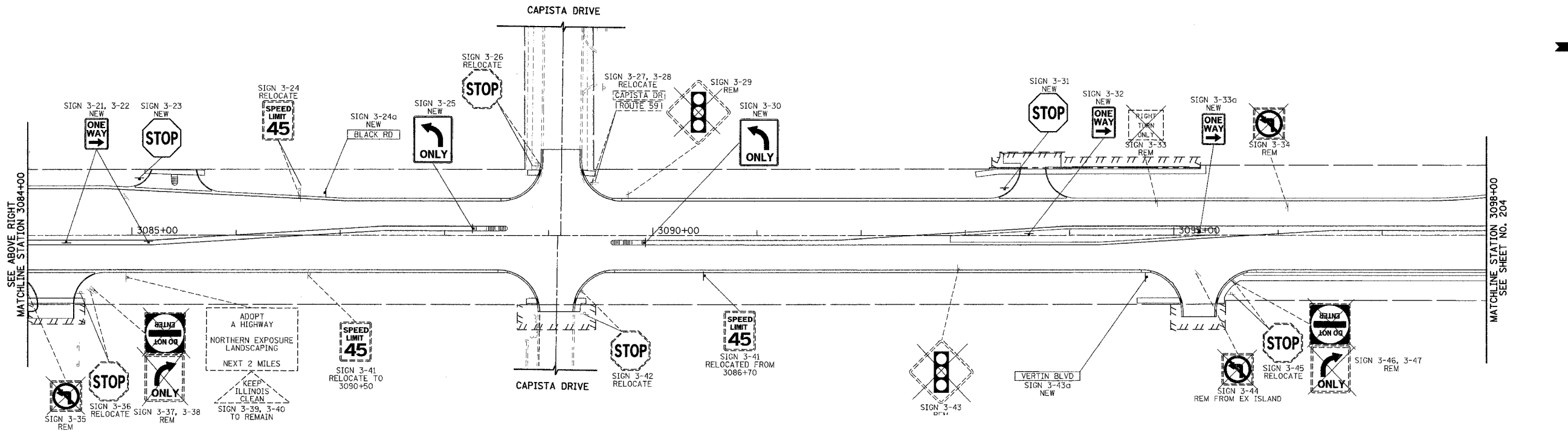
DATE 3/18/08
DRAWN BY KB
CHECKED BY VJD

SCALE IN FEET

RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	203
STA. 3069+50 TO STA. 3098+00 (IL ROUTE 59)				
STA. 13+75 TO STA. 16+50 (BLACK ROAD)				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



FOR LEGEND AND NOTES
SEE SHEET NO. 201



DATE	
BY	
REVISIONS	
PLANNED	
NOTED	
NO.	

DATE	
BY	
REVISIONS	
PROFILES	
NOTED	
NO.	

REVISIONS	
NAME	DATE

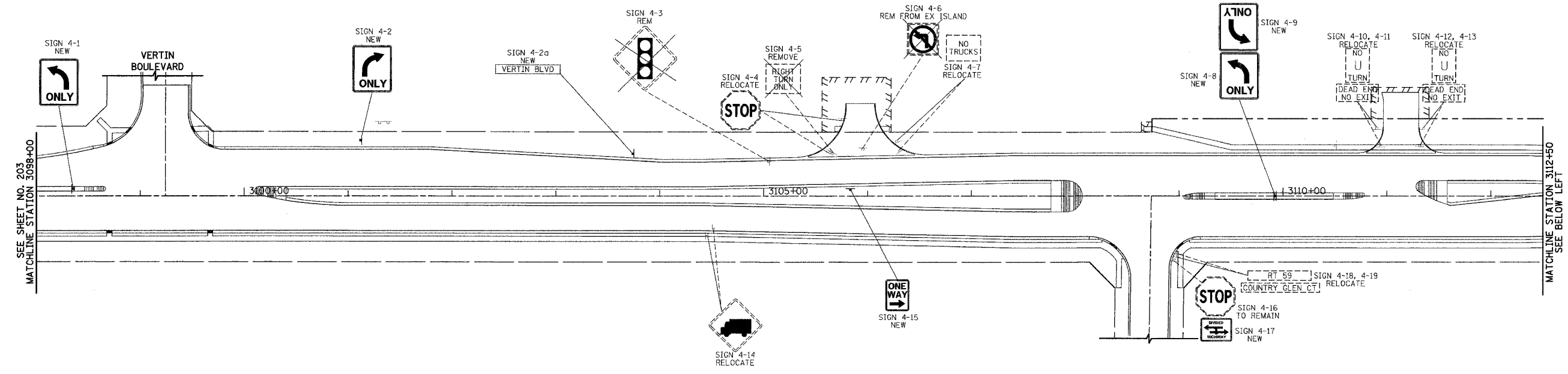
ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGNING PLAN

ILLINOIS ROUTE 59
STATION 3069+50 TO STATION 3098+00
BLACK ROAD
STATION 13+75 TO STATION 16+50

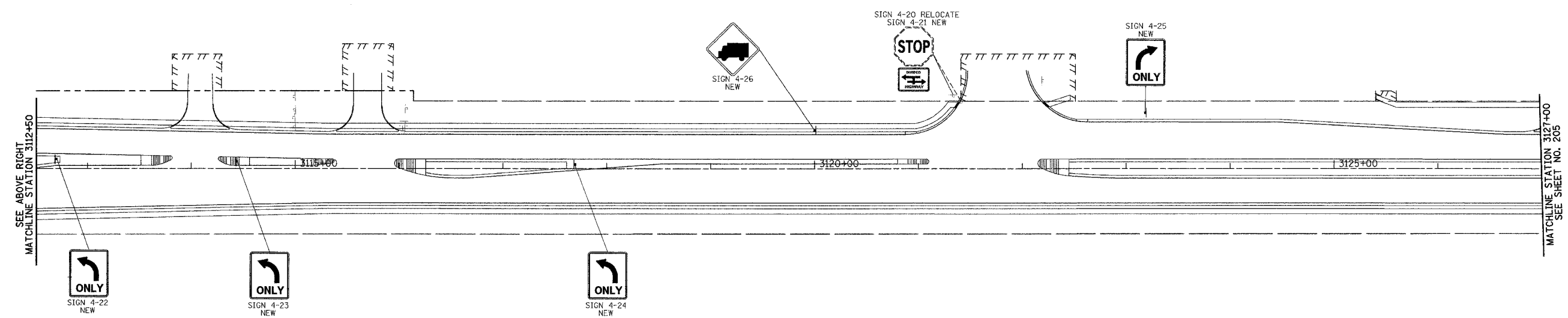
DATE: 3/18/08
DRAWN BY: KB
CHECKED BY: VJD

SCALE IN FEET: 0, 50

RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	204
STA. 3098+00		TO STA. 3127+00		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



FOR LEGEND AND NOTES
SEE SHEET NO. 201



DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN

ILLINOIS ROUTE 59

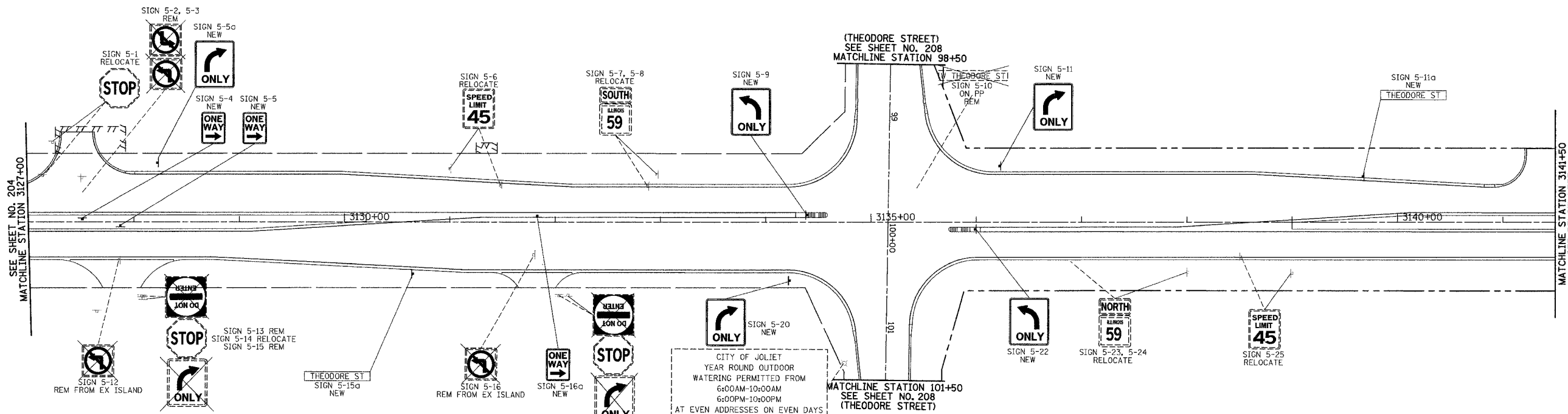
STATION 3098+00 TO STATION 3127+00

DATE 3/18/08
DRAWN BY KB
CHECKED BY VJD

50 0 50
SCALE IN FEET

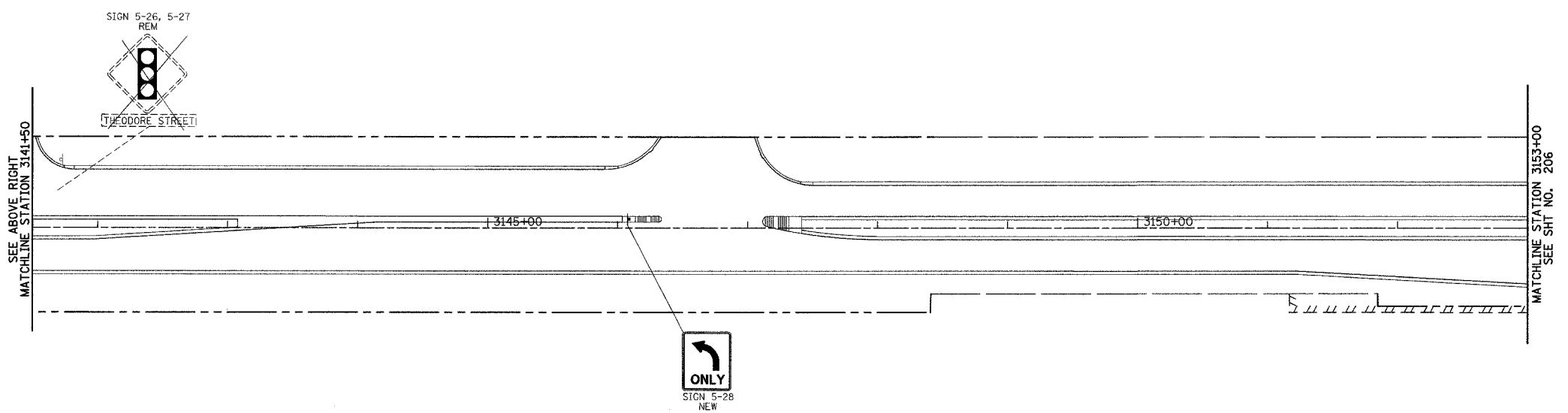
RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	205

STA. 3127+00 TO STA. 3153+00 (ILL. ROUTE 59)
 STA. 98+50 TO STA. 101+50 (THEODORE STREET)
 FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT



FOR LEGEND AND NOTES
SEE SHEET NO. 201

CITY OF JOLIET
YEAR ROUND OUTDOOR
WATERING PERMITTED FROM
6:00AM-10:00AM
6:00PM-10:00PM
AT EVEN ADDRESSES ON EVEN DAYS
AT ODD ADDRESSES ON ODD DAYS



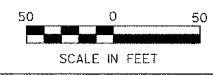
ONLY
NEW

PLAN	DATE	BY
REVISION		
NO. 1		
NO. 2		
NO. 3		
NO. 4		
NO. 5		
NO. 6		
NO. 7		
NO. 8		
NO. 9		
NO. 10		

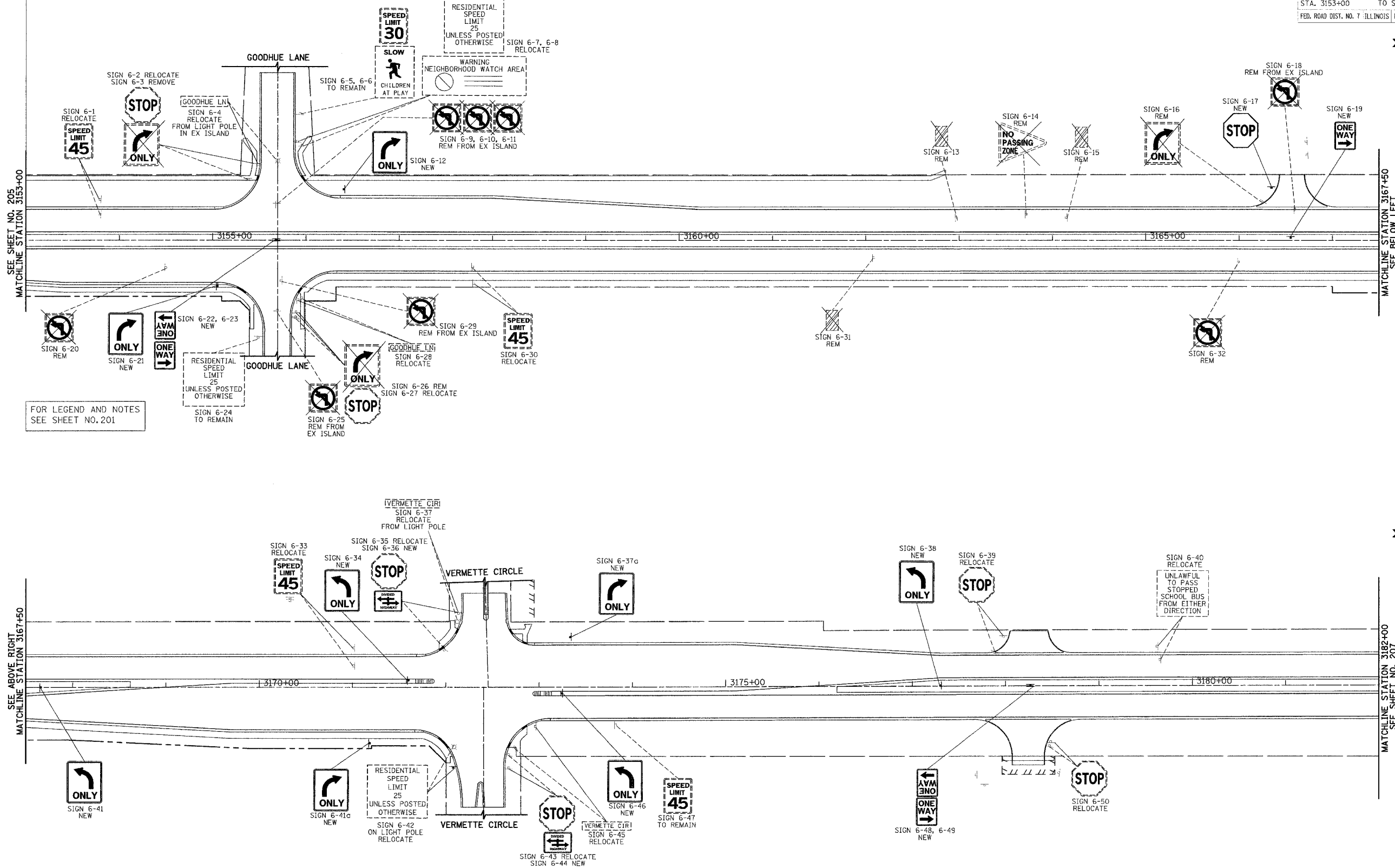
PROFILE	DATE	BY
REVISION		
NO. 1		
NO. 2		
NO. 3		
NO. 4		
NO. 5		
NO. 6		
NO. 7		
NO. 8		
NO. 9		
NO. 10		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGNING PLAN
 ILLINOIS ROUTE 59
 STATION 3127+00 TO STATION 3153+00
 THEODORE STREET
 STATION 98+50 TO STATION 101+50
 DATE 3/18/08
 DRAWN BY KB
 CHECKED BY VJD



RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	206
STA. 3153+00		TO STA. 3182+00		
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT



FOR LEGEND AND NOTES
SEE SHEET NO. 201

DATE	BY	REVISIONS

DATE	BY	REVISIONS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN

ILLINOIS ROUTE 59

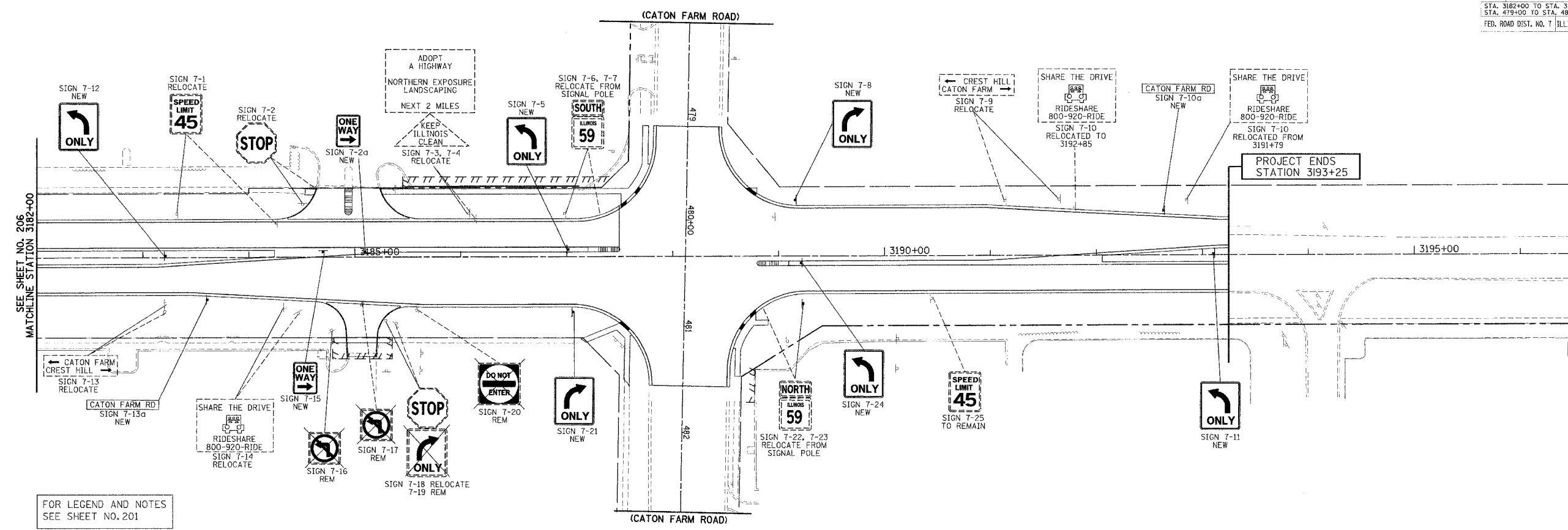
STATION 3153+00 TO STATION 3182+00

DATE 3/18/08
DRAWN BY KB
CHECKED BY VJD

SCALE IN FEET

RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	207

STA. 3182+00 TO STA. 3193+00 (IL ROUTE 59)
 STA. 479+00 TO STA. 481+75 (CATON FARM ROAD)
 FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT



DATE	BY	REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS

DATE	BY	REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS

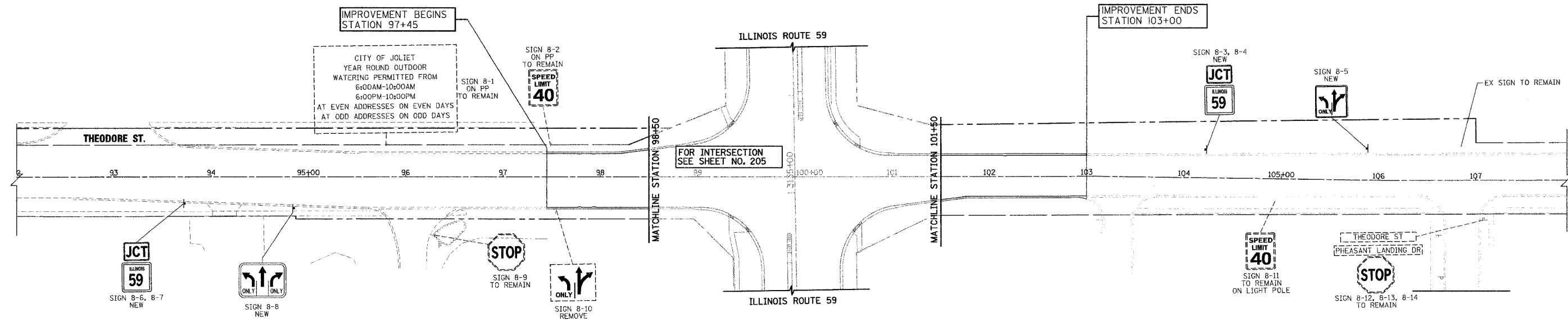
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGNING PLAN
 ILLINOIS ROUTE 59
 STATION 3182+00 TO STATION 3193+00
 CATON FARM ROAD
 STATION 479+00 TO STATION 481+75

DATE 3/18/08
 DRAWN BY KB
 CHECKED BY VJD

50 0 50
 SCALE IN FEET

RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL.	355	208
STA. 97+45 TO STA. 98+50				
STA. 101+50 TO STA. 103+00				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



FOR LEGEND AND NOTES
SEE SHEET NO. 201

PLAN	DESIGNED	DATE
	CHECKED	
	IN CHARGE	
	BY	
	DATE	

PROFILE	DESIGNED	DATE
	CHECKED	
	IN CHARGE	
	BY	
	DATE	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN



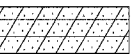


THEODORE STREET
STATION 97+45 TO STATION 98+50
STATION 101+50 TO STATION 103+00

DATE 3/18/08
DRAWN BY KB
CHECKED BY VJD

50 0 50
SCALE IN FEET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL.	355	209
STA. 3032+25.77		TO STA. 3040+50		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

LEGEND

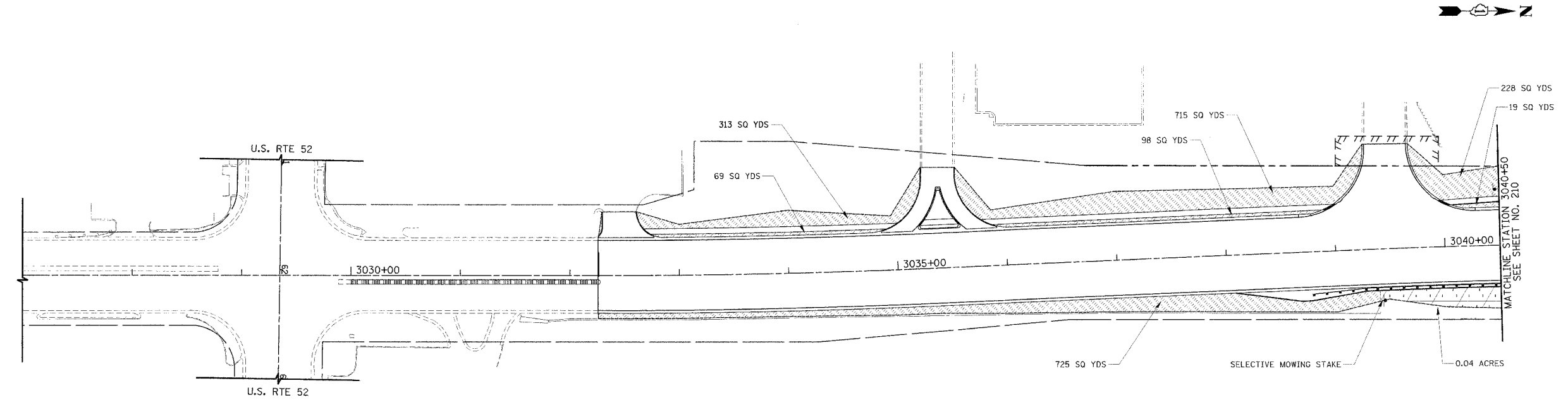
-  MOWSTAKE W/SIGN
-  SEEDING CLASS 2A, EROSION CONTROL BLANKET
-  SEEDING CLASS 4 & 5A, COMBINED COMPOST FURNISH AND PLACE 4", EROSION CONTROL BLANKET
-  SODDING, SALT TOLERANT
-  INTERSEEDING CLASS 4, BROADLEAF WEED CONTROL AND EROSION CONTROL BLANKET.

TOPSOIL SHALL BE PLACED AT THE DEPTH AND LOCATION LISTED BELOW:

- 4" BETWEEN SIDEWALK AND EX/PR R.O.W. AND BETWEEN BACK OF CURB AND EX/PR R.O.W. IN LOCATIONS WHERE THERE IS NO SIDEWALK
- 8" BETWEEN BACK OF CURB AND EX OR PROP SIDEWALK
- 12" LANDSCAPED MEDIANS

DATE	08/
SCALE	AS SHOWN
PROJECT	ILLINOIS ROUTE 59
PLAN	LANDSCAPING
NO. 1	LANDSCAPING
DATE	08/
SCALE	AS SHOWN
PROJECT	ILLINOIS ROUTE 59
PLAN	LANDSCAPING
NO. 1	LANDSCAPING

DATE	08/
SCALE	AS SHOWN
PROJECT	ILLINOIS ROUTE 59
PLAN	LANDSCAPING
NO. 1	LANDSCAPING
DATE	08/
SCALE	AS SHOWN
PROJECT	ILLINOIS ROUTE 59
PLAN	LANDSCAPING
NO. 1	LANDSCAPING



NOTE: SEE PLAN AND PROFILE SHEETS FOR TREE REMOVALS AND SELECTIVE CLEARING LOCATIONS

REVISIONS	
NAME	DATE
REVISED ILS9 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

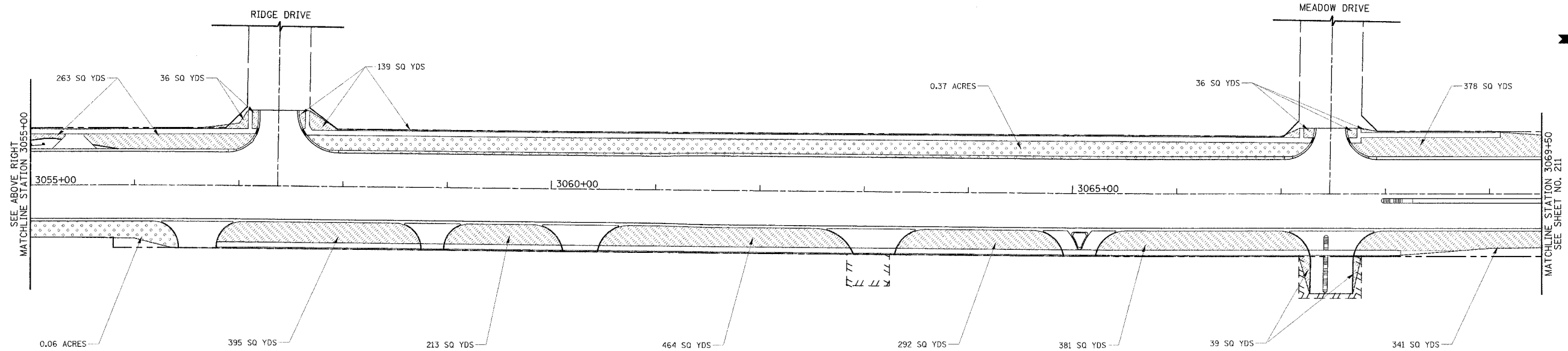
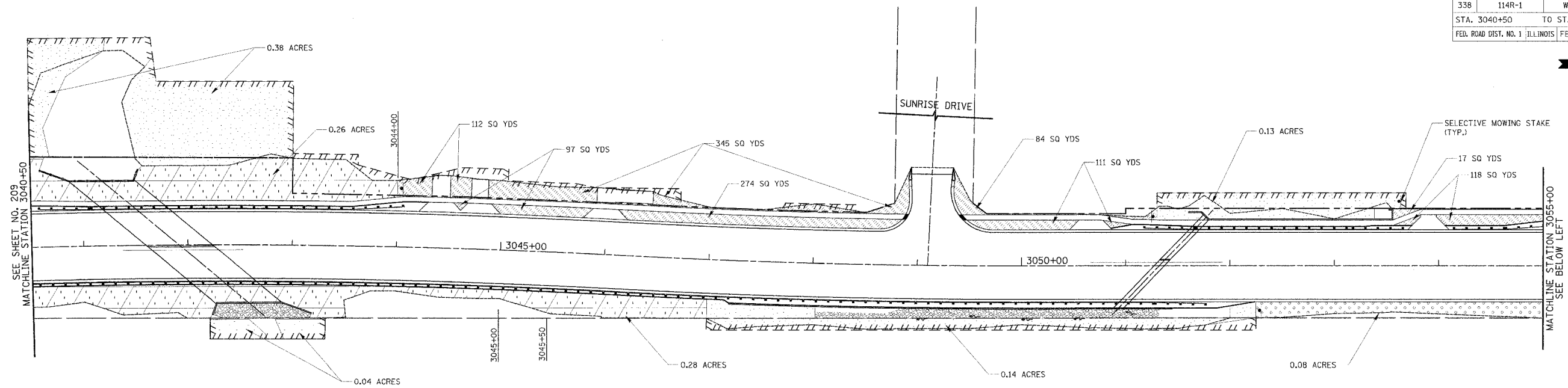
LANDSCAPING PLAN

ILLINOIS ROUTE 59
STATION 3032+25.77 TO STATION 3040+50

DATE 3/18/08
DRAWN BY MJG
CHECKED BY VJD

50 0 50
SCALE IN FEET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	210
STA. 3040+50		TO STA. 3069+50		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEE SHEET 209 FOR LEGEND

PLAN	SUBMITTED	DATE
BY		
NO. OF SHEETS	CHECKED	
NO.	BY	
NO.	DATE	

PROFILE	DATE
NO. OF SHEETS	
NO.	
NO.	

REVISIONS	
NAME	DATE
REVISED IL 59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

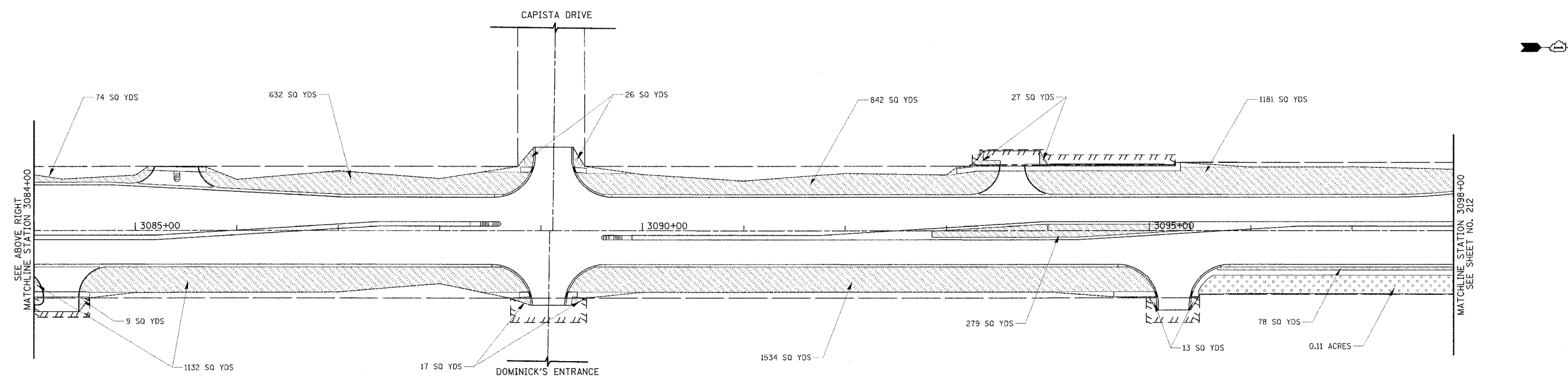
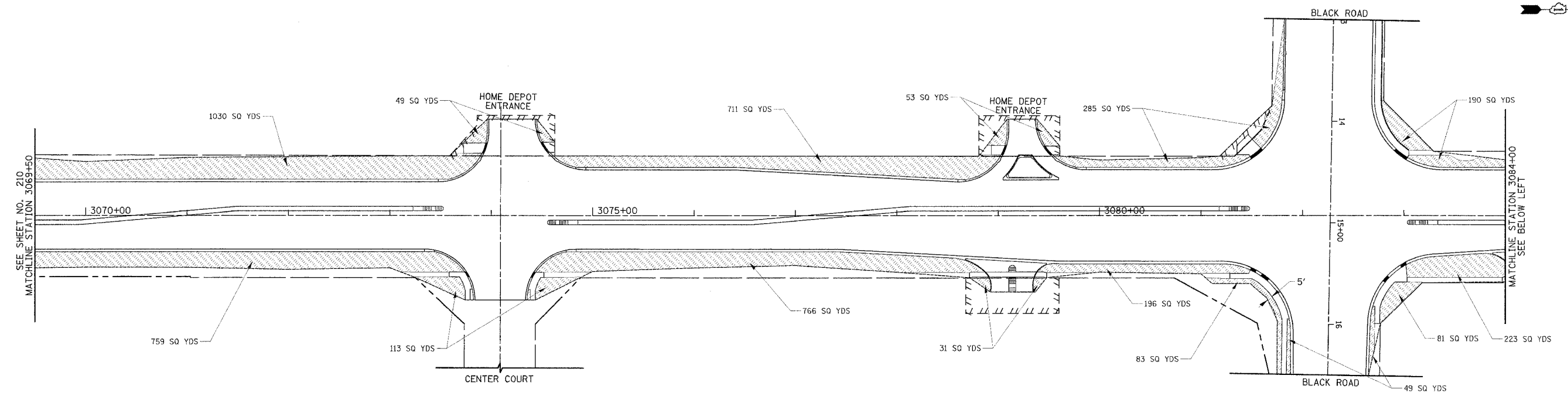
LANDSCAPING PLAN

ILLINOIS ROUTE 59
STATION 3040+50 TO STATION 3069+50

DATE 3/18/08
DRAWN BY MJG
CHECKED BY VJD

50 0 50
SCALE IN FEET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	211
STA. 3069+50 TO STA. 3098+00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEE SHEET 209 FOR LEGEND

DATE	BY	REVISION

DATE	BY	REVISION

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

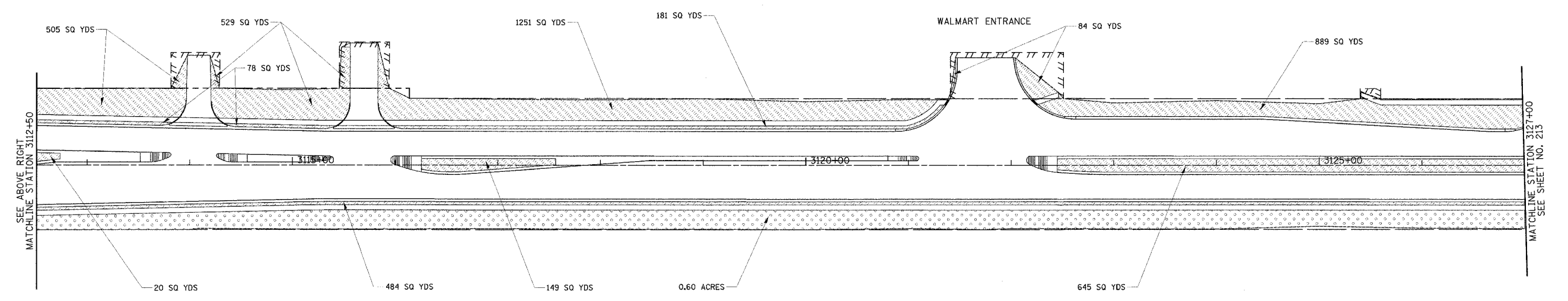
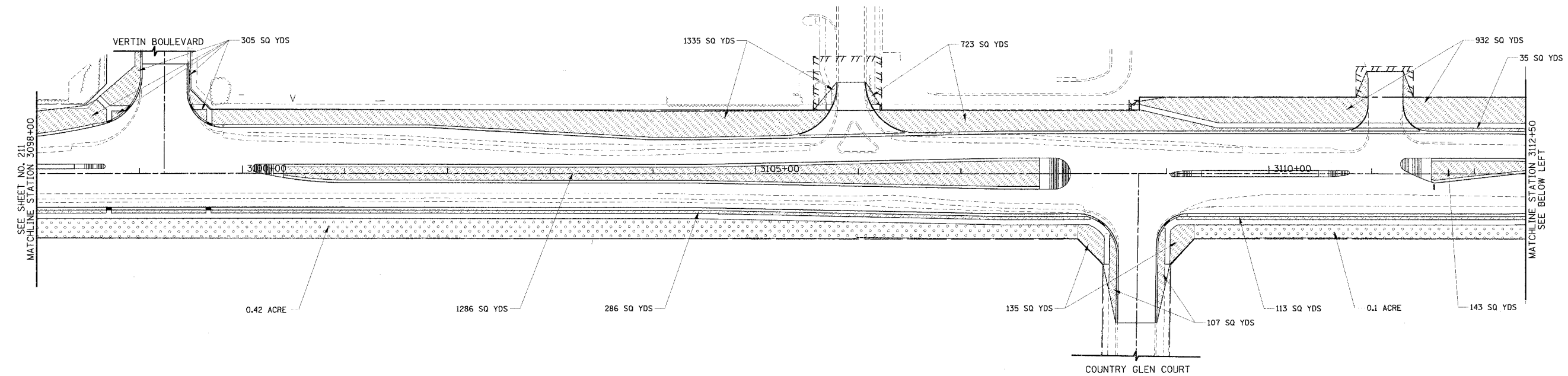
LANDSCAPING PLAN

ILLINOIS ROUTE 59
STATION 3069+50 TO STATION 3098+00
BLACK ROAD
STATION 13+75 TO STATION 16+50

DATE 3/18/08
DRAWN BY MJG
CHECKED BY VJD

SCALE IN FEET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	212
STA. 3098+00		TO STA. 3127+00		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT



SEE SHEET 209 FOR LEGEND

PLAN	SUBMITTED	DATE
	BY	
	DATE	
	BY	
	DATE	
	BY	
	DATE	

PROFILE	SUBMITTED	DATE
	BY	
	DATE	
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	DATE	

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

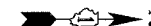
LANDSCAPING PLAN

ILLINOIS ROUTE 59
STATION 3098+00 TO STATION 3127+00

DATE 3/18/08
DRAWN BY MJG
CHECKED BY VJD

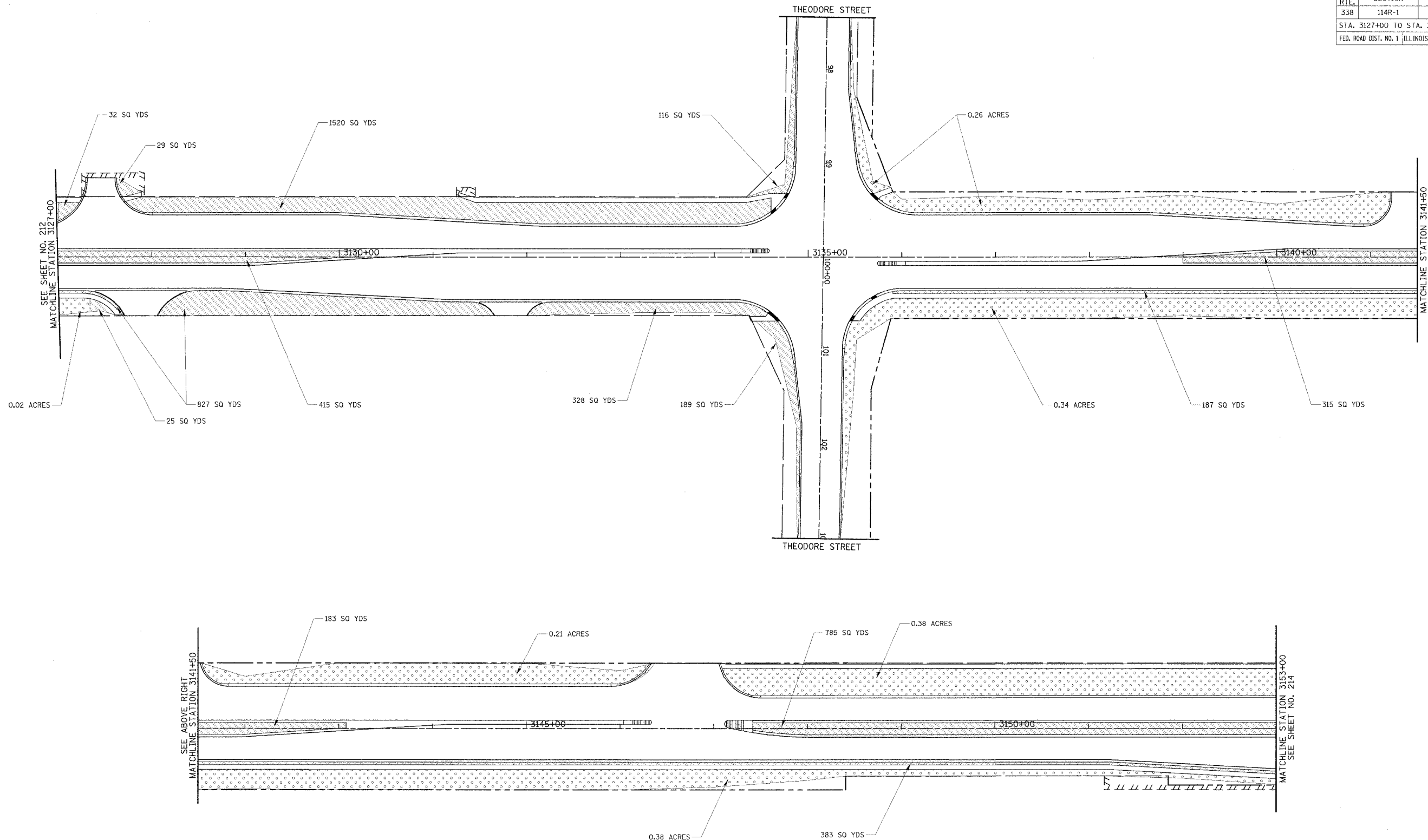
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SCALE IN FEET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	213
STA. 3127+00 TO STA. 3153+00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



PLAN	DATE
REVISED	
BY	
CHECKED	
DATE	
NO. OF SHEETS	
ST. OF WAY CHECKED	
ADD FILE NAME	

PROFILE	DATE
REVISED	
BY	
CHECKED	
DATE	
NO. OF SHEETS	
ST. OF WAY CHECKED	
ADD FILE NAME	



SEE SHEET 209 FOR LEGEND

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/08

ILLINOIS DEPARTMENT OF TRANSPORTATION

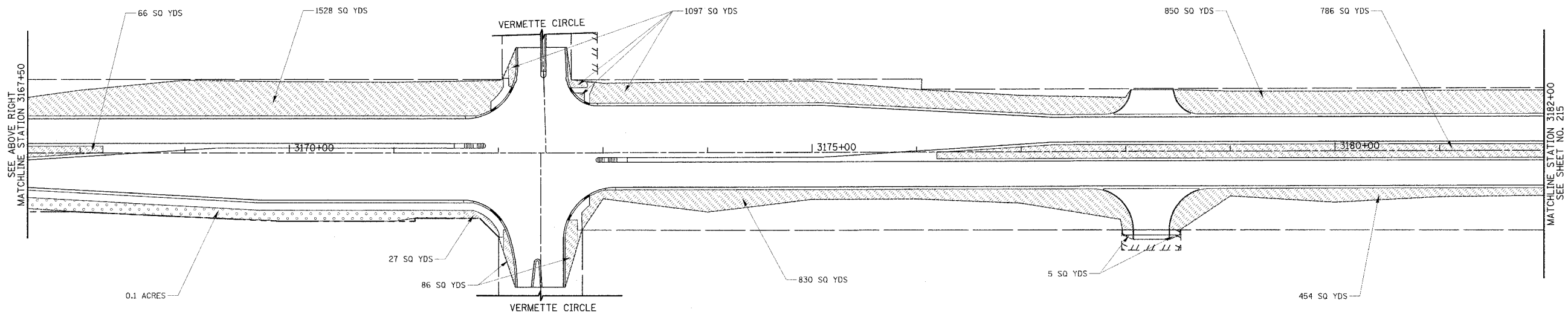
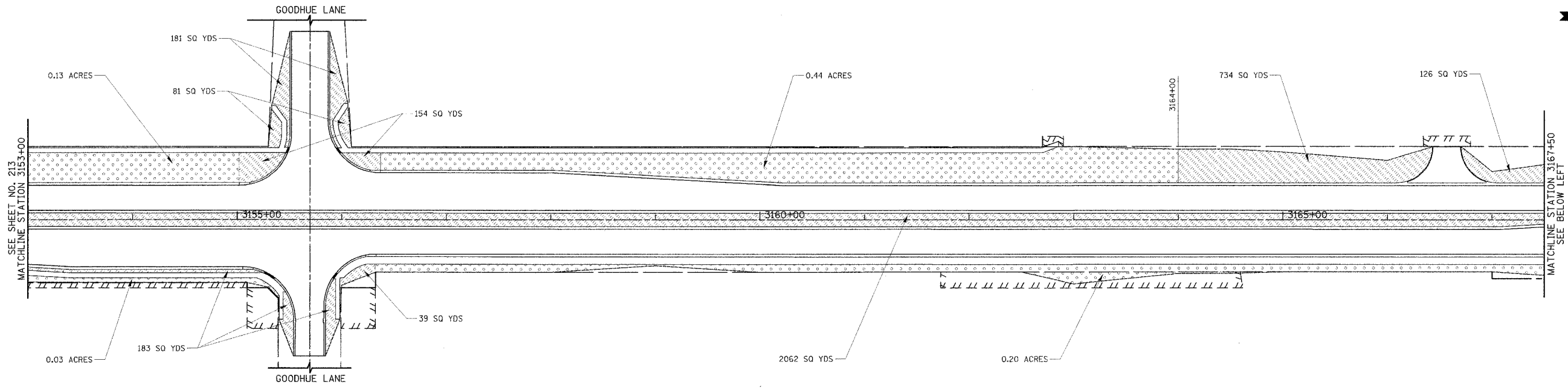
LANDSCAPING PLAN

ILLINOIS ROUTE 59
STATION 3127+00 TO STATION 3153+00
THEODORE STREET
STATION 98+50 TO STATION 101+50

DATE 3/18/08
DRAWN BY MJG
CHECKED BY VJD

50 0 50
SCALE IN FEET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	214
STA. 3153+00		TO STA. 3182+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



SEE SHEET 209
FOR LEGEND

PLAN	DATE
BY	
REVISIONS	
NO. 1	
NO. 2	
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NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	

PROFILE	DATE
BY	
REVISIONS	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
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NO. 9	
NO. 10	

REVISIONS	
NAME	DATE
REVISED IL 59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

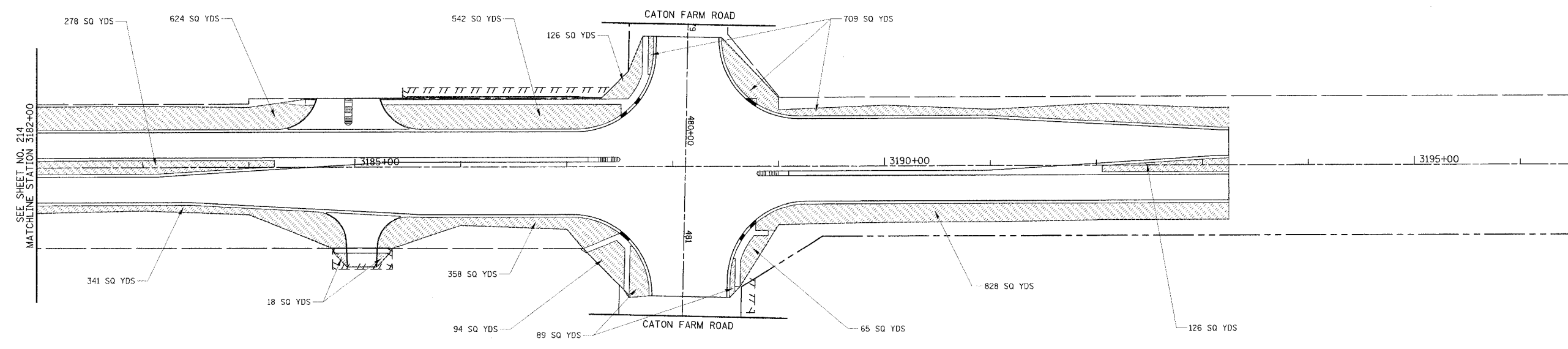
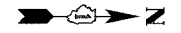
LANDSCAPING PLAN

ILLINOIS ROUTE 59
STATION 3153+00 TO STATION 3182+00

DATE 3/18/08
DRAWN BY MJG
CHECKED BY VJD

50 0 50
SCALE IN FEET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	215
STA. 3182+00 TO STA. 3193+25				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEE SHEET NO. 214
MATCHLINE STATION 3182+00

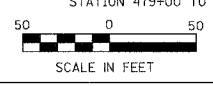
SEE SHEET 209
FOR LEGEND

PLAN	DATE
BY: _____	DATE: _____
PROJECT NO. _____	
DATE CHECKED _____	
BY: _____	
DATE CHECKED _____	
BY: _____	
DATE CHECKED _____	

PROFILE	DATE
BY: _____	DATE: _____
PROJECT NO. _____	
DATE CHECKED _____	
BY: _____	
DATE CHECKED _____	
BY: _____	
DATE CHECKED _____	

REVISIONS	
NAME	DATE
REVISED IL 59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
LANDSCAPING PLAN
ILLINOIS ROUTE 59
STATION 3182+00 TO STATION 3193+25
CATON FARM ROAD
STATION 479+00 TO STATION 481+75
DATE 3/18/08
DRAWN BY MJG
CHECKED BY VJD



TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

F.A.P. RTE. 338	SECTION 114R-1	COUNTY WILL	TOTAL SHEETS 355	SHEET NO. 218
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

LOCATION OF WORK	UNIT	TOTAL	IL RTE 59 & BLACK ROAD	IL RTE 59 & VERTIN BOULEVARD	IL RTE 59 & WALMART ENTRANCE	IL RTE 59 & THEODORE STREET	IL RTE 59 & VERMETTE CIRCLE	IL RTE 59 & CATON FARM ROAD	INTER-CONNECT	EMERGENCY VEHICLE PREEMPTION EQUIPMENT	
			80% FED 10% STATE 5% WILL CO 5% SHOREWOOD	100% SHOREWOOD	100% JOLIET	100% JOLIET	80% FED 10% STATE 10% JOLIET	80% FED 10% STATE 5% WILL CO 5% JOLIET		80% FED 20% STATE	100% SHOREWOOD
PAY ITEM			Y031-1F	Y031-1F	Y031-1F	Y031-1F	Y031-1F	Y031-1F	Y031-1F	Y031-3D	Y031-3D
SIGN PANEL - TYPE 1	50 FT	158	29	23	8	32	33	33			
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	12,179	555	526	651	512	555	979	8,401		
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	569	96	150	188	57		78			
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	338	39	39	10	54	154	42			
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	20	10					10			
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1,288	129	17	52	124	90	280	596		
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	85	22	34		9		20			
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	2,109	530	185	223	425	269	477			
HANDHOLE	EACH	41	4	4	4	4	6	6	13		
HEAVY-DUTY HANDHOLE	EACH	19	4	2	1	4	4	4			
DOUBLE HANDHOLE	EACH	9	2	1	1	2	1	2			
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	13,122	700	715	870	623	704	1,109	8,401		
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4							4		
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	5	1	1	1	1	1				
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1									
MASTER CONTROLLER (SPECIAL)	EACH	1							1		
TRANSCEIVER - FIBER OPTIC	EACH	6	1	1	1	1	1	1			
ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 2C	FOOT	3,955	766	682	224	855	715	713			
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	9,227	1,991	1,142	745	1,700	1,818	1,831			
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	6,409	1,064	1,440	1,596	975	772	562			
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	10,918	2,799	767	552	1,958	1,822	3,020			
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	16,773	2,608	1,817	1,968	2,870	2,721	4,789			
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	247	32	45	24	35	31	80			
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1			1						
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2		1	1						
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	8	4			2		2			
STEEL MAST ARM ASSEMBLY AND POLE, 14 FT.	EACH	1		1							
STEEL MAST ARM ASSEMBLY AND POLE, 16 FT.	EACH	1			1						
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	2		1				1			
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	3			1	2					
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1			1						
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1					1				
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	3			1		1	1			
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1		1							
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1		1							
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1	1								
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2	2								
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1	1								
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30 FT. AND 38 FT.	EACH	1					1				
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 32 FT.	EACH	1			1						
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 34 FT. AND 30 FT.	EACH	1					1				
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 50 FT. AND 30 FT.	EACH	1				1					
CONCRETE FOUNDATION, TYPE A	FOOT	44	16	4	8	8		8			
CONCRETE FOUNDATION, TYPE C	FOOT	24	4	4	4	4	4	4			
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	102		20	15	27	30	10			
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	237	60	26	45	30	30	46			
DRILL EXISTING HANDHOLE	EACH	1							1		
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	20	4	4	4	3	4	1			
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5		2	3						
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	2				2				
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	38	6	4	4	7	6	11			
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1		1							
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	2					1			
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2			1			1			
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	10		2	2	2	2	2			
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	16	4	2	3	4	3	3			
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	58	10	8	8	10	10	12			
INDUCTIVE LOOP DETECTOR	EACH	64	13	7	7	12	10	15			
LIGHT DETECTOR	EACH	12								4	8
LIGHT DETECTOR AMPLIFIER	EACH	6								2	4
PEDESTRIAN PUSH-BUTTON	EACH	24	4	5	2	5	4	4			
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	4	2	1				1			
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,437							3,437		
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3	1	1				1			
REMOVE EXISTING HANDHOLE	EACH	23	8	2				9	4		
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2	1					1			
REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1				1					
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	15,405							15,405		
MAINTENANCE OF EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1									
PREFORMED DETECTOR LOOP	FOOT	6,395	2,495	547	629	949	912	863			
PAINT NEW TRAFFIC SIGNAL POST	EACH	5	4*	1							
PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	2		2							
OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1							1		
PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	6	4*	2							
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	5	2	1		1		1			
SERVICE INSTALLATION - POLE MOUNTED	EACH	6	1	1	1	1	1	1			
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	15,405							15,405		
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	3,997	917	562	498	749	513	758			
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	2,204								694	1,510
TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	2	1					1			
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	3,437							3,437		
UNINTERRUPTABLE POWER SUPPLY	EACH	6	1	1	1	1	1	1			
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30 FT. AND 54 FT.	EACH	1				1					
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT. AND 28 FT.	EACH	1						1			
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 54 FT. AND 22 FT.	EACH	1						1			

* 100% OF THE COST WILL BE PAID BY VILLAGE OF SHOREWOOD

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL SCHEDULE OF QUANTITIES
 ILLINOIS ROUTE 59
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM
 SCALE: NONE
 DATE 3/18/08

PLAN
 SUBMITTED BY DATE
 PLOTTED BY DATE
 NOTE BOOK NO. OF WAY RELEASED
 NO. DATE FILE NAME

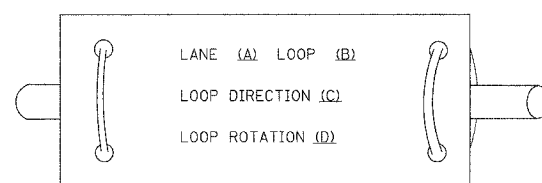
PROFILE
 SUBMITTED BY DATE
 PLOTTED BY DATE
 NOTE BOOK NO. OF WAY RELEASED
 NO. DATE FILE NAME

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	219
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

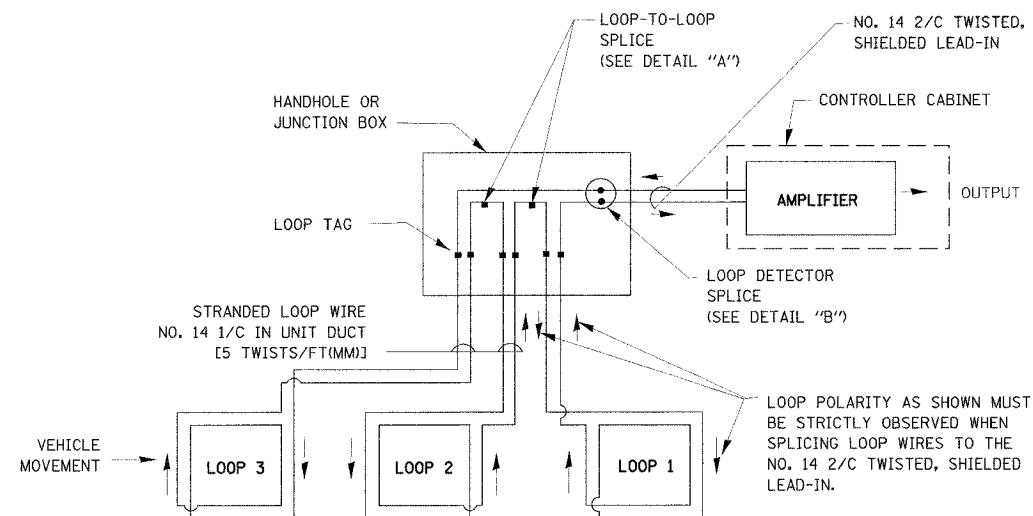
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

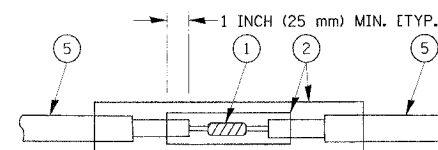


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

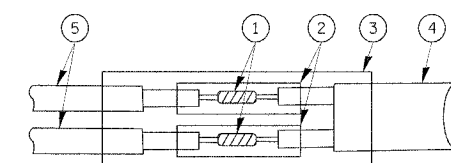


DETECTOR LOOP WIRING SCHEMATIC

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



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

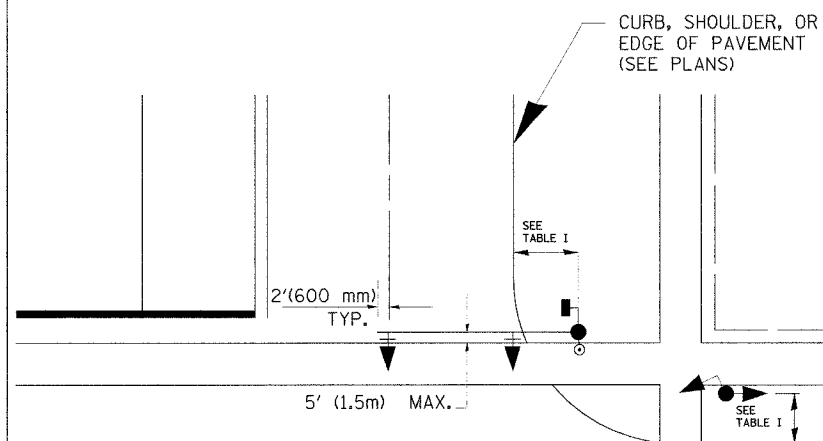
SCALE: VERT. NONE
HORIZ. NONE
DATE 1-01-02

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

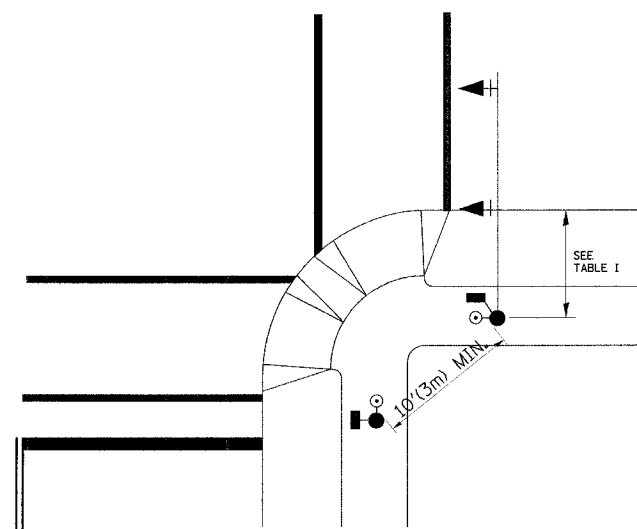
F.A.P. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	220
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL MAST ARM AND POST

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



PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

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

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

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

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

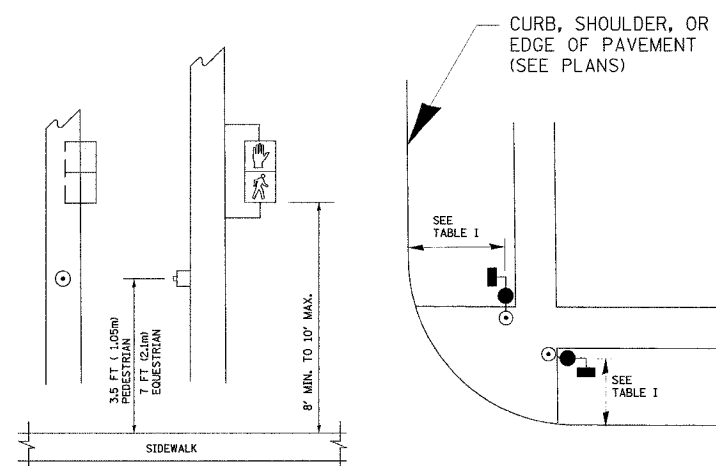


TABLE I

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

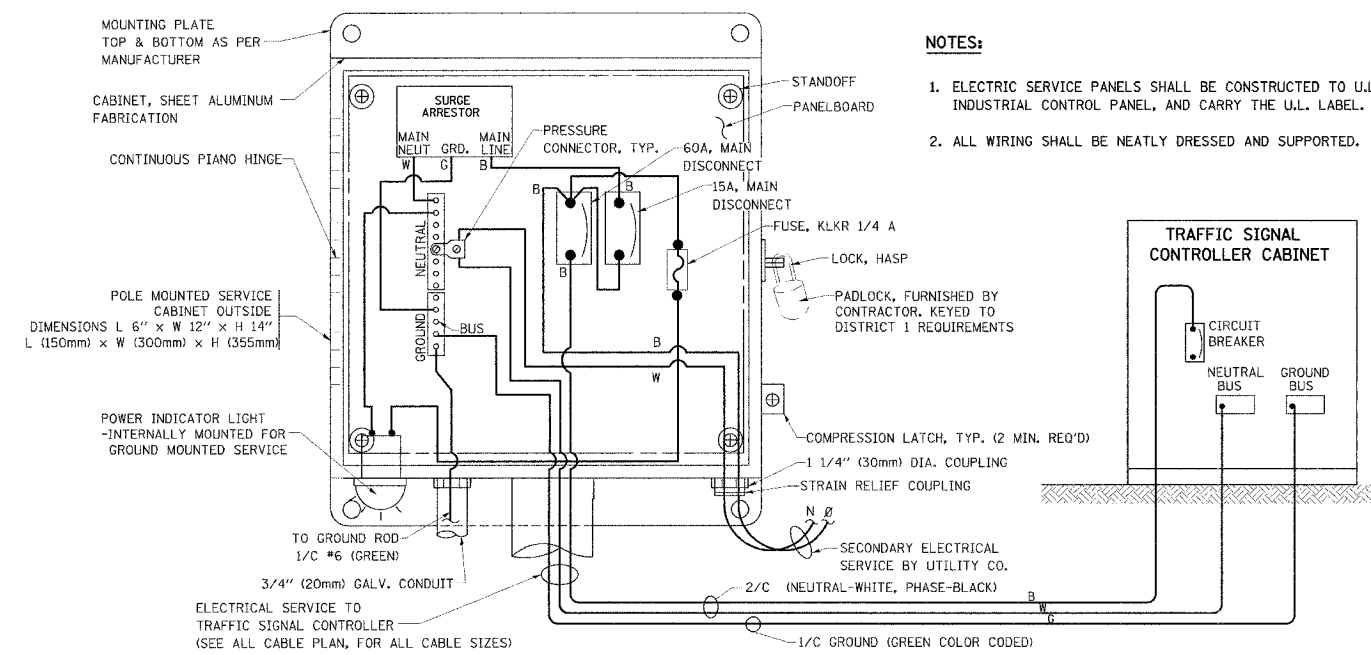
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HORIZ. NONE
DATE 1-01-02

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

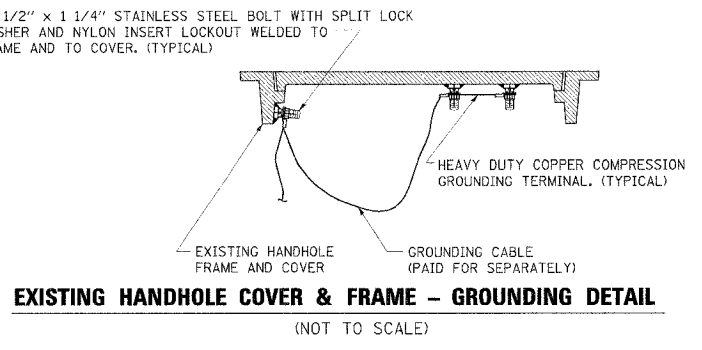
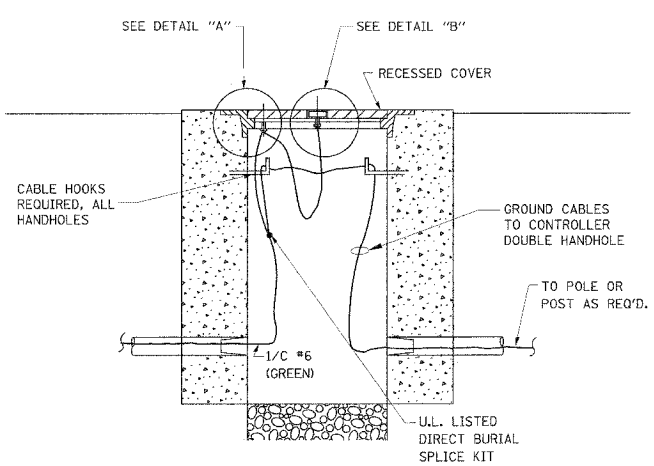
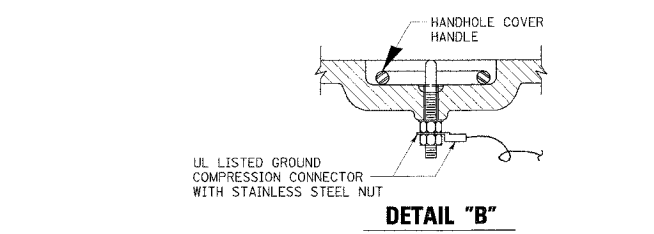
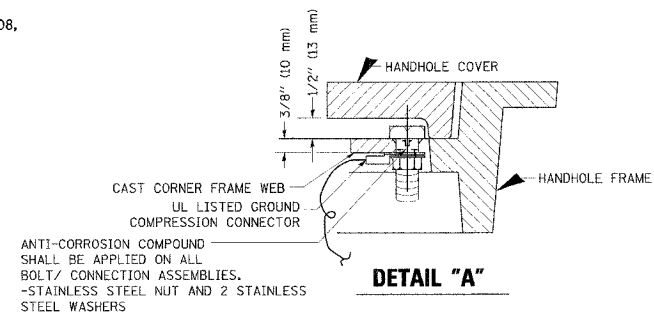
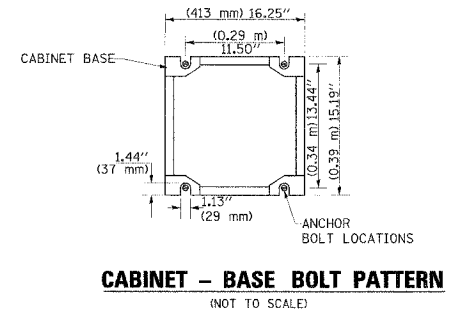
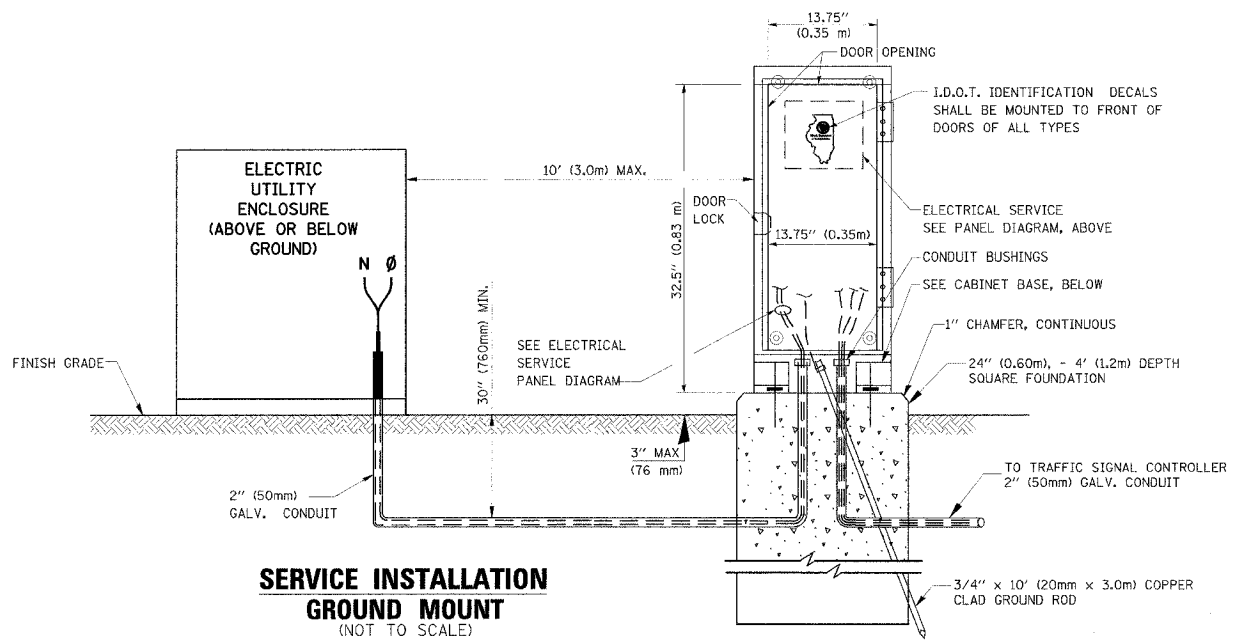
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DATE-TIME
DCN-SPEC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	221
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

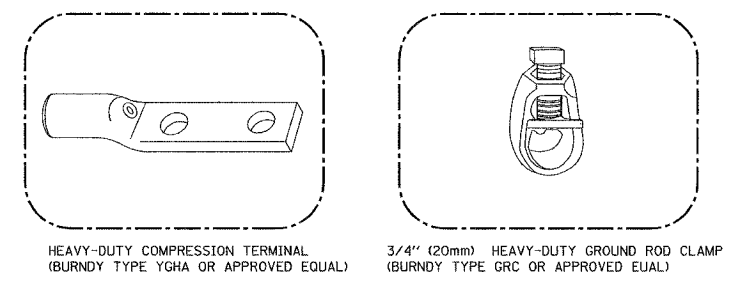


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

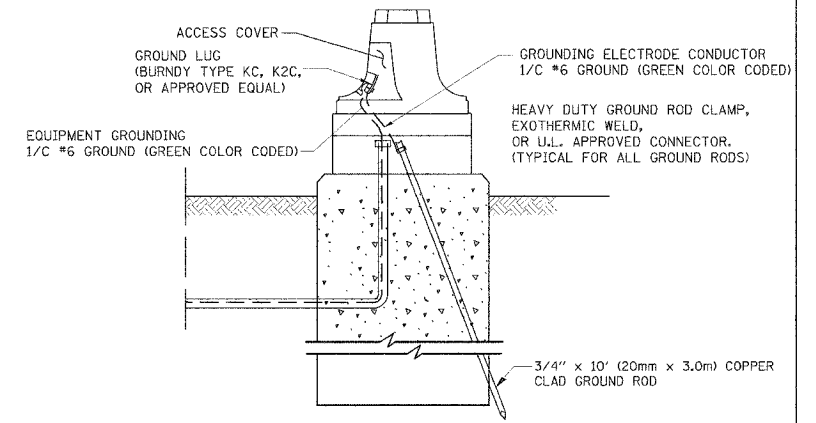


NOTES:
GROUNDING SYSTEM

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



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



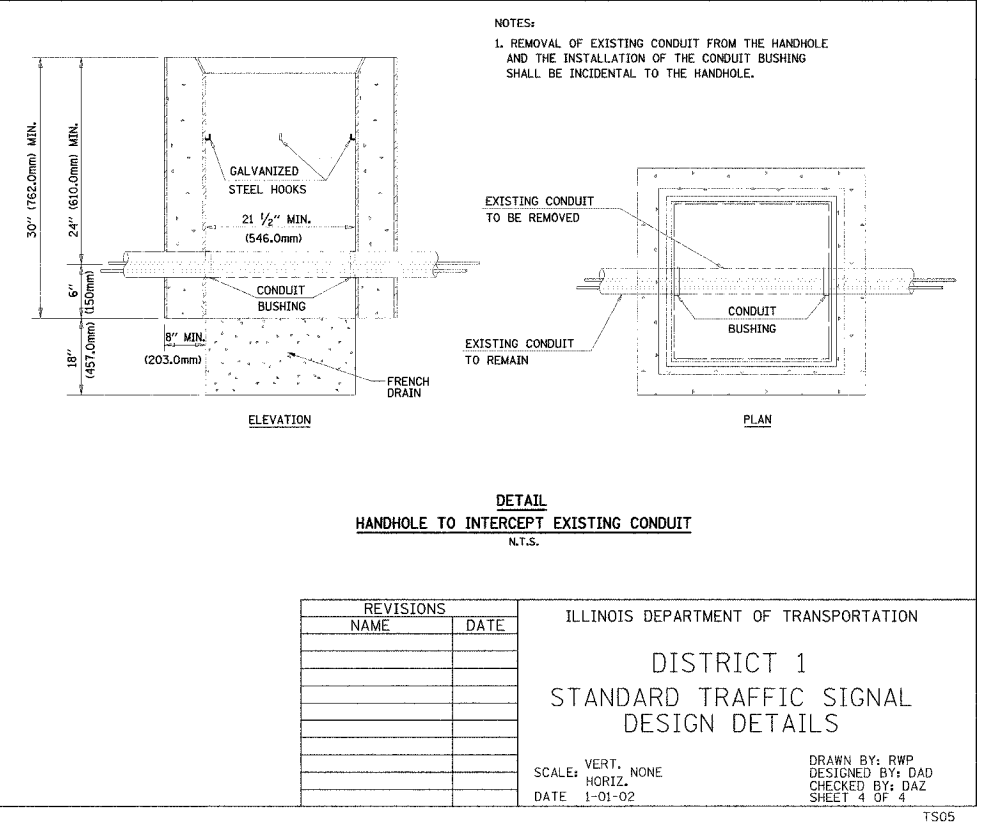
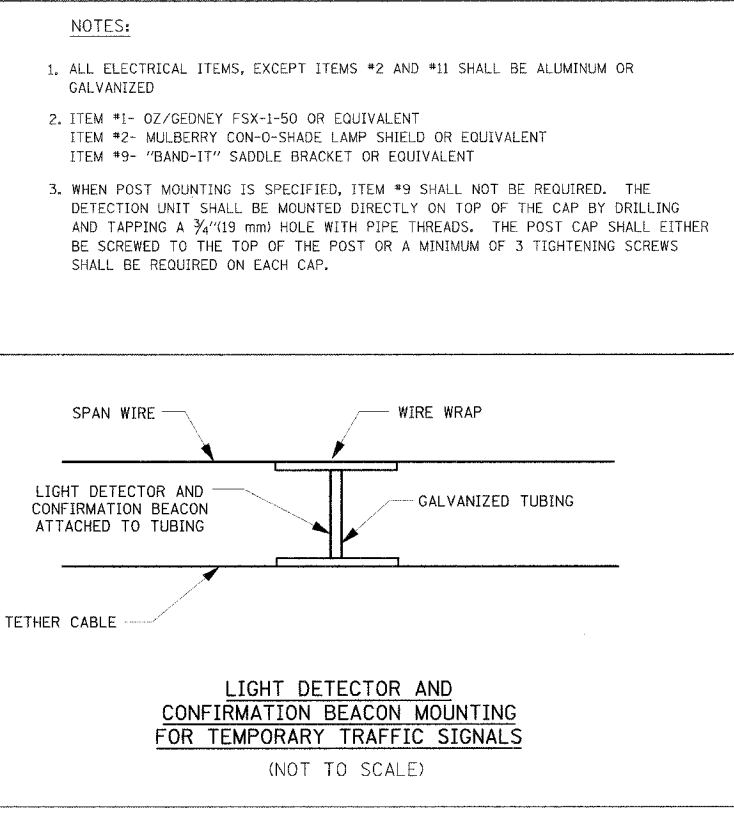
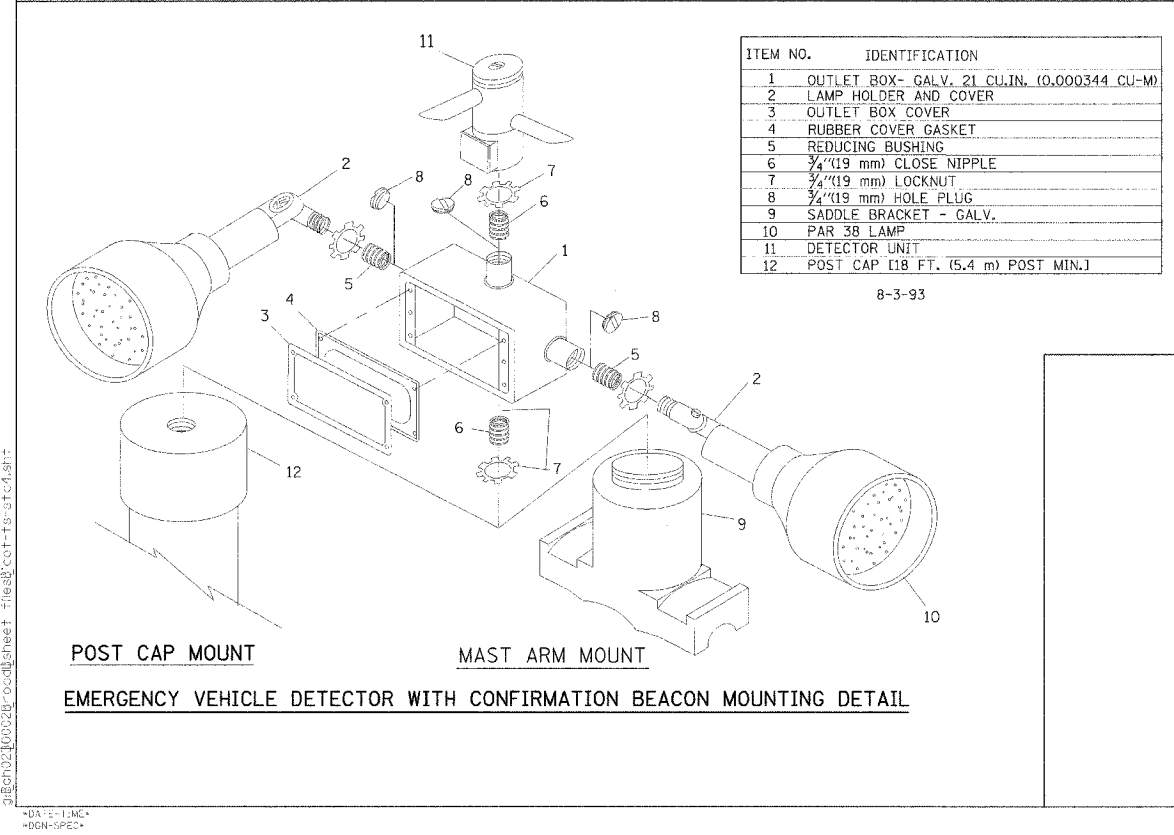
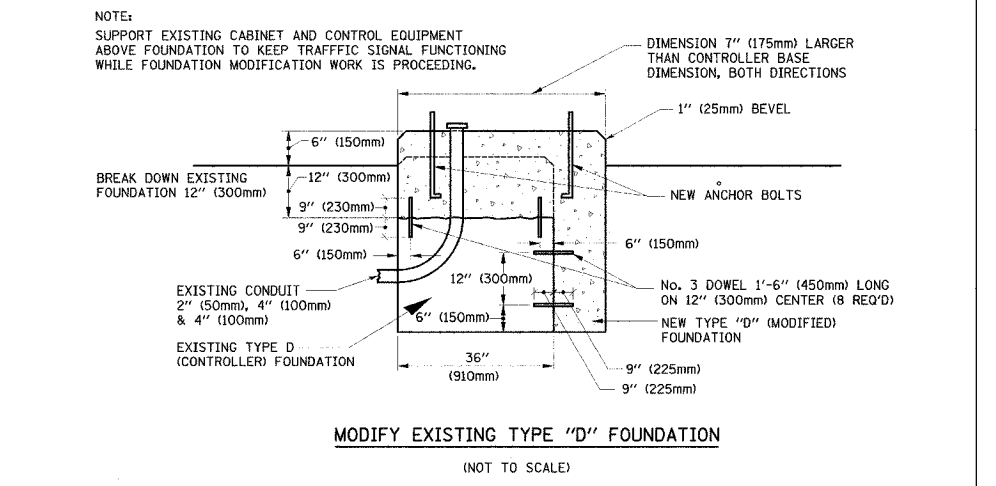
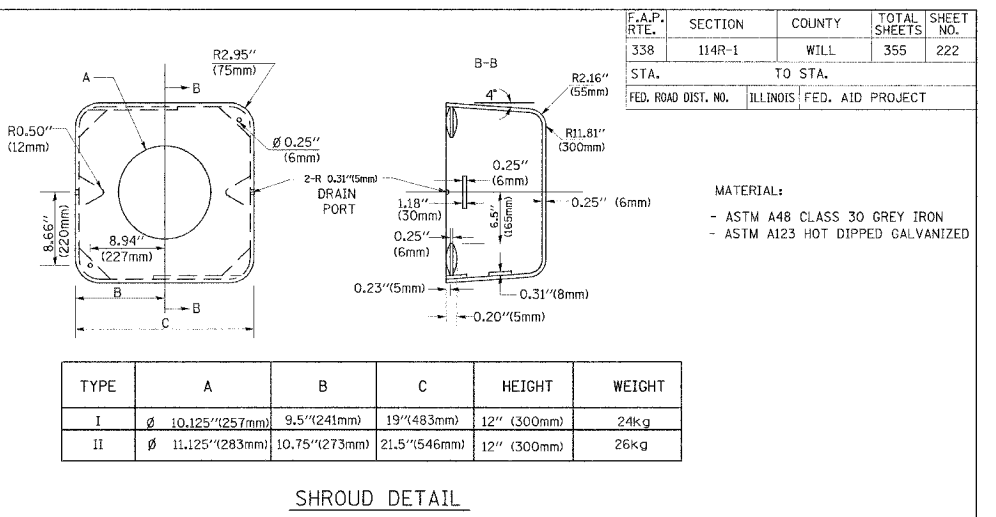
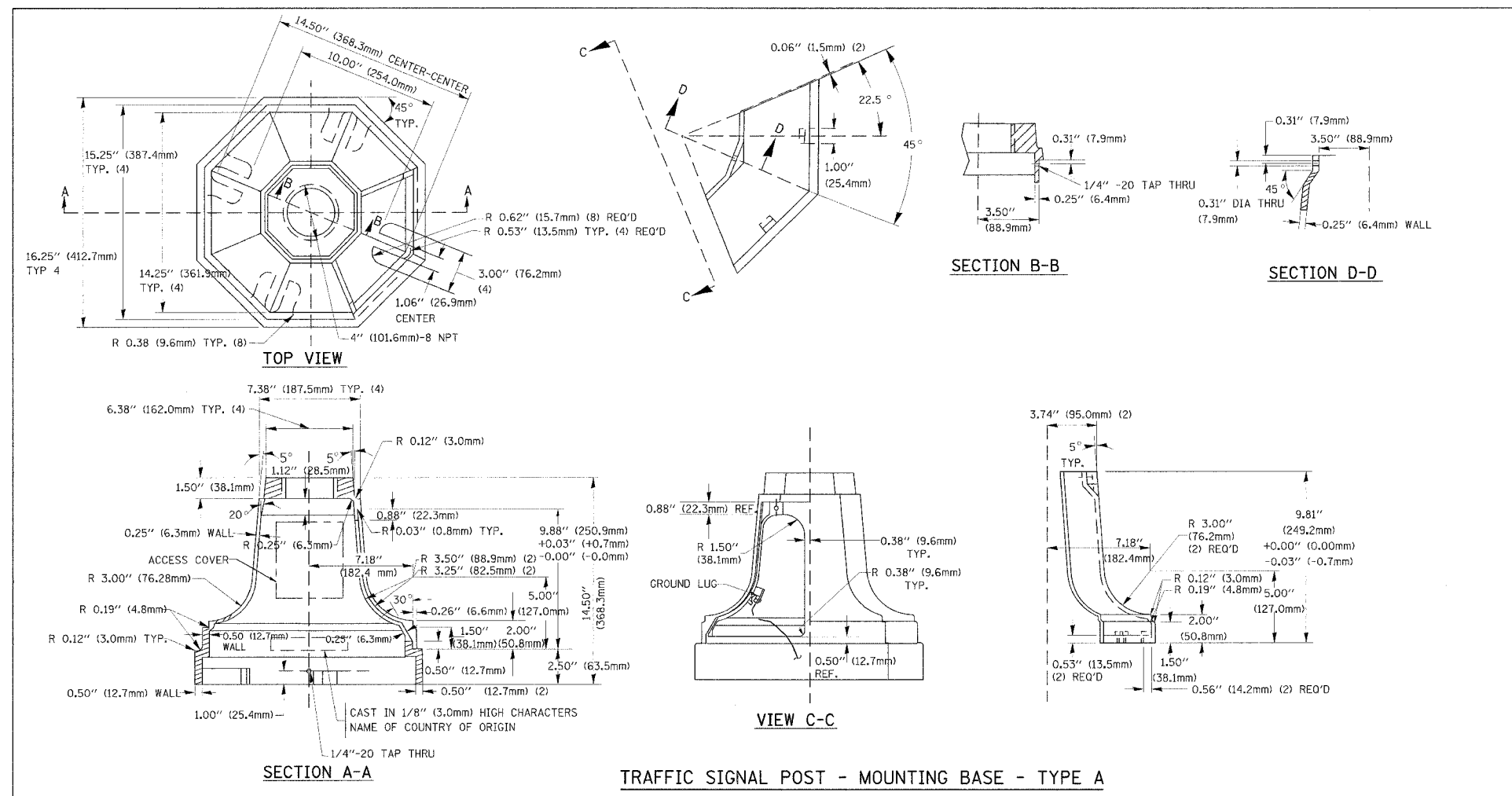
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

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

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

F.A.P. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	222
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

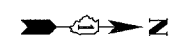


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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	223
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

NOTE: THE EXISTING CONDUITS, LOOP DETECTORS AND MAGNETIC DETECTORS SHALL BE ABANDONED.

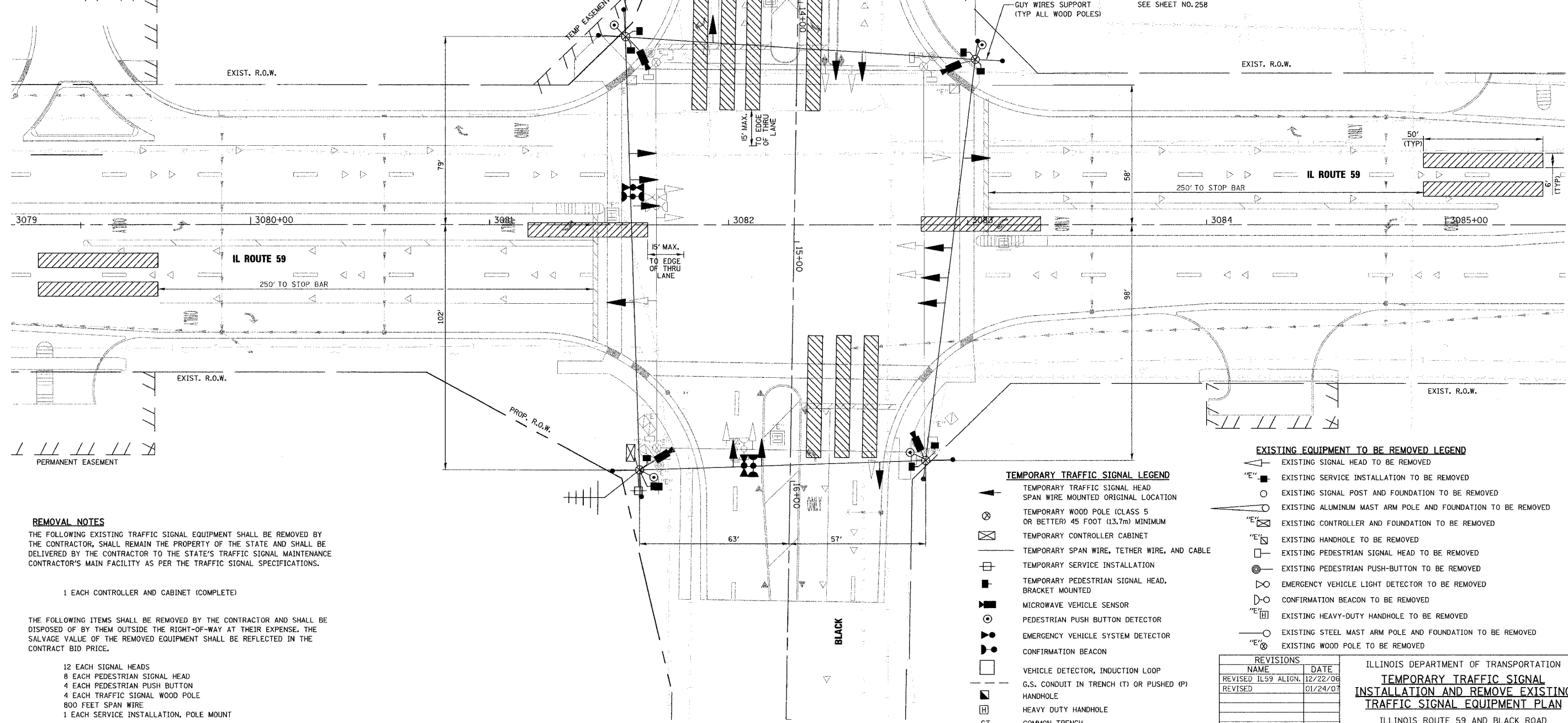


NOTES

- FOR TEMPORARY TRAFFIC SIGNAL CABLE PLAN SEE SHEET NO.225
- FOR SHARP OR. TEMPORARY TRAFFIC SIGNAL AND CABLE PLAN SEE SHEET NO.226 & 227
- TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED ON PRIOR TO STAGE I CONSTRUCTION. TEMPORARY TRAFFIC SIGNAL HEADS MUST BE RELOCATED TO STAGE II CONSTRUCTION LOCATIONS PRIOR TO THE START OF STAGE II CONSTRUCTION AS SHOWN ON THE PLANS.
- ONLY AN APPROVED IDOT ELECTRICAL SUBCONTRACTOR WILL BE PERMITTED TO INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES.
- FOR TEMPORARY TRAFFIC SIGNAL CONTROLLER PLATFORM DETAIL SEE SHEET NO.258

NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- 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.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES AND RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- RIGHT-TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANES ARE OPEN TO TRAFFIC.



DATE	BY	REVISION

DATE	BY	REVISION

REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'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.

- 12 EACH SIGNAL HEADS
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH BUTTON
- 4 EACH TRAFFIC SIGNAL WOOD POLE
- 800 FEET SPAN WIRE
- 1 EACH SERVICE INSTALLATION, POLE MOUNT

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD
- SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- MICROWAVE VEHICLE SENSOR
- PEDESTRIAN PUSH BUTTON DETECTOR
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- COMMON TRENCH
- TEMPORARY VIDEO DETECTION ZONE
- TEMPORARY RADIO INTERCONNECT ANTENNA

EXISTING EQUIPMENT TO BE REMOVED LEGEND

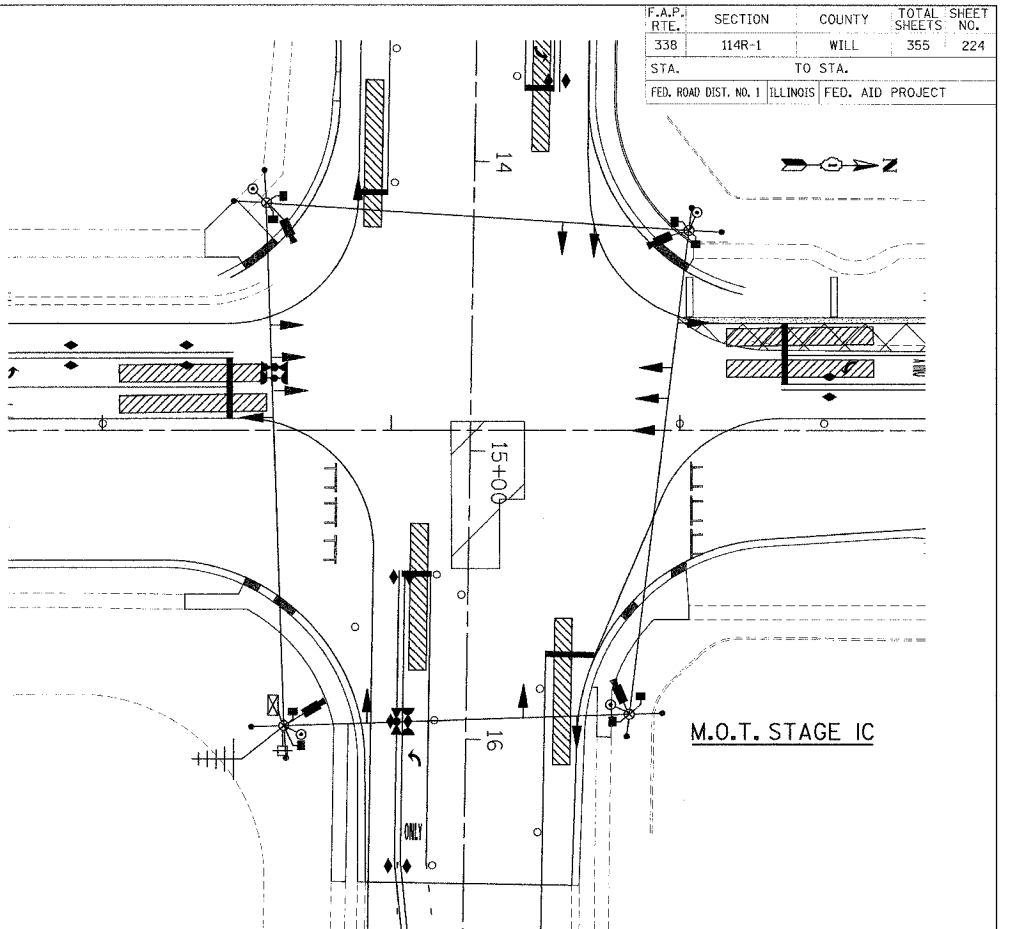
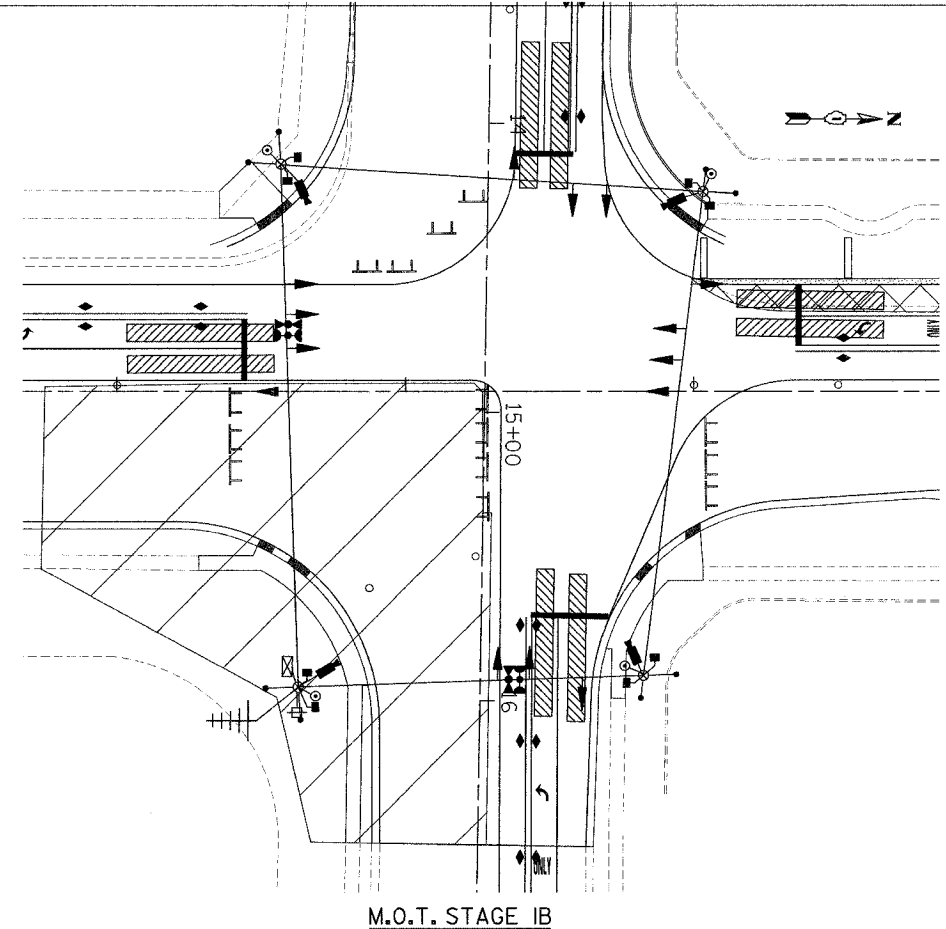
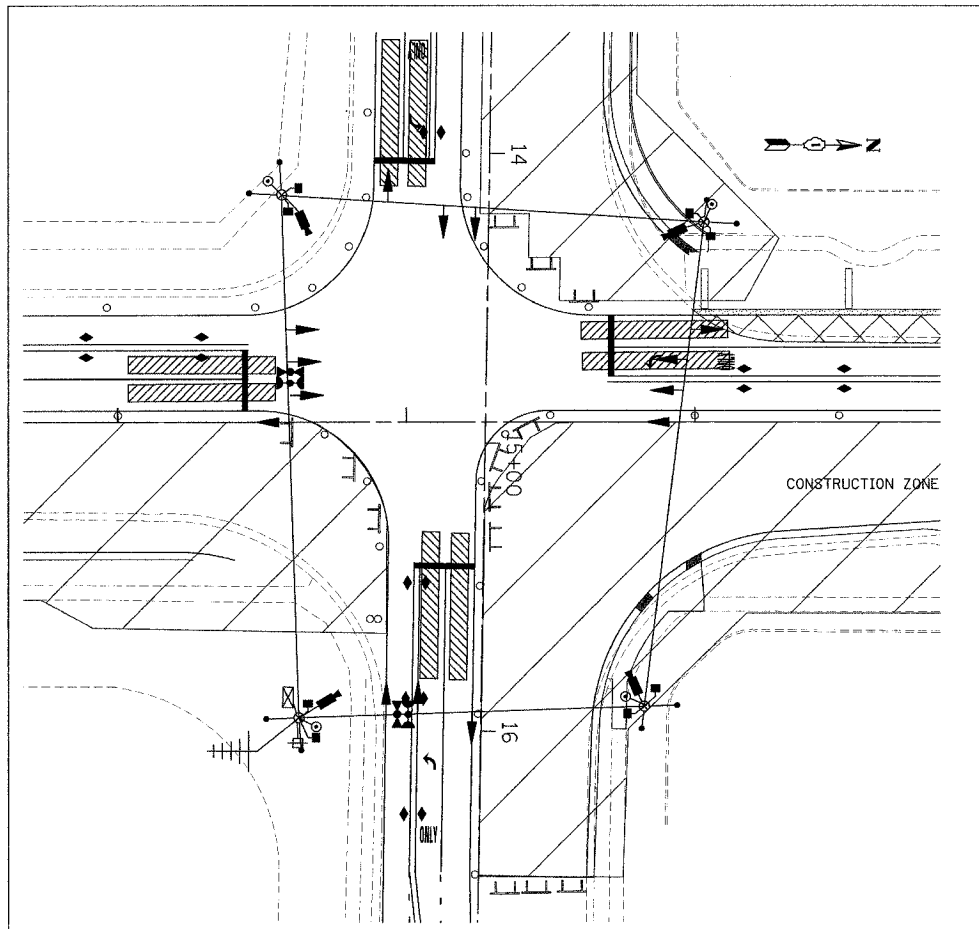
- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING WOOD POLE TO BE REMOVED

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/08
REVISED	01/24/07

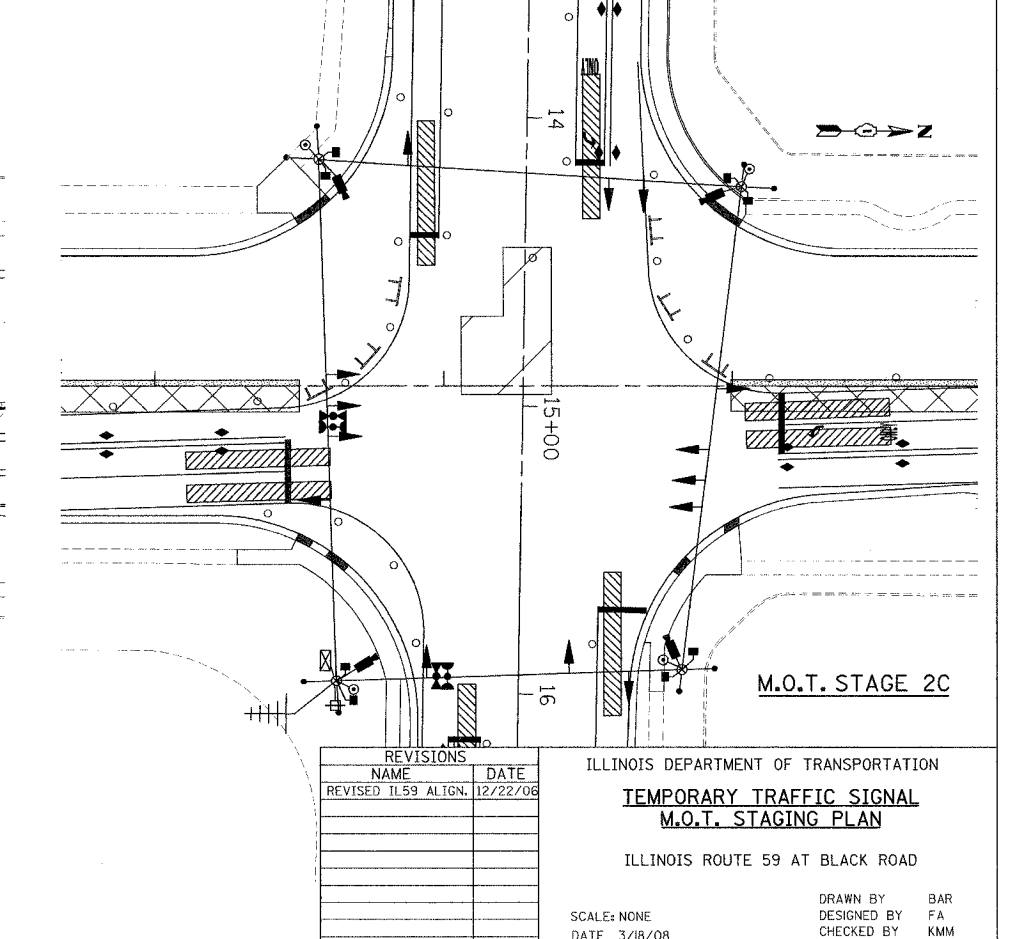
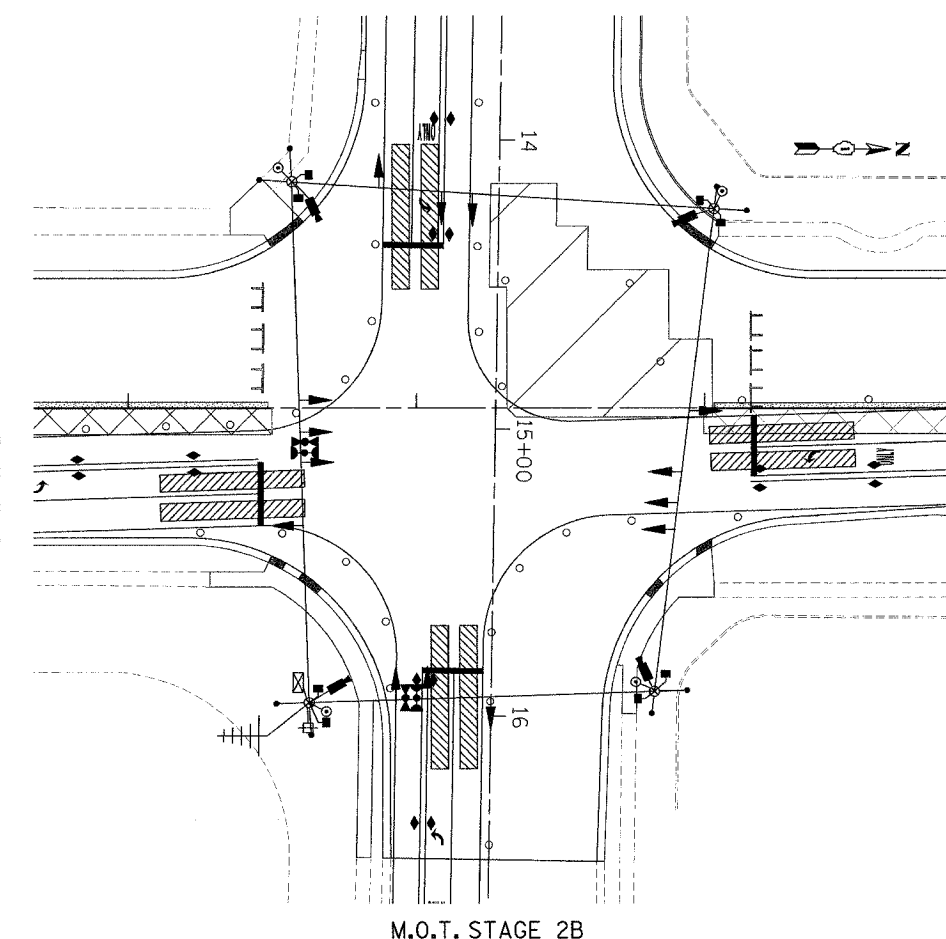
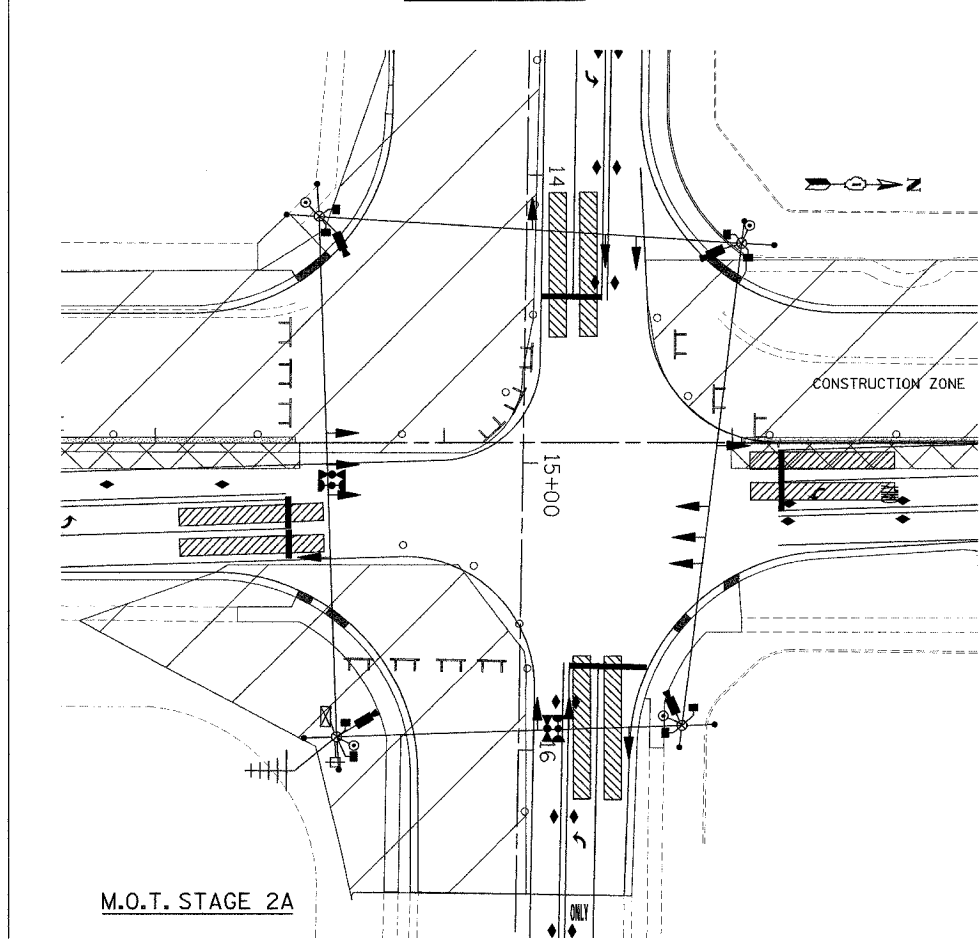
ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
 INSTALLATION AND REMOVE EXISTING
 TRAFFIC SIGNAL EQUIPMENT PLAN**
 ILLINOIS ROUTE 59 AND BLACK ROAD

SCALE 1"=20'
 DATE 3/18/08
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

DATE	BY
PROJECT	DESIGNED BY
PLANNED	CHECKED BY
NOTE BOOK	DATE
NO.	FILE NAME



DATE	BY
PROJECT	DESIGNED BY
PLANNED	CHECKED BY
NOTE BOOK	DATE
NO.	FILE NAME



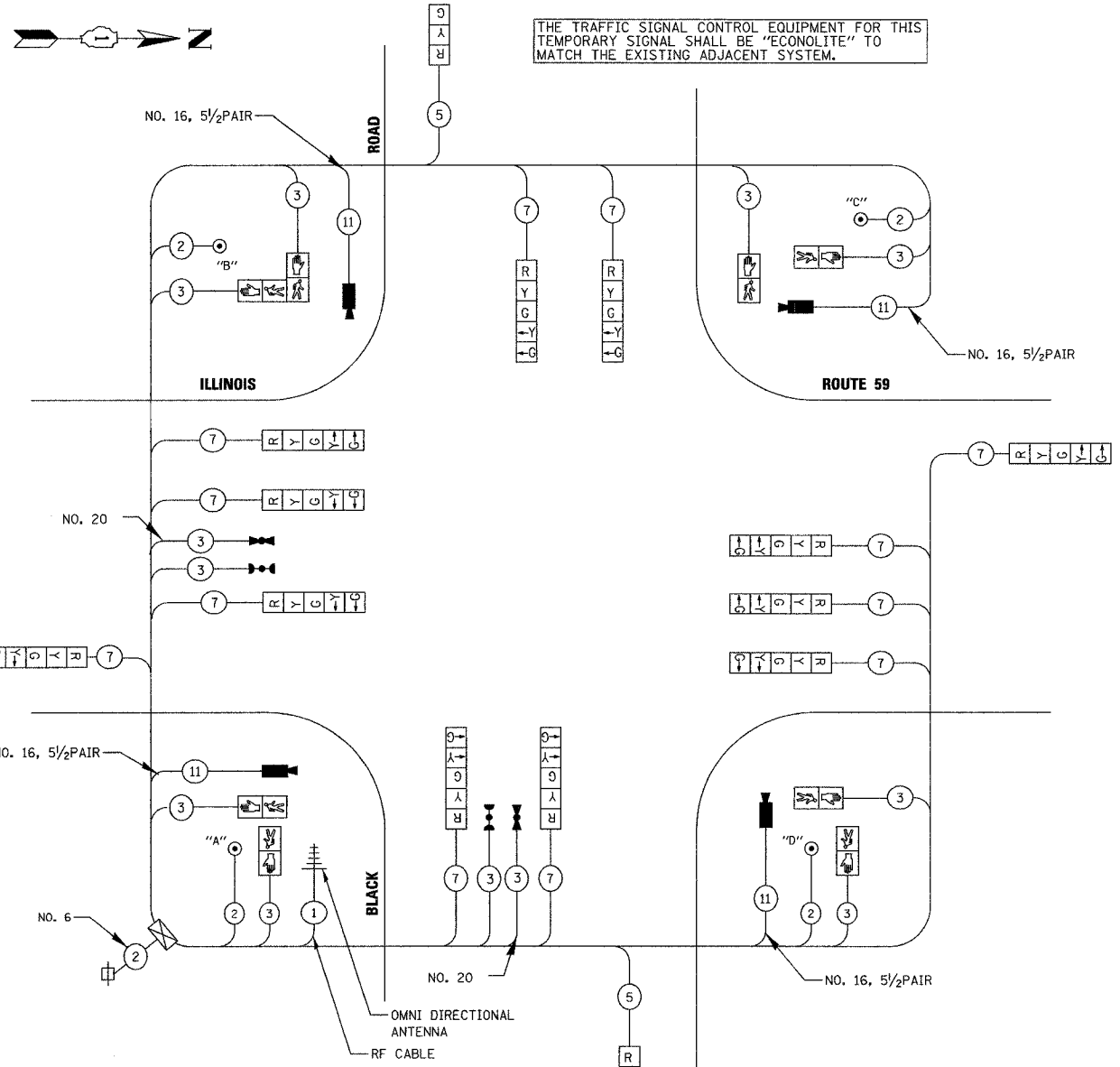
REVISIONS	NAME	DATE
1	REVISED	11.59 ALIGN. 12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
M.O.T. STAGING PLAN**
ILLINOIS ROUTE 59 AT BLACK ROAD

SCALE: NONE
DATE 3/18/08

DRAWN BY BAR
DESIGNED BY FA
CHECKED BY KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	225
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TEMPORARY CABLE PLAN
NOT TO SCALE

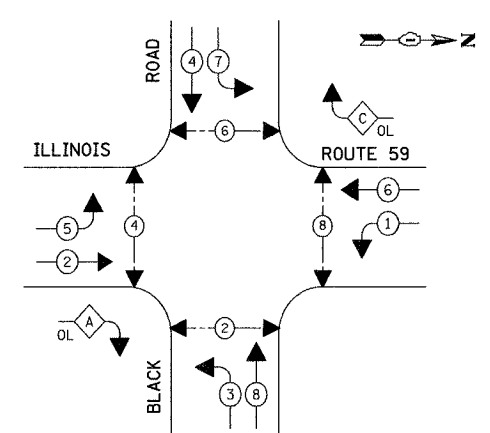
- NOTE:**
1. AN APPROVED IDOT SUBCONTRACTOR MUST INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES. ADJUSTMENT WILL BE REQUIRED BETWEEN PRIMARY AND SECONDARY.
 2. RIGHT-TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANES ARE OPEN TO TRAFFIC.

TEMPORARY CABLE DIAGRAM LEGEND

- [R] TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300mm)
- [X] TEMPORARY CONTROLLER CABINET
- [S] TEMPORARY SERVICE INSTALLATION
- (5) INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- [E] EMERGENCY VEHICLE LIGHT DETECTOR
- [B] CONFIRMATION BEACON
- [V] VIDEO DETECTION CAMERA
- (C) COAXIAL CABLE
- [A] TEMPORARY RADIO INTERCONNECT ANTENNA

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

TEMPORARY CONTROLLER SEQUENCE



- LEGEND**
- | | | | |
|----|----------------|------------------|-----------------|
| OL | OVERLAP LETTER | PERMISSIVE PHASE | PROTECTED PHASE |
| A | = | 6 | 3 |
| C | = | 6 + 7 | |
- [OL] OVERLAP
 - [*] DUAL ENTRY PHASE
 - [*] PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

NOTE: OVERLAPS "A" AND "C" SHALL BE INACTIVE UNTIL NB AND SB RIGHT TURN LANES ARE OPENED TO TRAFFIC.

TYPE	NO. LAMPS	WATTAGE INCAND.	LED X % OPERATION	TOTAL WATTAGE	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	64	0.05	
FLASHER			0.50		
ENERGY COSTS TO:			TOTAL =		587.8

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: JUDY MILLER
PHONE: 815-724-5717
COMPANY: COMMONWEALTH EDISON

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NAME	DATE
REVISED IL59 ALIGN.	12/22/06

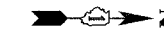
ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ILLINOIS ROUTE 59 AT BLACK ROAD
SCALE: NONE
DATE 3/18/08
DRAWN BY: BAR
DESIGNED BY: FA
CHECKED BY: KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	226
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES AND RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

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



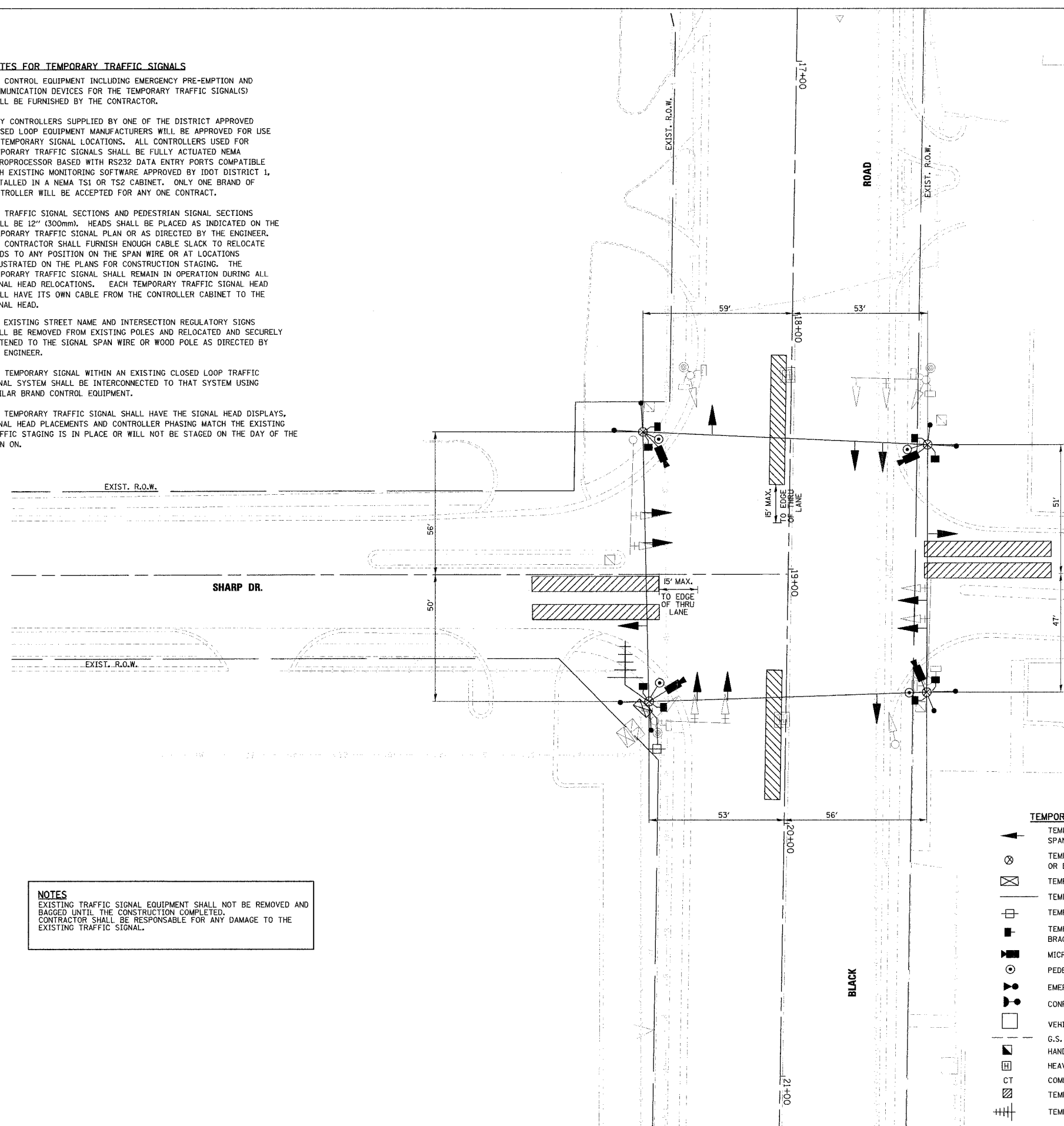
NOTE: THE EXISTING CONDUITS, LOOP DETECTORS AND MAGNETIC DETECTORS SHALL BE ABANDONED.

NOTES

1. FOR TEMPORARY TRAFFIC SIGNAL CABLE PLAN SEE SHEET NO.227
2. TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED ON PRIOR TO STAGE I CONSTRUCTION. TEMPORARY TRAFFIC SIGNAL HEADS MUST BE RELOCATED TO STAGE II CONSTRUCTION LOCATIONS PRIOR TO THE START OF STAGE II CONSTRUCTION AS SHOWN ON THE PLANS.
3. ONLY AN APPROVED IDOT ELECTRICAL SUBCONTRACTOR WILL BE PERMITTED TO INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES.
4. FOR TEMPORARY TRAFFIC SIGNAL CONTROLLER PLATFORM DETAIL SEE SHEET NO.258

DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY

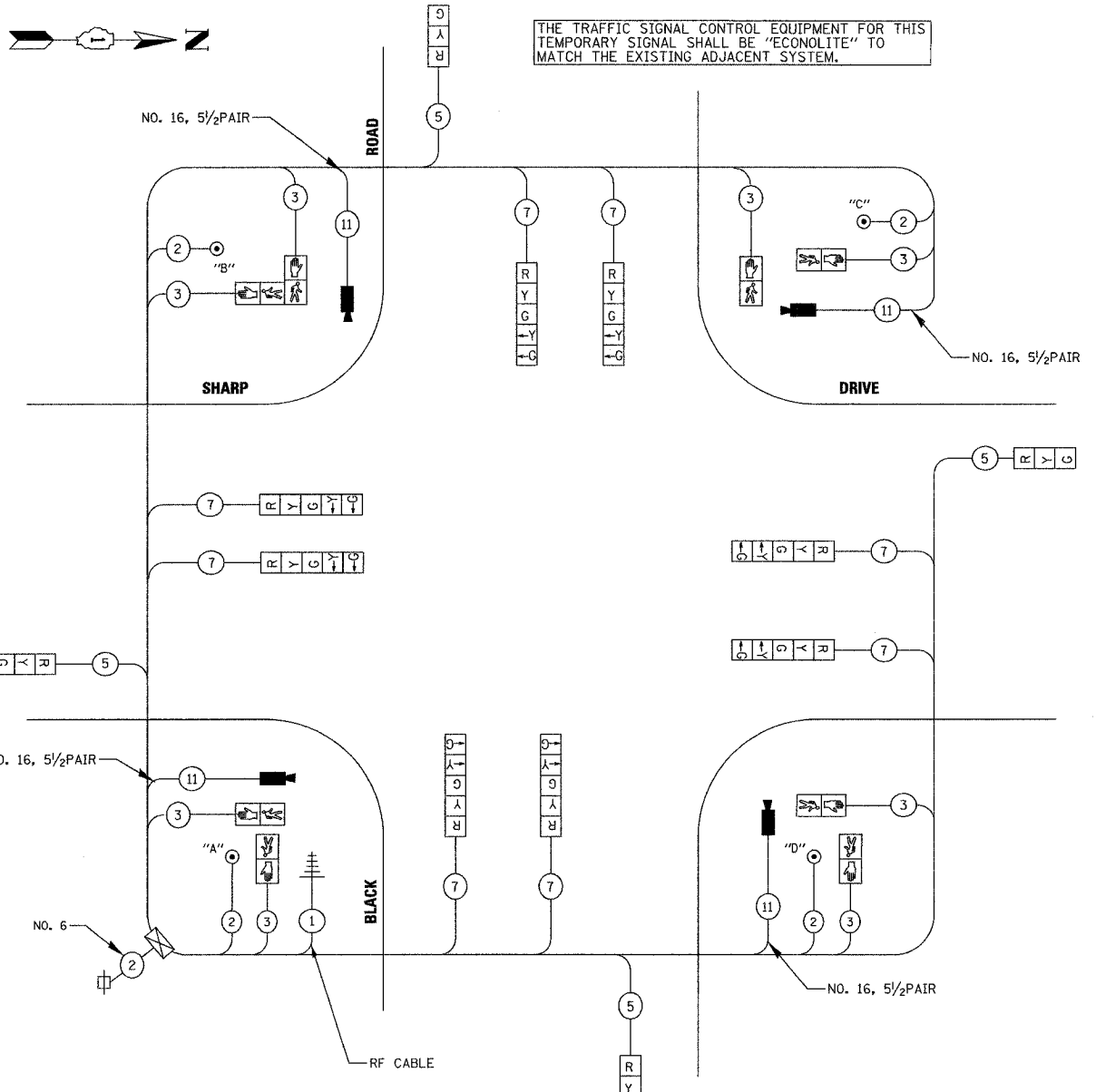


NOTES
EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED AND BAGGED UNTIL THE CONSTRUCTION COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING TRAFFIC SIGNAL.

- TEMPORARY TRAFFIC SIGNAL LEGEND**
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD
 - TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
 - ⊗ TEMPORARY CONTROLLER CABINET
 - TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
 - ⊕ TEMPORARY SERVICE INSTALLATION
 - TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
 - ⊙ MICROWAVE VEHICLE SENSOR
 - ⊙ PEDESTRIAN PUSH BUTTON DETECTOR
 - ⊙ EMERGENCY VEHICLE SYSTEM DETECTOR
 - ⊙ CONFIRMATION BEACON
 - VEHICLE DETECTOR, INDUCTION LOOP
 - G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
 - ⊕ HANDHOLE
 - ⊕ HEAVY DUTY HANDHOLE
 - CT COMMON TRENCH
 - ▨ TEMPORARY VIDEO DETECTION ZONE
 - ⊕ TEMPORARY RADIO INTERCONNECT ANTENNA

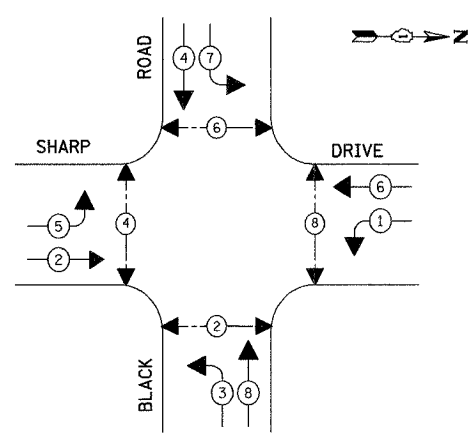
REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06
REVISED	01/24/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN
SHARP DR AND BLACK ROAD
SCALE 1"=20'
DATE 3/18/08
DRAWN BY BAR
DESIGNED BY FA
CHECKED BY KMM



TEMPORARY CABLE PLAN
NOT TO SCALE

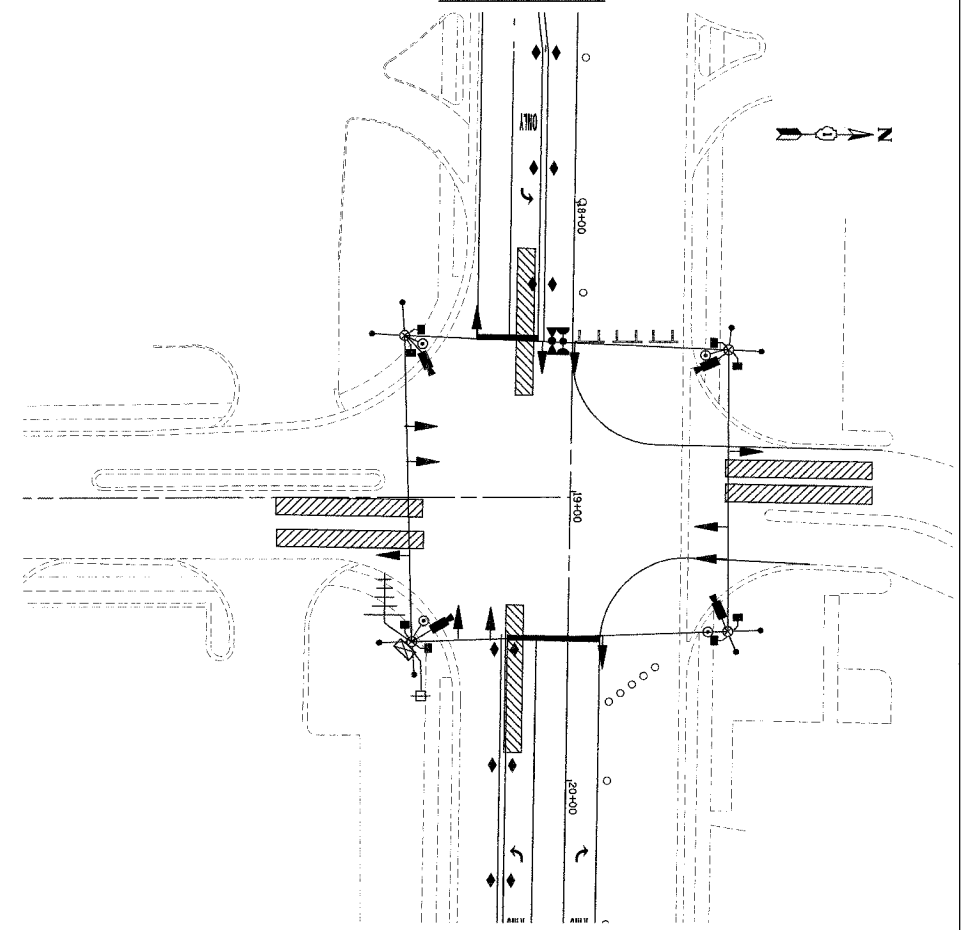
TEMPORARY CONTROLLER SEQUENCE



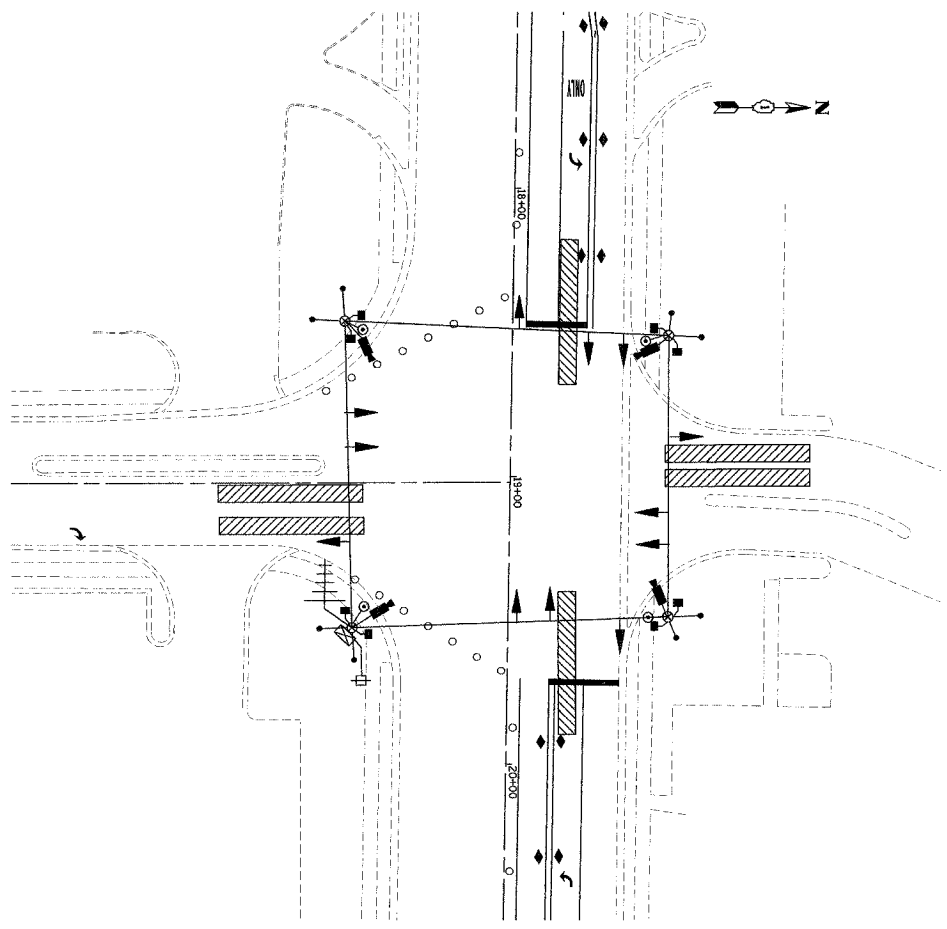
- LEGEND**
- ⊗ → DUAL ENTRY PHASE
 - ⊗ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

M.O.T. STAGE 1



M.O.T. STAGE 2



NOTE:

1. AN APPROVED IDOT SUBCONTRACTOR MUST INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES. ADJUSTMENT WILL BE REQUIRED BETWEEN PRIMARY AND SECONDARY.

TEMPORARY CABLE DIAGRAM LEGEND

- ⊗ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300mm)
- ⊗ TEMPORARY CONTROLLER CABINET
- ⊗ TEMPORARY SERVICE INSTALLATION
- ⑤ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ⊗ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊗ CONFIRMATION BEACON
- ⊗ VIDEO DETECTION CAMERA
- ⊗ COAXIAL CABLE
- ⊗ TEMPORARY RADIO INTERCONNECT ANTENNA

NOTE:

PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
 PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

TYPE	NO. LAMPS	WATTAGE	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	64	0.05	
FLASHER				0.50	
ENERGY COSTS TO:	TOTAL =				541.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY CONTACT: JUDY MILLER
 PHONE: 815-724-5717
 COMPANY: COMMONWEALTH EDISON

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REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 SHARP DR AT BLACK ROAD

SCALE: NONE
 DATE: 3/18/08

DRAWN BY: BAR
 DESIGNED BY: FA
 CHECKED BY: KMM

TRAFFIC SIGNAL LEGEND

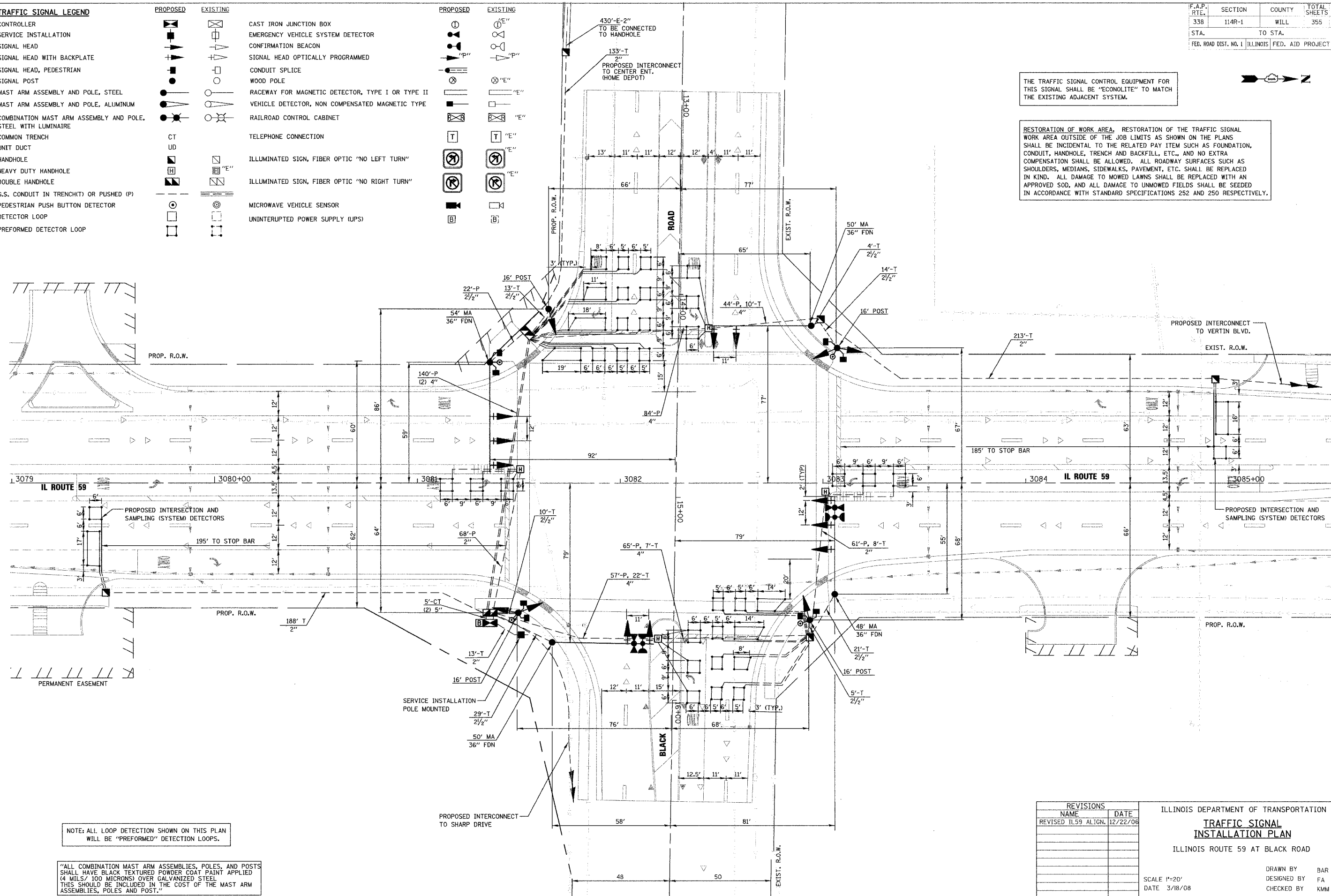
	PROPOSED	EXISTING		PROPOSED	EXISTING	
CONTROLLER	[Symbol]	[Symbol]	CAST IRON JUNCTION BOX	[Symbol]	[Symbol]	
SERVICE INSTALLATION	[Symbol]	[Symbol]	EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]	
SIGNAL HEAD	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]	
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]	
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]	
SIGNAL POST	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]	
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]	
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]	
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]	
COMMON TRENCH	CT		TELEPHONE CONNECTION	T	T	
UNIT DUCT	UD					
HANDHOLE	[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"	[Symbol]	[Symbol]	
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"	[Symbol]	[Symbol]	
DOUBLE HANDHOLE	[Symbol]	[Symbol]				
G.S. CONDUIT IN TRENCH(T) OR PUSHED (P)			MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]	
PEDESTRIAN PUSH BUTTON DETECTOR	[Symbol]	[Symbol]	UNINTERRUPTED POWER SUPPLY (UPS)	[Symbol]	[Symbol]	
DETECTOR LOOP	[Symbol]	[Symbol]				
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]				

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

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

DATE	BY

DATE	BY



NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PERFORMED" DETECTION LOOPS.

"ALL COMBINATION MAST ARM ASSEMBLIES, POLES, AND POSTS SHALL HAVE BLACK TEXTURED POWDER COAT PAINT APPLIED (4 MILS/ 100 MICRONS) OVER GALVANIZED STEEL. THIS SHOULD BE INCLUDED IN THE COST OF THE MAST ARM ASSEMBLIES, POLES AND POST."

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC SIGNAL
 INSTALLATION PLAN**
 ILLINOIS ROUTE 59 AT BLACK ROAD

SCALE 1"=20'
 DATE 3/18/08

DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL.	355	229
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

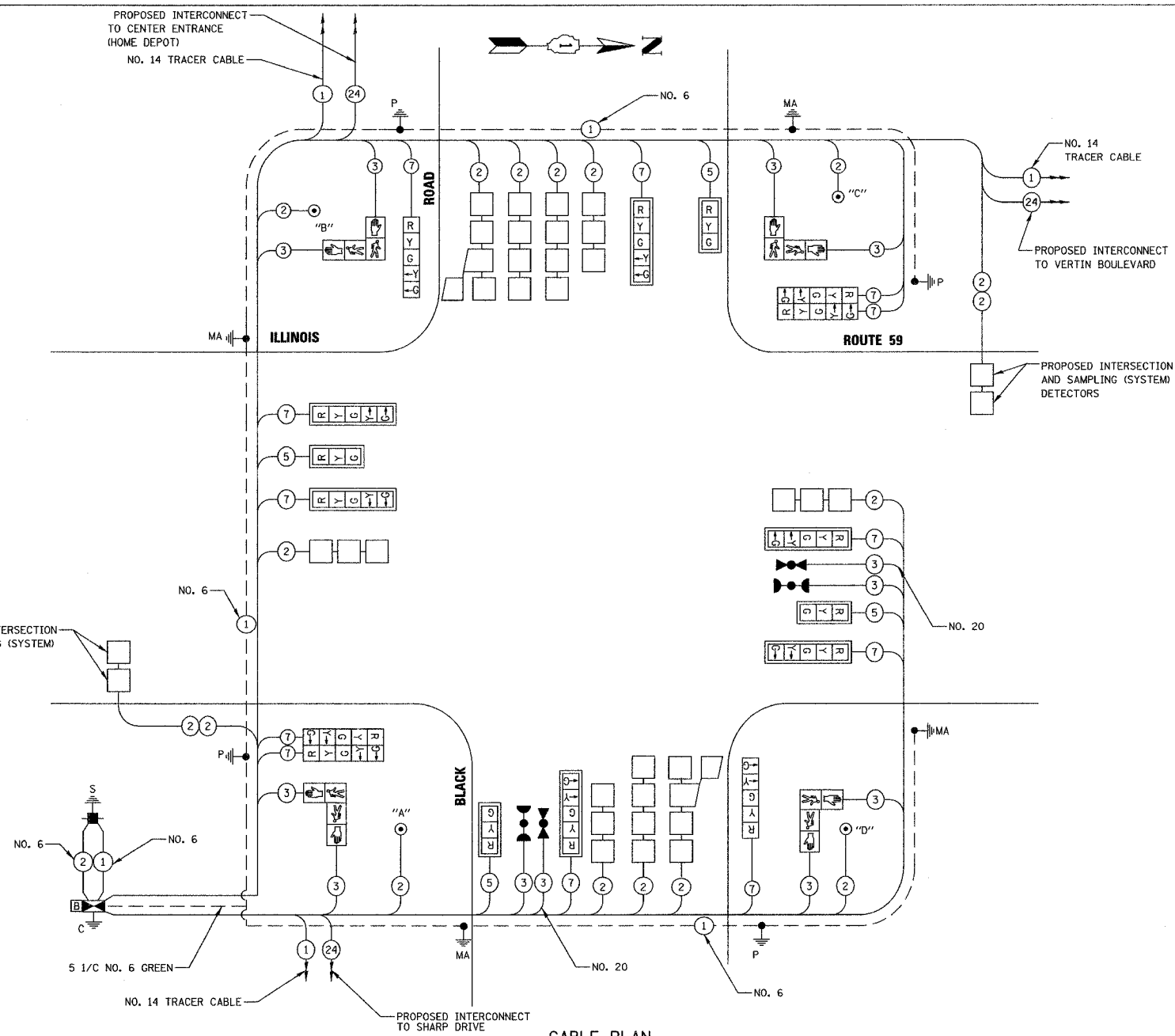
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	29
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	555
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	96
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	129
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	22
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	530
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	700
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 2C	FOOT	766
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,991
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,064
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,799
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2,608
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	32
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	13
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
PREFORMED DETECTOR LOOP	FOOT	2,495
** PAINT NEW TRAFFIC SIGNAL POST	EACH	4
** PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	4
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	917
* ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	397
TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

* 100% OF THE COST FOR EMERGENCY VEHICLE PREEMPTION ITEMS WILL BE PAID FOR BY VILLAGE OF SHOREWOOD.
 ** 100% OF THE COST WILL BE PAID BY VILLAGE OF SHOREWOOD.

NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PREFORMED" DETECTION LOOPS.

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



CABLE PLAN

CABLE PLAN LEGEND

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

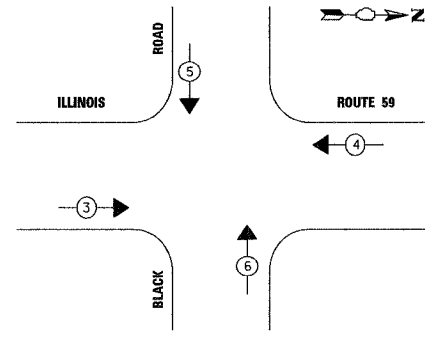
NOTES:
 PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
 PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	64	0.50	

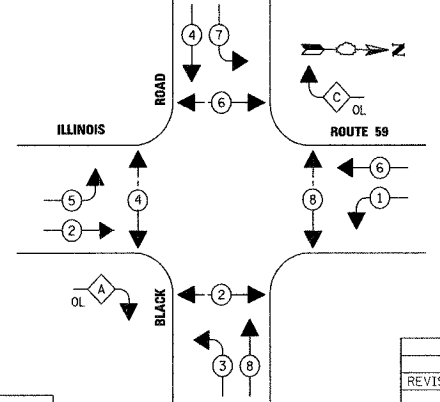
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY CONTACT: JUDY MILLER
 PHONE: 815-724-5717
 COMPANY: COMMONWEALTH EDISON

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

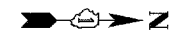
PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	←	↓	↑

LEGEND	OVERLAP		
	LETTER	PHASE	PHASE
DUAL ENTRY PHASE	A	=	2 + 3
OVERLAP	C	=	6 + 7
PEDESTRIAN PHASE	*		

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
 ILLINOIS ROUTE 59 AT BLACK ROAD
 SCALE: NONE
 DATE: 3/18/08
 DRAWN BY: BAR
 DESIGNED BY: FA
 CHECKED BY: KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	230
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES FOR TEMPORARY TRAFFIC SIGNALS

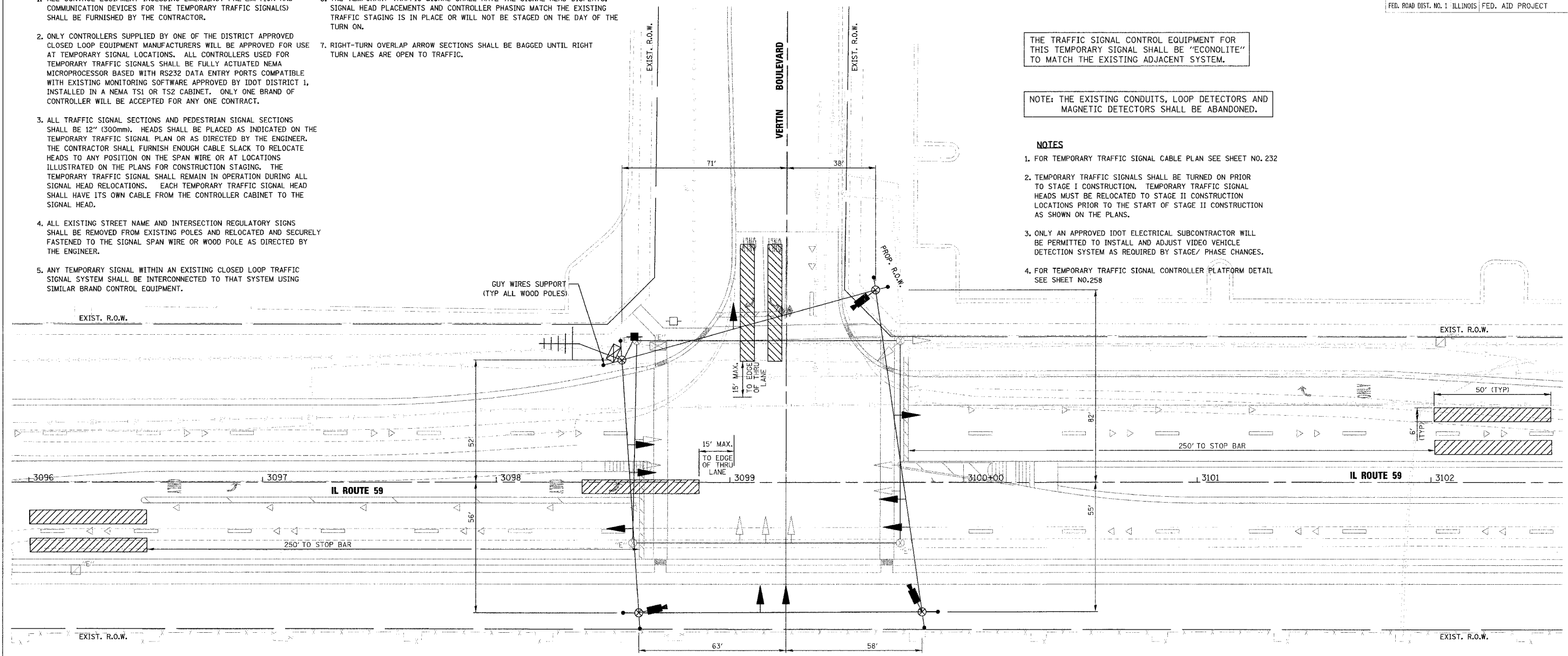
- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES AND RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- RIGHT-TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANES ARE OPEN TO TRAFFIC.

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

NOTE: THE EXISTING CONDUITS, LOOP DETECTORS AND MAGNETIC DETECTORS SHALL BE ABANDONED.

NOTES

- FOR TEMPORARY TRAFFIC SIGNAL CABLE PLAN SEE SHEET NO. 232
- TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED ON PRIOR TO STAGE I CONSTRUCTION. TEMPORARY TRAFFIC SIGNAL HEADS MUST BE RELOCATED TO STAGE II CONSTRUCTION LOCATIONS PRIOR TO THE START OF STAGE II CONSTRUCTION AS SHOWN ON THE PLANS.
- ONLY AN APPROVED IDOT ELECTRICAL SUBCONTRACTOR WILL BE PERMITTED TO INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES.
- FOR TEMPORARY TRAFFIC SIGNAL CONTROLLER PLATFORM DETAIL SEE SHEET NO. 258



PI AN	DATE
BY	
REVISIONS	
NO.	DATE
1	

PROFILE	DATE
BY	
REVISIONS	
NO.	DATE
1	

REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'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.

- 7 EACH SIGNAL HEADS
- 1 EACH SERVICE INSTALLATION, POLE MOUNTED
- 4 EACH WOOD POLES
- 389 FEET SPAN WIRE

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- MICROWAVE VEHICLE SENSOR
- PEDESTRIAN PUSH BUTTON DETECTOR
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- COMMON TRENCH
- TEMPORARY VIDEO DETECTION ZONE
- TEMPORARY RADIO INTERCONNECT ANTENNA

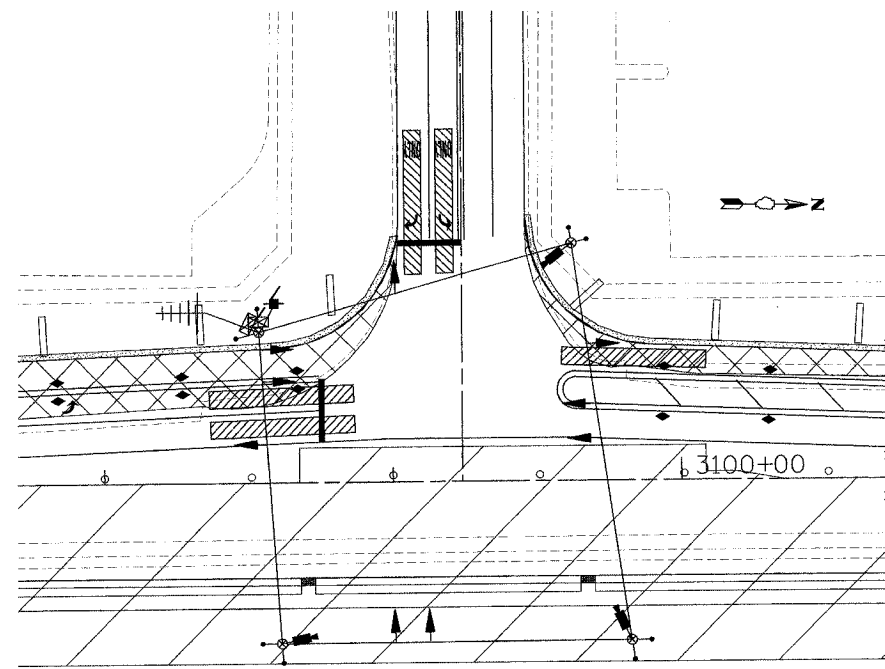
EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING WOOD POLE TO BE REMOVED

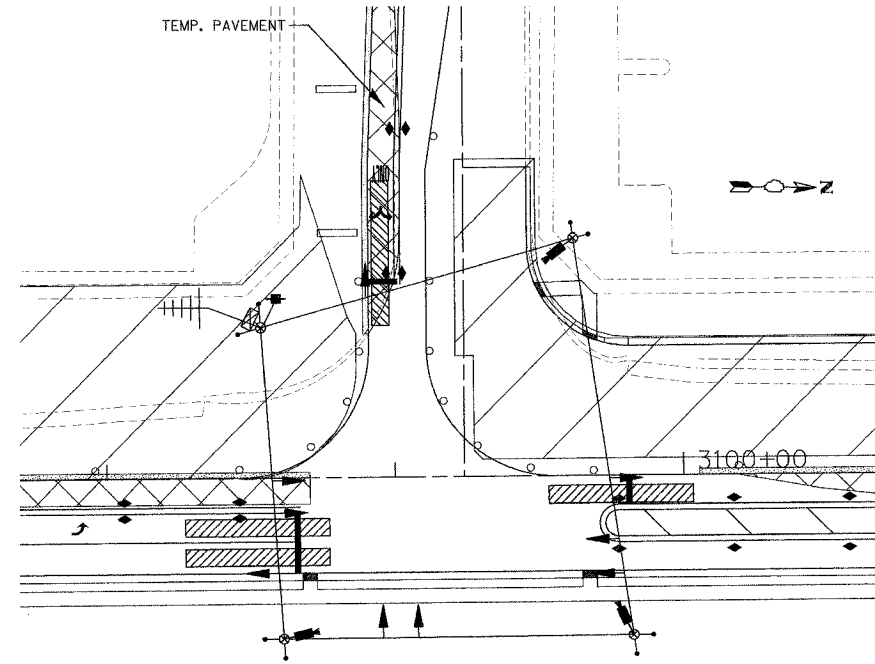
REVISIONS	
NAME	DATE
REVISED IL 59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
 INSTALLATION PLAN**
 ILLINOIS ROUTE 59 AND VERTIN BOULEVARD
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM
 SCALE P=20'
 DATE 3/18/08

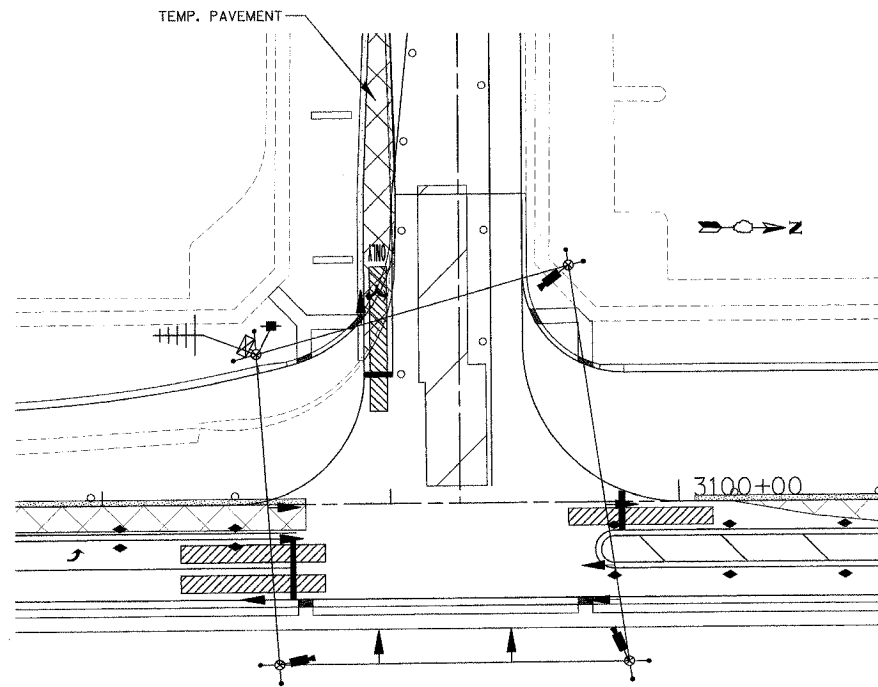
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	231
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



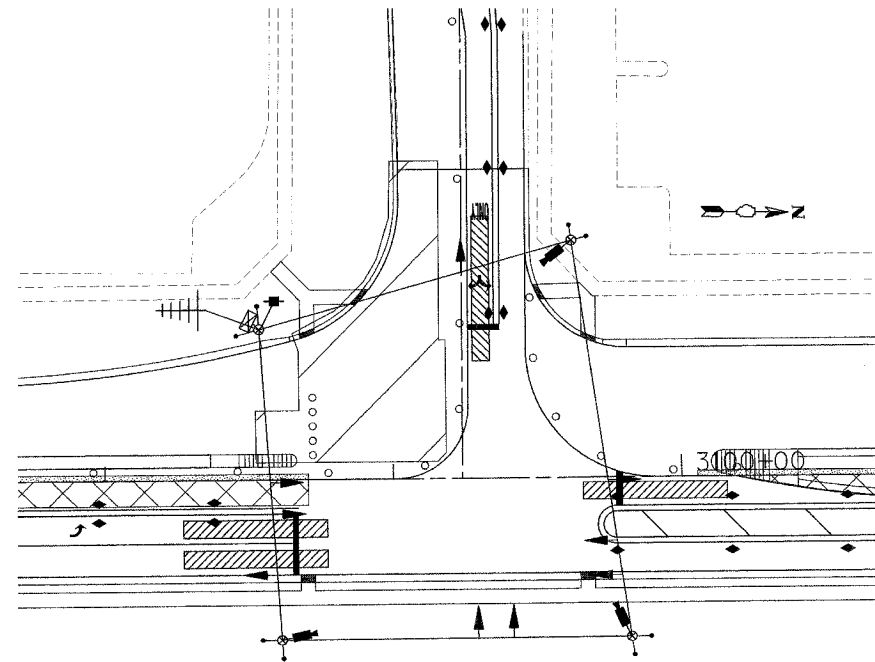
M.O.T. STAGE 1



M.O.T. STAGE 2A



M.O.T. STAGE 2B



M.O.T. STAGE 2C

PI AN	DATE
SUBMITTED	BY
PLOTTED	
NOTE BOOK	
NO. 1	
NO. 2	

PROJ 11 F	DATE
STRUCTURE NOTATION	BY
NO. 1	
NO. 2	

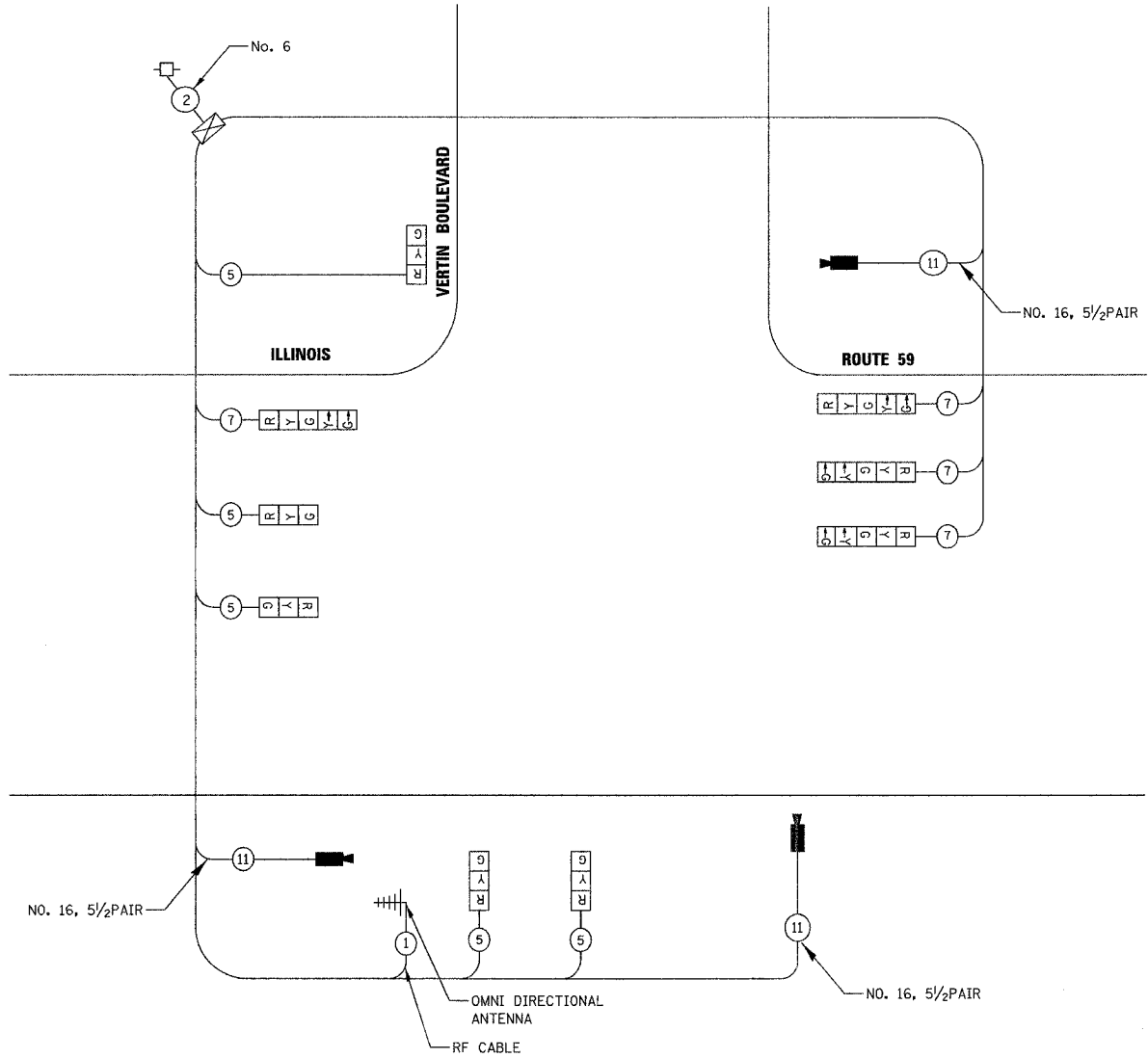
REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL
M.O.T. STAGING PLAN
 ILLINOIS ROUTE 59 AT VERTIN BOULEVARD

DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

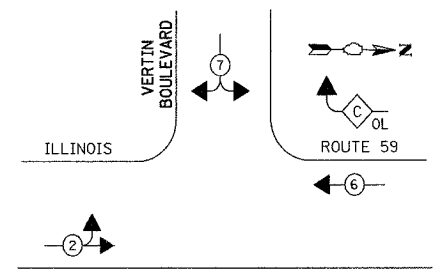
SCALE: NONE
 DATE 3/18/08

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	365	232
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TEMPORARY CABLE PLAN
NOT TO SCALE

TEMPORARY CONTROLLER SEQUENCE



- LEGEND**
- DUAL ENTRY PHASE
 - OVERLAP
 - NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

NOTE: OVERLAP "C" SHALL BE INACTIVE UNTIL SB RIGHT TURN LANES ARE OPENED TO TRAFFIC.

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

DATE	BY	REVISION
		1. CHECKED BY: [Signature]
		2. APPROVED BY: [Signature]

DATE	BY	REVISION
		1. CHECKED BY: [Signature]
		2. APPROVED BY: [Signature]

- NOTE:**
1. AN APPROVED IDOT SUBCONTRACTOR MUST INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES. ADJUSTMENT WILL BE REQUIRED BETWEEN PRIMARY AND SECONDARY.
 2. RIGHT-TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANE IS OPEN TO TRAFFIC.

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VIDEO DETECTION CAMERA
- COAXIAL CABLE
- TEMPORARY RADIO INTERCONNECT ANTENNA

TYPE	NO. LAMPS	WATTAGE	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.3
(GREEN)	9	135	15	0.25	33.8
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	64	0.05	
FLASHER				0.50	
TOTAL =					276.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: JUDY MILLER
PHONE: 815-724-5717
COMPANY: COMMONWEALTH EDISON

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ILLINOIS ROUTE 59 AT VERTIN BOULEVARD
DRAWN BY: BAR
DESIGNED BY: FA
CHECKED BY: KMM
SCALE: NONE
DATE: 3/18/08

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	234
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	23
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	526
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	150
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	17
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	34
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	185
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	715
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 2C	FOOT	682
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,142
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,440
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	767
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,817
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	45
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 14 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
* INDUCTIVE LOOP DETECTOR	EACH	7
* LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
PREFORMED DETECTOR LOOP	FOOT	547
** PAINT NEW TRAFFIC SIGNAL POST	EACH	1
** PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	2
** PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	2
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	562
* ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	297
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

* 100% OF THE COST FOR EMERGENCY VEHICLE PREEMPTION ITEMS WILL BE PAID FOR BY VILLAGE OF SHOREWOOD.
 ** 100% OF THE COST WILL BE PAID BY VILLAGE OF SHOREWOOD.

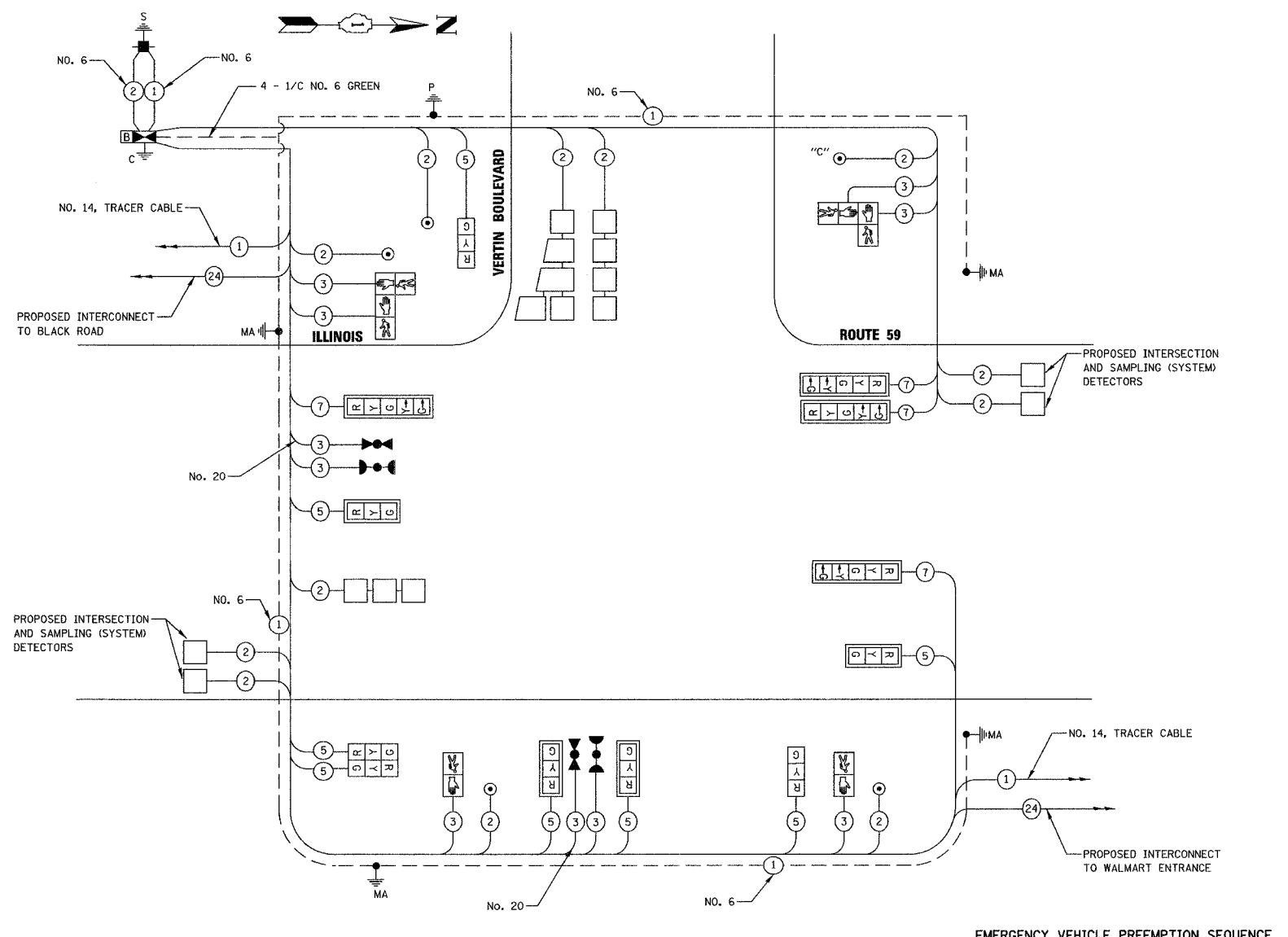
NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PREFORMED" DETECTION LOOPS.

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

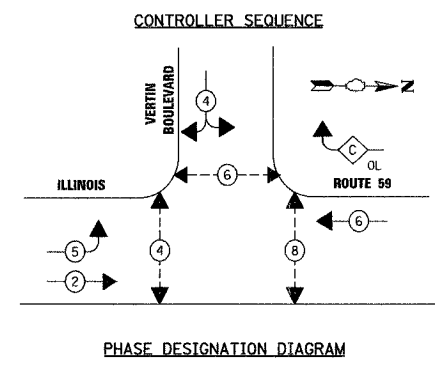
TYPE	NO. LAMPS	WATTAGE INCAND	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	64	0.50	
FLASHER					
TOTAL =				0.50	481.6

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
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 PHONE: 815-724-5717
 COMPANY: COMMONWEALTH EDISON

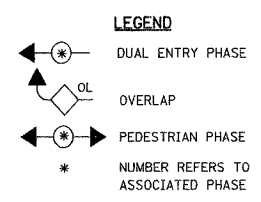
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C & D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
30" (750mm)	13.5 (4.1)	CONTROLLER CAB.	1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



CABLE PLAN

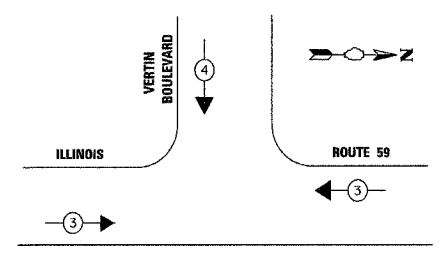


PHASE DESIGNATION DIAGRAM



NOTE: PUSH BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

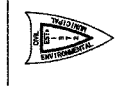
CABLE PLAN LEGEND

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

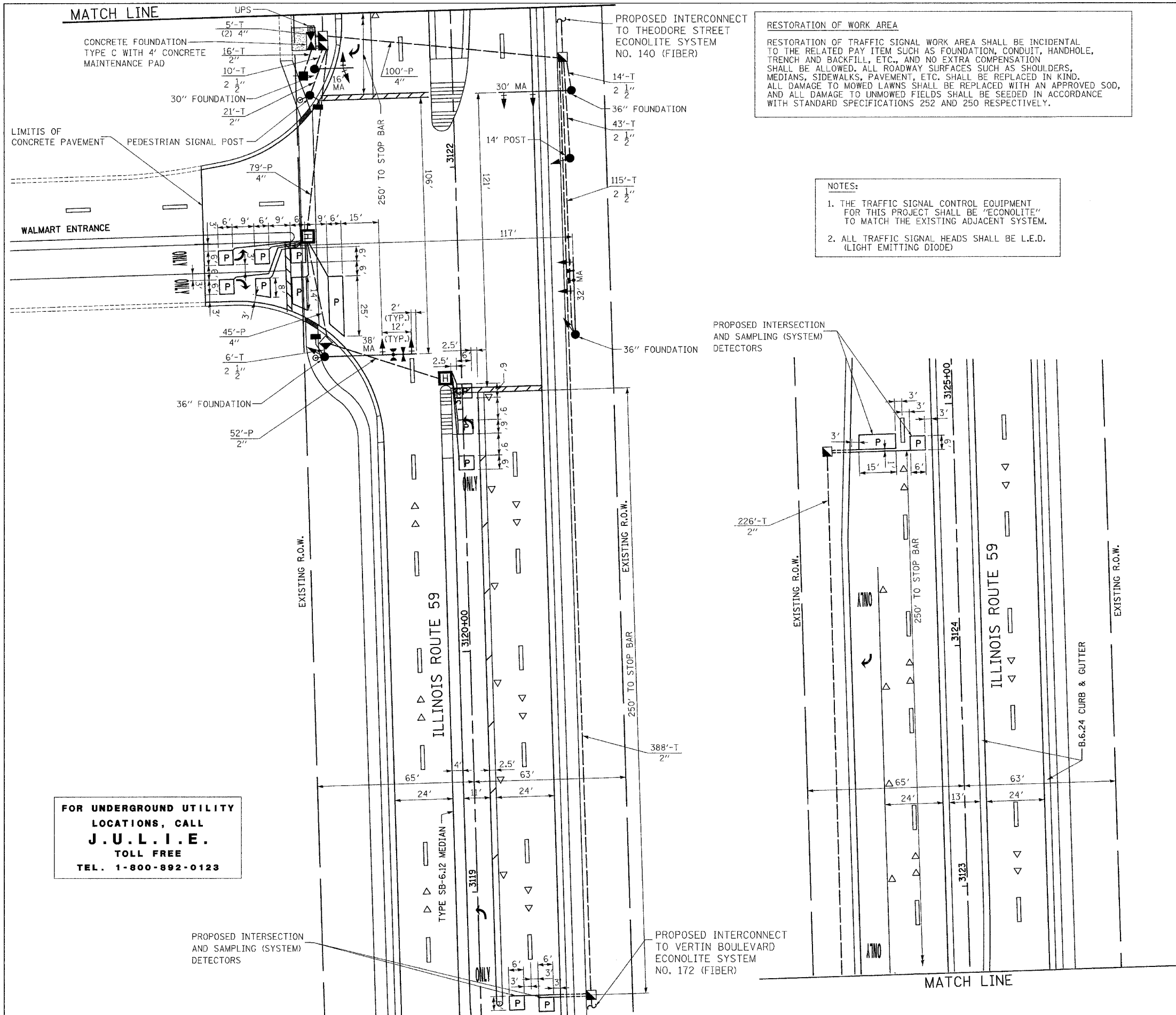
REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
 ILLINOIS ROUTE 59 AT VERTIN BOULEVARD
 SCALE: NONE
 DATE 3/18/08
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Chicago, Illinois 60614
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cemd@cemcon.com Website: www.cemcon.com



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	235	355
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 62416	



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

NOTES:
 1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.
 2. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"	[Symbol]	[Symbol]
ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"	[Symbol]	[Symbol]
CONDUIT SPLICE	[Symbol]	[Symbol]
WOOD POLE	[Symbol]	[Symbol]
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
UNINTERRUPTIBLE POWER SUPPLY	[Symbol]	[Symbol]
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

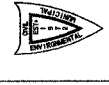
REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL INSTALLATION PLAN
 ILLINOIS ROUTE 59 AT WALMART ENTRANCE
 SCALE: VERT. 1" = 20'
 HORIZ. 1" = 20'
 DATE 3/17/2008
 DRAWN BY RDS
 DESIGNED BY BPT
 CHECKED BY BPT

PLOT DATE = 3/17/2008
 PLOT SCALE = 1" = 20'
 USER NAME = RDS

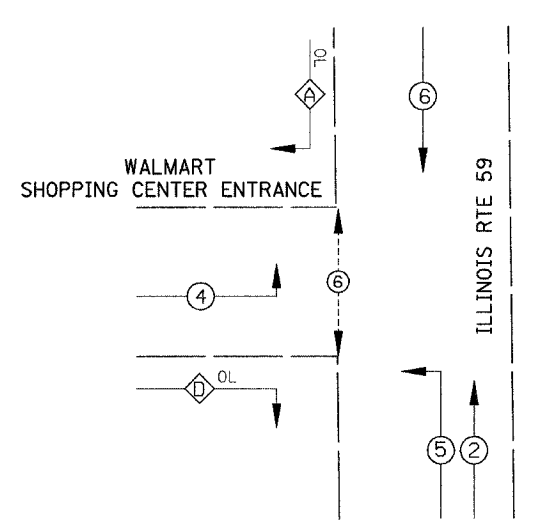
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Naperville, IL 60563-2100 Fax: 630.682.2199
 E-Mail: cead@cemcon.com Website: www.cemcon.com



CABLE PLAN LEGEND

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

CONTROLLER SEQUENCE



PROPOSED PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 6	+ 4
D	= 4	+ 5

SCHEDULE OF QUANTITIES

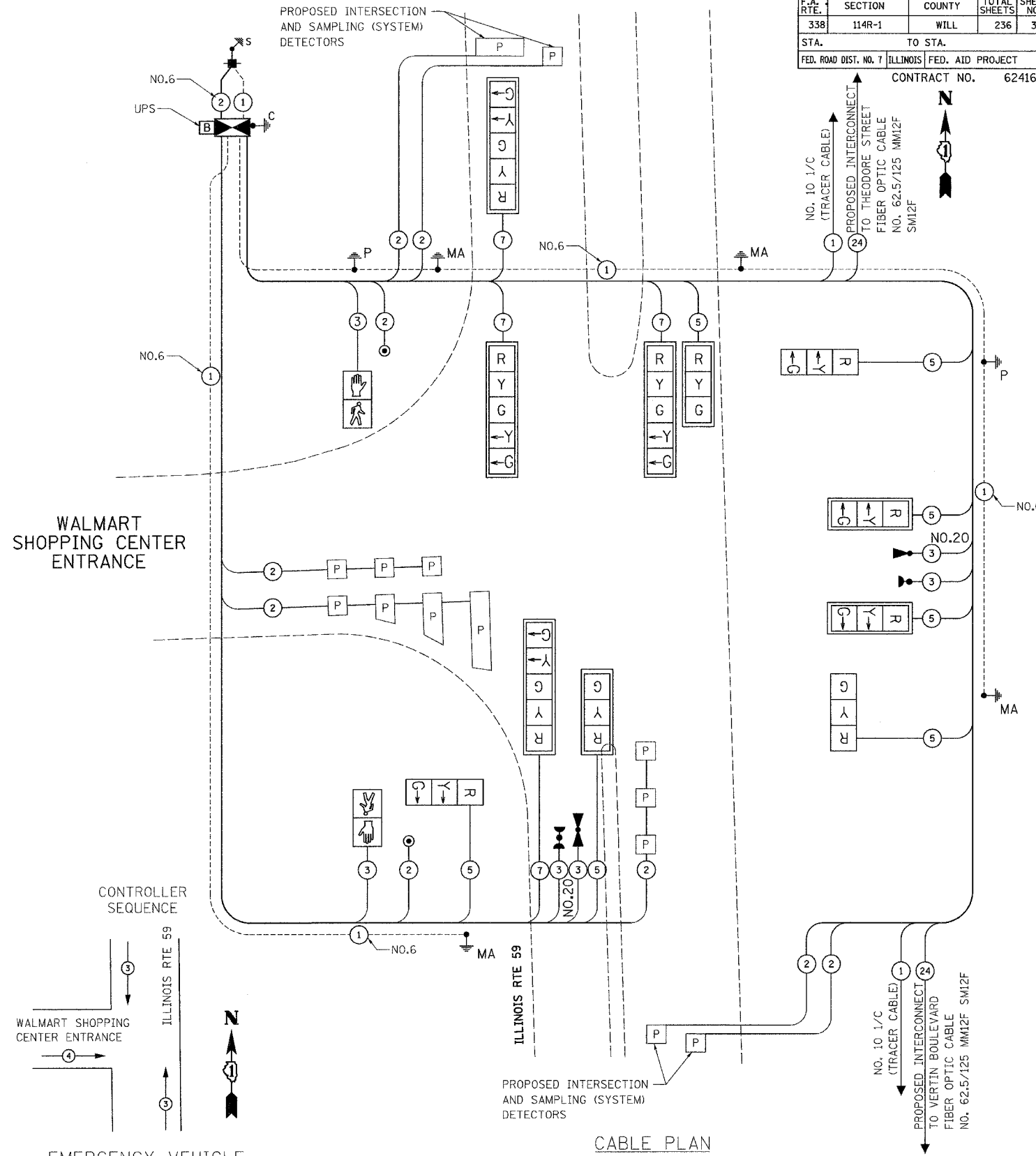
ITEM	UNIT	QUANTITY
SIGN PANEL, TYPE 1	SQ FT	7.5
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	651
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	188
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	52
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	223
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	870
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	224
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	745
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1596
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	552
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1968
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	24
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 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	45
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	2
PREFORMED DETECTOR LOOP	FOOT	629
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	498
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	511
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

I.D.O.T				TOTAL WATTAGE
TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	
SIGNAL (RED)	10	135 17	0.50	85
(YELLOW)	9	135 25	0.25	56.25
(GREEN)	9	135 15	0.25	33.75
ARROW	12	135 12	0.25	36
PED. SIGNAL	2	90 25	1.00	50
CONTROLLER	1	100 100	1.00	100
ILL UM. SIGN		84	0.05	
FLASHER				0.50
ENERGY COSTS TO:				TOTAL = 361.0

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

CONTACT: JUDY MILLER
 PHONE: (815)724-5717
 COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE	4 (1.2)	SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	236	355
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO.	62416

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES
 ILLINOIS RTE 59
 AT WALMART SHOPPING CENTER ENTRANCE

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 3/17/2008

DRAWN BY RDS
 DESIGNED BY BPT
 CHECKED BY BPT

PLOT DATE = 3/17/2008
 PLOT SCALE = 1"=20'
 USER NAME = RDS

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE MAINTAINED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR REPLACEMENT AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1. INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE MAINTAINED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES AND RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. ALL THE EXISTING TEMPORARY TRAFFIC SIGNAL EQUIPMENT SHALL BE RETURNED TO THE FOLLOWING AGENCY AFTER THE INSTALLATION OF PERMANENT SIGNALS. (NAME OF AGENCY.....)
8. RIGHT TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANE IS OPEN TO TRAFFIC.

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

NOTE: THE EXISTING CONDUITS, LOOP DETECTORS AND MAGNETIC DETECTORS SHALL BE ABANDONED.

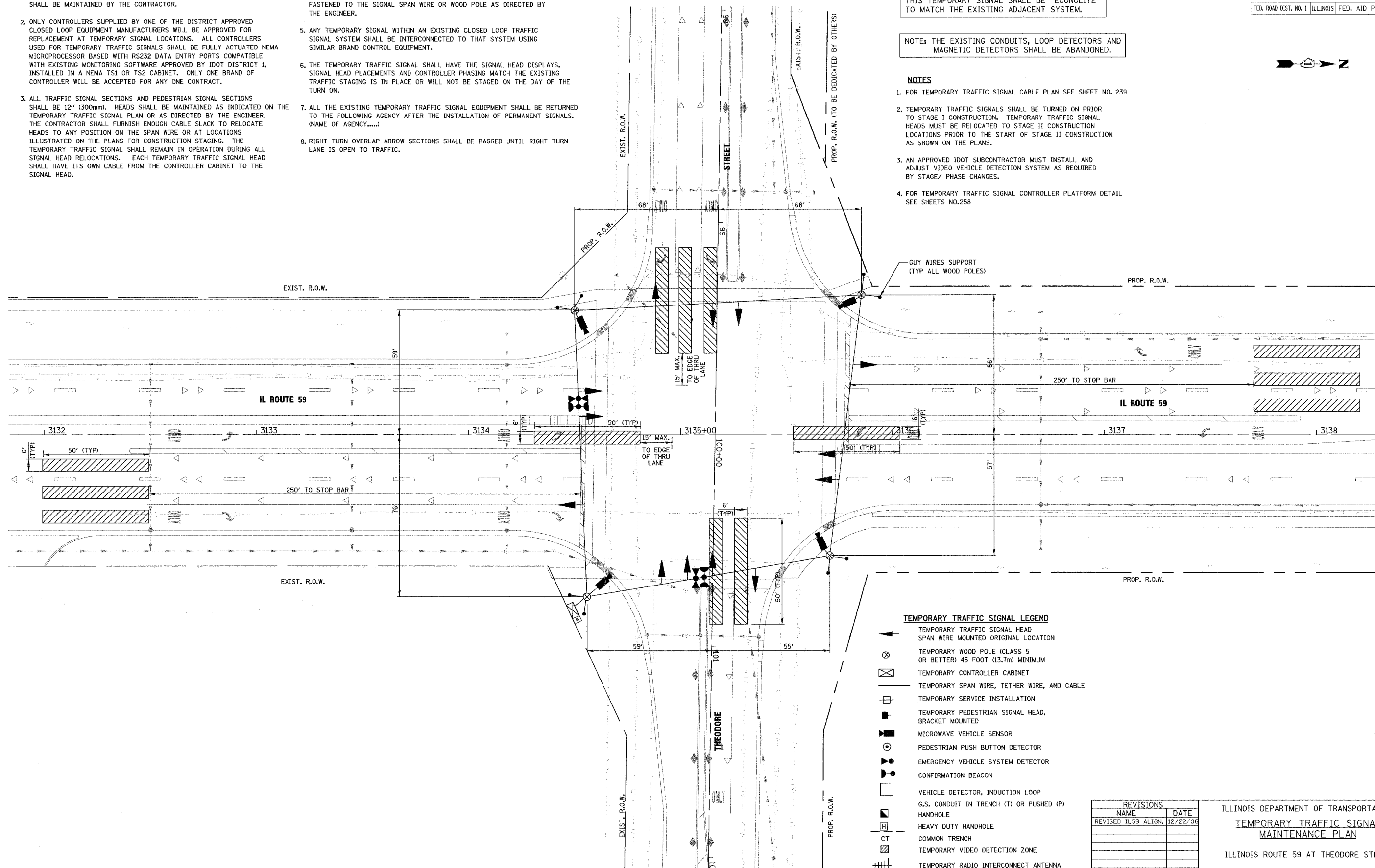
NOTES

1. FOR TEMPORARY TRAFFIC SIGNAL CABLE PLAN SEE SHEET NO. 239
2. TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED ON PRIOR TO STAGE I CONSTRUCTION. TEMPORARY TRAFFIC SIGNAL HEADS MUST BE RELOCATED TO STAGE II CONSTRUCTION LOCATIONS PRIOR TO THE START OF STAGE II CONSTRUCTION AS SHOWN ON THE PLANS.
3. AN APPROVED IDOT SUBCONTRACTOR MUST INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES.
4. FOR TEMPORARY TRAFFIC SIGNAL CONTROLLER PLATFORM DETAIL SEE SHEETS NO.258



PLAN	DATE
BY	
REVISION	
PLotted	
NOTE BOOK	
NO.	

PROFILE	DATE
BY	
REVISION	
PLotted	
NOTE BOOK	
NO.	



TEMPORARY TRAFFIC SIGNAL LEGEND

- ▲ TEMPORARY TRAFFIC SIGNAL HEAD
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊞ TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ⊞ TEMPORARY MICROWAVE VEHICLE SENSOR
- ⊞ TEMPORARY PEDESTRIAN PUSH BUTTON DETECTOR
- ⊞ TEMPORARY EMERGENCY VEHICLE SYSTEM DETECTOR
- ⊞ TEMPORARY CONFIRMATION BEACON
- ⊞ TEMPORARY VEHICLE DETECTOR, INDUCTION LOOP
- ⊞ G.S. CONDUIT IN TRENCH (T) OR PUSHED (P) HANDHOLE
- ⊞ HEAVY DUTY HANDHOLE
- ⊞ COMMON TRENCH
- ⊞ TEMPORARY VIDEO DETECTION ZONE
- ⊞ TEMPORARY RADIO INTERCONNECT ANTENNA
- ⊞ UNINTERRUPTED POWER SUPPLY (UPS)

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL MAINTENANCE PLAN
 ILLINOIS ROUTE 59 AT THEODORE STREET

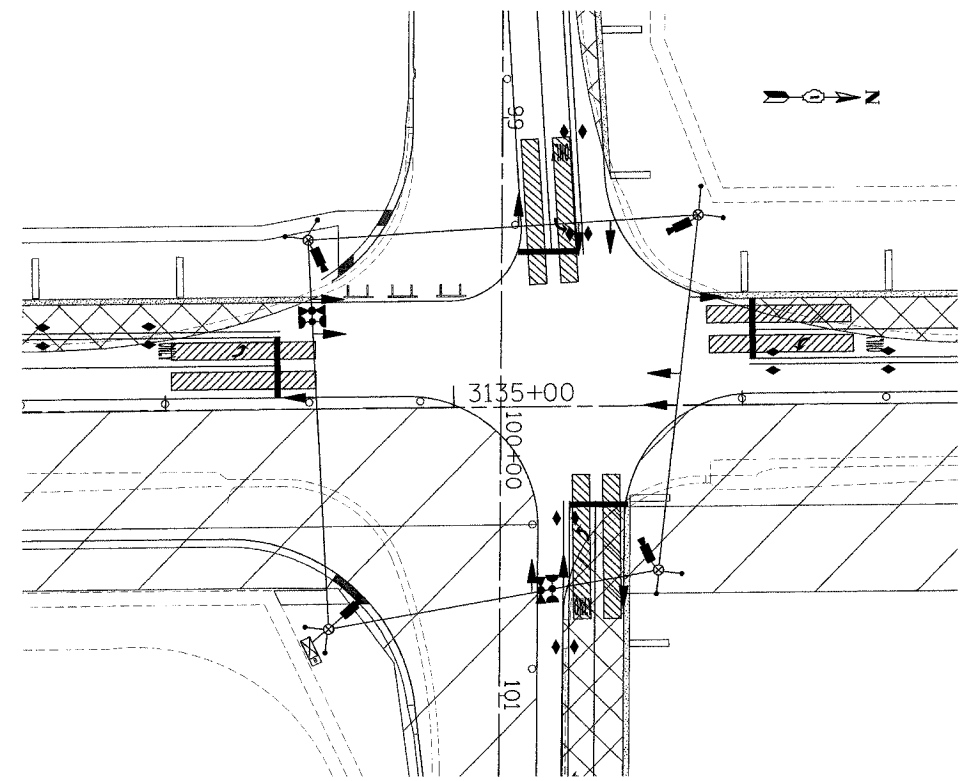
SCALE 1"=20'
 DATE 3/18/08

DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

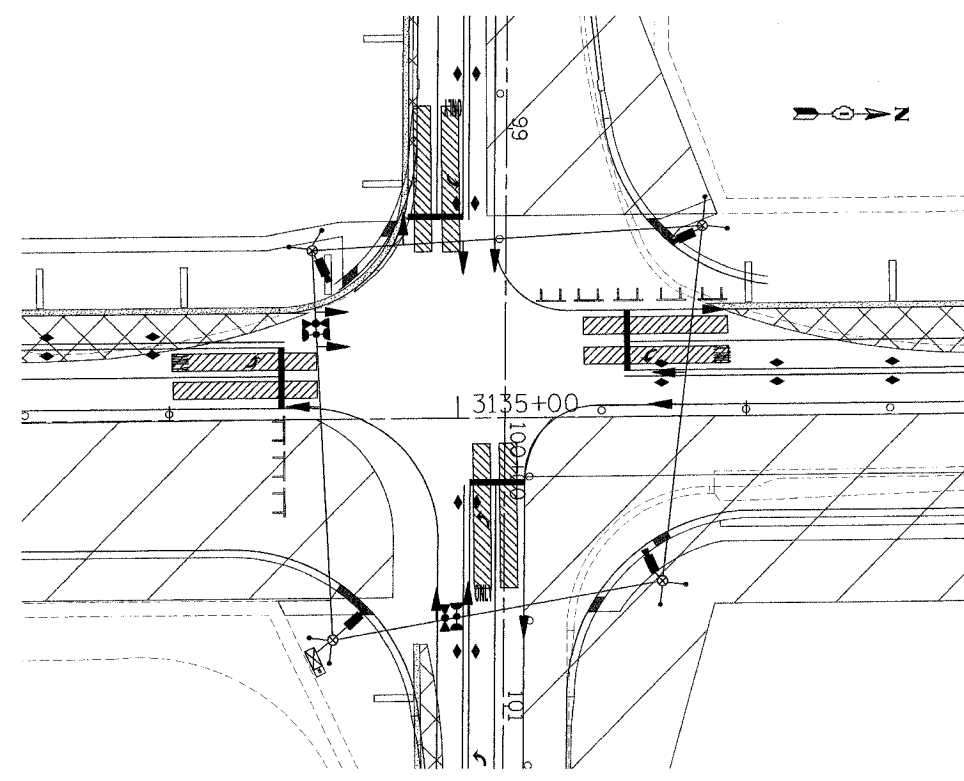
F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338 114R-1	WILL	355	238
STA.	TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

PLAN	DATE
BY	
REVISIONS	
1. PLOTTED	
2. CHECKED	
3. APPROVED	
NOTE BOOK	
NO.	

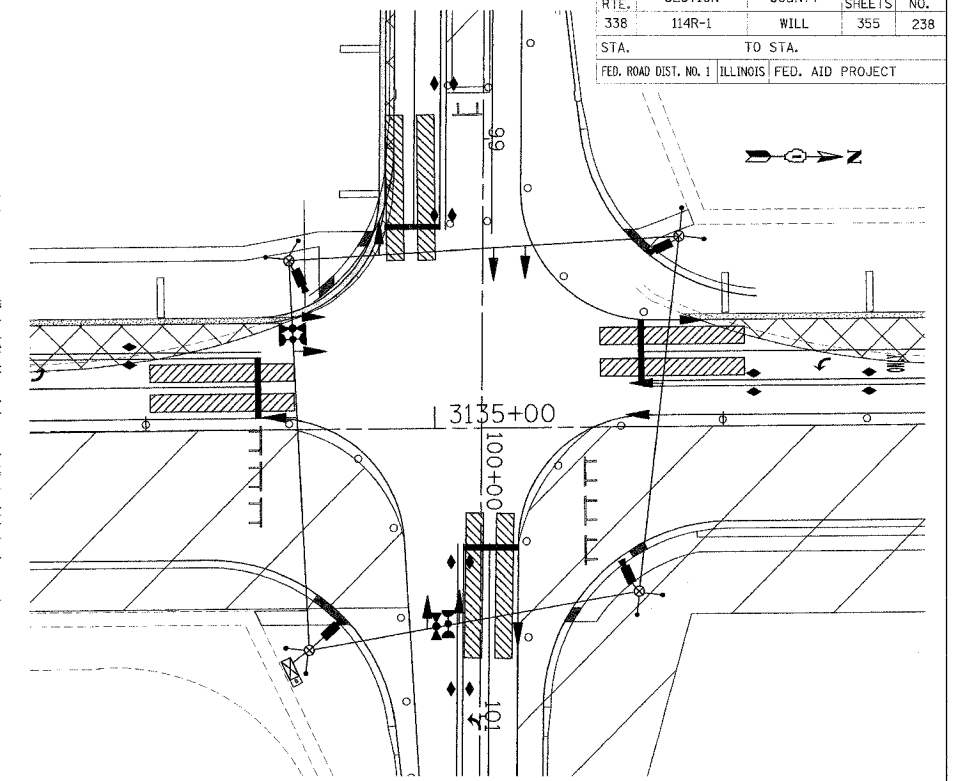
PROFILE	DATE
BY	
REVISIONS	
1. PLOTTED	
2. CHECKED	
3. APPROVED	
NOTE BOOK	
NO.	



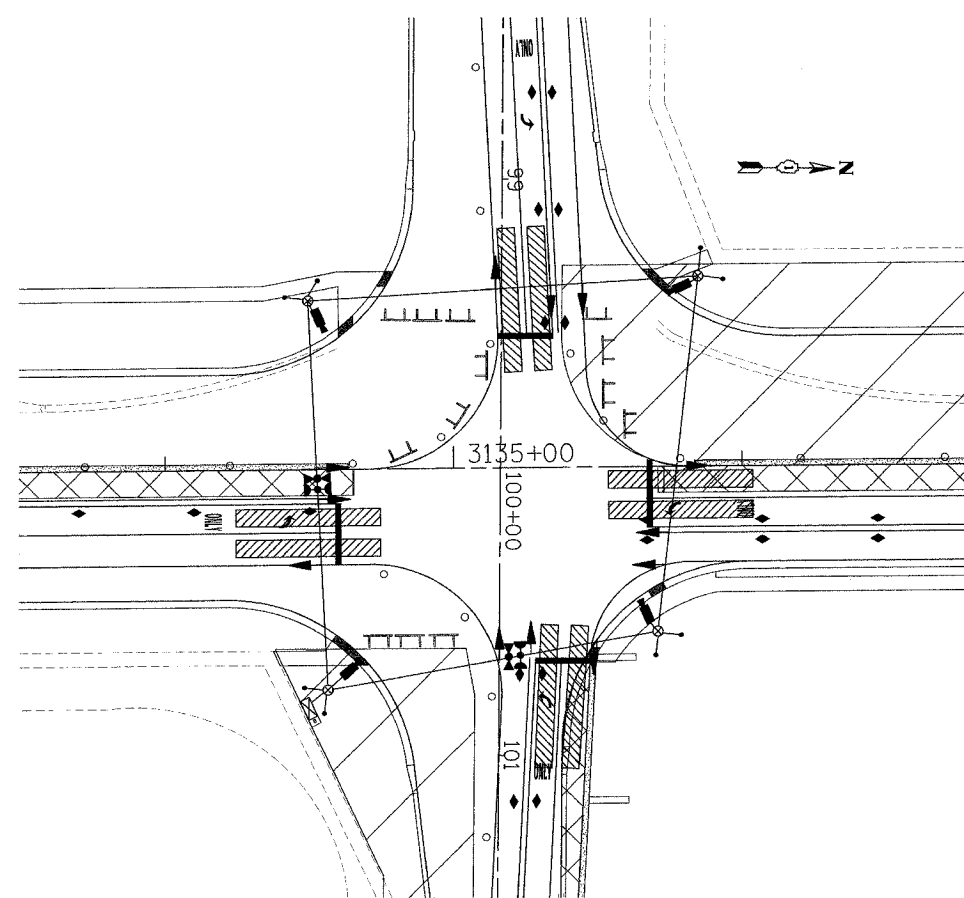
M.O.T. STAGE 1A



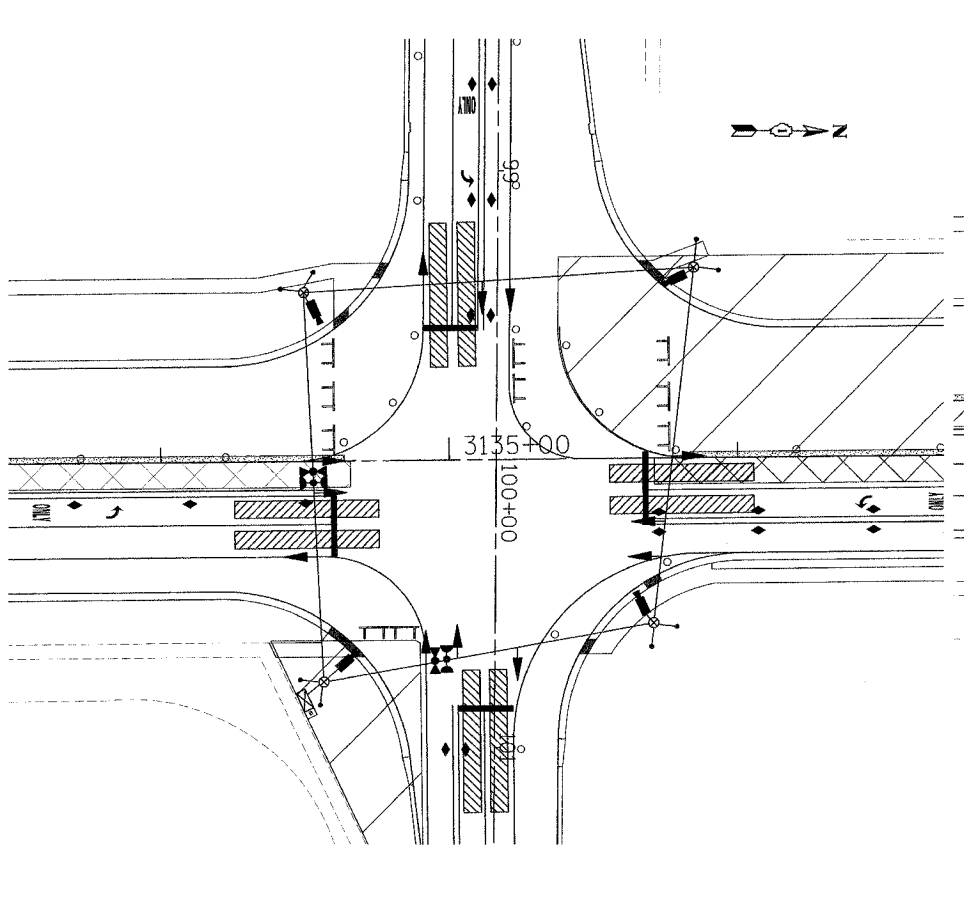
M.O.T. STAGE 1B



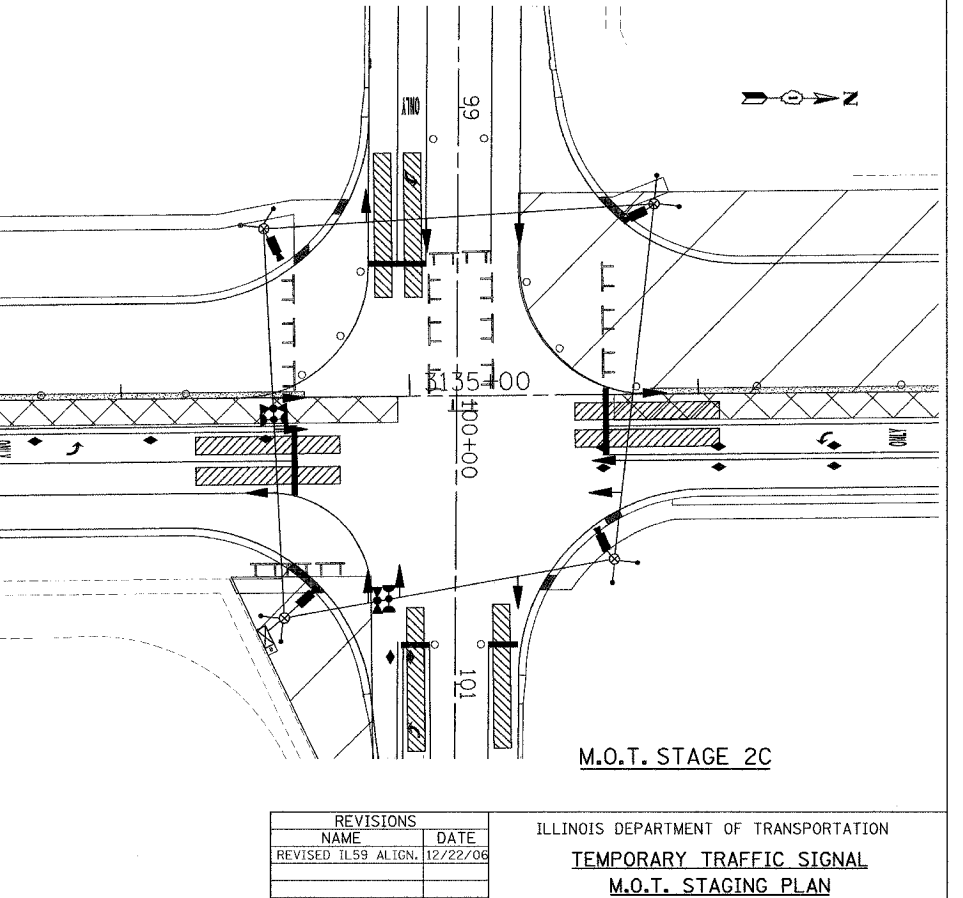
M.O.T. STAGE 1C



M.O.T. STAGE 2A



M.O.T. STAGE 2B



M.O.T. STAGE 2C

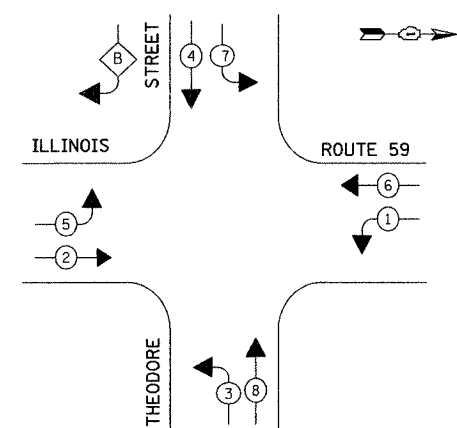
REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL
M.O.T. STAGING PLAN
 ILLINOIS ROUTE 59 AT THEODORE STREET

SCALE: NONE
 DATE 3/18/08

DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

TEMPORARY CONTROLLER SEQUENCE

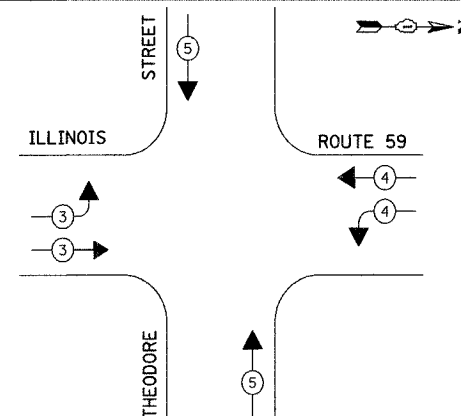


LEGEND

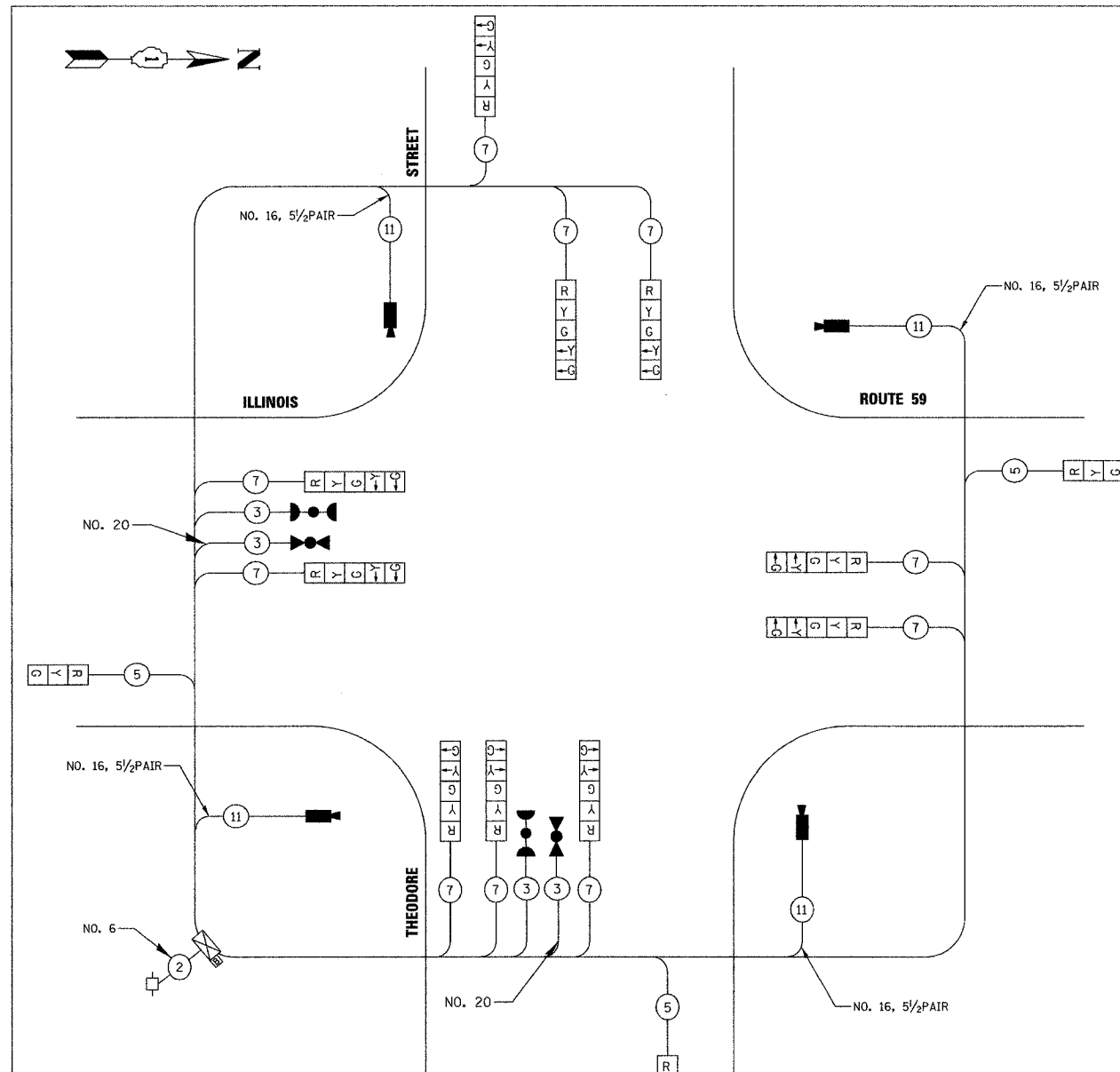
- DUAL ENTRY PHASE
- OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			



TEMPORARY CABLE PLAN
NOT TO SCALE

NOTE:

1. AN APPROVED IDOT SUBCONTRACTOR MUST INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES. ADJUSTMENT WILL BE REQUIRED BETWEEN PRIMARY AND SECONDARY.
2. RIGHT-TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANES ARE OPEN TO TRAFFIC.

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VIDEO DETECTION CAMERA
- COAXIAL CABLE
- TEMPORARY RADIO INTERCONNECT ANTENNA
- UNINTERRUPTED POWER SUPPLY (UPS)

TYPE	NO. LAMPS	WATTAGE INCAND	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	17	0.50	111
(YELLOW)	13	25	0.25	81
(GREEN)	13	15	0.25	49
ARROW	20	12	0.10	24
PED. SIGNAL	25	25	1.00	
CONTROLLER	1	100	1.00	100
ILLUM. SIGN		64	0.05	
UPS	1	25	1.00	25
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 390

CITY OF JOLIET
921 E. WASHINGTON STREET
JOLIET, IL 60432

ENERGY SUPPLY CONTACT: BETTY BURLS
PHONE: 815-724-5052
COMPANY: COMMONWEALTH EDISON

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

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
ILLINOIS ROUTE 59 AT THEODORE STREET
SCALE: NONE
DATE 3/18/08
DRAWN BY BAR
DESIGNED BY FA
CHECKED BY KMM

PLAN	DATE
SUBMITTED	BY
NOTED	BY
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
NO. 8	DATE
NO. 9	DATE
NO. 10	DATE
NO. 11	DATE
NO. 12	DATE
NO. 13	DATE
NO. 14	DATE
NO. 15	DATE
NO. 16	DATE
NO. 17	DATE
NO. 18	DATE
NO. 19	DATE
NO. 20	DATE
NO. 21	DATE
NO. 22	DATE
NO. 23	DATE
NO. 24	DATE
NO. 25	DATE
NO. 26	DATE
NO. 27	DATE
NO. 28	DATE
NO. 29	DATE
NO. 30	DATE

PHOTO	DATE
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
NO. 8	DATE
NO. 9	DATE
NO. 10	DATE
NO. 11	DATE
NO. 12	DATE
NO. 13	DATE
NO. 14	DATE
NO. 15	DATE
NO. 16	DATE
NO. 17	DATE
NO. 18	DATE
NO. 19	DATE
NO. 20	DATE
NO. 21	DATE
NO. 22	DATE
NO. 23	DATE
NO. 24	DATE
NO. 25	DATE
NO. 26	DATE
NO. 27	DATE
NO. 28	DATE
NO. 29	DATE
NO. 30	DATE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	240
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

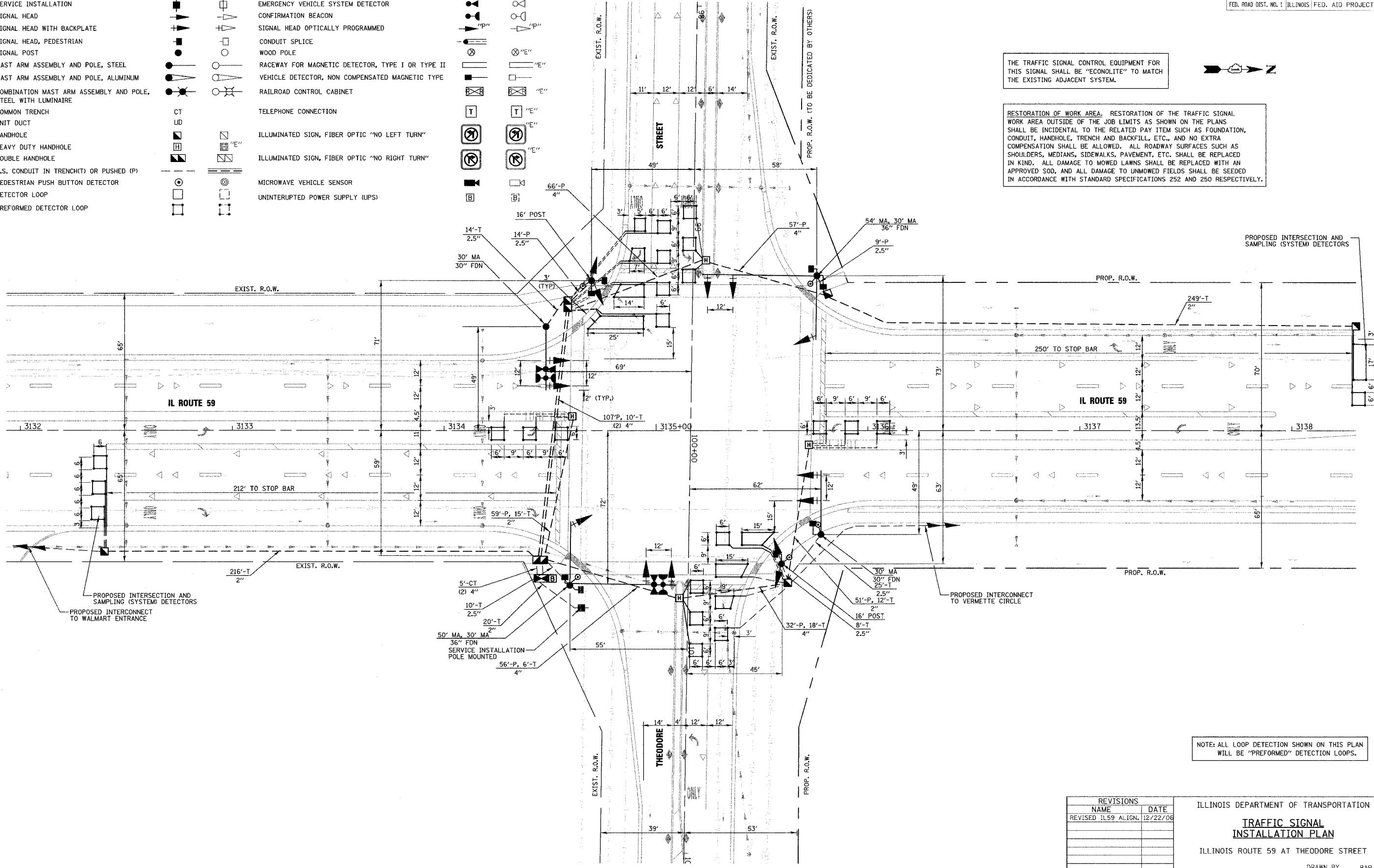
CONTROLLER			CAST IRON JUNCTION BOX
SERVICE INSTALLATION			EMERGENCY VEHICLE SYSTEM DETECTOR
SIGNAL HEAD			CONFIRMATION BEACON
SIGNAL HEAD WITH BACKPLATE			SIGNAL HEAD OPTICALLY PROGRAMMED
SIGNAL HEAD, PEDESTRIAN			CONDUIT SPLICE
SIGNAL POST			WOOD POLE
MAST ARM ASSEMBLY AND POLE, STEEL			RACEWAY FOR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

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

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



PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



PROPOSED INTERCONNECT TO WALMART ENTRANCE

PROPOSED INTERCONNECT TO VERMETTE CIRCLE

NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PERFORMED" DETECTION LOOPS.

PLAN	DATE	BY
DATE	BY	
DATE	BY	
DATE	BY	

PROFILE	DATE	BY
DATE	BY	
DATE	BY	
DATE	BY	

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC SIGNAL
 INSTALLATION PLAN**
 ILLINOIS ROUTE 59 AT THEODORE STREET

SCALE 1"=20'
 DATE 3/18/08

DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

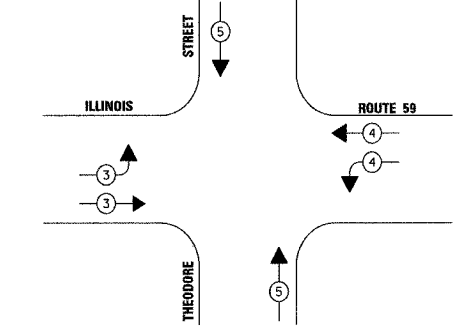
F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	241
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	32
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	512
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	57
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	54
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	124
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	9
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	425
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	623
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCIEVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 2C	FOOT	855
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,700
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	975
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,958
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2,870
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	35
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 50 FT. AND 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	12
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
MAINTENANCE OF EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
PERFORMED DETECTOR LOOP	FOOT	949
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	749
* ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	315
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30 FT. AND 54 FT.	EACH	1

* 100% OF THE COST FOR EMERGENCY VEHICLE PREEMPTION ITEMS WILL BE PAID FOR BY CITY OF JOLIET.

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↑

TYPE	WATTAGE			TOTAL WATTAGE
	NO. LAMPS	INCAND.	LED X % OPERATION	
SIGNAL (RED)	14	135	17	119
(YELLOW)	14	135	25	87.5
(GREEN)	14	135	15	52.5
ARROW	20	135	12	24
PED. SIGNAL	8	90	25	200
CONTROLLER	1	100	100	100
ILLUM. SIGN		84	64	0.05
FLASHER			0.50	
ENERGY COSTS TO:	TOTAL =			583

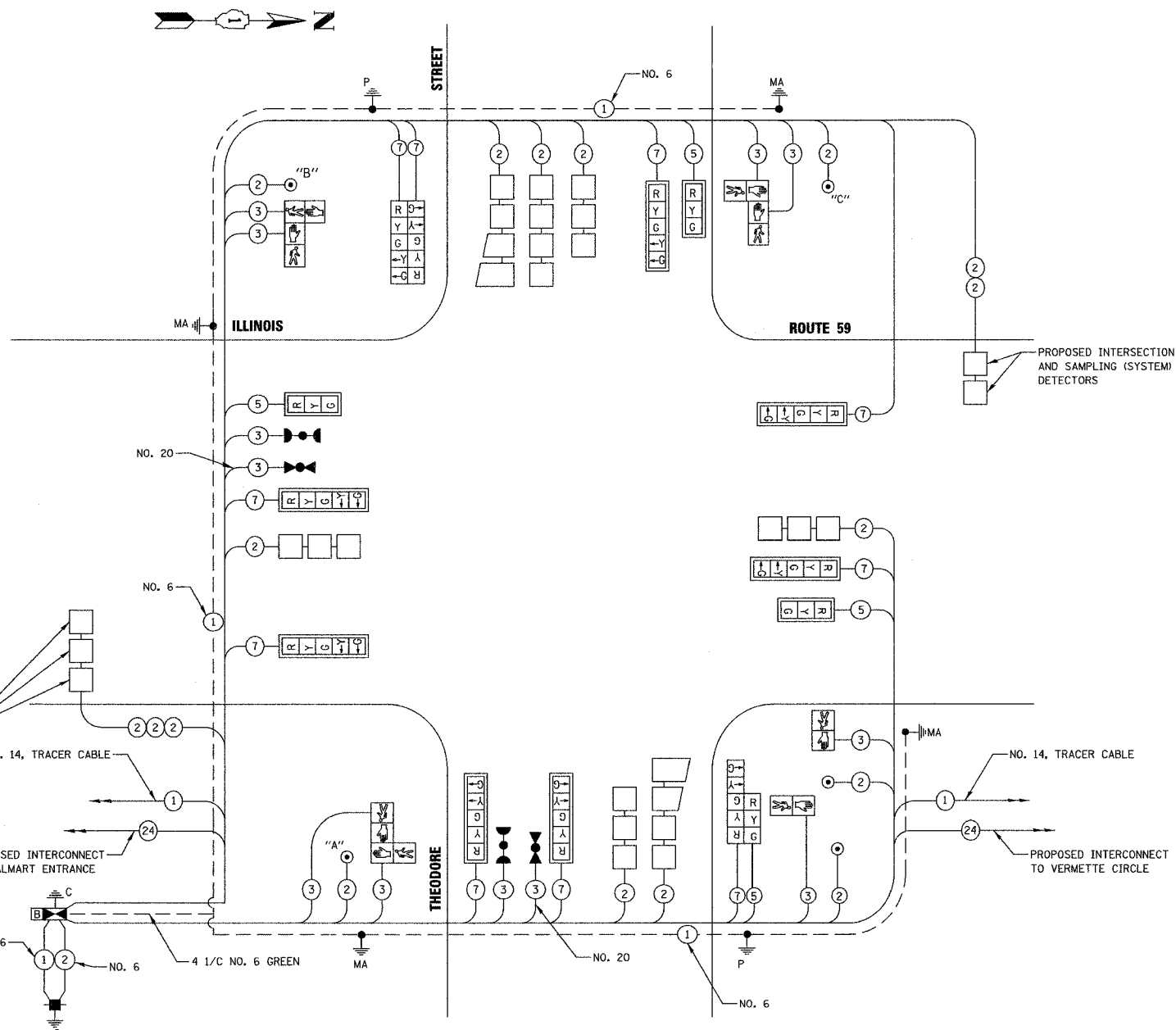
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY CONTACT: JUDY MILLER
 PHONE: 815-724-5717
 COMPANY: COMMONWEALTH EDISON

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

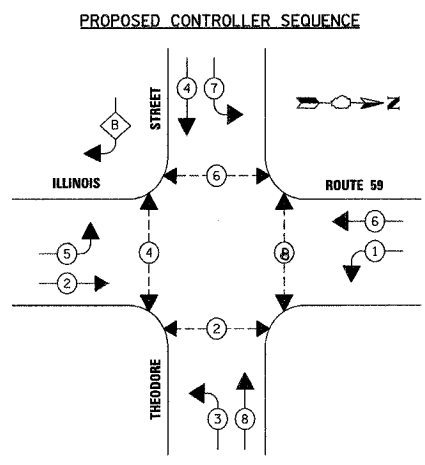
NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PERFORMED" DETECTION LOOPS.

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

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASE 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL TO PHASE 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL TO PHASE 6 AND 8.



CABLE PLAN



PHASE DESIGNATION DIAGRAM

CABLE PLAN LEGEND

- | EXISTING | PROPOSED | |
|----------|----------|---|
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE CONNECTION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | DENOTES NUMBER OF CONDUCTORS |
| | | GROUND CABLE IN CONDUIT |
| | | FIBER OPTIC CABLE IN CONDUIT |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN |
| | | ILLUMINATED SIGN |
| | | SIGNAL FACE WITH BACKPLATE |
| | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HH), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY (UPS) |

- #### LEGEND
- DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

NAME	DATE
REVISED IL59 ALIGN.	12/22/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
**CABLE PLAN,
 PHASE DESIGNATION DIAGRAM,
 AND SCHEDULE OF QUANTITIES**
 ILLINOIS ROUTE 59 AT THEODORE STREET

SCALE: NONE
 DATE 3/18/08

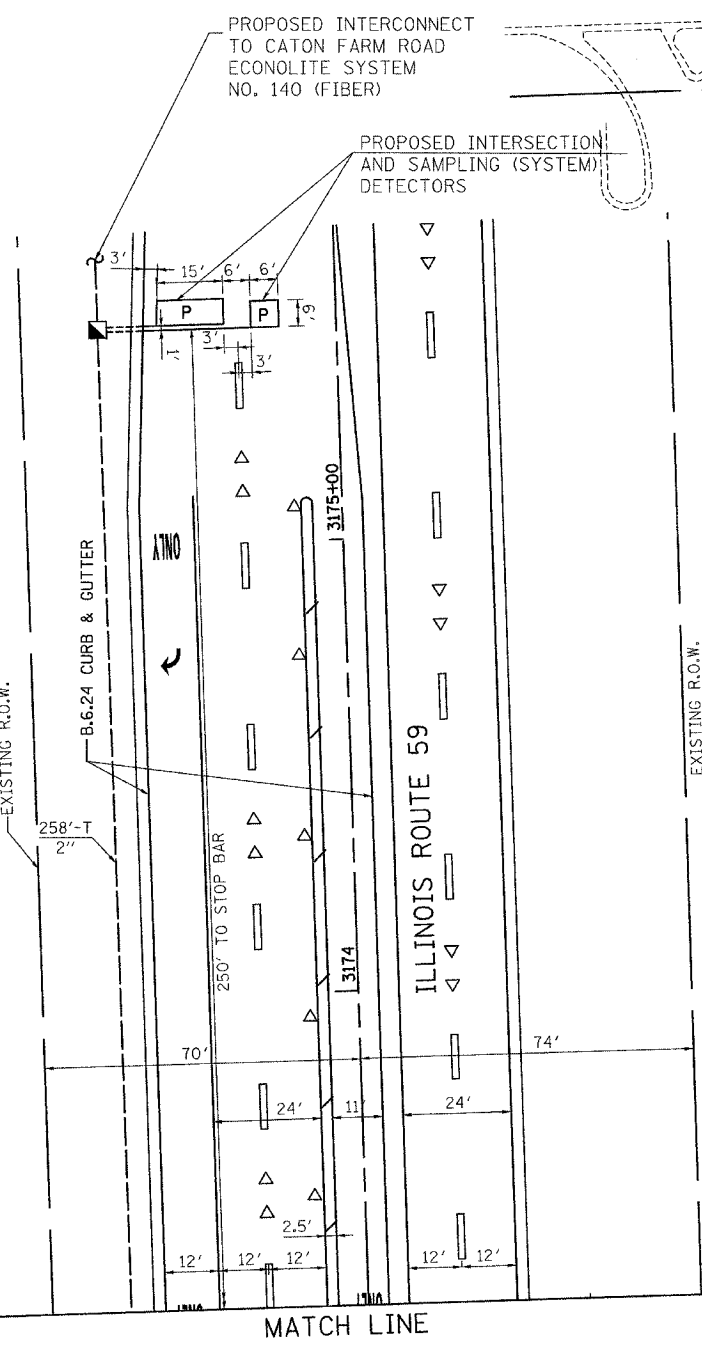
DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

PREPARED BY:
CEMCON I & A
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9875
 Tel: 630-581-8888 Fax: 630-581-8199
 E-Mail: info@cemcon.com Website: www.cemcon.com

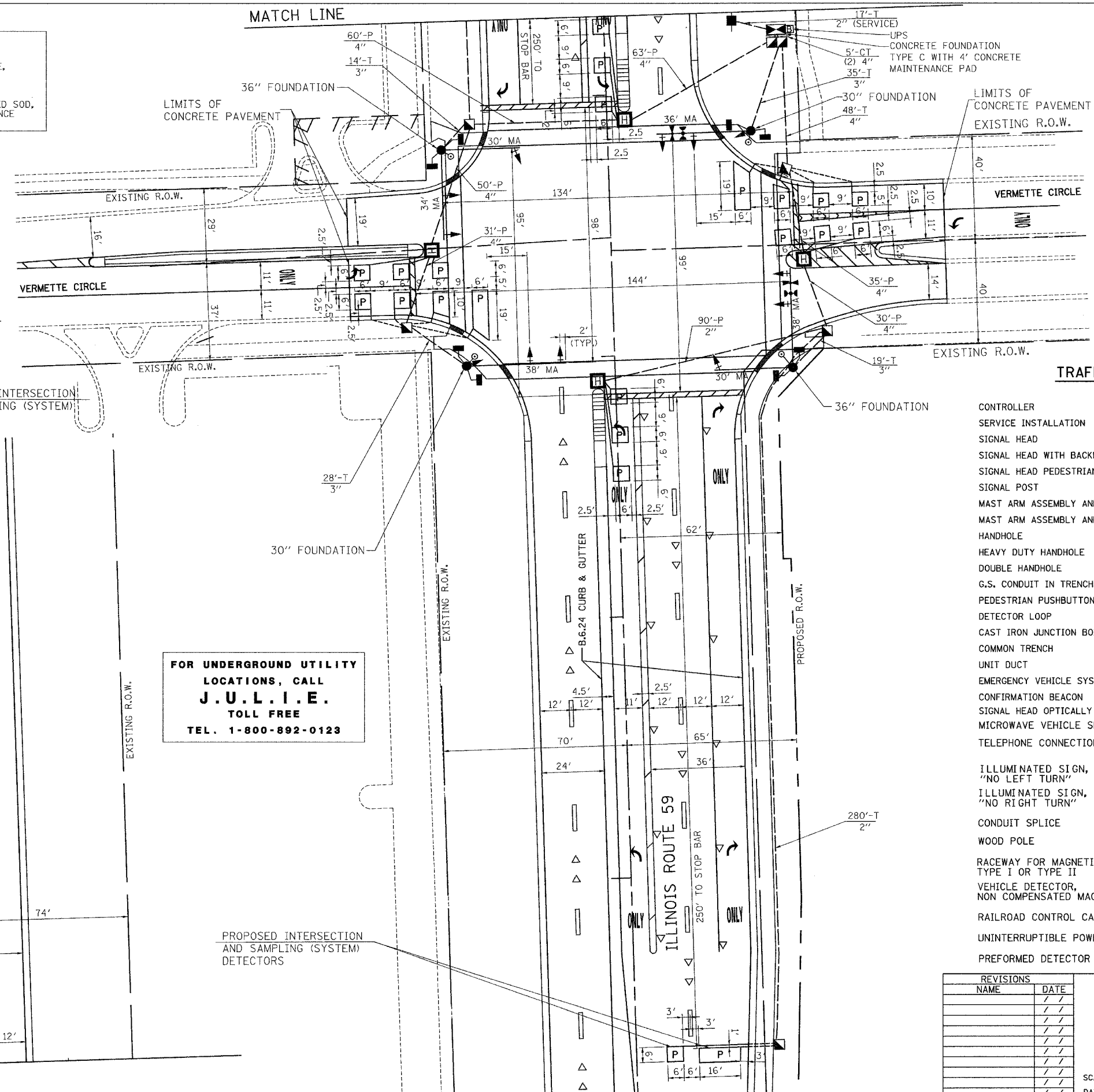
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	242	355
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.		62416		

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

- NOTES:**
1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.
 2. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)



FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"	[Symbol]	[Symbol]
ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"	[Symbol]	[Symbol]
CONDUIT SPLICE	[Symbol]	[Symbol]
WOOD POLE	[Symbol]	[Symbol]
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
UNINTERRUPTIBLE POWER SUPPLY	[Symbol]	[Symbol]
PREFORMED DETECTOR LOOP	[Symbol]	[Symbol]

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL INSTALLATION PLAN
 ILLINOIS ROUTE 59 AT
 VERMETTE CIRCLE

SCALE: VERT. 1" = 20'
 HORIZ. 1" = 40'
 DATE: 3/17/2008
 DRAWN BY: RDS
 DESIGNED BY: BPT
 CHECKED BY: BPT

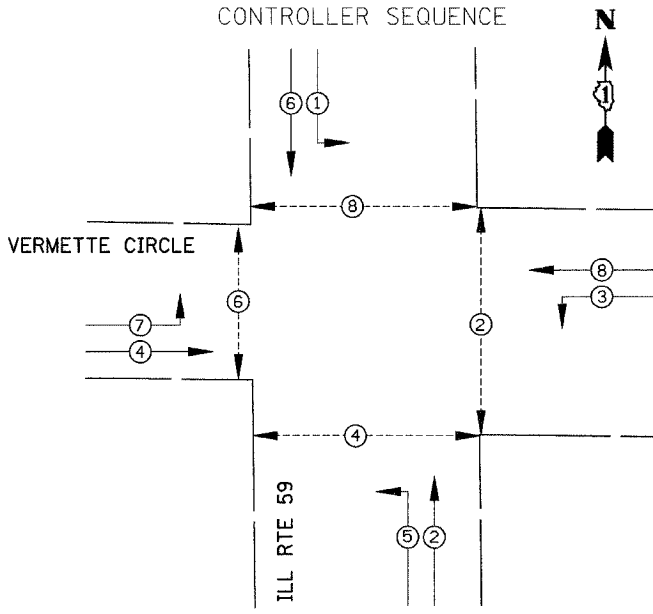
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 USER NAME = RDS

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 W. 1st St. Oak Creek, WI 53150
 Tel: 414.762.2100 Fax: 414.762.2199
 E-Mail: info@cemcon.com Website: www.cemcon.com



CABLE PLAN LEGEND

- | | | | |
|-----------------|-----------------|--|--|
| EXISTING | PROPOSED | | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION | |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION | CONTROLLER CABINET |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION | SERVICE INSTALLATION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION | TELEPHONE CONNECTION |
| | | CONTROLLER CABINET | MAGNETIC DETECTOR |
| | | SERVICE INSTALLATION | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | TELEPHONE CONNECTION | CONFIRMATION BEACON |
| | | MAGNETIC DETECTOR | VEHICLE DETECTOR, INDUCTION LOOP |
| | | EMERGENCY VEHICLE LIGHT DETECTOR | ① GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | CONFIRMATION BEACON | ② FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| | | PUSH-BUTTON DETECTOR | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | VEHICLE DETECTOR, INDUCTION LOOP | RAILROAD CONTROL CABINET |
| | | ① GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) | ILLUMINATED SIGN "NO LEFT TURN" |
| | | ② FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| | | RAILROAD CONTROL CABINET | GROUND ROD AT POST (P), OR MAST ARM POLE (MA) |
| | | ILLUMINATED SIGN "NO LEFT TURN" | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | ILLUMINATED SIGN "NO RIGHT TURN" | UNINTERRUPTIBLE POWER SUPPLY |
| | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) | PREFORMED DETECTOR LOOP |
| | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA) | |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION | |
| | | UNINTERRUPTIBLE POWER SUPPLY | |
| | | PREFORMED DETECTOR LOOP | |

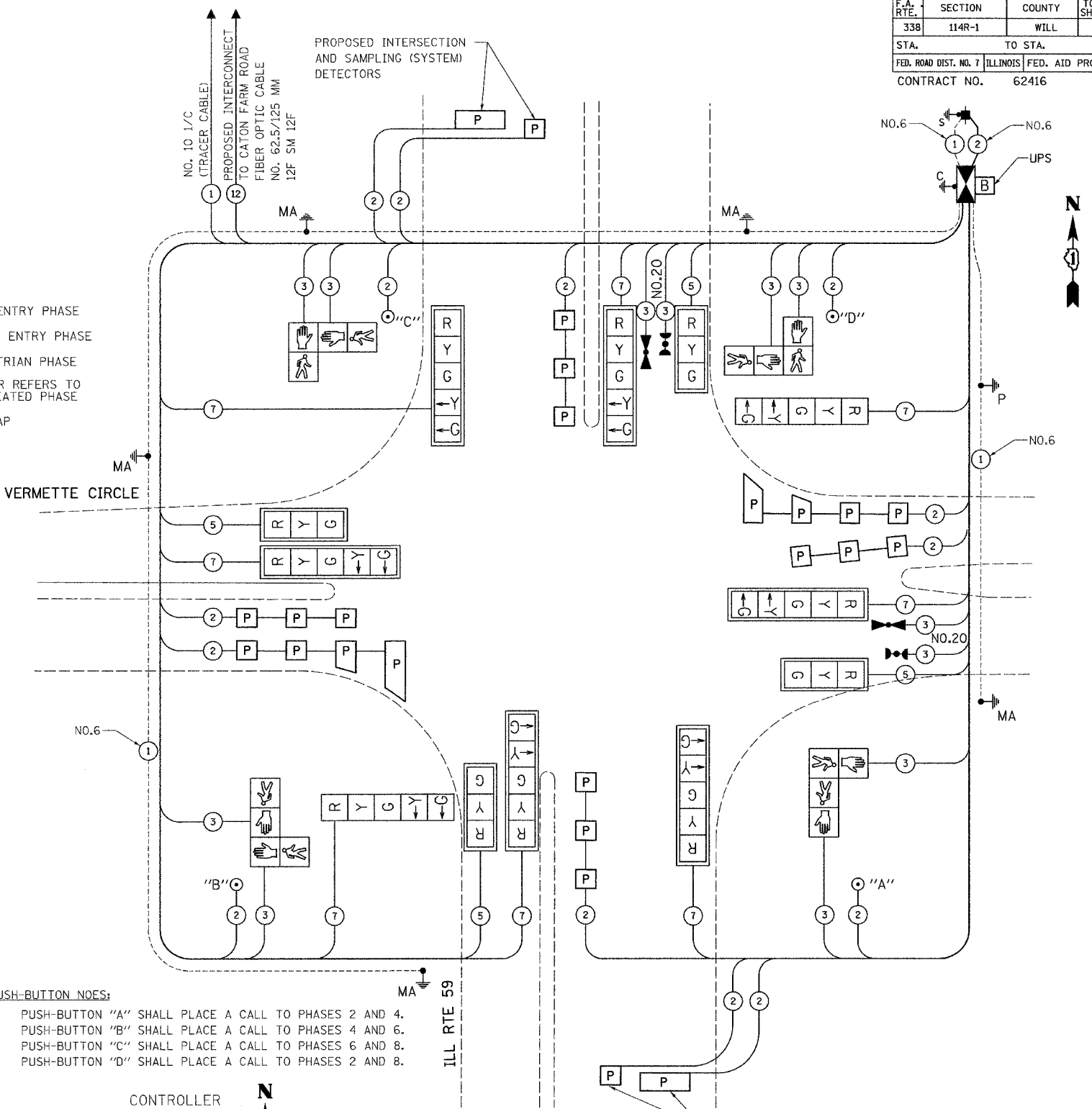


PROPOSED PHASE DESIGNATION DIAGRAM

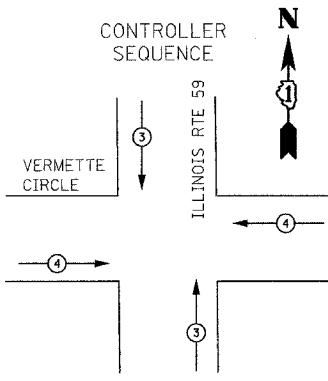
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL, TYPE 1	SQ FT	33
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	555
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	96
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	58
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	90
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	269
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	704
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	715
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1818
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	772
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1822
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2721
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	31
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30FT & 38FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 34FT & 30FT	EACH	1
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	10
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
PREFORMED DETECTOR LOOP	FOOT	912
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	513
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	337
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

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



- PUSH-BUTTON NOES:**
- PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 AND 4.
 - PUSH-BUTTON "B" SHALL PLACE A CALL TO PHASES 4 AND 6.
 - PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8.
 - PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 2 AND 8.



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES
 ILL RTE 59
 AT VERMETTE CIRCLE

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 3/17/2008

DRAWN BY RDS
 DESIGNED BY BPT
 CHECKED BY BPT

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

TYPE	NO. LAMPS	WATTAGE [INCAND.]	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	541.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 W. CENTER COURT
 SCHAMBURG, IL 60196-1096

ENERGY SUPPLY CONTACT: JUDY MILLER
 PHONE: (815)724-5717
 COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE	10 (3.0)	SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

PLOT DATE = 3/17/2008
 FILE NAME = I:\Projects\3528A43\signal\11\11\CABLE_RTE59\VERMETTE.dgn
 PLOT SCALE = 1"=20'
 USER NAME = RDS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	243	355
STA.	TO STA.			
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62416				

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	244
STA.	TO STA.			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

NOTES FOR TEMPORARY TRAFFIC SIGNALS

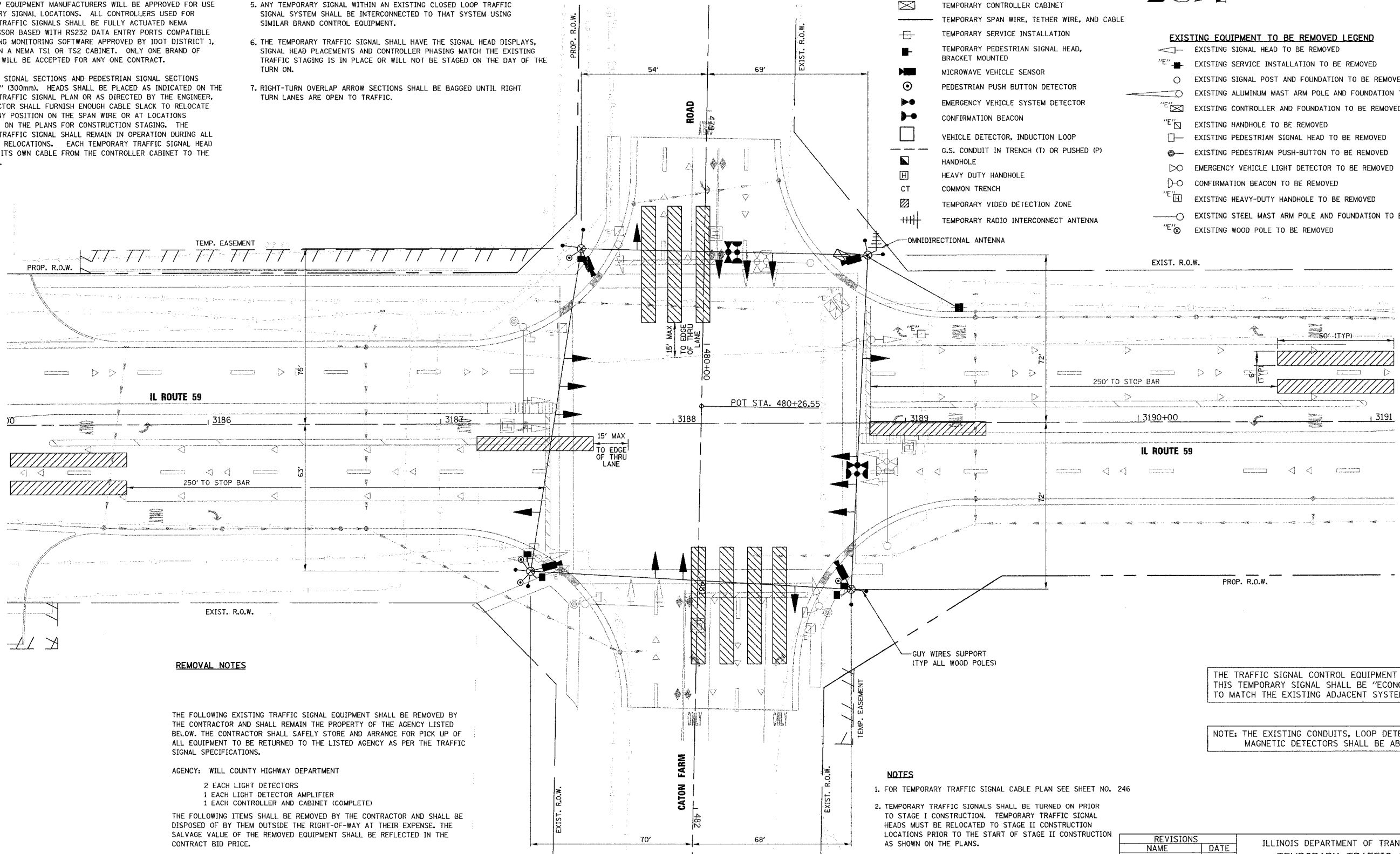
- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES AND RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- RIGHT-TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANES ARE OPEN TO TRAFFIC.

TEMPORARY TRAFFIC SIGNAL LEGEND

- ← TEMPORARY TRAFFIC SIGNAL HEAD
- SPAN WIRE MOUNTED ORIGINAL LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ⊞ MICROWAVE VEHICLE SENSOR
- ⊙ PEDESTRIAN PUSH BUTTON DETECTOR
- ⊞ EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- ⊞ G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- ⊞ HANDHOLE
- ⊞ HEAVY DUTY HANDHOLE
- CT COMMON TRENCH
- ⊞ TEMPORARY VIDEO DETECTION ZONE
- ⊞ TEMPORARY RADIO INTERCONNECT ANTENNA

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- ⊞ EXISTING SIGNAL HEAD TO BE REMOVED
- ⊞ EXISTING SERVICE INSTALLATION TO BE REMOVED
- ⊞ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING HANDHOLE TO BE REMOVED
- ⊞ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊞ EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- ⊞ EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- ⊞ CONFIRMATION BEACON TO BE REMOVED
- ⊞ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- ⊞ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING WOOD POLE TO BE REMOVED



REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- AGENCY: WILL COUNTY HIGHWAY DEPARTMENT
- 2 EACH LIGHT DETECTORS
 - 1 EACH LIGHT DETECTOR AMPLIFIER
 - 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.

- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH SIGNAL POST
- 14 EACH SIGNAL HEADS
- 4 EACH PEDESTRIAN SIGNAL HEADS
- 4 EACH PEDESTRIAN PUSH BUTTON
- 1 EACH SERVICE INSTALLATION

NOTES

- FOR TEMPORARY TRAFFIC SIGNAL CABLE PLAN SEE SHEET NO. 246
- TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED ON PRIOR TO STAGE I CONSTRUCTION. TEMPORARY TRAFFIC SIGNAL HEADS MUST BE RELOCATED TO STAGE II CONSTRUCTION LOCATIONS PRIOR TO THE START OF STAGE II CONSTRUCTION AS SHOWN ON THE PLANS.
- ONLY AN APPROVED IDOT ELECTRICAL SUBCONTRACTOR WILL BE PERMITTED TO INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES.
- FOR TEMPORARY TRAFFIC SIGNAL CONTROLLER PLATFORM DETAIL SEE SHEET NO. 258

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

NOTE: THE EXISTING CONDUITS, LOOP DETECTORS AND MAGNETIC DETECTORS SHALL BE ABANDONED.

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
 INSTALLATION AND REMOVE EXISTING
 TRAFFIC SIGNAL EQUIPMENT PLAN**
 ILLINOIS ROUTE 59 AND CATON FARM ROAD

SCALE 1"=20'
 DATE 3/18/08

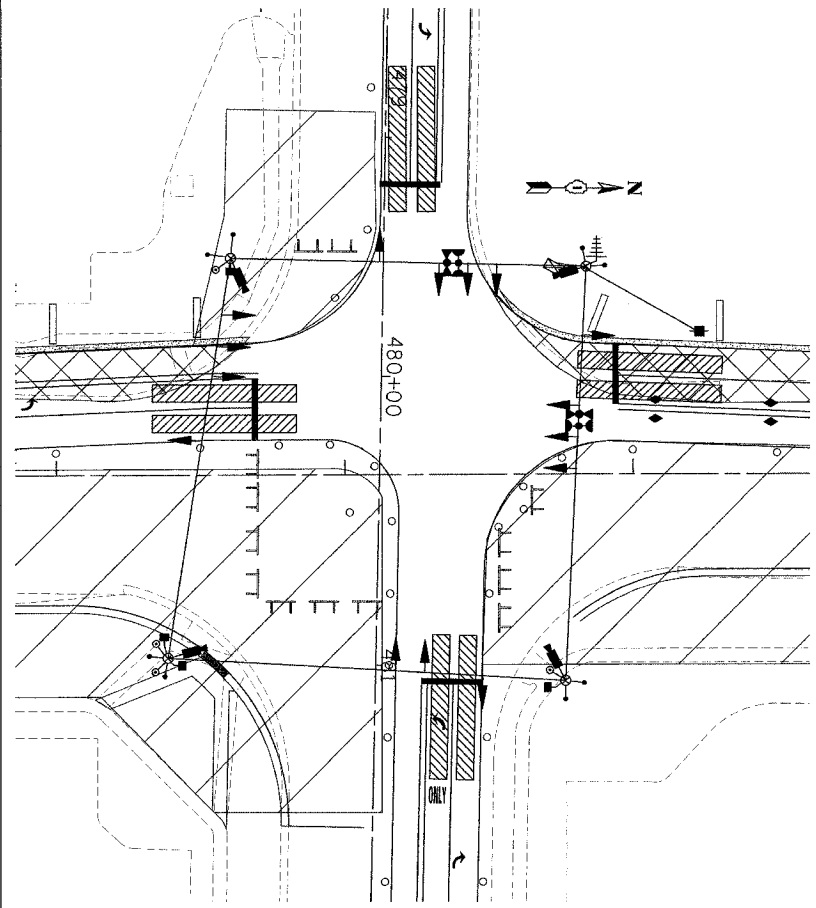
DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

PLAN	DATE
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IN CHARGE	

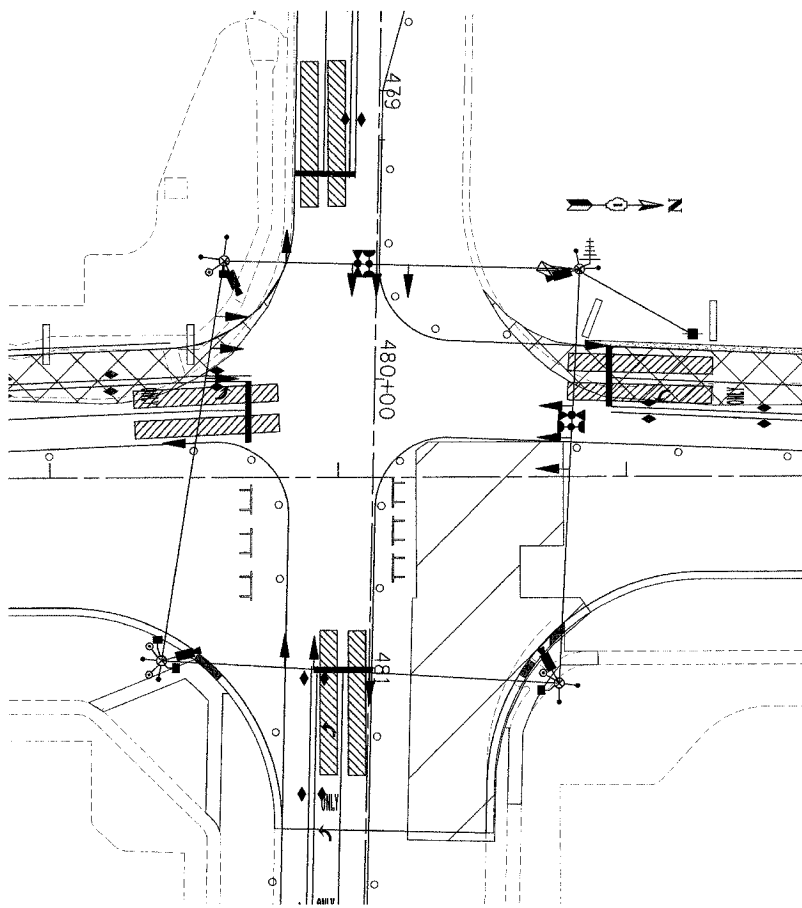
PROFILE	DATE
NO.	
BY	
CHECKED	
DESIGNED	
IN CHARGE	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	245
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

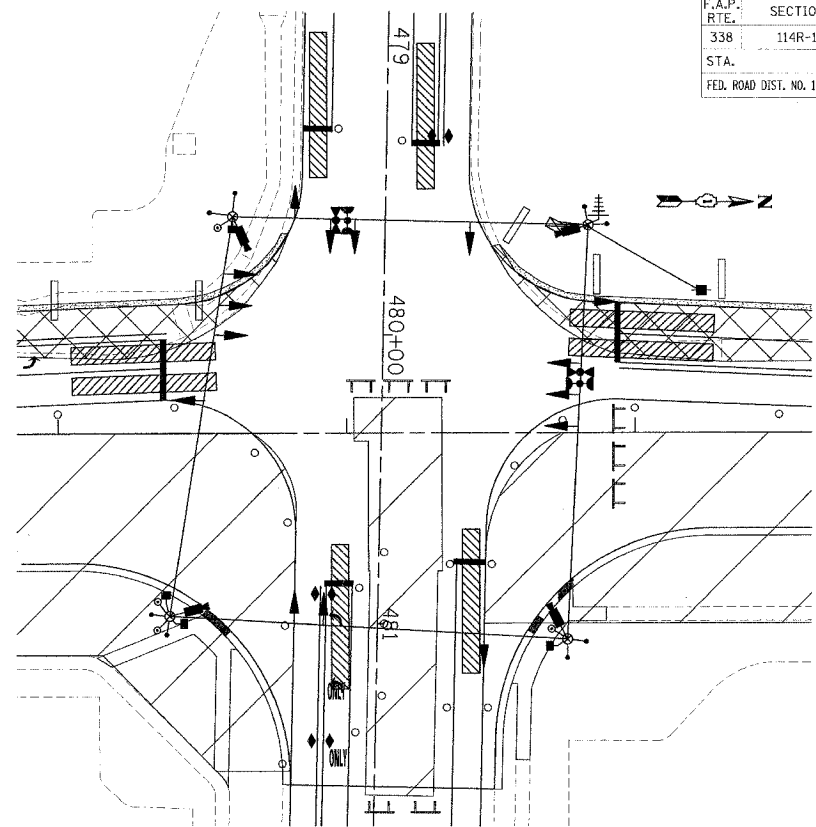
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NO. OF PAGES	
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NO. OF ELEVATIONS	
NO. OF ENDS	
NO. OF CURVES	
NO. OF SLOPES	
NO. OF GRADES	
NO. OF BRIDGES	
NO. OF TUNNELS	
NO. OF STRUCTURES	
NO. OF DETAILS	
NO. OF ELEVATIONS	
NO. OF ENDS	
NO. OF CURVES	
NO. OF SLOPES	
NO. OF GRADES	
NO. OF BRIDGES	
NO. OF TUNNELS	
NO. OF STRUCTURES	



M.O.T. STAGE IA

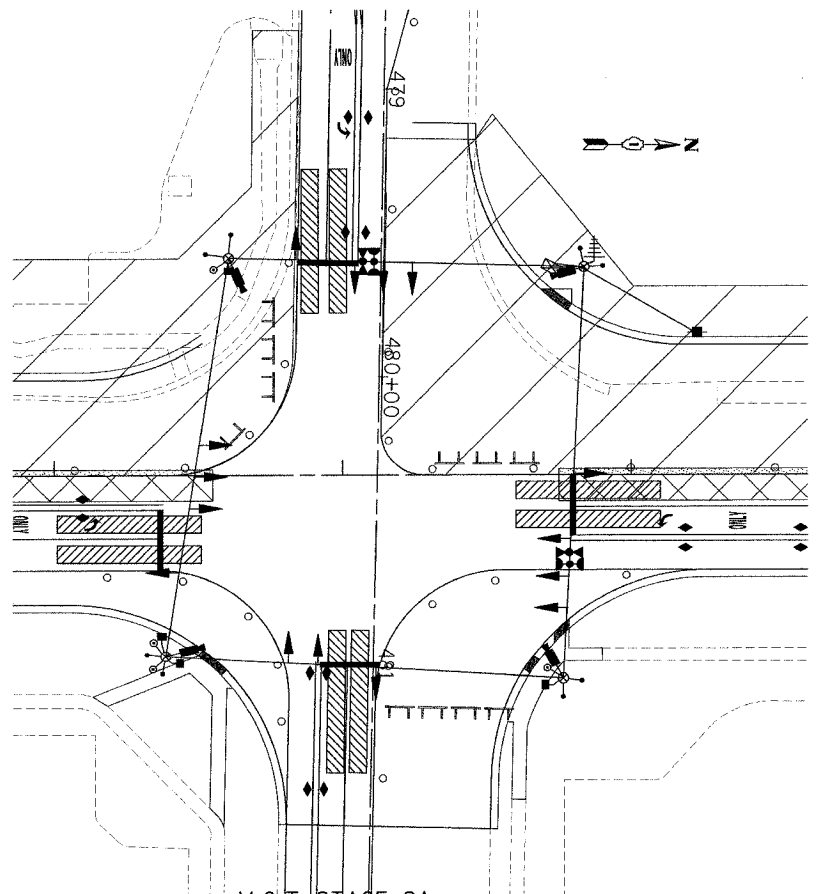


M.O.T. STAGE IB

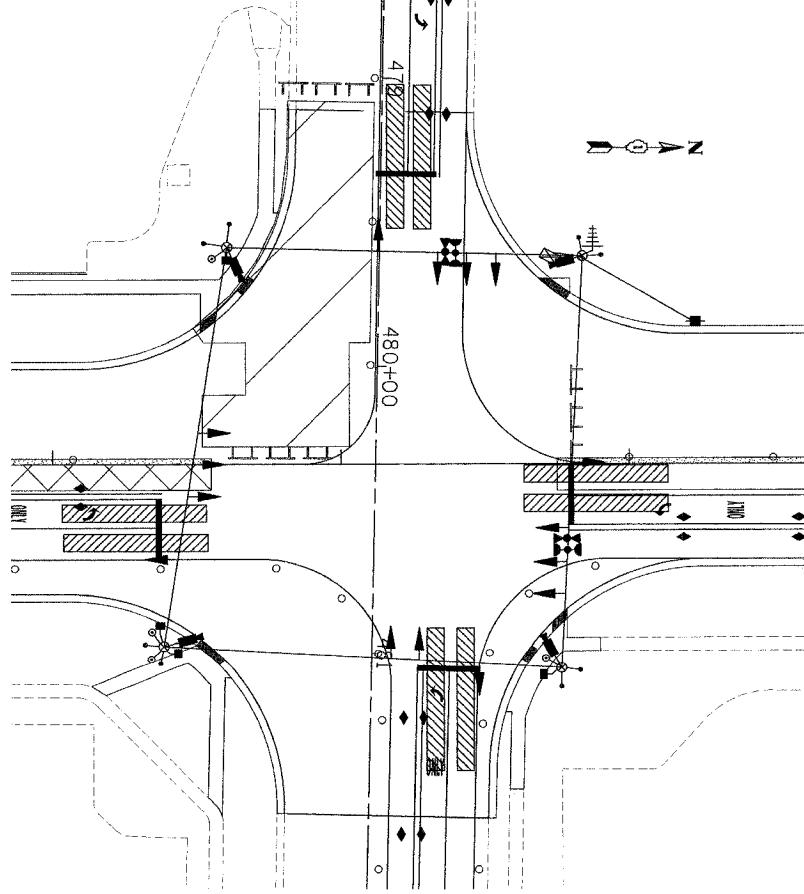


M.O.T. STAGE IC

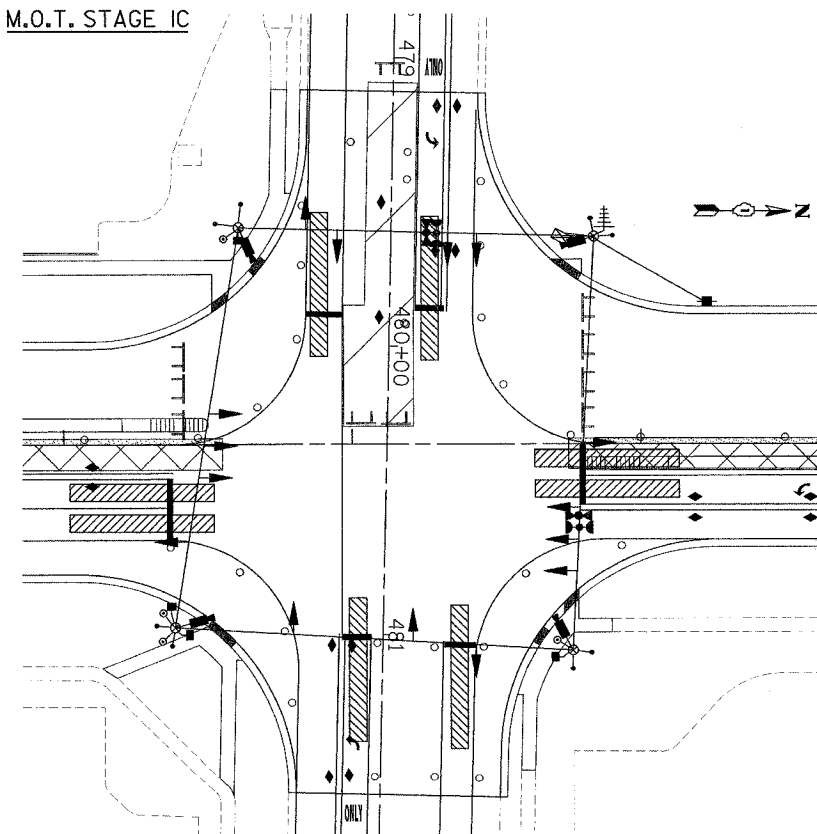
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NO. OF SECTIONS	
NO. OF DETAILS	
NO. OF ELEVATIONS	
NO. OF ENDS	
NO. OF CURVES	
NO. OF SLOPES	
NO. OF GRADES	
NO. OF BRIDGES	
NO. OF TUNNELS	
NO. OF STRUCTURES	



M.O.T. STAGE 2A



M.O.T. STAGE 2B



M.O.T. STAGE 2C

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

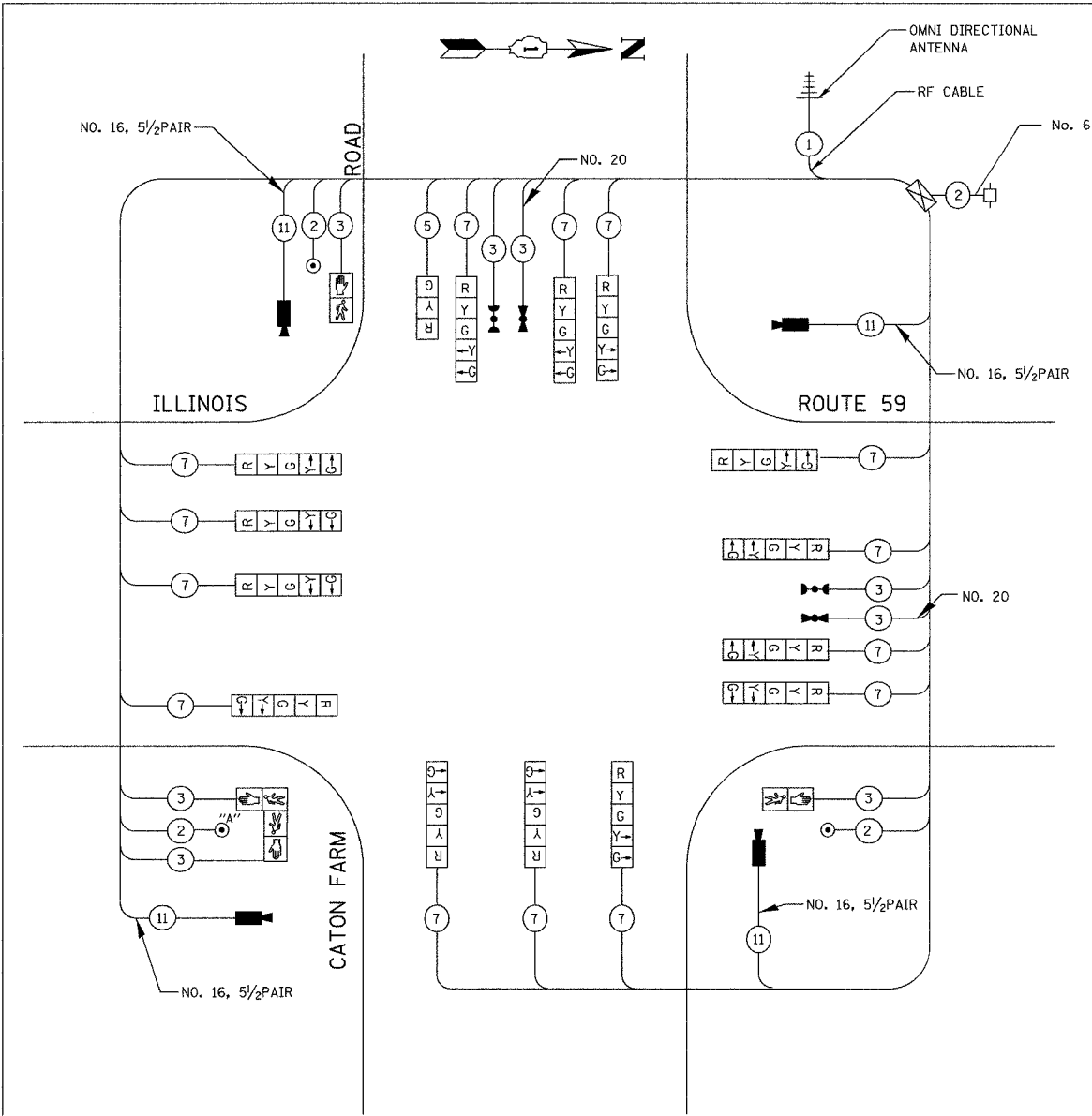
ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL
M.O.T. STAGING PLAN,
 ILLINOIS ROUTE 59 AT CATON FARM ROAD

SCALE: NONE
 DATE 3/18/08

DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	246
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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



TEMPORARY CABLE PLAN

NOT TO SCALE

NOTE:

- 1. AN APPROVED IDOT SUBCONTRACTOR MUST INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/ PHASE CHANGES. ADJUSTMENT WILL BE REQUIRED BETWEEN PRIMARY AND SECONDARY.
- 2. RIGHT-TURN OVERLAP ARROW SECTIONS SHALL BE BAGGED UNTIL RIGHT TURN LANES ARE OPEN TO TRAFFIC.

TEMPORARY CABLE DIAGRAM LEGEND

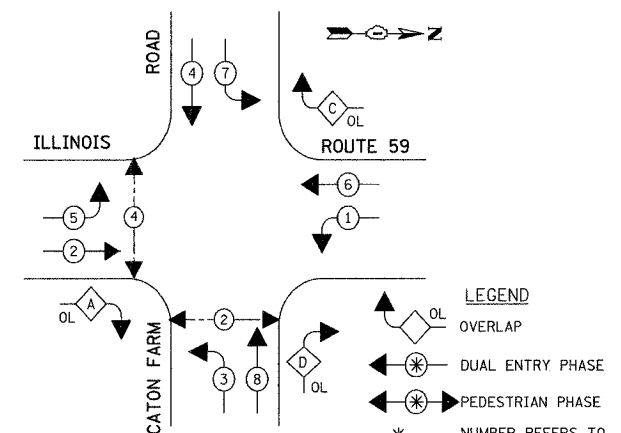
- [R] TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300mm)
- [X] TEMPORARY CONTROLLER CABINET
- [M] TEMPORARY SERVICE INSTALLATION
- (S) INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VIDEO DETECTION CAMERA
- (C) COAXIAL CABLE
- [Antenna] TEMPORARY RADIO INTERCONNECT ANTENNA

TYPE	NO. LAMPS	WATTAGE INCAND. LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	135 17 0.50	127.5
(YELLOW)	15	135 25 0.25	93.8
(GREEN)	15	135 15 0.25	56.3
ARROW	28	135 12 0.10	33.6
PED. SIGNAL	4	90 25 1.00	100
CONTROLLER	1	100 100 1.00	100
ILLUM. SIGN		84 64 0.05	
FLASHER		0.50	
		TOTAL =	511.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: JUDY MILLER
PHONE: 815-724-5717
COMPANY: COMMONWEALTH EDISON

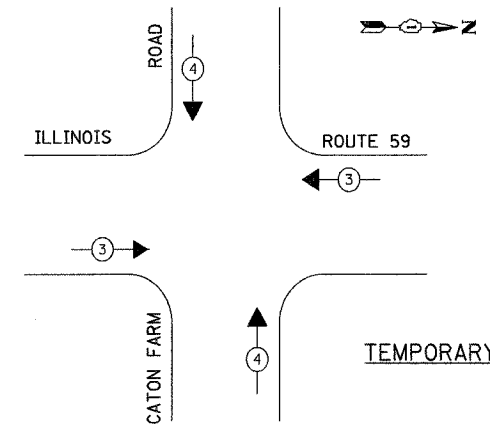
NOTE: PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4

TEMPORARY CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

NOTE: OVERLAPS "A", "C" AND "D" SHALL BE INACTIVE UNTIL NB AND SB RIGHT TURN LANES ARE OPENED TO TRAFFIC.



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	↕

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A =		3
C =		7
D =		1

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	TEMPORARY TRAFFIC SIGNAL CABLE PLAN AND PHASE DESIGNATION DIAGRAM ILLINOIS ROUTE 59 AT CATON FARM ROAD	
REVISED IL59 ALIGN.	12/22/06		
SCALE: NONE		DRAWN BY: BAR	DESIGNED BY: FA
DATE 3/18/08		CHECKED BY: KMM	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	247
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PREFORMED" DETECTION LOOPS.

SEE SHEET NO. 248
MATCHLINE STATION 478+50



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

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

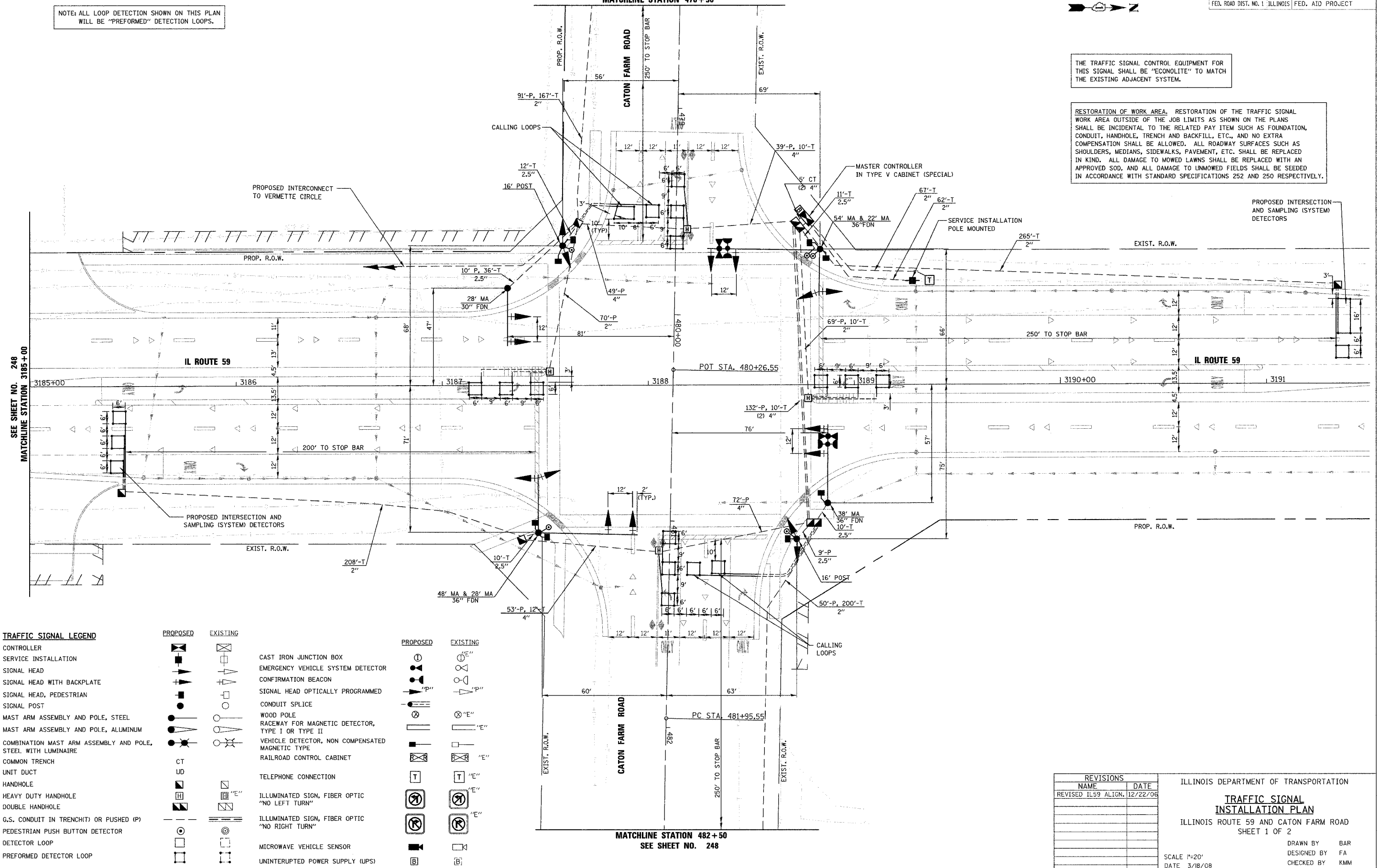
PLAN	DATE
BY	
CHECKED	
NO. 248	

PHOTO FILE	DATE
NO. 248	
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NO. 248	

SEE SHEET NO. 248
MATCHLINE STATION 3185+00

TRAFFIC SIGNAL LEGEND

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



REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC SIGNAL
INSTALLATION PLAN**
ILLINOIS ROUTE 59 AND CATON FARM ROAD
SHEET 1 OF 2

SCALE 1"=20'
DATE 3/18/08

DRAWN BY BAR
DESIGNED BY FA
CHECKED BY KMM

MATCHLINE STATION 482+50
SEE SHEET NO. 248

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	33
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	979
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	78
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	42
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	280
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	477
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1,109
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 2C	FOOT	713
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,831
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	562
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3,020
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4,789
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	80
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	46
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	11
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	15
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
PREFORMED DETECTOR LOOP	FOOT	863
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	758
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	347
TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT. AND 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 54 FT. AND 22 FT.	EACH	1

* 100% OF THE COST FOR EMERGENCY VEHICLE PREEMPTION ITEMS WILL BE PAID FOR BY CITY OF JOLIET.

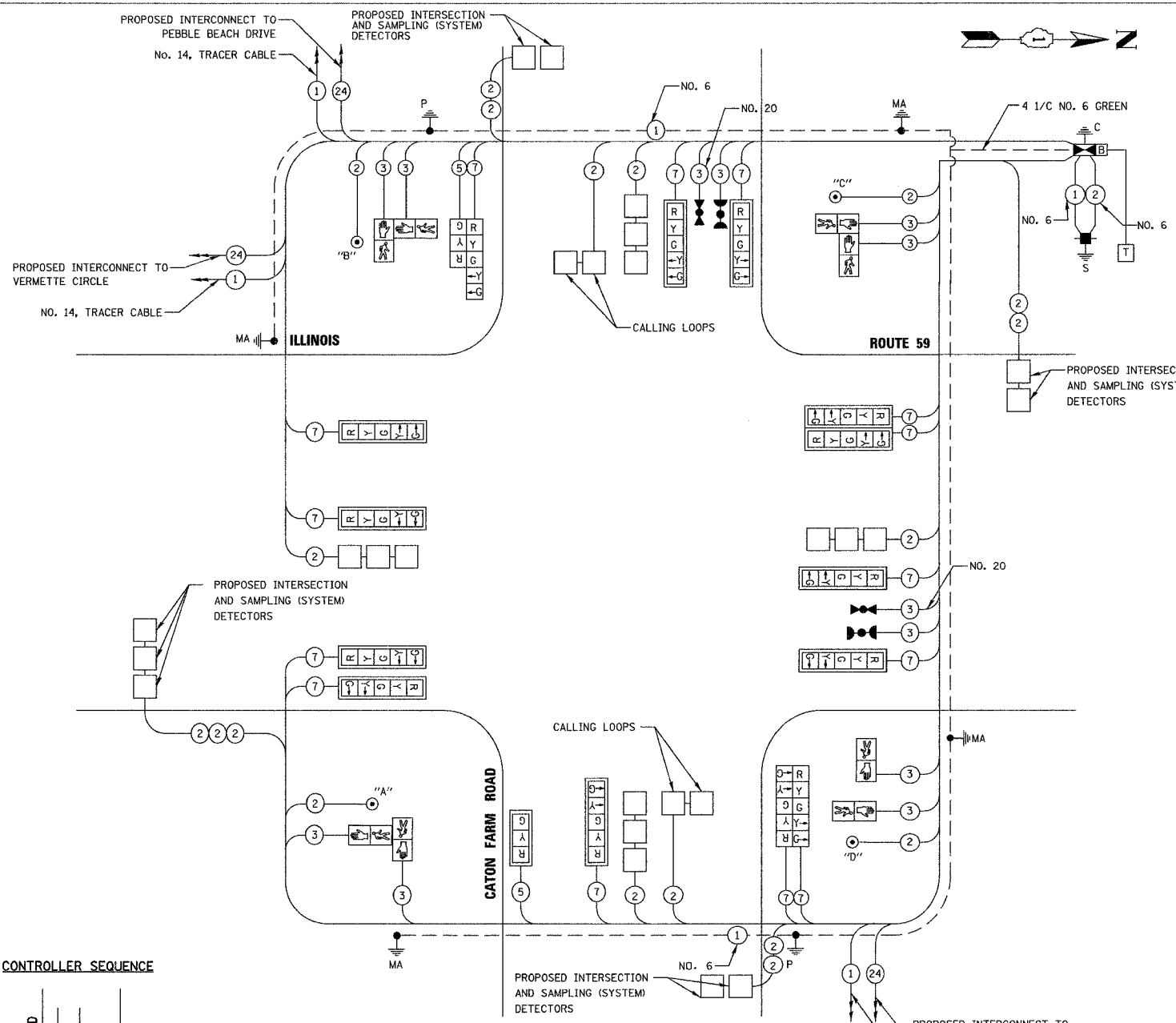
NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PREFORMED" DETECTION LOOPS.

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

TYPE	NO. LAMPS	WATTAGE INCAND	LED X % OPERATION	TOTAL WATTAGE	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	28	135	12	0.10	33.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	1	84	64	0.05	
FLASHER			0.50		
TOTAL =				629.6	

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY CONTACT: JUDY MILLER
 PHONE: 815-724-5717
 COMPANY: COMMONWEALTH EDISON

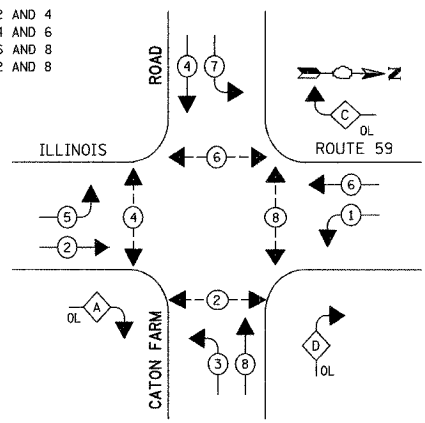
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C & D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2"
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
30" (750mm)	13.5 (4.1)	CONTROLLER CAB.	1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



CABLE PLAN LEGEND

- | | | | | |
|--|-----------------|--|-----------------|---|
| | EXISTING | | PROPOSED | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | | | CONTROLLER CABINET |
| | | | | SERVICE INSTALLATION |
| | | | | TELEPHONE CONNECTION |
| | | | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | | | MAGNETIC DETECTOR |
| | | | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | | | CONFIRMATION BEACON |
| | | | | PUSHBUTTON DETECTOR |
| | | | | DENOTES NUMBER OF CONDUCTORS |
| | | | | ALL CABLE NO. 14 EXCEPT AS INDICATED |
| | | | | ALL LOOP DETECTOR CABLE TO BE SHIELDED |
| | | | | GROUND CABLE IN CONDUIT |
| | | | | NO. 6 SOLID COPPER (GREEN) |
| | | | | FIBER OPTIC CABLE IN CONDUIT |
| | | | | NO. 62.5/125 2-MM12F & 5M12F |
| | | | | RAILROAD CONTROL CABINET |
| | | | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | | | SIGNAL FACE WITH BACKPLATE |
| | | | | "P" INDICATES PROGRAMMED HEAD |
| | | | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HH), OR CONTROLLER (C) |
| | | | | GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| | | | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | | | UNINTERRUPTED POWER SUPPLY (UPS) |

CONTROLLER SEQUENCE

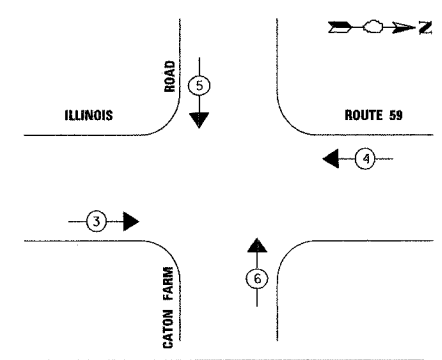


PHASE DESIGNATION DIAGRAM

- LEGEND**
- DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

CABLE PLAN

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	←	↓	↑

REVISIONS

NAME	DATE
REVISED IL59 ALIGN.	12/22/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
 ILLINOIS ROUTE 59 AT CATON FARM ROAD
 SCALE: NONE
 DATE 3/18/08
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	250
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

TEMPORARY RADIO INTERCONNECT ANTENNA (SEE NOTE 3)

CENTER ENT HOME DEPOT

HOME DEPOT ENT

3075+00

IL ROUTE 59

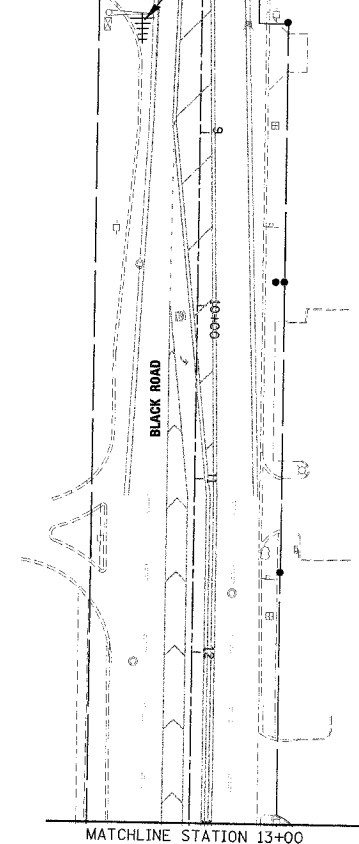
3080+00

3085+00

SEE BELOW LEFT MATCHLINE STATION 13+00

MATCHLINE STATION 3086+50 SEE BELOW LEFT

PLAN	DATE
REVISIONS	
DATE	
BY	
CHECKED	
DATE	
BY	
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BY	
CHECKED	
DATE	



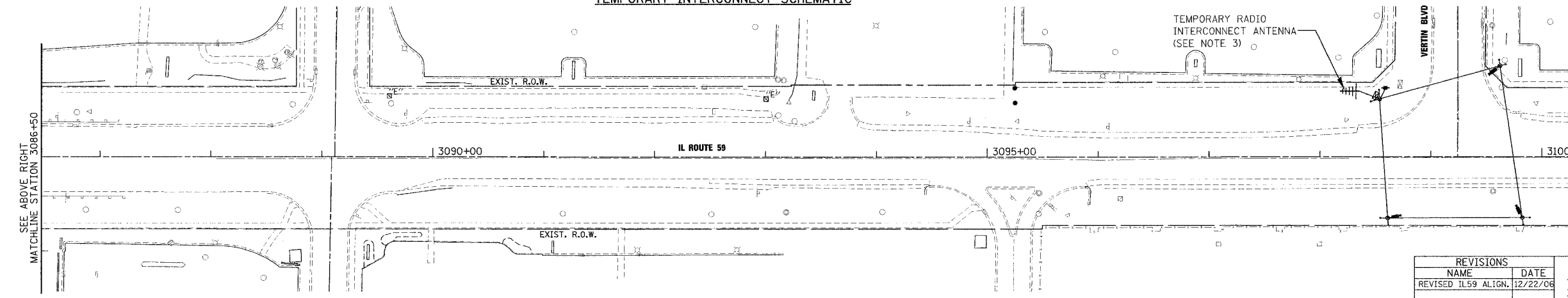
MATCHLINE STATION 13+00 SEE ABOVE RIGHT

PROFILE	DATE
REVISIONS	
DATE	
BY	
CHECKED	
DATE	
BY	
CHECKED	
DATE	

TEMPORARY INTERCONNECT SCHEMATIC

- NOTES:
1. ALL WORK SPECIFIED IN THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN SHALL BE COMPLETED ACCORDING TO IDOT STANDARD SPECIFICATIONS ADOPTED JANUARY 1, 2007, AND DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS REVISED JANUARY 1, 2007.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EXISTING TRAFFIC SIGNAL INSTALLATION AT THE BLACK ROAD INTERSECTIONS WITH SHARP DR AND HOME DEPOT CENTER ENTRANCE AND THE INTERCONNECT SYSTEM BETWEEN THE TWO INTERSECTIONS.
 3. THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT SYSTEM BETWEEN THE BLACK ROAD INTERSECTIONS WITH SHARP DR, IL59 AND HOME DEPOT CENTER ENTRANCE AND THE IL59/VERTIN BLVD INTERSECTION SHALL BE WIRELESS INTERCONNECT ACCORDING TO THE TEMPORARY TRAFFIC SIGNAL SPECIFICATION OF THE DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS. THE ANTENNA SHALL BE PLACED ON THE EXISTING MAST ARM ASSEMBLY AND POLE AS INDICATED AT THE INTERSECTIONS OF SHARP DR AND HOME DEPOT CENTER ENTRANCE AND CONNECTED TO THE EXISTING CONTROLLER AT EACH INTERSECTION. THE ANTENNA SHALL BE PLACED ON THE WOOD POLE CLOSEST TO THE TEMPORARY CONTROLLER AT IL59 INTERSECTIONS WITH BLACK ROAD AND VERTIN BLVD. ANTENNA SHALL BE CONNECTED TO TEMPORARY CONTROLLER. THE TEMPORARY RF CABLE SHALL BE INSTALLED BETWEEN THE ANTENNA AND THE CONTROLLER CABINET.
 4. ALL NECESSARY CABLES, ANTENNA, AND OTHER COMPONENTS REQUIRED FOR FULLY FUNCTIONAL TEMPORARY RADIO INTERCONNECT SYSTEM SHALL BE INCLUDED AND PAID FOR AS THE ITEM TEMPORARY TRAFFIC SIGNAL INTERCONNECT.
 5. THE ANTENNAE AND ALL CABLES SHALL BE REMOVED UPON COMPLETION OF THE PROPOSED FIBER OPTIC INTERCONNECT SYSTEM. ANY HOLES IN THE MAST ARMS SHALL BE PLUGGED. THIS SHALL BE INCLUDED IN THE PAY ITEM OF TEMPORARY TRAFFIC SIGNAL INTERCONNECT.

- LEGEND:
- ⊠ EXISTING CONTROLLER
 - ⊠ EXISTING DOUBLE HANDHOLE
 - ⊠ EXISTING HANDHOLE
 - ⊠ EXISTING UTILITY POLE
 - EXISTING G.S. CONDUIT
 - EXISTING LOOP DETECTOR
 - ⊠ EXISTING HANDHOLE TO BE REMOVED
 - TEMPORARY LMR400 RF CABLE
 - ⊠ TEMPORARY RADIO INTERCONNECT ANTENNA
 - ⊠ TEMPORARY WOOD POLE



SEE ABOVE RIGHT MATCHLINE STATION 3086+50

3090+00

IL ROUTE 59

3095+00

3100

TEMPORARY RADIO INTERCONNECT ANTENNA (SEE NOTE 3)

TEMPORARY SYSTEM INTERCONNECT

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

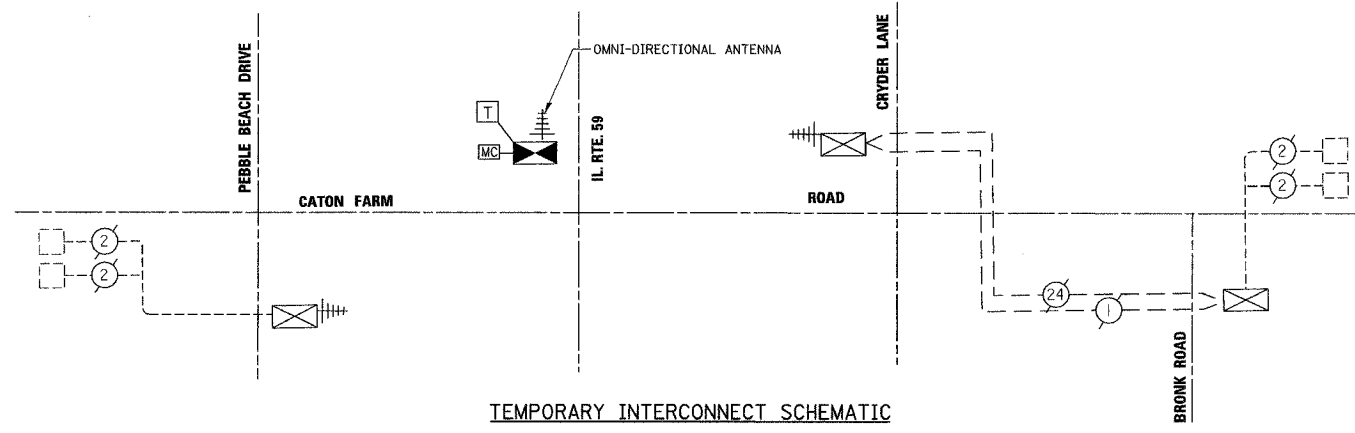
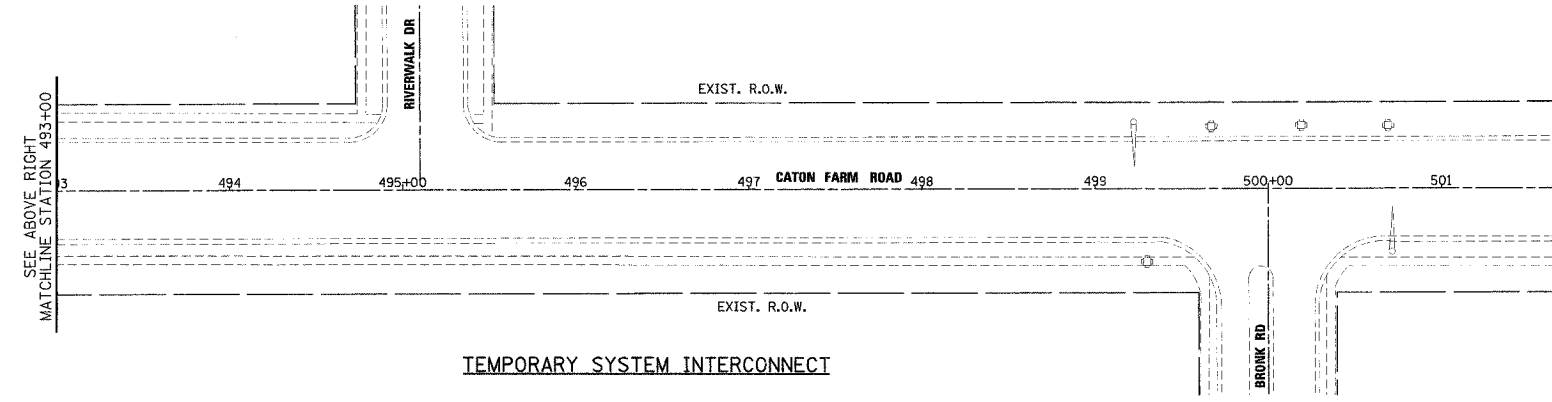
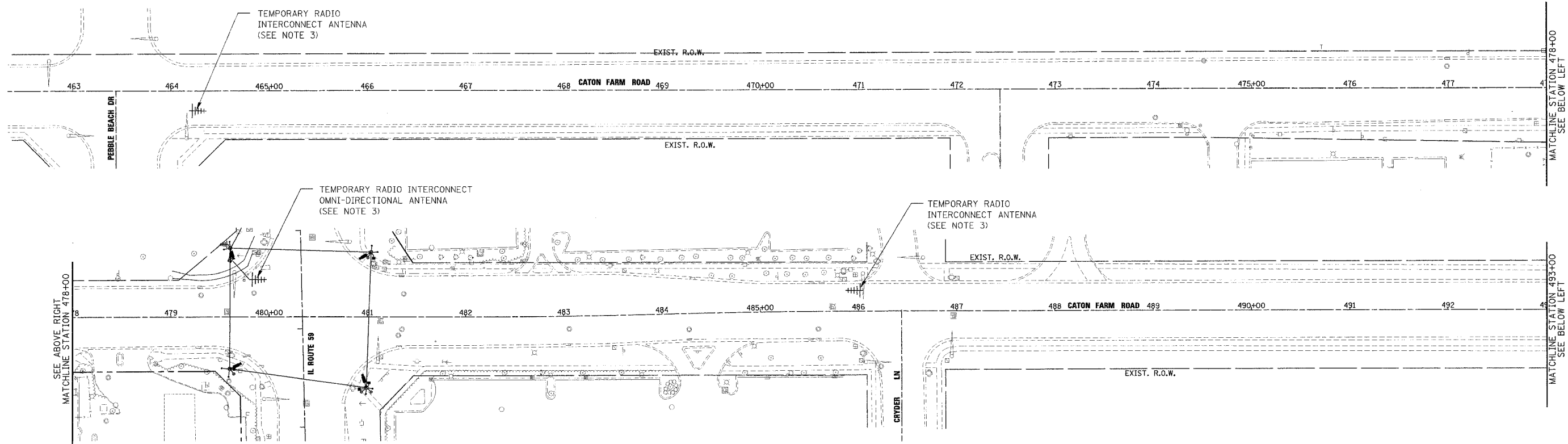
ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY SYSTEM INTERCONNECT &
 TEMPORARY INTERCONNECT SCHEMATIC**
 BLACK ROAD

SCALE 1"=50'
 DATE 3/18/08

DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL.	355	251
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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



NOTES:

- ALL WORK SPECIFIED IN THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN SHALL BE COMPLETED ACCORDING TO IDOT STANDARD SPECIFICATIONS ADOPTED JANUARY 1, 2007, AND DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS REVISED JANUARY 1, 2007.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EXISTING TRAFFIC SIGNAL INSTALLATION AT THE CATON FARM ROAD INTERSECTIONS WITH PEBBLE BEACH DR AND BRONK ROAD AND THE INTERCONNECT SYSTEM BETWEEN THE TWO INTERSECTIONS.
- THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT SYSTEM BETWEEN THE INTERSECTION OF PEBBLE BEACH DR AND BRONK ROAD SHALL BE WIRELESS INTERCONNECT ACCORDING TO THE TEMPORARY TRAFFIC SIGNAL SPECIFICATION OF THE DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS. THE ANTENNA SHALL BE PLACED ON THE EXISTING MAST ARM ASSEMBLY AND POLE AS INDICATED AT THE INTERSECTIONS OF PEBBLE BEACH DR AND BRONK ROAD AND CONNECTED TO THE EXISTING CONTROLLER AT EACH INTERSECTION. THE TEMPORARY RF CABLE SHALL BE INSTALLED BETWEEN THE ANTENNA AND THE CONTROLLER CABINET.
- ALL NECESSARY CABLES, ANTENNA, AND OTHER COMPONENTS REQUIRED FOR FULLY FUNCTIONAL TEMPORARY RADIO INTERCONNECT SYSTEM SHALL BE INCLUDED AND PAID FOR AS THE ITEM TEMPORARY TRAFFIC SIGNAL INTERCONNECT.
- THE ANTENNAE AND ALL CABLES SHALL BE REMOVED UPON COMPLETION OF THE PROPOSED FIBER OPTIC INTERCONNECT SYSTEM. ANY HOLES IN THE MAST ARMS SHALL BE PLUGGED. THIS SHALL BE INCLUDED IN THE PAY ITEM OF TEMPORARY TRAFFIC SIGNAL INTERCONNECT.

LEGEND:

- ⊠ EXISTING CONTROLLER
- ⊠ EXISTING DOUBLE HANDHOLE
- ⊠ EXISTING HANDHOLE
- ⊠ EXISTING UTILITY POLE
- EXISTING G.S. CONDUIT
- EXISTING LOOP DETECTOR
- ⊠ EXISTING HANDHOLE TO BE REMOVED
- TEMPORARY LMR400 RF CABLE
- ⊠ TEMPORARY RADIO INTERCONNECT ANTENNA
- ⊠ TEMPORARY WOOD POLE

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY SYSTEM INTERCONNECT &
 TEMPORARY INTERCONNECT SCHEMATIC**
 CATON FARM ROAD

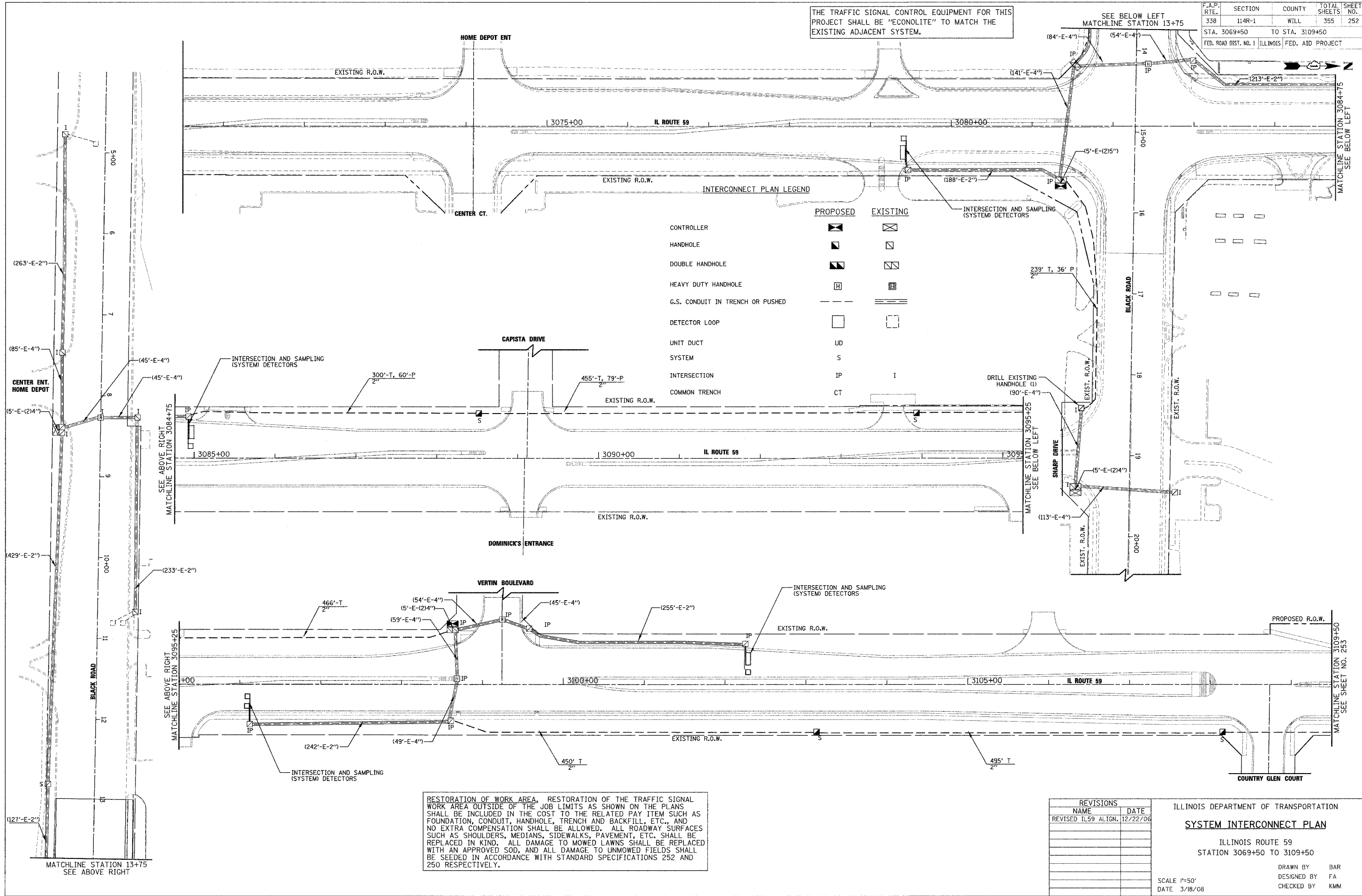
SCALE 1"=50'
 DATE 3/18/08
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

PLAN	SUBMITTED BY	DATE
NO.	NOTE BOOK	
	DATE	

PROFILE	SUBMITTED BY	DATE
NO.	NOTE BOOK	
	DATE	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	252
STA. 3069+50		TO STA. 3109+50		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
COMMON TRENCH	CT	

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

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

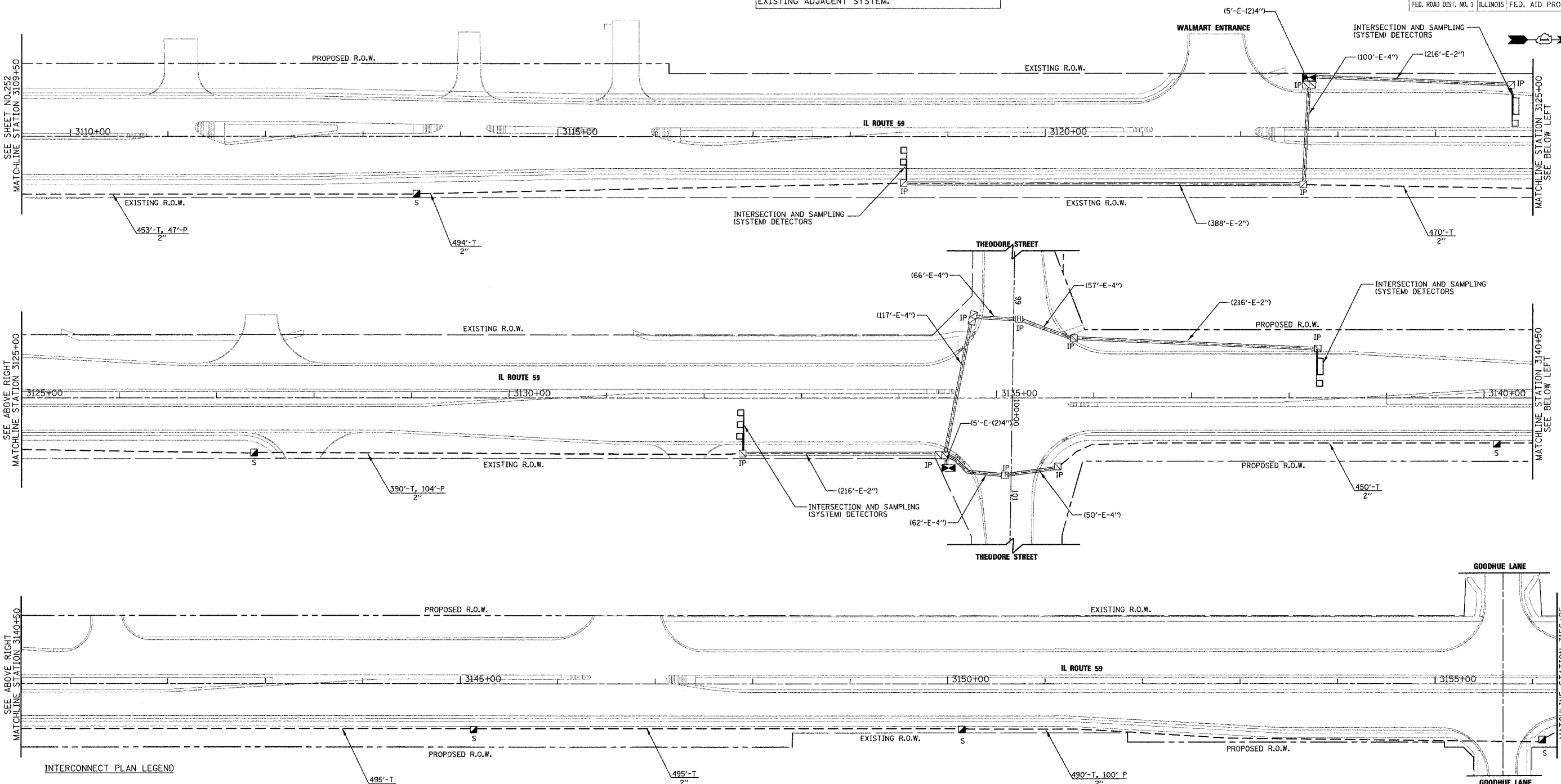
ILLINOIS DEPARTMENT OF TRANSPORTATION
SYSTEM INTERCONNECT PLAN
 ILLINOIS ROUTE 59
 STATION 3069+50 TO 3109+50
 SCALE 1"=50'
 DATE 3/18/08
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

DATE	BY

DATE	BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	253
STA. 3109+50		TO STA. 3156+25		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

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



PLAN	SUPERVISOR	DATE
NO. 1		

PROFILE	SUPERVISOR	DATE
NO. 1		

INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	◀▶	◻
HANDHOLE	◼	◻
DOUBLE HANDHOLE	◼◼	◻◻
HEAVY DUTY HANDHOLE	◻	◻
G.S. CONDUIT IN TRENCH OR PUSHED	---	===
DETECTOR LOOP	◻	◻
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
COMMON TRENCH	CT	

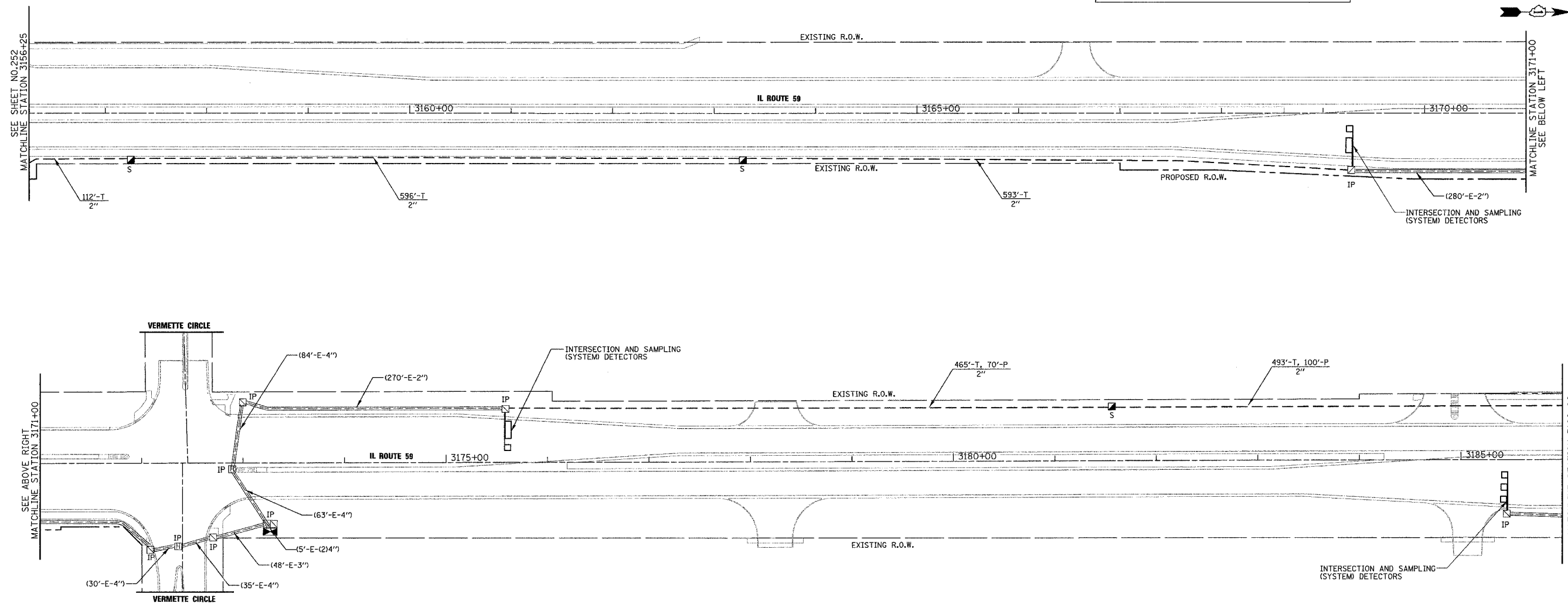
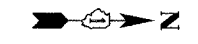
RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA OUTSIDE OF THE JOB LIMITS AS SHOWN ON THE PLANS SHALL BE INCLUDED IN THE COST TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES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

REVISIONS	
NAME	DATE
REVISED IL 59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
SYSTEM INTERCONNECT PLAN
 ILLINOIS ROUTE 59
 STATION 3109+50 TO 3156+25
 SCALE 1"=50'
 DATE 3/18/08
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL.	355	254
STA. 3156+25		TO STA. 3186+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

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



PLAN	DATE
APPROVED	08/08
PLANNED	
NOTED	
NO. OF SHEETS	
NO. OF SHEETS	
NO. OF SHEETS	
NO. OF SHEETS	

PROFILE	DATE
APPROVED	
PLANNED	
NOTED	
NO. OF SHEETS	
NO. OF SHEETS	
NO. OF SHEETS	
NO. OF SHEETS	

INTERCONNECT PLAN LEGEND

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

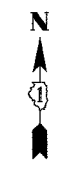
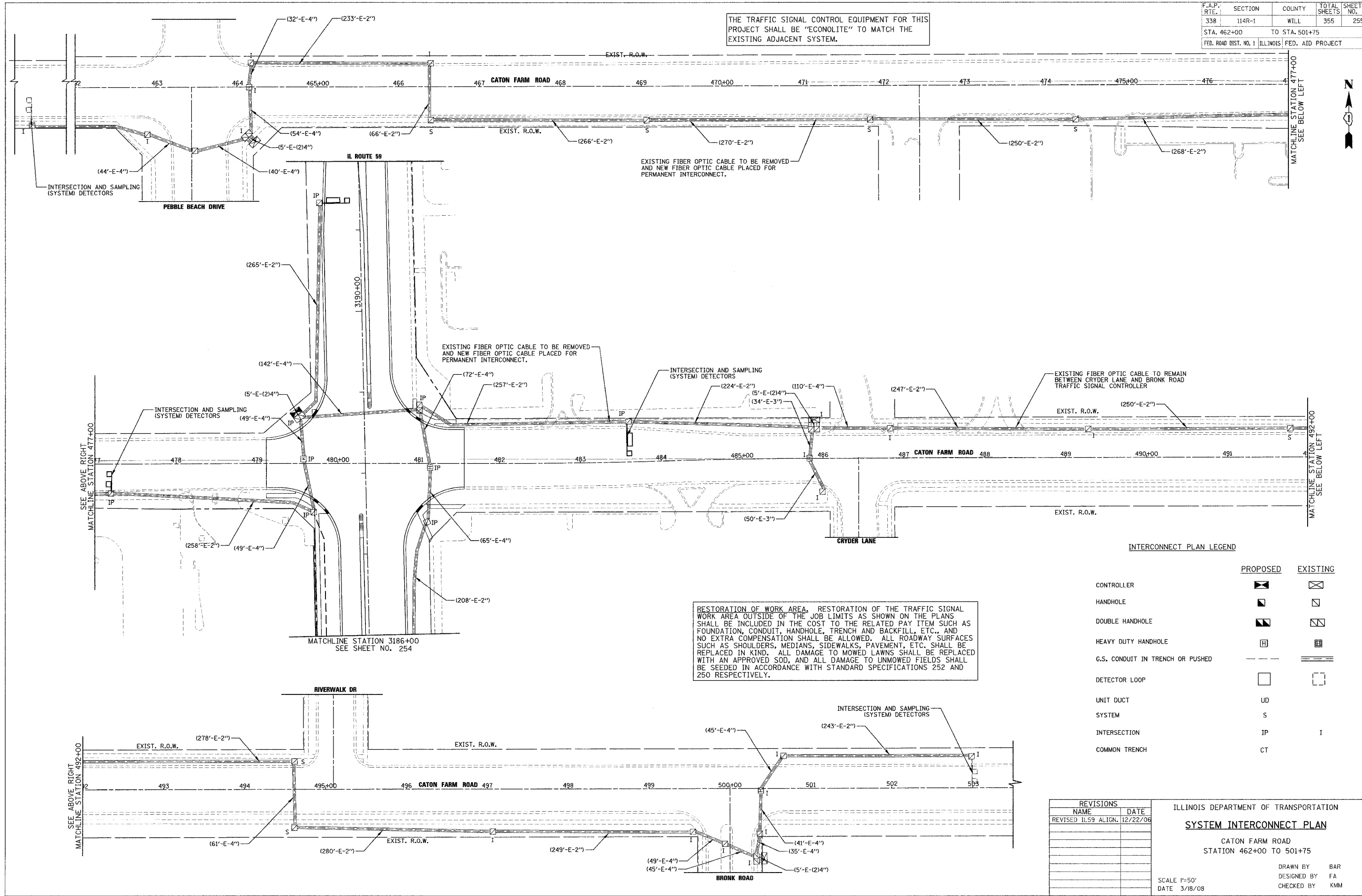
RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA OUTSIDE OF THE JOB LIMITS AS SHOWN ON THE PLANS SHALL BE INCLUDED IN THE COST TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES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

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
SYSTEM INTERCONNECT PLAN
 ILLINOIS ROUTE 59
 STATION 3156+25 TO 3186+00
 SCALE 1"=50'
 DATE 3/18/08
 DRAWN BY BAR
 DESIGNED BY FA
 CHECKED BY KMM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	255
STA. 462+00 TO STA. 501+75		ILLINOIS FED. AID PROJECT		

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



DATE	BY

DATE	BY

EXISTING FIBER OPTIC CABLE TO BE REMOVED AND NEW FIBER OPTIC CABLE PLACED FOR PERMANENT INTERCONNECT.

EXISTING FIBER OPTIC CABLE TO BE REMOVED AND NEW FIBER OPTIC CABLE PLACED FOR PERMANENT INTERCONNECT.

EXISTING FIBER OPTIC CABLE TO REMAIN BETWEEN CRYDER LANE AND BRONK ROAD TRAFFIC SIGNAL CONTROLLER

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

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

REVISIONS	
NAME	DATE
REVISED IL 59 ALIGN.	12/22/08

ILLINOIS DEPARTMENT OF TRANSPORTATION

SYSTEM INTERCONNECT PLAN

CATON FARM ROAD
STATION 462+00 TO 501+75

SCALE 1"=50'
DATE 3/18/08

DRAWN BY BAR
DESIGNED BY FA
CHECKED BY KMM

SYSTEM INTERCONNECT SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	8,401
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	596
HANDHOLE	EACH	13
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	8,401
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4
MASTER CONTROLLER (SPECIAL)	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,437
REMOVE EXISTING HANDHOLE	EACH	4
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	15,405
OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	15,405
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	3,437

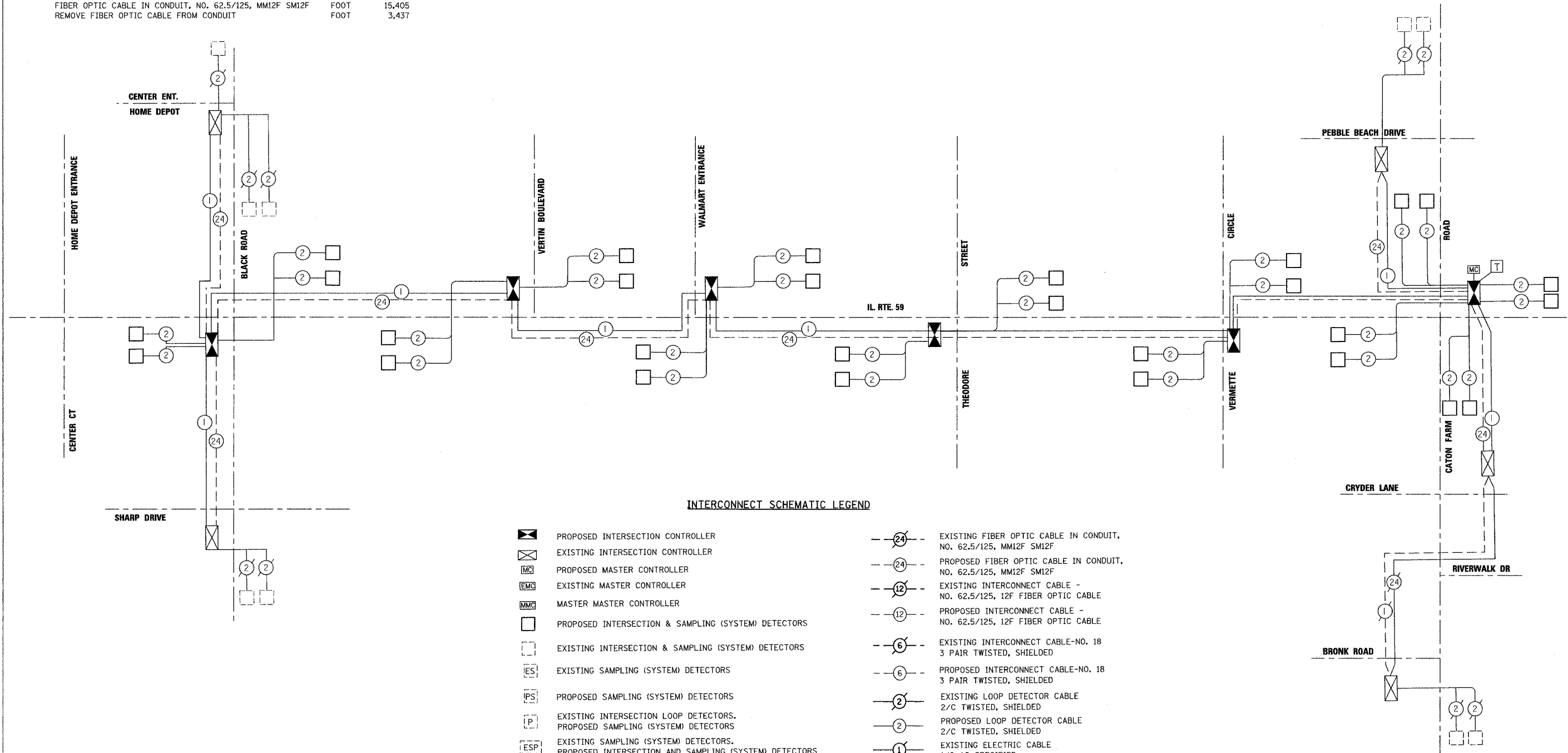
F.A.P. RTE. 338	SECTION 114R-1	COUNTY WILL	TOTAL SHEETS 355	SHEET NO. 256
STA. TO STA.		FED. AID PROJECT		

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THE CATON FARM ROAD SYSTEM SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



PLAN	DATE	BY
REVISED		
NOTE BOOK		
NO.		

PROFILE	DATE	BY
REVISED		
NOTE BOOK		
NO.		



INTERCONNECT SCHEMATIC LEGEND

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

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

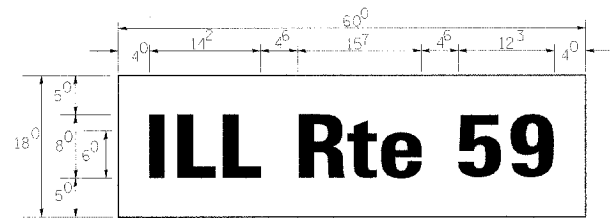
ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT SCHEMATIC
 ILLINOIS ROUTE 59 AND CATON FARM ROAD

SCALE NONE
 DATE 3/18/08

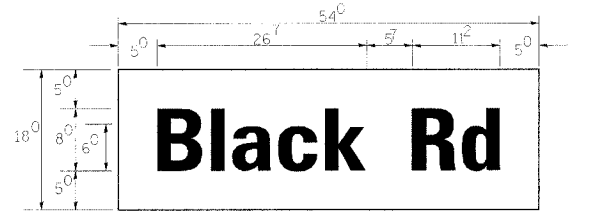
DRAWN BY MJG
 DESIGNED BY CMU
 CHECKED BY KMM

*REF-
*REF-
*REF-

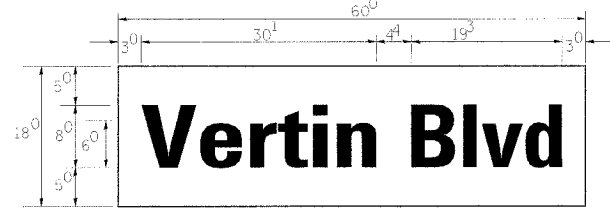
PANEL SIGN DESIGN TYPE 1



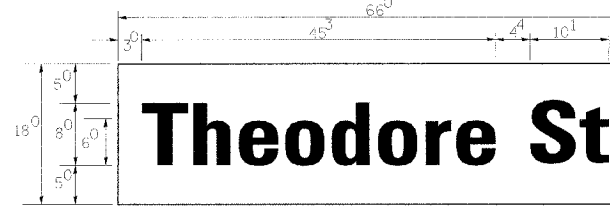
___ Sq. M. each
7.5 Sq. Ft. each
10 Required
Design Series D



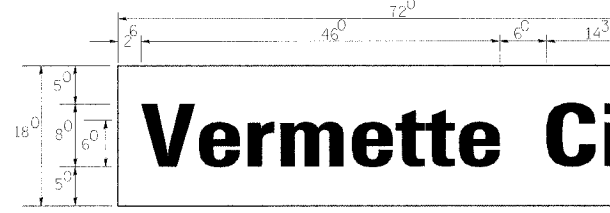
___ Sq. M. each
6.75 Sq. Ft. each
2 Required
Design Series D



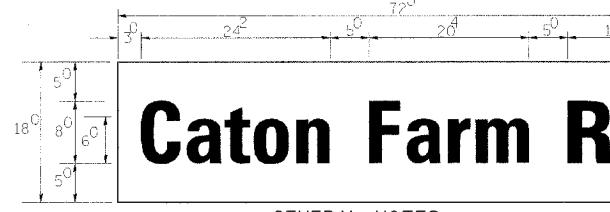
___ Sq. M. each
7.50 Sq. Ft. each
2 Required
Design Series D



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



___ Sq. M. each
9 Sq. Ft. each
2 Required
Design Series D



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

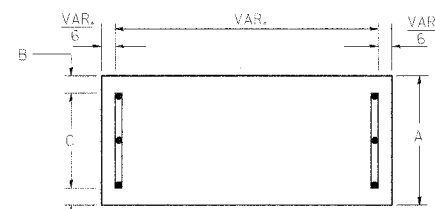
GENERAL NOTES

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

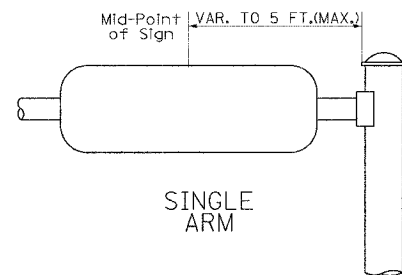
PARTS LISTING:
SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
BRACKETS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

*DATE TIME
*DCN-SPEC
USER

SUPPORTING CHANNELS

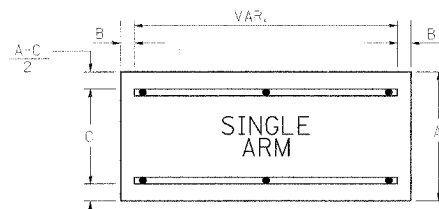


A	B	C
18"	2"	14"

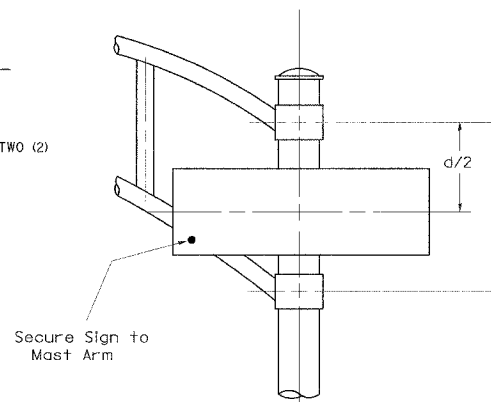


SINGLE ARM

SUPPORTING CHANNELS



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



DUAL ARM

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

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

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

EXAMPLE, 2³ DENOTES 3"/8"

FIRST LETTER	SECOND LETTER															
	a		c		d		e		g		o		q		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
E	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
F	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
G	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
H	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
I	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
J	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
K	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
L	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
M	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
N	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
O	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

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

FIRST LETTER	SECOND LETTER															
	a		c		d		e		g		o		q		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
b	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
d	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
e	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
f	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
g	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
h	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
i	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

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

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

UPPER AND LOWER CASE
LETTER WIDTHS

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

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

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

Illinois Department of Transportation
DISTRICT 1

MAST ARM MOUNTED
STREET NAME SIGNS

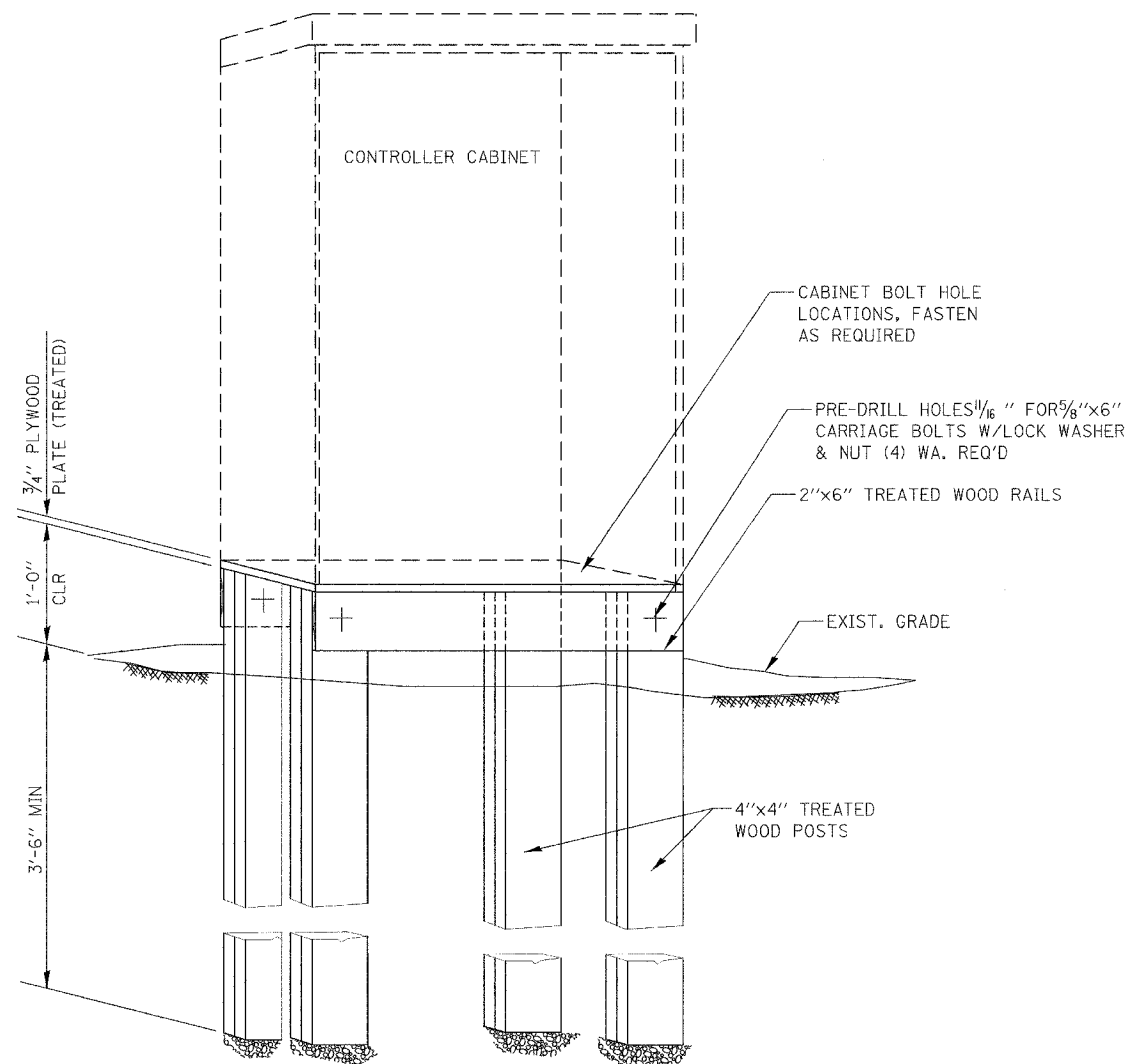
SCALE: NONE
DATE: 3/18/08

DRAWN BY: RBB
DESIGNED BY: JHE
CHECKED BY: DAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	258
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTROLLER CABINET TYPE & DIMENSIONS VARY.
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT
CABINET DIMENSIONS PRIOR TO THE CONSTRUCTION OF
THE CABINET MOUNTING PLATFORM SHOWN BELOW.

CABINET PLATFORM LEGS & RAILS SHALL BE CONSTRUCTED
OF TREATED WOOD TO RESIST WEATHERING



TEMPORARY TRAFFIC SIGNAL
CONTROLLER PLATFORM DETAIL

N.T.S.

PLAN	REVISED	DATE
NO. _____	BY _____	_____

PROFILE	REVISED	DATE
NO. _____	BY _____	_____

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMP TS CONTROLLER PLATFORM DETAIL
ILLINOIS ROUTE 59 AND CATON FARM ROAD

SCALE NONE
DATE 3/18/08
DRAWN BY BAR
DESIGNED BY FA
CHECKED BY KMM

Bench Mark: Square cut in center of 13' Headwall.
21' West of IL Route 59, North of Sunrise
Drive. Elevation 598.12.

Existing Structure: Single Reinforced Concrete Box
Culvert, 14' wide by 10' high by 92'-6"
long. To be removed and replaced with
the road open to two (2) lanes of
traffic at all times by utilizing Staged
Construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

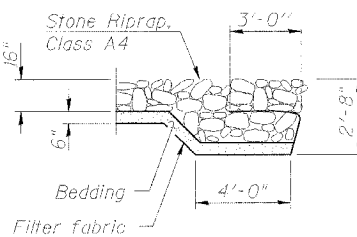
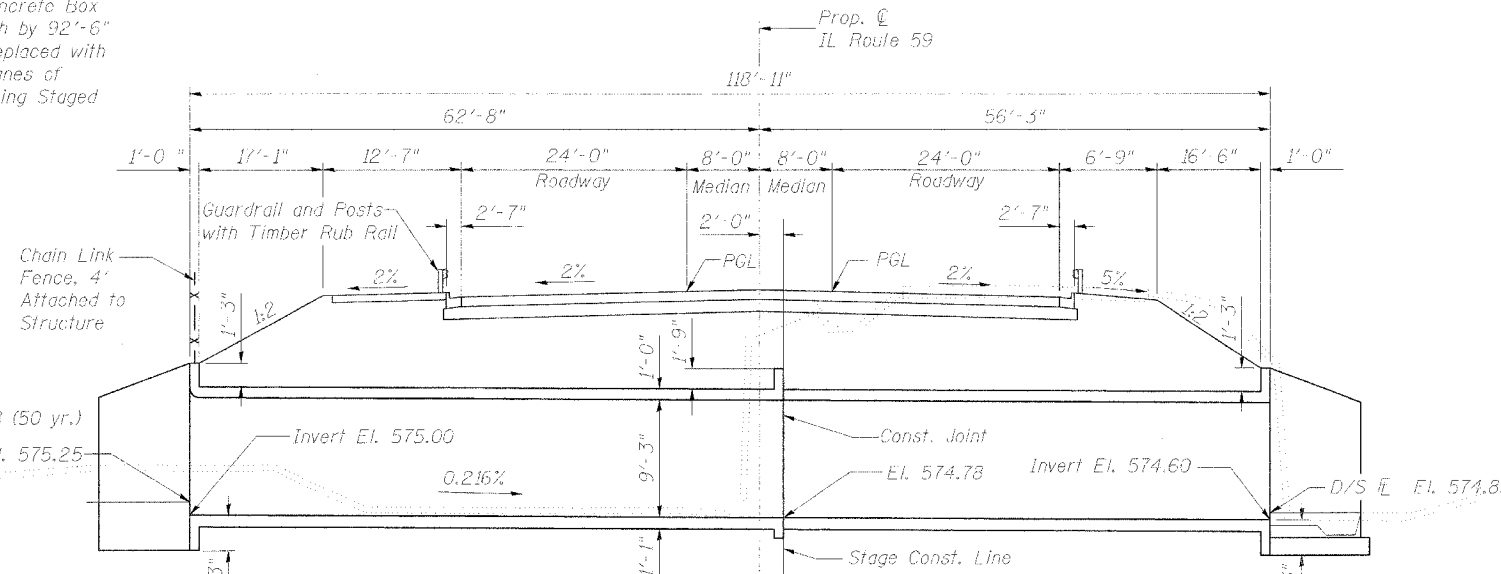
1. Reinforcement Bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provision.
2. Reinforcement Bars designated (E) shall be epoxy coated.
3. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the horizontally cantilevered wingwalls.
4. All construction joints shall be bonded.
5. For backfilling and embankment, see Standard Specifications.
6. Exposed concrete edges shall have a standard 3/4" chamfer unless otherwise noted.
7. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

FOUL NO.	SECTION	COUNTY	SHEETS	SHEET NO. SI-1
338	114R-1	WILL	355	9 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract # 62416

TOTAL BILL OF MATERIAL

Item	Unit	Total
Stone Riprap, Class A4	Sq. Yd.	180
Filler Fabric	Sq. Yd.	240
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	166,890
Reinforcement Bars, Epoxy Coated	Pound	1420
Bar Splicers	Each	212
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	860.4
Chain Link Fence, 4' Attached to Structure	Foot	104
Temporary Soil Retention System	Sq. Ft.	1228



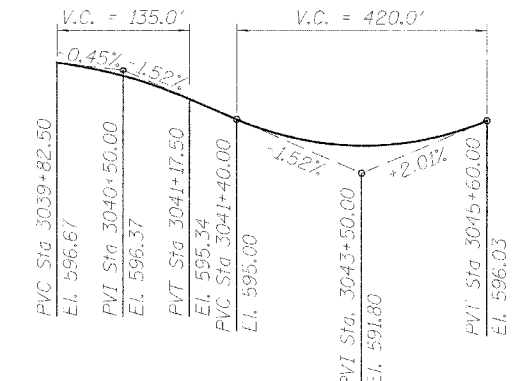
SHOWING SHORT WINGWALL

LONGITUDINAL SECTION

SHOWING LONG WINGWALL

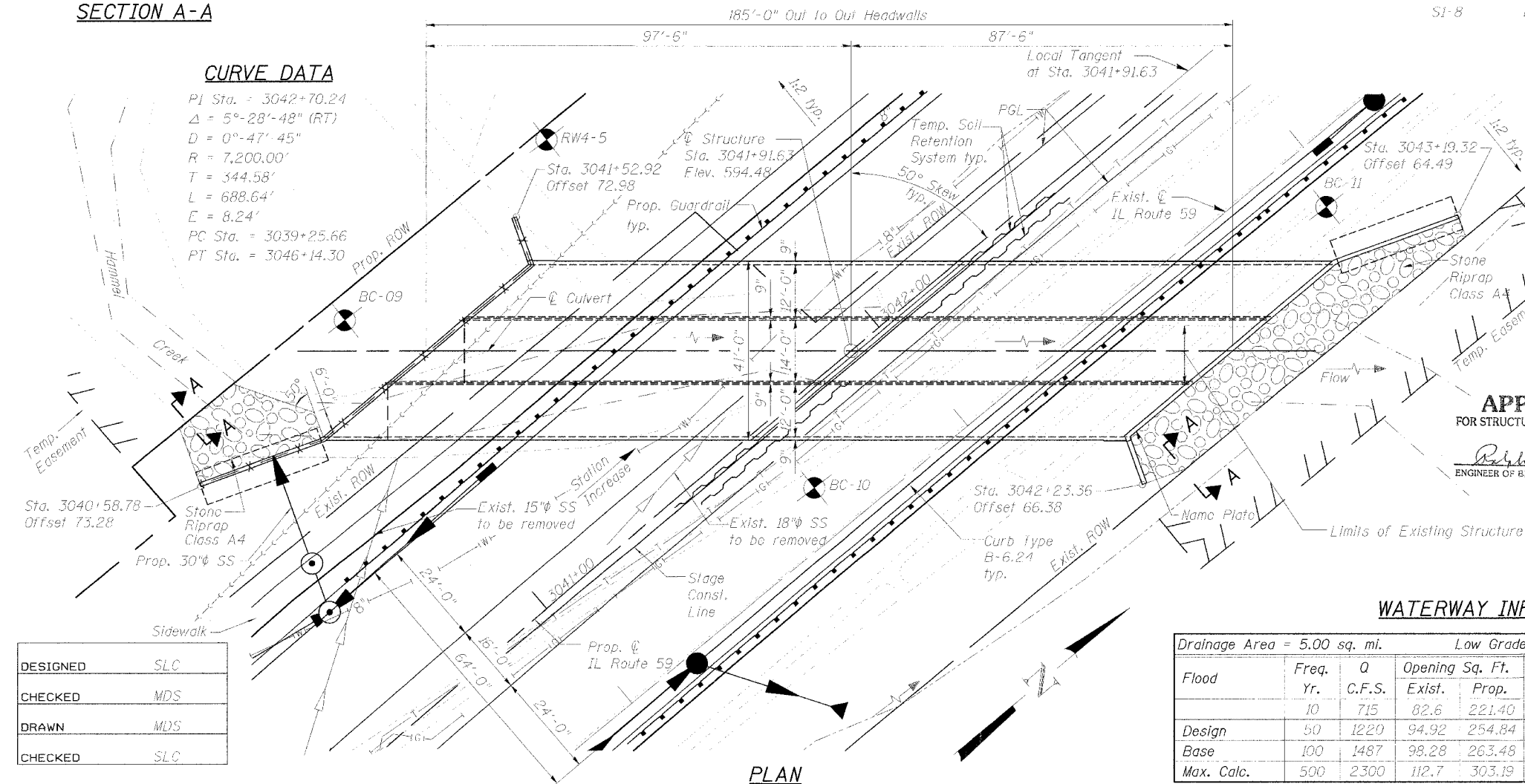
INDEX OF SHEETS

- SI-1 GENERAL PLAN
- SI-2 CONSTRUCTION STAGING
- SI-3 CULVERT BOTTOM SLAB PLAN
- SI-4 CULVERT TOP SLAB PLAN
- SI-5 CULVERT SECTIONS AND DETAILS
- SI-6 BAR SPLICER ASSEMBLY DETAILS
- SI-7 BORING LOGS I
- SI-8 BORING LOGS II



CURVE DATA

PI Sta. = 3042+70.24
Δ = 5°-28'-48" (RT)
D = 0°-47'-45"
R = 7,200.00'
T = 344.58'
L = 688.64'
E = 8.24'
PC Sta. = 3039+25.66
PT Sta. = 3046+14.30



DESIGN SPECIFICATIONS

AASHTO 2002 "Standard Specifications for Highway Bridges".

LOADING HS20-44

Allow 50 lb/sq ft for future wearing surface.

DESIGN STRESSES

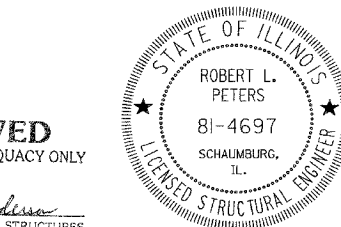
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

NAME PLATE

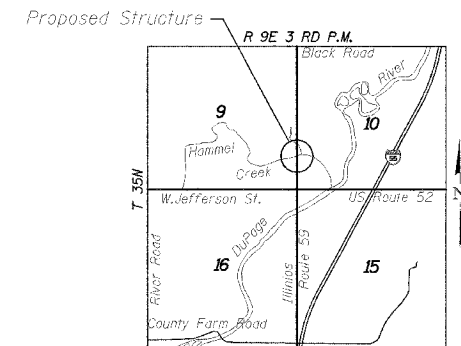
STATION 3041+91.63
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 338 SEC. 114R-1
LOADING HS20
STR. NO. 099-4660

NAME PLATE

See Std. 515001



ROBERT L. PETERS, P.E., S.E.
NO. 081-04697
EXP. DATE 11/30/08

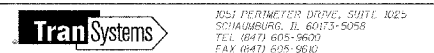


WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head-Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	715	82.6	221.40	581.30	1.12	0.00	582.25	581.30
Base	50	1220	94.92	254.84	582.18	2.62	0.00	581.80	582.18
Max. Calc.	100	1487	98.28	263.48	582.42	3.70	0.15	586.12	582.57
	500	2300	112.7	303.19	590.17	6.72	0.79	590.17	584.24

GENERAL PLAN

IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660



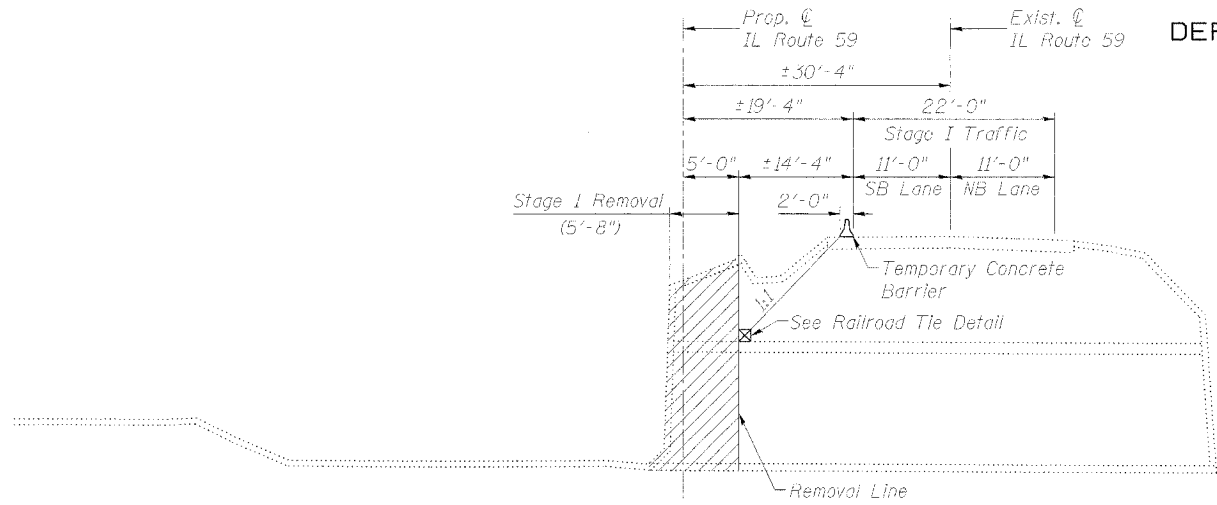
4:USER# 4:DATE# 4:TIME#

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

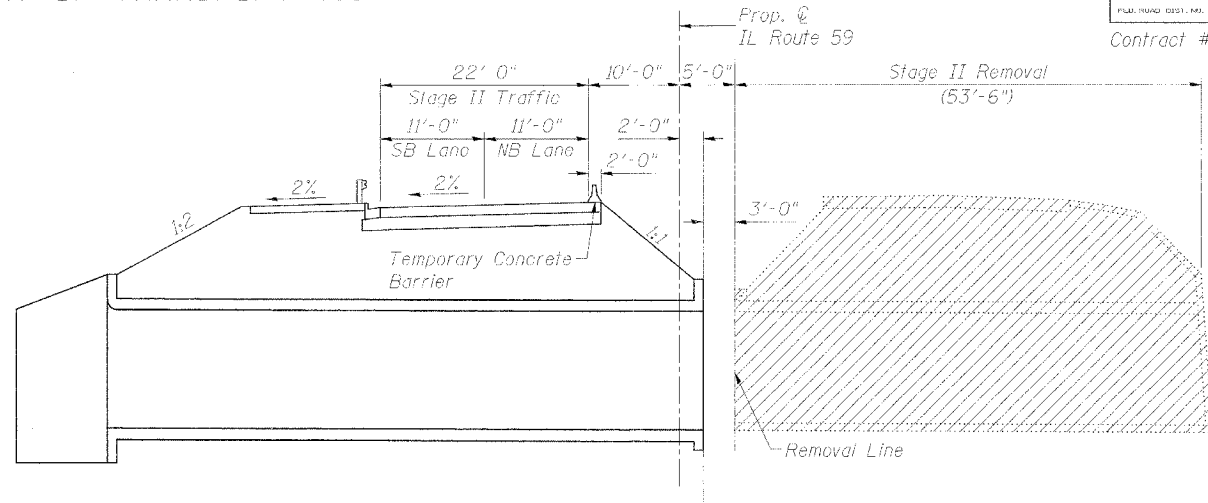
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	260
PLAN/ROAD DIST./M.I./	M. STATE	FED. AID PROJECT		

SHEET NO. 51-2
8 SHEETS

Contract # 62416

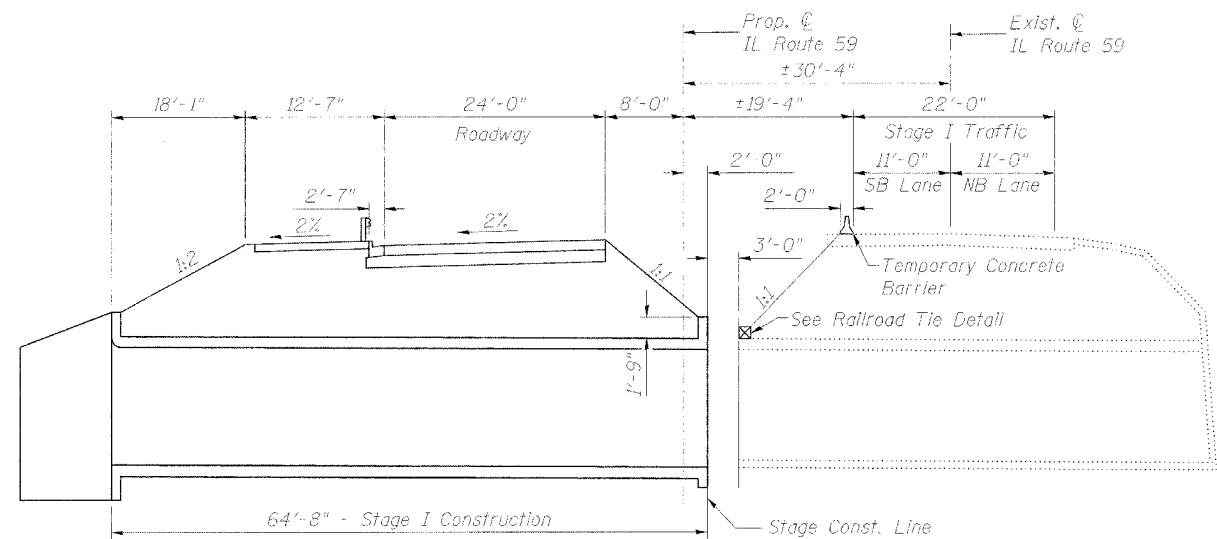


STAGE I REMOVAL
(Looking North)

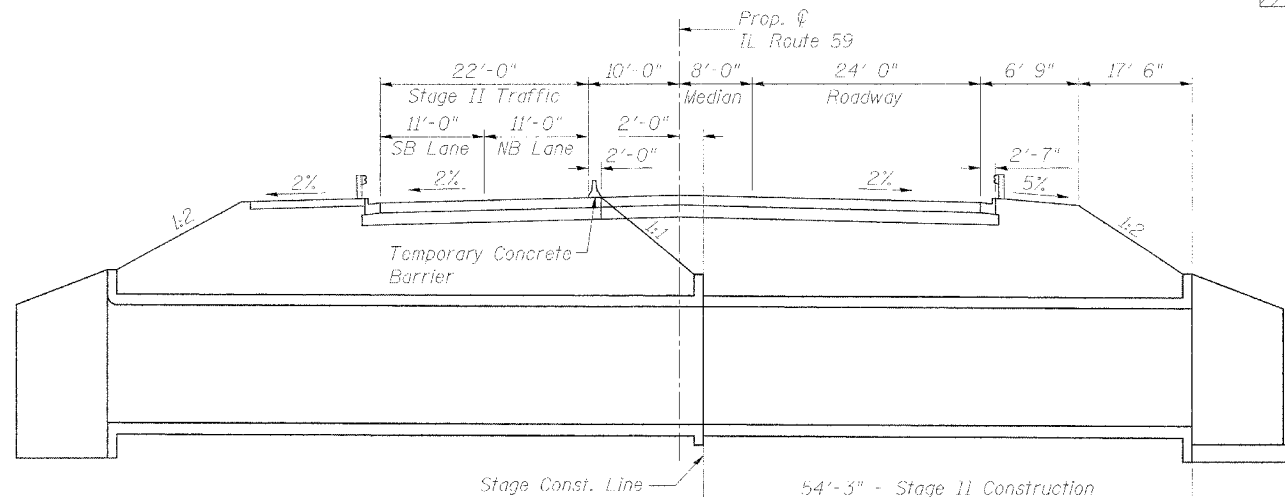


STAGE II REMOVAL
(Looking North)

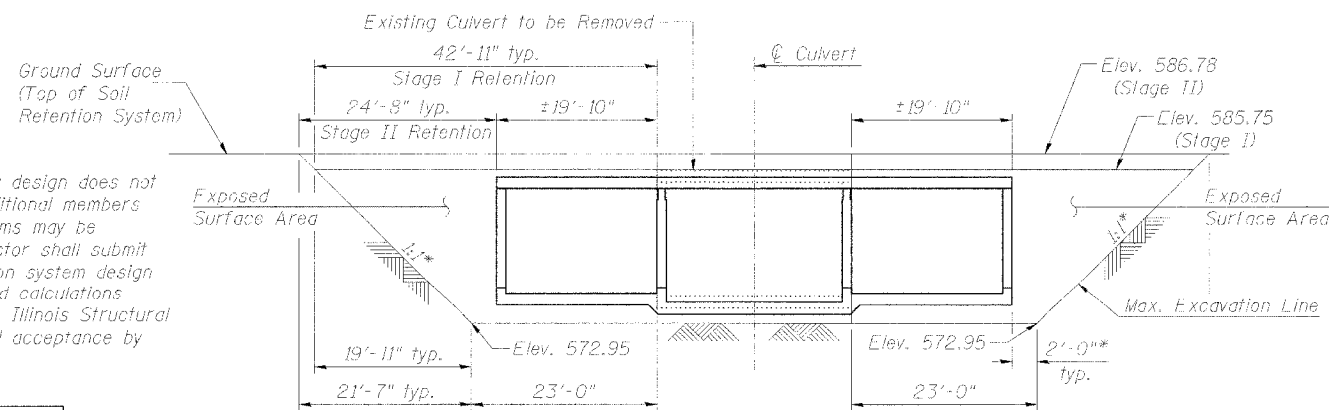
LEGEND
Removal of Existing Culvert and Roadway



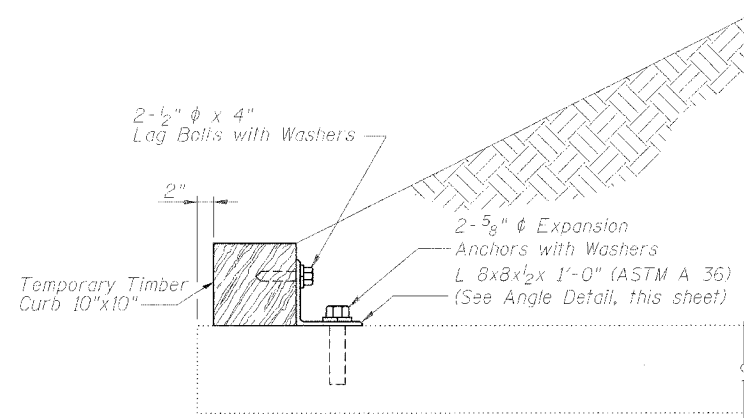
STAGE I CONSTRUCTION
(Looking North)



STAGE II CONSTRUCTION
(Looking North)

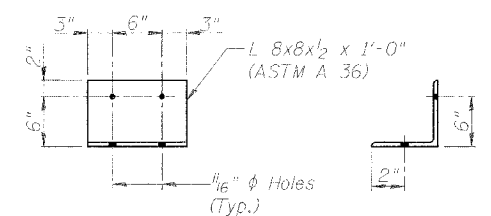


TEMPORARY SOIL RETENTION SYSTEM
Slope and Distances Shown Along Skew at Stage Construction Line



RAILROAD TIE DETAIL

The L 8x8x1/2 x 1'-0" and Temporary Timber shall not be removed until Stage I Construction has been completed.
Connect one (1) L 8x8x1/2 x 1'-0" to the top of existing culvert with two (2) expansion anchors placed in two (2) holes. Angles to be positioned near each end of all timber curbs, but the outside lag bolt shall be at least 6" from end of timber. Cost included with Concrete Box Culverts.



ANGLE DETAIL

A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations signed and sealed by an Illinois Structural Engineer for review and acceptance by the Engineer.

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

CONSTRUCTION STAGING
IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660

TranSystems

8051 PLENUM/LEI DRIVE, SUITE 2025
SCHMIDT, IL 60175-5008
TEL (847) 625-9600
FAX (847) 625-5600

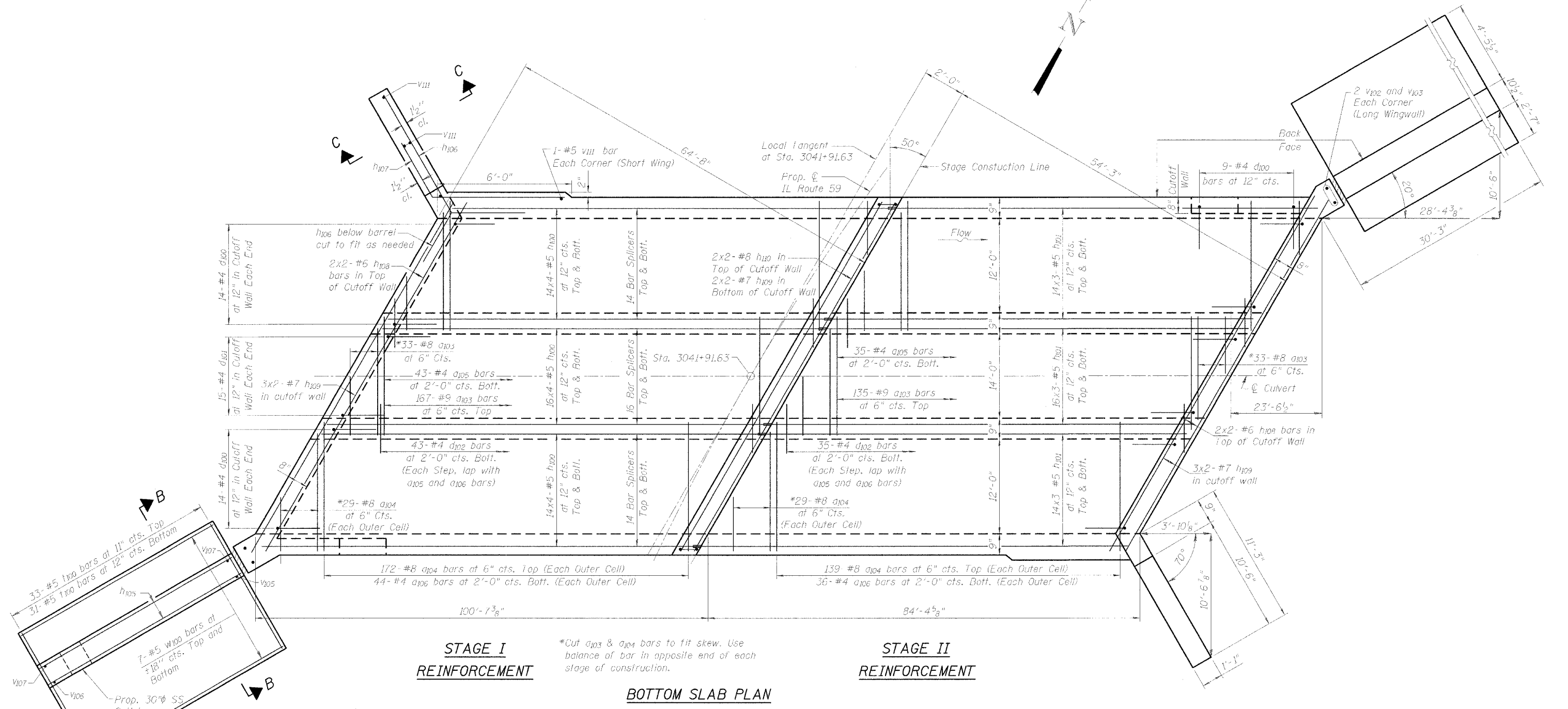
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3/18/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	DISTRICT	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	261
FED. ROAD DIST. NO. 7		FED. AID PROJECT		

Contract # 62416



**STAGE I
REINFORCEMENT**

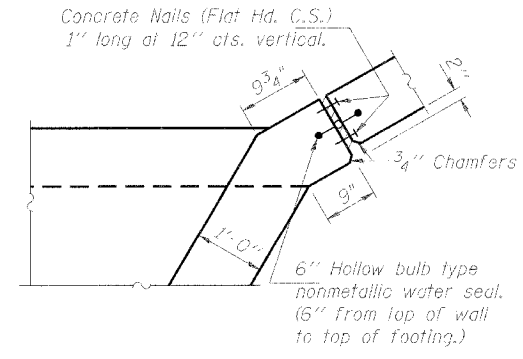
**STAGE II
REINFORCEMENT**

BOTTOM SLAB PLAN

*Cut a103 & a104 bars to fit skew. Use balance of bar in opposite end of each stage of construction.

MINIMUM BAR LAP

- (Barrel)
- #5 bar = 1'-8"
- #6 bar = 2'-0"
- #7 bar = 2'-9"
- #8 bar = 3'-8"



CORNER DETAIL

- Notes:
- Bars indicated thus 14x4-#5 etc. indicates 14 lines of bars with 4 lengths per line.
 - For Section B-B and C-C, see Sheet S1-5.

CULVERT BOTTOM SLAB PLAN

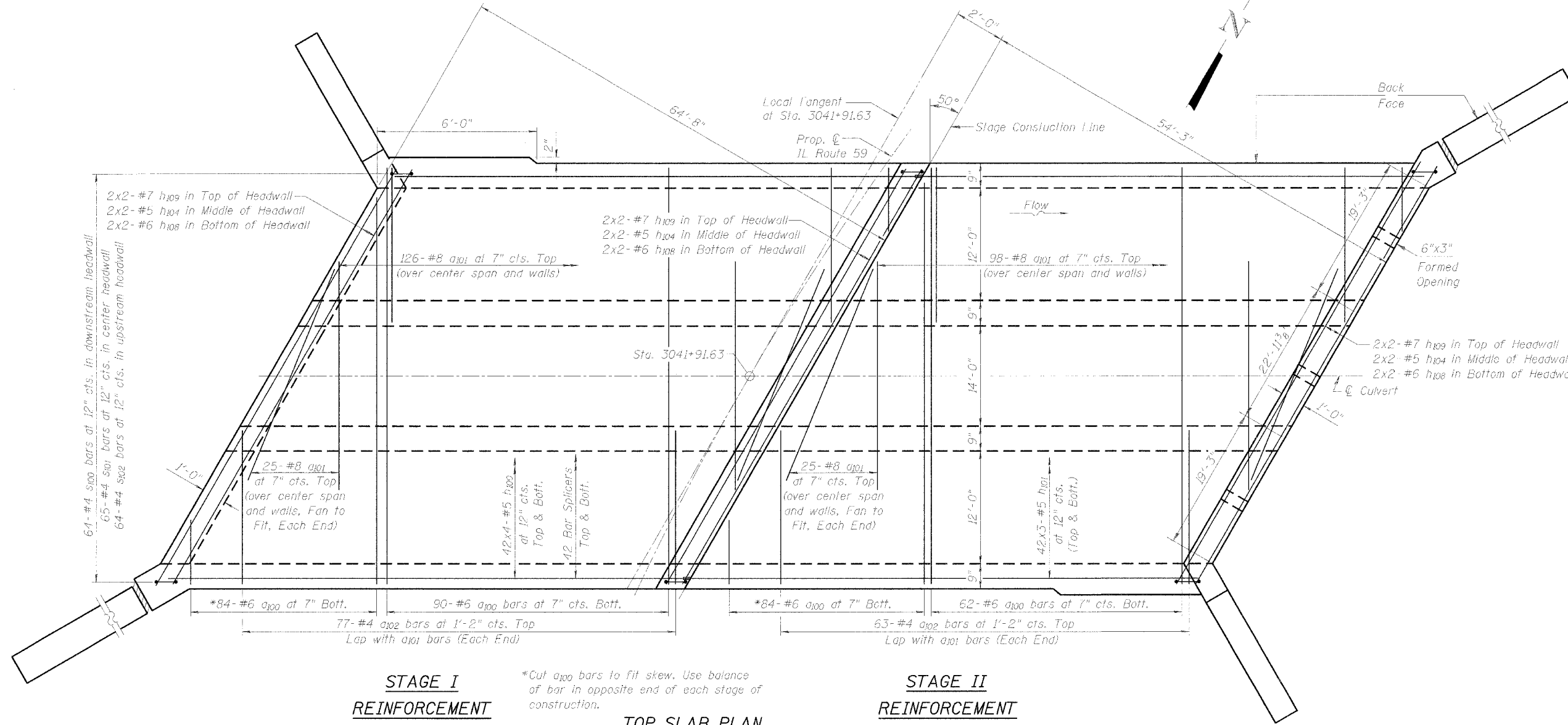
IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	262
FUNDING DIST. NO.	LINE NO.	FED. AID PROJECT		

Contract # 62416



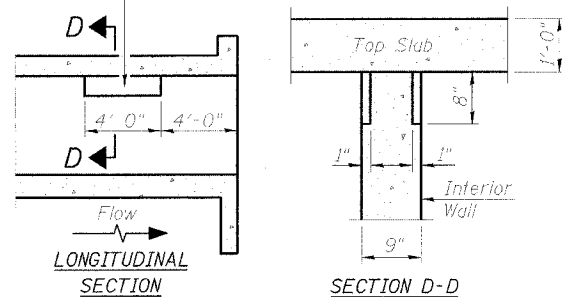
**STAGE I
REINFORCEMENT**

**STAGE II
REINFORCEMENT**

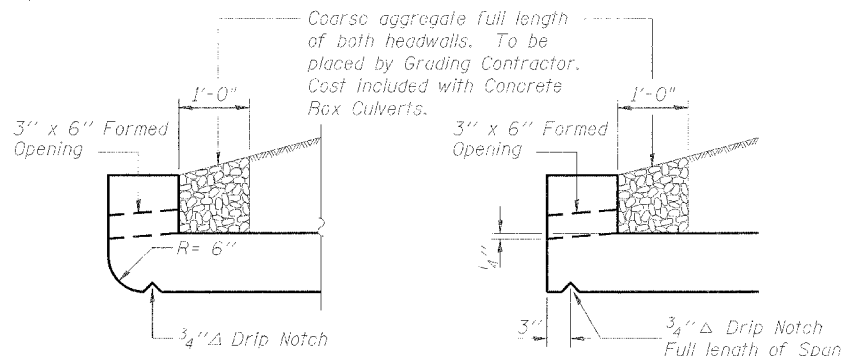
*Cut ϕ_{100} bars to fit skew. Use balance of bar in opposite end of each stage of construction.

TOP SLAB PLAN

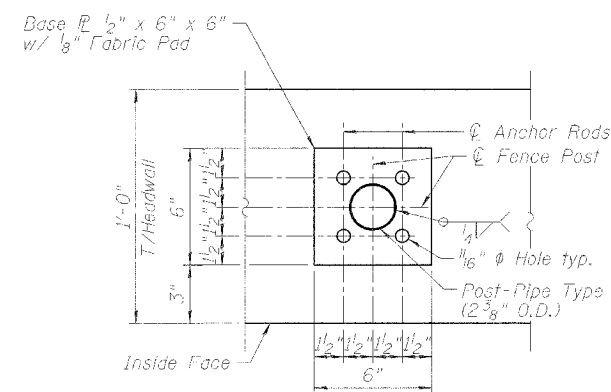
Notch formed by rough finished board attached to and removed with formwork, each interior wall. (Do not chamfer).



**PHOEBE NESTING
SITE DETAILS**
(Downstream End Only)



**AT UPSTREAM END AT DOWNSTREAM END
DRAIN DETAIL**



BASE PLATE DETAIL

MINIMUM BAR LAP

(Barrel)

- #5 bar = 1'-8"
- #6 bar = 2'-0"
- #7 bar = 2'-9"
- #8 bar = 3'-8"

Notes:
Bars indicated thus 42x4-#5 etc. indicates 42 lines of bars with 4 lengths per line.

CULVERT TOP SLAB PLAN

IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660



351 PERIMETER DRIVE, SUITE 1025
SCHMIDWAY, IL 60173-5050
TEL (847) 805-9600
FAX (847) 605-9600

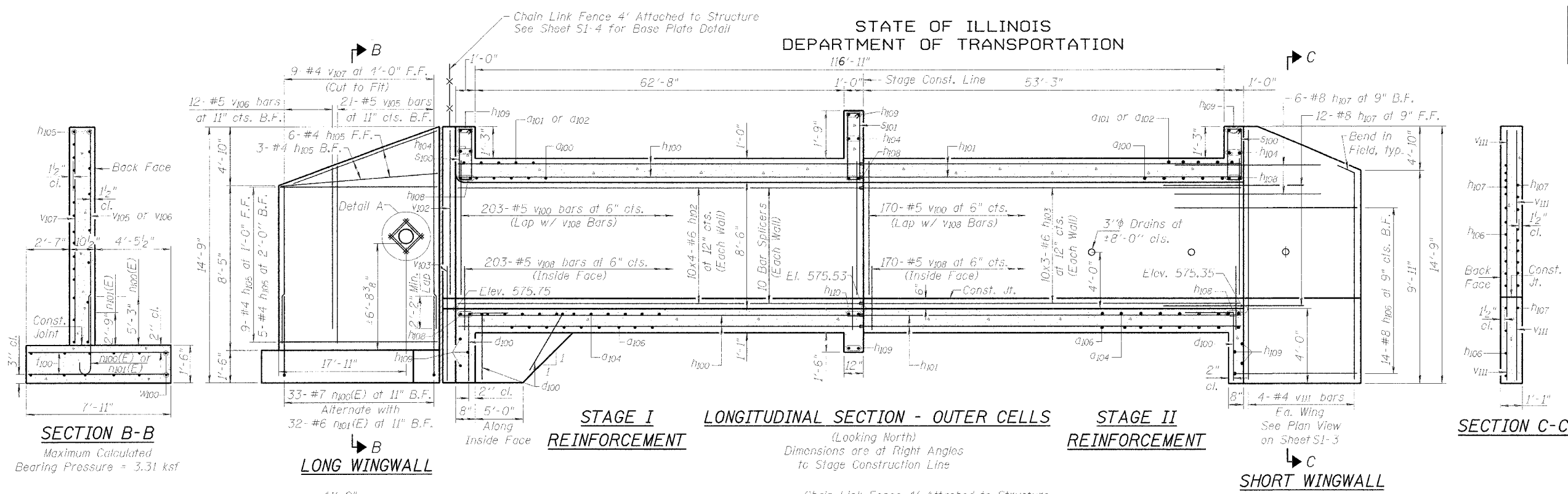
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	DISTRICT	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	263
FED. ROAD DIST. NO. 7		STATE PROJECT	SHEETS	
		FED. AID PROJECT	8	

Contract # 62416

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a100	320	# 6	42'-0"	C
a101	324	# 8	23'-3"	C
a102	280	# 4	10'-1"	C
a103	368	# 5	17'-8"	C
a104	738	# 8	15'-0"	C
a105	78	# 4	15'-2"	C
a106	160	# 4	13'-2"	C
d100	74	# 4	5'-6"	L
d101	30	# 4	4'-9"	L
d102	156	# 4	3'-9"	L
h100	688	# 5	26'-5"	C
h101	516	# 5	29'-3"	C
h102	160	# 6	26'-8"	C
h103	120	# 6	29'-6"	C
h104	12	# 5	33'-0"	C
h105	46	# 5	29'-3"	C
h106	28	# 8	14'-3"	C
h107	36	# 8	8'-0"	C
h108	20	# 6	33'-3"	C
h109	28	# 7	33'-8"	C
h110	4	# 8	54'-2"	C
h111	16	# 5	4'-1"	C
n100(E)	66	# 7	7'-3"	C
n101(E)	64	# 6	4'-7"	C
s100	64	# 4	6'-3"	C
s101	65	# 4	7'-3"	C
s102	64	# 4	6'-1"	C
v100	128	# 5	7'-8"	C
v101	746	# 5	8'-8"	C
v102	376	# 4	8'-8"	C
v103	4	# 5	9'-11"	C
v105	4	# 5	7'-3"	C
v105	42	# 5	10'-0"	C
v106	24	# 5	8'-2"	C
v107	18	# 4	13'-0"	C
v108	746	# 5	3'-9"	C
v109	376	# 4	4'-6"	C
v111	10	# 4	14'-5"	C
w100	28	# 5	29'-3"	C
Reinforcement Bars		Pound	166,890	
Reinforcement Bars, Epoxy Coated		Pound	1420	
Concrete Box Culverts		Cu. Yd.	860.4	

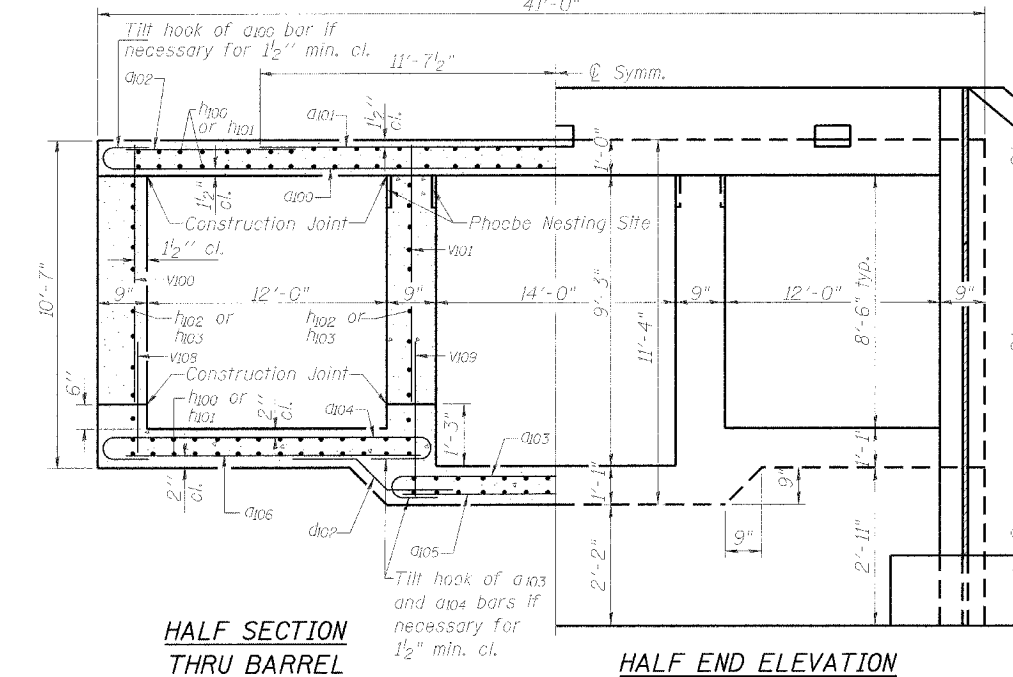


SECTION B-B
Maximum Calculated
Bearing Pressure = 3.31 ksf

STAGE I REINFORCEMENT
LONGITUDINAL SECTION - OUTER CELLS
(Looking North)
Dimensions are at Right Angles
to Stage Construction Line

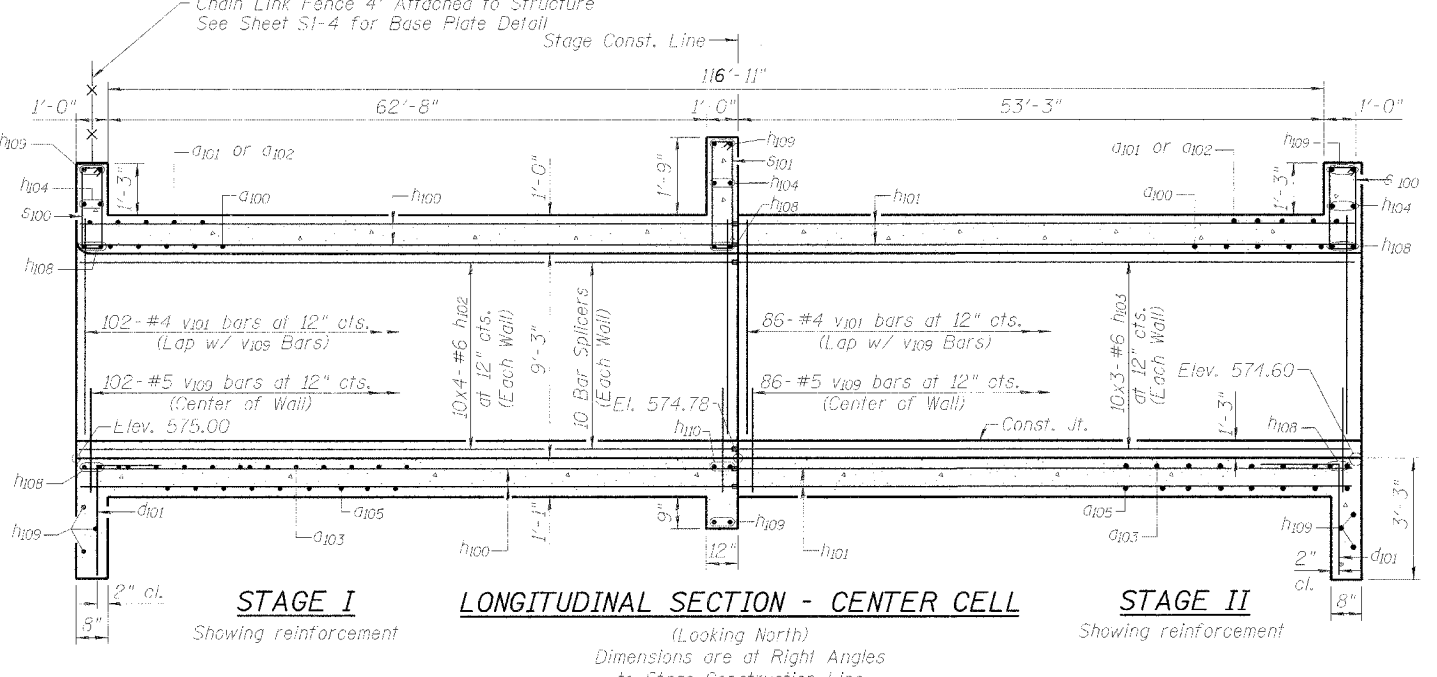
STAGE II REINFORCEMENT
LONGITUDINAL SECTION - OUTER CELLS
(Looking North)
Dimensions are at Right Angles
to Stage Construction Line

SECTION C-C
SHORT WINGWALL



HALF SECTION THRU BARREL

HALF END ELEVATION

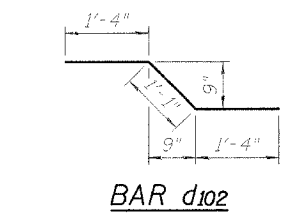


STAGE I Showing reinforcement
LONGITUDINAL SECTION - CENTER CELL
(Looking North)
Dimensions are at Right Angles
to Stage Construction Line

STAGE II Showing reinforcement
LONGITUDINAL SECTION - CENTER CELL
(Looking North)
Dimensions are at Right Angles
to Stage Construction Line

MINIMUM BAR LAP

- (Barrel)
- #5 bar = 1'-8"
- #6 bar = 2'-0"
- #7 bar = 2'-9"
- #8 bar = 3'-8"



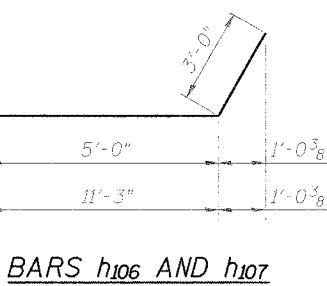
BAR d102

BARS a100, a103 AND a104

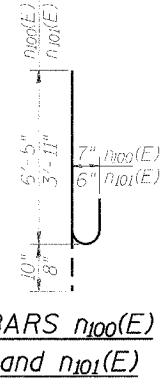
Bar	A	J	X
a100	8"	6"	10'-8"
a103	1'-3"	11'-4"	15'-2"
a104	11"	8"	13'-2"



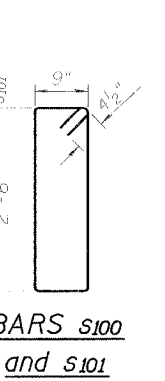
BARS d100 and d101



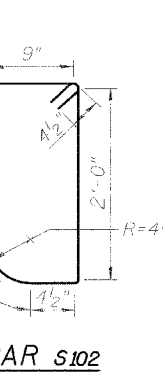
BARS h106 AND h107



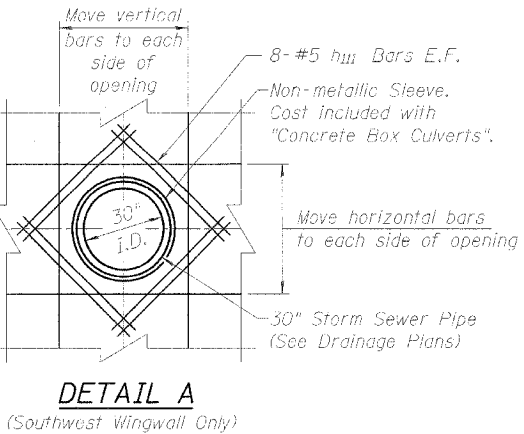
BARS n100(E) and n101(E)



BARS s100 and s101



BAR s102



DETAIL A
(Southwest Wingwall Only)

CULVERT SECTIONS AND DETAILS

IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 51-6
338	114R-1	WILL	355	264	8 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

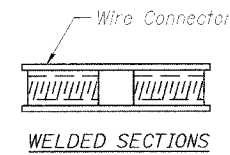
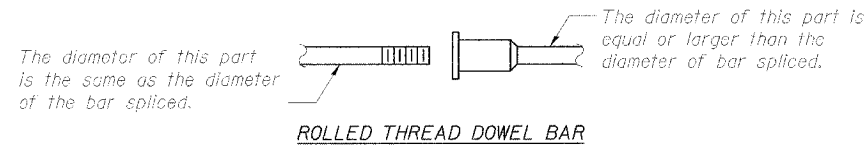
Contract # 62416

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

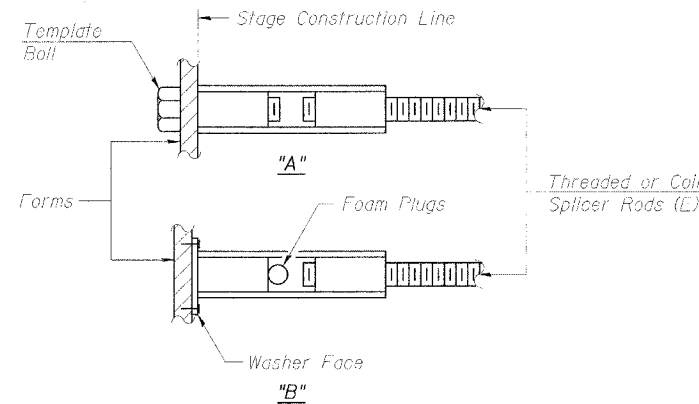
- ① Minimum Capacity = $1.25 \times f_y \times A_1$
(Tension in kips)
 - ② Minimum *Pull-out Strength = $0.66 \times f_y \times A_1$
(Tension in kips)
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_1 = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



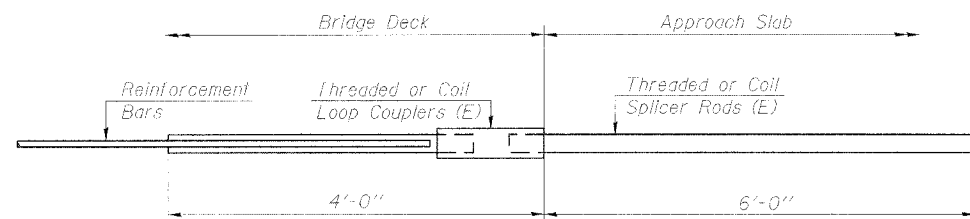
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



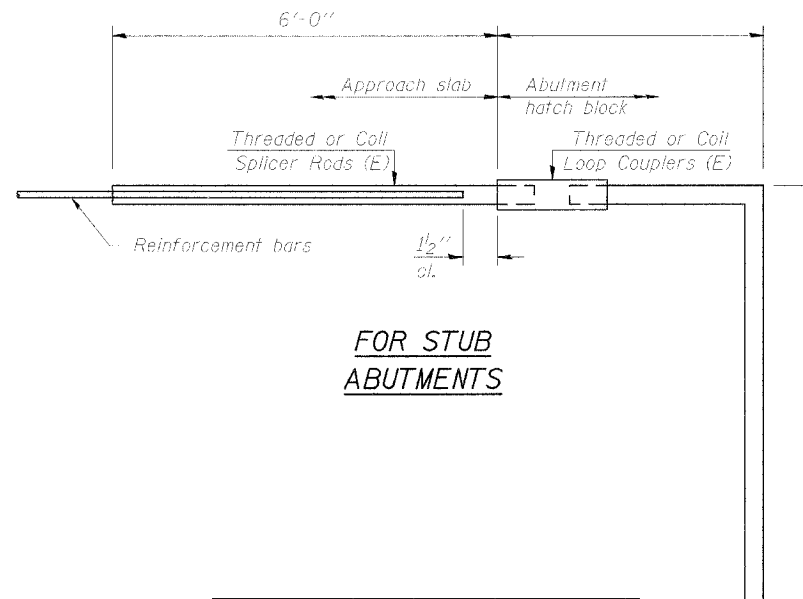
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



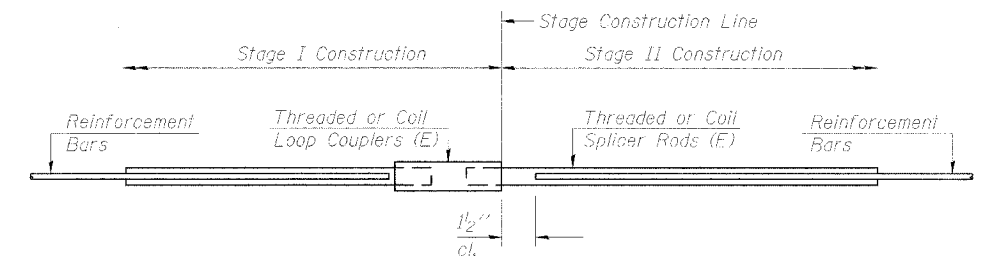
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	



FOR STUB ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	

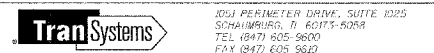


STANDARD

Bar Size	No. Assemblies Required	Location
#5	172	Top and Bottom Slab
#6	40	Sidewalls

BAR SPLICER ASSEMBLY DETAILS

IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660



DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BSD-1

11-1-06

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	8
FED. ROAD DIST. NO. 7		ILLINOIS	SHEETS	

Contract # 62416

W Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BC-09
WEI Job No.: 790-05-01
Datum: NGVD
Elevation: 579.64 ft
North: 1769444.72 ft
East: 1020986.30 ft
Station: 3041+07.79
Offset: 81.04 LT

Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)
579.64	1.6-inch thick black LOAM --TOPSOIL--	0											
	Stiff, black and brown CLAY --FILL--	1	3	4	6	1.25							
577.1	Medium stiff, brown and gray CLAY	2	4	5	4	0.50							
574.1	Medium dense, brown GRAVELLY SANDY LOAM	3	5	12	12	NP							
571.6	Dense, gray SAND and GRAVEL-size dolostone clasts in a silty matrix --WEATHERED BEDROCK--	4	8	15	40	NP							
569.6	--AUGER REFUSAL--	5				NP							
	Boring terminated at 11.08 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-22-2003	Complete Drilling	04-22-2003	While Drilling	∇	6.50 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	∇	4.50 ft	
Driller	K&J	Logger	J. Kasnick	Checked by	N. Davis	NA	
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Depth to Water	∇	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

W Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BC-10
WEI Job No.: 790-05-01
Datum: NGVD
Elevation: 595.05 ft
North: 1769505.08 ft
East: 1021082.81 ft
Station: 3041+64.52
Offset: 18.11 RT

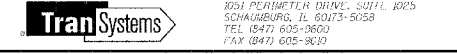
Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)
594.84	1.6-inch ASPHALT --PAVEMENT--	0											
	8-inch thick CONCRETE --PAVEMENT--	1	4	8	8	4.50							
	Medium stiff to hard, black, brown, and gray, gravelly CLAY --FILL--	2	3	5	5	0.75							
589.6	Stiff to very stiff, brown and gray CLAY	3	2	3	4	2.25							
		4	2	3	3	1.25							
584.6	Very stiff, gray and green CLAY with organic matter	5	3	3	3	3.50							
		6	2	7	9	2.71							
579.6	Very stiff, gray CLAY to CLAY LOAM	7	5	10	10	3.85							
		8	17	10	11	2.00							
573.9	Very dense, gray SANDY GRAVEL --WEATHERED BEDROCK--	9	12	36	17	NP							
571.1	--AUGER REFUSAL--	10				NP							
	Boring terminated at 23.92 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-21-2003	Complete Drilling	04-21-2003	While Drilling	∇	DRY	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	∇	DRY	
Driller	K&J	Logger	S. Patel	Checked by	N. Davis	NA	
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Depth to Water	∇	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BORING LOGS I
IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
338	114R-1	WILL	355	266
FED. ROAD DIST. NO. 7		FED. AID PROJECT		

Contract # 62416

W Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BC-11
WEI Job No.: 790-05-01
Datum: NGVD
Elevation: 593.67 ft
North: 1769638.28 ft
East: 1021104.06 ft
Station: 3042+96.55
Offset: 43.55 RT

Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Page 1 of 1

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
592.7	3-inch thick SANDY GRAVEL --SHOULDER AGGREGATE-- Stiff to very stiff, brown and gray CLAY --FILL--	1	7 6 6	2.25 P	18			--AUGER REFUSAL-- Boring terminated at 25.00 ft					
		5	4 3 6	1.75 P	17								
		10	3 4 4	2.50 P	20								
596.7	Stiff to very stiff, brown and gray CLAY to SILTY CLAY	10	2 3 3	3.00 P	31								
		15	1 3 3	1.23 S	21								
580.7	Stiff, black SILTY CLAY, trace organic matter	15	2 3 6	1.00 P	34								
574.4	Medium dense, brown and gray SILT	20	5 10 13	NP	25								
574.7	Stiff to very stiff, gray CLAY with interbedded sand and silt lenses	20	4 10 9	1.39 B	27								
		25	5 11 21	3.00 P	15								
560.6	Very dense, gray, gravelly SILT LOAM	25	9 36 37	NP	3								

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-21-2003	Complete Drilling	04-21-2003	While Drilling	▽	23.50 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	▽	DRY	
Driller	K&J	Logger	S. Patel	Time After Drilling	NA		
Checked by	N. Davis			Depth to Water	▽	NA	
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

W Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW4-5
WEI Job No.: 790-05-01
Datum: NGVD
Elevation: 579.45 ft
North: 1769506.59 ft
East: 1020982.10 ft
Station: 3041+69.08
Offset: 82.50 LT

Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Page 1 of 1

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
578.8	8-inch thick black LOAM --TOPSOIL-- Stiff, brown and gray, gravelly CLAY, with silt interbeds	1	4 5 7	1.00 P	31								
576.5	Medium stiff, brown, black, and gray CLAY to CLAY LOAM Medium dense, black and brown, medium SAND	2	3 4 14	0.75 P	23								
574.0	Stiff, black, brown, and gray, gravelly SANDY CLAY LOAM	3	10 17 13	1.25 P	13								
571.5	DOLOSTONE cobbles	4	36 45 46	NP	1								
569.0	Medium stiff, gray and light blue CLAY	5	5 5 12	0.50 P	27								
565.5	--WEATHERED BEDROCK-- --AUGER REFUSAL-- Boring terminated at 13.75 ft	6	50										

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-22-2003	Complete Drilling	04-22-2003	While Drilling	▽	DRY	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	▽	12.50 ft	
Driller	K&J	Logger	J. Kasnick	Time After Drilling	NA		
Checked by	N. Davis			Depth to Water	▽	NA	
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BORING LOGS II
IL ROUTE 59 OVER HAMMEL CREEK
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3041+91.63
STRUCTURE NO. 099-4660

TranSystems
1051 PERIMETER DRIVE, SUITE 1025
SCHALMERSBURG, IL 60173-5058
TEL: (847) 865-9600
FAX: (847) 865-9600

I:\Users\slc\Documents\2002\Structural\Borings\Borings2.sht

Benchmark:
Square cut in center of 13' Headwall, 21' West of IL Route 59
North of Sunrise Drive, Elevation 598.12

Existing Structure:
None.

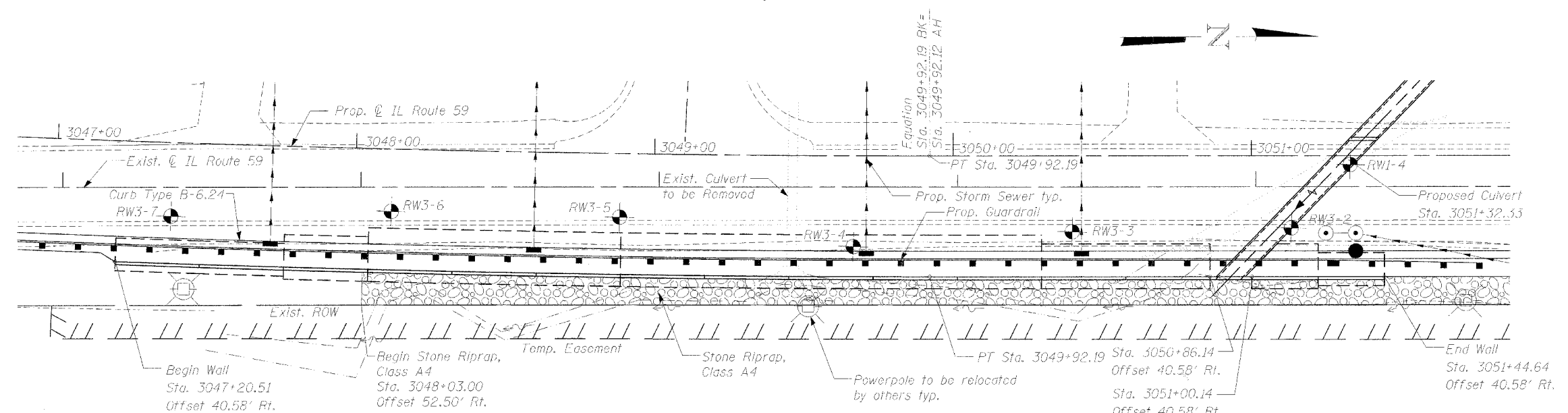
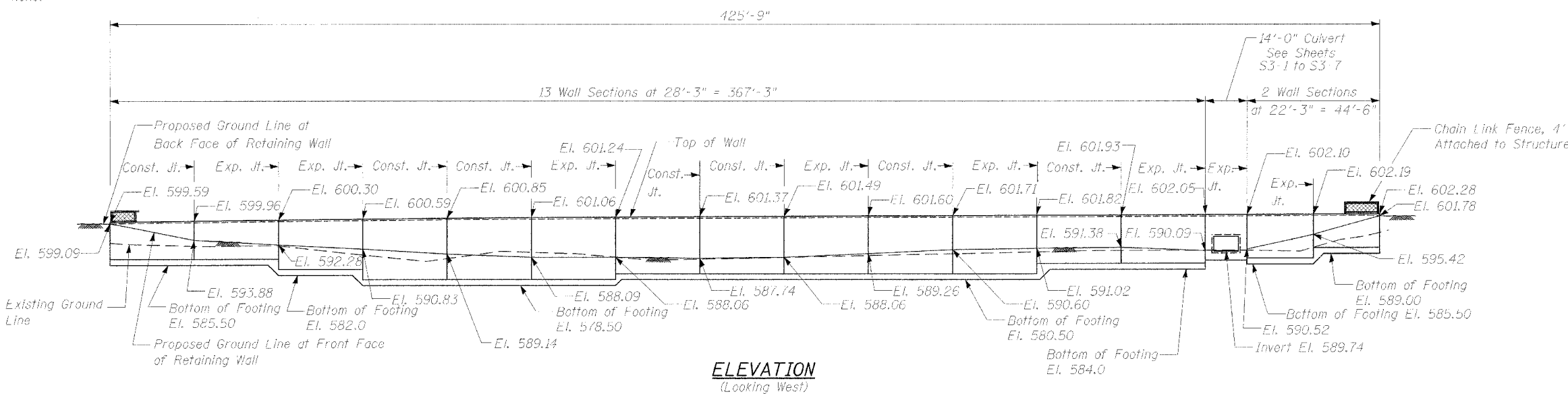
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	POST MILE	SHEET NO.	SHEET NO. S2-1
F.A.P. 338	114R-1	WILL	355	267	5 SHEETS
FED. AID PROJ. NO. 7	ILLINOIS	FISC. AID PROJECT			

Contract # 62416

TOTAL BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment, Special	Cu. Yd.	909
Stone Riprap, Class A4	Sq. Yd.	400
Filter Fabric	Sq. Yd.	400
Structure Excavation	Cu. Yd.	3276
Concrete Structures	Cu. Yd.	839.7
Reinforcement Bars, Epoxy Coated	Pound	116,640
Geocomposite Wall Drain	Sq. Yd.	601
Pipe Underdrains for Structures 4"	Foot	415
Chain Link Fence, 4' Attached to Structure	Foot	412



ELEVATION
(Looking West)

PLAN

GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- All construction joints shall be bonded.
- Exposed concrete edges shall have a standard $\frac{3}{4}$ " chamfer otherwise noted. Chamfer on vertical edges shall be continued a minimum of 1 foot below the finished ground line.
- Station and offsets are measured from the Proposed Centerline of IL Route 59 to the back face at the top of the retaining wall.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Minimum Bar Laps shall be:

Bar	Min. Lap
#5	2'-2"
#6	2'-7"

INDEX OF SHEETS

- S2-1 GENERAL PLAN
- S2-2 PLAN AND ELEVATION I
- S2-3 PLAN AND ELEVATION II
- S2-4 PLAN AND ELEVATION III
- S2-5 RETAINING WALL DETAILS
- S2-6 BORING LOGS I
- S2-7 BORING LOGS II
- S2-8 BORING LOGS III

LEGEND

- Soil Boring Location
- Rip Rap

DESIGN SPECIFICATIONS

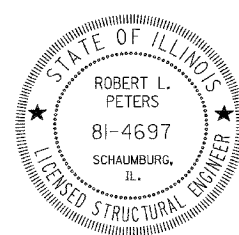
AASHTO 2002 "Standard Specifications for Highway Bridges".

DESIGN STRESSES

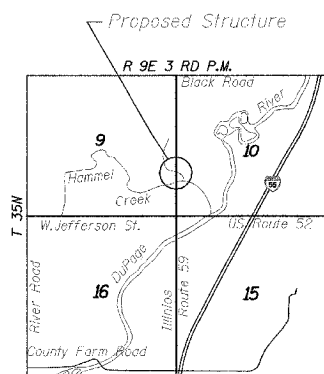
FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Adams
ENGINEER OF BRIDGES AND STRUCTURES



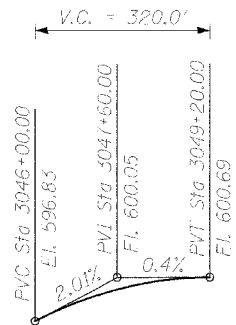
Robert L. Peters - 03/16/08
 ROBERT L. PETERS, P.E., S.E.
 NO. 081-04697
 EXP. DATE 11/30/08



LOCATION SKETCH

CURVE DATA

$\Delta = 3^\circ-01'-25''$
 $D = 0^\circ-48'-00''$
 $R = 7,160.82'$
 $T = 188.99'$
 $L = 377.89'$
 $E = 2.49'$
 PC Sta. 3046+14.30
 PT Sta. 3048+03.29
 PT Sta. 3049+92.19



PROFILE GRADE
(Along PGL)

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

GENERAL PLAN

RETAINING WALL ALONG IL ROUTE 59
 F.A.P. ROUTE 338 SECTION 114R-1
 WILL COUNTY
 STATION 3047+20.51 TO STATION 3051+44.64
 STRUCTURE NO. 099-W016



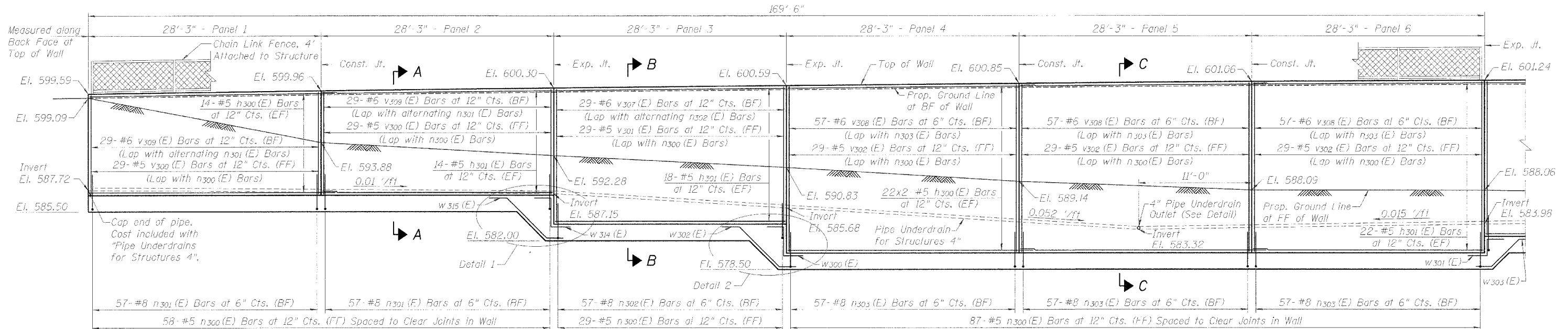
1051 PERIMETER DRIVE, SUITE 1025
 SCHAUMBURG, IL 60173-5086
 TEL (847) 605-9600
 FAX (847) 605-9630

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

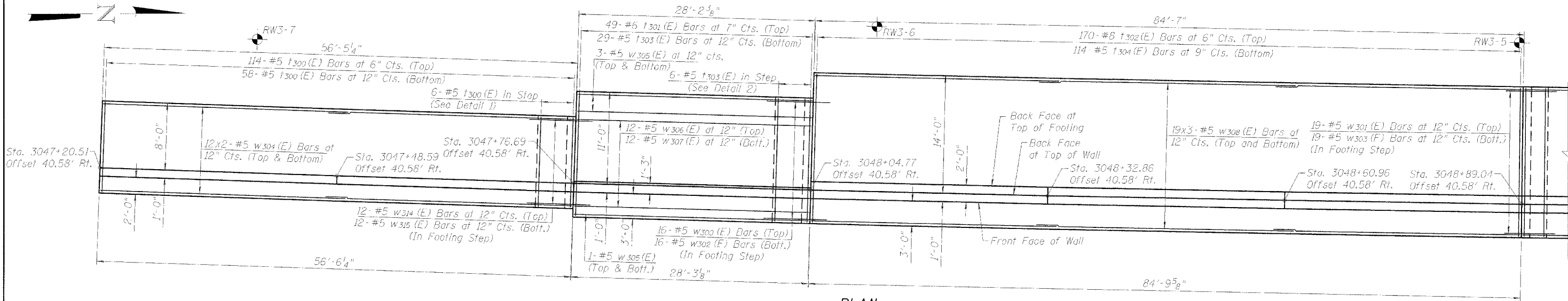
ROUTE NO.	SECTION	COUNTY	CDIST. SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	268
FED. ROAD DIST. NO. 7		BLK/MS	FED. AID PROJECT	

Contract # 62416

SHEET NO. S2-2
8 SHEETS



ELEVATION
(Looking West)

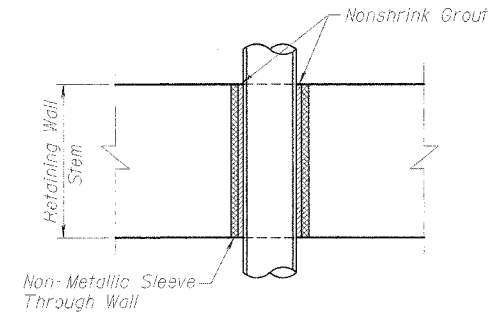


PLAN

LEGEND

● Soil Boring Location

- Notes:
1. For Sections A-A, B-B & C-C, see Sheet S2-5.
 2. For Construction and Expansion Joint details see Sheet S2-5.
 3. Bars indicated thus 19x3-#5 etc. indicates 19 lines of bars with 3 lengths per line.



PIPE OUTLET THRU WALL

Furnishing and installing Non-Metallic Sleeve and Grout is included in the cost of "Concrete Structures".

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

DETAIL 1

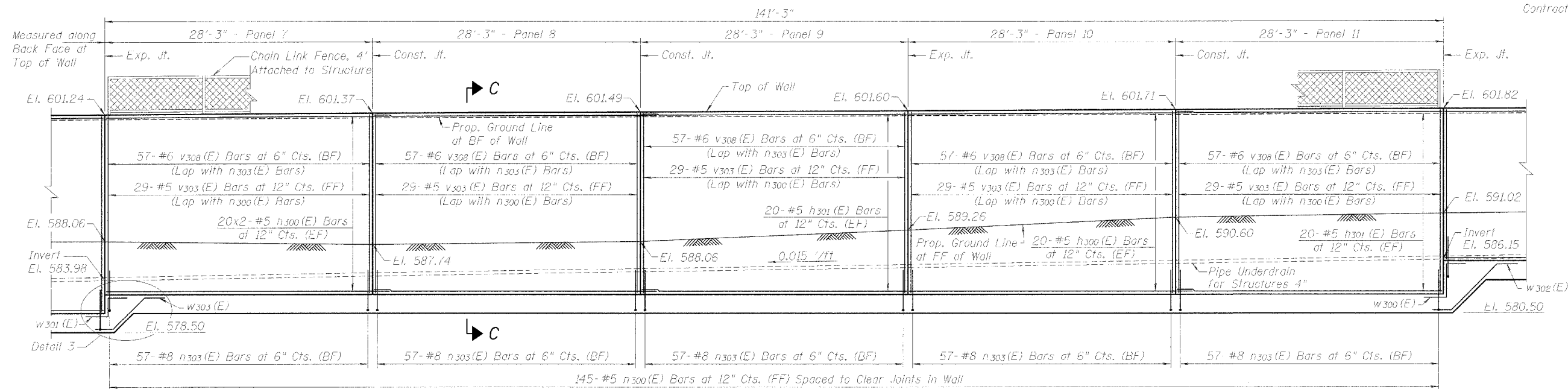
DETAIL 2

PLAN AND ELEVATION I
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3047+20.51 TO STATION 3051+44.64
STRUCTURE NO. 099-WQ16

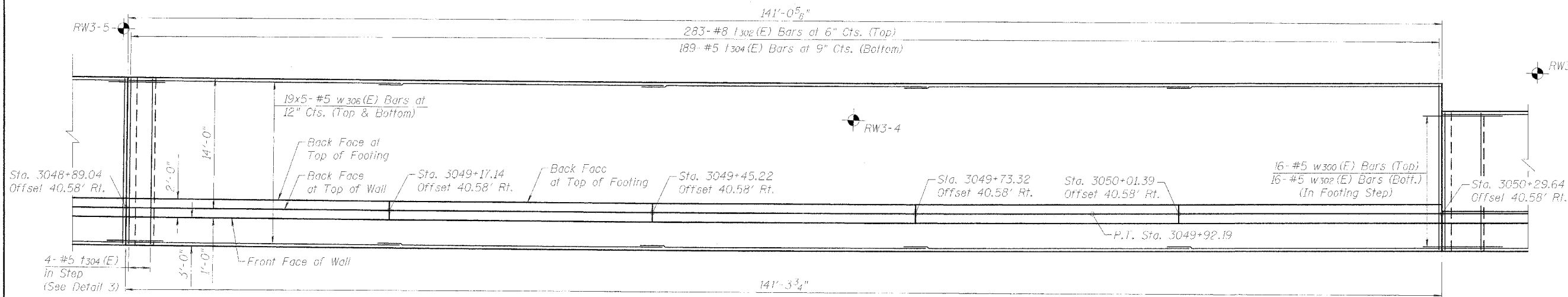
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	269
FIG. PROJ. DIST. NO. 7	S. 114R-1	FED. AID PROJECT		

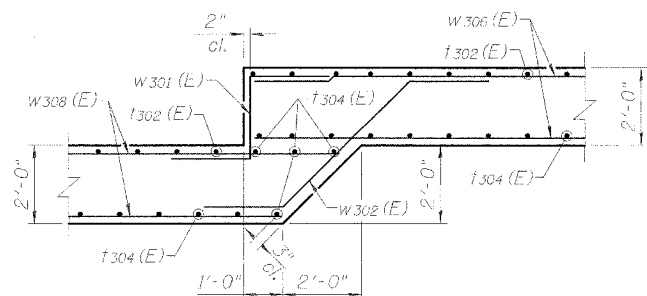
Contract # 62416



ELEVATION
(Looking West)



PLAN



DETAIL 3

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

LEGEND

Soil Boring Location

- Notes:
- For Section C-C, see Sheet S2-5.
 - Bars indicated thus 19x5-#5 etc. indicates 19 lines of bars with 5 lengths per line.

PLAN AND ELEVATION II
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3047+20.51 TO STATION 3051+44.64
STRUCTURE NO. 099-W016

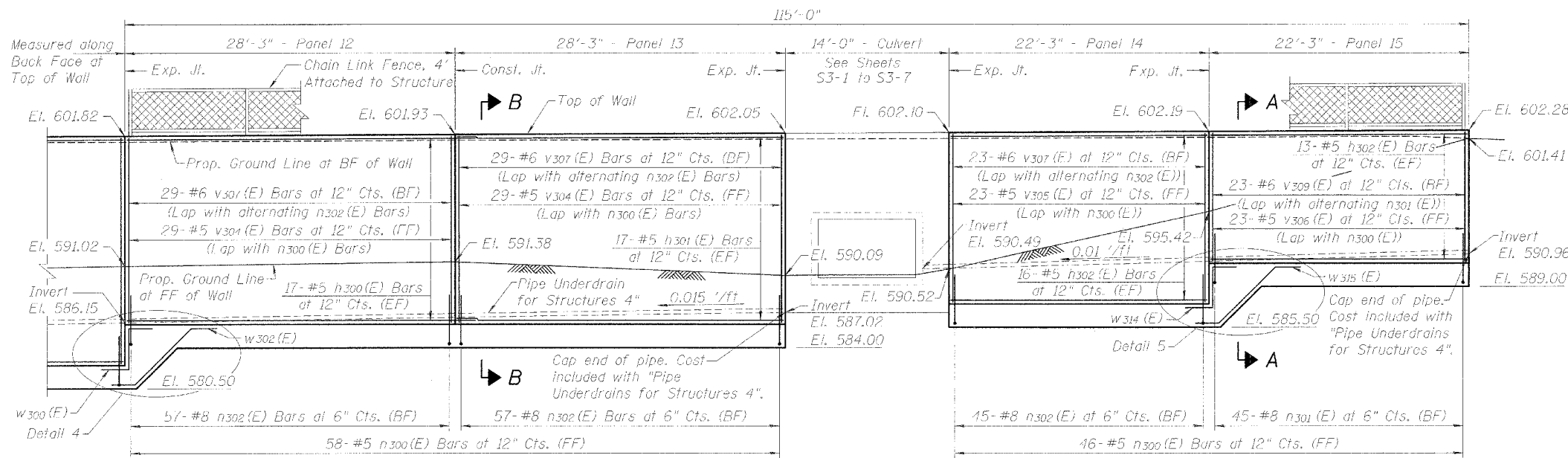
TranSystems

1051 PERIMETER DRIVE, SUITE 1025
SCHEMUNGA, IL 60173-5036
TEL (847) 605-9800
FAX (847) 605-9830

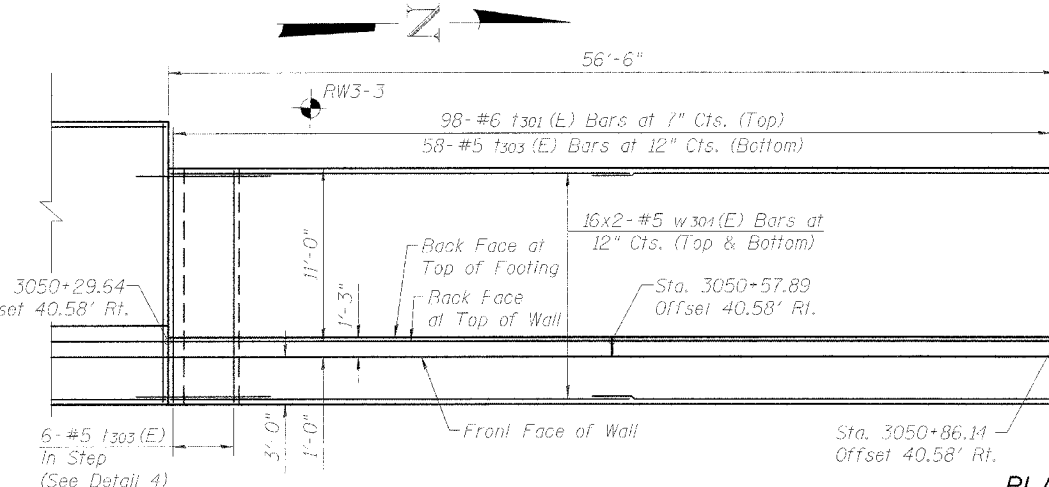
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	270
FED. ROAD DIST. NO. 7		ILLINOIS	SHEETS	

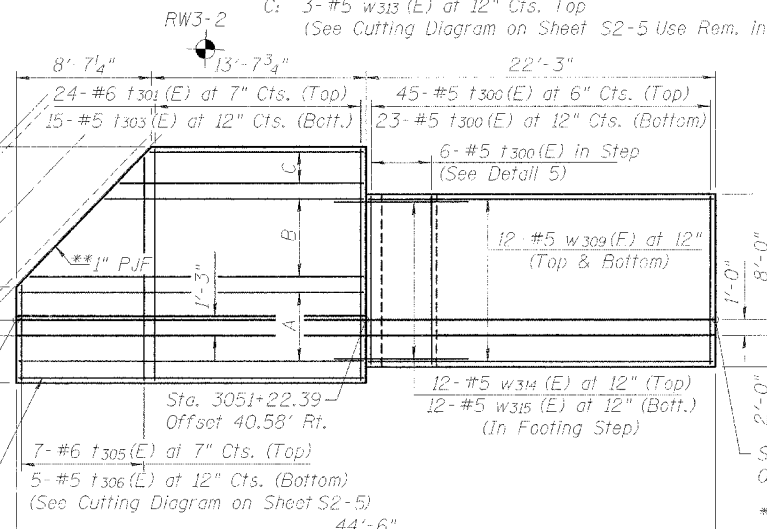
Contract # 62416



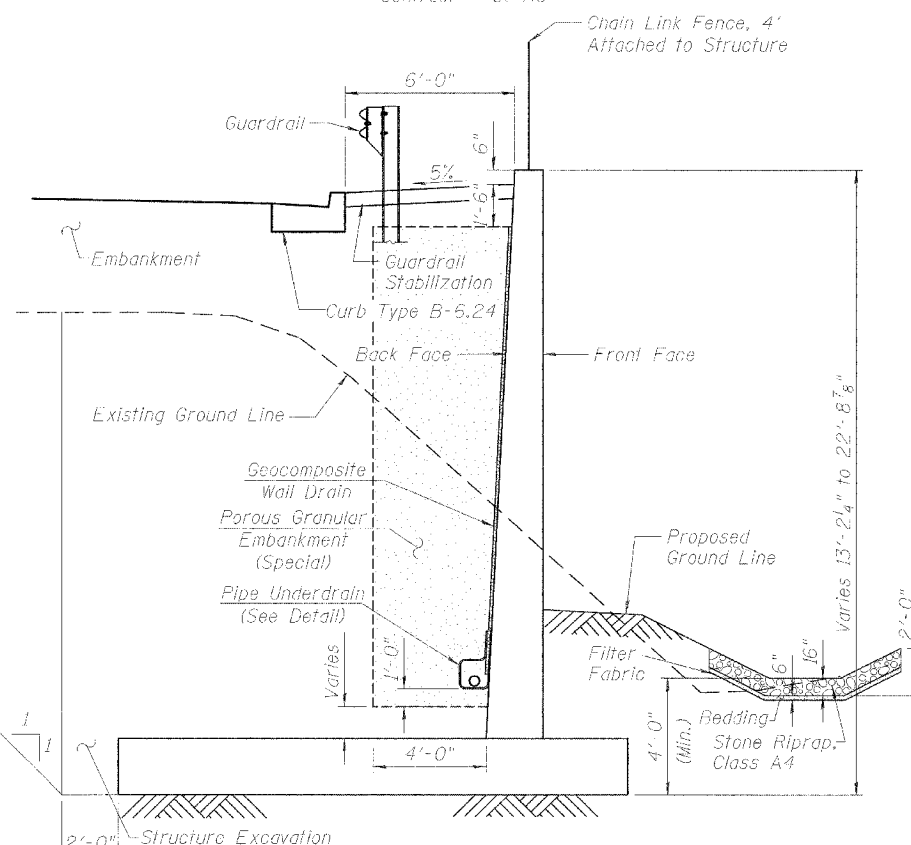
ELEVATION
(Looking West)



PLAN

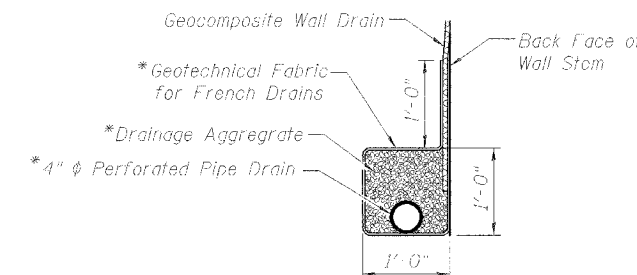


DETAIL 5



TYPICAL SECTION THRU WALL

(See roadway drawings for guardrail, guardrail stabilization, embankment and curb details)



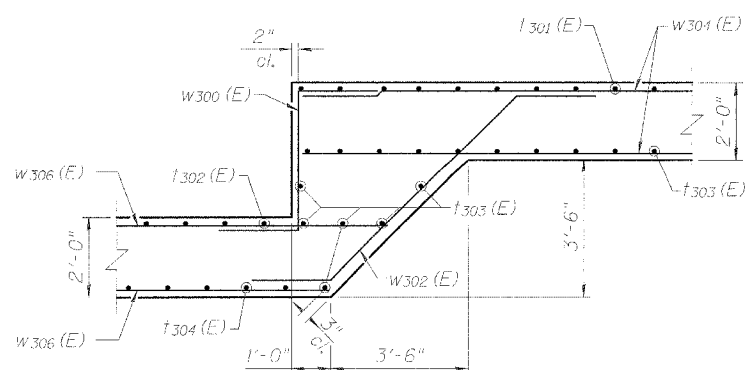
PIPE UNDERDRAIN DETAIL

*Included in the cost of "Pipe Underdrains for Structures"

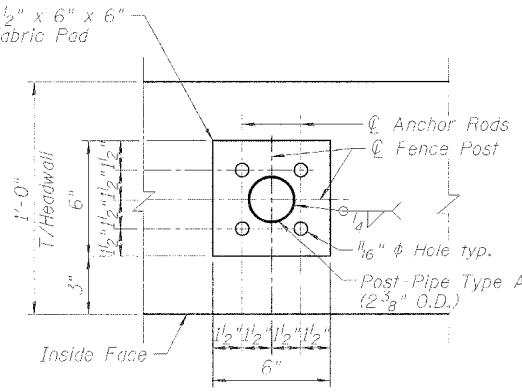
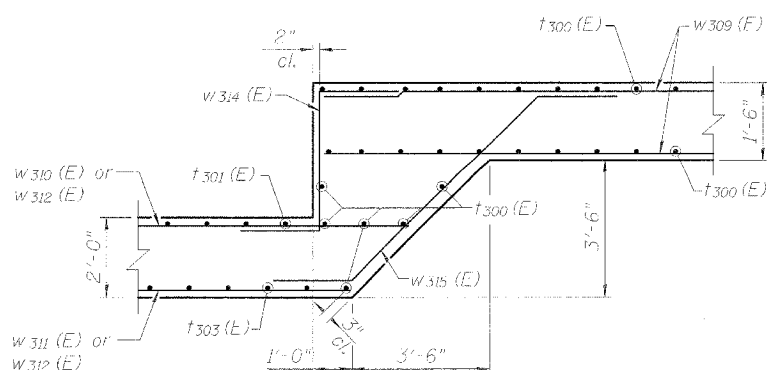
LEGEND

Soil Boring Location

- Notes:
- For Construction and Expansion Joint details, see Sheet S2-5
 - Bars indicated thus 16x2-#5 etc. indicates 16 lines of bars with 2 lengths for line.



DETAIL 4



BASE PLATE DETAIL

Drill and Grout $\frac{5}{8}$ " diameter Anchor Rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications. Cost included with "Chain Link Fence, 4' Attached to Structure". For additional Chain Link Fence Details see Std. 664001.

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

PLAN AND ELEVATION III
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3047+20.51 TO STATION 3051+44.64
STRUCTURE NO. 099-W016

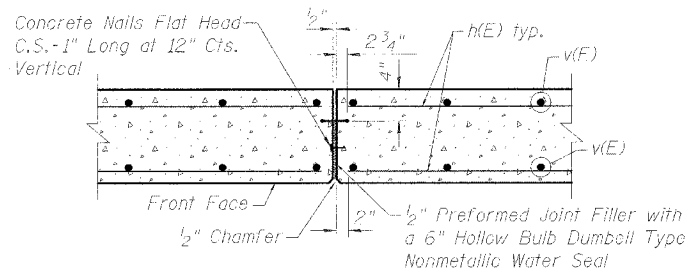
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	271
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract # 62416

BILL OF MATERIAL

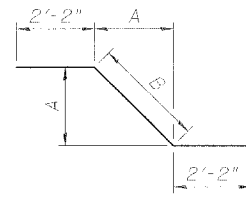
Bar	No.	Size	Length	Shape
h300(E)	270	#5	30'-5"	—
h301(E)	222	#5	27'-11"	—
h302(E)	58	#5	21'-11"	—
n300(F)	423	#5	5'-7"	—
n301(E)	159	#8	9'-9"	—
n302(E)	216	#8	13'-0"	—
n303(E)	456	#8	10'-10"	—
v300(E)	58	#5	12'-3"	—
v301(E)	29	#5	15'-11"	—
v302(E)	87	#5	19'-9"	—
v303(E)	145	#5	18'-5"	—
v304(E)	58	#5	15'-6"	—
v305(E)	23	#5	14'-3"	—
v306(E)	23	#5	11'-4"	—
v307(E)	110	#6	9'-1"	—
v308(E)	456	#6	15'-5"	—
v309(E)	81	#6	8'-7"	—
l300(E)	252	#5	10'-8"	—
l301(E)	171	#6	14'-8"	—
l302(E)	453	#8	17'-8"	—
l303(E)	114	#5	14'-8"	—
l304(E)	307	#5	17'-8"	—
l305(E)	7	#6	20'-4"	—
l306(E)	5	#5	20'-4"	—
w300(E)	32	#5	7'-10"	—
w301(E)	19	#5	6'-4"	—
w302(E)	32	#5	11'-6"	—
w303(E)	19	#5	9'-5"	—
w304(E)	112	#5	29'-2"	—
w305(E)	8	#5	27'-11"	—
w306(E)	202	#5	30'-9"	—
w307(E)	12	#5	28'-11"	—
w308(E)	114	#5	31'-6"	—
w309(F)	26	#5	21'-11"	—
w310(E)	6	#5	24'-9"	—
w311(E)	6	#5	22'-11"	—
w312(E)	6	#5	41'-2"	—
w313(E)	3	#5	28'-8"	—
w314(E)	24	#5	7'-4"	—
w315(E)	24	#5	10'-10"	—
Porous Granular Embankment, Special		Cu. Yd.		909
Structure Excavation		Cu. Yd.		3276
Concrete Structures		Cu. Yd.		839.7
Reinforcement Bars, Epoxy Coated		Pound		116,640
Geocomposite Wall Drain		Sq. Yd.		601
Pipe Underdrains for Structures 4"		Foot		415



WALL EXPANSION JOINT DETAIL

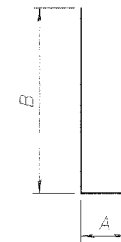
BARS w300 (E), w301 (E) AND w314 (E)

Bar	A
w300 (E)	3'-6"
w301 (E)	2'-0"
w314 (E)	3'-0"



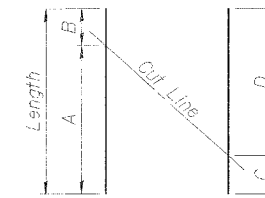
BARS w302 (E), w303 (E) AND w315 (E)

Bar	A	B
w302 (E)	5'-1"	1'-2"
w303 (E)	3'-7"	5'-1"
w315 (E)	4'-7"	6'-6"



BARS n300 (E) THRU n303 (E)

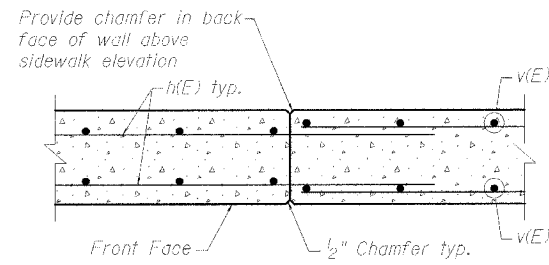
Bar	A	B
n300 (E)	10"	4'-9"
n301 (E)	1'-4"	8'-5"
n302 (E)	1'-4"	11'-8"
n303 (E)	1'-4"	9'-6"



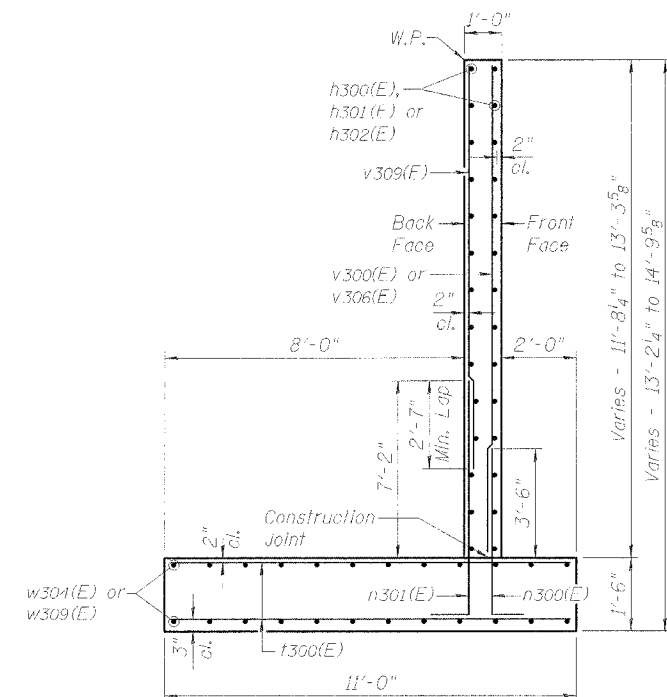
FIELD CUTTING DIAGRAM

Order bars full length. Cut as shown and use remainder of bars as shown on Sheet S2-4.

Bar	A	B	C	D	Length
l305(F)	14'-6"	5'-10"	9'-10"	10'-6"	20'-4"
l306(E)	14'-6"	5'-10"	9'-8"	10'-8"	20'-4"
w312 (E)	24'-0"	17'-2"	19'-0"	22'-2"	41'-2"
w313 (F)	15'-4"	13'-4"	13'-4"	15'-4"	28'-8"

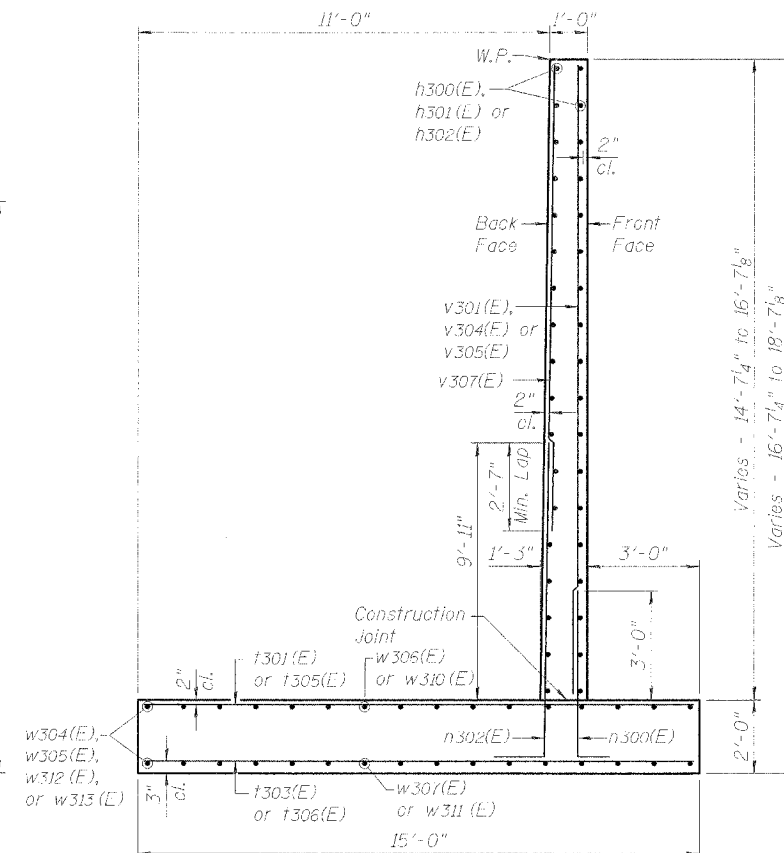


WALL CONSTRUCTION JOINT DETAIL



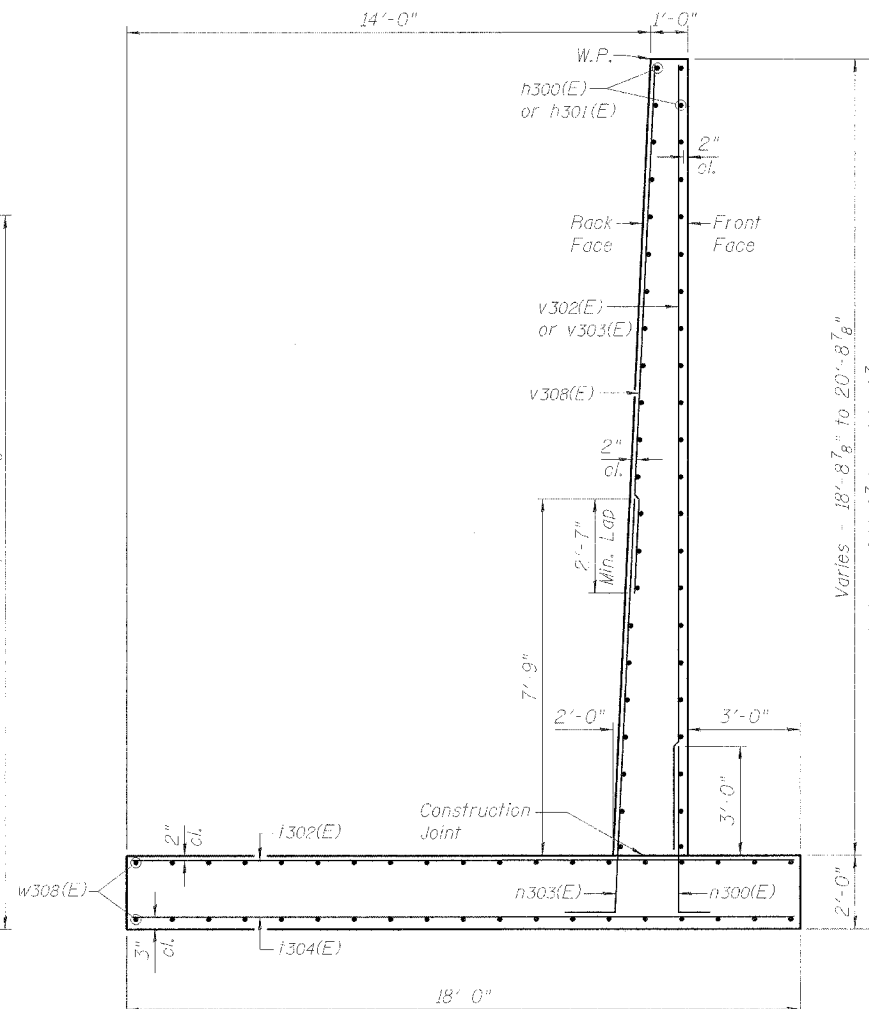
SECTION A-A

Panels 1, 2 and 15
Maximum Calculated
Bearing Pressure = 2.50 ksf



SECTION B-B

Panels 3, 12, 13 and 14
Maximum Calculated
Bearing Pressure = 2.61 ksf



SECTION C-C

Panels 4 to 11
Maximum Calculated
Bearing Pressure = 3.36 ksf

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

RETAINING WALL DETAILS

RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3047+20.51 TO STATION 3051+44.64
STRUCTURE NO. 099-WQ16



2051 PENNINGTON DRIVE, SUITE 1025
SCHAMPAIGN, IL 60173-0058
TEL (847) 605-9600
FAX (847) 605-9630

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

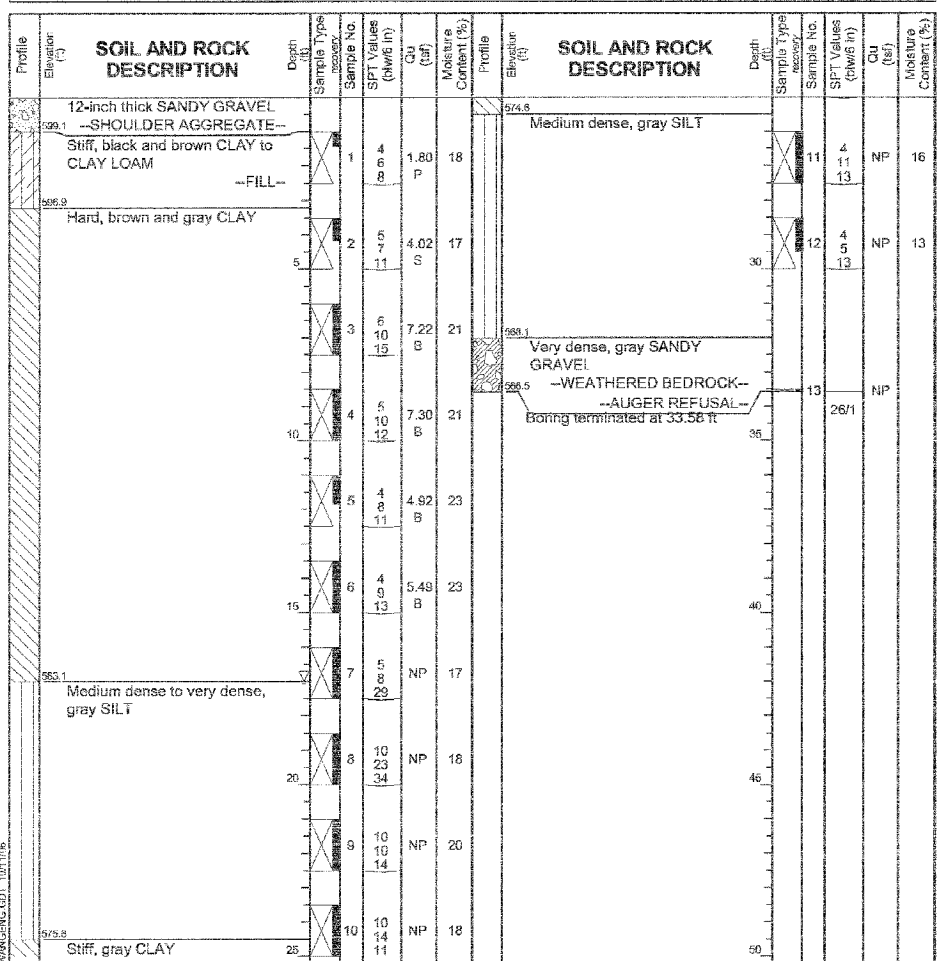
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
338	114R-1	WILL	355	272
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

Contract # 62416

Wang Engineering, INC.
Wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW3-1
WEI Job No.: 790-05-01
Client: **TransSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 600.11 ft
North: 1770530.51 ft
East: 1021077.78 ft
Station: 3051+89.15
Offset: 25.24 RT

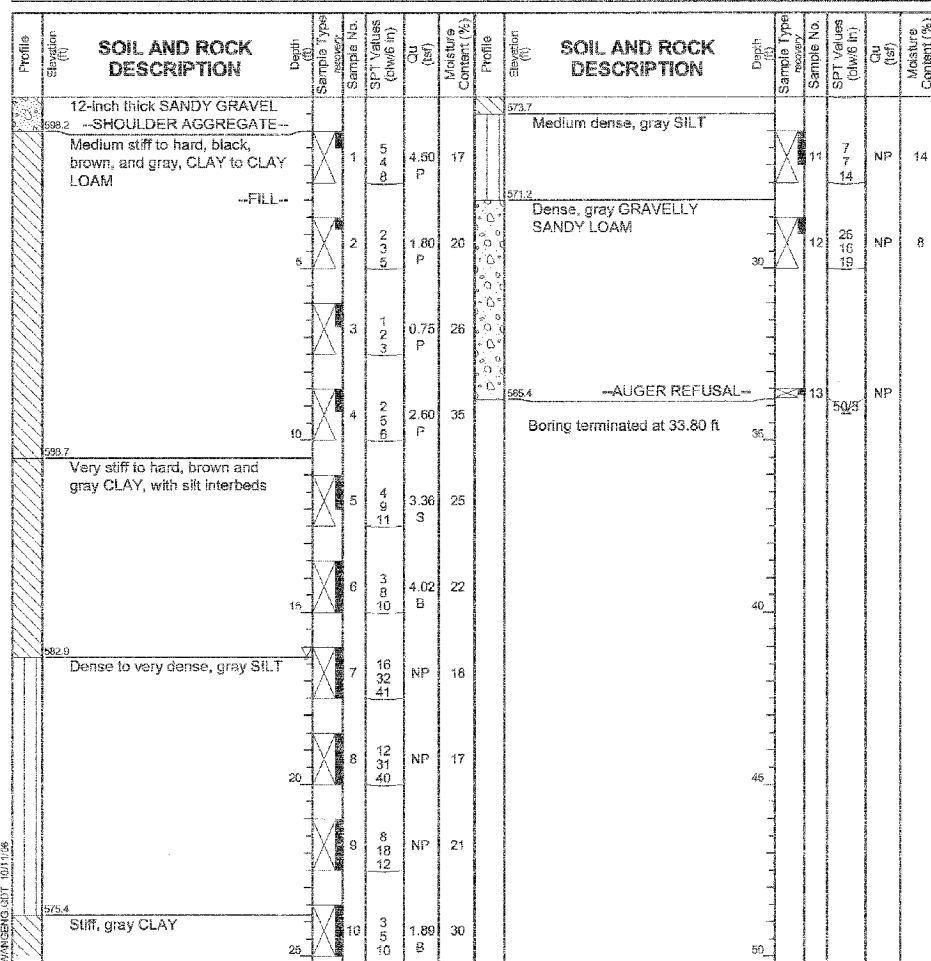


GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-21-2003	Complete Drilling	04-21-2003
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV
Driller	K&J	Logger	S. Patel
Checked by	N. Davis	Drilling Method	3.25 ID HSA; Boring backfilled upon completion
Drilling Method	3.25 ID HSA; Boring backfilled upon completion	While Drilling	17.00 ft
		At Completion of Drilling	NA
		Time After Drilling	NA
		Depth to Water	NA

Wang Engineering, INC.
Wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW3-2
WEI Job No.: 790-05-01
Client: **TransSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 599.17 ft
North: 1770454.45 ft
East: 1021078.70 ft
Station: 3051+13.09
Offset: 23.79 RT

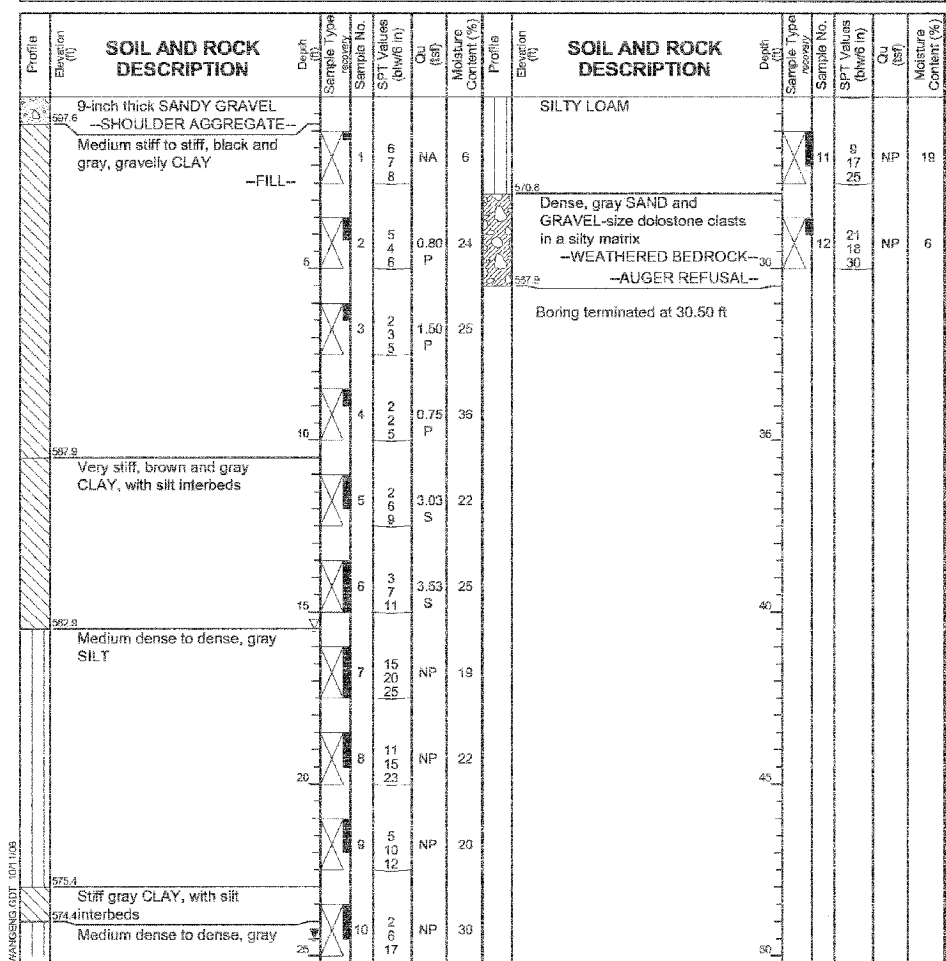


GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-21-2003	Complete Drilling	04-21-2003
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV
Driller	K&J	Logger	S. Patel
Checked by	N. Davis	Drilling Method	3.25 ID HSA; Boring backfilled upon completion
Drilling Method	3.25 ID HSA; Boring backfilled upon completion	While Drilling	16.30 ft
		At Completion of Drilling	NA
		Time After Drilling	NA
		Depth to Water	NA

Wang Engineering, INC.
Wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW3-3
WEI Job No.: 790-05-01
Client: **TransSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 598.39 ft
North: 1770381.06 ft
East: 1021082.24 ft
Station: 3050+39.62
Offset: 25.05 RT



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-18-2003	Complete Drilling	04-18-2003
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV
Driller	K&J	Logger	J. Kasnick
Checked by	N. Davis	Drilling Method	3.25 ID HSA; Boring backfilled upon completion
Drilling Method	3.25 ID HSA; Boring backfilled upon completion	While Drilling	15.50 ft
		At Completion of Drilling	24.50 ft
		Time After Drilling	NA
		Depth to Water	NA

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BORING LOGS I
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3047+20.51 TO STATION 3051+44.64
STRUCTURE NO. 099-W016

TranSystems
1051 PERIMETER DRIVE, SUITE 1025
SCHMIDGALL, IL 60173-5056
TEL (847) 625-9600
FAX (847) 625-9600

4/USDR# 8/DATE# 04/2002-0002-STRUC-UT-CIV-SHEETS/SLW/01/01

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COPY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	273
FED. HIGH. DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract # 62416

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW3-4
WEI Job No.: 790-05-01
Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 596.81 ft
North: 1770307.81 ft
East: 1021089.48 ft
Station: 3049+66.29
Offset: 30.07 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	CU (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	CU (tsf)	Moisture Content (%)
595.6	14-inch thick SANDY GRAVEL --SHOULDER AGGREGATE-- Stiff to very stiff, black, brown, and gray CLAY --FILL--	1	13 7 6	NP	7		597.1	Dense, gray SAND and GRAVEL-size dolostone clasts in a silty matrix --WEATHERED BEDROCK--	11	13 22 25	NP	3	
		2	5 5 4	1.00	23				12	11 22 50/2	NP	9	
		3	4 3 5	1.00	29								
		4	2 3 6	2.00	47								
		5	6 9 12	4.35	24								
		6	5 8 22	2.25	27								
586.3	Very stiff to hard, brown and gray CLAY, with silt interbeds	7	11 19 22	NP	19								
581.3	Medium dense to dense, gray SILT	8	3 3 13	NP	21								
575.3	Medium stiff, gray SILTY CLAY, with silt interbeds	9	3 5 8	0.74	28								
573.6	Dense, gray SILT	10	12 17 22	NP	16								
571.8													

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-18-2003	Complete Drilling	04-18-2003	While Drilling	▽	18.00 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	▽	DRY	
Driller	K&J	Logger	J. Kasnick	Checked by	N. Davis	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

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BORING LOG RW3-5
WEI Job No.: 790-05-01
Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 596.74 ft
North: 1770229.18 ft
East: 1021082.01 ft
Station: 3048+88.13
Offset: 20.87 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	CU (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	CU (tsf)	Moisture Content (%)
594.4	52-inch thick ASPHALT --PAVEMENT--						591.2	Medium dense, gray, gravelly, coarse LOAM	10	5 7 12	NP	11	
594.4	4-inch thick CONCRETE RUBBLE --BASE COURSE--						588.7	Very dense, gray GRAVELLY SANDY LOAM	11	12 25 60/3	NP	57	
594.4	8-inch thick CONCRETE --PAVEMENT--						586.2	Very dense, gravelly SILTY LOAM	12	11 8 27	NP	64	
594.4	12-inch thick CRUSHED STONE --BASE COURSE--						582.7	Very soft, gray CLAY	13	19 50/5	NP	17	
594.4	8-inch thick CONCRETE Stiff to hard, black, brown and gray CLAY --FILL--												
		1	5 5 5	4.62	25								
		2	3 3 5	1.75	38								
		3	4 4 6	2.80	21								
		4	3 7 10	3.44	18								
		5	6 17 28	NP	17								
		6	18 20 14	NP	19								
		7	5 11 17	NP	30								
		8	4 4 8	1.64	10								
		9	8 9 11	2.75	10								
587.2	Very stiff, brown and gray CLAY, with silt interbeds	10					582.2	Very dense, gray SAND and GRAVEL-size dolostone clasts in a silty matrix --WEATHERED BEDROCK--	11				
583.0	Medium dense to dense, gray SILT	15											
578.2		20											
578.2	Stiff to very stiff, gray, gravelly CLAY	25											

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-18-2003	Complete Drilling	04-18-2003	While Drilling	▽	18.00 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	▽	22.50 ft	
Driller	K&J	Logger	J. Kasnick	Checked by	N. Davis	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BORING LOGS II
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3047+20.51 TO STATION 3051+44.64
STRUCTURE NO. 099-W016

TranSystems
8551 PERIMETER DRIVE, SUITE 1025
SCHMIDGERS, IL 60173-5088
TEL: (847) 600-9800
FAX: (847) 600-9800

4:55:58 PM 3/18/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	274
SHEETS				

Contract # 62416

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW3-6
WEI Job No.: 790-05-01
Client: **TransSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 595.86 ft
North: 1770152.60 ft
East: 1021082.44 ft
Station: 3048+11.77
Offset: 20.44 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	CU (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	CU (tsf)	Moisture Content (%)
595.86	2-inch thick ASPHALT --PAVEMENT--	0					595.86	Very dense, gray, gravelly LOAM	10	10	NP	9	
595.86	4-inch thick CONCRETE RUBBLE --BASE COURSE--	1	4				595.86	--WEATHERED BEDROCK--	11	11	NP	6	
595.86	6-inch thick CONCRETE --PAVEMENT--	2	5				597.3	Boring terminated at 28.58 ft	30				
595.86	12-inch thick CRUSHED STONE --BASE COURSE--	3	6	1.50		21							
595.86	6-inch thick CONCRETE Stiff to very stiff, black and gray CLAY --FILL--	4	5	5	2.75	26							
595.86	Very stiff to hard, gray CLAY, with silt interbeds	5	7	5	2.75	23							
595.86		10	8	5	2.75	23							
595.86		15	10	5	4.51	22							
595.86		20	14	9	NP	11							
595.86	Medium dense to very dense, gray SILT	25	15	9	NP	11							
595.86		30	16	5	NP	19							
595.86		35	17	5	NP	19							
595.86		40	18	8	NP	22							
595.86		45	19	8	NP	22							
595.86	Stiff, gray, gravelly SANDY CLAY LOAM	50	20	5	1.72	18							
595.86		55	21	5	1.72	18							
595.86	Dense, gray SANDY GRAVEL	60	22	3	NP	5							
595.86		65	23	3	NP	5							

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-17-2003	Complete Drilling	04-17-2003	While Drilling	▽	20.50 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	▽	16.00 ft	
Driller	K&J	Logger	J. Kasnick	Checked by	N. Davis	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

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Consulting Geotechnical and Environmental Engineers
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1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW3-7
WEI Job No.: 790-05-01
Client: **TransSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 595.02 ft
North: 1770078.82 ft
East: 1021086.22 ft
Station: 3047+38.22
Offset: 24.17 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	CU (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	CU (tsf)	Moisture Content (%)
594.5	2-inch thick ASPHALT --PAVEMENT--	0					594.5	Very dense, gray, gravelly LOAM	10	10	NP	9	
594.5	4-inch thick CONCRETE RUBBLE --BASE COURSE--	1	1				594.5	--WEATHERED BEDROCK--	11	11	NP	6	
594.5	12-inch thick CONCRETE --PAVEMENT--	2	2				597.3	Boring terminated at 28.58 ft	30				
594.5	12-inch thick CRUSHED STONE --BASE COURSE--	3	3	4.02		27							
594.5	6-inch thick CONCRETE Hard, brown and gray CLAY with interbedded silt lenses	4	4	4.26		27							
594.5		5	5	4.16		26							
594.5		10	6	4	NP	16							
594.5	Medium dense to very dense, gray SILT to SILTY LOAM	15	7	NP	17								
594.5		20	8	NP	19								
594.5		25	9	3	NP	19							
594.5		30	10	4	NP	17							
594.5	Very stiff, gray SILTY CLAY	35	11	2.00		27							
594.5		40	12	5	NP	16							
594.5	--WEATHERED BEDROCK--	45	13	5	NP	16							
594.5	Boring terminated at 19.83 ft	50	14	5	NP	16							

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-17-2003	Complete Drilling	04-17-2003	While Drilling	▽	15.50 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV	At Completion of Drilling	▽	14.50 ft	
Driller	K&J	Logger	J. Kasnick	Checked by	N. Davis	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BORING LOGS III
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3047+20.51 TO STATION 3051+44.64
STRUCTURE NO. 099-W016

TranSystems
8051 PERIMETER DRIVE, SUITE 1025
SCHMIDT, IL 60173-5098
TEL: (847) 600-3000
FAX: (817) 605-9510

S:\Users\slc\Documents\0022\STRUCTURAL\sheets\blawall3.sht

Bench Mark: Square cut in center of 13' Headwall, 21' West of IL Route 59, North of Sunrise Drive. Elevation 598.12.

Existing Structure: Single Reinforced Concrete Box Culvert, 6' wide by 5 high by 85' long. To be removed and replaced with the road open to two (2) lanes of traffic at all times by utilizing staged construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 338	114R-1	WILL	355	275
FED. PROJ. DIST. NO.	ILLINOIS	FED. AID PROJECT		

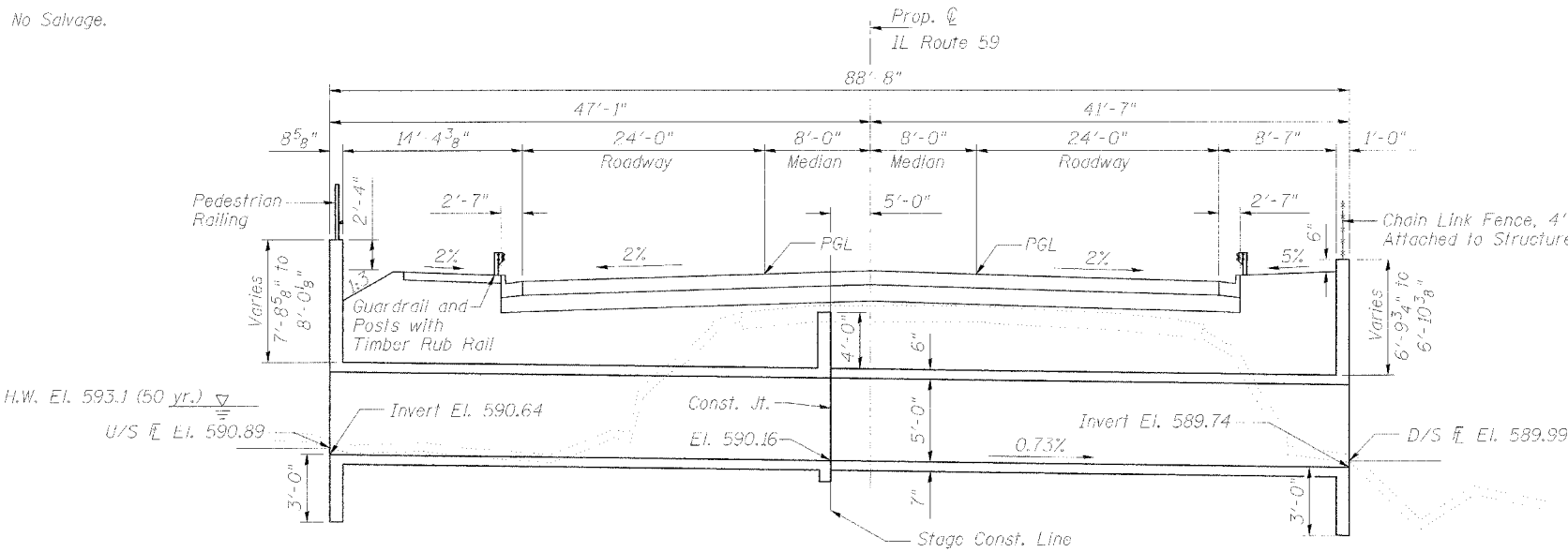
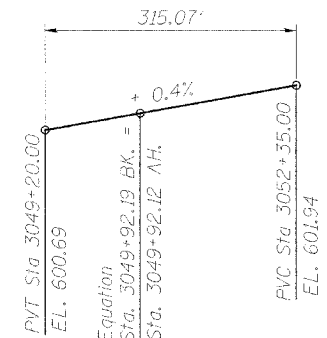
Contract # 62416

TOTAL BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment, Special	Cu. Yd.	23
Reinforcement Bars	Pound	12,990
Bar Splicers	Each	41
Pedestrian Railing	Foot	13
Concrete Box Culverts	Cu. Yd.	74.0
Geocomposite Wall Drain	Sq. Yd.	16
Pipe Underdrains for Structures 4"	Foot	29
Chain Link Fence, 4' Attached to Structure	Foot	14
Temporary Soil Retention System	Sq. Ft.	362
Box Culvert Removal	Foot	85

GENERAL NOTES

- Reinforcement Bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provision.
- Reinforcement Bars designated (E) shall be epoxy coated.
- A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the horizontally cantilevered wingwalls.
- All construction joints shall be bonded.
- For backfilling and embankment, see Standard Specifications.
- Exposed concrete edges shall have standard 3/4" chamfer unless otherwise noted.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.



LONGITUDINAL SECTION

(Looking North)

(Dimensions at right angle to CL Route 59, measured along CL Culvert)

INDEX OF SHEETS

- S3-1 GENERAL PLAN
- S3-2 CONSTRUCTION STAGING
- S3-3 CULVERT PLAN AND ELEVATION
- S3-4 CULVERT SECTIONS AND DETAILS
- S3-5 PEDESTRIAN RAILING
- S3-6 BAR SPLICER ASSEMBLY DETAILS
- S3-7 BORING LOGS

PROFILE GRADE

(Along PGI.)

DESIGN SPECIFICATIONS

AASHTO 2002 "Standard Specifications for Highway Bridges".

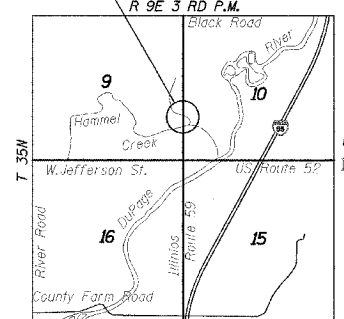
LOADING HS20-44

Allow 50 lb/sq ft for future wearing surface.

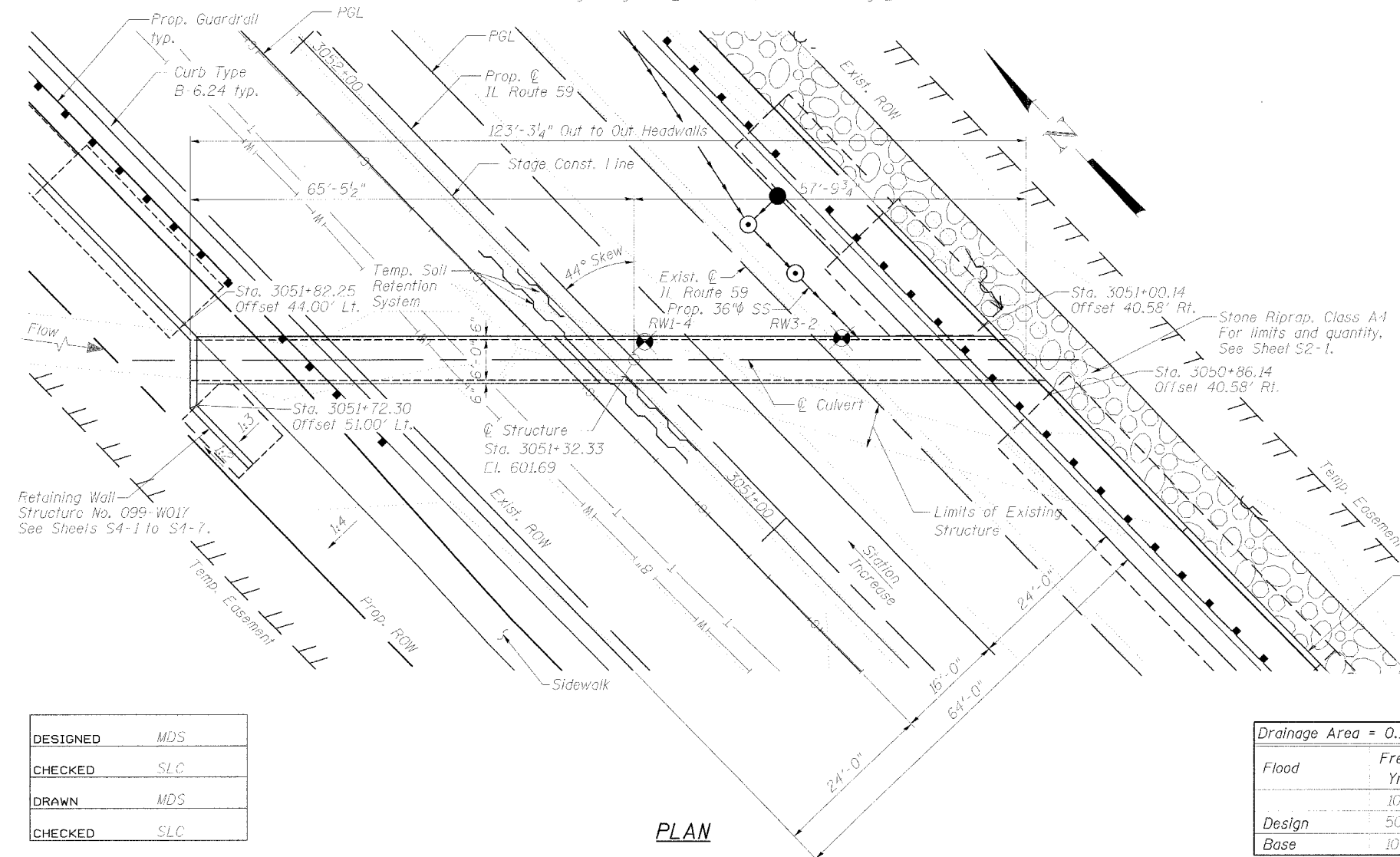
DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

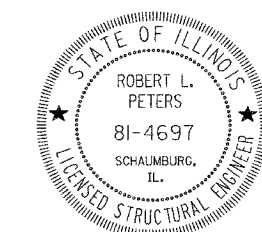
Proposed Structure



LOCATION SKETCH



PLAN



ROBERT L. PETERS, P.E., S.E.
NO. 081-04697
EXP. DATE 11/30/08

WATERWAY INFORMATION

Drainage Area = 0.166 sq. mi.		Low Grade Elev. = 601.00		Sta. 3051+05			
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural H.W.E.	Head-Ft. Exist. Prop.	Headwater El. Exist. Prop.	
Design	10	69.4	13.0	13.0	592.80	1.00 1.00	593.80 593.80
	50	95.9	14.8	14.8	593.10	1.45 1.45	594.55 594.55
Base	100	106.6	15.7	15.7	593.25	1.55 1.55	594.70 594.70

GENERAL PLAN

IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33

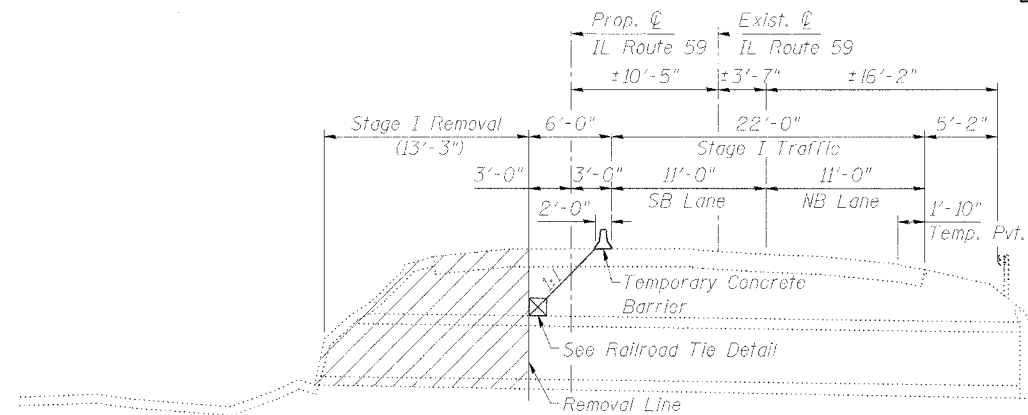


3251 PFLUMPTER DRIVE, SUITE 1025
SCHAMBURG, IL 60173-5088
TEL (847) 605-9600
FAX (847) 605-9610

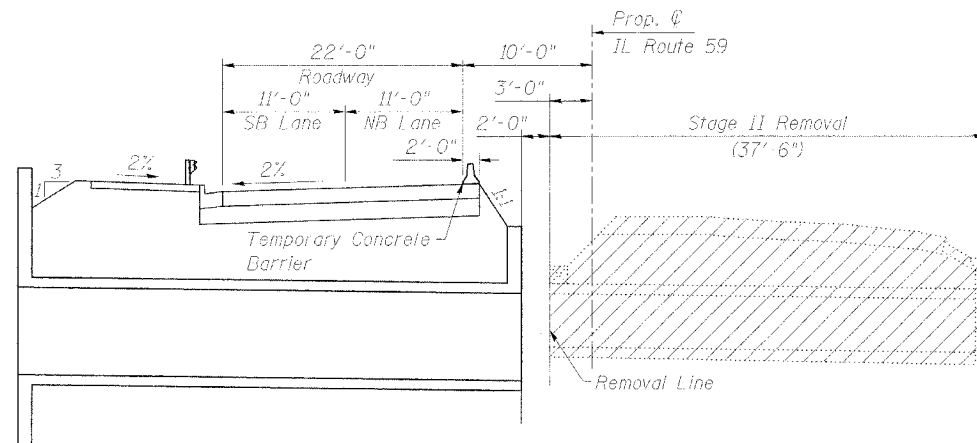
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	276
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

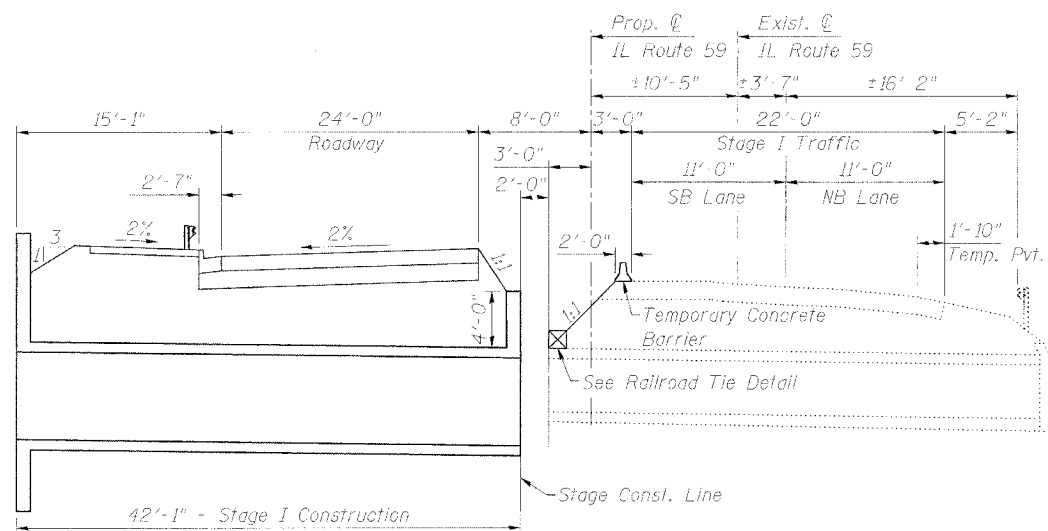
Contract # 62416



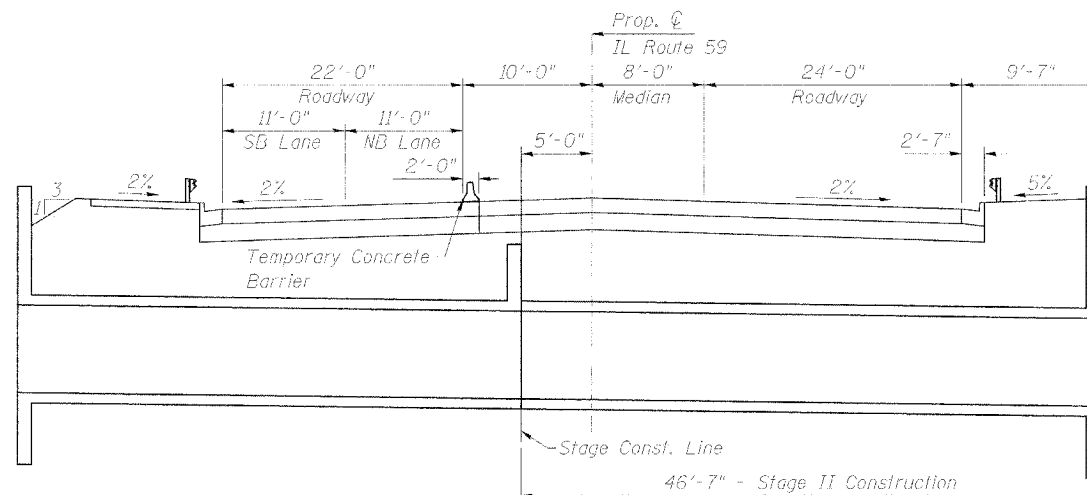
STAGE I REMOVAL
(Looking North)



STAGE II REMOVAL
(Looking North)



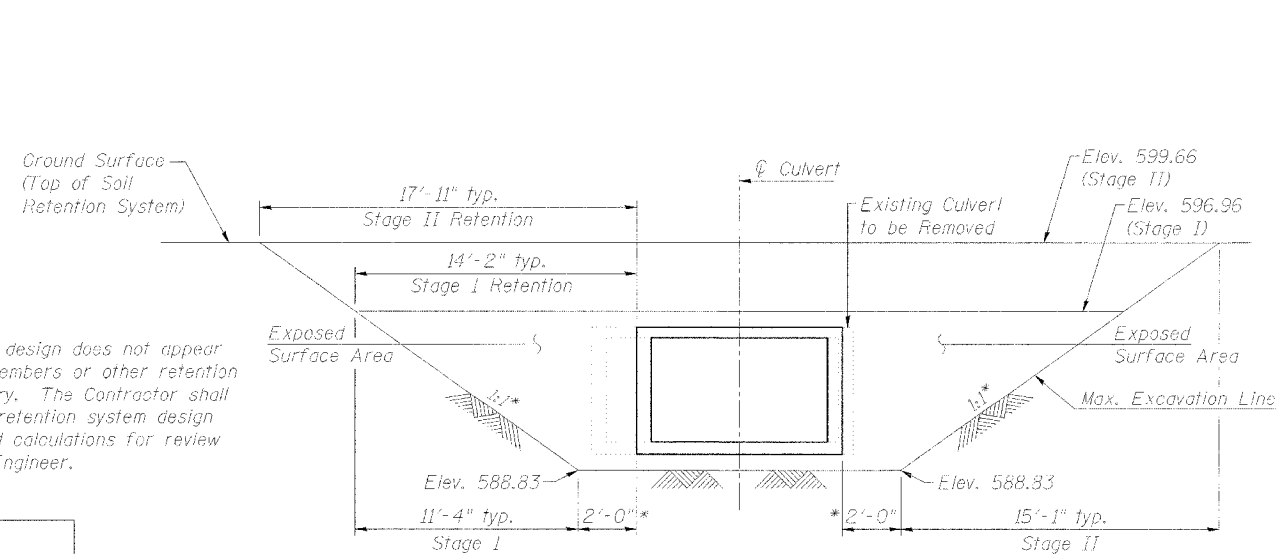
STAGE I CONSTRUCTION
(Looking North)



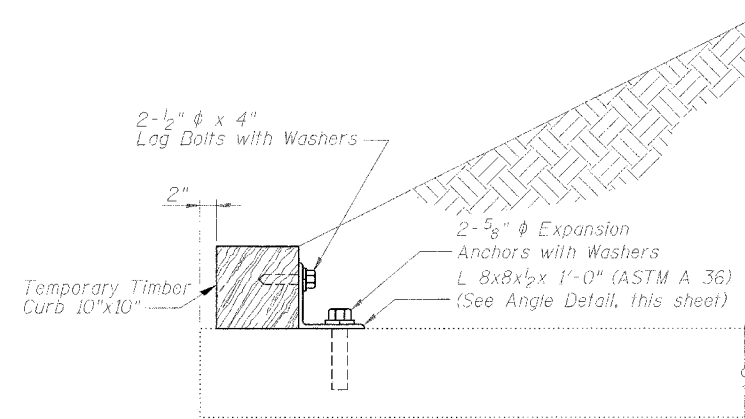
STAGE II CONSTRUCTION
(Looking North)

LEGEND

Removal of Existing Culvert and Roadway

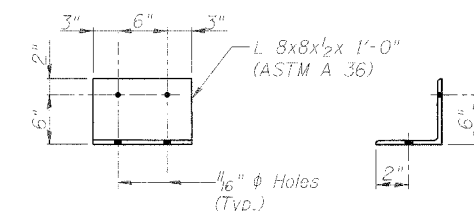


TEMPORARY SOIL RETENTION SYSTEM
(Looking East)
Slope and Distances Shown Along Skew at Stage Construction Line



RAILROAD TIE DETAIL

The L 8x8x1/2 x 1'-0" and Temporary Timber shall not be removed until Stage I Construction has been completed.
Connect one (1) L 8x8x1/2 x 1'-0" to the top of existing culvert with two (2) expansion anchors placed in two (2) holes. Angles to be positioned near each end of all timber curbs, but the outside lag bolt shall be at least 6" from end of timber. Cost included with Concrete Box Culverts.



ANGLE DETAIL

NOTE:
A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

DESIGNED	MDS
CHECKED	SLC
DRAWN	MDS
CHECKED	SLC

CONSTRUCTION STAGING

IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33

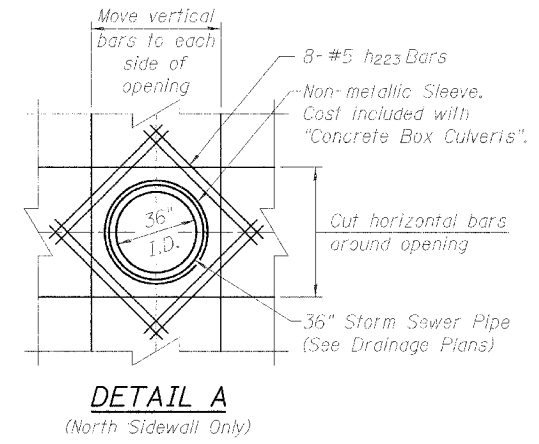
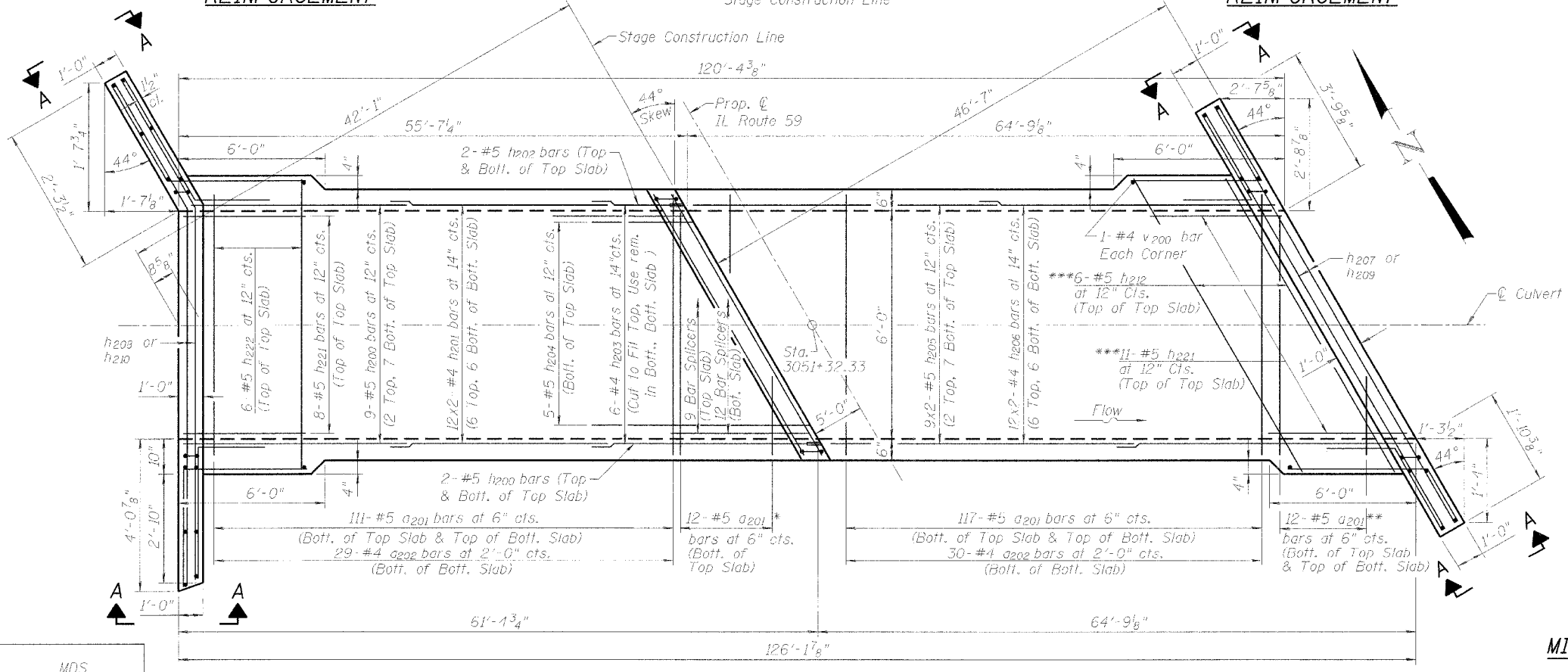
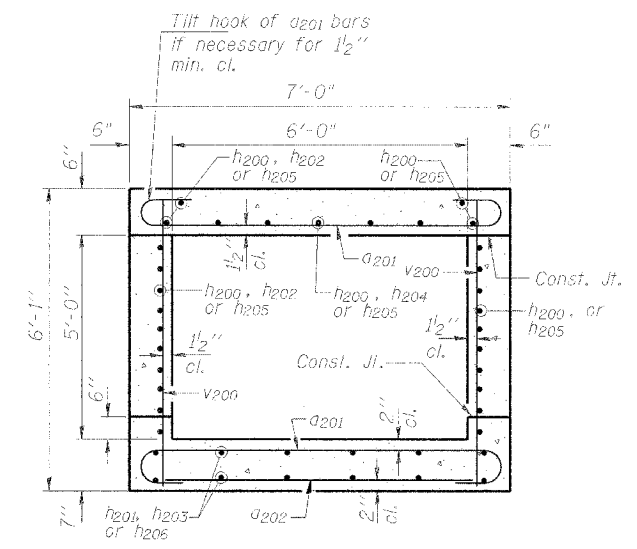
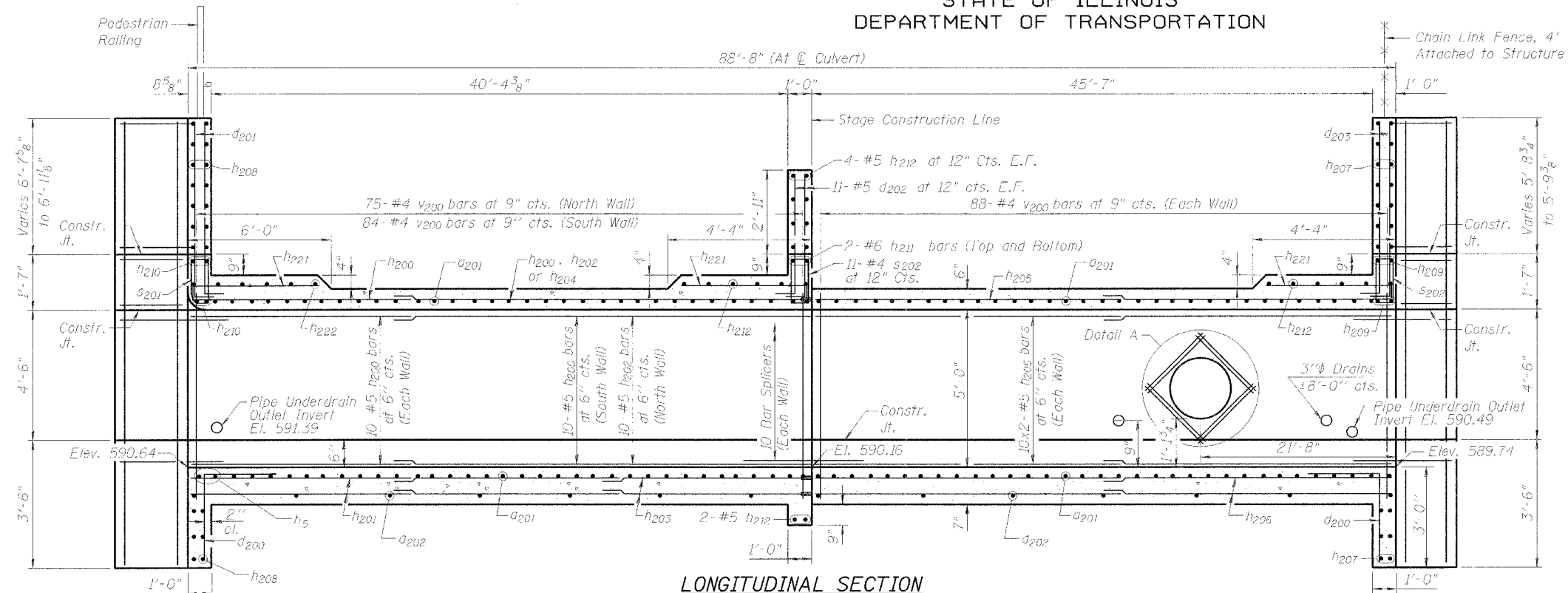


1051 PERIMETER DRIVE, SUITE 1025
SCHAMBERG, IL 60173-5058
TEL: (815) 605-9600
FAX: (815) 605-9610

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	277
FED. ROAD DIST. NO. 7			ILLINOIS	FED. AID PROJECT-

SHEET NO. 53-3
7 SHEETS
Contract # 62416



MINIMUM BAR LAP
(Barrel)

#4 bar	= 1'-4"
#5 bar	= 1'-8"
#6 bar	= 2'-0"
#7 bar	= 2'-9"
#8 bar	= 3'-8"

- Notes:
1. Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
 2. For Section A-A, see Sheet S3-4.

CULVERT PLAN AND ELEVATION
IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33

DESIGNED	MDS
CHECKED	SLC
DRAWN	MDS
CHECKED	SLC

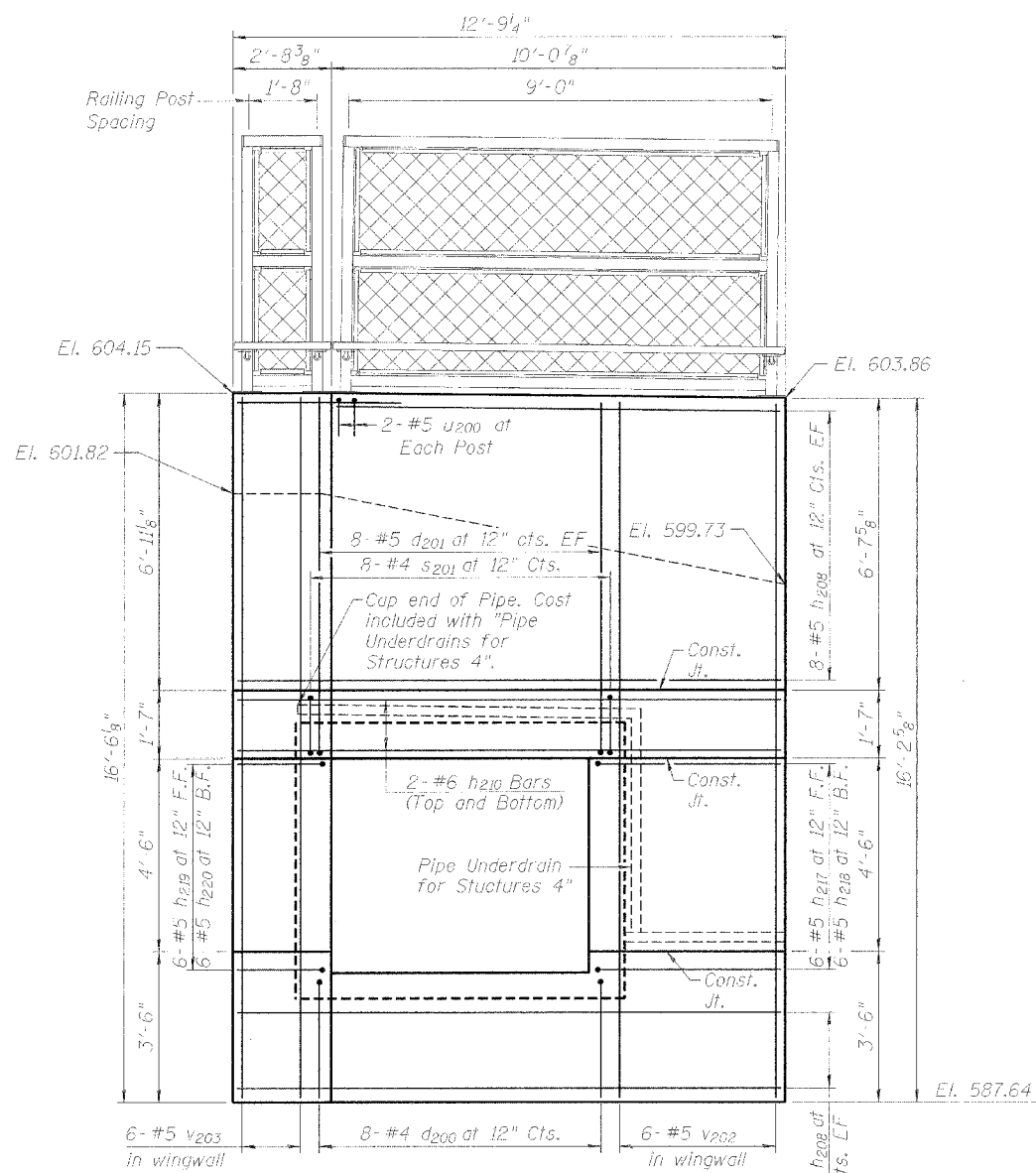
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	JOB NO.	SHEET NO.
F.A.P. 338	114R-1	WILL	355	278
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

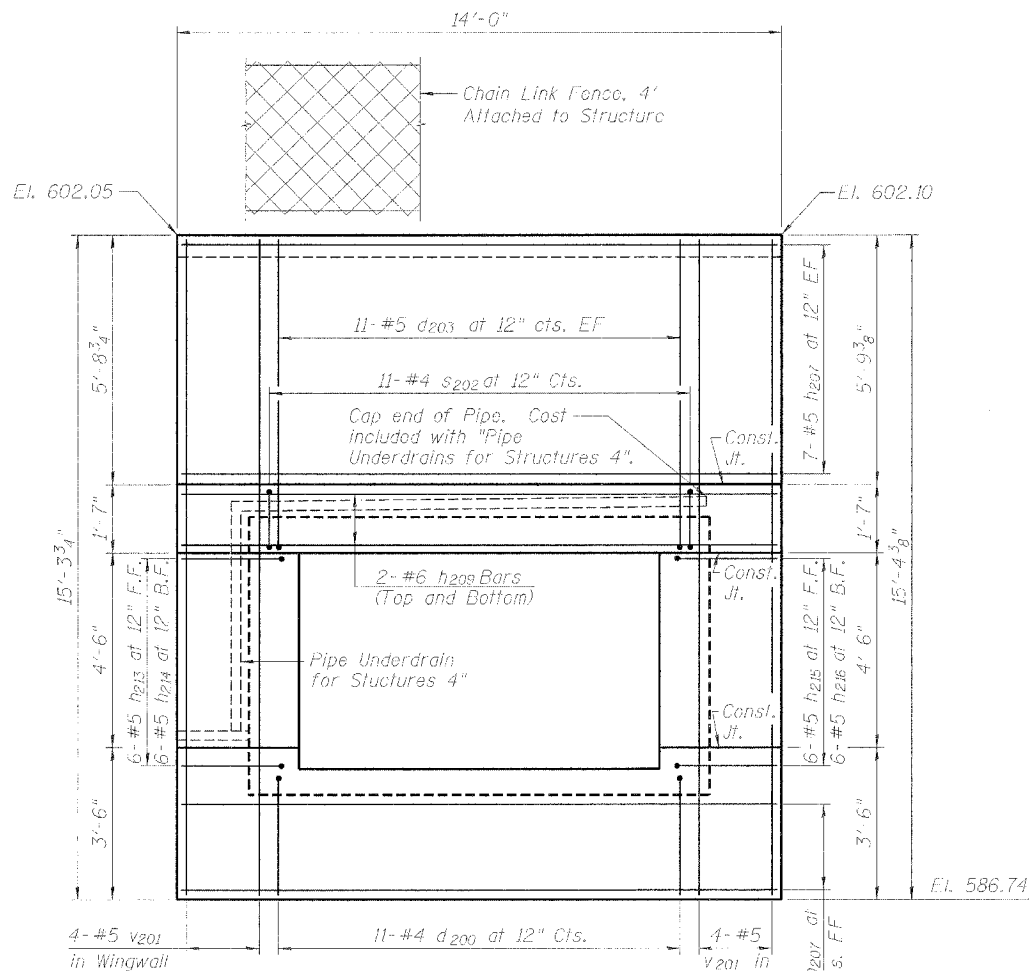
Contract # 62416

BILL OF MATERIAL

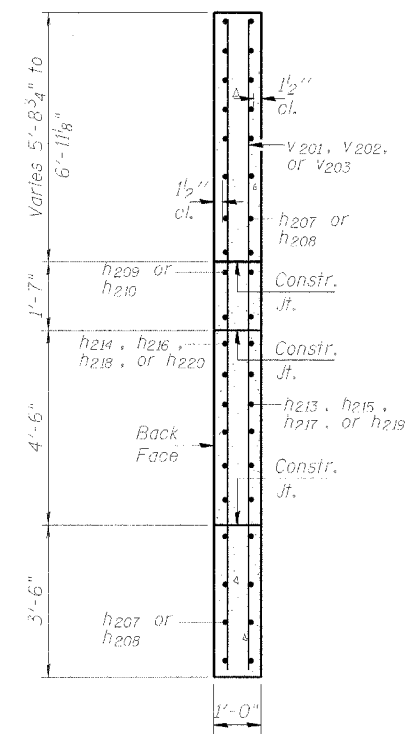
Bar	No.	Size	Length	Shape
a201	492	#5	7'-10"	C
a202	59	#4	6'-3"	—
d200	19	#4	4'-5"	L
d201	16	#5	8'-10"	L
d202	22	#5	5'-0"	L
d203	22	#5	7'-10"	L
h200	41	#5	31'-8"	—
h201	24	#1	25'-0"	—
h202	12	#5	24'-11"	—
h203	6	#4	21'-11"	—
h204	5	#5	30'-4"	—
h205	58	#5	33'-2"	—
h206	24	#4	33'-0"	—
h207	20	#5	13'-8"	—
h208	22	#5	12'-0"	—
h209	4	#6	13'-8"	—
h210	4	#6	12'-0"	—
h211	4	#6	9'-5"	—
h212	16	#5	9'-5"	—
h213	6	#5	6'-11"	—
h214	6	#5	5'-3"	—
h215	6	#5	7'-3"	—
h216	6	#5	5'-7"	—
h217	6	#5	8'-7"	—
h218	6	#5	6'-5"	—
h219	6	#5	7'-4"	—
h220	6	#5	5'-8"	—
h221	30	#5	6'-1"	—
h222	6	#5	7'-4"	—
h223	8	#5	5'-0"	—
h224	6	#5	10'-1"	—
s201	8	#4	4'-9"	D
s202	22	#1	4'-11"	D
u200	8	#5	5'-0"	U
v200	339	#4	5'-9"	—
v201	8	#5	15'-0"	—
v202	6	#5	15'-10"	—
v203	6	#5	16'-1"	—
Concrete Box Culverts			Cu. Yd.	74.0
Reinforcement Bars			Found	12,990



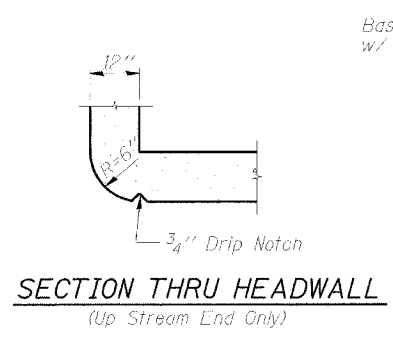
WEST END VIEW
(Looking Southeast)



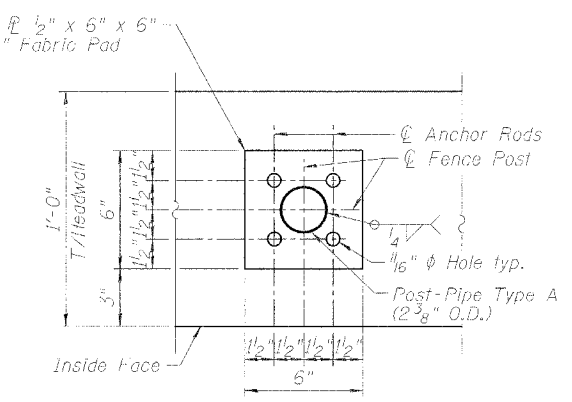
EAST END VIEW
(Looking West)



SECTION A-A

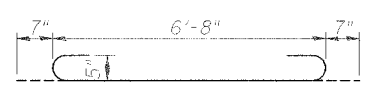


SECTION THRU HEADWALL
(Up Stream End Only)

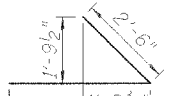


BASE PLATE DETAIL

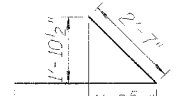
Drill and Grout 5/8" diameter Anchor Rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications. Cost included with "Chain Link Fence, 4' Attached to Structure". For additional Chain Link Fence Details see Std. 664001.



BAR a201



BAR h215



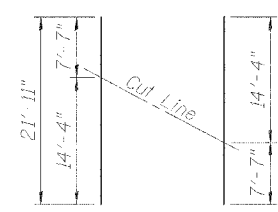
BAR h216

BARS d200 THRU d203 and h217, h218 and h221

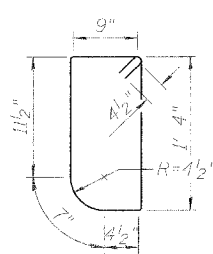
Bar	A	B
d200	1'-9"	2'-8"
d201	10"	8'-0"
d202	10"	4'-2"
d203	10"	7'-0"
h217	3'-2"	5'-5"
h218	3'-5"	3'-0"
h221	10"	5'-6"

BARS h208, h210, h213, h214, h219 and h220

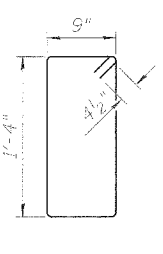
Bar	A	B	C	D
h208	9'-10"	1'-7"	1'-6"	2'-2"
h210	9'-10"	1'-7"	1'-6"	2'-2"
h213	6'-0"	7 3/4"	8"	11"
h214	3'-0"	1'-7"	1'-7 1/2"	2'-3"
h219	6'-0"	11"	11 1/2"	1'-4"
h220	3'-0"	1'-10 1/4"	1'-11"	2'-8"



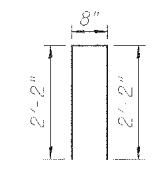
BAR h203



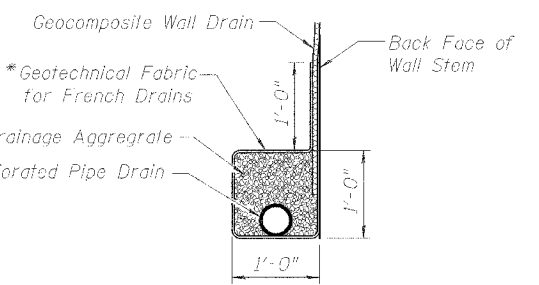
BAR s201



BAR s202



BAR u200



PIPE UNDERDRAIN DETAIL

*Included in the cost of "Pipe Underdrains for Structures"

CULVERT SECTIONS AND DETAILS

IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33



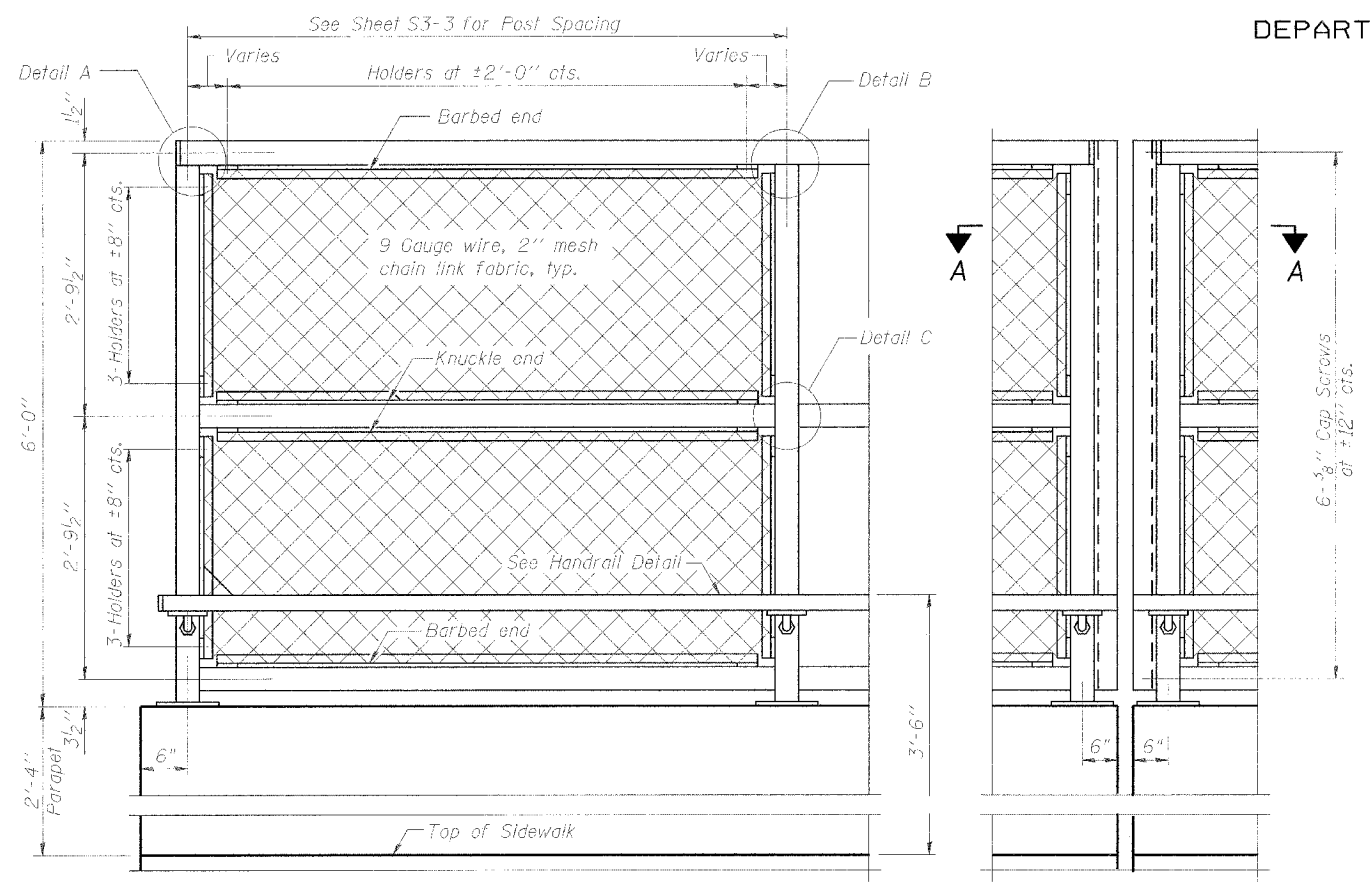
1051 PERIMETER DRIVE, SUITE 1025
SCHAMBERG, IL 60173-5058
TEL (847) 620-3900
FAX (847) 620-9630

© 2008 TranSystems
 01/20/08 10:02:00 2008 structural sheets\cdd\chansh

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

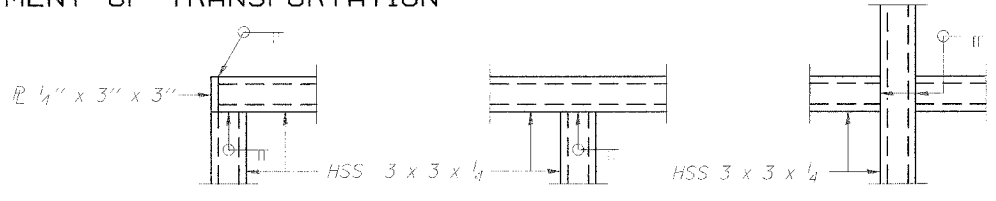
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. S3-5 7 SHEETS
F.A.P. 338	114R-1	WILL	355	279	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 62416

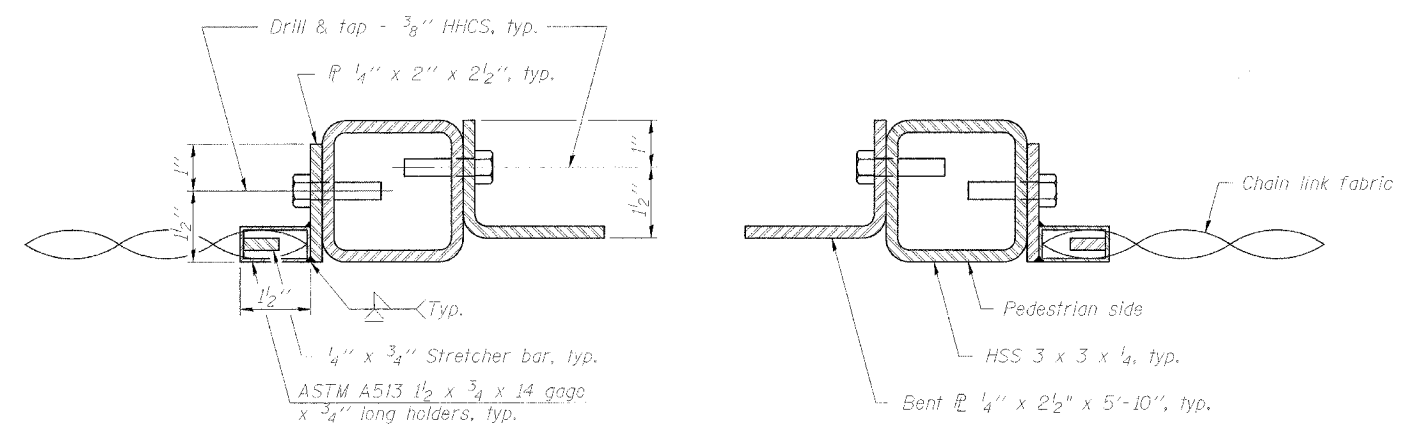


ELEVATION
(Inside Face)

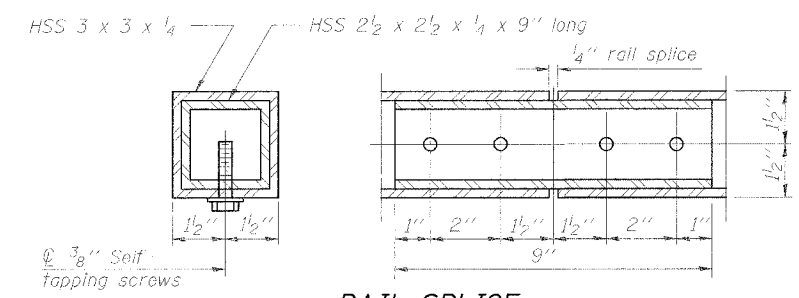
ELEVATION
(At Expansion Joint)



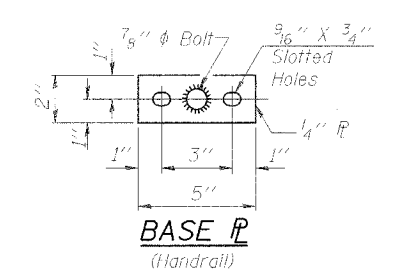
DETAIL A **DETAIL B** **DETAIL C**



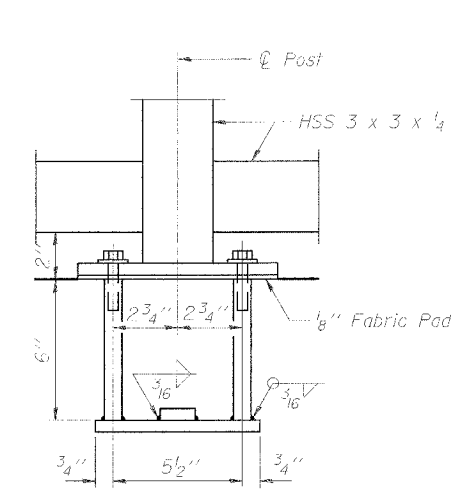
SECTION A-A



RAIL SPLICE

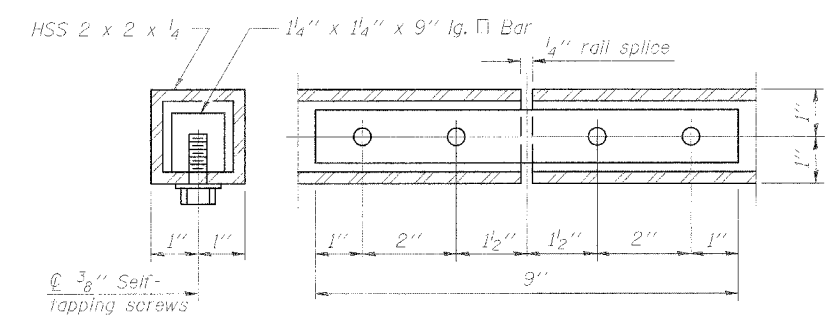
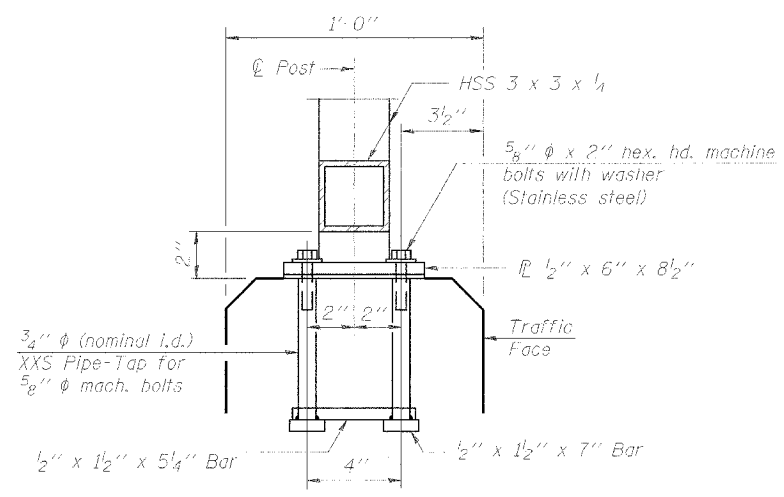


BASE PLATE
(Handrail)

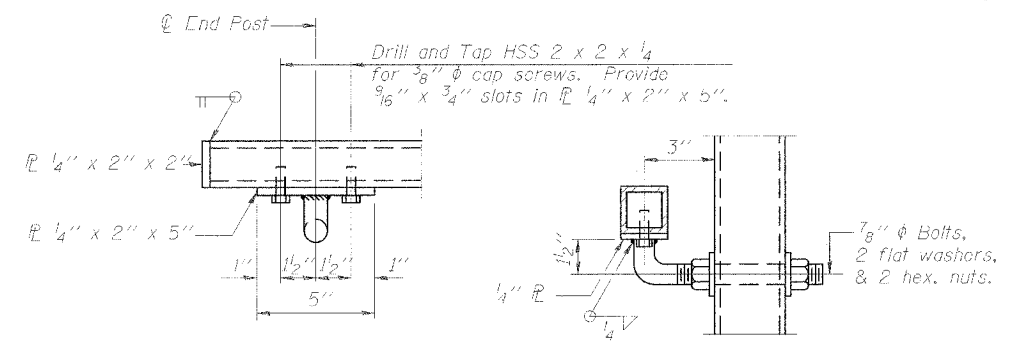


ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



HANDRAIL SPLICE



HANDRAIL DETAIL

All posts, railing, splices, anchor devices, and bent plates shall be powder coated and the color shall be black.

All galvanized exterior surfaces shall be coated with a urethane or triglycidyl isocyanurate (TGIC) polyester powder to a dry film thickness of 2.0 mils. Prior to application, the surface shall be mechanically etched by brush blasting (Ref. SSPC-SP7) and the zinc coated substrate preheated to 450 degrees F for a minimum one (1) hour. The coating shall be electrostatically applied and cured by elevating the zinc-coated substrate temperature to a minimum of 400 degrees F.

Prior to shipping, the poles and posts shall be wrapped in ultraviolet-inhibiting plastic foam or rubberized foam.

The chain link fabric shall conform to the requirements of Article 1006.27(a)(1) of the Standard Specifications, and shall be vinyl coated to match the black powder coating on all posts, railing, splices, anchor devices and bent plates.

BILL OF MATERIAL

Item	Unit	Quantity
Pedestrian Railing	Foot	13

PEDESTRIAN RAILING

IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33

DESIGNED	MDS
CHECKED	SLC
DRAWN	MDS
CHECKED	SLC

R-28

11-1-06 (10'-0" Maximum Post Spacing)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	280
FED. AID PROJ. NO.	ILLINOIS	FED. AID PROJECT		

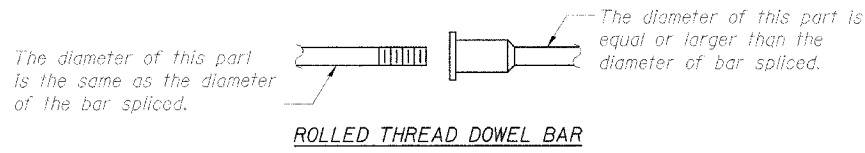
Contract # 62416

NOTES

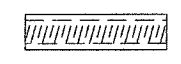
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_t$
(Tension in kips)
 - ② Minimum *Pull-out Strength = $0.66 \times f_y \times A_t$
(Tension in kips)
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

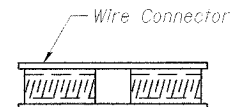
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	11.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



ROLLED THREAD DOWEL BAR



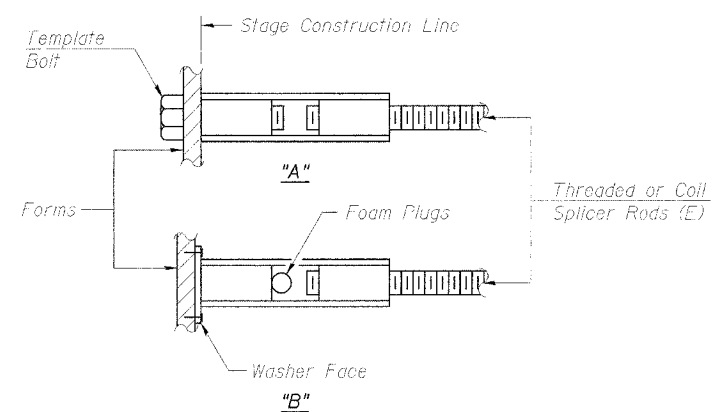
** ONE PIECE



WELDED SECTIONS

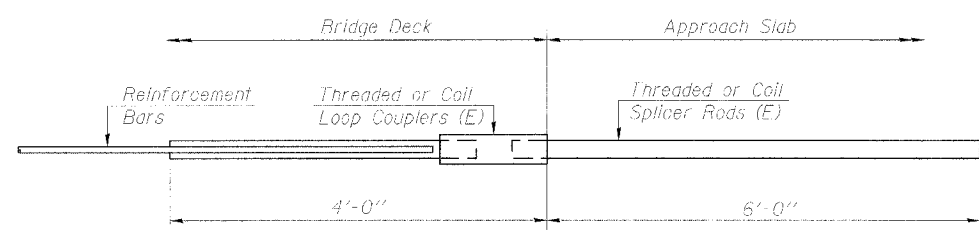
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



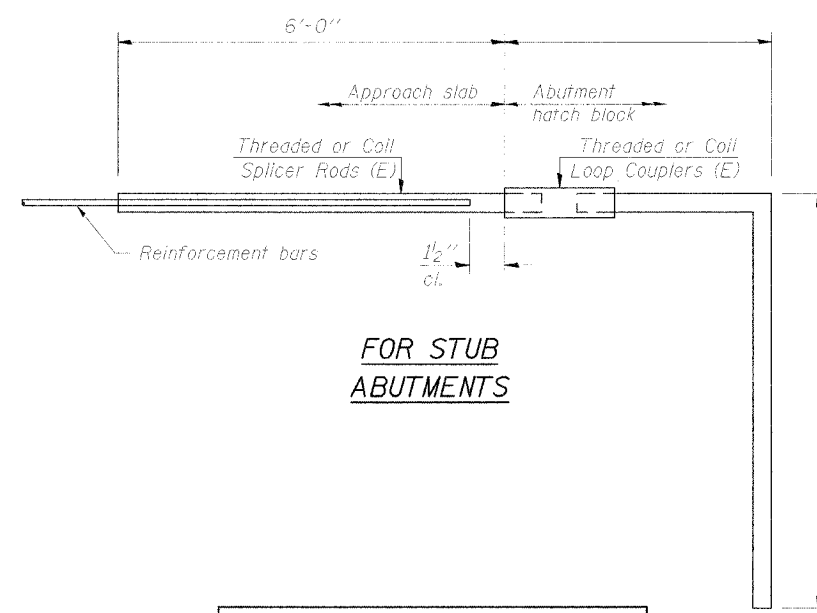
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



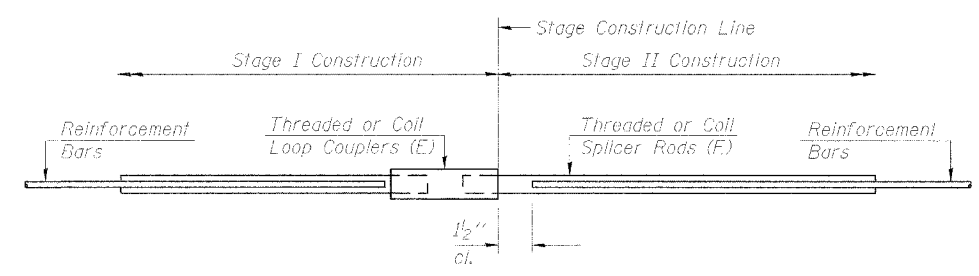
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



STANDARD

Bar Size	No. Assemblies Required	Location
#5	9	Top Slab
#5	20	Sidewalls
#4	12	Bottom Slab

BAR SPLICER ASSEMBLY DETAILS

IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33



1051 PERIMETER DRIVE, SUITE 1025
SCHAMBURG, IL 60173 5058
TEL (647) 605-9600
FAX (647) 605-9610

DESIGNED	MDS
CHECKED	SLC
DRAWN	MDS
CHECKED	SLC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	281
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract # 62416

BORING LOG RW1-4 Page 1 of 1

Wang Engineering, INC.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

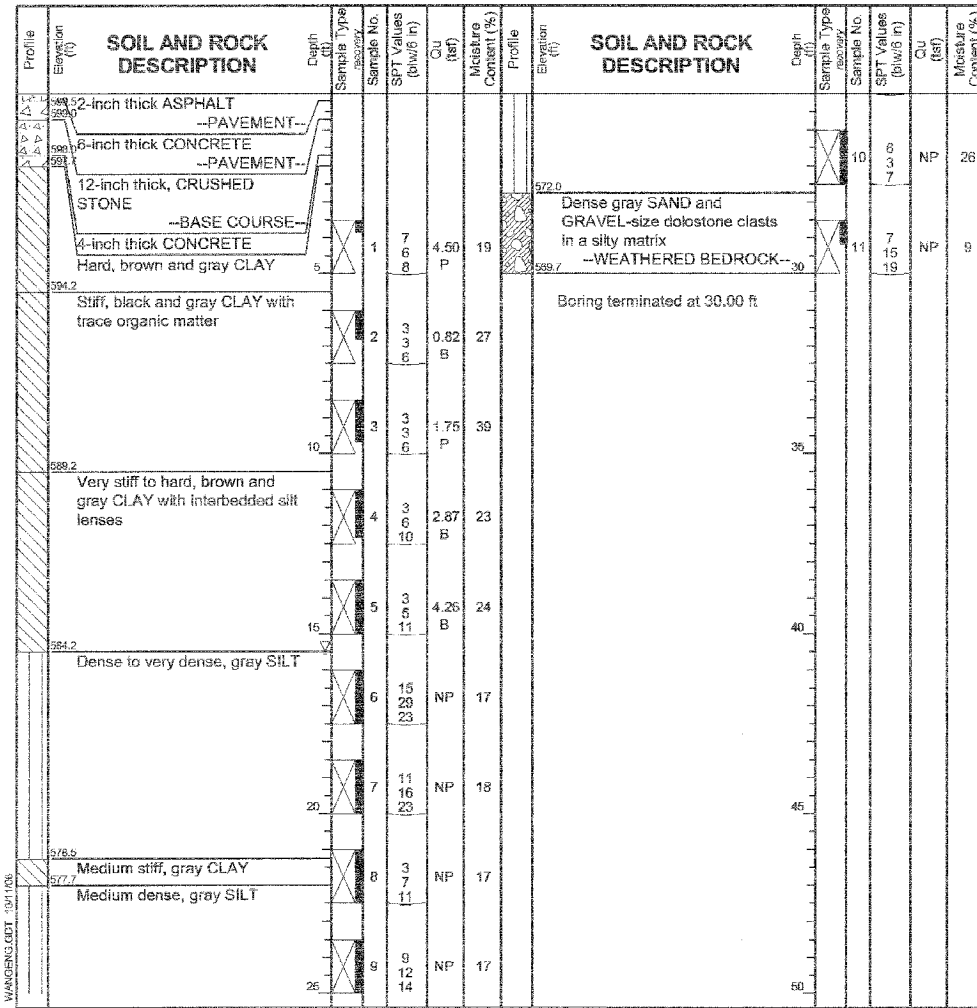
WEI Job No.: 790-05-01

Client: **TranSystems Corporation**

Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**

Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 599.74 ft
North: 1770473.56 ft
East: 1021056.81 ft
Station: 3051+32.88
Offset: 2.51 RT



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-16-2003	Complete Drilling	04-16-2003
Drilling Contractor	Patrick Drilling	Drill Rig	CME-55 TMR
Driller	K&J	Logger	A. Taylor
Checked by	E. Datz	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion		
While Drilling	15.50 ft	At Completion of Drilling	DRY
Depth to Water	NA	The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

BORING LOG RW3-2 Page 1 of 1

Wang Engineering, INC.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

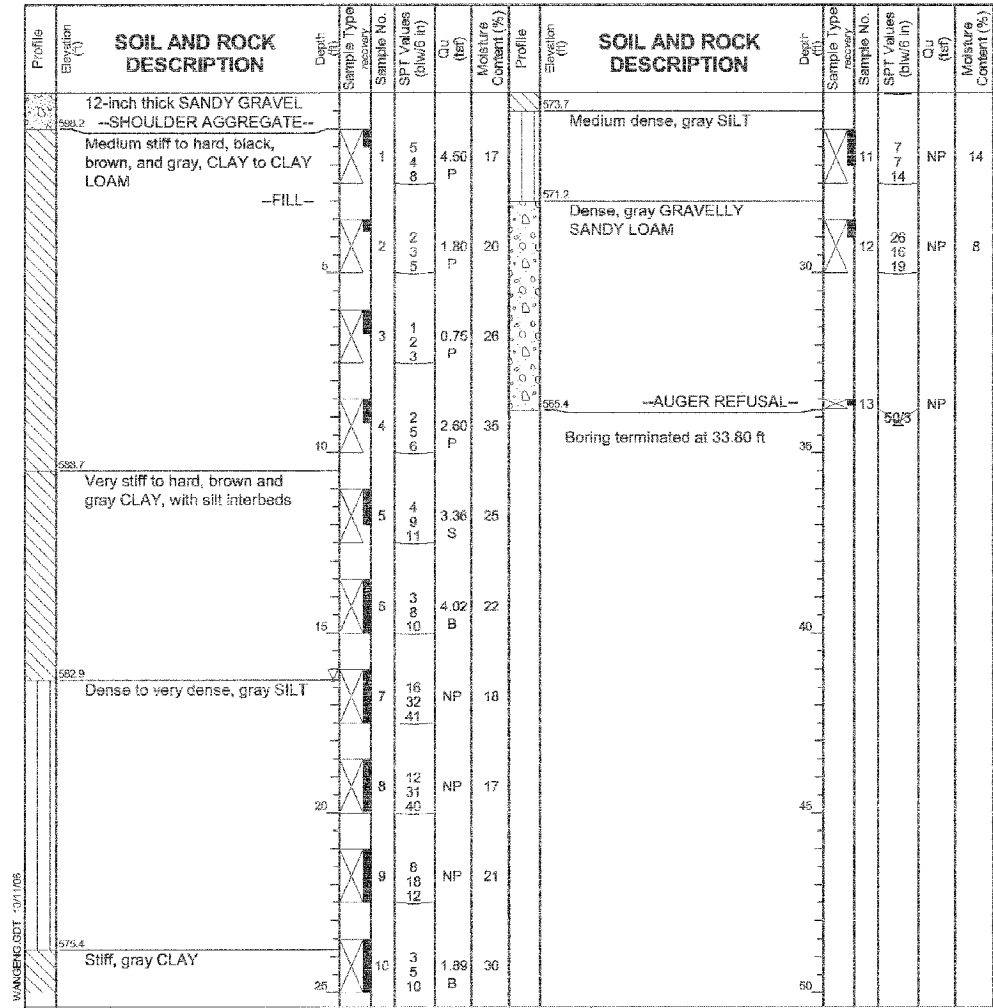
WEI Job No.: 790-05-01

Client: **TranSystems Corporation**

Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**

Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 599.17 ft
North: 1770454.45 ft
East: 1021078.70 ft
Station: 3051+13.09
Offset: 23.79 RT



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-21-2003	Complete Drilling	04-21-2003
Drilling Contractor	Patrick Drilling	Drill Rig	CME-75 ATV
Driller	K&J	Logger	S. Patel
Checked by	N. Davis	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion		
While Drilling	16.30 ft	At Completion of Drilling	NA
Depth to Water	NA	The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

DESIGNED	MDS
CHECKED	SLC
DRAWN	MDS
CHECKED	SLC

BORING LOGS

IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33

1051 PERIMETER DRIVE, SUITE 1025
SCHAMBERG, IL 60173-5050
TEL (847) 605-9600
FAX (847) 605-9610

PLSCH# 80418
 DATE# 04/16/03
 TIME# 10:11:00
 FILE# C:\c02\0002\STRUCTURAL\sheets\bl011ch.dwg

Benchmark:
Square cut in center of 13' Headwall, 21' West of IL Route 59
North of Sunrise Drive, Elevation 598.12

Existing Structure:
None.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 338	114R-1	WILL	355	282
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		7 SHEETS

Contract # 62416

TOTAL BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment, Special	Cu. Yd.	252
Stone Riprap, Class A4	Sq. Yd.	20
Filter Fabric	Sq. Yd.	25
Structure Excavation	Cu. Yd.	783
Concrete Structures	Cu. Yd.	203.2
Reinforcement Bars, Epoxy Coated	Pound	29,180
Pedestrian Railing	Foot	186
Geocomposite Wall Drain	Sq. Yd.	172
Pipe Underdrains for Structures 4"	Foot	192

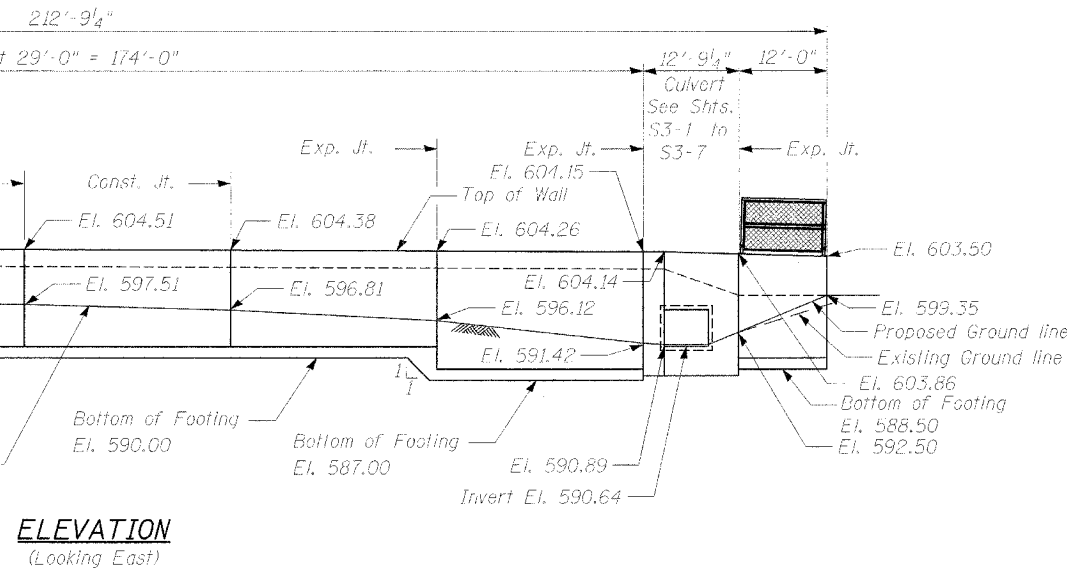
GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.
- Reinforcement bars designated (F) shall be epoxy coated.
- All construction joints shall be bonded.
- Exposed concrete edges shall have a standard 3/4" chamfer unless otherwise noted. Chamfer on vertical edges shall be continued a minimum of 1 foot below the finished ground line.
- Station and offsets are measured from the Proposed Centerline of IL Route 59 to the back face at the top of the retaining wall.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Minimum Bar Laps shall be:

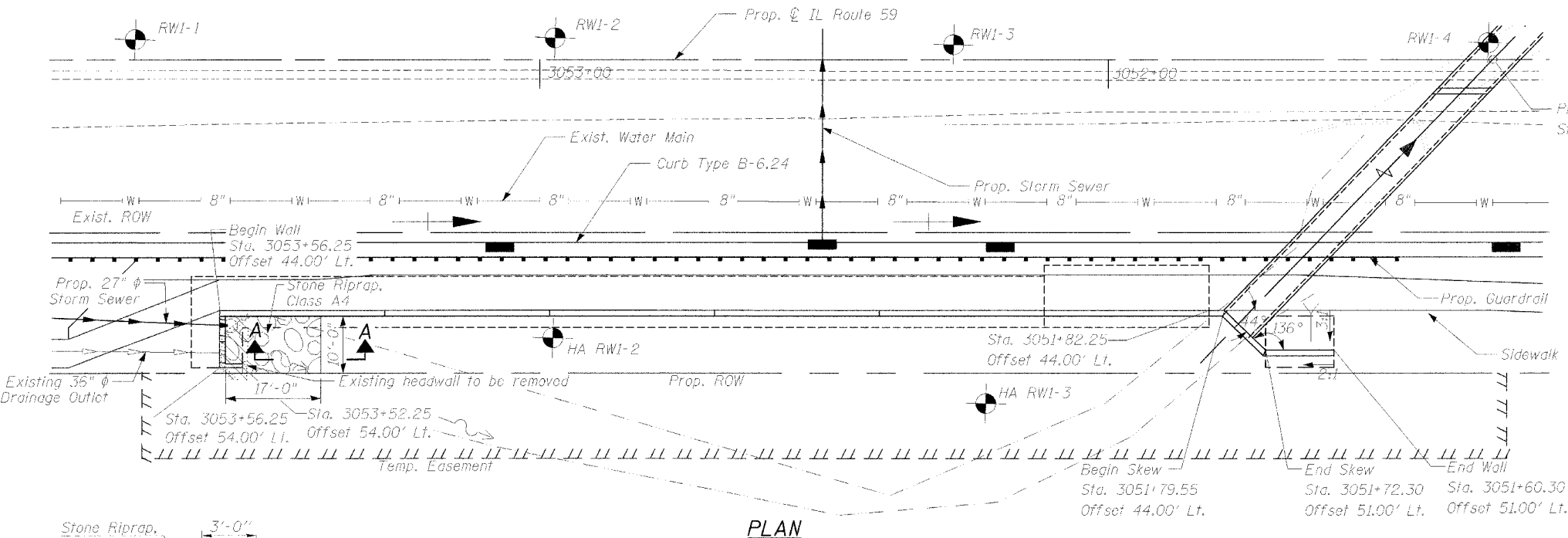
Bar	Min. Lap
#5	2'-2"
#6	2'-7"

INDEX OF SHEETS

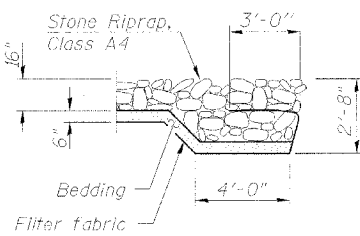
- S4-1 GENERAL PLAN
- S4-2 PLAN AND ELEVATION
- S4-3 RETAINING WALL DETAILS
- S4-4 PEDESTRIAN RAILING
- S4-5 BORING LOGS I
- S4-6 BORING LOGS II
- S4-7 BORING LOGS III



ELEVATION
(Looking East)

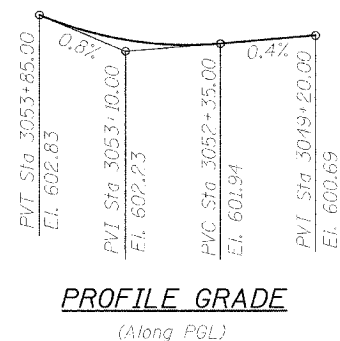


PLAN



SECTION A-A

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC



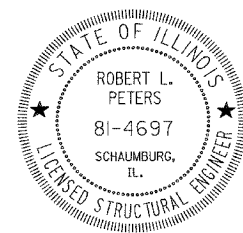
PROFILE GRADE
(Along PGL)

LEGEND:

- Soil Boring Location
- Riprap

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert L. Peters
ENGINEER OF BRIDGES AND STRUCTURES

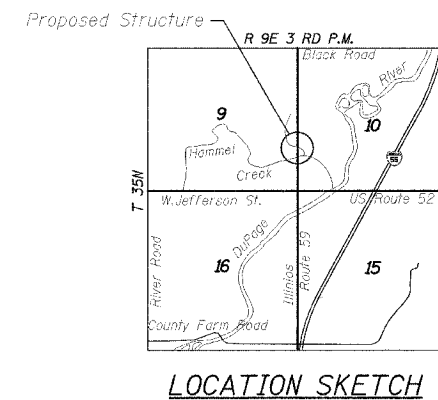


DESIGN SPECIFICATIONS

AASHTO 2002 "Standard Specifications for Highway Bridges"

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)



LOCATION SKETCH

GENERAL PLAN

RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+60.30 TO STATION 3053+56.25
STRUCTURE NO. 099-W017



INSI PERMETER DRAW. SUITE 102A
SCHAMBERG, IL 60173-3038
TEL (847) 605-9600
FAX (847) 605-9630

#LSERS: 6/01/18 6:10:48 PM G:\proj\0002\STRUCT\civ\sheet\slc\dwg\wall.rvt

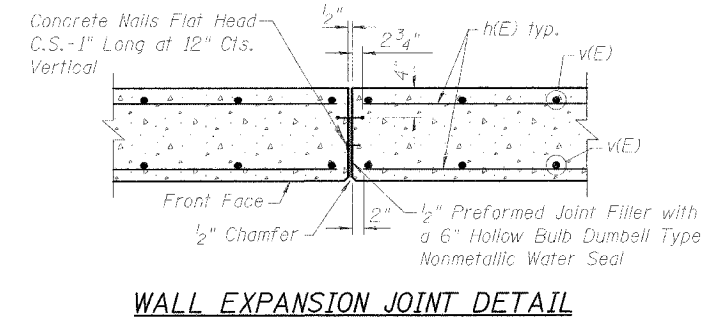
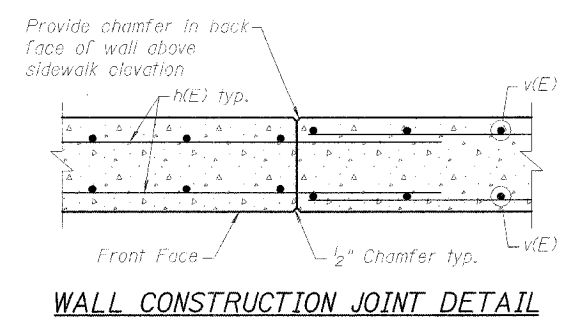
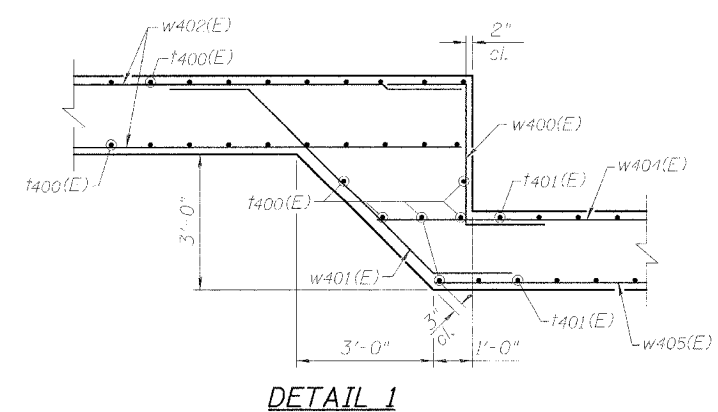
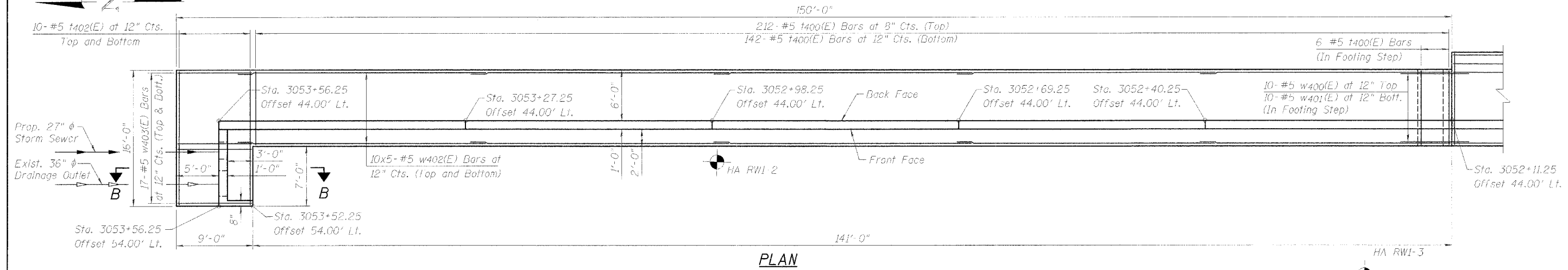
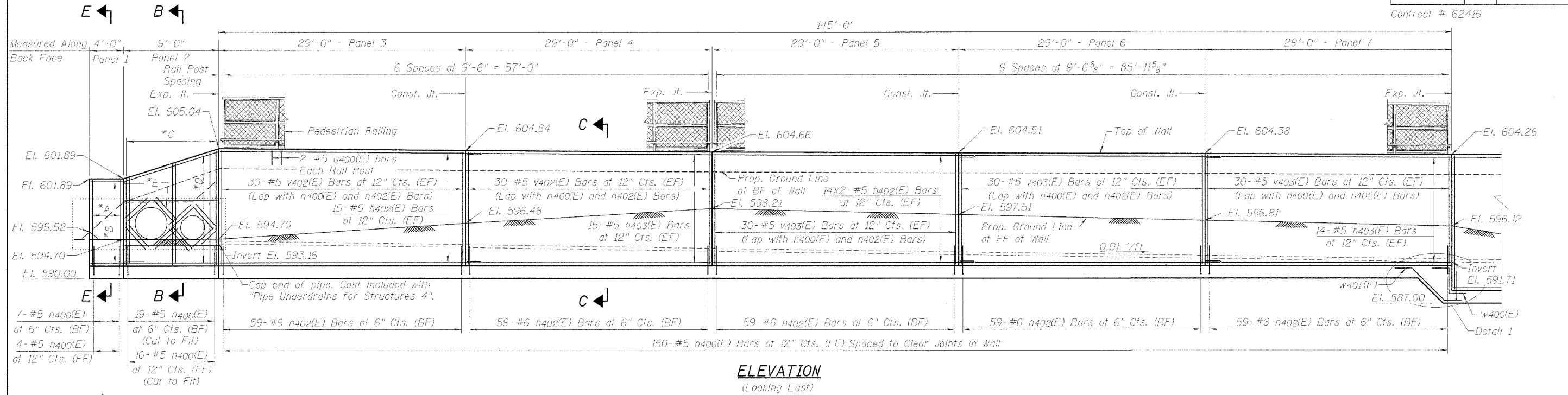
1/18/08

*Panel 1 - A: 4-#5 v400(E) Bars at 12" Cts. (LF)
 B: 11-#5 h400(E) Bars at 12" Cts. (EF)
 *Panel 2 - C: 10-#5 v401(E) Bars (EF) (Cut bars to fit around Pipes)
 D: 15-#5 h401(E) Bars (EF, Fan to Fit) (Cut bars to fit around Pipes)
 E: 2-#5 h405(E) Bars Around Each Pipe (EF), 32 total

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEETS
338	114R-1	WILL	355	283
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

Contract # 62416



LEGEND

Soil Boring Location

- Notes:
- For Sections B-B, C-C and E-E, see Sheet S4-3.
 - Bars Indicated thus 14x2-#5 etc. indicates 14 lines of bars with 2 lengths per line.

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

PLAN AND ELEVATION
 RETAINING WALL ALONG IL ROUTE 59
 F.A.P. ROUTE 338 SECTION 114R-1
 WILL COUNTY
 STATION 3051+60.30 TO STATION 3053+56.25
 STRUCTURE NO. 099-W017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

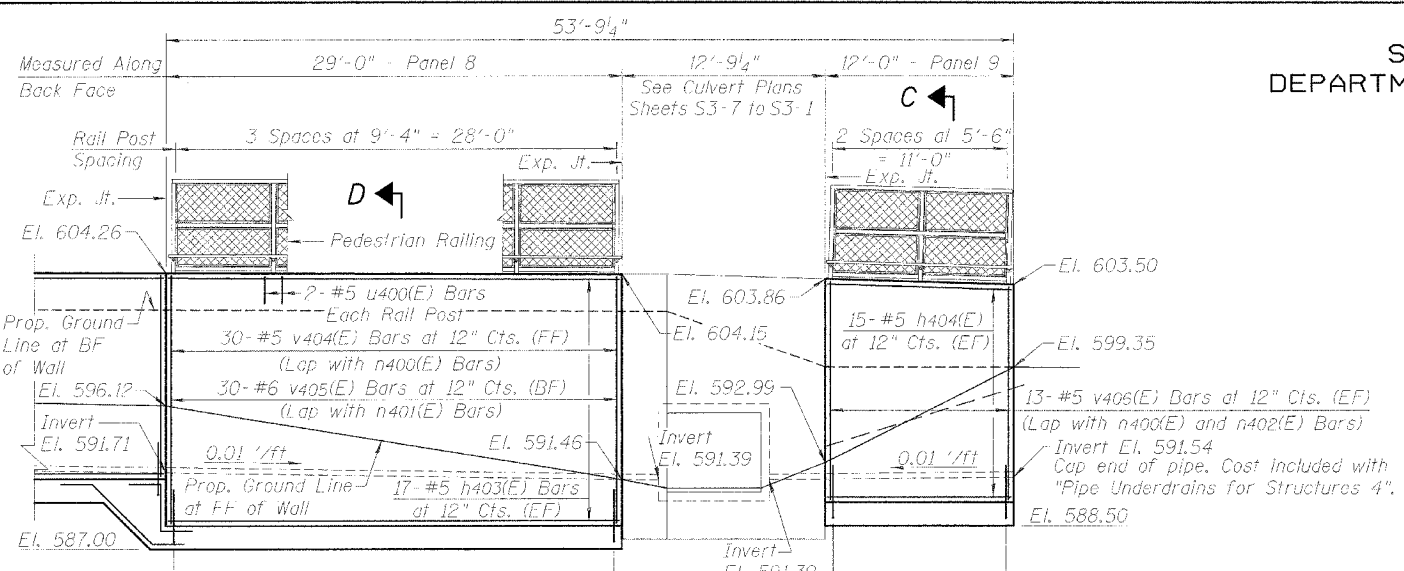
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	7
FED. AID DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 54-3
7 SHEETS

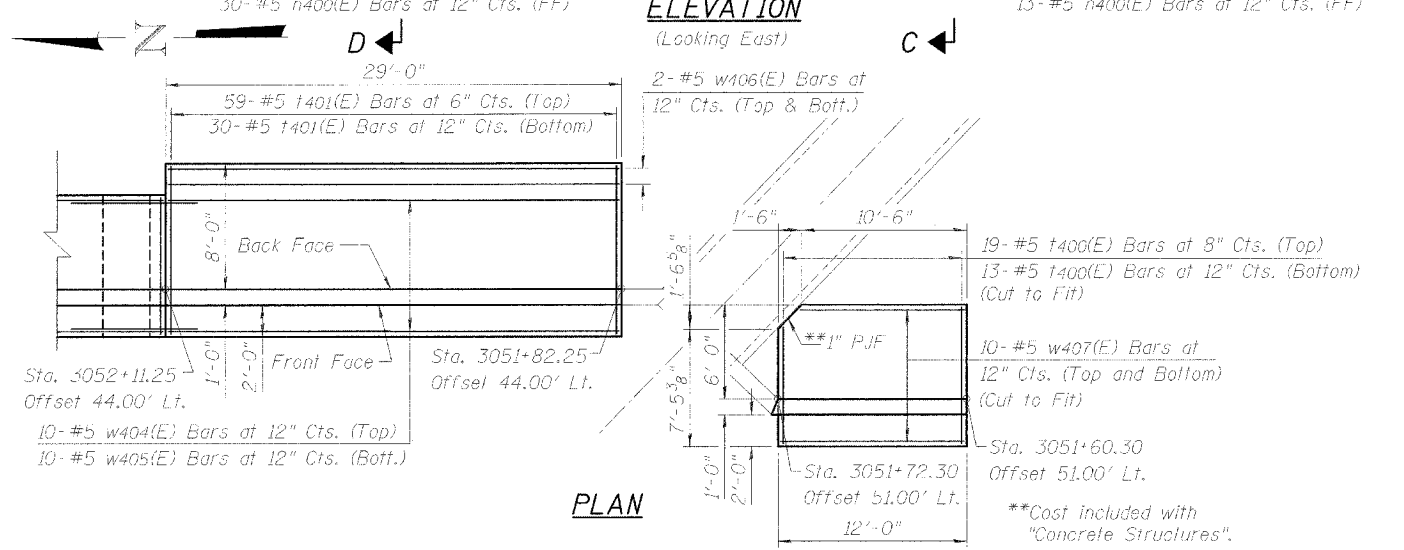
Contract # 62416

BILL OF MATERIAL

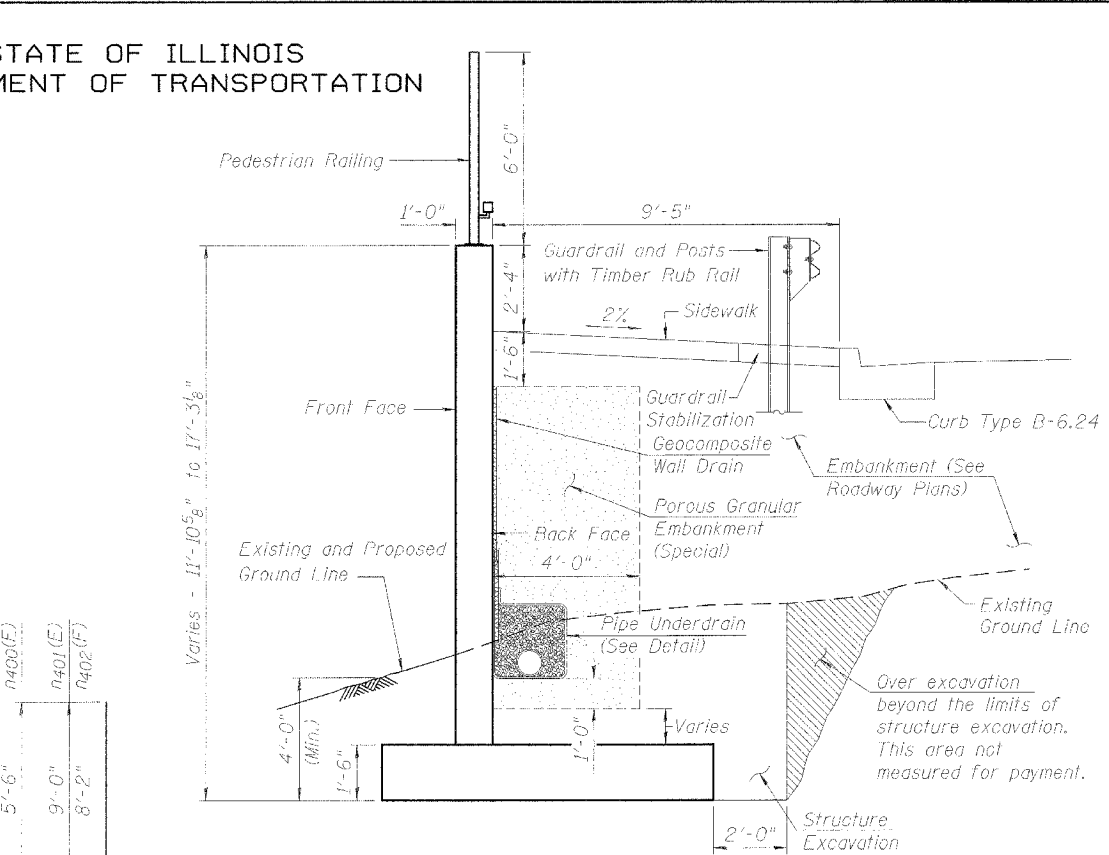
Bar	No.	Size	Length	Shape
h400(E)	22	#5	4'-6"	┌
h401(E)	30	#5	8'-8"	┌
h402(E)	86	#5	31'-2"	┌
h403(E)	92	#5	28'-8"	┌
h404(E)	30	#5	11'-8"	┌
h405(E)	32	#5	3'-0"	┌
n400(E)	233	#5	6'-4"	┌
n401(E)	59	#8	10'-4"	┌
n402(E)	320	#6	9'-2"	┌
l400(E)	392	#5	8'-8"	┌
l401(E)	89	#5	10'-8"	┌
l402(E)	20	#5	15'-8"	┌
u400(E)	48	#5	2'-8"	┌
v400(E)	8	#5	10'-0"	┌
v401(E)	20	#5	11'-3"	┌
v402(E)	124	#5	12'-10"	┌
v403(E)	180	#5	12'-5"	┌
v404(E)	30	#5	15'-4"	┌
v405(E)	30	#6	10'-5"	┌
v406(E)	26	#5	13'-2"	┌
w400(E)	10	#5	7'-8"	┌
w401(E)	10	#5	10'-5"	┌
w402(E)	100	#5	30'-4"	┌
w403(E)	34	#5	8'-8"	┌
w404(E)	10	#5	30'-11"	┌
w405(E)	10	#5	29'-7"	┌
w406(E)	1	#5	28'-8"	┌
w407(E)	20	#5	11'-8"	┌
Porous Granular Embankment, Special			Cu. Yd.	252
Structure Excavation			Cu. Yd.	783
Concrete Structures			Cu. Yd.	203.2
Reinforcement Bars, Epoxy Coated			Pound	29,180
Geocomposite Wall Drain			Sq. Yd.	172
Pipe Underdrains for Structures 4"			Foot	192



ELEVATION
(Looking East)

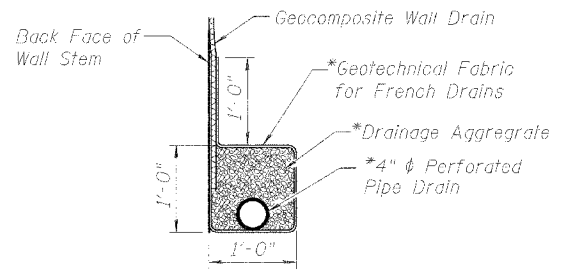
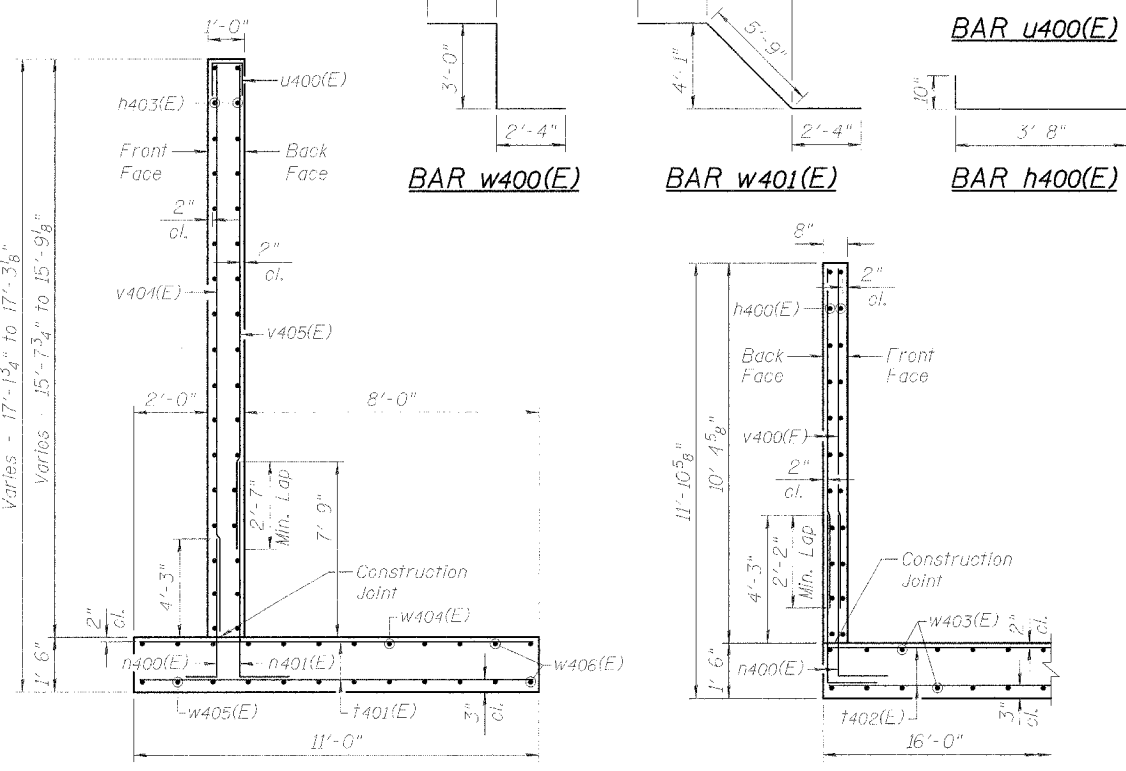


PLAN



TYPICAL SECTION THRU WALL
(See roadway drawings for guardrail, guardrail stabilization, embankment and curb details)

BARS n400(E) THRU n402(E)

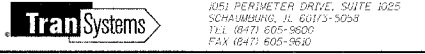


PIPE UNDERDRAIN DETAIL

* Included in the cost of "Pipe Underdrains for Structures".

RETAINING WALL DETAILS

RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+60.30 TO STATION 3053+56.25
STRUCTURE NO. 099-W017



DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

SECTION B-B
Panel 2
Maximum Calculated
Bearing Pressure = 1.89 ksf

SECTION C-C
Panels 3 thru 7, 9
Maximum Calculated
Bearing Pressure = 2.58 ksf

SECTION D-D
Panel 8
Maximum Calculated
Bearing Pressure = 2.77 ksf

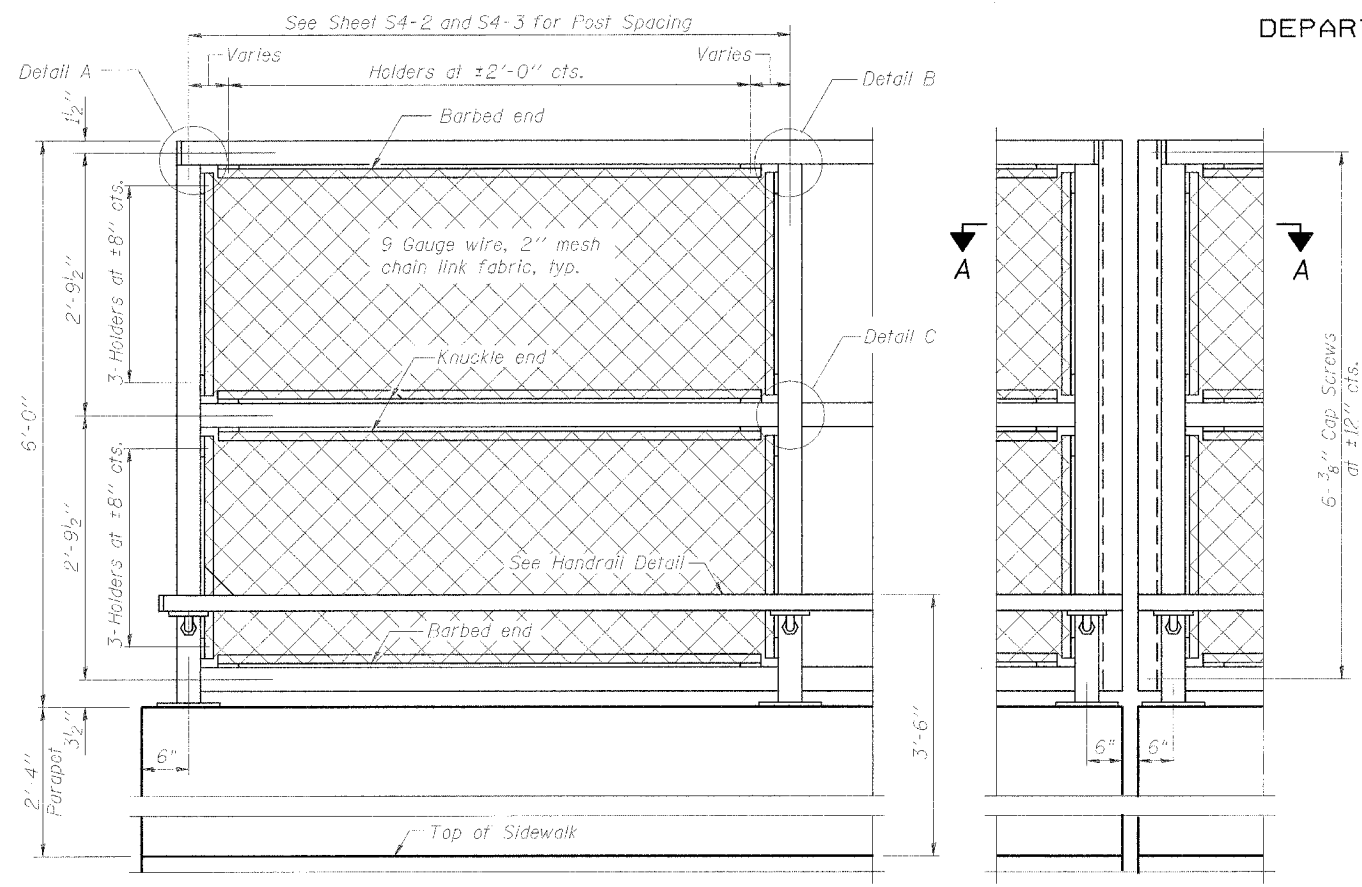
SECTION E-E
Panel 1

B:\SHEET8\3DATEP - 01\ch02\0022\structural\sheet5\wccetall.rvt

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

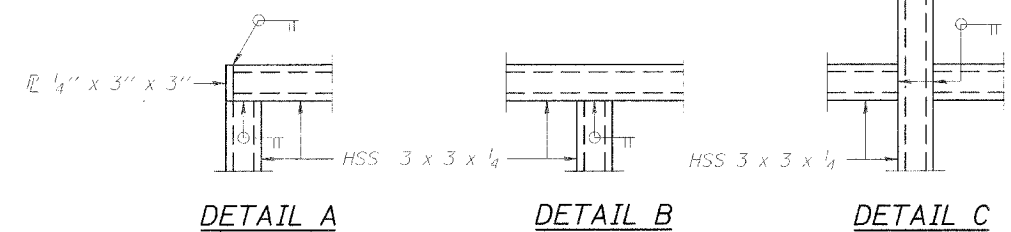
ROUTE NO.	SECTION	QUANTITY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	285
FED. ROAD DIST. NO. 7	ILLINOIS	WILL. ROAD PROJECT		

Contract # 62416

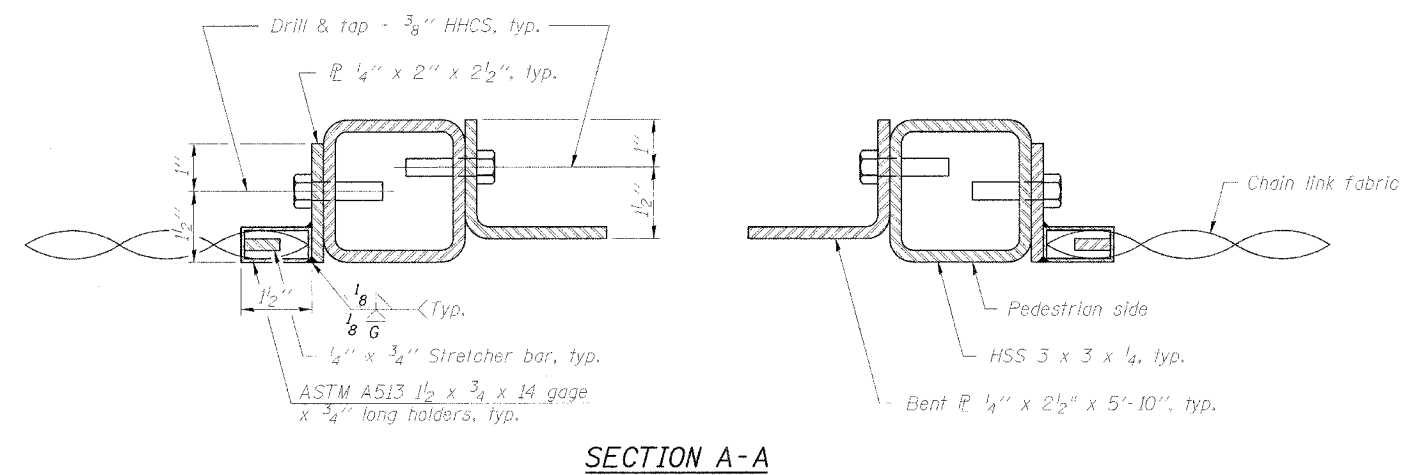


ELEVATION
(Inside Face)

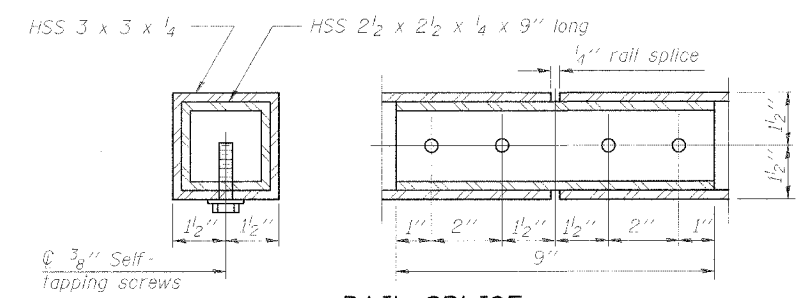
ELEVATION
(At Expansion Joint)



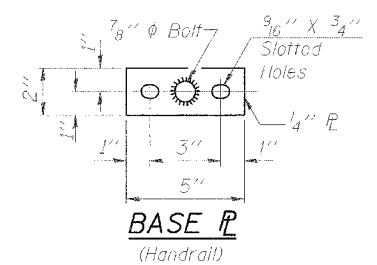
DETAIL A **DETAIL B** **DETAIL C**



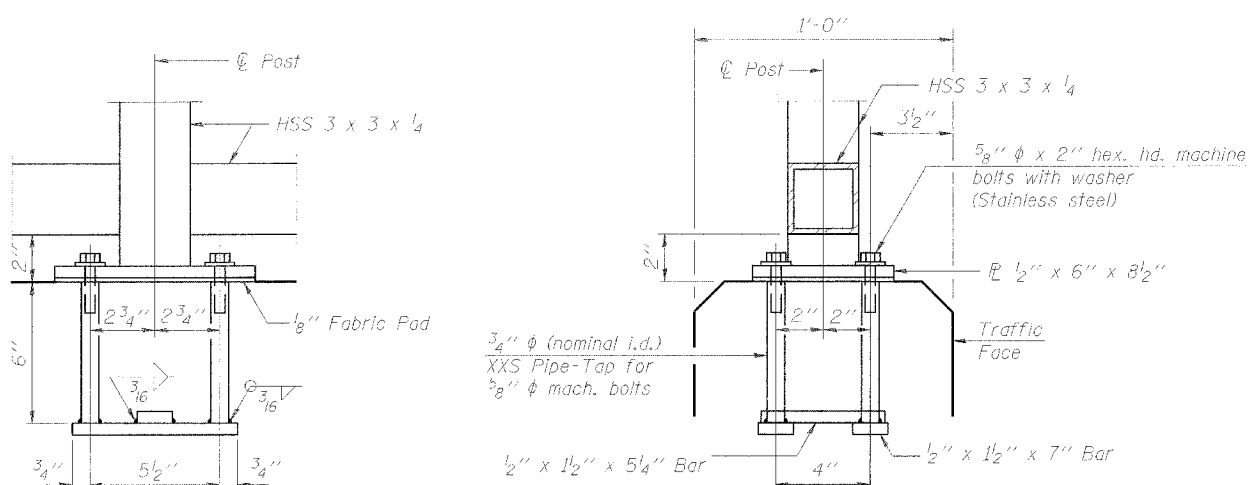
SECTION A-A



RAIL SPLICE

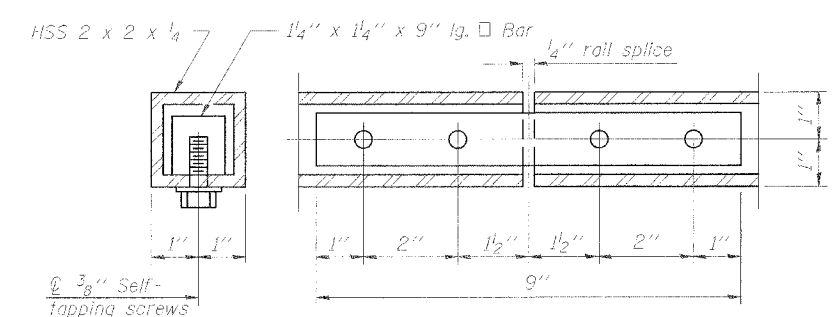


BASE PL
(Handrail)

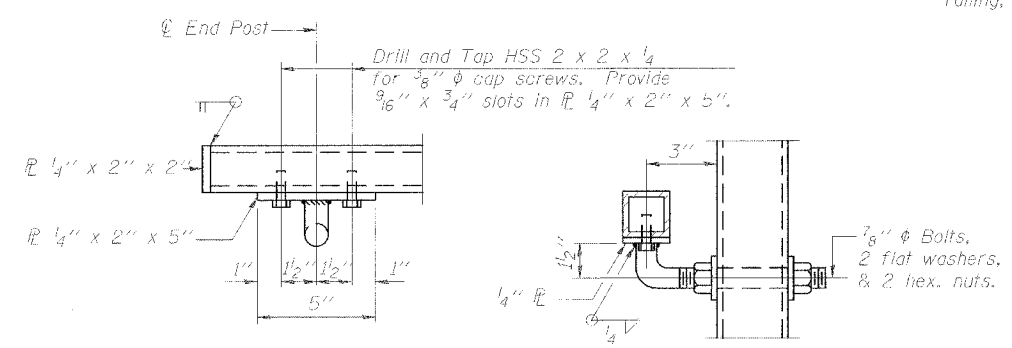


ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



HANDRAIL SPLICE



HANDRAIL DETAIL

All posts, railing, splices, anchor devices, and bent plates shall be powder coated and the color shall be black.

All galvanized exterior surfaces shall be coated with a urethane or triglycidyl isocyanurate (TGIC) polyester powder to a dry film thickness of 2.0 mils. Prior to application, the surface shall be mechanically etched by brush blasting (Ref. SSPC-SP7) and the zinc coated substrate preheated to 450 degrees F for a minimum one (1) hour. The coating shall be electrostatically applied and cured by elevating the zinc-coated substrate temperature to a minimum of 400 degrees F.

Prior to shipping, the poles and posts shall be wrapped in ultraviolet-inhibiting plastic foam or rubberized foam.

The chain link fabric shall conform to the requirements of Article 1006.27(a)(1) of the Standard Specifications, and shall be vinyl coated to match the black powder coating on all posts, railing, splices, anchor devices and bent plates.

BILL OF MATERIAL

Item	Unit	Quantity
Pedestrian Railing	Foot	186

PEDESTRIAN RAILING

RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+60.30 TO STATION 3053+56.25
STRUCTURE NO. 099-W017



851 PERIMETER DRIVE, SUITE 8025
SCHAMPIERS, IL 60171-5098
TEL (847) 605-9600
FAX (847) 605-9510

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

R-28 11-1-05 (10'-0" Maximum Post Spacing)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	7
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

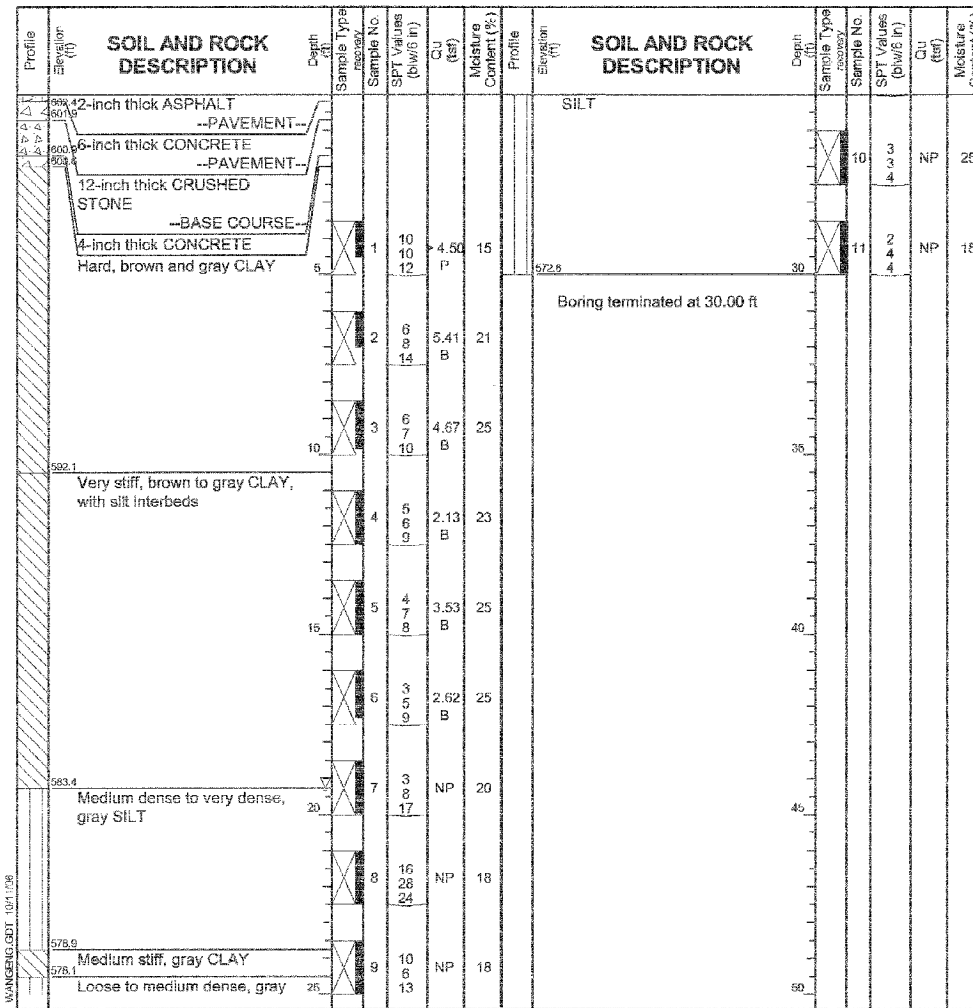
Contract # 62416

W Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW1-1
WEI Job No.: 790-05-01
Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 602.61 ft
North: 1770711.43 ft
East: 1021050.07 ft
Station: 3053+70.84
Offset: 3.15 RT

Page 1 of 1



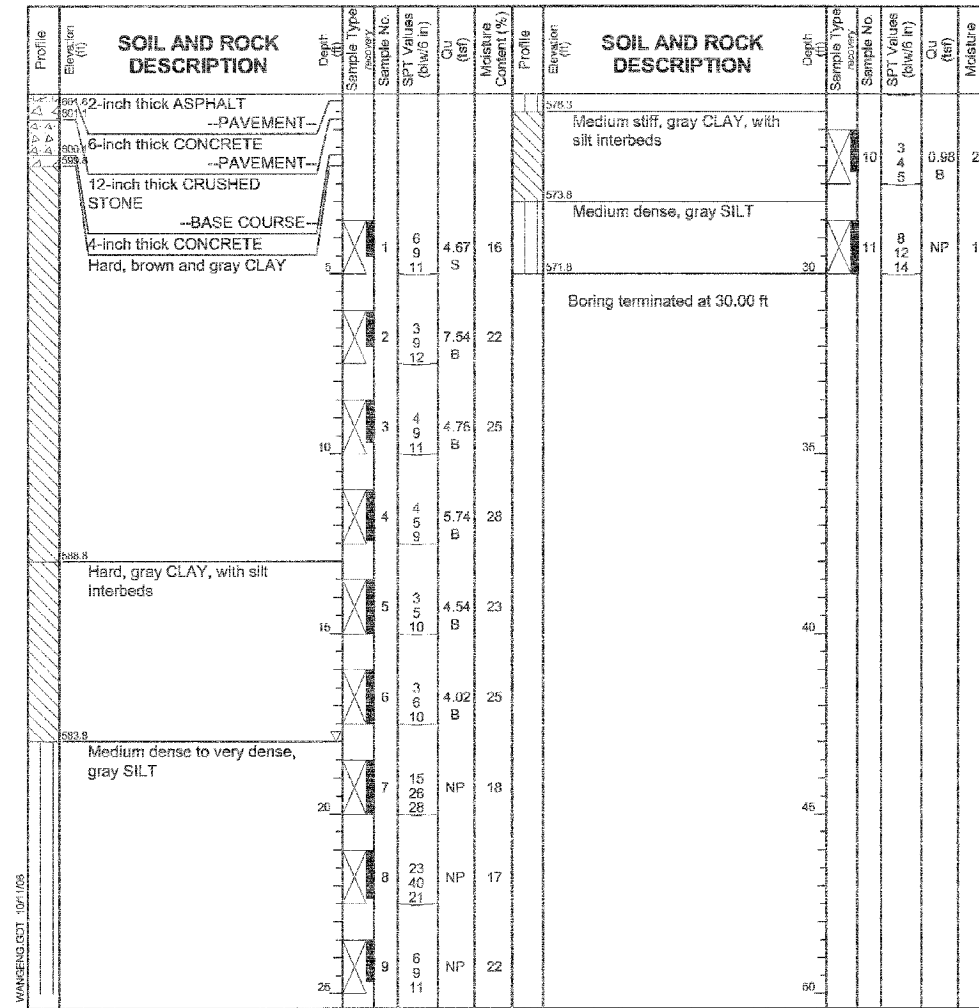
GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-16-2003	Complete Drilling	04-16-2003	While Drilling	▽	19.25 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-55 TMR	At Completion of Drilling	▽	DRY	
Driller	K&J	Logger	A. Taylor	Checked by	E. Datz		
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Time After Drilling	NA		
				Depth to Water	▽	NA	

W Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW1-2
WEI Job No.: 790-05-01
Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 601.83 ft
North: 1770637.65 ft
East: 1021052.60 ft
Station: 3052+97.02
Offset: 3.39 RT

Page 1 of 1



GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-16-2003	Complete Drilling	04-16-2003	While Drilling	▽	18.00 ft	
Drilling Contractor	Patrick Drilling	Drill Rig	CME-55 TMR	At Completion of Drilling	▽	DRY	
Driller	K&J	Logger	A. Taylor	Checked by	E. Datz		
Drilling Method	3.25 ID HSA; Boring backfilled upon completion			Time After Drilling	NA		
				Depth to Water	▽	NA	

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BORING LOGS I
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+60.30 TO STATION 3053+56.25
STRUCTURE NO. 099-W017

TranSystems
1051 PERIMETER DRIVE, SUITE 1025
SCHAMBERG, IL 60173-5008
TEL: (847) 605-3600
FAX: (847) 605-9630

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	287
F.S. ROAD DIST. NO. / E. IMP. /		FED. AID PROJECT-		

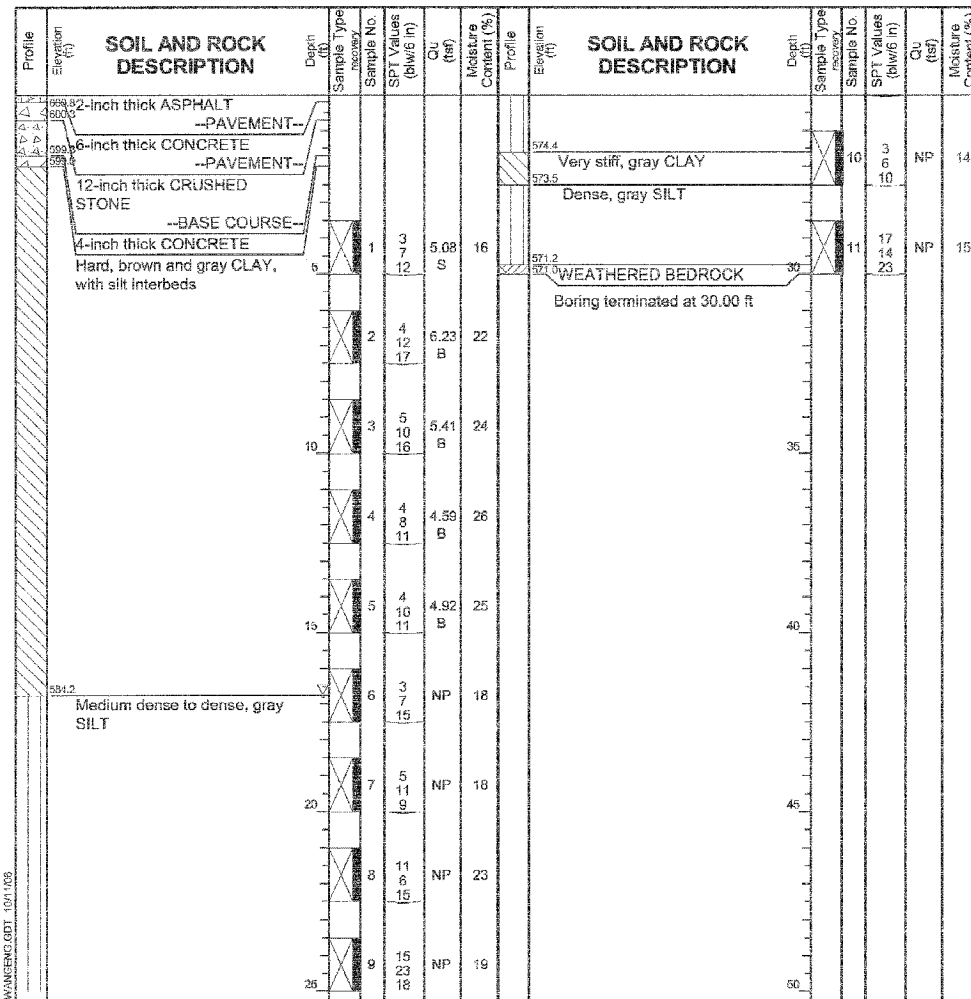
Contract # 62416

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW1-3
WEI Job No.: 790-05-01

Datum: NGVD
Elevation: 600.98 ft
North: 1770567.56 ft
East: 1021053.57 ft
Station: 3052+26.93
Offset: 2.19 RT

Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-16-2003	Complete Drilling	04-16-2003
Drilling Contractor	Patrick Drilling	Drill Rig	CME-55 TMR
Driller	K&J	Logger	A. Taylor
Checked by	E. Datz	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion	Depth to Water	NA
		While Drilling	16.75 ft
		At Completion of Drilling	DRY

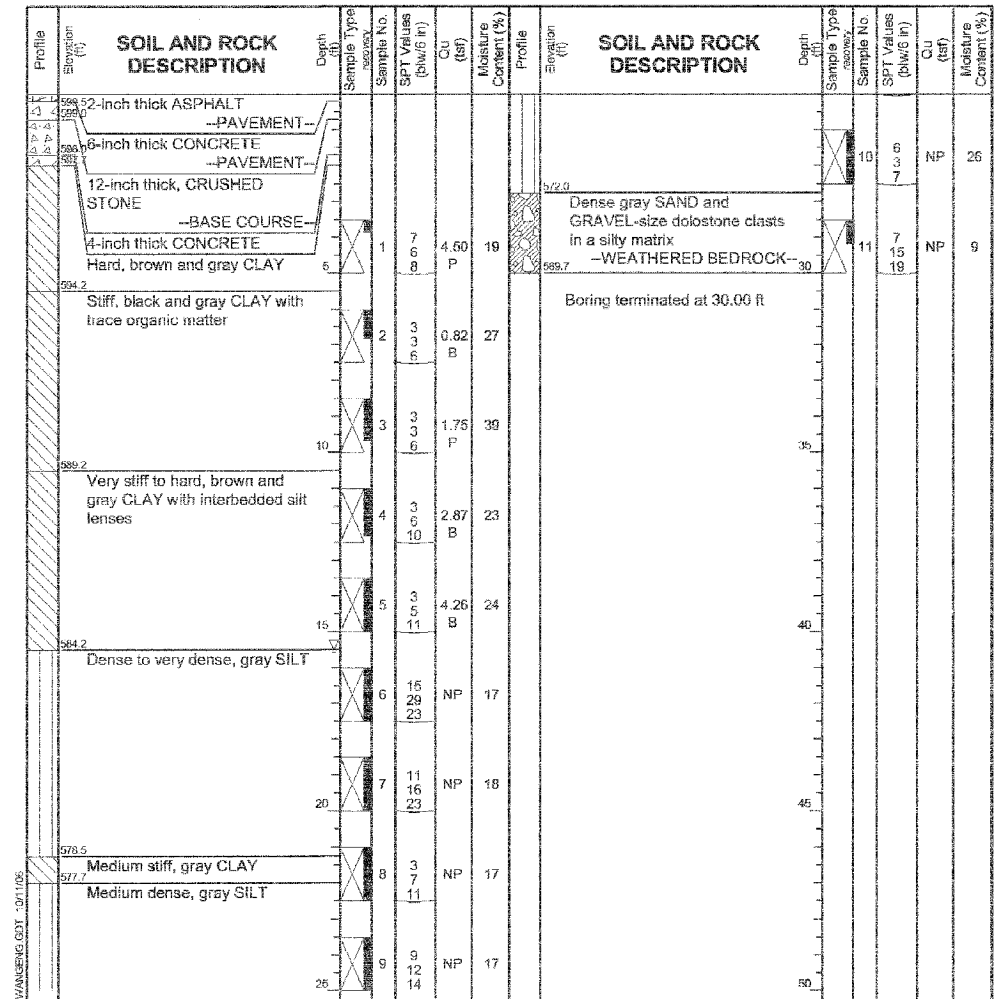
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RW1-4
WEI Job No.: 790-05-01

Datum: NGVD
Elevation: 599.74 ft
North: 1770473.56 ft
East: 1021058.81 ft
Station: 3051+32.88
Offset: 2.51 RT

Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-16-2003	Complete Drilling	04-16-2003
Drilling Contractor	Patrick Drilling	Drill Rig	CME-55 TMR
Driller	K&J	Logger	A. Taylor
Checked by	E. Datz	Time After Drilling	NA
Drilling Method	3.25 ID HSA; Boring backfilled upon completion	Depth to Water	NA
		While Drilling	15.50 ft
		At Completion of Drilling	DRY

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

BORING LOGS II
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+60.30 TO STATION 3053+56.25
STRUCTURE NO. 099-W017

TranSystems
1051 PERIMETER DRIVE, SUITE 1025
SCHMUNBERG, IL 60175-6058
TEL (847) 605-9600
FAX (847) 605-9600

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 338	114R-1	WILL	355	288
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract # 62416

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG HA RW 1-2
WEI Job No.: 790-05-01
Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 595.00 ft
North: 1770636.39 ft
East: 1020999.91 ft
Station:
Offset:

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)
594.56	6-inch thick, Sand and Gravel												
	Very stiff to hard, gray SILTY CLAY	1			4.25	P							
		2			4.50	P							
		3			4.00	P							
		4			2.75	P							
		5				NP							
595.5	Gray Silt	10											
595.0	Gray Silt	10											

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-25-2006	Complete Drilling	05-25-2006	While Drilling	▽	9.50 ft	
Drilling Contractor	Precon Drilling	Drill Rig	Hand Auger	At Completion of Drilling	▽	--	
Driller	S&L	Logger	ND	Checked by	MEP		
Drilling Method	Jack Hammer Smping			Time After Drilling	NA		
				Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG HA RW 1-3
WEI Job No.: 790-05-01
Client: **TranSystems Corporation**
Project: **RT 59 (FAP 338) Reconstruction, IDOT D-91-123-02**
Location: **T35N R9E, Will County, Illinois**

Datum: NGVD
Elevation: 595.00 ft
North: 1770559.83 ft
East: 1020999.76 ft
Station:
Offset:

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Cu (tsf)	Moisture Content (%)
594.0	12-inch thick, black LOAM - TOPSOIL -												
	Very stiff to hard, gray SILTY CLAY	1			1.00	P							
		2			4.00	P							
		3			4.25	P							
		4			4.00	P							
		5				NP							
595.5	Gray Silt	10											
595.0	Gray Silt	10											

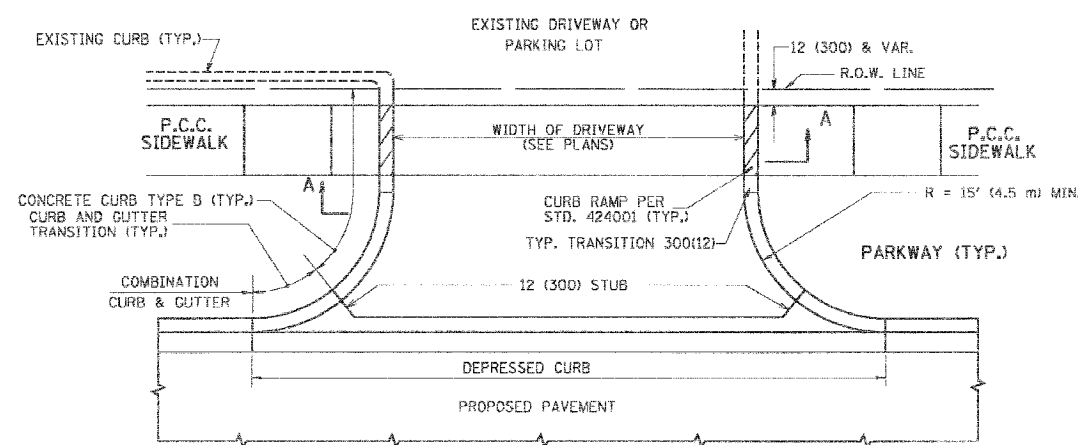
GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-25-2006	Complete Drilling	05-25-2006	While Drilling	▽	9.50 ft	
Drilling Contractor	Precon Drilling	Drill Rig	Hand Auger	At Completion of Drilling	▽	--	
Driller	S&L	Logger	ND	Checked by	MEP		
Drilling Method	Jack Hammer Smping			Time After Drilling	NA		
				Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

DESIGNED	SLC
CHECKED	MDS
DRAWN	MDS
CHECKED	SLC

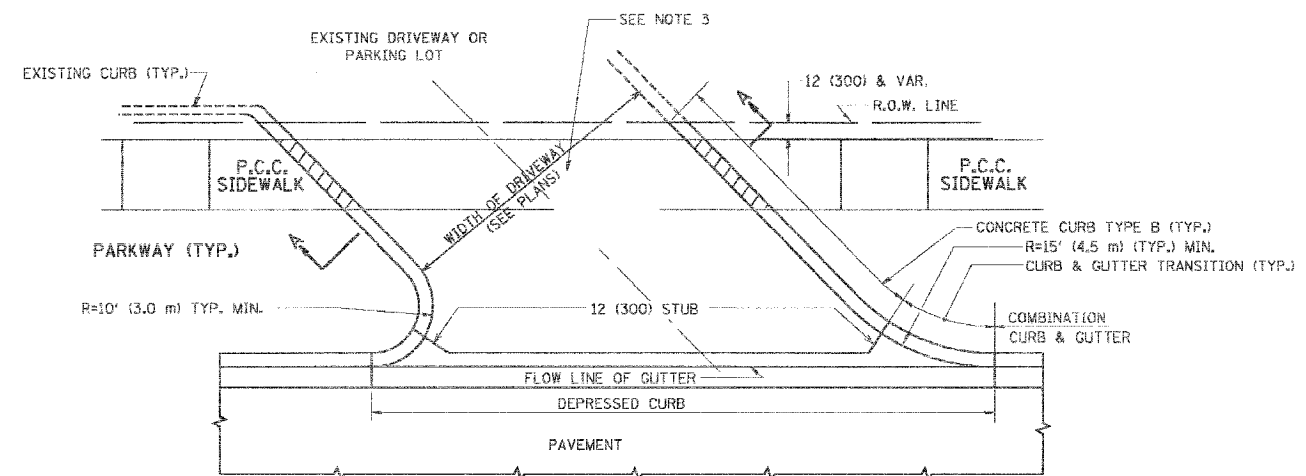
BORING LOGS III
RETAINING WALL ALONG IL ROUTE 59
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+60.30 TO STATION 3053+56.25
STRUCTURE NO. 099-W017

TranSystems
1051 PERIMETER DRIVE, SUITE 1025
SCHAMBERG, IL 60173-2068
TEL (847) 605-9600
FAX (847) 605-9630

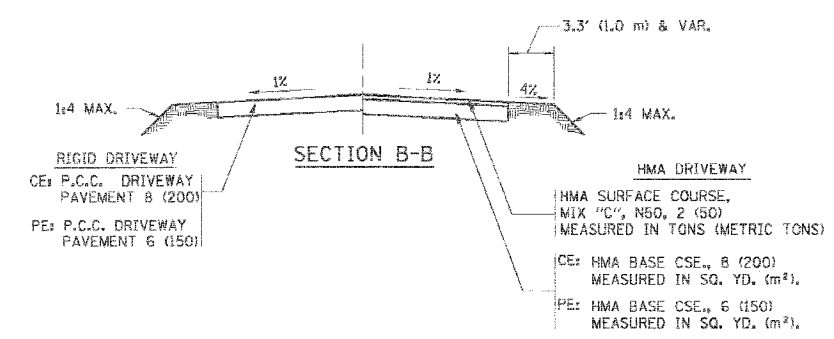
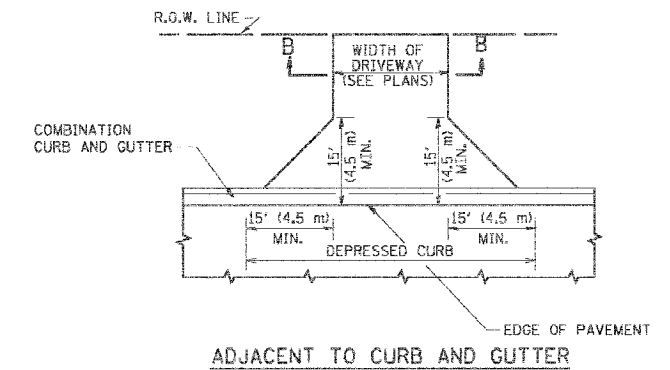
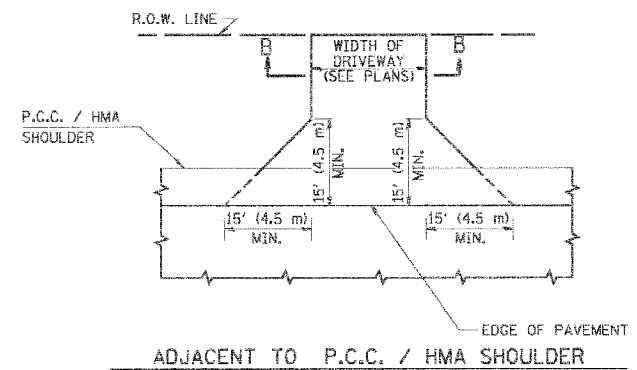
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WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE A 8 (200) MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

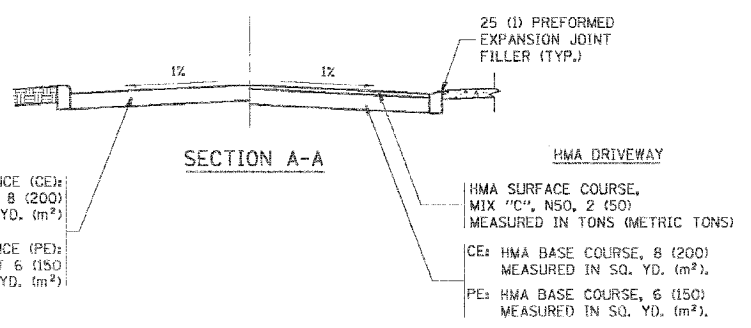
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE
R. SHAR	01-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. LAFLEUR	04-15-03
R. BORO	01-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS

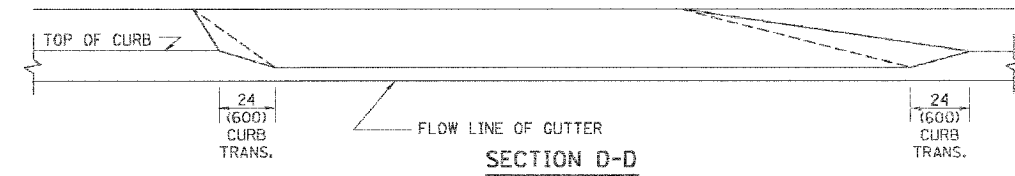
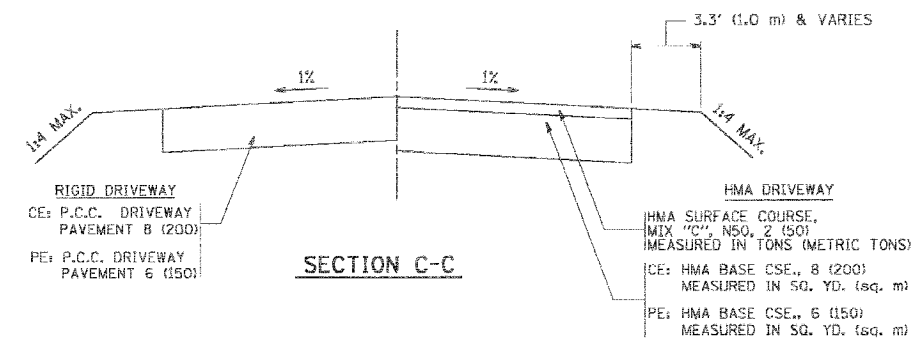
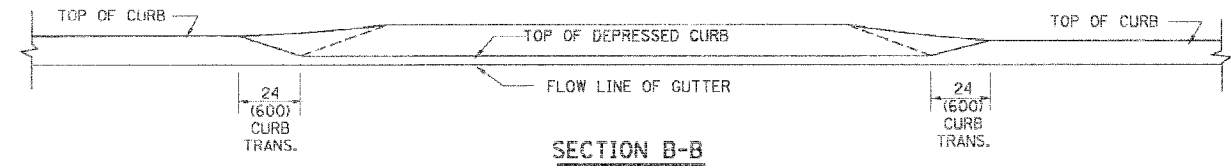
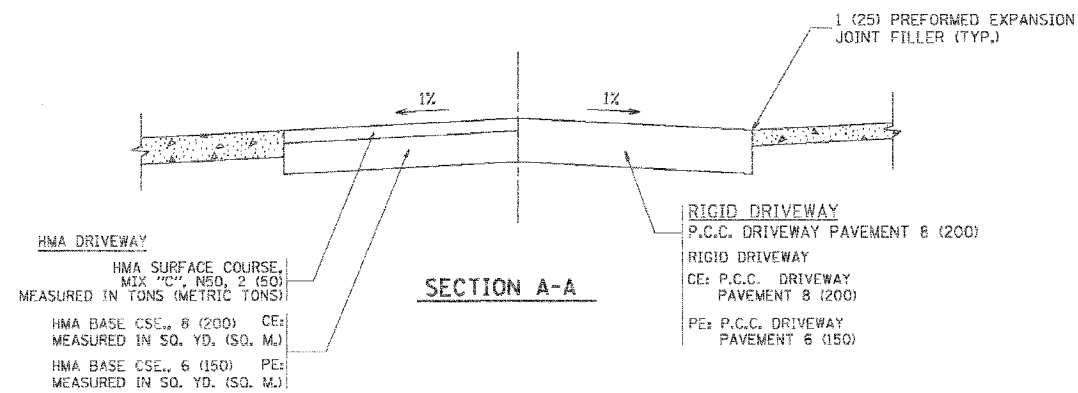
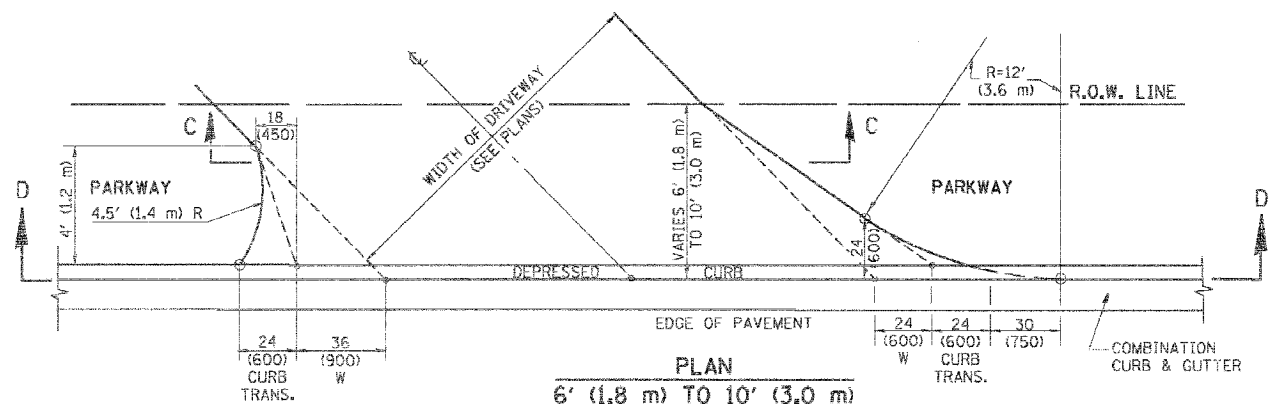
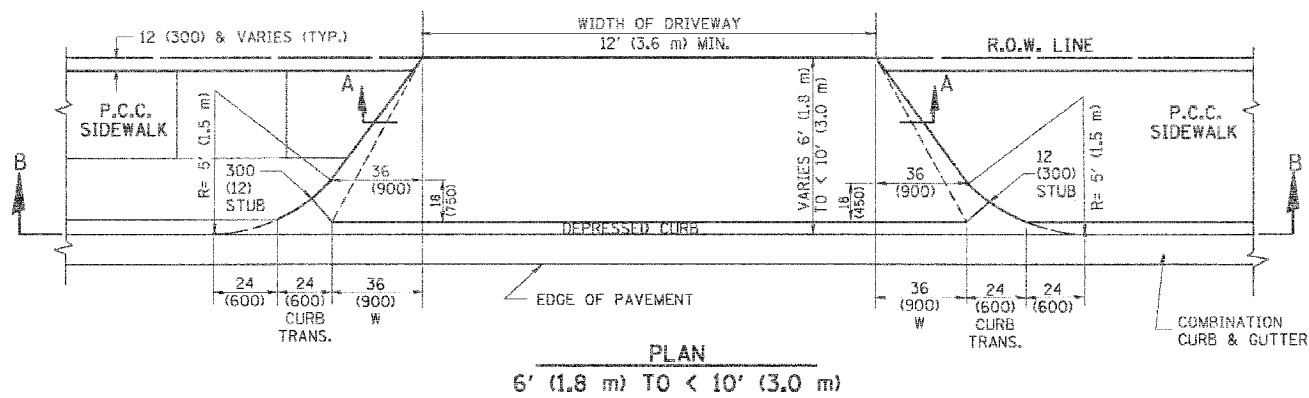
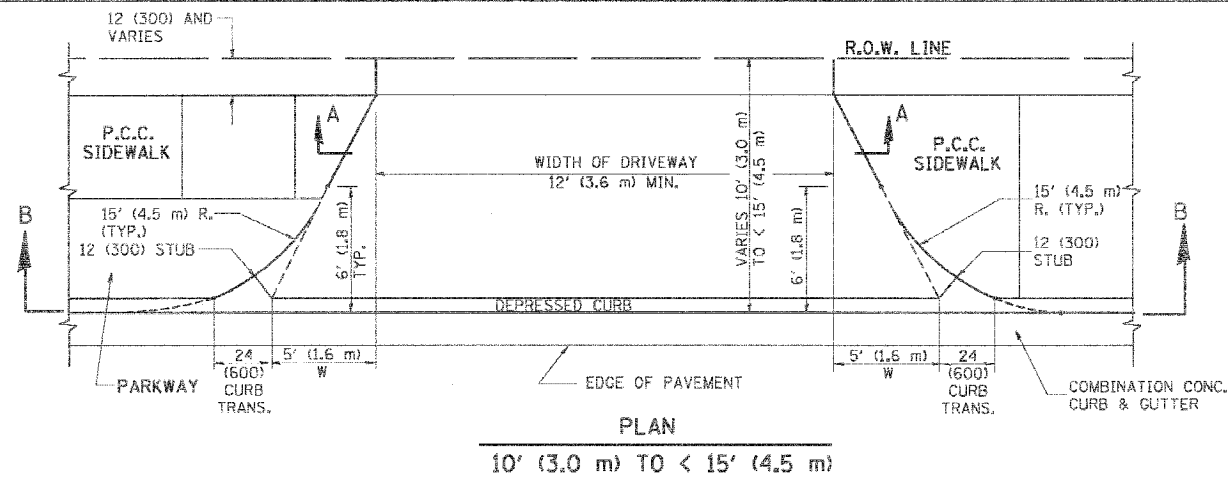
DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

PLOT DATE = 3/1/2007
FILE NAME = R:\projects\62719\62719.dgn
PLOT SCALE = 1/8" = 1'-0"
USER NAME = bboroz

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	290
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

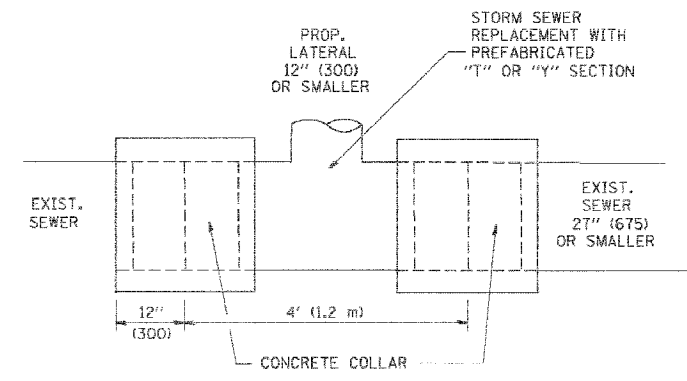
DRIVEWAY DETAILS
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

REVISIONS	
NAME	DATE
R. SHAH	11/06/95
J. POLLASTRINI	08/12/96
J. POLLASTRINI	12/14/96
A. ABBAS	03/21/97
T. WOLTZ	04/08/97
M. GOMEZ	04/06/01
P. LAFLEUR	04/15/03
R. BORO	01/01/07

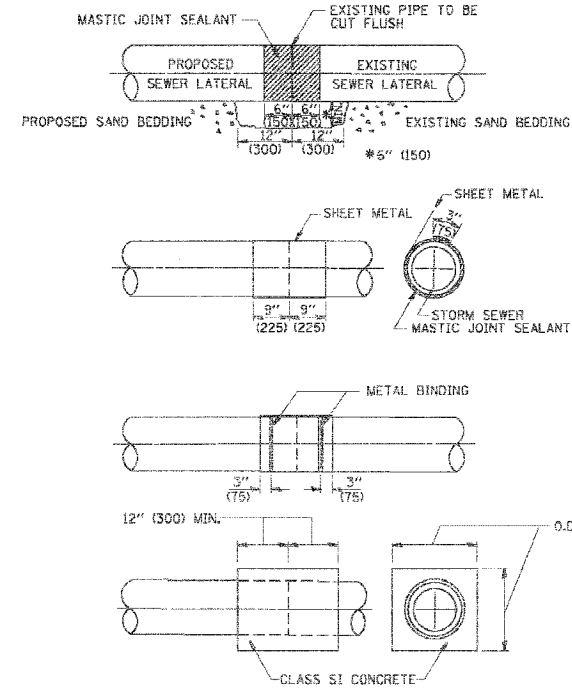
SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

CONTRACT NO.				
F.A. RY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	291
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

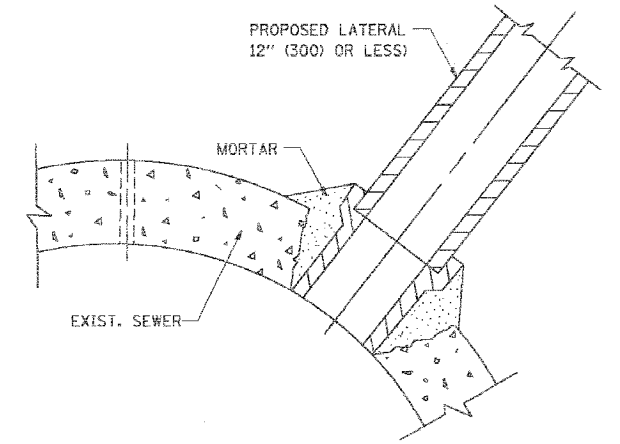


DETAIL "A"
LATERAL CONNECTION TO EXISTING SEWER
OF 27" (675) OR SMALLER



DETAIL "B"
CLASS SI CONCRETE COLLAR

- CONSTRUCTION SEQUENCE
- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
 - APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
 - BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" x 6" (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
 - CUT A PIECE OF SHEET METAL GAGE NO. 19 L1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
 - WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
 - LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
 - PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
 - WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
 - PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"
PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

- A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
- B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/93
M. DE YONG	05/08/93
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM SEWER
CONNECTION TO EXISTING SEWER

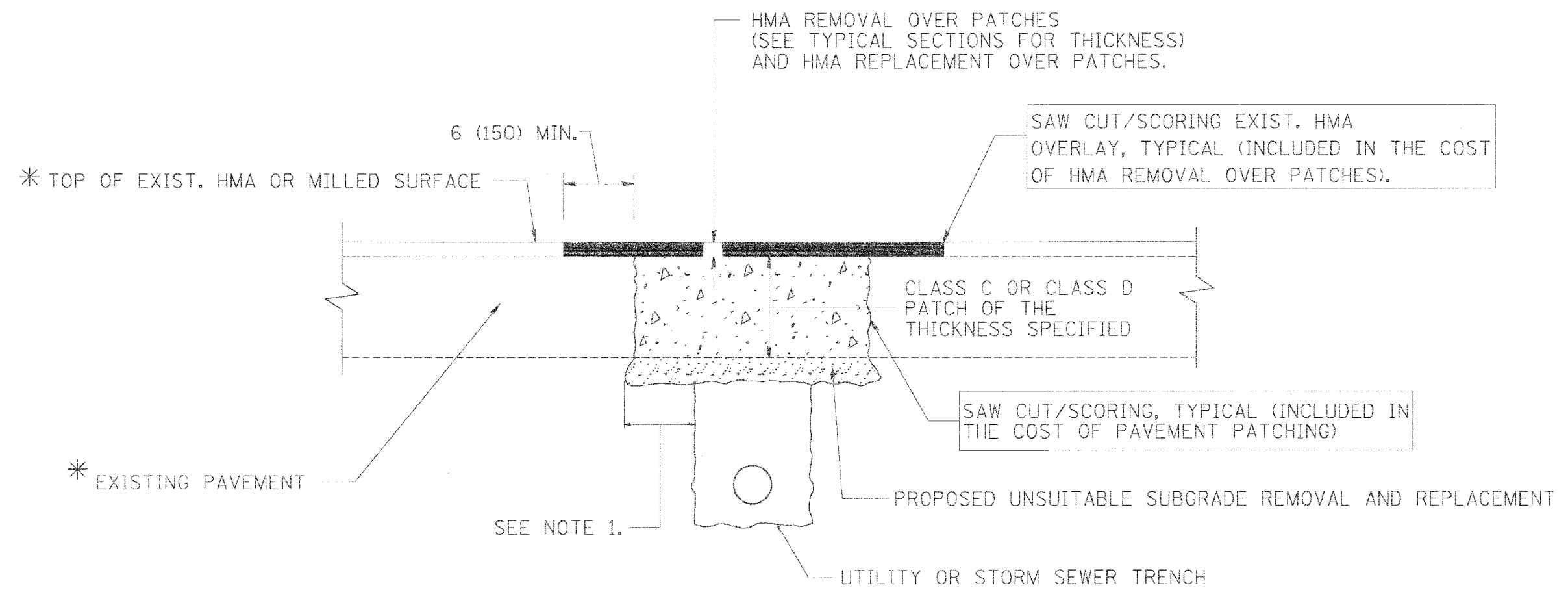
SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

BD500-01 (BD-7)

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PLOT SCALE = 80:1
USER = bmsrd

CONTRACT NO.			
F.A. RY.	SECTION	COUNTY	TOTAL SHEET NO.
338	114R-1	WILL	355 292
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/14/95
R. SHAH	05/23/95
R. SHAH	04/24/95
A. HOUSEH	03/15/96
A. ABBAS	03/21/97
A. ABBAS	01/20/98
ART ABBAS	04/27/98
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

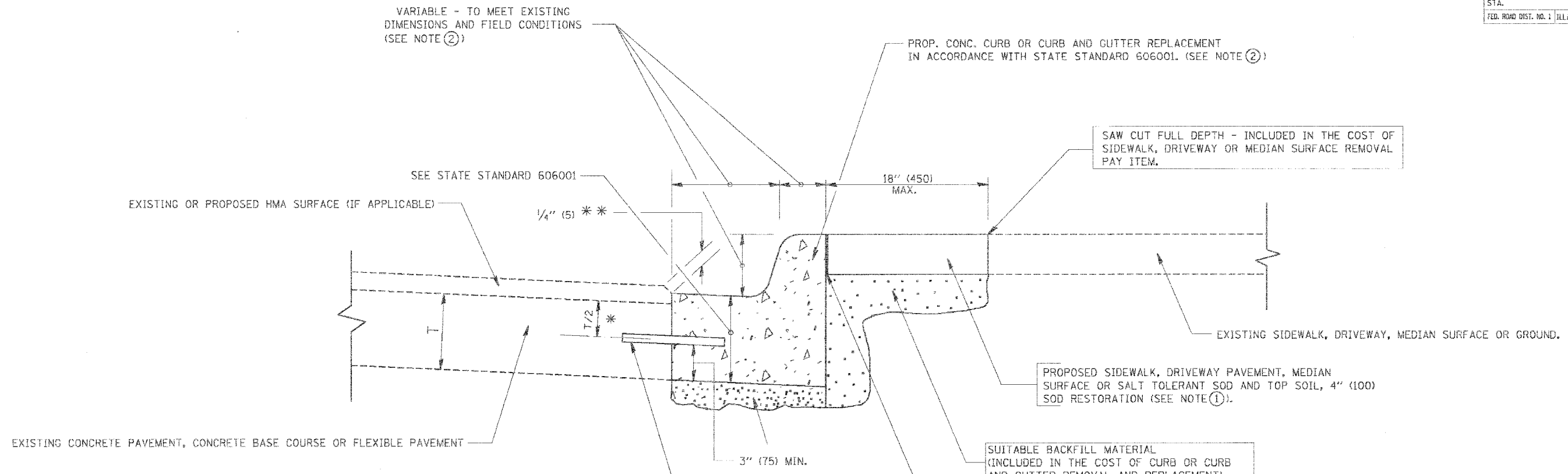
PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY
BD400-04 (BD-22)

PLOT DATE : 04/28/07
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PLOT SCALE : 80.000 / 1.
USER NAME : boro

CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	293
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- * * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

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

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

- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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

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

REVISIONS	
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/99
R. SHAH	03/02/99
R. SHAH	08/19/99
R. SHAH	09/12/99
R. SHAH	09/19/99
R. SHAH	10/03/99
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

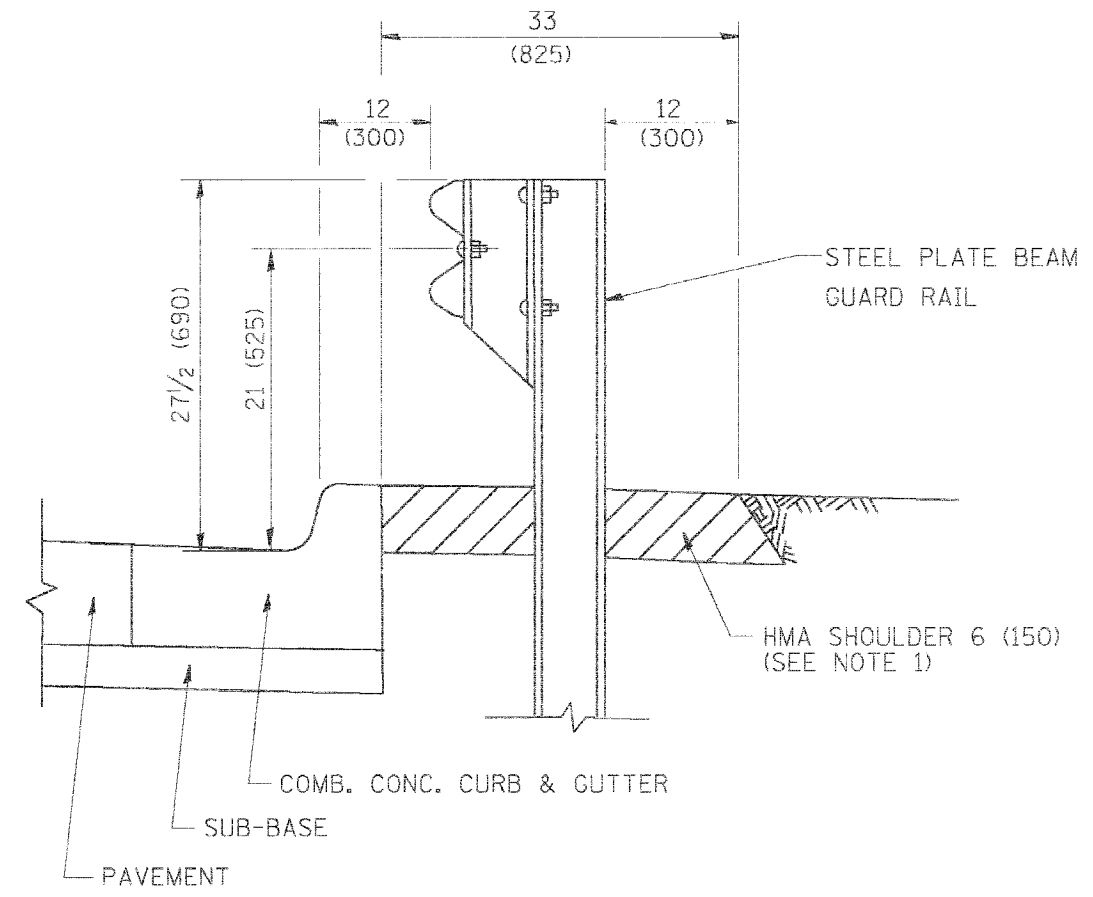
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE
HORIZ. _____
DRAWN BY _____
CHECKED BY _____
BD600-06 (BD-24)

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

PLOT DATE = 3/17/2007
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PLOT SCALE = 1/8" = 1'-0"
USER NAME = bbarnd

CONTRACT NO.				
F.A. RY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	294
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

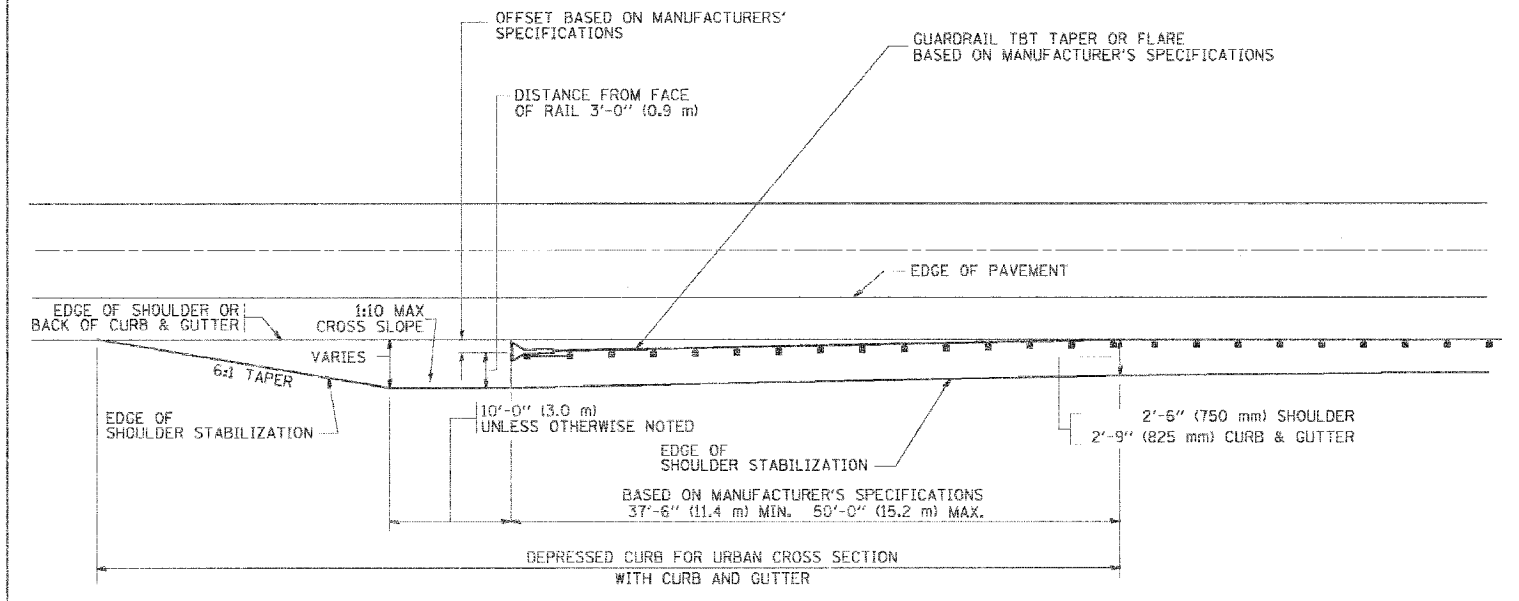


- NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER
 [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



STABILIZATION AT TBT TY. 1 SPL.

TBT = TRAFFIC BARRIER TERMINAL
 ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	02/23/98
A. ABBAS	03/21/97
E. GOMEZ	08/28/00
R. BORG	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

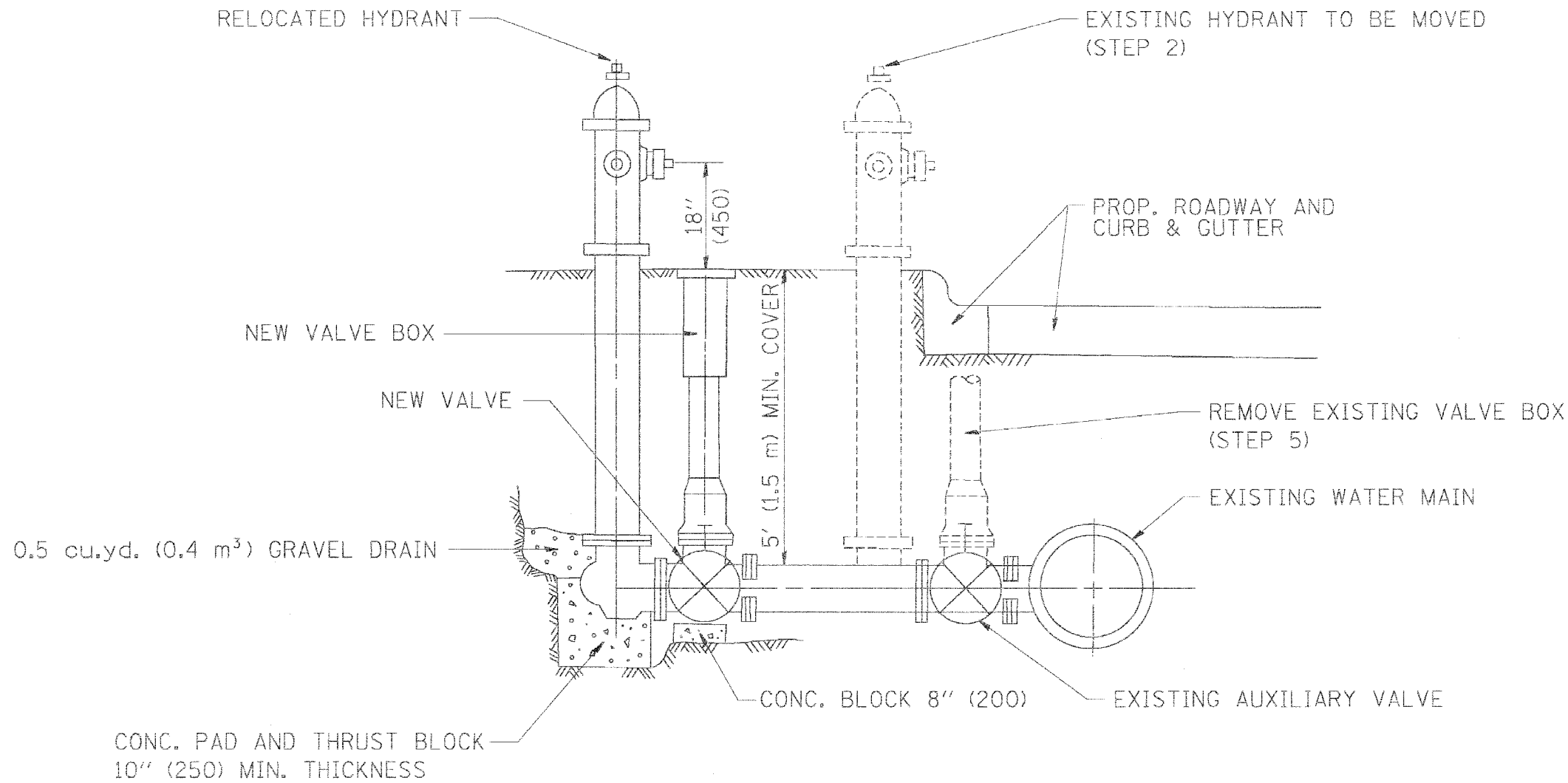
DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.

SCALE: VERT. NONE
 HORIZ. NONE

DRAWN BY: jis
 CHECKED BY:

PLOT DATE: 3/1/2007
 FILE NAME: H:\Users\jshah\p\dwg\B0600-10.dwg
 PLOT SCALE: 1/1
 USER: jshah

CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
338	114R-1	WILL.	355 295
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	



SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

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

REVISIONS	
NAME	DATE
R. SHAH	09/09/94
R. SHAH	10/25/94

ILLINOIS DEPARTMENT OF TRANSPORTATION

FIRE HYDRANT TO BE MOVED

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

PLOT DATE = 3/1/2007
 FILE NAME = R:\projects\114R-01\114R-01.dwg
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 USER NAME = bward

F.A. RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	296

STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

GENERAL NOTES

ALTERNATE MATERIAL FOR THE WALLS MAY BE CONCRETE MASONRY UNITS, PRECAST REINFORCED CONCRETE SECTIONS OR CAST-IN-PLACE CONCRETE. THE CAST IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN MAY BE USED WHEN APPROVED BY THE ENGINEER.

CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS.

STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

STEPS SHALL BE OMITTED FOR WORK IN COOK COUNTY WHEN THE DEPTH OF THE MANHOLE IS TEN (10') OR LESS.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 612.13 OF THE STANDARD SPECIFICATIONS, THE CONTRACT UNIT PRICE FOR MANHOLES, TYPE A, 7'-DIAMETER SHALL INCLUDE THE SAND CUSHION WHEN REQUIRED, FURNISHING AND INSTALLING STEPS WHEN REQUIRED, FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL, AND FURNISHING AND INSTALLING FLAT SLAB TOP.

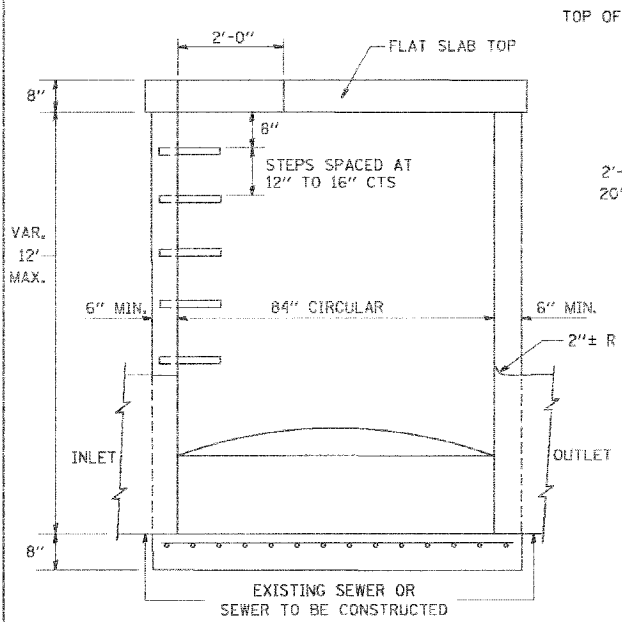
PRECAST FLAT SLAB TOP SHALL CONFORM TO ARTICLES 505.01 THRU 505.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS. REINFORCEMENT BARS AND WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.10. ONLY GRADE 60 REINFORCEMENT BARS WILL BE PERMITTED.

BOTTOM SLAB SHALL BE REINFORCED BY EITHER REINFORCEMENT BARS OR WELDED WIRE FABRIC. THE MINIMUM REINFORCEMENT SHALL BE 0.46 SQUARE INCH PER LINEAR FOOT IN BOTH DIRECTIONS.

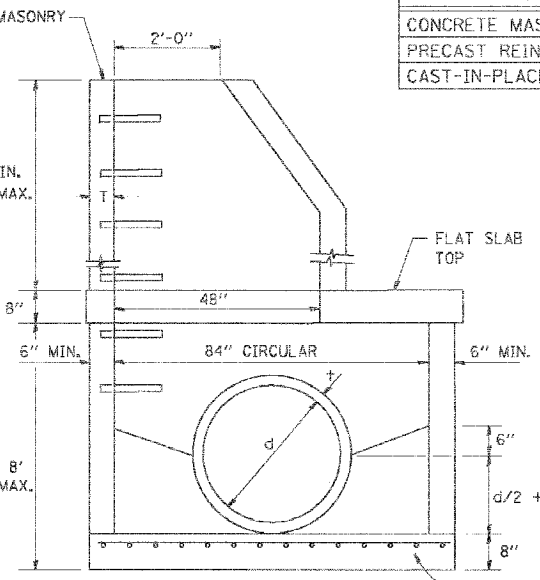
JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.

LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.

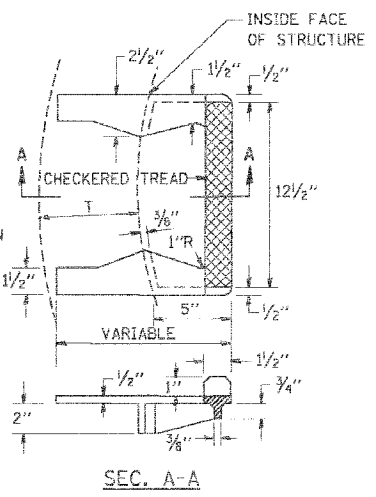
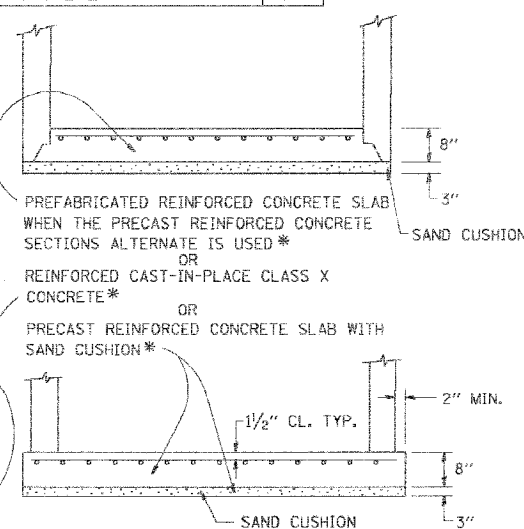
ALTERNATE MATERIALS FOR RISERS	T (MIN.)
CONCRETE MASONRY UNITS	5"
PRECAST REINFORCED CONCRETE SECTIONS	4"
CAST-IN-PLACE CONCRETE	6"



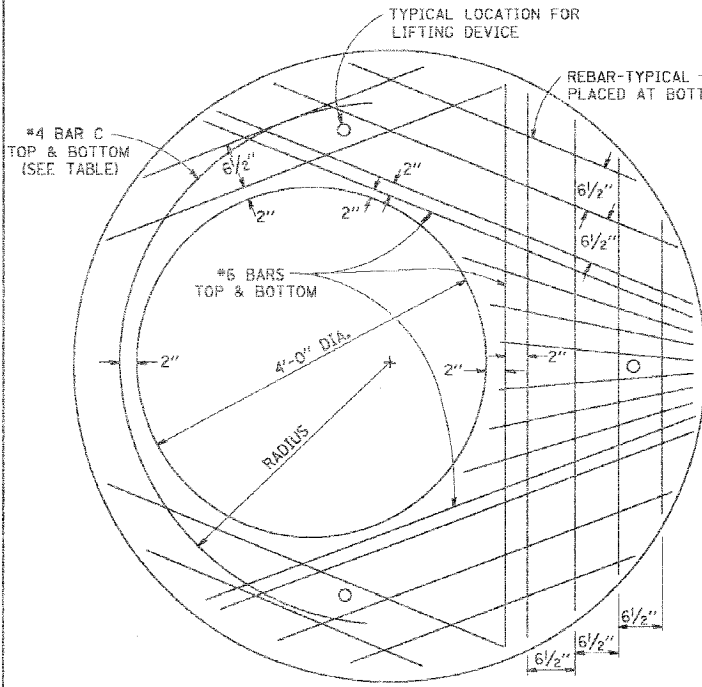
ELEVATION



ELEVATION

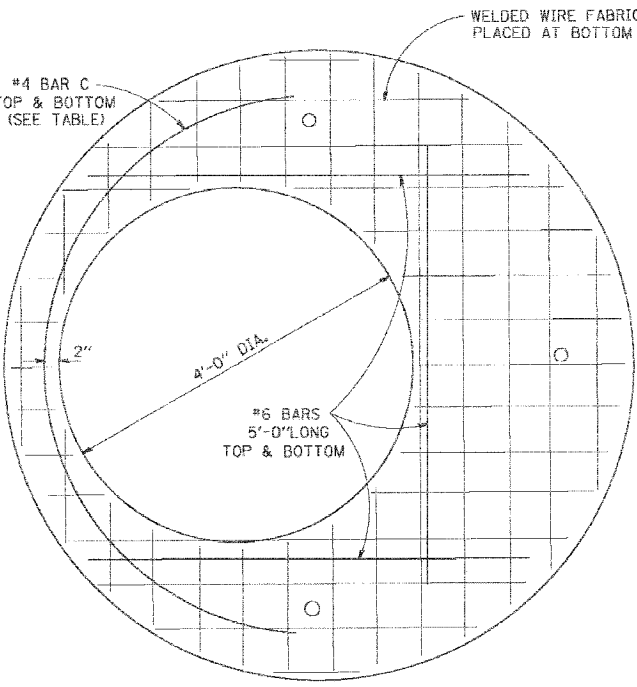
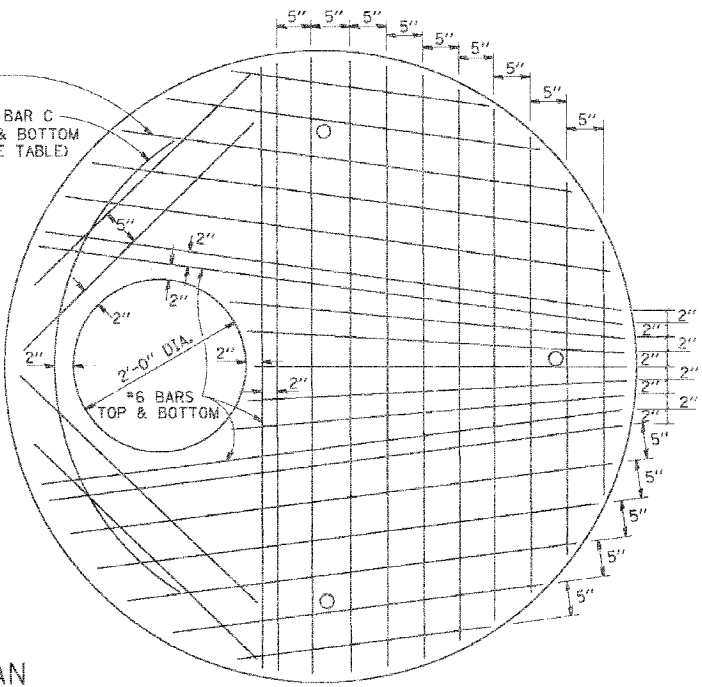


CAST IRON STEPS



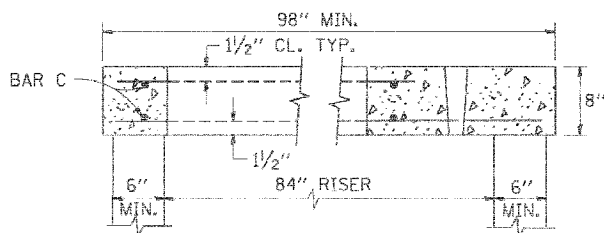
PLAN

SHOWING REBAR REINFORCEMENT



PLAN

SHOWING WELDED WIRE FABRIC REINFORCEMENT



SECTION B-B

TABLE

DIAMETER OF OPENING	REINFORCEMENT "A" WWF OR BAR SIZE	BAR C			
		SIZE	LENGTH	RADIUS	
2'-0"	1.06 SQ.IN./LIN.FT.	#6	#4	6'-0"	38"
4'-0"	0.82 SQ.IN./LIN.FT.	#6	#4	9'-0"	38"

NOTE: THIS STRUCTURE SHOULD BE USED WITH PIPES SIZE 54" DIA. OR SMALLER.

REVISIONS	
NAME	DATE
	10/18/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
MANHOLE TYPE A
7 FOOT DIAMETER
SCALE: VERT. NONE
HORIZ. NONE
DRAWN BY
CHECKED BY

PLLOT DATE = 2/16/2007
FILE NAME = K:\Users\ba037.dgn
PLOT SCALE = 80.0000 / 1.00
USER NAME = ba037

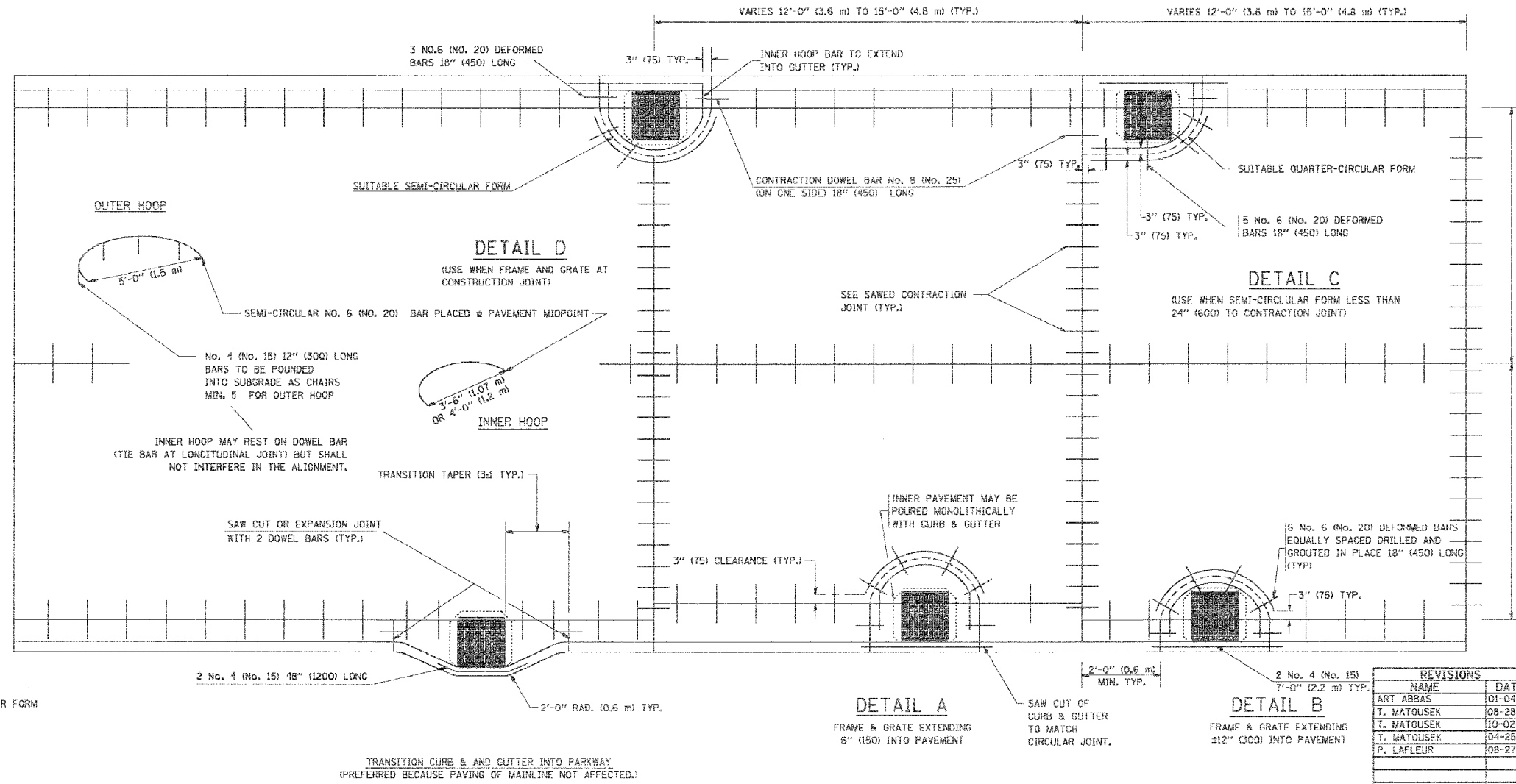
F.A. RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	297
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 8" (200)	3'-6" (1.1 m)	4'-0" (1.2 m)	5'-0" (1.5 m)
> 8" (200) TO 14" (360)	4'-0" (1.2 m)	4'-6" (1.4 m)	5'-0" (1.5 m)

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT. EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.

DESIGNER NOTE:
THIS DETAIL IS TO BE USED WHEN THE GUTTER FLAG IS LESS THAN 24"



ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

ILLINOIS DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT CURB AND GUTTER

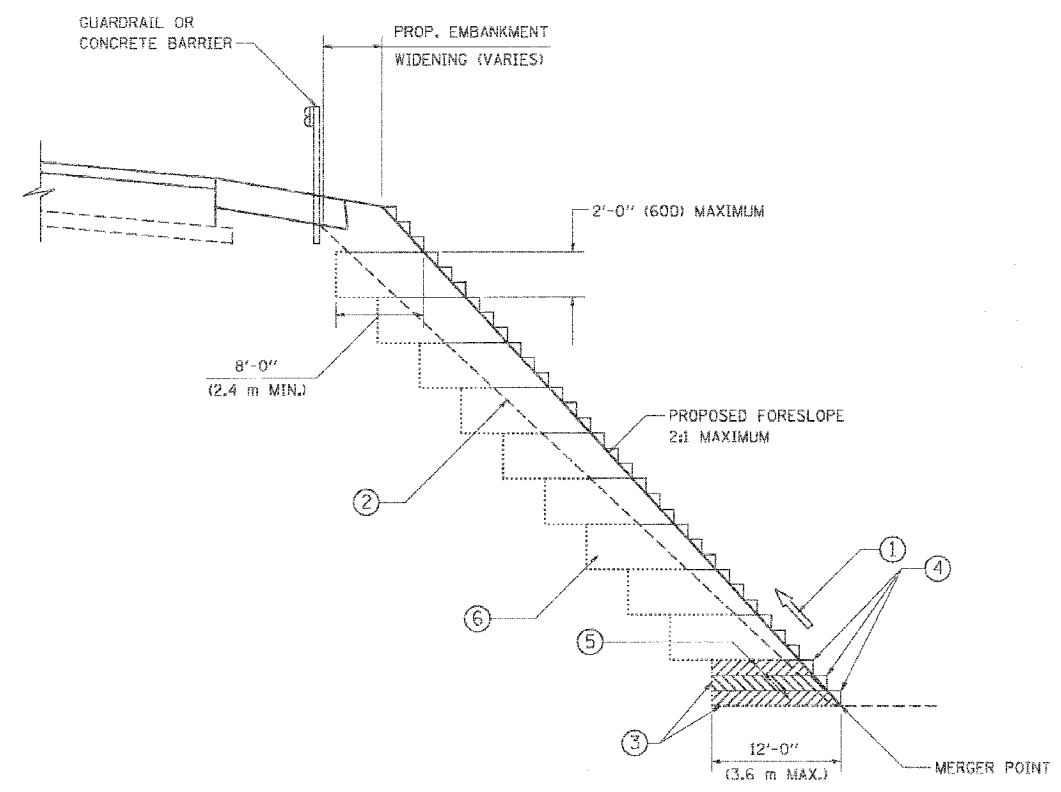
SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

REVISIONS	
NAME	DATE
ART ABBAS	01-04-99
T. MATOUSEK	08-28-00
T. MATOUSEK	10-02-00
T. MATOUSEK	04-25-02
P. LAFLEUR	08-27-02

PLOT DATE = 2/1/2007
FILE NAME = K:\projects\114r\114r.dwg
PLOT SCALE = 1/8" = 1'-0"
USER NAME = bmoore

CONTRACT NO.				
STA.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	298
STA. TO STA.		FED. ROAD DIST. NO. 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.

REVISIONS	
NAME	DATE
	05/16/04

ILLINOIS DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT
WIDENING

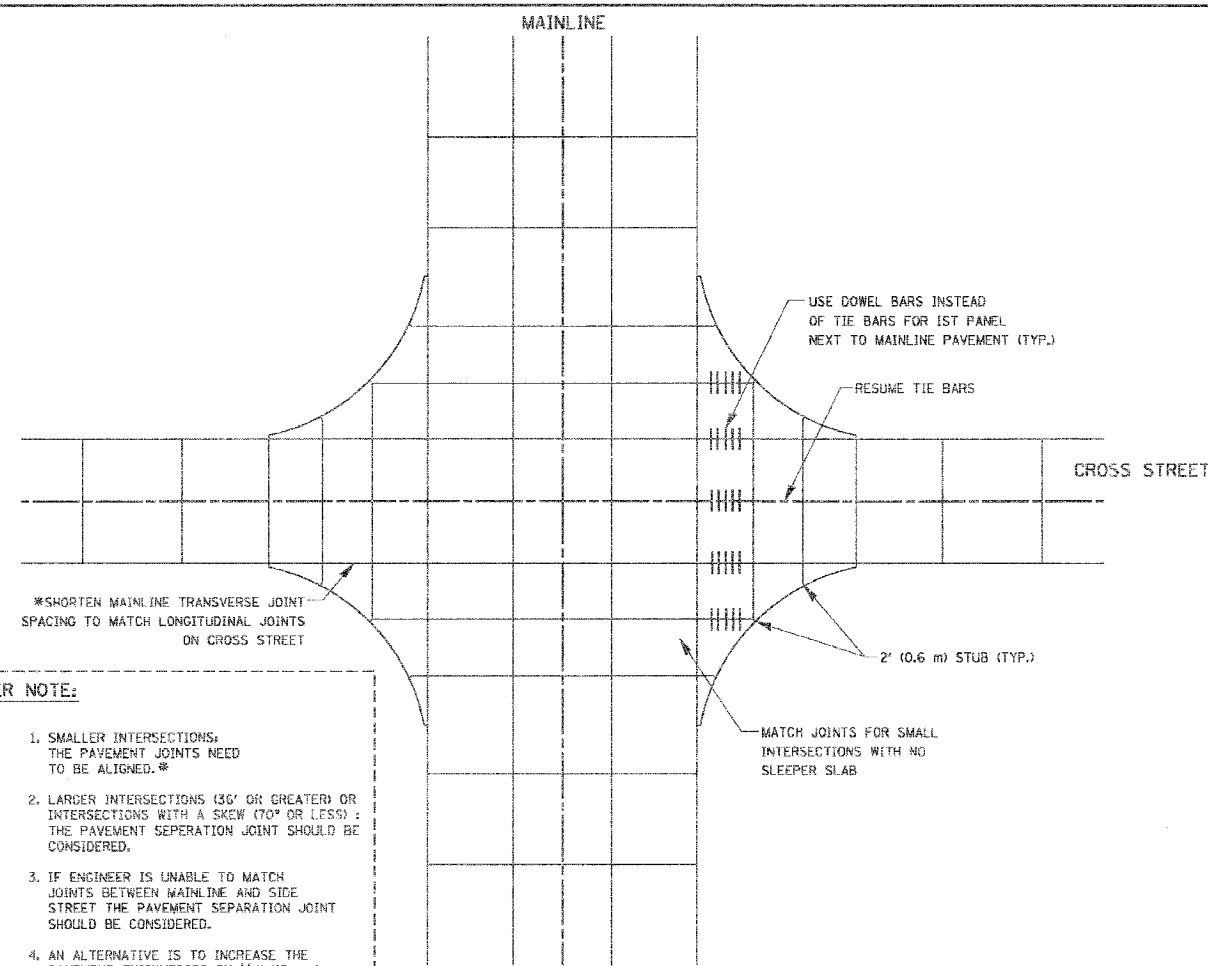
SCALE: VERT. NONE
HORIZ.

DRAWN BY: CADD
CHECKED BY: S.E.B.
BD-51

PLT DATE = 04/20/07
FILE NAME = S:\projects\114R-1\114R-1.dwg
PLT SCALE = 1/8" = 1'-0"
USER NAME = bturner

P.A. DIST.	SECTION	COUNTY	DATE SHEETS	SHEET NO.
338	114R-1	WILL	355	299
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	CIVIL ENGINEERING		

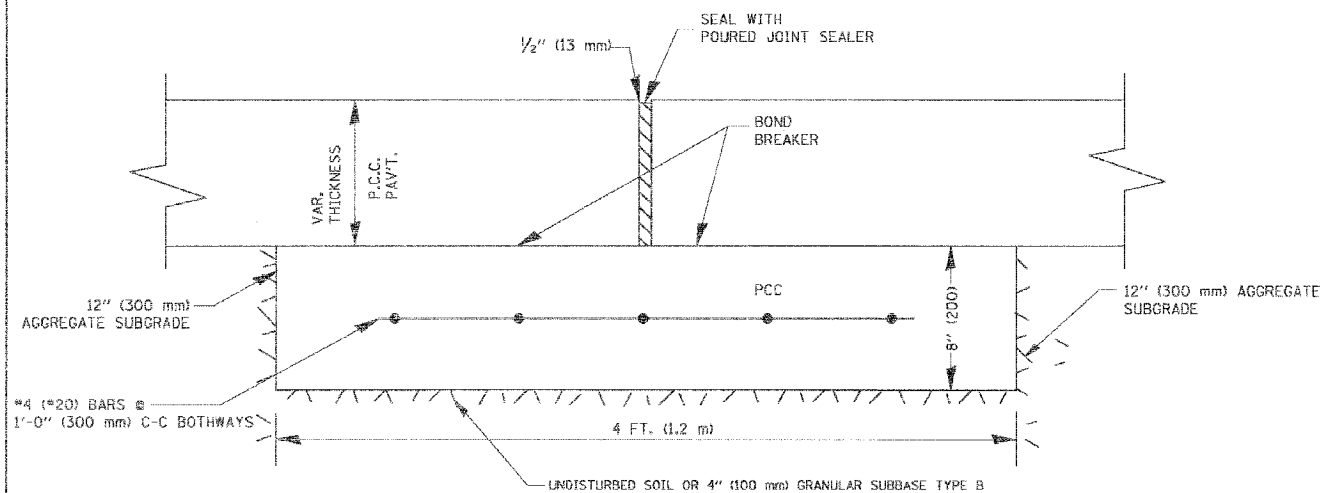
THE USE OF CROSS STREET PAVEMENT SEPARATION JOINTS FOR SKEWED OR LARGE INTERSECTIONS WHERE JOINTS MAY NOT MATCH



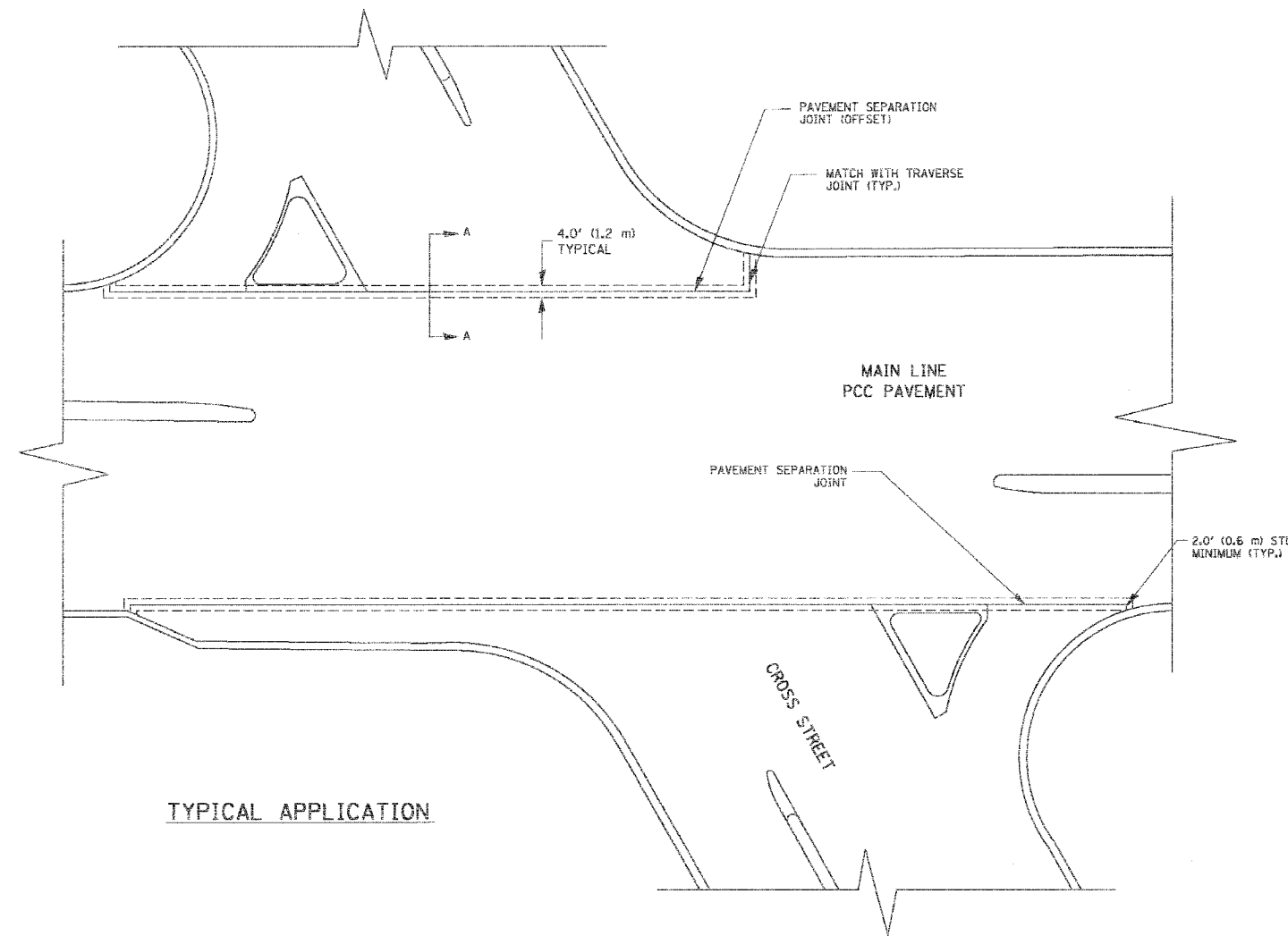
DESIGNER NOTE:

1. SMALLER INTERSECTIONS: THE PAVEMENT JOINTS NEED TO BE ALIGNED.*
2. LARGER INTERSECTIONS (36' OR GREATER) OR INTERSECTIONS WITH A SKEW (70° OR LESS): THE PAVEMENT SEPARATION JOINT SHOULD BE CONSIDERED.
3. IF ENGINEER IS UNABLE TO MATCH JOINTS BETWEEN MAINLINE AND SIDE STREET THE PAVEMENT SEPARATION JOINT SHOULD BE CONSIDERED.
4. AN ALTERNATIVE IS TO INCREASE THE PAVEMENT THICKNESSES BY 1/2" (13 mm) FOR THE LENGTH OF THE AFFECTED PANELS AT THE INTERSECTION.
5. FOR LARGE INTERSECTIONS (6 LANES OR MORE) WHERE JOINTS CAN BE MATCHED, USE #8 (25) DOWEL BARS INSTEAD OF #8 (25) TIE BARS AT EDGE OF MAINLINE PAVEMENT WHEN NO PAVEMENT SEPARATION JOINTS USED.

PLAN



PROPOSED SECTION A-A



TYPICAL APPLICATION

NOTE:

1. JOINT FILLER SHALL CONSIST OF A SHEET OF 1/2" (13 mm) BITUMINOUS PREFORMED FIBER JOINT FILLER CONFORMING TO ARTICLE 1051.03 OF THE STANDARD SPECIFICATIONS.
2. THE JOINT SHALL BE SEALED WITH A HOT POUR JOINT SEALER CONFORMING TO ARTICLE 1050.02 OF THE STANDARD SPECIFICATIONS.
3. A SINGLE LAYER OF FELT ROOFING PAPER SHALL SERVE AS A BOND BREAKER.
4. JOINT SHALL CONTINUE THROUGH COMBINATION CURB & GUTTER OR PCC SHOULDER.
5. PAVEMENT SEPARATION JOINT IS TO BE PAID FOR AS "SLEEPER SLAB" AND IS TO BE MEASURED IN PLACE BY THE LINEAL FOOT.
6. BOND BREAKER AND 1/2" (13 mm) JOINT AND FILLER SHALL BE INCIDENTAL TO THE PAY ITEM "SLEEPER SLAB".

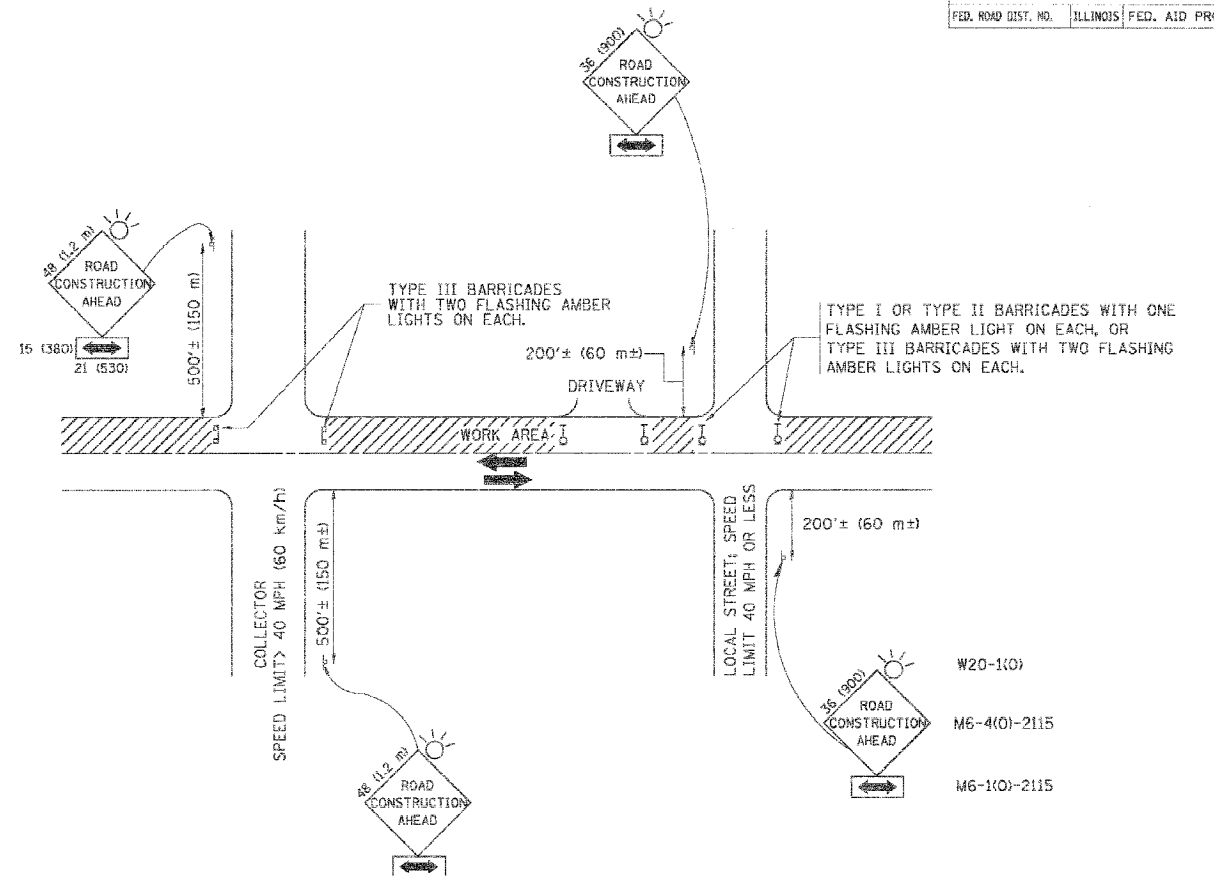
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**DETAIL OF PAVEMENT SEPARATION
JOINT FOR JOINTED PCC
PAVEMENTS AT
INTERSECTIONS**

SCALE: NONE
DATE 12/27/2006

DRAWN BY:
CHECKED BY:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	355	300
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.				



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.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS

SCALE: NONE

DRAWN BY

CHECKED BY

TC-10