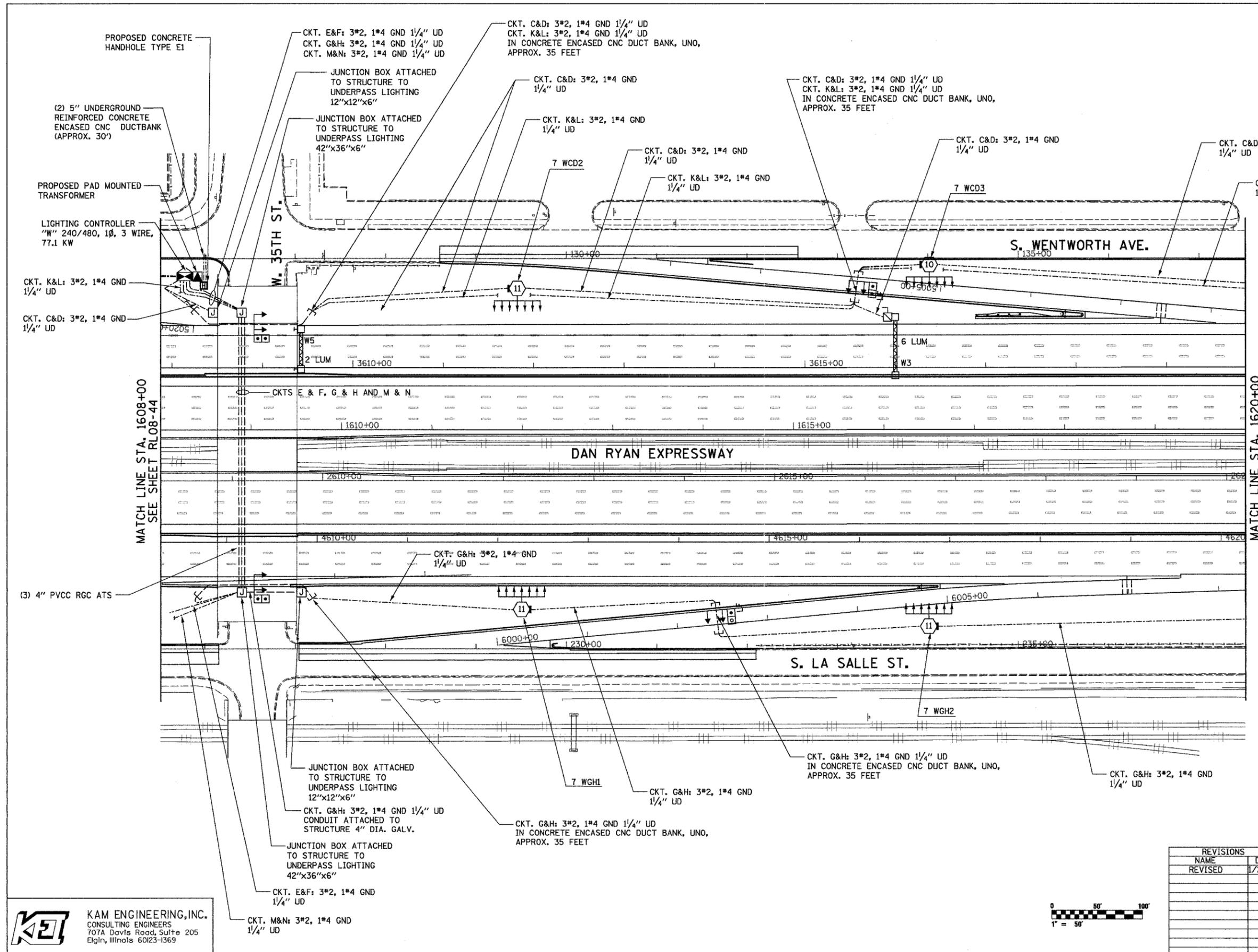
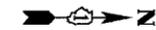


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	301
STA. 1608+00		TO STA. 1620+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583



NOTES:
1. SEE SHEET ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES.

MATCH LINE STA. 1608+00
SEE SHEET RL08-44

MATCH LINE STA. 1620+00
SEE SHEET RL08-46

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REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

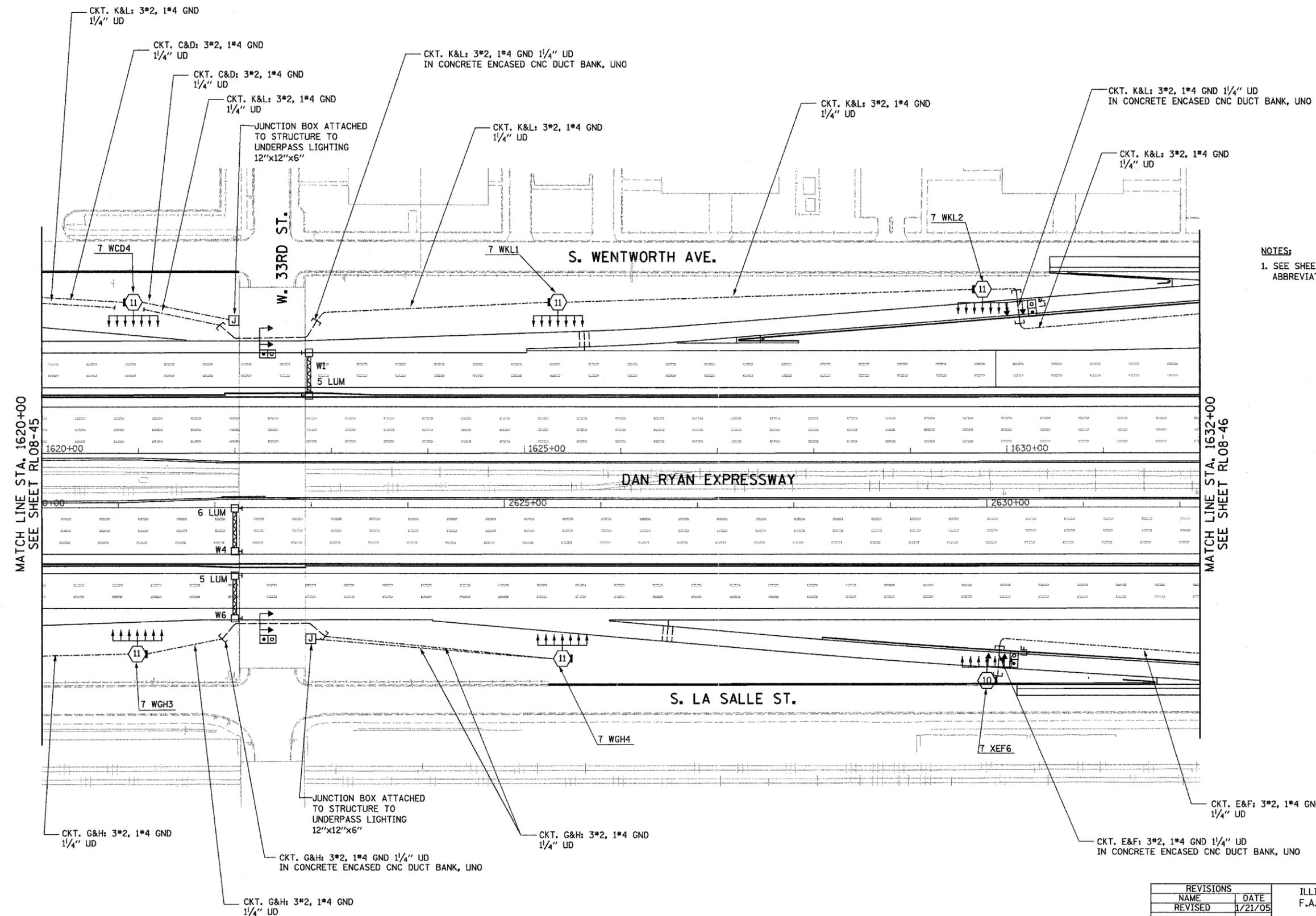
**ROADWAY LIGHTING PLANS
FINAL IMPROVEMENTS**

SCALE: 1"=50'
DATE: OCTOBER 29, 2004
DRAWN BY: BL
CHECKED BY: SM

RL08-45

01/24/2005 03:39:21 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	302
STA. 1620+00		TO STA. 1632+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



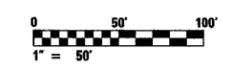
NOTES:
 1. SEE SHEET ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES.

MATCH LINE STA. 1620+00
 SEE SHEET RL08-45

MATCH LINE STA. 1632+00
 SEE SHEET RL08-46

RL08-46

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NAME	DATE
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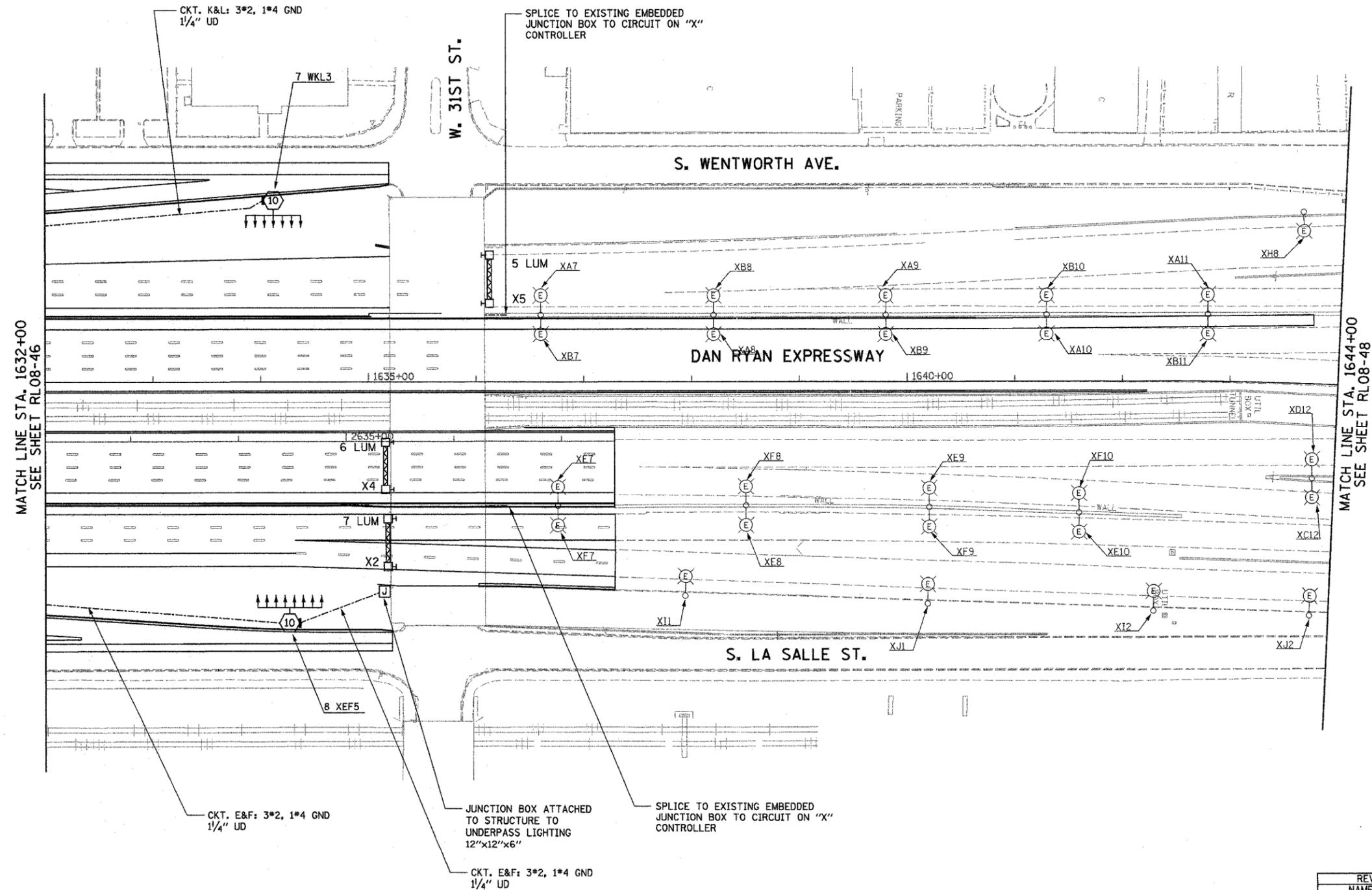
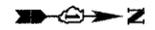
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

ROADWAY LIGHTING PLANS
 FINAL IMPROVEMENTS

SCALE: 1"=50'
 DATE: OCTOBER 29, 2004
 DRAWN BY: BL
 CHECKED BY: SM

03/24/2005 0:33:54 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	303
STA. 1632+00		TO STA. 1644+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



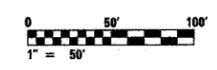
NOTES:
1. SEE SHEET ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES.

MATCH LINE STA. 1632+00
SEE SHEET RL08-46

MATCH LINE STA. 1644+00
SEE SHEET RL08-48

RL08-47

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NAME	DATE

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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

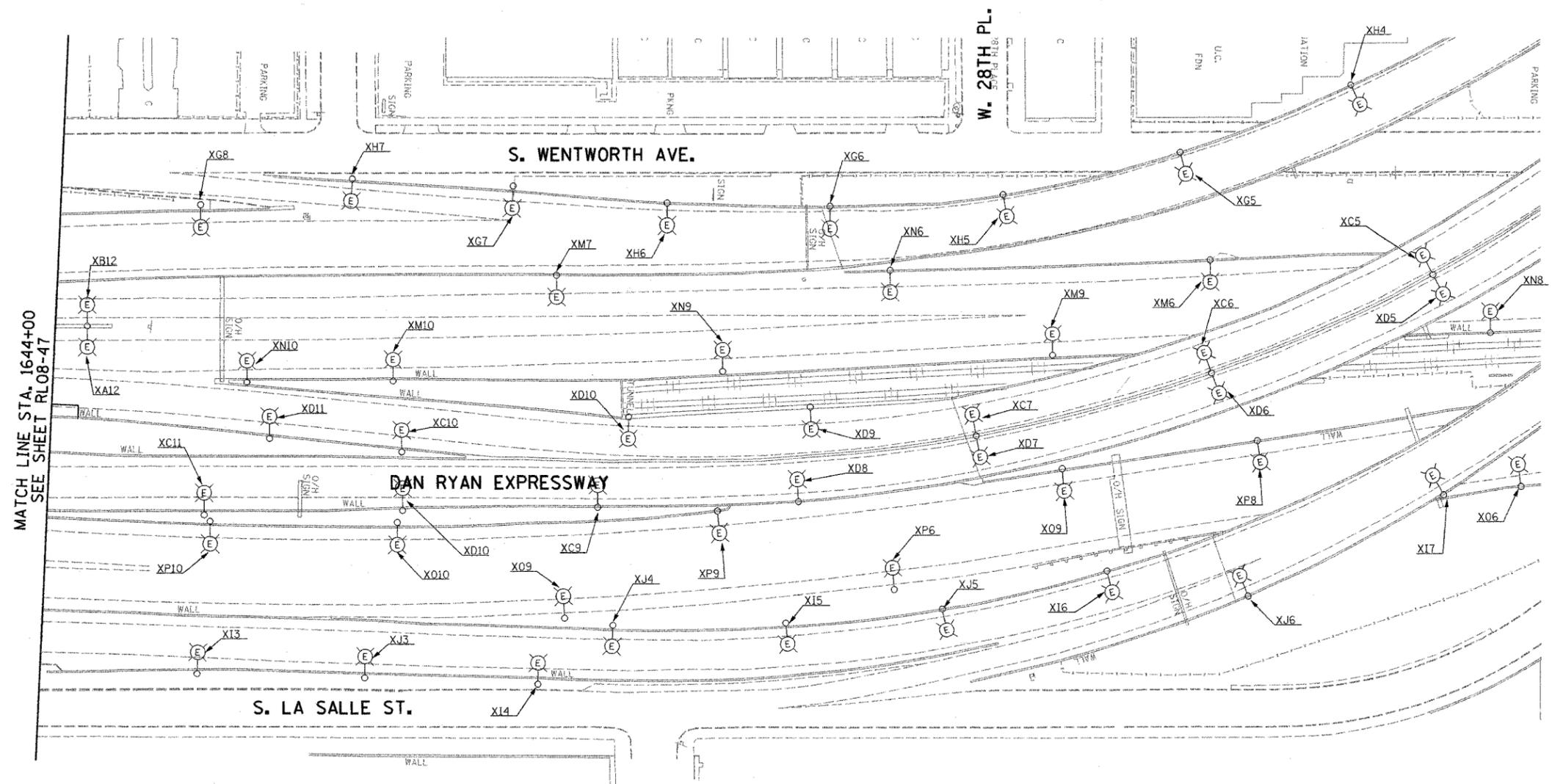
**ROADWAY LIGHTING PLANS
FINAL IMPROVEMENTS**

SCALE: 1"=50'
DATE: OCTOBER 29, 2004

DRAWN BY: BL
CHECKED BY: SM

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07/15/2004

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	304
STA. 1644+00		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				

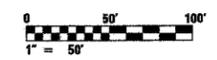


NOTES:
 1. SEE SHEET ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES.

MATCH LINE STA. 1644+00
SEE SHEET RL08-47

RL08-48

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

**ROADWAY LIGHTING PLANS
 FINAL IMPROVEMENTS**

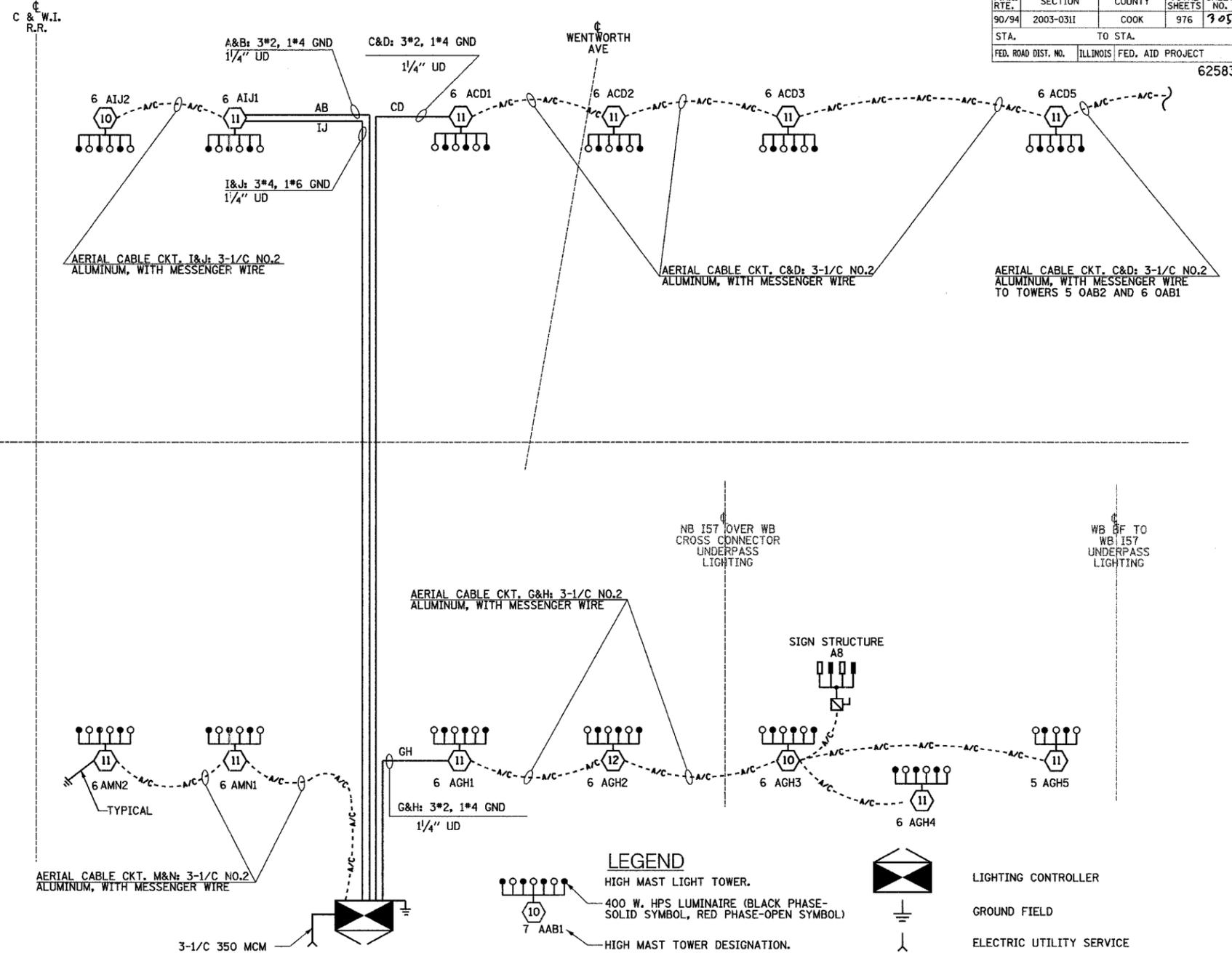
SCALE: 1"=50'
 DATE: OCTOBER 29, 2004

DRAWN BY: BL
 CHECKED BY: SM

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	305
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62583



LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE, (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- ECA
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE, (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "A"**

- NOTES:
- SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS

LOAD TABLE
LIGHTING CONTROLLER "A"

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A			B		
C	36.0	8,640	D	34.0	8,160
E			F		
G	31.8	7,632	H	29.8	7,152
I	12.0	2,880	J	12.0	2,880
K			L		
M	12.0	2,880	N	12.0	2,880
O			P		
TOTAL	91.8	22,032	TOTAL	87.8	21,072

SINGH 300 W. ADAMS ST.
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SL05-01

REVISIONS	
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F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

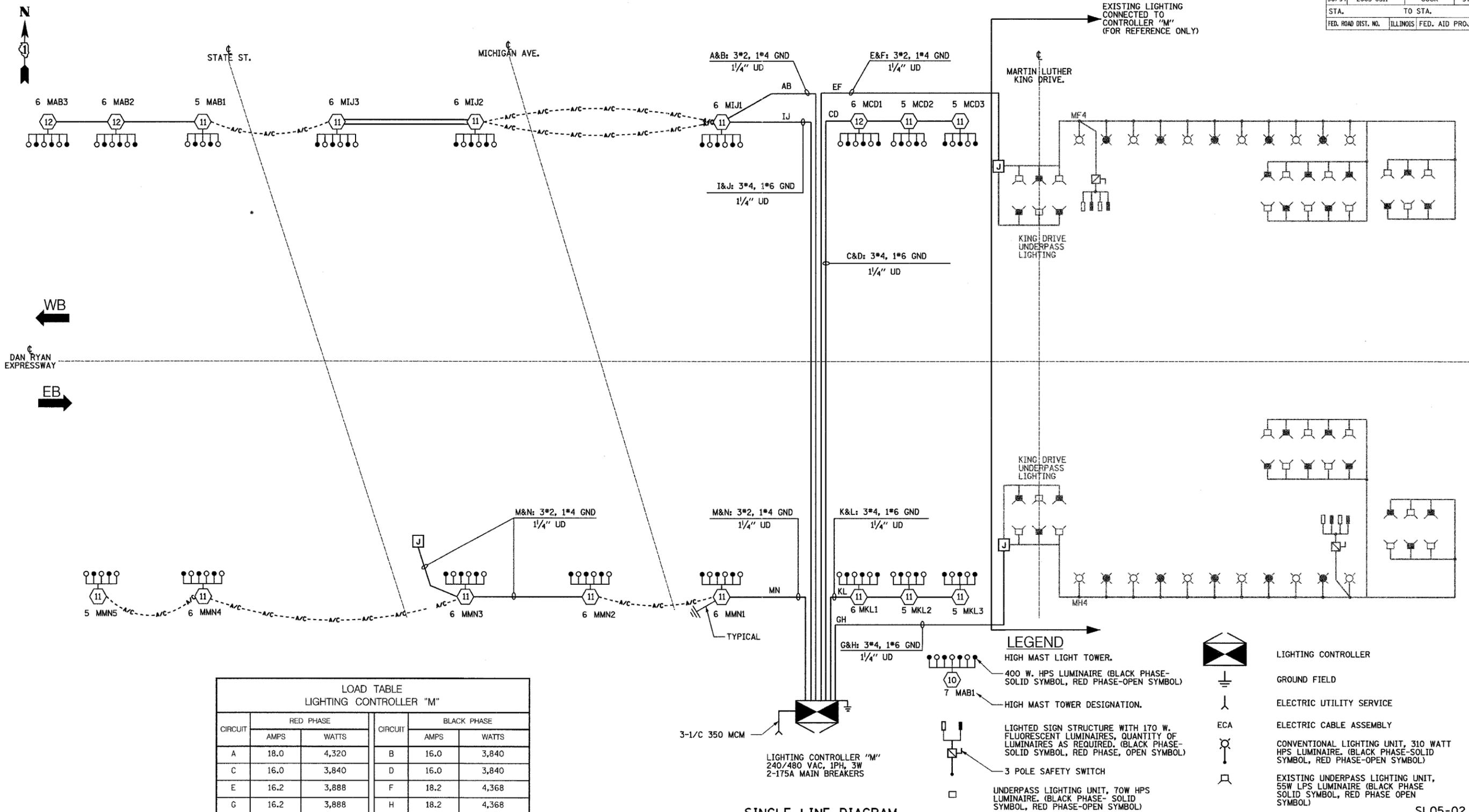
**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "A"
PROPOSED IMPROVEMENTS 2005**

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	306
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583



LOAD TABLE
LIGHTING CONTROLLER "M"

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	18.0	4,320	B	16.0	3,840
C	16.0	3,840	D	16.0	3,840
E	16.2	3,888	F	18.2	4,368
G	16.2	3,888	H	18.2	4,368
I	18.0	4,320	J	18.0	4,320
K	16.0	3,840	L	16.0	3,840
M	30.0	7,200	N	28.0	6,720
O			P		
TOTAL	130.4	31,296	TOTAL	130.4	31,296

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "M"

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

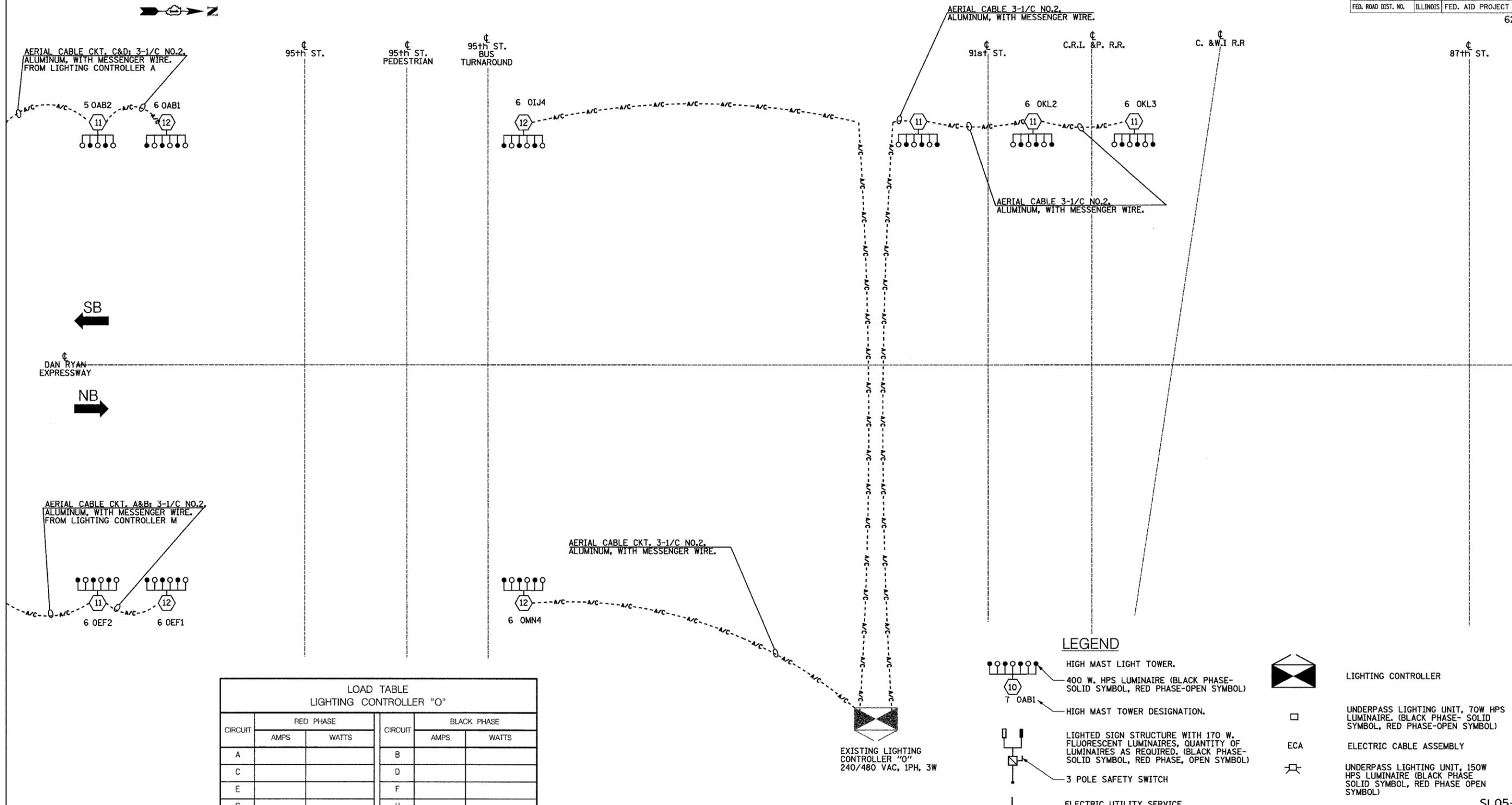
SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "M"
PROPOSED IMPROVEMENTS 2005

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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LOAD TABLE
LIGHTING CONTROLLER "O"

CIRCUIT	RED PHASE		BLACK PHASE	
	AMPS	WATTS	AMPS	WATTS
A			B	
C			D	
E			F	
G			H	
I	6	1440	J	6 1440
K			L	6 1440
M	6	1440	N	
O			P	
TOTAL	12	2880	TOTAL	12 2880

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- ELECTRIC UTILITY SERVICE
- GROUND ROD
- LIGHTING CONTROLLER
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- ELECTRIC CABLE ASSEMBLY
- UNDERPASS LIGHTING UNIT, 150W HPS LUMINAIRE (BLACK PHASE SOLID SYMBOL, RED PHASE OPEN SYMBOL)

**SINGLE LINE DIAGRAM
EXISTING LIGHTING CONTROLLER "O"**

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

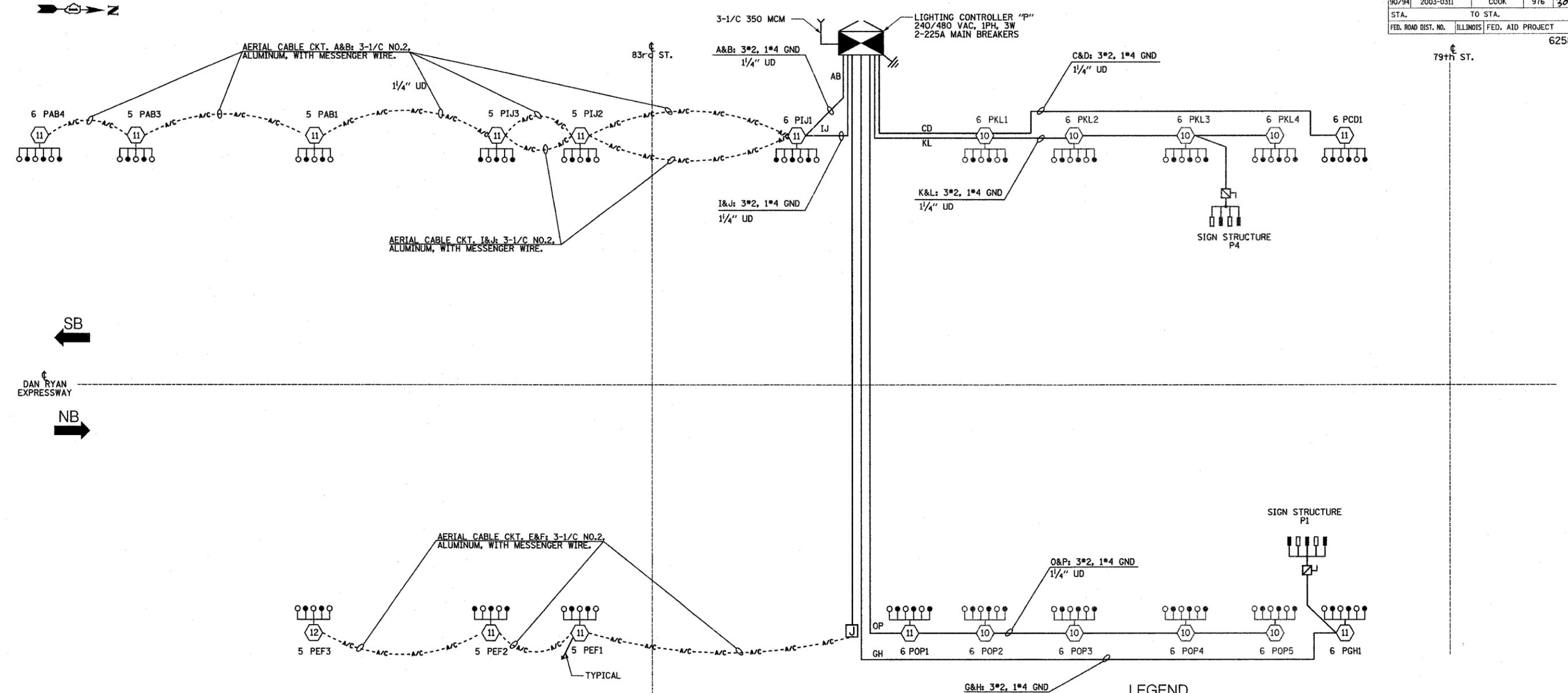
**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "O"
PROPOSED IMPROVEMENTS 2005**

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	18.0	4,320	B	14.0	3,360
C	6.0	1,440	D	6.0	1,440
E	16.0	3,840	F	14.0	3,360
G	7.76	1,862.4	H	8.64	2,073.6
I	16.0	3,840	J	16.0	3,840
K	25.8	6,192	L	25.8	6,192
M			N		
O	30.0	7,200	P	30.0	7,200
TOTAL	92.0	22,094.4	TOTAL	114.44	20,865.6

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"**
(NOT TO SCALE)

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE

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REVISIONS	
NAME	DATE

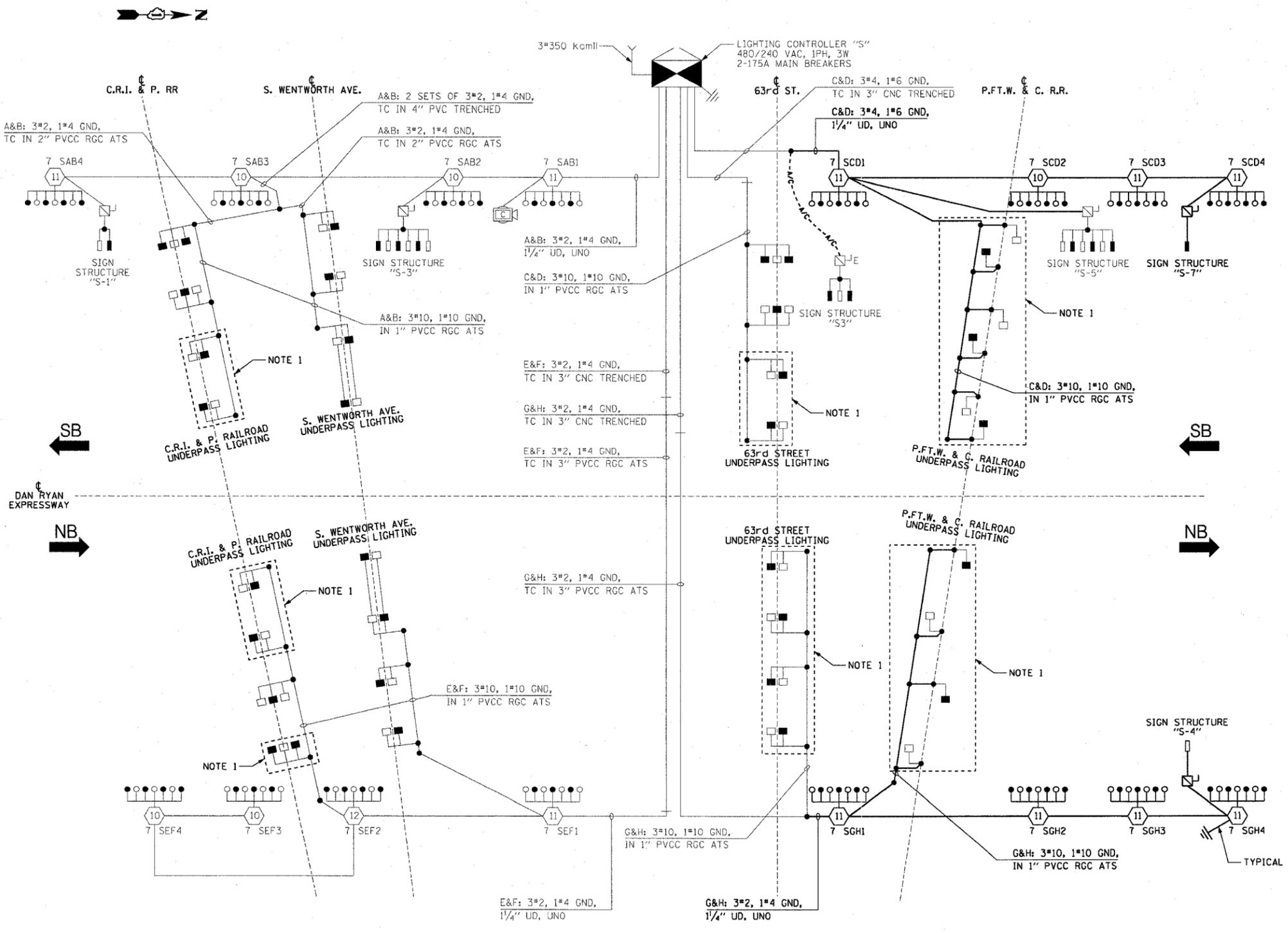
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"**
PROPOSED IMPROVEMENTS 2005

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	310
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- EXISTING LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE, UNLESS NOTED OTHERWISE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA
- TEMPORARY AERIAL CABLE 3*2 WITH MESSENGER

LOAD TABLE
LIGHTING CONTROLLER "S"

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	33.8	8,112	B	33.8	8,112
C	33.3	7,992	D	35.0	8,400
E	30.4	7,296	F	30.3	7,272
G	30.0	7,200	H	29.1	6,984
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	127.5	30,600	TOTAL	128.2	30,768

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"
NOT TO SCALE

- NOTES:**
- EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"
PROPOSED IMPROVEMENTS 2005

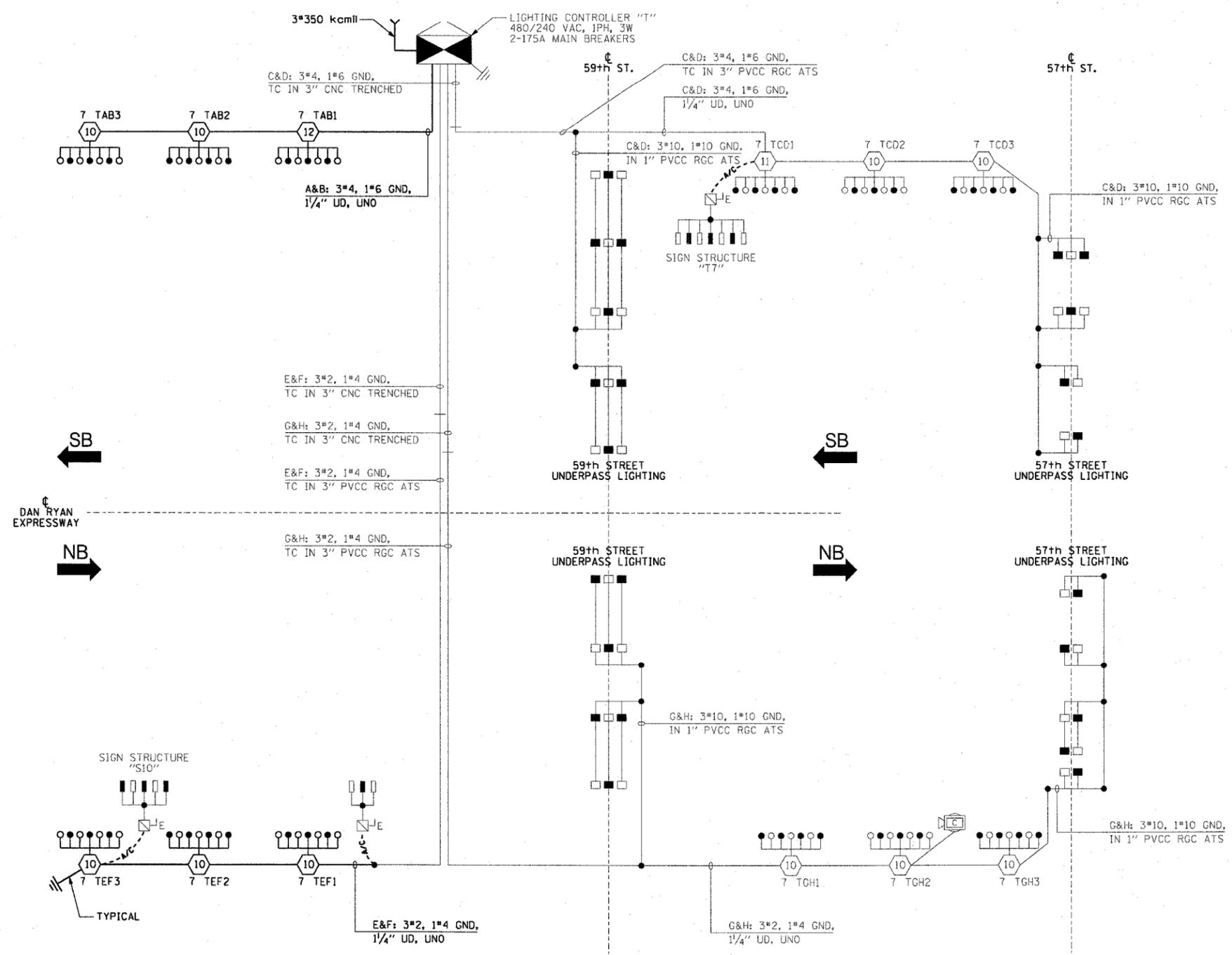
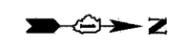
SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

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LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- EXISTING LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED, (BLACK PHASE- SOLID SYMBOL, RED PHASE- OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE, (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA
- TEMPORARY AERIAL CABLE 3*2 WITH MESSENGER



**LOAD TABLE
LIGHTING CONTROLLER "T"**

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	21.3	5,112	B	19.4	4,656
C	27.7	6,648	D	28.4	6,816
E	24.7	5,928	F	22.8	5,472
G	23.6	5,664	H	25.5	6,120
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	97.3	23,352	TOTAL	96.1	23,064

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"**
NOT TO SCALE

NOTES:
1. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS	
NAME	DATE

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F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"**
PROPOSED IMPROVEMENTS 2005

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	312
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62583

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- EXISTING LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE- OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE, UNLESS NOTED OTHERWISE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA
- TEMPORARY AERIAL CABLE, 3*2 WITH MESSENGER WIRE

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	19.4	4,656	B	21.3	5,112
C	32.3	7,752	D	32.3	7,752
E	22.8	5,472	F	24.7	5,928
G	10.4	2,496	H	8.5	2,040
I	15.9	3,816	J	15.9	3,816
K	27.1	6,504	L	27.1	6,504
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	127.9	30,696	TOTAL	129.8	31,152

REVISIONS	
NAME	DATE

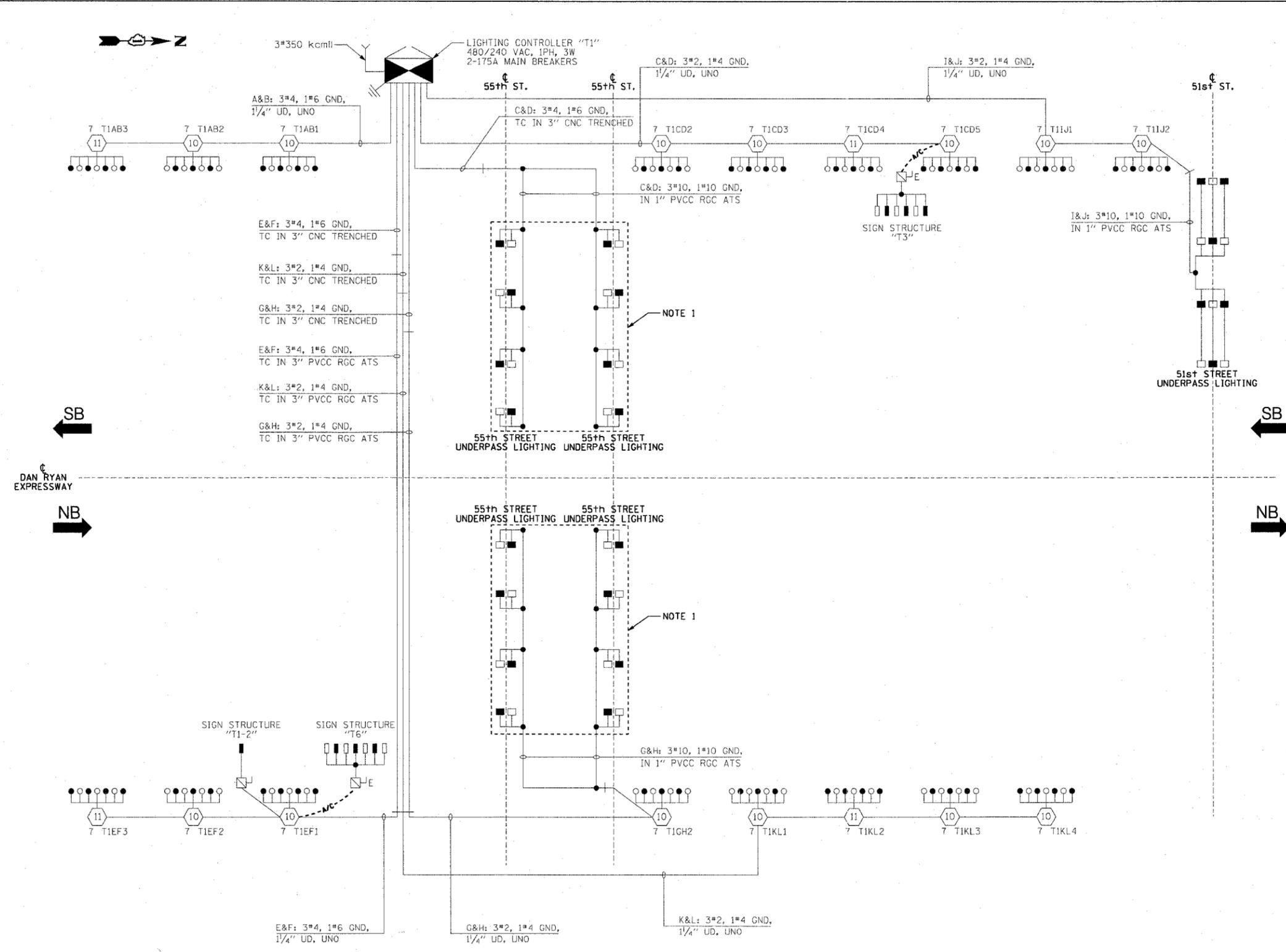
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T1"
PROPOSED IMPROVEMENTS 2005**

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

- NOTES:**
- EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRES. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T1"**
NOT TO SCALE



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62583

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- EXISTING LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE, UNLESS NOTED OTHERWISE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA
- TEMPORARY AERIAL CABLE 3*2 WITH MESSENGER
- EXISTING AERIAL CABLE

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	13.6	3,264	B	13.6	3,264
C	8.5	2,040	D	10.4	2,496
E	28.8	6,912	F	28.0	6,720
G	2.7	648	H	2.7	648
I	28.8	6,912	J	29.7	7,128
K	17.0	4,080	L	17.0	4,080
M	10.1	2,424	N	8.1	1,944
O			P		
TOTAL	109.5	26,280	TOTAL	109.5	26,280

REVISIONS	
NAME	DATE

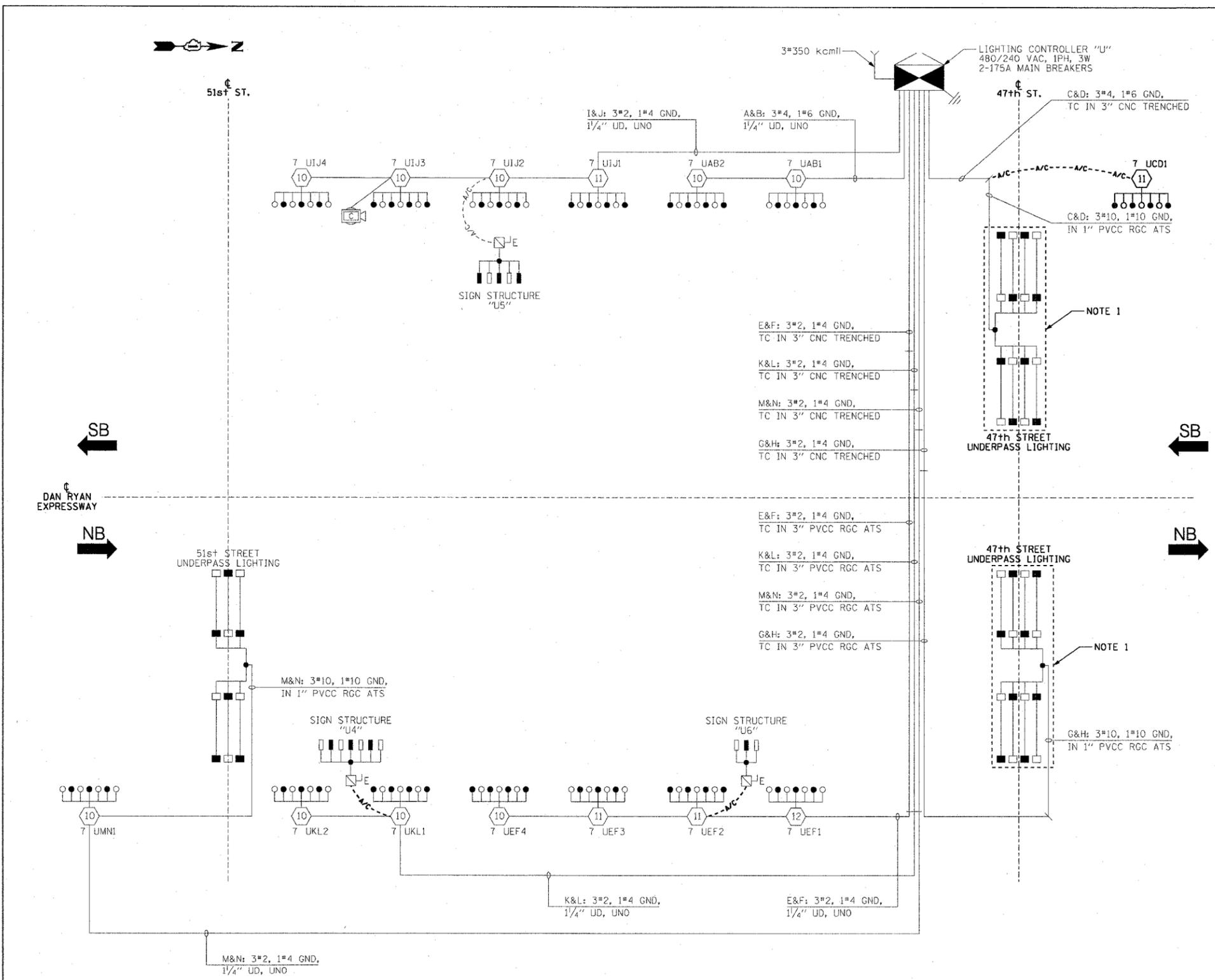
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"
PROPOSED IMPROVEMENTS 2005**

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

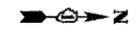
- NOTES:**
- EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"**
NOT TO SCALE



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	315
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

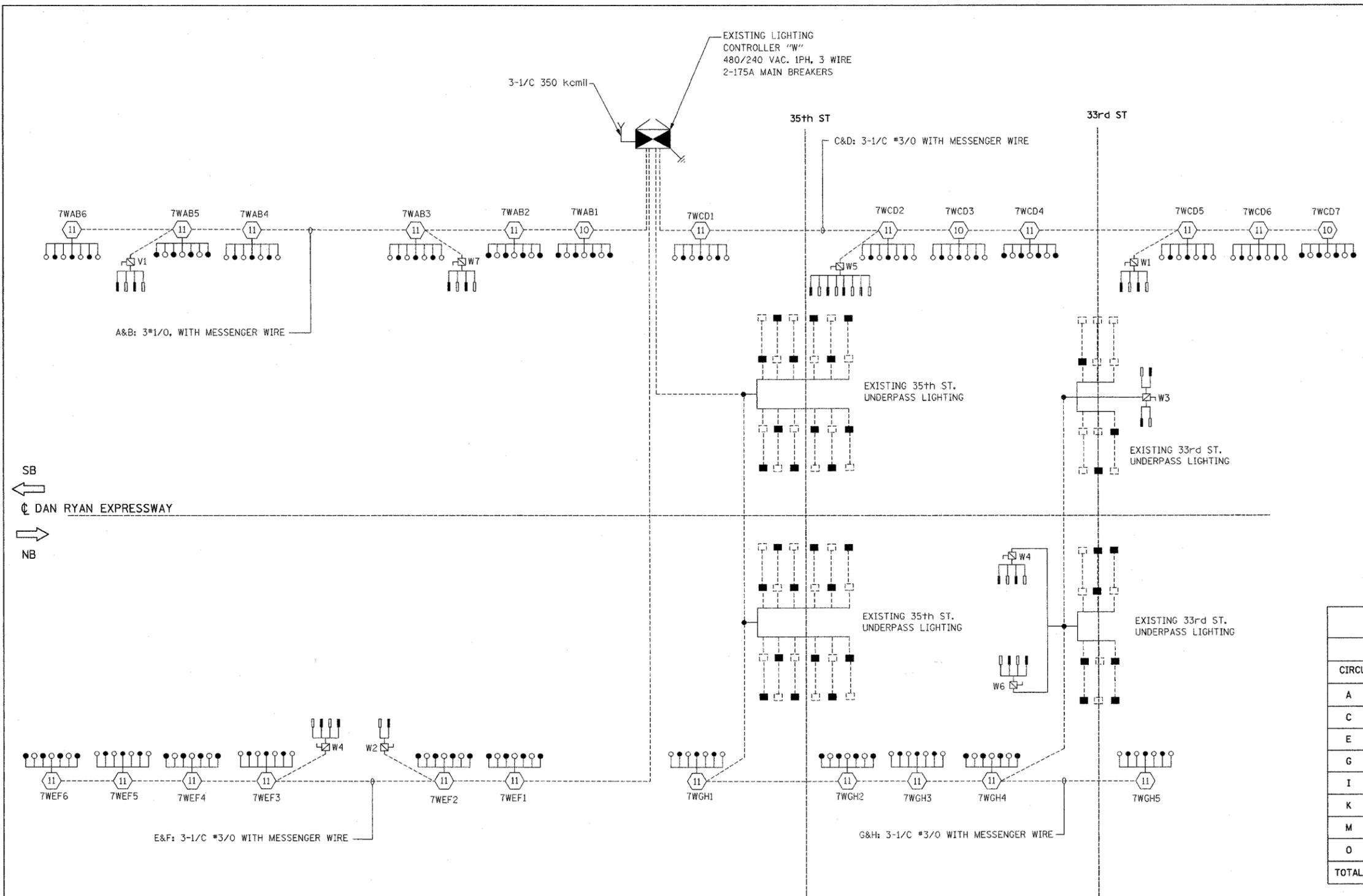
62583



LEGEND:

- HIGH MAST LIGHT TOWER
- 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
- TVCD1 HIGH MAST TOWER DESIGNATION
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- AERIAL CABLE, 3*3/0 WITH MESSENGER CABLE UNLESS OTHERWISE INDICATED
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES. QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE- OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	45.20	9080	B	45.20	9080
C	69.75	13715	D	57.65	11385
E	42.40	8510	F	46.40	9310
G	45.15	8815	H	43.85	8525
I	SPARE	SPARE	J	SPARE	SPARE
K	SPARE	SPARE	L	SPARE	SPARE
M	SPARE	SPARE	N	SPARE	SPARE
O	SPARE	SPARE	P	SPARE	SPARE
TOTAL	202.50A	40,120	TOTAL	193.10A	38,300



SB
←
DAN RYAN EXPRESSWAY
→
NB

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "W"
PROPOSED IMPROVEMENTS 2005**

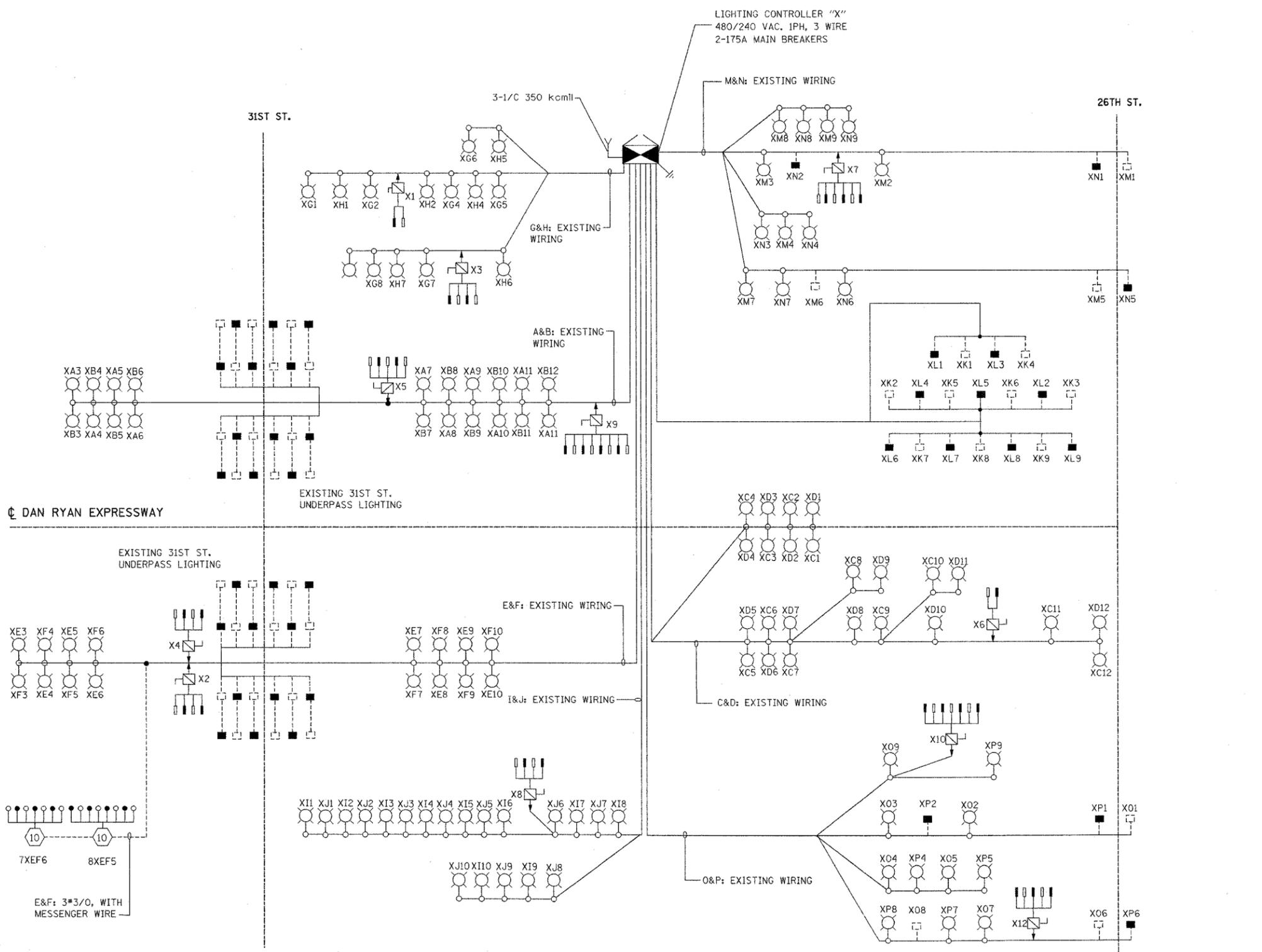
SCALE: NONE
DATE: OCTOBER 29, 2004

DRAWN BY: BL
CHECKED BY: SM

SL05-12

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	316
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



- LEGEND:**
- HIGH MAST LIGHT TOWER
 - 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
 - 7VCD1 HIGH MAST TOWER DESIGNATION
 - LIGHTING CONTROLLER
 - GROUND FIELD
 - ELECTRIC UTILITY SERVICE
 - UNIT DUCT, 3-1/2 #2 WITH 1/2 #4 GROUND, 1/4"
 - LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
 - 3 POLE SAFETY SWITCH
 - UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE.
 - CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRE.
 - AERIAL CABLE, 3#3/0 WITH MESSENGER CABLE UNLESS OTHERWISE INDICATED

LOAD TABLE LIGHTING CONTROLLER "X"					
CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	
A	24.80	4950	B	24.00	4780
C	18.80	3890	D	18.80	3890
E	35.40	7020	F	33.40	6620
G	12.90	2680	H	12.90	2680
I	16.60	3440	J	16.60	3440
K	3.15	495	L	3.15	495
M	12.45	2535	N	12.45	2535
O	14.05	2875	P	14.15	2905
TOTAL	138.15A	27,885	TOTAL	135.45A	27,345

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

**SINGLE LINE DIAGRAM
 LIGHTING CONTROLLER "X"
 PROPOSED IMPROVEMENTS 2005**

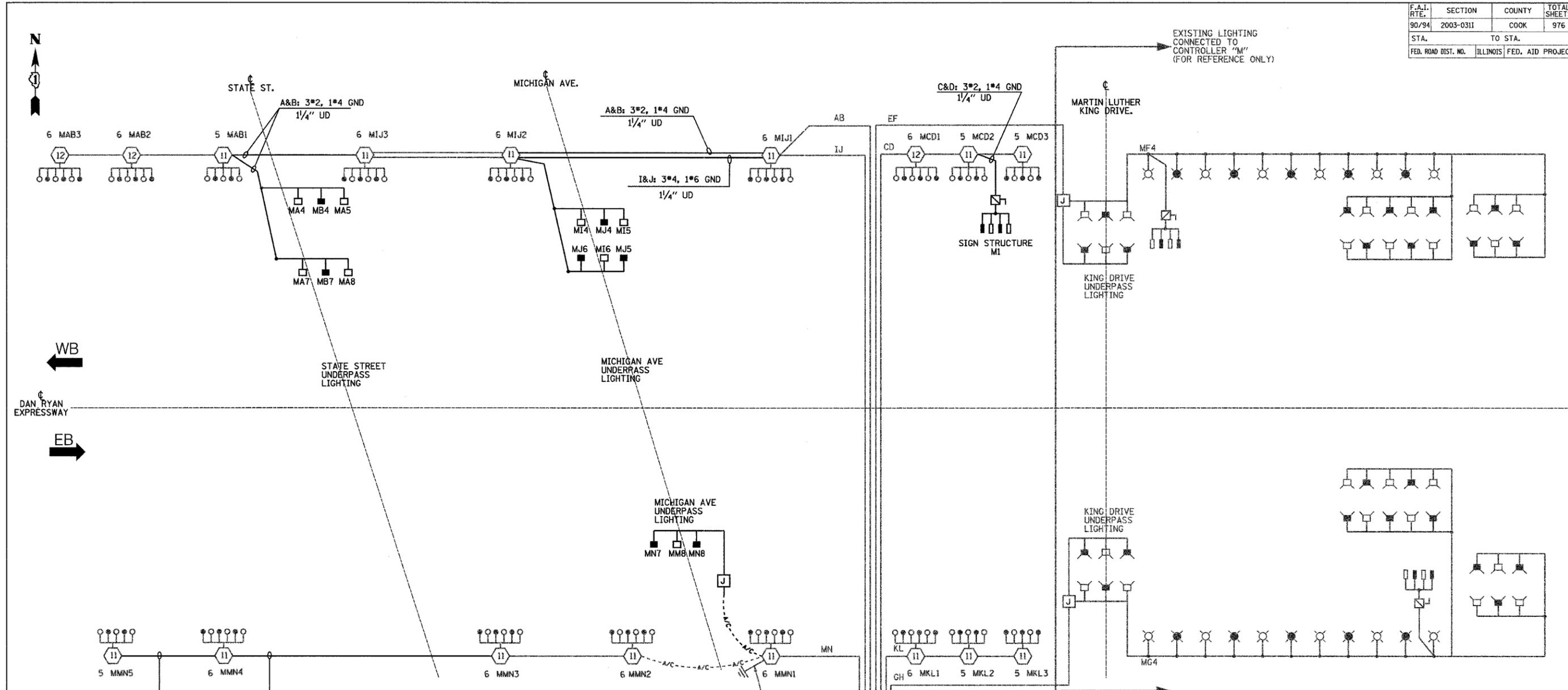
SCALE: NONE
 DATE: OCTOBER 29, 2004

DRAWN BY: BL
 CHECKED BY: SM

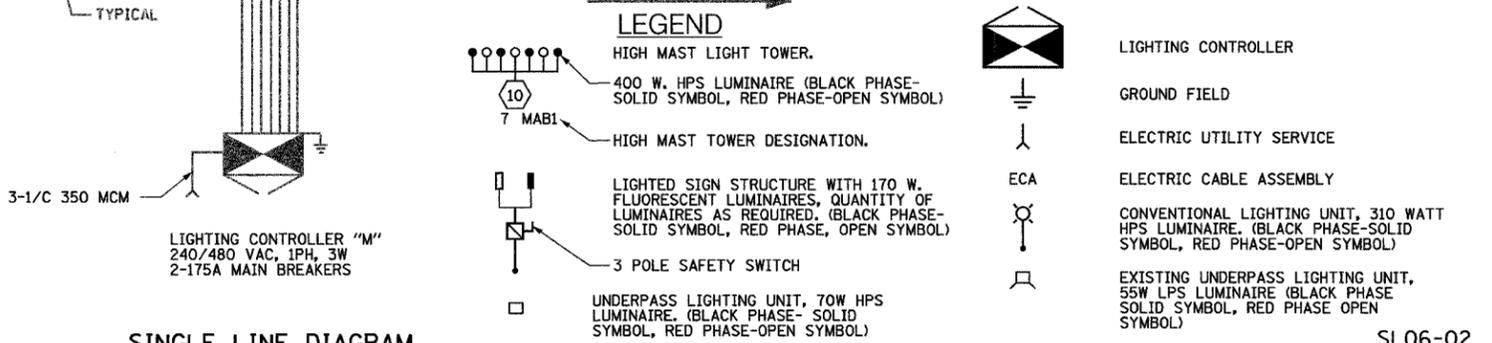
KAM ENGINEERING, INC.
 CONSULTING ENGINEERS
 707A Davils Road, Suite 205
 Elgin, Illinois 60123-1369

SL05-13

11/26/04



CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	19.6	4,704	B	16.8	4,224
C	18.6	4,464	D	18.6	4,464
E	16.2	3,888	F	18.2	4,368
G	16.2	3,888	H	18.2	4,368
I	19.2	4,608	J	19.2	4,608
K	16.0	3,840	L	16.0	3,840
M	30.4	7,296	N	28.8	6,912
O			P		
TOTAL	136.2	32,688	TOTAL	135.8	32,592



**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "M"**

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "M"
PROPOSED IMPROVEMENTS 2006**

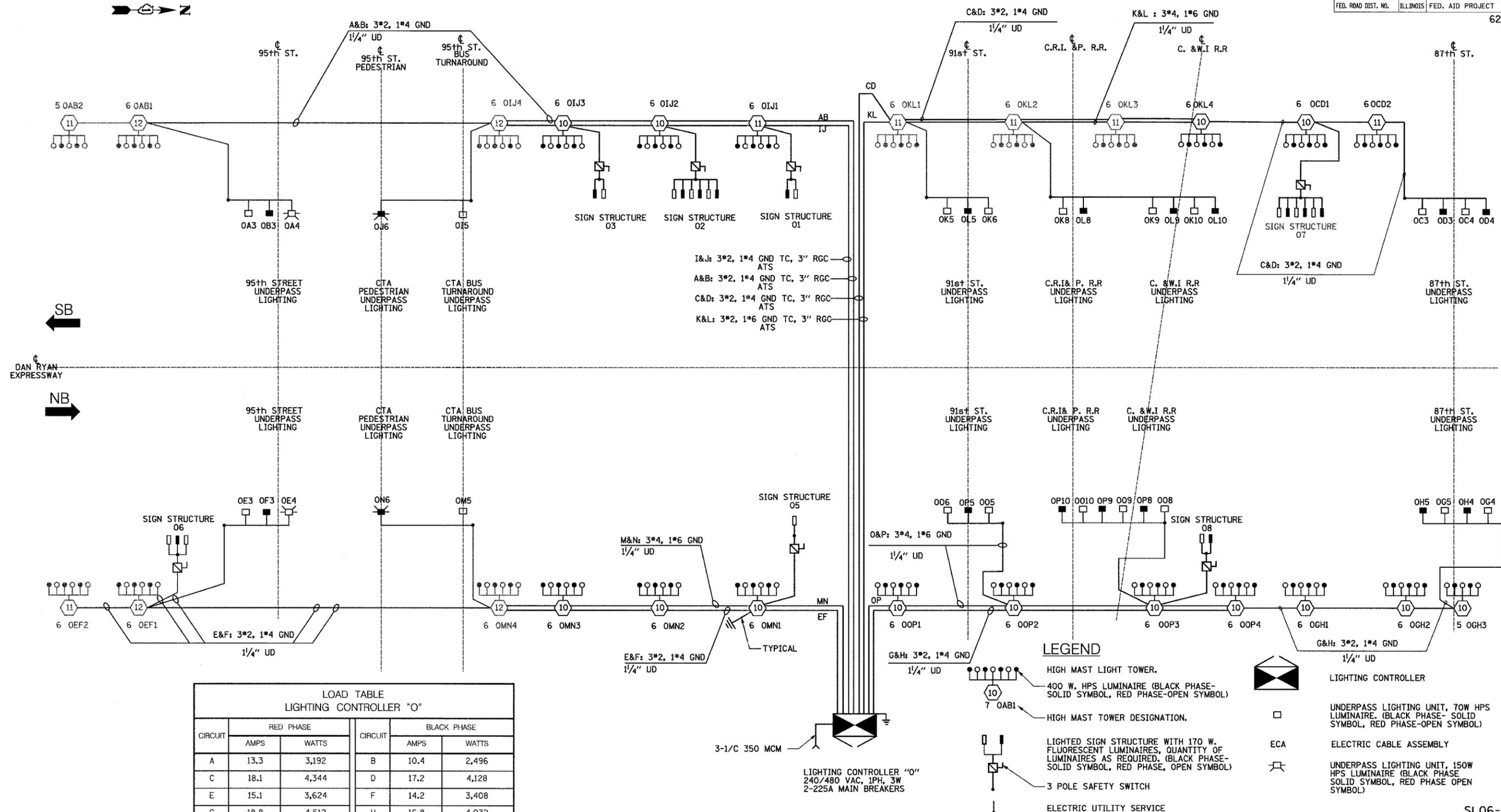
SCALE: NOT TO SCALE
DATE: OCTOBER 29, 2004

DRAWN BY: YJ
CHECKED BY: TM

SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

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CIRCUIT	RED PHASE		BLACK PHASE	
	AMPS	WATTS	CIRCUIT	WATTS
A	13.3	3,192	B	2,496
C	18.1	4,344	D	4,128
E	15.1	3,624	F	3,408
G	18.8	4,512	H	4,032
I	30.5	7,320	J	7,440
K	26.0	6,240	L	6,144
M	26.1	6,264	N	6,384
O	27.7	6,648	P	6,576
TOTAL	175.6	42,144	TOTAL	40,608

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "O"**

- NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS

LEGEND

- HIGH MAST LIGHT TOWER.
- LIGHTING CONTROLLER
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- ECA
- UNDERPASS LIGHTING UNIT, 150W HPS LUMINAIRE (BLACK PHASE SOLID SYMBOL, RED PHASE OPEN SYMBOL)
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- ELECTRIC UTILITY SERVICE
- GROUND ROD

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "O"
PROPOSED IMPROVEMENTS 2006**

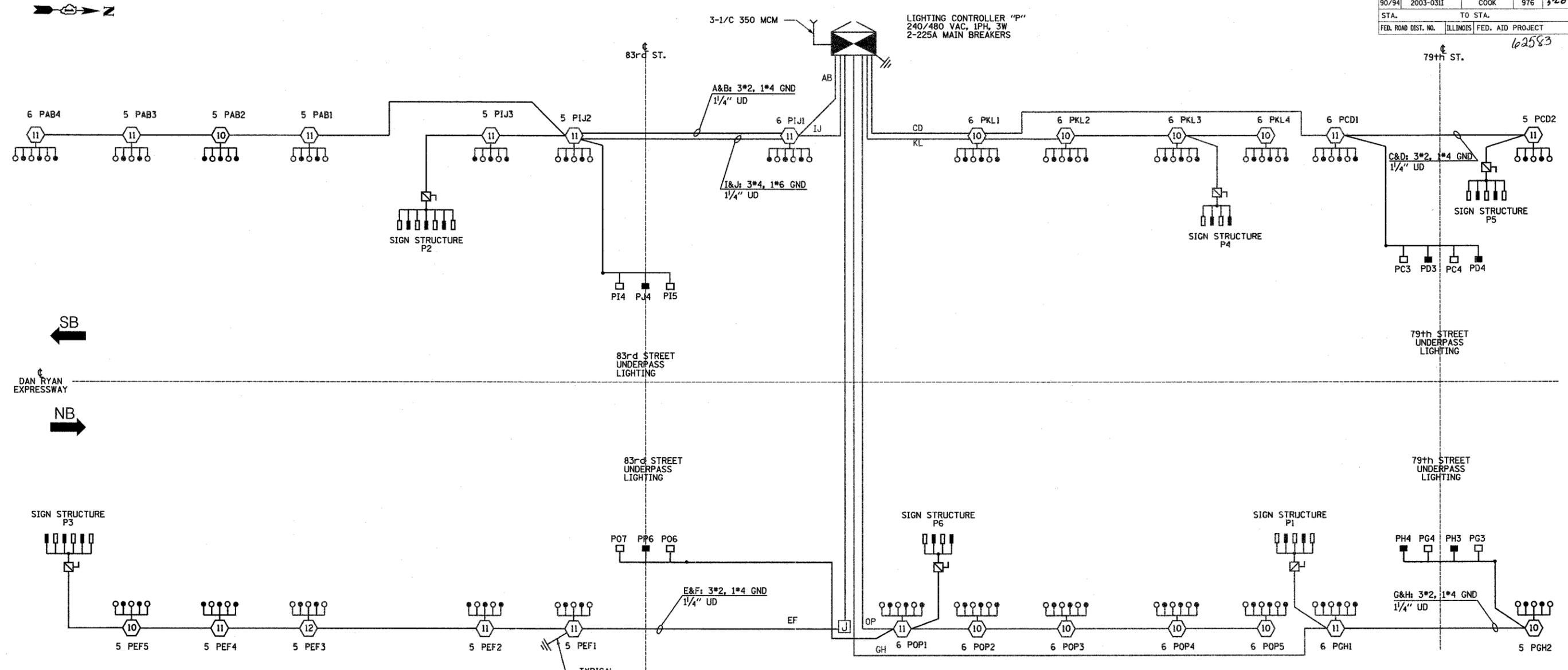
SCALE: NOT TO SCALE
DATE: OCTOBER 29, 2004

DRAWN BY: YJ
CHECKED BY: TM

SINGH 300 W. ADAMS ST.
SINGH & ASSOCIATES, INC. CHICAGO, IL 60606
CONSULTING ENGINEERS TEL: (312) 629-0240
FAX: (312) 629-8449

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-03II	COOK	976	320
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	22.0	5,280	B	20.0	4,800
C	15.4	3,696	D	12.6	3,024
E	28.6	6,864	F	26.6	6,384
G	12.8	3,072	H	10.8	2,592
I	20.3	4,872	J	19.0	4,560
K	25.8	6,192	L	25.8	6,192
M			N		
O	31.8	7,632	P	31.8	7,632
TOTAL	156.7	37,608	TOTAL	146.6	35,184

- LEGEND**
- HIGH MAST LIGHT TOWER.
 - 400 W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - HIGH MAST TOWER DESIGNATION.
 - LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
 - 3 POLE SAFETY SWITCH
 - UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - LIGHTING CONTROLLER
 - GROUND FIELD
 - ELECTRIC UTILITY SERVICE

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

SINGH 300 W. ADAMS ST.
SINGH & ASSOCIATES, INC. CHICAGO, IL 60606
CONSULTING ENGINEERS TEL: (312) 629-0240
FAX: (312) 629-8449

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"
PROPOSED IMPROVEMENTS 2006**

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

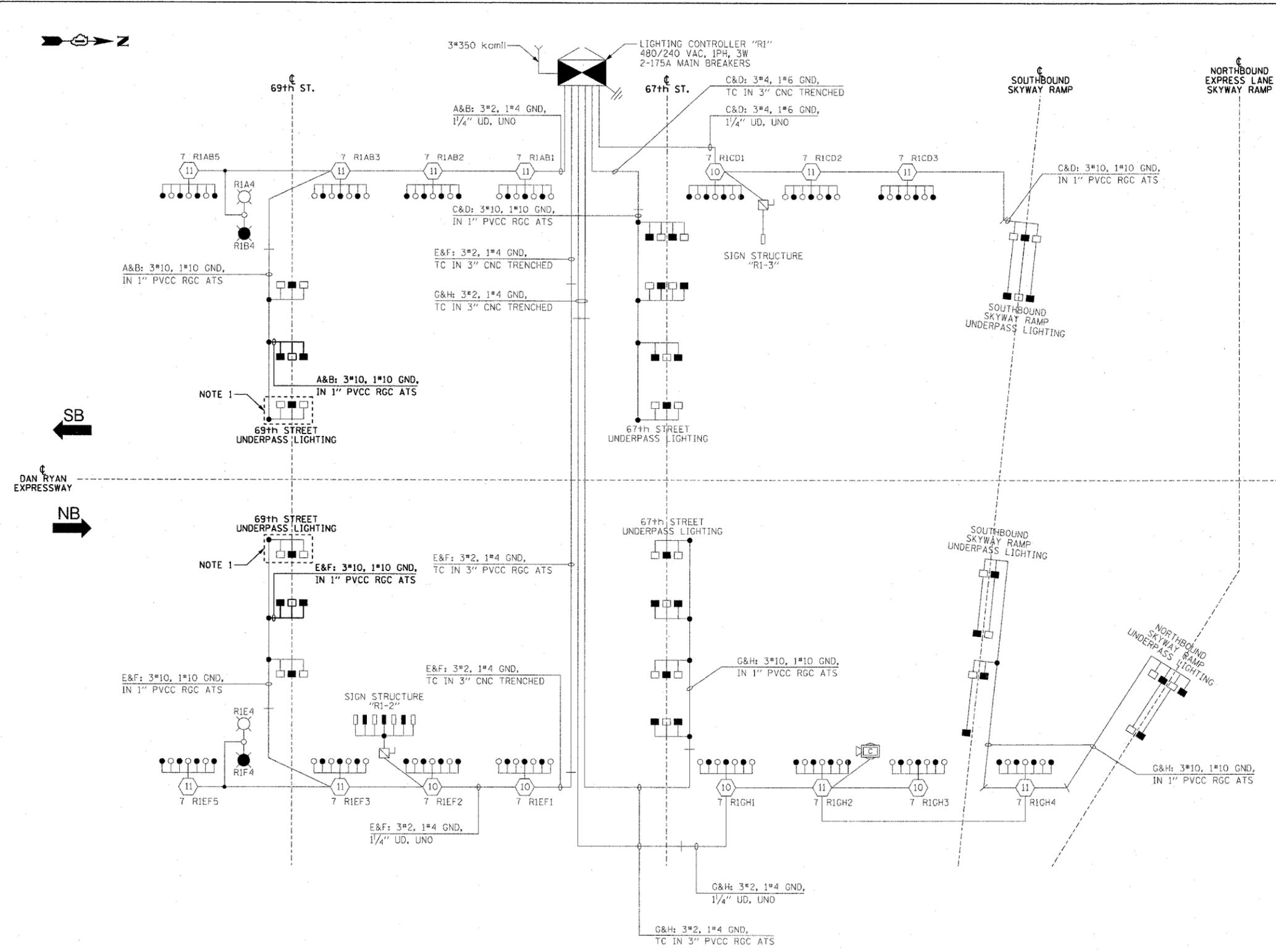
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	222
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE, UNLESS NOTED OTHERWISE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- RIA4 LUMINAIRE DESIGNATION
- CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRES. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- CLOSED CIRCUIT TELEVISION CAMERA



LOAD TABLE
LIGHTING CONTROLLER "R1"

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	30.4	7,296	B	30.1	7,224
C	24.0	5,760	D	25.1	6,024
E	33.8	8,112	F	32.6	7,824
G	31.7	7,608	H	32.0	7,680
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	119.9	28,776	TOTAL	119.8	28,752

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "R1"
NOT TO SCALE

NOTES:

1. EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRES. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
2. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

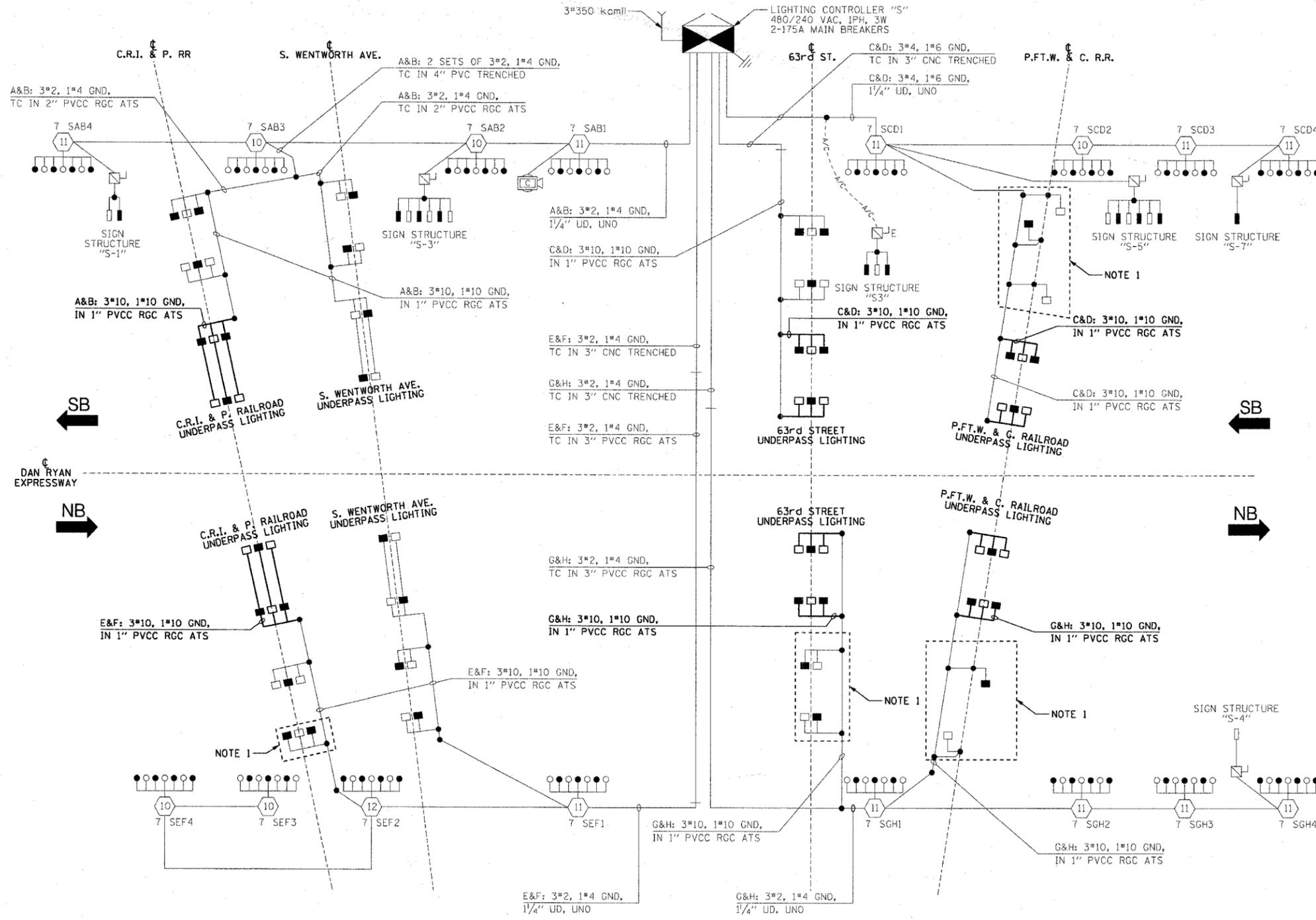
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "R1"
PROPOSED IMPROVEMENTS 2006

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	323
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- EXISTING LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE, UNLESS NOTED OTHERWISE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA
- EXISTING AERIAL CABLE

LOAD TABLE
LIGHTING CONTROLLER "S"

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	34.3	8,232	B	34.3	8,232
C	34.6	8,304	D	35.9	8,616
E	30.9	7,416	F	30.8	7,392
G	31.2	7,488	H	30.4	7,296
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	131.0	31,440	TOTAL	131.4	31,536

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"
NOT TO SCALE

- NOTES:**
- EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"
PROPOSED IMPROVEMENTS 2006

SCALE: NOT TO SCALE DRAWN BY: CUM
DATE: October 29, 2004 CHECKED BY: WDS



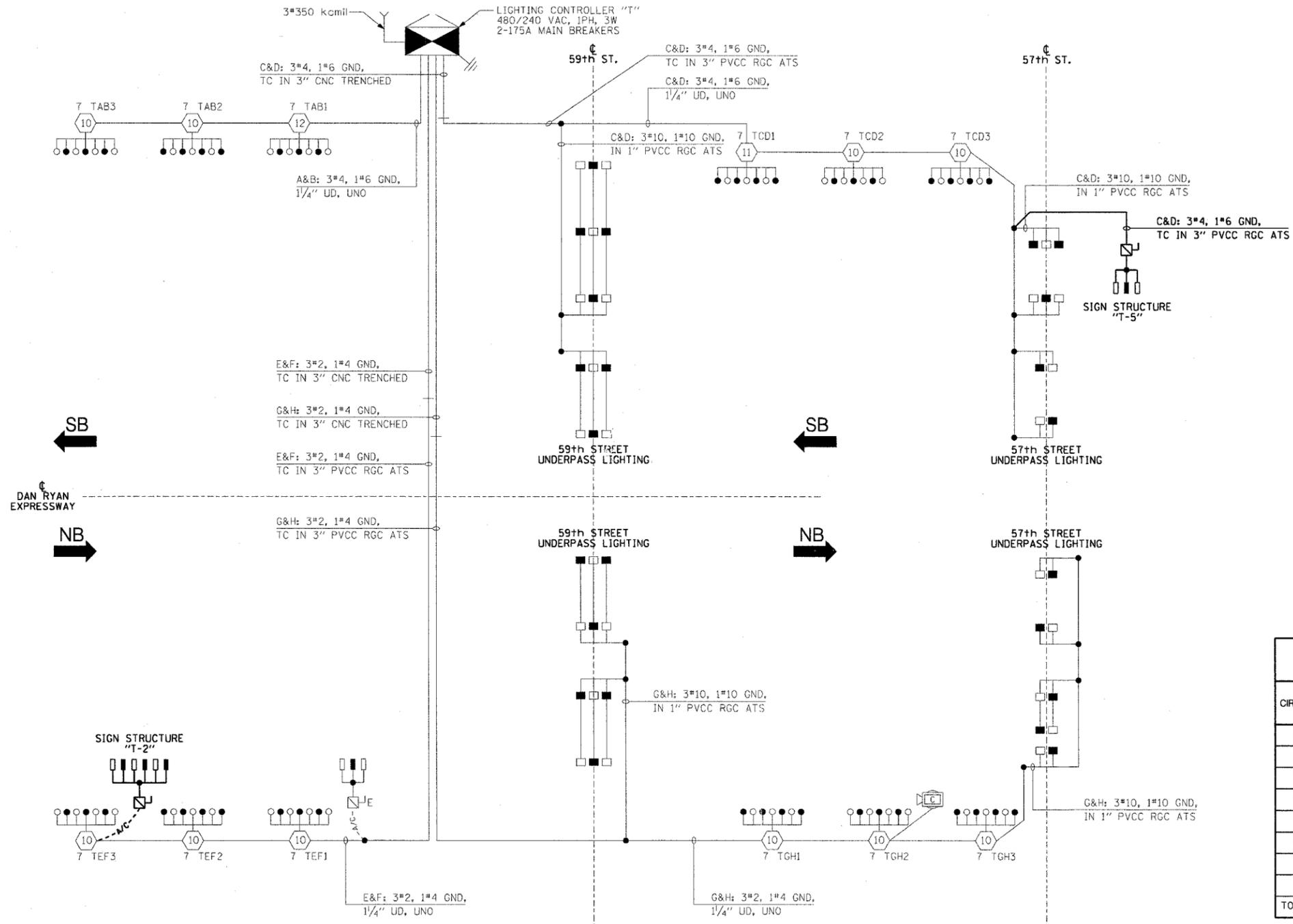
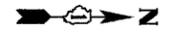
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	227
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 7 UABI
- HIGH MAST TOWER DESIGNATION.
- EXISTING LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE- OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA
- TEMPORARY AERIAL CABLE 3*2 WITH MESSENGER
- EXISTING AERIAL CABLE



CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	21.3	5,112	B	19.4	4,656
C	26.0	6,240	D	26.7	6,408
E	25.5	6,120	F	22.8	5,472
G	23.6	5,664	H	25.5	6,120
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	96.4	23,136	TOTAL	94.4	22,656

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"**
NOT TO SCALE

NOTES:

- UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"**
PROPOSED IMPROVEMENTS 2006

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

62583

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE, UNLESS NOTED OTHERWISE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA

**LOAD TABLE
LIGHTING CONTROLLER "T1"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	19.4	4,656	B	21.3	5,112
C	31.7	7,608	D	30.8	7,392
E	21.9	5,256	F	24.7	5,928
G	10.6	2,544	H	8.7	2,088
I	15.9	3,816	J	15.9	3,816
K	27.1	6,504	L	27.1	6,504
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	126.6	30,384	TOTAL	128.5	30,840

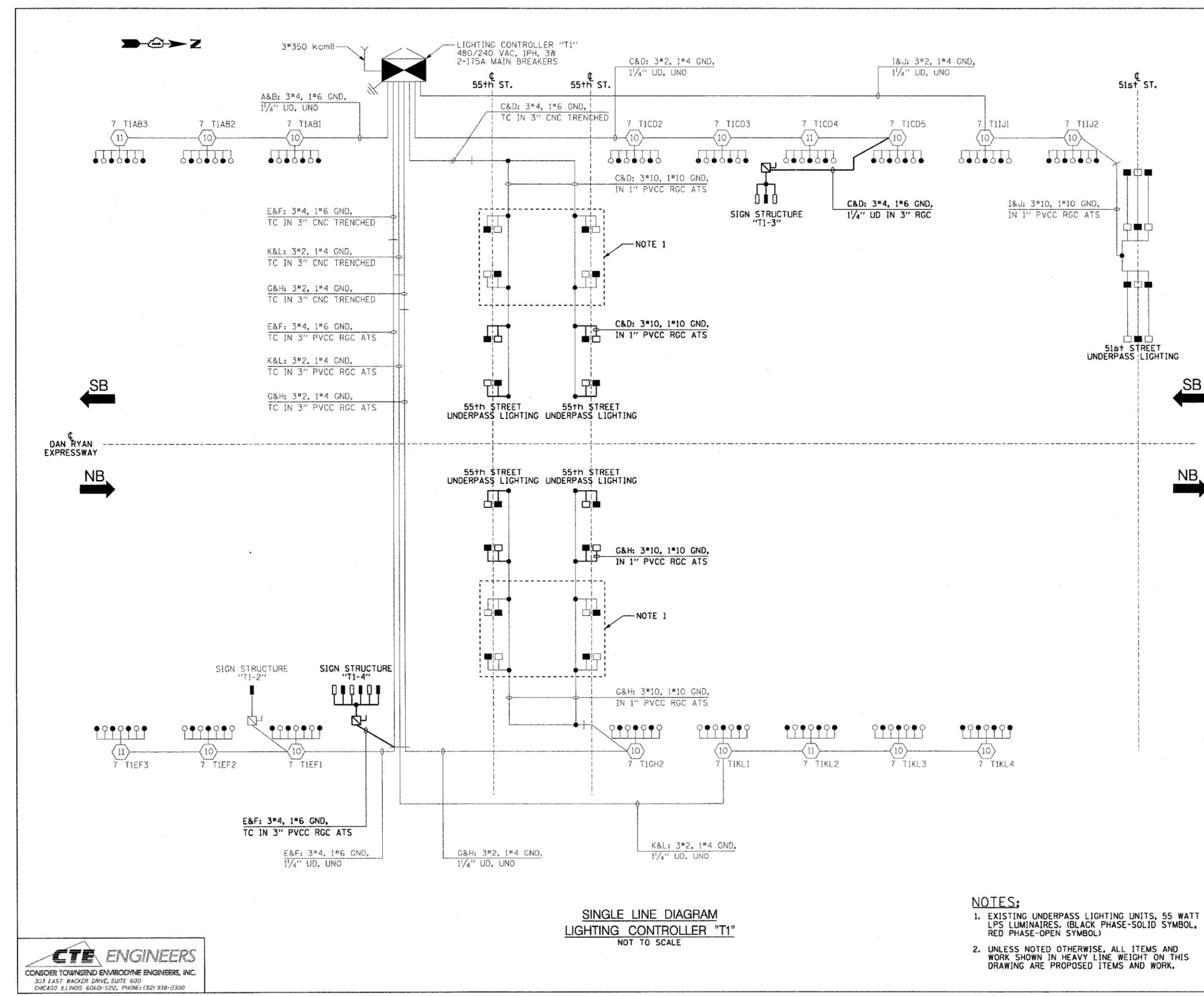
SL06-09

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T1"
PROPOSED IMPROVEMENTS 2006**

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS



- NOTES:**
- EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

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LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- EXISTING LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE, UNLESS NOTED OTHERWISE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA
- TEMPORARY AERIAL CABLE 3*2 WITH MESSENGER
- EXISTING AERIAL CABLE
- TEMPORARY LIGHTING UNIT, 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	13.6	3,264	B	13.6	3,264
C	16.4	3,936	D	16.4	3,936
E	28.8	6,912	F	28.0	6,720
G	10.6	2,544	H	12.6	3,024
I	29.7	7,128	J	31.3	7,512
K	13.6	3,264	L	13.6	3,264
M	12.6	3,024	N	10.7	2,568
O			P		
TOTAL	125.3	30,072	TOTAL	126.2	30,288

SL06-10

NOTES:

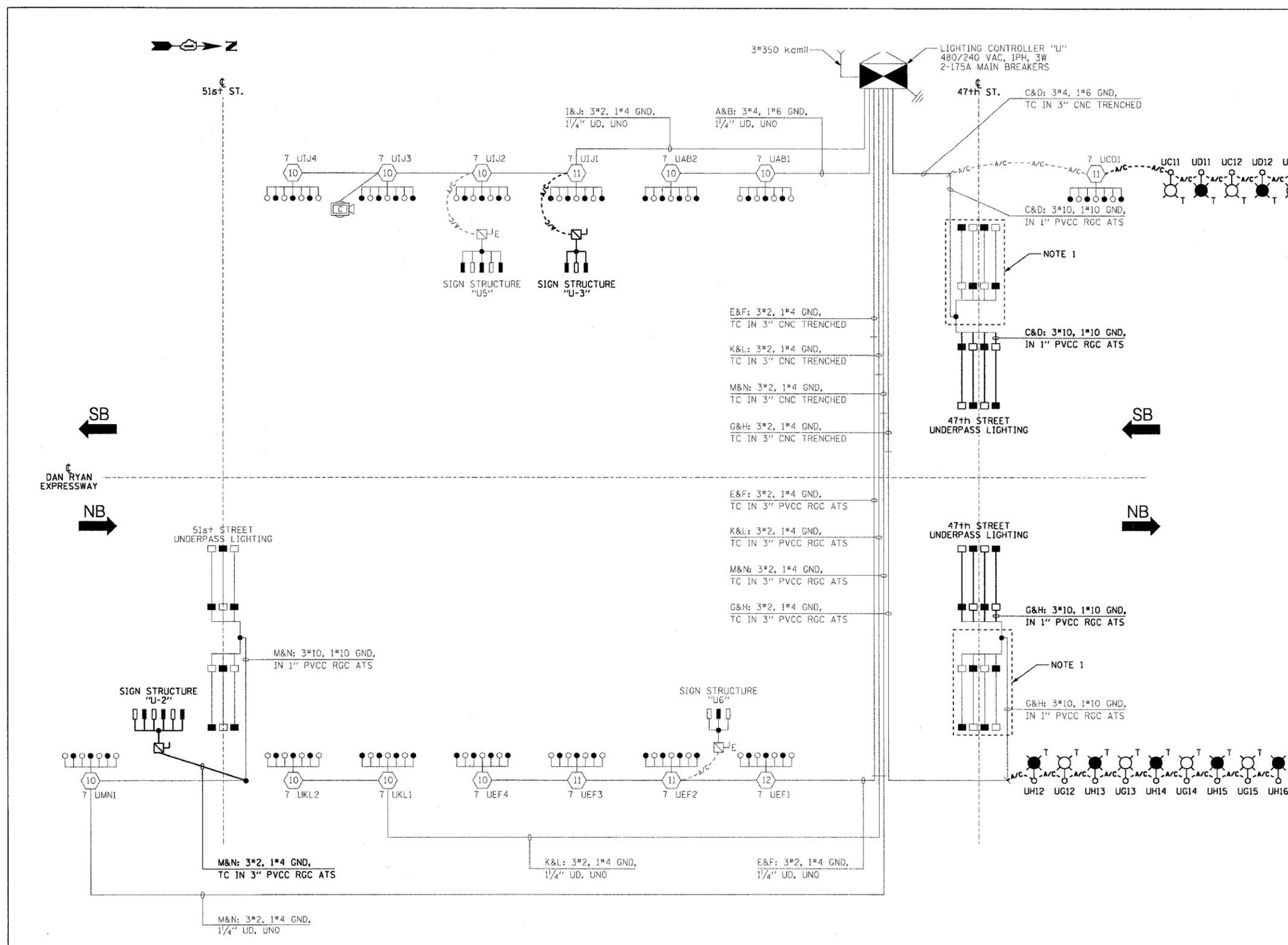
1. EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
2. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS	
NAME	DATE

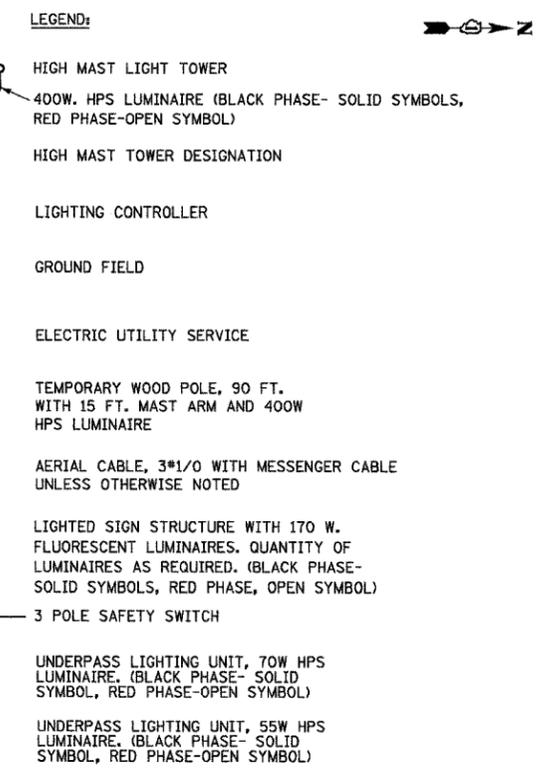
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"
PROPOSED IMPROVEMENTS 2006**

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

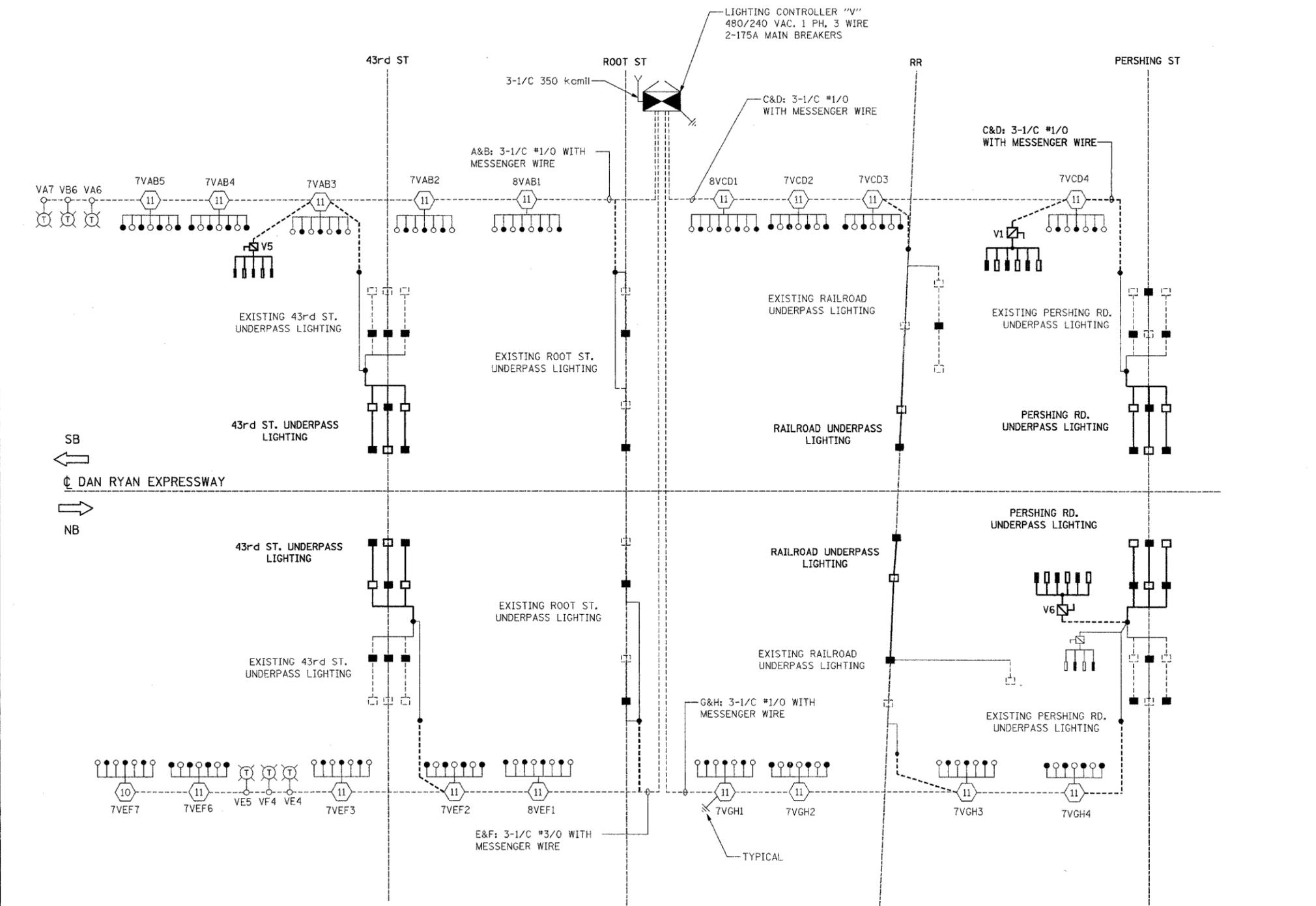


**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"
NOT TO SCALE**



**LOAD TABLE
LIGHTING CONTROLLER "V"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	44.55	8825	B	43.35	8595
C	34.10	6720	D	35.40	7010
E	42.95	8485	F	40.95	8085
G	35.35	7005	H	35.00	6950
I	SPARE	SPARE	J	SPARE	SPARE
K	SPARE	SPARE	L	SPARE	SPARE
M	SPARE	SPARE	N	SPARE	SPARE
O	SPARE	SPARE	P	SPARE	SPARE
TOTAL	156.95A	31,035	TOTAL	154.70A	30,640



SL06-11

REVISIONS

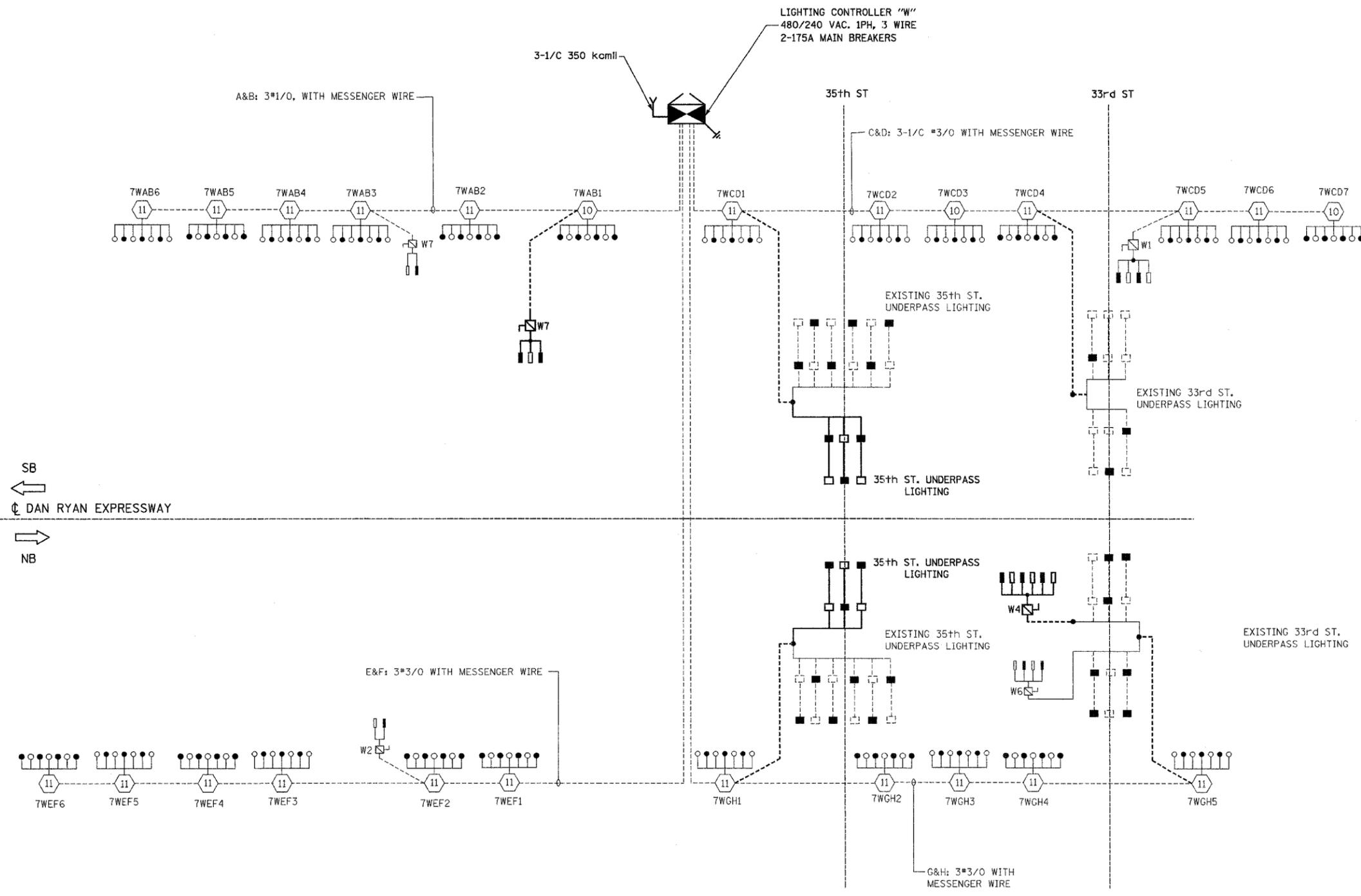
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

**SINGLE LINE DIAGRAM
 LIGHTING CONTROLLER "V"
 PROPOSED IMPROVEMENTS 2006**

SCALE: NONE DRAWN BY: BL
 DATE: OCTOBER 29, 2004 CHECKED BY: SM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	928
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



SB
←
DAN RYAN EXPRESSWAY
→
NB

- LEGEND:**
- HIGH MAST LIGHT TOWER
 - 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
 - 7VCD1 HIGH MAST TOWER DESIGNATION
 - LIGHTING CONTROLLER
 - GROUND FIELD
 - ELECTRIC UTILITY SERVICE
 - AERIAL CABLE, 3*3/0 WITH MESSENGER CABLE UNLESS OTHERWISE INDICATED
 - LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
 - 3 POLE SAFETY SWITCH
 - UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

**LOAD TABLE
LIGHTING CONTROLLER "W"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	43.60	8740	B	44.40	8910
C	68.05	13375	D	51.95	10245
E	40.80	8170	F	44.80	8970
G	45.05	8865	H	43.75	8575
I	SPARE	SPARE	J	SPARE	SPARE
K	SPARE	SPARE	L	SPARE	SPARE
M	SPARE	SPARE	N	SPARE	SPARE
O	SPARE	SPARE	P	SPARE	SPARE
TOTAL	197.50A	39,150	TOTAL	184.90A	36,700

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "W"
PROPOSED IMPROVEMENTS 2006**

SCALE: NONE DRAWN BY: BL
DATE: OCTOBER 29, 2004 CHECKED BY: SM

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

SL06-12

11/4/04 3:20 AM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	92-1
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583

LEGEND:

- HIGH MAST LIGHT TOWER
- 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
- 7VCD1 HIGH MAST TOWER DESIGNATION
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- UNIT DUCT, 3-1/C #2 WITH 1/C #4 GROUND, 1/4"
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE.
- CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRE.
- AERIAL CABLE, 3*3/0 WITH MESSENGER CABLE

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	WATTS	
A	17.90	3590	B	17.10	3420
C	18.80	3890	D	18.80	3890
E	29.30	5830	F	27.30	5430
G	12.90	2680	H	12.90	2680
I	16.60	3440	J	16.60	3440
K	3.15	495	L	3.15	495
M	12.45	2535	N	12.45	2535
O	14.05	2875	P	14.15	2905
TOTAL	125.15A	25,335	TOTAL	122.45A	24,795

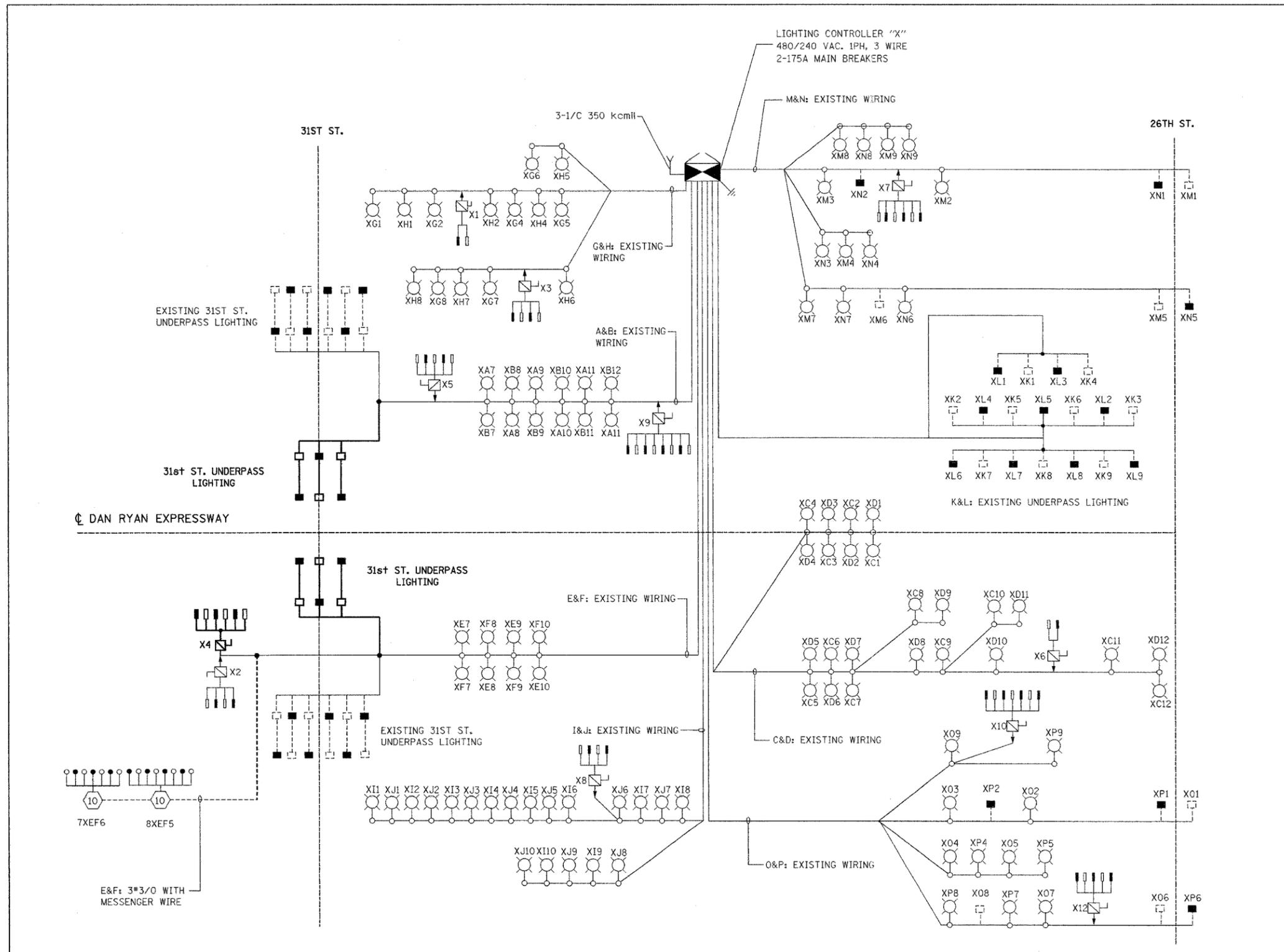
SL06-13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

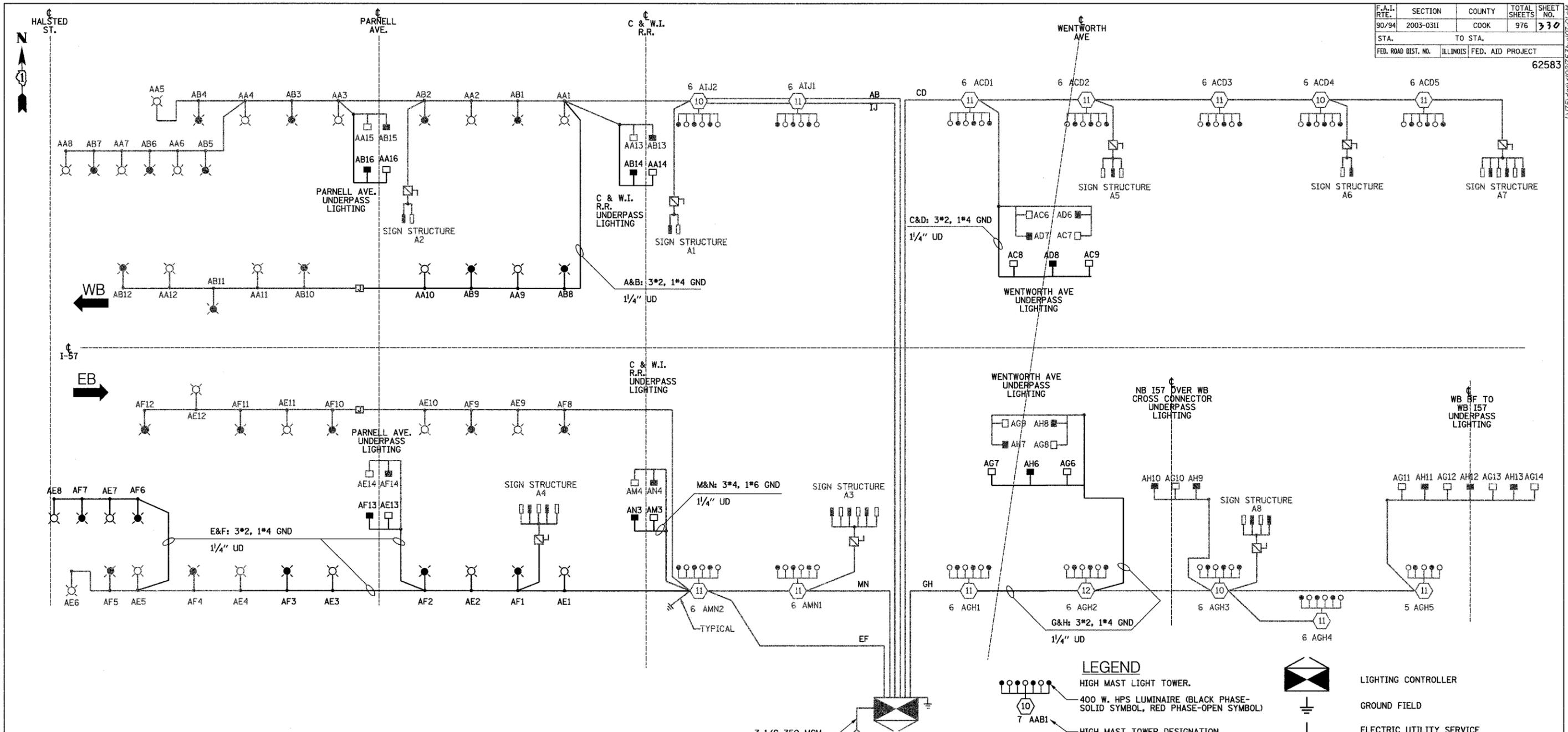
SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "X"
PROPOSED IMPROVEMENTS 2006

SCALE: NONE
DATE: OCTOBER 29, 2004
DRAWN BY: BL
CHECKED BY: SM



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

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**LOAD TABLE
LIGHTING CONTROLLER "A"**

CIRCUIT	RED PHASE		BLACK PHASE	
	AMPS	WATTS	CIRCUIT	WATTS
A	23.8	5,712	B	5,712
C	41.3	9,912	D	9,384
E	23.8	5,712	F	5,712
G	35.4	8,496	H	7,920
I	13.8	3,312	J	3,312
K			L	
M	16.3	3,912	N	3,696
O			P	
TOTAL	154.4	37,056	TOTAL	35,736

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "A"**

- NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- ELECTRIC CABLE ASSEMBLY
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
CONSULTING ENGINEERS FAX: (312) 629-8449

SL07-01

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

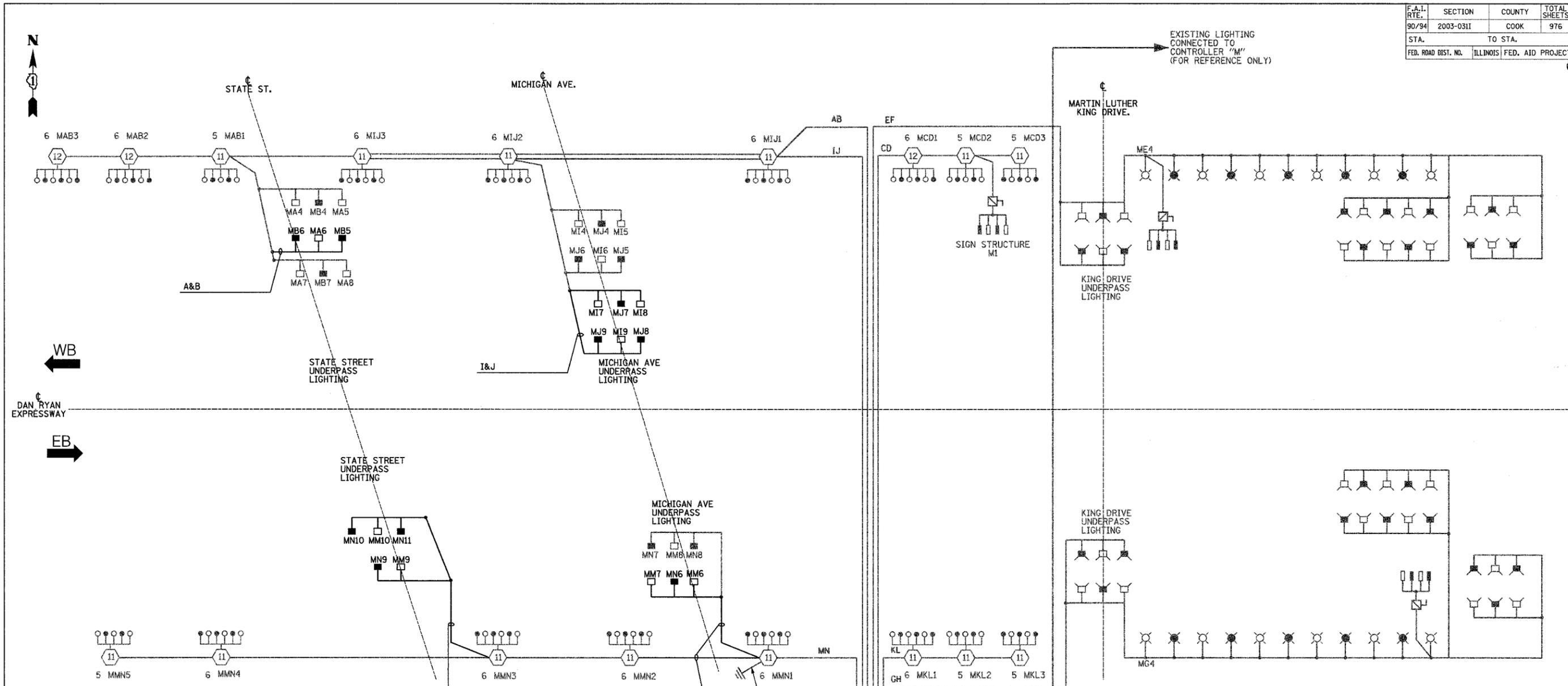
**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "A"
PROPOSED IMPROVEMENTS 2007**

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	331
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62583



LOAD TABLE
LIGHTING CONTROLLER "M"

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	20.0	4,800	B	17.6	4,224
C	18.6	4,464	D	18.6	4,464
E	16.2	3,888	F	18.2	4,368
G	16.2	3,888	H	18.2	4,368
I	20.4	4,896	J	20.4	4,896
K	16.0	3,840	L	16.0	3,840
M	32.0	7,680	N	30.4	7,296
O			P		
TOTAL	139.4	33,456	TOTAL	139.4	33,456

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "M"

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

LEGEND

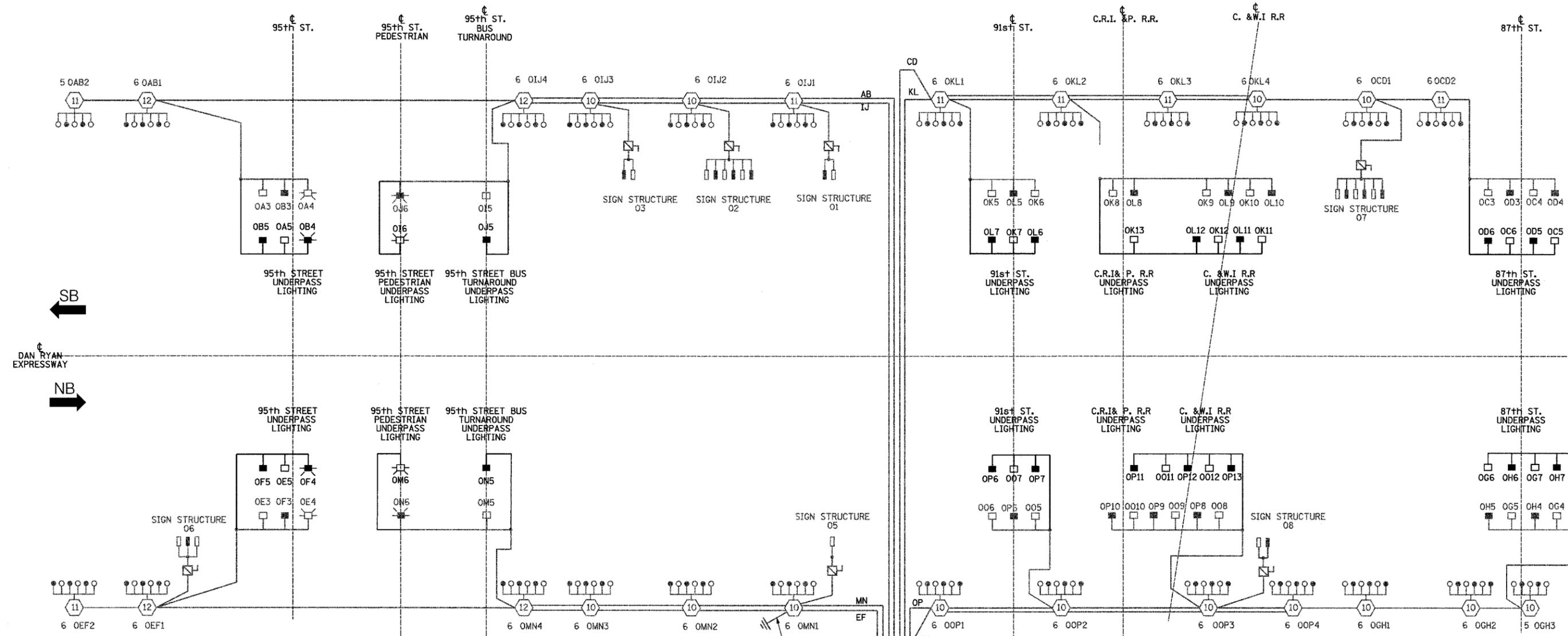
- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- ECA
- ELECTRIC CABLE ASSEMBLY
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- EXISTING UNDERPASS LIGHTING UNIT, 55W LPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		SINGLE LINE DIAGRAM LIGHTING CONTROLLER "M" PROPOSED IMPROVEMENTS 2007

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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CHICAGO, IL 60606
TEL: (312) 629-0240
SINGH & ASSOCIATES, INC. FAX: (312) 629-8449
CONSULTING ENGINEERS

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**LOAD TABLE
LIGHTING CONTROLLER "O"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	13.7	3,288	B	11.7	2,808
C	18.9	4,536	D	18.0	4,320
E	15.5	3,720	F	15.5	3,720
G	19.6	4,704	H	17.6	4,224
I	31.5	7,560	J	31.5	7,560
K	27.6	6,624	L	27.2	6,528
M	27.1	6,504	N	27.1	6,504
O	29.0	6,950	P	29.4	7,056
TOTAL	182.5	43,800	TOTAL	178.0	42,720

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- ELECTRIC UTILITY SERVICE
- GROUND ROD
- LIGHTING CONTROLLER
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- ECA ELECTRIC CABLE ASSEMBLY
- UNDERPASS LIGHTING UNIT, 150W HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE OPEN SYMBOL)

3-1/C 350 MCM
LIGHTING CONTROLLER "O"
240/480 VAC, 1PH, 3W
2-225A MAIN BREAKERS

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "O"**

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "O"
PROPOSED IMPROVEMENTS 2007**

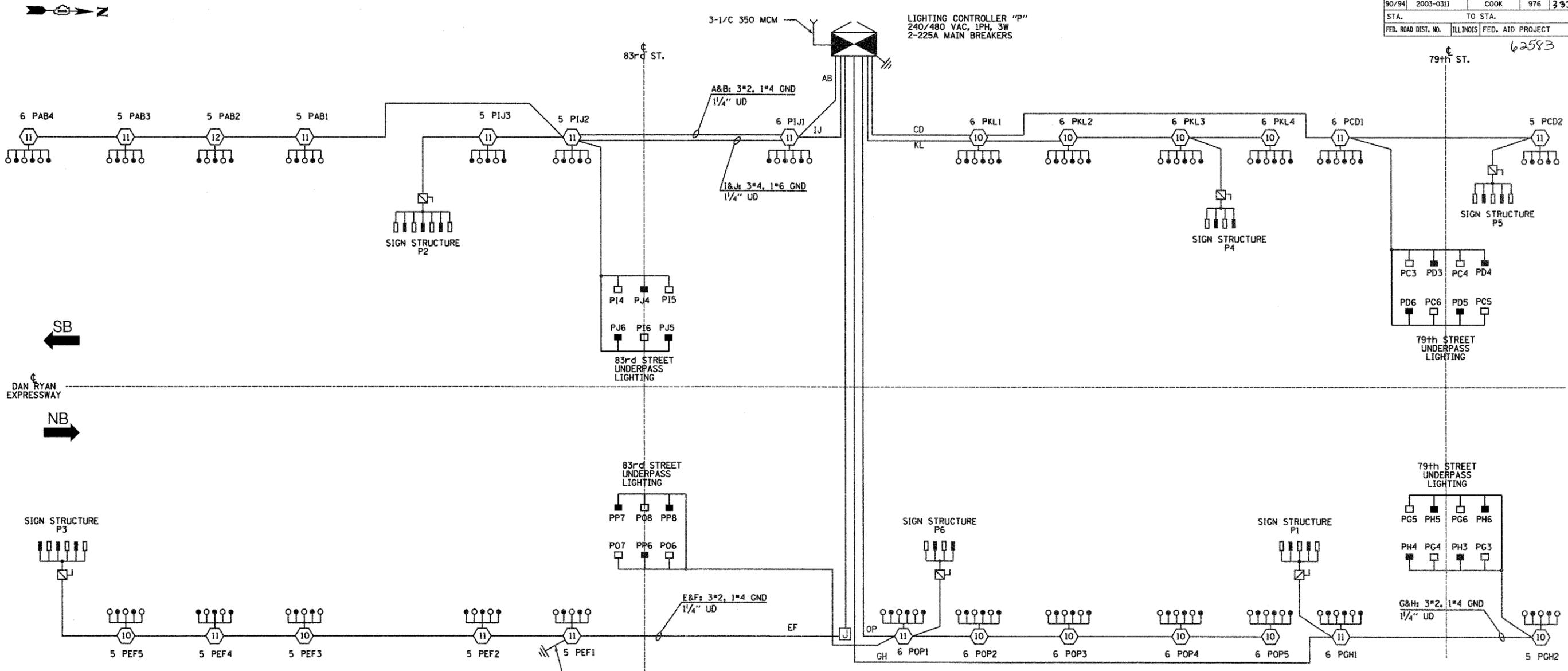
SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-03II	COOK	976	393
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	22.0	5,280	B	20.0	4,800
C	16.2	3,888	D	13.4	3,216
E	29.0	6,960	F	27.4	6,576
G	13.6	3,264	H	11.6	2,784
I	20.7	4,968	J	19.8	4,752
K	25.8	6,192	L	25.8	6,192
M			N		
O	34.3	8,232	P	33.9	8,136
TOTAL	161.6	38,784	TOTAL	151.9	36,456

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"**

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
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CONSULTING ENGINEERS FAX: (312) 629-8449

REVISIONS	
NAME	DATE

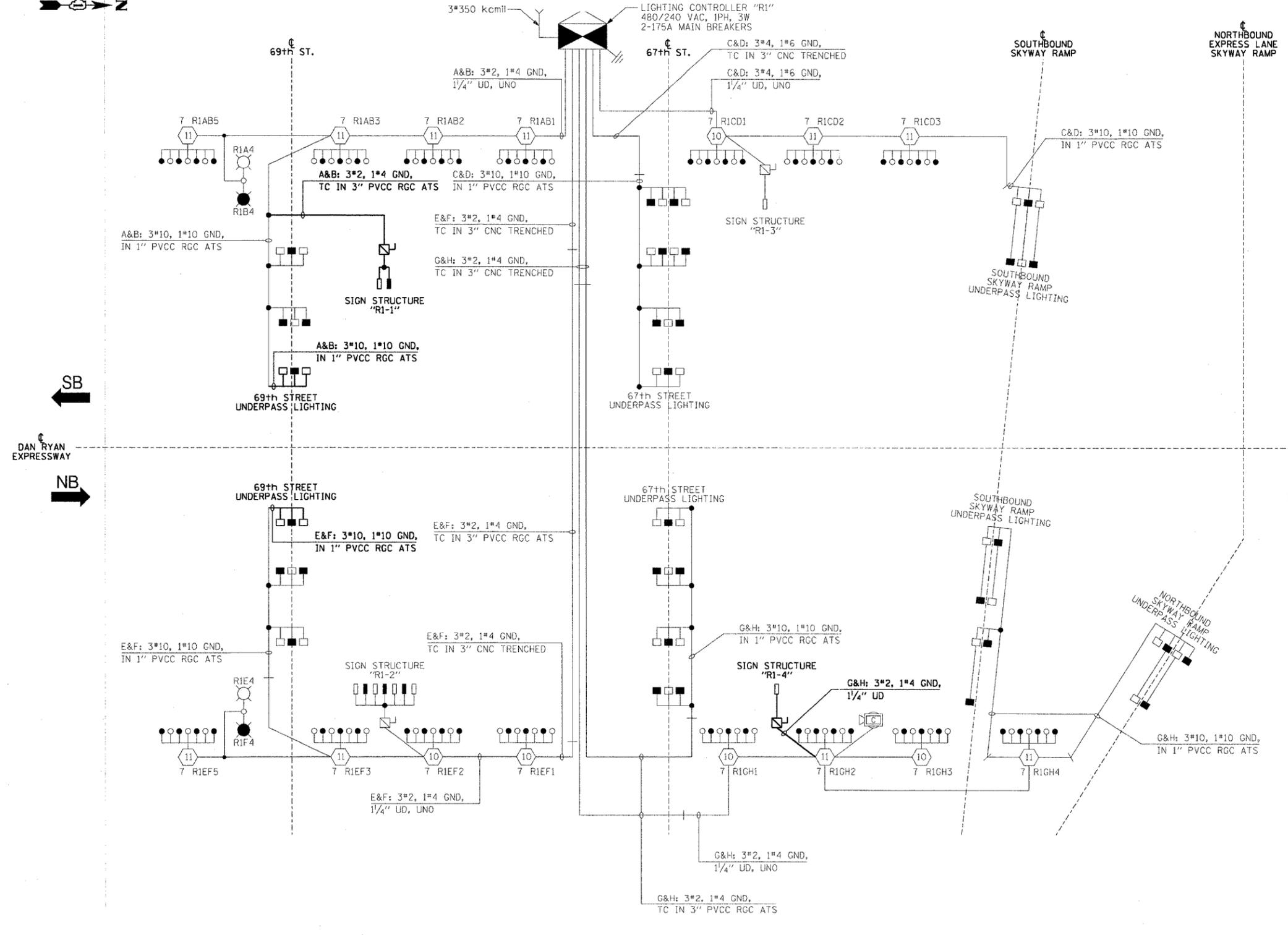
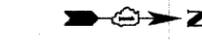
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"
PROPOSED IMPROVEMENTS 2007**

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	335
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		



62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- LUMINAIRE DESIGNATION
- CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- CLOSED CIRCUIT TELEVISION CAMERA

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	31.4	7,536	B	31.0	7,440
C	24.0	5,760	D	25.1	6,024
E	33.9	8,136	F	32.7	7,848
G	32.5	7,800	H	32.0	7,680
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	121.8	29,232	TOTAL	120.8	28,992

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "R1"**
NOT TO SCALE

NOTES:
1. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "R1"**
PROPOSED IMPROVEMENTS 2007

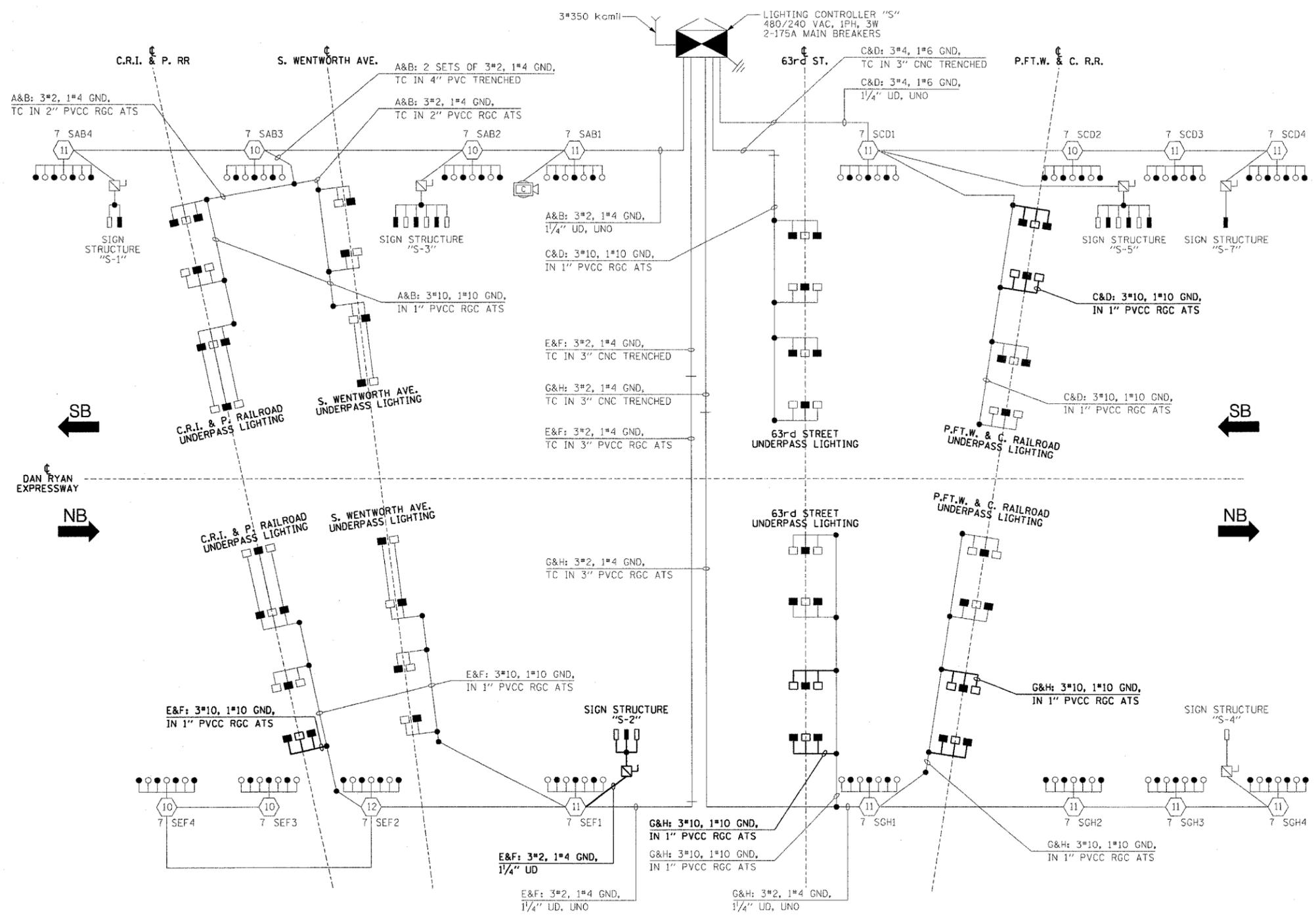
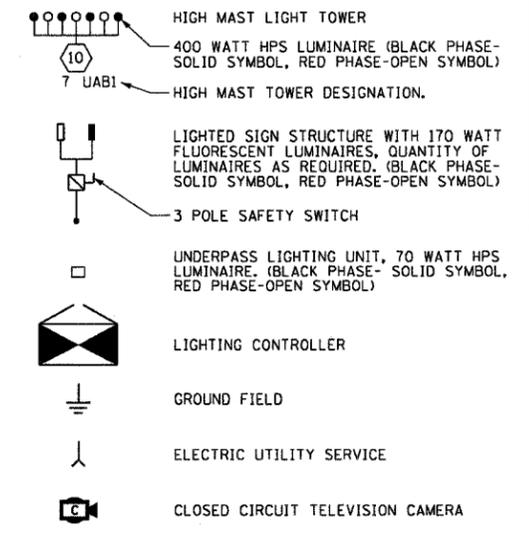
SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS



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62583

LEGEND



CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	34.3	8,232	B	34.3	8,232
C	34.2	8,208	D	35.0	8,400
E	32.6	7,824	F	31.8	7,632
G	32.5	7,800	H	31.7	7,608
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	133.6	32,064	TOTAL	132.8	31,872

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"**
NOT TO SCALE

NOTES:
1. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"**
PROPOSED IMPROVEMENTS 2007

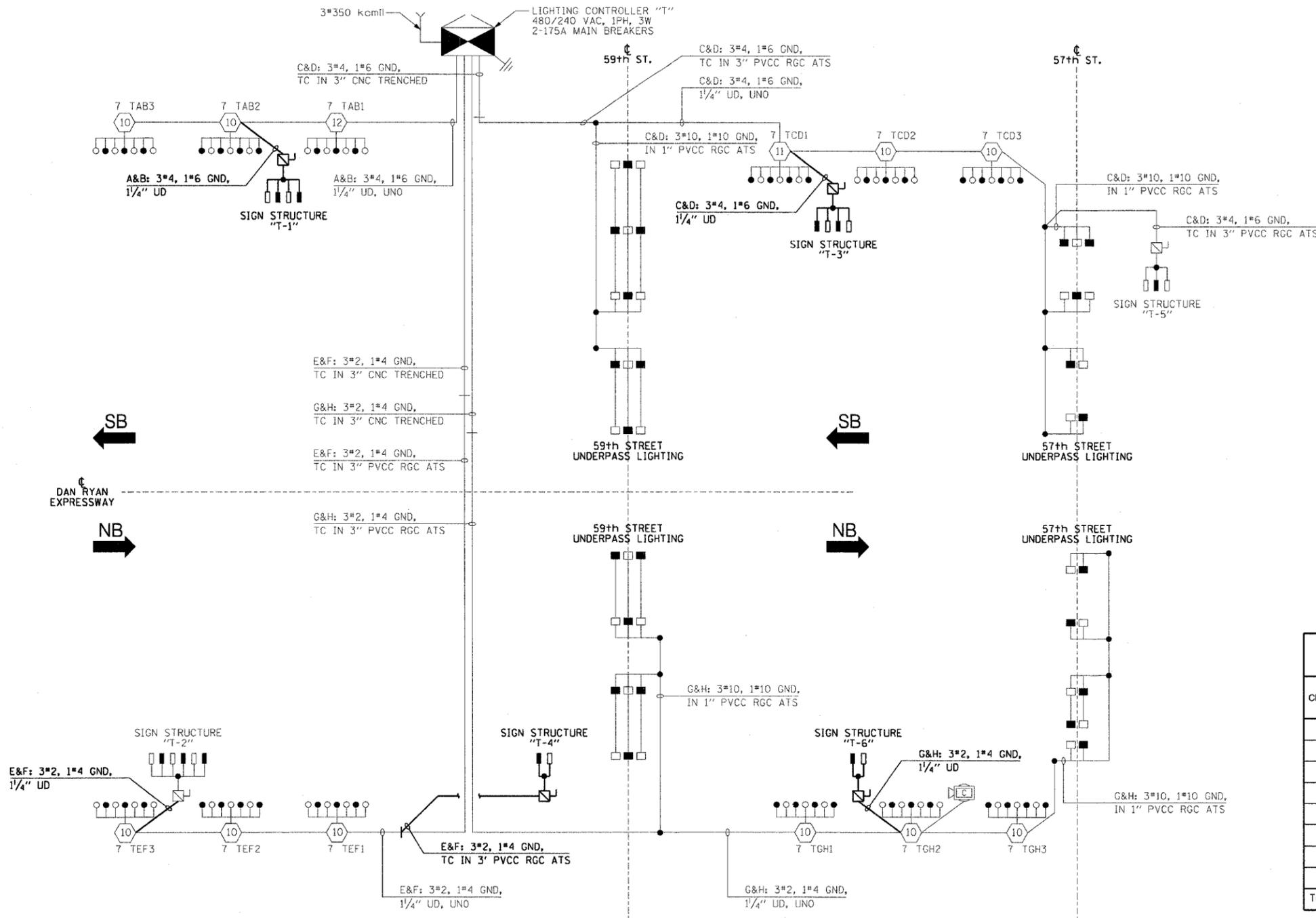
SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

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62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 7 UABI HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA



CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	23.0	5,520	B	21.1	5,064
C	27.7	6,648	D	28.4	6,816
E	24.7	5,928	F	22.8	5,472
G	24.4	5,856	H	26.3	6,312
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	99.8	23,952	TOTAL	98.6	23,664

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"**
NOT TO SCALE

NOTES:
1. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"
PROPOSED IMPROVEMENTS 2007**

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	334
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			

62583

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA

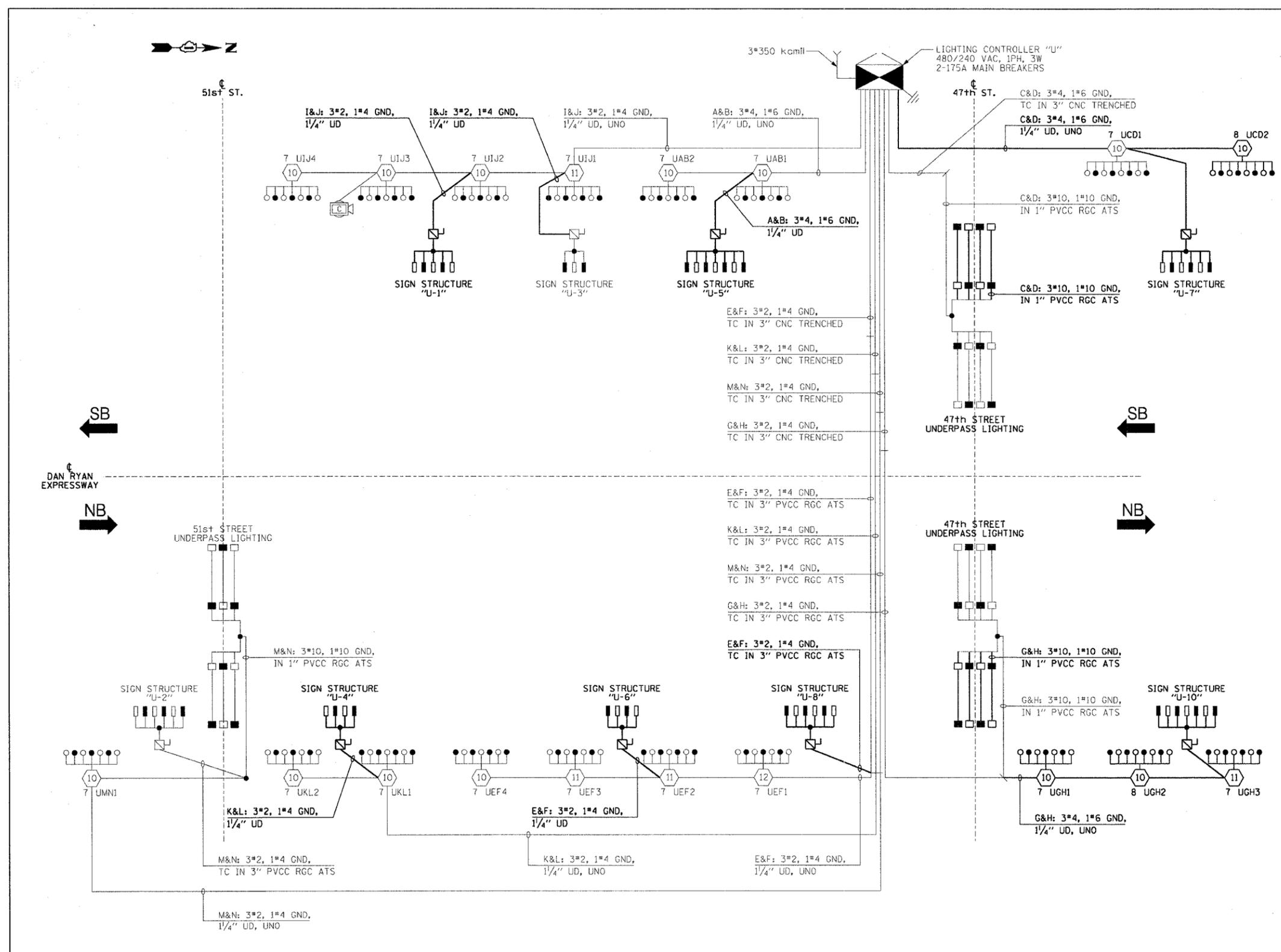
CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	16.1	3,864	B	17.0	4,080
C	19.2	4,608	D	21.1	5,064
E	31.3	7,512	F	31.3	7,512
G	26.9	6,456	H	27.7	6,648
I	30.5	7,320	J	30.5	7,320
K	15.3	3,672	L	15.3	3,672
M	12.6	3,024	N	10.7	2,568
O			P		
TOTAL	151.9	36,456	TOTAL	153.6	36,864

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"
PROPOSED IMPROVEMENTS 2007

SCALE: NOT TO SCALE DRAWN BY: CUM
DATE: October 29, 2004 CHECKED BY: WDS



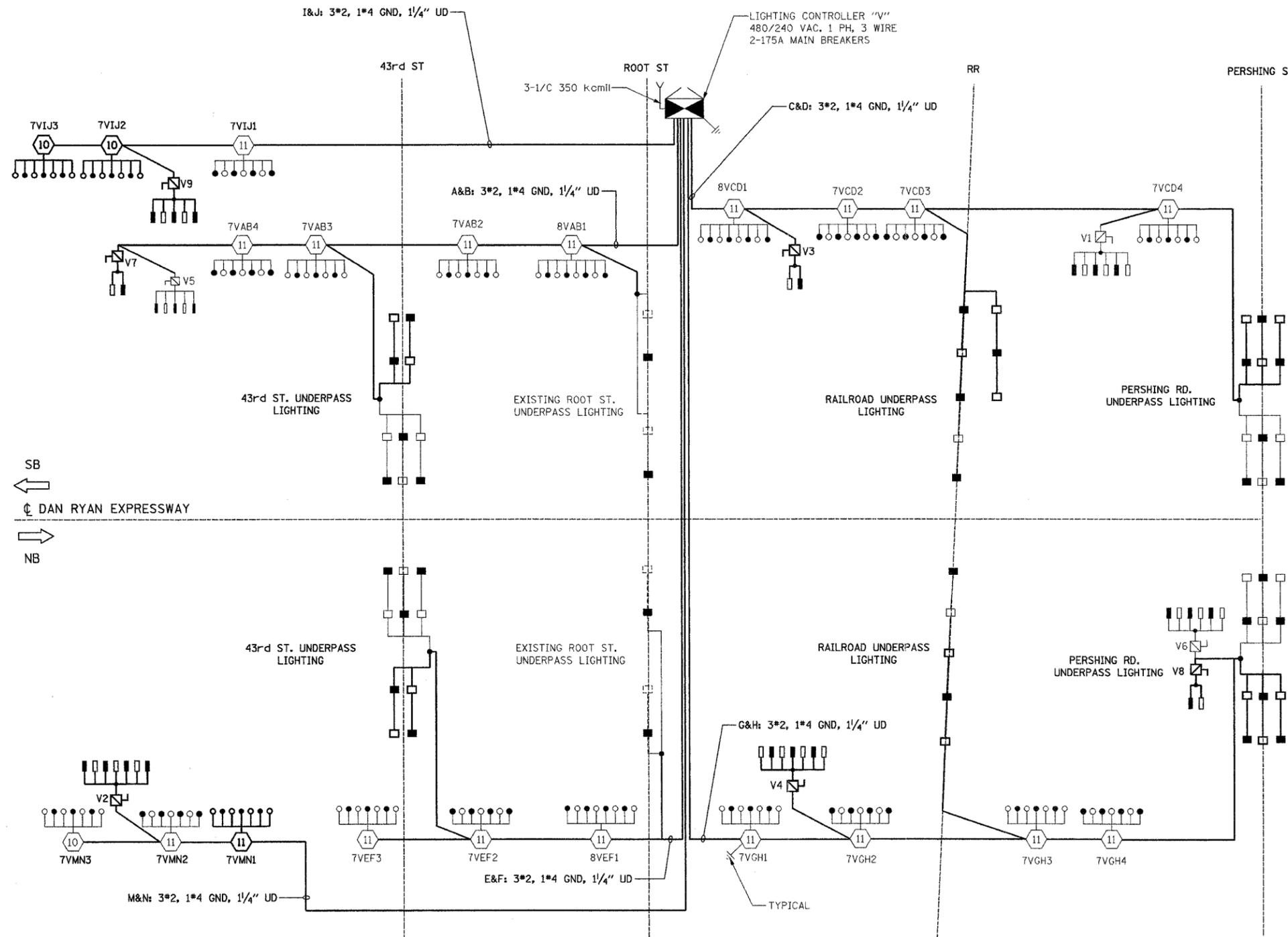
**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"**
NOT TO SCALE

NOTES:
1. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.



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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-031I	COOK	976	340
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



- LEGEND:**
- HIGH MAST LIGHT TOWER
 - 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
 - 7VCD1 HIGH MAST TOWER DESIGNATION
 - LIGHTING CONTROLLER
 - GROUND FIELD
 - ELECTRIC UTILITY SERVICE
 - UNIT DUCT, 3-1/C #2 WITH 1/C #4 GROUND, 1/4"
 - LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
 - 3 POLE SAFETY SWITCH
 - UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

**LOAD TABLE
LIGHTING CONTROLLER "V"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	35.10	6970	B	33.90	6740
C	35.20	6980	D	37.20	7380
E	24.00	4750	F	24.00	4750
G	38.00	7590	H	36.80	7350
I	23.60	4740	J	22.40	4510
K	SPARE	SPARE	L	SPARE	SPARE
M	24.40	4910	N	23.20	4680
O	SPARE	SPARE	P	SPARE	SPARE
TOTAL	180.30A	35,940	TOTAL	177.50A	35,410

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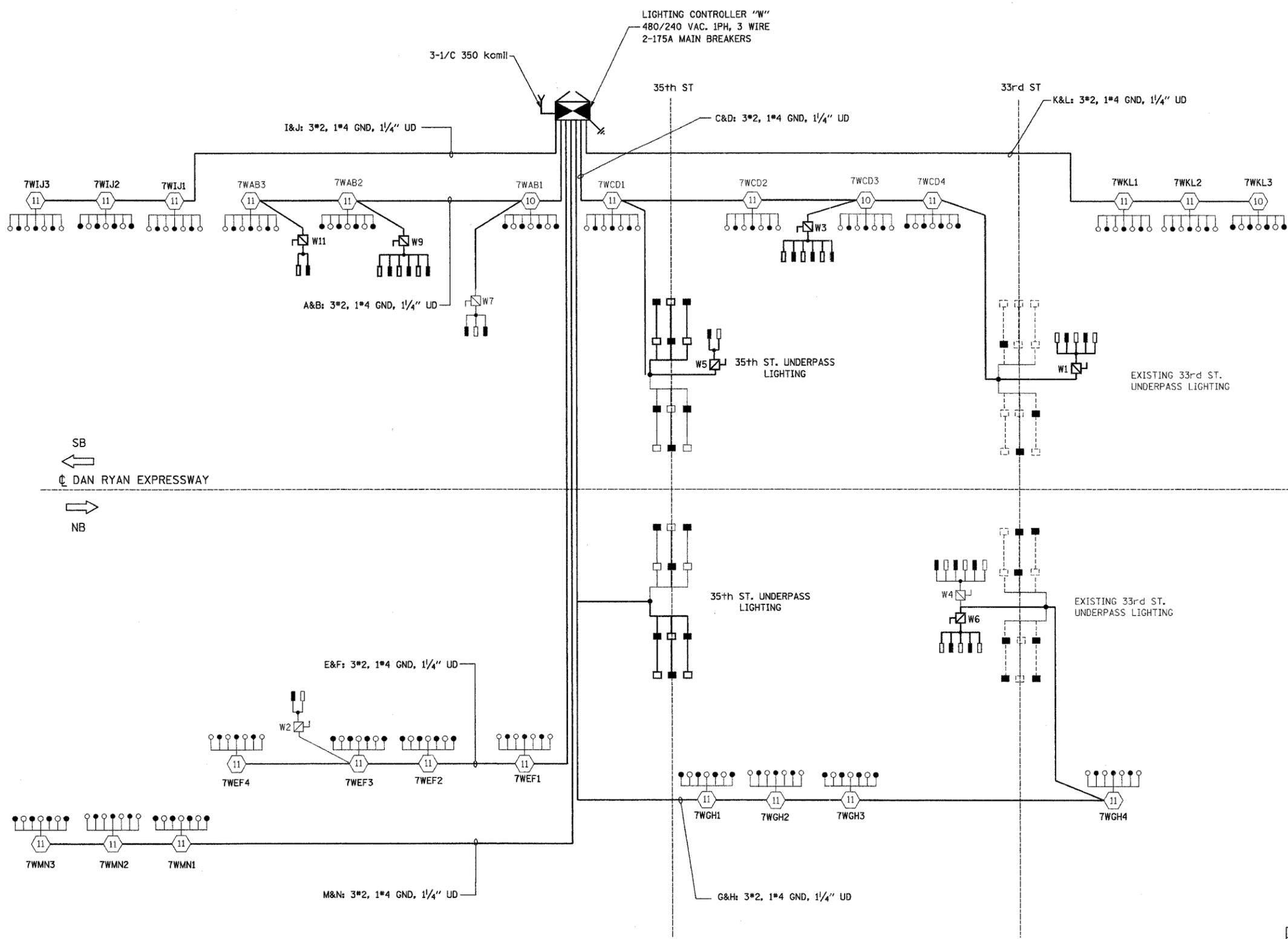
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		SINGLE LINE DIAGRAM LIGHTING CONTROLLER "V" PROPOSED IMPROVEMENTS 2007

SCALE: NONE DRAWN BY: BL
DATE: OCTOBER 29, 2004 CHECKED BY: SM

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CONSULTING ENGINEERS
707A Davis Road, Suite 205
Elgin, Illinois 60123-1369

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	341
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62583				



- LEGEND:**
- HIGH MAST LIGHT TOWER
 - 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
 - TVCD1 HIGH MAST TOWER DESIGNATION
 - LIGHTING CONTROLLER
 - GROUND FIELD
 - ELECTRIC UTILITY SERVICE
 - UNIT DUCT, 3-1/C #2 WITH 1/C #4 GROUND, 1/4"
 - LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
 - 3 POLE SAFETY SWITCH
 - UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

**LOAD TABLE
LIGHTING CONTROLLER "W"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	24.00	4850	B	26.80	5420
C	41.15	8105	D	34.25	6805
E	28.80	5770	F	28.80	5770
G	36.95	7315	H	37.65	7425
I	22.00	4400	J	20.00	4000
K	22.00	4400	L	20.00	4000
M	20.00	4000	N	22.00	4400
O	SPARE	SPARE	P	SPARE	SPARE
TOTAL	194.90A	38,840	TOTAL	189.50A	37,820

SB
←
DAN RYAN EXPRESSWAY
→
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CONSULTING ENGINEERS
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Elgin, Illinois 60123-1369

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "W"
PROPOSED IMPROVEMENTS 2007**

SCALE: NONE
DATE: OCTOBER 29, 2004

DRAWN BY: BL
CHECKED BY: SM

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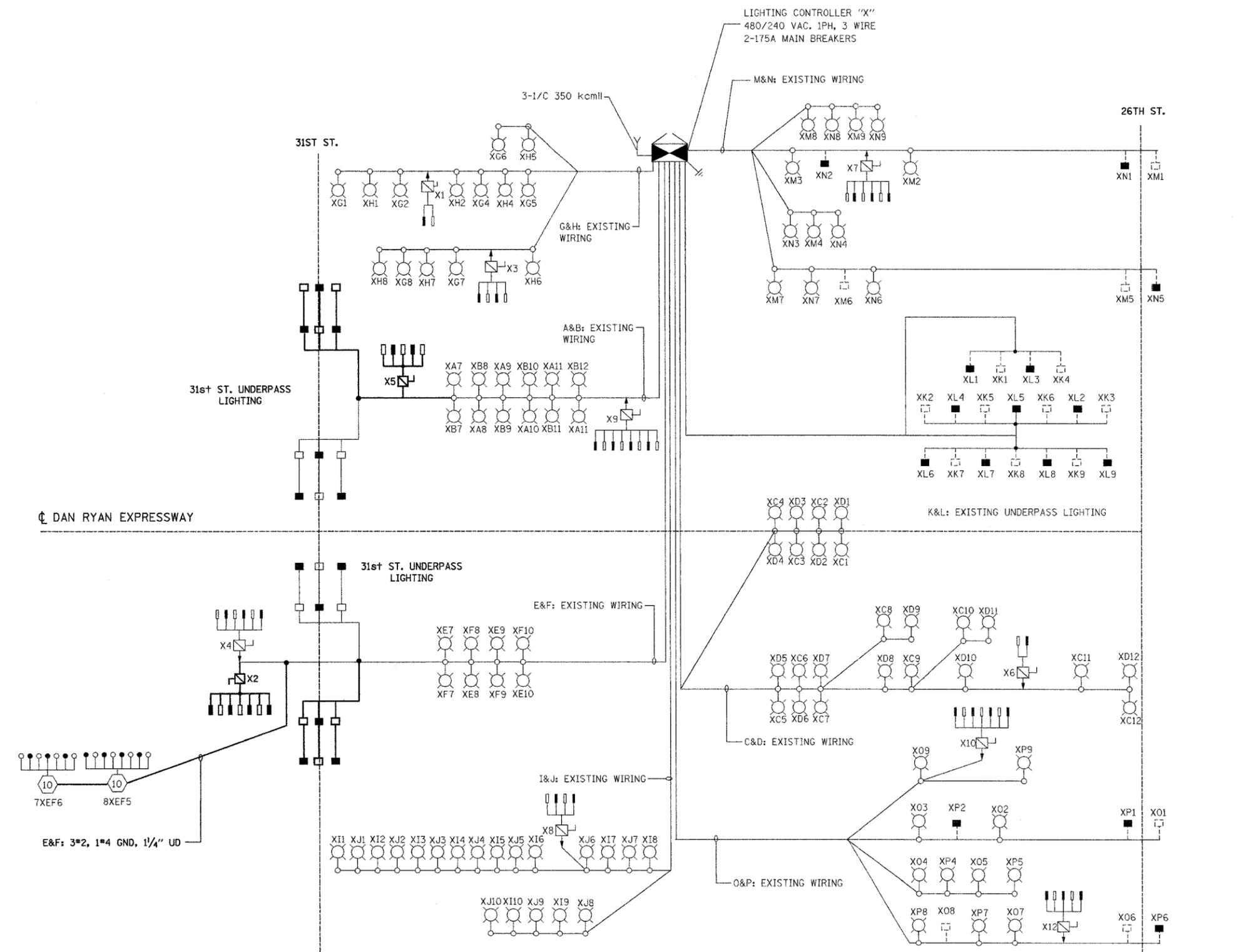
F.A.I. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	342
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583

LEGEND:

- HIGH MAST LIGHT TOWER
- 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
- TVCD1 HIGH MAST TOWER DESIGNATION
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- UNIT DUCT, 3-1/8" #2 WITH 1/8" #4 GROUND, 1/4"
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE.
- CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRE.

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	17.00	3470	B	16.20	3300
C	18.80	3890	D	18.80	3890
E	29.20	5880	F	28.00	5650
G	12.90	2680	H	12.90	2680
I	16.60	3440	J	16.60	3440
K	3.15	495	L	3.15	495
M	12.45	2535	N	12.45	2535
O	14.05	2875	P	14.15	2905
TOTAL	124.15A	25,265	TOTAL	122.25A	24,895



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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

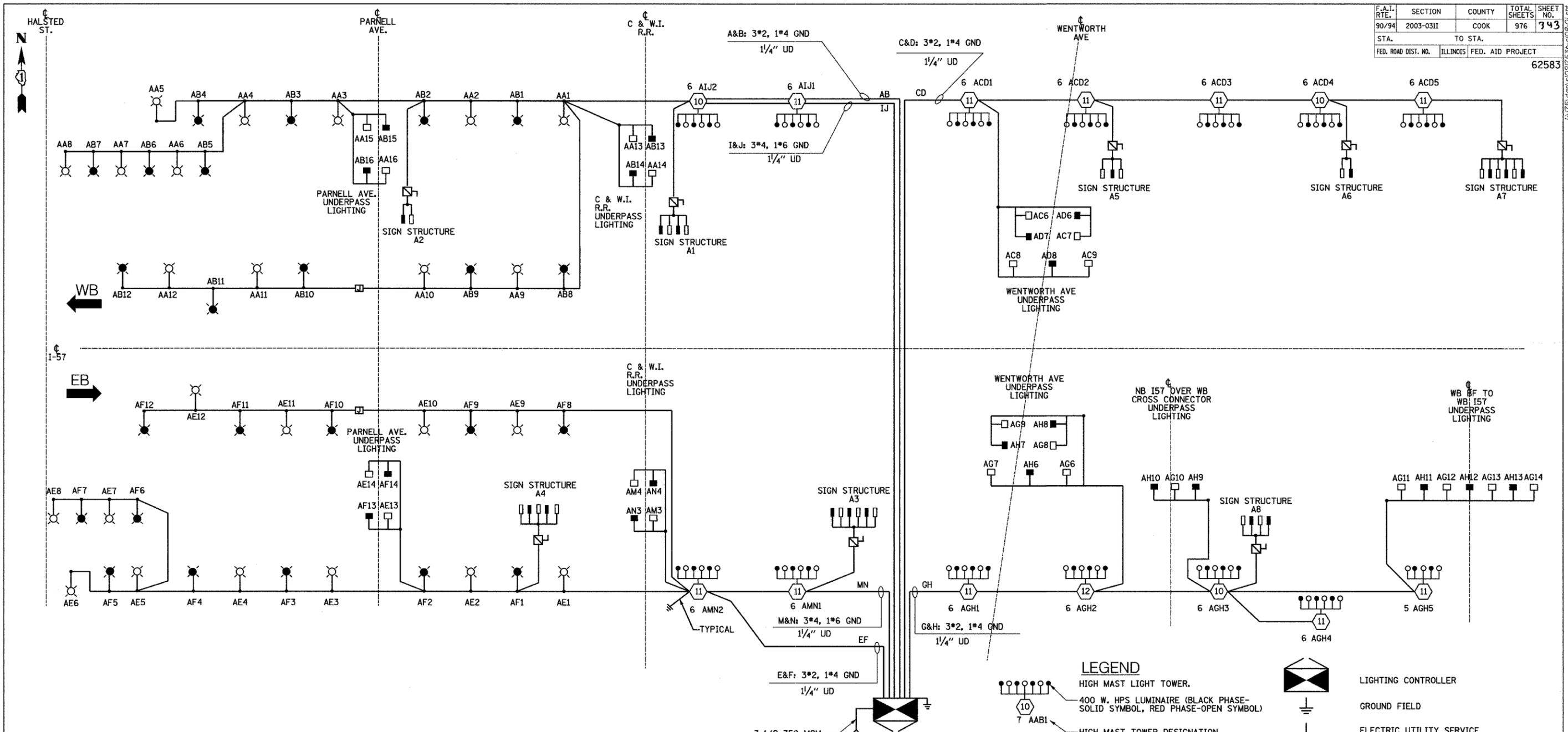
**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "X"
PROPOSED IMPROVEMENTS 2007**

SCALE: NONE
DATE: OCTOBER 29, 2004

DRAWN BY: BL
CHECKED BY: SM

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LOAD TABLE LIGHTING CONTROLLER "A"					
CIRCUIT	RED PHASE		BLACK PHASE		CIRCUIT
	AMPS	WATTS	AMPS	WATTS	
A	23.8	5,712	B	23.8	5,712
C	41.3	9,912	D	39.1	9,384
E	23.8	5,712	F	23.8	5,712
G	35.4	8,496	H	33.0	7,920
I	13.8	3,312	J	13.8	3,312
K			L		
M	16.3	3,912	N	15.4	3,696
O			P		
TOTAL	154.4	37,056	TOTAL	148.9	35,736

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "A"**

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- ELECTRIC CABLE ASSEMBLY
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

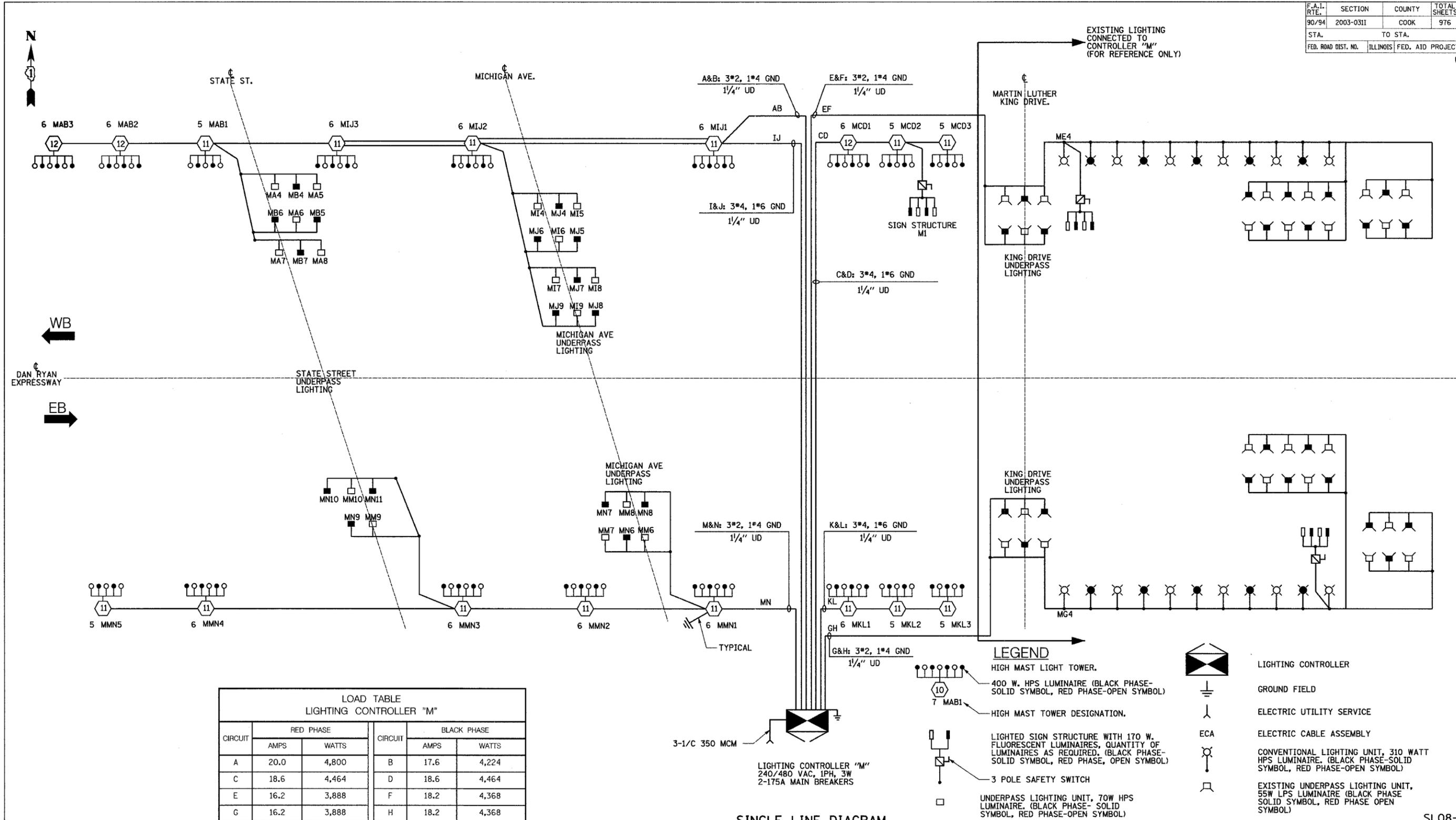
SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		SINGLE LINE DIAGRAM LIGHTING CONTROLLER "A" FINAL CONDITION

SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	20.0	4,800	B	17.6	4,224
C	18.6	4,464	D	18.6	4,464
E	16.2	3,888	F	18.2	4,368
G	16.2	3,888	H	18.2	4,368
I	20.4	4,896	J	20.4	4,896
K	16.0	3,840	L	16.0	3,840
M	32.0	7,680	N	30.4	7,296
O			P		
TOTAL	139.4	33,456	TOTAL	139.4	33,456

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "M"**

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- ECA
- ELECTRIC CABLE ASSEMBLY
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- EXISTING UNDERPASS LIGHTING UNIT, 55W LPS LUMINAIRE (BLACK PHASE SOLID SYMBOL, RED PHASE OPEN SYMBOL)

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "M"
FINAL CONDITION**

SCALE: NOT TO SCALE
DATE: OCTOBER 29, 2004
DRAWN BY: YJ
CHECKED BY: TM

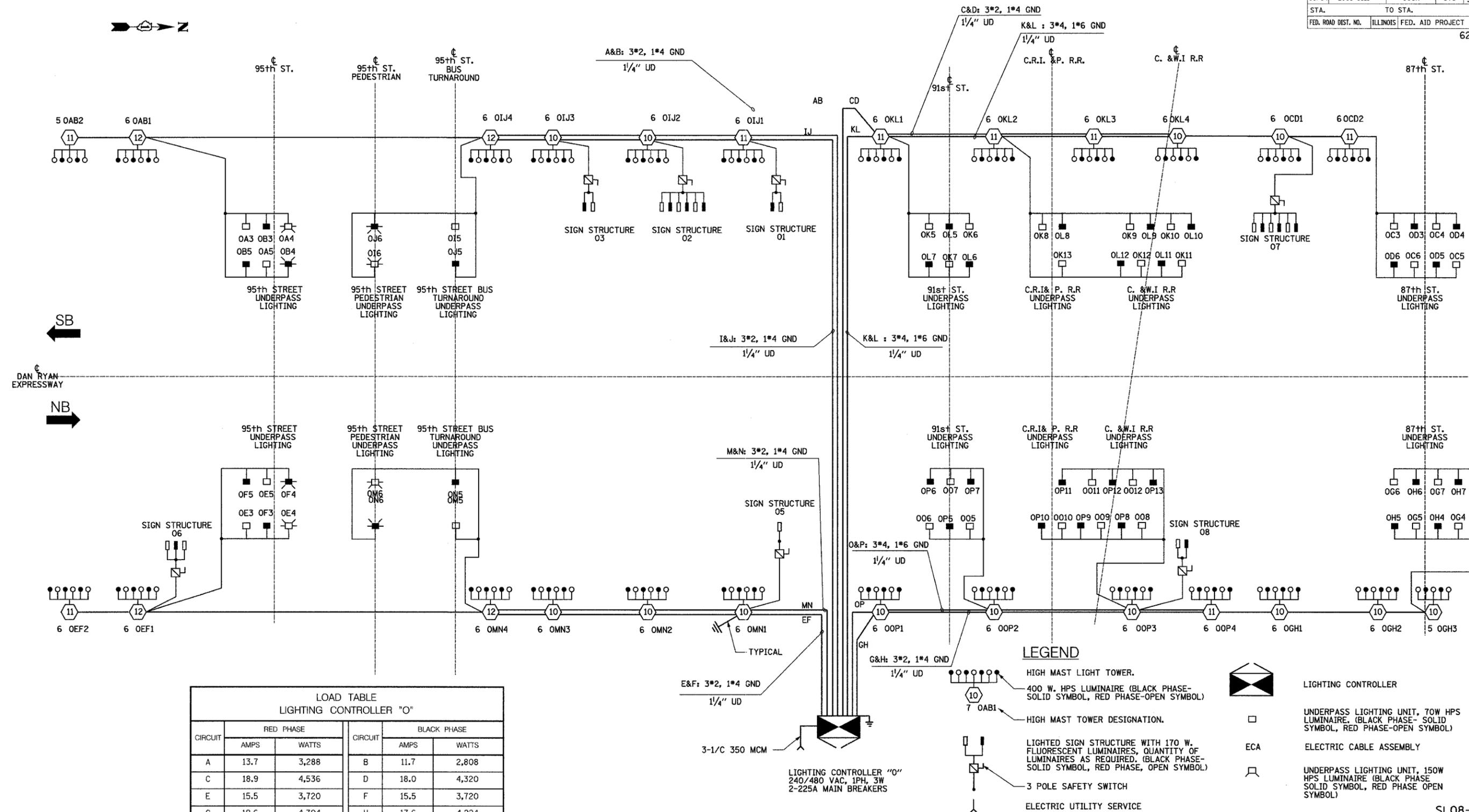
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SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	345
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62583



LOAD TABLE
LIGHTING CONTROLLER "O"

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	13.7	3,288	B	11.7	2,808
C	18.9	4,536	D	18.0	4,320
E	15.5	3,720	F	15.5	3,720
G	19.6	4,704	H	17.6	4,224
I	31.5	7,560	J	31.5	7,560
K	27.6	6,624	L	27.2	6,528
M	27.1	6,504	N	27.1	6,504
O	29.0	6,950	P	29.4	7,056
TOTAL	182.5	43,800	TOTAL	178.0	42,720

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- ELECTRIC UTILITY SERVICE
- GROUND ROD
- LIGHTING CONTROLLER
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- ECA ELECTRIC CABLE ASSEMBLY
- UNDERPASS LIGHTING UNIT, 150W HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE OPEN SYMBOL)

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "O"

- NOTES:
- SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "O"
FINAL CONDITION

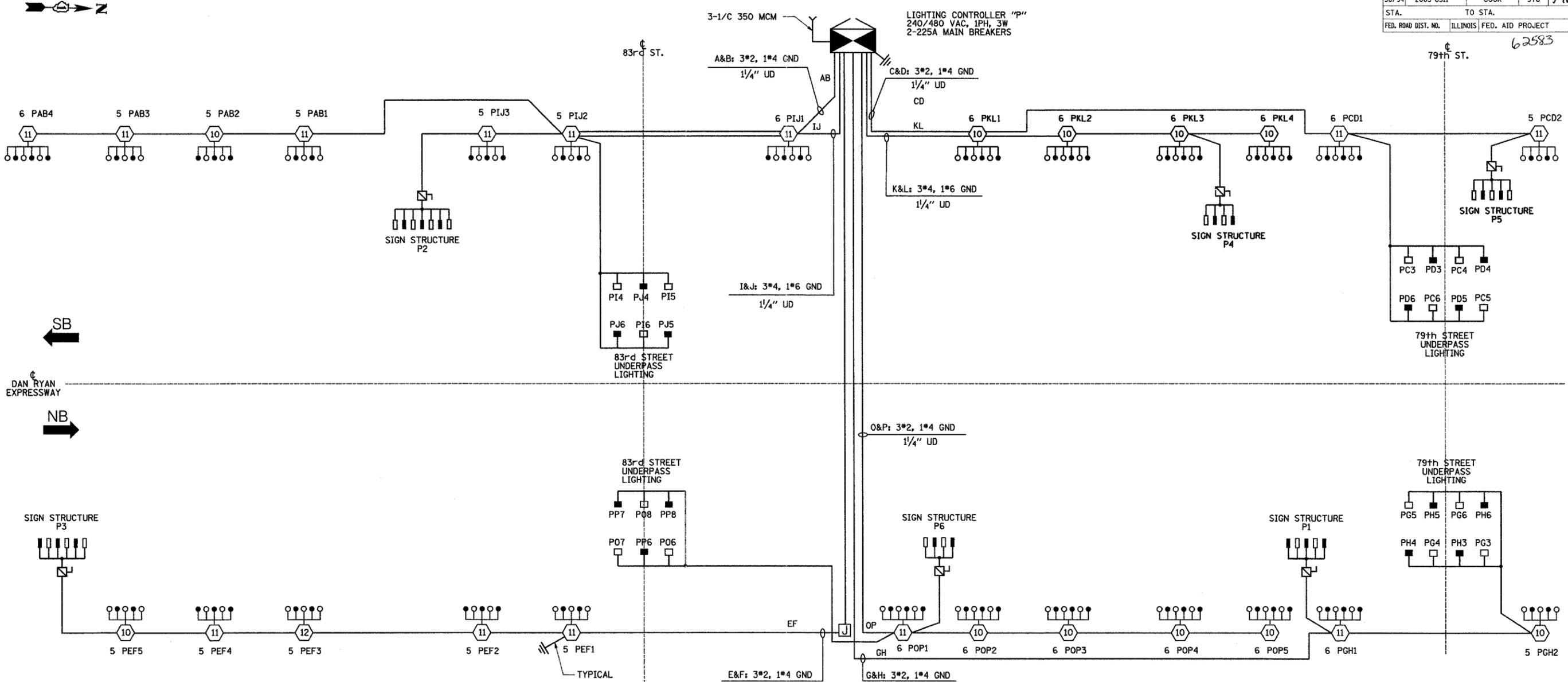
SCALE: NOT TO SCALE
DATE: OCTOBER 29, 2004

DRAWN BY: YJ
CHECKED BY: TM

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CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	22.0	5,280	B	20.0	4,800
C	16.2	3,888	D	13.4	3,216
E	29.0	6,960	F	27.4	6,576
G	13.6	3,264	H	11.6	2,784
I	20.7	4,968	J	19.8	4,752
K	25.8	6,192	L	25.8	6,192
M			N		
O	34.3	8,232	P	33.9	8,136
TOTAL	167.7	40,248	TOTAL	157.2	37,728

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"**

NOTES:
1. SEE DRAWING ME-12 FOR WIRING DIAGRAM DETAILS.

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
CONSULTING ENGINEERS FAX: (312) 629-8449

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "P"
FINAL CONDITION**

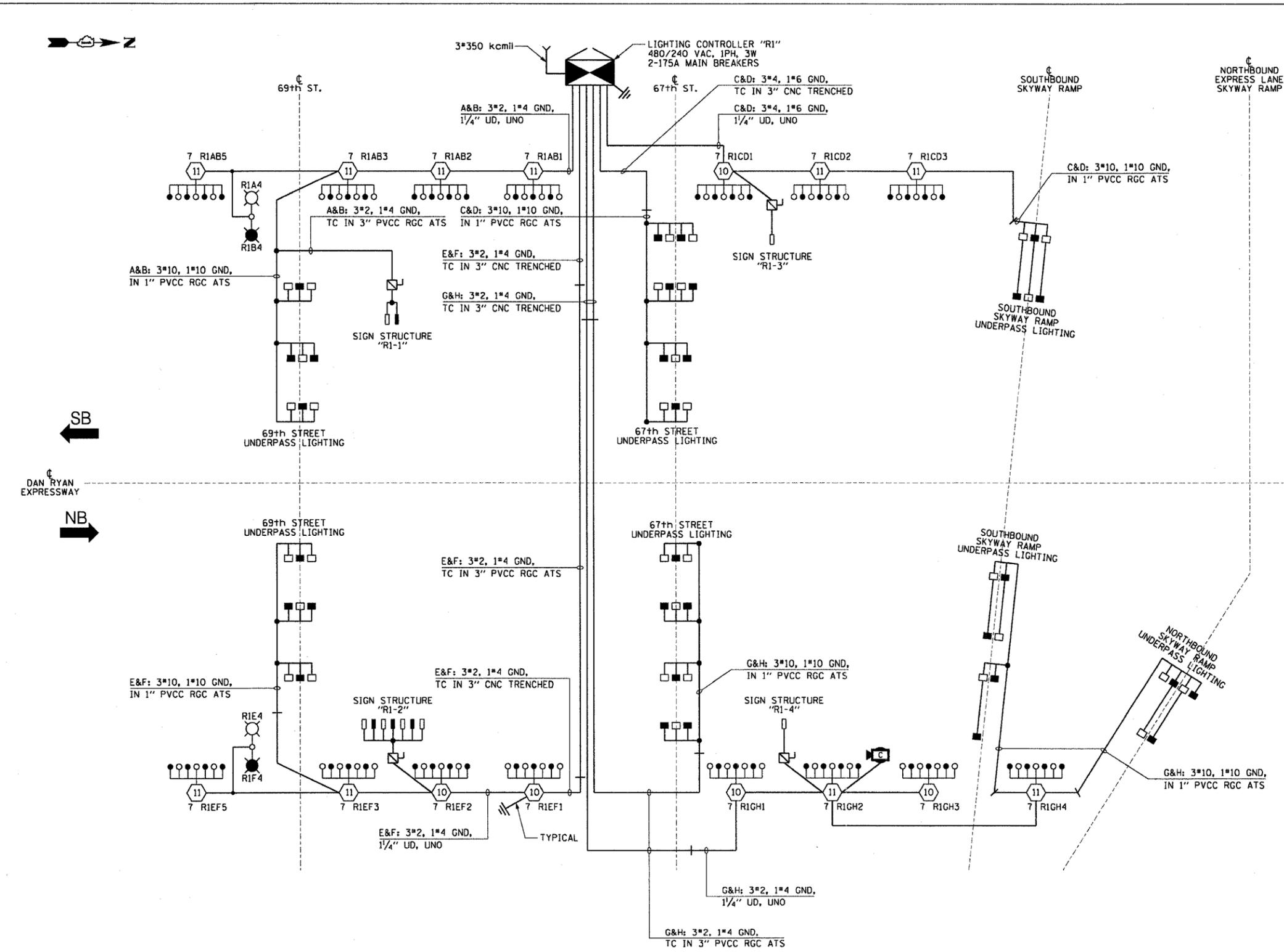
SCALE: NOT TO SCALE DRAWN BY: YJ
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE- OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- LUMINAIRE DESIGNATION
- CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- CLOSED CIRCUIT TELEVISION CAMERA



LOAD TABLE
LIGHTING CONTROLLER "R1"

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	31.4	7,536	B	31.0	7,440
C	24.0	5,760	D	25.1	6,024
E	33.9	8,136	F	32.7	7,848
G	32.5	7,800	H	32.0	7,680
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	121.8	29,232	TOTAL	120.8	28,992

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "R1"
NOT TO SCALE



REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "R1"
PROPOSED IMPROVEMENTS

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

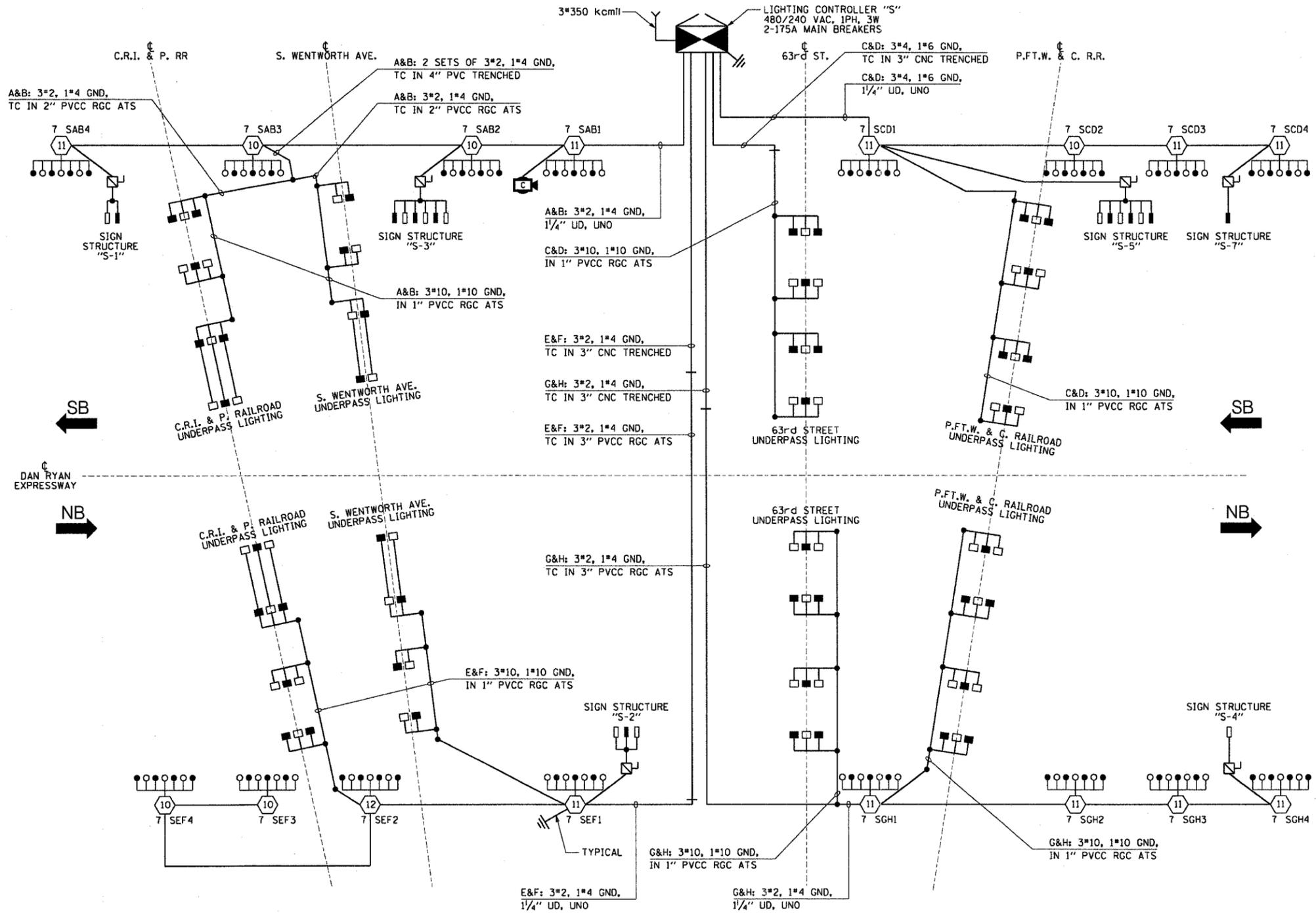
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	349
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA



**LOAD TABLE
LIGHTING CONTROLLER "S"**

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	34.3	8,232	B	34.3	8,232
C	34.2	8,208	D	35.0	8,400
E	32.6	7,824	F	31.8	7,632
G	32.5	7,800	H	31.7	7,608
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	133.6	32,064	TOTAL	132.8	31,872

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"**
NOT TO SCALE



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "S"**
PROPOSED IMPROVEMENTS

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

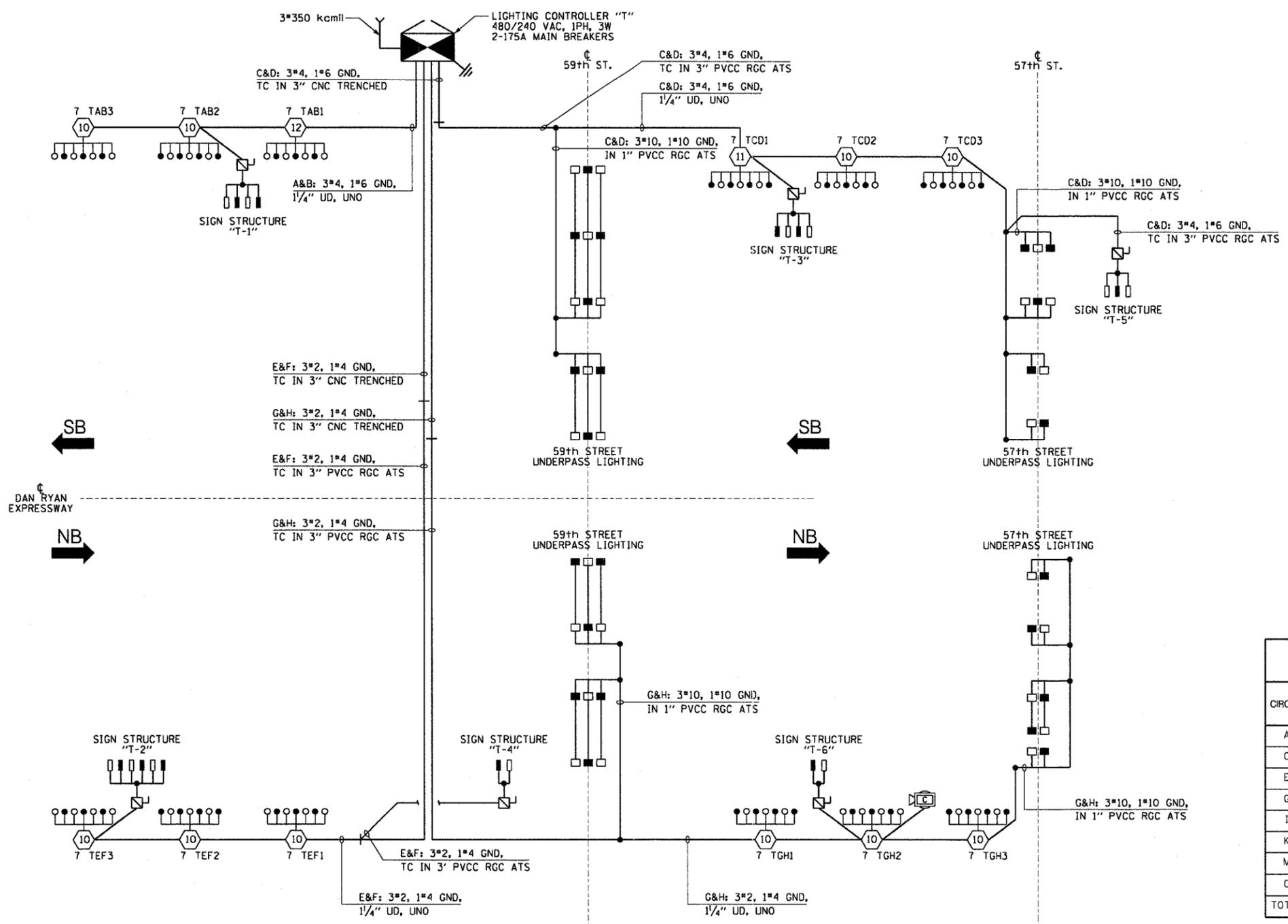
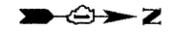
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	350
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62583

LEGEND

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 7 UAB1 HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 WATT FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA



CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	23.0	5,520	B	21.1	5,064
C	27.7	6,648	D	28.4	6,816
E	24.7	5,928	F	22.8	5,472
G	24.4	5,856	H	26.3	6,312
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	99.8	23,952	TOTAL	98.6	23,664

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"**
NOT TO SCALE

SL08-08

REVISIONS	
NAME	DATE

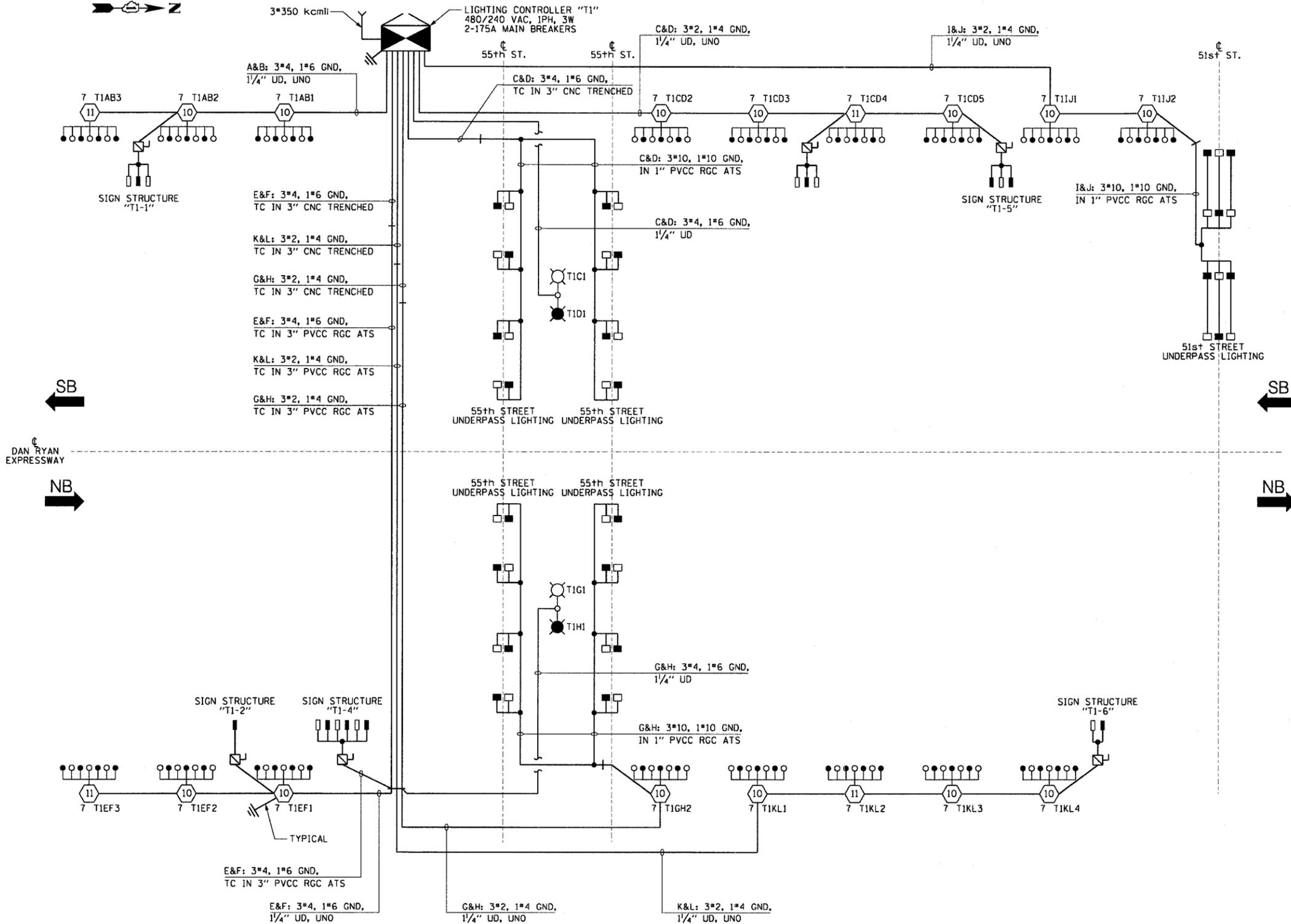
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T"
PROPOSED IMPROVEMENTS**

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	351
STA.	TO STA.		FED. AID PROJECT	
	62583			



- LEGEND**
- HIGH MAST LIGHT TOWER.
 - 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - HIGH MAST TOWER DESIGNATION.
 - LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE, QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE, OPEN SYMBOL)
 - 3 POLE SAFETY SWITCH
 - UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - LIGHTING CONTROLLER
 - GROUND FIELD
 - ELECTRIC UTILITY SERVICE
 - LUMINAIRE DESIGNATION
 - CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - RIB4
 - CLOSED CIRCUIT TELEVISION CAMERA

LOAD TABLE
LIGHTING CONTROLLER "T1"

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	21.1	5,064	B	22.2	5,328
C	34.2	8,208	D	34.2	8,208
E	21.9	5,256	F	24.7	5,928
G	12.3	2,952	H	10.4	2,496
I	15.9	3,816	J	15.9	3,816
K	28.0	6,720	L	28.0	6,720
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	133.4	32,016	TOTAL	135.4	32,496

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T1"
NOT TO SCALE

CTE ENGINEERS
CONSOER TOWNSEND ENVIRONMENTAL ENGINEERS, INC.
303 EAST WACKER DRIVE, SUITE 600
CHICAGO, ILLINOIS 60601-5202, PHONE: (312) 938-0300

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "T1"
PROPOSED IMPROVEMENTS

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

MAX-40465/ELECTRIC-CONT-2/25/04/Contract #2008-Final/SLO8092A.08/57

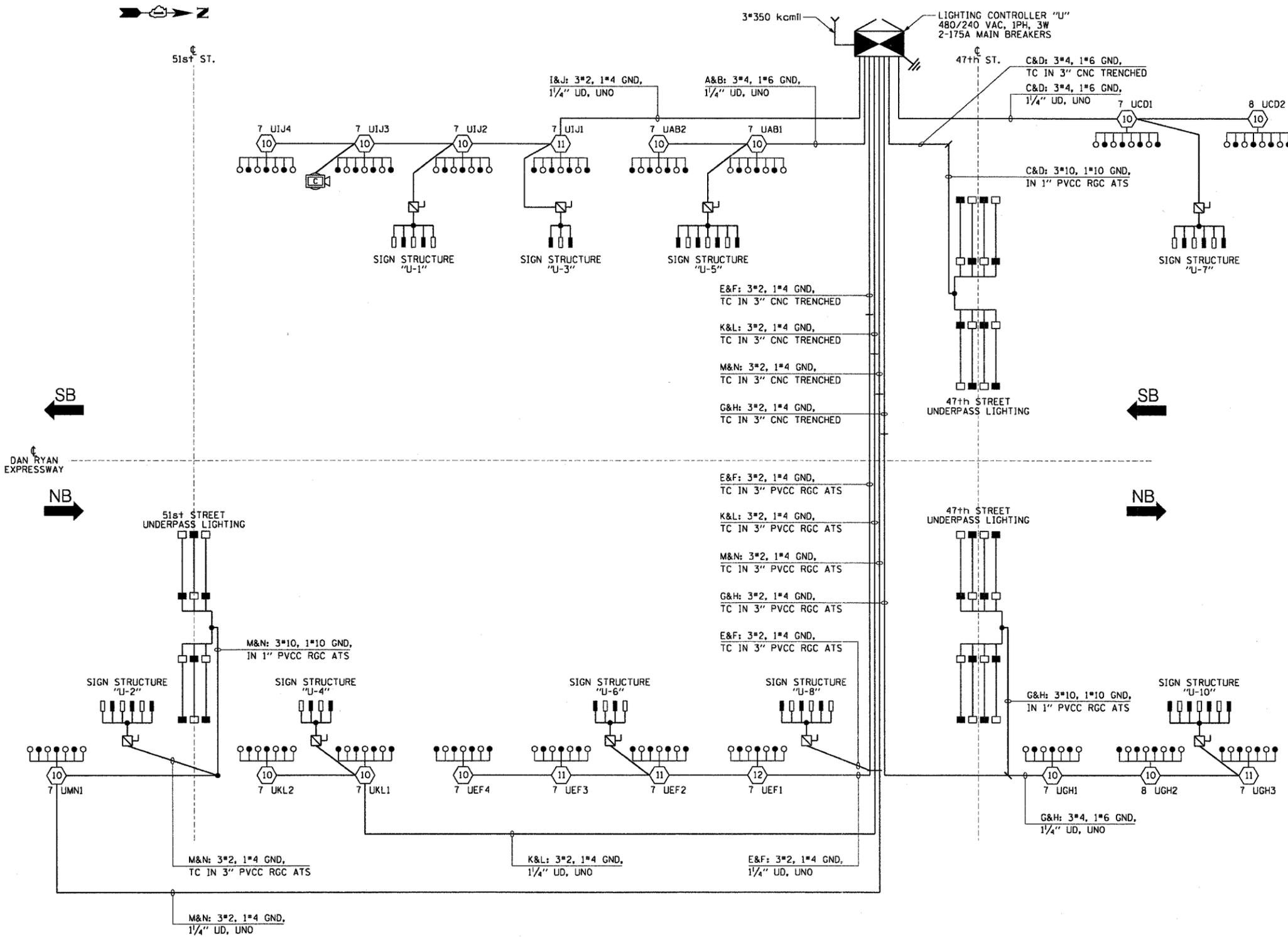
F.A.I. SECTION COUNTY TOTAL SHEET	90/94 2003-0311 COOK 976 352
STA. TO STA.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

62583

LEGEND

- HIGH MAST LIGHT TOWER.
- 400 W. HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- HIGH MAST TOWER DESIGNATION.
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- CLOSED CIRCUIT TELEVISION CAMERA

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	16.1	3,864	B	17.0	4,080
C	19.2	4,608	D	21.1	5,064
E	31.3	7,512	F	31.3	7,512
G	26.9	6,456	H	27.7	6,648
I	30.5	7,320	J	30.5	7,320
K	15.3	3,672	L	15.3	3,672
M	12.6	3,024	N	10.7	2,568
O			P		
TOTAL	151.9	36,456	TOTAL	153.6	36,864



**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"**
NOT TO SCALE

CTE ENGINEERS
CONSOER TOWNSEND ENVIRONMENTAL ENGINEERS, INC.
303 EAST WACKER DRIVE, SUITE 600
CHICAGO, ILLINOIS 60601-5212, PHONE: (312) 938-0300

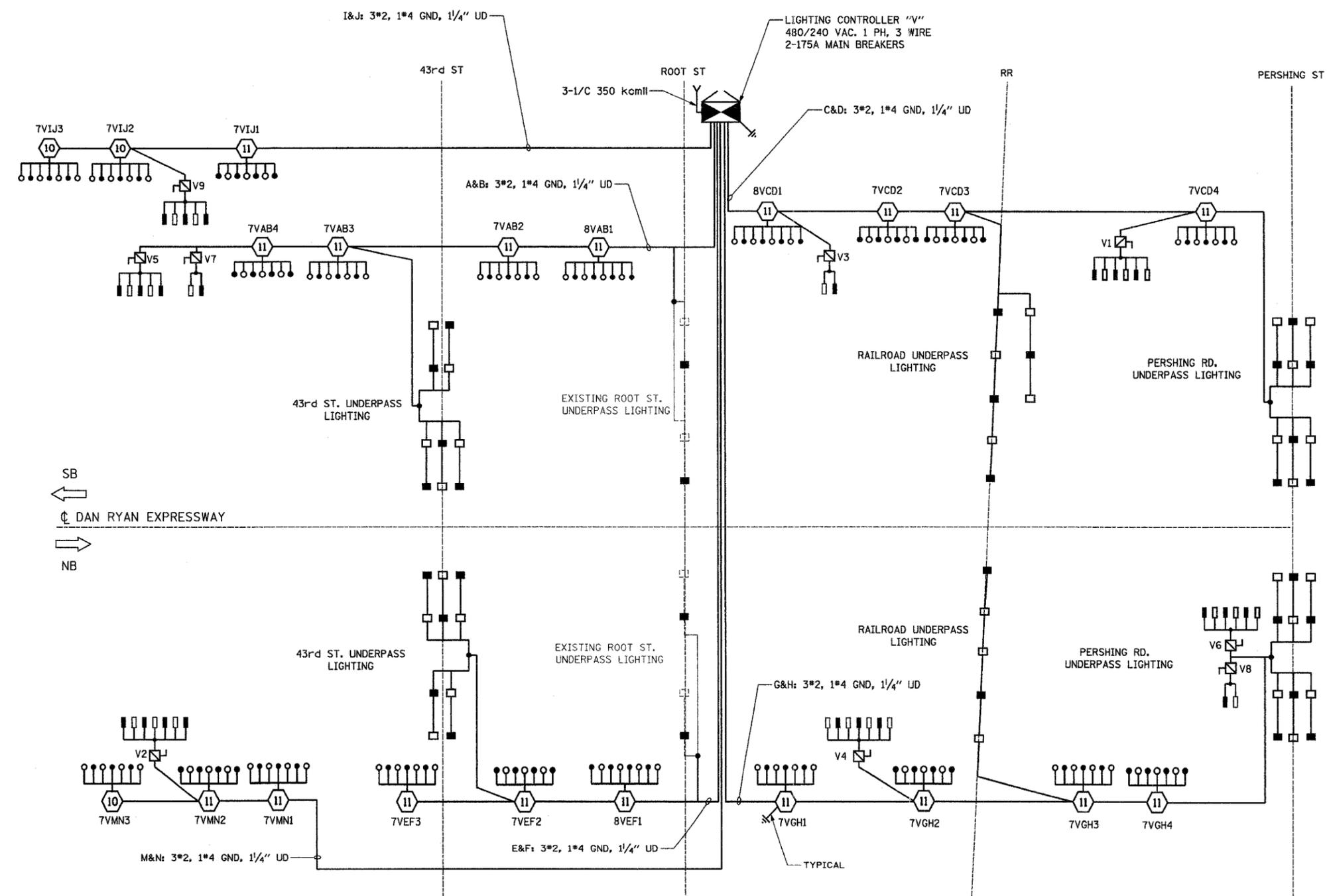
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "U"**
PROPOSED IMPROVEMENTS

SCALE: NOT TO SCALE DRAWN BY: CJM
DATE: October 29, 2004 CHECKED BY: WDS

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- LEGEND:**
- HIGH MAST LIGHT TOWER
 - 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
 - 7VCD1 HIGH MAST TOWER DESIGNATION
 - LIGHTING CONTROLLER
 - GROUND FIELD
 - ELECTRIC UTILITY SERVICE
 - UNIT DUCT, 3-1/C #2 WITH 1/C #4 GROUND, 1/4"
 - LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES. QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
 - 3 POLE SAFETY SWITCH
 - UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
 - UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	35.10	6970	B	33.90	6740
C	35.20	6980	D	37.20	7380
E	24.00	4750	F	24.00	4750
G	38.00	7590	H	36.80	7350
I	23.60	4740	J	22.40	4510
K	SPARE	SPARE	L	SPARE	SPARE
M	24.40	4910	N	23.20	4680
O	SPARE	SPARE	P	SPARE	SPARE
TOTAL	180.30A	35,940	TOTAL	177.50A	35,410

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

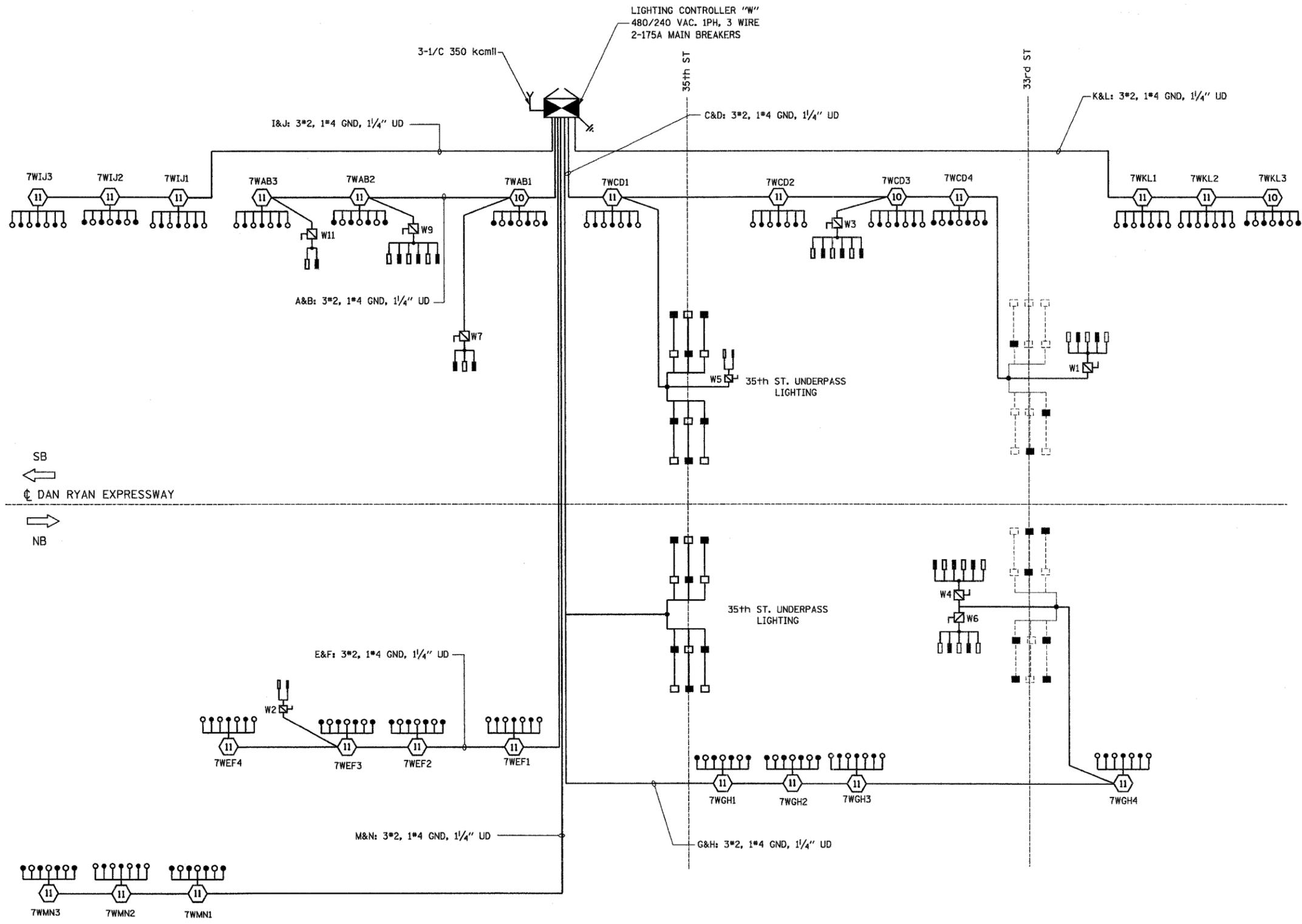
**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "V"
FINAL CONDITION**

SCALE: NONE DRAWN BY: BL
DATE: OCTOBER 29, 2004 CHECKED BY: SM

SL08-11

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-03II	COOK	976	354
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



LEGEND:

- HIGH MAST LIGHT TOWER
- 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
- 7WCD1 HIGH MAST TOWER DESIGNATION
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- UNIT DUCT, 3-1/C #2 WITH 1/C #4 GROUND, 1/4"
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRE. QUANTITY OF LUMINAIRE AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	24.00	4850	B	26.80	5420
C	41.15	8105	D	34.25	6805
E	28.80	5770	F	28.80	5770
G	36.95	7315	H	37.65	7425
I	22.00	4400	J	20.00	4000
K	22.00	4400	L	20.00	4000
M	20.00	4000	N	22.00	4400
O	SPARE	SPARE	P	SPARE	SPARE
TOTAL	194.90A	38,840	TOTAL	189.50A	37,820

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "W"
FINAL CONDITION**

SCALE: NONE
DATE: OCTOBER 29, 2004
DRAWN BY: BL
CHECKED BY: SM

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CONSULTING ENGINEERS
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Elgin, Illinois 60123-1369

SL08-12

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	356
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62583

LEGEND:

- HIGH MAST LIGHT TOWER
- 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
- TVCD1 HIGH MAST TOWER DESIGNATION
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- UNIT DUCT, 3-1/2" #2 WITH 1/2" #4 GROUND, 1/4"
- LIGHTED SIGN STRUCTURE WITH 170 W. FLUORESCENT LUMINAIRES. QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOLS, RED PHASE, OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- UNDERPASS LIGHTING UNIT, 55W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE.
- CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRE.

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	17.00	3470	B	16.20	3300
C	18.80	3890	D	18.80	3890
E	29.20	5880	F	28.00	5650
G	12.90	2680	H	12.90	2680
I	16.60	3440	J	16.60	3440
K	3.15	495	L	3.15	495
M	12.45	2535	N	12.45	2535
O	14.05	2875	P	14.15	2905
TOTAL	124.15A	25,265	TOTAL	122.25A	24,895

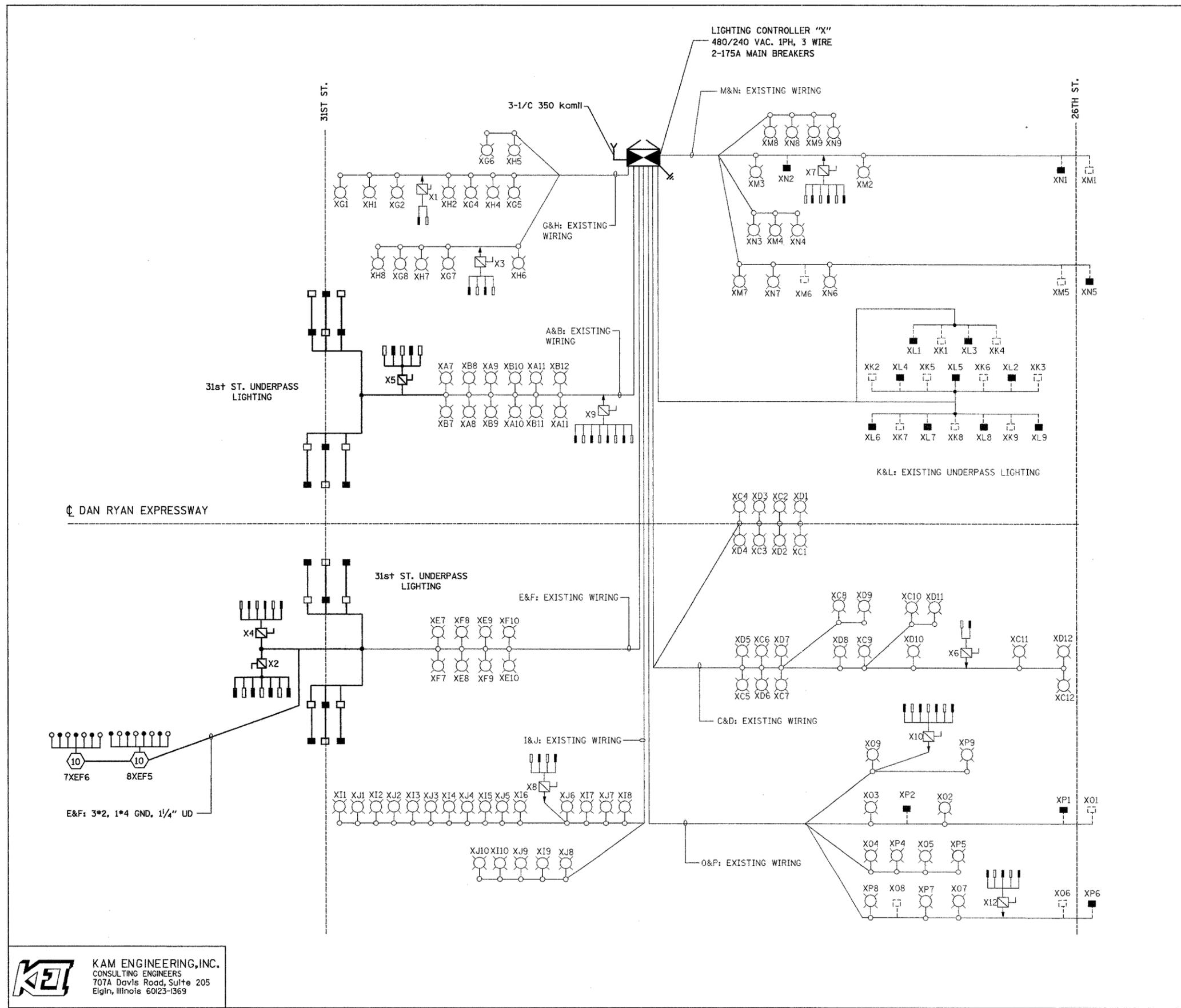
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "X"
FINAL CONDITION**

SCALE: NONE
DATE: OCTOBER 29, 2004

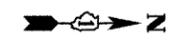
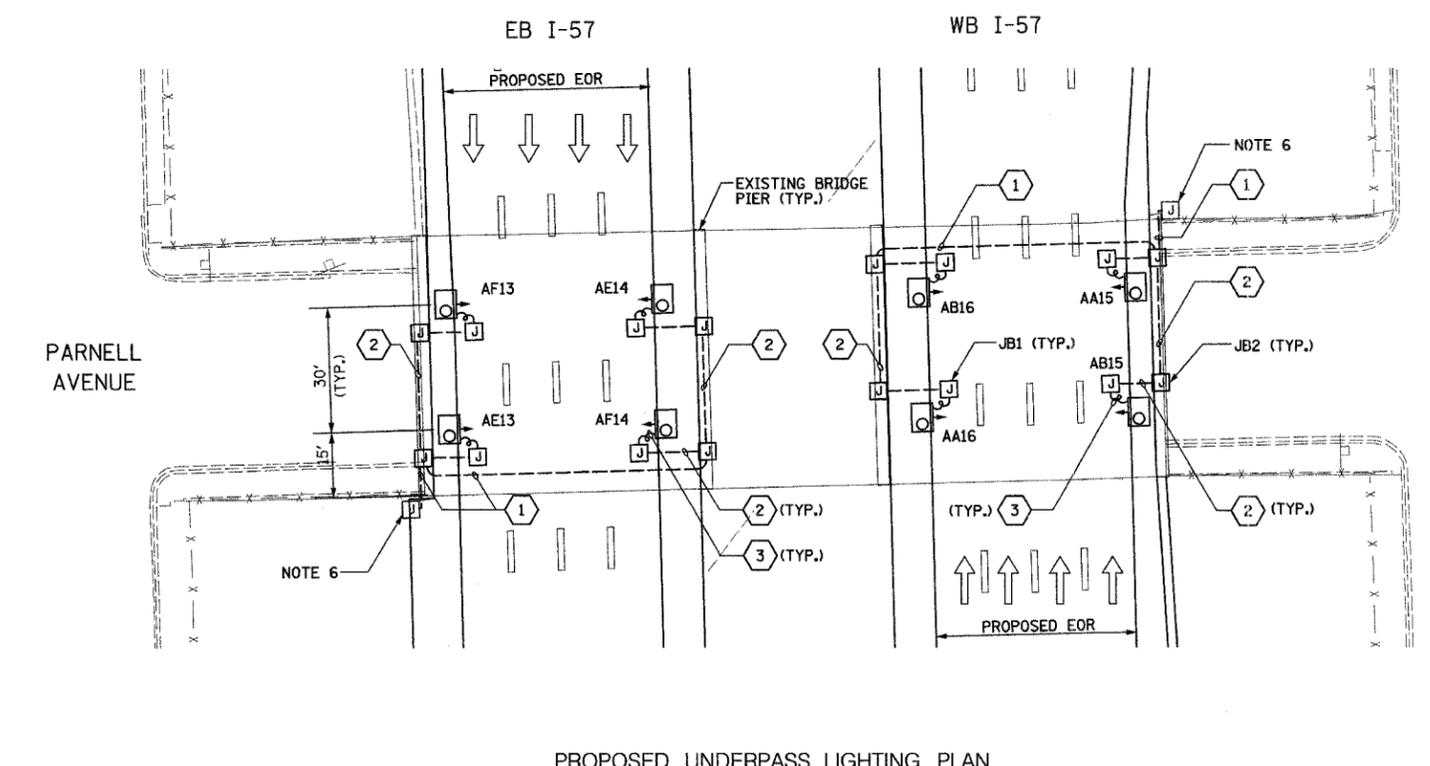
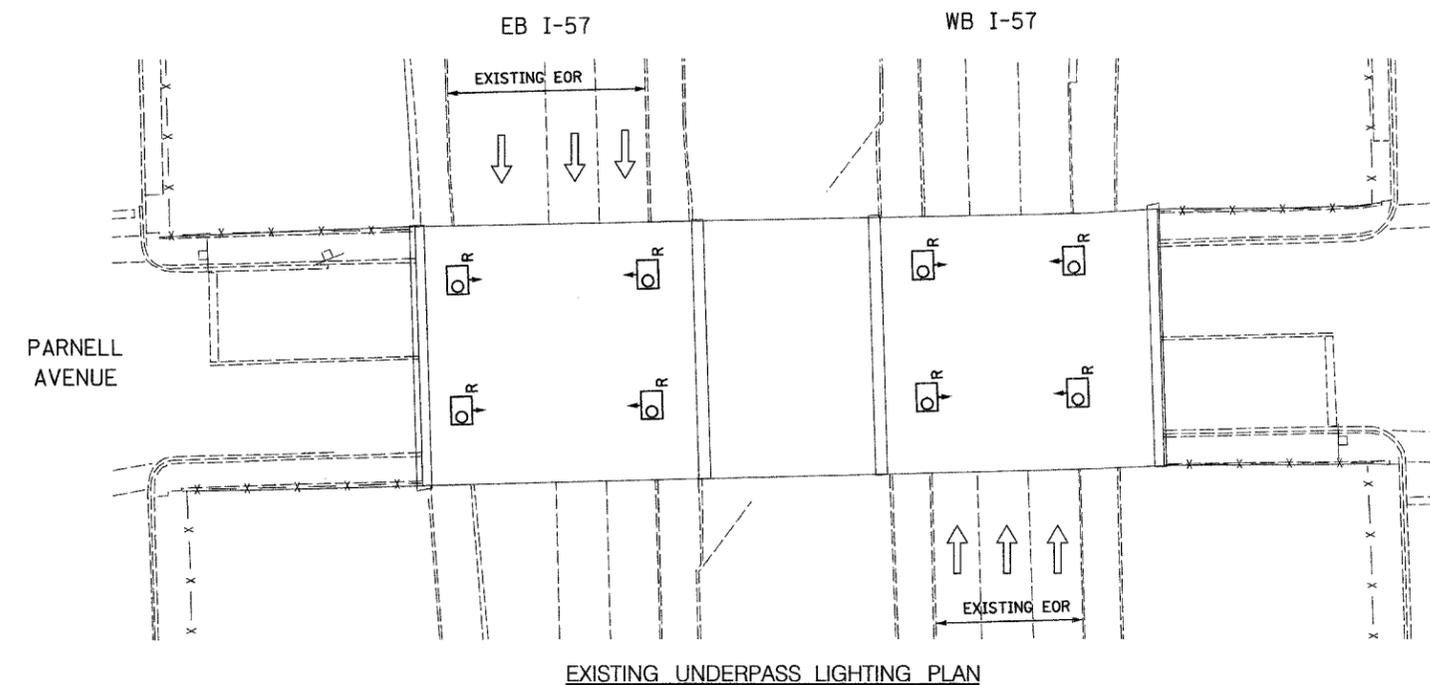
DRAWN BY: BL
CHECKED BY: SM



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

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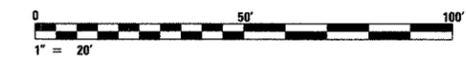
- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
 - UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-02 AND RL07-02 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "A". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "A".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:

- 2006: WB I-57 OUTSIDE LANE
EB I-57 INSIDE LANE
- 2007: WB I-57 INSIDE LANE
EB I-57 OUTSIDE LANE

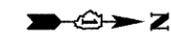


UL-01

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS PARNELL AVENUE
SCALE: 1"=20'		DRAWN BY: VG CHECKED BY: TM
DATE: OCTOBER 29, 2004		

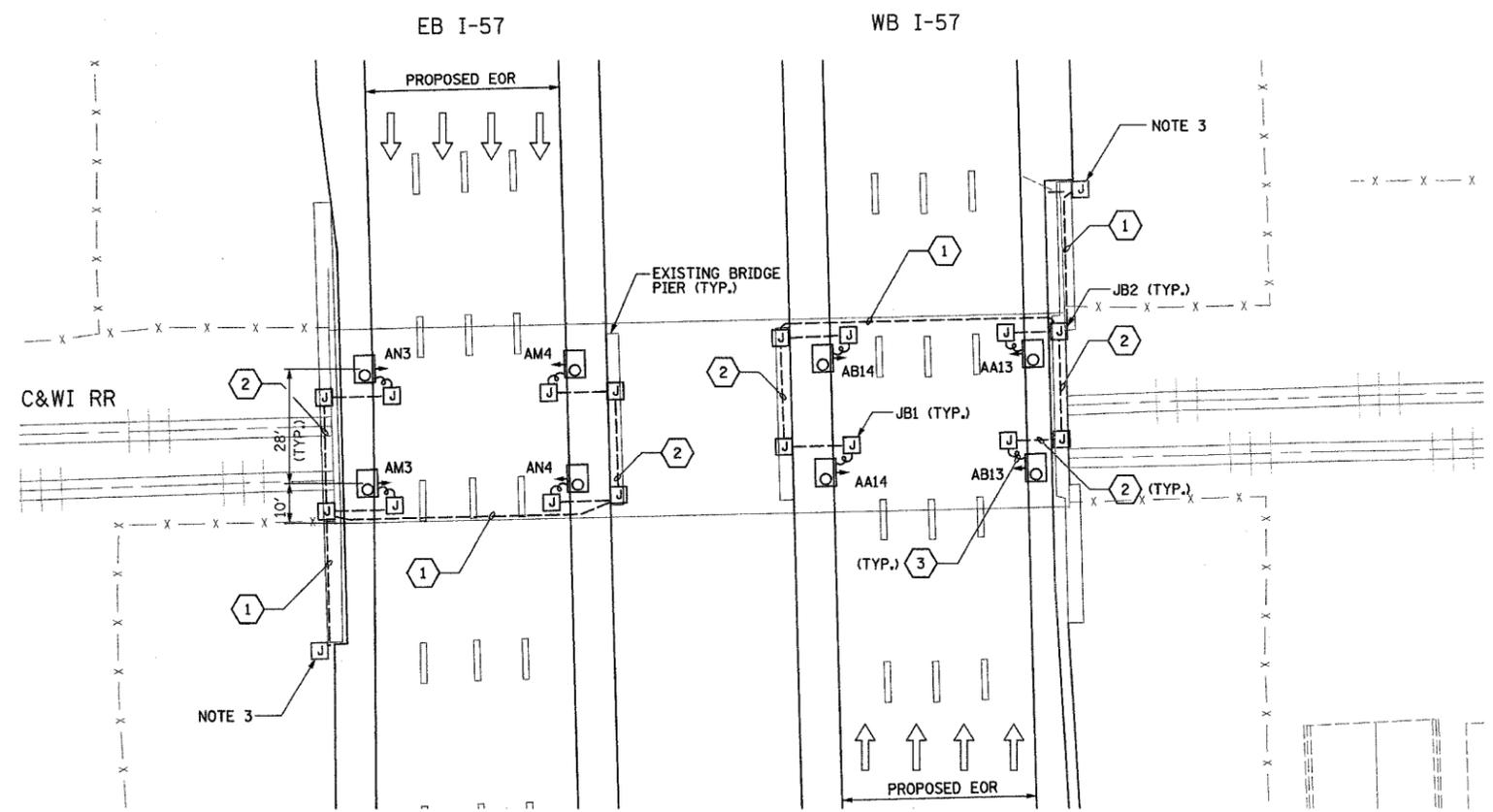
SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
CONSULTING ENGINEERS FAX: (312) 629-8445

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NOTES

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-03 AND RL07-03 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "A". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "A".
- ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.



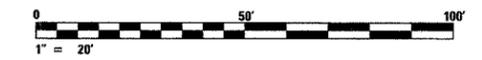
PROPOSED UNDERPASS LIGHTING PLAN

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
NO.	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:

- 2006: WB I-57 OUTSIDE LANE
EB I-57 INSIDE LANE
- 2007: WB I-57 INSIDE LANE
EB I-57 OUTSIDE LANE

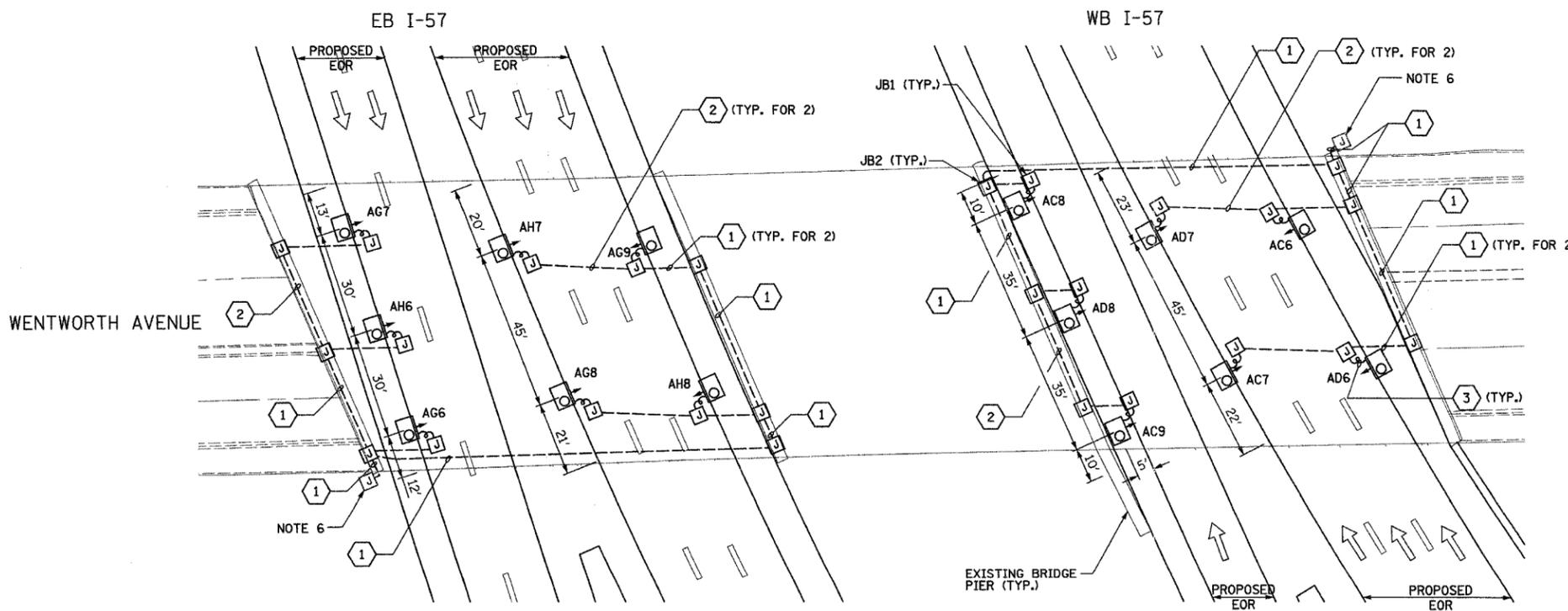
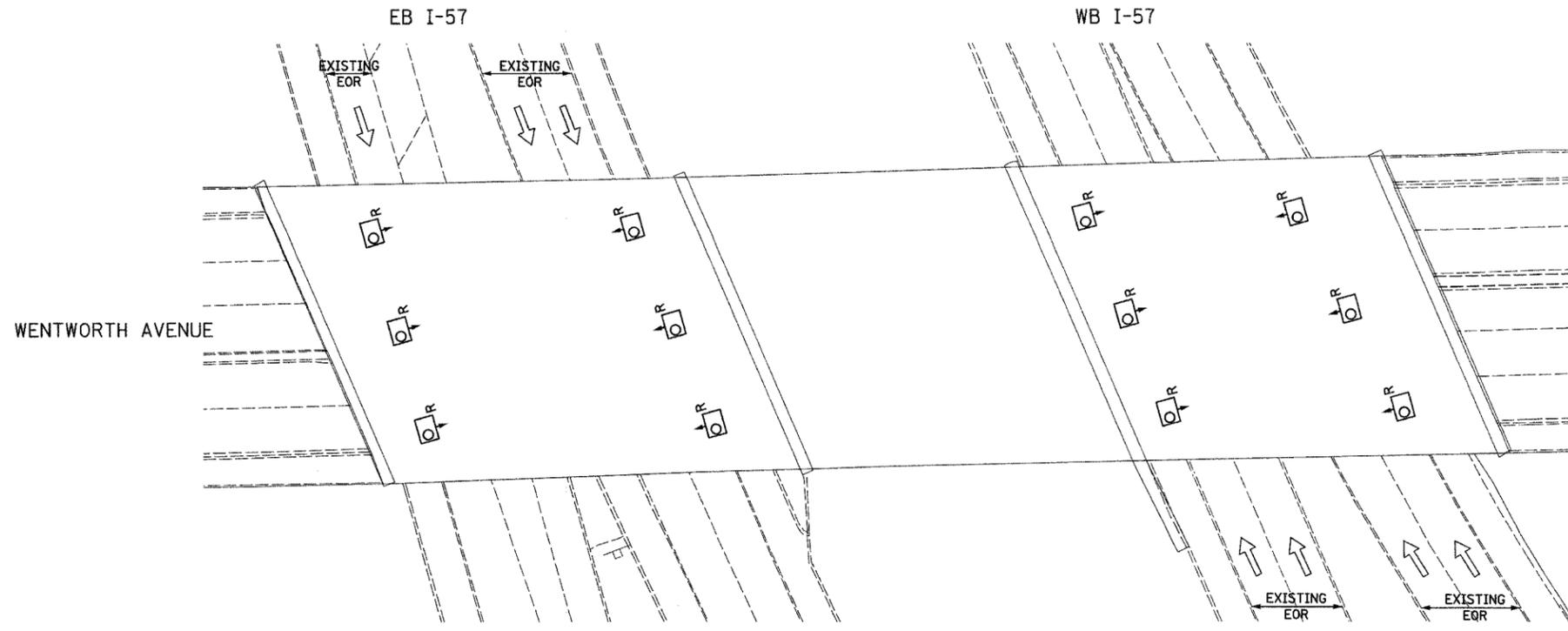


UL-02

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
SINGH & ASSOCIATES, INC. FAX: (312) 629-8449
CONSULTING ENGINEERS

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS C&WI RR OVER I-57 PROPOSED IMPROVEMENTS
SCALE: 1"=20'		DRAWN BY: VG
DATE: OCTOBER 29, 2004		CHECKED BY: TM

10/15/2004 9:35:34 AM



- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
 - UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RLO6-04 AND RLO7-04 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "A". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "A".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:

- 2006: WB I-57 OUTSIDE LANE
EB I-57 INSIDE LANE
- 2007: WB I-57 INSIDE LANE
EB I-57 OUTSIDE LANE



UL-03

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
SINGH & ASSOCIATES, INC. FAX: (312) 629-8449
CONSULTING ENGINEERS

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
WENTWORTH AVENUE

SCALE: 1"=20' DRAWN BY: VG
DATE: OCTOBER 29, 2004 CHECKED BY: TM

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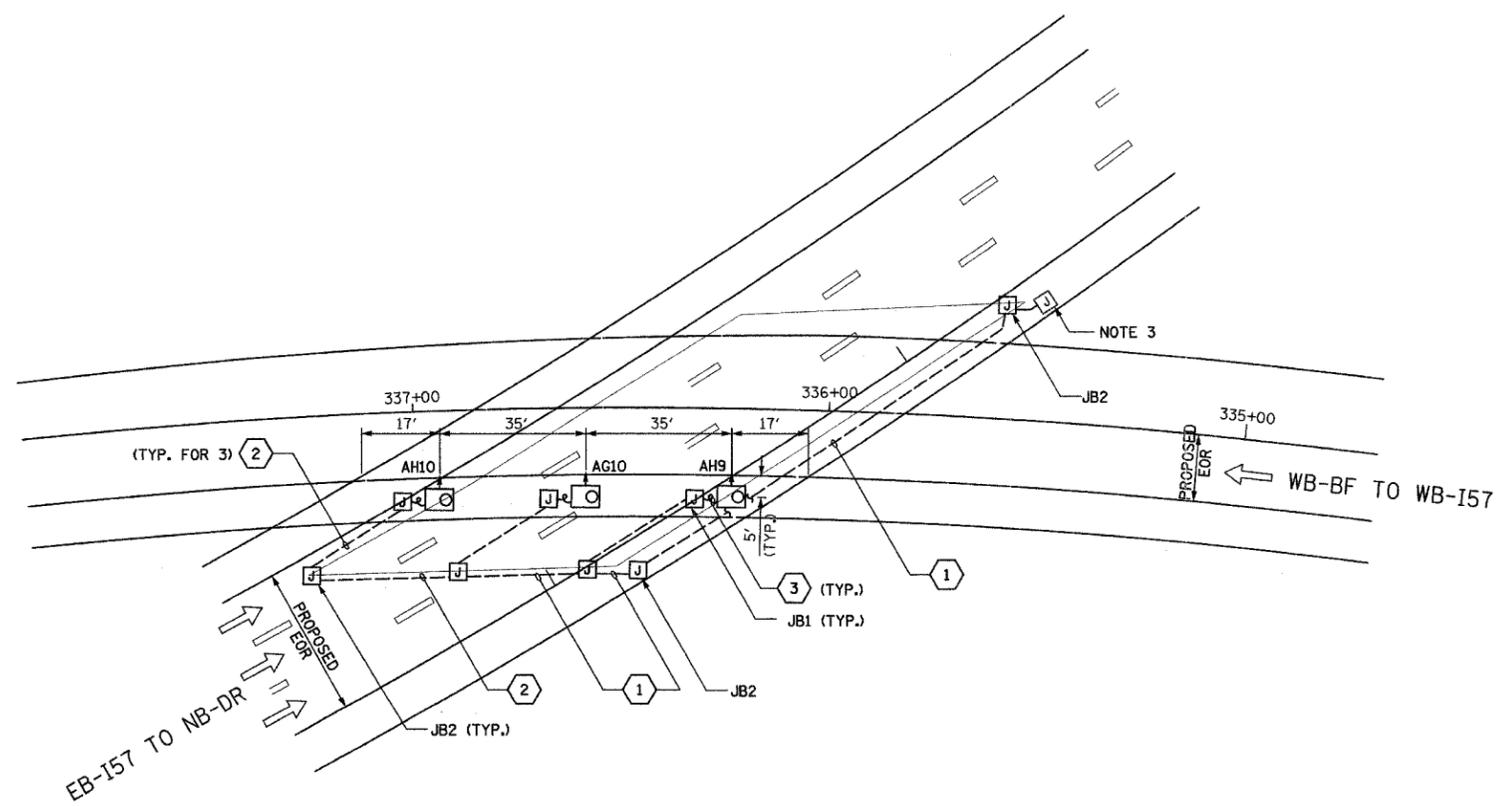
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-03II	COOK	976	359
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583



NOTES

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL05-04 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "A". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "A".
- ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 6294, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.



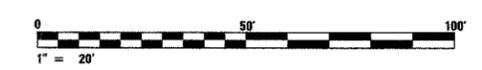
JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
NO.	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

PROPOSED UNDERPASS LIGHTING PLAN

SEQUENCE OF WORK:

2005 INSTALL ALL UNDERPASS LIGHTING



UL-04

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	

UNDERPASS LIGHTING PLANS
NB-I57 TO OVER WB X-CONNECTOR
PROPOSED IMPROVEMENTS

SCALE: 1"=20' DRAWN BY: VG
DATE: OCTOBER 29, 2004 CHECKED BY: TM

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
CONSULTING ENGINEERS FAX: (312) 629-8449

10/14/2004 3:48:53 PM

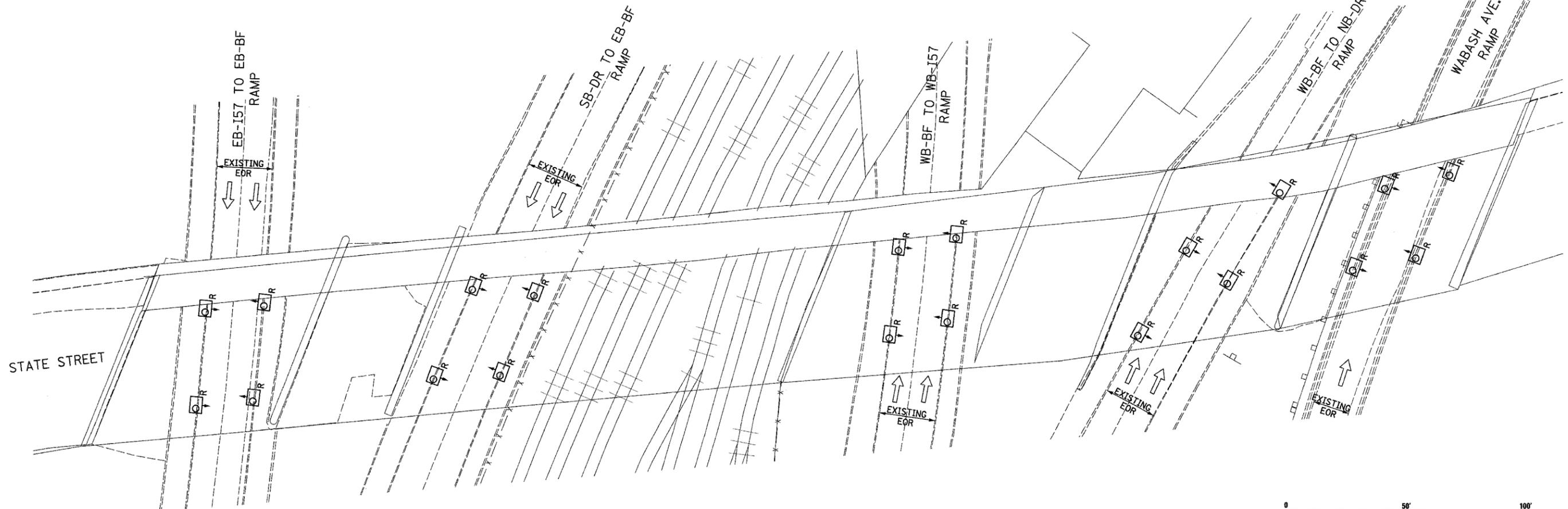
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	360
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583

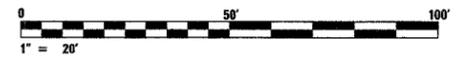


NOTES

1. SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
2. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
3. THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
4. UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
5. COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.
6. CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.



EXISTING UNDERPASS LIGHTING PLAN



UL-05

SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
STATE STREET
EXISTING CONDITIONS AND DEMOLITION

SCALE: 1"=20'
DATE: OCTOBER 29, 2004

DRAWN BY: VG
CHECKED BY: TM

10/15/2004 9:53:55 AM

NOTES

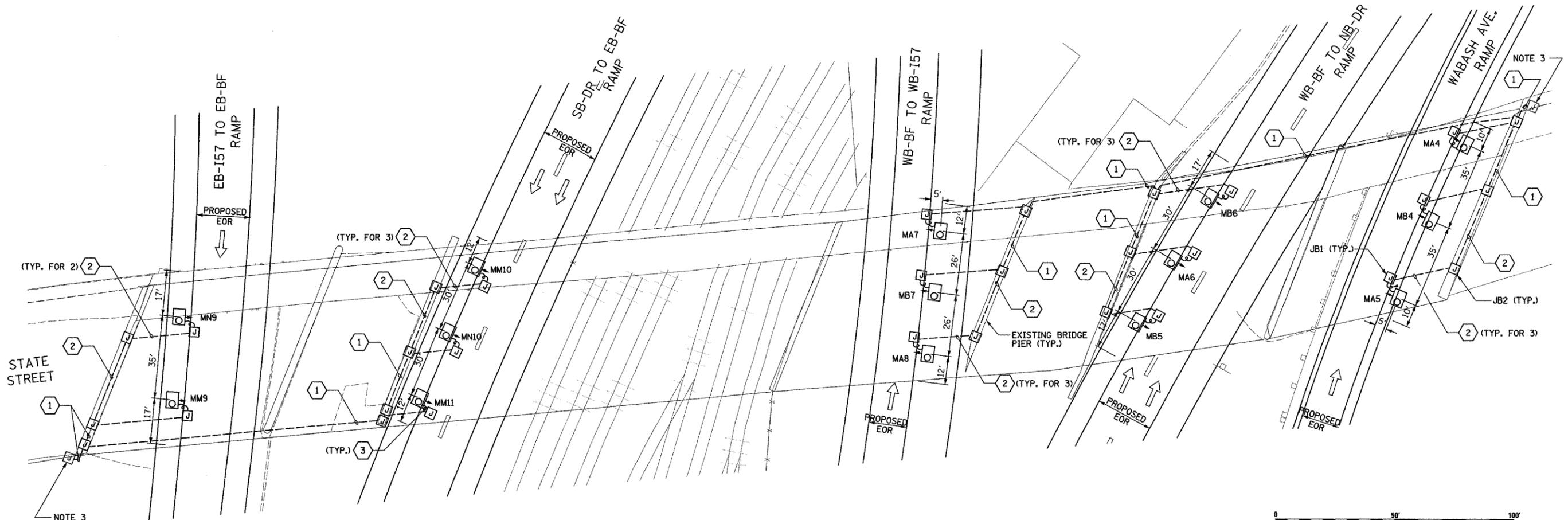
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL05-06, RL06-06, AND RL07-06 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "M". SEE DRAWING SLO8-02 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "M".
- ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

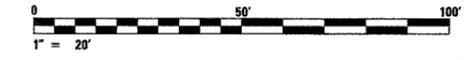
CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:

- 2006: WABASH AVE. RAMP
- 2006: WB-BF TO WB I-57
- 2007: WB-BF TO NB-DR
- 2007: SB-DR TO EB-BF
- 2007: EB I-57 TO EB-BF



PROPOSED UNDERPASS LIGHTING PLAN



UL-06

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
CONSULTING ENGINEERS FAX: (312) 629-8449

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

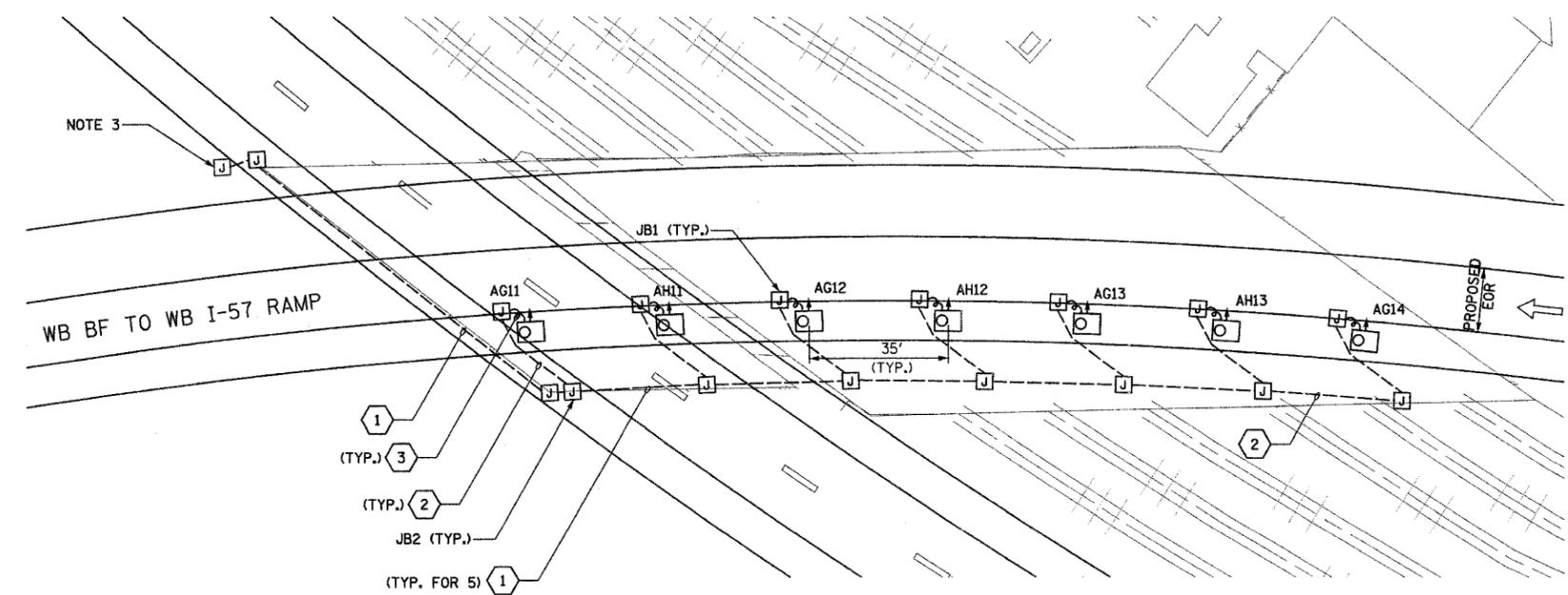
UNDERPASS LIGHTING PLANS
STATE STREET
PROPOSED IMPROVEMENTS

SCALE: 1"=20' DRAWN BY: VG
DATE: OCTOBER 29, 2004 CHECKED BY: TM

10/15/2004 10:24:40 AM



- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL07-06 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "A". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "A".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

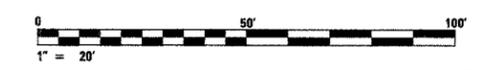


PROPOSED UNDERPASS LIGHTING PLAN

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
NO.	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:
2007: ALL UNDERPASS LIGHTING



UL-07

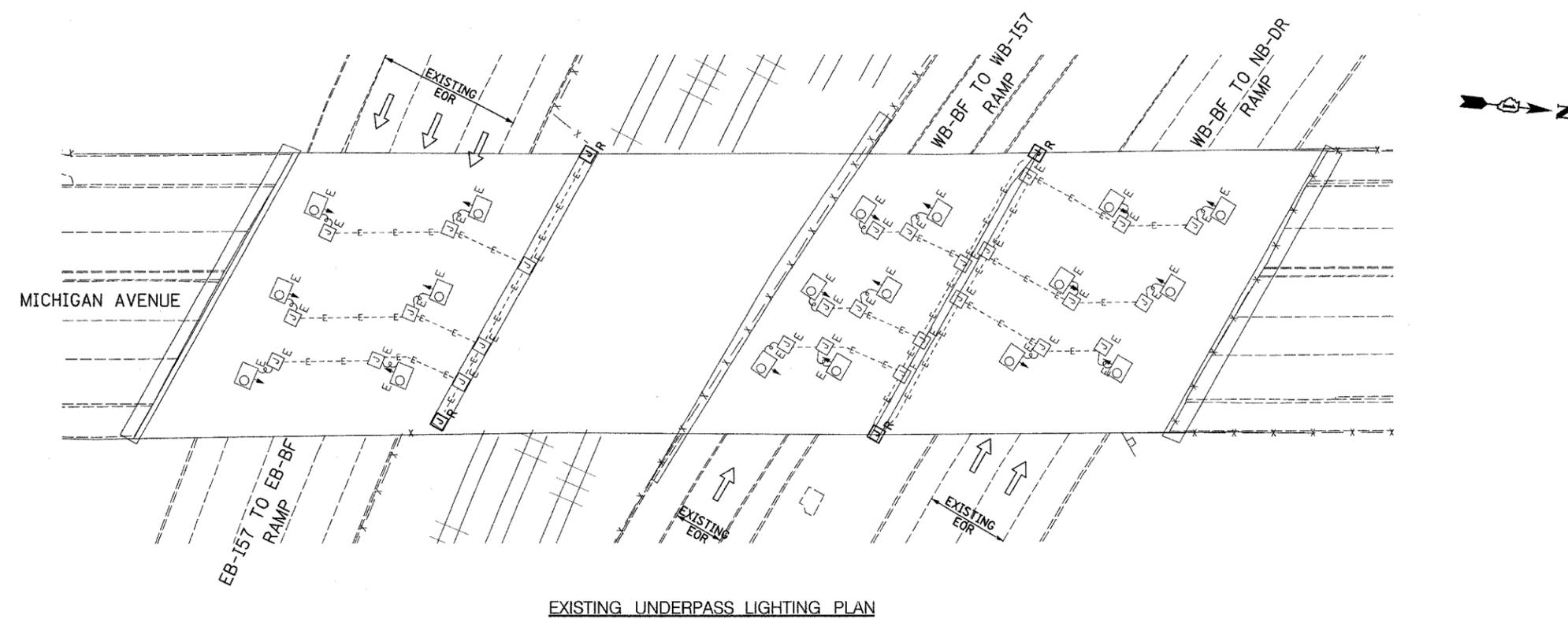
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	

**UNDERPASS LIGHTING PLANS
WB-BF TO WB-I57 RAMP
PROPOSED IMPROVEMENTS**

SCALE: 1"=20' DRAWN BY: VG
DATE: OCTOBER 29, 2004 CHECKED BY: TM

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
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SINGH & ASSOCIATES, INC. FAX: (312) 629-8449
CONSULTING ENGINEERS

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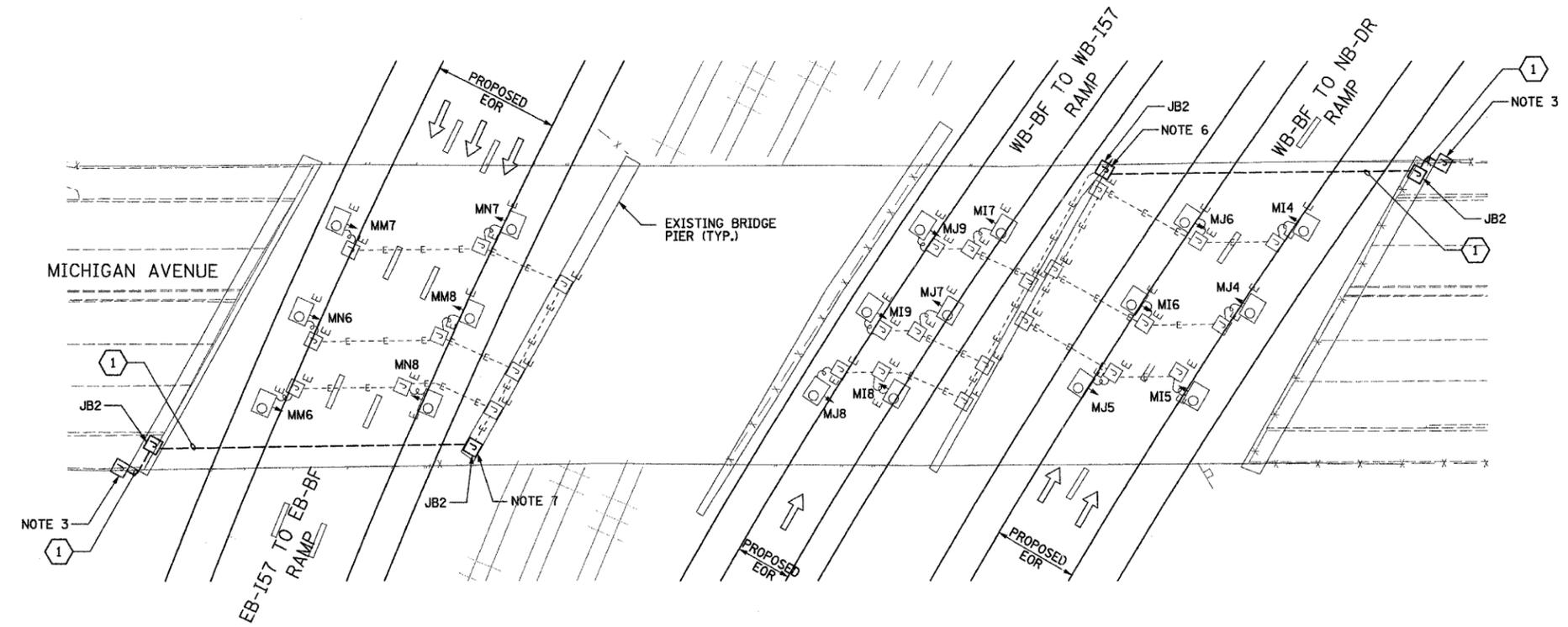
EXISTING UNDERPASS LIGHTING PLAN



- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-07 AND RL07-07 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "M". SEE DRAWING SLO8-02 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "M".
 - EXISTING UNDERPASS LIGHTING SHALL BE USED FOR PROPOSED LIGHTING. CHANGE CIRCUIT DESIGNATION TO MATCH PROPOSED.
 - SPLICE EXISTING 3#10 AND 1#10 GND. TO CKT. I&J, FROM CONTROLLER "M".
 - SPLICE EXISTING 3#10 AND 1#10 GND. TO CKT. M&N, FROM CONTROLLER "M".
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

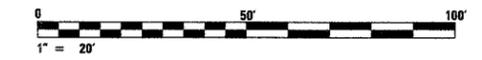
CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)



PROPOSED UNDERPASS LIGHTING PLAN

SEQUENCE OF WORK:

- 2006: WB BF TO NB-DR
- 2006: EB I-57 TO EB-BF NORTH SIDE
- 2007: WB I-57 TO EB-BF SOUTH SIDE
- 2007: WB-BF TO WB I-57



UL-08

SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

300 W. ADAMS ST.
CHICAGO, IL 60604
TEL: (312) 629-0240
FAX: (312) 629-8449

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
MICHIGAN AVENUE

SCALE: 1"=20'
DATE: OCTOBER 29, 2004
DRAWN BY: VG
CHECKED BY: TM

10/14/2004 3:49:00 PM

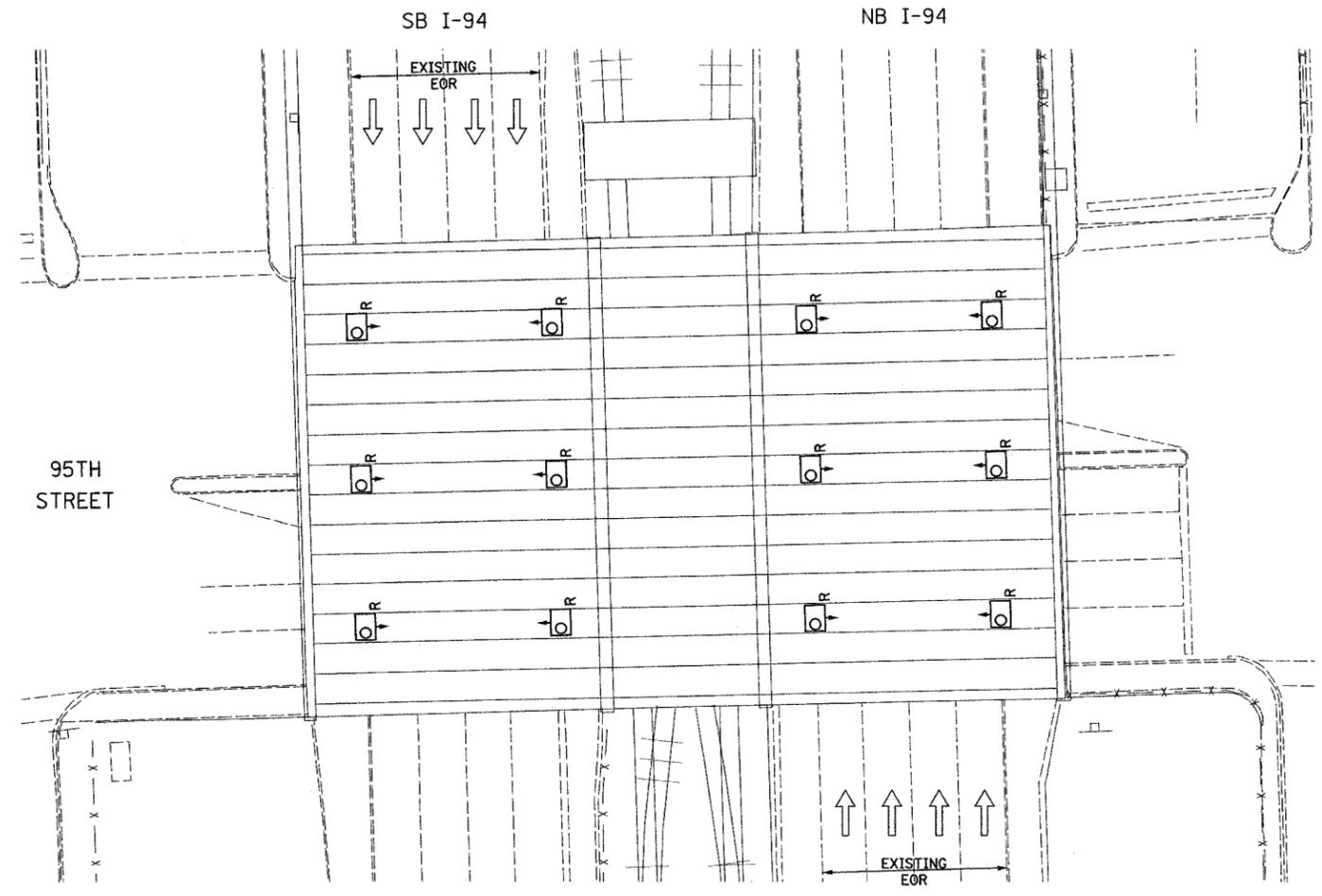
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	364
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583



NOTES

1. SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
2. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
3. THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
4. UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
5. COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.
6. CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.



EXISTING UNDERPASS LIGHTING PLAN



UL-09

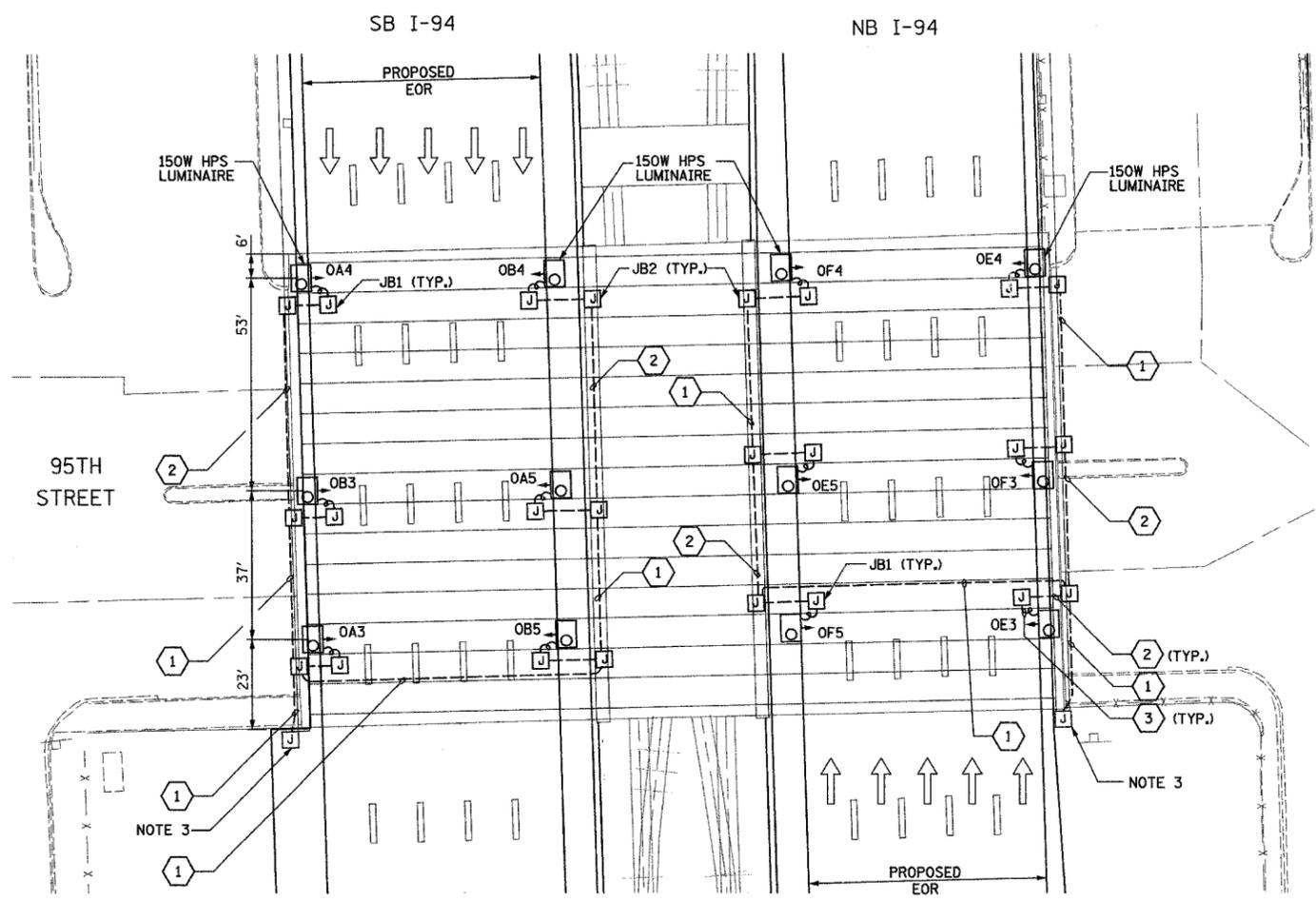
SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
SINGH & ASSOCIATES, INC. CONSULTING ENGINEERS
FAX: (312) 629-8449

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 95TH STREET EXISTING CONDITIONS AND DEMOLITION SCALE: 1"=20' DATE: OCTOBER 29, 2004
DRAWN BY: VG		CHECKED BY: TM
DATE: OCTOBER 29, 2004		

10/15/2004 9:53:58 AM



- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RLO6-10 AND RLO7-10 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "O". SEE DRAWING SLO8-03 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "O".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK. IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

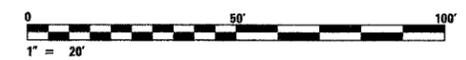


JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
NO.	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

PROPOSED UNDERPASS LIGHTING PLAN

SEQUENCE OF WORK:
 2006: OUTSIDE LANES, NB I-94 AND SB I-94
 2007: INSIDE LANES, NB I-94 AND SB I-94

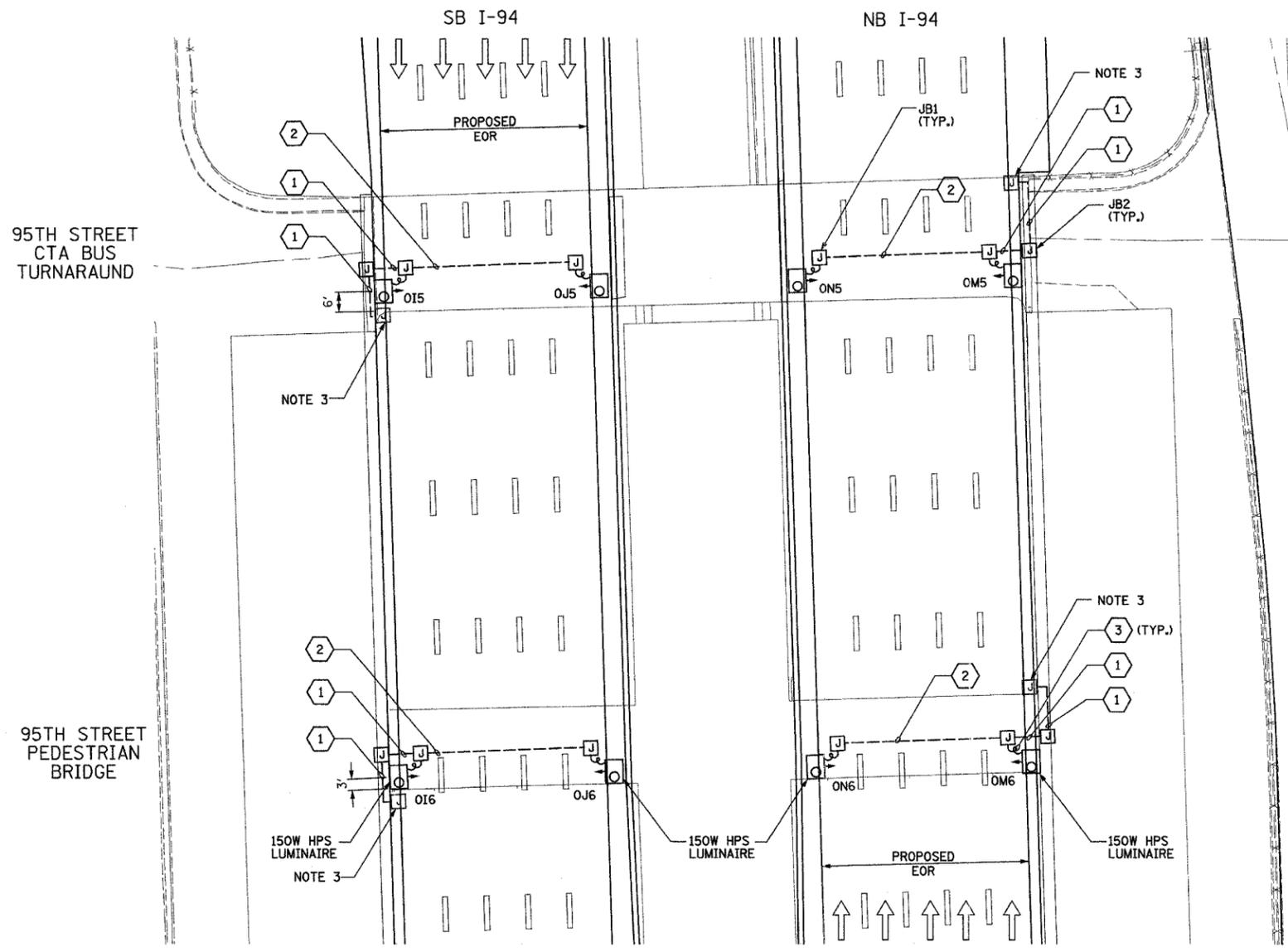


UL-10

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 95TH STREET PROPOSED IMPROVEMENTS
SCALE: 1"=20'		DRAWN BY: VG
DATE: OCTOBER 29, 2004		CHECKED BY: TM

SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
CONSULTING ENGINEERS FAX: (312) 629-8449

10/14/2004 3:49:03 PM

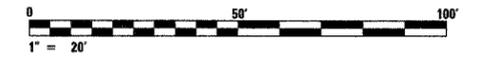


- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-10 AND RL07-10 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "O". SEE DRAWING SLO8-03 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "O".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE		
NO.	SIZE	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)	

SEQUENCE OF WORK:
 2006: OUTSIDE LANES, NB I-94 AND SB I-94
 2007: INSIDE LANES, NB I-94 AND SB I-94



UL-11

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57 UNDERPASS LIGHTING PLANS 95TH STREET CTA BUS TURNARAUND AND PEDESTRIAN BRIDGE PROPOSED IMPROVEMENTS
NAME	DATE	

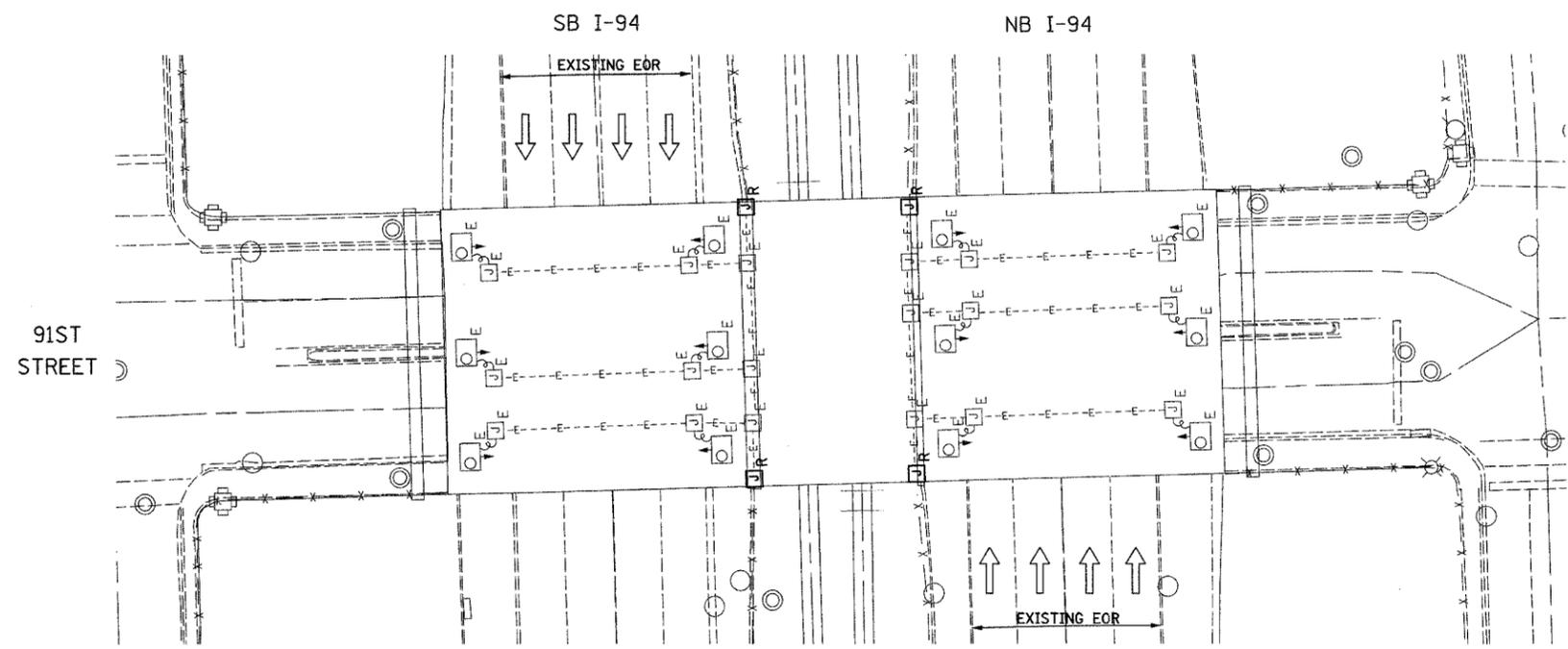
SCALE: 1"=20' DRAWN BY: VG
 DATE: OCTOBER 29, 2004 CHECKED BY: TM

SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

10/14/2004 3:49:05 PM

F.A.I. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	367
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62583

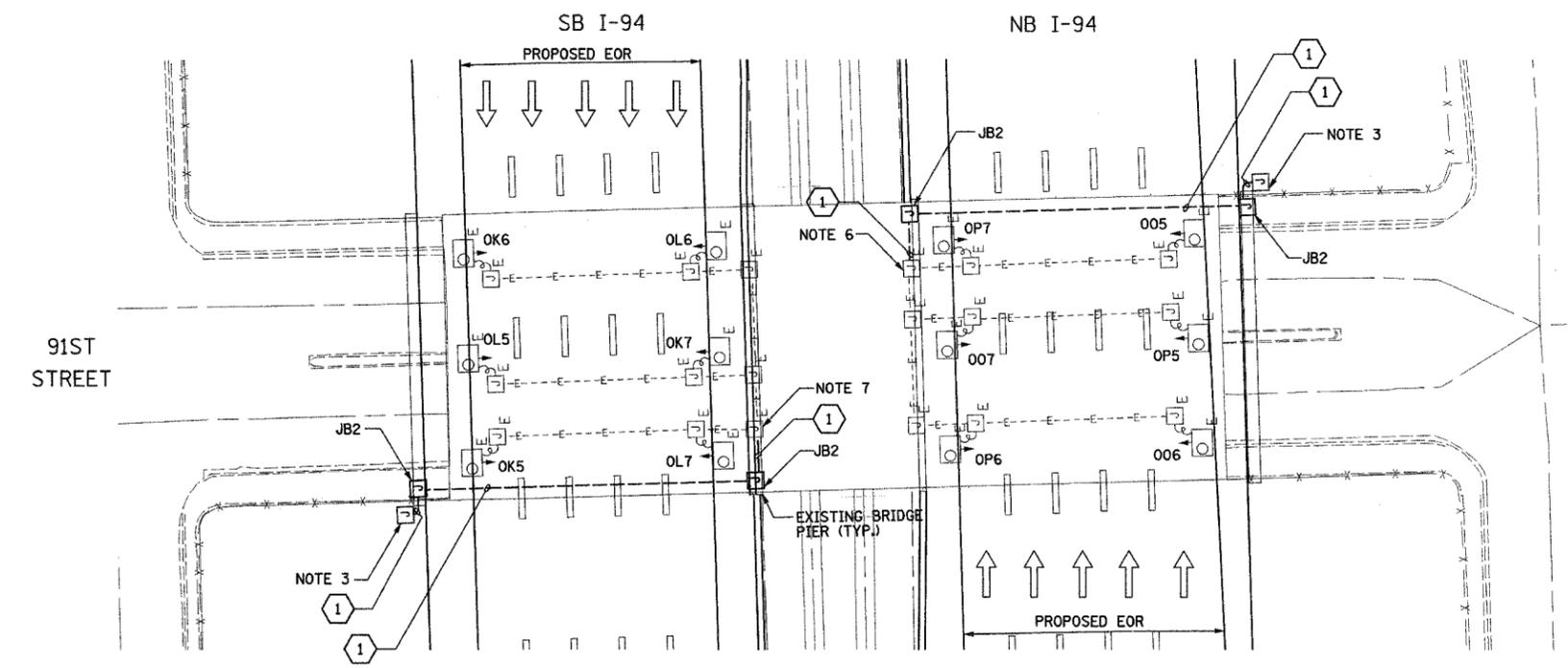


EXISTING UNDERPASS LIGHTING PLAN

- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RLO6-12 AND RLO7-12 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "O", SEE DRAWING SLO8-03 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "O".
 - EXISTING UNDERPASS LIGHTING SHALL BE USED FOR PROPOSED LIGHTING. CHANGE CIRCUIT DESIGNATION TO MATCH PROPOSED.
 - SPLICE EXISTING 3*10 AND 1*10 GND. TO CKT. O&P, FROM CONTROLLER "O".
 - SPLICE EXISTING 3*10 AND 1*10 GND. TO CKT. K&L, FROM CONTROLLER "O".
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

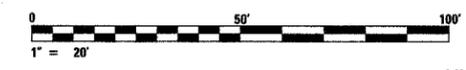
JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)



PROPOSED UNDERPASS LIGHTING PLAN

SEQUENCE OF WORK:
 2006: OUTSIDE LANES, NB I-94 AND SB I-94
 2007: INSIDE LANES, NB I-94 AND SB I-94



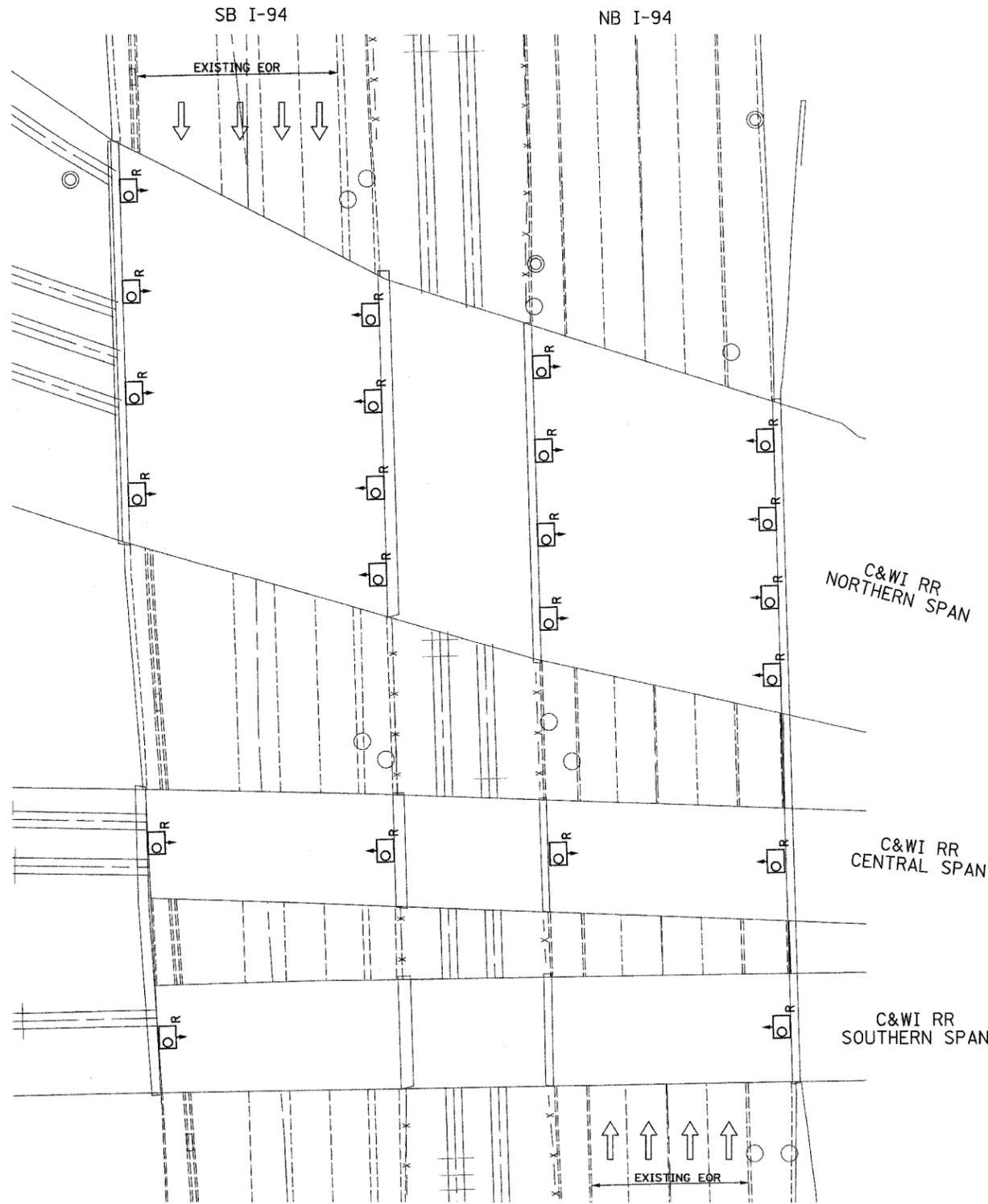
UL-12

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 91ST STREET SCALE: 1"=20' DATE: OCTOBER 29, 2004 DRAWN BY: VG CHECKED BY: TM

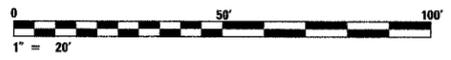
SINGH 300 W. ADAMS ST.
 CHICAGO, IL 60606
 SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
 CONSULTING ENGINEERS FAX: (312) 629-8449

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	362
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	62583	



- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
 - UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.



UL-13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

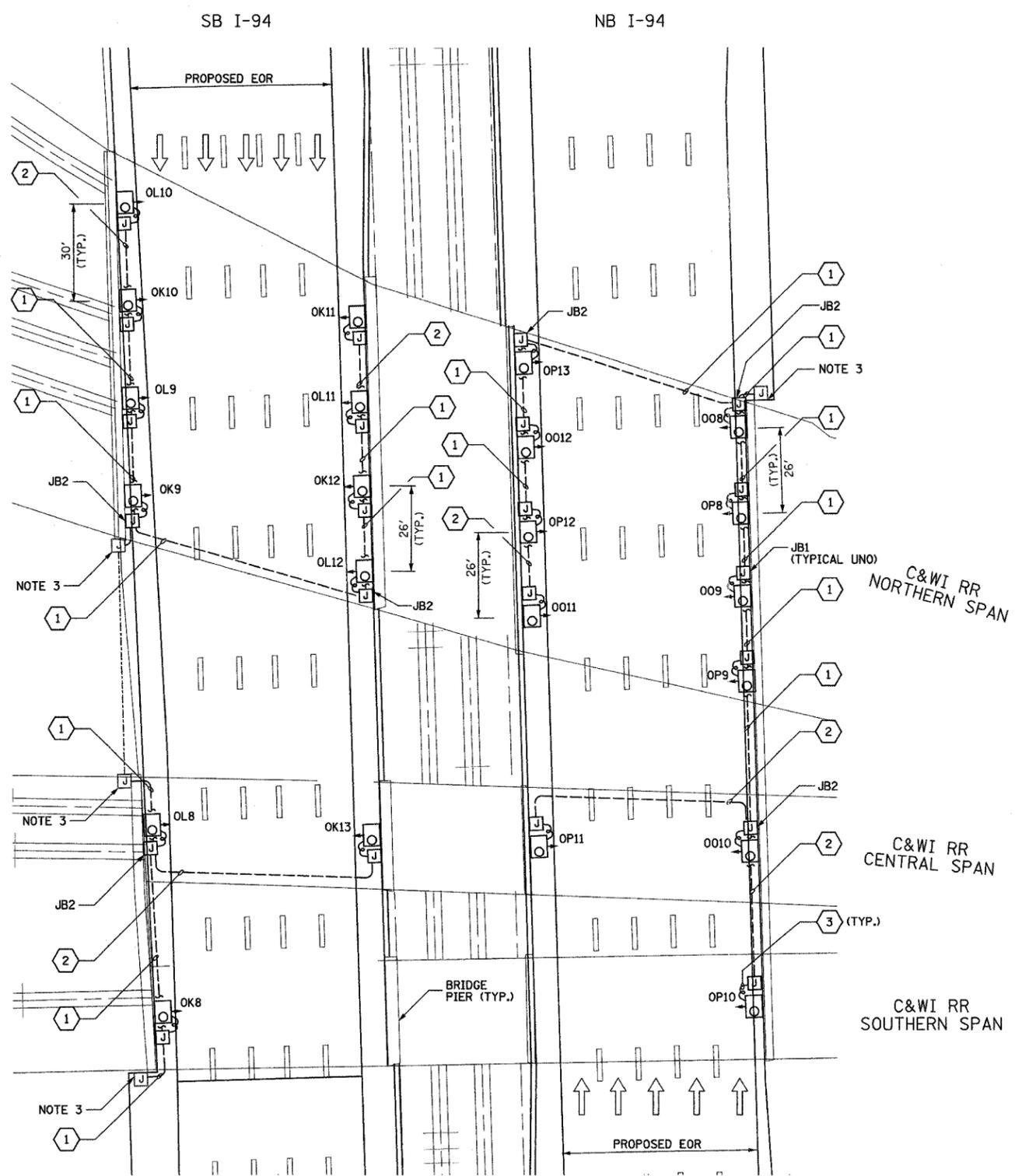
UNDERPASS LIGHTING PLANS
 C&WI RR OVER FAI-90/94
 EXISTING CONDITIONS AND DEMOLITION

SCALE: 1"=20' DRAWN BY: VG
 DATE: OCTOBER 29, 2004 CHECKED BY: TM

SINGH 300 W. ADAMS ST.
 CHICAGO, IL 60606
 SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
 CONSULTING ENGINEERS FAX: (312) 629-8449

EXISTING UNDERPASS LIGHTING PLAN

10/15/2004 9:54:01 AM



- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PIER OR ABUTMENT WALL MOUNTED AS SHOWN. SEE DRAWING ME-07 FOR PIER/ABUTMENT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-12 AND RL07-12 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "0". SEE DRAWING SL08-03 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "0".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK. IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE		
NO.	SIZE	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)	

SEQUENCE OF WORK:

2006: OUTSIDE LANES, NB I-94 AND SB I-94

2007: INSIDE LANES, NB I-94 AND SB I-94



UL-14

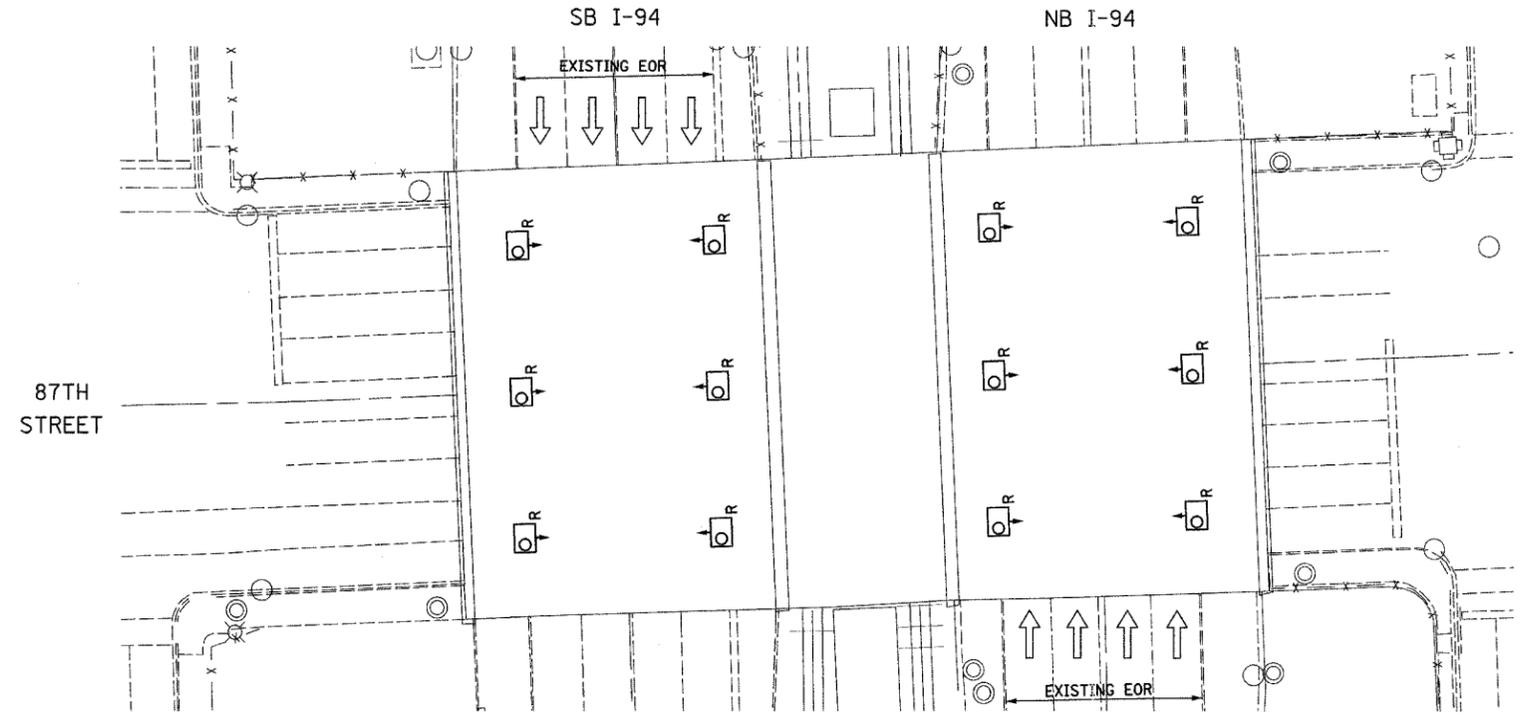
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS C&WI RR OVER FAI-90/94 PROPOSED IMPROVEMENTS SCALE: 1"=20' DRAWN BY: VG DATE: OCTOBER 29, 2004 CHECKED BY: TM

PROPOSED UNDERPASS LIGHTING PLAN

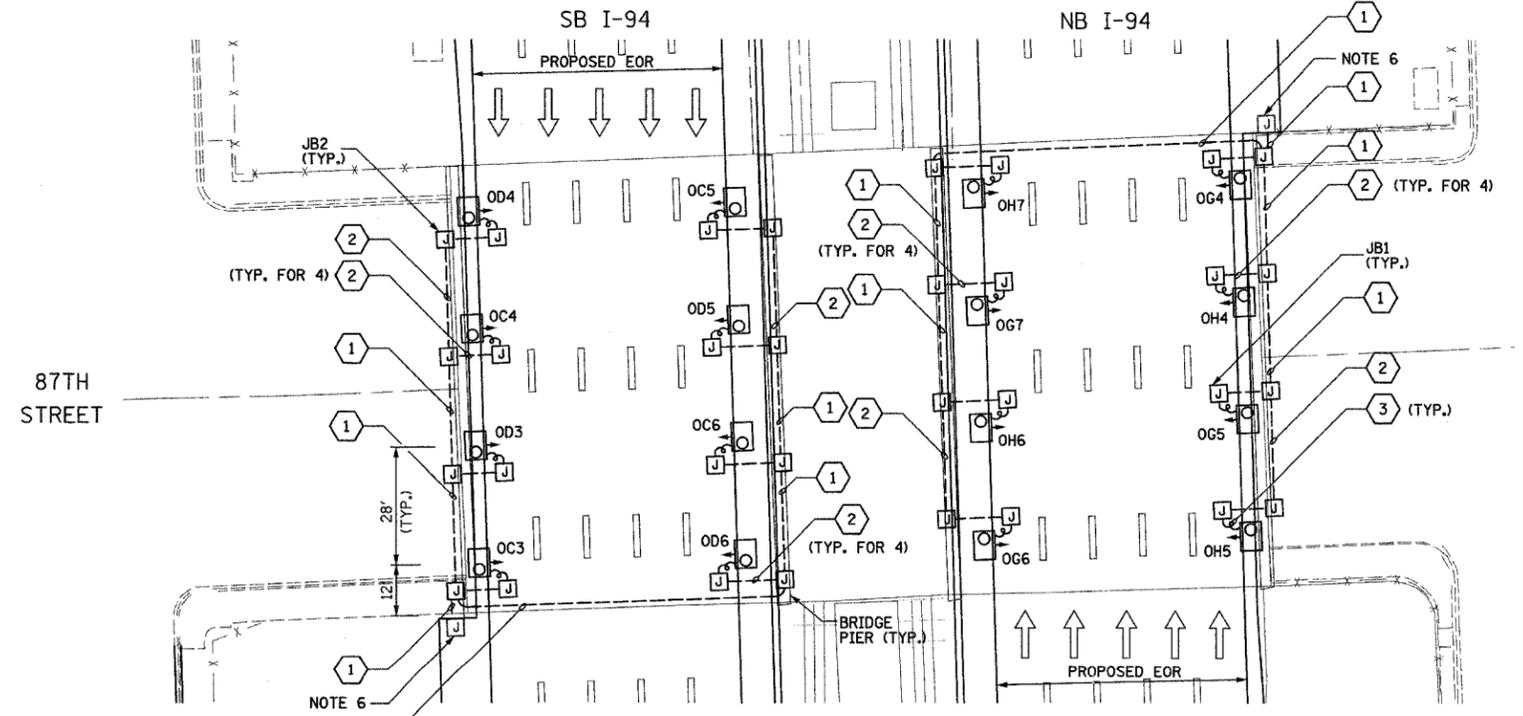
SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	770
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	62583	



EXISTING UNDERPASS LIGHTING PLAN



PROPOSED UNDERPASS LIGHTING PLAN

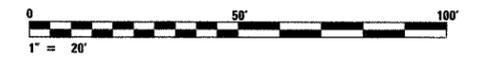


- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
 - UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-14 AND RL07-14 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "O". SEE DRAWING SLO8-03 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "O".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C#10, 1-1/C#10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C#10, 1-1/C#10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C#10, 1-1/C#10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:
 2006: OUTSIDE LANES, NB I-94 AND SB I-94
 2007: INSIDE LANES, NB I-94 AND SB I-94



UL-15

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 318+ STREET TO I-57

**UNDERPASS LIGHTING PLANS
 87TH STREET**

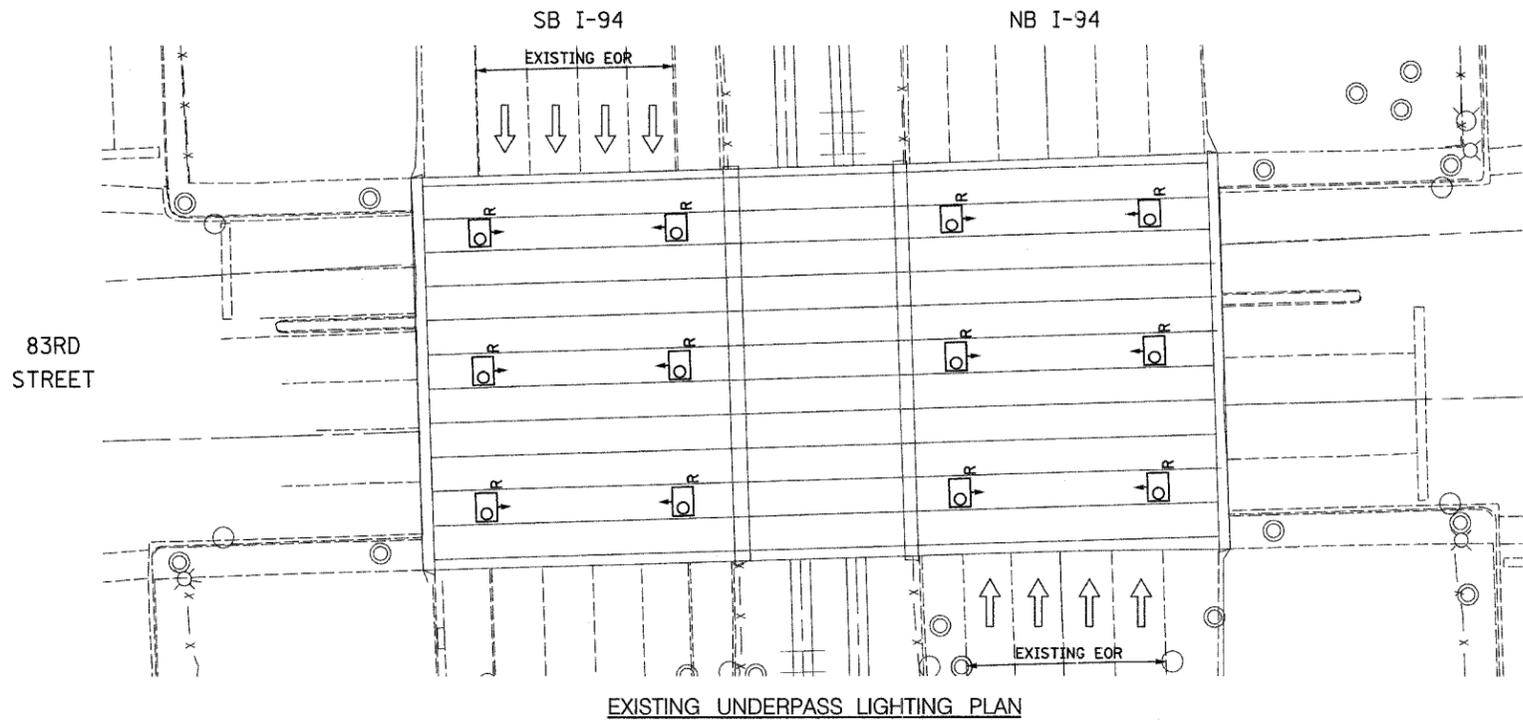
SCALE: 1"=20'
 DATE: OCTOBER 29, 2004

DRAWN BY: VG
 CHECKED BY: TM

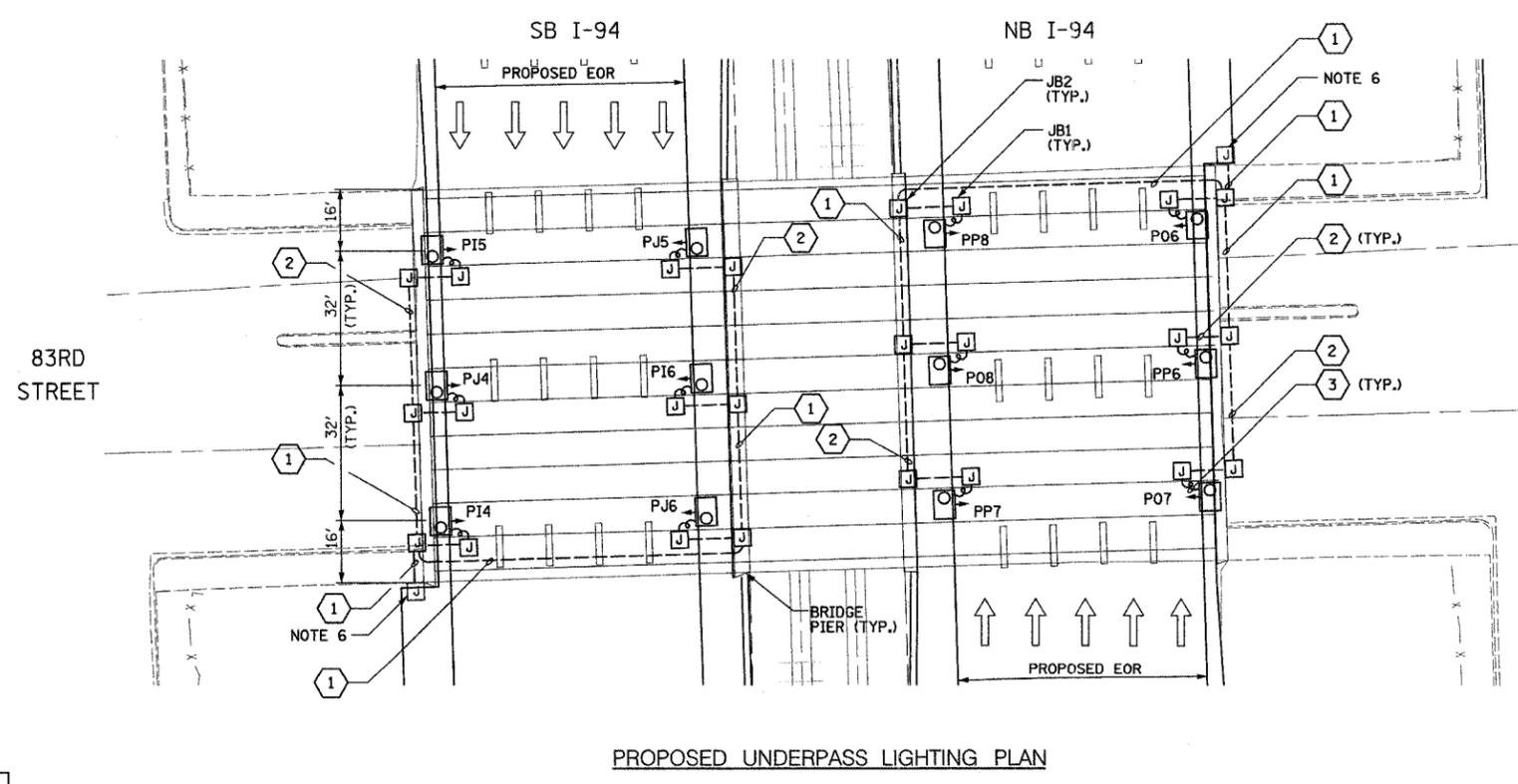
SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS

300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

10/14/2004 3:49:15 PM



- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
 - UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-16 AND RL07-16 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "P". SEE DRAWING SLO8-04 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "P".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK. IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.



JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE		
NO.	DESCRIPTION	
1	3-1/2"X10, 1-1/2"X10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
2	2-1/2"X10, 1-1/2"X10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
3	2-1/2"X10, 1-1/2"X10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)	

SEQUENCE OF WORK:
 2006: OUTSIDE LANES, NB I-94 AND SB I-94
 2007: INSIDE LANES, NB I-94 AND SB I-94



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

UNDERPASS LIGHTING PLANS
 83RD STREET

SCALE: 1"=20'
 DATE: OCTOBER 29, 2004

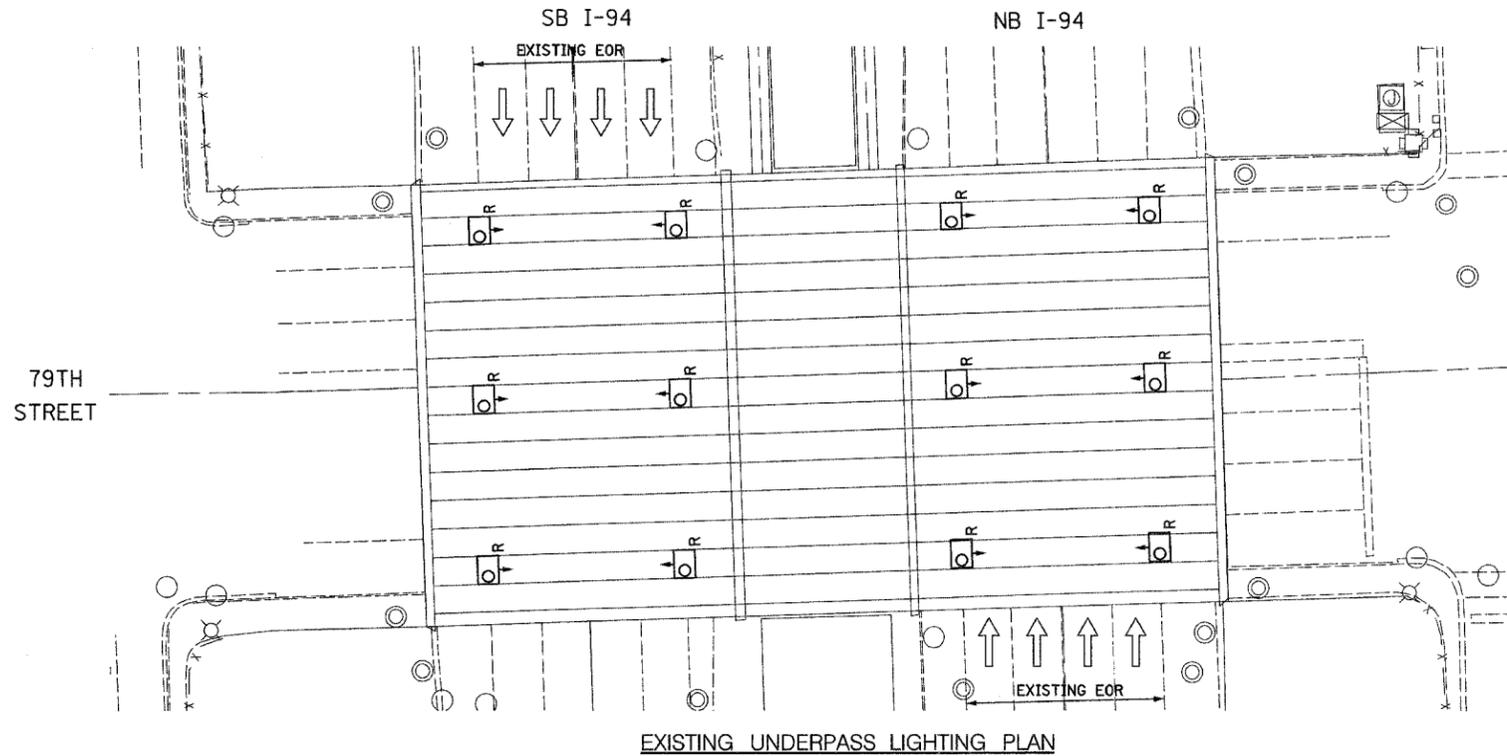
DRAWN BY: VG
 CHECKED BY: TM

SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS

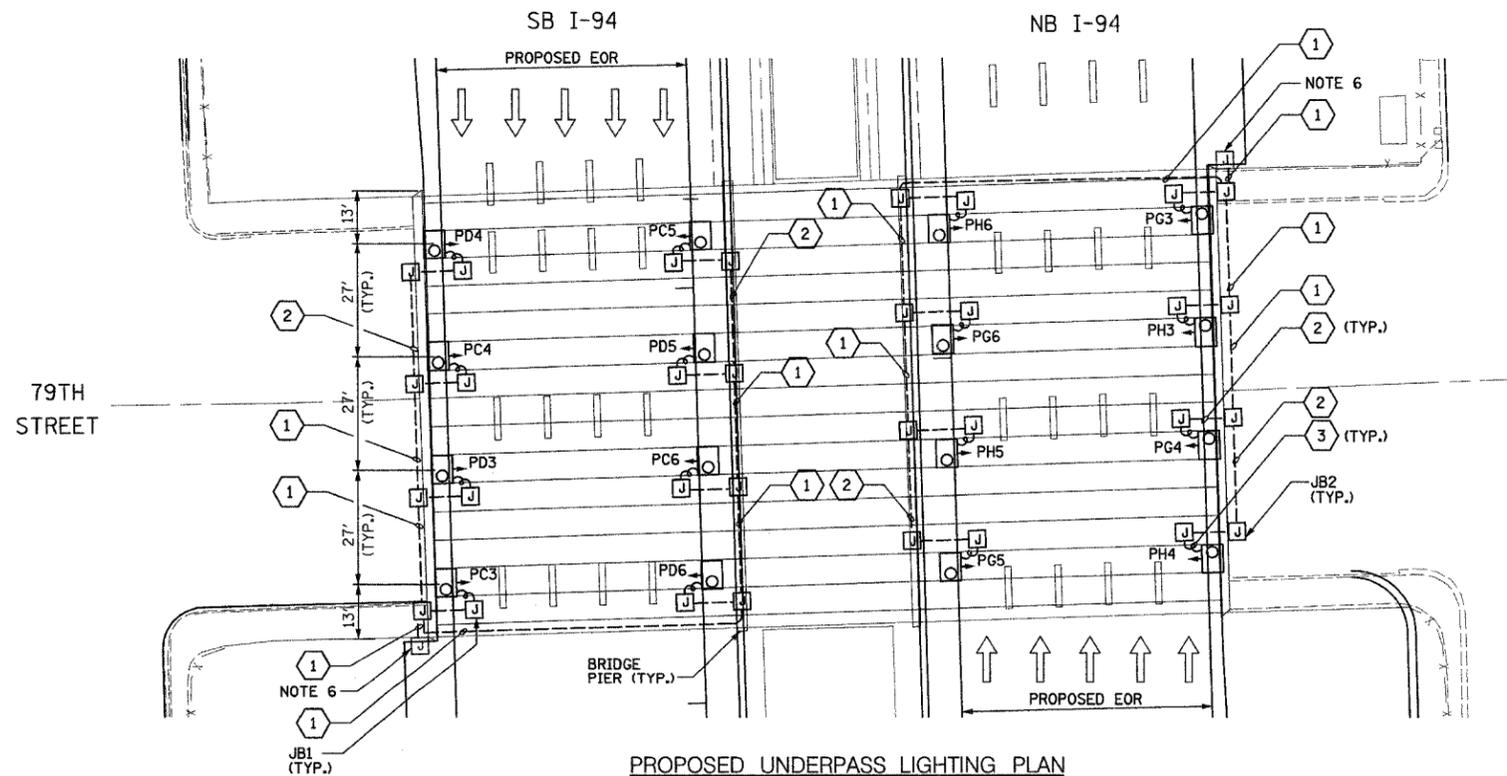
300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

10/14/2004 3:49:19 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	372
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	62583	



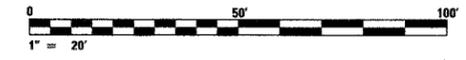
- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
 - UNDERPASS LUMINAIRES SHALL BE SALVAGED AND RETURNED TO IDOT.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-18 AND RL07-18 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "P". SEE DRAWING SLO8-04 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "P".
 - ALL PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL BE APPROVED BY IDOT PRIOR TO INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK. IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.



JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
NO.	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:
 2006: OUTSIDE LANES, NB I-94 AND SB I-94
 2007: INSIDE LANES, NB I-94 AND SB I-94



UL-17

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

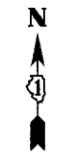
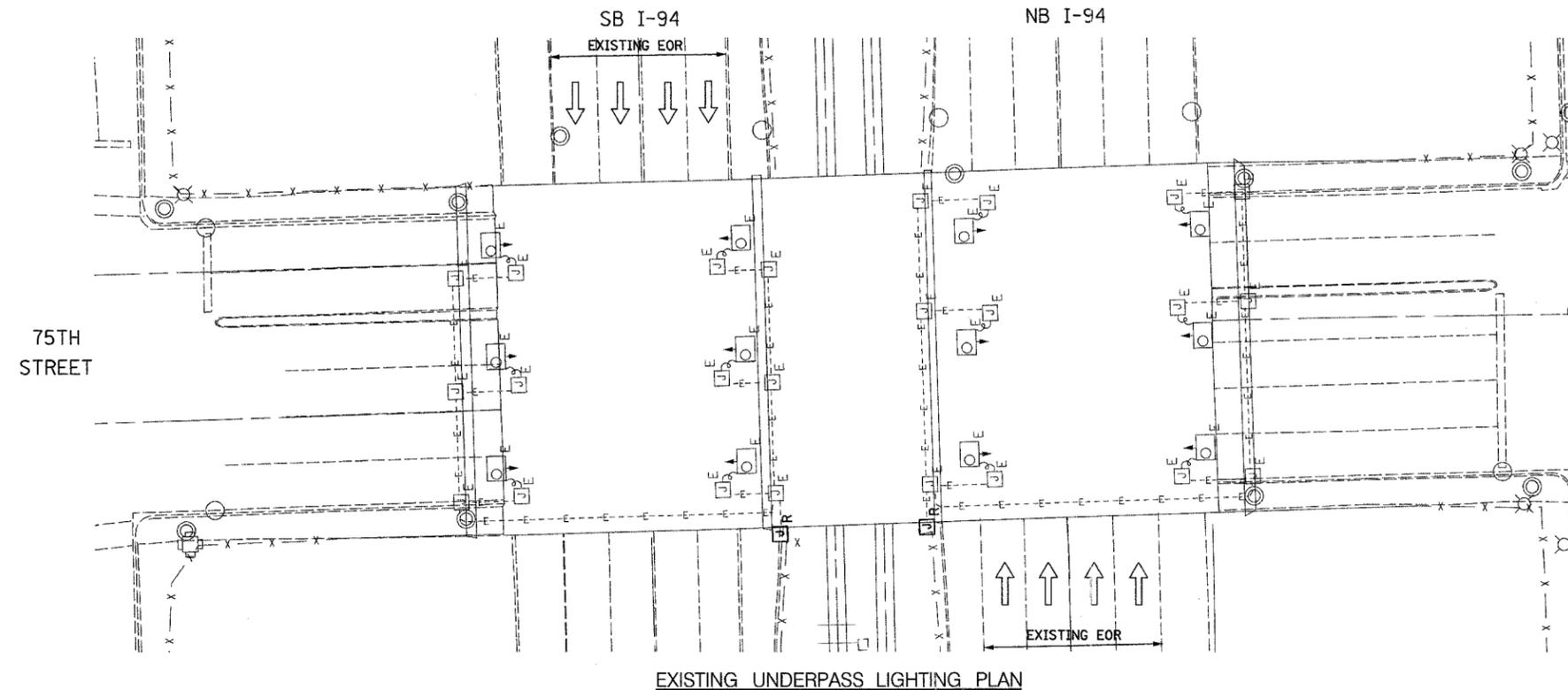
UNDERPASS LIGHTING PLANS
 79TH STREET

SCALE: 1"=20'
 DATE: OCTOBER 29, 2004

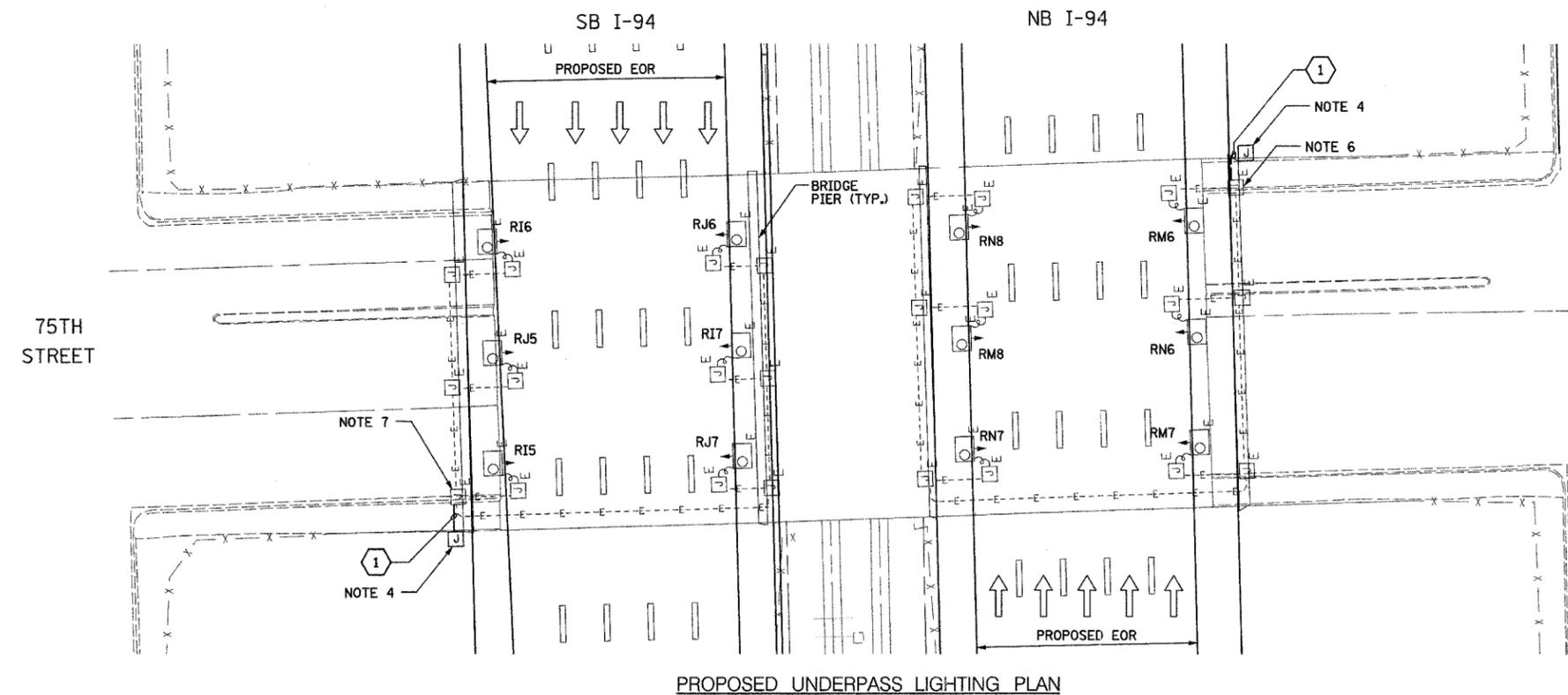
DRAWN BY: VG
 CHECKED BY: TM

SINGH 300 W. ADAMS ST.
 CHICAGO, IL 60606
 SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
 CONSULTING ENGINEERS FAX: (312) 629-8449

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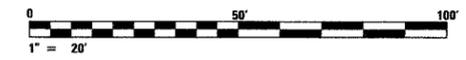
- NOTES**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-20 AND RL07-20 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "R". SEE DRAWING SLO8-05 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "R".
 - EXISTING UNDERPASS LIGHTING SHALL BE USED FOR PROPOSED LIGHTING. CHANGE CIRCUIT DESIGNATION TO MATCH PROPOSED.
 - SPLICE EXISTING 3*10 AND 1*10 GND. TO CKT. M&N, FROM CONTROLLER "R".
 - SPLICE EXISTING 3*10 AND 1*10 GND. TO CKT. I&J, FROM CONTROLLER "R".
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.



JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:
 2006: OUTSIDE LANES, NB I-94 AND SB I-94
 2007: INSIDE LANES, NB I-94 AND SB I-94



UL-19

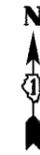
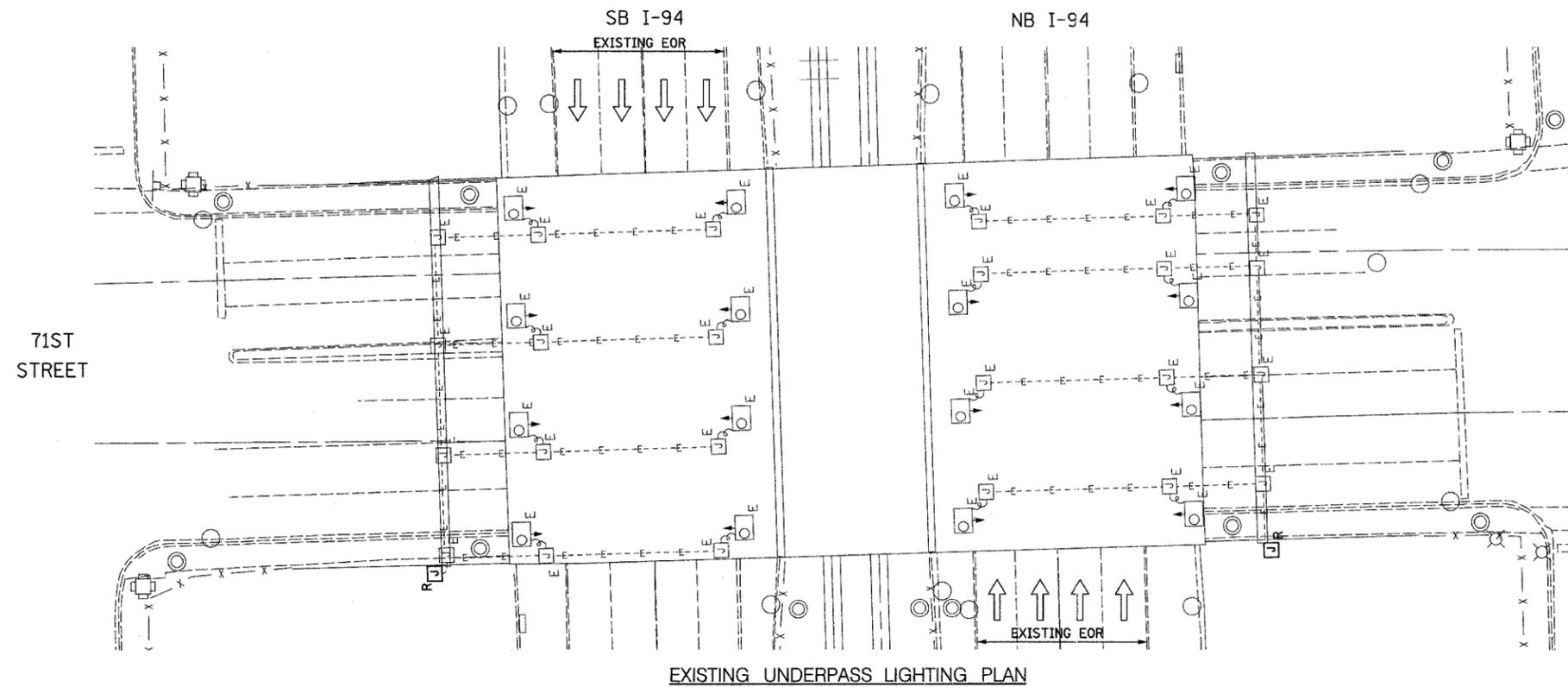
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 75TH STREET
SCALE: 1"=20'		DRAWN BY: VG
DATE: OCTOBER 29, 2004		CHECKED BY: TM

SINGH 300 W. ADAMS ST.
 SINGH & ASSOCIATES, INC. CHICAGO, IL 60606
 CONSULTING ENGINEERS TEL: (312) 629-0240
 FAX: (312) 629-8449

10/14/2004 3:49:25 PM

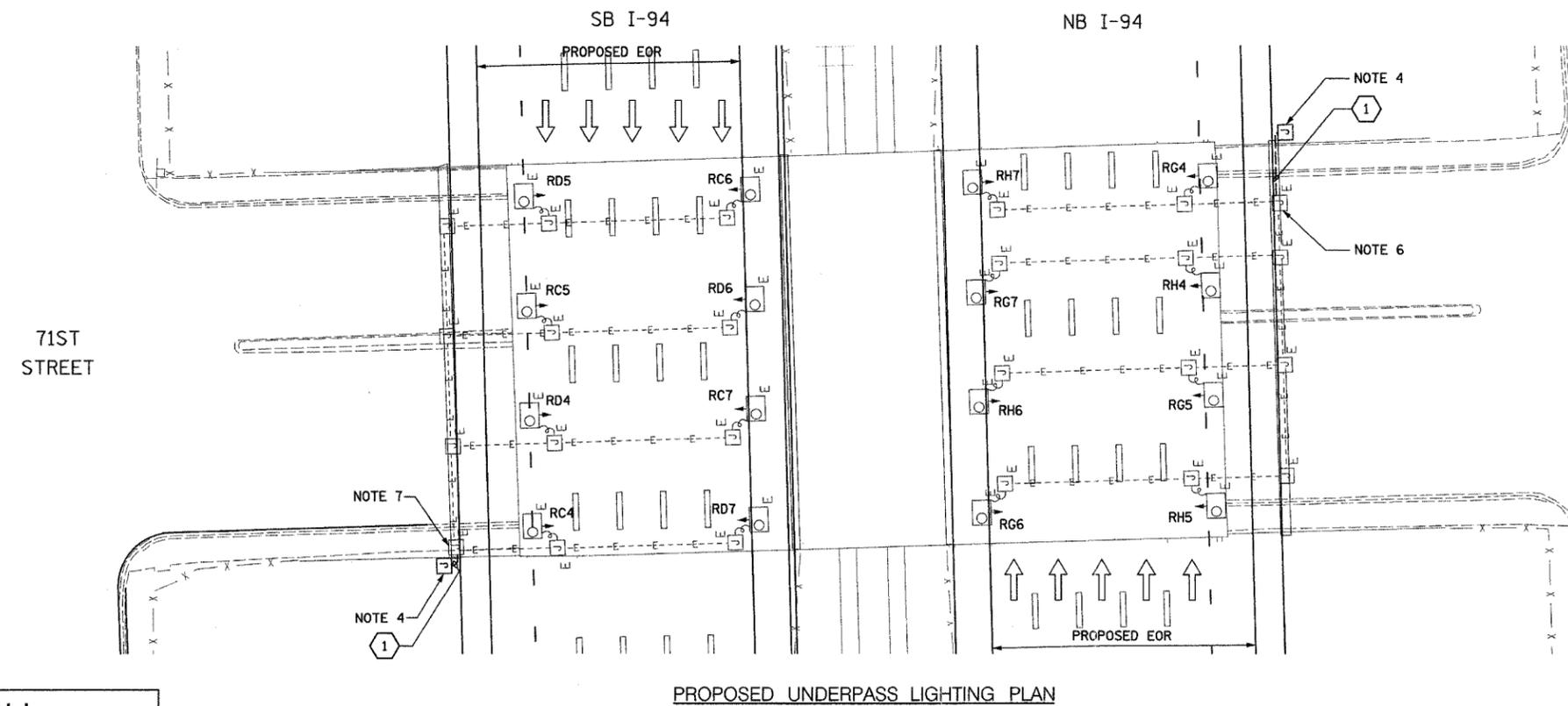
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	375
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583



NOTES

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RL06-22 AND RL07-22 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING SHALL BE FED FROM IDOT LIGHTING CONTROLLER "R". SEE DRAWING SLO8-05 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "R".
- EXISTING UNDERPASS LIGHTING TO BE USED FOR PROPOSED LIGHTING. CHANGE CIRCUIT DESIGNATION TO MATCH PROPOSED.
- SPLICE EXISTING 3*10 AND 1*10 GND. TO CKT. G&H, FROM CONTROLLER "R".
SPLICE EXISTING 3*10 AND 1*10 GND. TO CKT. C&D, FROM CONTROLLER "R".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK. IDOT CONTRACTS 62304, 62305, 62592, 62593, CONSTRUCTION STAGING AND TRAFFIC CONTROL PLANS.

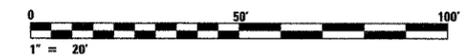


JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK:

- 2006: OUTSIDE LANES, NB I-94 AND SB I-94
- 2007: INSIDE LANES, NB I-94 AND SB I-94



UL-19A

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
71ST STREET

SCALE: 1"=20'
DATE: OCTOBER 29, 2004
DRAWN BY: VG
CHECKED BY: TM

SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

10/15/2004 8:24:45 AM

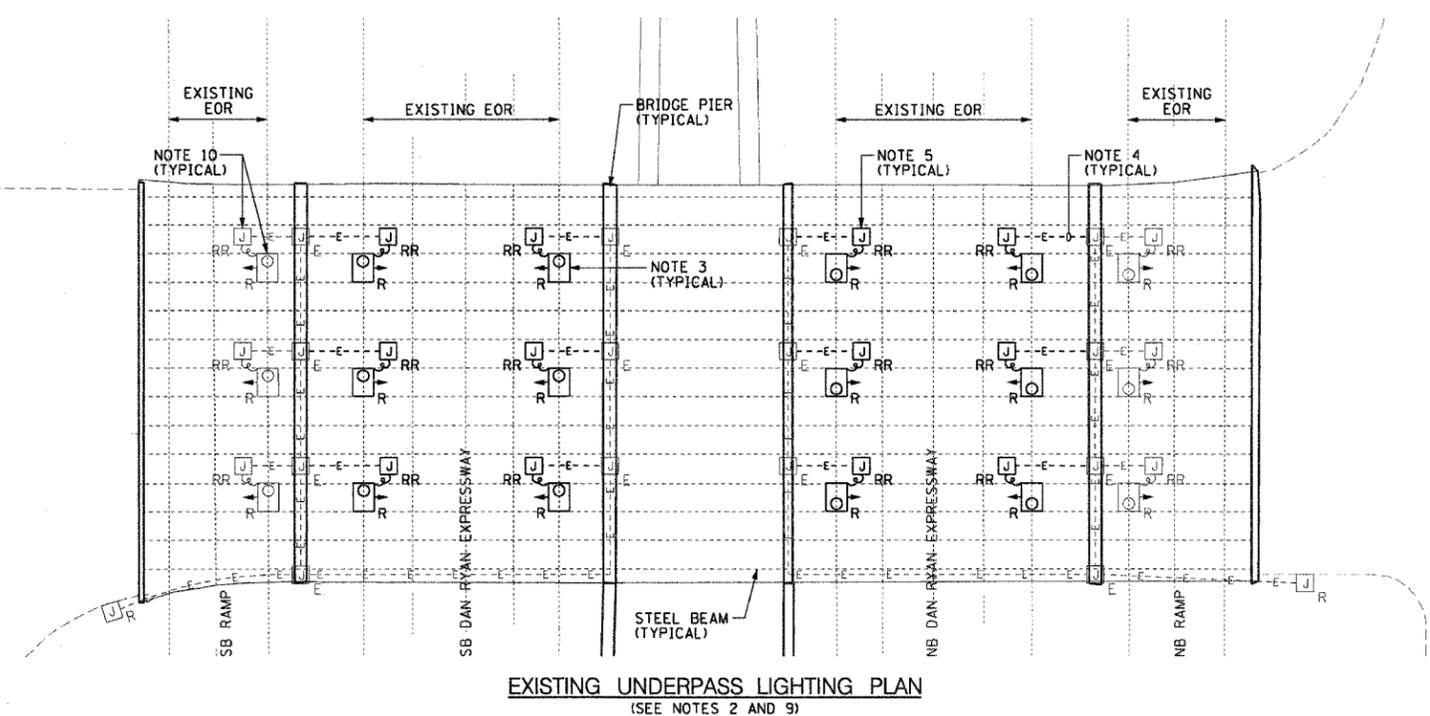
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	376
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62583

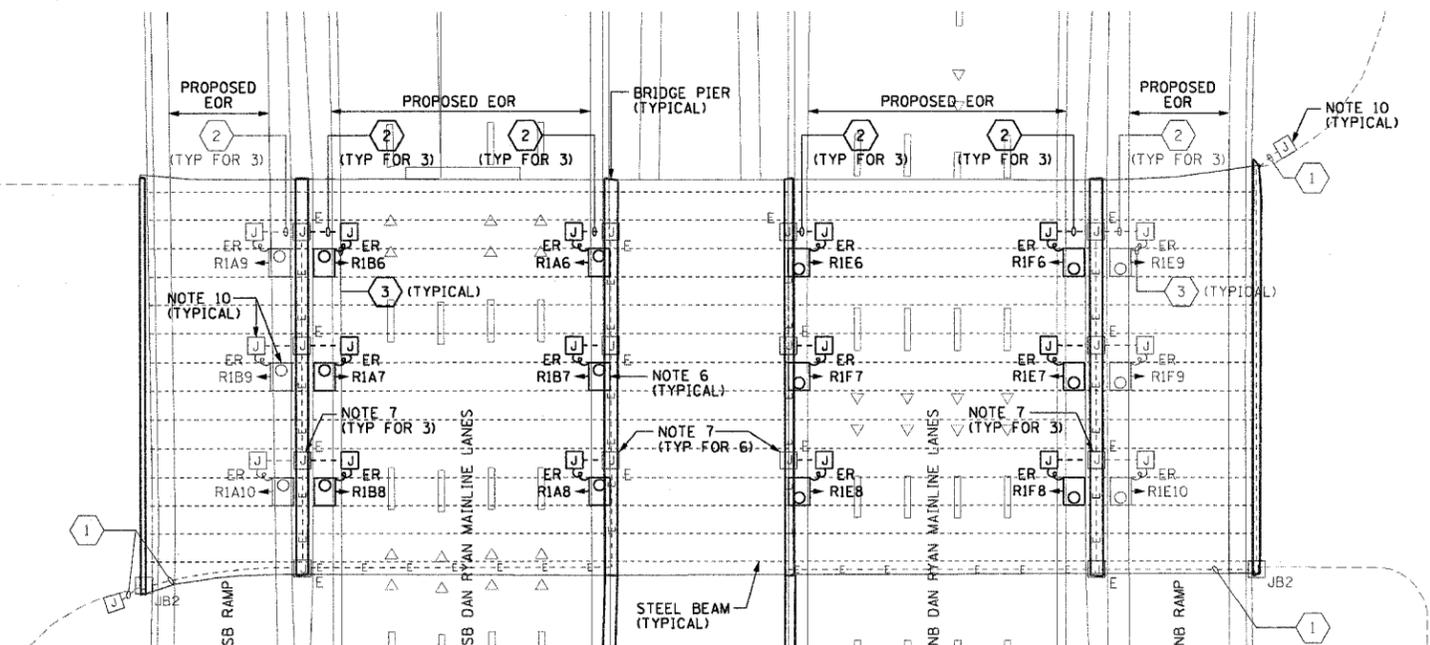


NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- REMOVE AND DISPOSE OF EXISTING CABLE AND CONDUIT ATTACHED TO STRUCTURE AND PROVIDE PLUG AS REQUIRED FOR EXISTING JUNCTION BOX HOLE.
- RELOCATE ALL EXISTING JUNCTION BOXES DESIGNATED TO BE REMOVED AND REINSTALLED (RR) TO THE NEW UNDERPASS LUMINAIRE LOCATIONS AS SHOWN ON THIS DRAWING.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE EXISTING UNDERPASS LIGHTING CIRCUIT CABLES LOCATED IN THE EXISTING JUNCTION BOX.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "R1". SEE DRAWING SLO8-06 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "R1".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- ELECTRICAL WORK COMPLETED AS PART OF IDOT CONTRACT NUMBER 62733.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62733, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTES 2 AND 9)



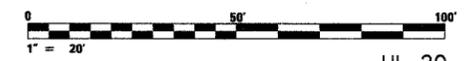
PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 8)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE / CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 11):

- 2006: REPLACE UNDERPASS LIGHTING OVER THE EAST SIDE OF THE NB MAINLINE LANES
REPLACE UNDERPASS LIGHTING OVER THE WEST SIDE OF THE SB MAINLINE LANES
- 2007: REPLACE UNDERPASS LIGHTING OVER THE WEST SIDE OF THE NB MAINLINE LANES
REPLACE UNDERPASS LIGHTING OVER THE EAST SIDE OF THE SB MAINLINE LANES



UL-20



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57 UNDERPASS LIGHTING PLANS 69TH STREET
NAME	DATE	
		SCALE: 1"=20' DATE: October 29, 2004 DRAWN BY: HAR CHECKED BY: WDS

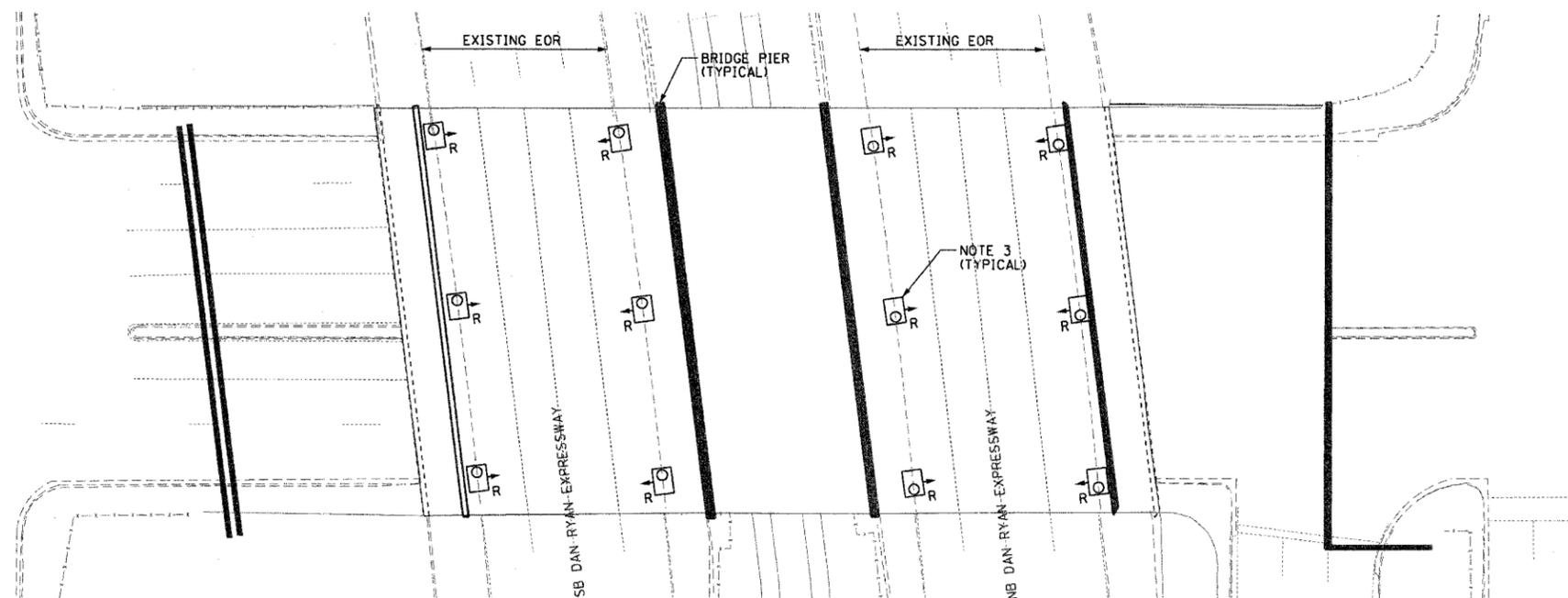
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	377
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE SERVICE FEED CABLES LOCATED IN THE JUNCTION BOX. SEE DRAWING RL-25 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "R1". SEE DRAWING SL-06 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "R1".
- PROVIDE TEMPORARY POWER AS REQUIRED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62590, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



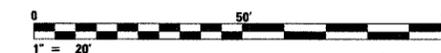
EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTE 2)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

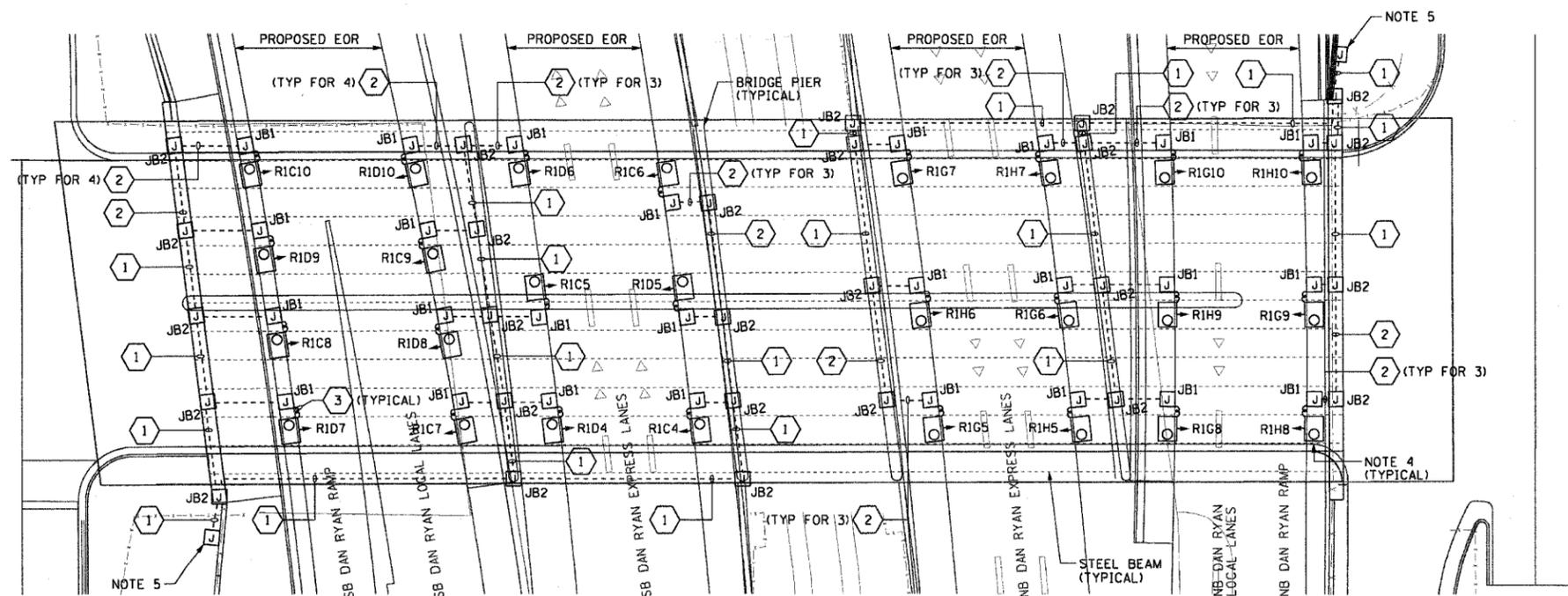
CABLE /CONDUIT SCHEDULE	
1	3-1/2" DIA, 1-1/2" GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/2" DIA, 1-1/2" GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/2" DIA, 1-1/2" GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 8):

- INSTALL PRIMARY POWER FEEDS AS SHOWN ON RL-25 (NOTE 7)
- INSTALL UNDERPASS LIGHTING IN EXPRESS LANES
- INSTALL UNDERPASS LIGHTING IN LOCAL LANES
- INSTALL UNDERPASS LIGHTING IN RAMP LANES



UL-21



PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 6)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
67TH STREET

SCALE: 1"=20'
DATE: October 29, 2004

DRAWN BY: HAR
CHECKED BY: WDS

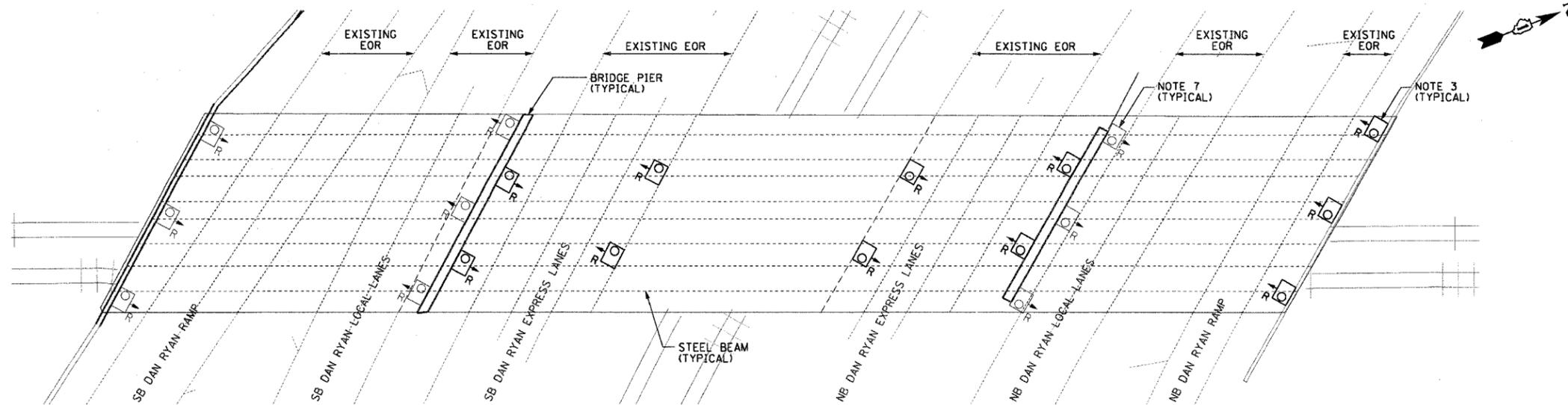
THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY.
ALL UNDERPASS LIGHTING EQUIPMENT SHOWN WAS
INSTALLED IN IDOT CONTRACT NO. 62733.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	374
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

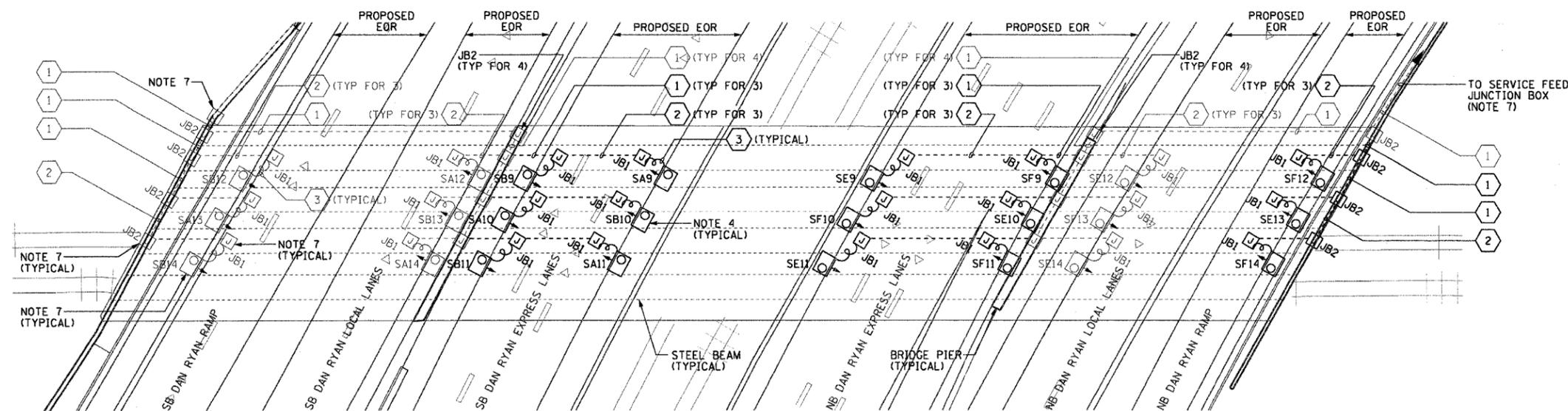
62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "S". SEE DRAWING SLO8-07 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "S".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- ELECTRICAL WORK COMPLETED AS PART OF IDOT CONTRACT NUMBER 62733.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62733, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTES 2 AND 6)



PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 5)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE		
NO.	DESCRIPTION	NOTES
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)	

SEQUENCE OF WORK (NOTE 8):

- 2006: REPLACE UNDERPASS LIGHTING IN EXPRESS LANES
- 2007: REPLACE UNDERPASS LIGHTING IN NB RAMP LANES



UL-23

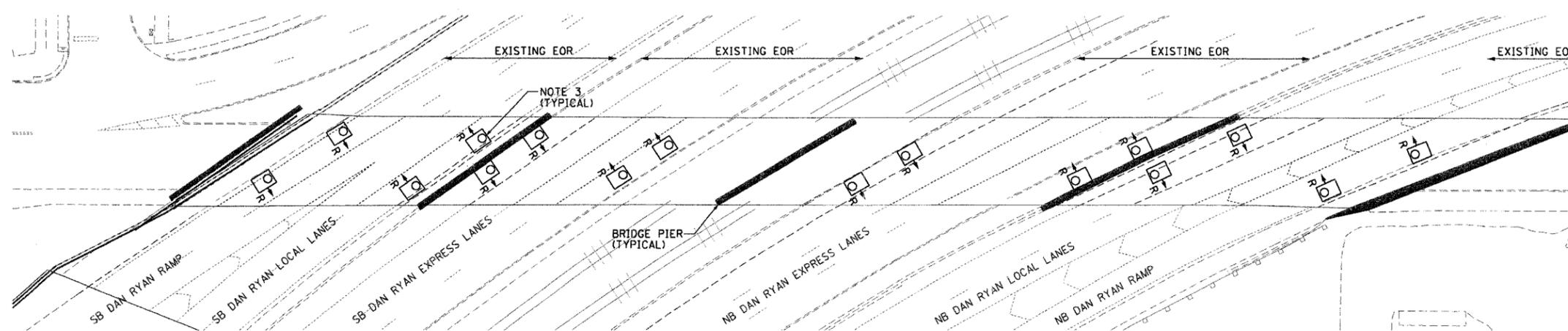
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS C.R.I. AND P. R.R. SCALE: 1"=20' DRAWN BY: HAR DATE: October 29, 2004 CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	380
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE SERVICE FEED CABLES LOCATED IN THE JUNCTION BOX. SEE DRAWINGS RL-27 AND RL-28 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "S". SEE DRAWING SL-07 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "S".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62587, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



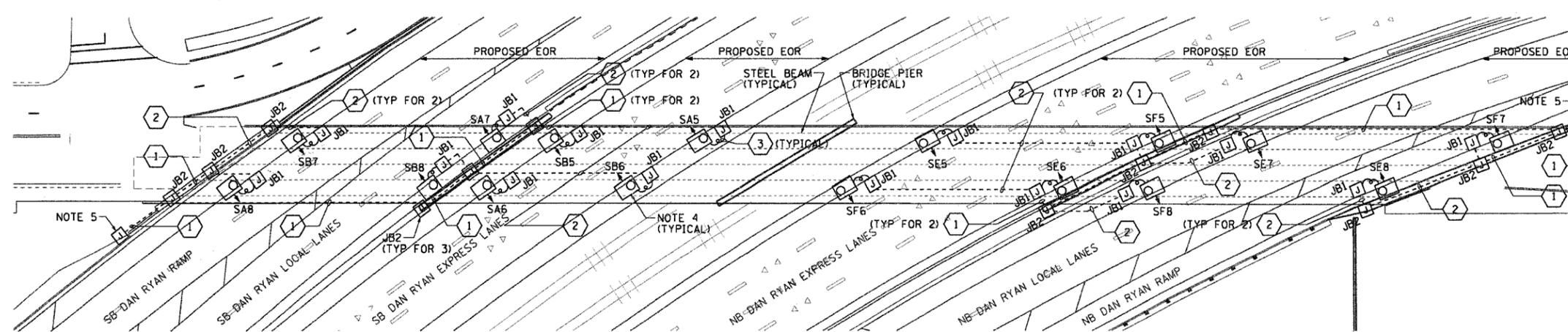
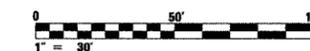
EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTE 2)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C#10, 1-1/C#10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C#10, 1-1/C#10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C#10, 1-1/C#10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 8):

- 2004: INSTALL PRIMARY POWER FEEDS AS SHOWN ON RL-27 AND RL-28 AND CONNECT EXISTING CIRCUIT TO NEW FEEDS (NOTE 7)
- INSTALL UNDERPASS LIGHTING IN EXPRESS LANES
- INSTALL UNDERPASS LIGHTING IN LOCAL LANES
- INSTALL UNDERPASS LIGHTING IN RAMP LANES



PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 6)

REVISIONS	
NAME	DATE

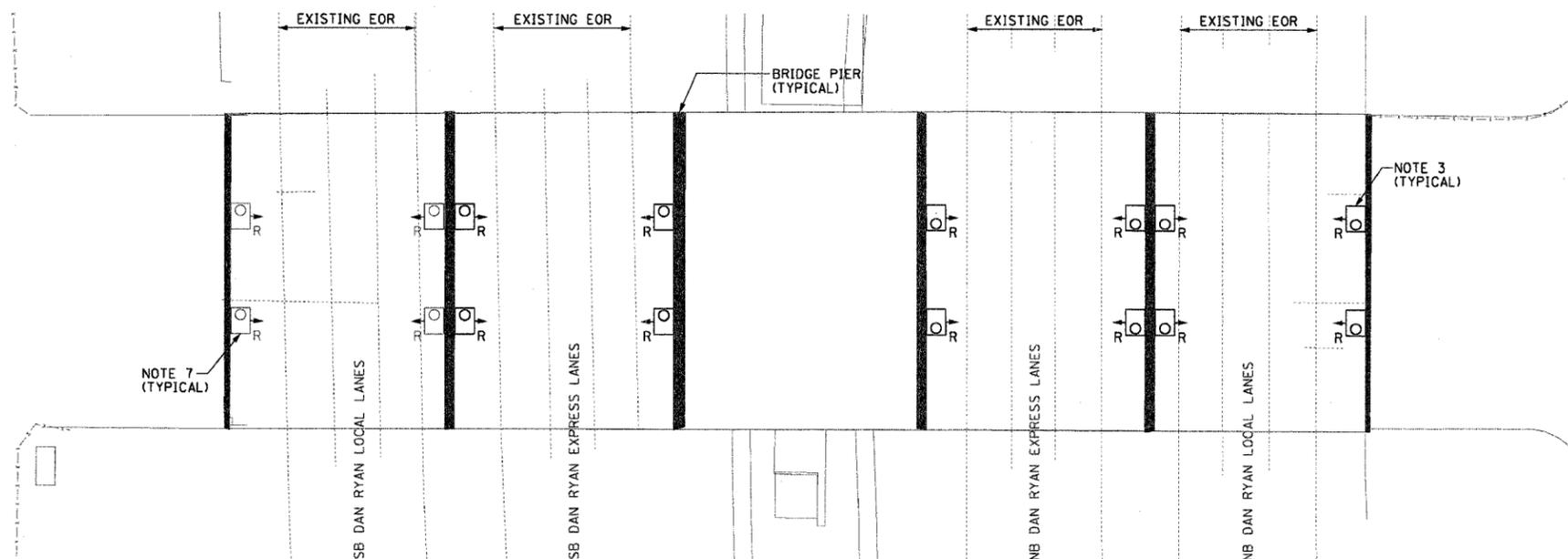
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
WENTWORTH AVENUE

SCALE: 1"=30'
DATE: October 29, 2004
DRAWN BY: HAR
CHECKED BY: WDS

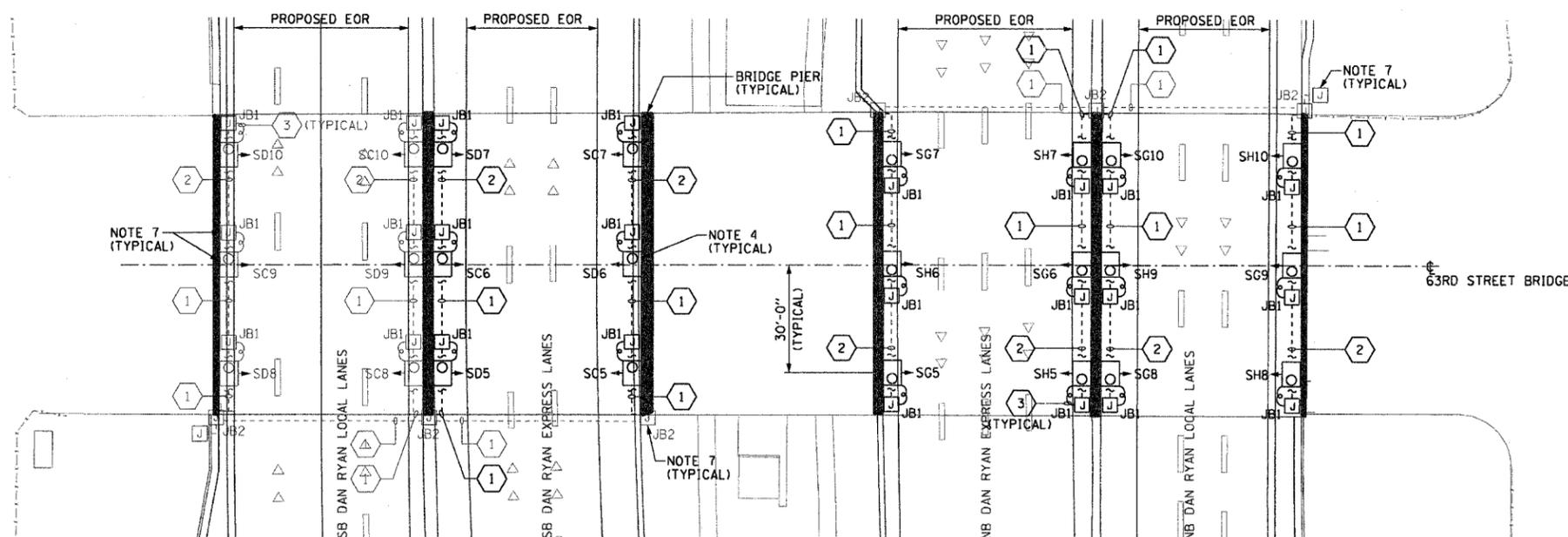
THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY.
ALL UNDERPASS LIGHTING EQUIPMENT SHOWN WAS
INSTALLED IN IDOT CONTRACT NO. 62733.

62583



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTES 2 AND 6)

- NOTES:**
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
 - ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PIER OR ABUTMENT WALL MOUNTED. SEE DRAWING ME-07 FOR PIER/ABUTMENT WALL MOUNTED UNDERPASS LIGHTING DETAILS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "S". SEE DRAWING SLOB-07 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "S".
 - CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
 - ELECTRICAL WORK COMPLETED AS PART OF IDOT CONTRACT NUMBER 62733.
 - COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62733, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.

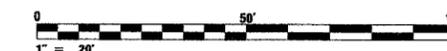


PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 5)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
NO.	DESCRIPTION
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

- SEQUENCE OF WORK (NOTE 8):**
- 2006: REPLACE UNDERPASS LIGHTING IN EXPRESS LANES
 - 2007: REPLACE UNDERPASS LIGHTING IN NB LOCAL LANES



UL-25

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
63RD STREET

SCALE: 1"=20'
DATE: October 29, 2004

DRAWN BY: HAR
CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	382
STA. -	TO STA. -			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62583

NOTES:

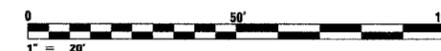
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PIER OR ABUTMENT WALL MOUNTED. SEE DRAWING ME-07 FOR PIER/ABUTMENT WALL MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE SERVICE FEED CABLES LOCATED IN THE JUNCTION BOX. SEE DRAWING RLO5-28 AND RLO5-29 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "S". SEE DRAWING SLO8-07 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "S".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62733, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE / CONDUIT SCHEDULE	
1	3-1/C#10, 1-1/C#10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C#10, 1-1/C#10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C#10, 1-1/C#10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 8):

- 2005: INSTALL PRIMARY POWER FEEDS AS SHOWN ON RLO5-28 AND RLO5-29 AND CONNECT EXISTING CIRCUITS TO NEW CIRCUITS (NOTE 7)
- 2006: REPLACE UNDERPASS LIGHTING IN EXPRESS LANES
- 2007: REPLACE UNDERPASS LIGHTING IN LOCAL LANES



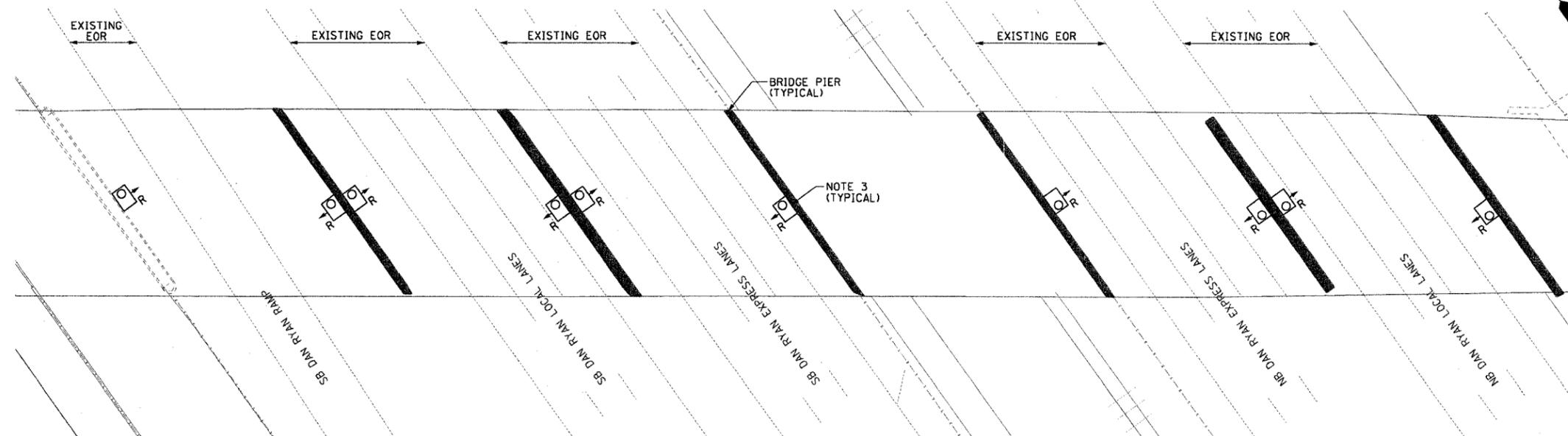
UL-26

REVISIONS	
NAME	DATE

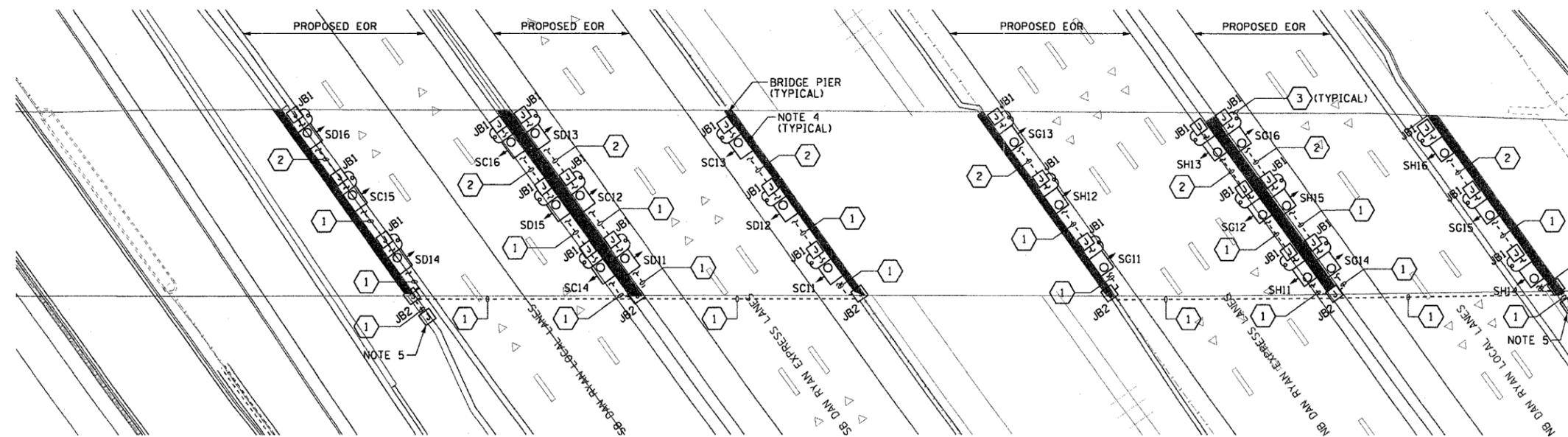
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
P.F.T.W. & C. R.R.

SCALE: 1"=20' DRAWN BY: HAR
DATE: October 29, 2004 CHECKED BY: WDS



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTES 2 AND 7)



PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 6)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	283
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62583

NOTES:

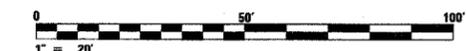
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- REMOVE AND DISPOSE OF EXISTING CABLE AND CONDUIT ATTACHED TO STRUCTURE AND PROVIDE PLUG AS REQUIRED FOR EXISTING JUNCTION BOX HOLE.
- PROVIDE A NEW FEEDER TO THE EXISTING UNDERPASS LIGHTING AS SHOWN. SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE SERVICE FEED CABLES LOCATED IN THE JUNCTION BOX. SEE DRAWING RL-31 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE EXISTING UNDERPASS LIGHTING CIRCUIT CABLES LOCATED IN THE EXISTING JUNCTION BOX.
- ALL EXISTING UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "T". SEE DRAWING SL-08 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "T".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- ALL EXISTING UNDERPASS LIGHTING EQUIPMENT SHOWN ON THIS DRAWING WAS INSTALLED AS PART OF THE 59TH STREET BRIDGE RECONSTRUCTION.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62583, 59TH STREET BRIDGE CONTRACTOR, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.
- CONTRACTOR MUST MAINTAIN THE ROADWAY LIGHTING CIRCUIT CONTINUITY TO PROVIDE TEMPORARY POWER TO THE EXISTING ROADWAY LIGHTING UNITS SOUTH OF 59TH STREET AND THE LIGHTED SIGN STRUCTURE LOCATED AT STATION 1452+07.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
①	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 9):

- 2004: INSTALL PRIMARY POWER FEEDS AS SHOWN ON RL-31 AND CONNECT EXISTING CIRCUITS TO NEW CIRCUITS (NOTE 7)



UL-27

REVISIONS	
NAME	DATE

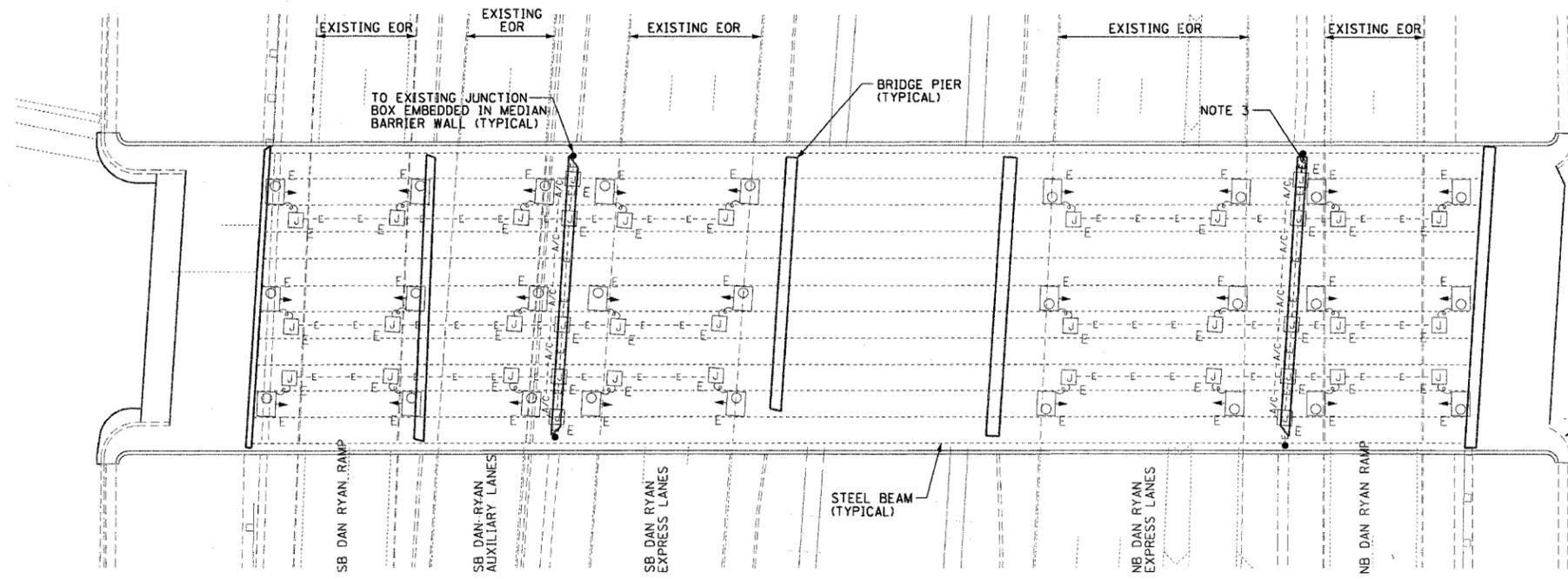
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
59TH STREET

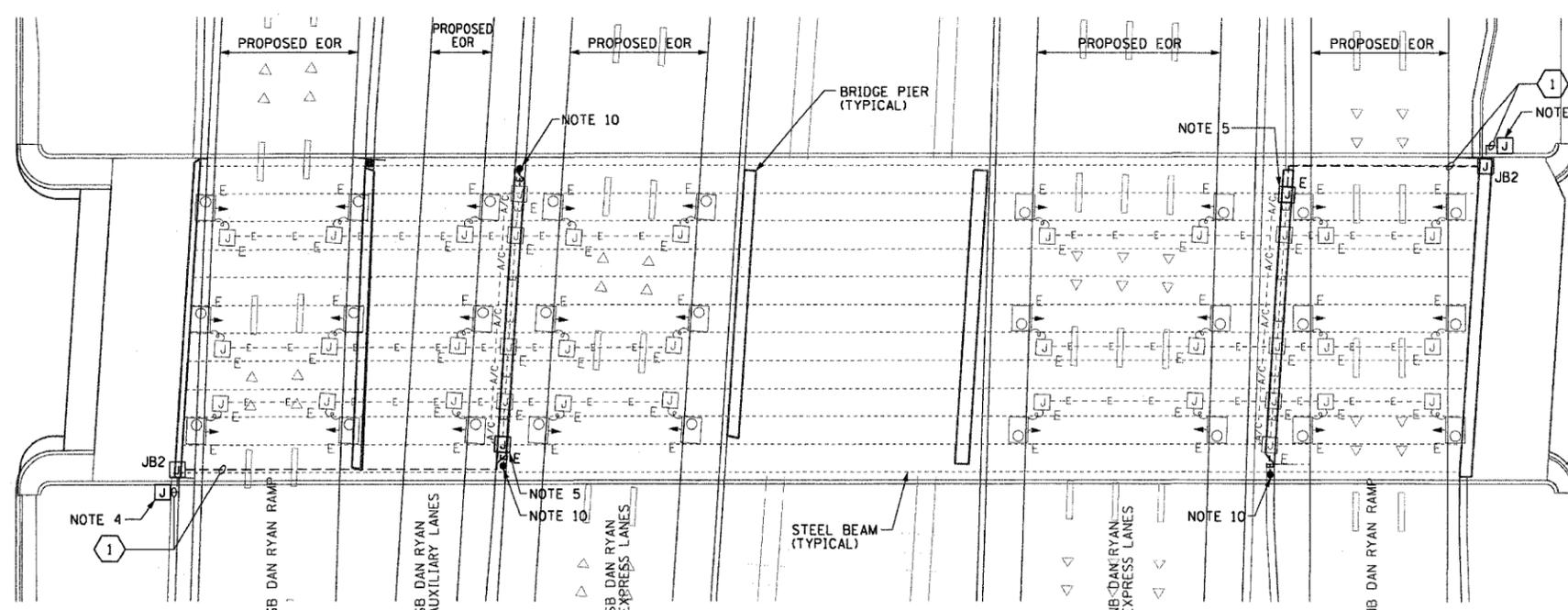
SCALE: 1"=20'
DATE: October 29, 2004

DRAWN BY: HAR
CHECKED BY: WDS

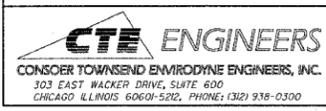
THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY.
ALL UNDERPASS LIGHTING EQUIPMENT SHOWN WAS
INSTALLED IN IDOT CONTRACT NO. 62733.



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTES 2 & 8)



PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTES 6 & 8)



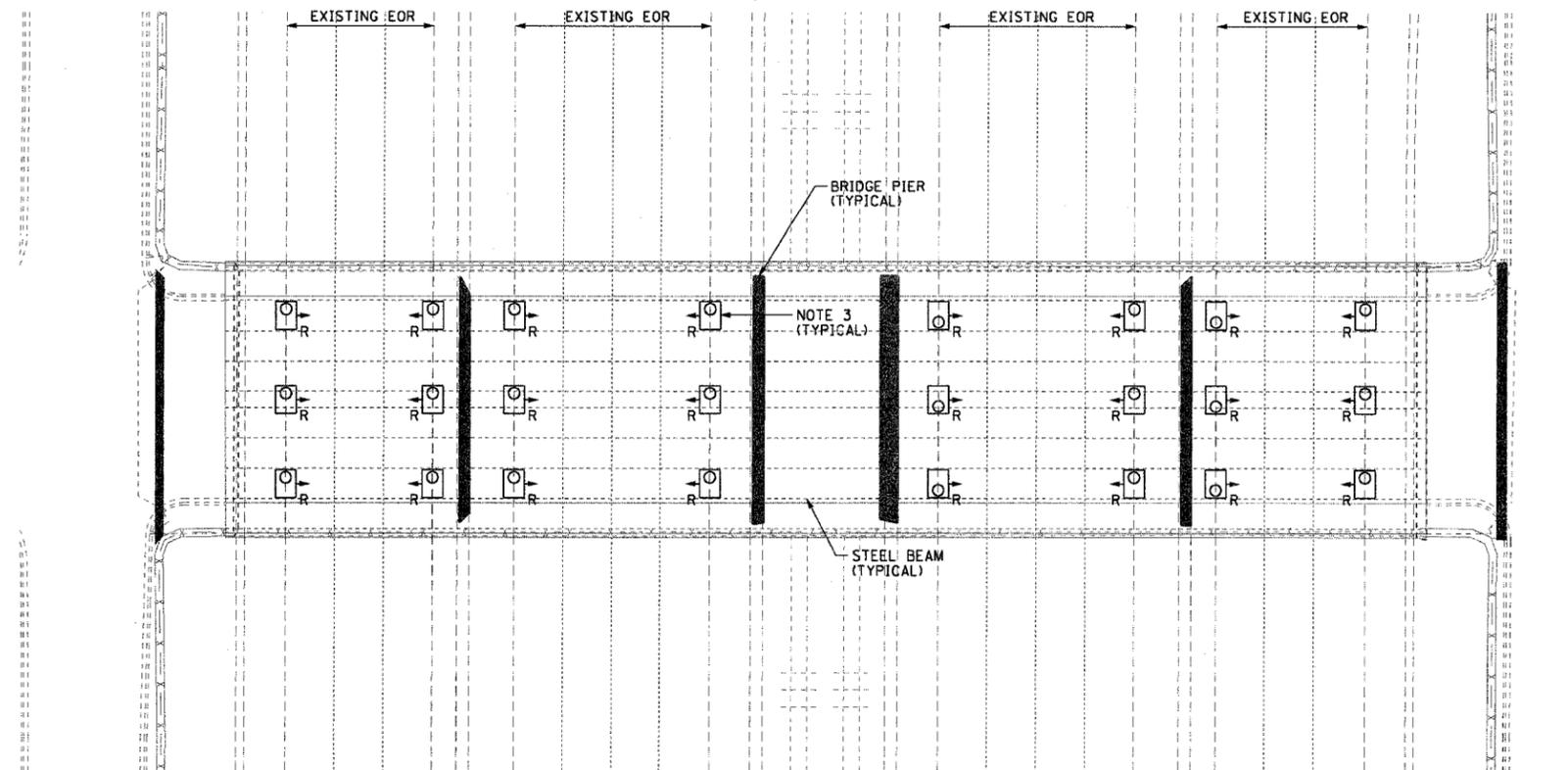
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
90/94	2003-0311	COOK	976
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

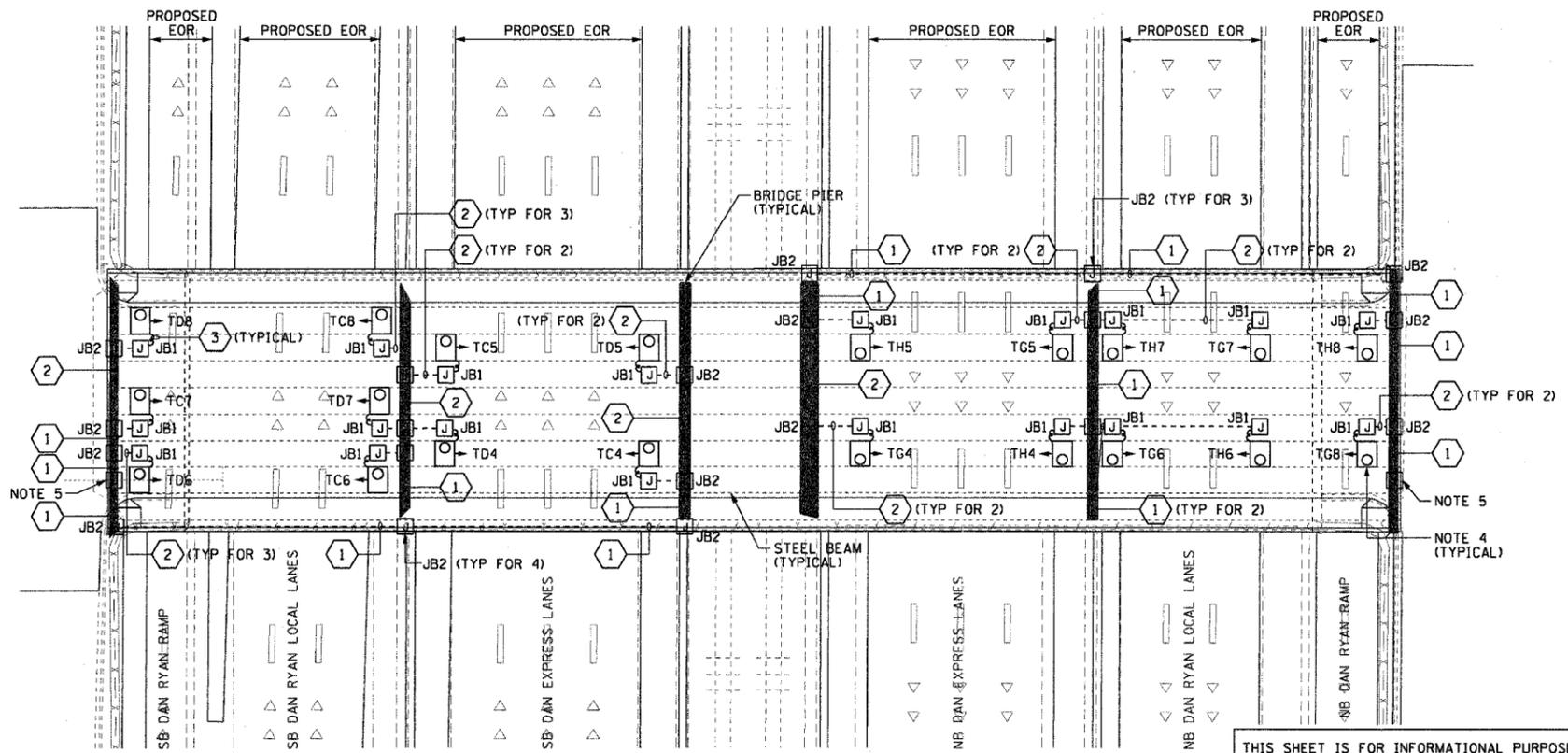
62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, AND HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE SERVICE FEED CABLES LOCATED IN THE JUNCTION BOX. SEE DRAWING RL-32 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "T". SEE DRAWING SL-08 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "T".
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62586, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTE 2)



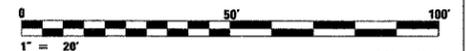
PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 6)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C#10, 1-1/C#10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C#10, 1-1/C#10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C#10, 1-1/C#10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 7):

- 2004: INSTALL PRIMARY POWER FEEDS AS SHOWN ON RL-32 AND CONNECT EXISTING CIRCUITS TO NEW CIRCUITS
- INSTALL UNDERPASS LIGHTING IN RAMP LANES
- INSTALL UNDERPASS LIGHTING IN EXPRESS LANES
- INSTALL UNDERPASS LIGHTING IN LOCAL LANES



UL-28

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
57TH STREET

SCALE: 1"=20'
DATE: October 29, 2004
DRAWN BY: HAR
CHECKED BY: WDS

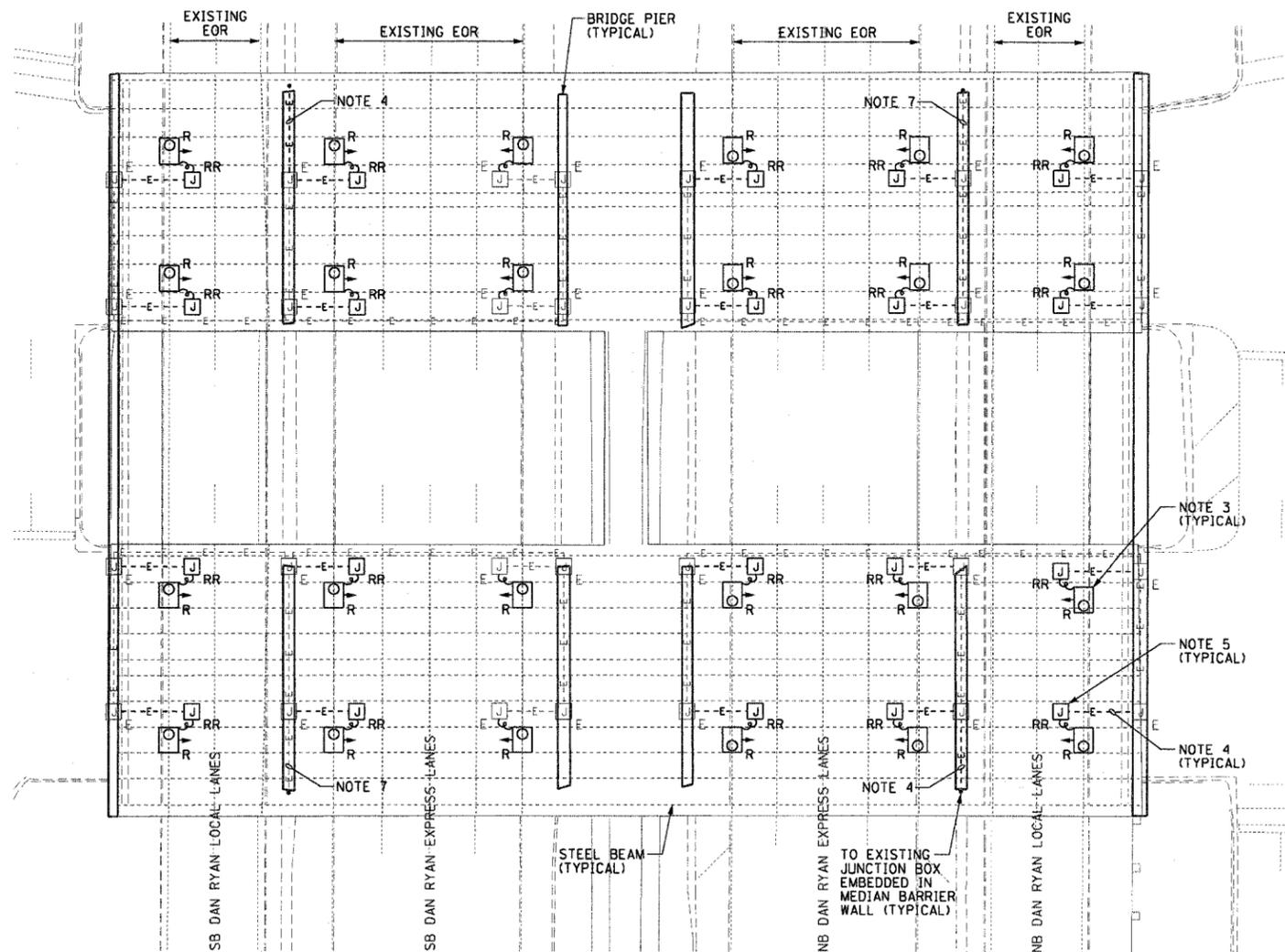
THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY.
ALL UNDERPASS LIGHTING EQUIPMENT SHOWN WAS
INSTALLED IN IDOT CONTRACT NO. 62733.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	385
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

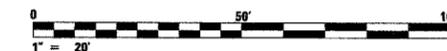
62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- REMOVE EXISTING CABLE AND CONDUIT ATTACHED TO STRUCTURE BACK TO THE NEAREST JUNCTION BOX AND PROVIDE PLUG FOR EXISTING JUNCTION BOX HOLE.
- RELOCATE ALL EXISTING JUNCTION BOXES DESIGNATED TO BE REMOVED AND REINSTALLED (RR) TO THE NEW UNDERPASS LUMINAIRE LOCATIONS AS SHOWN ON DRAWING UL-30.
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- ELECTRICAL WORK COMPLETED AS PART OF IDOT CONTRACT NUMBER 62733.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62733, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTES 2 AND 8)



UL-29

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

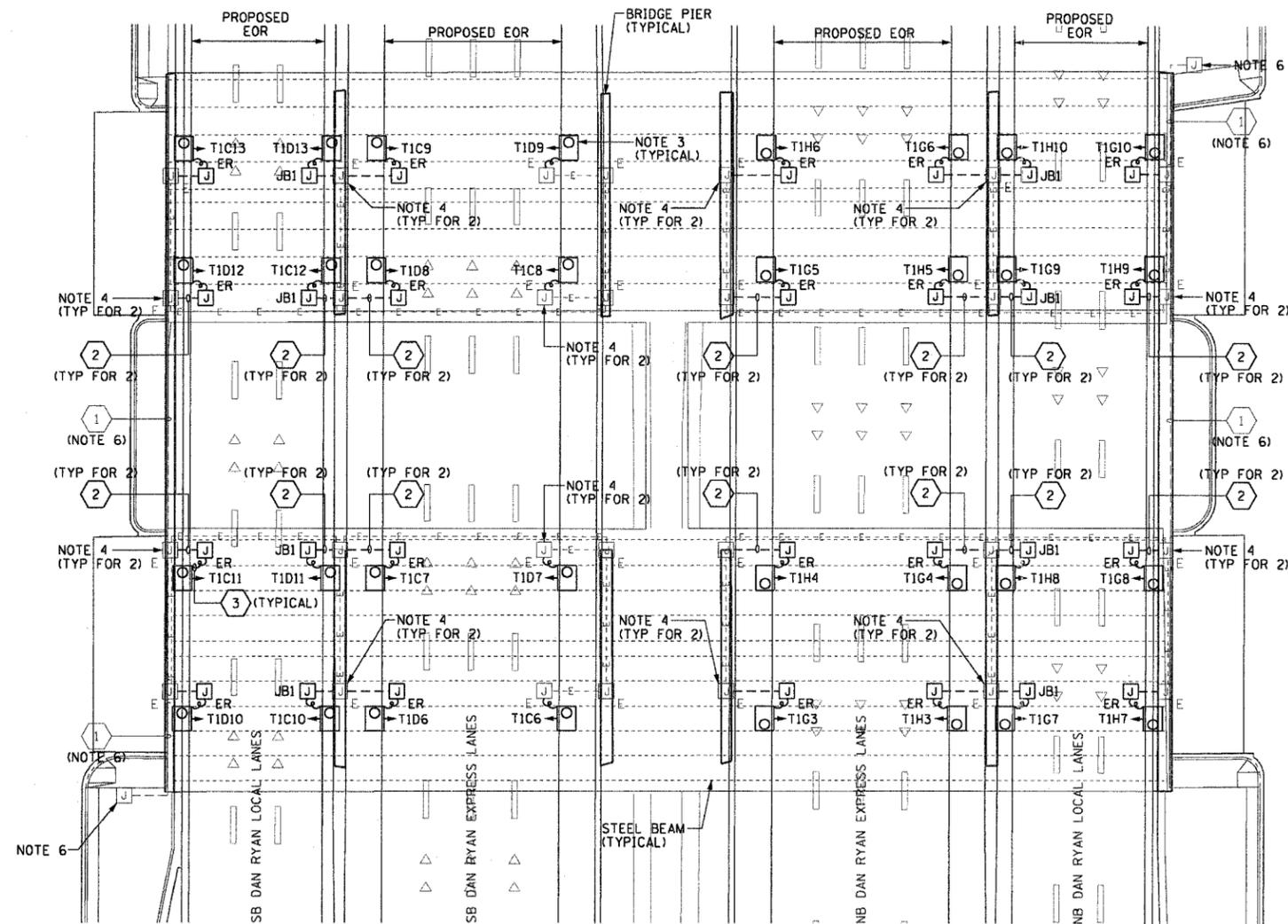
UNDERPASS LIGHTING PLANS
55TH STREET
EXISTING CONDITIONS AND DEMOLITION
SCALE: 1"=20' DRAWN BY: HAR
DATE: October 29, 2004 CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	386
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE EXISTING UNDERPASS LIGHTING CIRCUIT CABLES LOCATED IN THE EXISTING JUNCTION BOX.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "T1". SEE DRAWING SLO8-09 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "T1".
- ELECTRICAL WORK COMPLETED AS PART OF IDOT CONTRACT NUMBER 62733.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62733, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



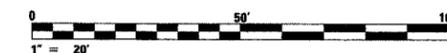
PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTES 2 & 5)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/C*10, 1-1/C*10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 7):

- 2006: REPLACE UNDERPASS LIGHTING IN EXPRESS LANES
- 2007: REPLACE UNDERPASS LIGHTING IN LOCAL LANES



UL-30

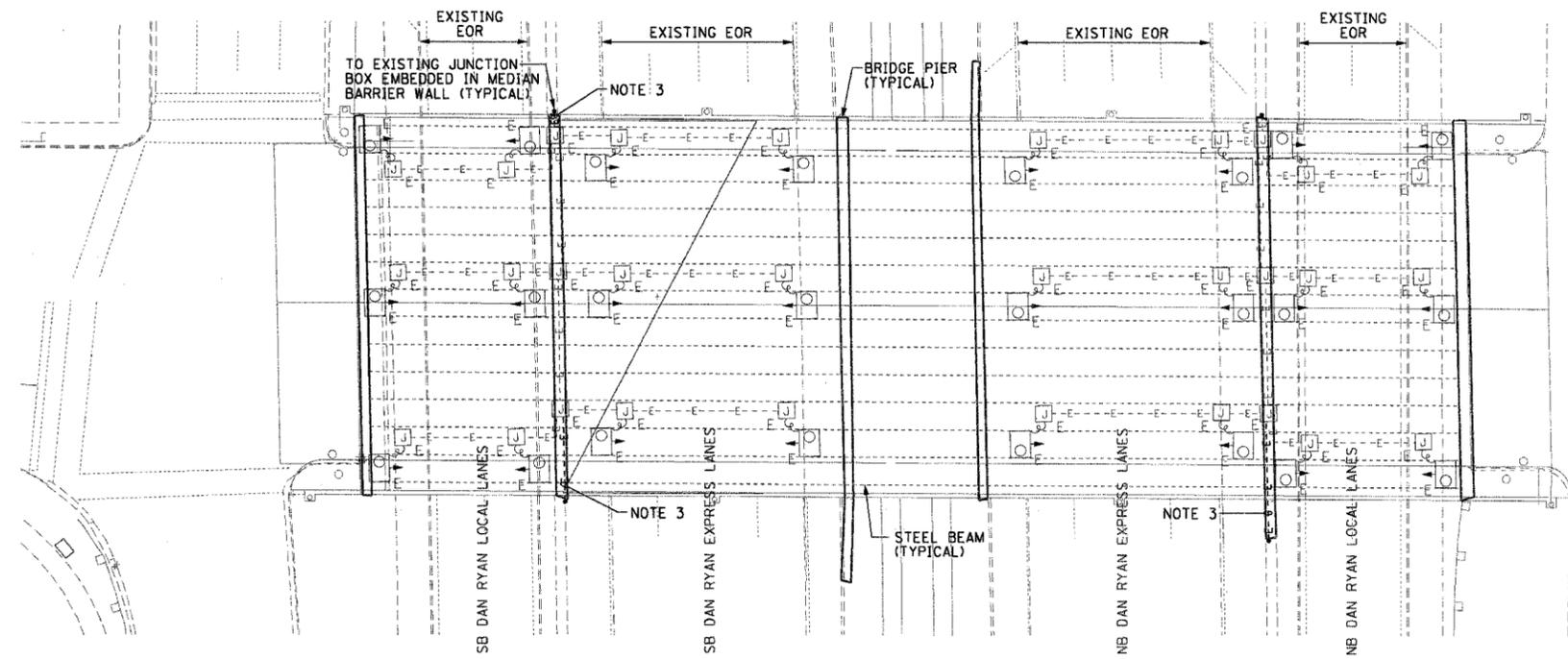
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 55TH STREET PROPOSED IMPROVEMENTS SCALE: 1"=20' DRAWN BY: HAR DATE: October 29, 2004 CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	387
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

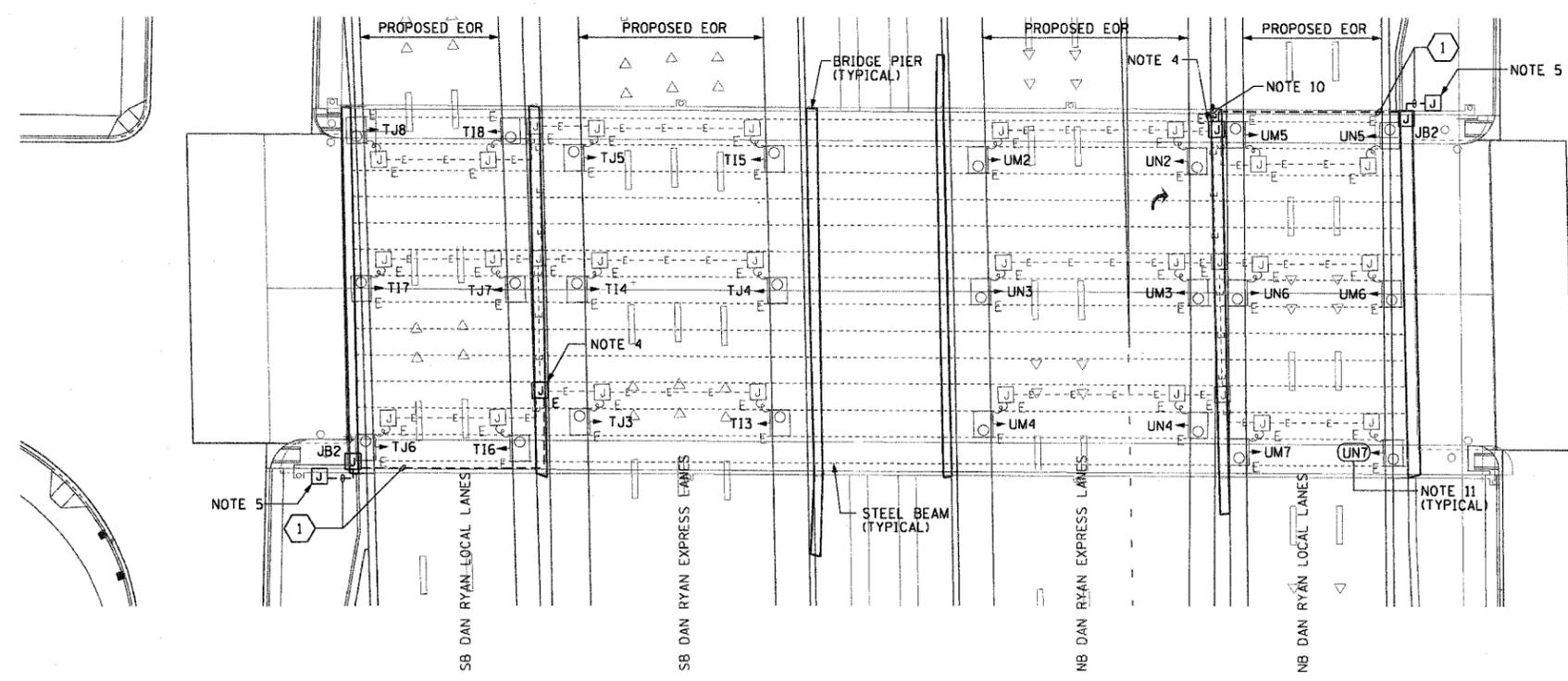
62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- REMOVE AND DISPOSE OF EXISTING CABLE AND CONDUIT ATTACHED TO STRUCTURE AND PROVIDE PLUG AS REQUIRED FOR EXISTING JUNCTION BOX HOLE.
- PROVIDE A NEW FEEDER TO EXISTING UNDERPASS LIGHTING AS SHOWN. SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE EXISTING UNDERPASS LIGHTING CIRCUIT CABLES LOCATED IN THE EXISTING JUNCTION BOX.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE SERVICE FEED CABLES LOCATED IN THE JUNCTION BOX. SEE DRAWING RL-35 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLERS "T1" AND "U". SEE DRAWINGS SL-09 AND SL-10 FOR SINGLE LINE DIAGRAMS OF LIGHTING CONTROLLERS "T1" AND "U".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
-
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62583, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.
- CONTRACTOR MUST MAINTAIN THE ROADWAY LIGHTING CIRCUIT CONTINUITY TO PROVIDE TEMPORARY POWER TO THE LIGHTED SIGN STRUCTURES LOCATED AT STATIONS 2508+82 AND 2523+02.
- CONTRACTOR MUST PROVIDE NEW LUMINAIRE NUMBERING DECALS AS SHOWN ON THIS DRAWING.



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTE 2)



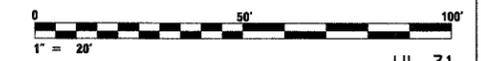
PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 6)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
①	3-1/C#10, 1-1/C#10 GND IN 1" DIA PVC RC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)

SEQUENCE OF WORK (NOTE 9):

2004: INSTALL PRIMARY POWER FEEDS AS SHOWN ON RL-35 AND CONNECT EXISTING CIRCUITS TO NEW CIRCUITS (NOTE 7)



UL-31

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57
UNDERPASS LIGHTING PLANS
51ST STREET
SCALE: 1"=20'
DATE: October 29, 2004
DRAWN BY: HAR
CHECKED BY: WDS

THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY. ALL UNDERPASS LIGHTING EQUIPMENT SHOWN WAS INSTALLED IN IDOT CONTRACT NO. 62733.

CTE ENGINEERS
CONSOER TOWNSEND ENVIRONMENTAL ENGINEERS, INC.
303 EAST WACKER DRIVE, SUITE 600
CHICAGO, ILLINOIS 60601-5212, PHONE: (312) 938-0300

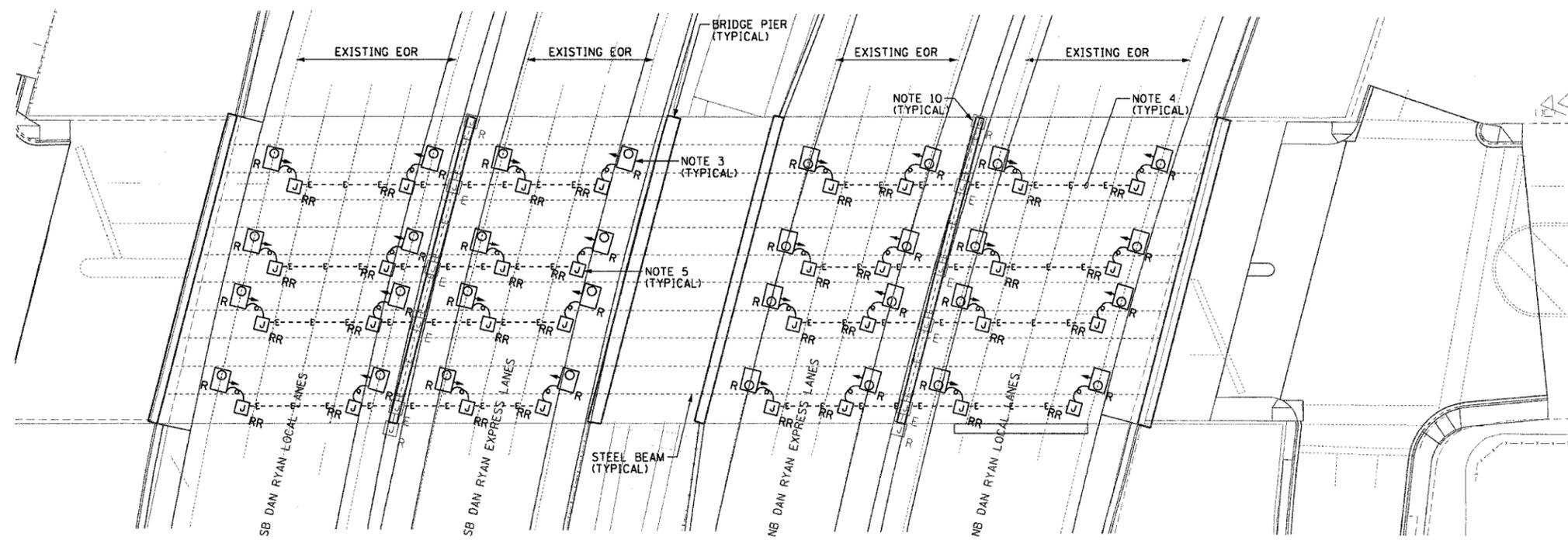
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
90/94	2003-0311	COOK	976
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

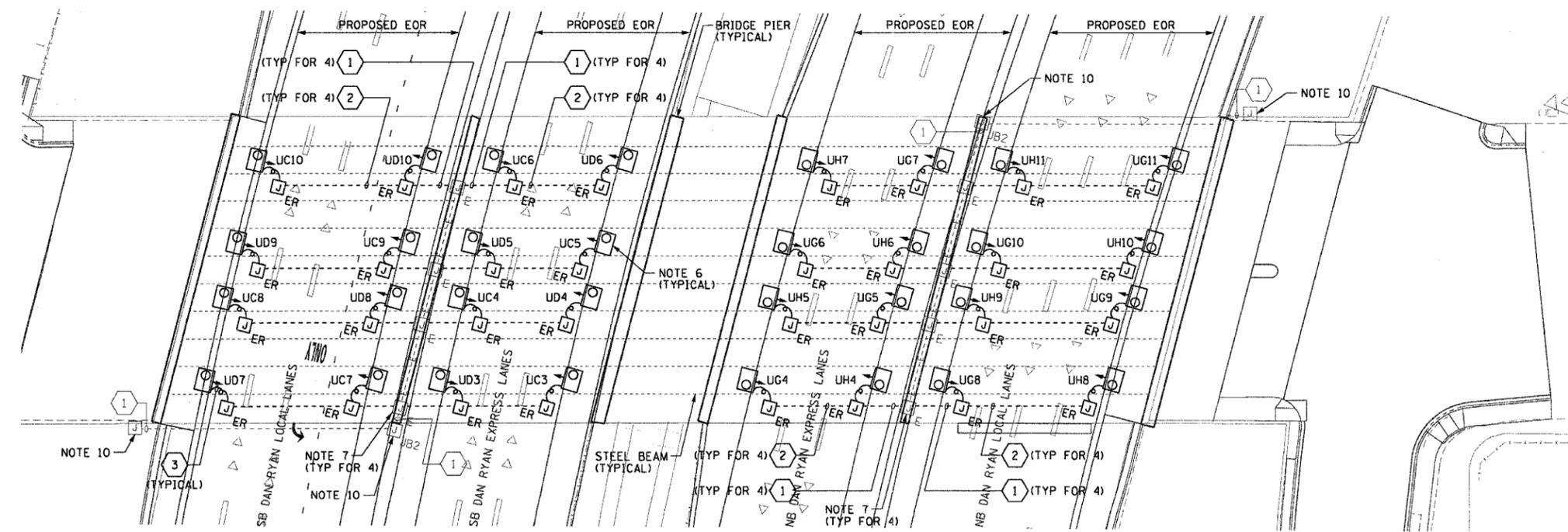
62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES AND CONDUIT BACK TO THE NEAREST JUNCTION BOX. COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED AS PART OF THE "REMOVE EXISTING UNDERPASS LUMINAIRE, AND SALVAGE" PAY ITEM.
- REMOVE AND DISPOSE OF EXISTING CABLE AND CONDUIT ATTACHED TO STRUCTURE AND PROVIDE PLUG AS REQUIRED FOR EXISTING JUNCTION BOX HOLE.
- RELOCATE ALL EXISTING JUNCTION BOXES DESIGNATED TO BE REMOVED AND REINSTALLED (RR) TO THE NEW UNDERPASS LUMINAIRE LOCATIONS AS SHOWN ON THIS DRAWING.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING MUST BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUIT CABLES TO THE EXISTING UNDERPASS LIGHTING CIRCUIT CABLES LOCATED IN THE EXISTING JUNCTION BOX.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM 100T LIGHTING CONTROLLER "U". SEE DRAWING SL-08-10 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "U".
- CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM.
- ELECTRICAL WORK COMPLETED AS PART OF IDOT CONTRACT NUMBER 62733.
- COORDINATE ALL ELECTRICAL WORK WITH CIVIL WORK, IDOT CONTRACT NUMBER 62733, CONSTRUCTION STAGING AND TRAFFIC CONTROL OVERVIEW PLANS.



EXISTING UNDERPASS LIGHTING PLAN
(SEE NOTES 2 AND 9)



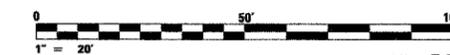
PROPOSED UNDERPASS LIGHTING PLAN
(SEE NOTE 8)

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE		
1	3-1/C"10, 1-1/C"10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
2	2-1/C"10, 1-1/C"10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
3	2-1/C"10, 1-1/C"10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)	

SEQUENCE OF WORK (NOTE 11):

- 2006: REPLACE UNDERPASS LIGHTING IN EXPRESS LANES
- 2007: REPLACE UNDERPASS LIGHTING IN LOCAL LANES



UL-32

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLANS
47TH STREET

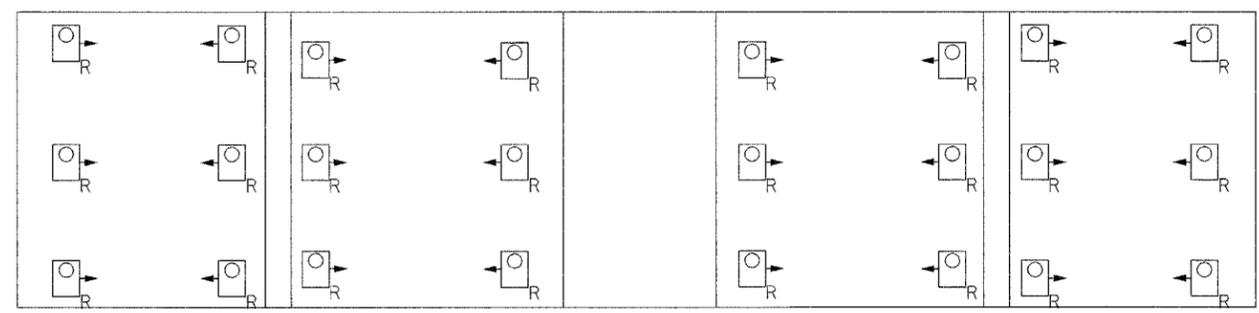
SCALE: 1"=20'
DATE: October 29, 2004
DRAWN BY: HAR
CHECKED BY: WDS

CTE ENGINEERS
CONSOER TOWNSEND ENVIRONMENTAL ENGINEERS, INC.
303 EAST WALKER DRIVE, SUITE 600
CHICAGO, ILLINOIS 60601-5212, PHONE: (312) 938-0300

I:\p\4046\elec\16-cntr\2b-shf\contract_2\undpass\ul020322a.dwg 10/15/2004 02:36:42 PM



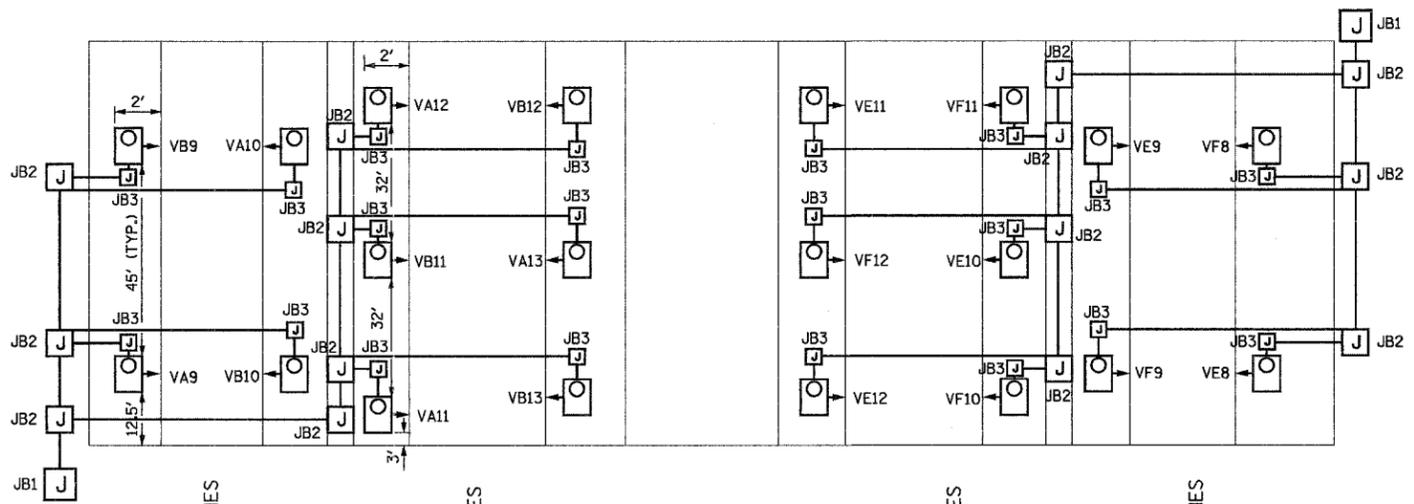
- NOTES:**
- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
 - SEE DRAWING RL08-40 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "V". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "V".
 - CONTRACTOR MUST REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
 - SPLICE THE NEW UNDERPASS LIGHTING CIRCUITS OVER THE EXPRESS LANES TO THE EXISTING UNDERPASS LIGHTING CIRCUITS OVER THE LOCAL LANES DURING 2006.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM AND THE PROPOSED LIGHTING SYSTEM AT DIFFERENT STAGES.



EXISTING UNDERPASS LIGHTING PLAN

- SEQUENCE OF WORK**
- 2005: EXISTING UNDERPASS LIGHTING CONNECTED TO EXISTING CONTROLLER.
 - 2006: PROPOSED UNDERPASS LIGHTING OVER THE EXPRESS LANES AND EXISTING UNDERPASS LIGHTING OVER LOCAL LANES CONNECTED TO PROPOSED CONTROLLER.
 - 2007: PROPOSED UNDERPASS LIGHTING CONNECTED TO PROPOSED CONTROLLER.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	12"x12"x6"	STAINLESS STEEL ATTACHED TO STRUCTURE
JB2	12"x10"x6"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN
JB3	6"x6"x4"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN



PROPOSED UNDERPASS LIGHTING PLAN

REVISIONS	
NAME	DATE
REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57

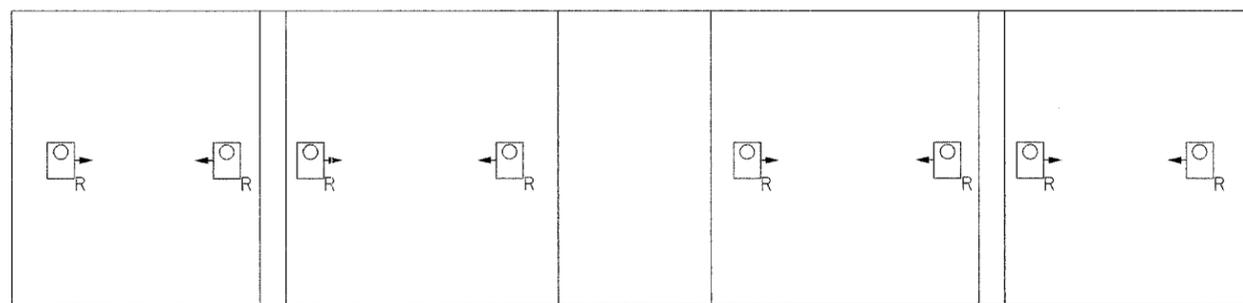
UNDERPASS LIGHTING PLAN
 43rd STREET

SCALE: NONE
 DATE: OCTOBER 29, 2004
 DRAWN BY: BL
 CHECKED BY: SM

01/24/2005 03:40:48 PM

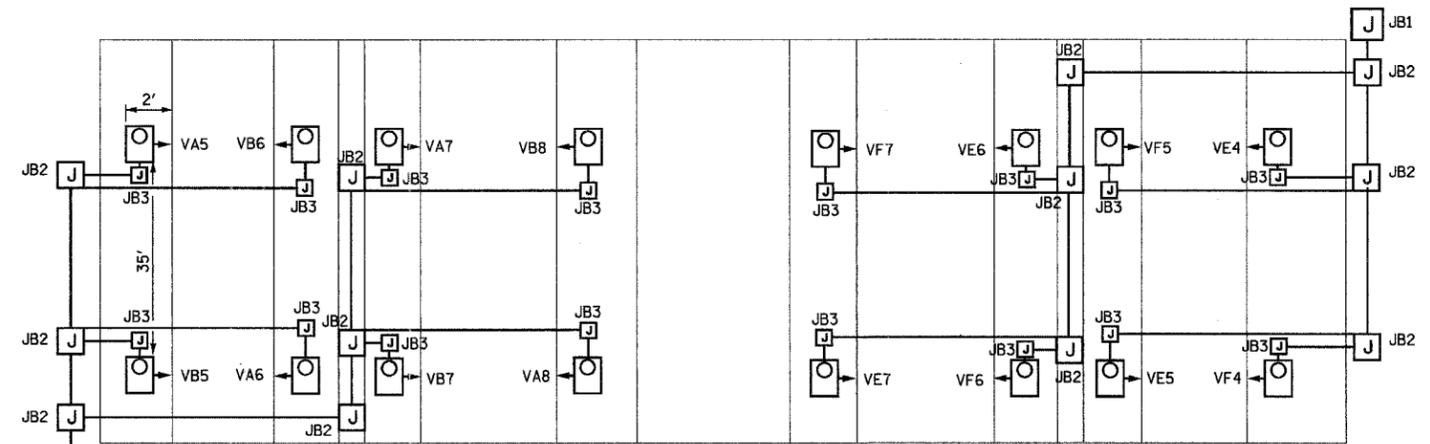


- NOTES:**
- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
 - SEE DRAWING RLO8-41 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "V". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "V".
 - CONTRACTOR MUST REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
 - SPLICE THE NEW UNDERPASS LIGHTING CIRCUITS OVER THE EXPRESS LANES TO THE EXISTING UNDERPASS LIGHTING CIRCUITS OVER THE LOCAL LANES DURING 2006.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM AND THE PROPOSED LIGHTING SYSTEM AT DIFFERENT STAGES.



EXISTING UNDERPASS LIGHTING PLAN

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	12"x12"x6"	STAINLESS STEEL ATTACHED TO STRUCTURE
JB2	12"x10"x6"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN
JB3	6"x6"x4"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN



FUTURE UNDERPASS LIGHTING PLAN

FOR INFORMATION ONLY



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

REVISIONS	
NAME	DATE
REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLAN
ROOT STREET

SCALE: NONE
DATE: OCTOBER 29, 2004
DRAWN BY: BL
CHECKED BY: SM

UL-34

01/24/2005 04:43 PM

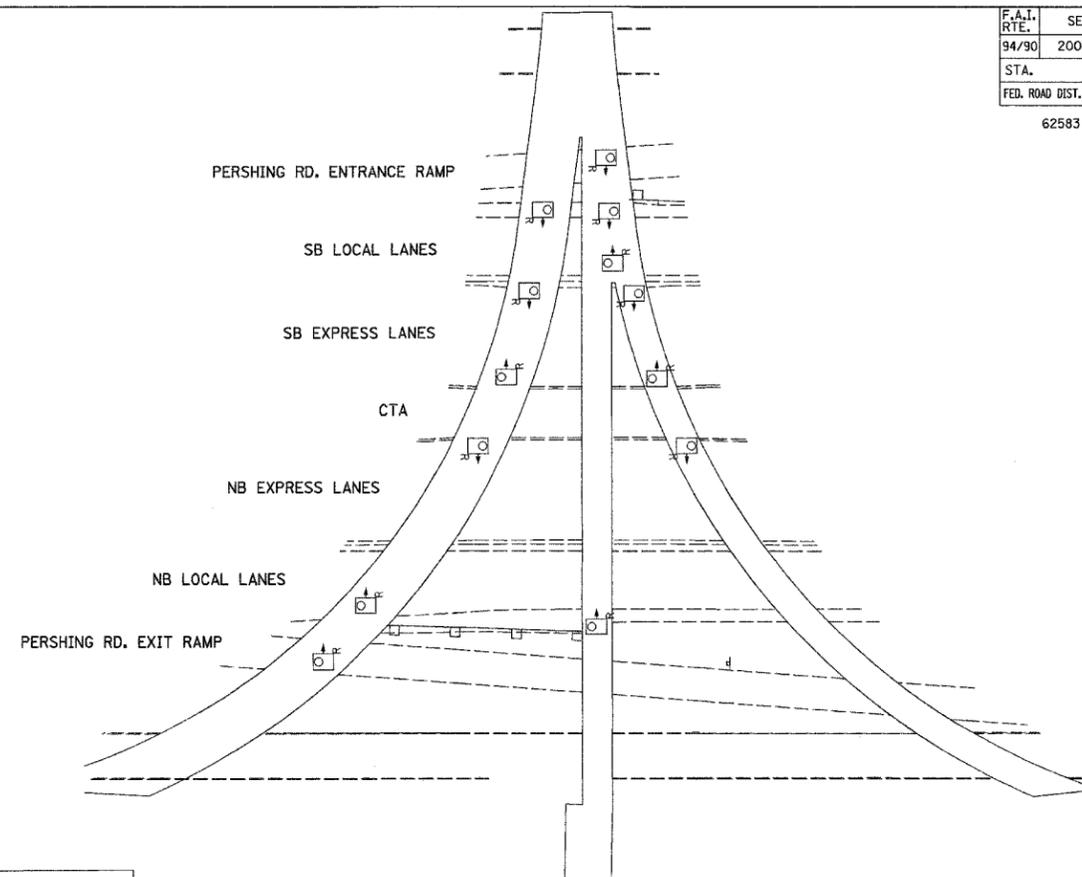
NOTES:

- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- SEE DRAWING ME-05 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
- SEE DRAWING RL08-42 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "V". SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "V".
- CONTRACTOR MUST REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
- SPLICE THE NEW UNDERPASS LIGHTING CIRCUITS OVER THE EXPRESS LANES TO THE EXISTING UNDERPASS LIGHTING CIRCUITS OVER THE LOCAL LANES DURING 2006.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM AND THE PROPOSED LIGHTING SYSTEM AT DIFFERENT STAGES.

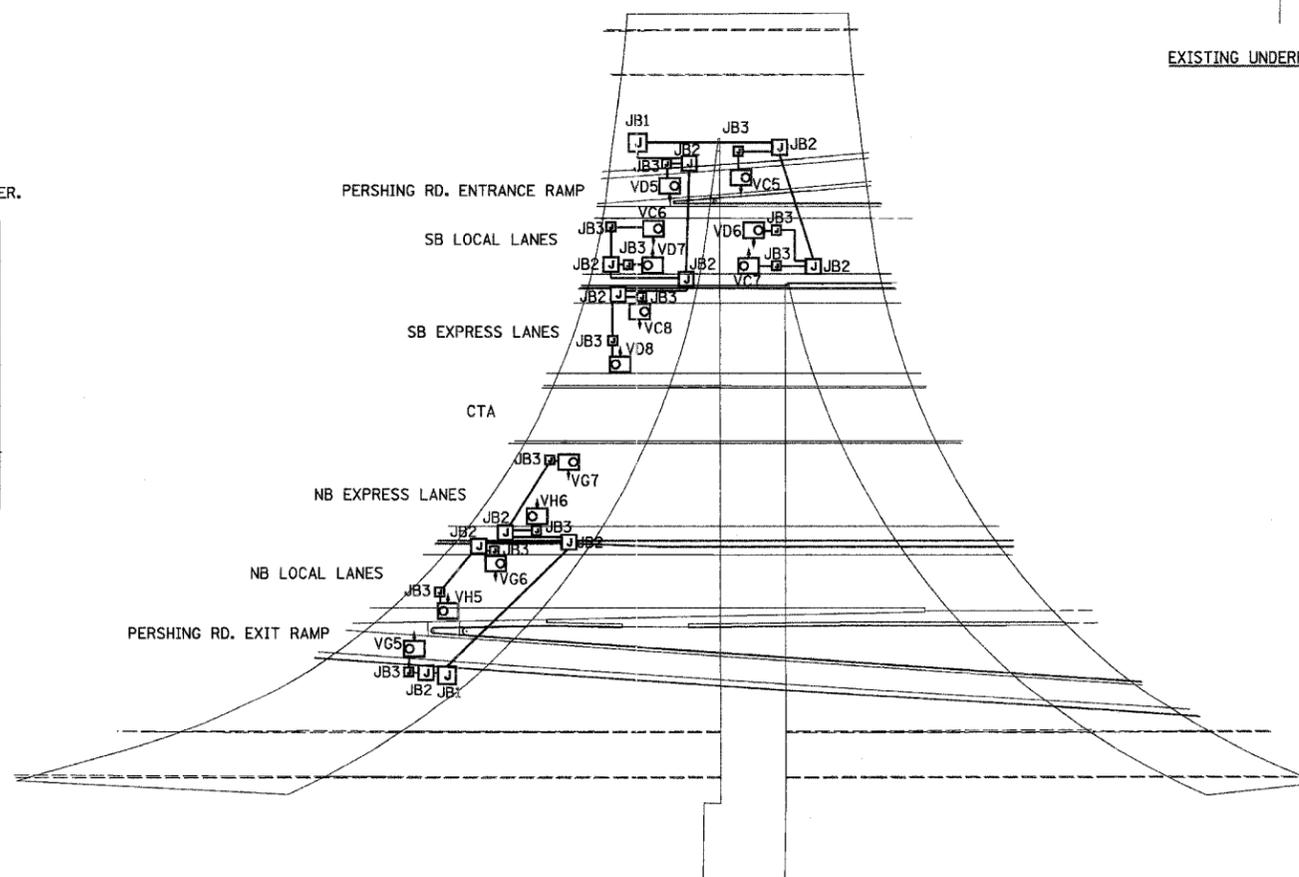
SEQUENCE OF WORK

- 2005: EXISTING UNDERPASS LIGHTING CONNECTED TO EXISTING CONTROLLER.
- 2006: PROPOSED UNDERPASS LIGHTING OVER THE EXPRESS LANES AND EXISTING UNDERPASS LIGHTING OVER LOCAL LANES CONNECTED TO PROPOSED CONTROLLER.
- 2007: PROPOSED UNDERPASS LIGHTING CONNECTED TO PROPOSED CONTROLLER.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	12"x12"x6"	STAINLESS STEEL ATTACHED TO STRUCTURE
JB2	12"x10"x6"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN
JB3	6"x6"x4"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN



EXISTING UNDERPASS LIGHTING PLAN



PROPOSED UNDERPASS LIGHTING PLAN

UL-35

REVISIONS	
NAME	DATE
REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**UNDERPASS LIGHTING PLAN
RAILROAD STRUCTURE**

SCALE: NONE
DATE: OCTOBER 29, 2004
DRAWN BY: BL
CHECKED BY: SM

62583



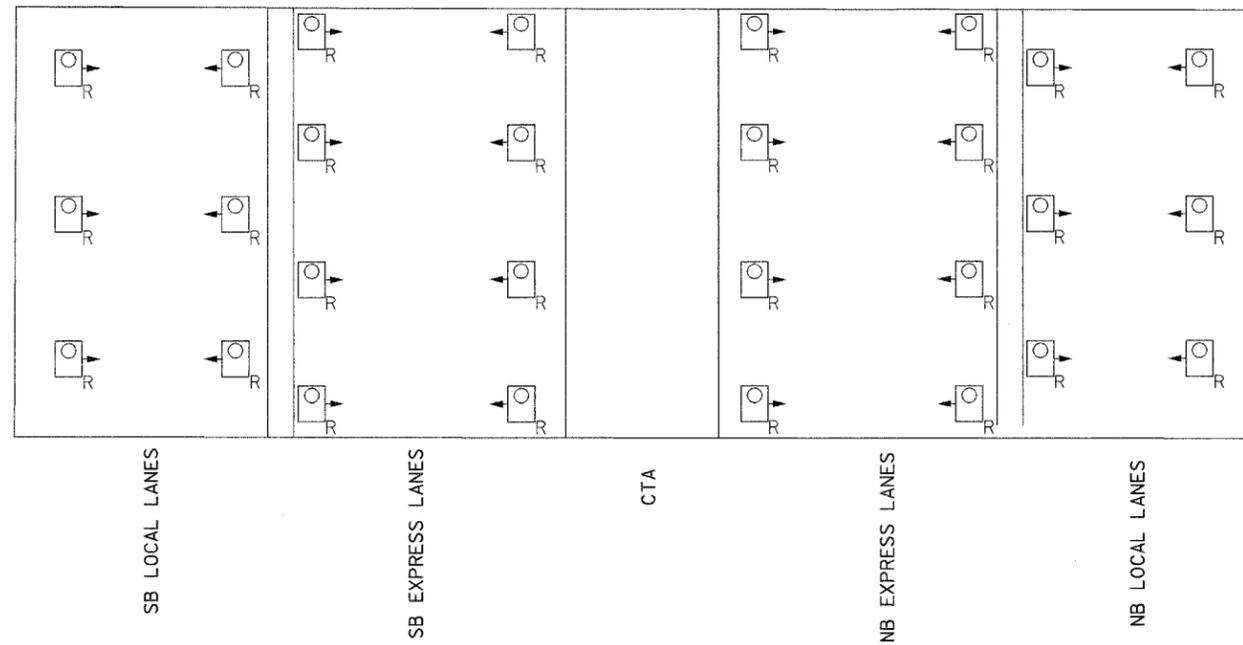
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- NOTES:**
- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
 - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
 - SEE DRAWING RL08-42 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
 - ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "V", SEE DRAWING SLO8-01 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "V".
 - CONTRACTOR MUST REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
 - SPLICE THE NEW UNDERPASS LIGHTING CIRCUITS OVER THE EXPRESS LANES TO THE EXISTING UNDERPASS LIGHTING CIRCUITS OVER THE LOCAL LANES DURING 2006.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM AND THE PROPOSED LIGHTING SYSTEM AT DIFFERENT STAGES.

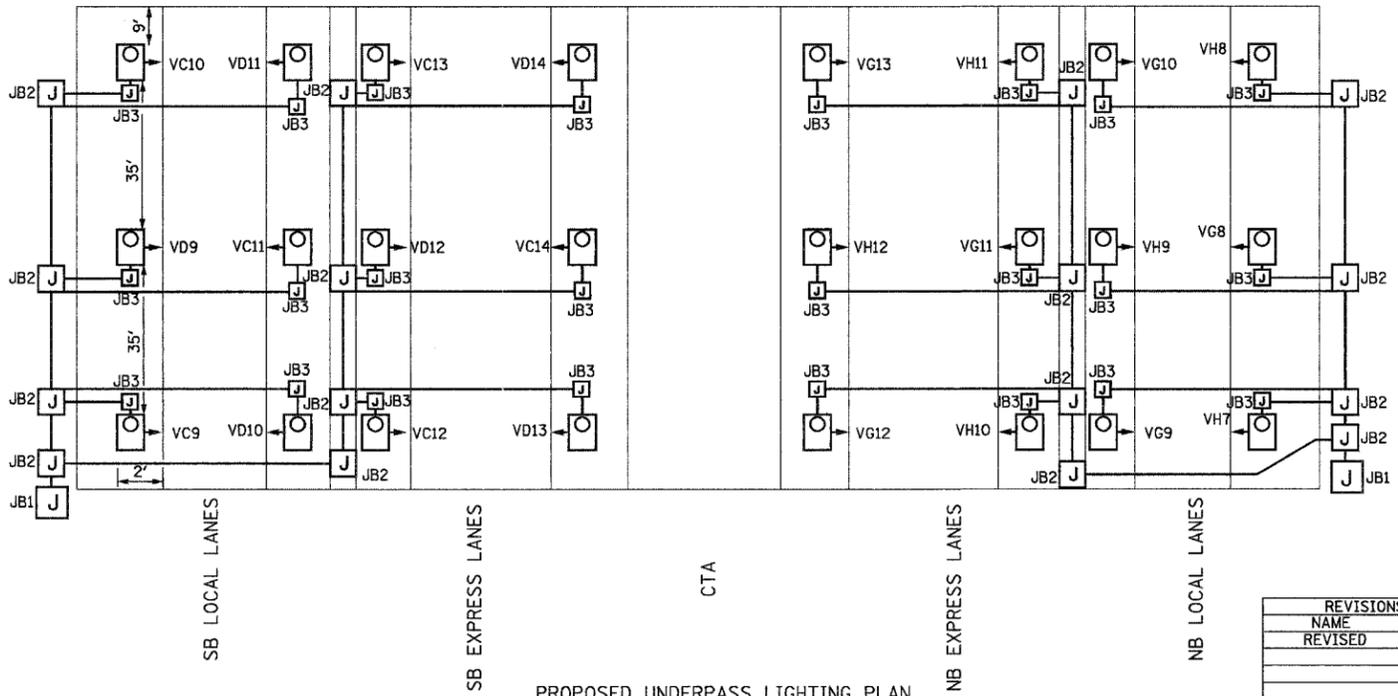
SEQUENCE OF WORK

- 2005: EXISTING UNDERPASS LIGHTING CONNECTED TO EXISTING CONTROLLER.
- 2006: PROPOSED UNDERPASS LIGHTING OVER THE EXPRESS LANES AND EXISTING UNDERPASS LIGHTING OVER LOCAL LANES CONNECTED TO PROPOSED CONTROLLER.
- 2007: PROPOSED UNDERPASS LIGHTING CONNECTED TO PROPOSED CONTROLLER.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	12"x12"x6"	STAINLESS STEEL ATTACHED TO STRUCTURE
JB2	12"x10"x6"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN
JB3	6"x6"x4"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN



EXISTING UNDERPASS LIGHTING PLAN



PROPOSED UNDERPASS LIGHTING PLAN

REVISIONS	
NAME	DATE
REVISOR	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

**UNDERPASS LIGHTING PLAN
PERSHING ROAD**

SCALE: NONE
DATE: OCTOBER 29, 2004
DRAWN BY: BL
CHECKED BY: SM

UL-36



62583



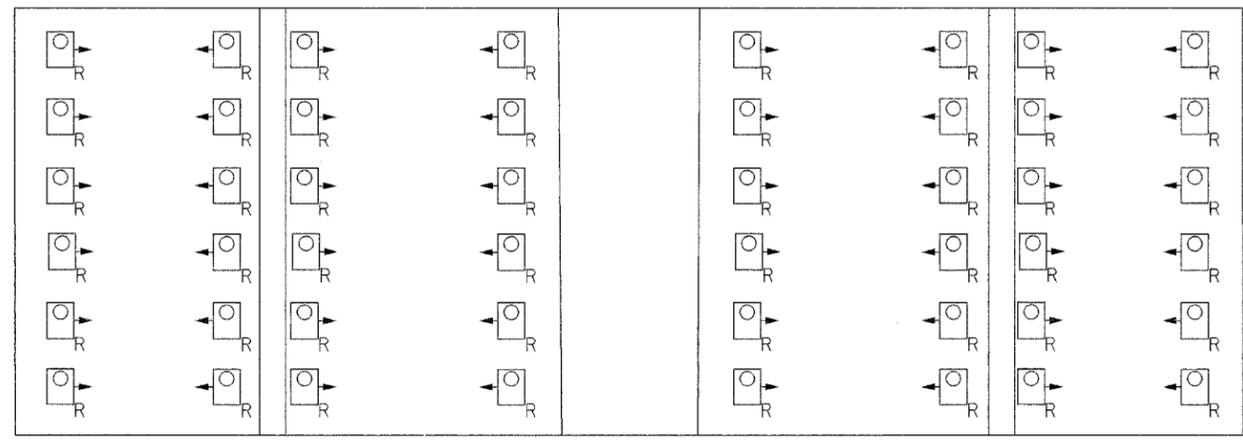
NOTES:

- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
- SEE DRAWING RL08-45 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "W". SEE DRAWING SLO8-02 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "W".
- CONTRACTOR MUST REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
- SPLICE THE NEW UNDERPASS LIGHTING CIRCUITS OVER THE EXPRESS LANES TO THE EXISTING UNDERPASS LIGHTING CIRCUITS OVER THE LOCAL LANES DURING 2006.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM AND THE PROPOSED LIGHTING SYSTEM AT DIFFERENT STAGES.

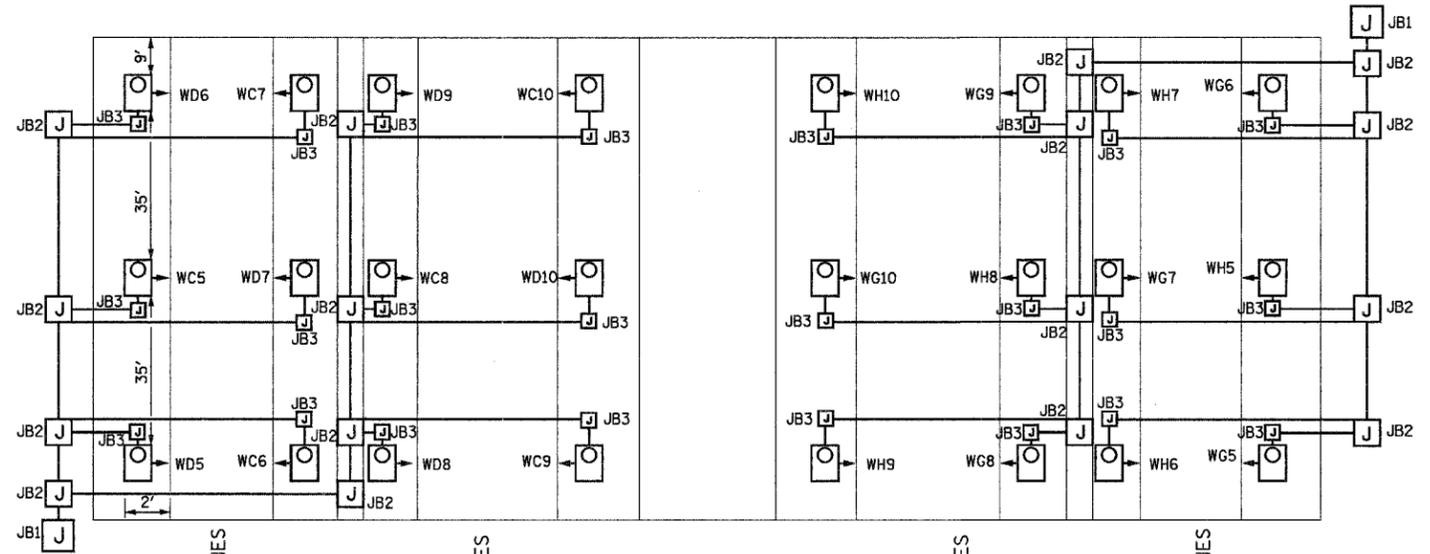
SEQUENCE OF WORK

- 2005: EXISTING UNDERPASS LIGHTING CONNECTED TO EXISTING CONTROLLER.
- 2006: PROPOSED UNDERPASS LIGHTING OVER THE EXPRESS LANES AND EXISTING UNDERPASS LIGHTING OVER LOCAL LANES CONNECTED TO PROPOSED CONTROLLER.
- 2007: PROPOSED UNDERPASS LIGHTING CONNECTED TO PROPOSED CONTROLLER.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	12"x12"x6"	STAINLESS STEEL ATTACHED TO STRUCTURE
JB2	12"x10"x6"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN
JB3	6"x6"x4"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN



EXISTING UNDERPASS LIGHTING PLAN



PROPOSED UNDERPASS LIGHTING PLAN

REVISIONS	
NAME	DATE
REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57
 UNDERPASS LIGHTING PLAN
 35th STREET

SCALE: NONE
 DATE: OCTOBER 29, 2004
 DRAWN BY: BL
 CHECKED BY: SM

UL-37

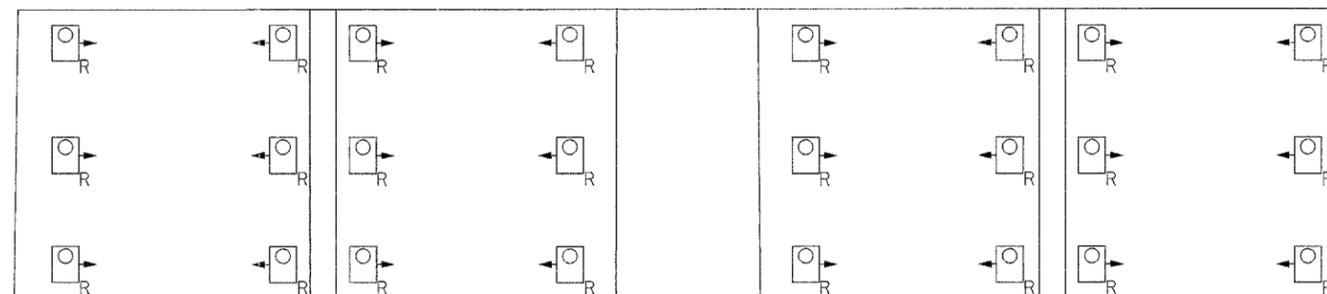
62583



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NOTES:

- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
- SEE DRAWING RLO8-46 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "W". SEE DRAWING SLO8-02 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "W".
- CONTRACTOR MUST REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
- SPLICE THE NEW UNDERPASS LIGHTING CIRCUITS OVER THE EXPRESS LANES TO THE EXISTING UNDERPASS LIGHTING CIRCUITS OVER THE LOCAL LANES DURING 2006.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM AND THE PROPOSED LIGHTING SYSTEM AT DIFFERENT STAGES.



SB LOCAL LANES

SB EXPRESS LANES

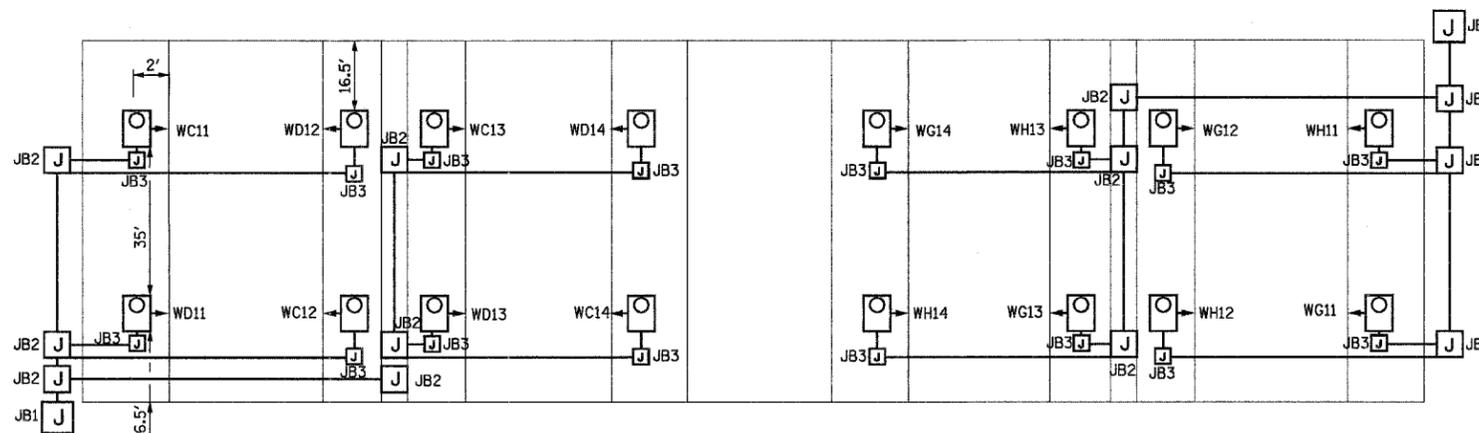
CTA

NB EXPRESS LANES

NB LOCAL LANES

EXISTING UNDERPASS LIGHTING PLAN

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	12"x12"x6"	STAINLESS STEEL ATTACHED TO STRUCTURE
JB2	12"x10"x6"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN
JB3	6"x6"x4"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN



SB LOCAL LANES

SB EXPRESS LANES

CTA

NB EXPRESS LANES

NB LOCAL LANES

FUTURE UNDERPASS LIGHTING PLAN

UL-38

REVISIONS	
NAME	DATE
REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

UNDERPASS LIGHTING PLAN
33rd STREET

SCALE: NONE DRAWN BY: BL
DATE: OCTOBER 29, 2004 CHECKED BY: SM



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

FOR INFORMATION ONLY

01/24/2005 03:45:06 PM

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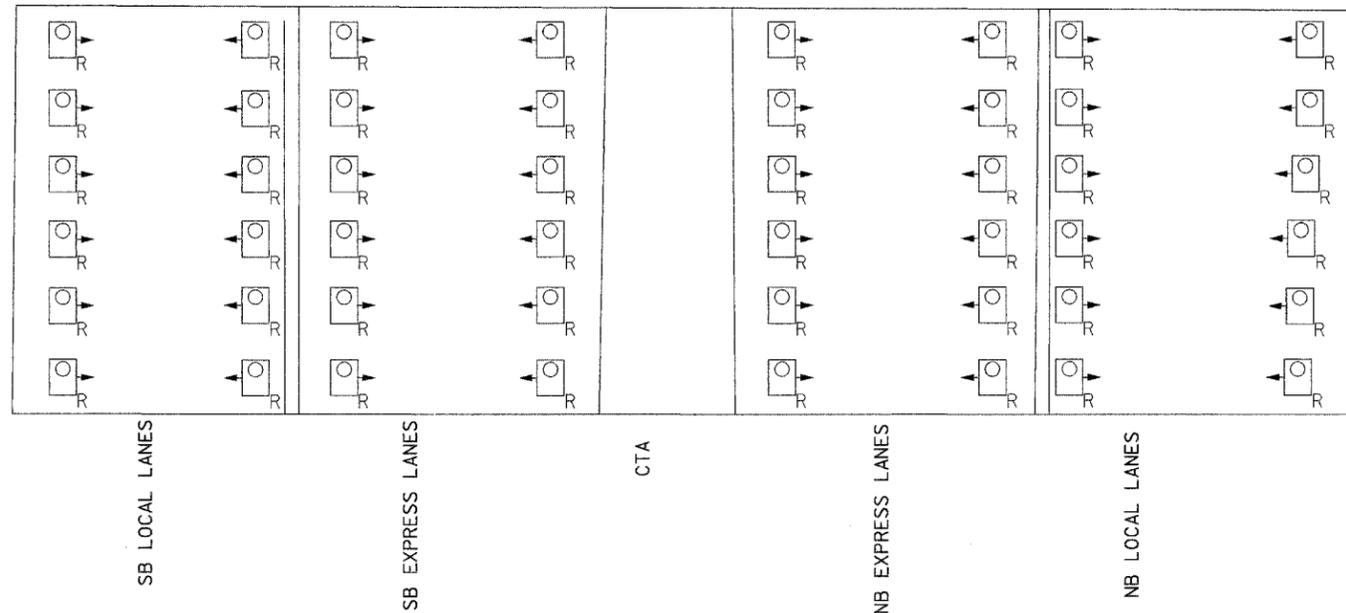
NOTES:

- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
- SEE DRAWING RL08-47 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- ALL PROPOSED UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM IDOT LIGHTING CONTROLLER "X". SEE DRAWING SLO8-03 FOR SINGLE LINE DIAGRAM FOR LIGHTING CONTROLLER "X".
- CONTRACTOR MUST REMOVE AND DISPOSE OF ALL EXISTING CABLE, CONDUIT, JUNCTION BOXES, AND ALL MOUNTING HARDWARE ASSOCIATED WITH THE EXISTING UNDERPASS LIGHTING.
- SPLICE THE NEW UNDERPASS LIGHTING CIRCUITS OVER THE EXPRESS LANES TO THE EXISTING UNDERPASS LIGHTING CIRCUITS OVER THE LOCAL LANES DURING 2006.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHOWN ON THIS DRAWING. THE EXISTING ELECTRICAL POWER FEEDS MAY NOT BE REMOVED UNTIL SUCH TIME AS THE PROPOSED POWER FEEDS ARE INSTALLED. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING SYSTEM AND THE PROPOSED LIGHTING SYSTEM AT DIFFERENT STAGES.

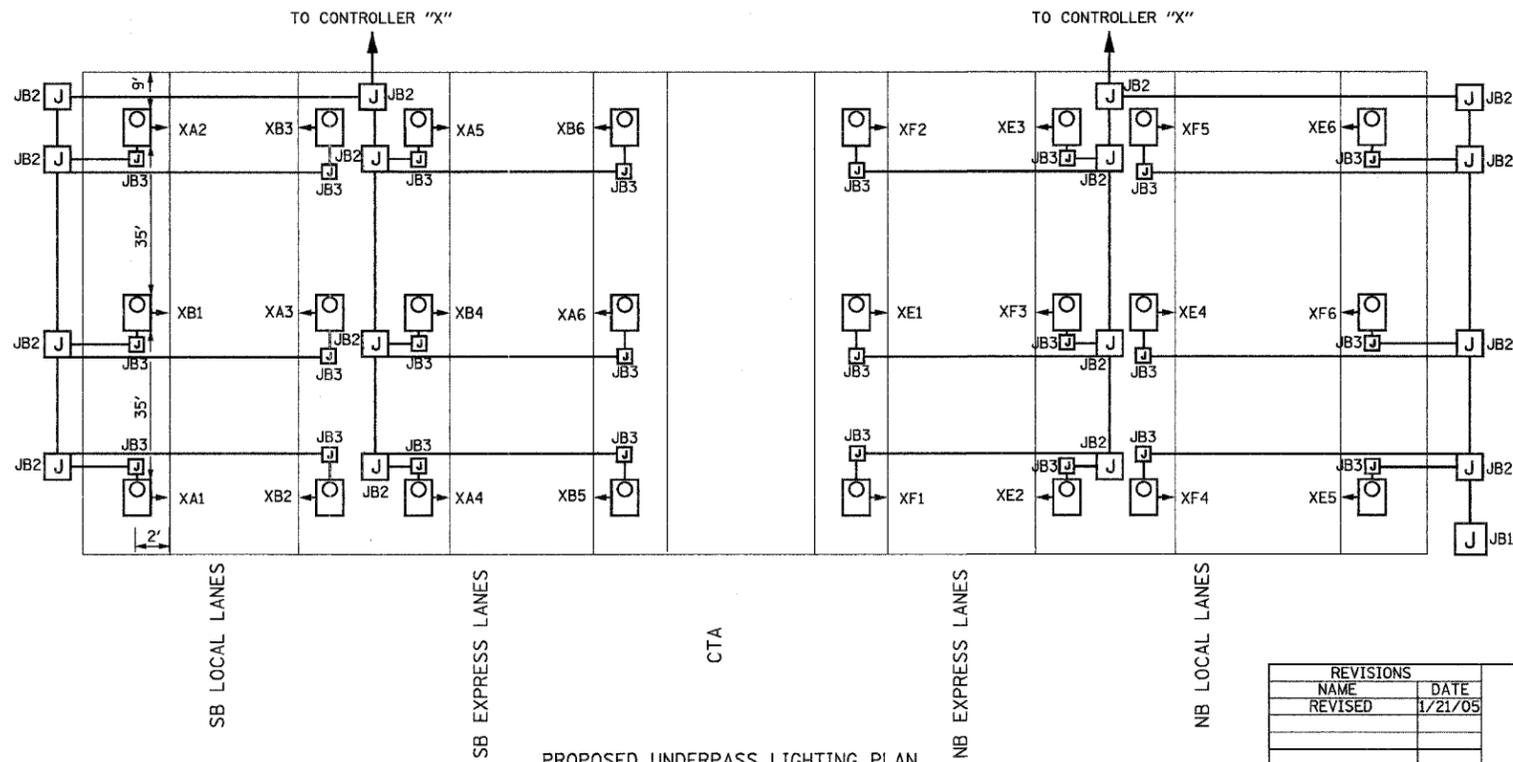
SEQUENCE OF WORK

- EXISTING UNDERPASS LIGHTING CONNECTED TO EXISTING CONTROLLER.
- PROPOSED UNDERPASS LIGHTING OVER THE EXPRESS LANES AND EXISTING UNDERPASS LIGHTING OVER LOCAL LANES CONNECTED TO PROPOSED CONTROLLER.
- PROPOSED UNDERPASS LIGHTING CONNECTED TO PROPOSED CONTROLLER.

JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	12"x12"x6"	STAINLESS STEEL ATTACHED TO STRUCTURE
JB2	12"x10"x6"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN
JB3	6"x6"x4"	STAINLESS STEEL ATTACHED TO ABUTMENT OR TOP OF PIER AS SHOWN



EXISTING UNDERPASS LIGHTING PLAN



PROPOSED UNDERPASS LIGHTING PLAN

UL-39

REVISIONS	
NAME	DATE
REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

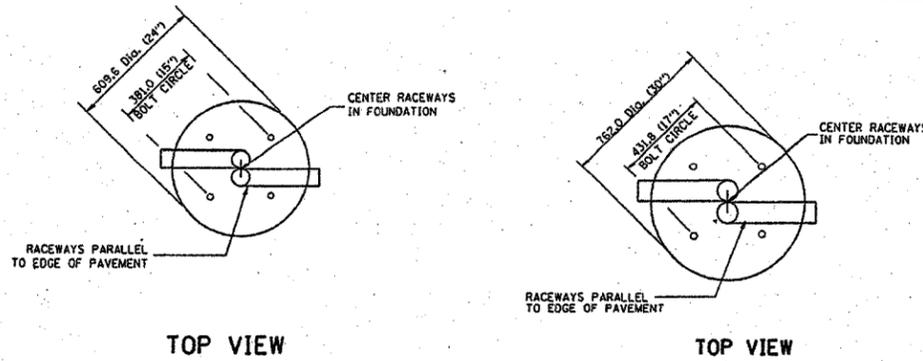
UNDERPASS LIGHTING PLAN
31st STREET

SCALE: NONE
DATE: OCTOBER 29, 2004
DRAWN BY: BL
CHECKED BY: SM

A. & S. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10/01	2003-09-12	COOK	976	397
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ALPHABET	FED. RD PROJECT		

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

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	3.96M (13'-0")	4.57M (15'-0")
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	2.09M (9'-6")	3.23M (10'-9")
STIFF CLAY Qu = 1.50 TON/SQ. FT.	2.13M (7'-0")	2.44M (8'-0")
LOOSE SAND φ = 34°	2.74M (9'-0")	3.05M (10'-0")
MEDIUM SAND φ = 37.5°	2.52M (8'-3")	2.74M (9'-0")
DENSE SAND φ = 40°	2.36M (7'-9")	2.74M (9'-0")

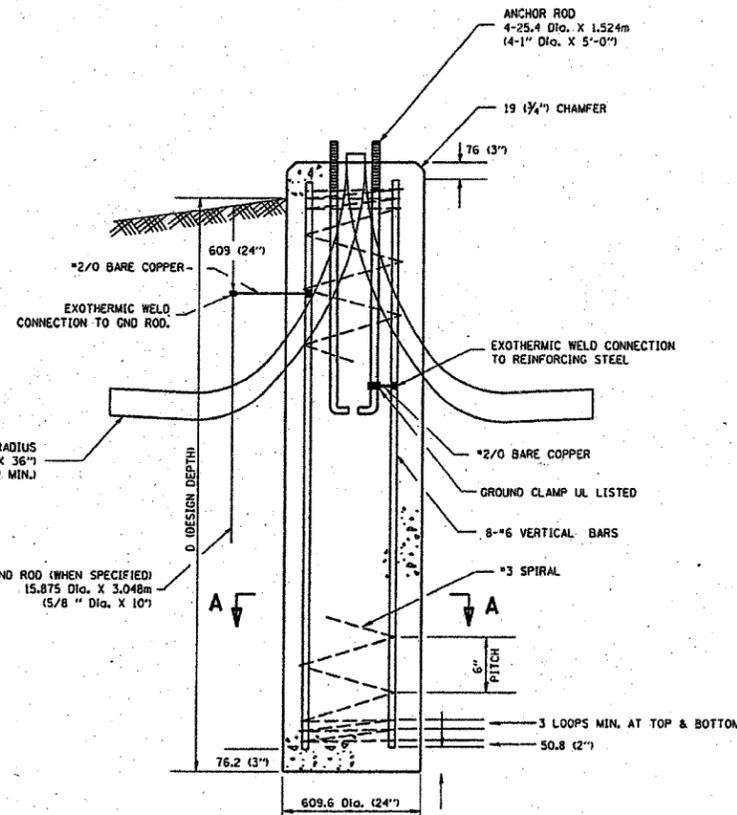


TOP VIEW

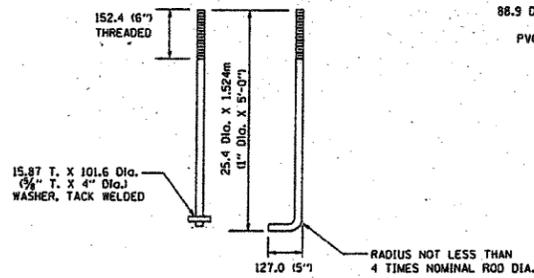
TOP VIEW

NOTES

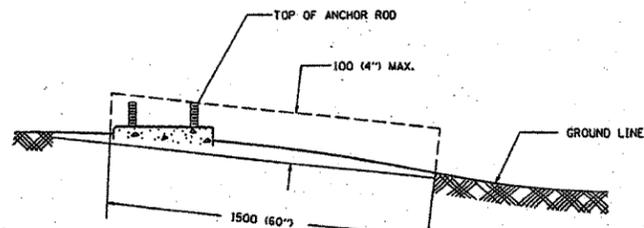
- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 1.5M (60 IN.) CHORD ACROSS THE FOUNDATION, 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 20MM (3/4-IN.).
- 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 10S). 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 UMIG MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 150 MM (6 INCHES) WITH A MINIMUM OF 75 MM (3 INCHES) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 69.3MM (2 3/4") 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 152.4MM (6") PITCH OR MAY SUBSTITUTE #3 TIES AT 304.8MM (12") 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 25.4MM (1") ABOVE THE TOP OF THE FOUNDATION.



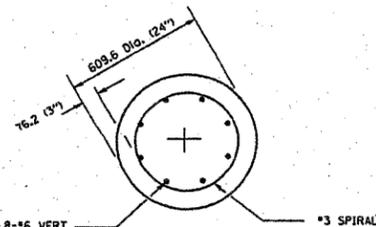
FOUNDATION DETAIL



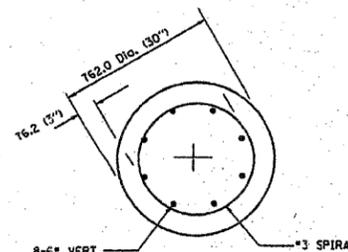
ANCHOR ROD DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

REVISIONS	
NAME	DATE

E-301

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE
DATE 03/19/2003

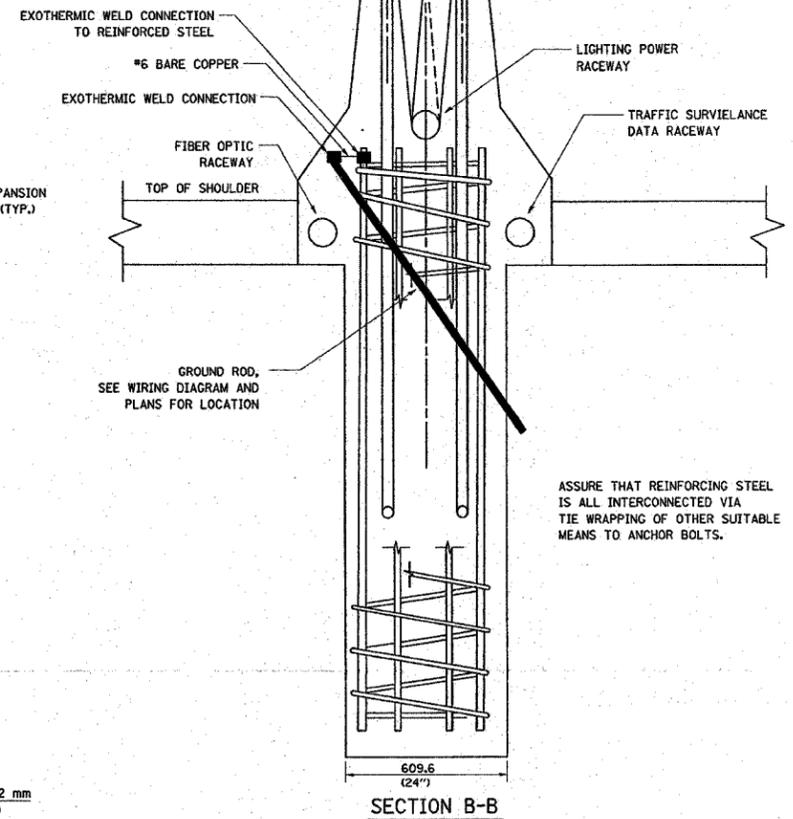
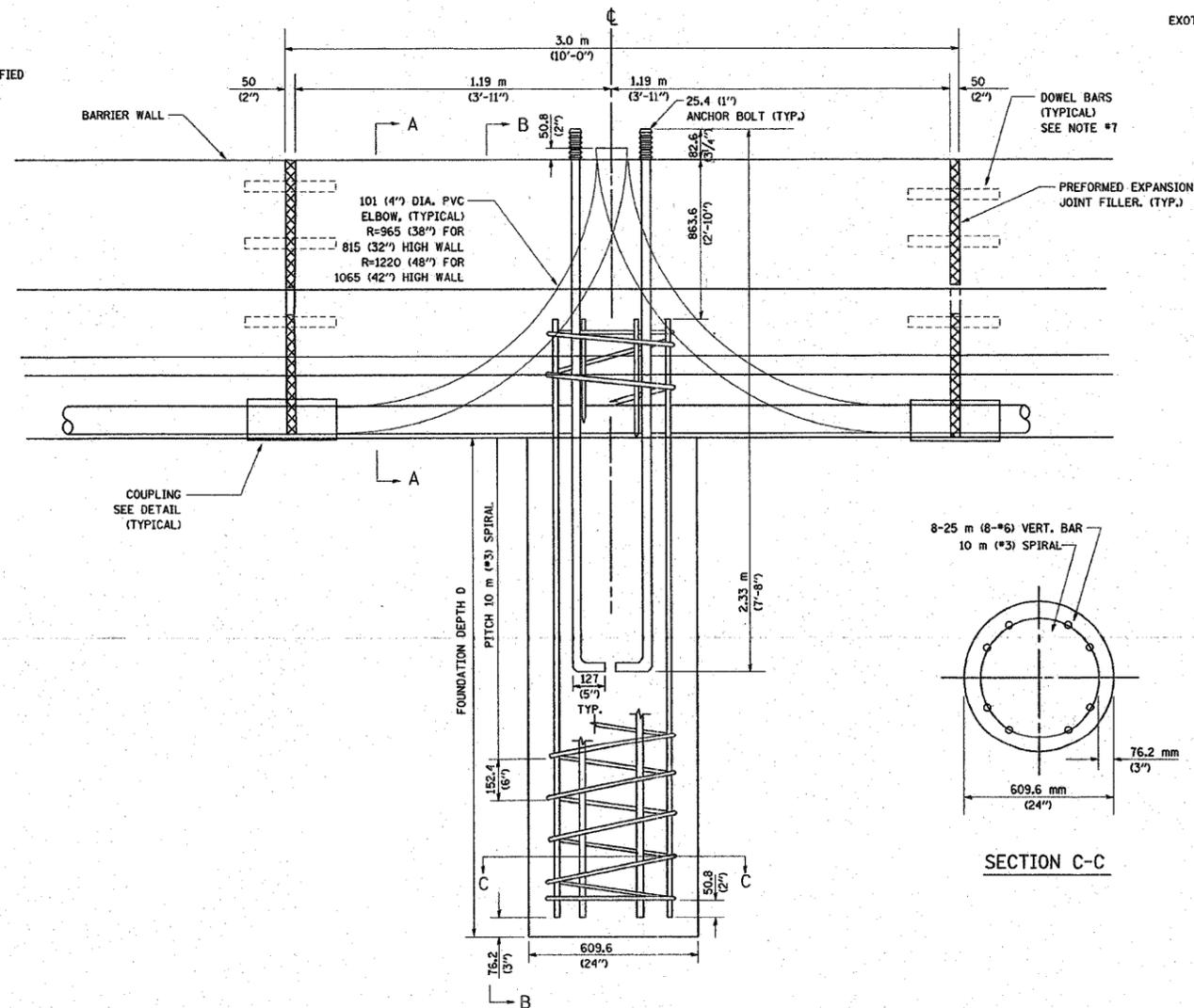
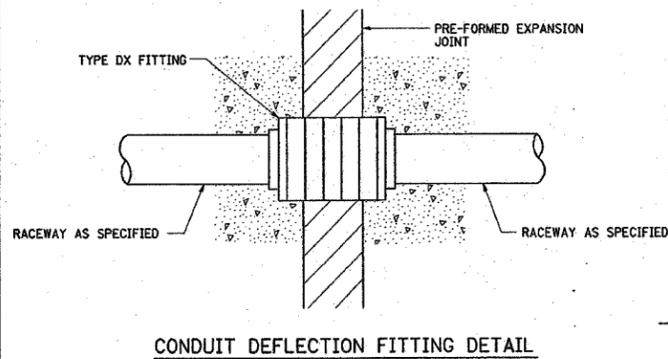
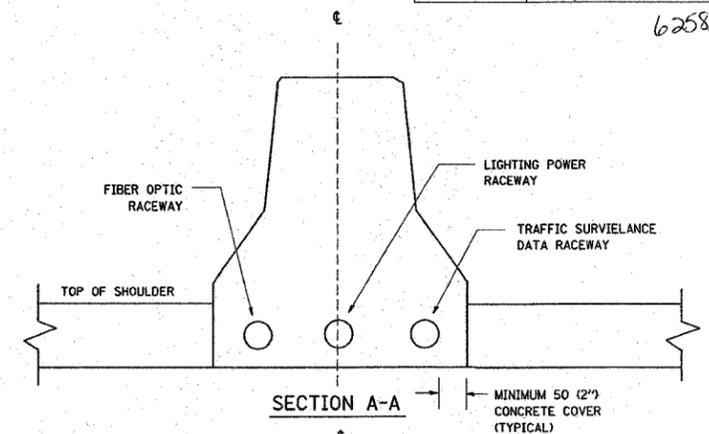
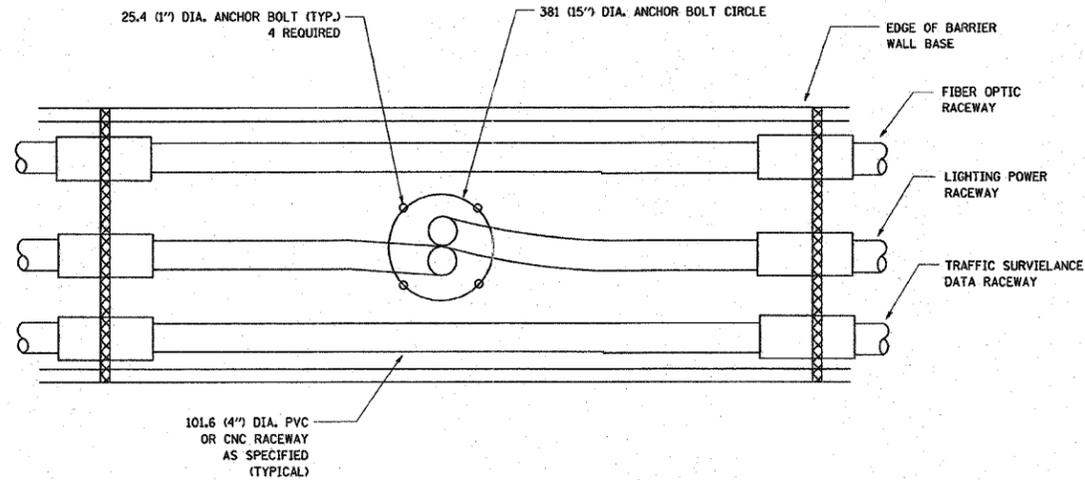
DRAWN BY JWM
CHECKED BY BE301
REVISION DATE: 04/22/02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
96/04	2009-0313	COOK	476	398
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62583

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORMS.
3. THE CONTRACTOR AT HIS OPTION MAY SUBSTITUTE 15 m (#4) TIES AT 304.8 m (12") CTRS. FOR THE 3 m (#3) SPIRAL. TACKWELDED TYPE BOLT MAY BE SUBSTITUTED FOR THE HOOK TYPE BOLT.
4. COLD BENDING OF THE HOOK BOLT SHALL NOT BE ALLOWED.
5. EXCAVATION FOR THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER 609.6 m (24 INCHES) IN DIAMETER.
6. THE ENGINEER SHALL DETERMINE THE TYPE OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE USING THE DOMINANT CHARACTERISTIC OF THE SOIL ENCOUNTERED.
7. BARRIER WALL EXPANSION AND CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 637001-02 AND 637006 AS APPLICABLE.



TYPE OF SOIL	FOUND FEPTH D	REINFORCEMENT IN FOUNDATION	
		VERTICAL BARS	SPIRAL
ROCK OR SOLIDIFIED SLAG	1.52 m (5'-0")	NONE	NONE
DENSE SAND	2.36 m (7'-9")	8-20 m x 2.74 m (8-#6 x 9'-0")	3 m x 27.43 m (#3 x 90')
MEDIUM SAND	2.51 m (8'-3")	8-20 m x 2.87 m (8-#6 x 9'-5")	3 m x 28.65 m (#3 x 94')
LOOSE SAND	2.74 m (9'-0")	8-20 m x 3.09 m (8-#6 x 10'-2")	3 m x 30.48 m (#3 x 100')
STIFF CLAY	2.13 m (7'-0")	8-20 m x 2.48 m (8-#6 x 10'-8")	3 m x 24.38 m (#3 x 80')
MEDIUM CLAY	2.89 m (9'-6")	8-20 m x 3.25 m (8-#6 x 10'-8")	3 m x 31.69 m (#3 x 104')
SOFT CLAY	3.96 m (13'-0")	8-20 m x 4.32 m (8-#6 x 14'-2")	3 m x 43.89 m (#3 x 144')

DESIGN: 80 MPH AASHTO

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

609.6 mm (24") DIA. LIGHT POLE FOUNDATION INTEGRAL WITH DOUBLE FACE BARRIER WALL

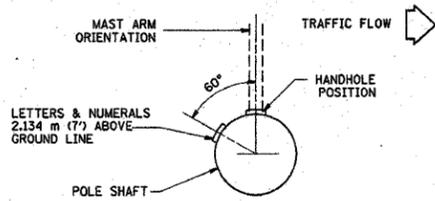
SCALE: VERT. NONE HORIZ. NONE DATE 04/07/2004

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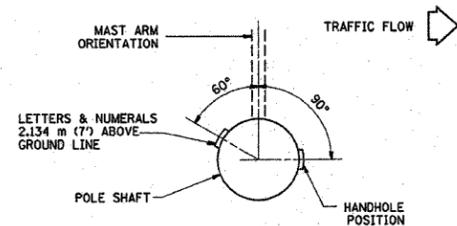
BE-322

P.L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	BLDG.	FED. AID PROJECT		

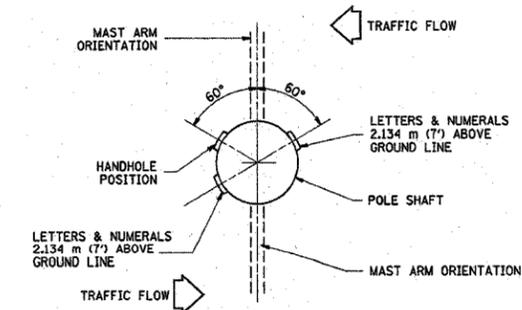
62583



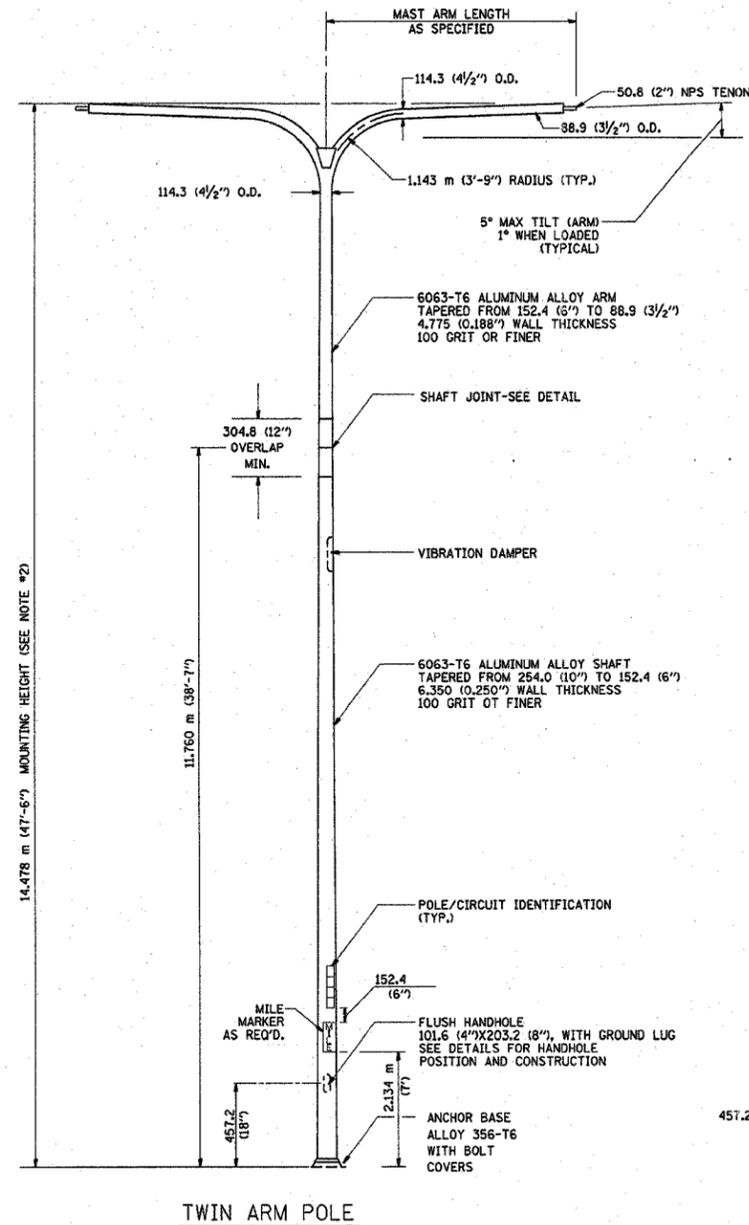
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



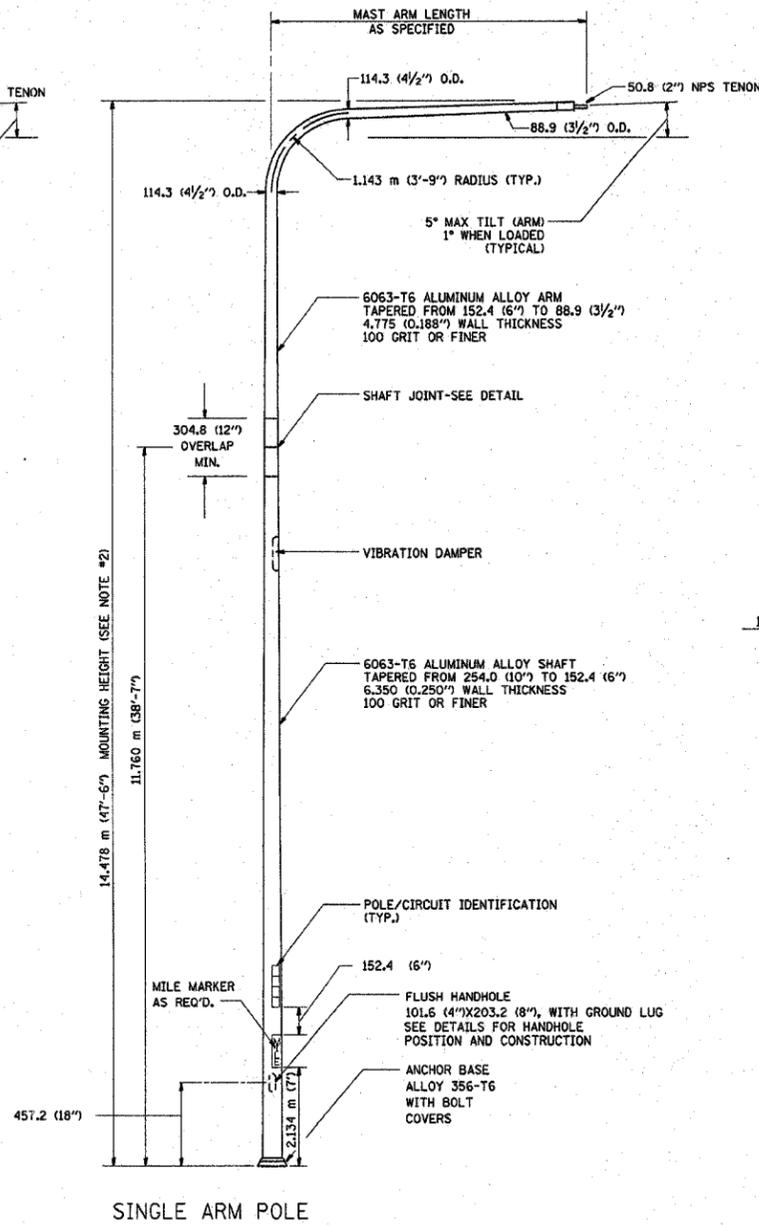
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

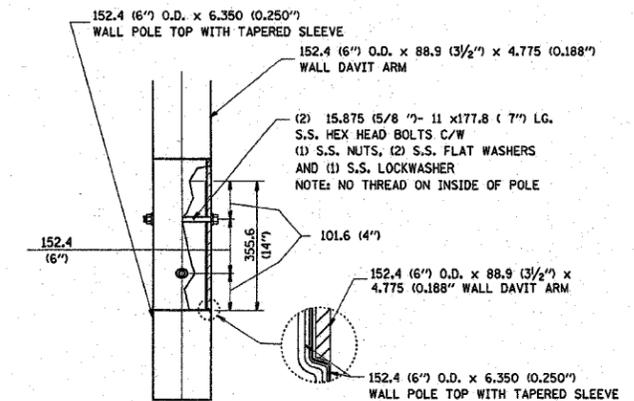


TWIN ARM POLE

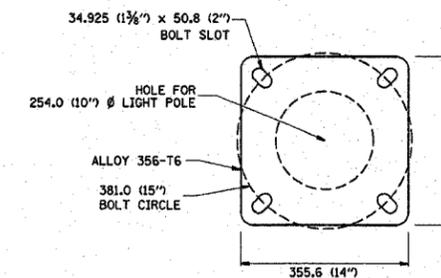


SINGLE ARM POLE

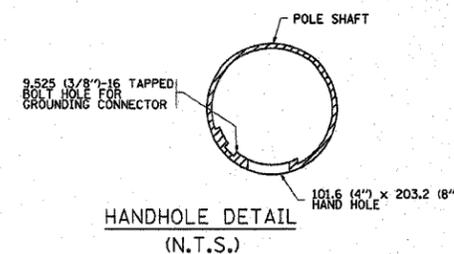
- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
 3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
 4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
 5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
 6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
 7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
 8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



DAVIT ARM CONNECTION
[355.6 (14) OVERLAP SHOWN]



LIGHT POLE BASE PLATE DETAIL
(FOR POLE MOUNTED ON 381.0 (15 INCH) BOLT CIRCLE FOUNDATION)



REVISIONS	
NAME	DATE
D. DREW	4-2-92
D. DREW	5-7-92
R. TOMSONS	9-6-00

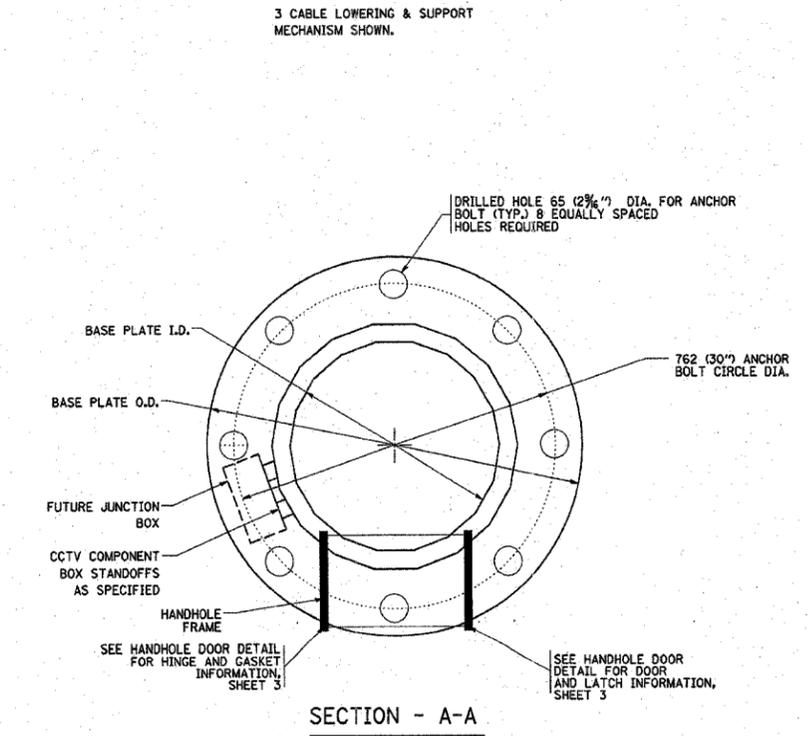
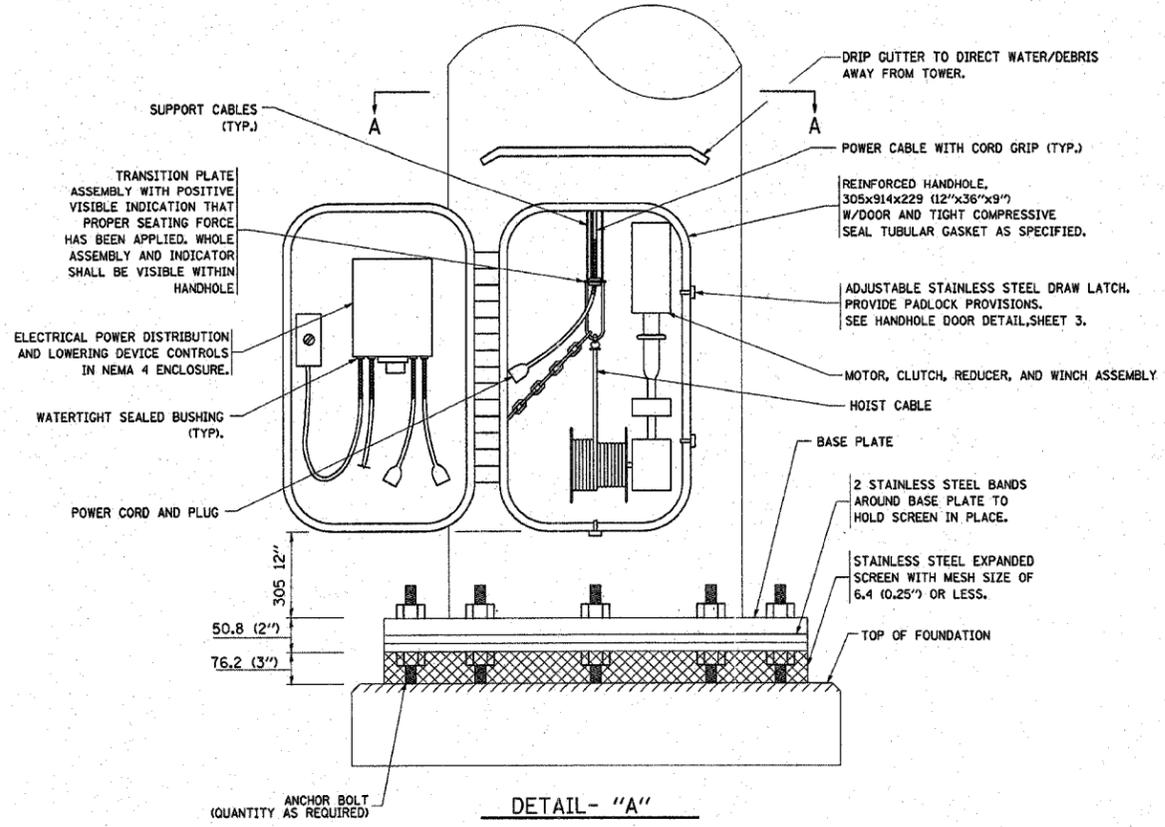
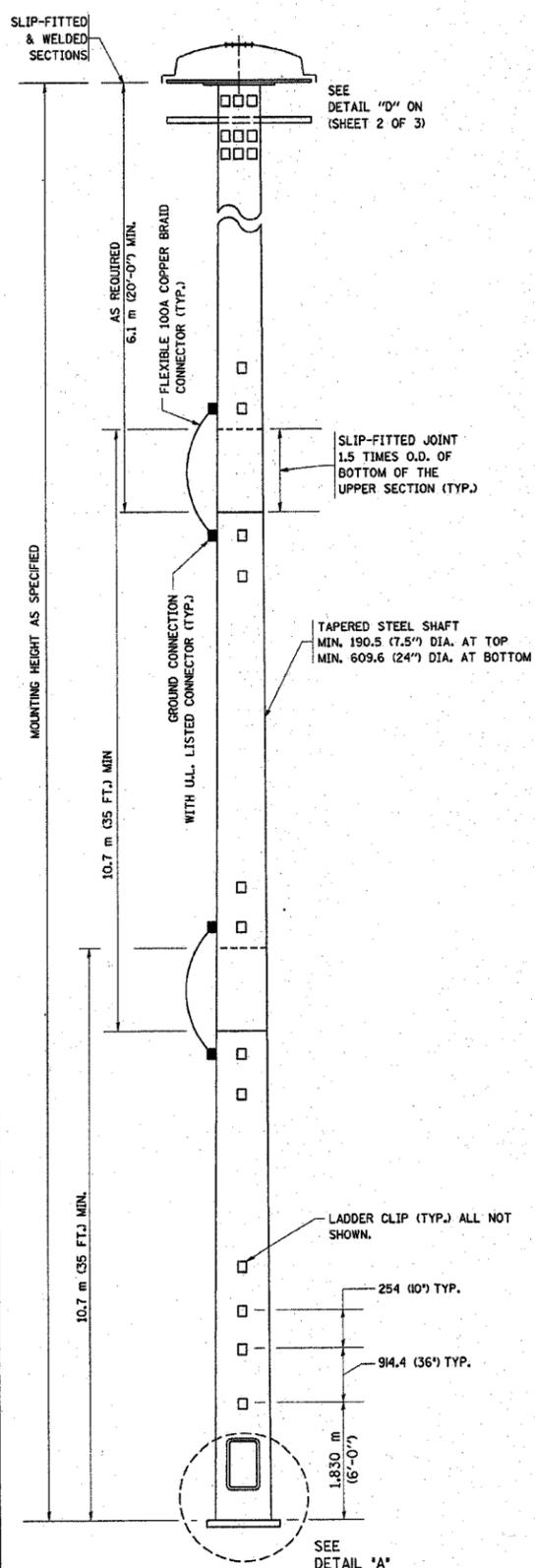
ILLINOIS DEPARTMENT OF TRANSPORTATION

DAVIT LIGHT POLE
14.478 m (47' - 6")
MOUNTING HEIGHT

SCALE: NONE
DATE: 08/08/2003

DRAWN BY: LEY
CHECKED BY: BE-410

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/4	20-03-031E	COOK	976	400
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	62583	



NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- THE DESIGN SHALL BE BASED UPON AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" CURRENT AT THE TIME THE PROJECT IS ADVERTISED AND A TOTAL COMBINED LUMINAIRE WEIGHT OF 326 KG (720 LBS.) AND HAVING A TOTAL PROJECTED AREA OF 7.3 SQ M (24 SQ. FT.).
- ALL TOWER SHAFT COMPONENTS, INCLUDING, BUT NOT LIMITED TO THE SHAFT SECTIONS, BASE PLATE, LADDER CLIPS, HANDHOLE DOOR, HANDHOLE REINFORCING, RAIN GUTTER, AND BASE PLATE, SHALL BE FABRICATED FROM HIGH-STRENGTH, LOW ALLOY, STEEL WITH A MINIMUM YIELD STRENGTH OF 345 K PA (50,000 PSI) ACCORDING TO AASHTO M 223 (ASTM A 572 GR50)
- THE ELECTRIC MOTOR, MOTOR GEAR REDUCER, WINCH DRUM ASSEMBLY AND AUTOMATIC SHUTOFF SWITCH OF THE LOWERING DEVICE SHALL BE ACCESSIBLE FROM THE FRONT OF THE TOWER FOR EASY REMOVAL AND MAINTENANCE. ALL COMPONENTS SHALL BE REMOVABLE THROUGH THE HANDHOLE.
- THE LIGHT TOWER SHAFT SHALL HAVE LADDER CLIPS. CLIPS SHALL BEGIN 1.8 M (6 FT.) ABOVE THE BASE PLATE WITH ALTERNATE 900 (36 INCH) AND 250 (10 INCH) SPACING THEREAFTER, FOR THE ENTIRE LENGTH. THE TOP 3 M (10 FT.) OF THE POLE SHAFT SHALL HAVE 3 SETS OF CLIPS. EACH SET OF CLIPS SHALL BE 120 DEGREES APART. CLIPS SHALL BE 6 X 50 (0.25 X 2 INCHES) WELDED TO THE SHAFT TO PRODUCE A SLOT 15.9 (0.625 INCHES) DEEP AND 41.3 (1.625 INCHES) LONG. THE TOP INSIDE EDGE SHALL BE CHAMFERED.
- A COPPER BONDING JUMPER SHALL BOND SLIP-FIT POLE SECTIONS TOGETHER WITH A FLAT COPPER MESH AND STAINLESS STEEL GROUND LUGS.
- ALL TOWER SHAFT HARDWARE, SUCH AS GROUND LUGS, JUNCTION BOXES, HARDWARE FOR THE HANDHOLE DOOR, INCLUDING THE HANDLE/LATCH MECHANISM, HINGE AND DOOR STOP, SHALL BE STAINLESS STEEL. ALL CONDUIT AND CONDUIT FITTINGS SHALL BE PVC COATED GALVANIZED STEEL.
- THE ENTIRE TOWER INCLUDING THE SHAFT, HANDHOLE, HANDHOLE DOOR, BASE PLATE AND ALL OTHER ELEMENTS WELDED TO THE SHAFT SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123) AND THEN PAINTED AS SPECIFIED. THE LUMINAIRE RING SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- THE FINISH COAT SHALL BE FEDERAL STANDARD COLOR NUMBER 16307 (HANFORD GREY). COLOR SAMPLE TO BE SUBMITTED FOR APPROVAL
- ALL MULTI-CONDUCTOR CABLES SHALL BE FITTED WITH A HEAT-SHRINK MULTI-LEG BOOT. THE BOOT SHALL MEET MILITARY SPECIFICATION MIL-I-81765/1.
- PRIOR TO DELIVERY, THE TOWER AND ALL ITS COMPONENTS SHALL BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE IN THE PRESENCE OF THE ENGINEER. ANY PARTS FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED.
- THE LIGHT TOWER SHALL BE STRAIGHT AND CENTERED ON ITS LONGITUDINAL AXIS, UNDER NO-WIND CONDITIONS, SO WHEN EXAMINED WITH A TRANSIT FROM ANY DIRECTION, THE DEVIATION FROM THE NORMAL SHALL NOT EXCEED 2 MM IN 1 M (1/8 IN. IN 3 FT) WITHIN ANY 1.5 M (5 FT) OF HEIGHT, WITH TOTAL DEVIATION NOT TO EXCEED 75 (3 IN.) FROM THE VERTICAL AXIS THROUGH THE CENTER OF THE POLE BASE.
- PVC CONDUIT WILL NOT BE ALLOWED.
- THE NUMBER OF COUNTER WEIGHTS TO BE SUPPLIED AS A PART OF THE LIGHT TOWER PAY ITEM IS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
HIGH MAST LIGHT TOWER
 27m TO 36m (90FT TO 120FT)
 SHEET 1 OF 3

SCALE: VERT. NONE
 HORIZ. DATE
 DRAWN BY
 CHECKED BY