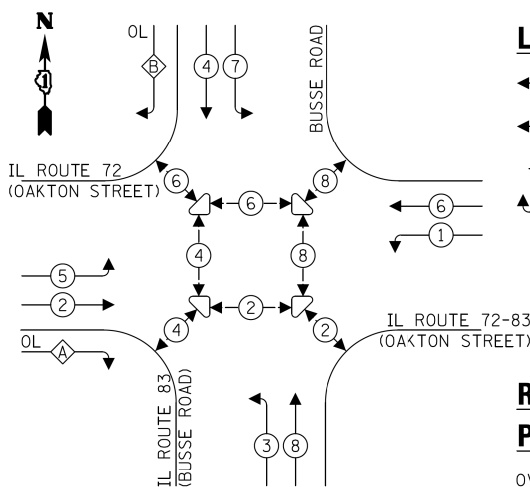


**PROPOSED CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

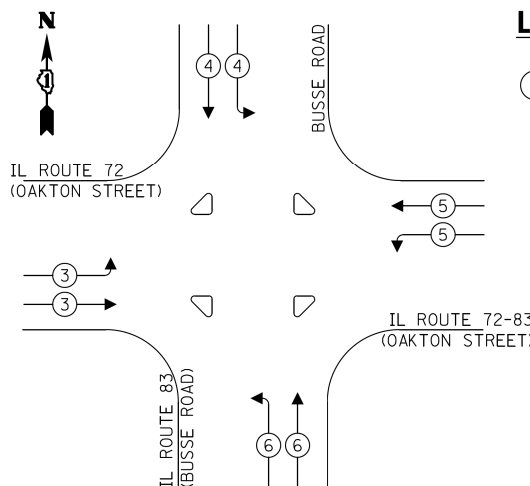
**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5

**LEGEND:**

- ⊙ NO. 14 3/C (BLACK, WHITE, GREEN), TYPE SOOW

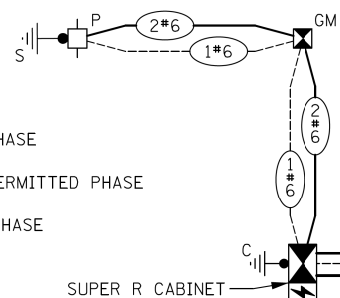
**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

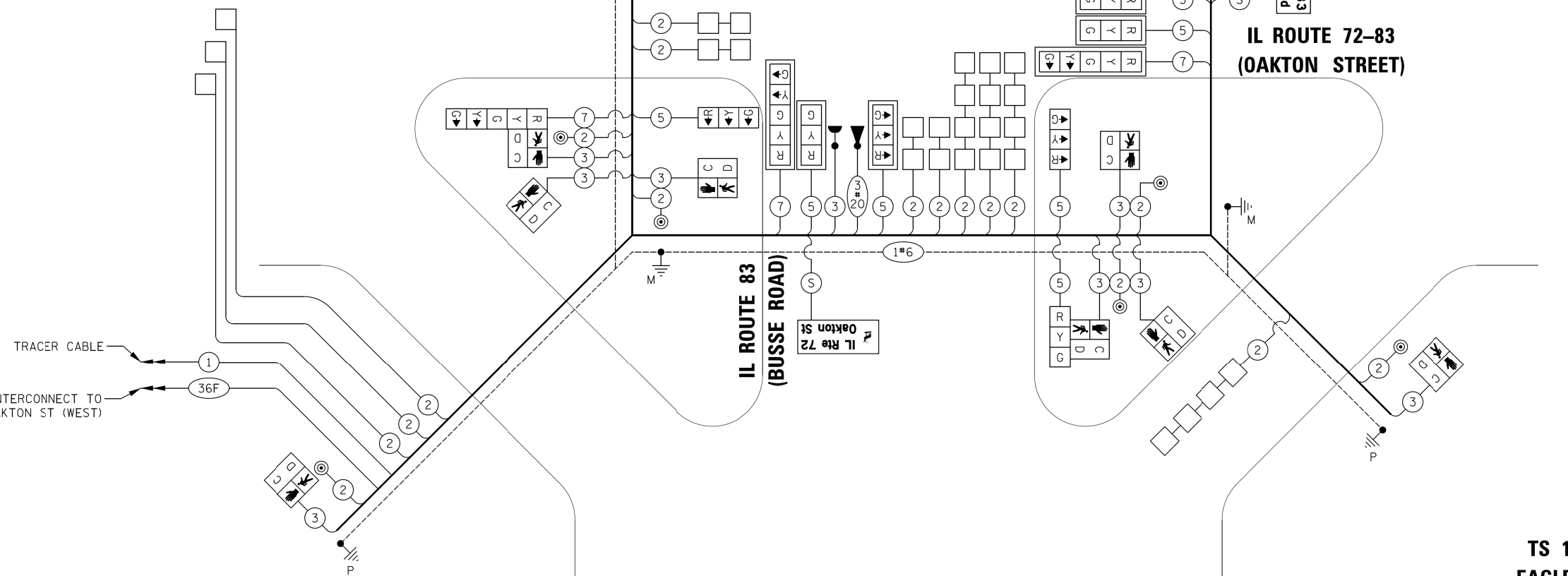
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	23	11	50	126.5
(YELLOW)	23	20	5	23.0
(GREEN)	23	12	45	124.2
ARROW	8	10	10	8.0
PED. SIGNAL	14	20	100	280.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	-	-	-	-
<b>TOTAL =</b>				<b>926.7</b>

ENERGY COSTS TO:  
 ELK GROVE VILLAGE  
 901 WELLINGTON AVENUE  
 ELK GROVE VILLAGE, IL 60007  
 ENERGY SUPPLY: CONTACT: CHRISTINE LEFTWICH  
 PHONE: (630) 424-5124  
 COMPANY: COMED  
 ACCOUNT NUMBER: 0829153004



TRACER CABLE  
 PROPOSED INTERCONNECT TO IL RTE 72/OAKTON ST (WEST)

PROPOSED INTERCONNECT TO IL RTE 72/OAKTON ST (WEST)



USER NAME = LEP	DESIGNED - LEP	REVISED -
PLOT SCALE = 20,0000' / 1"	DRAWN - OJT	REVISED -
PLOT DATE = 10/25/2019	CHECKED - JJE	REVISED -
	DATE - 11/1/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

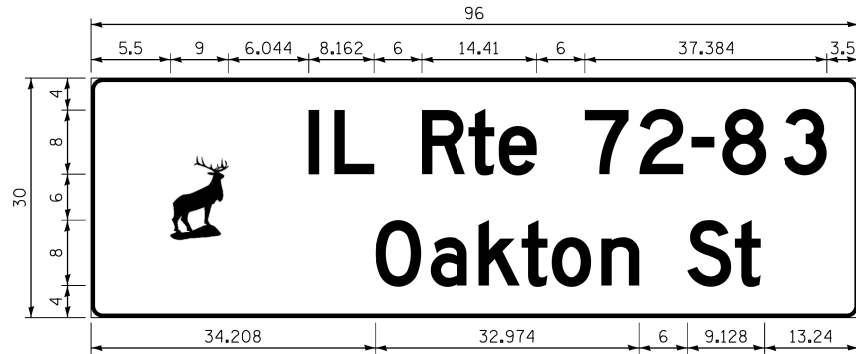
PROPOSED CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
 & EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 IL RTE 72-83 (OAKTON ST) AT IL RTE 83 (BUSSE RD) (MIDDLE)  
 SCALE: NO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 2011-019-TS	COUNTY COOK	TOTAL SHEETS 191	SHEET NO. 101
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

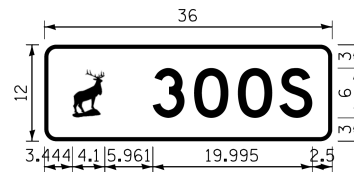
TS 11310  
 EAGLE 1M

**SIGN PANEL – ILLUMINATED STREET NAME SIGN**

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



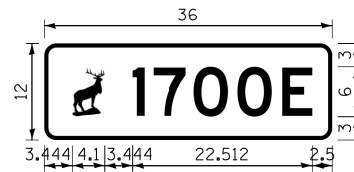
DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	20	LED SNS	ZZ	1 (DOUBLE-SIDED)



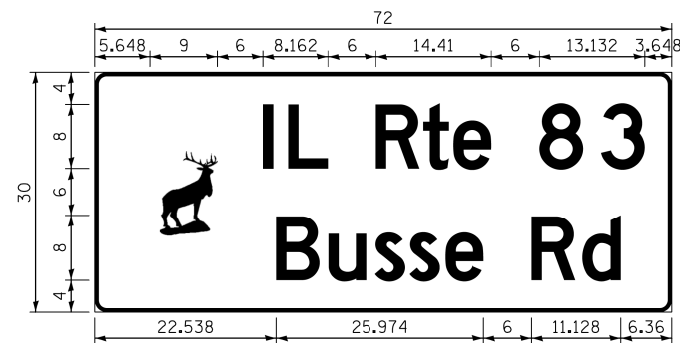
DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	3	TYPE 1	ZZ	2



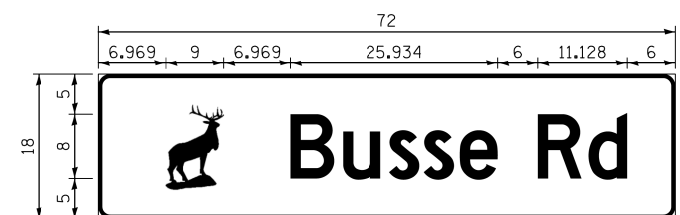
DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15	LED SNS	ZZ	1 (DOUBLE-SIDED)



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	3	TYPE 1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15	LED SNS	ZZ	1 (DOUBLE-SIDED)



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	9	LED SNS	ZZ	1 (DOUBLE-SIDED)

**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	42
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1094
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	26
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	957
UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA.	FOOT	310
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	5
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2714
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	5047
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5372
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1085
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	6159
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	220
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1810
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	58
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	14
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	15
INDUCTIVE LOOP DETECTOR	EACH	21
DETECTOR LOOP, TYPE I	FOOT	1765
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	11
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	11
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1234
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER	FOOT	12
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	1079

**TS 11310  
EAGLE 1M**



USER NAME = jje	DESIGNED - LEP	REVISED -
PLOT SCALE = 20,0000' / 1"	DRAWN - OJT	REVISED -
PLOT DATE = 11/1/2019	CHECKED - JJE	REVISED -
	DATE - 11/1/2019	REVISED -

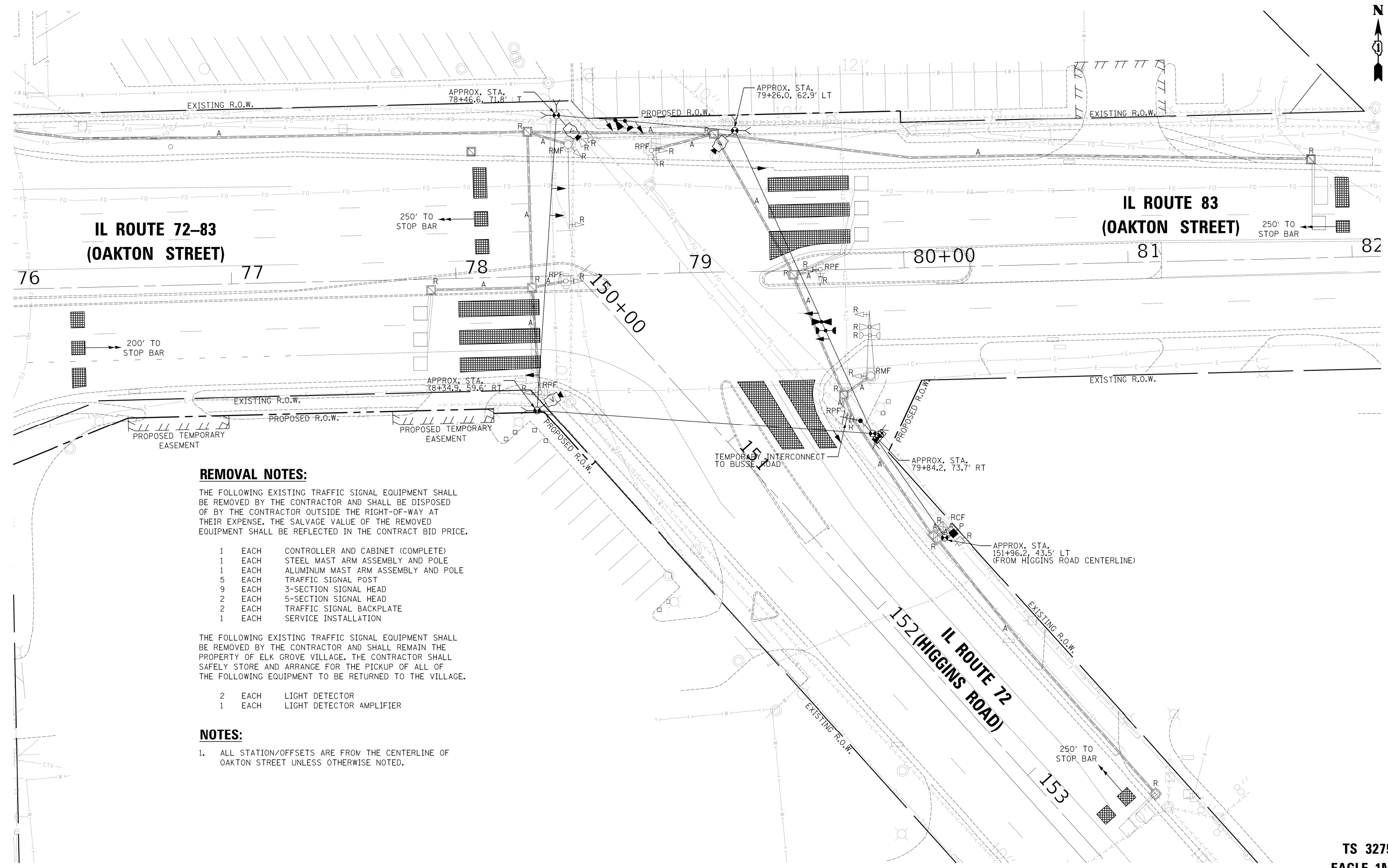
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ILLUMINATED STREET NAME SIGNS AND SCHEDULE OF QUANTITIES  
IL RTE 72-83 (OAKTON ST) AT IL RTE 83 (BUSSE RD) (MIDDLE)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	102
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				





**REMOVAL NOTES:**

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 5 EACH TRAFFIC SIGNAL POST
- 9 EACH 3-SECTION SIGNAL HEAD
- 2 EACH 5-SECTION SIGNAL HEAD
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH SERVICE INSTALLATION

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF ELK GROVE VILLAGE. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICKUP OF ALL OF THE FOLLOWING EQUIPMENT TO BE RETURNED TO THE VILLAGE.

- 2 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER

**NOTES:**

1. ALL STATION/OFFSETS ARE FROM THE CENTERLINE OF OAKTON STREET UNLESS OTHERWISE NOTED.



USER NAME = LEP	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
PLOT SCALE = 20.0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 10/24/2019	DATE - 11/1/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

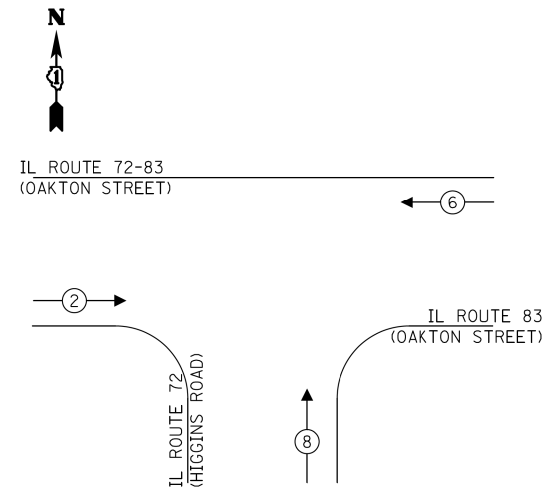
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN  
IL RTE 72-83 (OAKTON ST) AT IL RTE 72 (HIGGINS RD) (EAST)

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

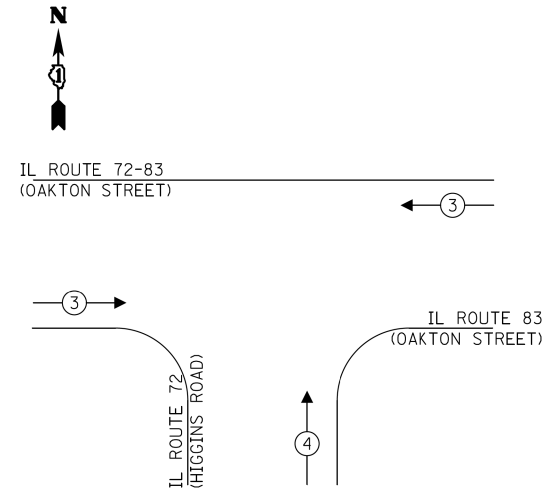
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	103
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

TS 3275  
EAGLE 1M

**TEMPORARY CONTROLLER SEQUENCE**



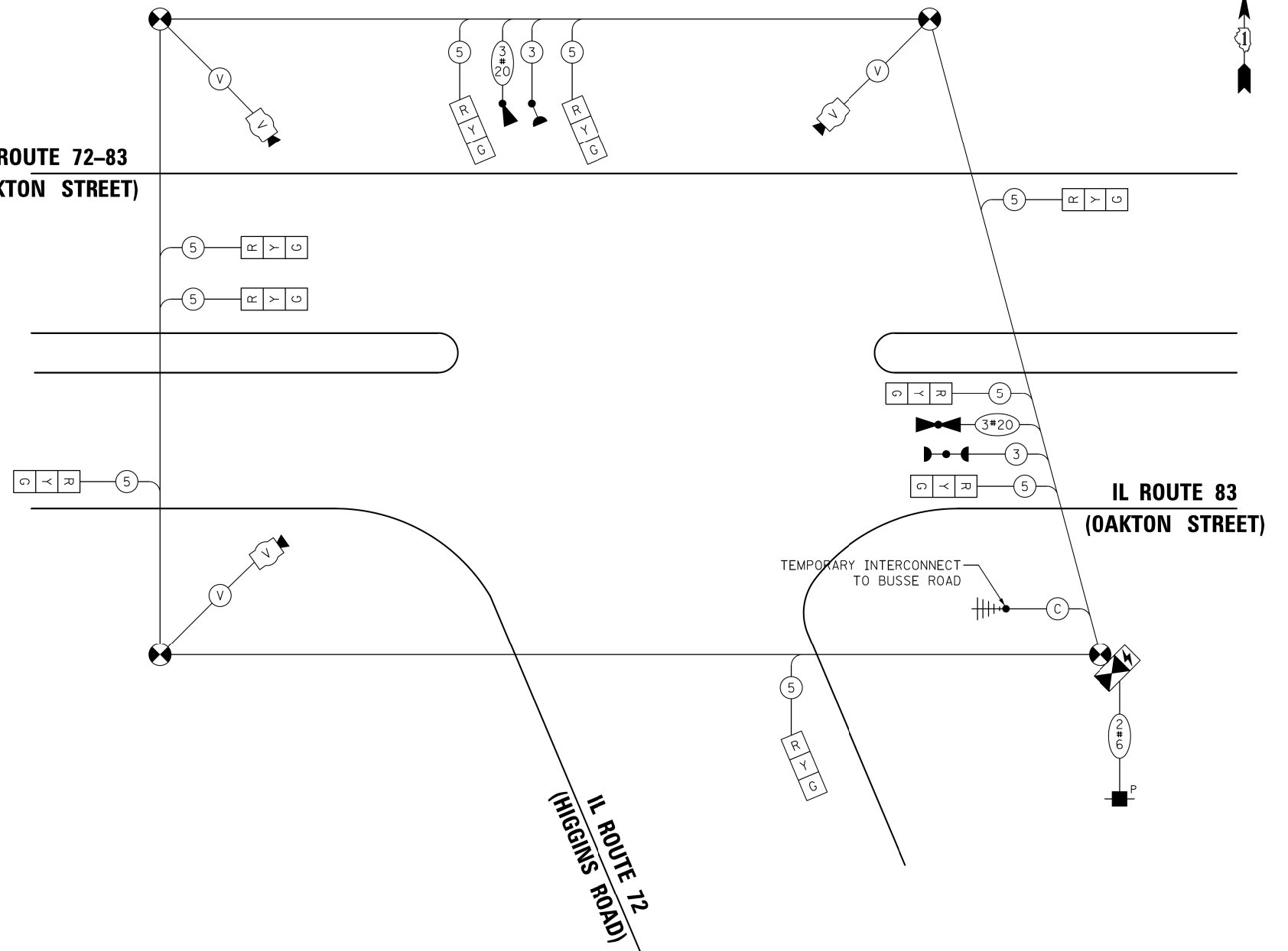
**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND:**

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ ← PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

**IL ROUTE 72-83 (OAKTON STREET)**



**CABLE PLAN**  
(NOT TO SCALE)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	11	50	49,5
(YELLOW)	9	20	5	9,0
(GREEN)	9	12	45	48,6
ARROW	-	10	10	-
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100,0
UPS	1	25	100	25,0
VIDEO SYSTEM	1	150	100	150,0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				382,1

ENERGY COSTS TO:

ELK GROVE VILLAGE  
901 WELLINGTON AVENUE  
ELK GROVE VILLAGE, IL 60007

ENERGY SUPPLY: CONTACT: CHRISTINE LEFTWICH  
PHONE: (630) 424-5124  
COMPANY: COMED  
ACCOUNT NUMBER: 1183141069



USER NAME = LEP	DESIGNED - LEP	REVISED -
PLOT SCALE = 20,0000' / 1in.	DRAWN - OJT	REVISED -
PLOT DATE = 10/24/2019	CHECKED - JJE	REVISED -
	DATE - 11/1/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

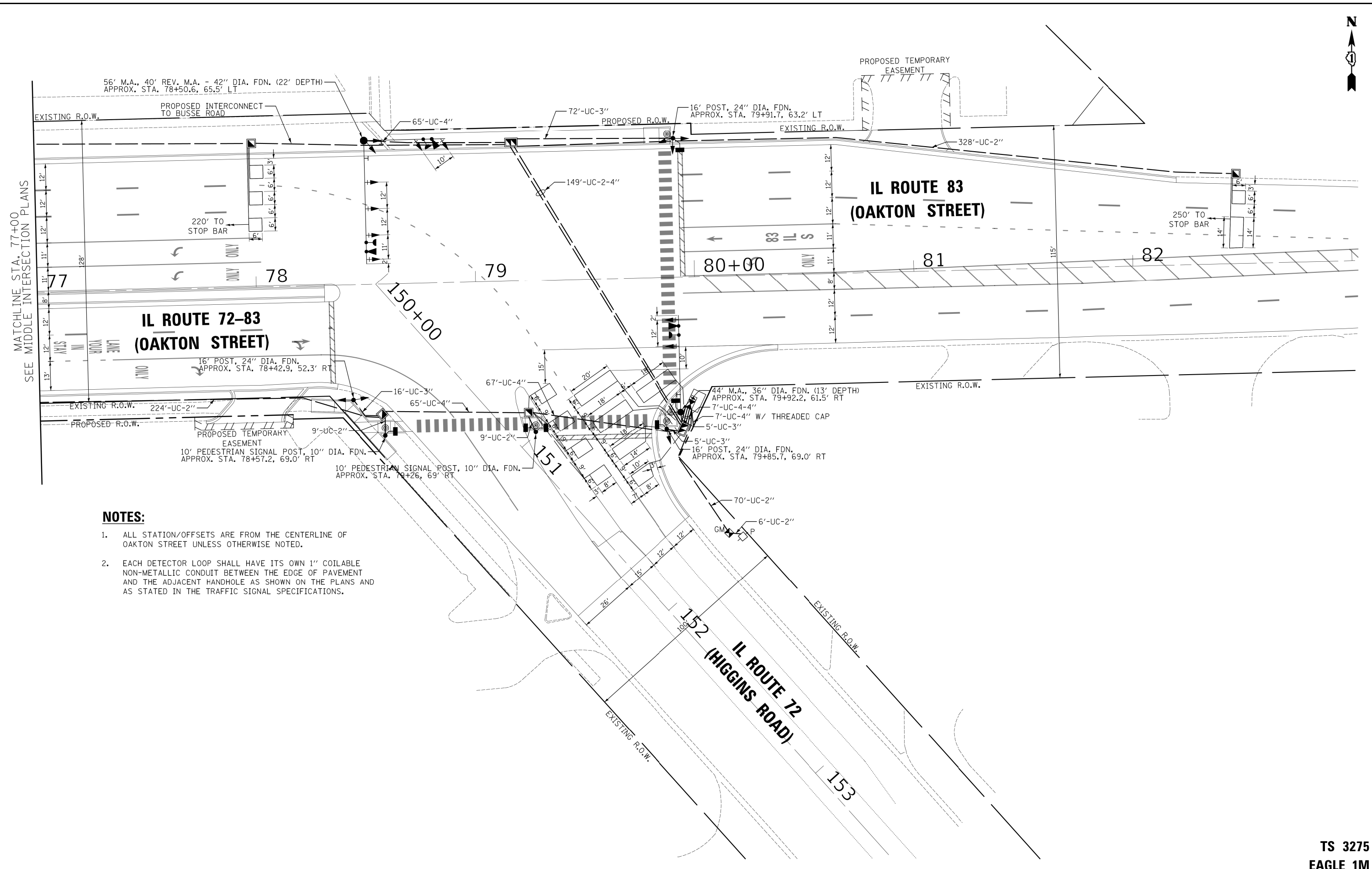
**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
& TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
IL RTE 72-83 (OAKTON ST) AT IL RTE 72 (HIGGINS RD) (EAST)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	104
CONTRACT NO. 60P14				

ILLINOIS FED. AID PROJECT

**TS 3275  
EAGLE 1M**



**NOTES:**

1. ALL STATION/OFFSETS ARE FROM THE CENTERLINE OF OAKTON STREET UNLESS OTHERWISE NOTED.
2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.



USER NAME = LEP	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
PLOT SCALE = 20,0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 10/31/2019	DATE - 11/1/2019	REVISED -

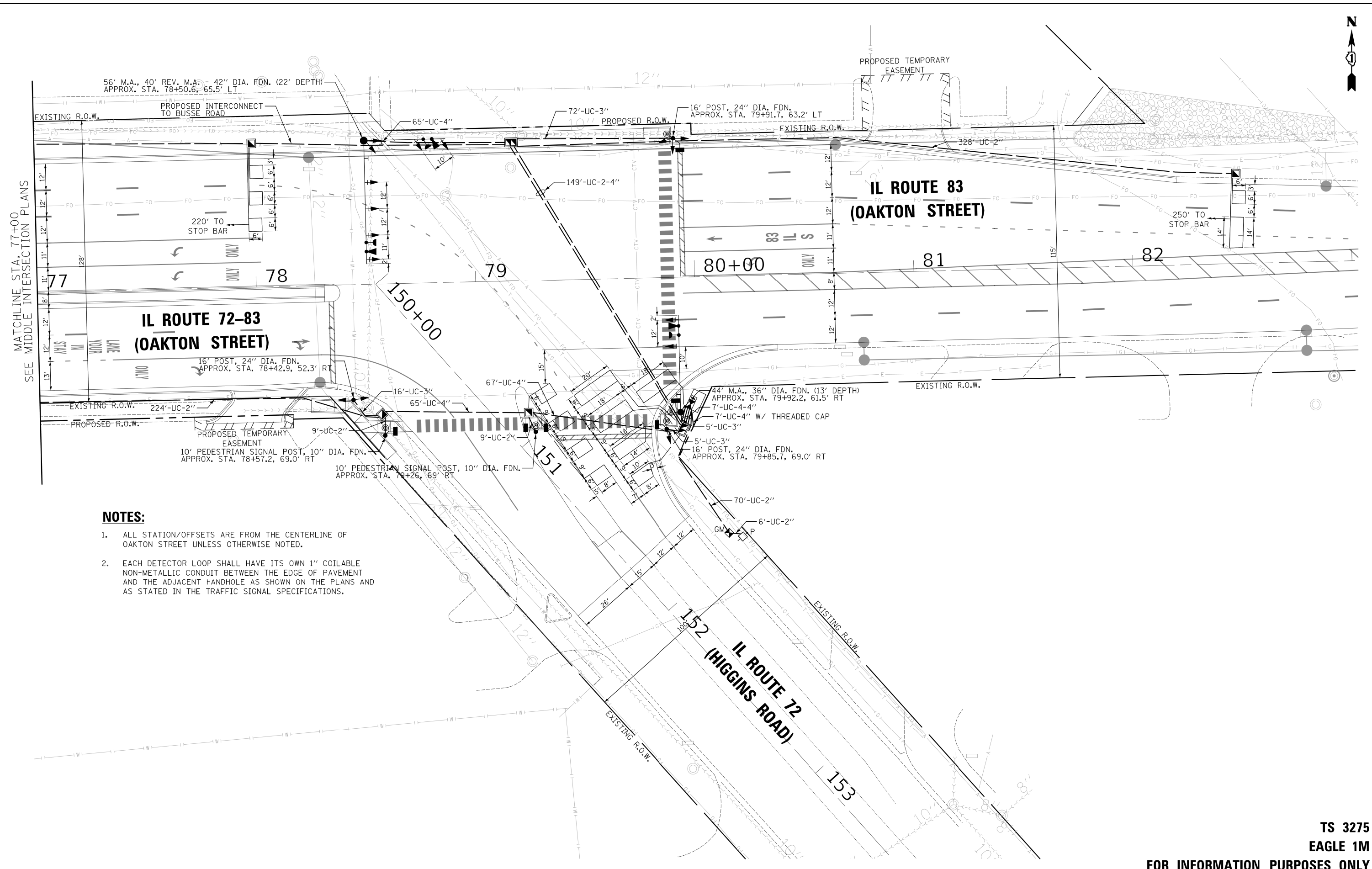
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN  
IL RTE 72-83 (OAKTON ST) AT IL RTE 72 (HIGGINS RD) (EAST)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	105
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

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

**TS 3275  
EAGLE 1M**



**NOTES:**

1. ALL STATION/OFFSETS ARE FROM THE CENTERLINE OF OAKTON STREET UNLESS OTHERWISE NOTED.
2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

**TS 3275  
EAGLE 1M  
FOR INFORMATION PURPOSES ONLY**



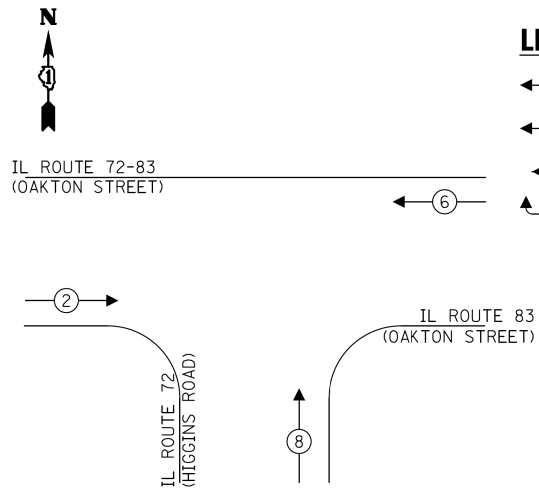
USER NAME = LEP	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
PLOT SCALE = 20,0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 10/31/2019	DATE - 11/1/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

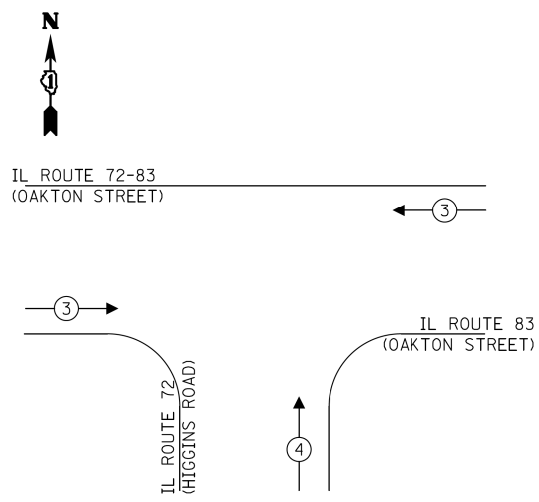
**UTILITY PLAN  
IL RTE 72-83 (OAKTON ST) AT IL RTE 72 (HIGGINS RD) (EAST)**  
SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	106
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

**PROPOSED CONTROLLER SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**

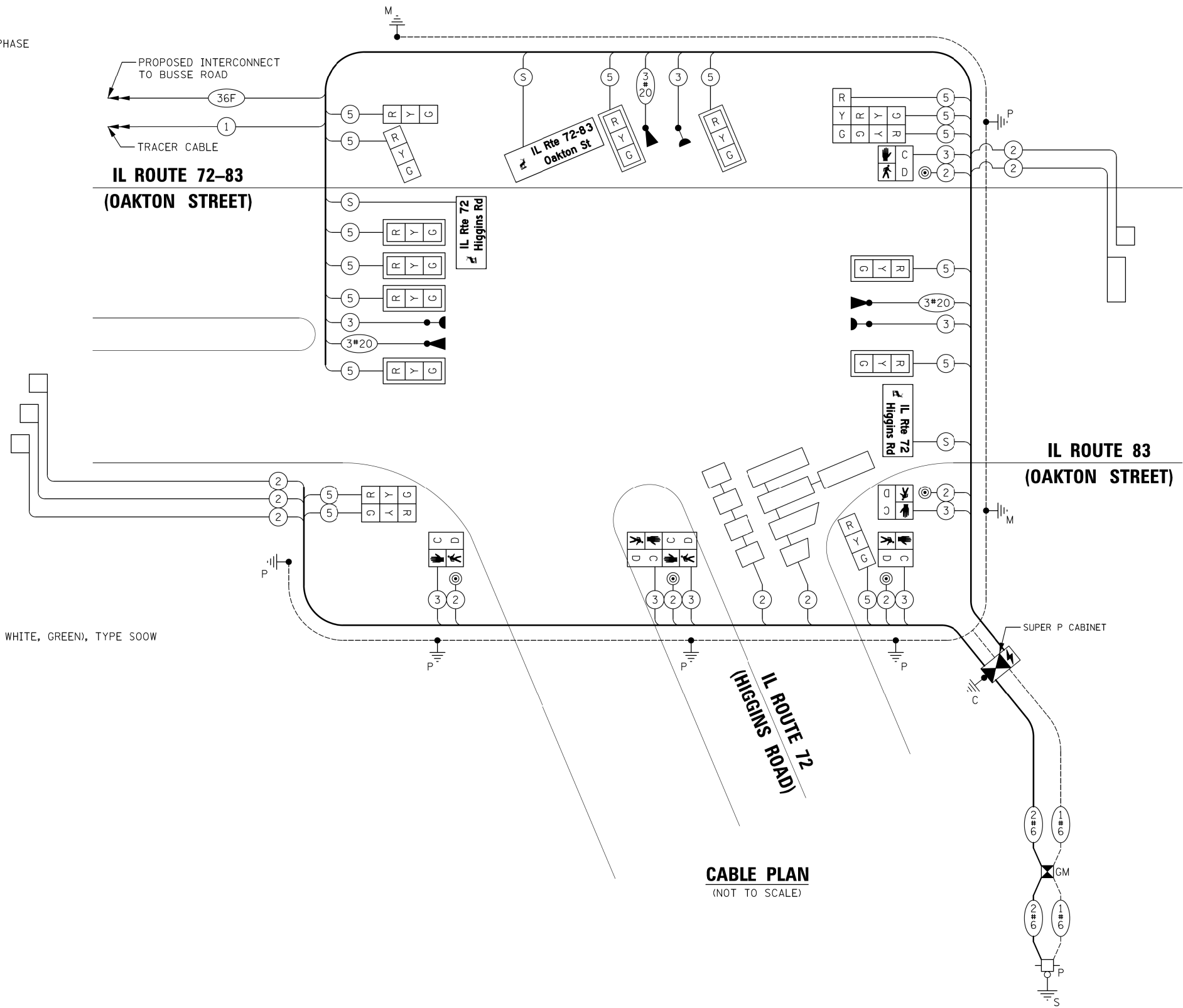


**LEGEND:**

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ ← PROTECTED/PERMITTED PHASE
- ← ⊙ ← PEDESTRIAN PHASE
- ⊙ OL OVERLAP

**LEGEND:**

- ⊙ NO. 14 3/C (BLACK, WHITE, GREEN), TYPE SOOW



**CABLE PLAN**  
(NOT TO SCALE)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
ARROW	-	10	10	-
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	3	120	50	180.0
LUMINAIRE	-	-	-	-
TOTAL =				615.4

ENERGY COSTS TO:  
 ELK GROVE VILLAGE  
 901 WELLINGTON AVENUE  
 ELK GROVE VILLAGE, IL 60007  
 ENERGY SUPPLY: CONTACT: CHRISTINE LEFTWICH  
 PHONE: (630) 424-5124  
 COMPANY: COMED  
 ACCOUNT NUMBER: 0829153004



USER NAME = LEP  
 DESIGNED - LEP  
 DRAWN - OJT  
 CHECKED - JJE  
 DATE - 11/1/2019  
 PLOT SCALE = 20,000' / 1" / 1" / 1"  
 PLOT DATE = 10/25/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
 & EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 IL RTE 72-83 (OAKTON ST) AT IL RTE 72 (HIGGINS RD) (EAST)**  
 SCALE: NO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

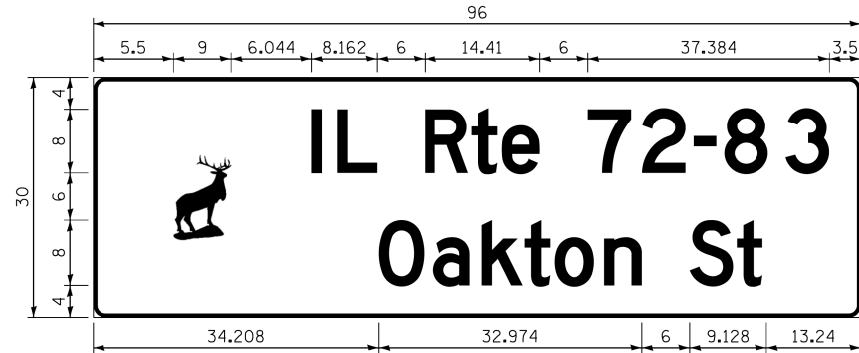
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	107

CONTRACT NO. 60P14  
 ILLINOIS FED. AID PROJECT

**TS 3275  
 EAGLE 1M**

**SIGN PANEL – ILLUMINATED STREET NAME SIGN**

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	20	LED SNS	ZZ	1 (SINGLE-SIDED)

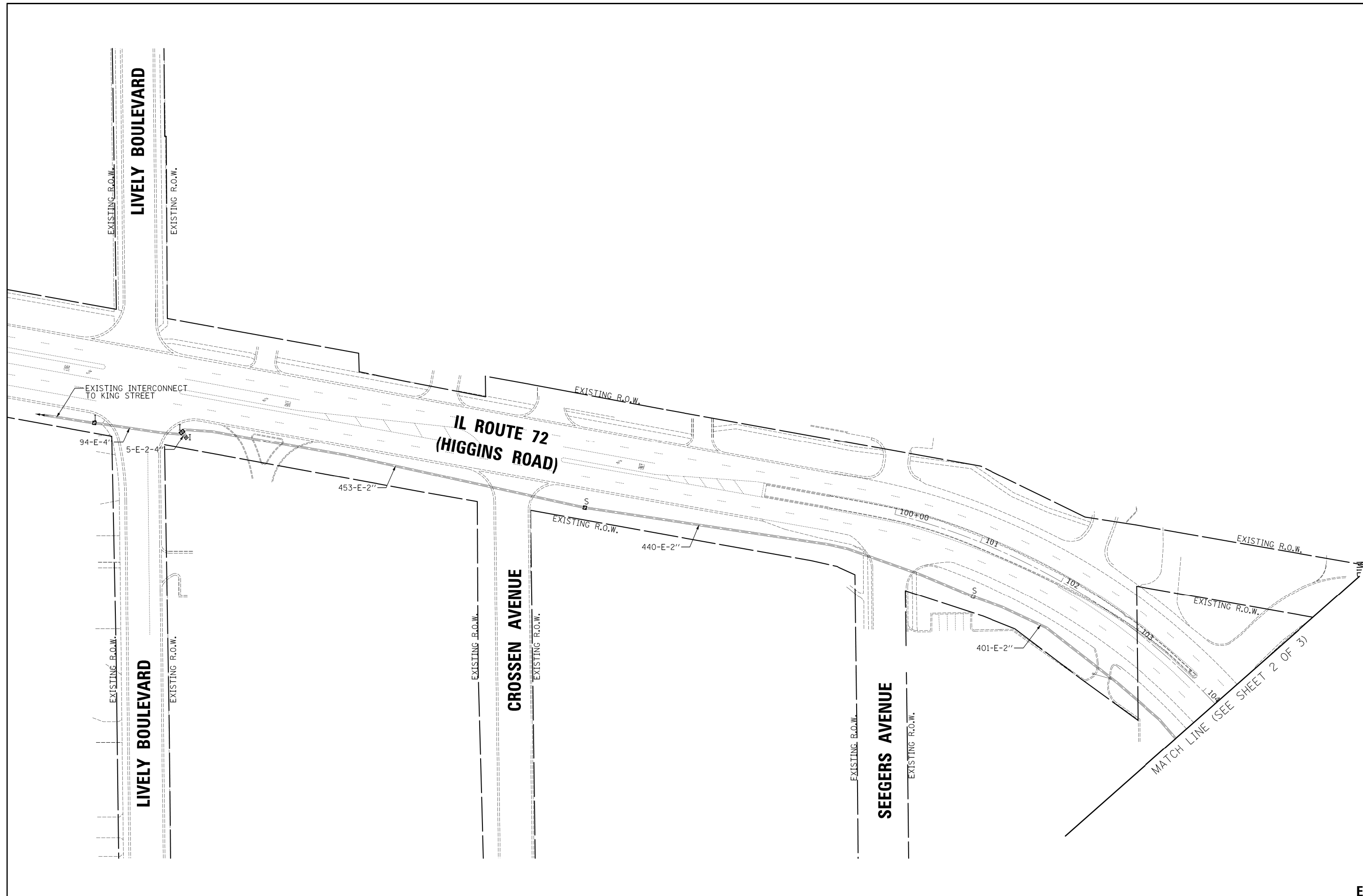


DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15	LED SNS	ZZ	2 (DOUBLE-SIDED)

**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	646
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	98
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	530
HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	649
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1554
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3876
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2365
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	115
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	888
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	22
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	600
LIGHT DETECTOR	EACH	3
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	8
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	736
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	3
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER	FOOT	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 40 FT. AND 56 FT.	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	632

**TS 3275  
EAGLE 1M**



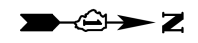
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	DRAWN - OJT	REVISED -
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PLOT DATE = 10/24/2019	DATE - 11/1/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TEMPORARY INTERCONNECT PLAN (SHEET 1 OF 3)</b>			
<b>IL RTE 72 (HIGGINS ROAD)</b>			
SCALE: 1" = 50'	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.

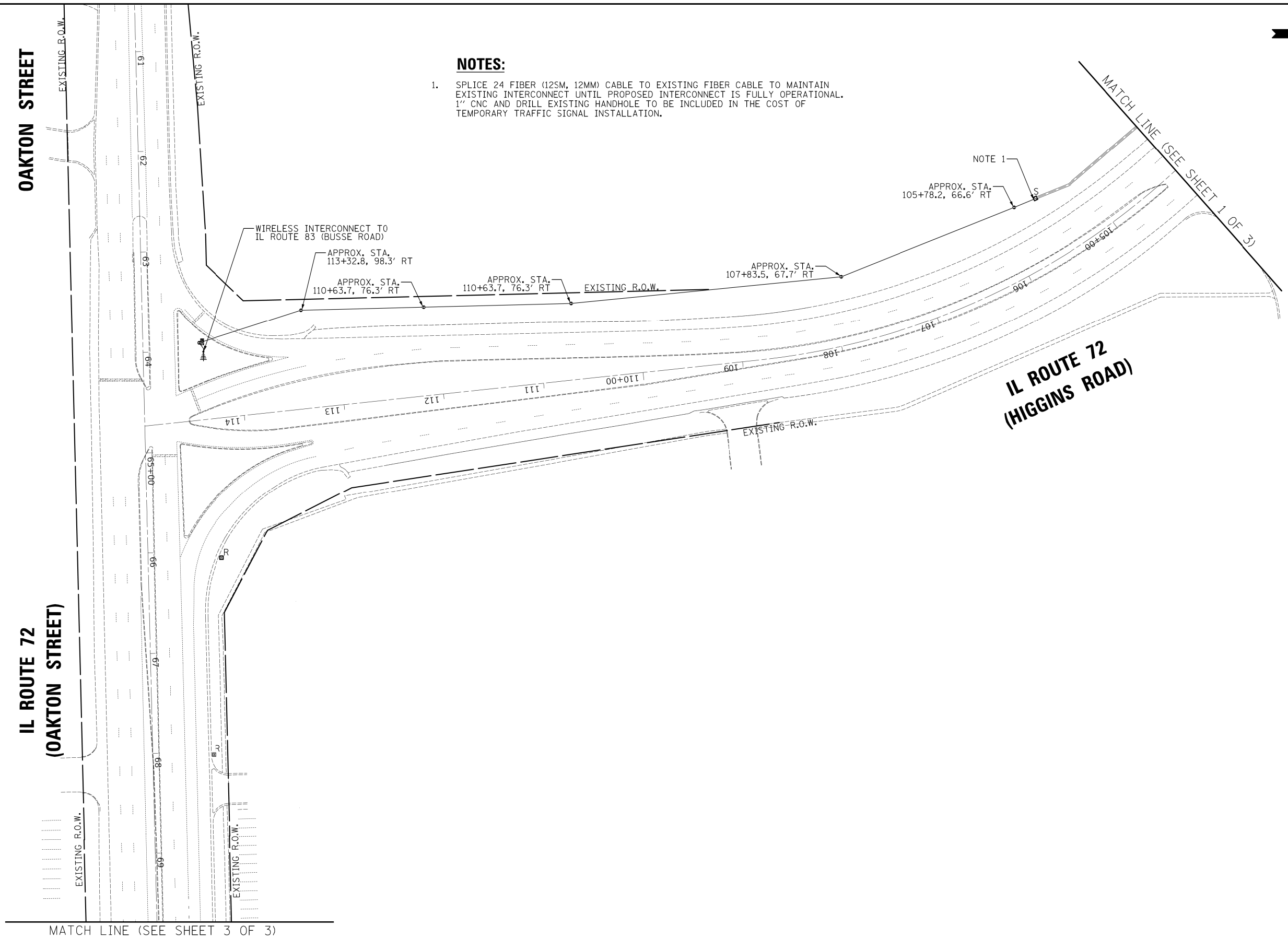
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	109
<b>CONTRACT NO. 60P14</b>				
ILLINOIS FED. AID PROJECT				

**EAGLE 1M**



**NOTES:**

1. SPLICE 24 FIBER (12SM, 12MM) CABLE TO EXISTING FIBER CABLE TO MAINTAIN EXISTING INTERCONNECT UNTIL PROPOSED INTERCONNECT IS FULLY OPERATIONAL. 1" CNC AND DRILL EXISTING HANDHOLE TO BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL INSTALLATION.



**IL ROUTE 72  
(OAKTON STREET)**

**IL ROUTE 72  
(HIGGINS ROAD)**

MATCH LINE (SEE SHEET 3 OF 3)

MATCH LINE (SEE SHEET 1 OF 3)



USER NAME = LEP	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
PLOT SCALE = 50.0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 11/1/2019	DATE - 11/1/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

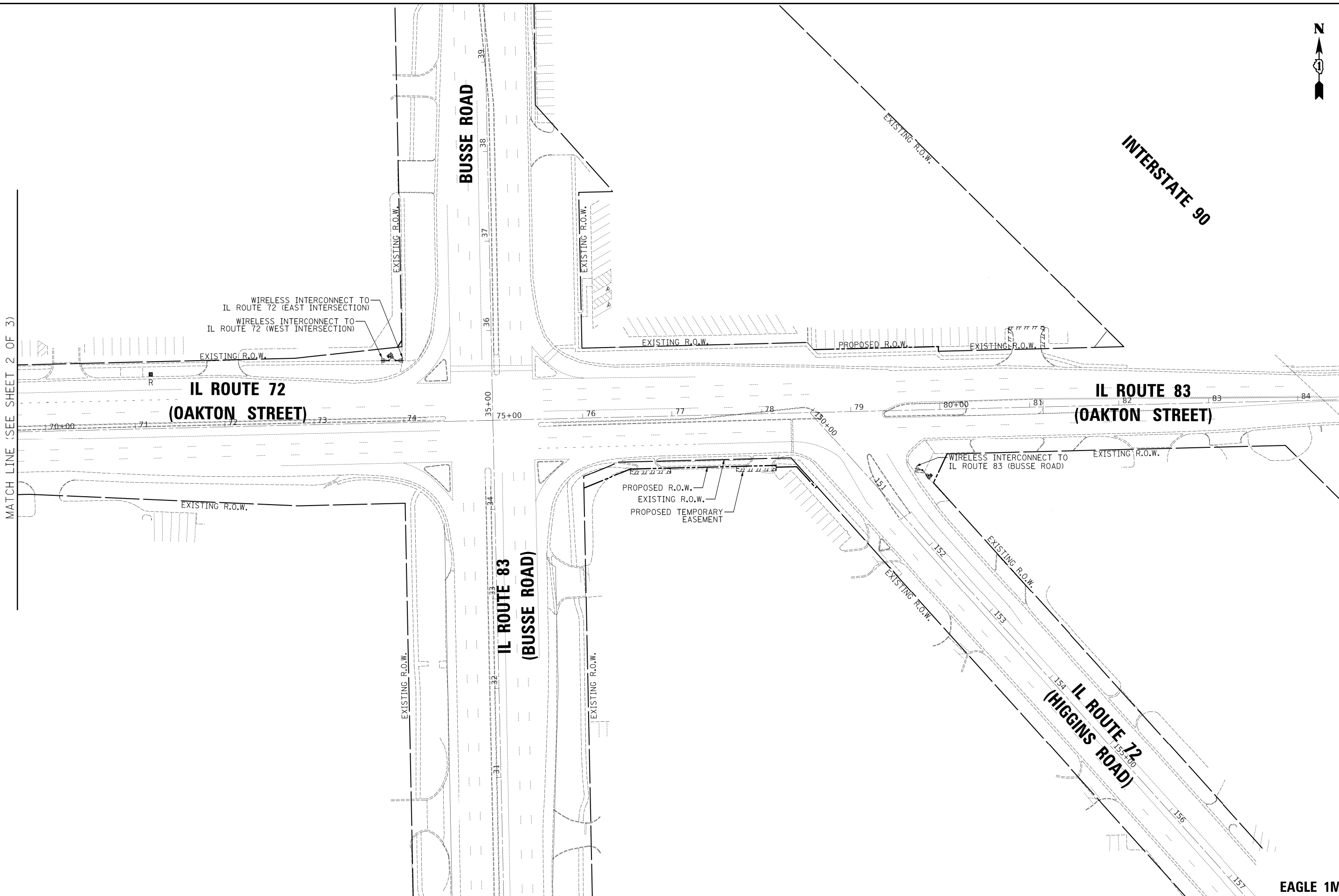
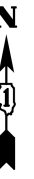
**TEMPORARY INTERCONNECT PLAN (SHEET 2 OF 3)  
IL RTE 72 (HIGGINS ROAD/OAKTON STREET)**

SCALE: 1" = 50' SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	110
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

**EAGLE 1M**





EAGLE 1M



USER NAME = LEP	DESIGNED - LEP	REVISED -
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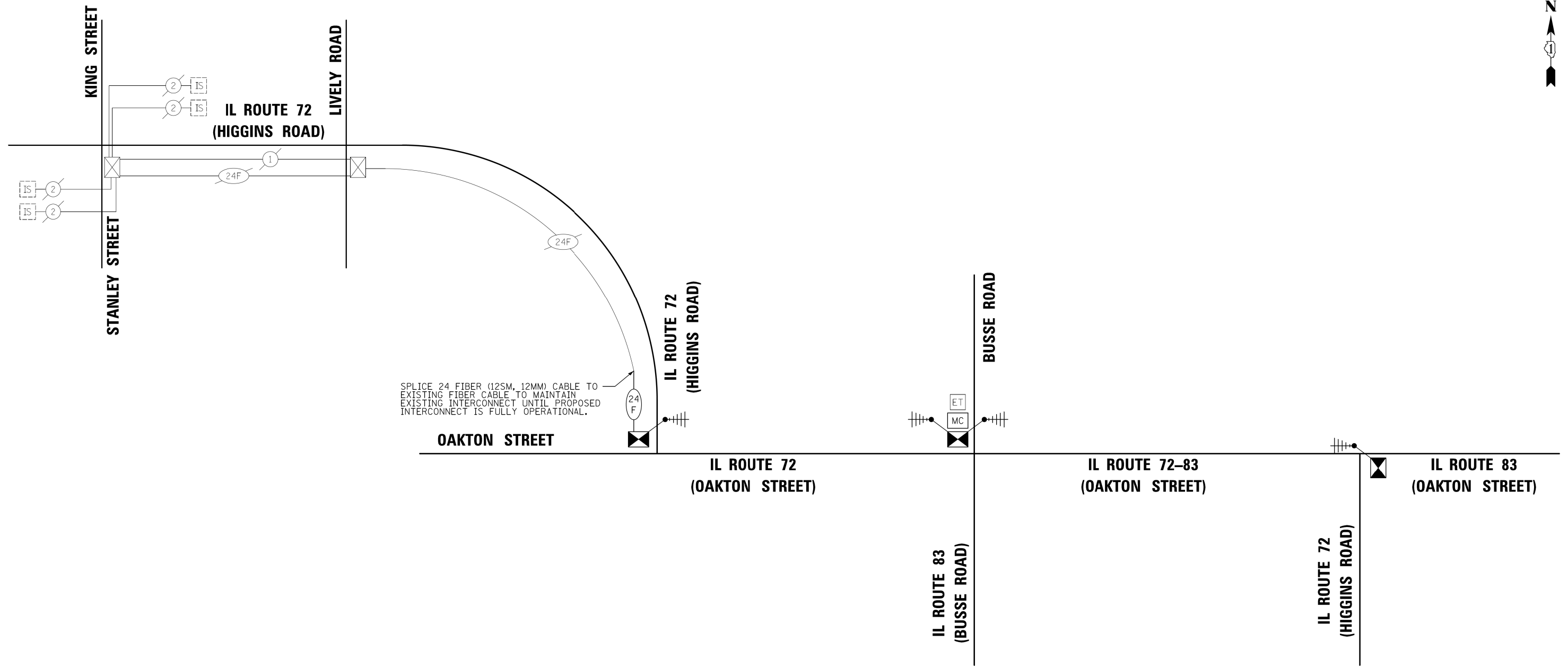
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN (SHEET 3 OF 3)  
IL RTE 72 (HIGGINS ROAD/OAKTON STREET)

SCALE: 1" = 50' SHEET NO. 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	111
CONTRACT NO. 60P14				

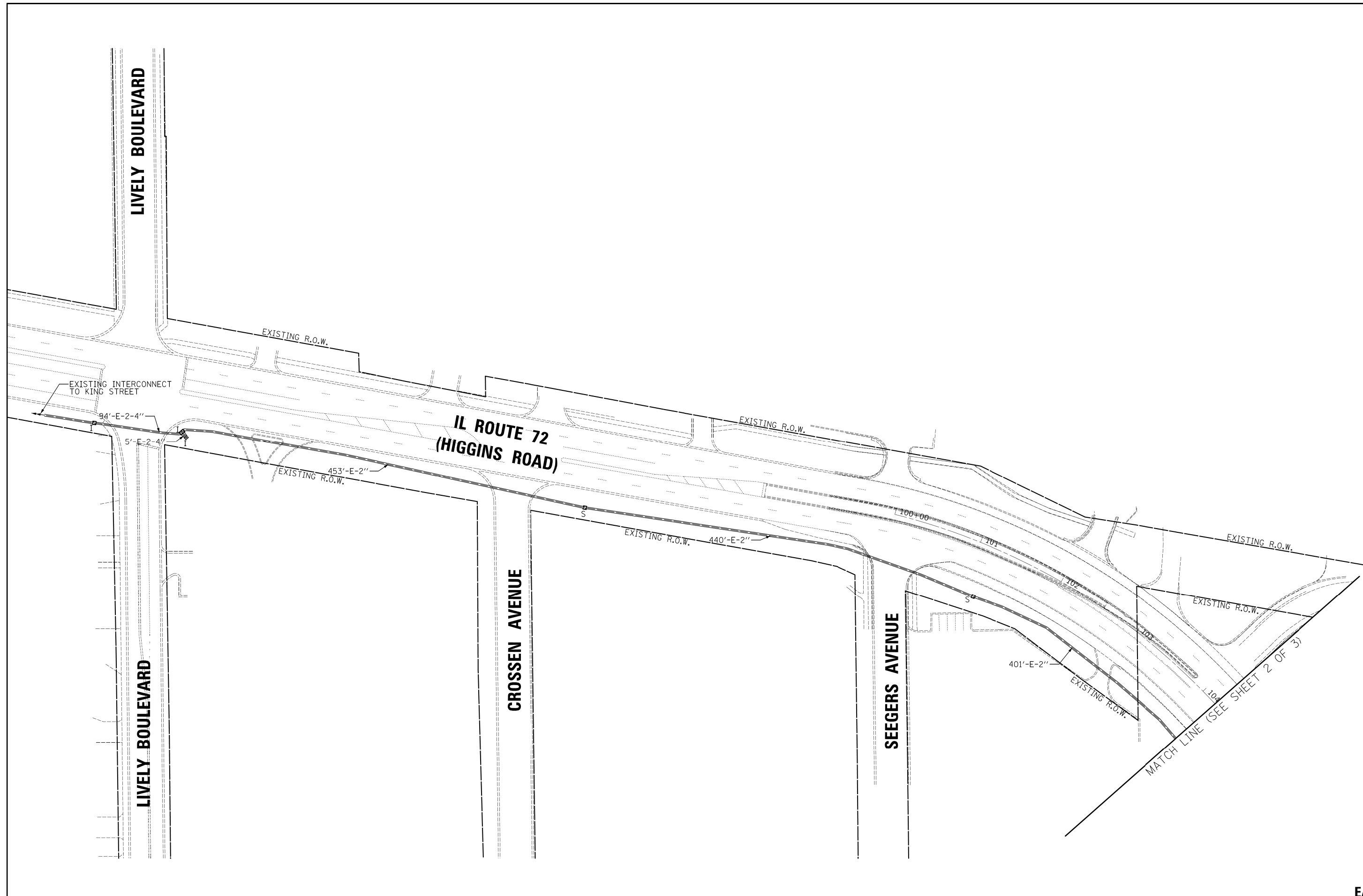
ILLINOIS FED. AID PROJECT



SPlice 24 FIBER (12SM, 12MM) CABLE TO EXISTING FIBER CABLE TO MAINTAIN EXISTING INTERCONNECT UNTIL PROPOSED INTERCONNECT IS FULLY OPERATIONAL.

**EAGLE 1M**

	USER NAME = LEP	DESIGNED - LEP	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT SCHEMATIC IL RTE 72 (HIGGINS ROAD/OAKTON STREET)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20,0000' / 1in.	DRAWN - OJT	REVISED -			341	2011-019-TS	COOK	191	112
	PLOT DATE = 10/25/2019	CHECKED - JJE	REVISED -			CONTRACT NO. 60P14				
		DATE - 11/1/2019	REVISED -			ILLINOIS FED. AID PROJECT				
					NO SCALE	SHEET NO. 1 OF 1 SHEETS	STA.		TO STA.	



USER NAME = LEP	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
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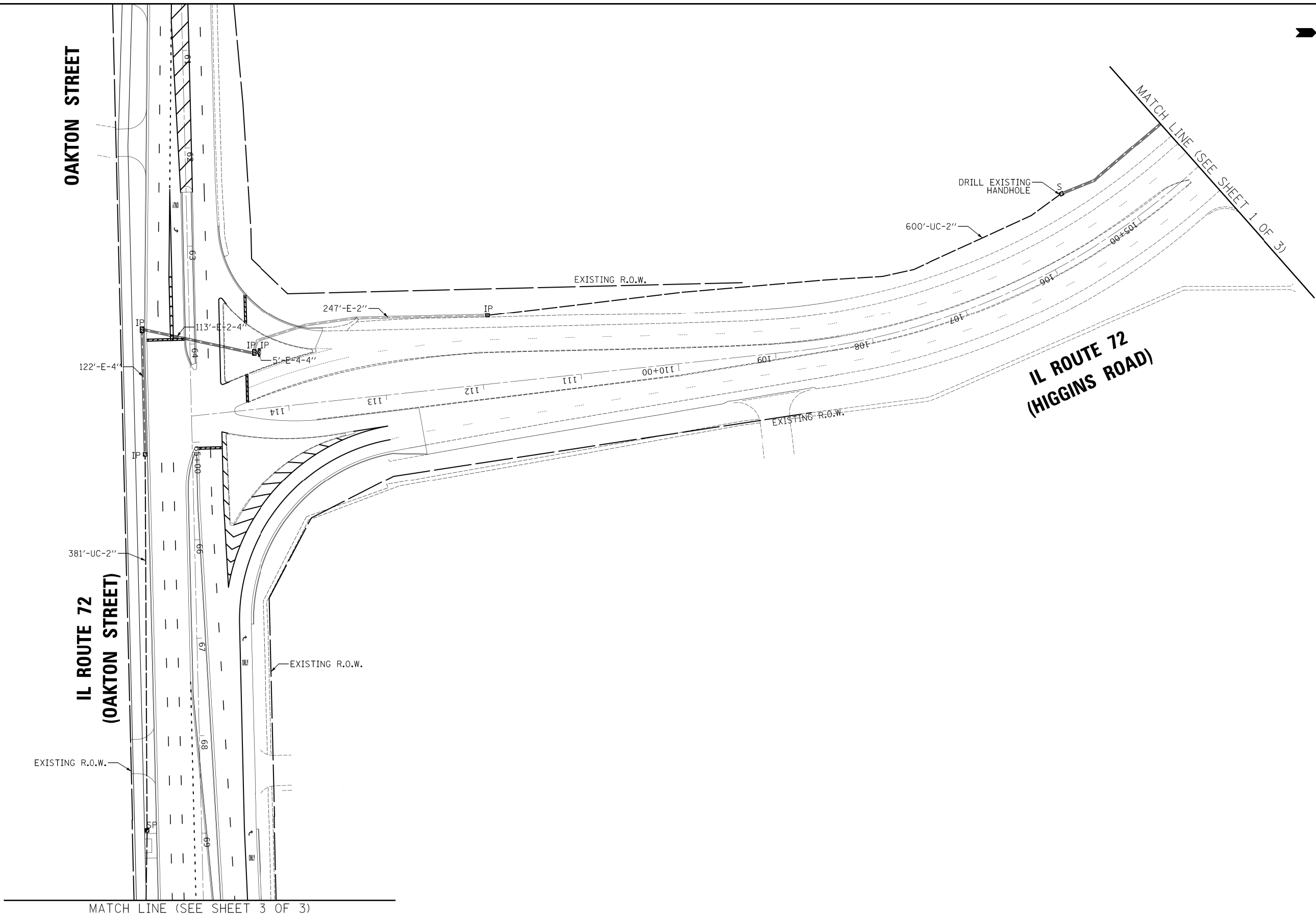
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN (SHEET 1 OF 3)  
IL RTE 72 (HIGGINS ROAD)**

SCALE: 1" = 50'    SHEET NO. 1 OF 3 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	113
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

**EAGLE 1M**



OAKTON STREET

IL ROUTE 72  
(OAKTON STREET)

IL ROUTE 72  
(HIGGINS ROAD)

MATCH LINE (SEE SHEET 3 OF 3)

MATCH LINE (SEE SHEET 1 OF 3)



USER NAME = LEP	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
PLOT SCALE = 50.0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 10/24/2019	DATE - 11/1/2019	REVISED -

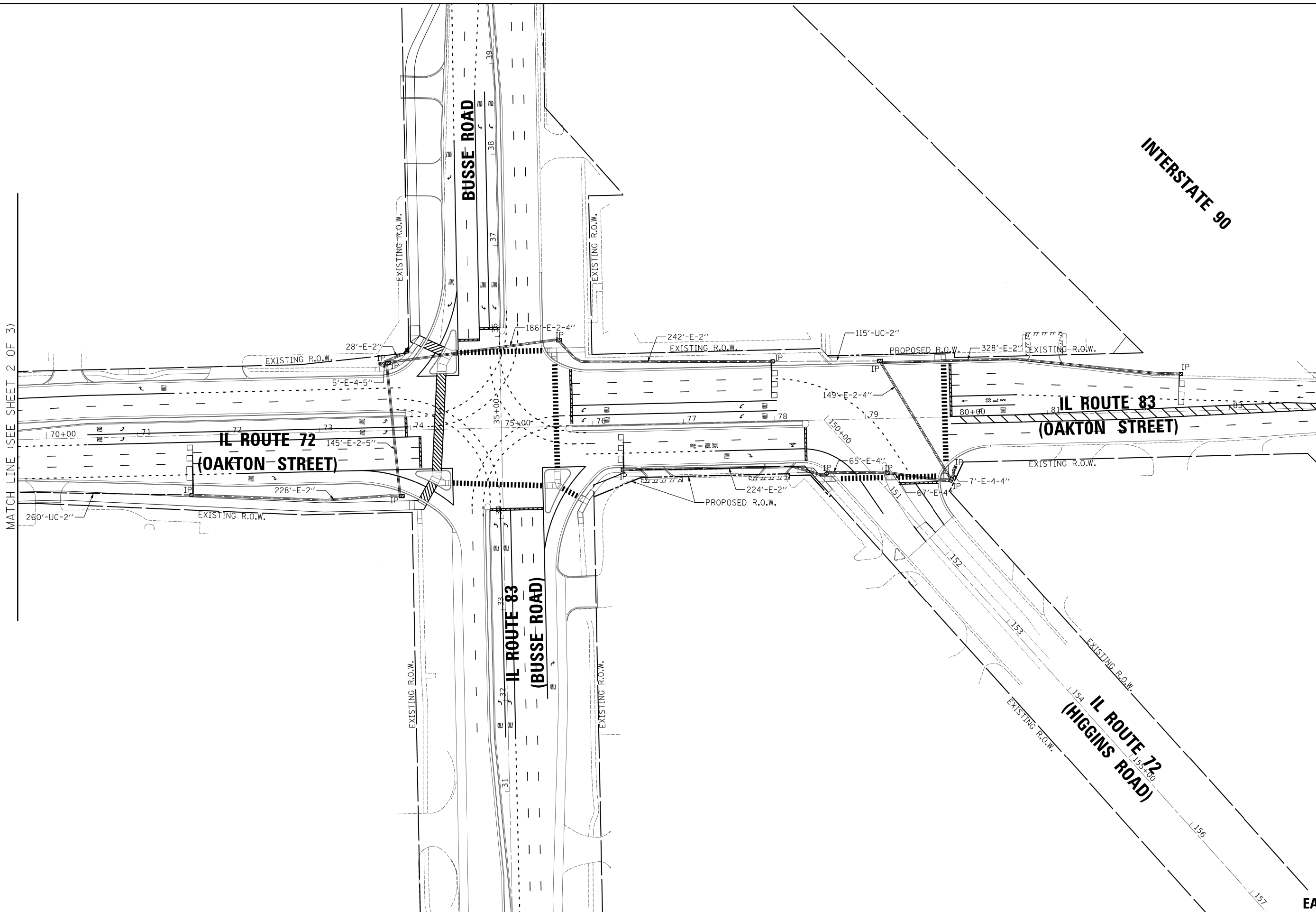
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT PLAN (SHEET 2 OF 3)  
IL RTE 72 (HIGGINS ROAD/OAKTON STREET)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	114
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

EAGLE 1M

SCALE: 1" = 50' SHEET NO. 2 OF 3 SHEETS STA. TO STA.



MATCH LINE (SEE SHEET 2 OF 3)



USER NAME = LEP	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
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PLOT DATE = 10/25/2019	DATE - 11/1/2019	REVISED -

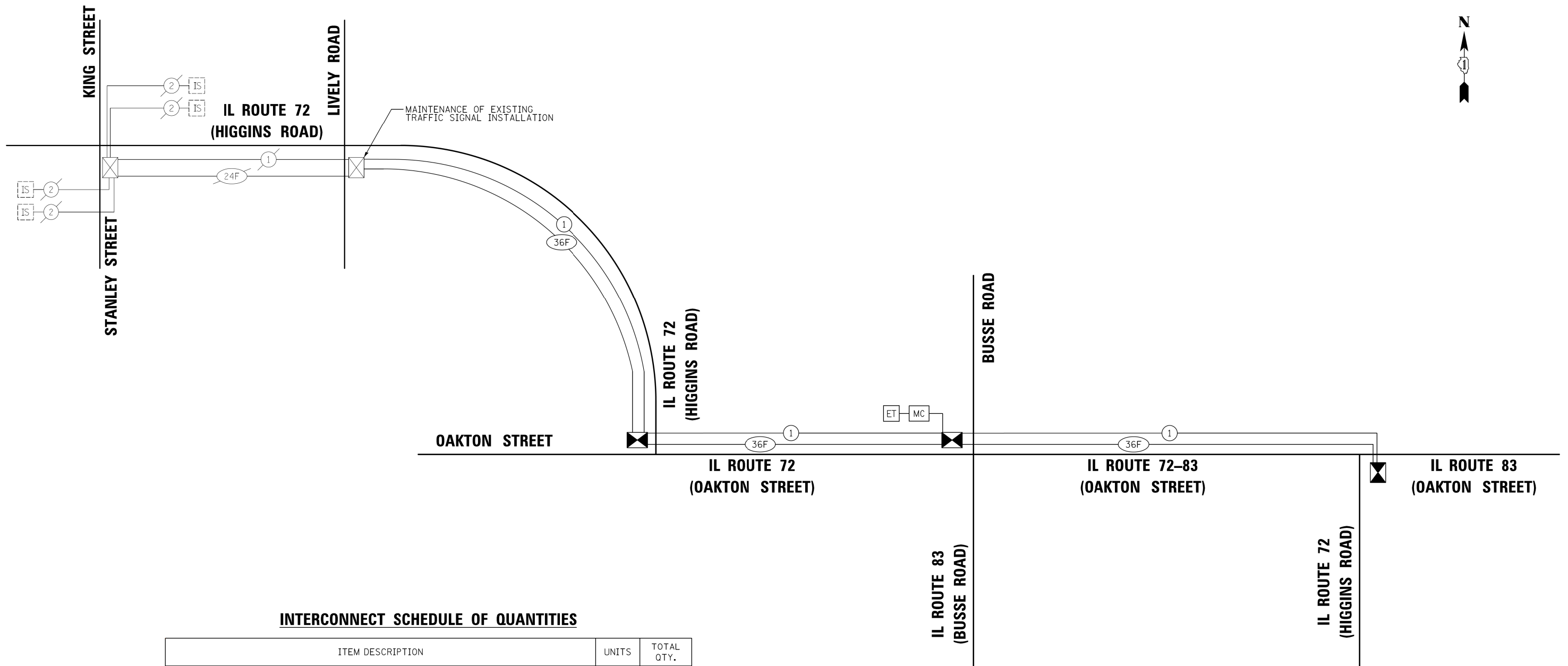
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN (SHEET 3 OF 3)  
IL RTE 72 (HIGGINS ROAD/OAKTON STREET)**

SCALE: 1" = 50'    SHEET NO. 3 OF 3 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	115
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

**EAGLE 1M**



**INTERCONNECT SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1356
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	4323
DRILL EXISTING HANDHOLE	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4587
REMOVE EXISTING HANDHOLE	EACH	3
ROD AND CLEAN EXISTING CONDUIT*	FOOT	500
MASTER CONTROLLER (SPECIAL)	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	4392
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

\* - NOMINAL QUANTITY TO BE USED AT DISCRETION OF ENGINEER

**EAGLE 1M**



USER NAME = JJ@	DESIGNED - LEP	REVISED -
	DRAWN - OJT	REVISED -
PLOT SCALE = 20,0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 11/1/2019	DATE - 11/1/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES  
IL RTE 72 (HIGGINS ROAD/OAKTON STREET)**

NO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	116
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				











**GENERAL NOTES:**

- THIS PROJECT INCLUDES THE INSTALLATION OF A NEW LIGHTING SYSTEM ALONG IL. ROUTE 72 (HIGGINS RD.) AND IL. ROUTE 83 (BUSSE RD.) THE PROPOSED LIGHTING SHALL BE OWNED AND MAINTAINED BY ELK GROVE VILLAGE.
- THE CONTRACTOR SHALL REQUEST A PARTIAL MAINTENANCE TRANSFER BEFORE WORK BEGINS TO CONNECT THE PROPOSED LIGHTING TO THE EXISTING LIGHTING CONTROLLER "EGF". THE CONTRACTOR SHALL CONTACT BRIAN LOVERING, CHIEF ENGINEER OF THE VILLAGE OF ELK GROVE VILLAGE AT (847) 734-8800.
- THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY COMPANY TO COORDINATE THE ELECTRIC SERVICE WORK. THE FIELD CONTACT PERSON IS LISA WILLIAMS OF ComEd AT (630) 424-5702.
- THE QUANTITIES OF RACEWAY WHEREVER INDICATED ON THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
- THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND/OVERHEAD UTILITIES PRIOR TO INSTALLATION OF LIGHT POLES AND CONDUITS. IF THERE IS A CONFLICT WITH THE LIGHT POLES/CONDUITS AS SHOWN ON PLANS, THE CONTRACTOR SHALL SUGGEST ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING DIGGING WORK. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL TAKE CARE WHEN INSTALLING UNIT DUCT TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES, SIDEWALK, DRIVEWAYS, PAVEMENT AND TREES INCLUDING THEIR ROOTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AT NO ADDITIONAL COST AND THE REPAIRS SHALL BE TO THE SATISFACTION OF THE ENGINEER.
- TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
- LIGHTING SYSTEM INSTALLATION SHALL CONFORM TO THE LATEST IDOT STANDARDS, NEC AND LOCAL CODES.
- ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE U/L LISTED AND LABELED.
- THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ROADWAY LIGHTING WITH ComEd. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY.
- ALL LED ROADWAY LUMINAIRES SHALL BE MOUNTED HORIZONTALLY. WHEN INSTALLING AN LED ROADWAY LUMINAIRE ON A TENON TOP POLE, THE PAY ITEM "LUMINAIRE MOUNTING BRACKET-SPECIAL" SHALL BE USED.

**BILL OF MATERIALS**

PAY ITEM	DESCRIPTION	UNIT	QUANTITY
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1578
81603020	UNIT DUCT, 600V, 3-1C NO. 10, 1/C NO. 10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	80
81603090	UNIT DUCT, 600V, 3-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	9110
81702160	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 1/0	FOOT	150
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	49
83001600	LIGHT POLE, ALUMINUM, 35 FT. M.H., 15 FT. DAVIT ARM	EACH	2
83003400	LIGHT POLE, ALUMINUM, 45 FT. M.H., 10 FT. DAVIT ARM	EACH	19
83003600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	28
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	490
83800105	BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	2
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	47
X8210402	LUMINAIRE MOUNTING BRACKET-SPECIAL	EACH	49
X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1

**LEGEND**

-  PROPOSED LIGHTING UNIT, 45 FT. MH, 15 FT. DAVIT ARM, (240V-LINE TO NEUTRAL), LED LUMINAIRE WITH BREAKAWAY DEVICE
-  PROPOSED LIGHTING UNIT, 45 FT. MH, 10 FT. DAVIT ARM, (240V-LINE TO NEUTRAL), LED LUMINAIRE WITH BREAKAWAY DEVICE
-  PROPOSED LIGHTING UNIT, 35 FT. MH, 15 FT. DAVIT ARM, (240V-LINE TO NEUTRAL), LED LUMINAIRE WITH BREAKAWAY DEVICE
-  EXISTING LIGHTING UNIT TO REMAIN
-  UNIT DUCT, 600V, 3-1C NO. 4, 1/C NO. 6 GROUND (XLP-TYPE USE) 1 1/4" DIA. POLYETHYLENE
-  ComEd ELECTRIC SERVICE POLE 240/480V, 1 PHASE 3 WIRE
-  PROPOSED LIGHTING CONTROLLER "EG\_" 240/480V, 3 WIRE, 200 AMP, BASE MOUNTED
-  RIGID GALVANIZED STEEL CONDUIT, UNDERGROUND, WITH UNIT DUCT
-  ELECTRIC CABLE IN CONDUIT 4" DIA., 3-1/C NO. 1/0
-  GROUND ROD 3/8" DIA. X 10 FT.

MODEL: \$MODELNAME\$ FILE NAME: \$FILE\$

**AMES Engineering, Inc.**  
CONSULTING ENGINEERS  
6330 Belmont Road, Unit 4B  
Downers Grove, IL 60516

USER NAME = \$USERS\$	DESIGNED - BL	REVISED -
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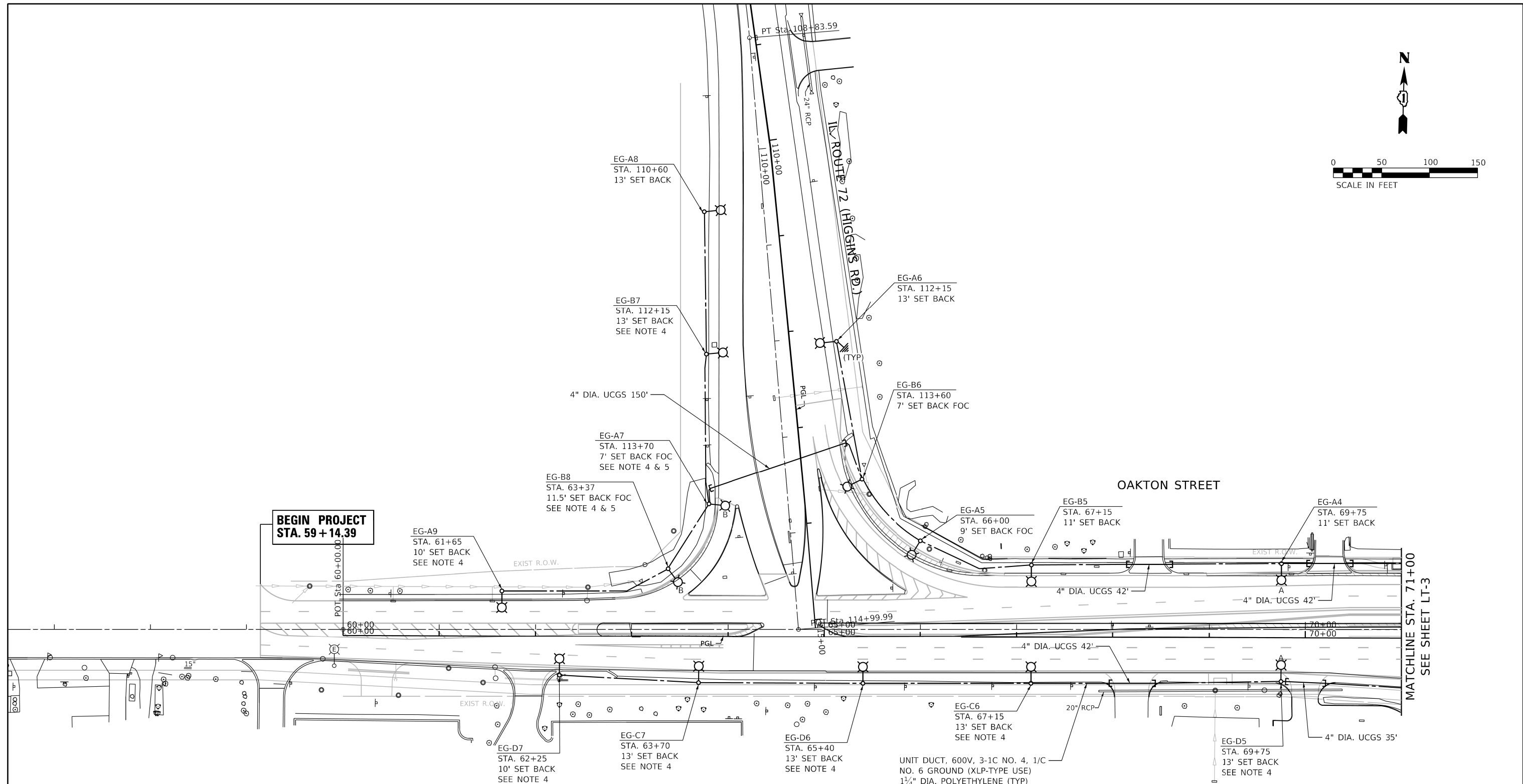
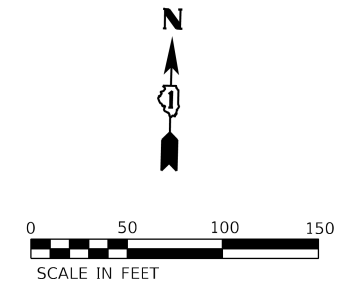
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, BILL OF MATERIALS AND LEGEND**  
**IL. ROUTE 72/IL. ROUTE 83 (IL. ROUTE 72(N) – IL. ROUTE 72(S))**

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	117
			CONTRACT NO. 60P14	
		ILLINOIS	FED. AID PROJECT	

LT-1



**NOTES:**

1. FOR LEGEND AND GENERAL NOTES, SEE SHEET LT-1.
2. SET BACK IS FROM EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED FROM FACE OF CURB (FOC).
3. UCGS STANDS FOR UNDERGROUND CONDUIT, GALVANIZED STEEL.
4. THE CONTRACTOR SHALL COORDINATE WITH ComEd FOR LIGHT POLE PLACEMENT UNDER/ADJACENT TO TRANSMISSION AND DISTRIBUTION LINES.
5. POLE FOUNDATION WITH BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE.

MODEL: \$MODELNAME\$ FILE: \$NAME\$. \$FILETYPE\$

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Downers Grove, IL 60516

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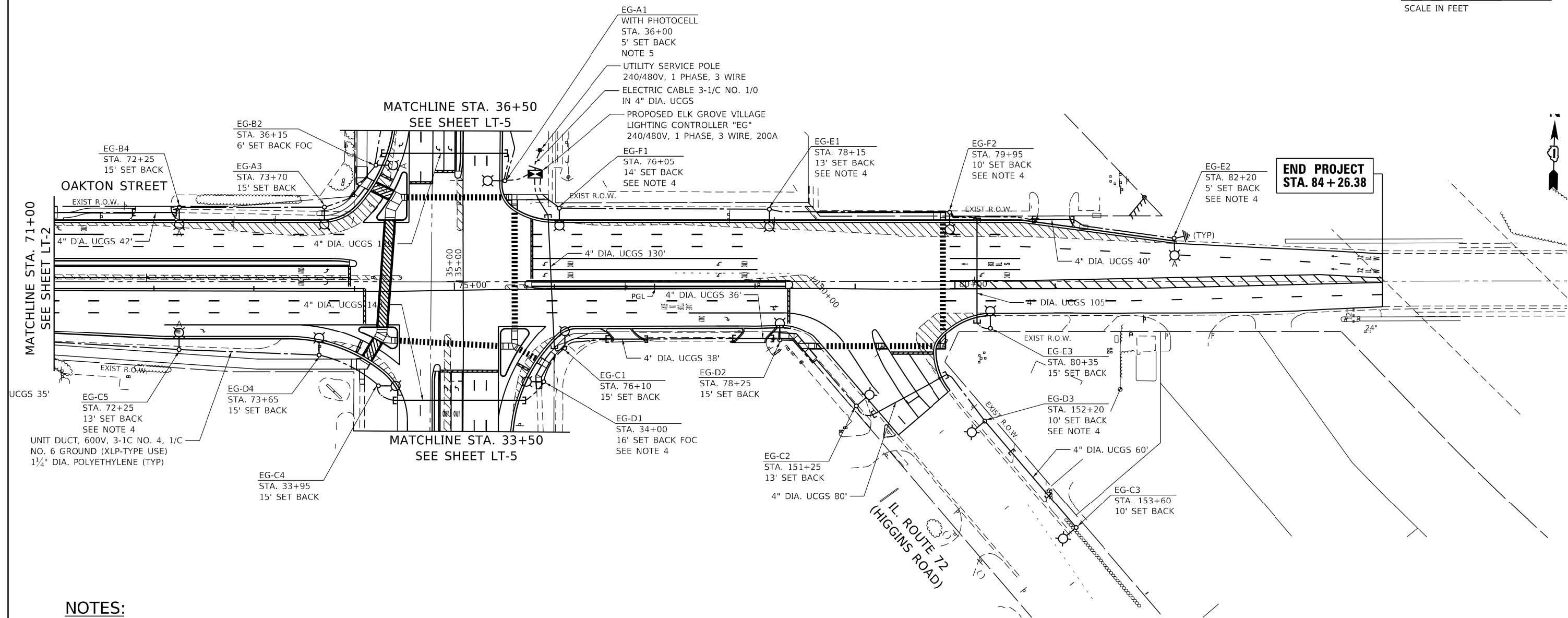
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLANS  
IL. ROUTE 72/IL. ROUTE 83 (IL. ROUTE 72(N) - IL. ROUTE 72(S))  
INCLUDING IL. ROUTE 83(S)**

SCALE: 1"=50'    SHEET    OF    SHEETS    STA. 59+14.39    TO STA. 71+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	118
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				





**END PROJECT  
STA. 84 + 26.38**

**NOTES:**

- FOR LEGEND AND GENERAL NOTES, SEE SHEET LT-1.
- SET BACK IS FROM EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED FROM FACE OF CURB (FOC).
- UCGS STANDS FOR UNDERGROUND CONDUIT, GALVANIZED STEEL.
- THE CONTRACTOR SHALL COORDINATE WITH ComEd FOR LIGHT POLE PLACEMENT UNDER/ADJACENT TO TRANSMISSION AND DISTRIBUTION LINES.
- THE 3-1/C #10, 1-1/C #10 GND SHALL BE WIRED BETWEEN EG-A1 PHOTOCELL AND THE LIGHTING CONTROLLER. ALL PHOTOCELL MATERIAL, INSTALLATION, ETC. SHALL BE INCLUDED IN PAY ITEM "LIGHTING CONTROLLER, SPECIAL." REFER TO SHEET LT-8 FOR LIGHTING CONTROLLER DETAILS. COST FOR THE UNIT DUCT, ASSOCIATE MATERIALS AND ITS INSTALLATION SHALL BE PAID FOR UNDER PAY ITEM "UNIT DUCT, 600V, 3-1/C NO. 10, 1/C NO. 10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE.

MODEL: \$MODELNAME\$  
FILE: \$NAME\$. \$FILE\$

**AMES Engineering, Inc.**  
CONSULTING ENGINEERS  
6330 Belmont Road, Unit 4B  
Downers Grove, IL 60516

USER NAME = \$USERS\$	DESIGNED - BL	REVISED -
	DRAWN - MD	REVISED -
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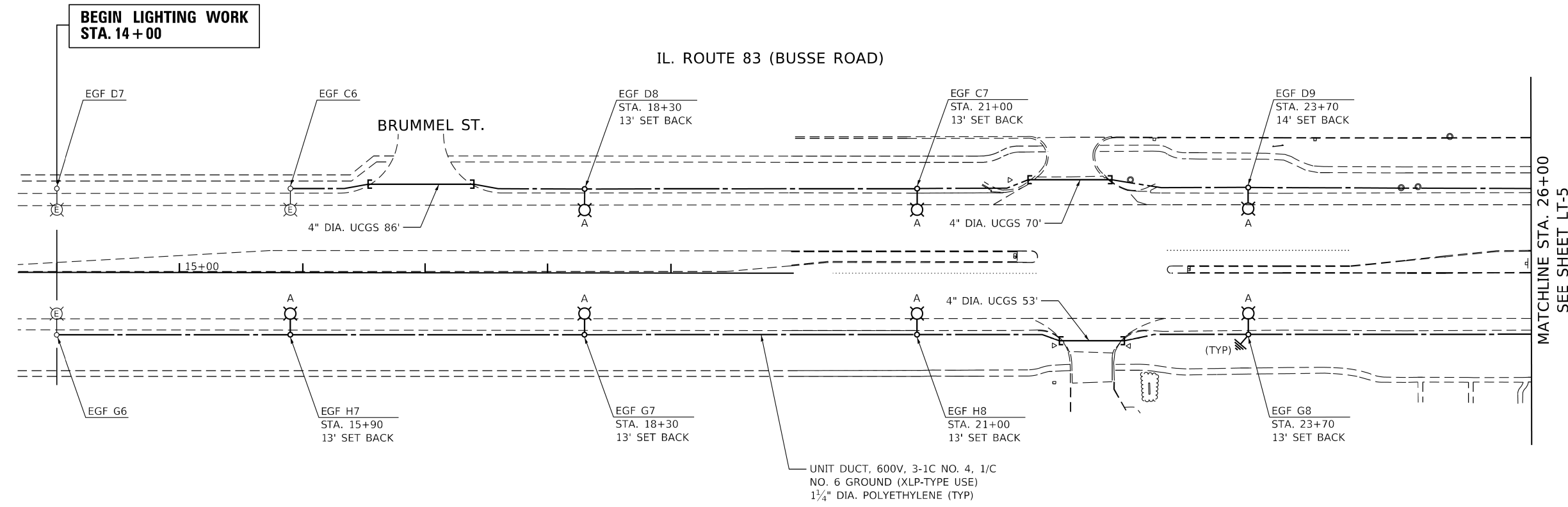
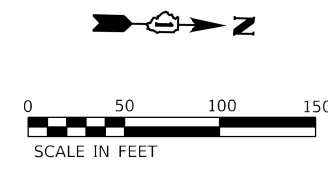
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLANS  
IL. ROUTE 72/IL. ROUTE 83 (IL. ROUTE 72(N) - IL. ROUTE 72(S)  
INCLUDING IL. ROUTE 83(S)**

SCALE: 1"=50' SHEET OF SHEETS STA. 71+00 TO STA. 84+26.38

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	119
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

**LT-3**



**NOTES:**

1. FOR LEGEND AND GENERAL NOTES, SEE SHEET LT-1.
2. SET BACK IS FROM EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED FROM FACE OF CURB (FOC).
3. UCGS STANDS FOR UNDERGROUND CONDUIT, GALVANIZED STEEL.

MODEL: \$MODELNAME\$  
FILE NAME: \$FILES\$

**AMES Engineering, Inc.**  
CONSULTING ENGINEERS  
6330 Belmont Road, Unit 4B  
Downers Grove, IL 60516

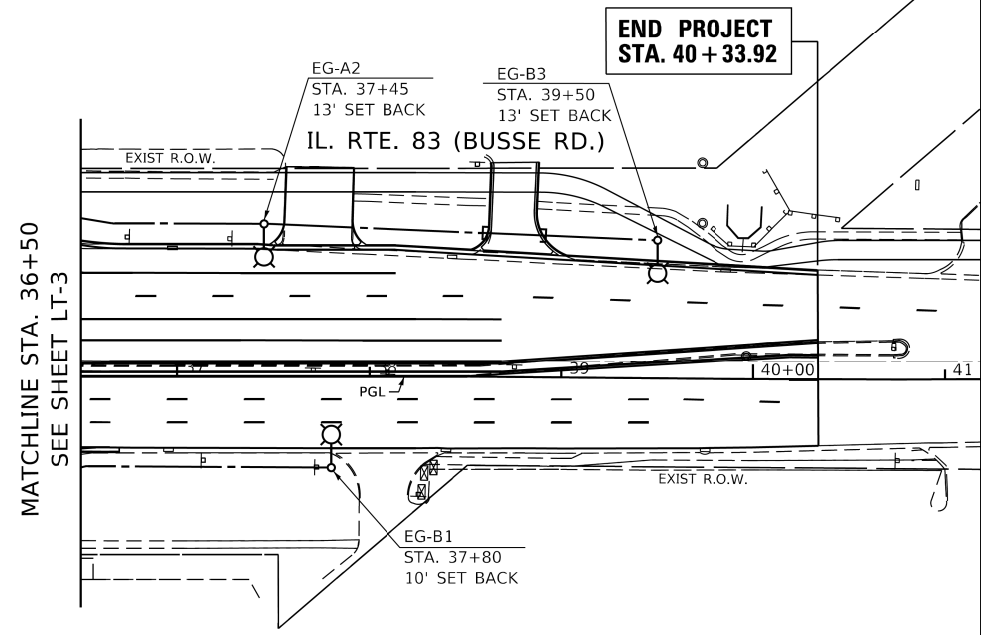
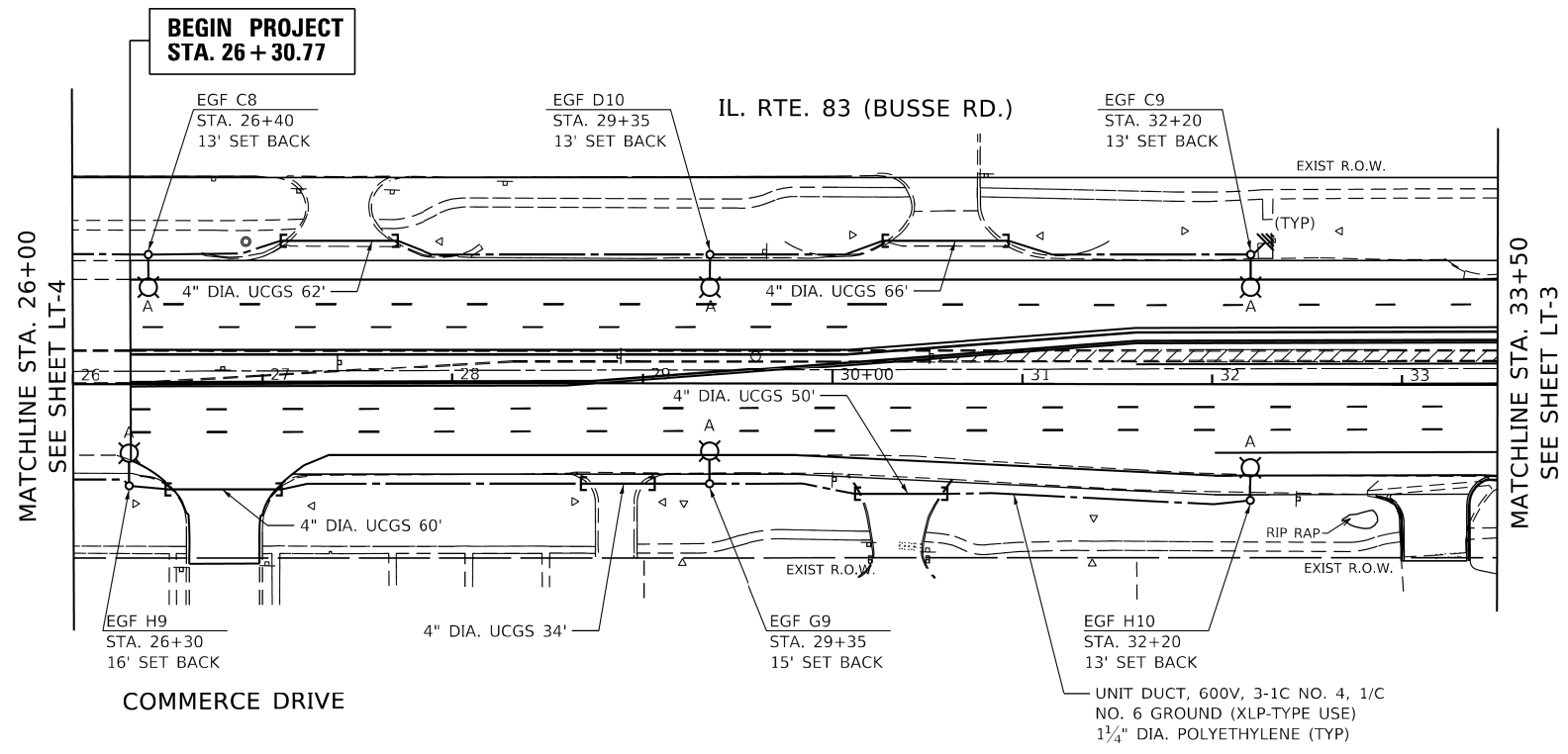
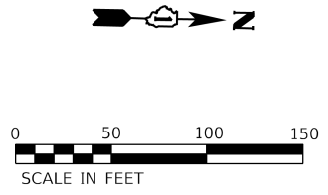
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PLOT DATE = \$DATES\$	DATE - 03-05-2020	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLANS  
IL. ROUTE 72/IL. ROUTE 83 (IL. ROUTE 72(N) - IL. ROUTE 72(S))  
INCLUDING IL. ROUTE 83(S)**

SCALE: 1"=50'    SHEET    OF    SHEETS    STA. 14+00    TO STA. 26+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	120
ILLINOIS			FED. AID PROJECT	
CONTRACT NO. 60P14				



**NOTES:**

1. FOR LEGEND AND GENERAL NOTES, SEE SHEET LT-1.
2. SET BACK IS FROM EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED FROM FACE OF CURB (FOC).
3. UCGS STANDS FOR UNDERGROUND CONDUIT, GALVANIZED STEEL.

MODEL: \$MODELNAME\$  
FILE NAME: \$FILES\$

**AMES Engineering, Inc.**  
CONSULTING ENGINEERS  
6330 Belmont Road, Unit 4B  
Downers Grove, IL 60516

USER NAME = \$USERS\$	DESIGNED - BL	REVISED -
DRAWN - MD	CHECKED - MB	REVISED -
PLOT SCALE = \$SCALES\$	DATE - 03-05-2020	REVISED -
PLOT DATE = \$DATES\$		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLANS  
IL. ROUTE 72/L. ROUTE 83 (IL. ROUTE 72(N) - IL. ROUTE 72(S))  
INCLUDING IL. ROUTE 83(S)**

SCALE: 1"=50'    SHEET    OF    SHEETS    STA. 26+30.77    TO STA. 40+33.92

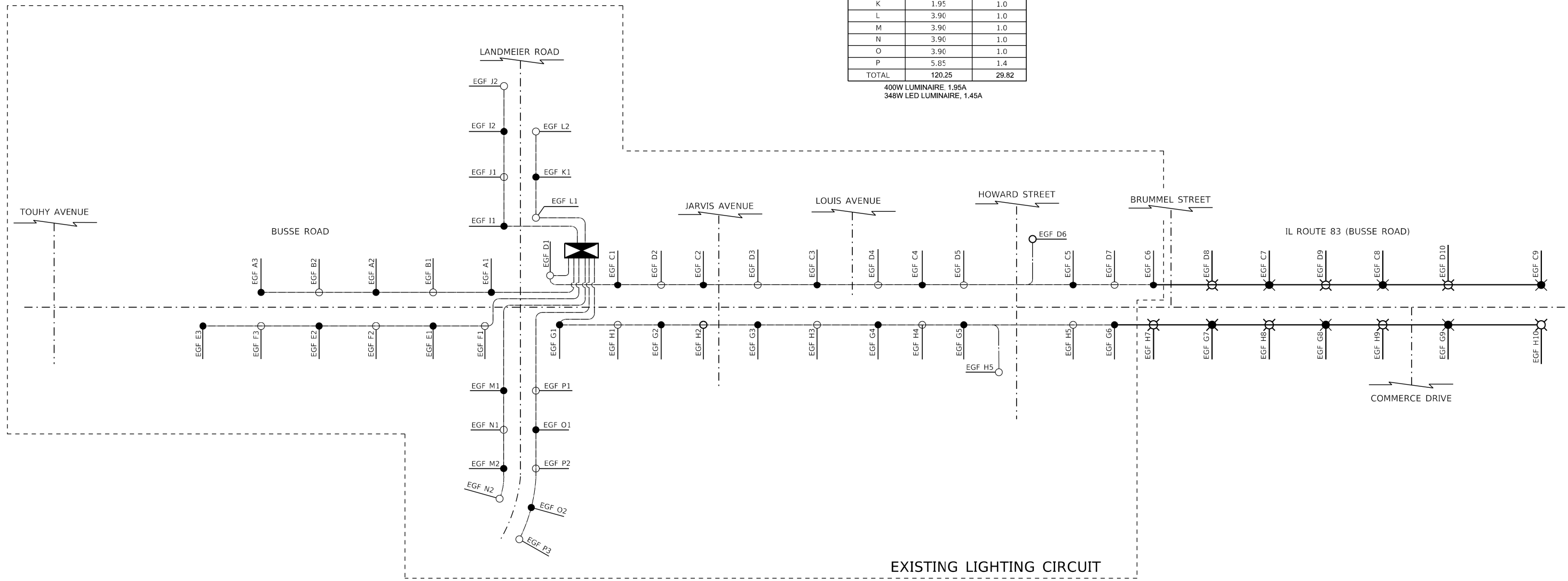
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	121
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

**LT-5**

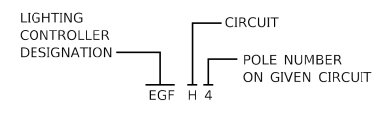


CONTROLLER EGF CIRCUIT LOAD TABLE		
CIRCUIT NO.	TOTAL FIXTURE AMPS	KVA LOAD
A	5.85	1.4
B	3.90	1.0
C	16.05	3.85
D	18.00	4.32
E	5.85	1.4
F	5.85	1.4
G	16.05	3.85
H	17.50	4.2
I	3.90	1.0
J	3.90	1.0
K	1.95	1.0
L	3.90	1.0
M	3.90	1.0
N	3.90	1.0
O	3.90	1.0
P	5.85	1.4
TOTAL	120.25	29.82

400W LUMINAIRE, 1.95A  
348W LED LUMINAIRE, 1.45A



**CIRCUIT DESIGNATION SCHEME**  
(TYPICAL)



**LEGEND**

- LITHONIA LUMINAIRE, SODIUM VAPOR 400W, 240V ON BLACK WIRE
- LITHONIA LUMINAIRE, SODIUM VAPOR 400W, 240V ON RED WIRE
- ⊠ EXISTING LIGHTING CONTROLLER 200 AMP, 240/480V, 1Ø 3-WIRE
- UNIT DUCT, 600V 3-1/C NO. 4 1/C NO. 4 GROUND (XLP-TYPE), 1 1/4" DIA.
- ⊗ KIM LUMINAIRE, LED, 348W, 240V ON RED WIRE
- ⊙ KIM LUMINAIRE, LED, 348W, 240V ON BLACK WIRE
- UNIT DUCT, 3-1/C NO. 4, 1/C NO. 6 GROUND (XLP-TYPE USE) 1 1/4" DIA. POLYETHYLENE

MODEL: \$MODELNAME\$ FILE NAME: \$FILES\$

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PLOT SCALE = \$SCALES\$	CHECKED - MB	REVISED -
PLOT DATE = \$DATES\$	DATE - 03-05-2020	REVISED -

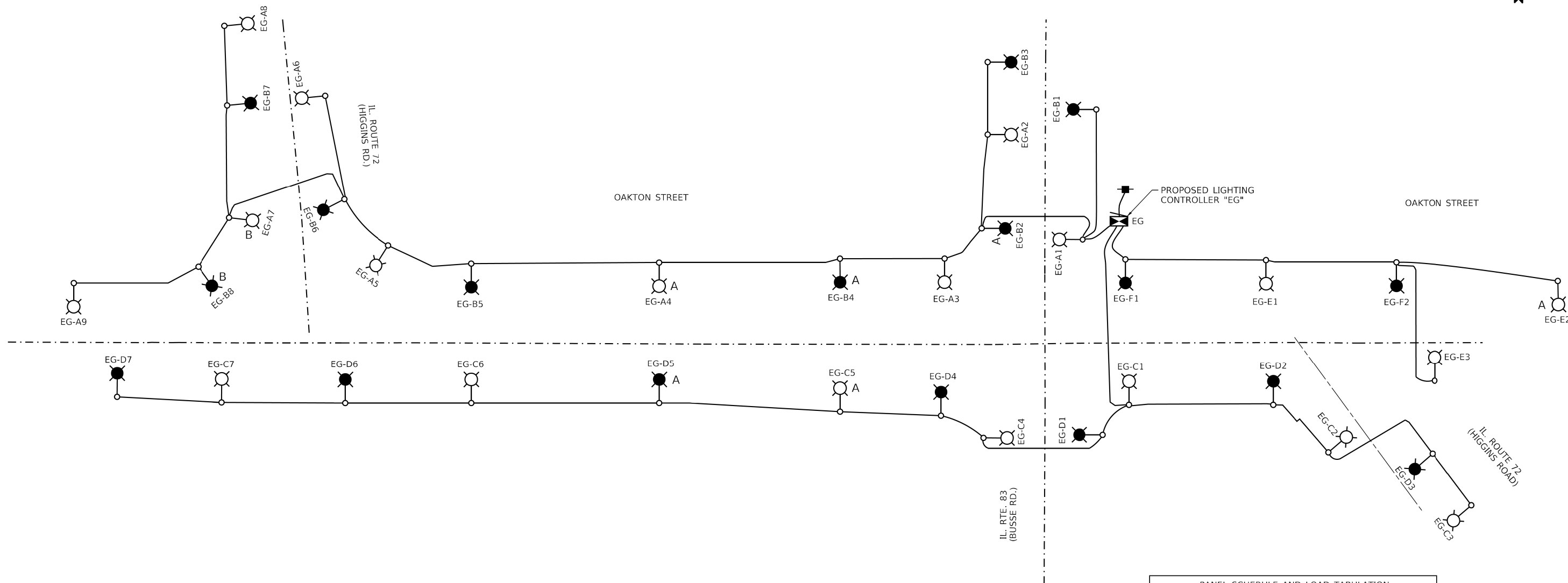
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SINGLE LINE DIAGRAM "EGF"**






SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	122
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P14	

LT-6



**LEGEND**

-  KIM LUMINAIRE, LED, 240V, 348W ON RED WIRE
-  KIM LUMINAIRE, LED, 240V, 348W ON BLACK WIRE
-  UNIT DUCT, 600V 3-1C NO. 4, 1/C NO.6 GROUND (XLP-TYPE USE)
-  ComEd ELECTRIC SERVICE POLE 240/480V, 1 PHASE 3 WIRE
-  PROPOSED LIGHTING CONTROLLER, 200 AMP, 240/480V, 1 PHASE, 3 WIRE.

PANEL SCHEDULE AND LOAD TABULATION LIGHTING CONTROLLER "EG" 240/480V AC, 1-PHASE, 3W, 200 AMPS-MAIN BREAKER				
CIRCUIT	BREAKER TRIPS-AMPS	CIRCUIT AMPS		WATTS
		RED	BLACK	
A	30A/1P	13.05		3132
B	30A/1P		11.60	2784
C	30A/1P	10.15		2436
D	30A/1P		10.15	2436
E	30A/1P	4.35		1044
F	30A/1P		2.90	696
G	30A/1P	SPARE	SPARE	SPARE
H	30A/1P	SPARE	SPARE	SPARE
TOTAL		27.55	24.65	12,528

348W LED LUMINAIRE, 1.45A

MODEL: \$MODELNAME\$  
FILE NAME: \$FILES\$

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CONSULTING ENGINEERS  
6330 Belmont Road, Unit 4B  
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PLOT SCALE = \$SCALES\$	CHECKED - MB	REVISED -
PLOT DATE = \$DATES\$	DATE - 03-05-2020	REVISED -

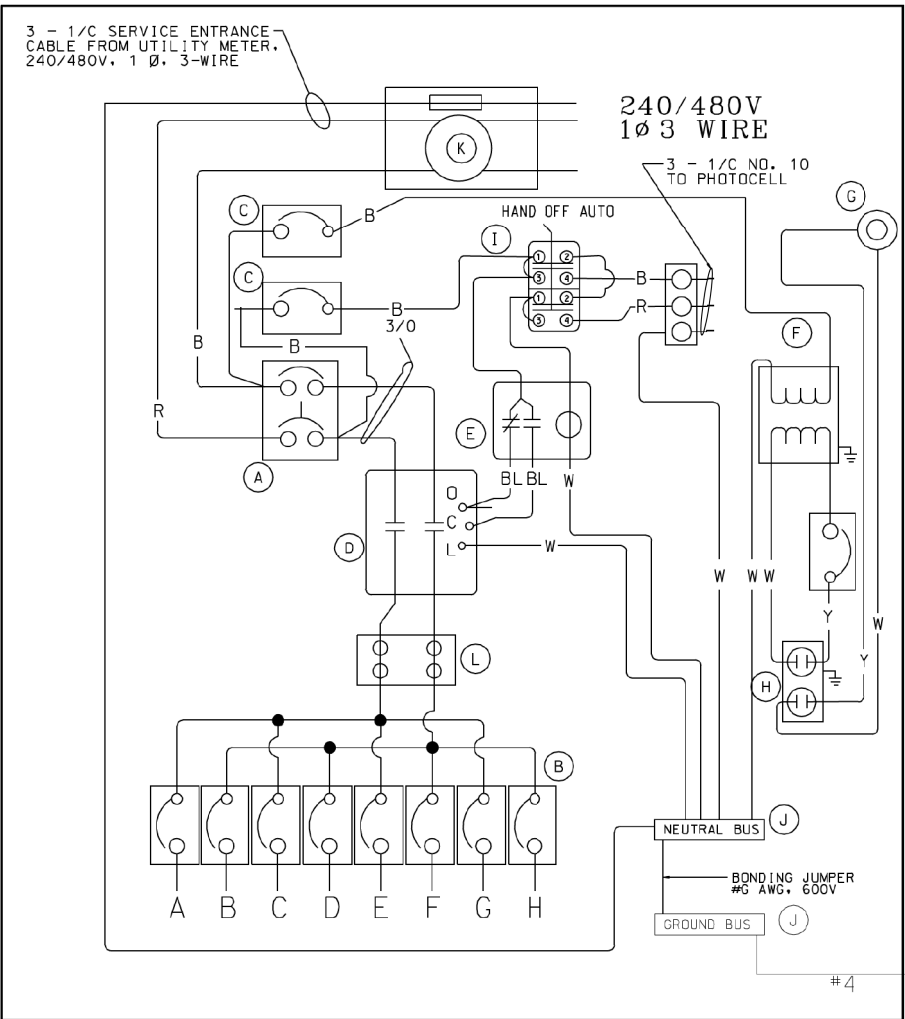
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SINGLE LINE DIAGRAM - PROPOSED "EG"**

SCALE: NTS SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	123
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P14	

LT-7



WIRING DIAGRAM

GROUNDING ROD 5/8" DIA. X 10' LONG

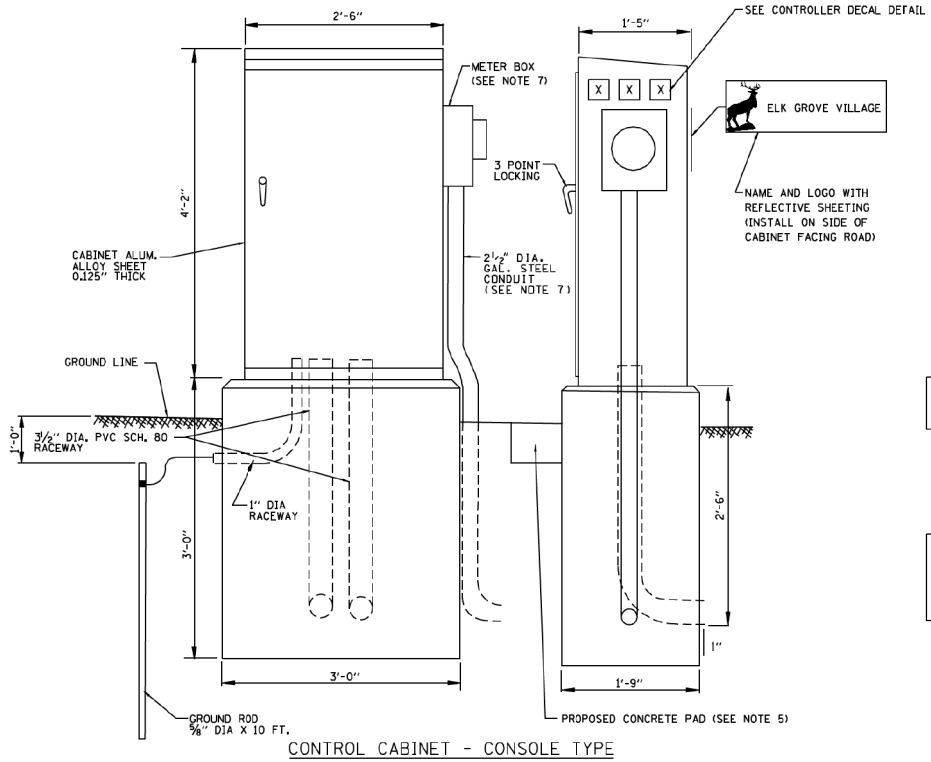
PANEL EQUIPMNT

BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2P, 600V, 200 AMP AT 480V
B	8	CIRCUIT BREAKERS, 1P, 30AMP AT 240V
C	3	CONTROL CIRCUIT - CIRCUIT BREAKER, 1P 15 AMP
D	1	CONTACTOR, MECHANICALLY HELD, 240V COIL, 2P, 200 AMP
E	1	AUXILIARY CONTROL RELAY
F	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER
G	1	INCANDESCENT LIGHTING FIXTURE W/ PULL CHAIN, 120V, 60 WATT
H	1	20 AMP, 120V, DUPLEX RECEPTACLE, GFCI
I	1	HAND-OFF- AUTO SWITCH
J	2	GROUND AND NEUTRAL BUS, 1/4" X 1" X 12"
K	1	METER AND BASE, 200 AMP
L	1	SPLICE BLOCK

POWER WIRING RHH/RHW  
CONTROL WIRING #12 MTW  
NEUTRAL BUS COLOR CODED WHITE  
GROUND BUS COLOR CODED GREEN  
UL LISTED

BL = BLUE  
W = WHITE  
B = BLACK  
R = RED  
Y = YELLOW

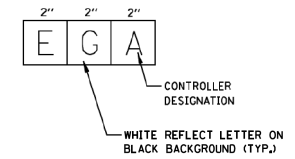
REMOTE MOUNTED PHOTOCELL  
ON NEAREST LIGHT POLE



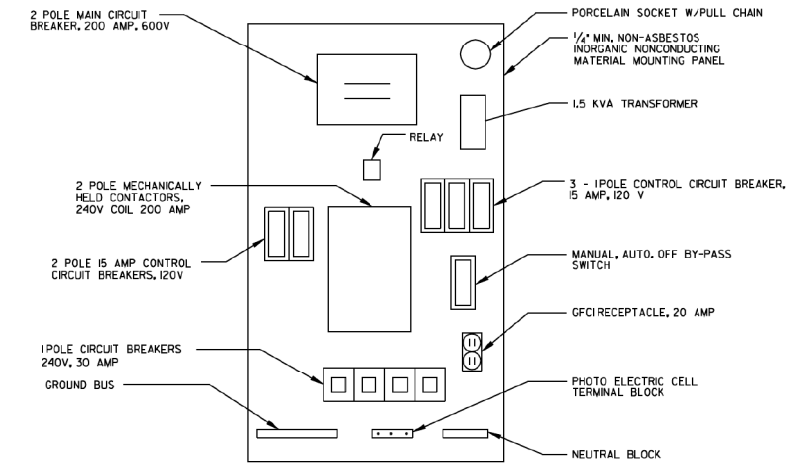
CONTROL CABINET - CONSOLE TYPE

NOTES

- CONTROL WIRING TO BE #12 AWG, 600 V, MTW SWITCH BOARD WIRE OF COLOR SPECIFIED IN WIRING DIAGRAM, STANDARD COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAREST THE SERVICE POLE.
- CONTROL CABINET DOOR SHALL FACE AWAY FROM THE ROADWAY.
- THE CONTROLLER CABINET SHALL BE BLACK POWDER COATED. SEE CONTRACT SPECIFICATIONS FOR DETAILS.
- A CONCRETE PAD, 36" X 36" X 3" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCLUDED IN THE COST FOR LIGHTING CONTROLLER.
- NAME AND LOGO CONSIST OF WHITE REFLECTORIZED SHEETING ON BLACK BACKGROUND AS MANUFACTURED BY 3M. SIZE 24" X 10" WITH 2" LETTERING.
- METER BOX AND GALVANIZED CONDUIT SHALL BE BLACK POWDER COATED TO MATCH CONTROLLER.
- THE PHOTOCELL SHALL BE INSTALLED ON THE POLE CLOSEST TO THE CONTROLLER AS SHOWN ON THE PLANS, THE COST TO FURNISH AND INSTALL THE PHOTOCELL SHALL BE INCLUDED IN THE COST OF THE LIGHTING CONTROLLER.
- SHOP DRAWINGS TO BE SUBMITTED TO ELK GROVE VILLAGE FOR APPROVAL. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



CONTROLLER DESIGNATION  
WHITE REFLECT LETTER ON BLACK BACKGROUND (TYP.)



CONTROLLER EQUIPMENT LAYOUT

MODEL: SPODELMAMES  
FILE NUMBER: 81125

**AMES Engineering, Inc.**  
CONSULTING ENGINEERS  
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Downers Grove, IL 60516

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PLOT DATE = SDATES	CHECKED - MB	REVISED -
	DATE - 03-05-2020	REVISED -

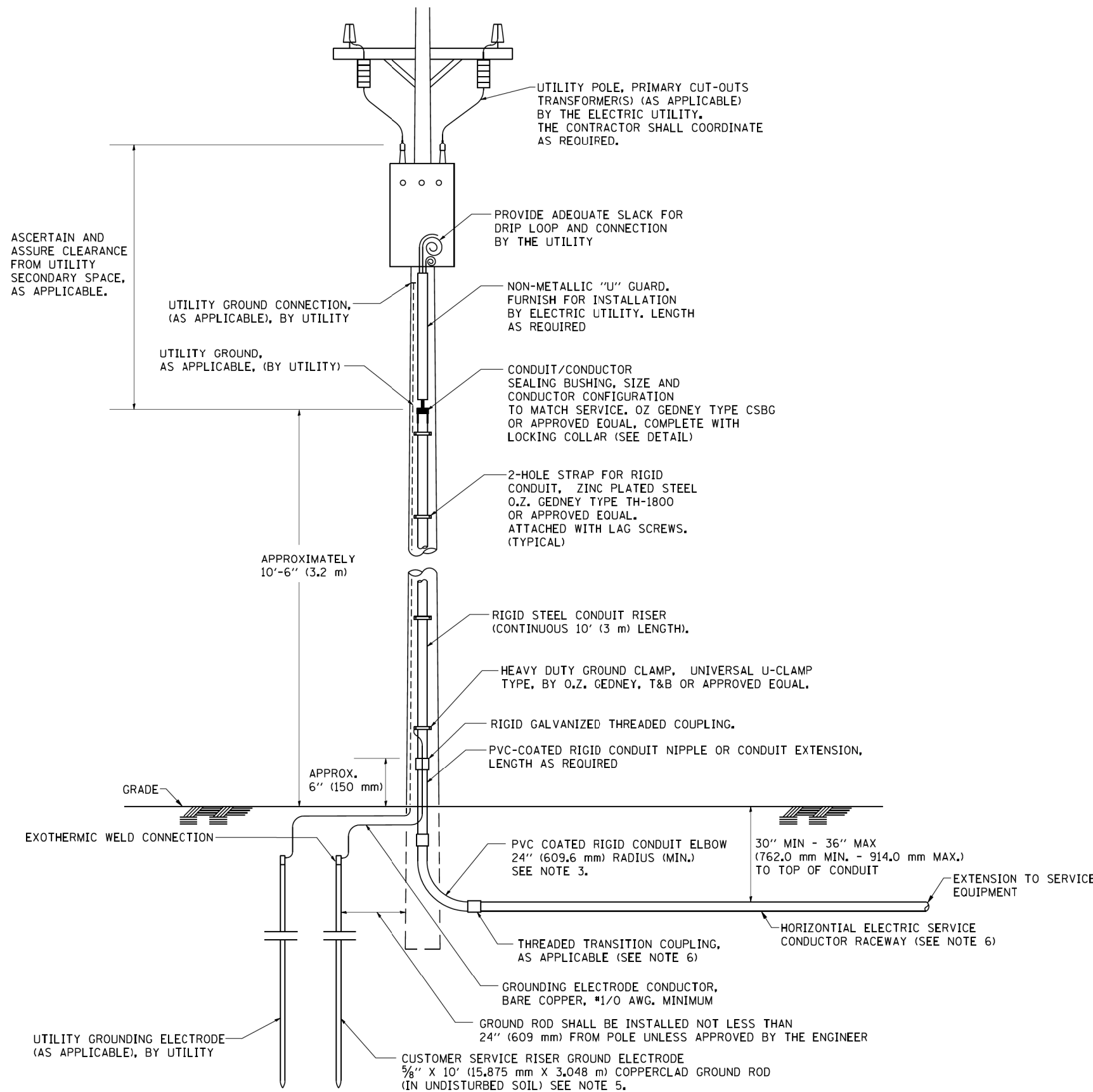
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER DETAILS "EG"

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	124
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

LT-8

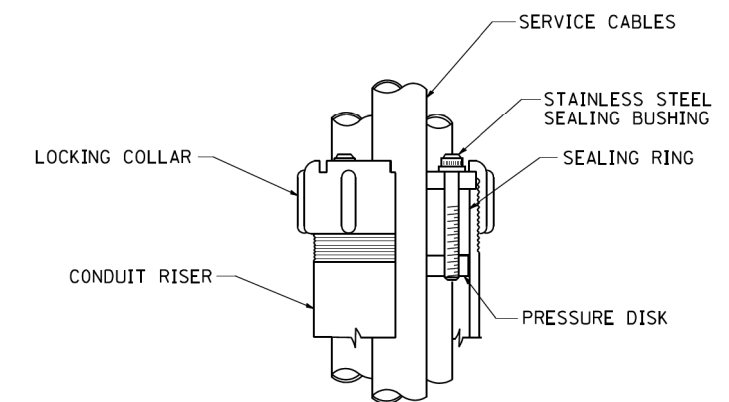


**APPLICATION**

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

**NOTES**

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALLIC TO NON METALLIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



**SEALING BUSHING DETAIL**

MODEL: \$MODELNAME\$  
FILE NAME: \$FILES\$

**AMES Engineering, Inc.**  
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6330 Belmont Road, Unit 4B  
Downers Grove, IL 60516

USER NAME = \$USERS\$	DESIGNED - BL	REVISED -
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PLOT SCALE = \$SCALES\$	CHECKED - MB	REVISED -
PLOT DATE = \$DATES\$	DATE - 03-05-2020	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ELECTRIC SERVICE INSTALLATION  
AERIAL REMOTE DISCONNECT**

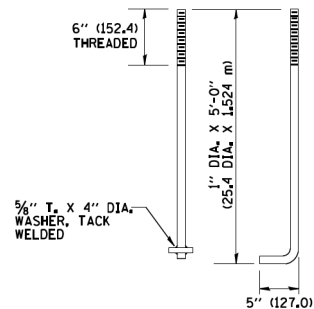
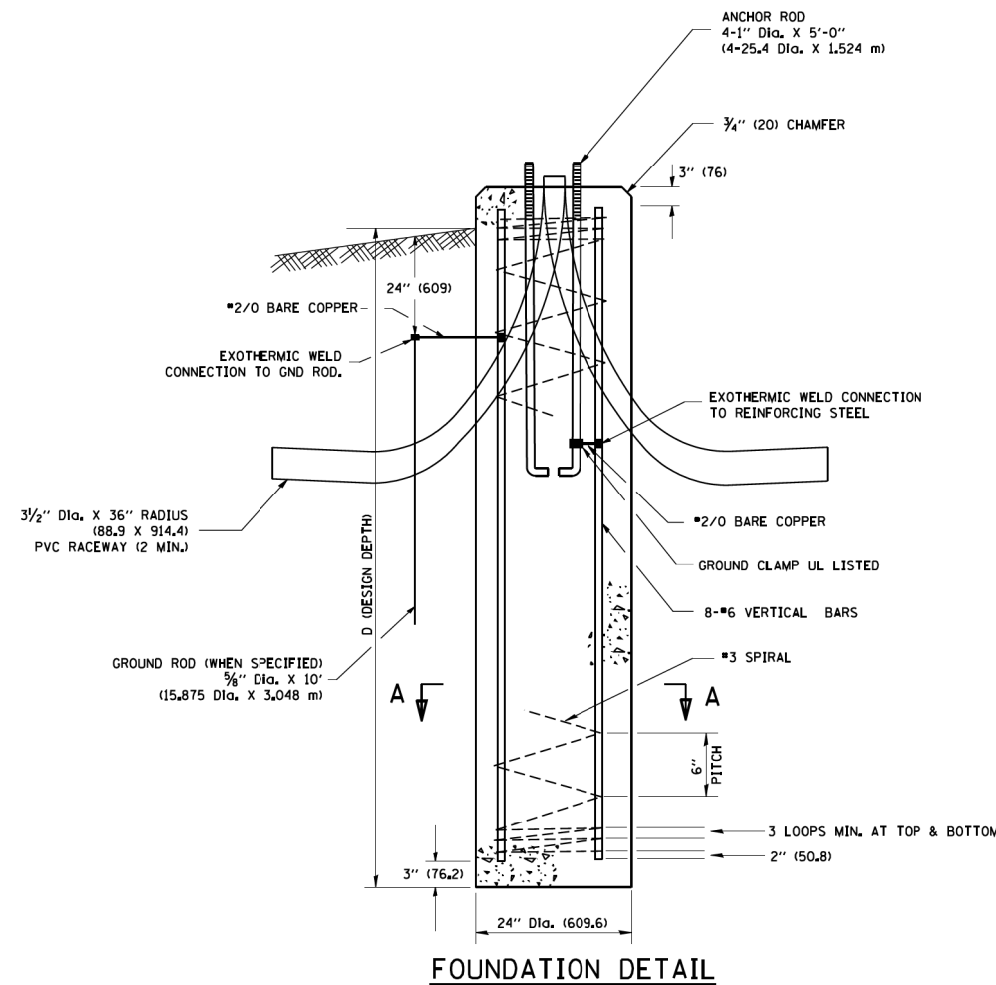
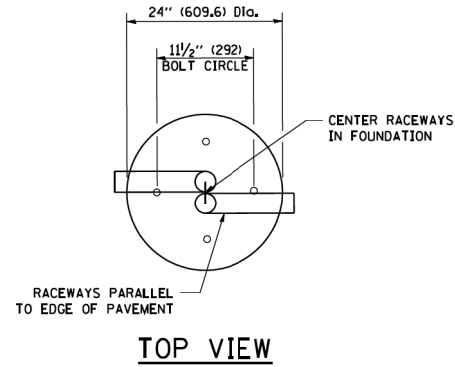
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	125
BE-220		CONTRACT NO. 60P14		
ILLINOIS FED. AID PROJECT				

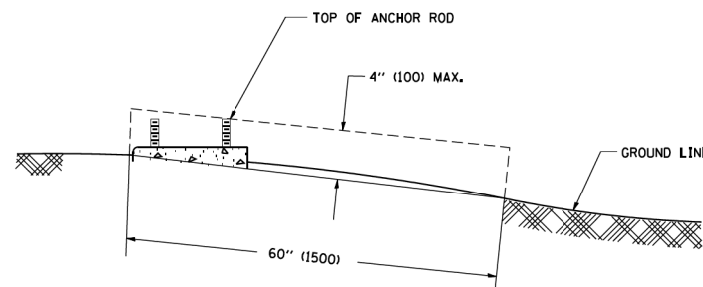
LT-9

**LIGHT POLE FOUNDATION DEPTH TABLE**  
30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

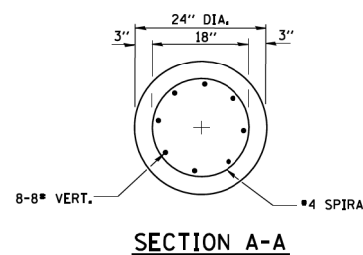
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY O <sub>u</sub> = 0.375 TON/SO. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY O <sub>u</sub> = 0.75 TON/SO. FT.	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY O <sub>u</sub> = 1.50 TON/SO. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



**ANCHOR BOLT DETAIL**



**FOUNDATION EXTENSION DETAIL**



**SECTION A-A**

**NOTES**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUCCER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

MODEL: \$MODELNAME\$  
FILE NUMBER: \$FILES\$

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PLOT DATE = \$DATES	CHECKED - MB	REVISED -
	DATE - 03-05-2020	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE FOUNDATION**  
**30' (9.144 m) to 35' (10.668 m) M.H. 11 1/2" (292 mm) BOLT CIRCLE**

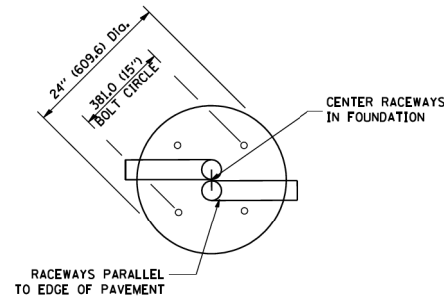
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	126
BE-300		CONTRACT NO. 60P14		
ILLINOIS FED. AID PROJECT				

LT-10

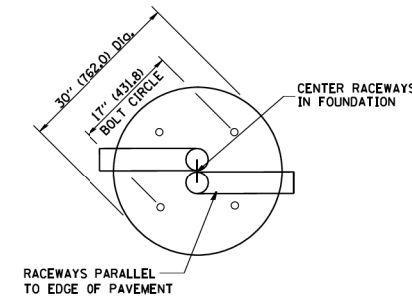


**LIGHT POLE FOUNDATION DEPTH TABLE**  
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

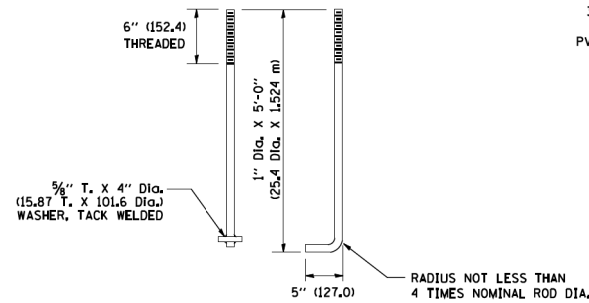
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SO. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SO. FT.	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SO. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



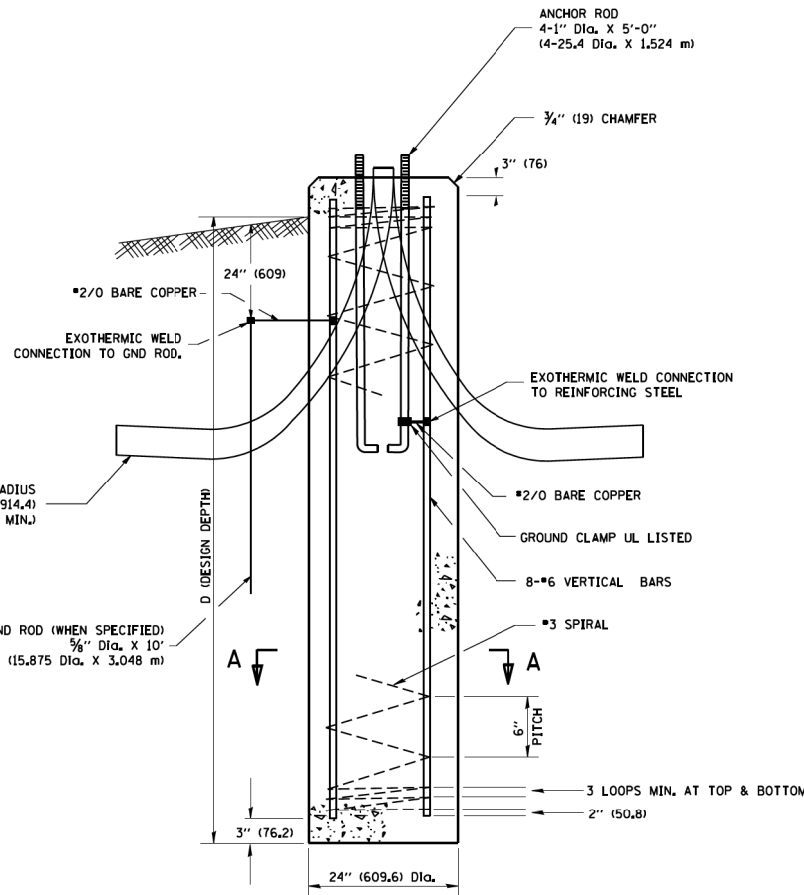
**TOP VIEW**



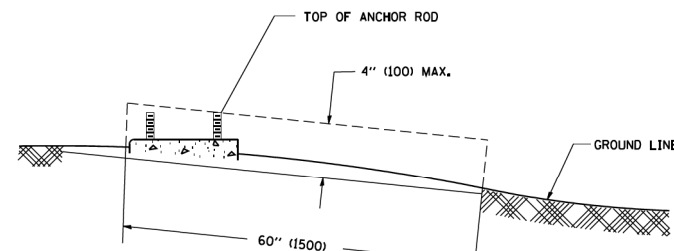
**TOP VIEW**



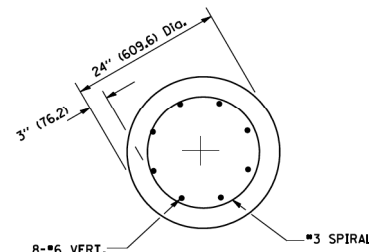
**ANCHOR ROD DETAIL**



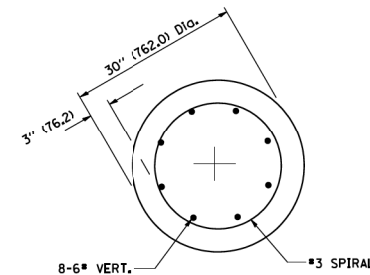
**FOUNDATION DETAIL**



**FOUNDATION EXTENSION DETAIL**



**SECTION A-A**



**SECTION A-A**

**NOTES**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS S1. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

MODEL: \$MODELNAME\$  
FILE NUMBER: \$FILE\$

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PLOT DATE = \$DATE\$	CHECKED - MB	REVISED -
	DATE - 03-05-2020	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE FOUNDATION**  
**40' (12.192 m) to 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	127
BE-301		CONTRACT NO. 60P14		
ILLINOIS FED. AID PROJECT				

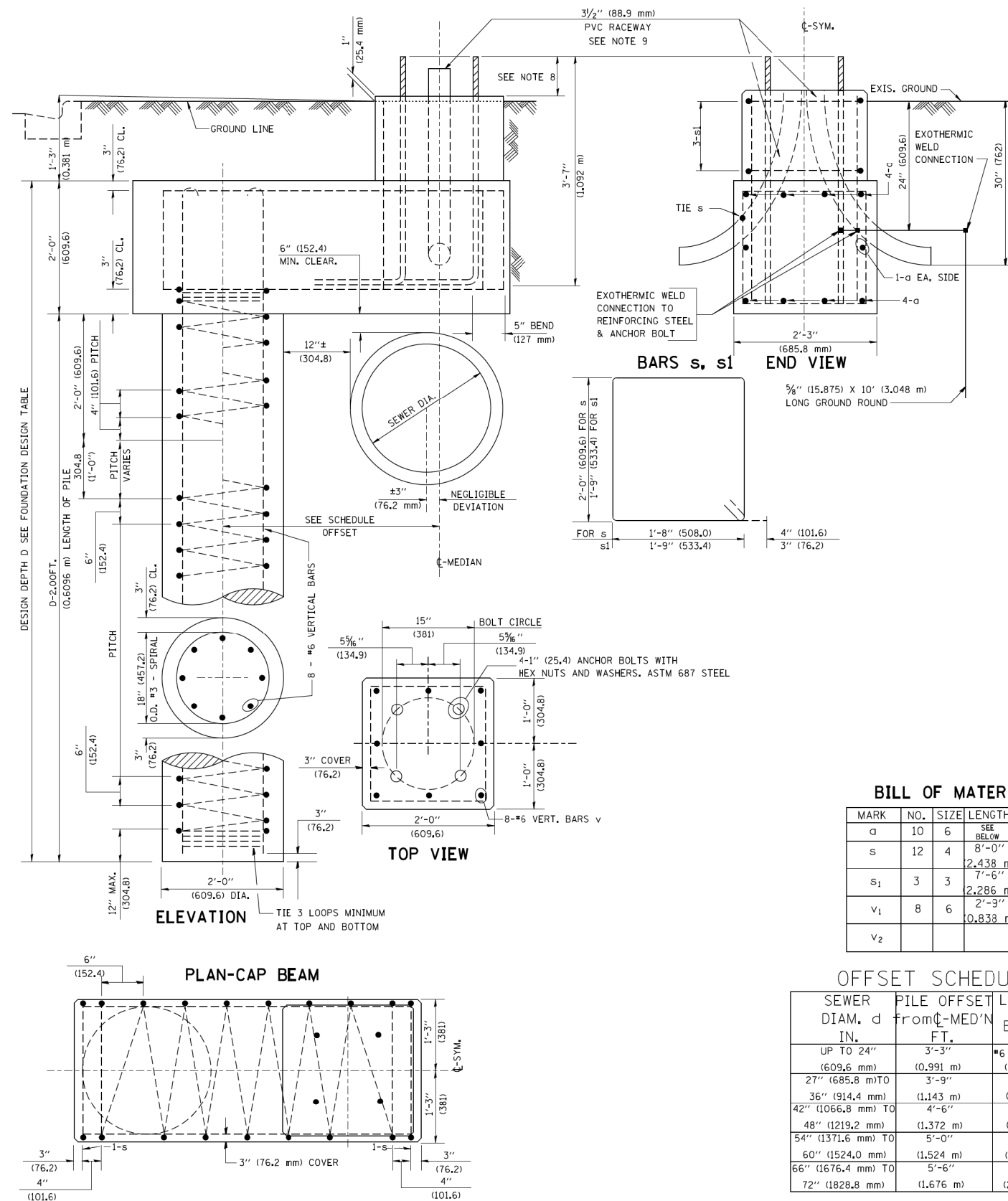
LT-11

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0" (3,962 m)	15'-0" (4,572 m)	8-#6X12'-6" (3,810 m)	#3X122' (37,186 m)	8-#6X14'-3" (4,343 m)	#3X141' (42,977 m)
MEDIUM CLAY	9'-6" (2,896 m)	10'-9" (3,277 m)	8-#6X9'-0" (2,743 m)	#3X90' (27,432 m)	8-#6X10'-0" (3,048 m)	#3X100' (30,480 m)
STIFF CLAY	7'-0" (2,134 m)	8'-0" (2,438 m)	8-#6X6'-6" (1,981 m)	#3X66' (20,112 m)	8-#6X7'-6" (2,286 m)	#3X76' (23,165 m)
LOOSE SAND	9'-0" (2,743 m)	10'-0" (3,048 m)	8-#6X8'-6" (2,591 m)	#3X85' (25,908 m)	8-#6X9'-6" (2,896 m)	#3X94' (28,651 m)
MEDIUM SAND	8'-3" (2,515 m)	9'-0" (2,743 m)	8-#6X8'-0" (2,438 m)	#3X78' (23,774 m)	8-#6X8'-6" (2,591 m)	#3X85' (25,908 m)
DENSE SAND	7'-9" (2,362 m)	9'-0" (2,743 m)	8-#6X7'-6" (2,286 m)	#3X73' (22,250 m)	8-#6X8'-6" (2,591 m)	#3X85' (25,908 m)
ROCK OR SOLIDIFIED SLAG	5'-0" (1,524 m)	5'-0" (1,524 m)	NONE	NONE	NONE	NONE

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERCTED.



BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8'-0" (2,438 m)	□
s1	3	3	7'-6" (2,286 m)	□
v1	8	6	2'-3" (0,838 m)	—
v2				

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET from C-MED'N FT.	LENGTH of BAR a FT.
UP TO 24" (609.6 mm)	3'-3" (0,991 m)	#6 x 5'-3" (1,600 m)
27" (685.8 mm) TO	3'-9" (1,143 m)	5'-9" (1,753 m)
36" (914.4 mm) TO	4'-6" (1,372 m)	6'-6" (1,981 m)
48" (1219.2 mm) TO	5'-0" (1,524 m)	7'-0" (2,134 m)
60" (1524.0 mm) TO	5'-6" (1,676 m)	7'-6" (2,286 m)
66" (1676.4 mm) TO		
72" (1828.8 mm) TO		

MODEL: SPODELMAMES  
FILE: D:\DWG: FTILES

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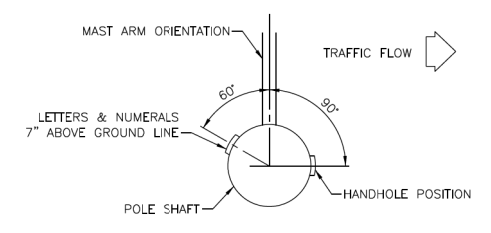
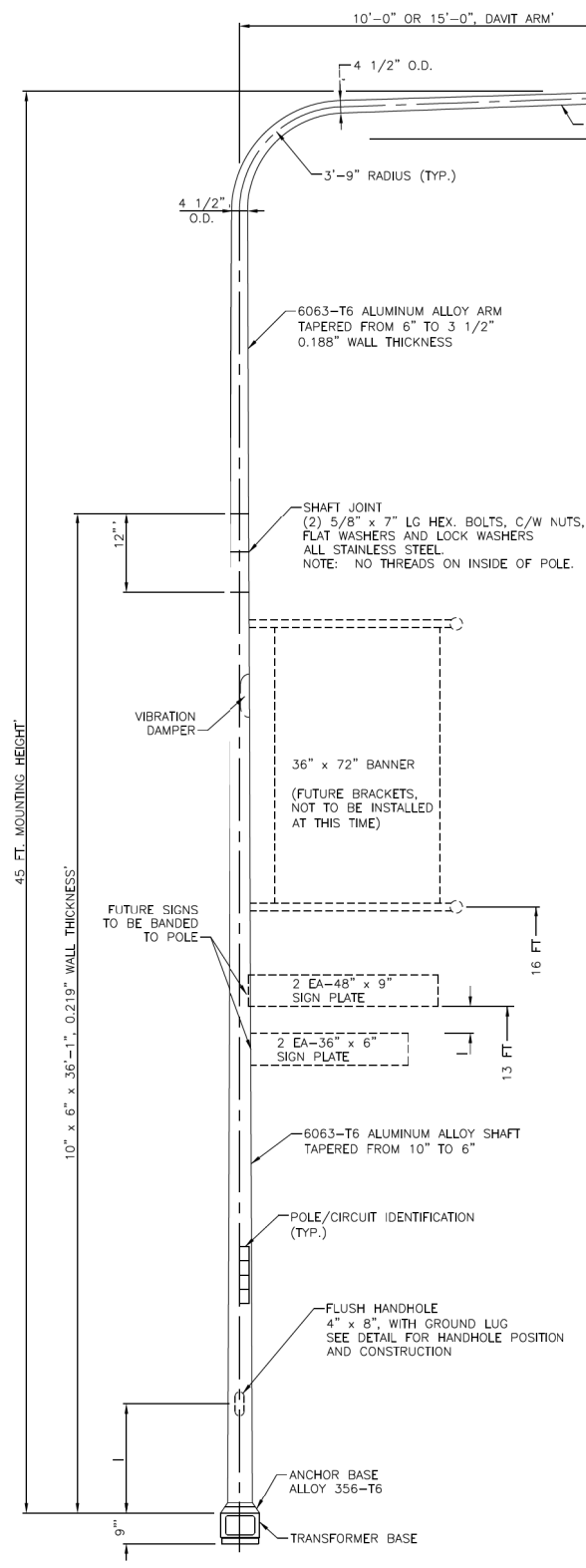
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**LIGHT POLE FOUNDATION OFFSET**  
40' (12,192 m) to 47 1/2" (14,478 m) M.H. 15" (381 mm) BOLT CIRCLE

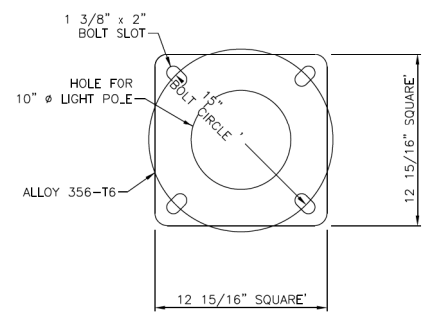
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341	2011-019-T5	COOK	191	128
BE-310		CONTRACT NO. 60P14		
ILLINOIS		FED. AID PROJECT		

LT-12



POSITIONS OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES

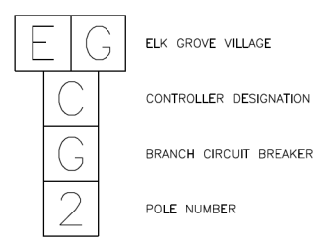
IDENTIFICATION DECALS - LETTER AND NUMERALS SHALL BE IN REFLECTIVE WHITE ON PRESSURE SENSITIVE REFLECTIVE BRONZE SHEETING.



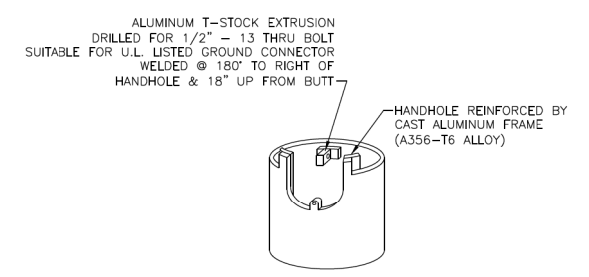
DAVIT ARM POLE BASE PLATE DETAIL

- NOTES:
1. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
  2. BOLT SLOTS WILL BE 1 3/8" x 2" CENTERED.
  3. TWO PIECE SHAFT WILL BE MATCH MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. STUD BOLT WILL BE 5/8" DIA. WITH NUT, FLAT WASHER, AND LOCK WASHER. THERE WILL BE NO THREADS ON THE BOLT INSIDE THE POLE SHAFT.
  4. THE LIGHT POLE SHALL MEET A.A.S.H.T.O. DESIGN CRITERIA.
  5. POLES SHALL BE BLACK POWDER COATED.
  6. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
  7. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
  8. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
  9. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.
  10. SHOP DRAWINGS TO BE SUBMITTED TO ELK GROVE VILLAGE FOR APPROVAL. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

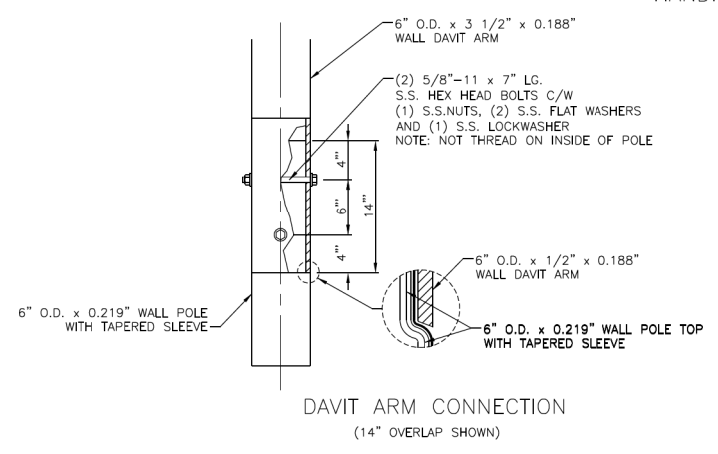
THE POLE SHAFT, DAVIT ARM, TRANSFORMER BASE, AND LUMINAIRE WITH MAST ARM ADAPTER SHALL BE PAINTED IN BLACK COLOR, POWDER COATED. (NOTE 5).



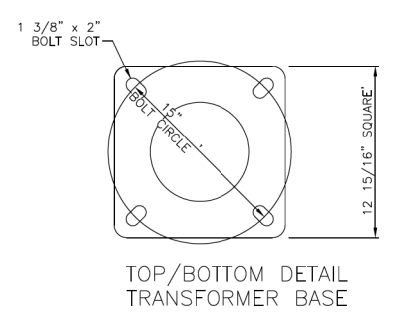
POLE NUMBERING TYP.



HANDHOLE AND GROUND LUG DETAIL



DAVIT ARM CONNECTION (14" OVERLAP SHOWN)



TOP/BOTTOM DETAIL TRANSFORMER BASE

MODEL: \$MODELNAME\$ FILE NAME: \$FILES\$

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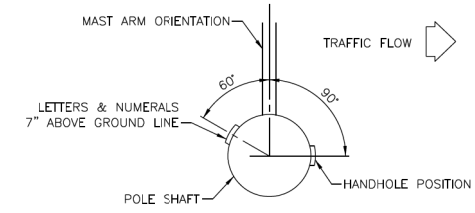
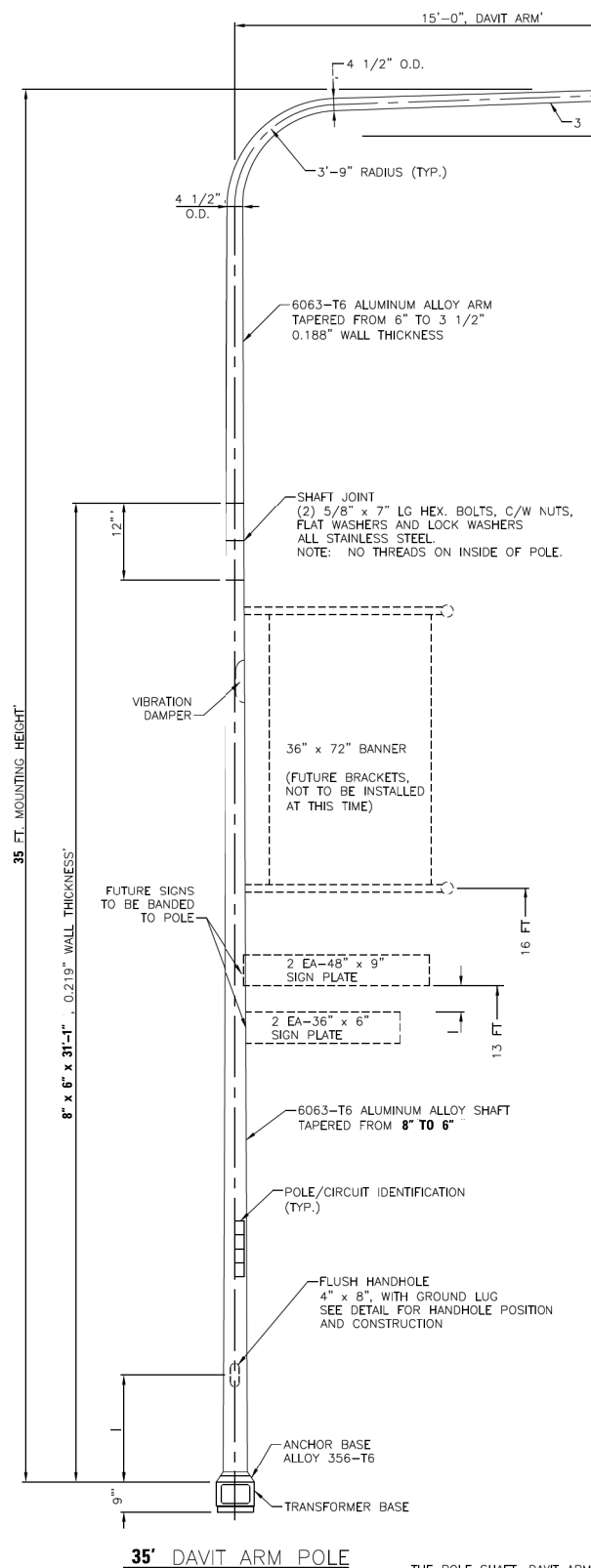
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	DATE - 03-05-2020	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>45' DAVIT LIGHT POLE AND DETAILS</b>	
SCALE:	SHEET OF SHEETS STA. TO STA.

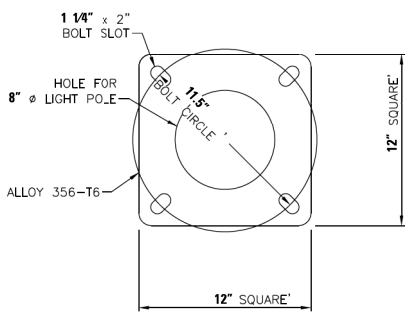
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	129
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

LT-13



POSITIONS OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES

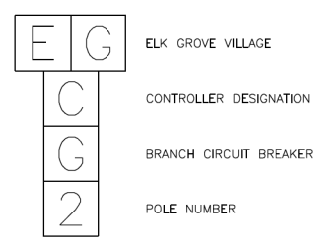
IDENTIFICATION DECALS - LETTER AND NUMERALS SHALL BE IN REFLECTIVE WHITE ON PRESSURE SENSITIVE REFLECTIVE BRONZE SHEETING.



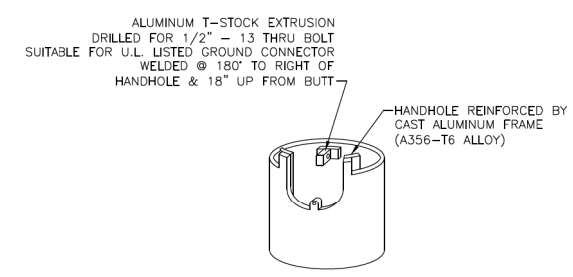
DAVIT ARM POLE BASE PLATE DETAIL

- NOTES:
1. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
  2. BOLT SLOTS WILL BE 1 1/4" x 2" CENTERED.
  3. TWO PIECE SHAFT WILL BE MATCH MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. STUD BOLT WILL BE 5/8" DIA. WITH NUT, FLAT WASHER, AND LOCK WASHER. THERE WILL BE NO THREADS ON THE BOLT INSIDE THE POLE SHAFT.
  4. THE LIGHT POLE SHALL MEET A.A.S.H.T.O. DESIGN CRITERIA.
  5. POLES SHALL BE BLACK POWDER COATED.
  6. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
  7. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
  8. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
  9. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.
  10. SHOP DRAWINGS TO BE SUBMITTED TO ELK GROVE VILLAGE FOR APPROVAL. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

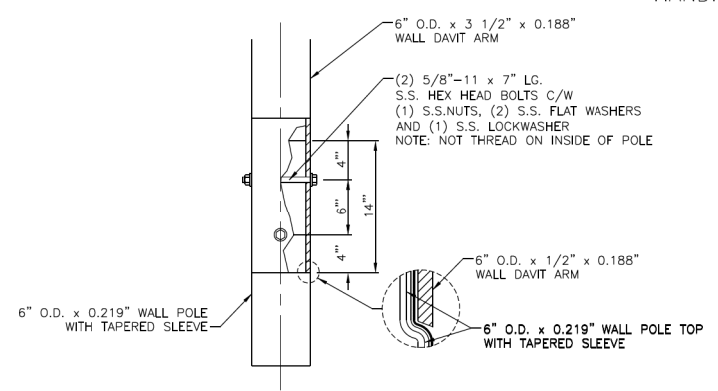
THE POLE SHAFT, DAVIT ARM, TRANSFORMER BASE, AND LUMINAIRE WITH MAST ARM ADAPTER SHALL BE PAINTED IN BLACK COLOR, POWDER COATED. (NOTE 5).



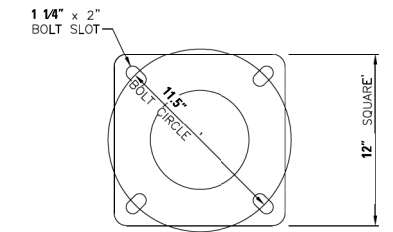
POLE NUMBERING TYP.



HANDHOLE AND GROUND LUG DETAIL



DAVIT ARM CONNECTION (14" OVERLAP SHOWN)



TOP/BOTTOM DETAIL TRANSFORMER BASE

MODEL: \$MODELNAME\$ FILE NAME: \$FILES\$

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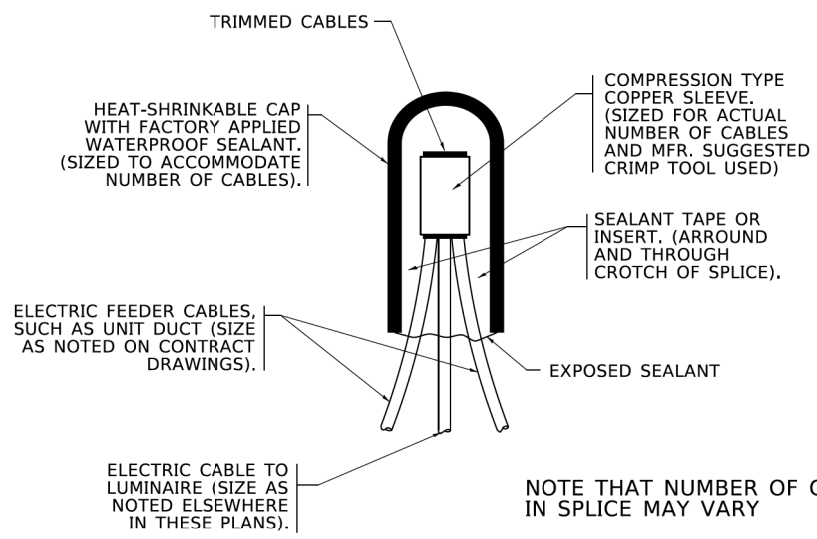
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35' DAVIT LIGHT POLE AND DETAILS	
SCALE:	SHEET OF SHEETS STA. TO STA.

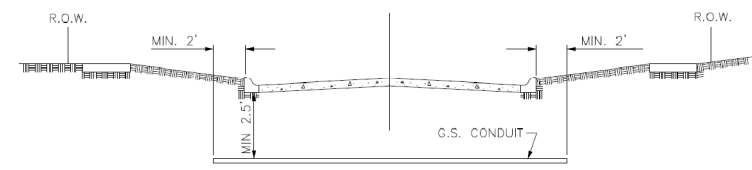
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	130
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

LT-14



**TYPICAL SPLICE DETAIL**  
**N.T.S.**

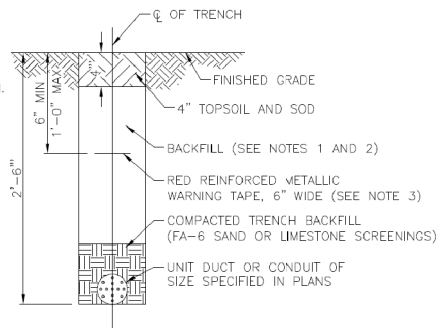
NOTE THAT NUMBER OF CABLES IN SPLICE MAY VARY



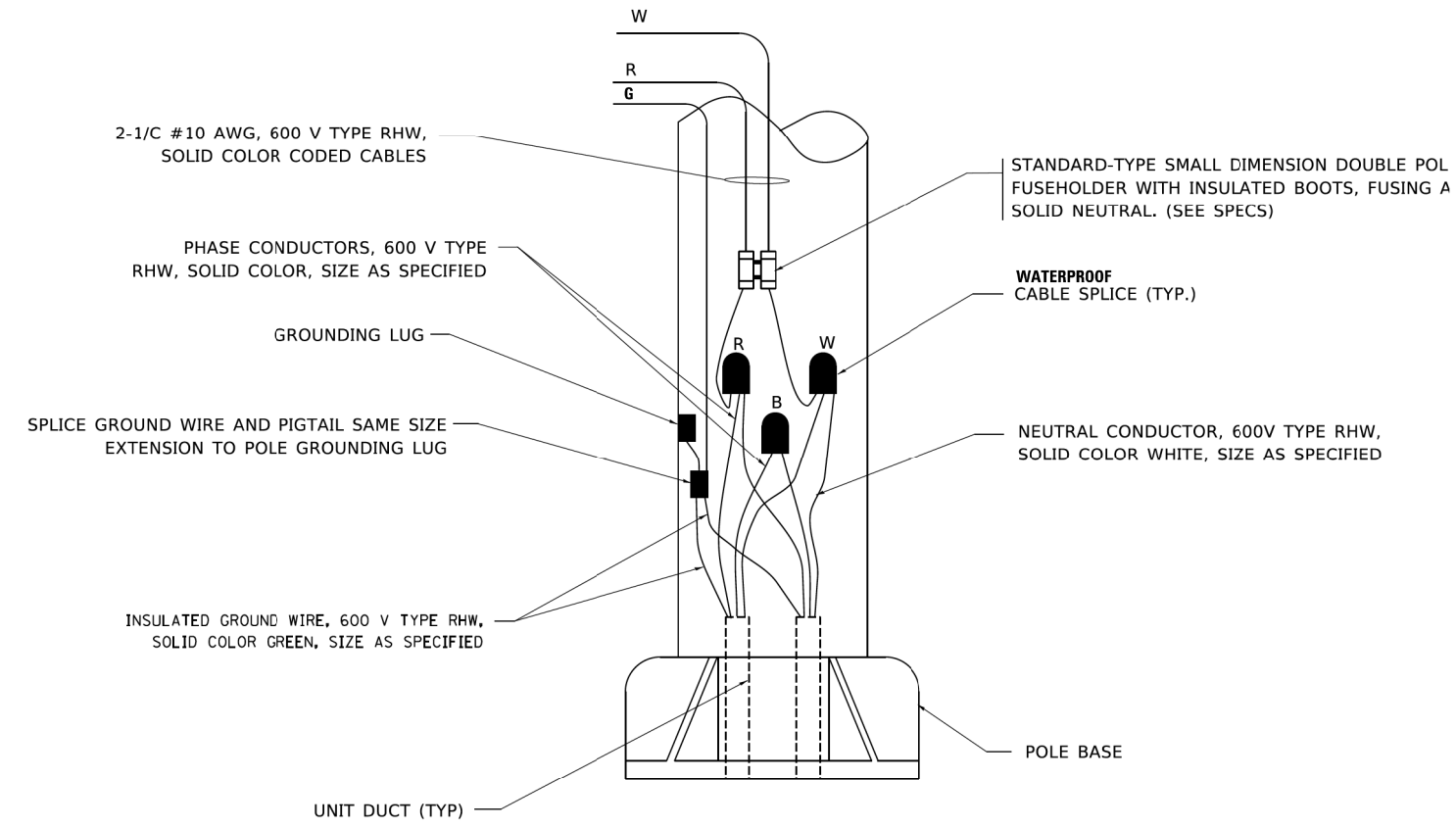
- STREET CROSSING**
- CONDUIT SHALL BE HEAVY WALL RIGID G.S. CONDUIT.
  - CONDUIT SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
  - CONDUIT SHALL BE A MINIMUM OF 2.5 FT. BELOW BOTTOM OF CURB.
- ELECTRICAL CONDUIT UNDER PAVEMENT**

**NOTES:**

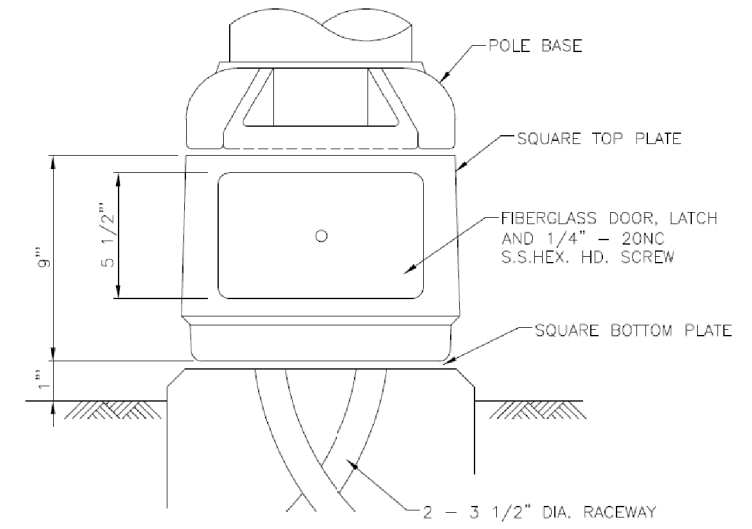
- IN GRASS COVERED AREAS, THE BACKFILL MAY BE COMPACTED EARTH.
- TRENCHES WITHIN 2' OF PROPOSED OR EXISTING STREETS, DRIVEWAYS, OR SIDEWALKS WILL BE BACKFILLED WITH COMPACTED FA-6 SAND OR LIMESTONE SCREENINGS.
- WARNING TAPE WILL BE RED WITH BLACK LETTERING TO READ "CAUTION - ELECTRIC LINE BURIED BELOW".
- ALL GRASS COVERED AREAS DISTURBED DURING CONSTRUCTION WILL BE RESTORED WITH 4" OF TOPSOIL AND SOD.



**TYPICAL TRENCH CROSS SECTION**



**POLE WIRING DETAIL**  
**N.T.S.**



**BREAKAWAY DEVICE, TRANSFORMER BASE**

THE BREAKAWAY TRANSFORMER BASE SHALL HAVE A LISTING OF APPROVAL BY FHWA COMPLIANCE TO 1985 AASHTO REQUIREMENTS.

MODEL: \$MODELNAME\$  
FILE NUMBER: \$FILES\$

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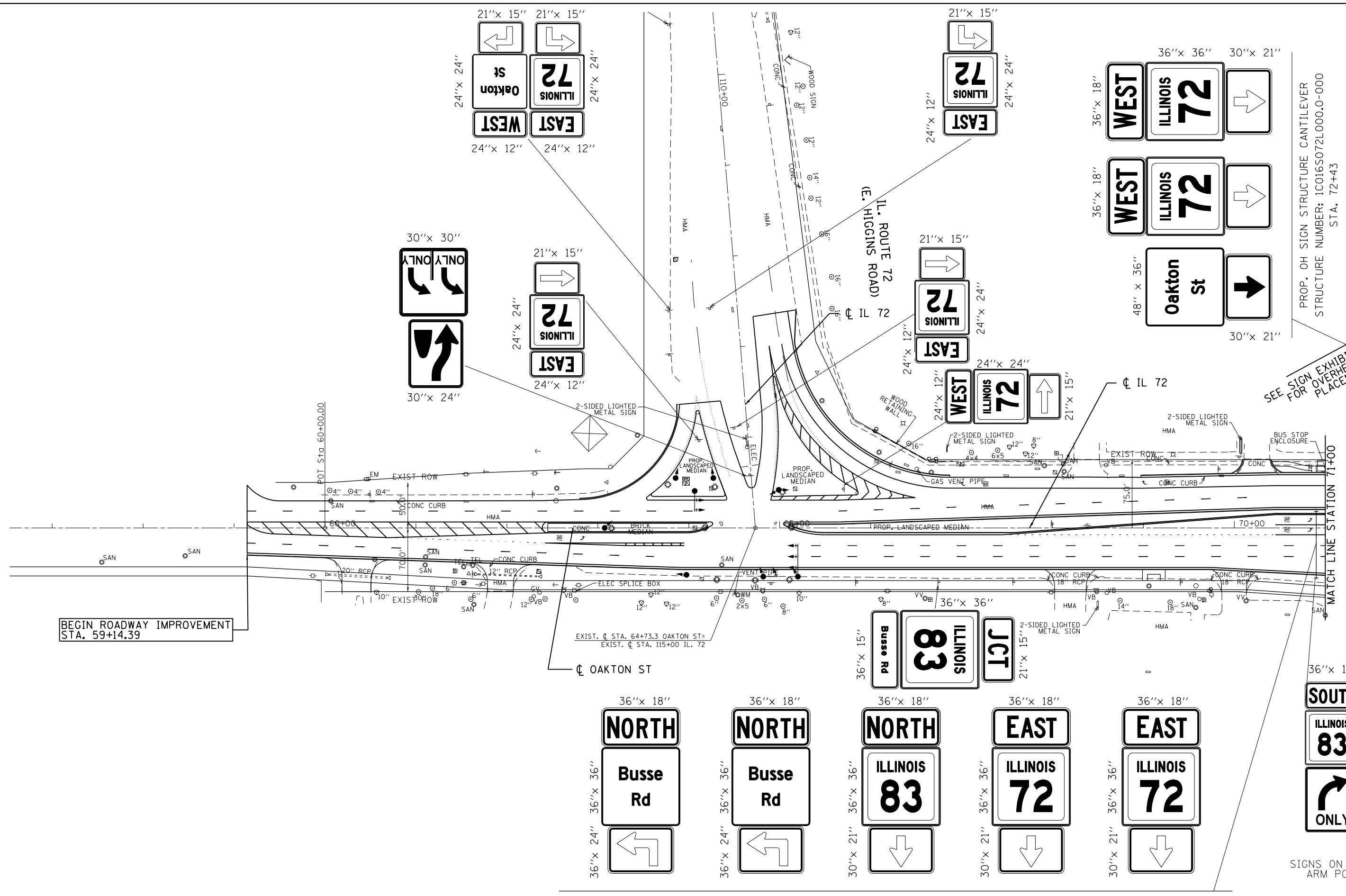
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**DEPARTMENT OF TRANSPORTATION**

**MISC. ELECTRICAL DETAILS**  
**SHEET A**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	131
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P14	



SEE SIGN EXHIBIT SHEET FOR OVERHEAD SIGN PLACEMENT

PROP. OH SIGN STRUCTURE CANTILEVER  
STRUCTURE NUMBER: 1C016S072L000.0-000  
STA. 72+43

PROP. OH SIGN STRUCTURE - SPAN DUAL MONOTUBE      STRUCTURE NUMBER: 1M016S072R000.0-000      STA. 70+90

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

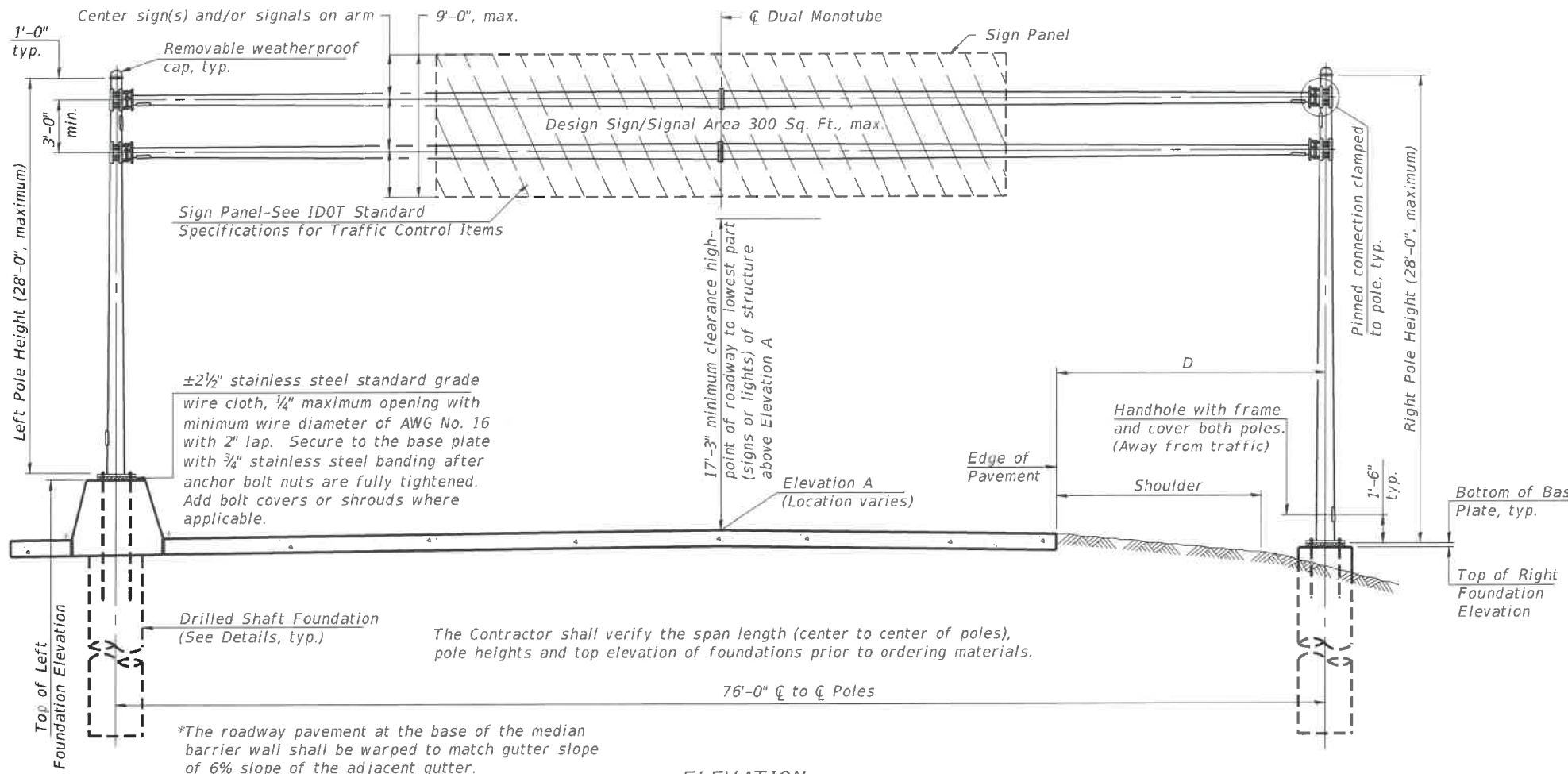
IL 72 (HIGGINS RD) AT IL 83 (BUSSE RD)  
PROPOSED SIGNAGE PLAN  
SCALE: 1"=50'      SHEET 1 OF 2 SHEETS      STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	132
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

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DRAWN	-	-
-	-	-
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-	-	-
PLOT DATE	= 6/26/2020	REVISIED
-	-	-

MODEL: Default  
FILE: Model\_Plan\_Signage\_Plan\_IL72\_000.dwg  
PROJECT: I:\Projects\142611\CO000000\Drawings\142611-000-000.dwg





The Contractor shall verify the span length (center to center of poles), pole heights and top elevation of foundations prior to ordering materials.

\*The roadway pavement at the base of the median barrier wall shall be warped to match gutter slope of 6% slope of the adjacent gutter.

**ELEVATION**  
Looking at face of signs.  
Looking upstation for structures with signs both sides.

**SIGN STRUCTURE DATA TABLE**

Structure Number	Station	C to C Poles	Elevation A	Dimension D	Actual Sign/Signal Area	Left Foundation			Right Foundation			Class SI Concrete (Cu. Yds.)				
						Elevation Top	Elev. Bottom	A	B	F	Elevation Top		Elev. Bottom	A	B	F
1M016S072R000.0-000	70+90	76'	680.08	8.64'	286 SF	683.30	665.72	4.58'	13'	17.58'	679.04	665.87	0.17'	13'	13.17'	8.0

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE - SPAN, DUAL MONOTUBE	Foot	76
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	8.0

**GENERAL NOTES**

**DESIGN:** Current (at time of letting) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (Fatigue Category II - natural wind gust only).

**CONSTRUCTION:** Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Recurring Special Provisions. ("Standard Specifications") All references to "Mast Arm Assembly and Pole" are applicable, unless otherwise noted.

**WELDING:** All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code and the Standard Specifications.

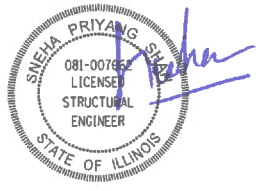
**ANCHOR RODS:** Shall conform to ASTM F1554 Grade 105. No welding shall be permitted on rods.

**FASTENERS:** All connection bolts shall be High Strength Bolts M164, Galvanize M232 (A153), Type 3, or stainless steel heavy hex conforming to ASTM A193, Grade B8 or B8M, Class 1. U-bolts shall be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished, or an equivalent material acceptable to the Engineer. Nuts for stainless steel bolts shall be stainless steel conforming to ASTM A194, Grade 8 (AISI Type 304) or Grade 8F (AISI Type 303). All nuts shall be "locknuts" with nylon or steel inserts and semifinished hexagonal heads equivalent to the finished heavy hex series of the American National Standard. Washers for stainless steel bolts shall be stainless steel conforming to ASTM A240, Type 302 or 304.

**REINFORCEMENT BARS:** Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

**CAMBER:** Minimum AASHTO camber =  $L / 1000 + \text{dead load camber}$

**FOUNDATIONS:** The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.



DATE SIGNED: 06/08/2020  
EXP. DATE: 11/30/2020

MODEL: Default  
FILE NAME: Q:\Engineering\Live\Projects\19013\_IDOT\_DUR\_Graef\Work Order\_2\CADD\CADD Sheets\Structural\60P14-014-DUALTUBE-1.dgn



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PLOT SCALE =	CHECKED - SPS	REVISED -
PLOT DATE =	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

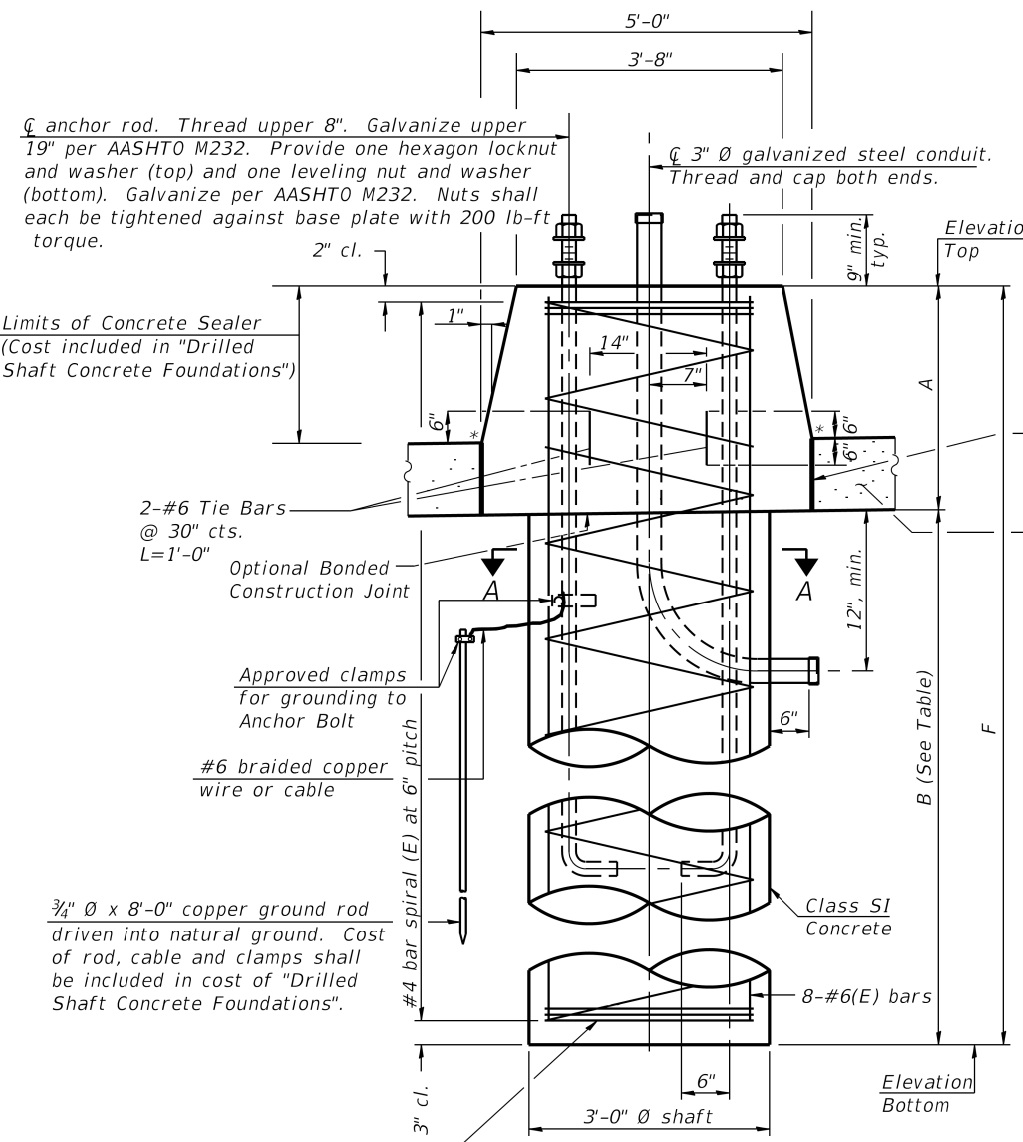
DUAL MONOTUBE SIGN STRUCTURE

SHEET OF SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	134
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				



MODEL: Default  
 FILE NAME: O:\Engineering\Live\Projects\19013\_IDOT\_DUR\_Graef\Work\_Order\_2\CADD\CADD\_Sheets\Structural\60P14-0-15-DUALTUBE-2.dgn

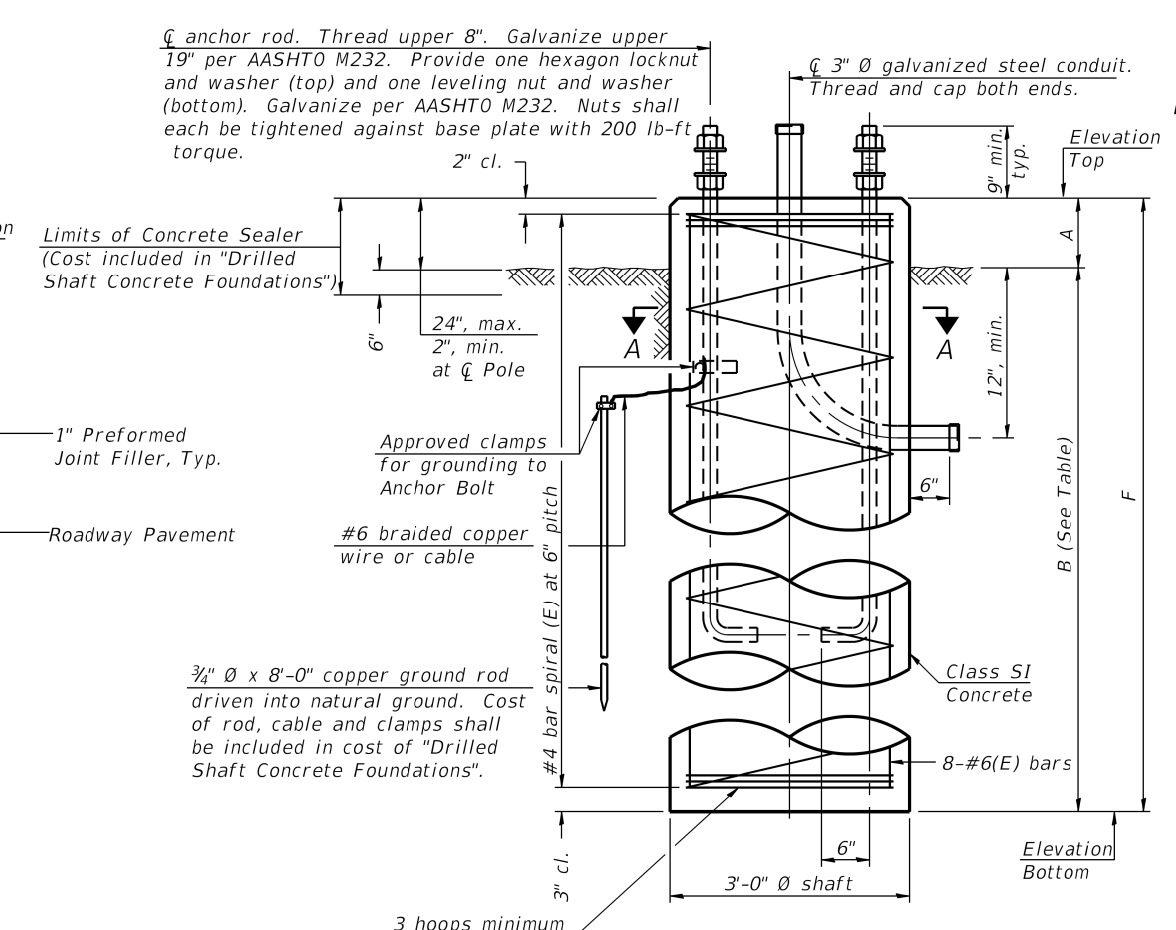


**FOUNDATION DETAILS - END VIEW (LEFT)**

Typical, except conduit may only be required at one foundation. Provide conduit openings both poles.  
 \*The roadway pavement at the base of the median barrier wall shall be warped to match gutter slope of 6% slope of the adjacent gutter.

**FOUNDATIONS:**

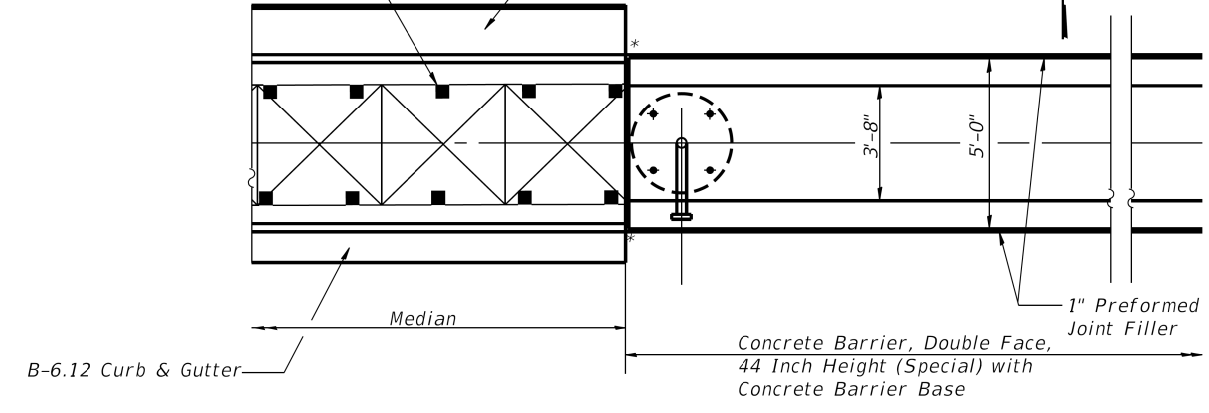
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength ( $Q_u$ ) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.  
 If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.  
 No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.  
 Concrete shall be placed monolithically, without construction joints.  
 Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.  
 A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".



**FOUNDATION DETAILS - END VIEW (RIGHT)**

Typical, except conduit may only be required at one foundation. Provide conduit openings both poles.

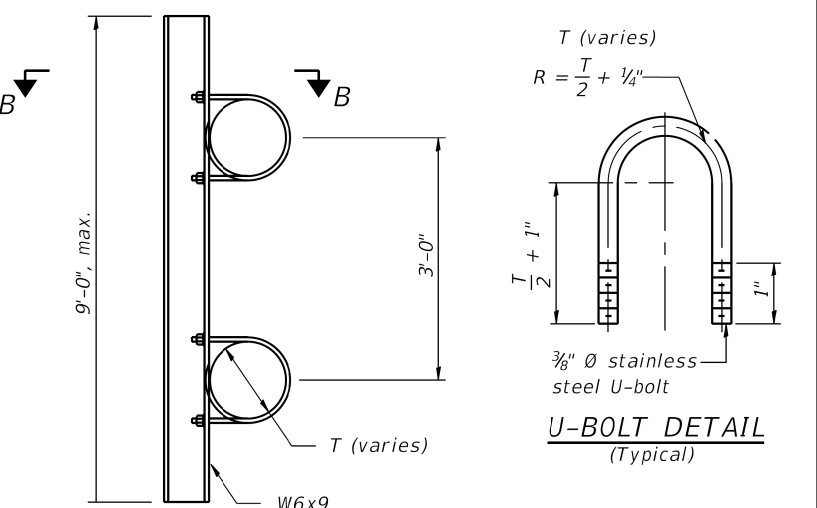
Impact Attenuators (Fully Redirective, Narrow), Test Level 2



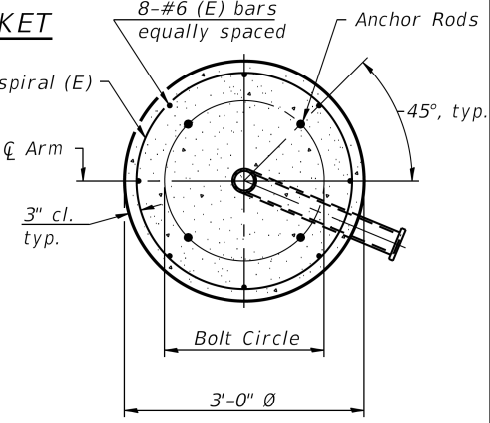
**PLAN - MEDIAN BARRIER (LEFT)**

\*The roadway pavement at the base of the median barrier wall shall be warped to match gutter slope of 6% slope of the adjacent gutter.

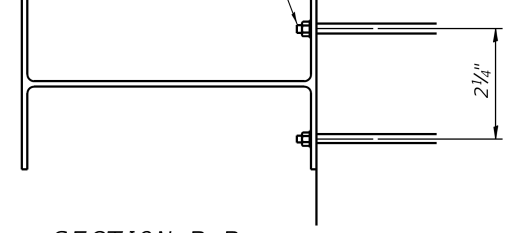
Foundation Design Table	
Span (Ft.)	B (Ft.)
Span ≤ 65	12
65 < Span ≤ 85	13
85 < Span ≤ 100	14



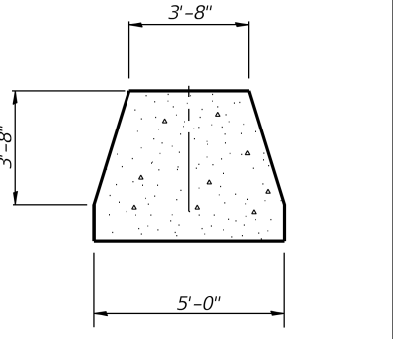
**SIGN MOUNTING BRACKET**



3/8" stainless steel U-bolt (Provide 2 stainless steel washers and 2 hex locknuts per bolt.) 2 bolts required per bracket. (See U-Bolt Detail)



6'-0" maximum spacing, 2'-0" maximum sign overhang beyond end bracket.



**SECTION THRU MEDIAN BARRIER (LEFT)**



USER NAME =	DESIGNED - JMT	REVISED -
PLOT SCALE =	CHECKED - SPS	REVISED -
PLOT DATE =	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**DUAL MONOTUBE SIGN STRUCTURE**

SHEET OF SHEETS

F.A.P. RTE. 341	SECTION 2011-019-TS	COUNTY COOK	TOTAL SHEETS 191	SHEET NO. 135
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				



### SOIL BORING LOG

GSI Job No. 19120-A

Page 1 of 2

Date 1/22/20

ROUTE IL Rte 72 & IL Rte 83 DESCRIPTION New Sign Trusses on IL Rte 72 & IL Rte 83 LOGGED BY TC

SECTION LOCATION NE 1/4, SEC. 27, TWP. T41N, RNG. R11E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station Offset Ground Surface Elev.	D E P T H S	B L O W S	U C S Q u T	M O I S T %	Surface Water Elev.		Stream Bed Elev.		D E P T H S	B L O W S	U C S Q u T	M O I S T %
						ft	ft	ft	ft				
	SB-01 70+29 0.20ft Right 680.60	(ft)	(/6")	(tsf)	(%)					(ft)	(/6")	(tsf)	(%)
3.0" ASPHALT	680.35												
SILTY CLAY LOAM with Stone-dark brown, gray & black-very stiff to hard (Fill)		3								3			
		5	4.0	17						3	1.5	22	
		8	P							6	P		
		3								3			
		5	2.0	15						3	0.7	23	
		7	P							6	B		
		-5								-25			
CLAY LOAM-brown & gray-very stiff	675.10												
		4								3			
		5	2.1	18						4	1.2	19	
		6	B							6	B		
		4								3			
		6	2.3	18						5	1.9	18	
		7	B							8	B		
		-10								-30			
CLAY-gray-stiff	670.10												
		3											
		3	1.5	18									
		3	P										
SILTY CLAY LOAM with Gravel-gray-medium dense	667.60												
		4								9			
		6		15						10		10	
		8								12			
		-15								-35			
CLAY-gray-medium stiff to stiff	665.10												
		3											
		4	0.9	19									
		9	B										
		3								5			
		3	1.3	24						5	2.3	17	
		4	P							5	P		
		-20								-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger  
BBS, from 137 (Rev. 8-99)



### SOIL BORING LOG

GSI Job No. 19120-A

Page 2 of 2

Date 1/22/20

ROUTE IL Rte 72 & IL Rte 83 DESCRIPTION New Sign Trusses on IL Rte 72 & IL Rte 83 LOGGED BY TC

SECTION LOCATION NE 1/4, SEC. 27, TWP. T41N, RNG. R11E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station Offset Ground Surface Elev.	D E P T H S	B L O W S	U C S Q u T	M O I S T %	Surface Water Elev.		Stream Bed Elev.		D E P T H S	B L O W S	U C S Q u T	M O I S T %
						ft	ft	ft	ft				
	SB-01 70+29 0.20ft Right 680.60	(ft)	(/6")	(tsf)	(%)					(ft)	(/6")	(tsf)	(%)
CLAY LOAM-gray-stiff to very stiff (continued)													
		5											
		9	2.5	16									
		10	P										
		6											
		8	1.3	21									
		11	P										
		-50											
End Of Boring @ -50.0'. Boring backfilled with cuttings.	630.60												

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger  
BBS, from 137 (Rev. 8-99)

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CHECKED - SPS	REVISED -	
PLOT SCALE =	DRAWN - JN	REVISED -
PLOT DATE =	CHECKED - JMT	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS- I

SHEET OF SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	136
CONTRACT NO. 60P14				
ILLINOIS		FED. AID PROJECT		



**GENERAL NOTES**

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:

Field Units  
 $f'_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.

All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W\*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.

The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

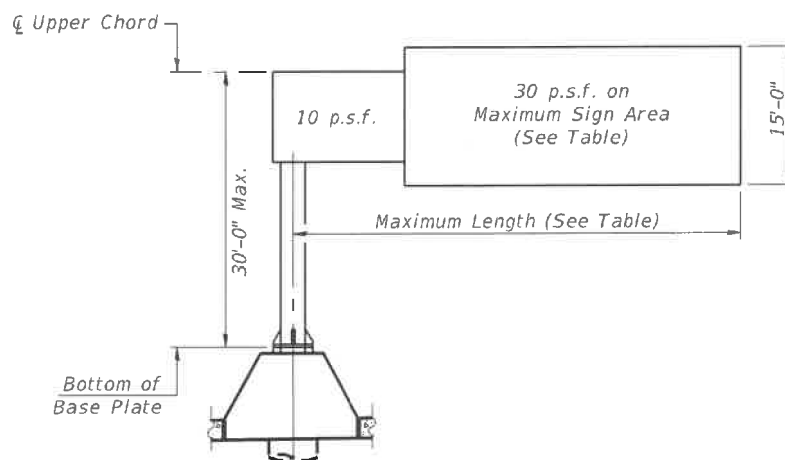
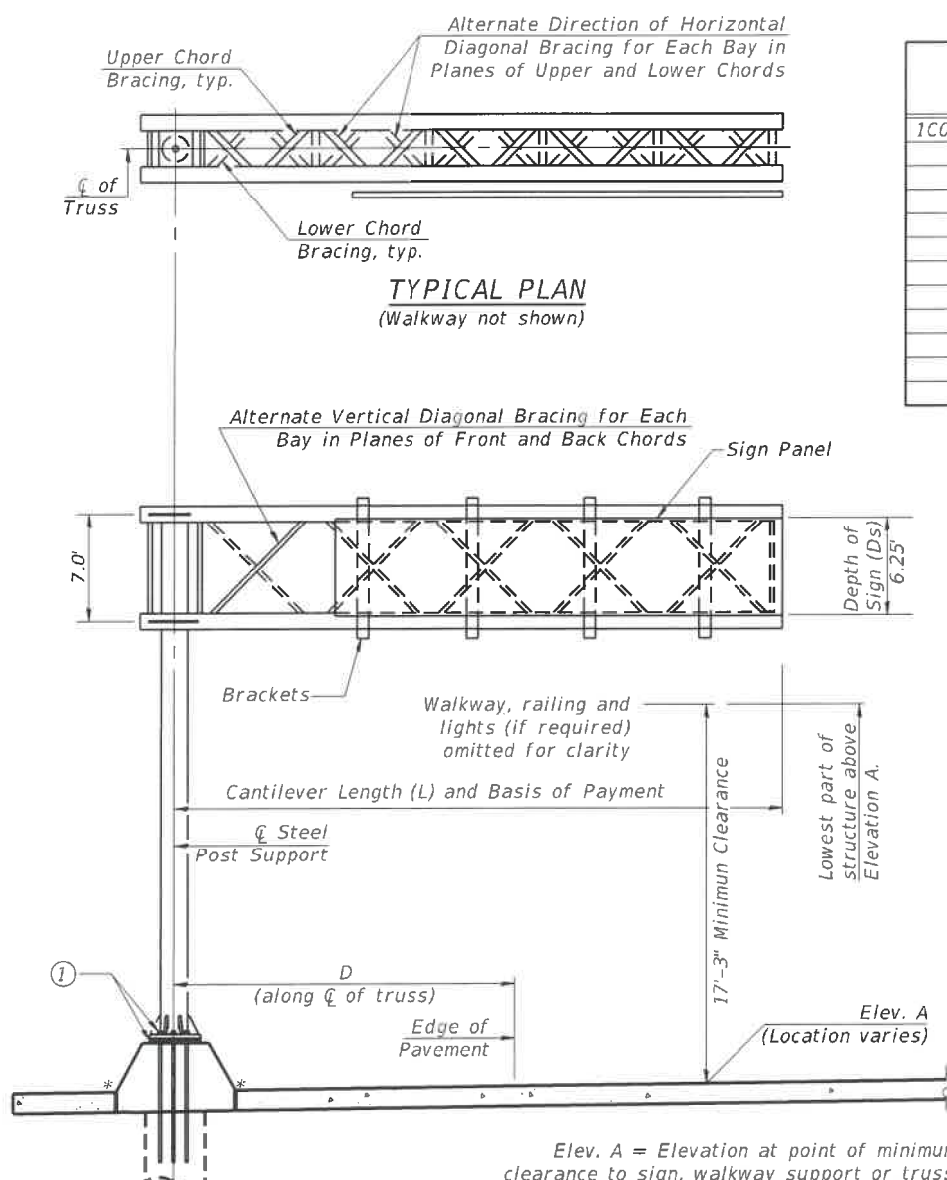
FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE-CANTILEVER TYPE I-C-A	Foot	0
OVERHEAD SIGN STRUCTURE - CANTILEVER TYPE II-C-A	Foot	0
OVERHEAD SIGN STRUCTURE - CANTILEVER TYPE III-C-A (36"x7'-0")	Foot	36
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	0
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	13.1

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	Ds	Total Sign Area
1C016S072L000.0-000	72+43	III-C-A	36'	678.55	4.5'	6.25'	178.75 Sq. Ft.

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



Note:  
 Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

① After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

\* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

\*The roadway pavement at the base of the median barrier wall shall be warped to match gutter slope of 6% slope of the adjacent gutter.



DATE SIGNED: 06/08/2020  
 EXP. DATE: 11/30/2020

MODEL: Default; FILE NAME: Q:\Engineering\LiveProjects\190113\_IDOT DUR\_Graef\Work Order 2\CADD\CADD Sheets\Structural\60P14-016-OSC-A-1-CANT - MEDIAN.dgn



**GENERAL NOTES**

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:  
Field Units  
f<sub>c</sub> = 3,500 p.s.i.  
f<sub>y</sub> = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W\*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

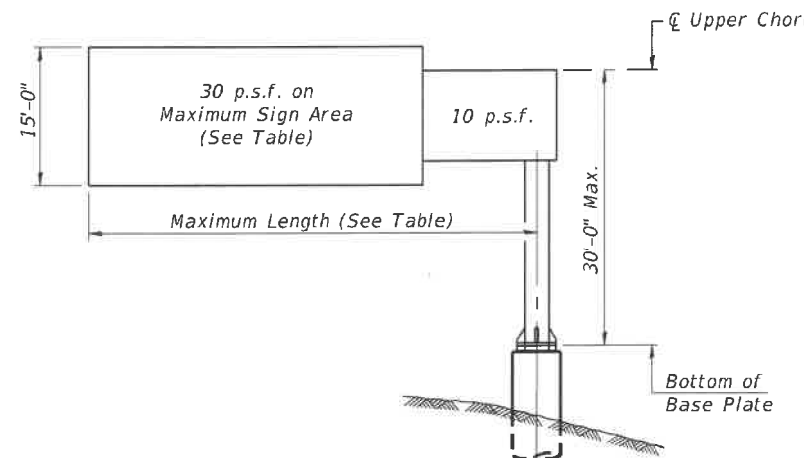
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	Ds	Total Sign Area
1C016S072L000.0-001	155+63	II-C-A	30'	675.74	10.5	6.5'	108.4 Sq. Ft.

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



**DESIGN WIND LOADING DIAGRAM**

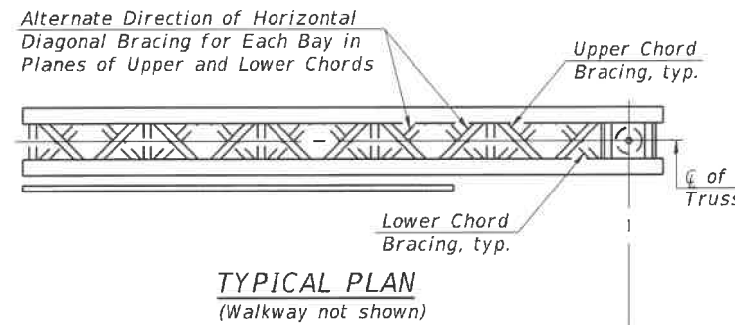
Parameters shown are basis for I.D.O.T. Standards. Installations not within dimensional limits shown require special analysis for all components.

**Note:**

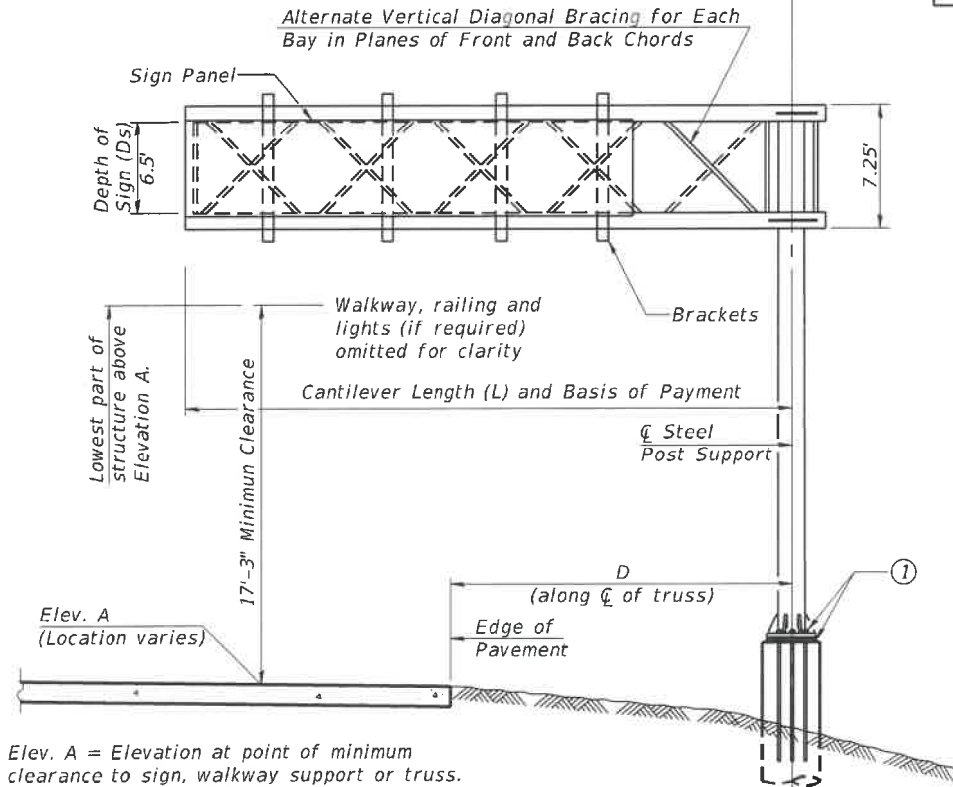
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

- ① After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

\* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

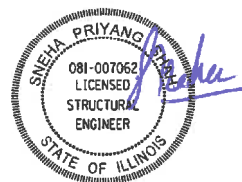


**TYPICAL PLAN**  
(Walkway not shown)



**TYPICAL ELEVATION**  
Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.



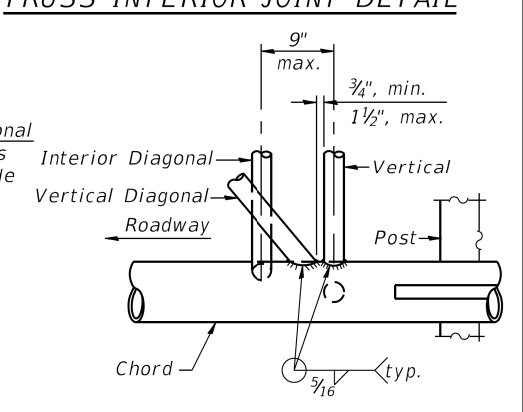
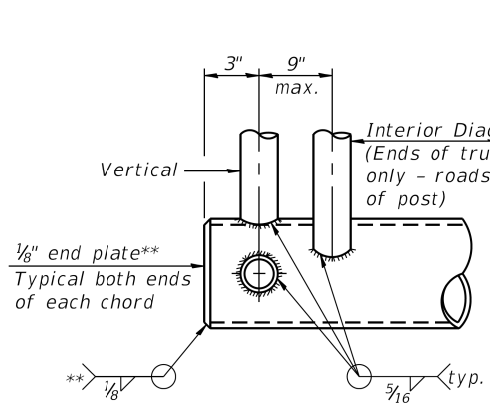
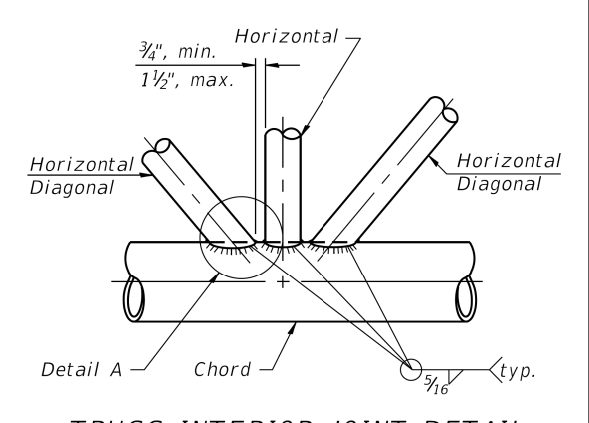
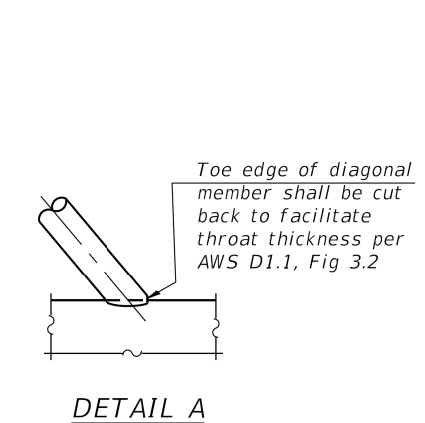
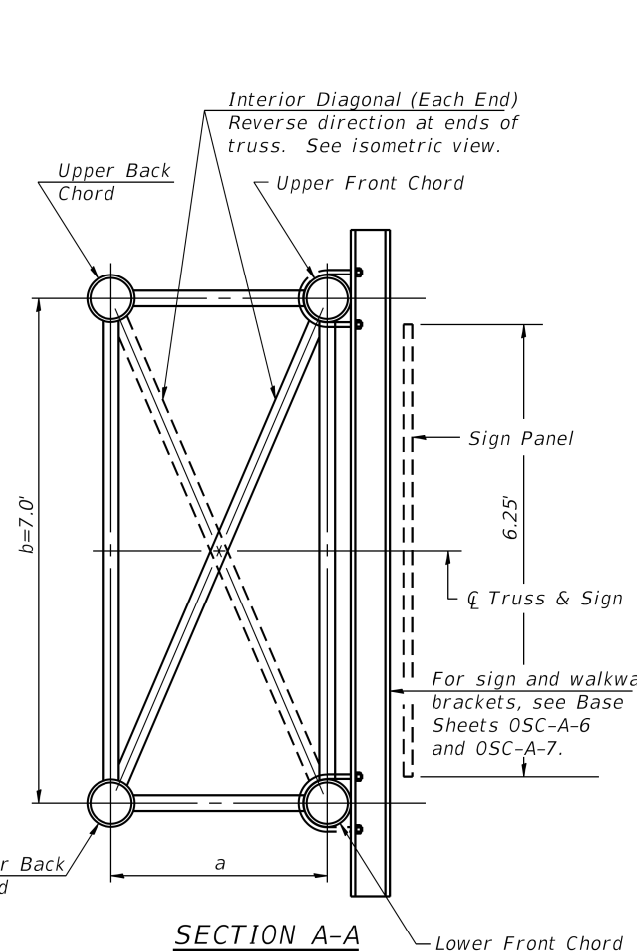
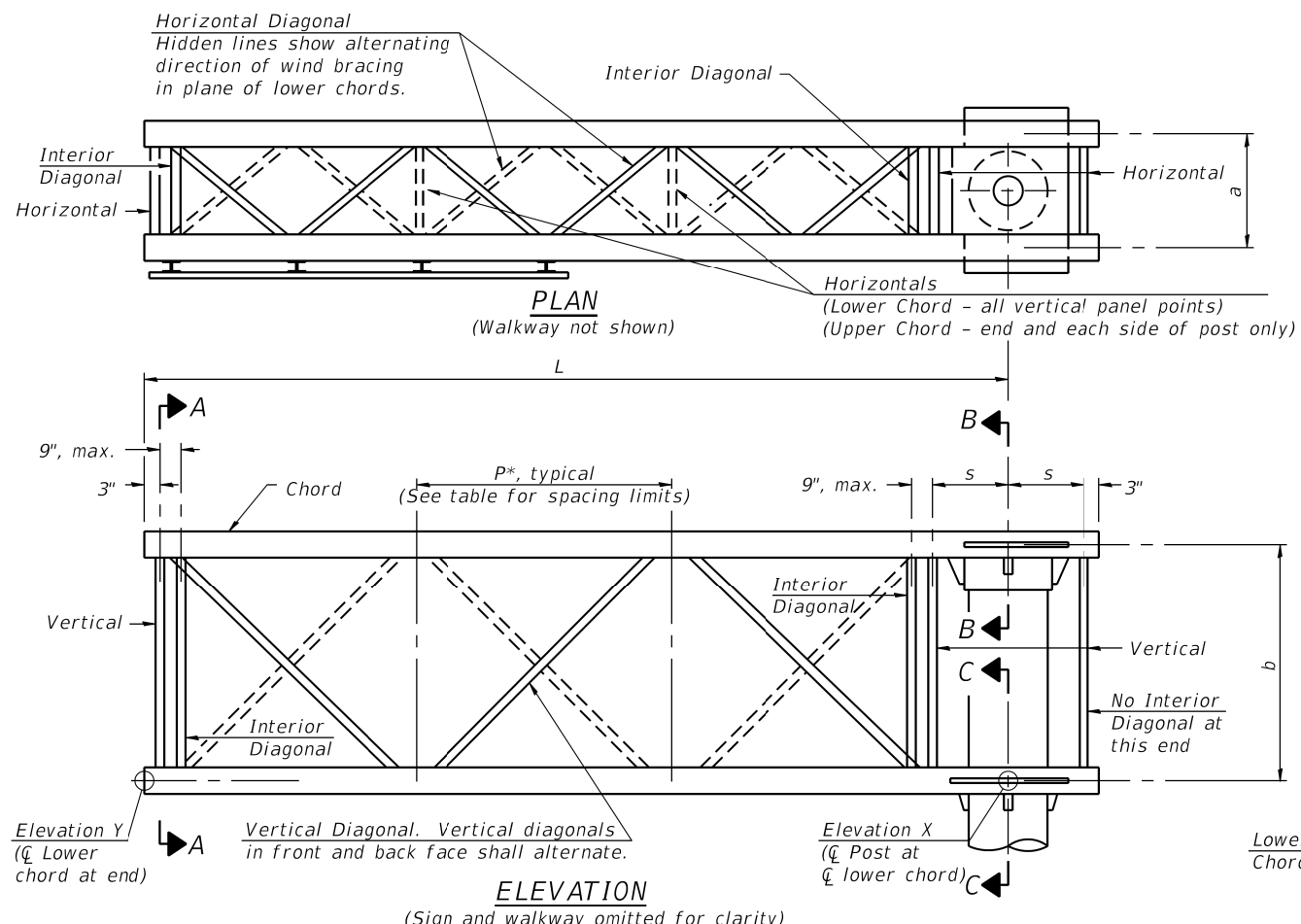
DATE SIGNED: 06/05/2020  
EXP. DATE: 11/30/2020

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE-CANTILEVER TYPE I-C-A	Foot	0
OVERHEAD SIGN STRUCTURE - CANTILEVER TYPE II-C-A (36"x5'-6")	Foot	30
OVERHEAD SIGN STRUCTURE - CANTILEVER TYPE III-C-A	Foot	0
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	0
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	8.4

OSC-A-1 2-17-2017

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Note:

For Section B-B and Section C-C, see Base Sheet OSC-A-3.

There are twice as many horizontal diagonals as there are vertical diagonals.

**TRUSS UNIT TABLE**

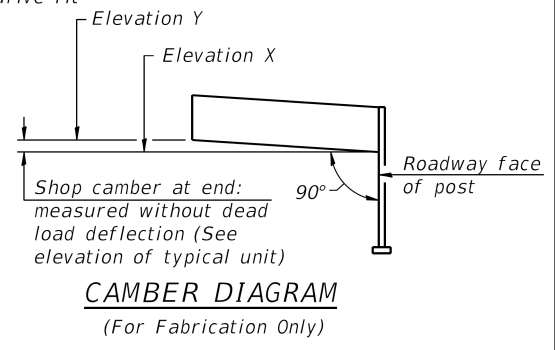
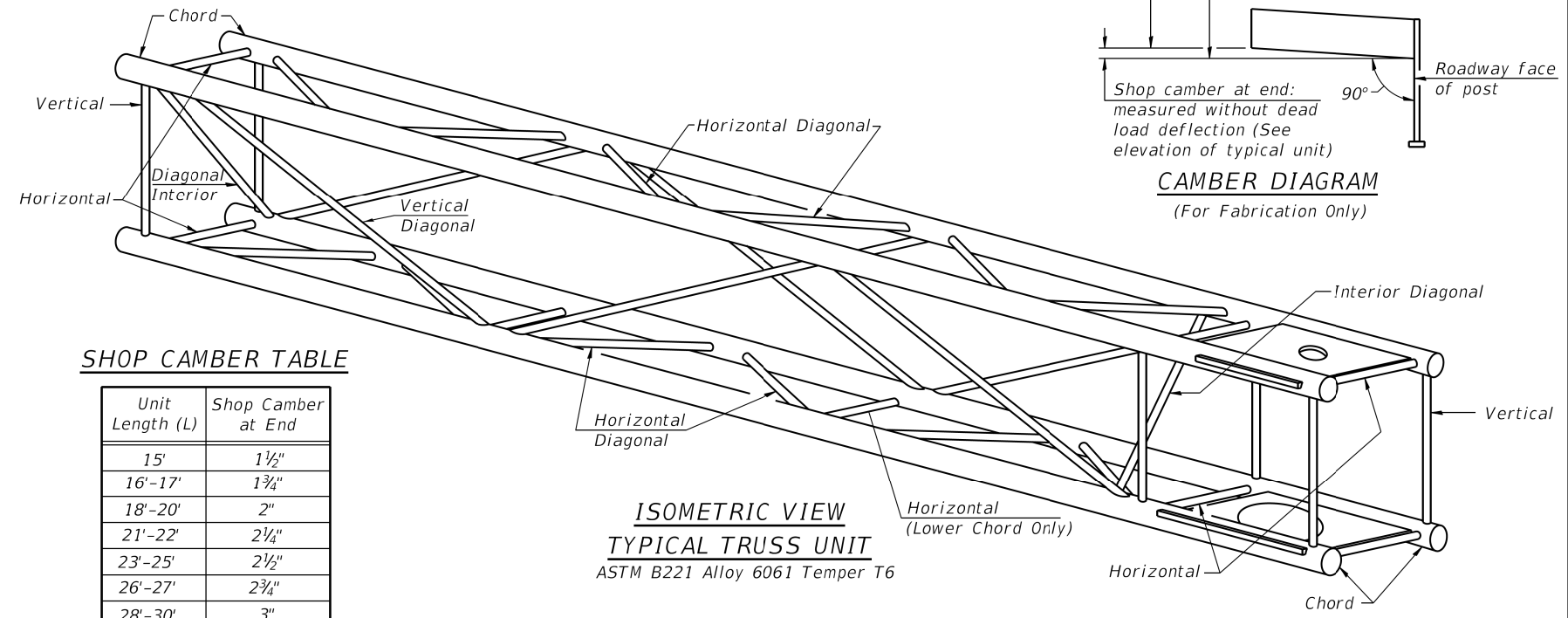
Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals	
					O.D.	Wall	O.D.	Wall
I-C-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"
II-C-A	36"	66"	21"	42" min. to 54" max.	6 1/2"	5/16"	3 1/4"	5/16"
III-C-A (35' Max.)	36"	84"	21"	48" min. to 66" max.	7"	3/8"	3 1/2"	3/8"
III-C-A (>35' to 40')	36"	84"	21"	48" min. to 66" max.	8"	3/8"	3 1/2"	3/8"

$$*p = \frac{L-3}{\# \text{ Panels}}$$

Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
1C016S072L000.0-000	72+43	III-C-A	36'	7	4.857'
1C016S072L000.0-001	155+63	II-C-A	30'	7	4'

**SHOP CAMBER TABLE**

Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"



OSC-A-2 2-17-2017



USER NAME =	DESIGNED - JMT	REVISED -
PLOT SCALE =	CHECKED - SPS	REVISED -
PLOT DATE =	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

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**DEPARTMENT OF TRANSPORTATION**

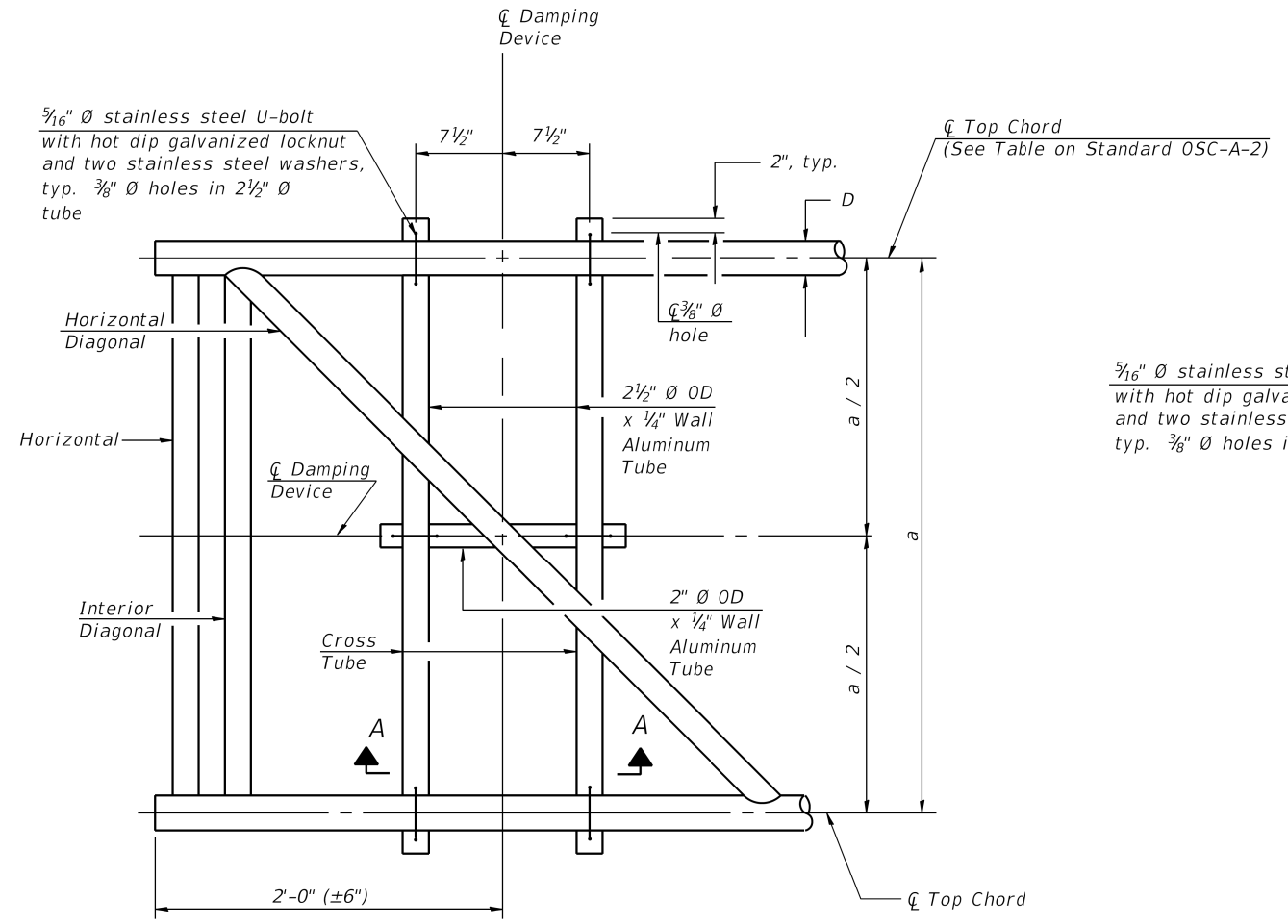
**CANTILEVER SIGN STRUCTURES - TRUSS DETAILS**  
**ALUMINUM TRUSS & STEEL POST**

SHEET OF SHEETS

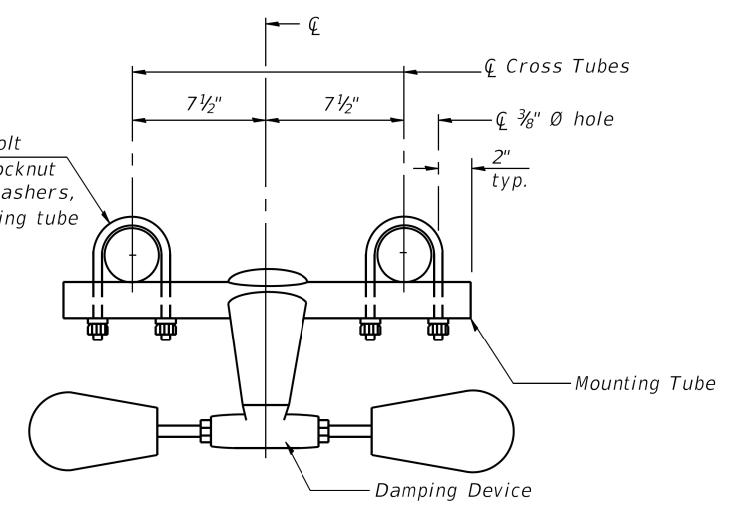
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341	2011-019-TS	COOK	191	140
CONTRACT NO. 60P14				
ILLINOIS / FED. AID PROJECT				

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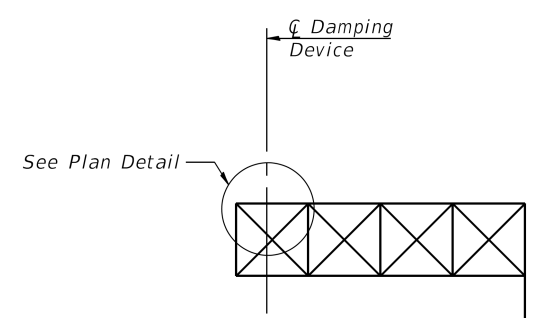
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**PLAN DETAIL**

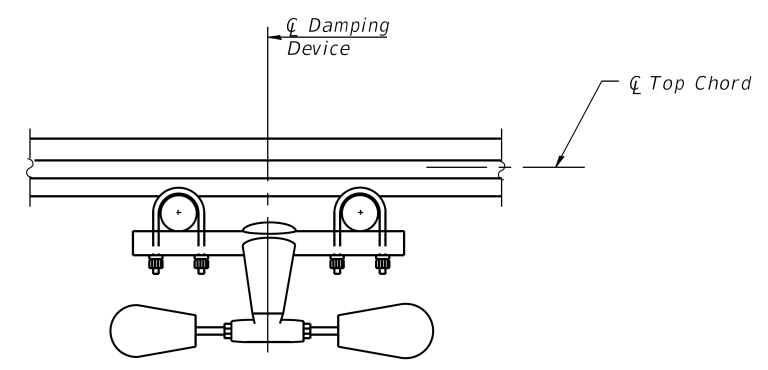


**TRUSS DAMPING DEVICE CONNECTION DETAIL**

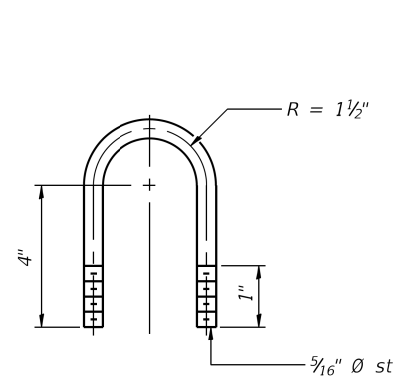


**ELEVATION**  
 Aluminum Cantilever Sign Structure

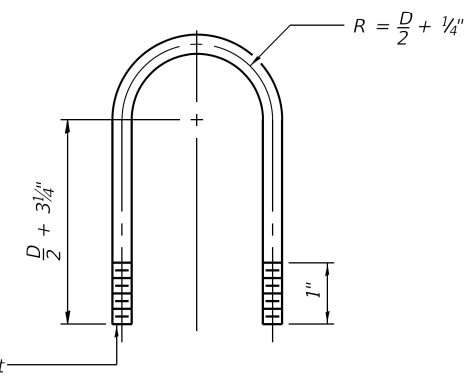
- GENERAL NOTES**
- Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum-29" minimum between ends of weights)
  - Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6



**SECTION A-A**



**DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL**  
 (Typical)



**TOP CHORD TO CROSS TUBE U-BOLT DETAIL**  
 (Typical)

OSC-A-D

2-17-2017



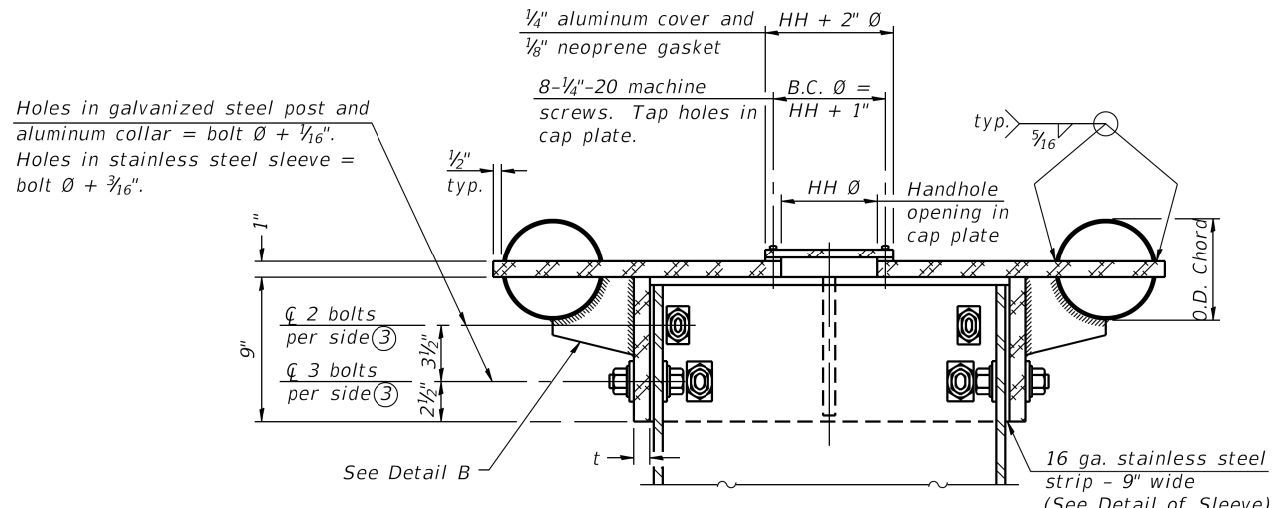
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PLOT DATE =	DRAWN - JN	REVISED -
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**CANTILEVER SIGN STRUCTURE  
 DAMPING DEVICE**

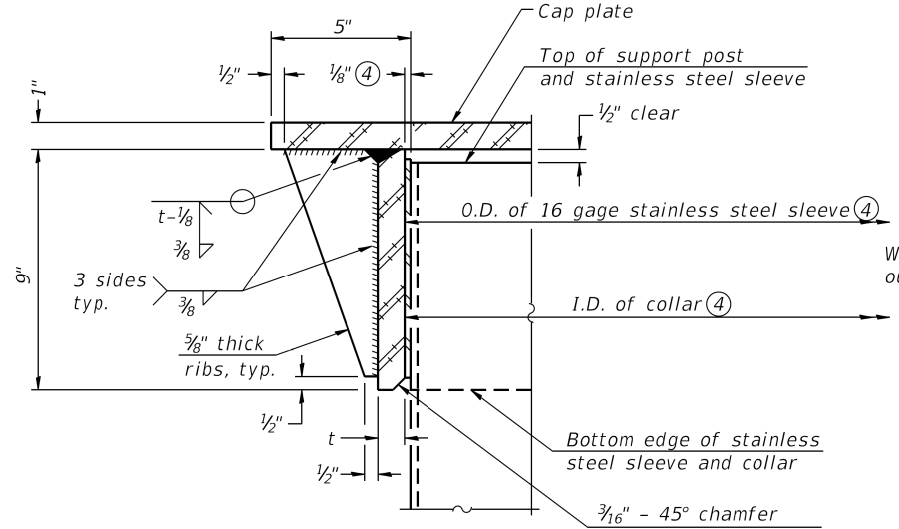
SHEET OF SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

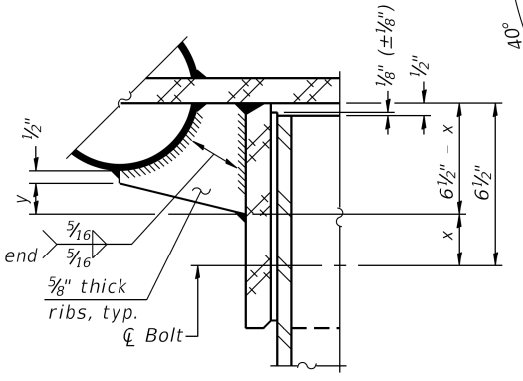


④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" (±1/16"). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.

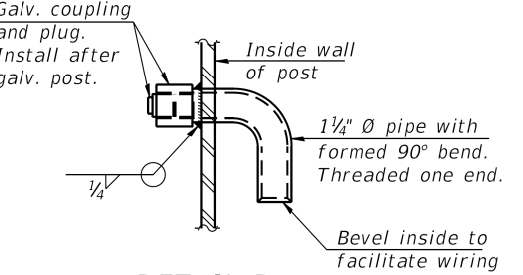
**SECTION B-B**  
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.



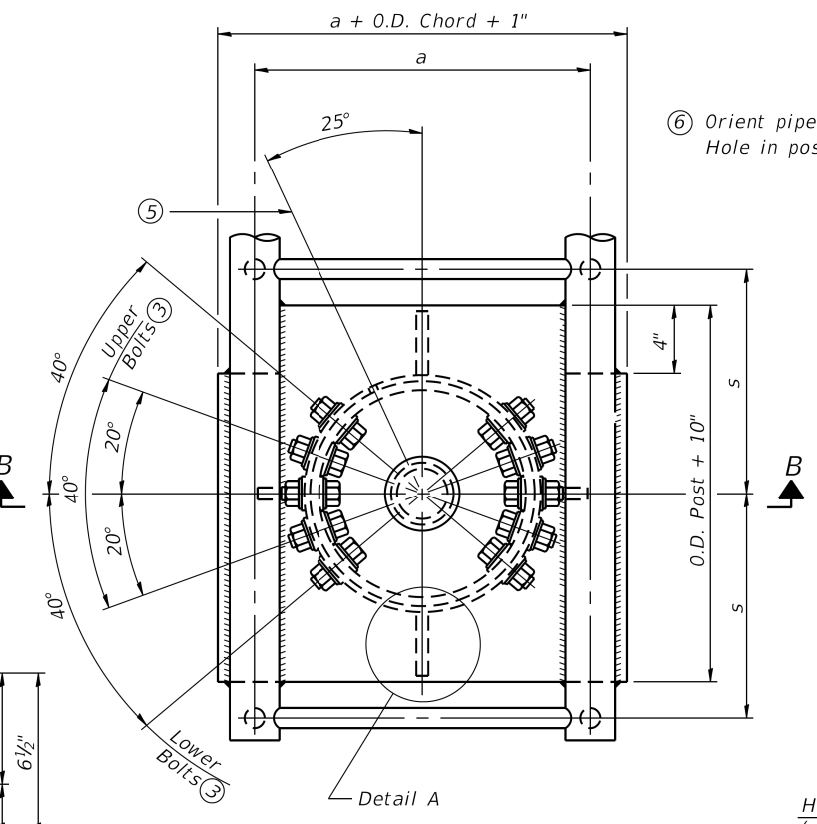
**DETAIL A**  
(Two locations)  
3/16" - 45° chamfer on inside of collar to facilitate field assembly



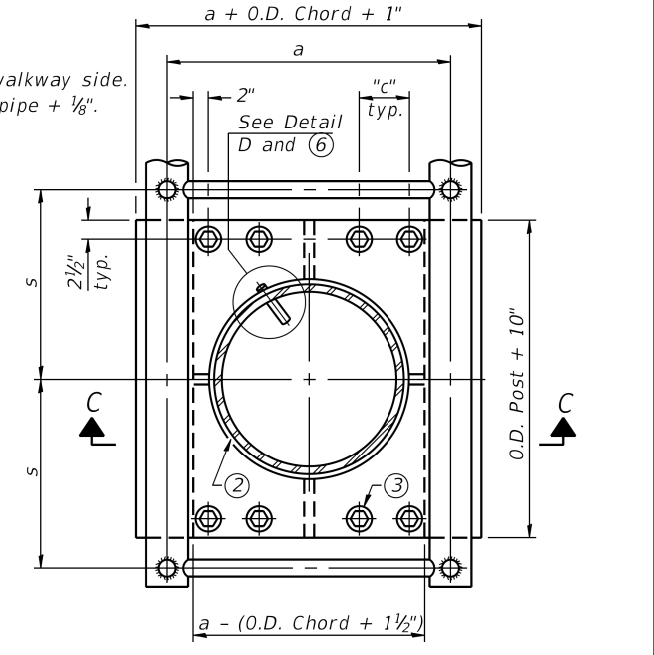
**DETAIL B**  
Two locations  
(For details not shown, see Detail C)



**DETAIL D**

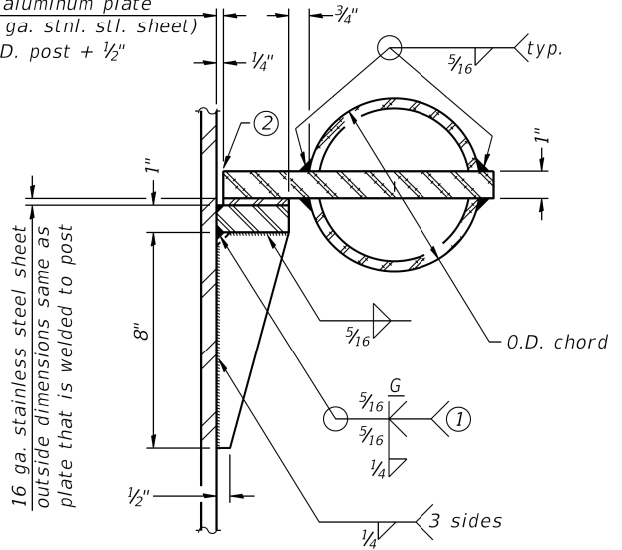


**PLAN VIEW - TOP OF COLUMN**  
⑤ Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)

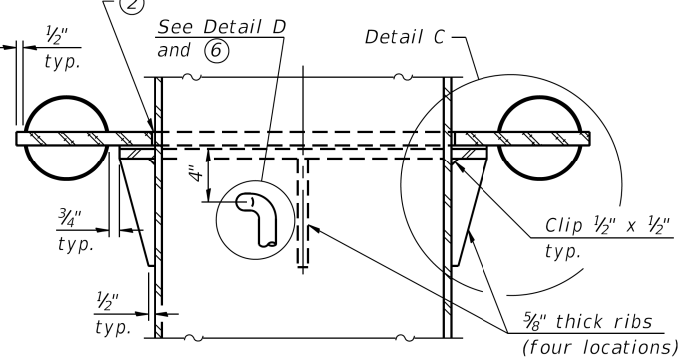


**SECTION THRU POST ABOVE LOWER CHORDS**

Hole in aluminum plate (and 16 ga. stnl. stl. sheet) to be O.D. post + 1/2"



**DETAIL C**



**SECTION C-C**

**CONTOURED WASHERS**

Bolt Size	Contoured Washers	
	Hole Dia.	B
7/8"	1"	2 1/2"
1"	1 1/8"	3"
1 1/4"	1 3/8"	3 1/4"

**DETAIL OF STAINLESS STEEL SLEEVE**

Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 1 1/2" long at 6" cts. along top edge and at 1/4" opening.

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	16" Ø (83#/'')	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" Ø (125#/'')	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24" Ø (125#/'')	1 1/4"	3 1/2"	12"	7/8"	2"	1"
III-C-A (>35' to 40')	24" Ø (171#/'')	1 1/4"	3 1/2"	12"	7/8"	2"	1"

- ① Grind top if required to fully seat aluminum plate and stainless steel sheet.
- ② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.
- ③ Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

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OSC-A-3

2-17-2017



USER NAME	DESIGNED	REVISIONS
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SPS	SPS	
JN	JN	
JMT	JMT	

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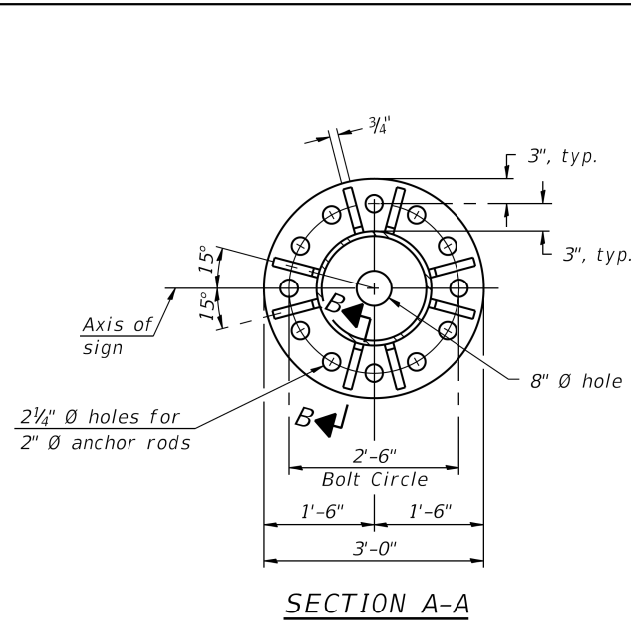
CANTILEVER SIGN STRUCTURES - JUNCTURE DETAILS  
ALUMINUM TRUSS & STEEL POST

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

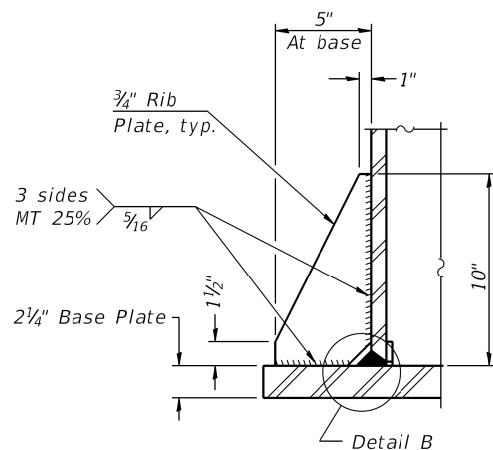
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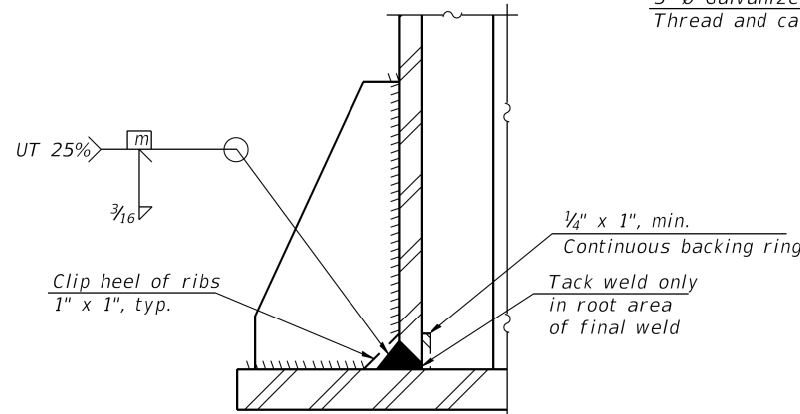
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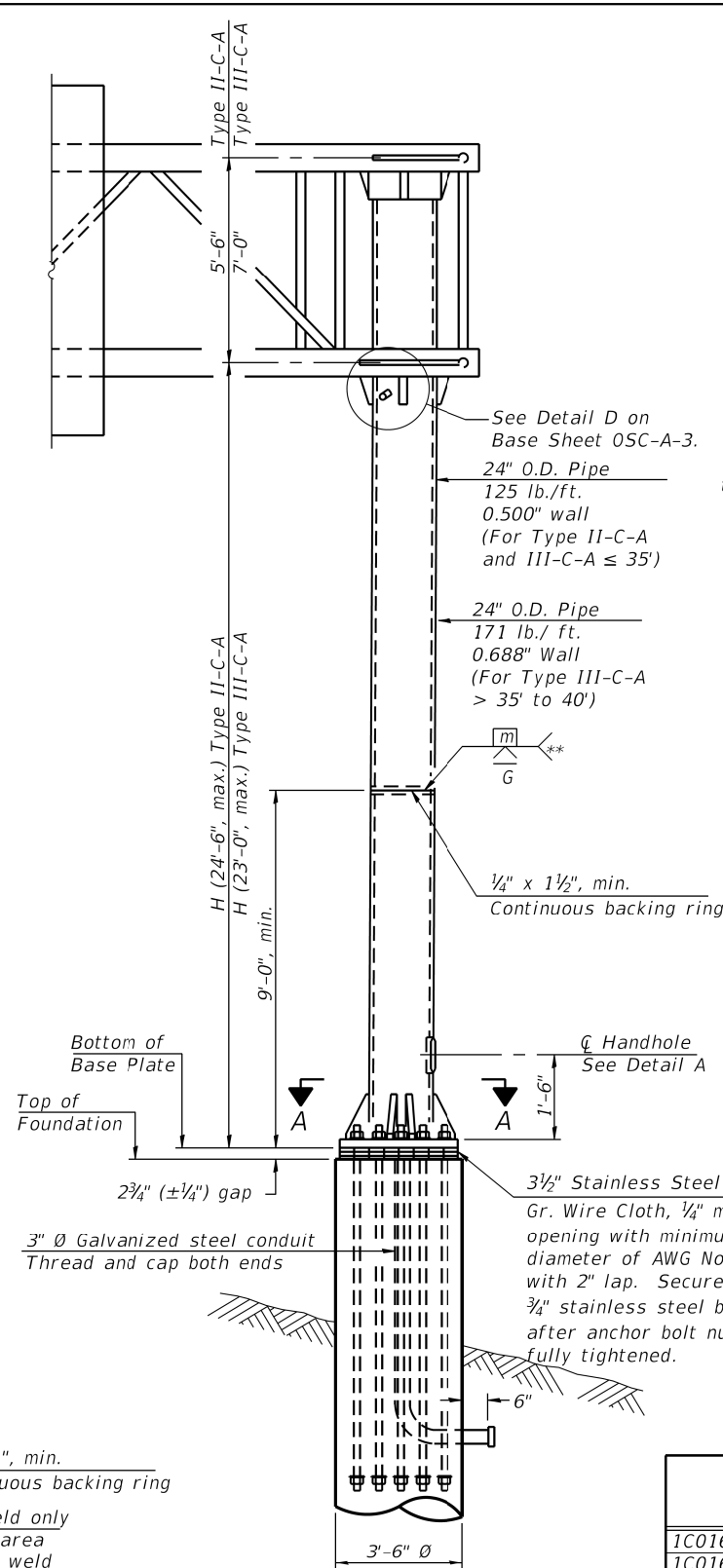
SECTION A-A



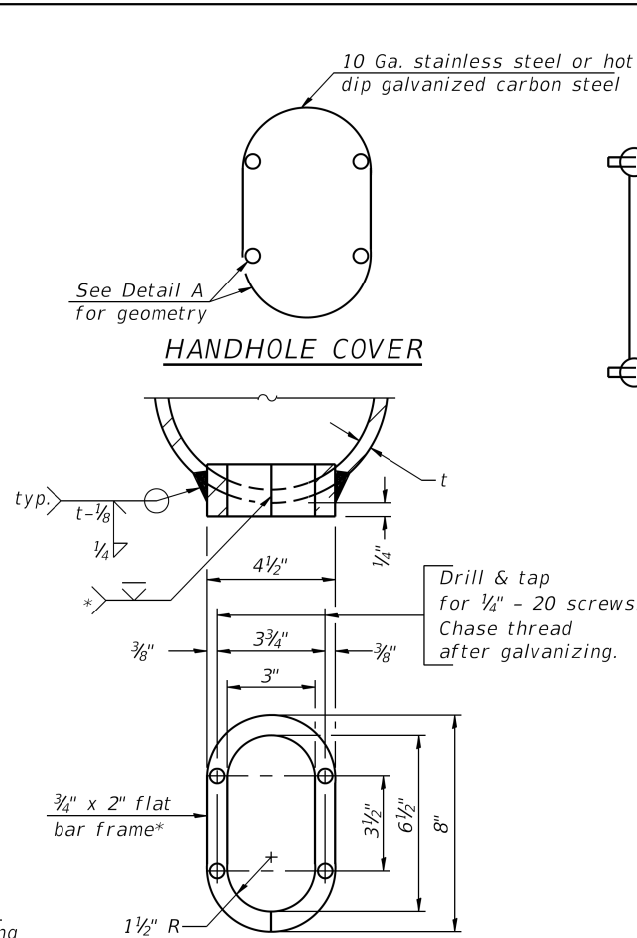
SECTION B-B



DETAIL B  
(Typical rib)



FRONT ELEVATION  
For Foundation Details see Base Sheet OSC-A-9.



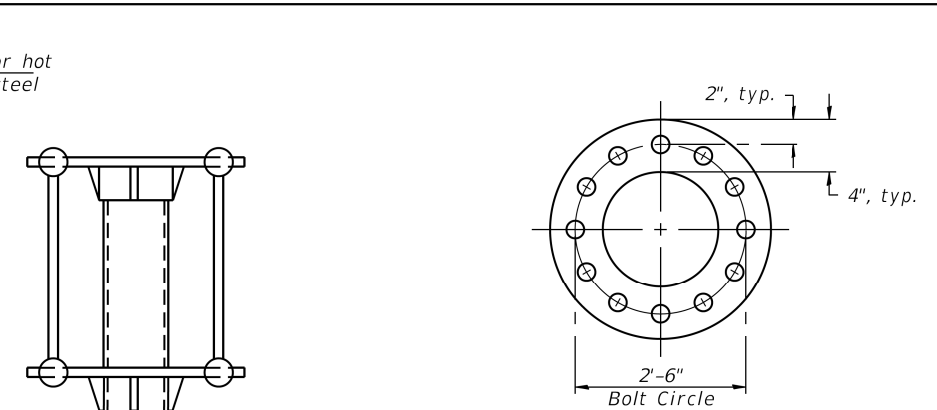
DETAIL A

\* Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500µ in or less.

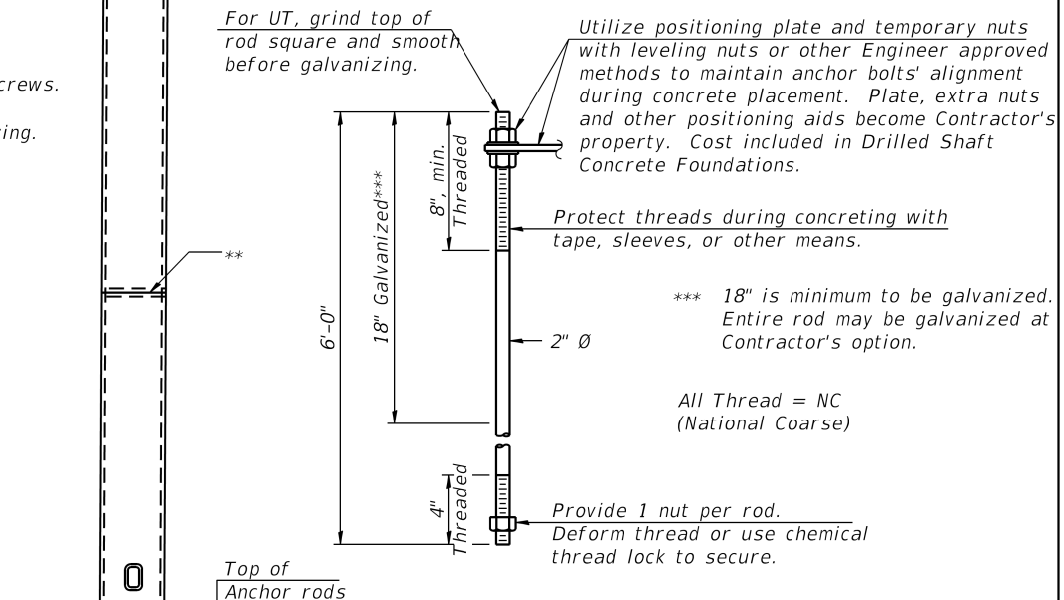
\*\* Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	H
1C016S072L000.0-000	72+43	18.73'
1C016S072L000.0-001	155+63	19.51'

Note: "H" based on 15'-0" or actual sign height, whichever is greater.



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize the upper 18" (minimum\*\*\*) and associated AASHTO M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide a nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

SIDE ELEVATION

OSC-A-5

2-17-2017



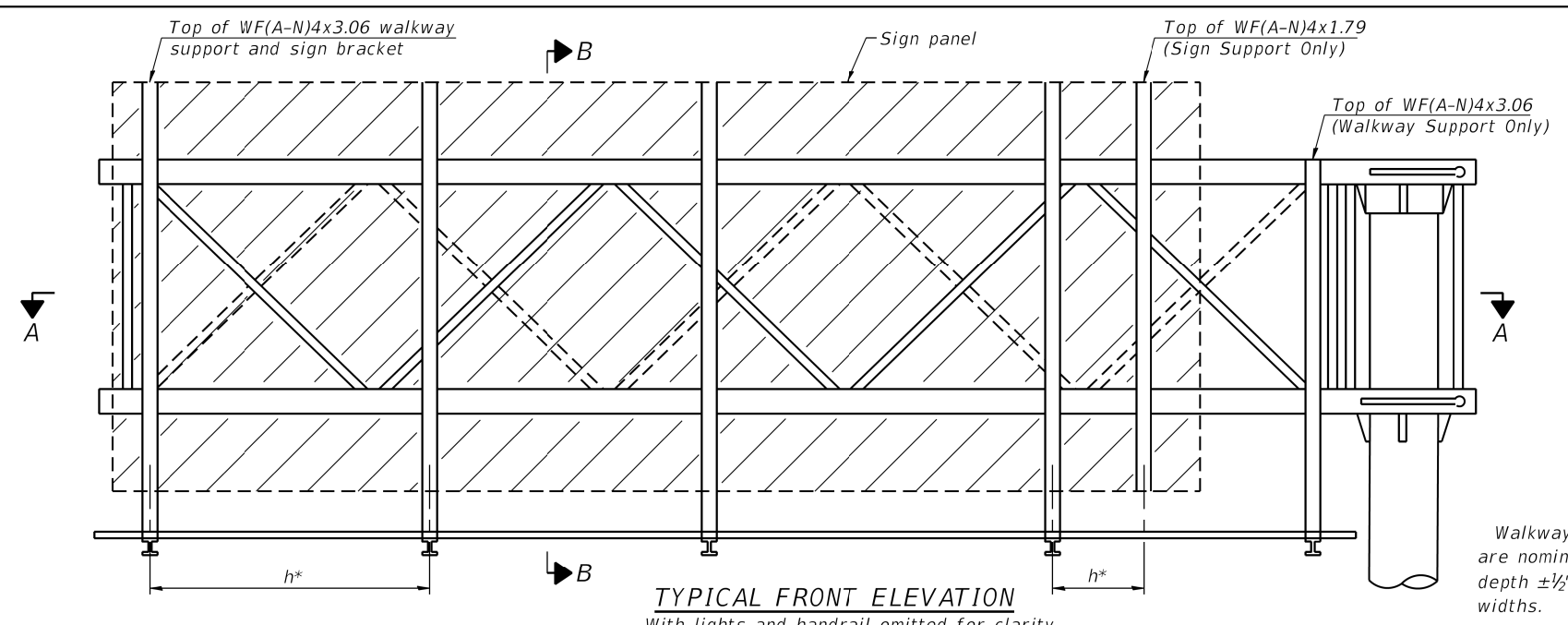
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PLOT DATE =	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

STATE OF ILLINOIS  
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CANTILEVER SIGN STRUCTURES - TYPE II-C-A & III-C-A  
TRUSS SUPPORT POST - ALUMINUM TRUSS & STEEL POST

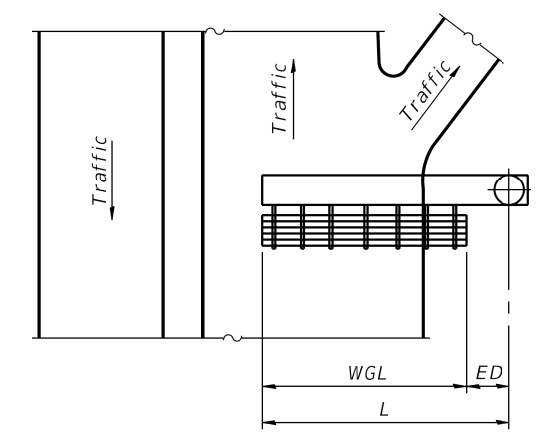
SHEET OF SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60P14				
ILLINOIS   FED. AID PROJECT				

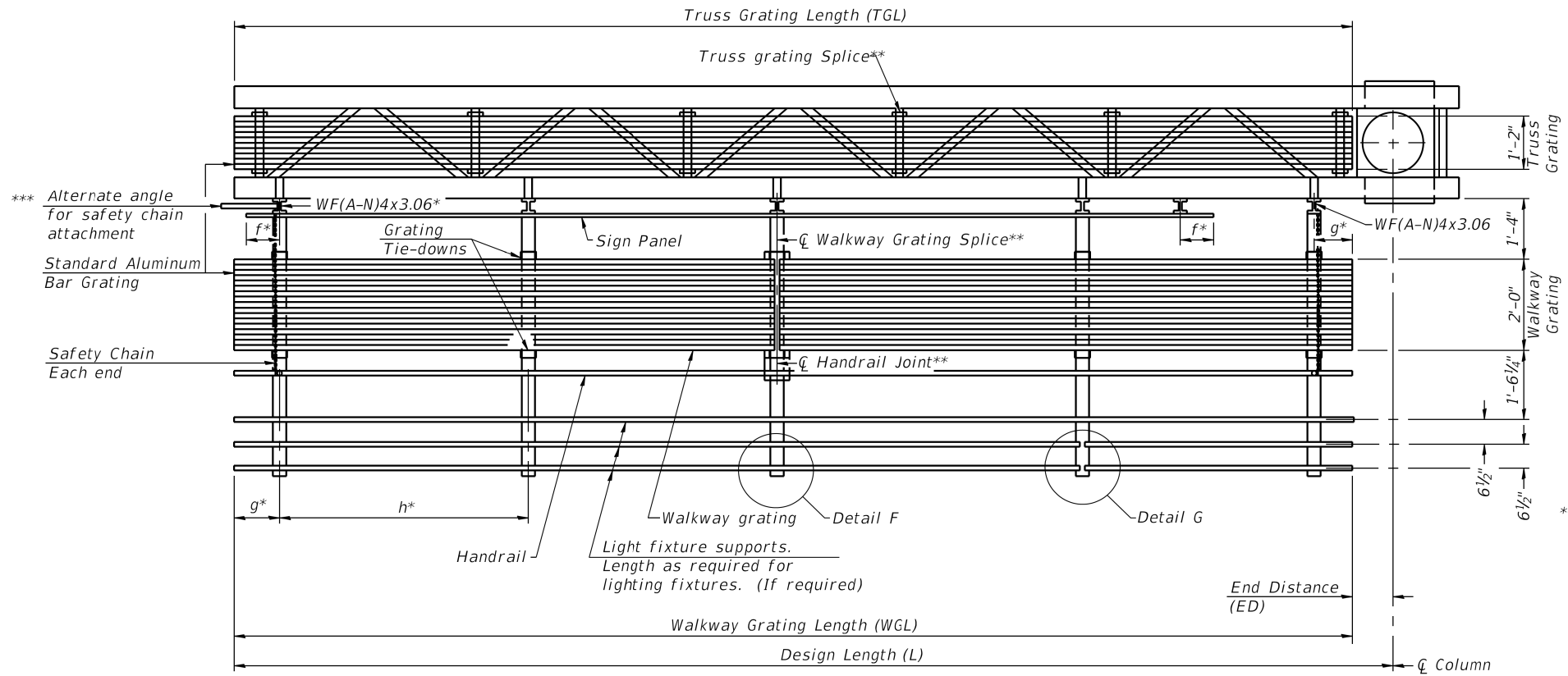


**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.

Walkway and truss grating dimensions are nominal and may vary (width ±1/2", depth ±1/2") based on available standard widths.



**PLAN WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)



**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Handrail and walkway grating shall span a minimum of three brackets between splices.  
\*\* Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left( \frac{\text{Post O.D.}}{2} + 6'' \right)$$

Structure Number	Station	WGL	ED	TGL
1C016S072L000.0-000	72+43	-----	-----	34.5'
1C016S072L000.0-001	155+63	-----	-----	28.5'

Notes:  
 \* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:  
 f = 12" maximum, 4" minimum (End of sign to center of nearest bracket)  
 g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)  
 h = 6'-0" maximum (center to center sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)  
 \*\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8  
 For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7.  
 For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

**BRACKET TABLE**

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

**WALKWAY GRATING, WALKWAY SUPPORTS, HANDRAIL AND LIGHTING ARE NOT INCLUDED IN THIS CONTRACT. INFORMATION SHOWN ON THIS SHEET SHALL BE USED FOR TRUSS GRATING AND SIGN BRACKETS ONLY.**

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OSC-A-6

2-17-2017



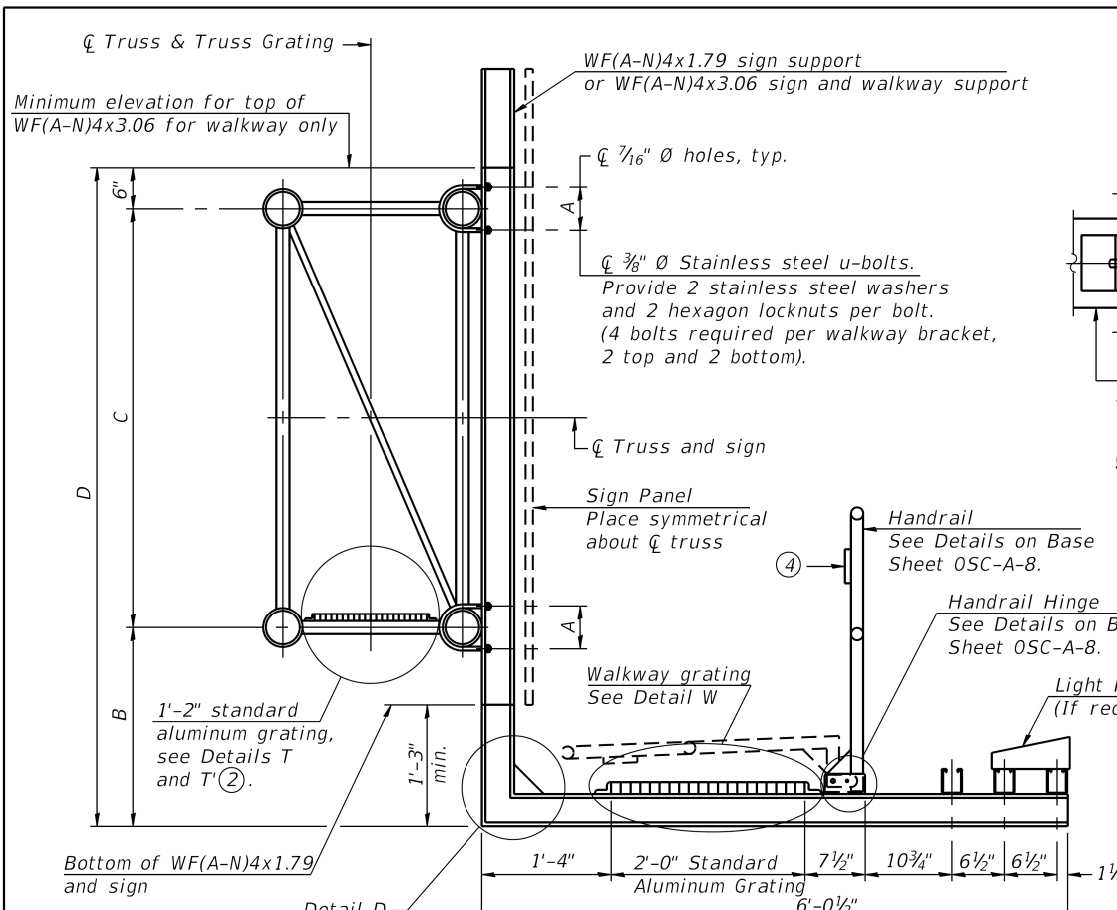
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**CANTILEVER SIGN STRUCTURES - ALUMINUM WALKWAY  
DETAILS - ALUMINUM TRUSS & STEEL POST**

SHEET OF SHEETS

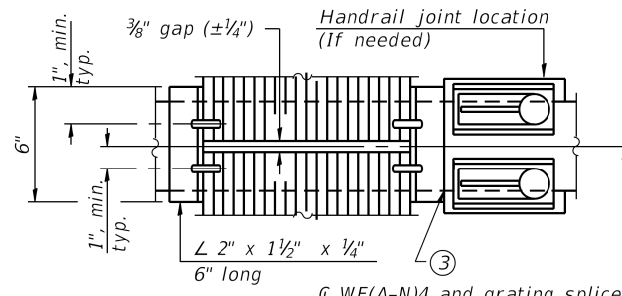
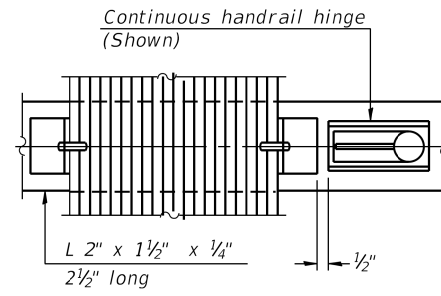
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341	2011-019-TS	COOK	191	144
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				



**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**

Main Bearing Bars (MBB) shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.  
 Cross bars (CB) shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

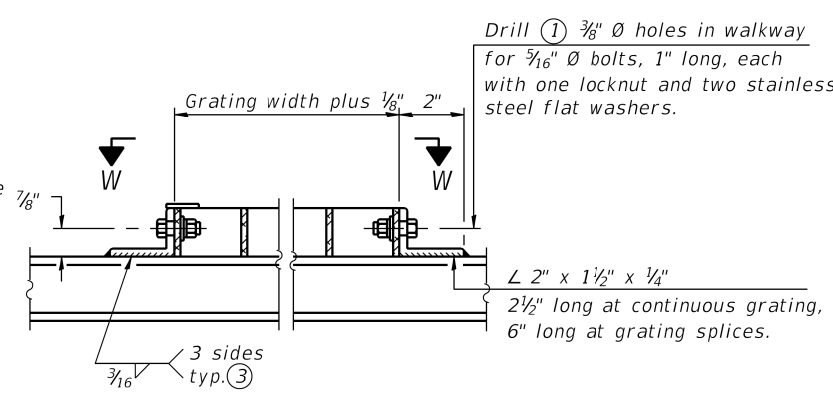
OR  
 Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:  
 Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.<sup>3</sup> per bar, a depth of 1 1/2", spaced on 1 3/16" centers.  
 Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.



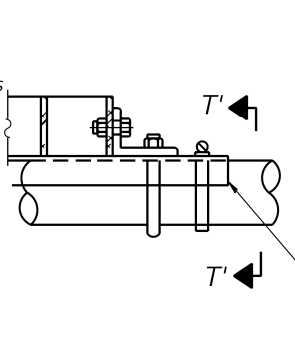
(CONTINUOUS WALKWAY GRATING)

(AT WALKWAY GRATING SPLICE)

**SECTION W-W**

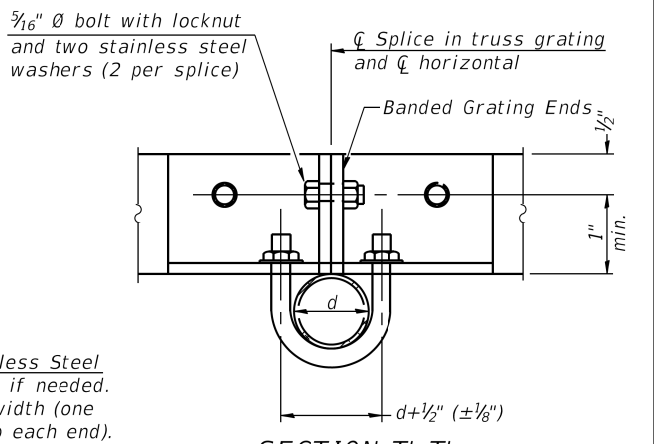


**DETAIL W**  
(Walkway grating)

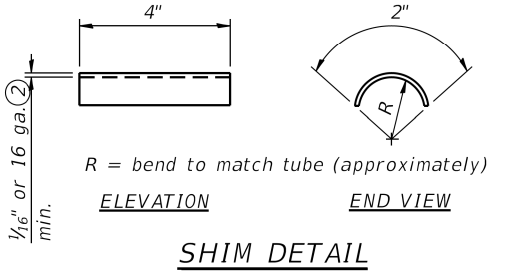


**DETAIL T'**  
(Truss grating splice)

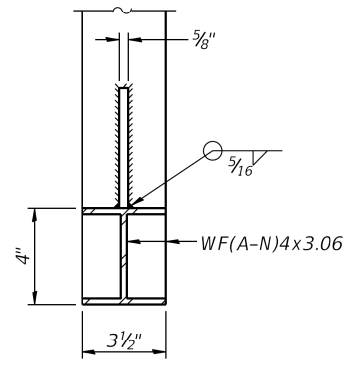
Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.



**SECTION T'-T'**

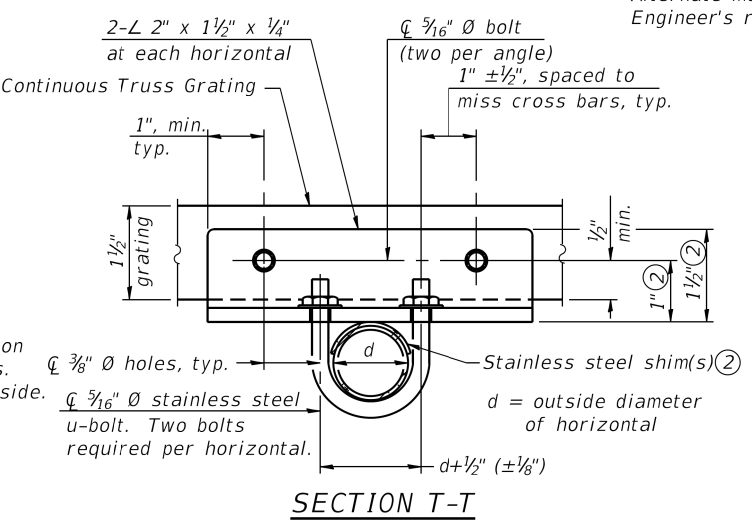
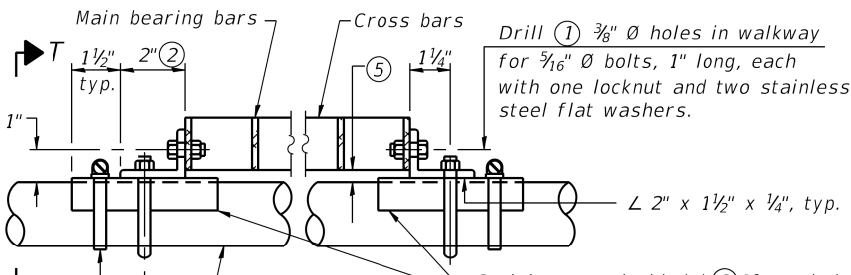


**SHIM DETAIL**



**SECTION B-B**

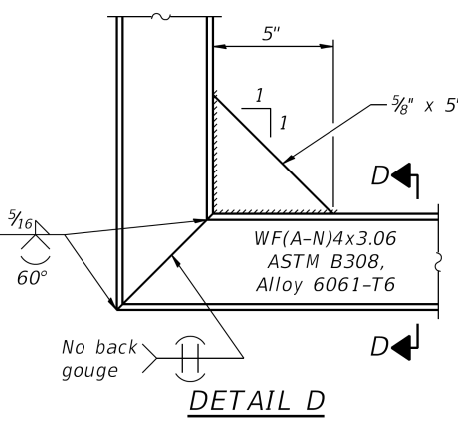
Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.



**SECTION T-T**

**SECTION D-D**

Screw type stainless steel tube clamp at shim location



**DETAIL D**

**DETAIL T**  
(Continuous Truss grating)

Drill 1 3/8" Ø holes in walkway for 5/16" Ø bolts, 1" long, each with one locknut and two stainless steel flat washers.  
 Stainless steel shim(s) (2) If needed, place on top of horizontals and horizontal diagonals. Secure with one stainless steel clamp per side. See "Shim Detail".  
 5/16" Ø holes in angles for 3/16" Ø stainless steel u-bolts. Two stainless steel washers and hot dip galvanized steel nuts required per bolt. U-bolt and angle connections required at horizontals only.

Structure Number	Station	A	⑥ B	C	⑥ D
1C016S072L000.0-000	72+43	8 3/8"	-----	84"	-----
1C016S072L000.0-001	155+63	6 7/8"	-----	66"	-----

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-8.)
- R 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- Based on actual sign height, Ds, given on OSC-A-1.

**WALKWAY GRATING, WALKWAY SUPPORTS, HANDRAIL AND LIGHTING ARE NOT INCLUDED IN THIS CONTRACT. INFORMATION SHOWN ON THIS SHEET SHALL BE USED FOR TRUSS GRATING AND SIGN BRACKETS ONLY.**

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OSC-A-7

2-17-2017



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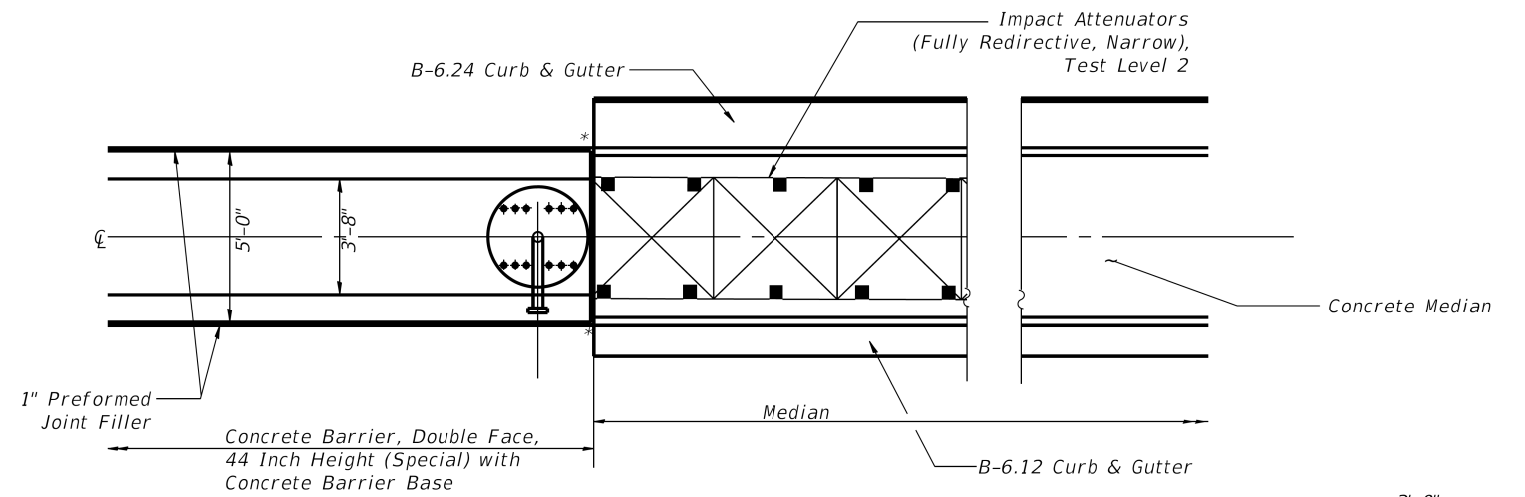
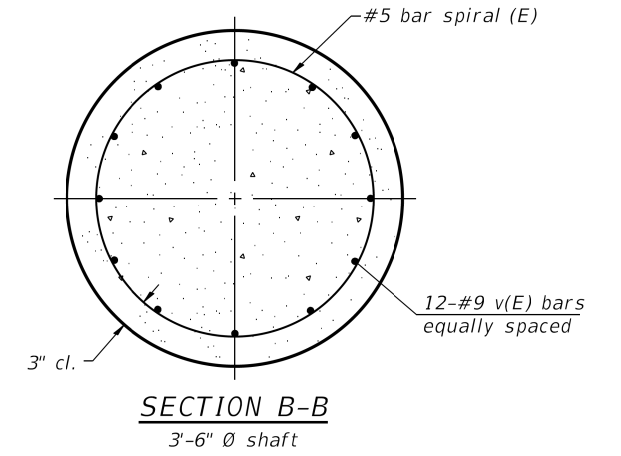
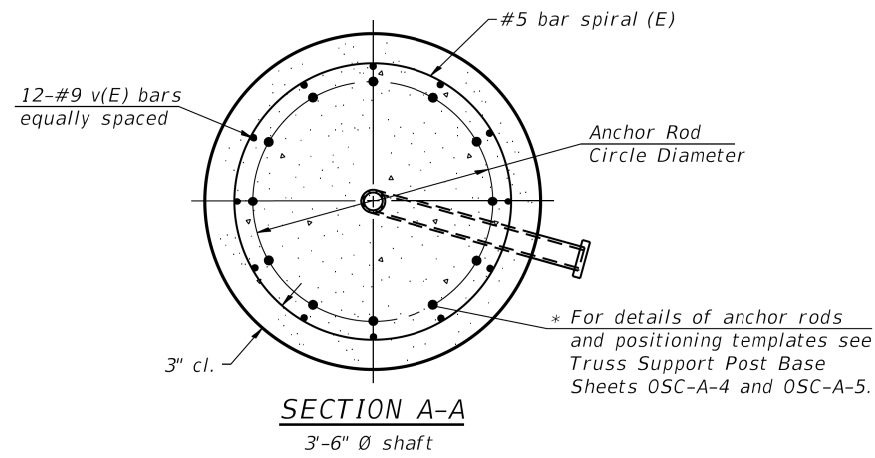
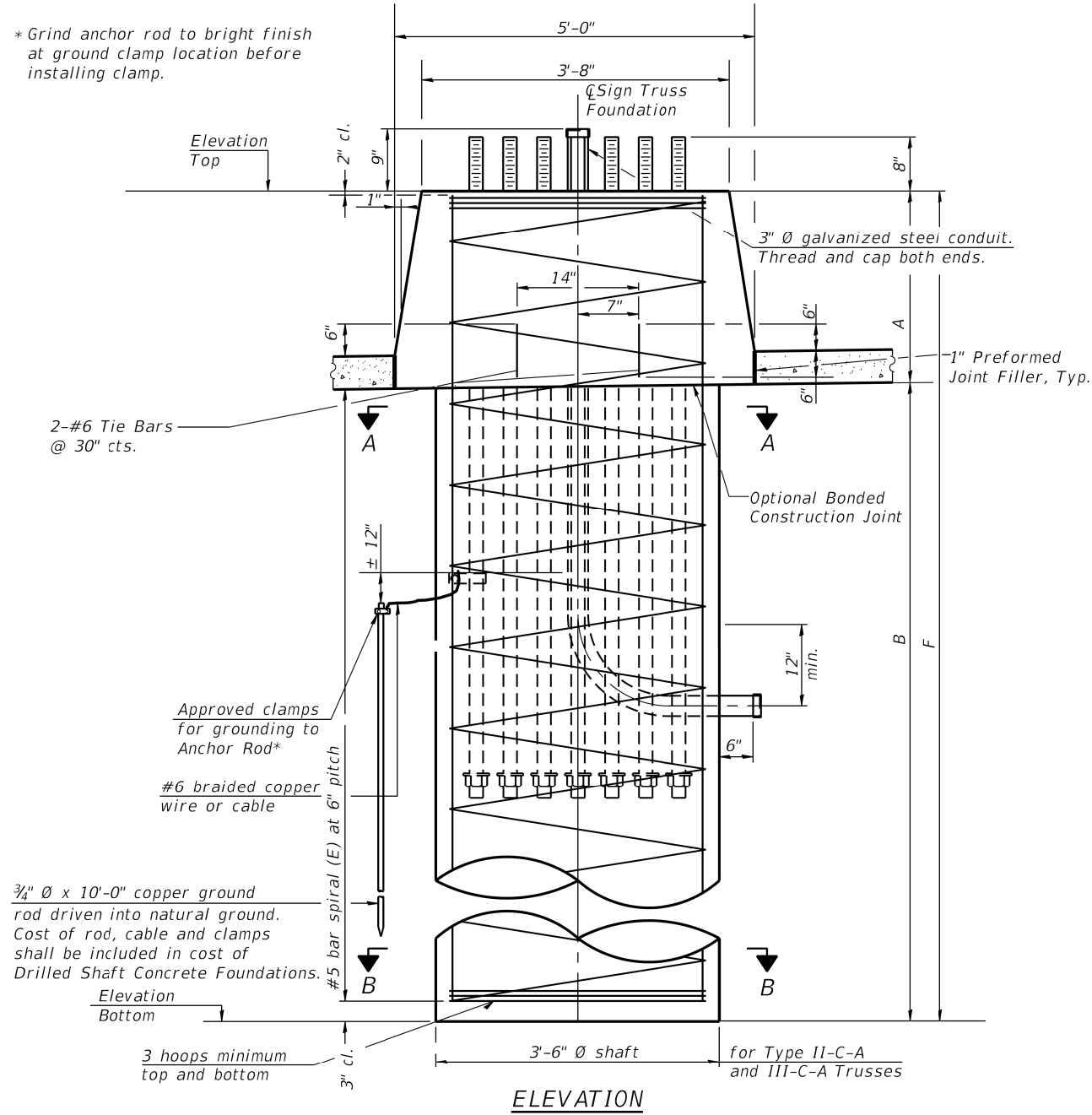
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CANTILEVER SIGN STRUCTURES - WALKWAY DETAILS  
 ALUMINUM TRUSS & STEEL POST**

SHEET OF SHEETS

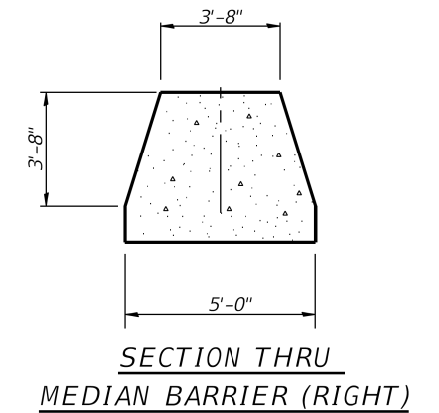
F.A.P. RTE. 341	SECTION 2011-019-TS	COUNTY COOK	TOTAL SHEETS 191	SHEET NO. 145
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

\* Grind anchor rod to bright finish at ground clamp location before installing clamp.



**PLAN - MEDIAN BARRIER (RIGHT)**

\*The roadway pavement at the base of the median barrier wall shall be warped to match gutter slope of 6% slope of the adjacent gutter.



Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	Qu	A	B	F	Class DS Concrete Cubic Yards
1C016S072L000.0-000	72+43	III-C-A	3.5'	682.10	645.76	2.0	4.75'	32'	36.75'	13.1

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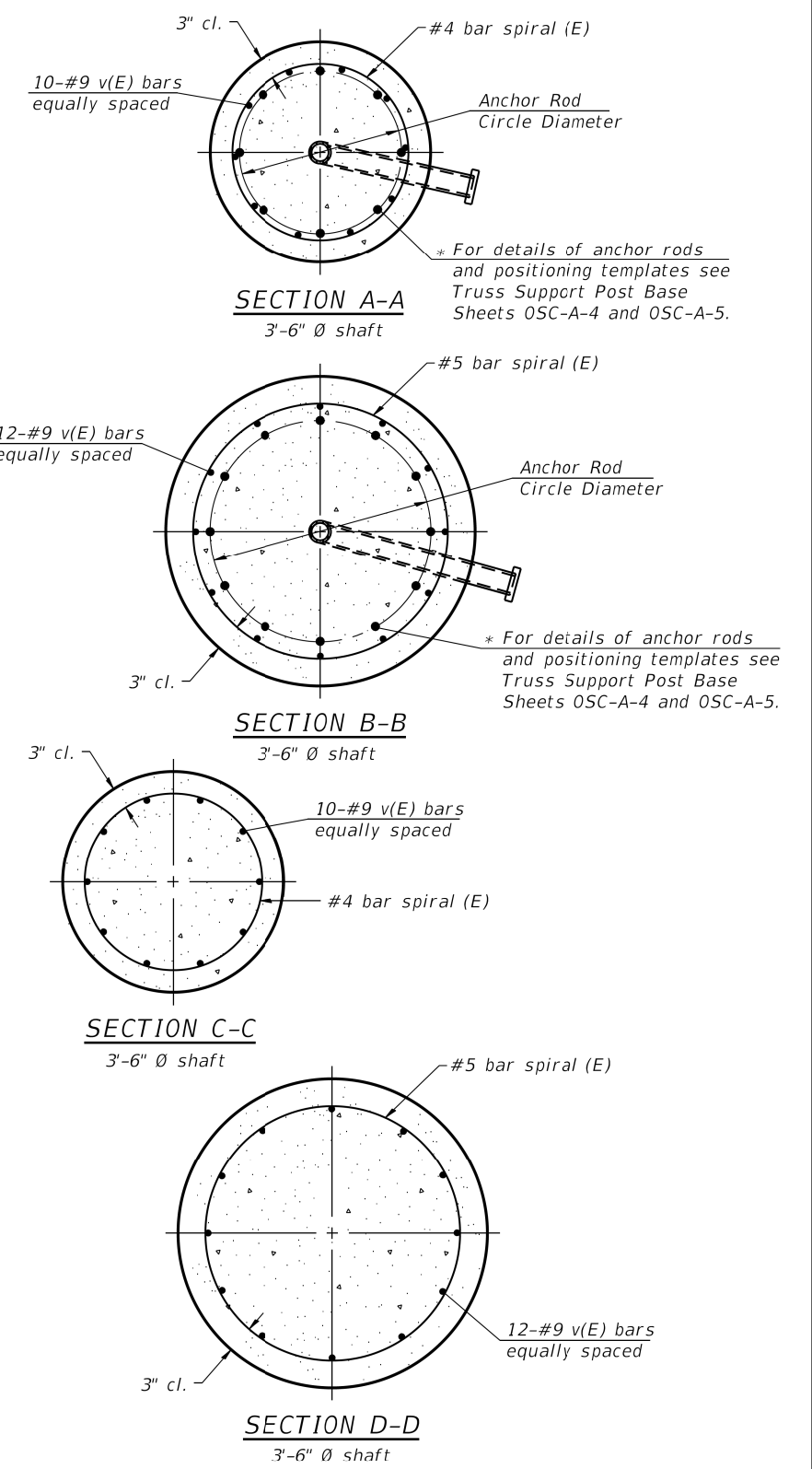
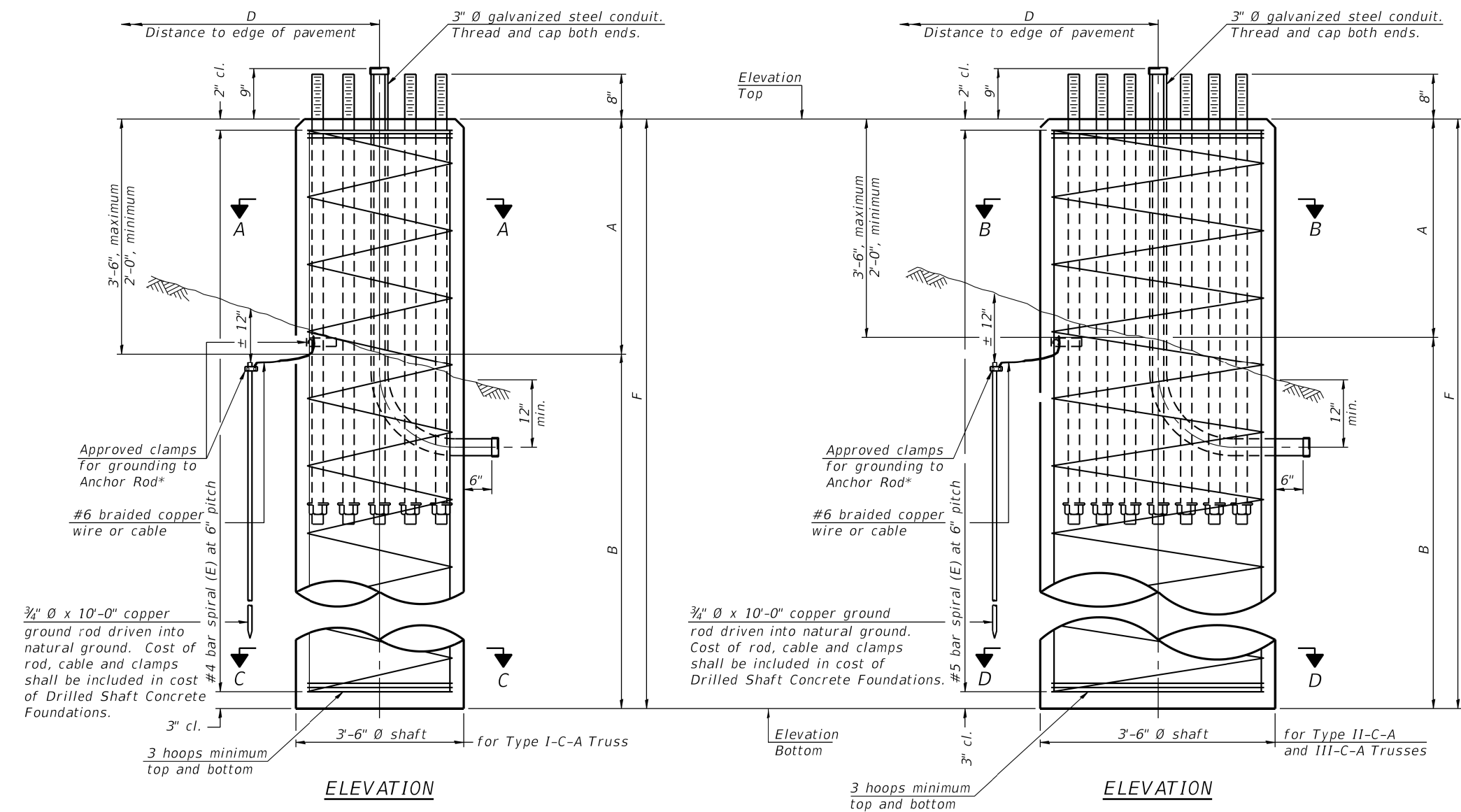
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - DRILLED SHAFT  
ALUMINUM TRUSS & STEEL POST

SHEET OF SHEETS

F.A.P. RTE. 341	SECTION 2011-019-TS	COUNTY COOK	TOTAL SHEETS 191	SHEET NO. 146
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				

\* Grind anchor rod to bright finish at ground clamp location before installing clamp.



**NOTES:**  
 The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength ( $Q_u$ ) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.  
 If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.  
 No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.  
 Concrete shall be placed monolithically, without construction joints.  
 Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.  
 A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	$Q_u$	A	B	F	Class DS Concrete Cubic Yards
1C016S072L000.0-001	155+63	II-C-A	3.5'	678.38	654.88	2.36	2'	21.5'	23.5'	8.4'

OSC-A-9

2-17-2017



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - DRILLED SHAFT  
ALUMINUM TRUSS & STEEL POST

SHEET OF SHEETS

F.A.P. RTE. 341	SECTION 2011-019-TS	COUNTY COOK	TOTAL SHEETS 191	SHEET NO. 147
CONTRACT NO. 60P14				

ILLINOIS FED. AID PROJECT

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### SOIL BORING LOG

GSI Job No. 19120-A

Page 1 of 2

Date 1/21/20

ROUTE IL Rte 72 & IL Rte 83 DESCRIPTION New Sign Trusses on IL Rte 72 & IL Rte 83 LOGGED BY TC

SECTION LOCATION NE 1/4, SEC. 27, TWP. T41N, RNG. R11E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.	DEPTH	BULGE	UCS	M O I S	Surface Water Elev.	DEPTH	BULGE	UCS	M O I S
Station	ft	(%)	(tsf)	(%)	ft	ft	(%)	(tsf)	(%)
BORING NO. SB-03					Groundwater Elev.:				
Station 72+57					First Encounter Dry to -10.0' ft				
Offset 51.30ft Left					Upon Completion n/a ft				
Ground Surface Elev. 677.94					After Hrs. ft				
3.0" ASPHALT, 10.0" CONCRETE	676.86				CLAY-gray-stiff to very stiff (continued)				
CLAY LOAM-brown & gray-stiff to very stiff	12					4			
	8		7			6	1.5	31	
	6					6	P		
	4					4			
	4	2.7	18			5	1.0	22	
	6	B				6	B		
	5					4			
	5	2.7	18			6	1.5	24	
	6	B				6	P		
	5					13			
	6	1.7	20			9	1.0	24	
	7	B				8	P		
	4								
	6	3.0	23						
	6	P							
CLAY-gray-stiff to very stiff	664.94					3			
	4					5	1.3	20	
	4	P				7	B		
	4								
	5	2.0	21						
	6	P							
	4								
	5					7			
	5	1.5	18			8		15	
	6	P				9			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger BBS, from 137 (Rev. 8-99)



### SOIL BORING LOG

GSI Job No. 19120-A

Page 2 of 2

Date 1/21/20

ROUTE IL Rte 72 & IL Rte 83 DESCRIPTION New Sign Trusses on IL Rte 72 & IL Rte 83 LOGGED BY TC

SECTION LOCATION NE 1/4, SEC. 27, TWP. T41N, RNG. R11E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.	DEPTH	BULGE	UCS	M O I S	Surface Water Elev.	DEPTH	BULGE	UCS	M O I S
Station	ft	(%)	(tsf)	(%)	ft	ft	(%)	(tsf)	(%)
BORING NO. SB-03					Groundwater Elev.:				
Station 72+57					First Encounter Dry to -10.0' ft				
Offset 51.30ft Left					Upon Completion n/a ft				
Ground Surface Elev. 677.94					After Hrs. ft				
SILTY LOAM-gray-medium dense (continued)									
	635.94								
CLAY LOAM-gray-stiff to very stiff									
	6								
	9	2.2	17						
	9	B							
	5								
	6	1.0	19						
	8	B							
	627.94								
End Of Boring @ -50.0'. Boring backfilled with cuttings.									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger BBS, from 137 (Rev. 8-99)

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## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

### SOIL BORING LOGS- III

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	148
CONTRACT NO. 60P14				
		ILLINOIS	FED. AID PROJECT	





GSI Job No. 19120-A

SOIL BORING LOG

Page 1 of 2

Date 1/20/20

ROUTE IL Rte 72 & IL Rte 83 DESCRIPTION New Sign Trusses on IL Rte 72 & IL Rte 83 LOGGED BY TC

SECTION LOCATION NW 1/4, SEC. 26, TWP. T41N, RNG. R11E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.	Station	Offset	Ground Surface Elev.	D E P T H	B L O W S	U C S	M O I S T U R E	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	H R S.	D E P T H	B L O W S	U C S	M O I S T U R E
			ft	(ft)	(/6")	(tsf)	(%)	ft	ft	ft	ft	ft	ft	(ft)	(/6")	(tsf)	(%)	
5.0" ASPHALT, 12.0" CONCRETE																		
	673.69				14										4			
GRAVEL with SAND-brown-very loose to medium dense (Fill)					7		5								4	0.9	21	
					12										9	B		
					4										4			
					2		4								4	1.0	19	
					2										7	P		
					1										3			
					2		9								3	0.7	27	
					1										5	B		
CLAY LOAM-brown & gray-stiff	667.11				4										4			
					5	1.7	18								6	0.8	23	
					6	B									6	B		
becoming gray @ -10.5'					4													
					4	1.2	18								12			
					6	B									12	2.3	14	
					5										8	B		
					8	1.0	17								12			
					12	P									8	B		
					4													
					5	1.0	18											
					7	B												
CLAY LOAM-gray-stiff to very stiff	638.11				5										5			
					6										6	1.0	15	
					8	B									6	P		
CLAY-gray-medium stiff to stiff	657.11				4													
					5	1.3	21											
					8	B												

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger BBS, from 137 (Rev. 8-99)



GSI Job No. 19120-A

SOIL BORING LOG

Page 2 of 2

Date 1/20/20

ROUTE IL Rte 72 & IL Rte 83 DESCRIPTION New Sign Trusses on IL Rte 72 & IL Rte 83 LOGGED BY TC

SECTION LOCATION NW 1/4, SEC. 26, TWP. T41N, RNG. R11E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.	Station	Offset	Ground Surface Elev.	D E P T H	B L O W S	U C S	M O I S T U R E	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	H R S.	D E P T H	B L O W S	U C S	M O I S T U R E
			ft	(ft)	(/6")	(tsf)	(%)	ft	ft	ft	ft	ft	ft	(ft)	(/6")	(tsf)	(%)	
CLAY LOAM-gray-stiff to very stiff (continued)																		
					7													
					10	2.2	18											
					12	B												
					6													
					8	1.2	19											
					10	B												
End Of Boring @ -50.0'. Boring backfilled with cuttings.	625.11																	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger BBS, from 137 (Rev. 8-99)

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS-V  
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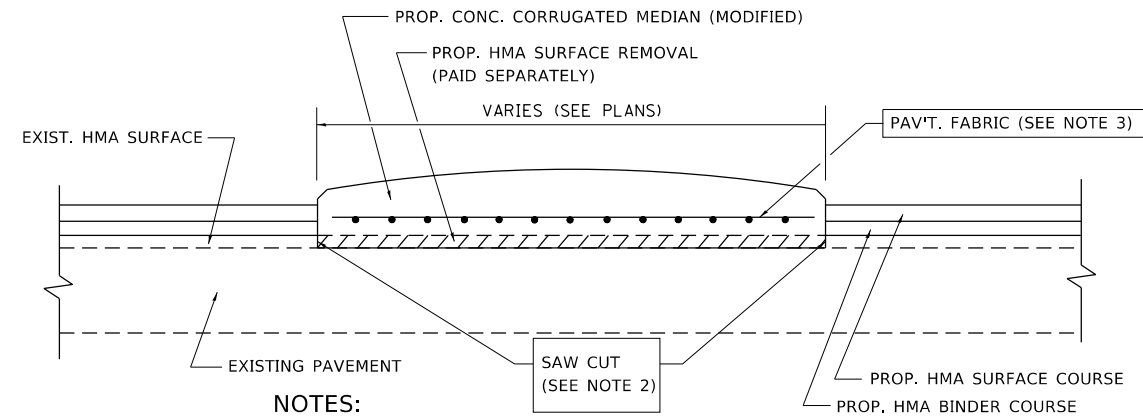
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CONTRACT NO. 60P14				
ILLINOIS		FED. AID PROJECT		









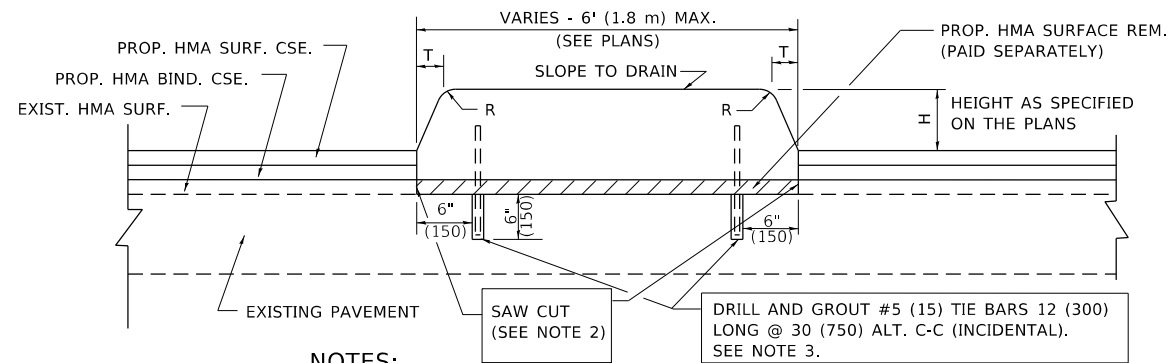


**NOTES:**

1. CORRUGATED MEDIAN (MODIFIED) SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE PORTIONS OF STATE STANDARD 606306.
2. WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY DELETE THE SAW CUT IF A NEAT JOINT CAN BE OBTAINED BY MILLING THE HMA SURFACE TO BE REMOVED. SAW CUT WILL BE INCLUDED IN THE COST OF CORRUGATED MEDIAN (MODIFIED)
3. PAVEMENT FABRIC WILL BE INCLUDED IN THE COST OF CORRUGATED MEDIAN (MODIFIED)

**DETAILS FOR CORRUGATED MEDIAN (MODIFIED)**

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT (SQUARE METER) FOR "CORRUGATED MEDIAN (MODIFIED)"



**NOTES:**

1. CONCRETE MEDIAN TYPE SB (DOWELLED) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF STATE STANDARD 606301 AND SECTION 606 OF THE STANDARD SPECIFICATIONS.
2. WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY DELETE THE SAW CUT IF A NEAT JOINT CAN BE OBTAINED BY MILLING THE HMA SURFACE TO BE REMOVED. SAW CUT WILL BE INCLUDED IN THE COST OF "CONCRETE MEDIAN TYPE SB (DOWELLED)"
3. FOR MEDIAN WIDTH LESS THAN 4' (1.2 m) USE ONE ROW OF #5 (15) BARS @ 30 (750) C-C ALONG THE MEDIAN CENTERLINE. TIE BARS WILL BE INCLUDED IN THE COST OF "CONCRETE MEDIAN TYPE SB (DOWELLED)"

**DETAILS FOR CONCRETE MEDIAN TYPE SB (DOWELLED)**

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT (SQUARE METER) FOR "CONCRETE MEDIAN TYPE SB (DOWELLED)"

H	R	T
6(150)	1(25)	1(25)
9(225)	1(25)	2(50)

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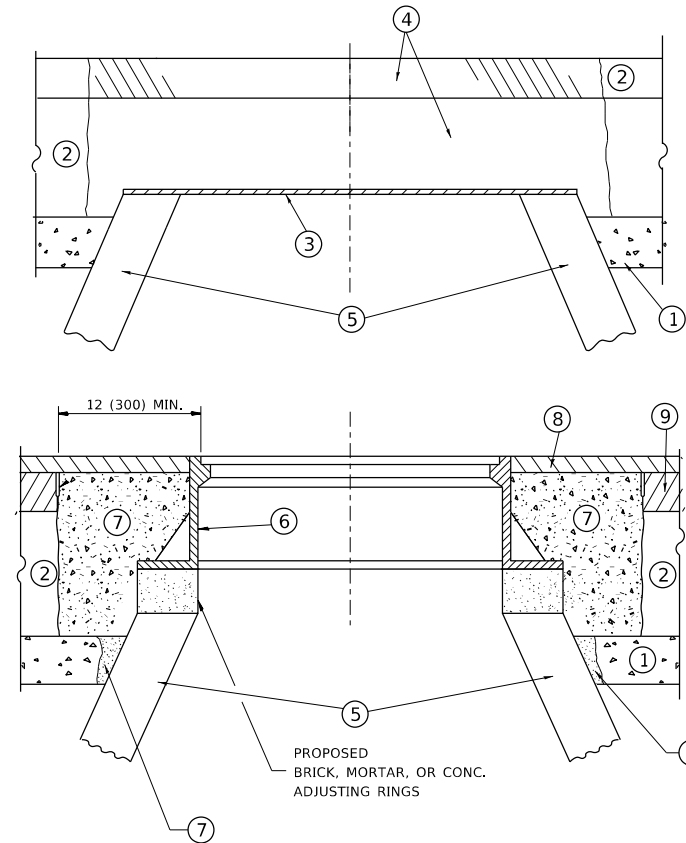
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR CONCRETE MEDIAN TYPE SB (DOWELLED)  
CORRUGATED MEDIAN (MODIFIED)**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	154
<b>BD600-02 (BD-5)</b>		CONTRACT NO. 60P14		
ILLINOIS FED. AID PROJECT				





**NOTES**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1 \* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT \*THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1 \*CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**LOCATION OF STRUCTURES**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT**

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR \*FRAMES AND LIDS TO BE ADJUSTED (SPECIAL).\*

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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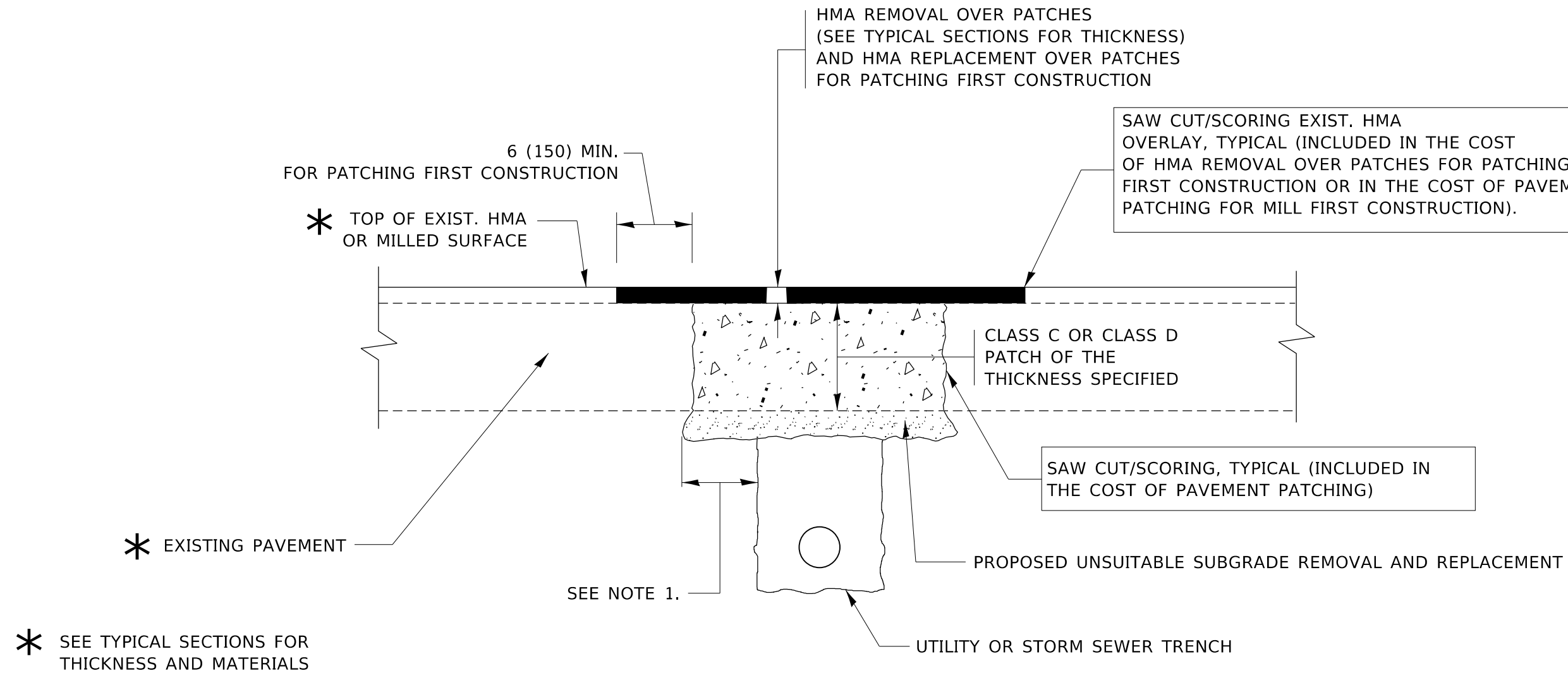
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	156
<b>BD600-03 (BD-8)</b>		CONTRACT NO. 60P14		
ILLINOIS		FED. AID PROJECT		



**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 (PATCHING FIRST)**

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

MODEL: Default  
FILE: hma15c\_patch.pwd\DOT\Documents\DOT\_Offices\Bartlett\_1\Projects\142611\CD\Drawings\Drawings\BIS\Std.dgn

USER NAME = bilgramisa	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
	DRAWN -	REVISED - R. BORO 01-01-07
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - R. BORO 09-04-07
PLOT DATE = 6/26/2020	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

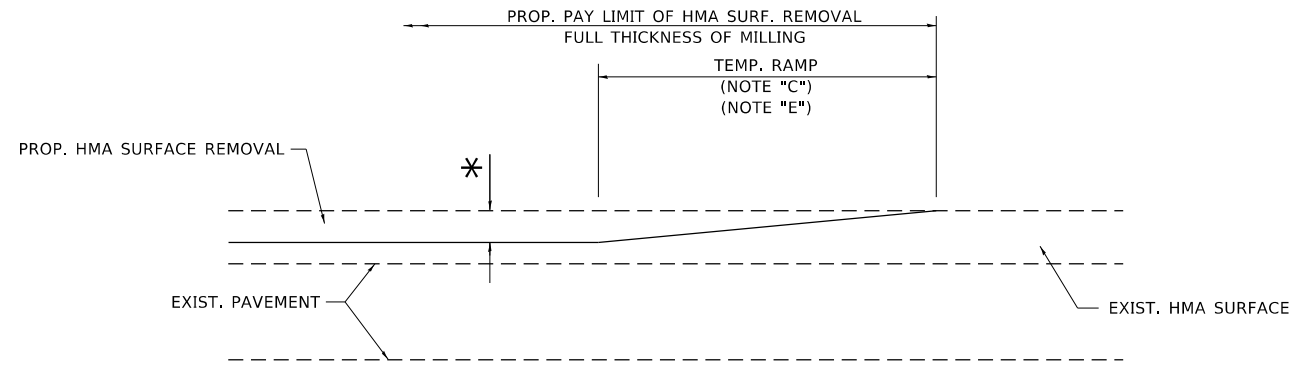
PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	157
BD400-04 (BD-22)		CONTRACT NO. 60P14		
ILLINOIS FED. AID PROJECT				



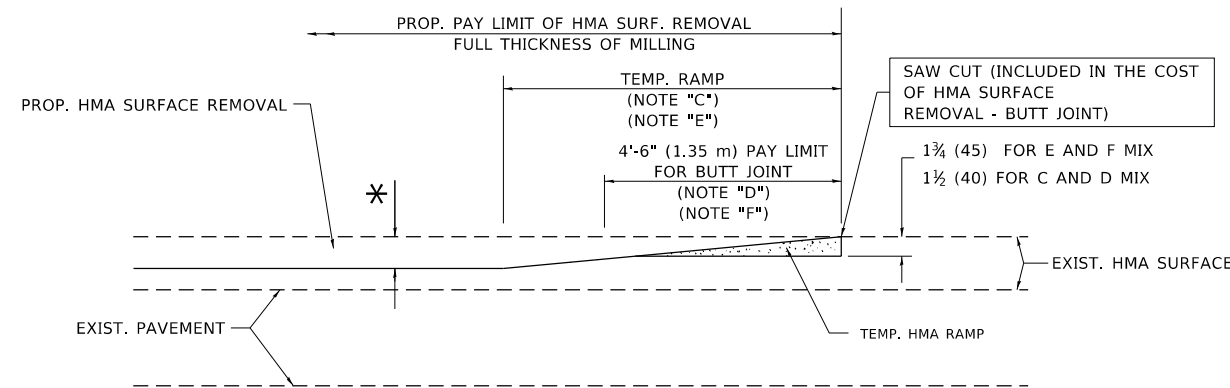




**MILLED TEMPORARY RAMP**

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**

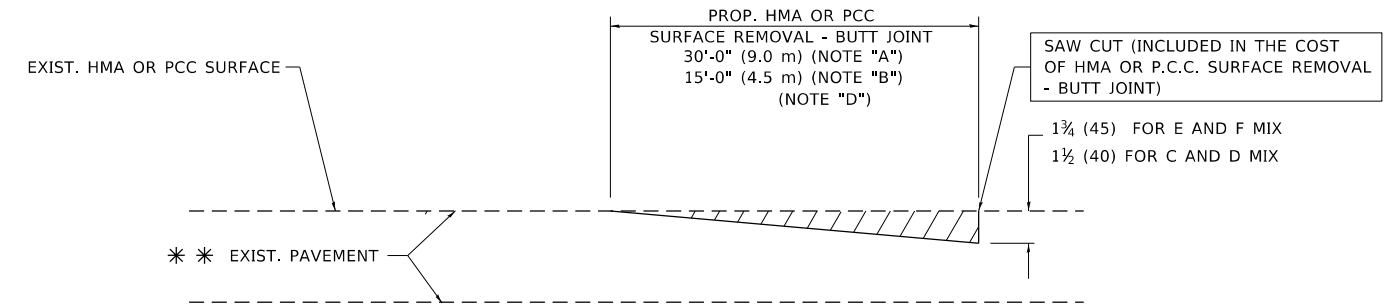


**HMA CONSTRUCTED TEMPORARY RAMP**

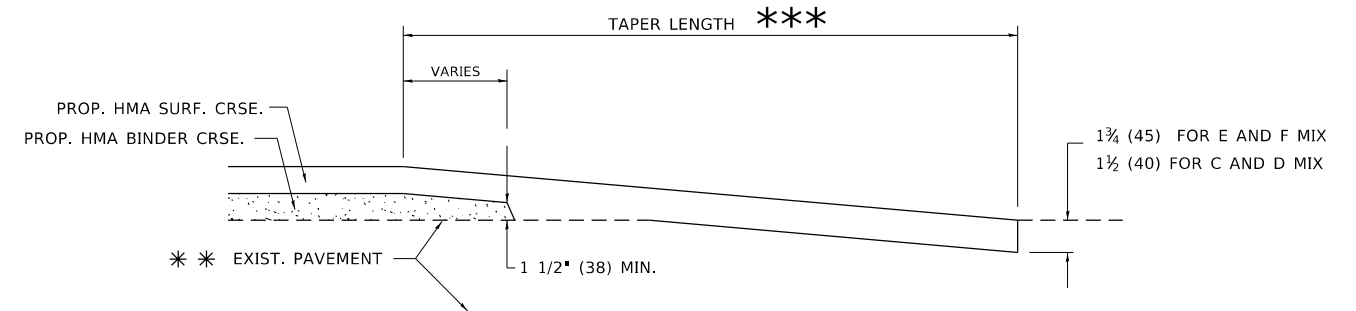
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

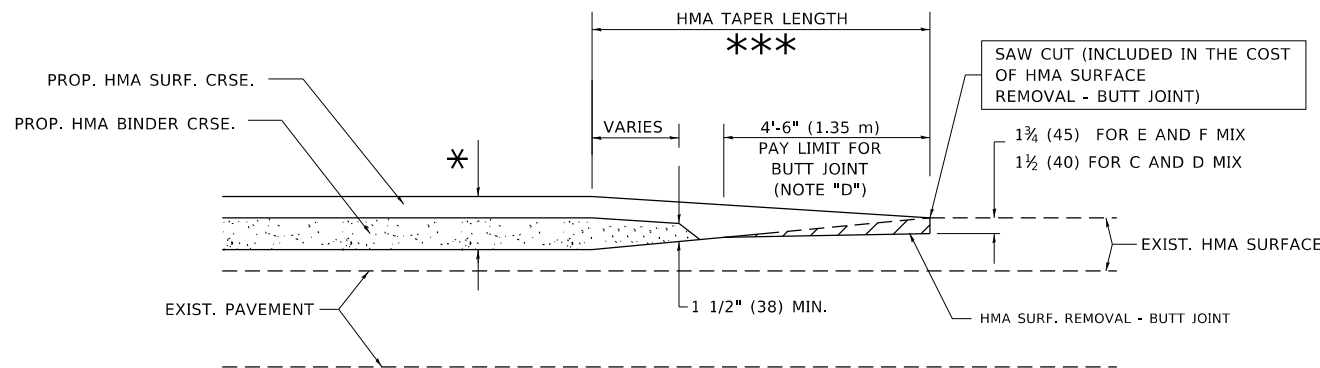
**NOTES**

- A. MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F. INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT.  
\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".  
\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT**

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

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



**BUTT JOINT AND HMA TAPER**

**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

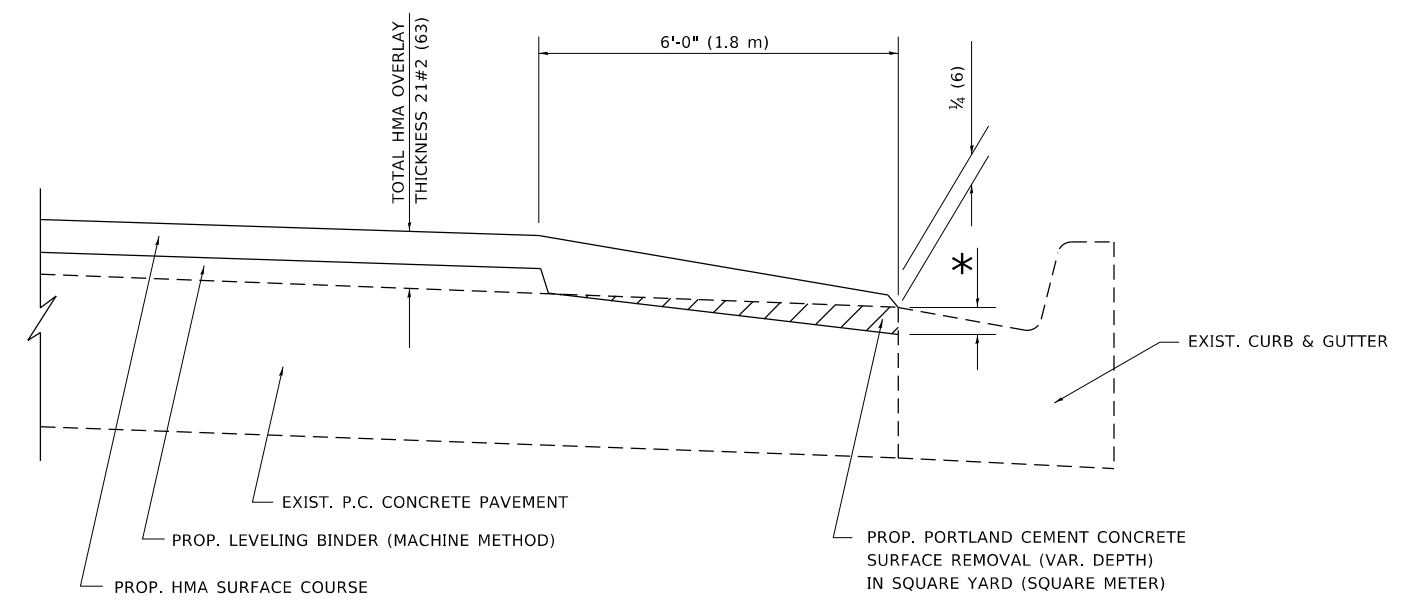
BUTT JOINT AND  
HMA TAPER DETAILS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	159
BD400-05 BD32		CONTRACT NO. 60P14		
ILLINOIS FED. AID PROJECT				

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USER NAME = Bilgramisa	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
PLOT SCALE = 100,0000 ' / in.	DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT DATE = 6/26/2020	CHECKED -	REVISED - M. GOMEZ 04-06-01
	DATE - 06-13-90	REVISED - R.BORO 01-01-07



**HMA TAPER AT  
EDGE OF P.C.C PAVEMENT**

HMA SURFACE	THICKNESS	LEVELING BINDER THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1 1/2 (38)	1 (25)	1 1/4 (33)
E	1 3/4 (44)	3/4 (19)	1 1/2 (38)

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

MODEL: Default  
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USER NAME = Bilgramisa	DESIGNED - R. SHAH	REVISED - A. ABBAS 05-05-9
	DRAWN - JIS	REVISED - E. GOMEZ 12-21-00
PLOT SCALE = 100.0000' / in.	CHECKED - A. ABBAS	REVISED - R. BORO 01-01-07
PLOT DATE = 6/26/2020	DATE - 09-10-94	REVISED - JP CHANG 07-08-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>HMA TAPER AT EDGE OF P.C.C PAVEMENT</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

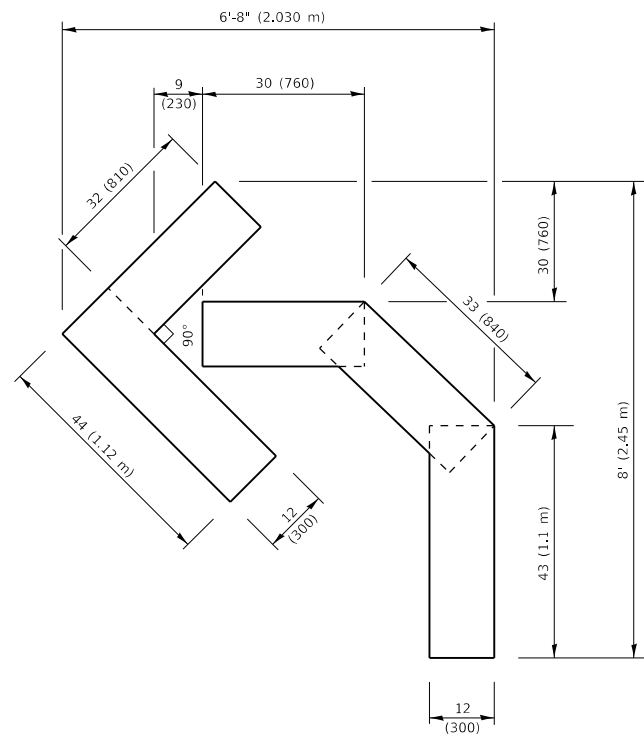
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-TS	COOK	191	160
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ILLINOIS FED. AID PROJECT				





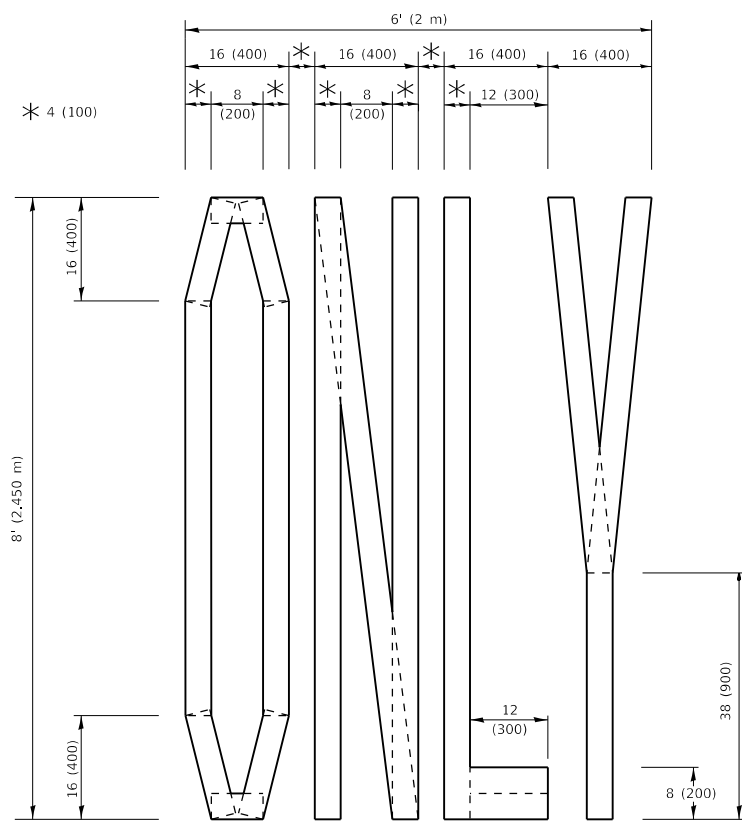






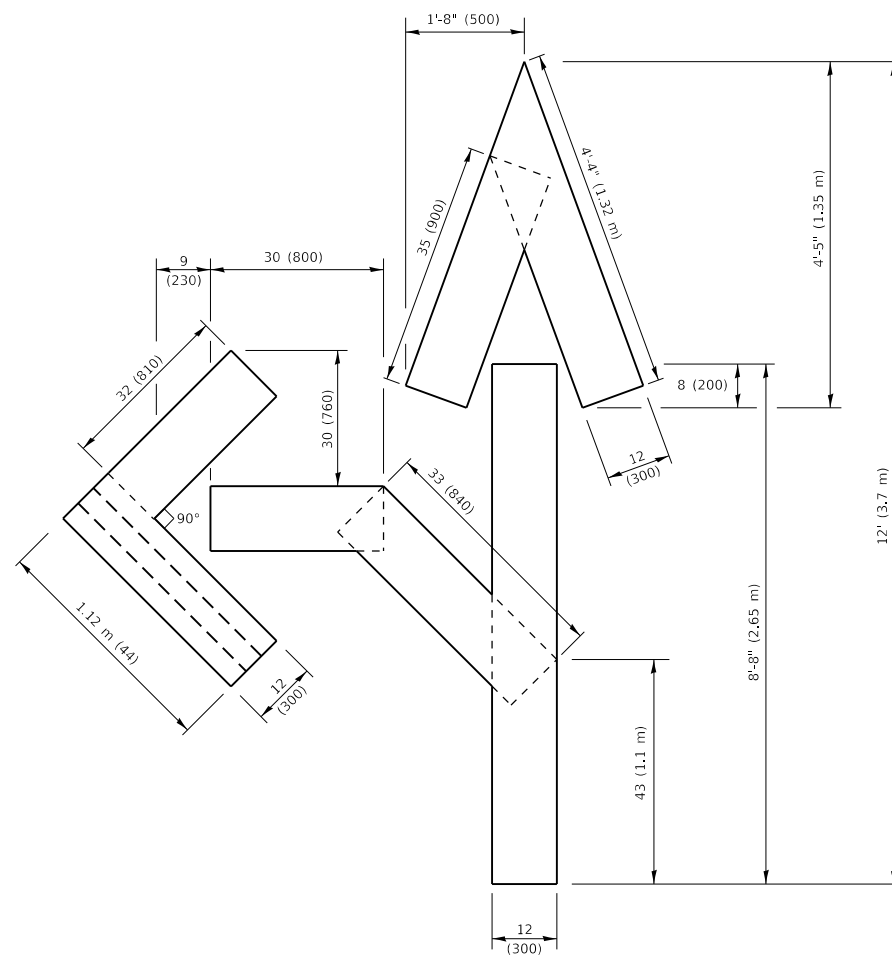
**QUANTITY**

4 (100) LINE = 45.5 ft. (13.9 m)  
15.2 sq. ft. (1.41 sq. m)



**QUANTITY**

4 (100) LINE = 64.1 ft. (19.5 m)  
21.4 sq. ft. (1.99 sq. m)

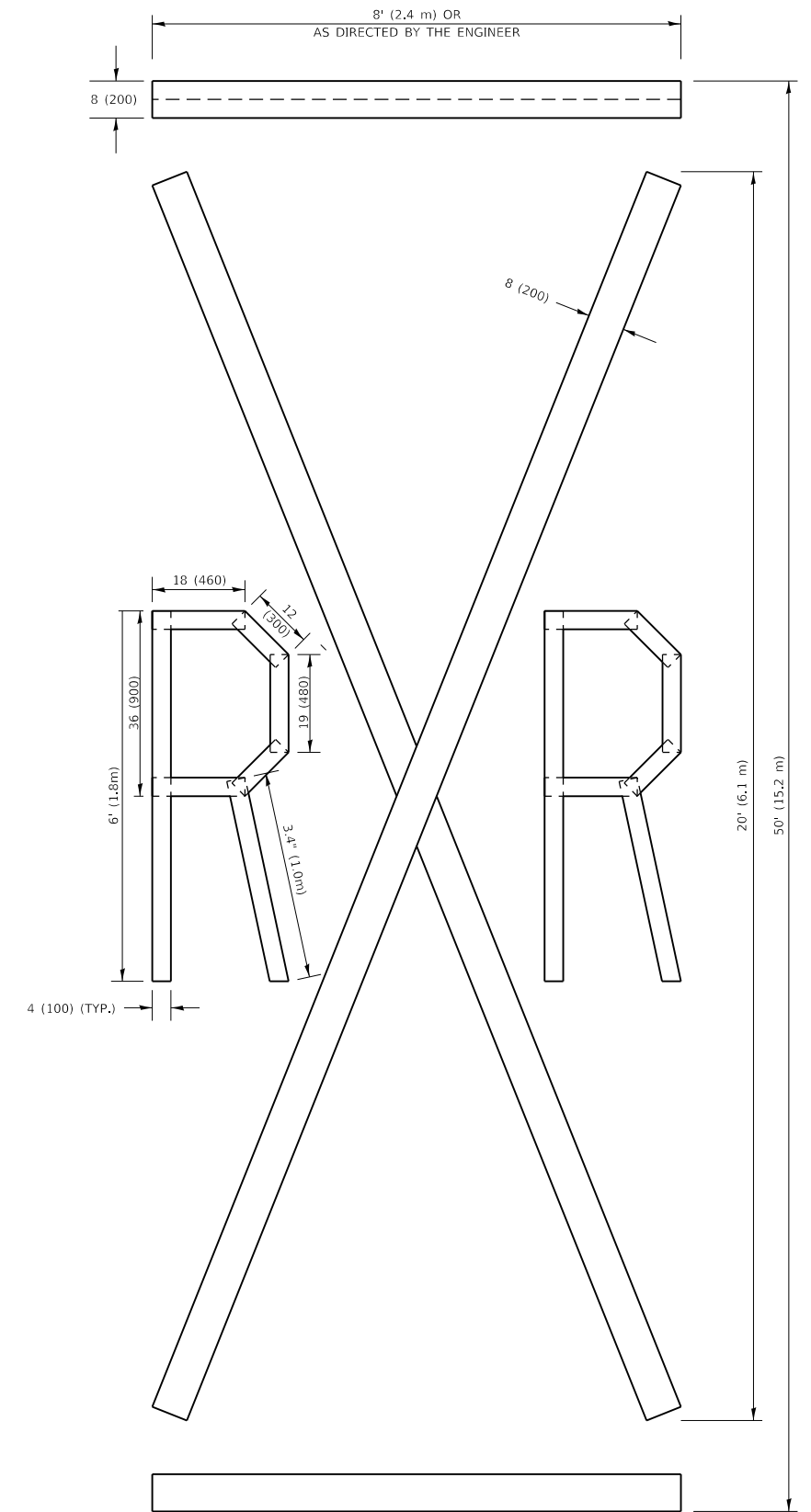


**QUANTITY**

4 (100) LINE = 82.5 ft. (25.1 m)  
27.5 sq. ft. (2.53 sq. m)

**NOTE:**

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



**QUANTITY**

4 (100) LINE = 225.9 ft. (68.9 m)  
75.3 sq. ft. (6.99 sq. m)

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

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USER NAME = Bllgramisa	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
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PLOT DATE = 6/26/2020	CHECKED -	REVISED - E. GOMEZ 08-28-00
	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 2011-019-TS	COUNTY COOK	TOTAL SHEETS 191	SHEET NO. 165
TC-16		CONTRACT NO. 60P14		
ILLINOIS FED. AID PROJECT				



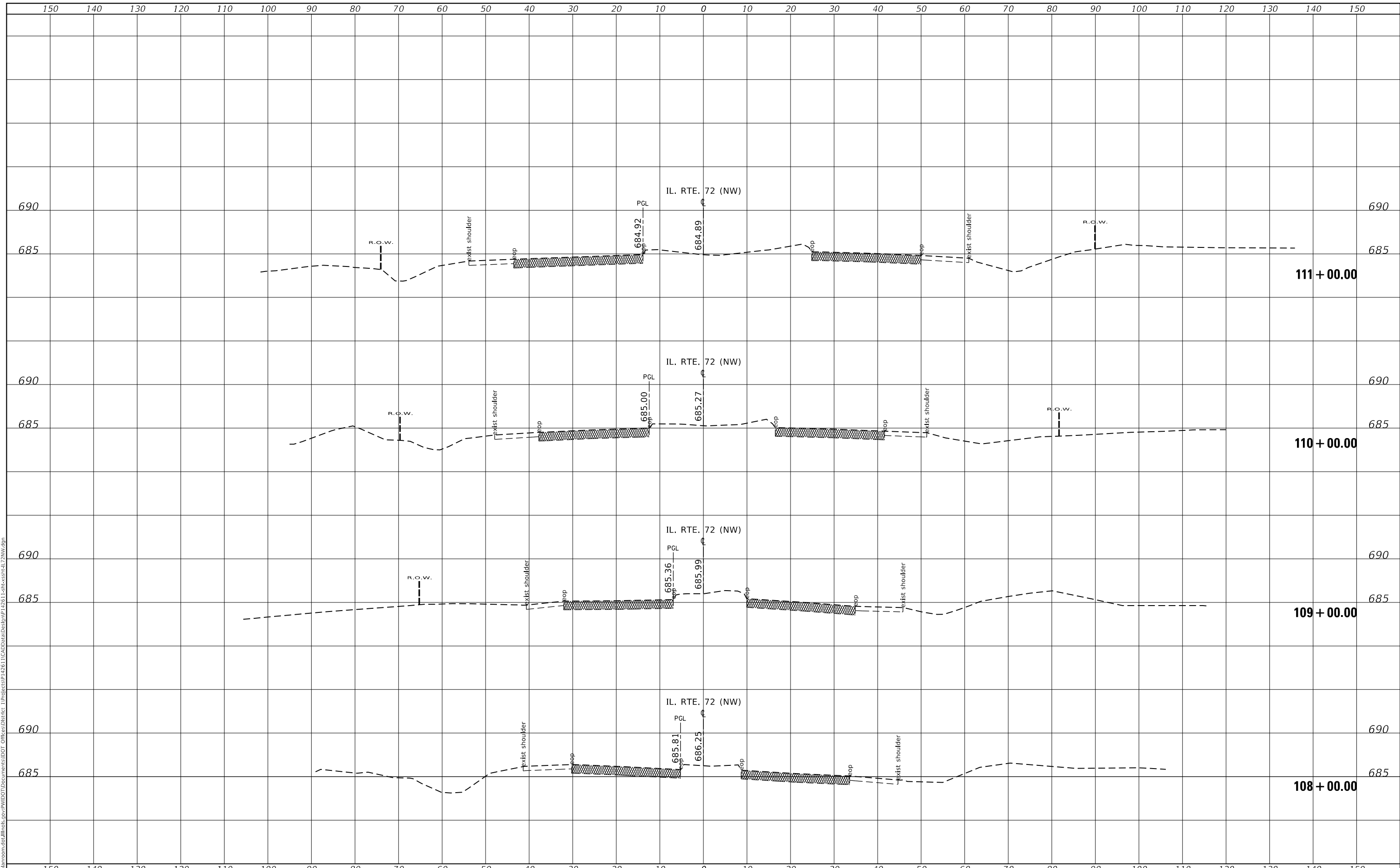




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ORIGINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
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	DRAWN -	REVISED -
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PLOT DATE = 6/26/2020	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

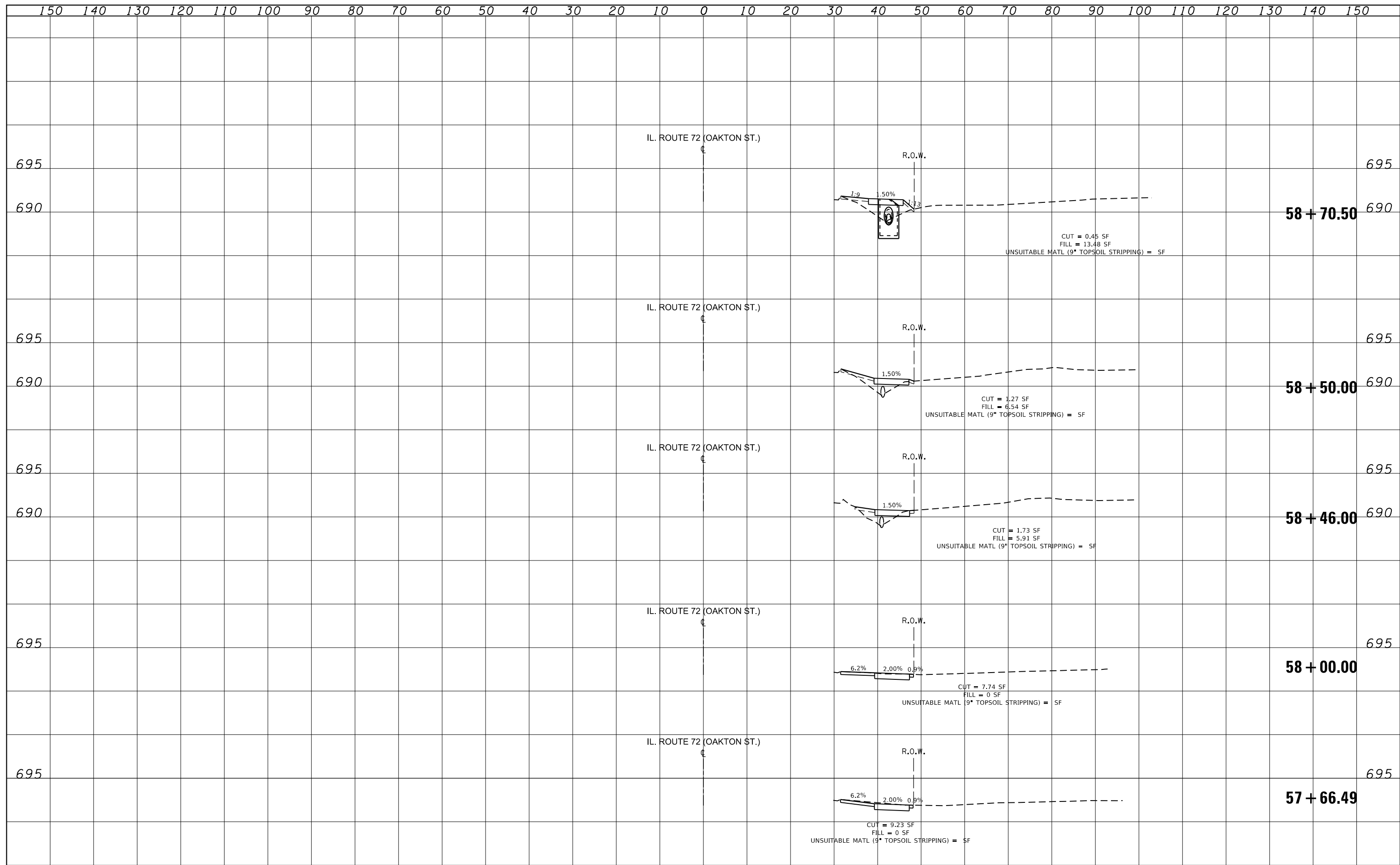
**IL. ROUTE 72 (HIGGINS RD.) AT OAKTON STREET.  
EXISTING AND PROPOSED CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. 108+00.00 TO STA. 111+00.00

F.A.P. RTE. 341	SECTION 2011-019-T5	COUNTY COOK	TOTAL SHEETS	SHEET NO.
			CONTRACT NO. 60P14	
			ILLINOIS FED. AID PROJECT	





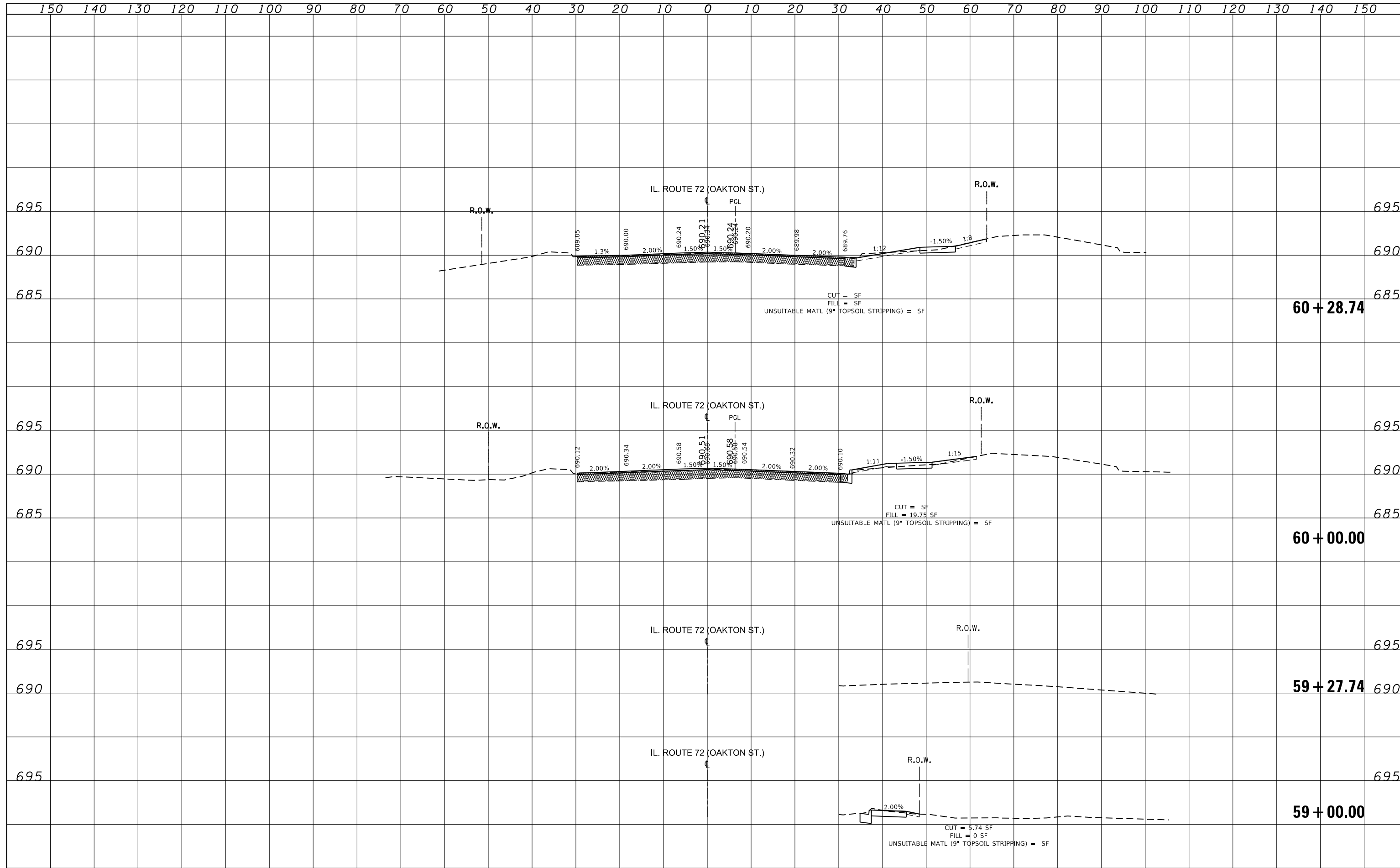


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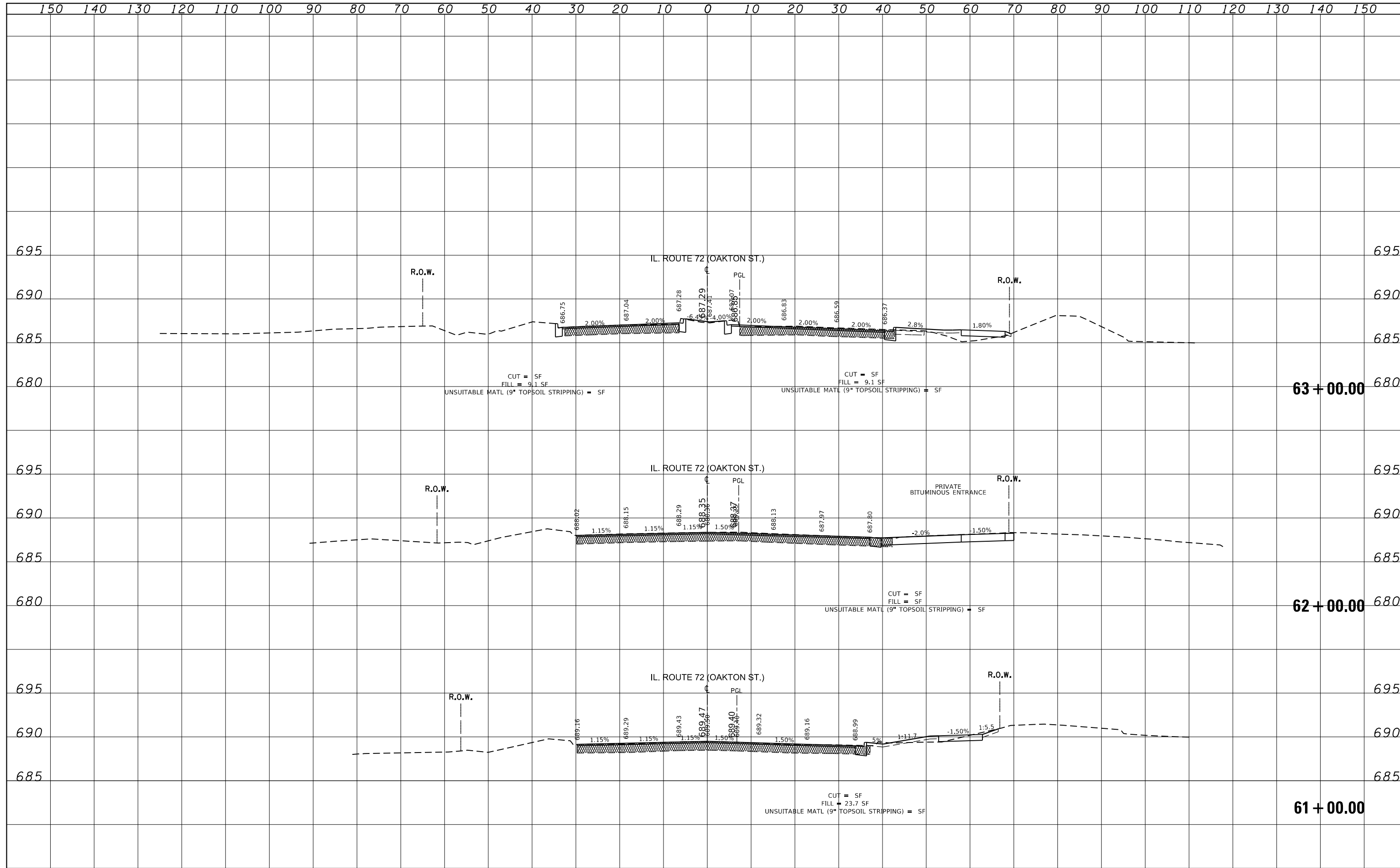
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FILE NAME =	USER NAME = Bilgromiso	DESIGNED -	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>IL. ROUTE 72 (OAKTON ST.) AT IL. ROUTE 83 / BUSSE RD.</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
px:\planroom.dot\illinois.gov\PIDOT\Documents\DOT Offices\District 1\Projects\PI42611\CADD\4-DRAWING\PI42611-sh-t-xssh-t-Oakton.dgn	DRAWN -	REVISIED -	REVISIED -						341	2011-019-TS	COOK	3	
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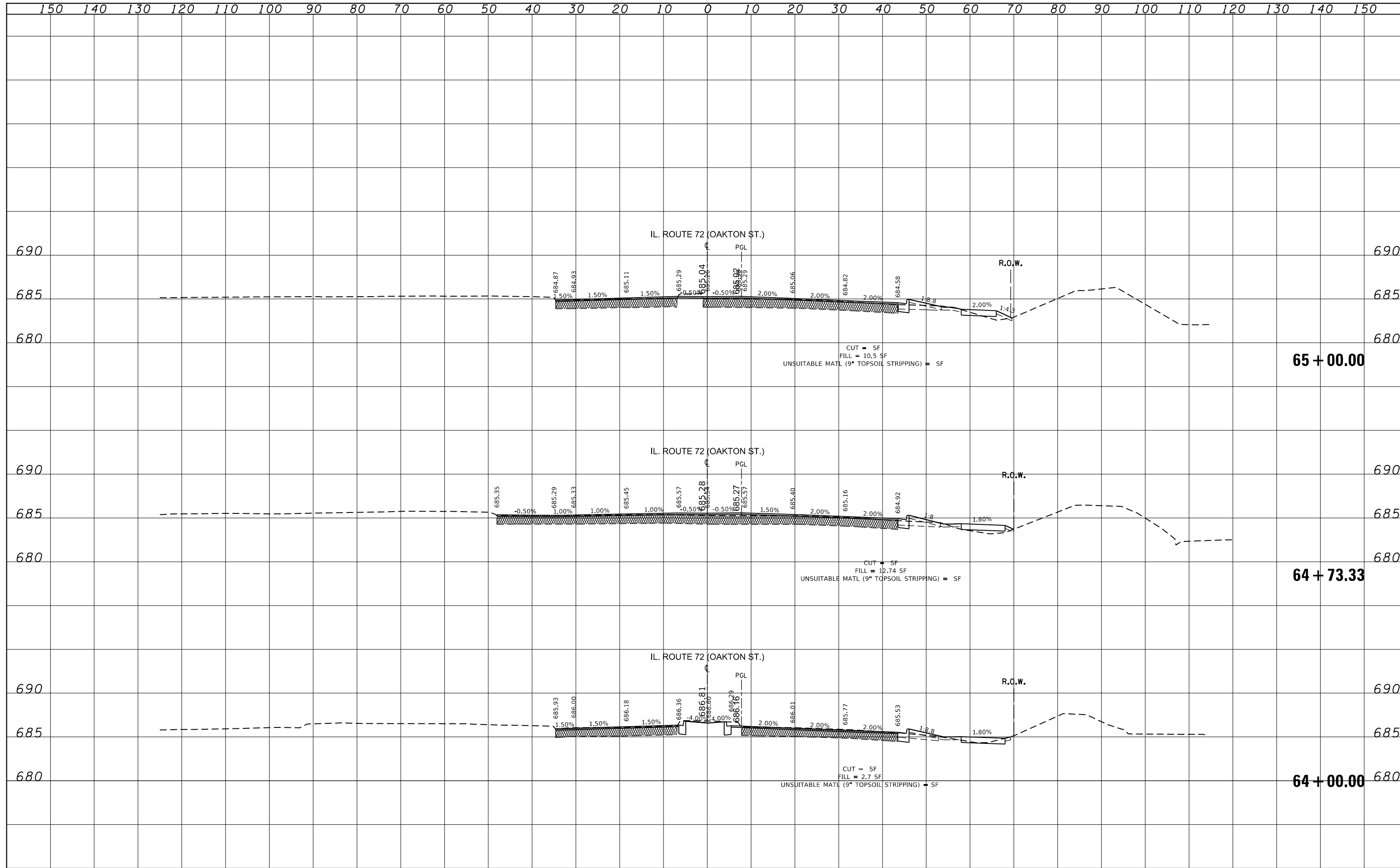
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FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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DATE	
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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
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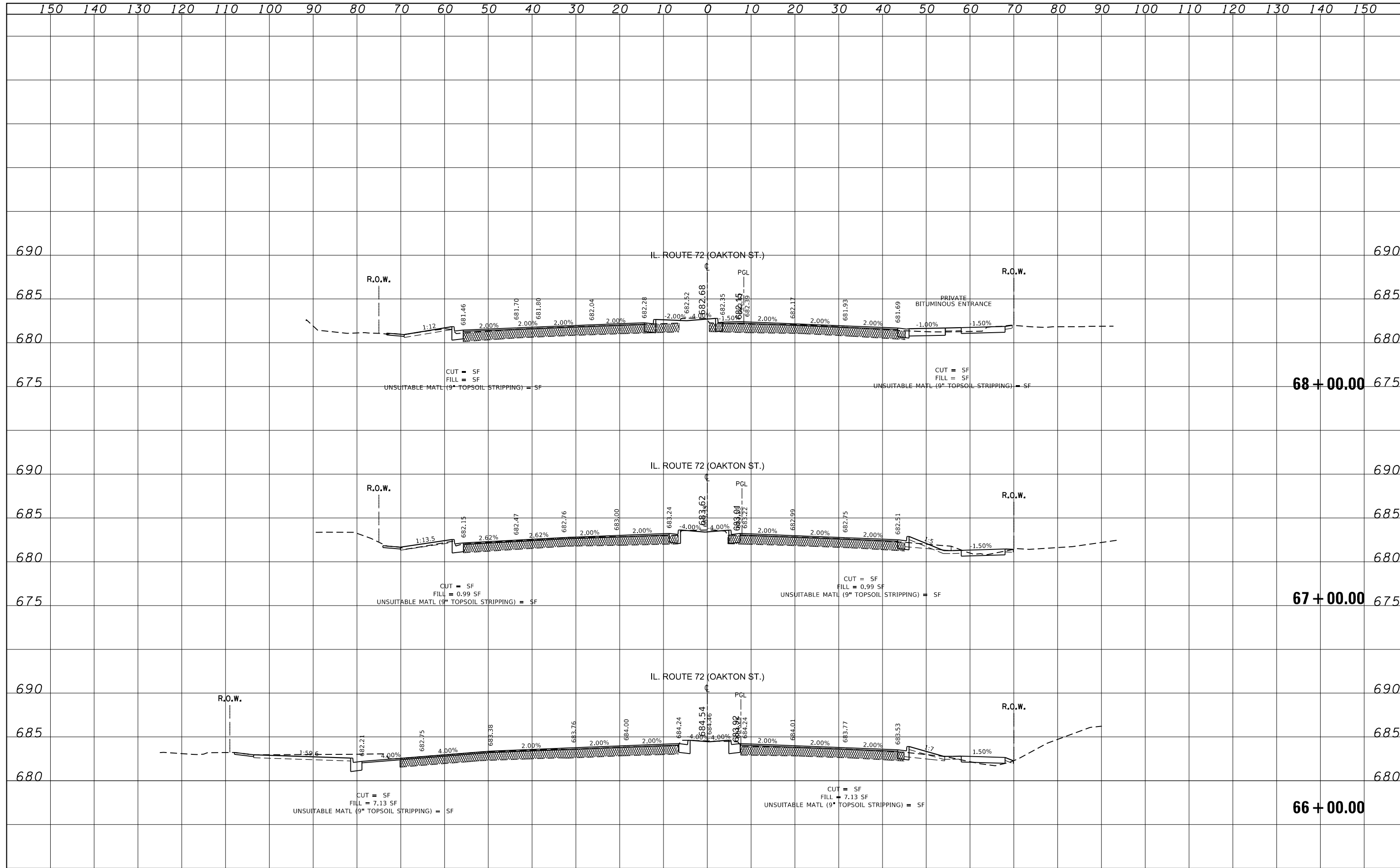


FILE NAME =	USER NAME = Bilgramisa	DESIGNED -	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>IL. ROUTE 72 (OAKTON ST.) AT IL. ROUTE 83 / BUSSE RD.</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\planroom.dot\illinois.gov\WIDOT\Documents\DOT Offices\District 1\Projects\P142611\CADD\DRAWN\P142611-sh-t-xssh-t-Oakton.dgn	DRAWN	CHECKED -	REVISIED -						341	2011-019-TS	COOK	5	5
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	PLOT DATE = 6/26/2020										ILLINOIS FED. AID PROJECT		



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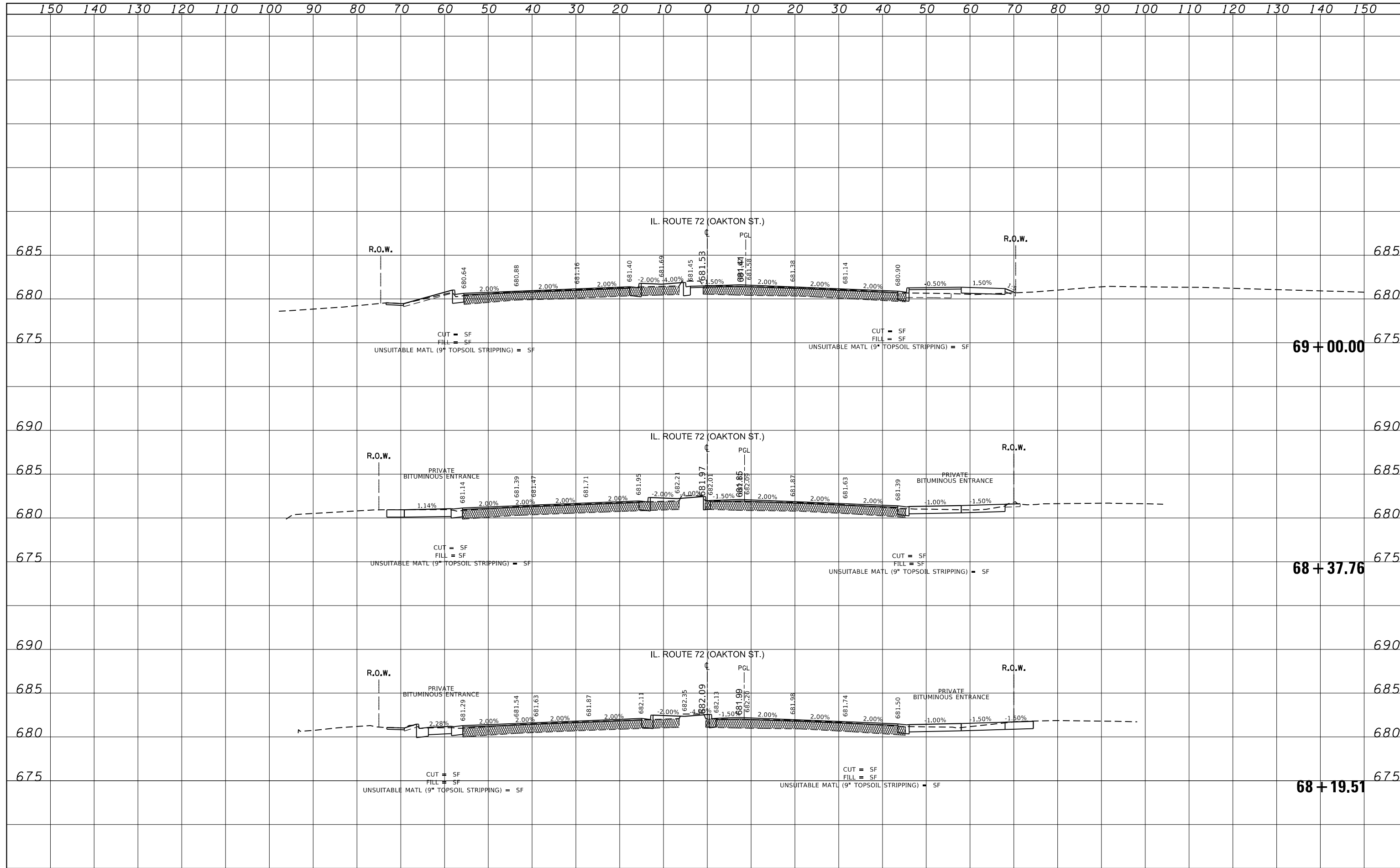
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FILE NAME =	USER NAME = Bilgimisa	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>IL. ROUTE 72 (OAKTON ST.) AT IL. ROUTE 83 / BUSSE RD.</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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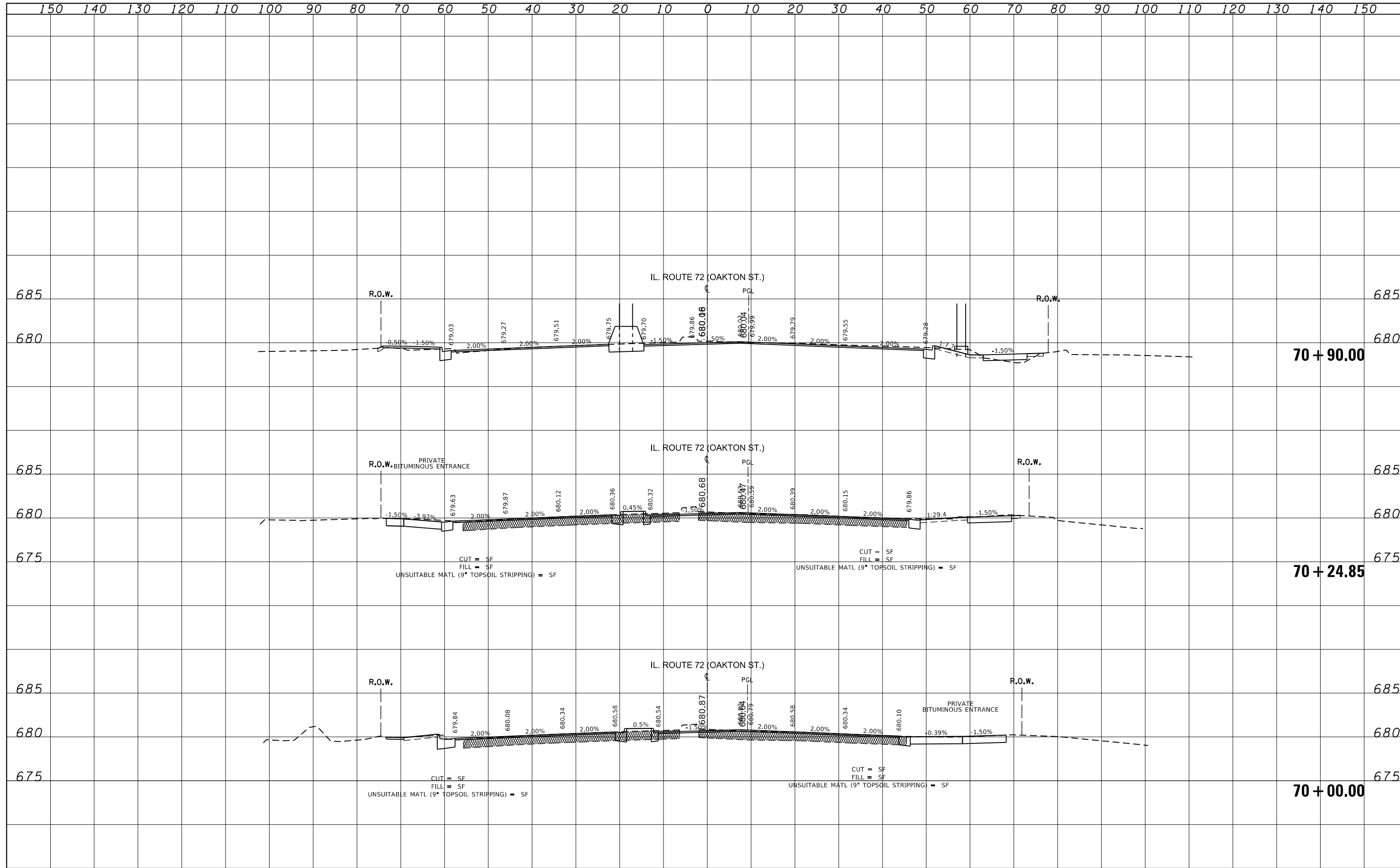
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FILE NAME =	USER NAME = Bilgramisa	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	p:\planroom.dot\illinois.gov\PIDOT\Documents\DOT Offices\District 1\Projects\P142611\CADD\Drawings\P142611-sh-t-xssh-t-Oakton.dgn	DRAWN -	REVISED -		341	2011-019-TS	COOK	7	7			
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	PLOT DATE = 6/26/2020	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA. 68+19.51	TO STA. 69+00.00	ILLINOIS FED. AID PROJECT	

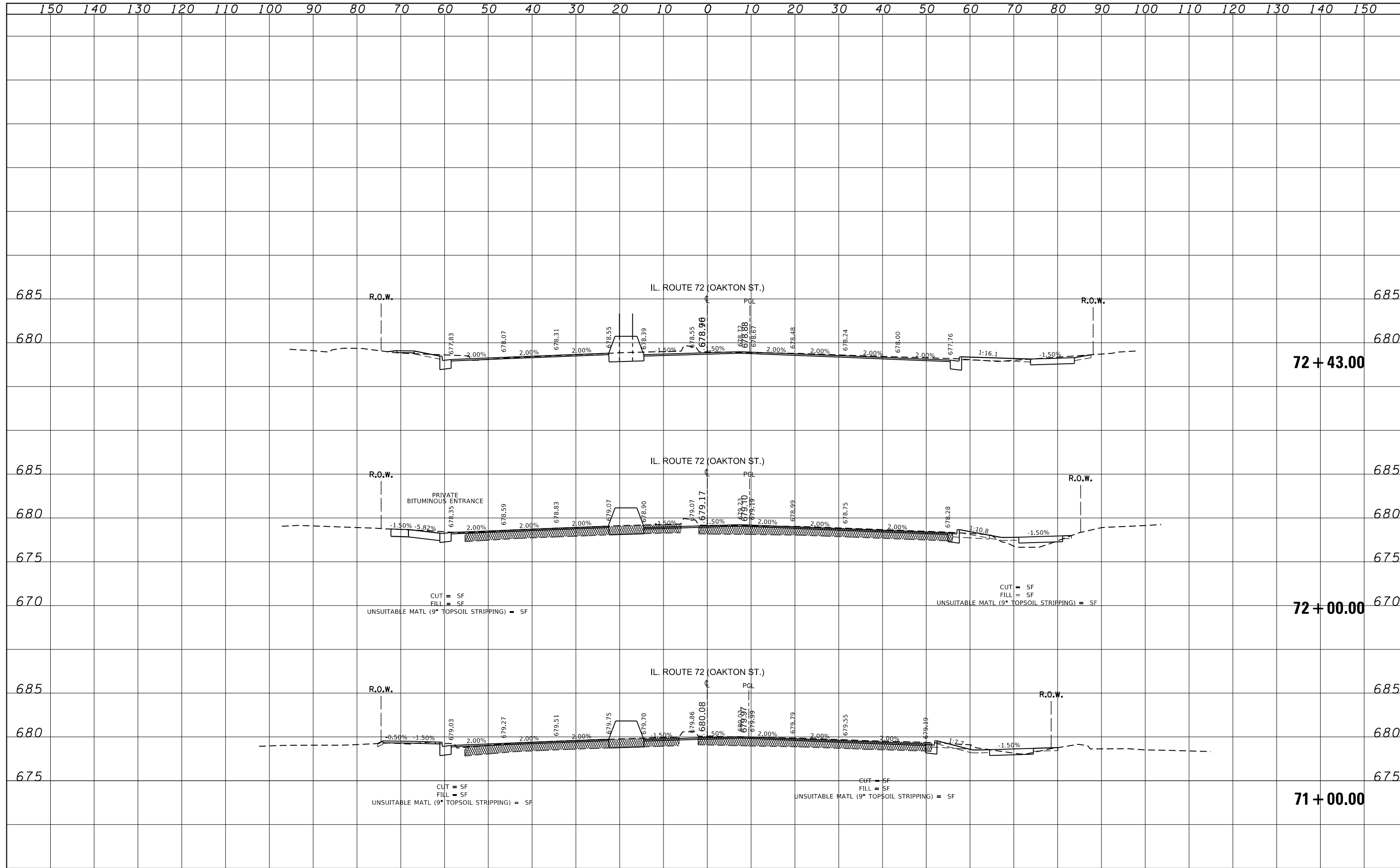
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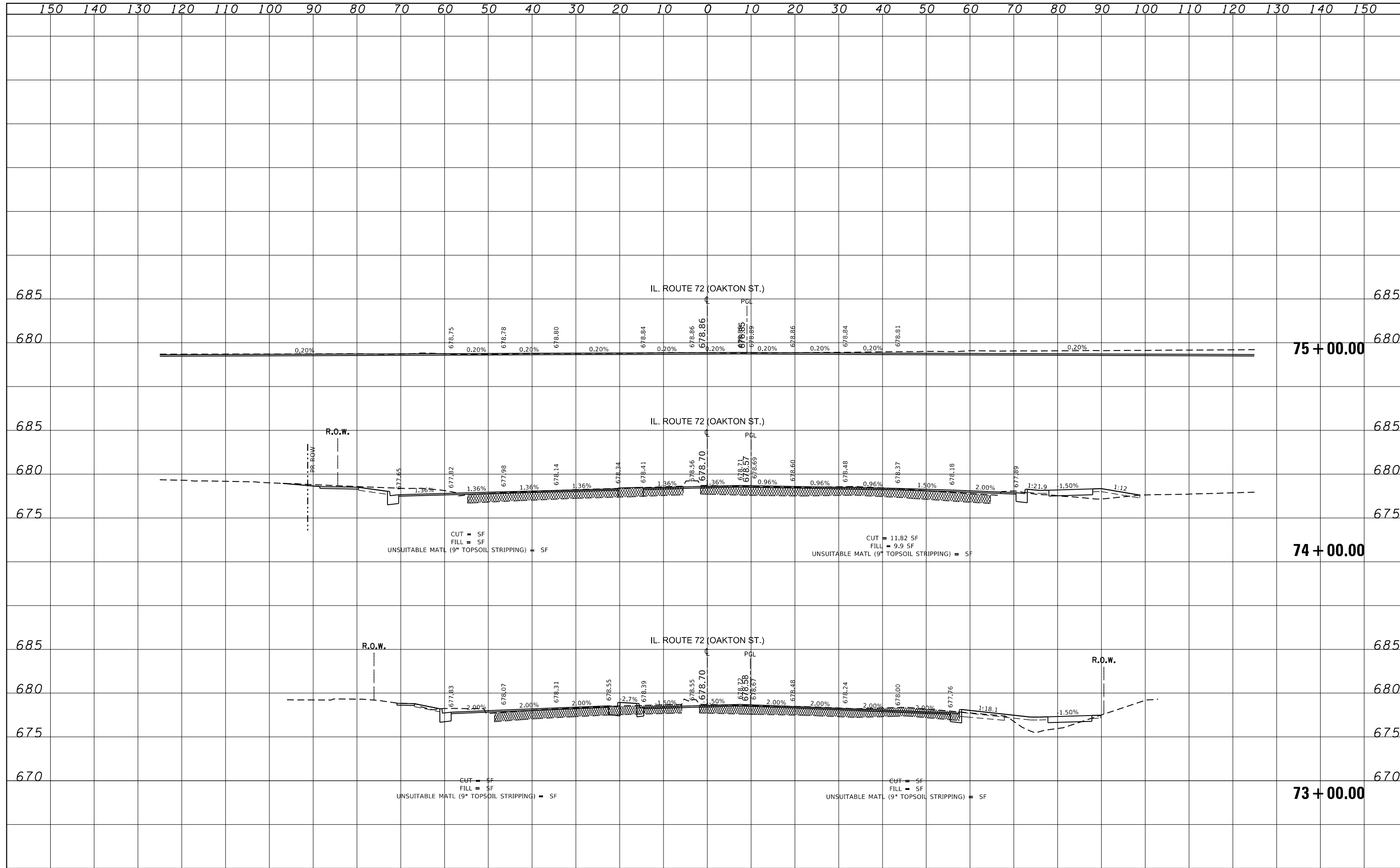
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FILE NAME =	USER NAME = Bilgimisa	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>IL. ROUTE 72 (OAKTON ST.) AT IL. ROUTE 83 / BUSSE RD.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	DOT Offices\District 1\Projects\P142611\CADD\Drawings\P142611-sh-t-xssh-Oakton.dgn	DRAWN -	REVISED -					341	2011-019-TS	COOK	9	
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	PLOT DATE = 6/26/2020	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA. 71+00.00	TO	STA. 72+43.00	ILLINOIS FED. AID PROJECT

DATE	
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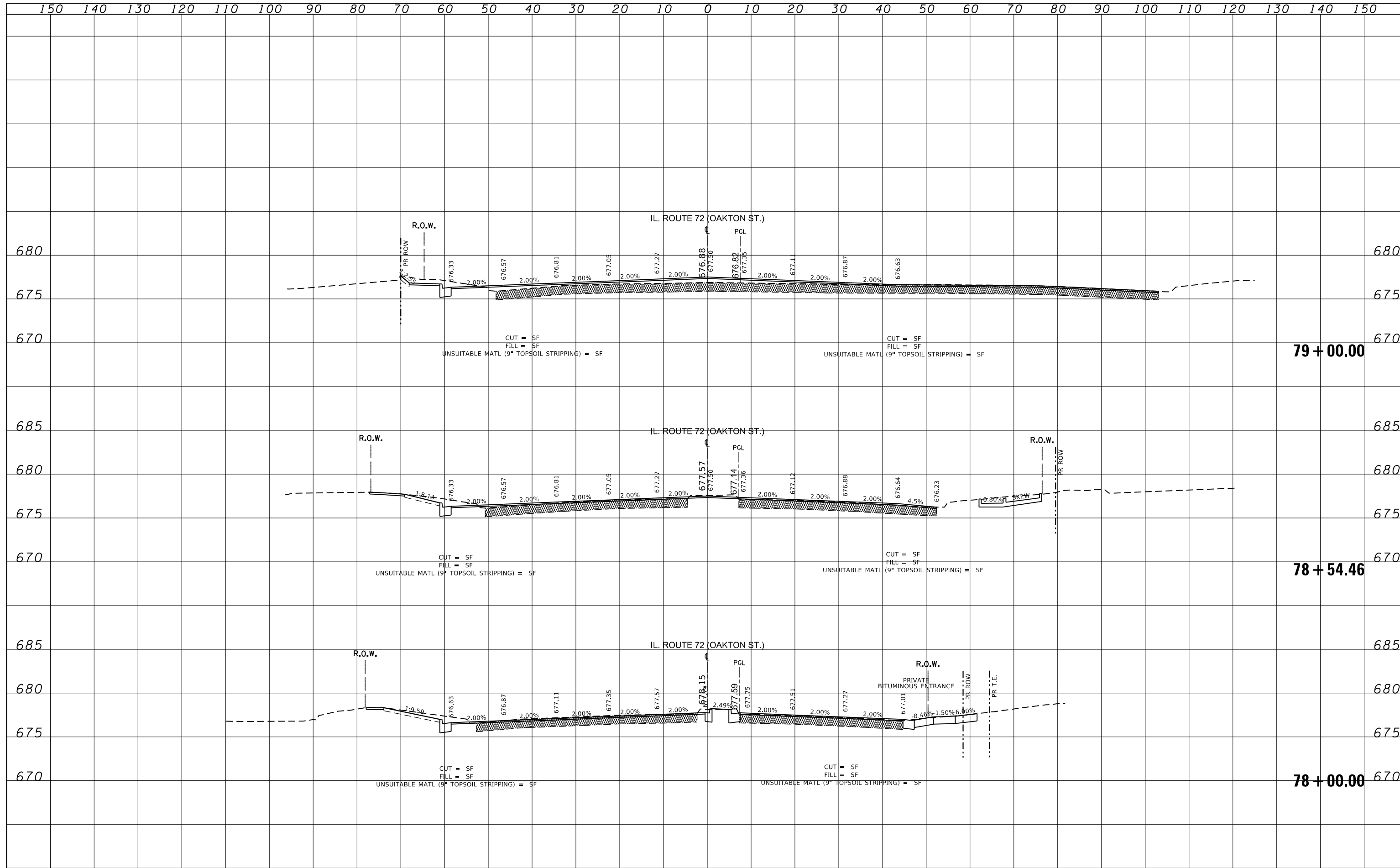
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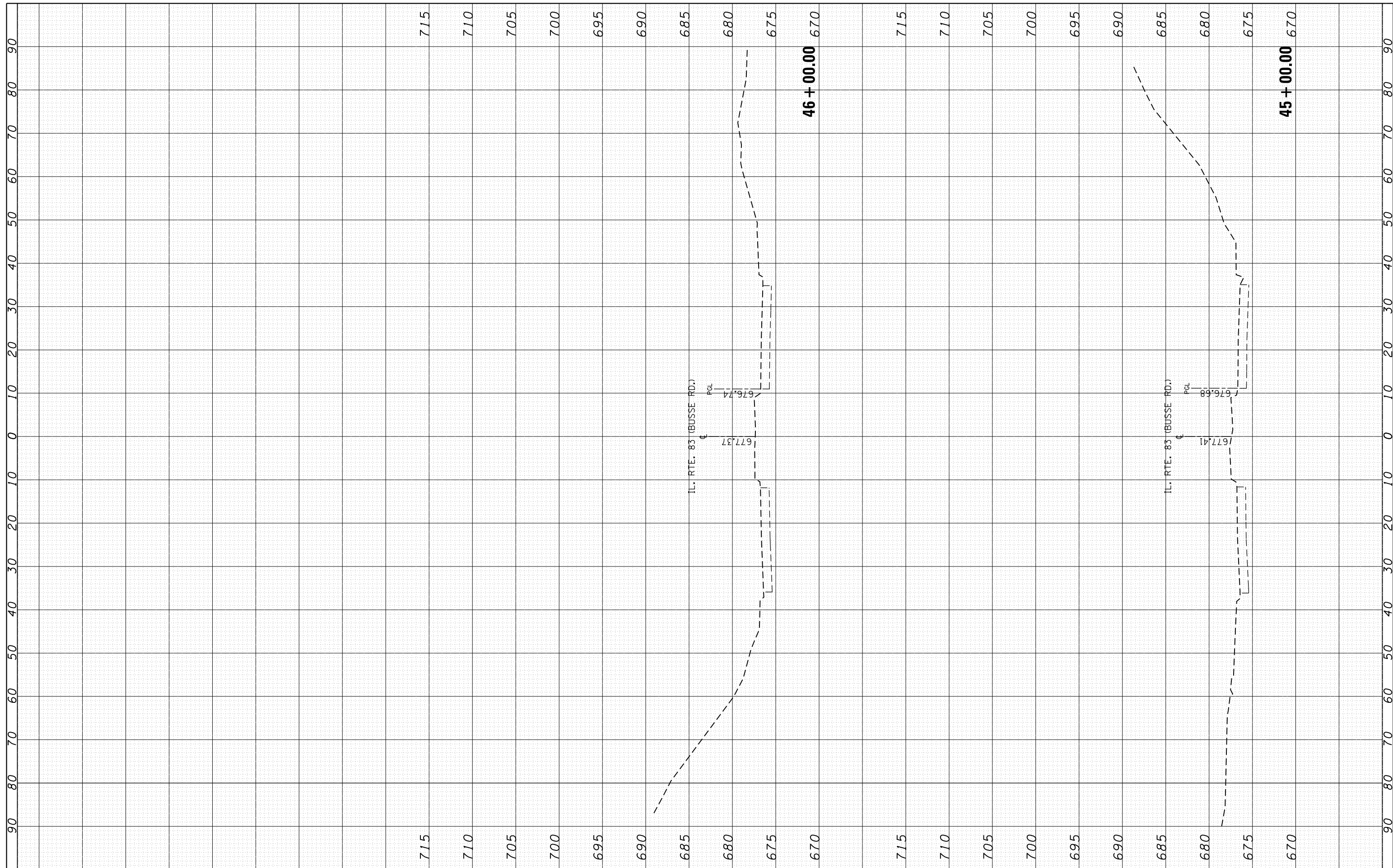
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	PLOT DATE = 6/26/2020	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				





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

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NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		



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 DESIGNED -  
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 CHECKED -  
 PLOT DATE = 6/26/2020  
 DATE -

DESIGNED -  
 REVISIONS:  
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

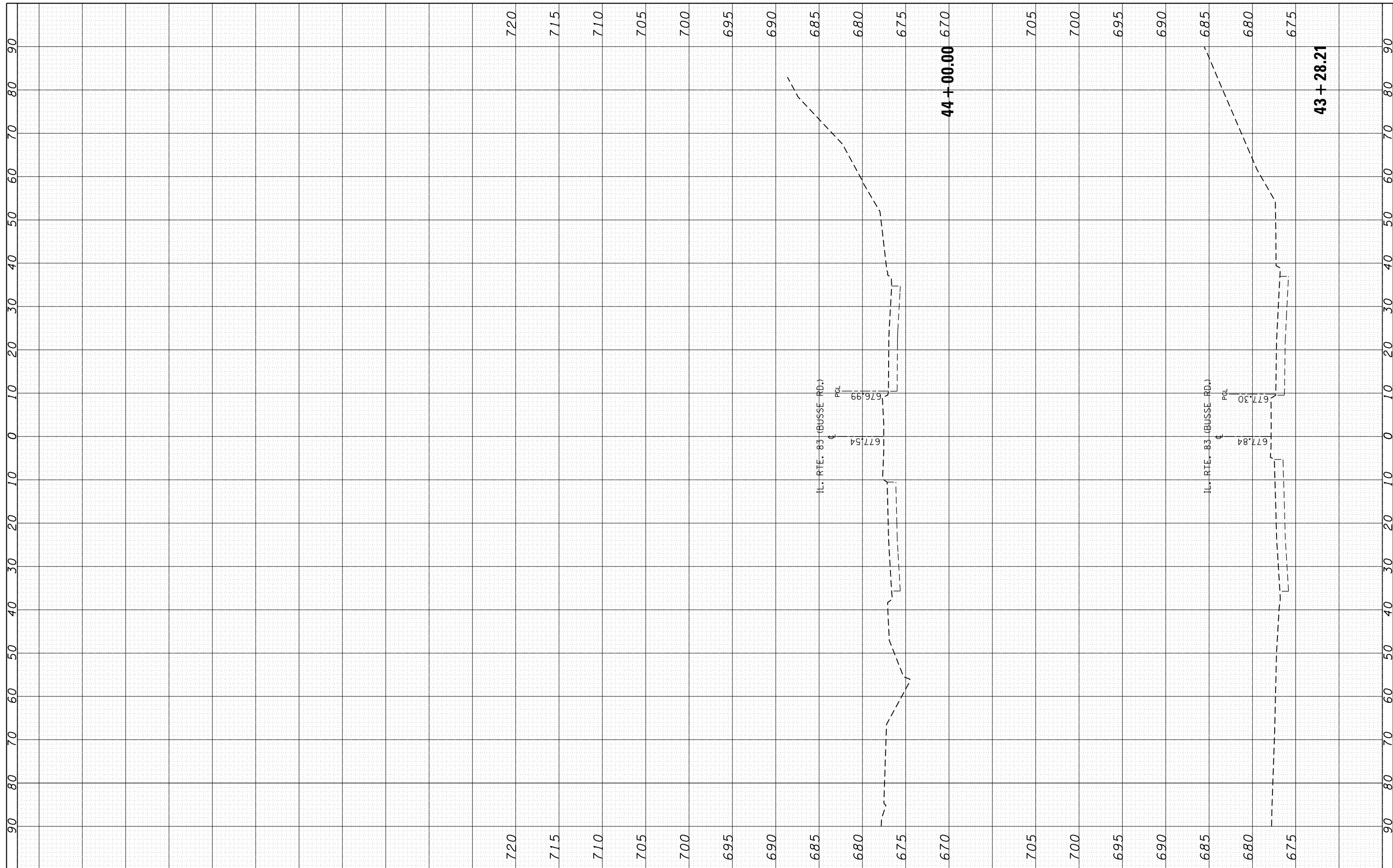
**CROSS SECTIONS  
 IL. ROUTE 72 (OAKTON AVE.) AT IL. ROUTE 83 (BUSSE RD.)**

SCALE: SHEET OF SHEETS STA. 45+00.00 TO STA. 46+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	183
CONTRACT NO. 60P14			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

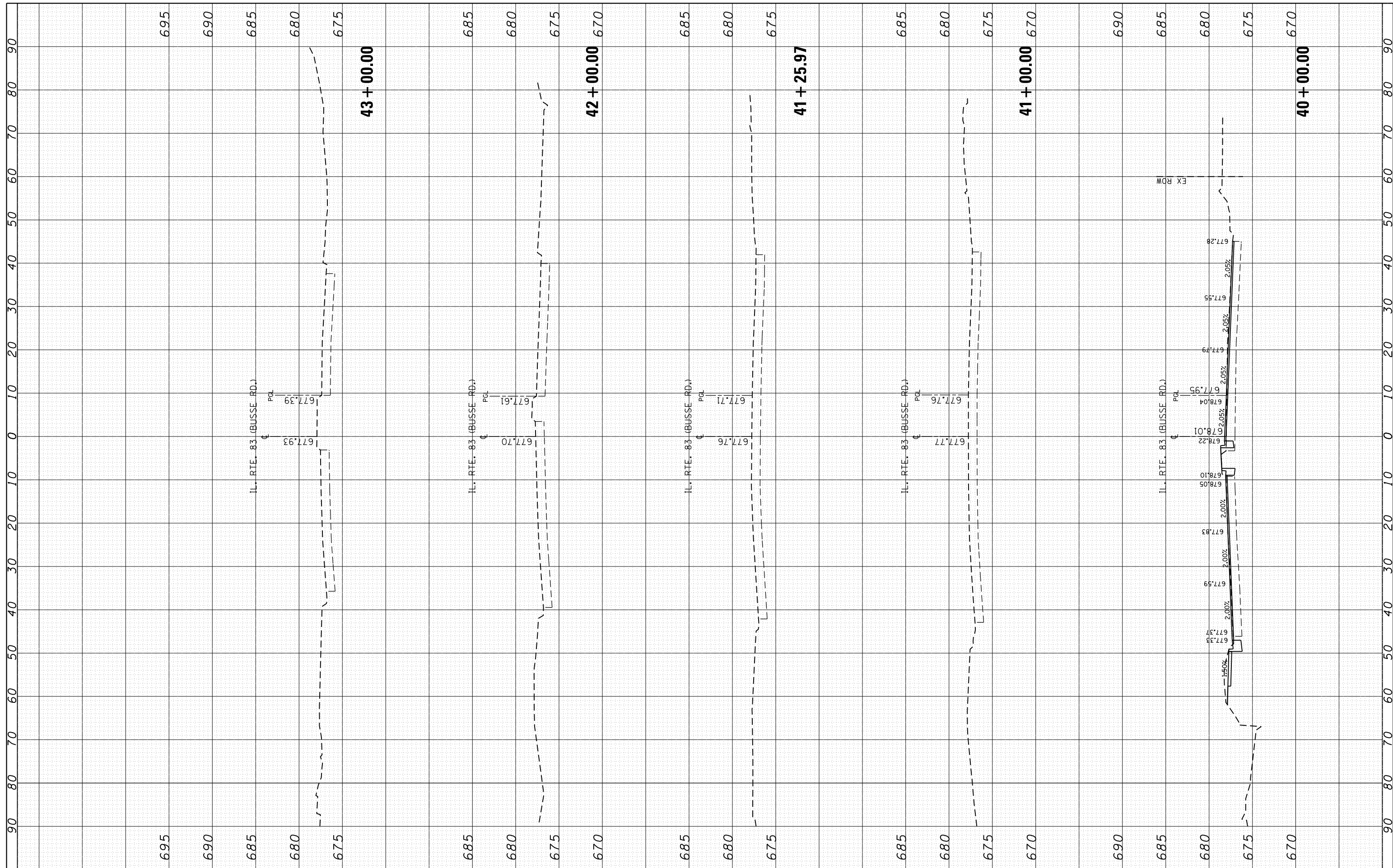
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		DRAWN -	REVISED -		<b>IL. ROUTE 72 (OAKTON AVE.) AT IL. ROUTE 83 (BUSSE RD.)</b>			341	2011-019-TS	COOK	191	184
		CHECKED -	REVISED -		SCALE:      SHEET    OF    SHEETS    STA. 43+28.21    TO STA. 44+00.00			<b>CONTRACT NO. 60P14</b>				
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

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

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



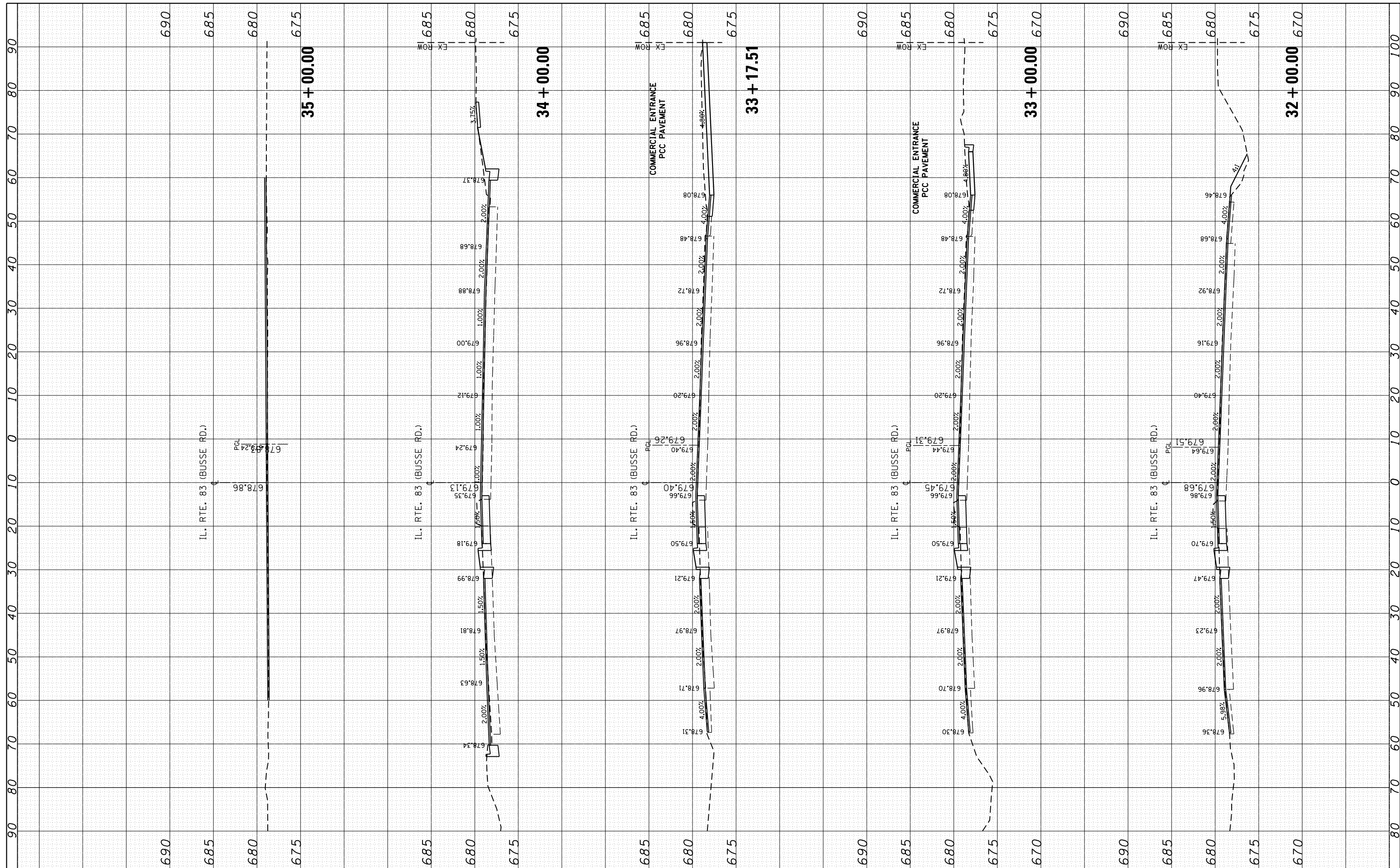
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	PLOT DATE = 6/26/2020	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							





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

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



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 PLOT SCALE = 20.0000' / in.  
 PLOT DATE = 6/26/2020

DESIGNED -  
 CHECKED -  
 DATE -

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

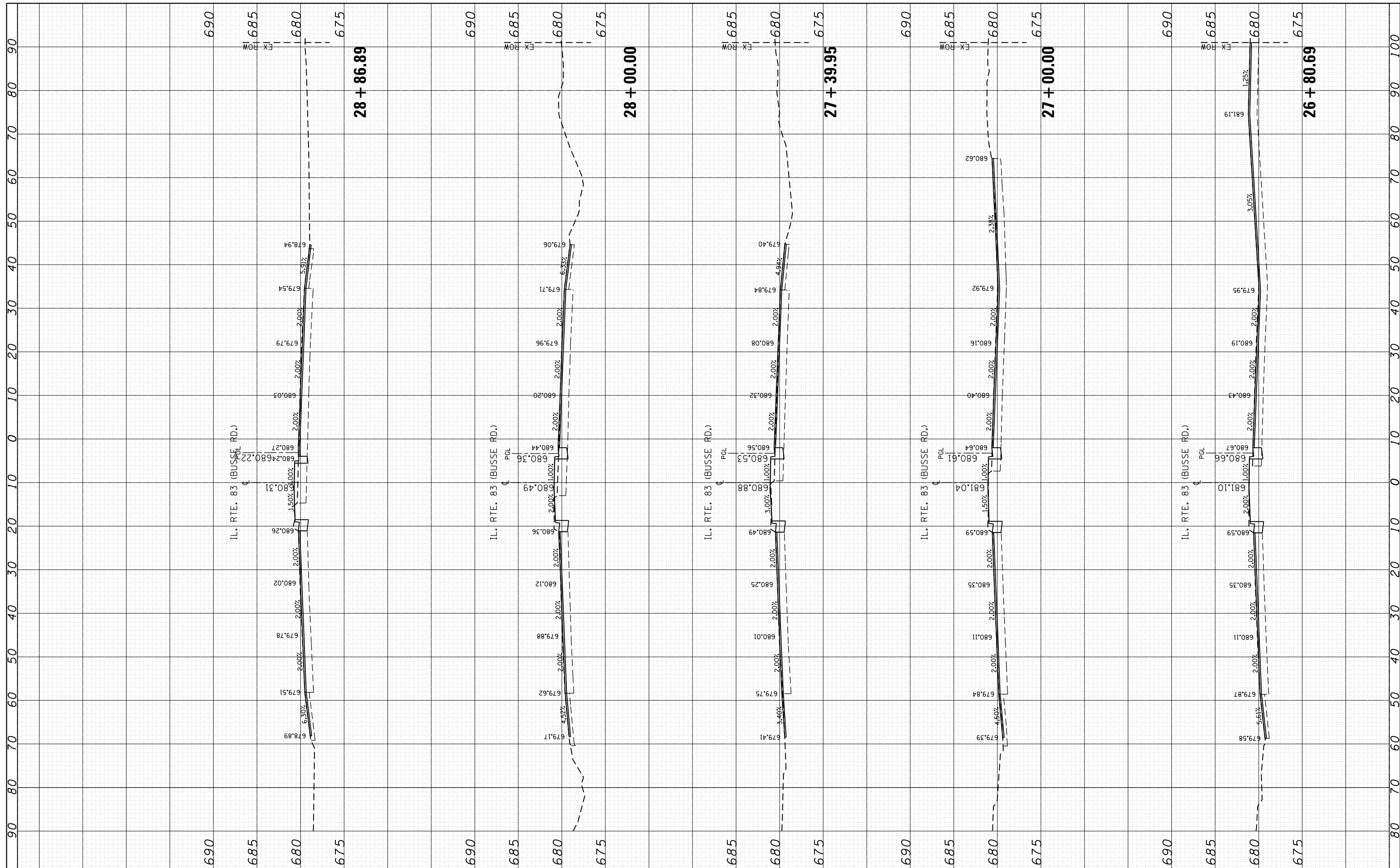
**CROSS SECTIONS**  
**IL. ROUTE 72 (OAKTON AVE.) AT IL. ROUTE 83 (BUSSE RD.)**  
 SCALE: SHEET OF SHEETS STA. 32+00.00 TO STA. 35+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	187
CONTRACT NO. 60P14			ILLINOIS FED. AID PROJECT	



FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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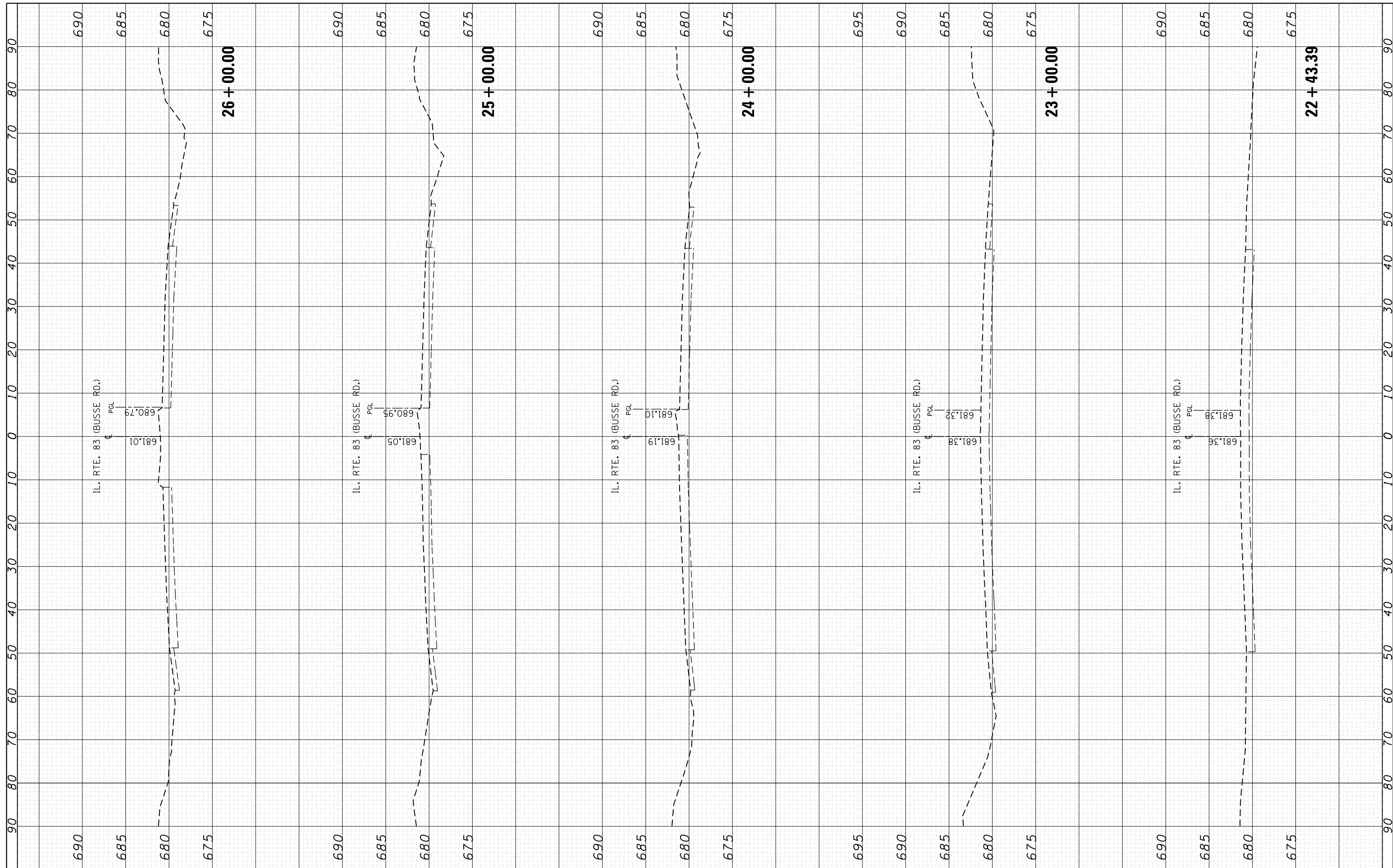
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 IL. ROUTE 72 (OAKTON AVE.) AT IL. ROUTE 83 (BUSSE RD.)**  
 SCALE: SHEET OF SHEETS STA. 26+80.69 TO STA. 28+86.89

F.A.P. RTE. 341	SECTION 2011-019-T5	COUNTY COOK	TOTAL SHEETS 191	SHEET NO. 189
			CONTRACT NO. 60P14	
ILLINOIS FED. AID PROJECT				

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

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



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

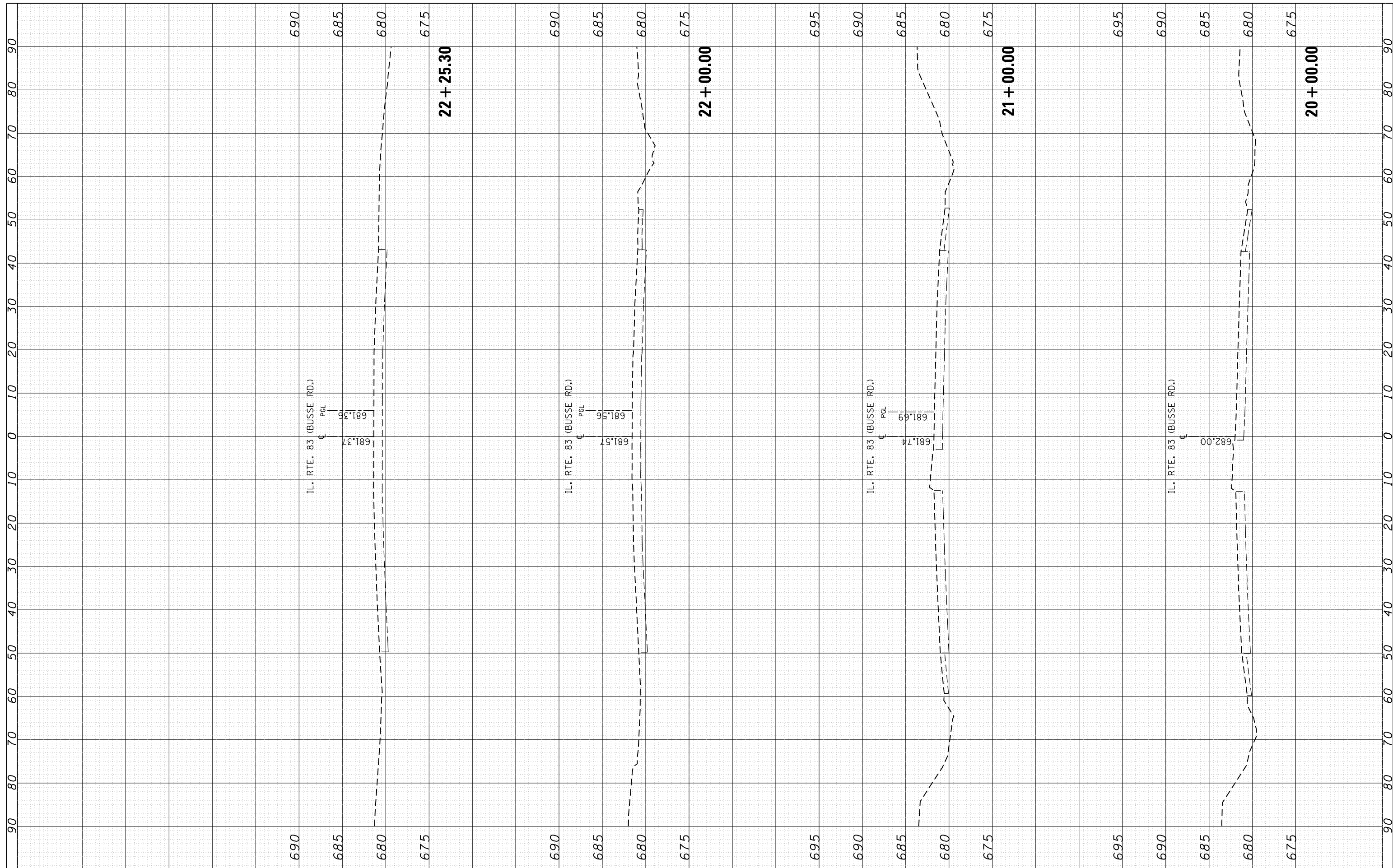
CROSS SECTIONS			
IL. ROUTE 72 (OAKTON AVE.) AT IL. ROUTE 83 (BUSSE RD.)			
SCALE:	SHEET	OF	SHEETS
			STA. 22+43.39 TO STA. 26+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-019-T5	COOK	191	190
CONTRACT NO. 60P14				
ILLINOIS FED. AID PROJECT				



FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE



FILE NAME =	USER NAME = Bilgrimes	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS IL. ROUTE 72 (OAKTON AVE.) AT IL. ROUTE 83 (BUSSE RD.)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
Default		CHECKED -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA. 20+00.00	TO STA. 22+25.30	341	2011-019-T5	COOK	191
		DATE -	REVISED -											CONTRACT NO. 60P14
														ILLINOIS FED. AID PROJECT