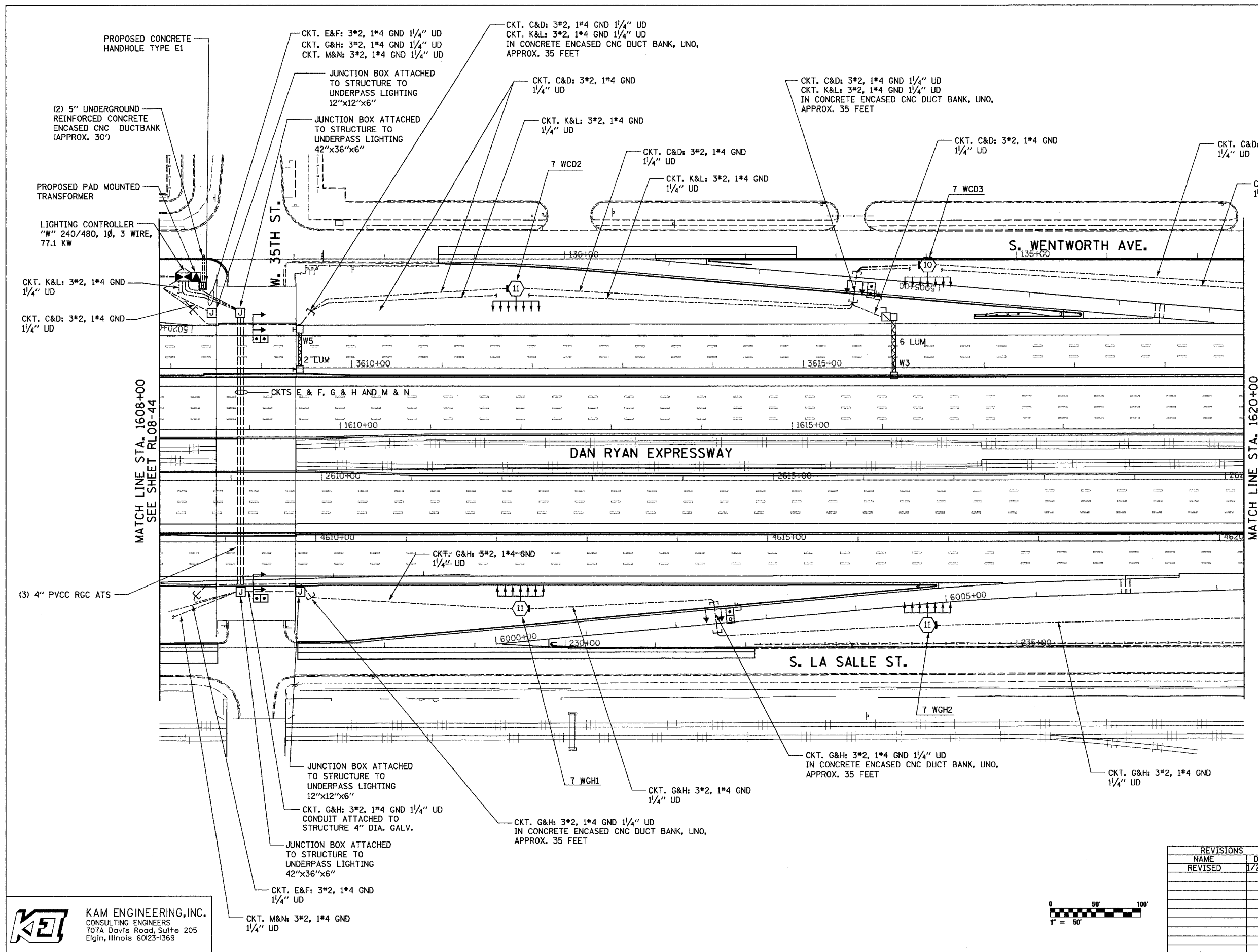


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	301
STA. 1608+00		TO STA. 1620+00		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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

RL08-45

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



REVISIONS	
NAME	DATE
REVISED	1/21/05

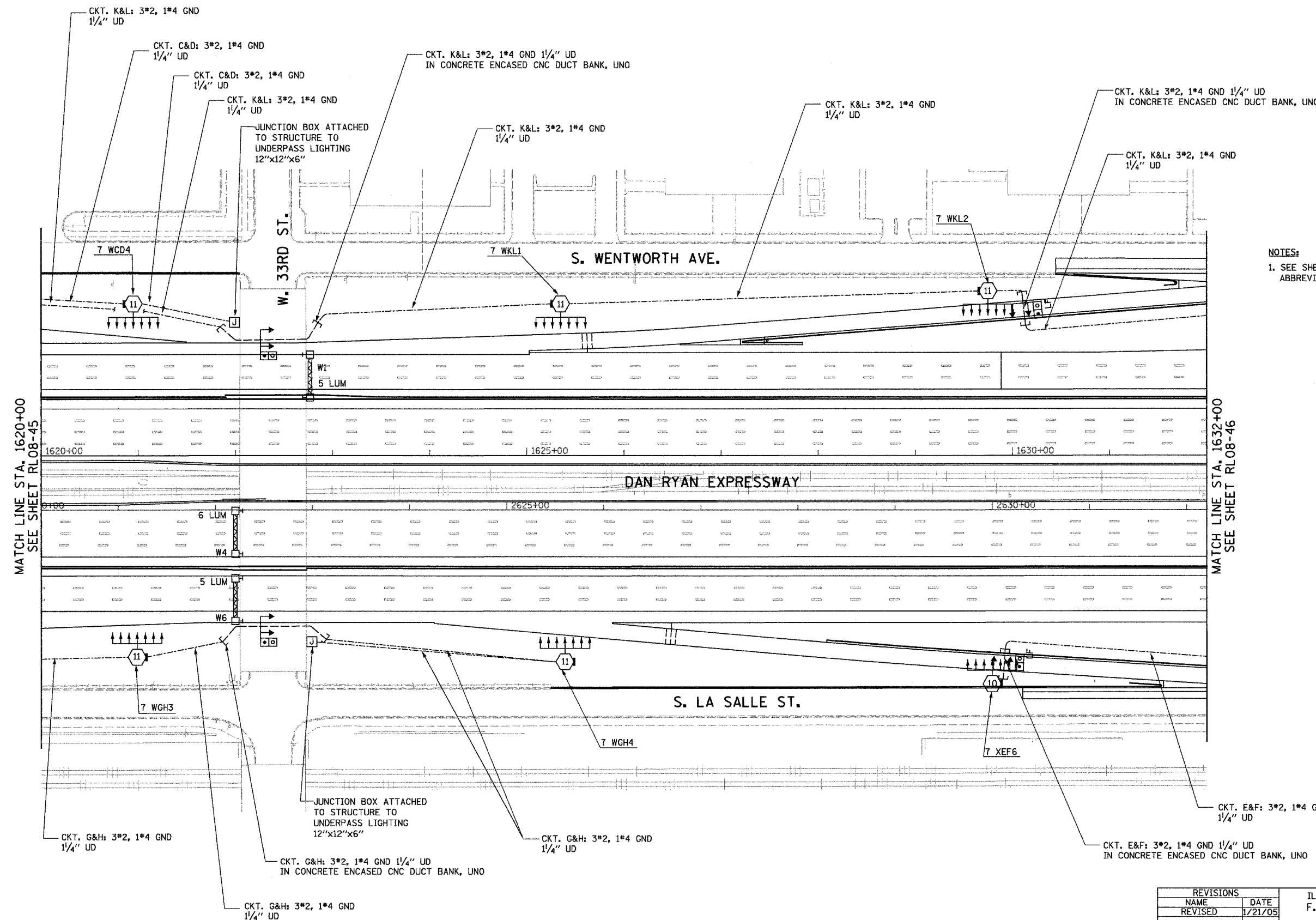
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

ROADWAY LIGHTING PLANS  
FINAL IMPROVEMENTS

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

01/21/05 03:39:21 PM 329 SHT Lighting RL08-45.DWG

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 RLO8-45

MATCH LINE STA. 1632+00  
SEE SHEET RLO8-46

RLO8-46

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



REVISIONS	
NAME	DATE
REVISED	1/21/05

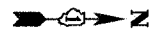
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

ROADWAY LIGHTING PLANS  
FINAL IMPROVEMENTS

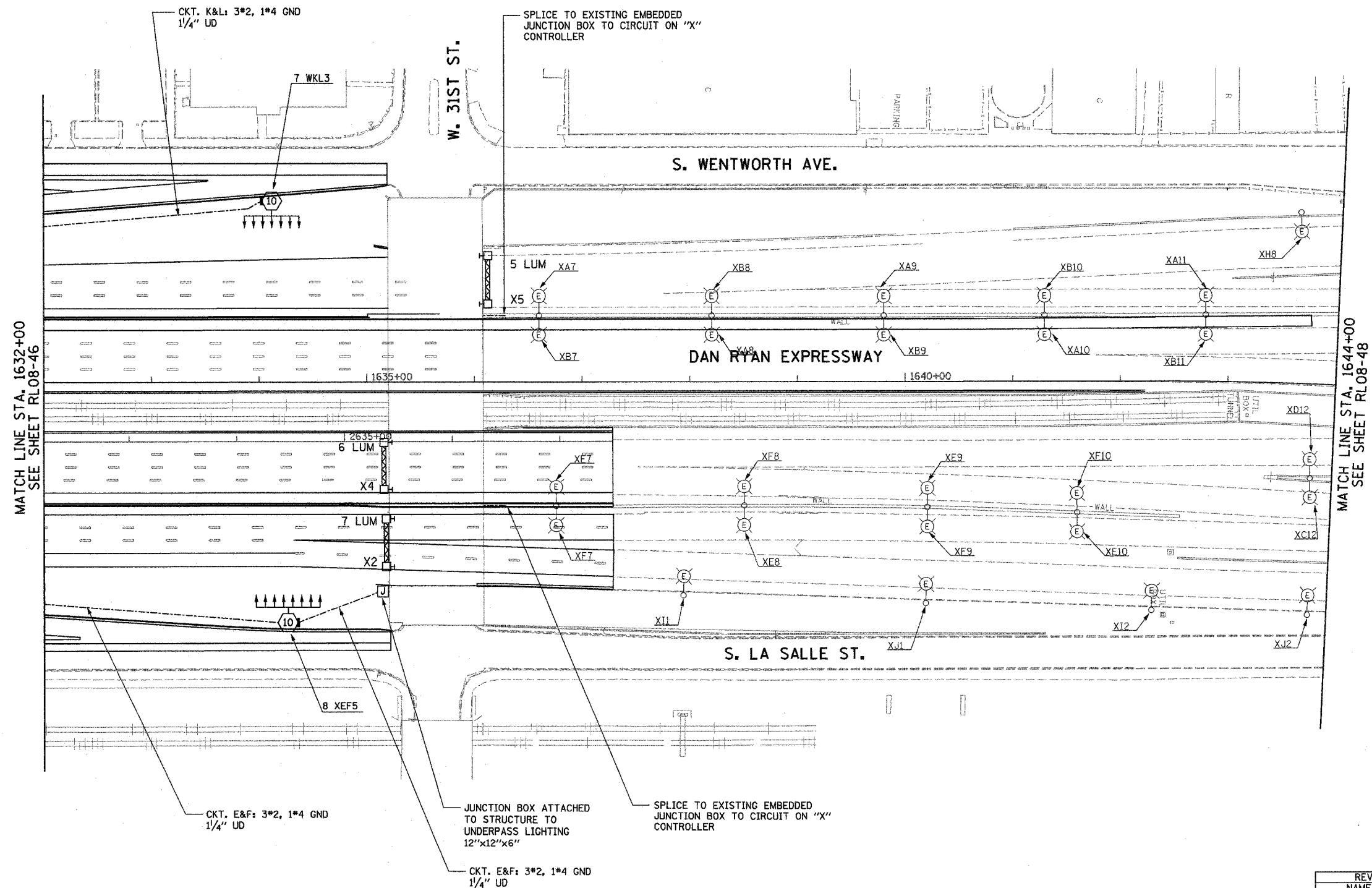
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CHECKED BY: SM

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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

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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**

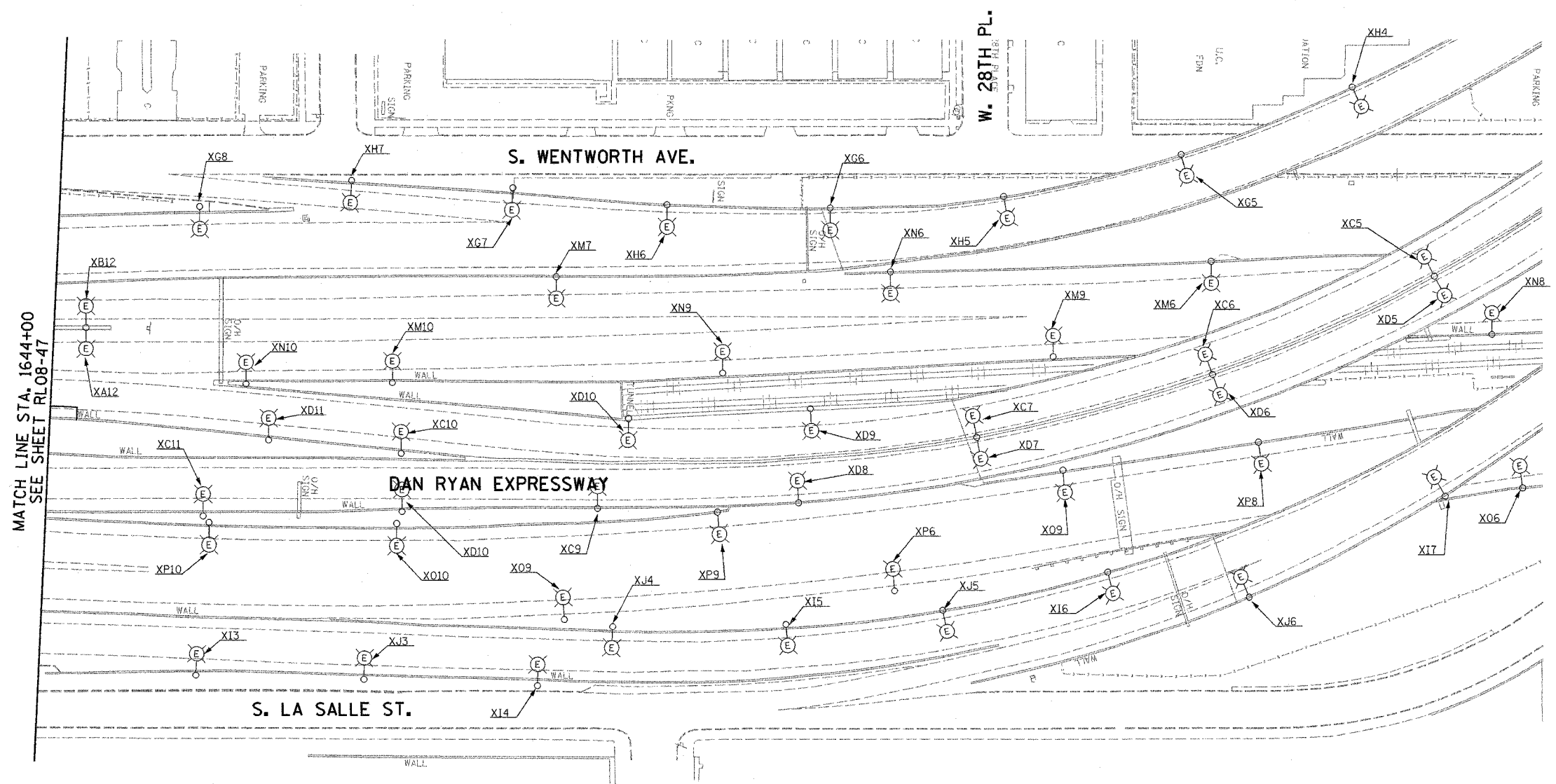
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DATE: OCTOBER 29, 2004

DRAWN BY: BL  
CHECKED BY: SM

RL08-47

03/25/2004 10/15/2004

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				

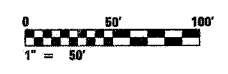


**NOTES:**  
 1. SEE SHEET ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES.

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

RL08-48

**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

**ROADWAY LIGHTING PLANS  
 FINAL IMPROVEMENTS**

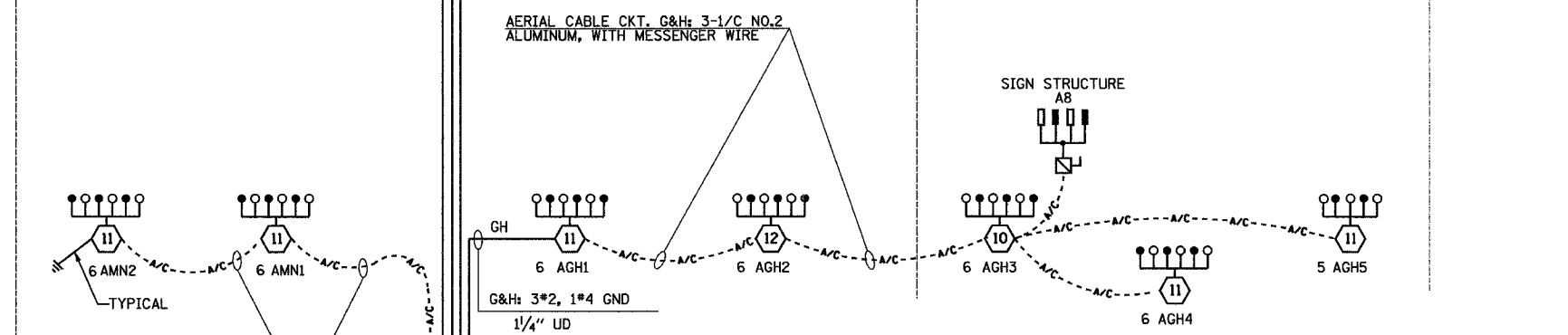
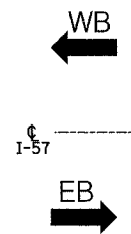
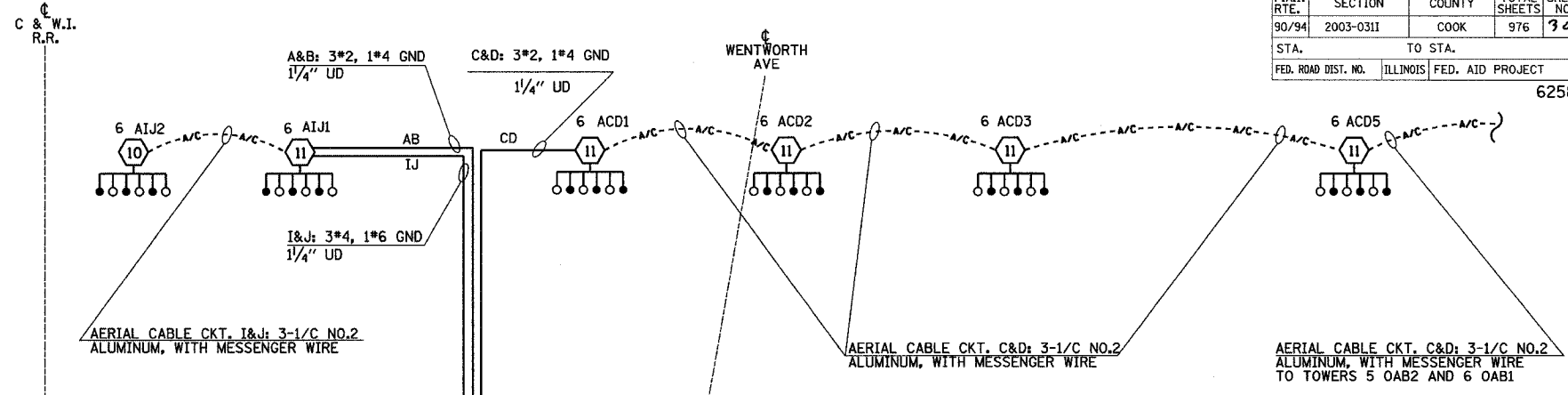
SCALE: 1"=50'  
 DATE: OCTOBER 29, 2004

DRAWN BY: BL  
 CHECKED BY: SM

03/25/2004 10:15:2004

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 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
- ECA
- CONVENTIONAL LIGHTING UNIT, 310 WATT HPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)

CIRCUIT	RED PHASE		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	
<b>TOTAL</b>	<b>91.8</b>	<b>22,032</b>	<b>TOTAL</b>	<b>87.8 21,072</b>

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

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

**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

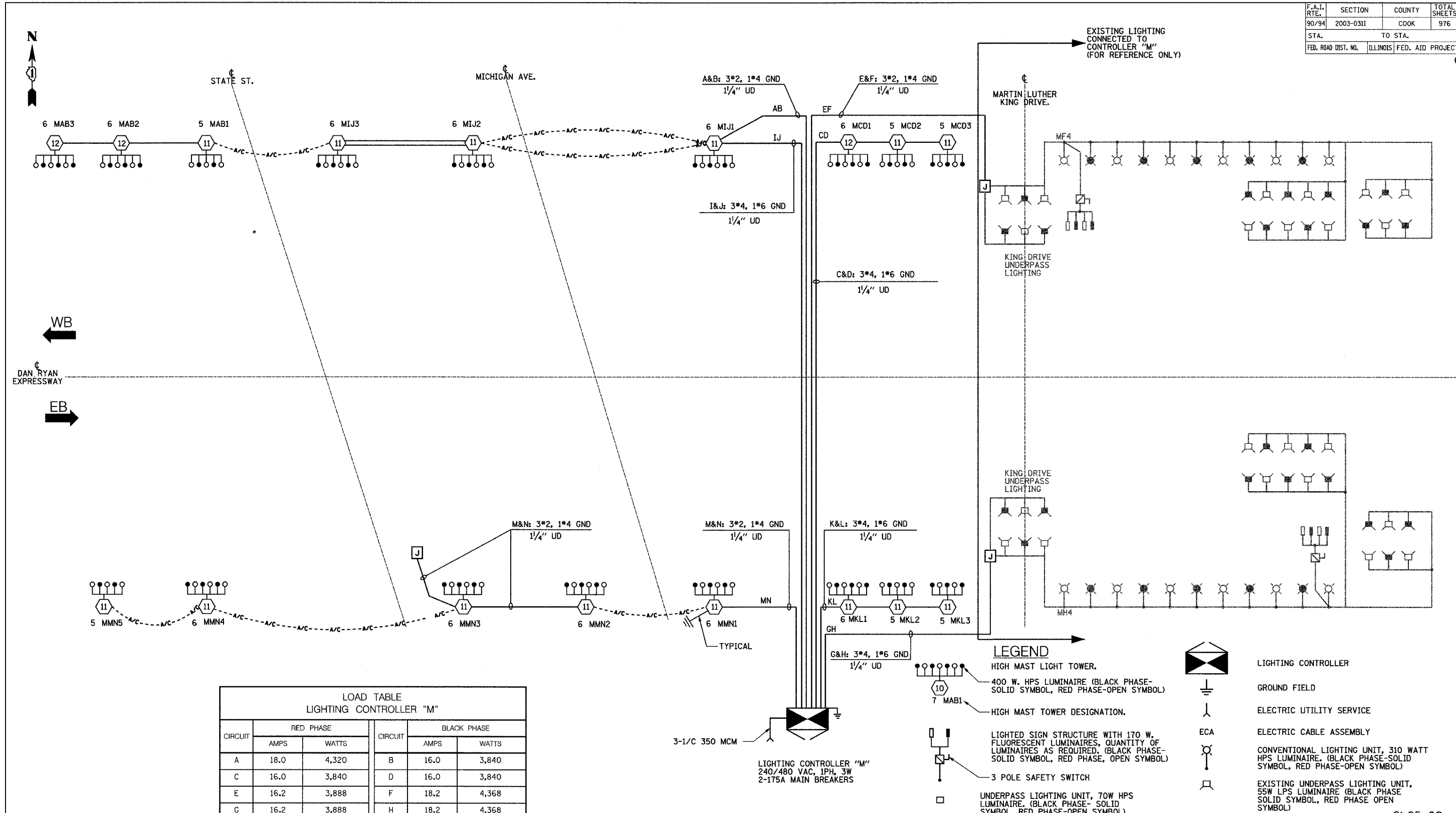
**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "A"  
PROPOSED IMPROVEMENTS 2005**

SCALE: NOT TO SCALE  
DATE: OCTOBER 29, 2004

DRAWN BY: YJ  
CHECKED BY: TM

SL05-01

11/23/2004 2:24:02 PM



**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.

- 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"**  
**PROPOSED IMPROVEMENTS 2005**

SCALE: NOT TO SCALE  
DATE: OCTOBER 29, 2004

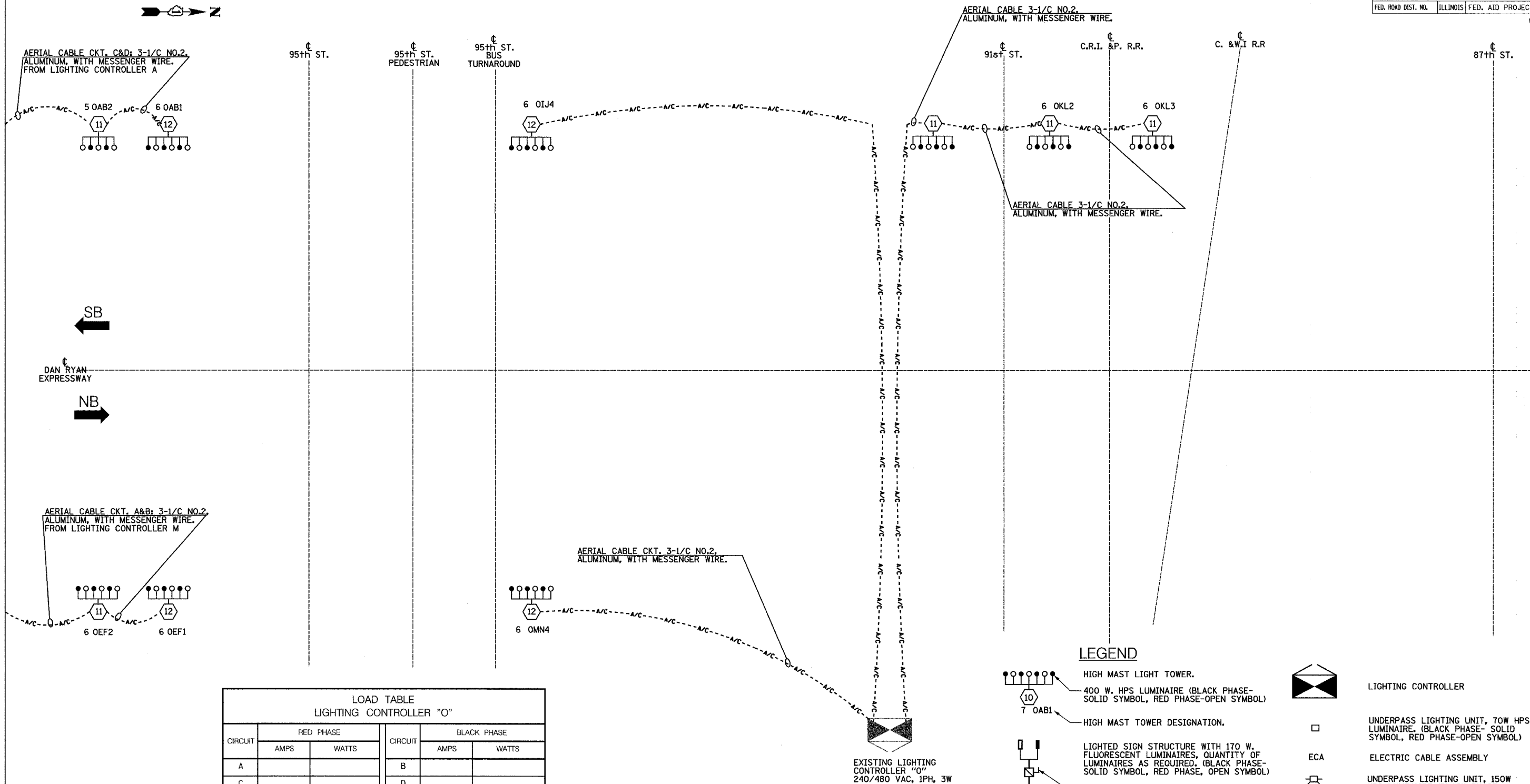
DRAWN BY: YJ  
CHECKED BY: TM

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CONSULTING ENGINEERS

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CHICAGO, IL 60606  
TEL: (312) 629-0240  
FAX: (312) 629-8448

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	307
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			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)
  - ECA
  - 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

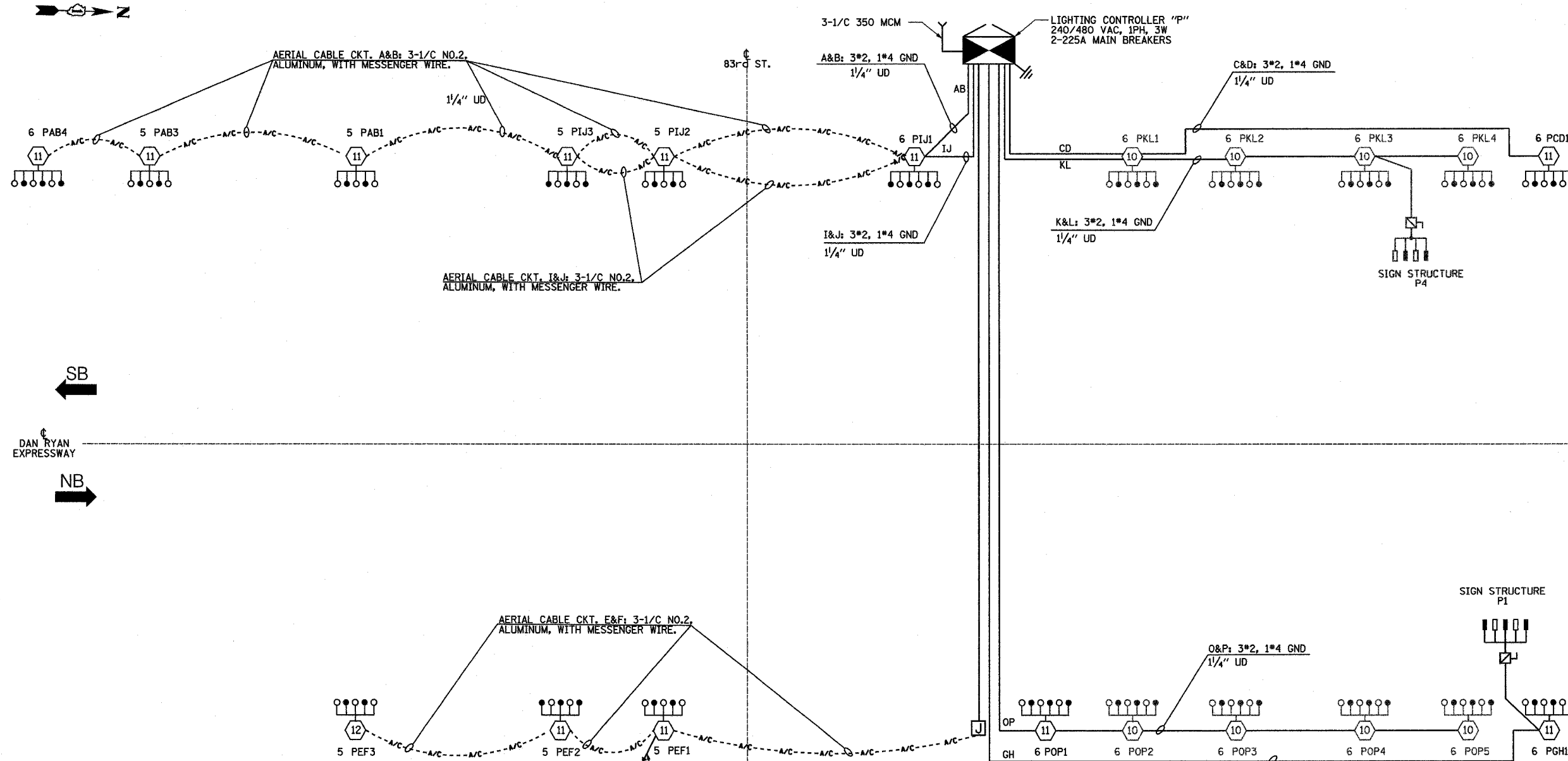
**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "O"  
PROPOSED IMPROVEMENTS 2005**

SCALE: NOT TO SCALE  
DATE: OCTOBER 29, 2004

DRAWN BY: YJ  
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 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

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

REVISIONS	
NAME	DATE

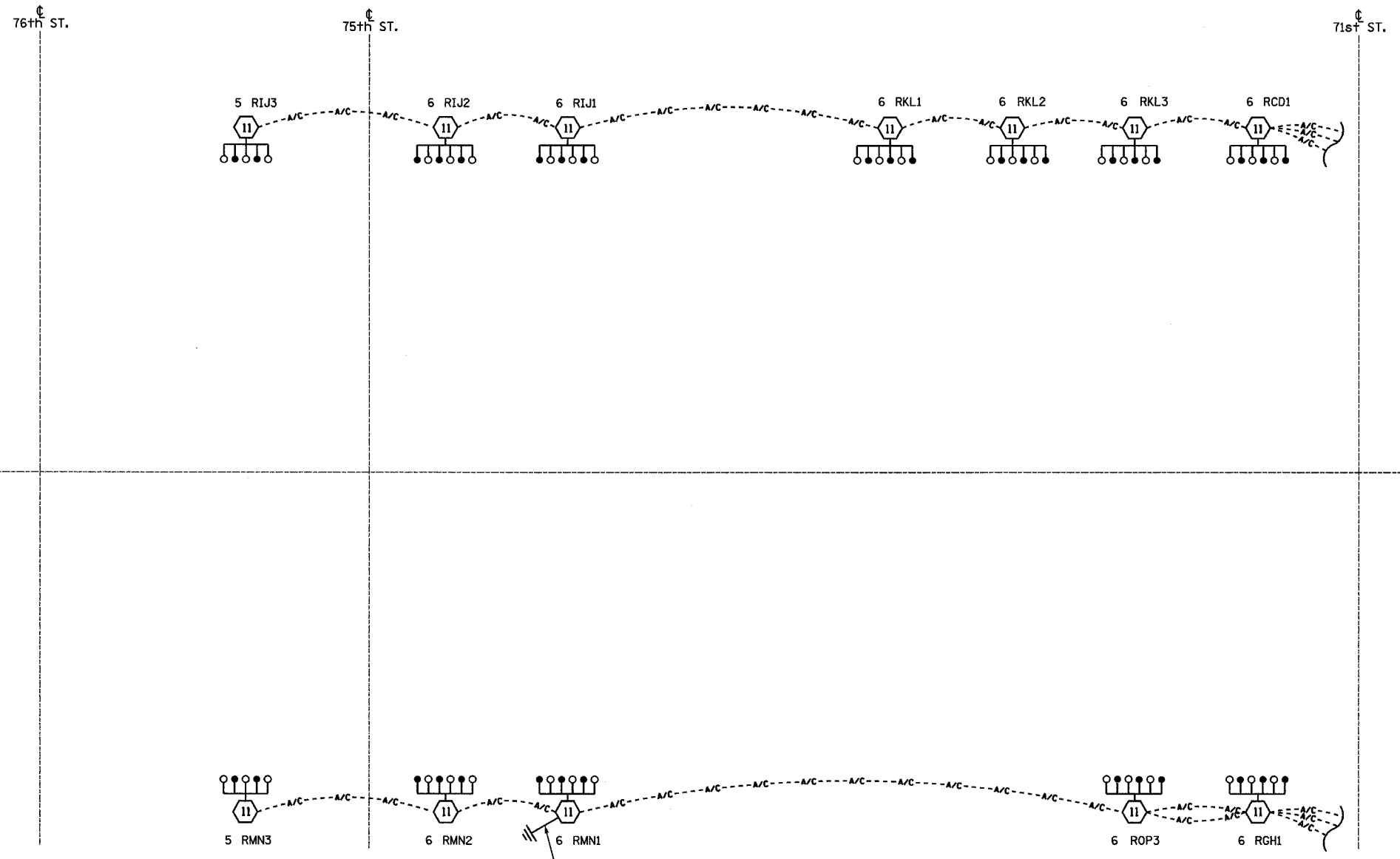
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

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

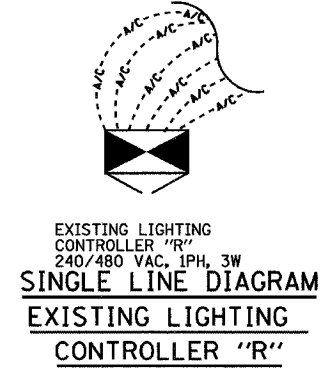
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DATE: OCTOBER 29, 2004      CHECKED BY: TM

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



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

- 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)
- EXISTING LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE

NAME	DATE
REVISOR	01/21/05

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

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

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

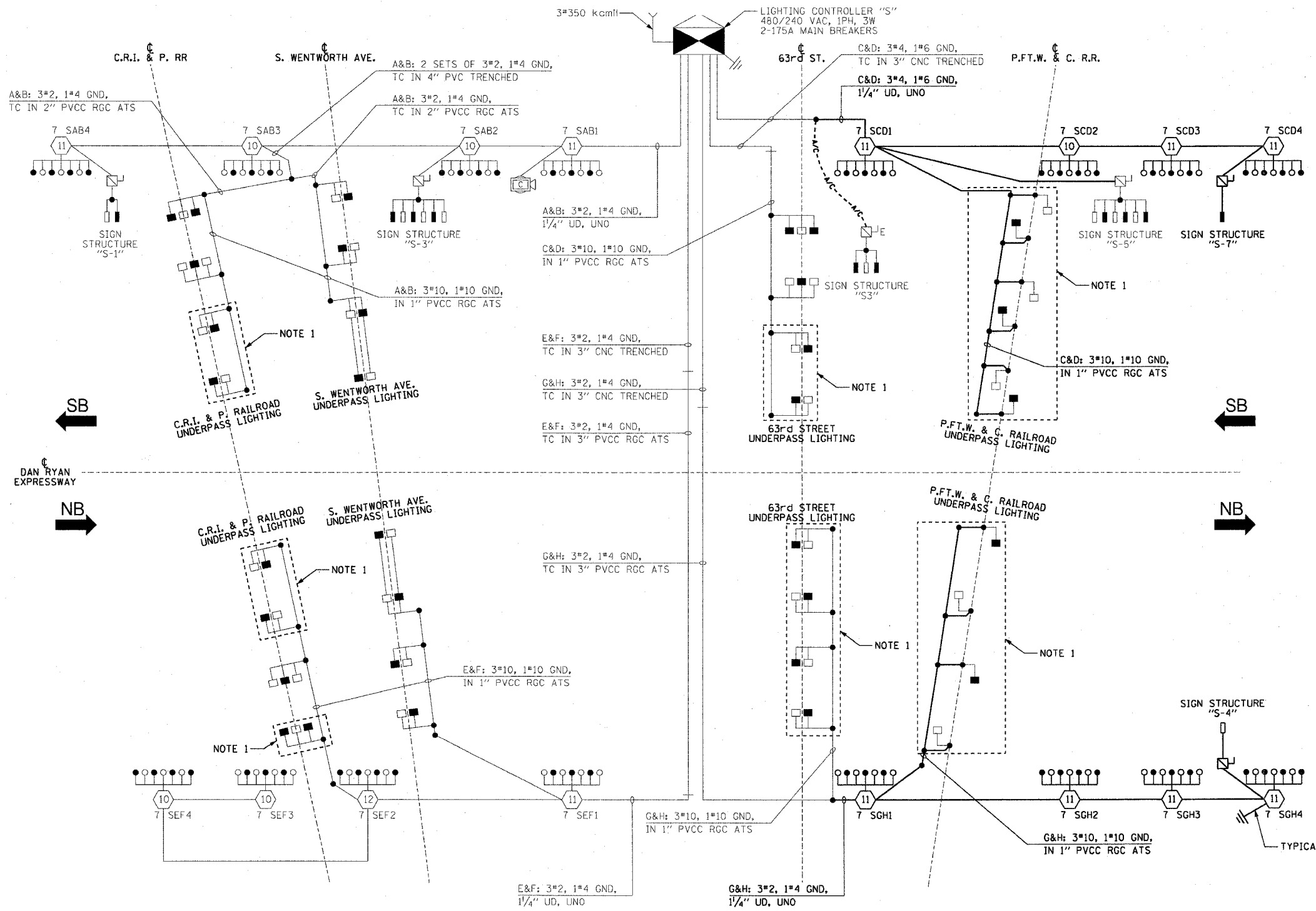
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	310
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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 LUMINAIRES, QUANTITY OF LUMINAIRES AS REQUIRED. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 3 POLE SAFETY SWITCH
- 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



**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	-	-
<b>TOTAL</b>	<b>127.5</b>	<b>30,600</b>	<b>TOTAL</b>	<b>128.2</b>	<b>30,768</b>

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

- 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.

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

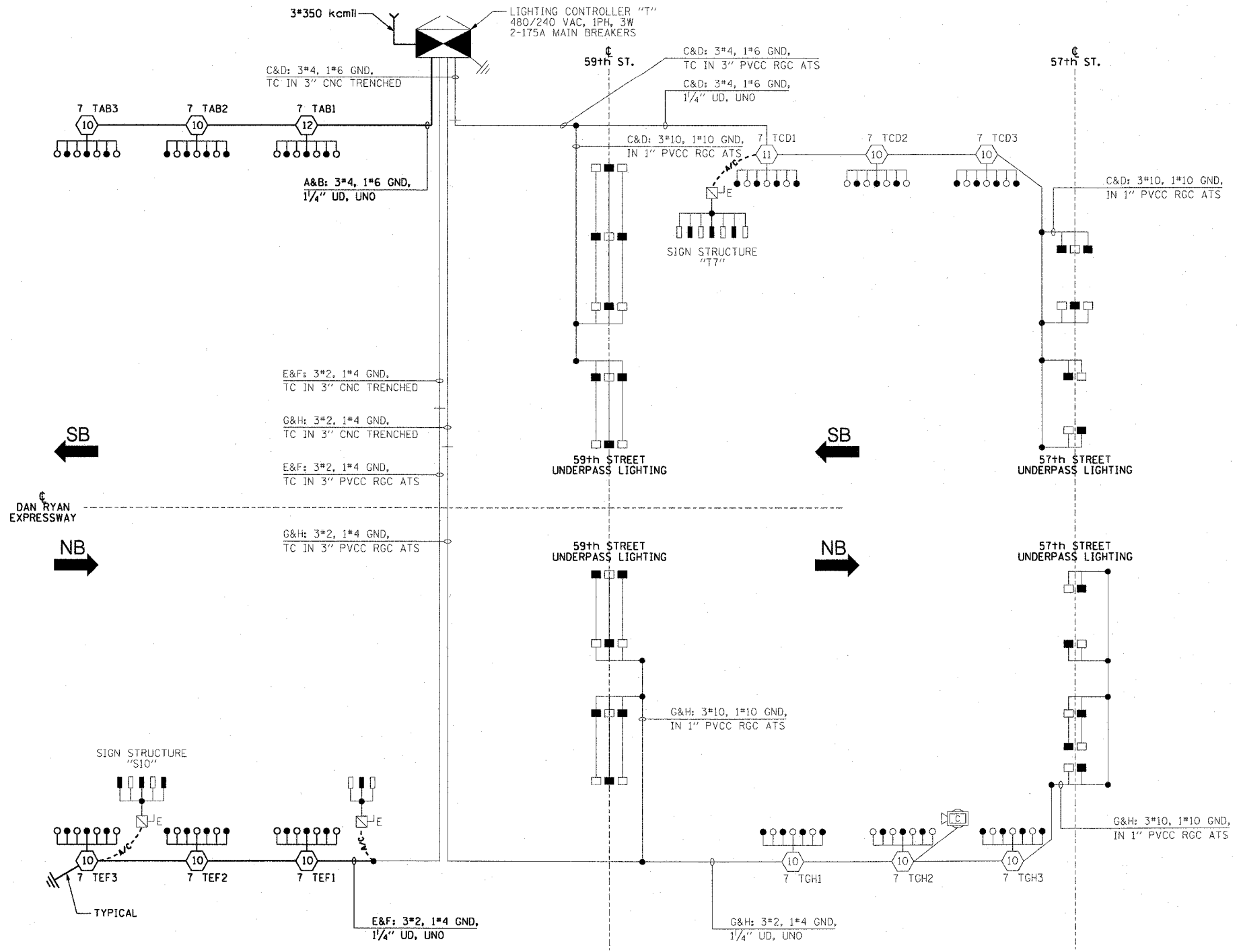
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	311
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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
- 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



CIRCUIT	RED PHASE		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

SL05-08

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 2005

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

**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.
90/94	2003-0311	COOK	976	512
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

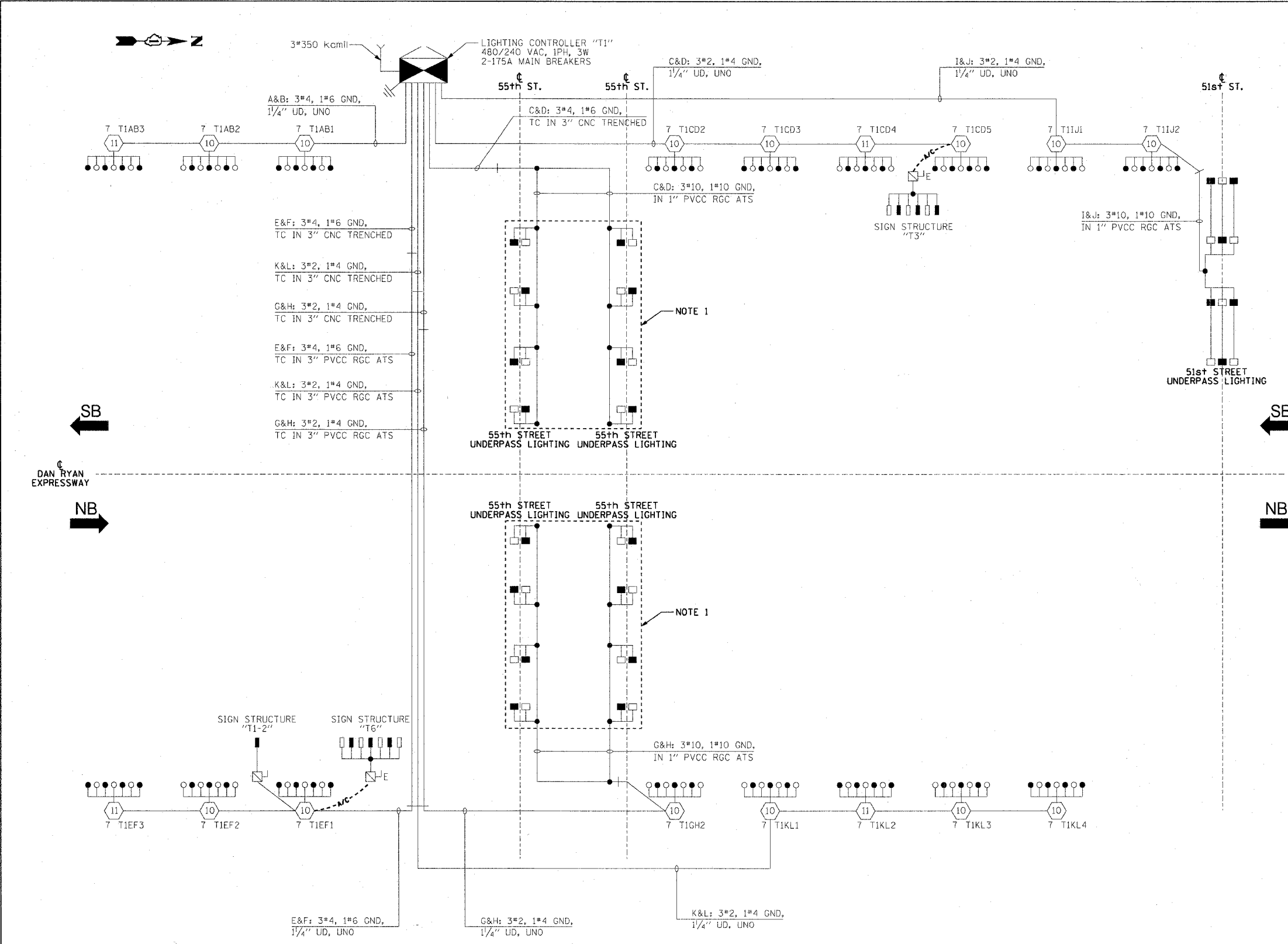
CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	19.4	4,656	B	21.3	5,112
C	32.3	7,752	D	32.3	7,752
E	22.8	5,472	F	24.7	5,928
G	10.4	2,496	H	8.5	2,040
I	15.9	3,816	J	15.9	3,816
K	27.1	6,504	L	27.1	6,504
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	127.9	30,696	TOTAL	129.8	31,152

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



SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "T1"  
NOT TO SCALE

- 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.

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	313
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
- 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

NAME	DATE

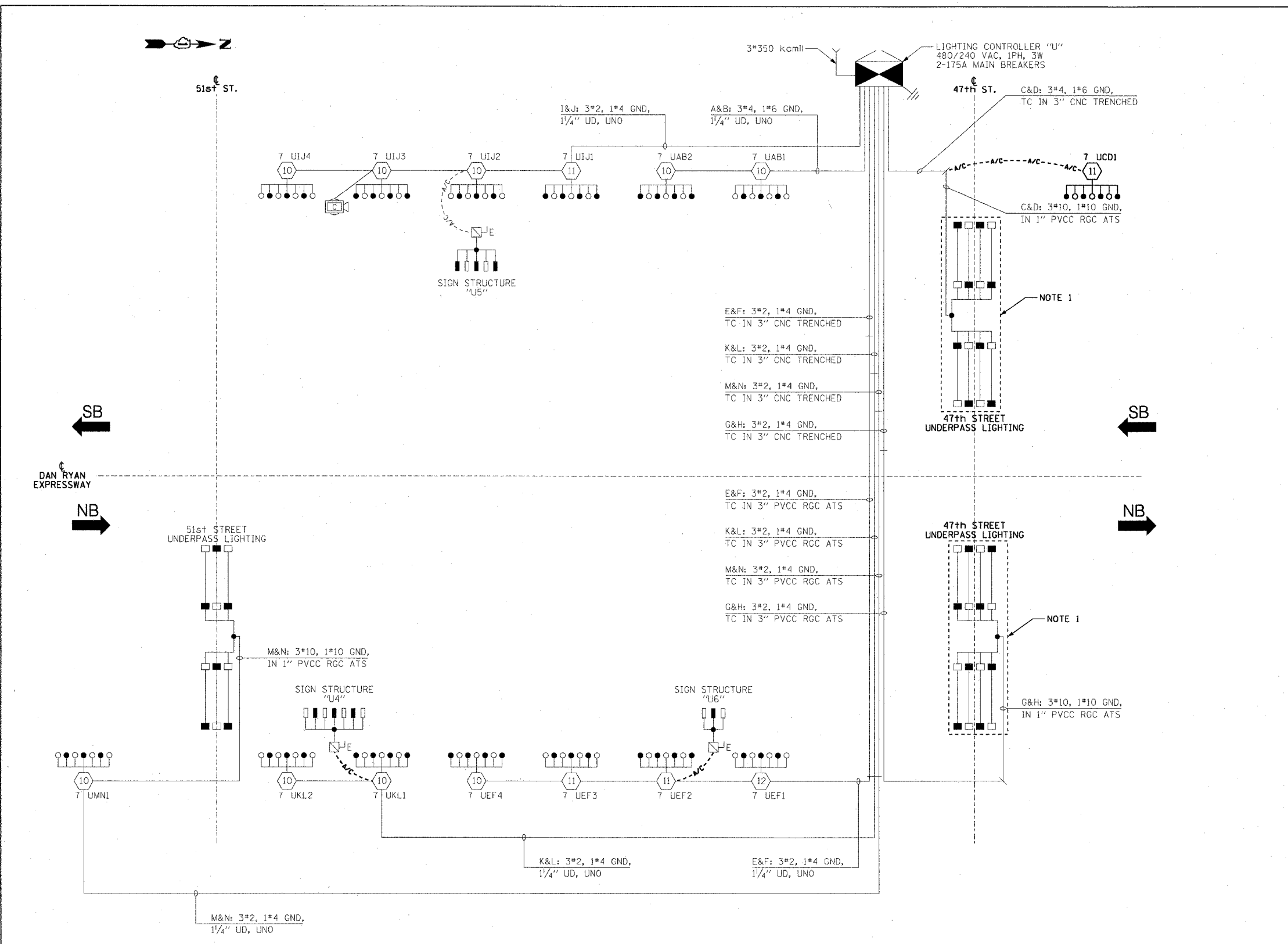
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "U"  
PROPOSED IMPROVEMENTS 2005

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

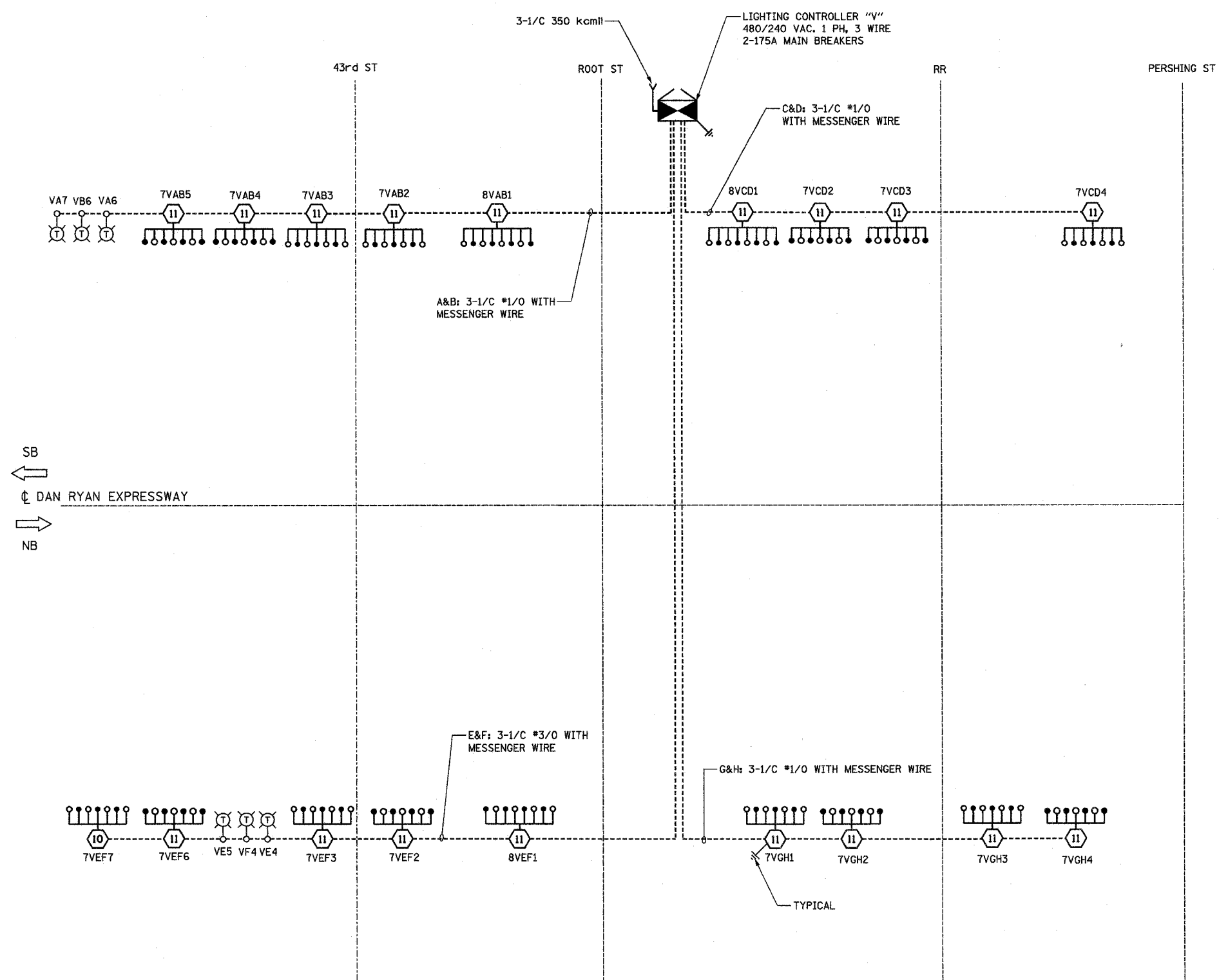
- NOTES:**
- EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
  - UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

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



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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	314
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
  - TEMPORARY WOOD POLE, 90 FT. WITH 15 FT. MAST ARM AND 400W HPS LUMINAIRE
  - AERIAL CABLE, 3#1/0 WITH MESSENGER CABLE UNLESS OTHERWISE INDICATED

SB  
←  
DAN RYAN EXPRESSWAY  
→  
NB

**LOAD TABLE  
LIGHTING CONTROLLER "V"**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	AMPS	WATTS
A	40.00	7600	B	38.00	7600
C	28.00	6000	D	30.00	6000
E	40.00	7600	F	38.00	7600
G	28.00	5600	H	28.00	5600
I	SPARE	SPARE	J	SPARE	SPARE
K	SPARE	SPARE	L	SPARE	SPARE
M	SPARE	SPARE	N	SPARE	SPARE
O	SPARE	SPARE	P	SPARE	SPARE
<b>TOTAL</b>	<b>136.00A</b>	<b>27,200</b>	<b>TOTAL</b>	<b>134.00A</b>	<b>26,800</b>

SL05-11

**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"  
PROPOSED IMPROVEMENTS 2005**

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

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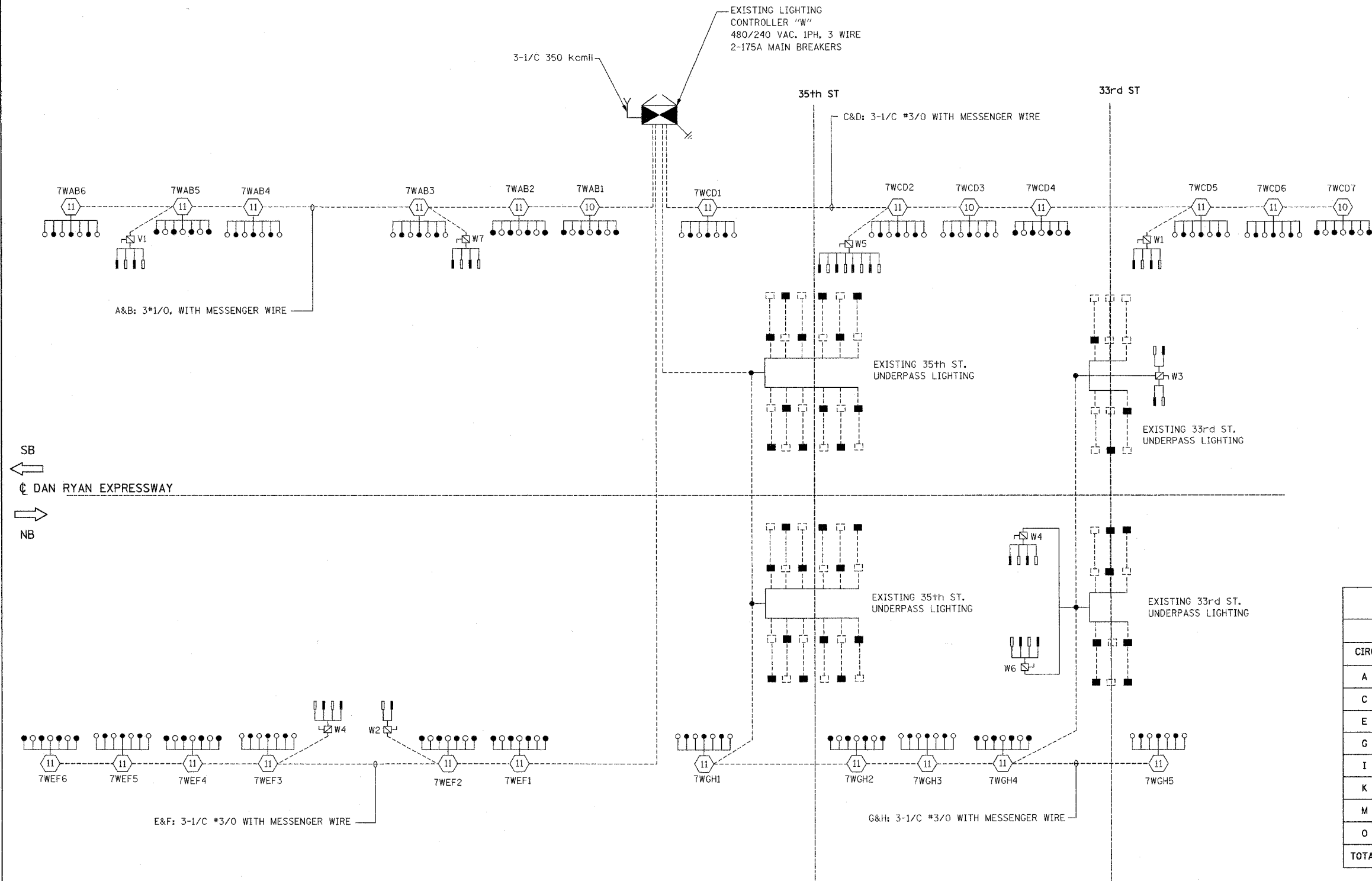
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	315
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

SL05-12

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**

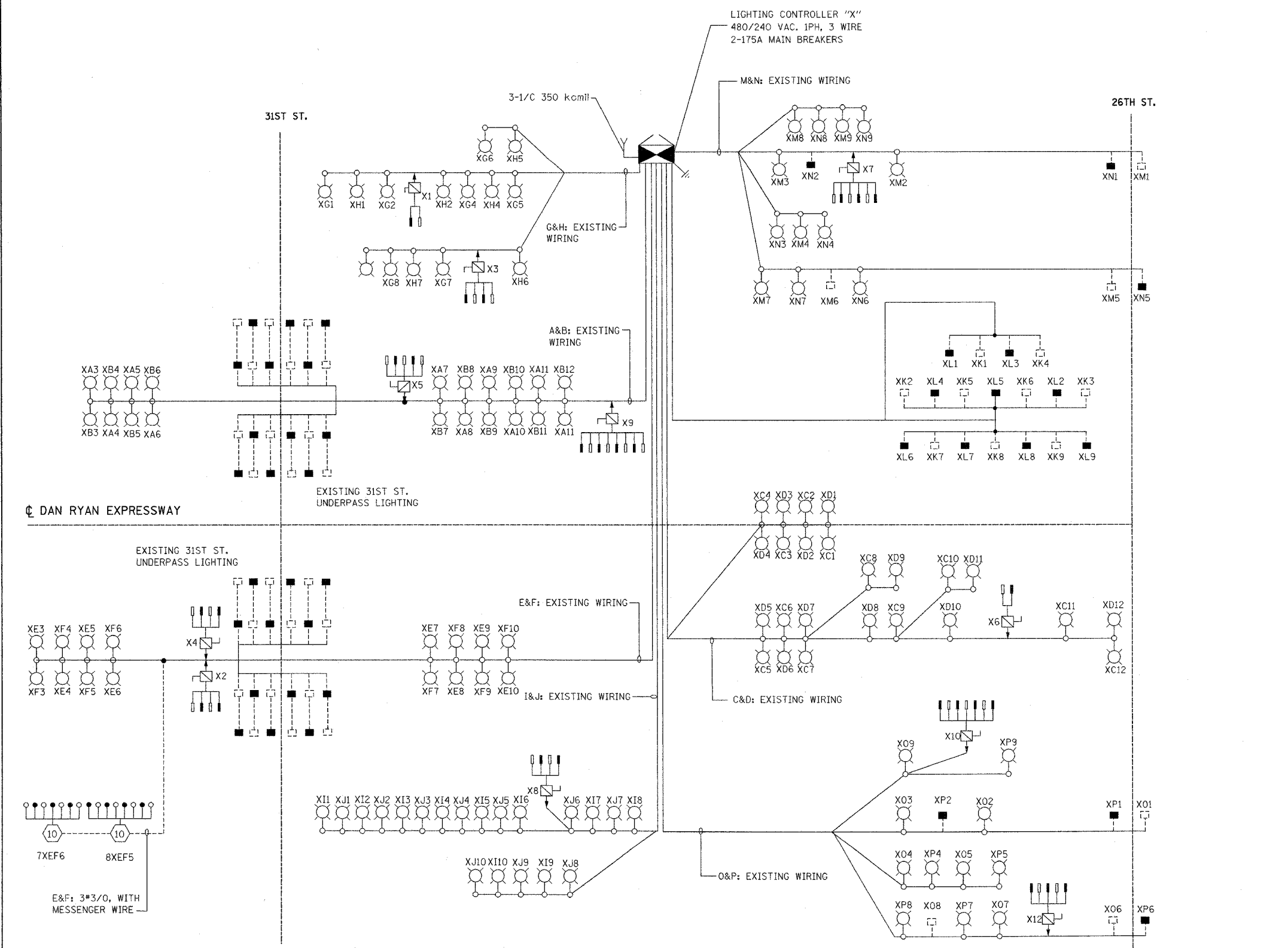
SCALE: NONE      DRAWN BY: BL  
DATE: OCTOBER 29, 2004      CHECKED BY: SM

**KAM ENGINEERING, INC.**  
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	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	WATTS
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
<b>TOTAL</b>	<b>138.15A</b>	<b>27,885</b>	<b>TOTAL</b>	<b>135.45A</b>	<b>27,345</b>

SL05-13

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

REVISIONS	
NAME	DATE

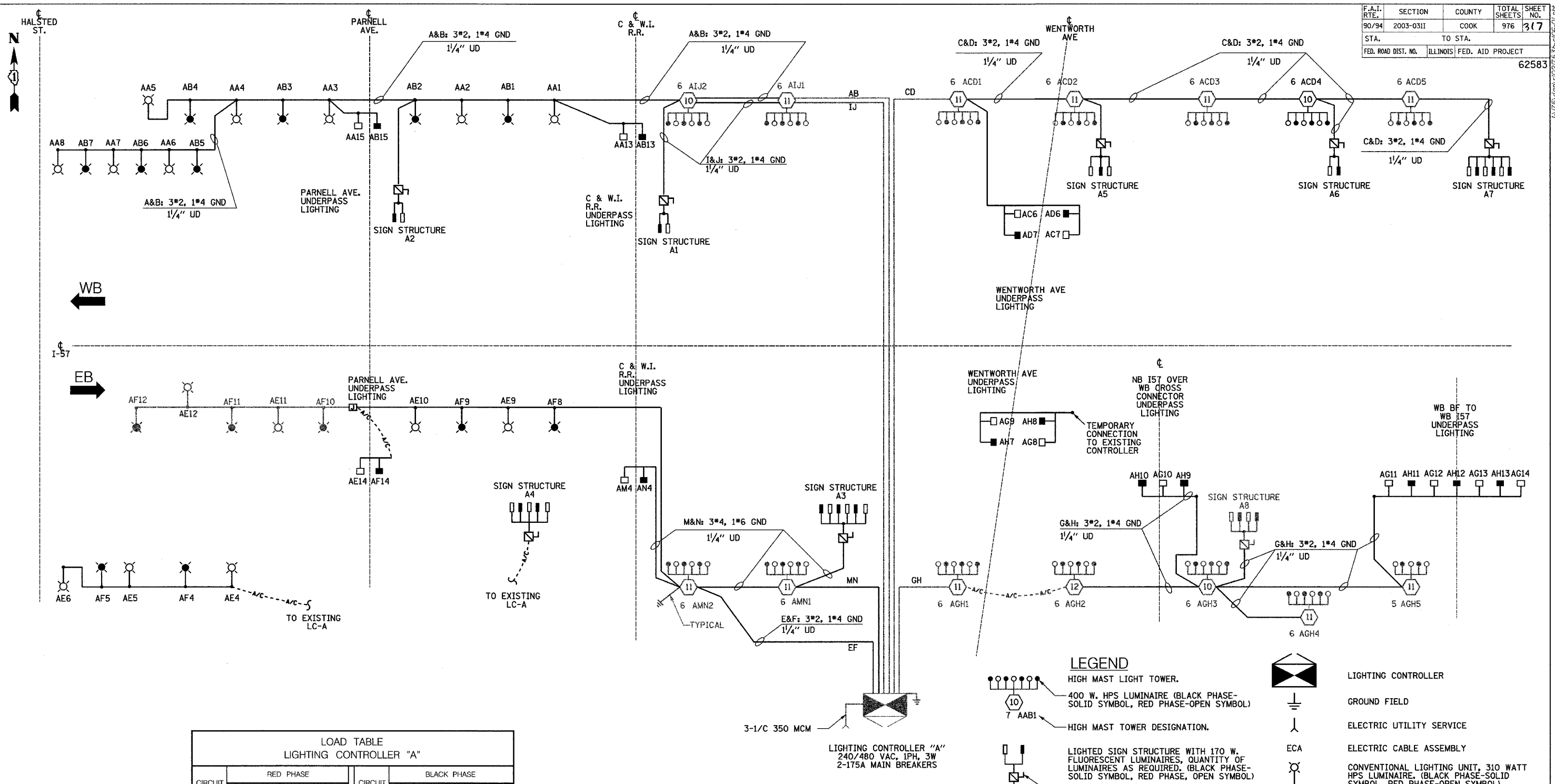
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

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

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

11/25/2004





**LOAD TABLE  
LIGHTING CONTROLLER "A"**

CIRCUIT	RED PHASE		BLACK PHASE	
	AMPS	WATTS	CIRCUIT	WATTS
A	16.2	3888	B	3,480
C	40.5	9,720	D	9,288
E	14.9	3,576	F	3,576
G	34.6	8,304	H	7,824
I	13.8	3,312	J	3,312
K			L	
M	15.9	3,816	N	3,600
O			P	
<b>TOTAL</b>	<b>135.9</b>	<b>32,616</b>	<b>TOTAL</b>	<b>31,080</b>

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

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

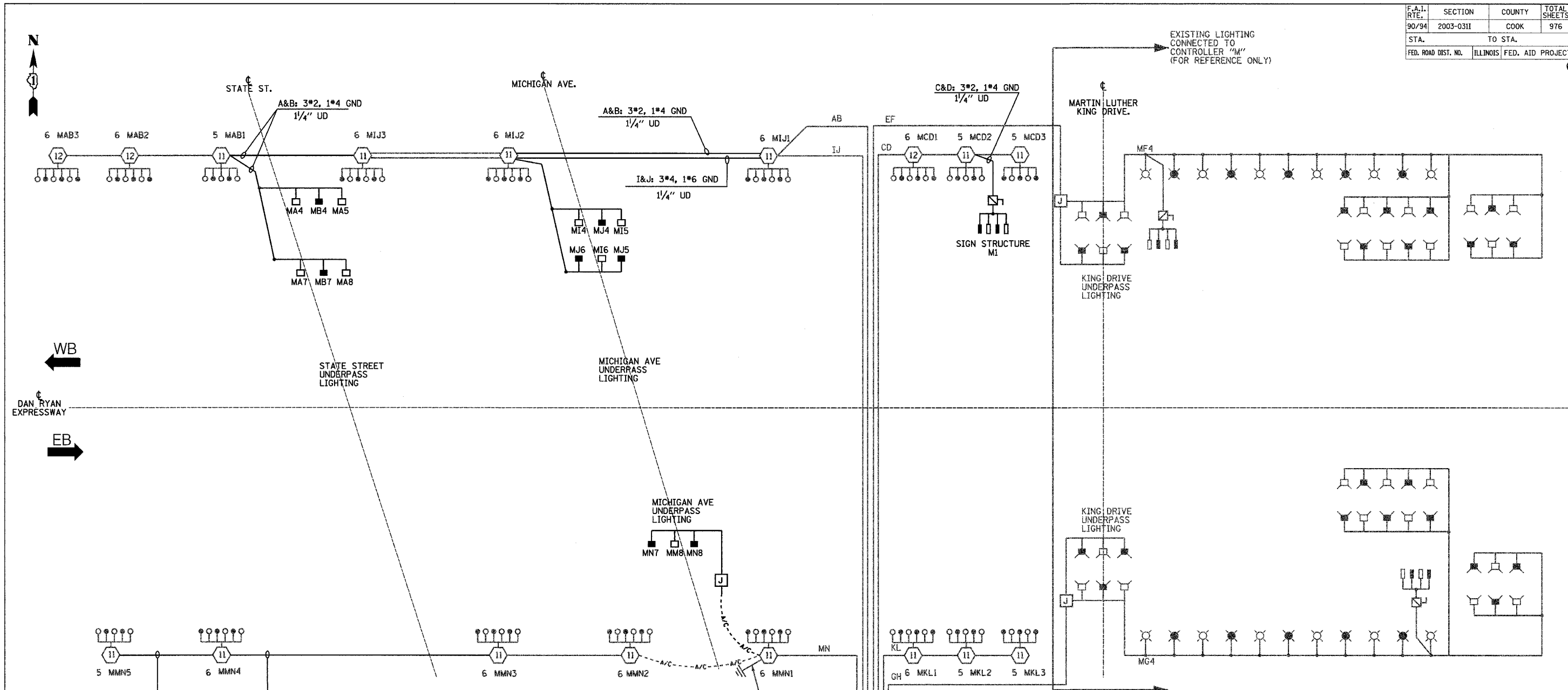
**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "A"  
PROPOSED IMPROVEMENTS 2006**

SCALE: NOT TO SCALE      DRAWN BY: YJ  
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) 629-8448

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**LOAD TABLE**  
LIGHTING CONTROLLER "M"

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		
<b>TOTAL</b>	<b>136.2</b>	<b>32,688</b>	<b>TOTAL</b>	<b>135.8</b>	<b>32,592</b>

**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

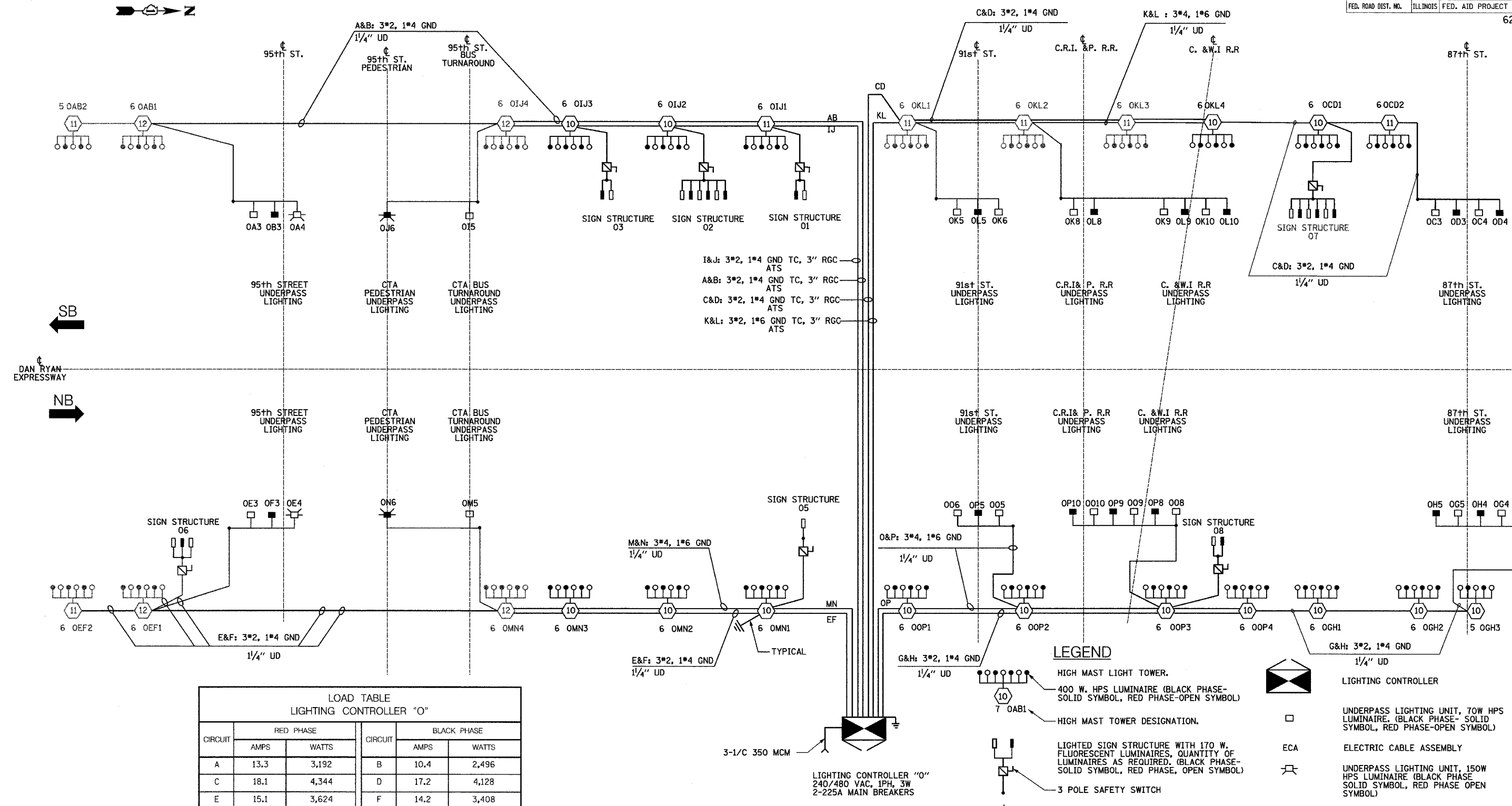
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

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

SCALE: NOT TO SCALE      DRAWN BY: YJ  
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

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CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	13.3	3,192	B	10.4	2,496
C	18.1	4,344	D	17.2	4,128
E	15.1	3,624	F	14.2	3,408
G	18.8	4,512	H	16.8	4,032
I	30.5	7,320	J	31.0	7,440
K	26.0	6,240	L	25.6	6,144
M	26.1	6,264	N	26.6	6,384
O	27.7	6,648	P	27.4	6,576
TOTAL	175.6	42,144	TOTAL	169.2	40,608

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

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

NAME	DATE

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

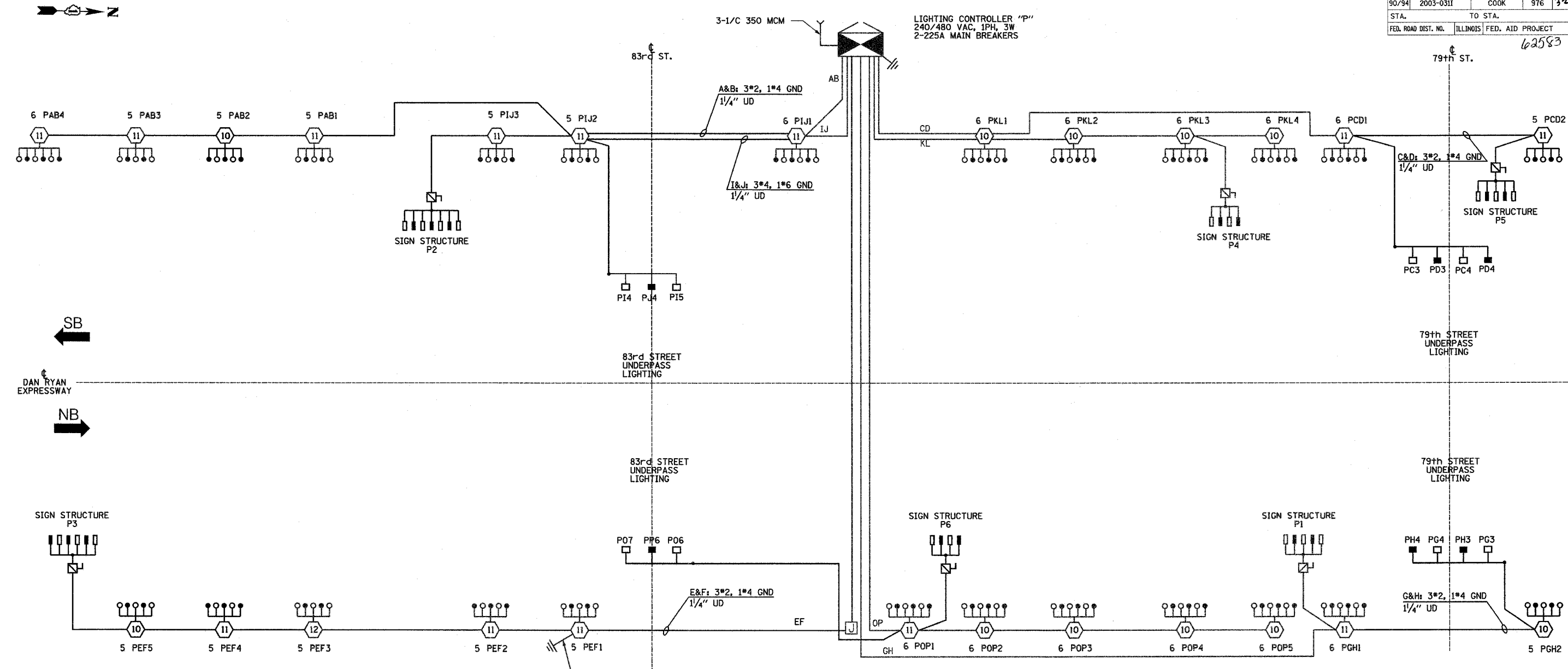
**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "O"  
PROPOSED IMPROVEMENTS 2006**

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

**SINGH** 300 W. ADAMS ST.  
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	320
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	62583	



**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)
- 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

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

**SINGH** 300 W. ADAMS ST.  
CHICAGO, IL 60606  
TEL: (312) 629-0240  
SINGH & ASSOCIATES, INC.  
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 2006**

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

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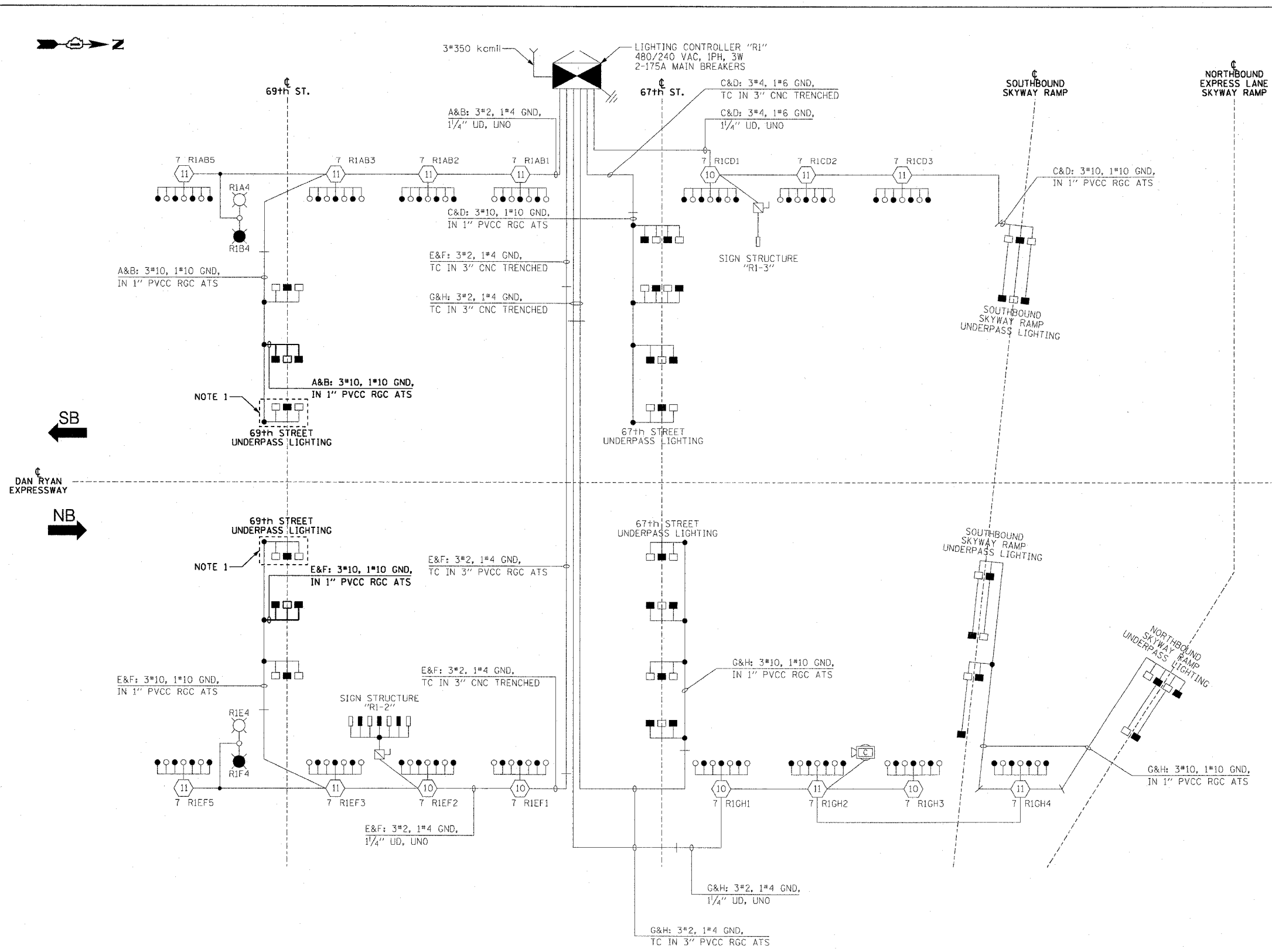


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	222
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

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 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
- 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		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	-	-
<b>TOTAL</b>	<b>119.9</b>	<b>28,776</b>	<b>TOTAL</b>	<b>119.8</b>	<b>28,752</b>

**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "R1"**  
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 "R1"**  
PROPOSED IMPROVEMENTS 2006

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

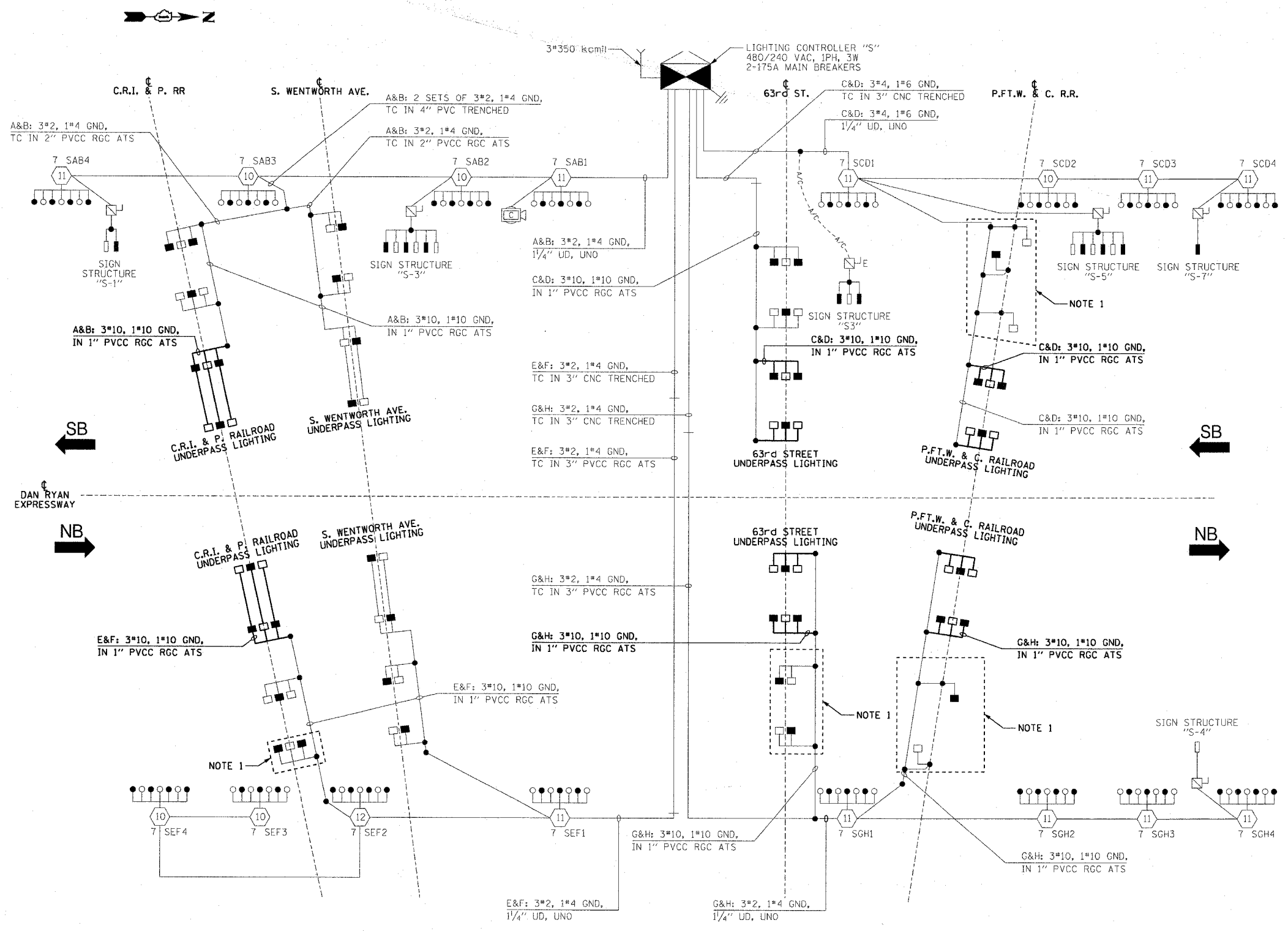
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F.A.I. RTE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	323
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62583

**LEGEND**

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 7 UAB1 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	-	-
<b>TOTAL</b>	<b>131.0</b>	<b>31,440</b>	<b>TOTAL</b>	<b>131.4</b>	<b>31,536</b>

**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**

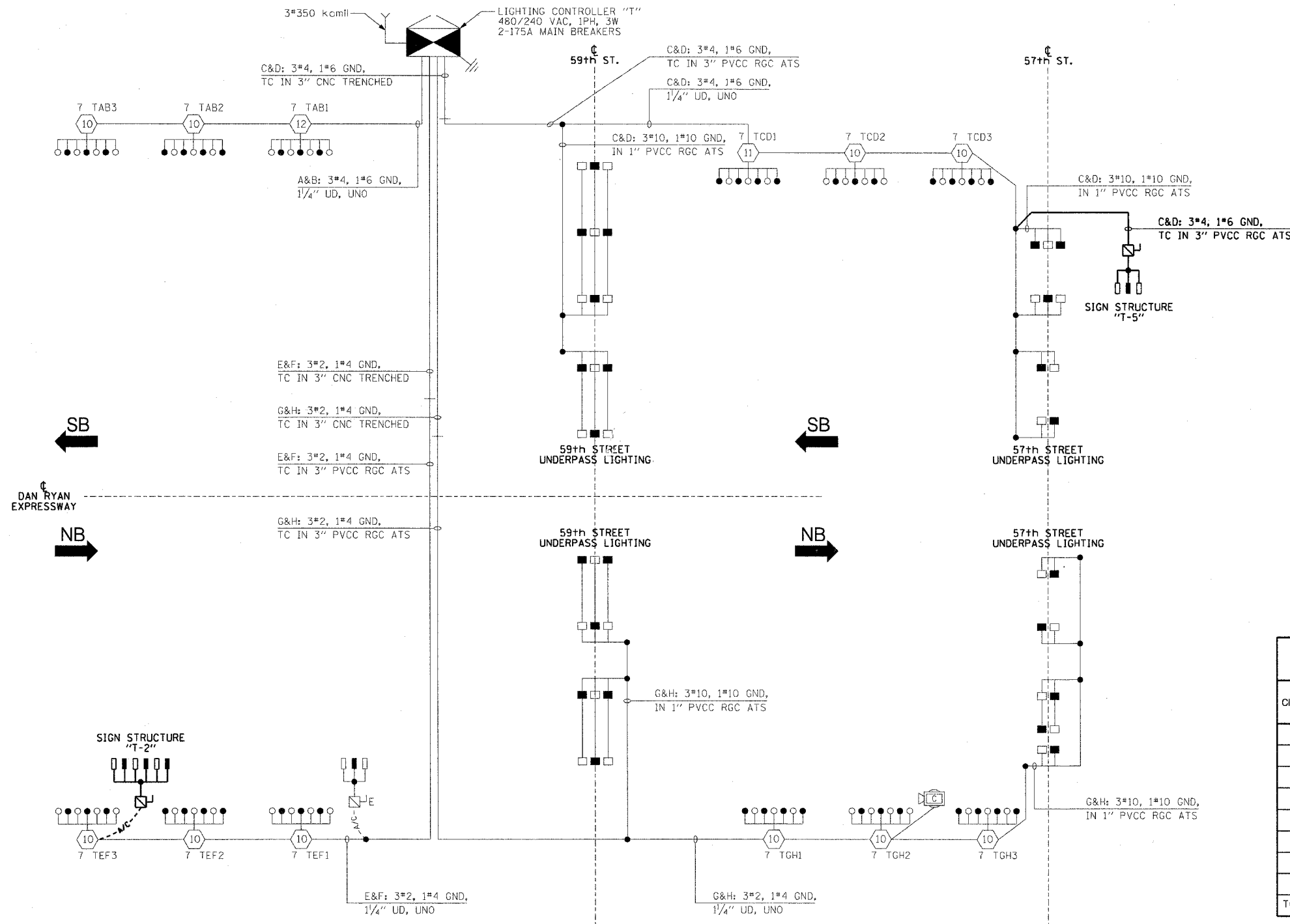
SCALE: NOT TO SCALE      DRAWN BY: CJM  
DATE: October 29, 2004      CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	327
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. (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		CIRCUIT	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:**  
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 2006**

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 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, UNLESS NOTED OTHERWISE. (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	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

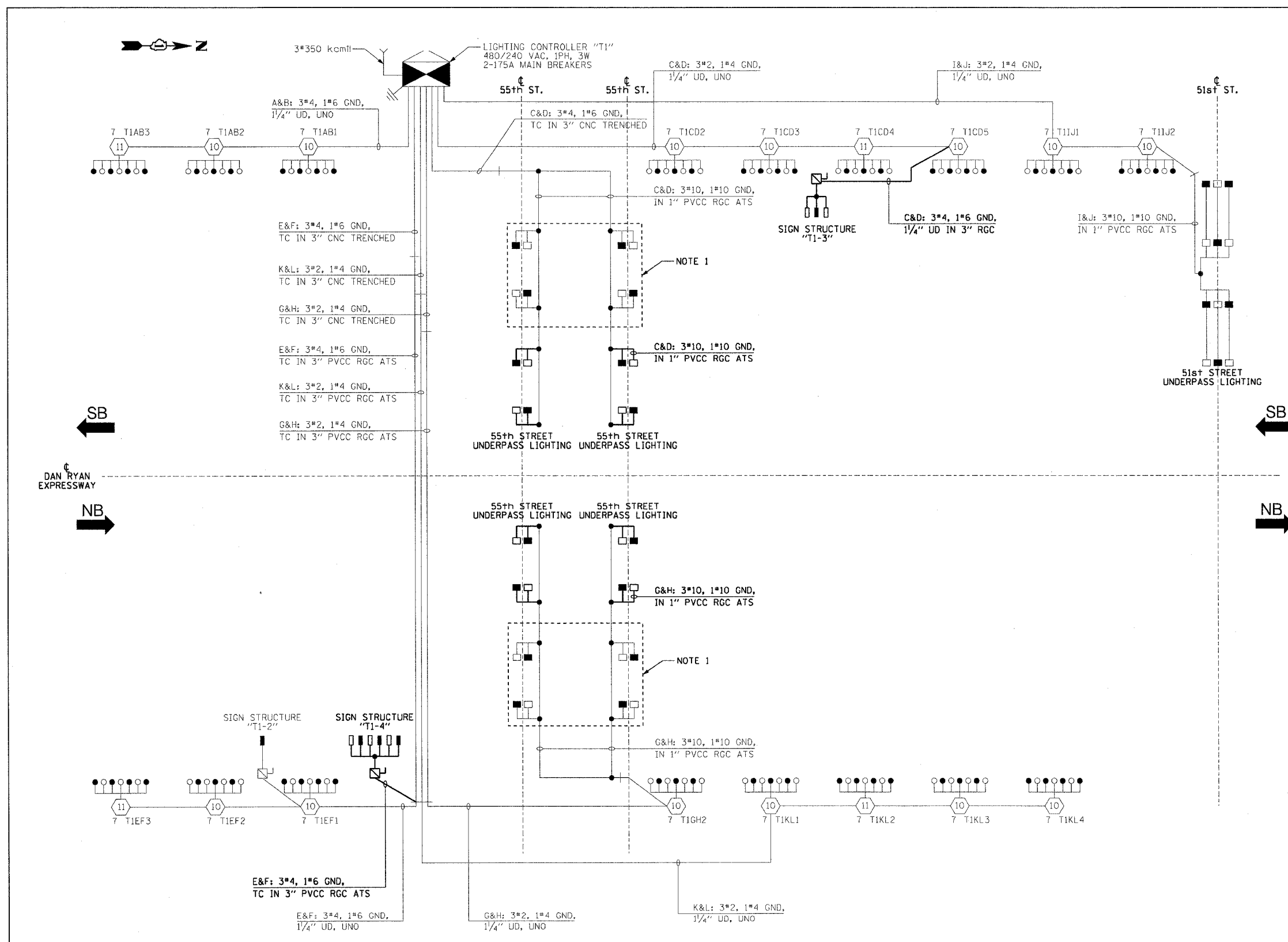
SL06-09

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



**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "T1"**  
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.

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, 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		CIRCUIT	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:**

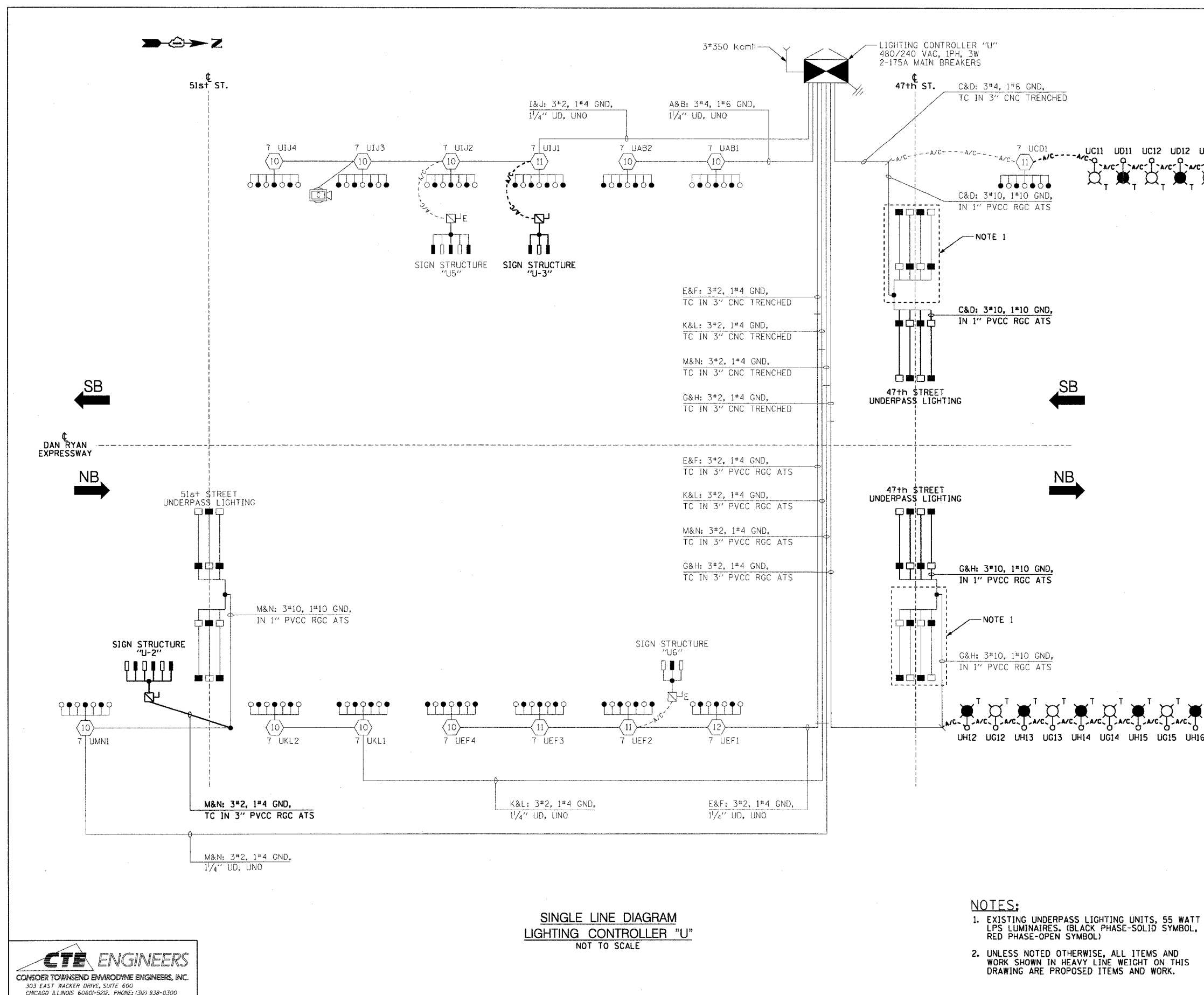
- EXISTING UNDERPASS LIGHTING UNITS, 55 WATT LPS LUMINAIRE. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED ITEMS AND WORK.

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 "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**

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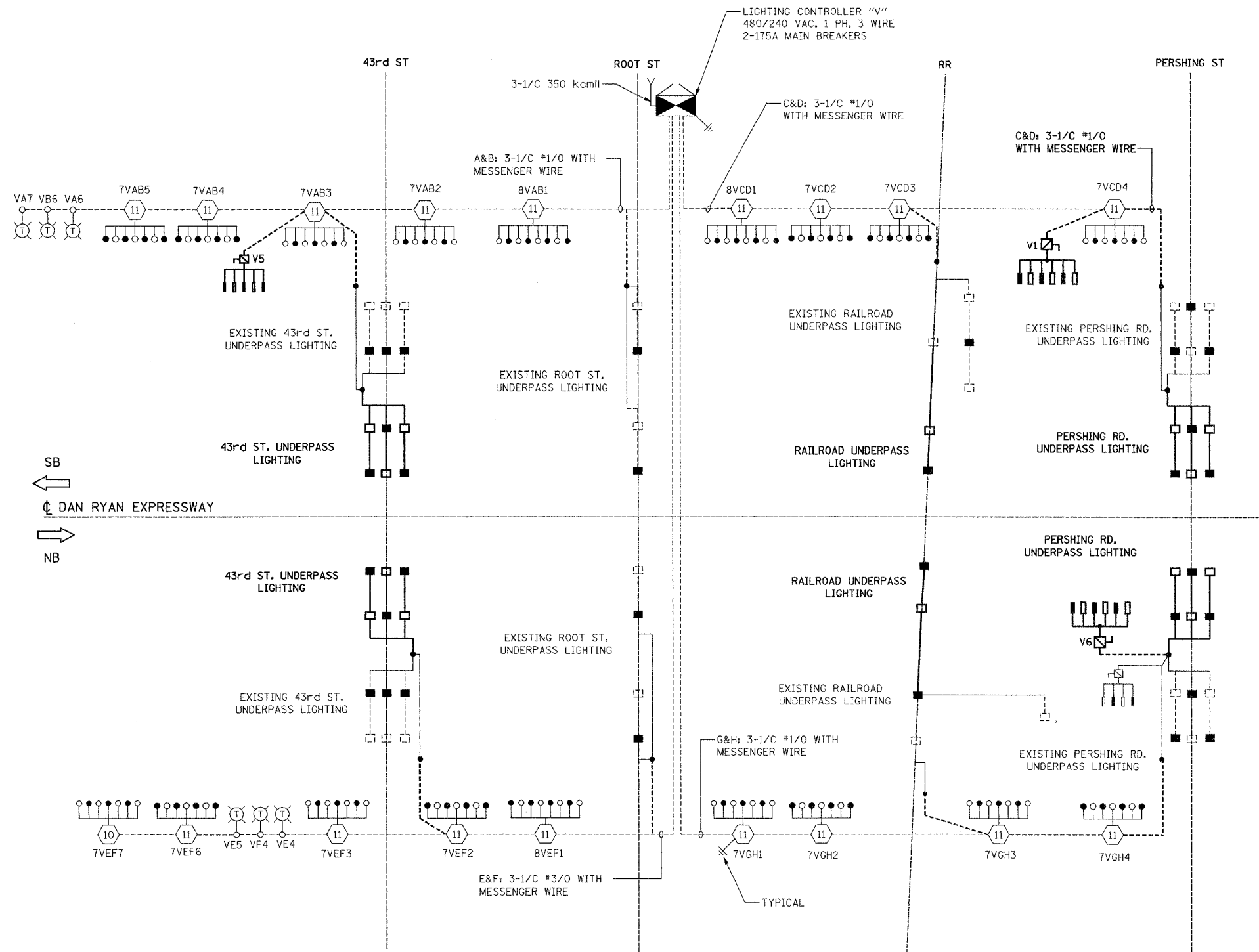
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	327
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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
- TEMPORARY WOOD POLE, 90 FT. WITH 15 FT. MAST ARM AND 400W HPS LUMINAIRE
- AERIAL CABLE, 3\*1/0 WITH MESSENGER CABLE UNLESS OTHERWISE NOTED
- 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	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

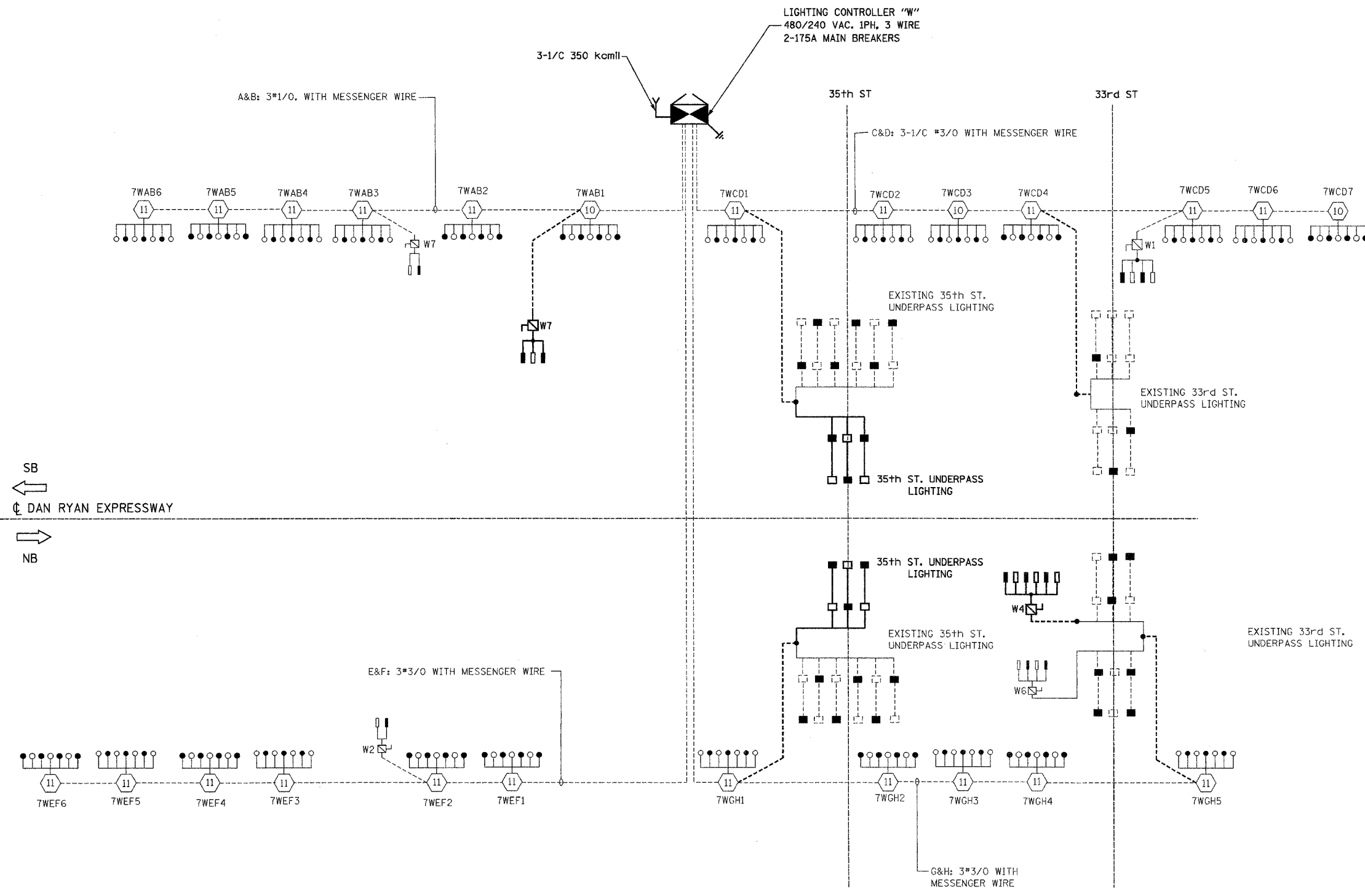
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "V"  
PROPOSED IMPROVEMENTS 2006

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

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

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- LEGEND:**
- HIGH MAST LIGHT TOWER
  - 400W. HPS LUMINAIRE (BLACK PHASE- SOLID SYMBOLS, RED PHASE-OPEN SYMBOL)
  - 7VCDI** 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
<b>TOTAL</b>	<b>197.50A</b>	<b>39,150</b>	<b>TOTAL</b>	<b>184.90A</b>	<b>36,700</b>

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**

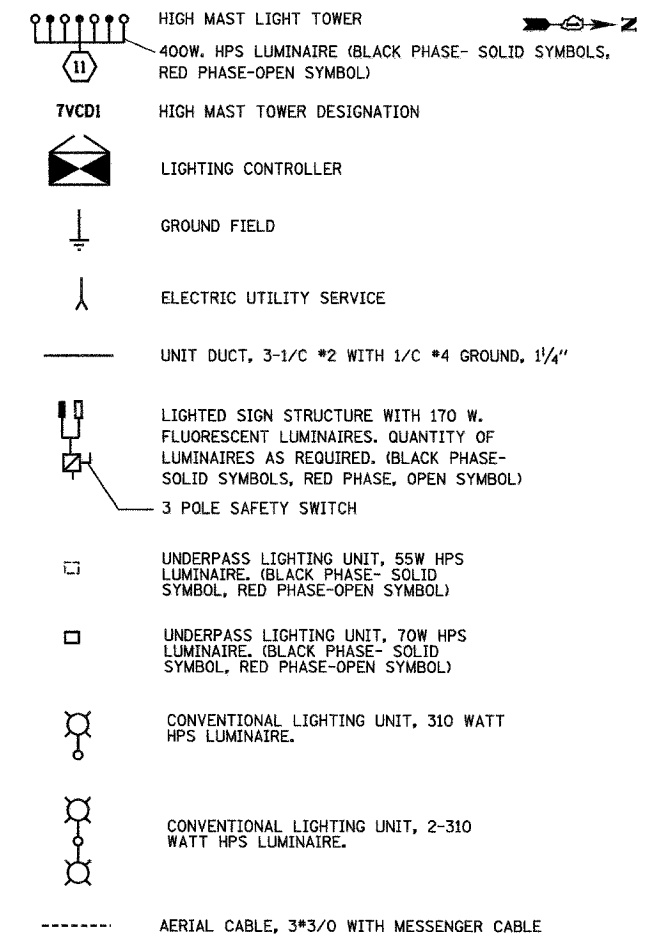
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DATE: OCTOBER 29, 2004      CHECKED BY: SM

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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:



CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	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

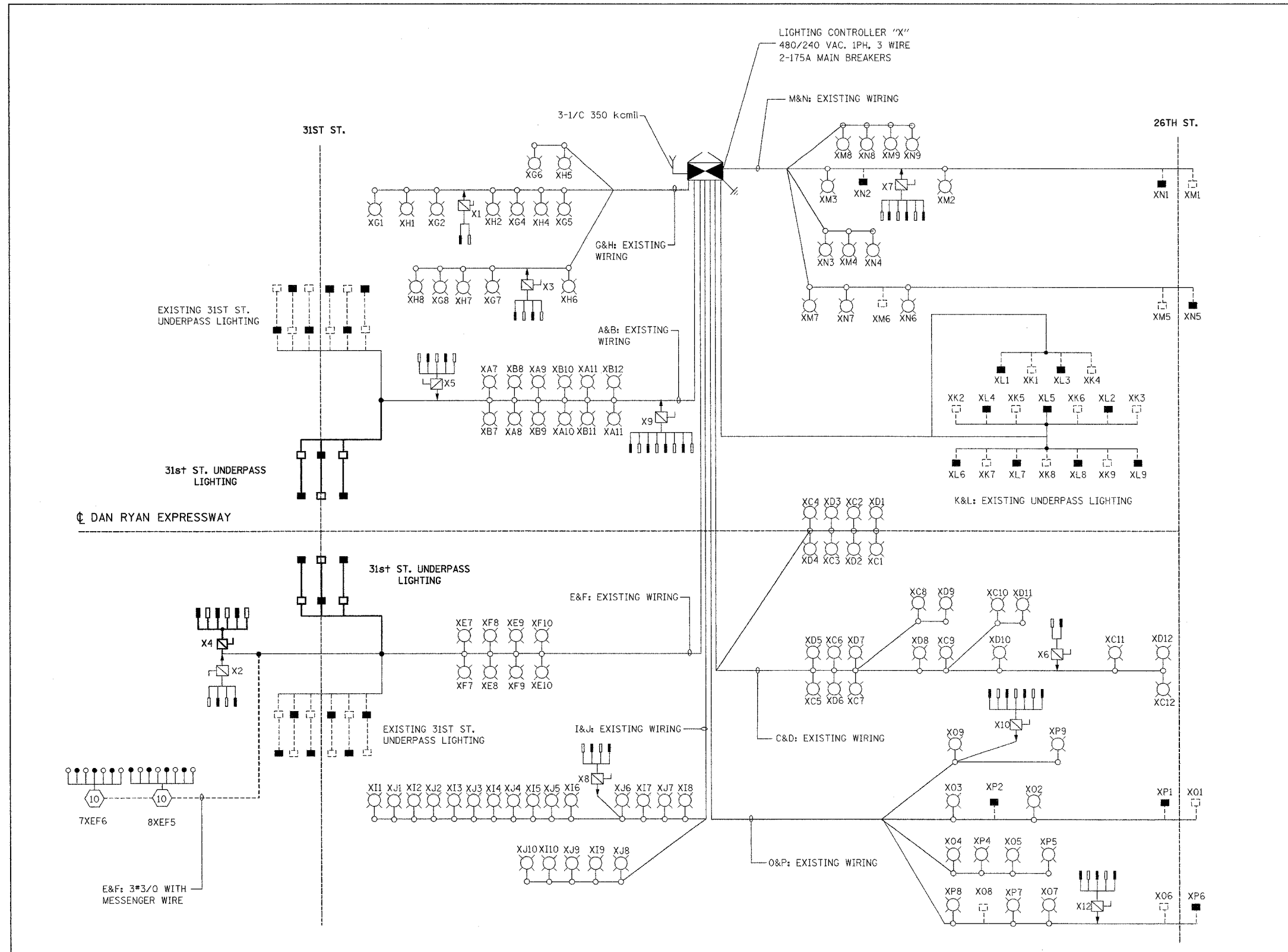
REVISIONS	NAME	DATE

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**

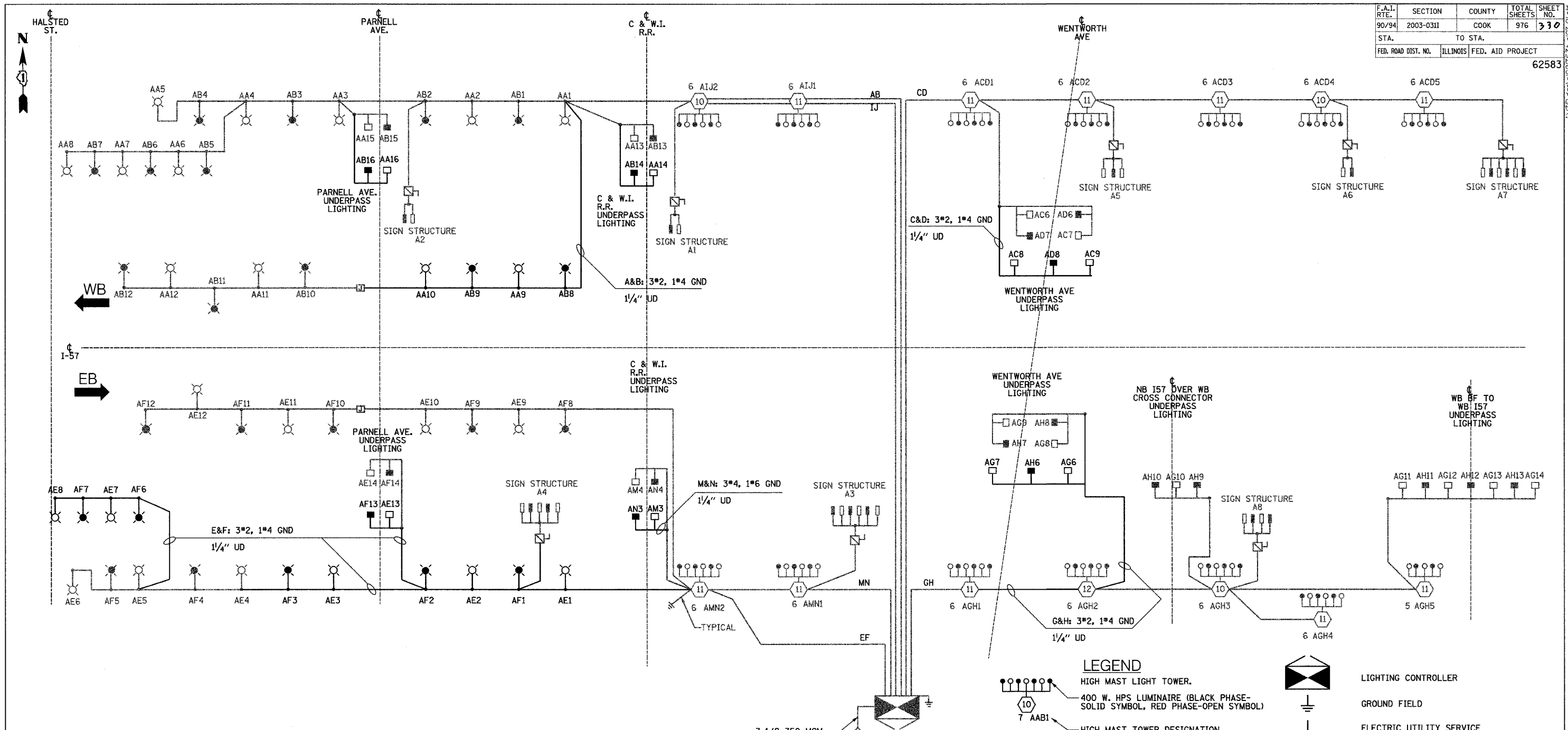
SCALE: NONE  
DATE: OCTOBER 29, 2004

DRAWN BY: BL  
CHECKED BY: SM



**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	
<b>TOTAL</b>	<b>154.4</b>	<b>37,056</b>	<b>TOTAL</b>	<b>35,736</b>

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

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

REVISIONS	
NAME	DATE

SL07-01

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

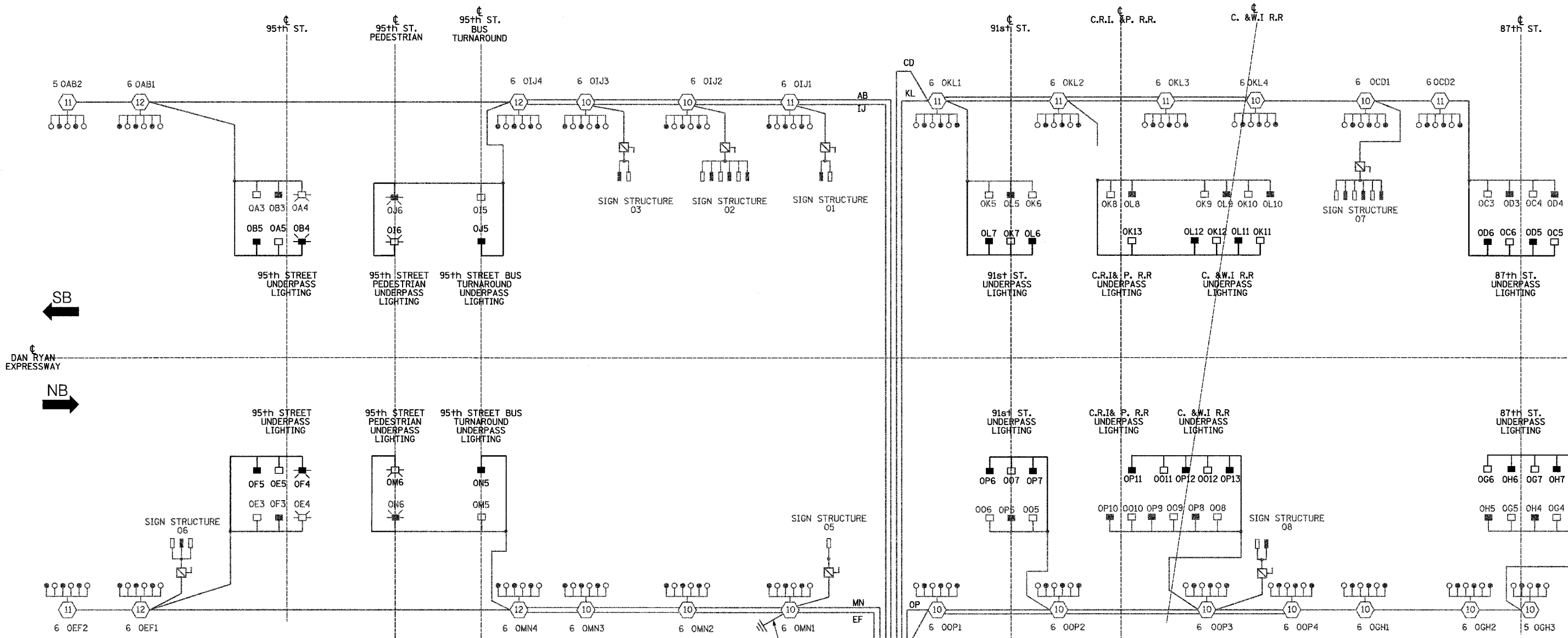
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DATE: OCTOBER 29, 2004      CHECKED BY: TM

**SINGH**  
SINGH & ASSOCIATES, INC.  
CONSULTING ENGINEERS

300 W. ADAMS ST.  
CHICAGO, IL 60606  
TEL: (312) 629-0240  
FAX: (312) 629-8448

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LOAD TABLE LIGHTING CONTROLLER "O"					
CIRCUIT	RED PHASE		BLACK PHASE		CIRCUIT
	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
- UNDERPASS LIGHTING UNIT, 150W HPS LUMINAIRE (BLACK PHASE SOLID SYMBOL, RED PHASE OPEN SYMBOL)

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

**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"  
PROPOSED IMPROVEMENTS 2007**

SCALE: NOT TO SCALE  
DATE: OCTOBER 29, 2004

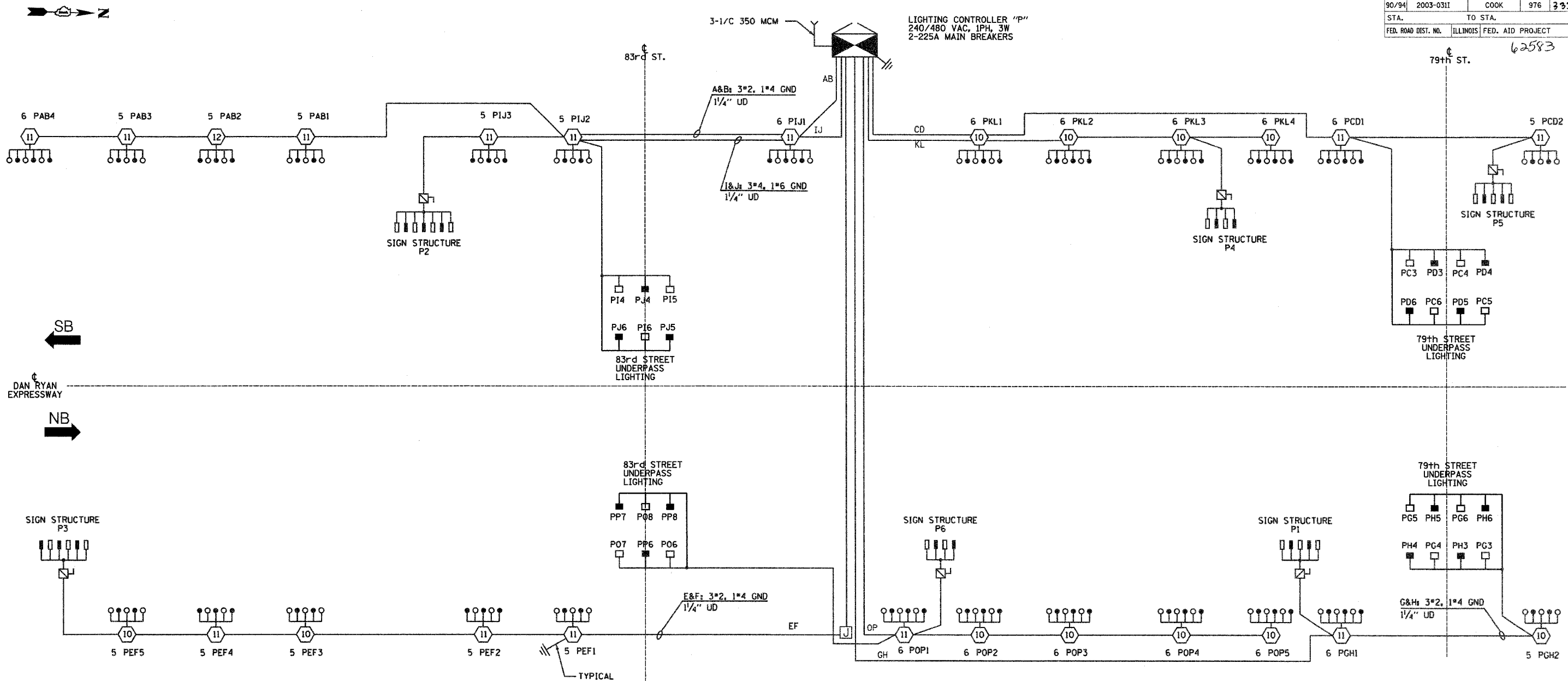
DRAWN BY: YJ  
CHECKED BY: TM

**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	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  
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

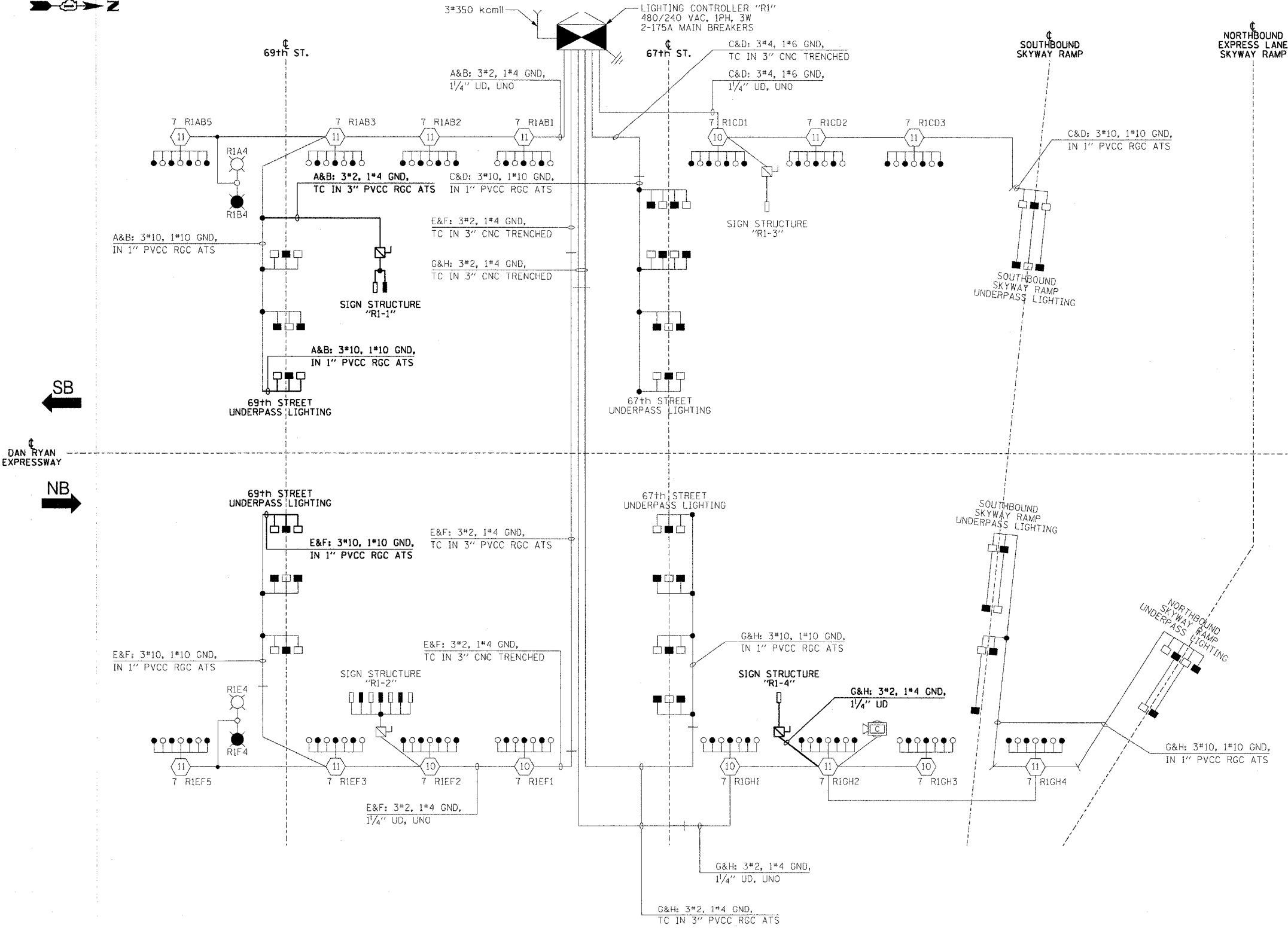
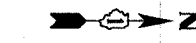
**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "P"  
PROPOSED IMPROVEMENTS 2007**

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	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

**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	-	-
<b>TOTAL</b>	<b>121.8</b>	<b>29,232</b>	<b>TOTAL</b>	<b>120.8</b>	<b>28,992</b>

**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



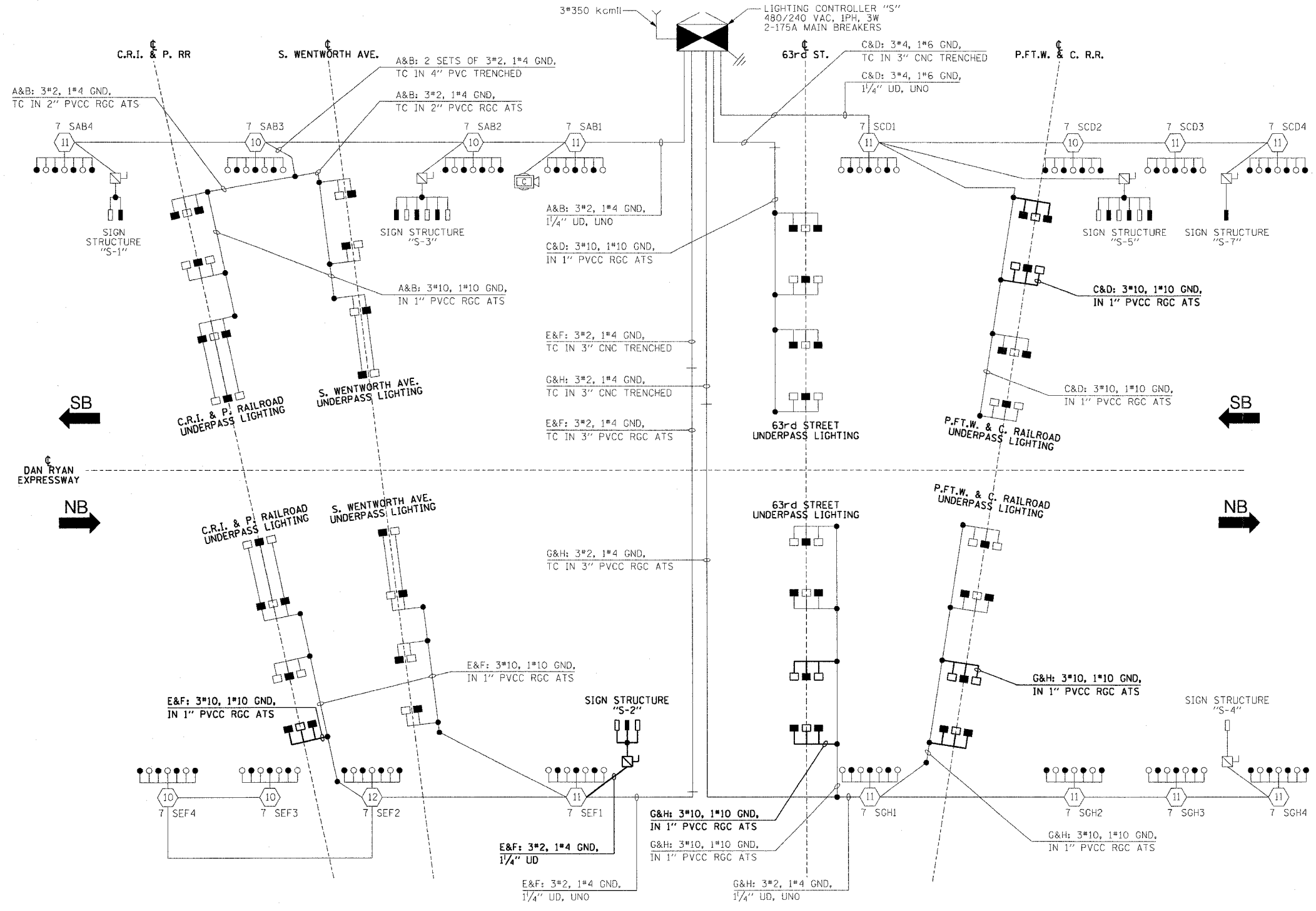
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	376
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62583

**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



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

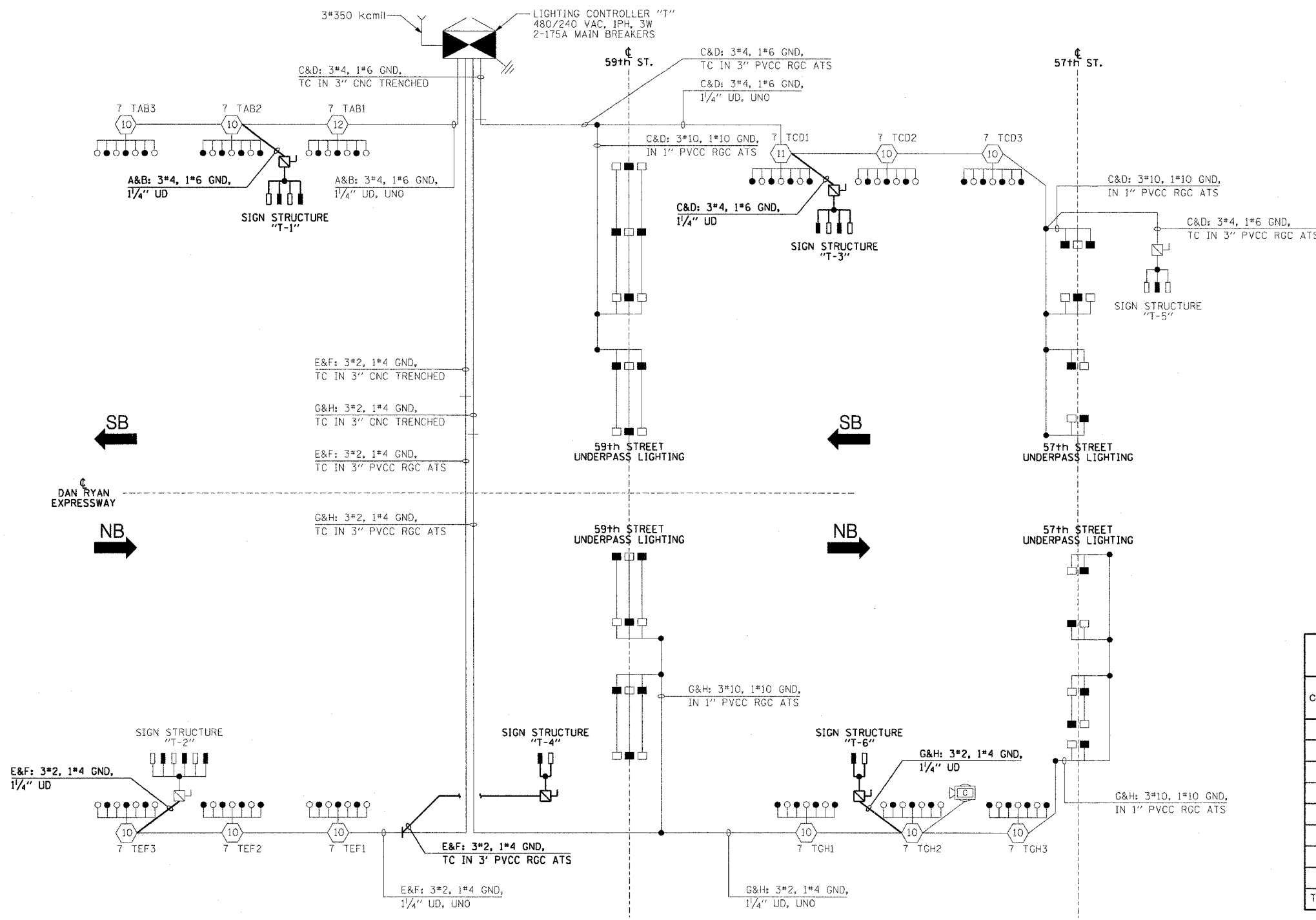
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	337
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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 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		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

**LOAD TABLE  
LIGHTING CONTROLLER "U"**

CIRCUIT	RED PHASE		CIRCUIT	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		
<b>TOTAL</b>	<b>151.9</b>	<b>36,456</b>	<b>TOTAL</b>	<b>153.6</b>	<b>36,864</b>

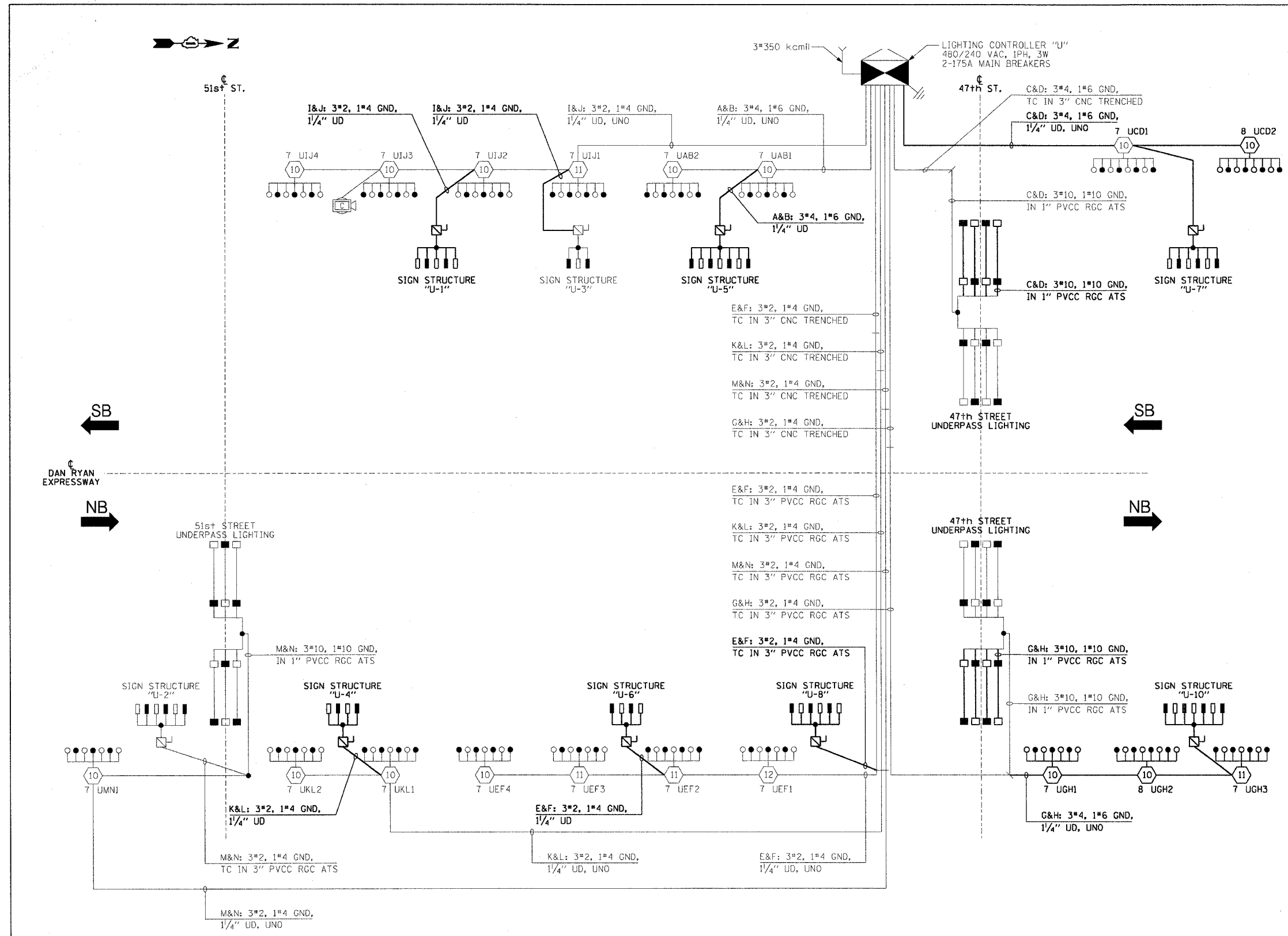
**REVISIONS**

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: CJM  
DATE: October 29, 2004      CHECKED BY: WDS



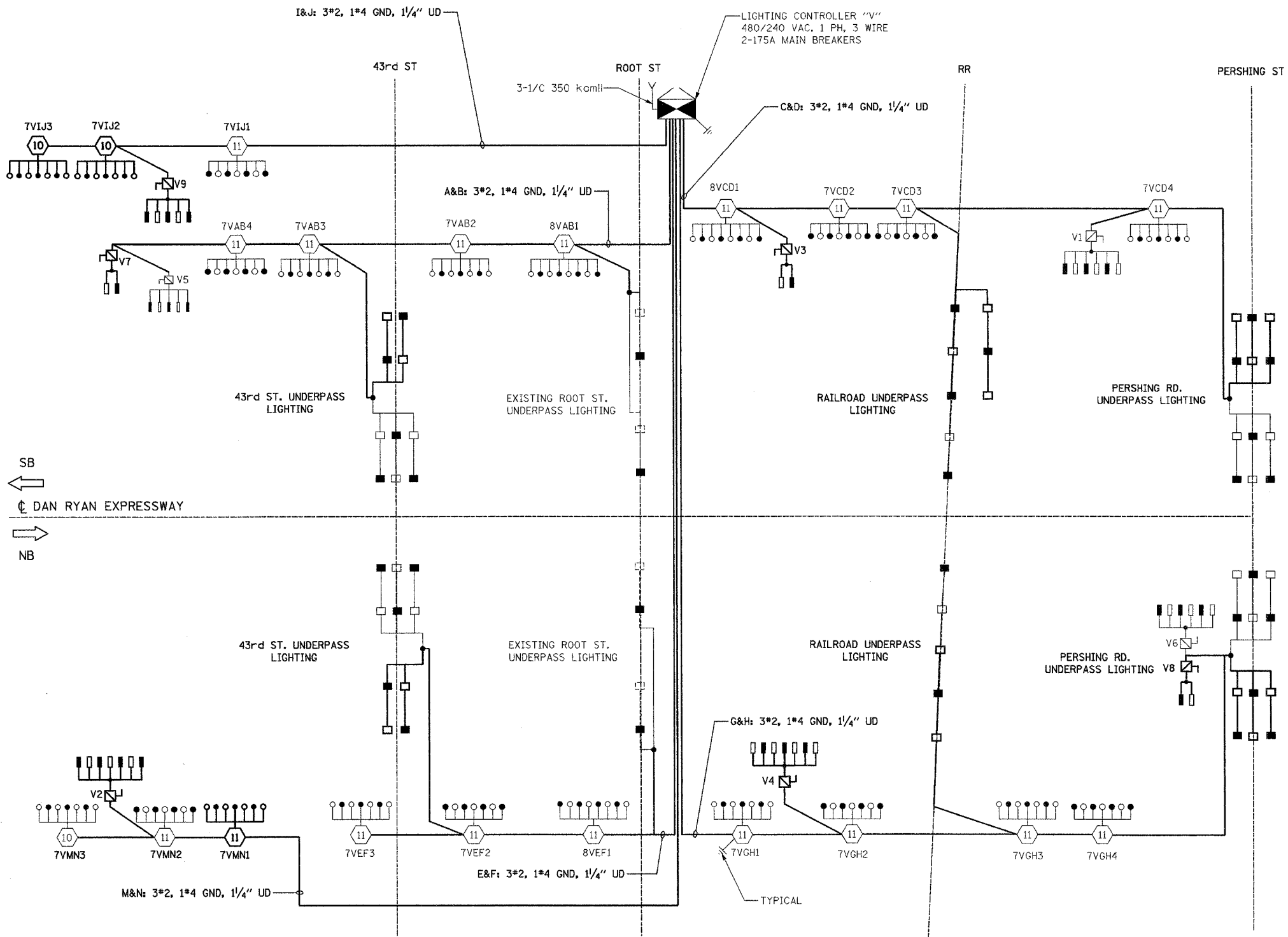
**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "U"  
NOT TO SCALE**

**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	2003-0311	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, 3-1/2 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, 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
<b>TOTAL</b>	<b>180.30A</b>	<b>35,940</b>	<b>TOTAL</b>	<b>177.50A</b>	<b>35,410</b>

**K&E** 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"  
PROPOSED IMPROVEMENTS 2007**

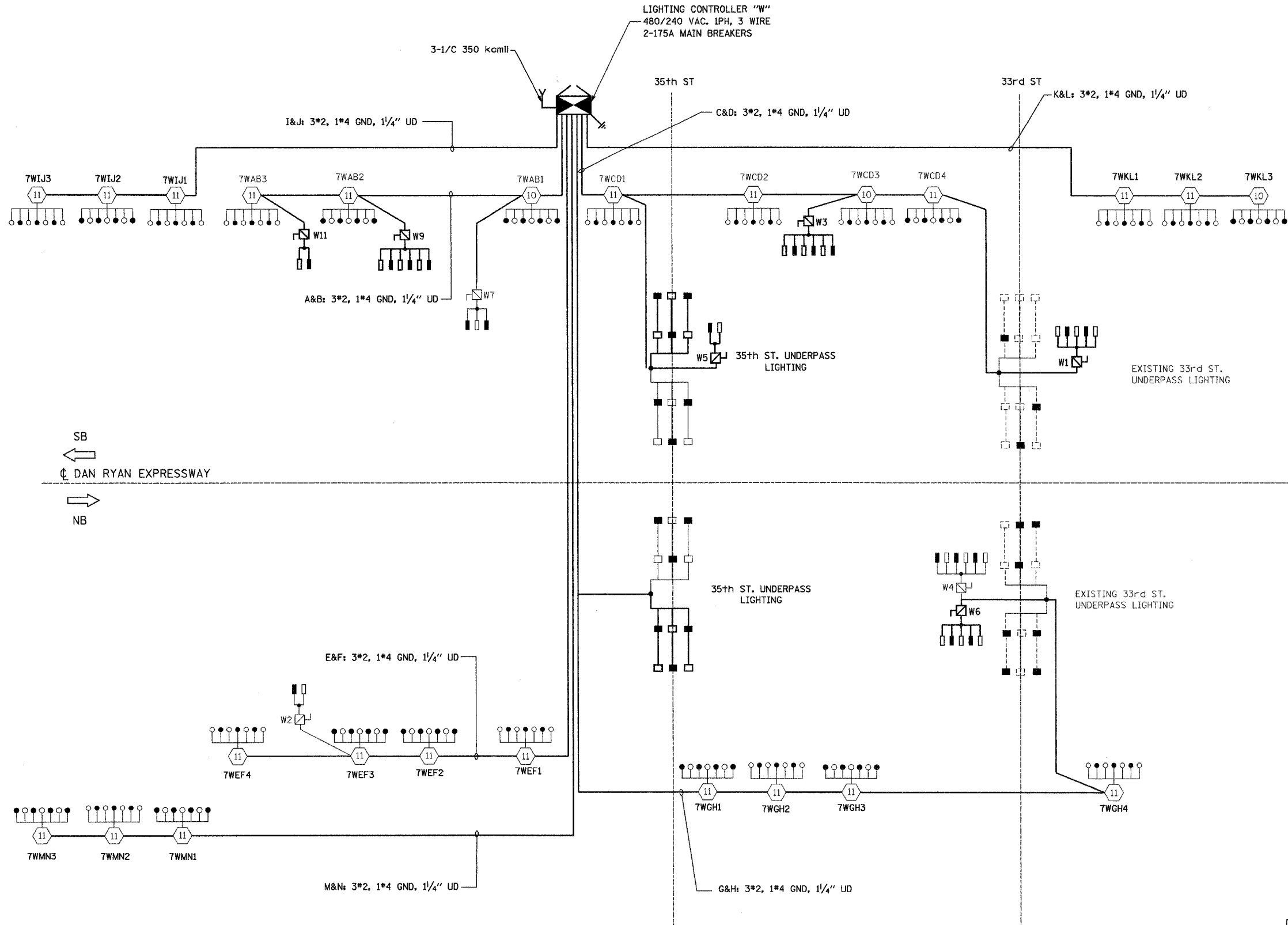
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DATE: OCTOBER 29, 2004      CHECKED BY: SM

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-03II	COOK	976	241
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 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)

**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
<b>TOTAL</b>	<b>194.90A</b>	<b>38,840</b>	<b>TOTAL</b>	<b>189.50A</b>	<b>37,820</b>

**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      DRAWN BY: BL  
DATE: OCTOBER 29, 2004      CHECKED BY: SM

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

SL07-12

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**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.

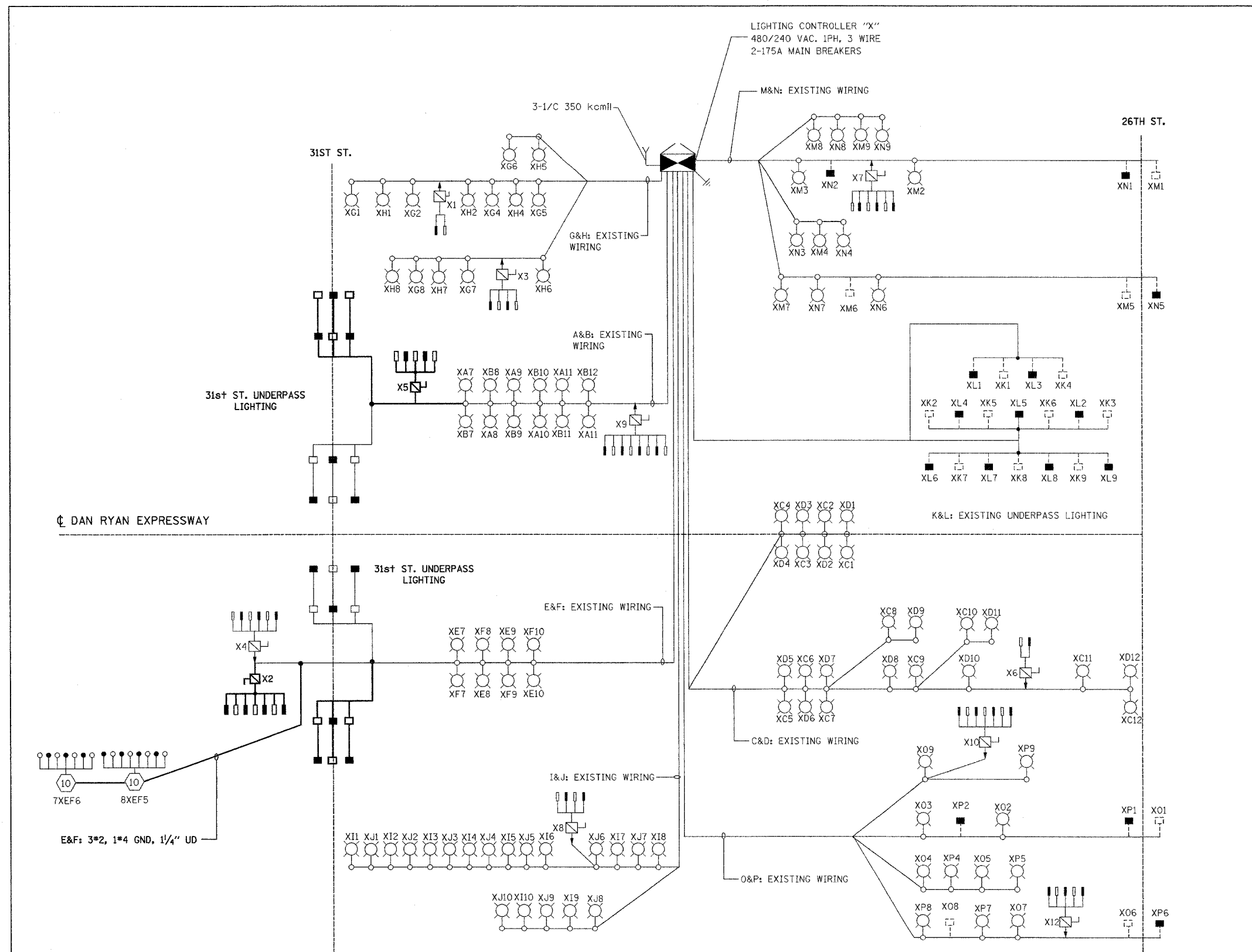
CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	WATTS	
A	17.00	3470	B	16.20	3300
C	18.80	3890	D	18.80	3890
E	29.20	5880	F	28.00	5650
G	12.90	2680	H	12.90	2680
I	16.60	3440	J	16.60	3440
K	3.15	495	L	3.15	495
M	12.45	2535	N	12.45	2535
O	14.05	2875	P	14.15	2905
TOTAL	124.15A	25,265	TOTAL	122.25A	24,895

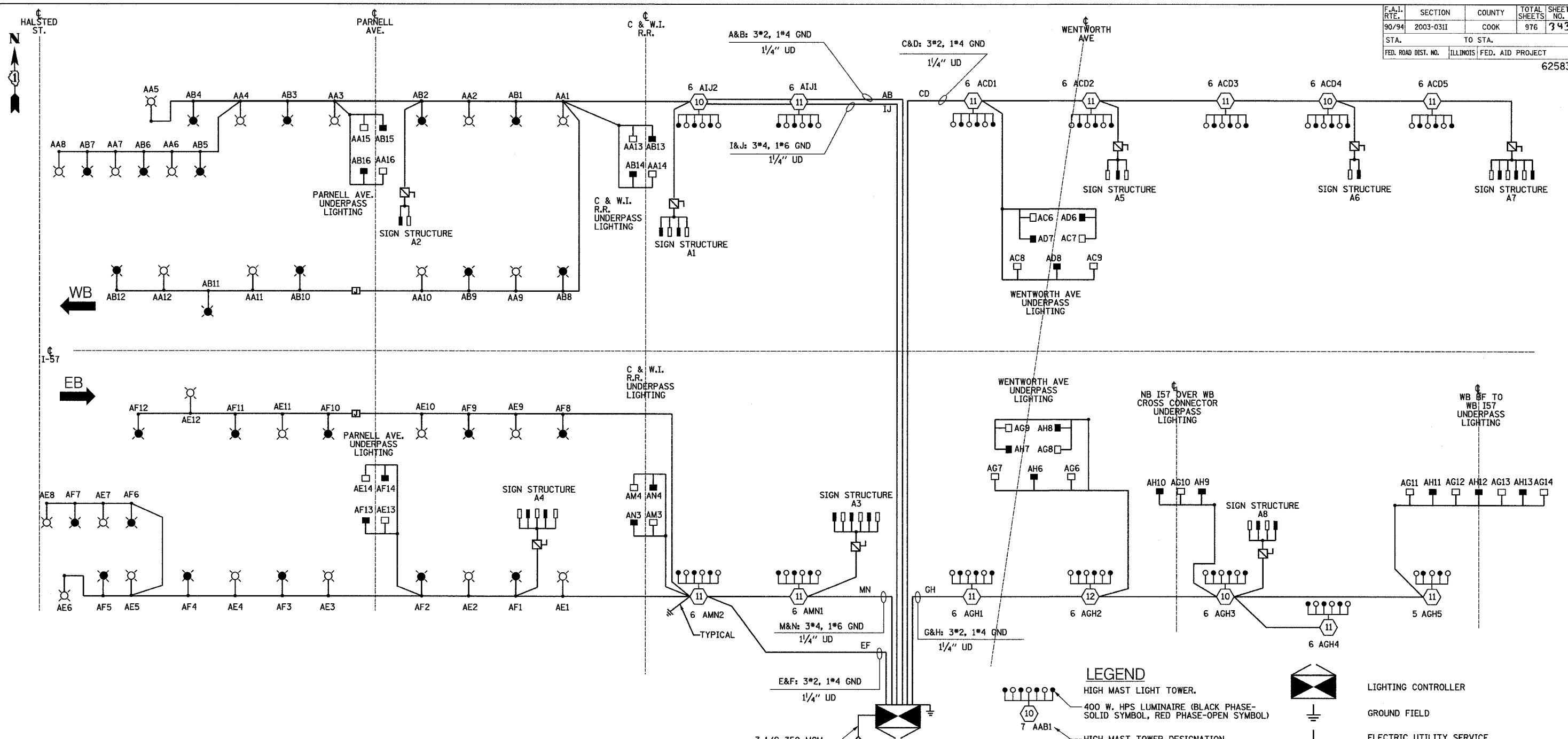
REVISIONS	
NAME	DATE

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

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

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





**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	
<b>TOTAL</b>	<b>154.4</b>	<b>37,056</b>	<b>TOTAL</b>	<b>35,736</b>

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

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 "A"  
FINAL CONDITION**

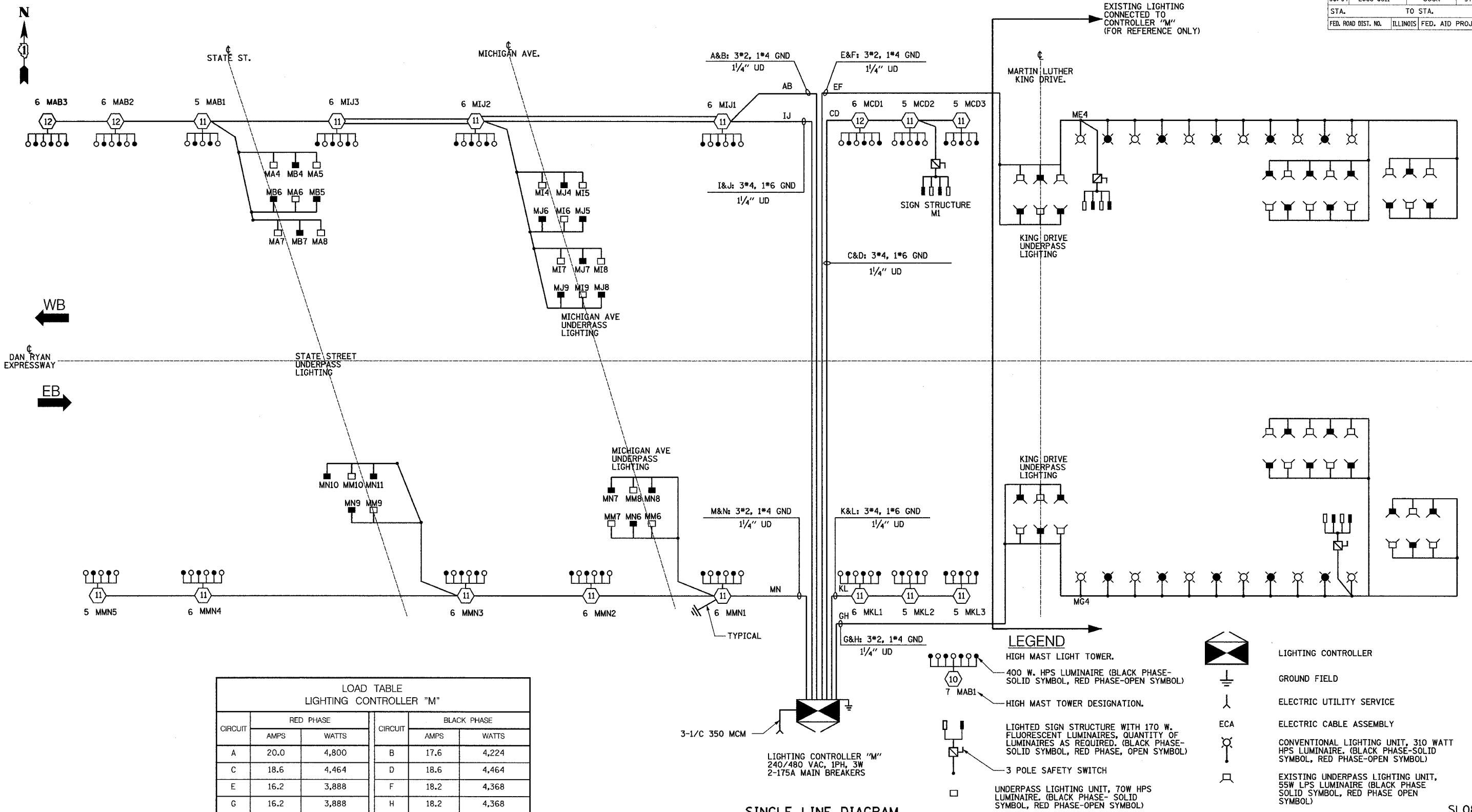
SCALE: NOT TO SCALE  
DATE: OCTOBER 29, 2004

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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**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)

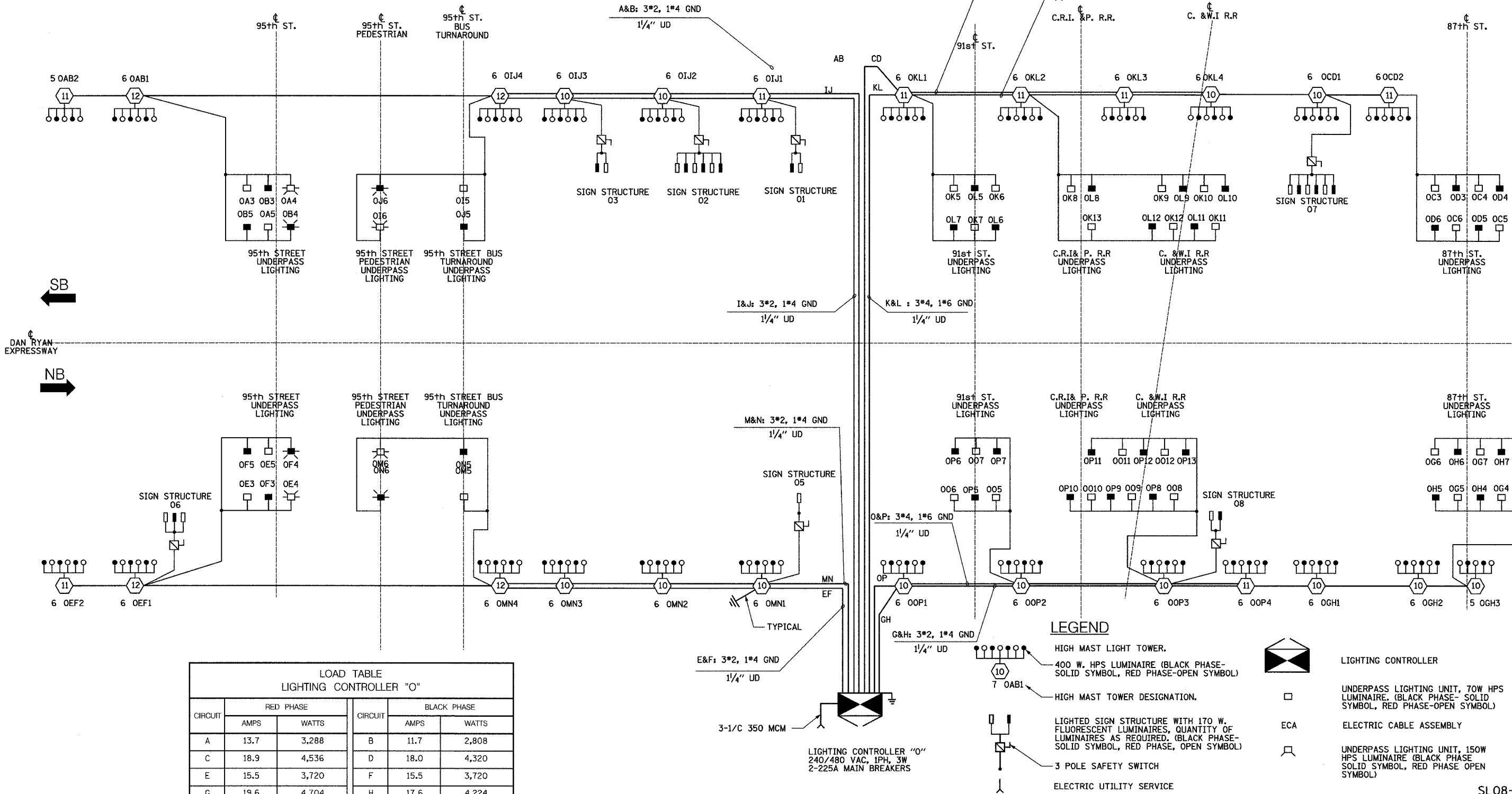
REVISIONS	
NAME	DATE

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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



**LOAD TABLE**  
**LIGHTING CONTROLLER "O"**

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

**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
- ELECTRIC UTILITY SERVICE
- GROUND ROD
- LIGHTING CONTROLLER
- UNDERPASS LIGHTING UNIT, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- ECA
- UNDERPASS LIGHTING UNIT, 150W HPS LUMINAIRE (BLACK PHASE SOLID SYMBOL, RED PHASE OPEN SYMBOL)

**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"**  
**FINAL CONDITION**

SCALE: NOT TO SCALE  
DATE: OCTOBER 29, 2004

DRAWN BY: YJ  
CHECKED BY: TM

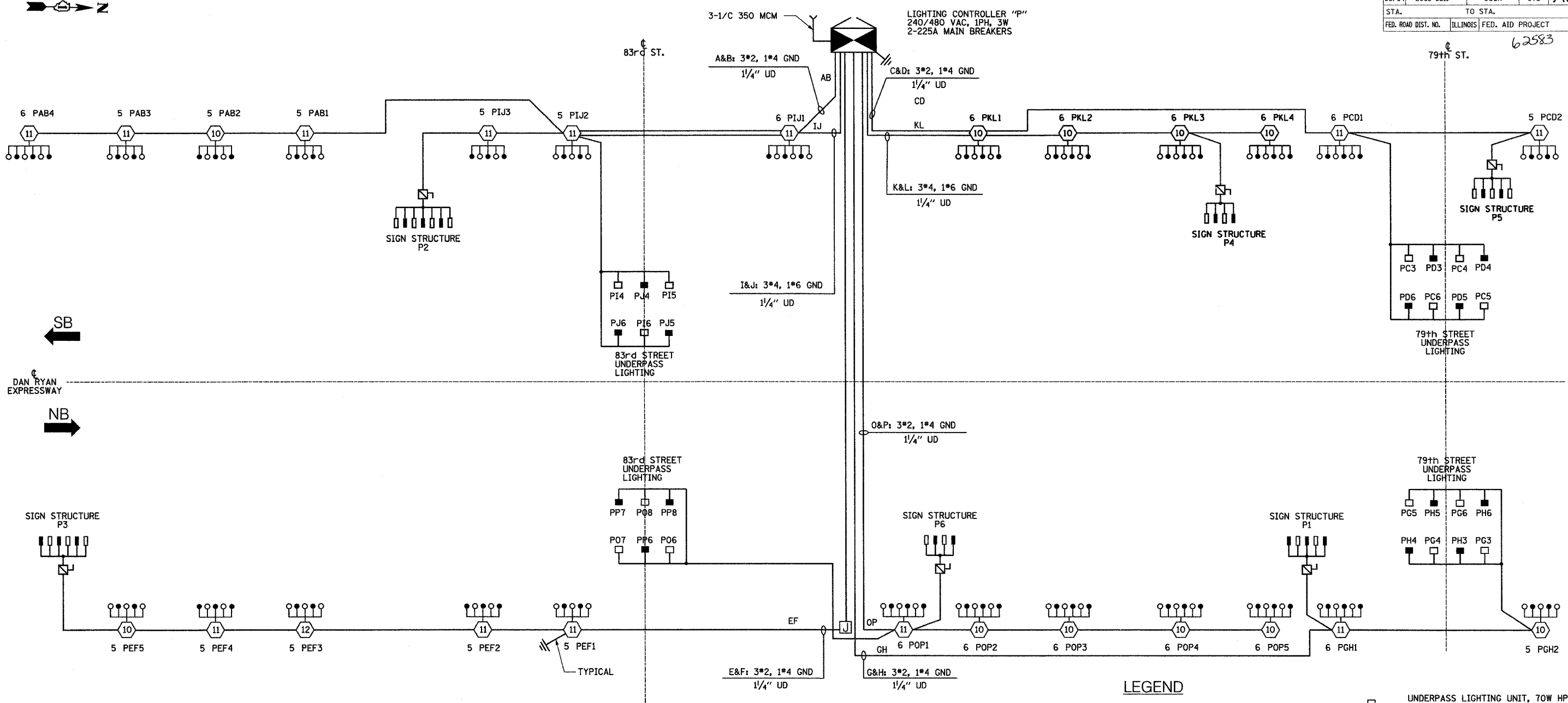
**SINGH**  
SINGH & ASSOCIATES, INC.  
CONSULTING ENGINEERS

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

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	346
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62583



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

- 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

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

LOAD TABLE LIGHTING CONTROLLER "P"					
CIRCUIT	RED PHASE		BLACK PHASE		CIRCUIT
	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
<b>TOTAL</b>	<b>167.7</b>	<b>40,248</b>	<b>TOTAL</b>	<b>157.2</b>	<b>37,728</b>

**SINGH** 300 W. ADAMS ST.  
CHICAGO, IL 60606  
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
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	
		<b>SINGLE LINE DIAGRAM LIGHTING CONTROLLER "P" FINAL CONDITION</b>  SCALE: NOT TO SCALE DRAWN BY: YJ DATE: OCTOBER 29, 2004 CHECKED BY: TM

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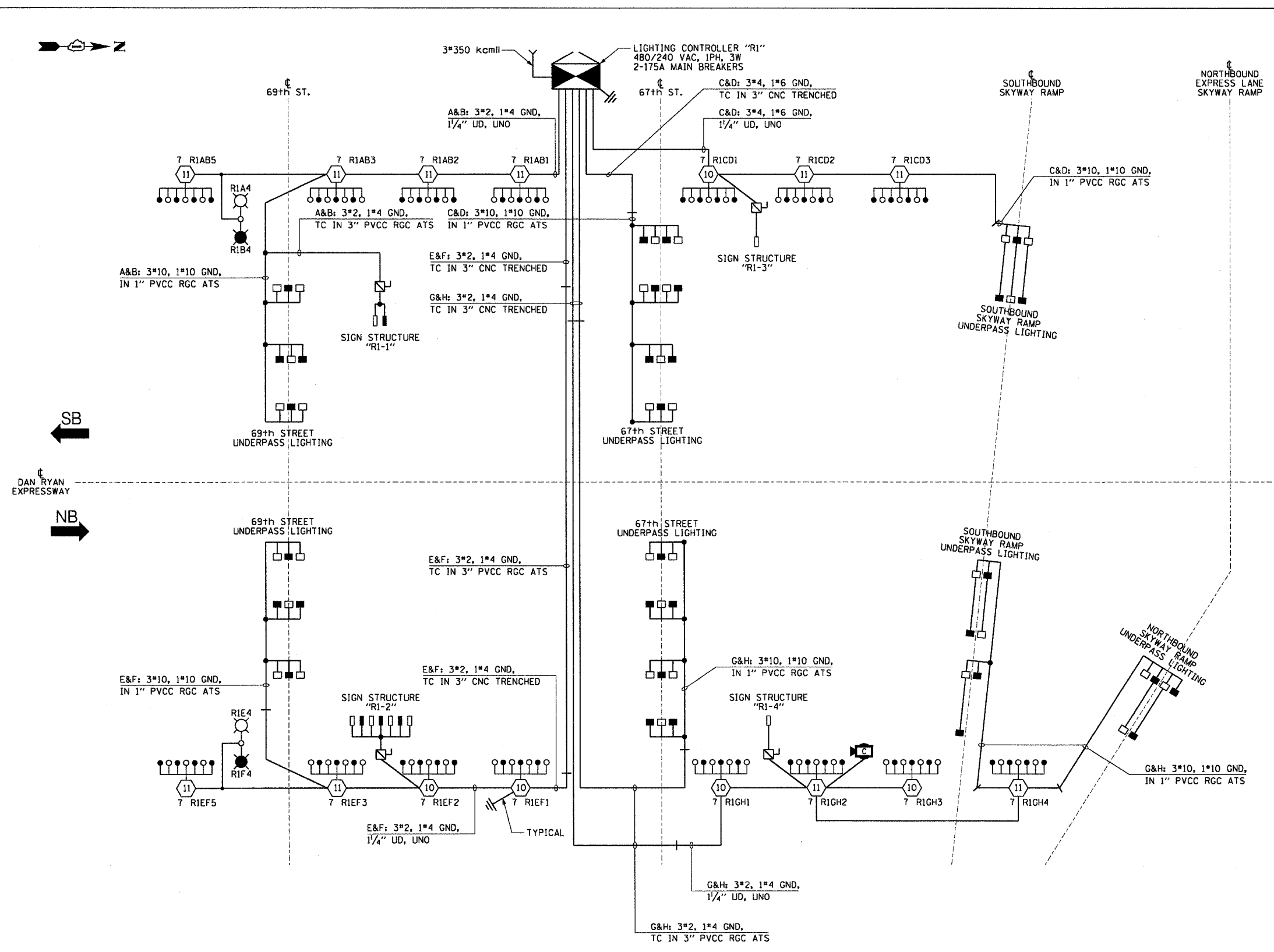
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	349
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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
- 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		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	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

**CTE ENGINEERS**  
CONSOER TOWNSEND ENVIRONMENTAL ENGINEERS, INC.  
303 EAST WACKER DRIVE, SUITE 600  
CHICAGO, ILLINOIS 60601-5212, PHONE: (312) 939-0300

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 "R1"  
PROPOSED IMPROVEMENTS**

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

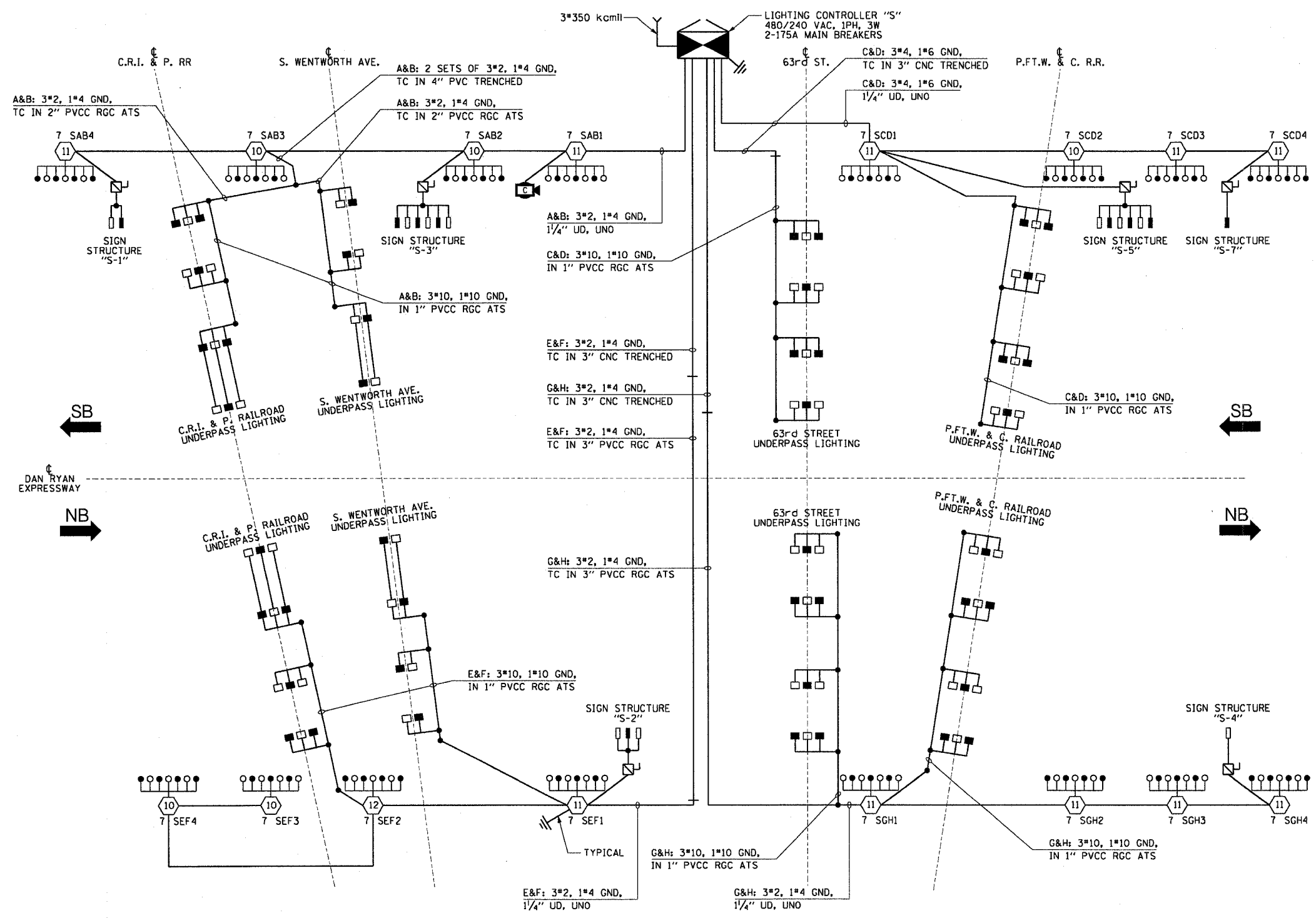
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62583

**LEGEND**

- HIGH MAST LIGHT TOWER
- 400 WATT HPS LUMINAIRE (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- 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		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

SL08-07

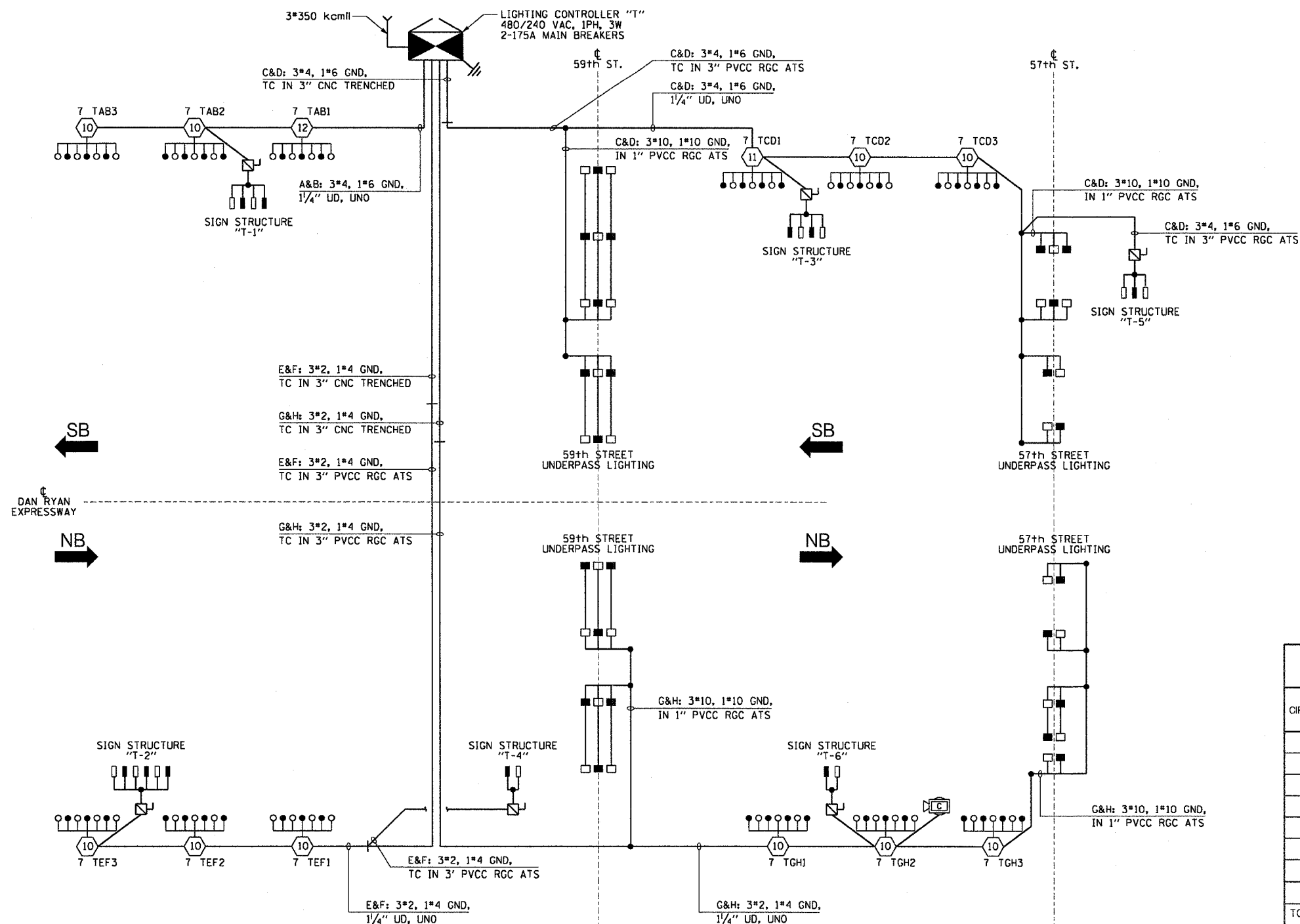
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	350
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

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 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		BLACK PHASE		
	AMPS	WATTS	CIRCUIT	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

**CTE ENGINEERS**  
CONSER 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 "T"  
PROPOSED IMPROVEMENTS

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

SLO8-08

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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. 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, 70W HPS LUMINAIRE. (BLACK PHASE- SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- LIGHTING CONTROLLER
- GROUND FIELD
- ELECTRIC UTILITY SERVICE
- R1A4 LUMINAIRE DESIGNATION
- CONVENTIONAL LIGHTING UNIT, 2-310 WATT HPS LUMINAIRES. (BLACK PHASE-SOLID SYMBOL, RED PHASE-OPEN SYMBOL)
- CLOSED CIRCUIT TELEVISION CAMERA

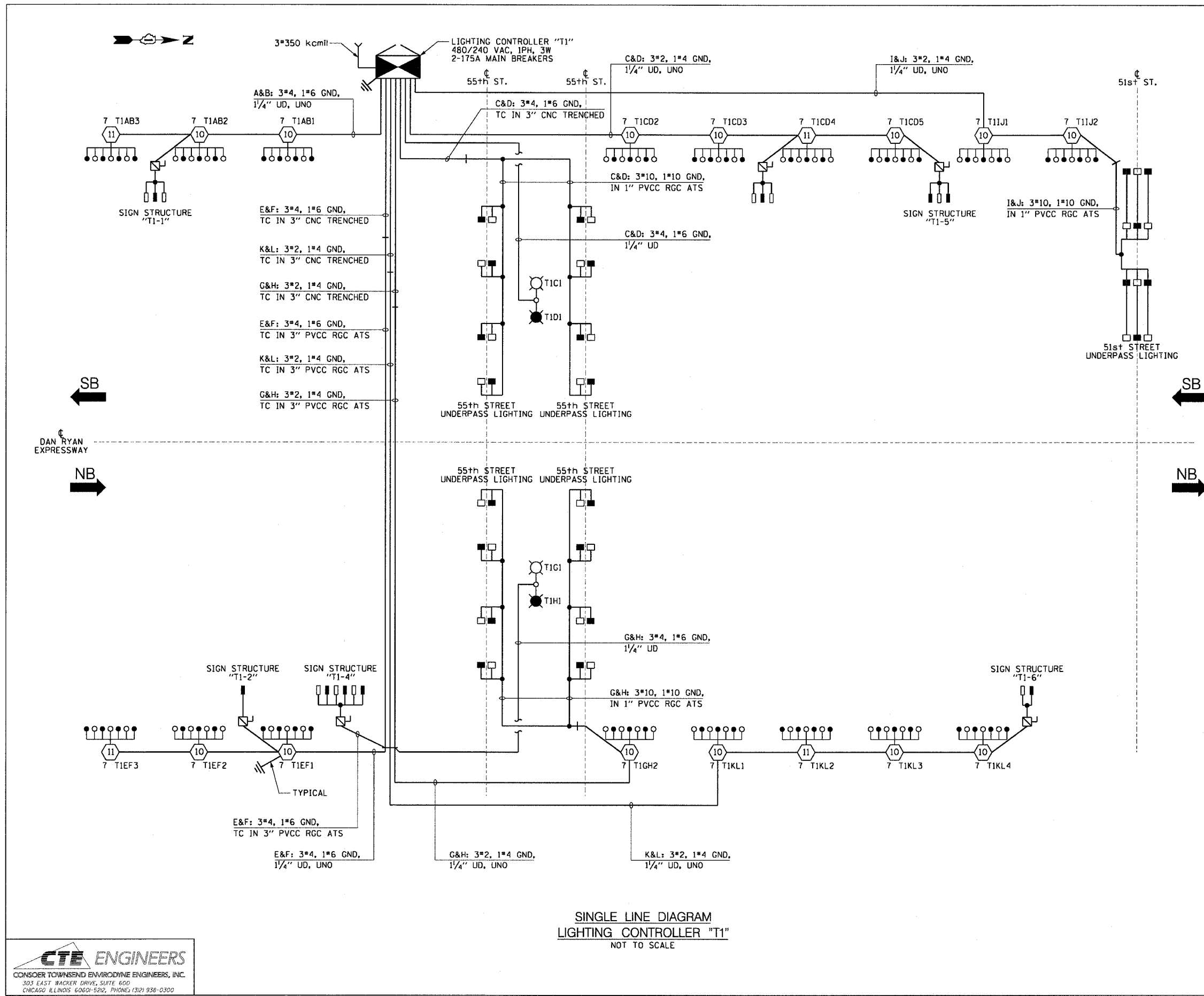
CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	21.1	5,064	B	22.2	5,328
C	34.2	8,208	D	34.2	8,208
E	21.9	5,256	F	24.7	5,928
G	12.3	2,952	H	10.4	2,496
I	15.9	3,816	J	15.9	3,816
K	28.0	6,720	L	28.0	6,720
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	133.4	32,016	TOTAL	135.4	32,496

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



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

SL08-09

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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 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		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

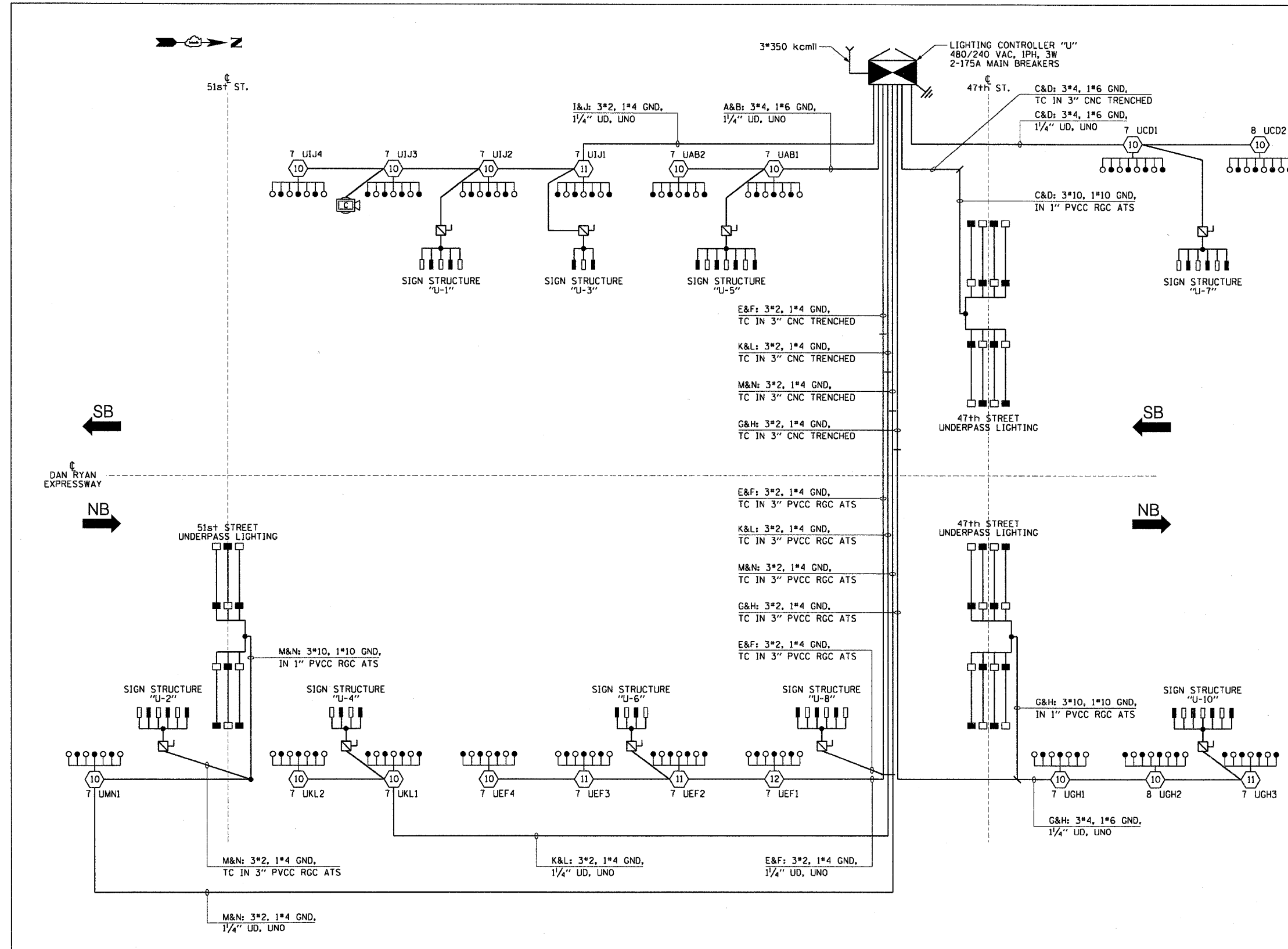
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REVISIONS	NAME	DATE

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

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

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

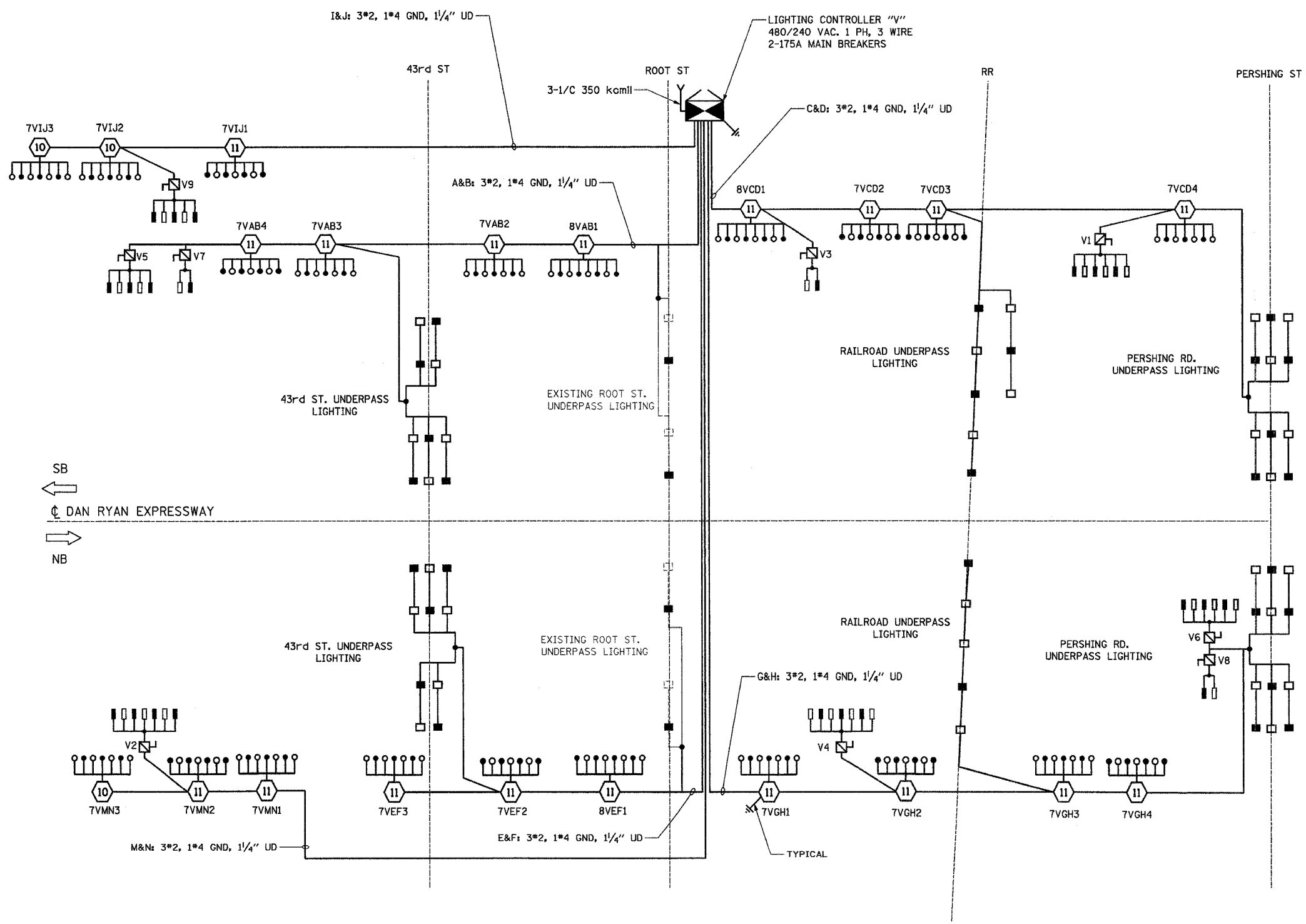


**SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "U"**  
NOT TO SCALE

**CTE ENGINEERS**  
CONSOER TOWNSEND EMVRODYNE 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 SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	353
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 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)

**LOAD TABLE**  
LIGHTING CONTROLLER "V"

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	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
<b>TOTAL</b>	<b>180.30A</b>	<b>35,940</b>	<b>TOTAL</b>	<b>177.50A</b>	<b>35,410</b>

**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**

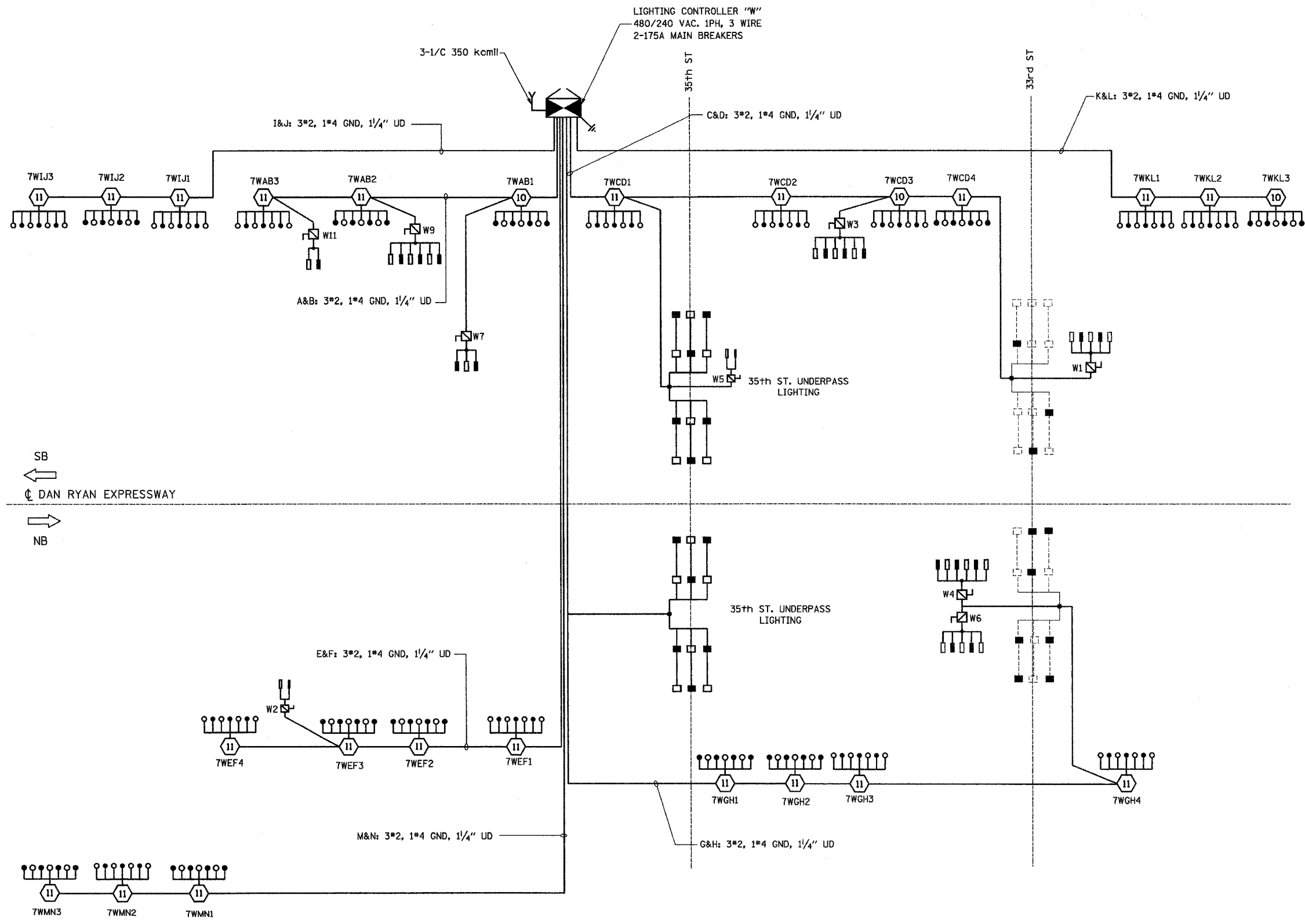
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CHECKED BY: SM

SL08-11

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	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)
- 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 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	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  
→  
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"  
FINAL CONDITION**

SCALE: NONE  
DATE: OCTOBER 29, 2004

DRAWN BY: BL  
CHECKED BY: SM

SL08-12

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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 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.

**LOAD TABLE  
LIGHTING CONTROLLER "X"**

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

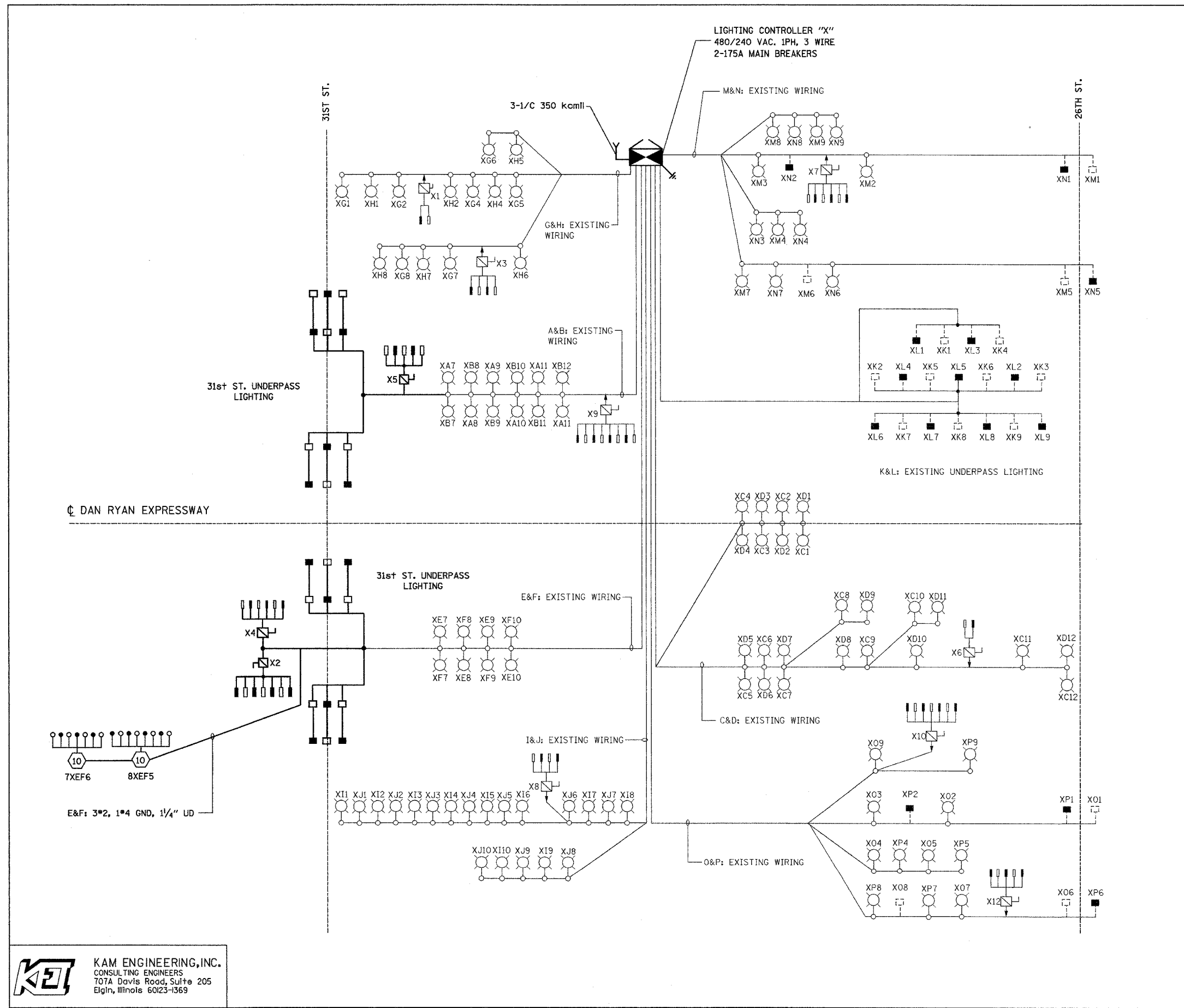
REVISIONS	
NAME	DATE

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      DRAWN BY: BL  
DATE: OCTOBER 29, 2004      CHECKED BY: SM

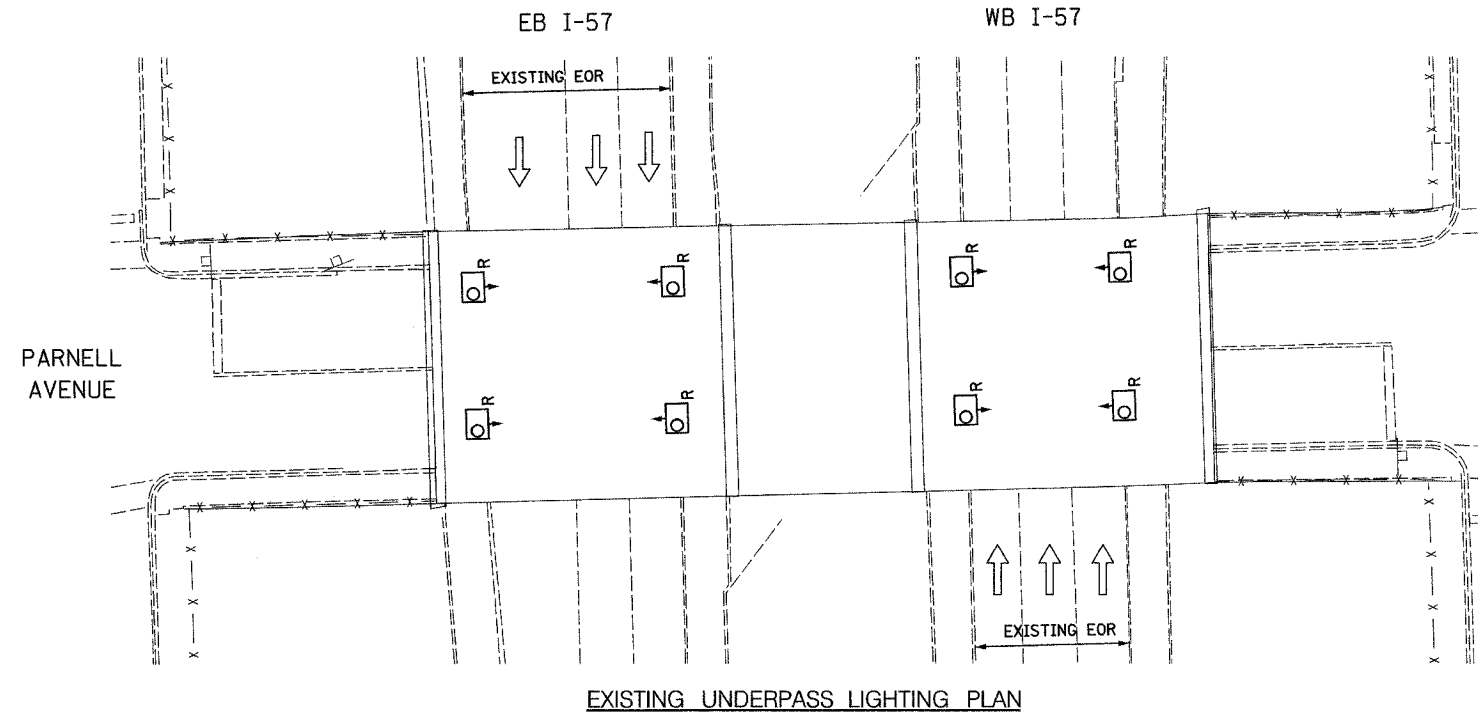
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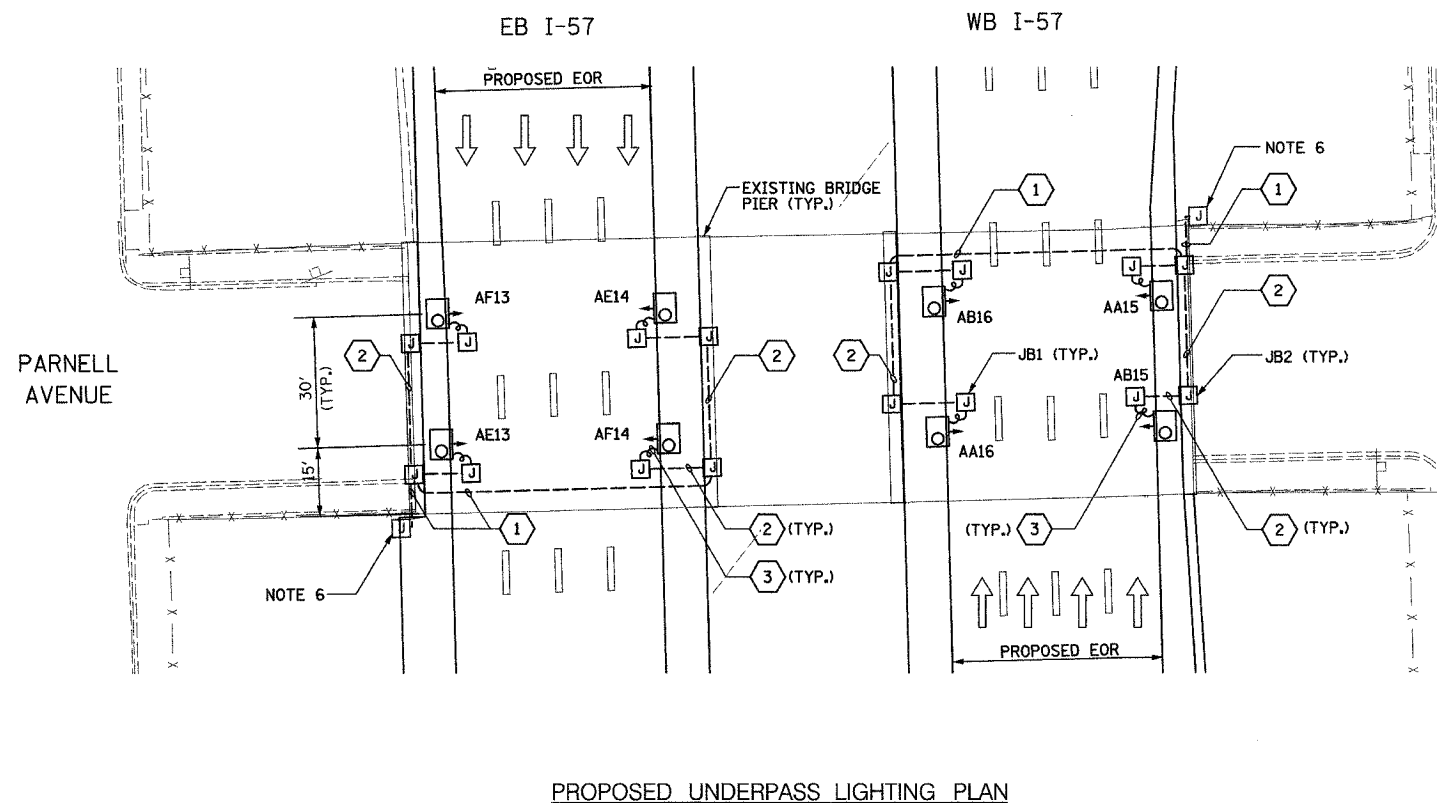
**KAM ENGINEERING, INC.**  
CONSULTING ENGINEERS  
707A Davis Road, Suite 205  
Elgin, Illinois 60123-1369

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-03II	COOK	976	356
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 RLO6-02 AND RLO7-02 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

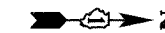
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS PARNELL AVENUE

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

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

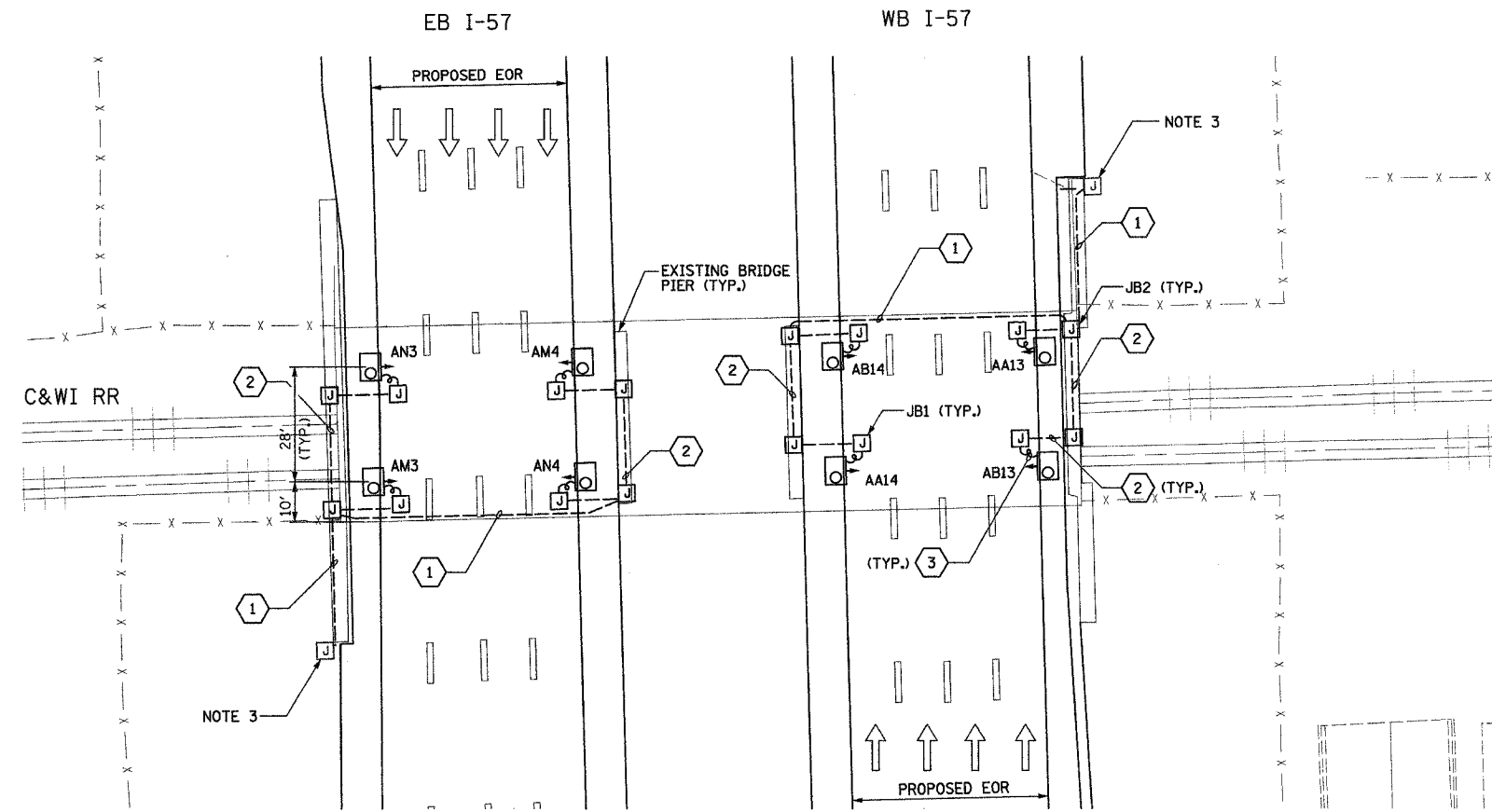
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**NOTES**

- 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 SLOB-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.



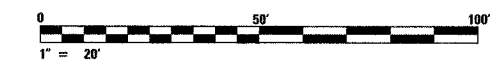
**PROPOSED UNDERPASS LIGHTING PLAN**

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

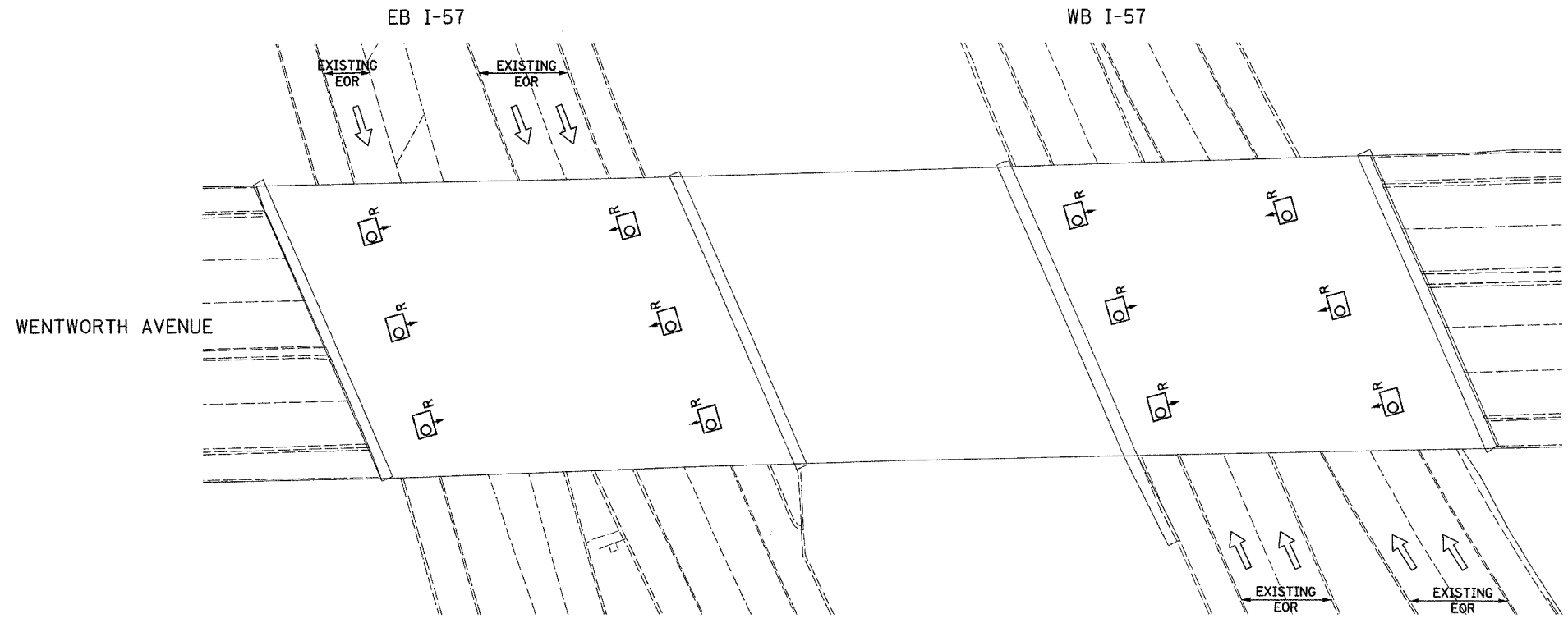
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS C&WI RR OVER I-57 PROPOSED IMPROVEMENTS  SCALE: 1"=20' DRAWN BY: VG DATE: OCTOBER 29, 2004 CHECKED BY: TM

**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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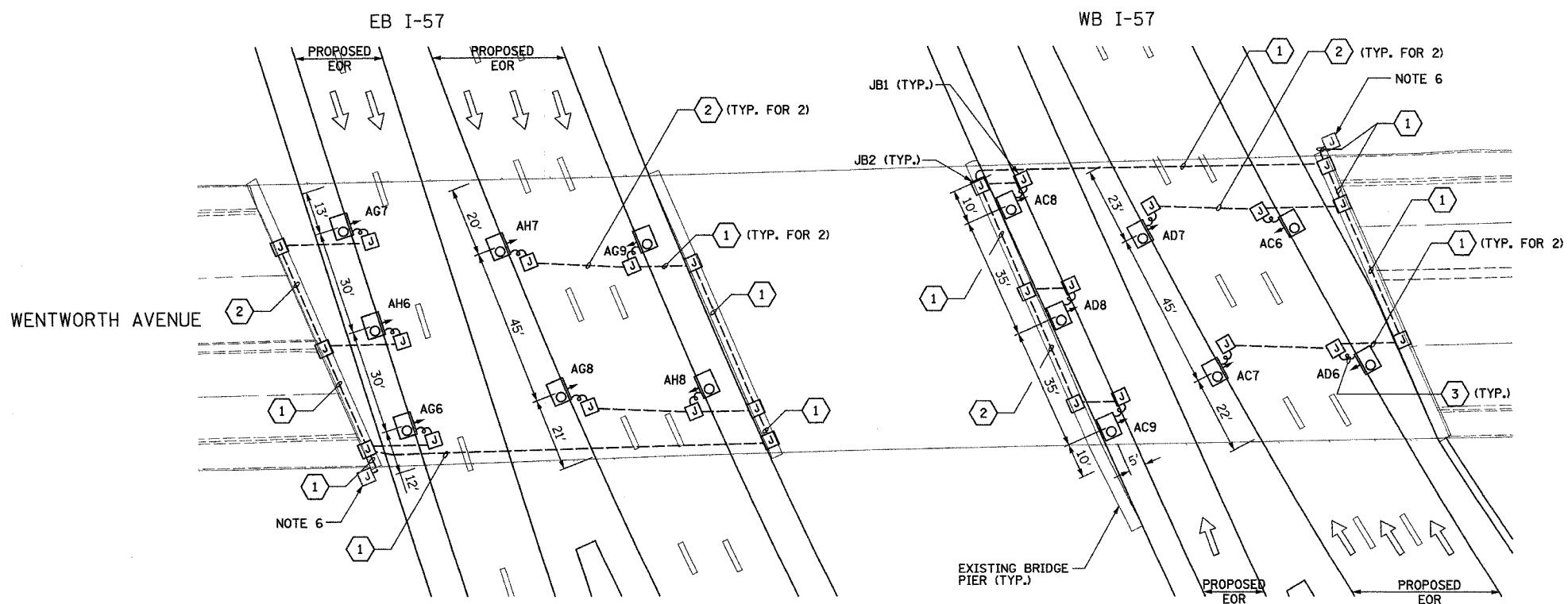
F.A.I. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	358
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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.
  - 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 RL06-04 AND RL07-04 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.



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	
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 60608  
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
CONSULTING ENGINEERS FAX: (312) 629-8449

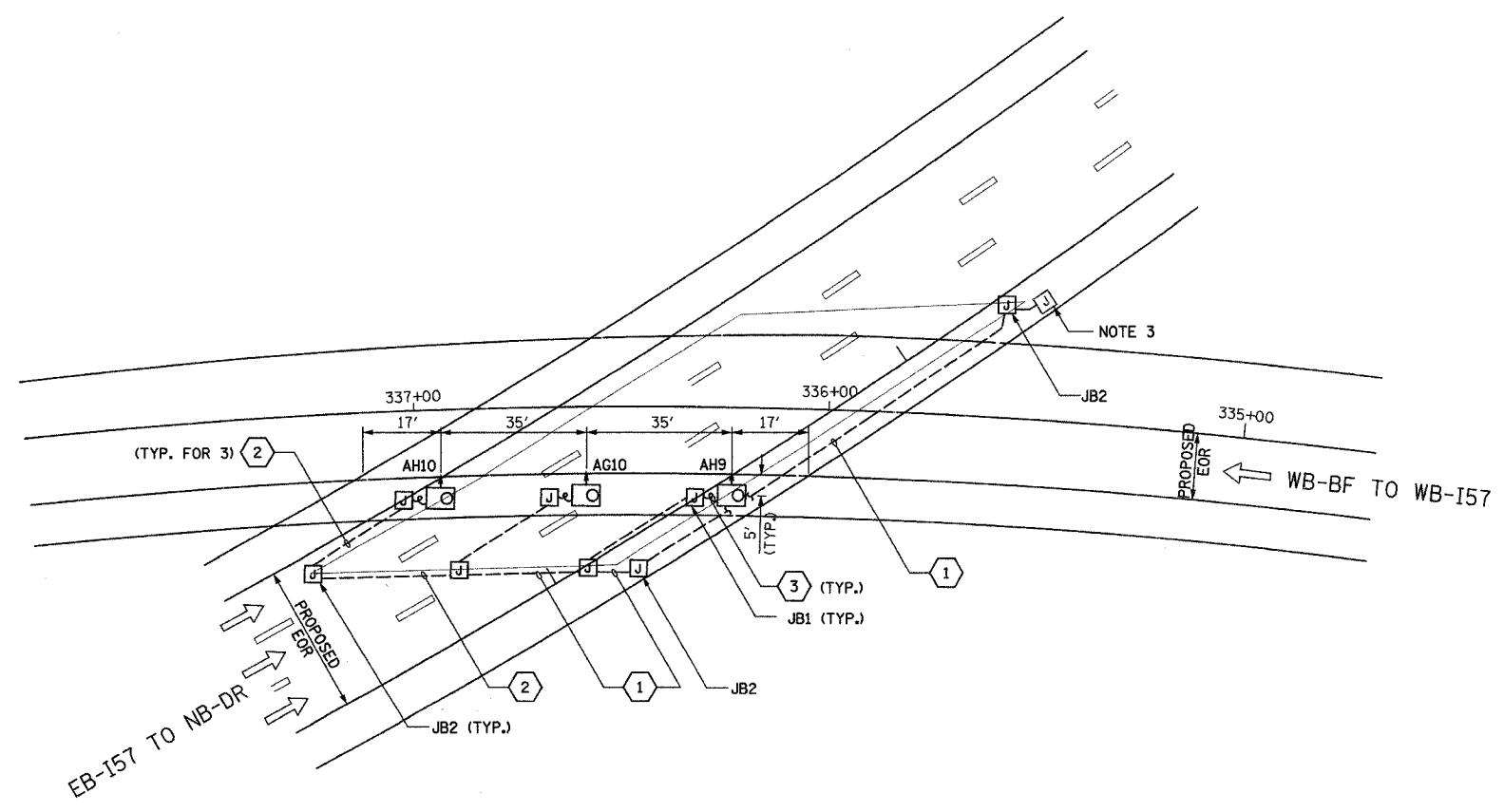
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		<p style="text-align: center;"><b>UNDERPASS LIGHTING PLANS WENTWORTH AVENUE</b></p> <p>SCALE: 1"=20'      DRAWN BY: VG DATE: OCTOBER 29, 2004      CHECKED BY: TM</p>

07/15/2004 9:48:29 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 RL05-04 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

**SINGH** 300 W. ADAMS ST.  
CHICAGO, IL 60606  
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
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 NB-I57 TO OVER WB X-CONNECTOR PROPOSED IMPROVEMENTS
SCALE: 1"=20'		DRAWN BY: VG
DATE: OCTOBER 29, 2004		CHECKED BY: TM

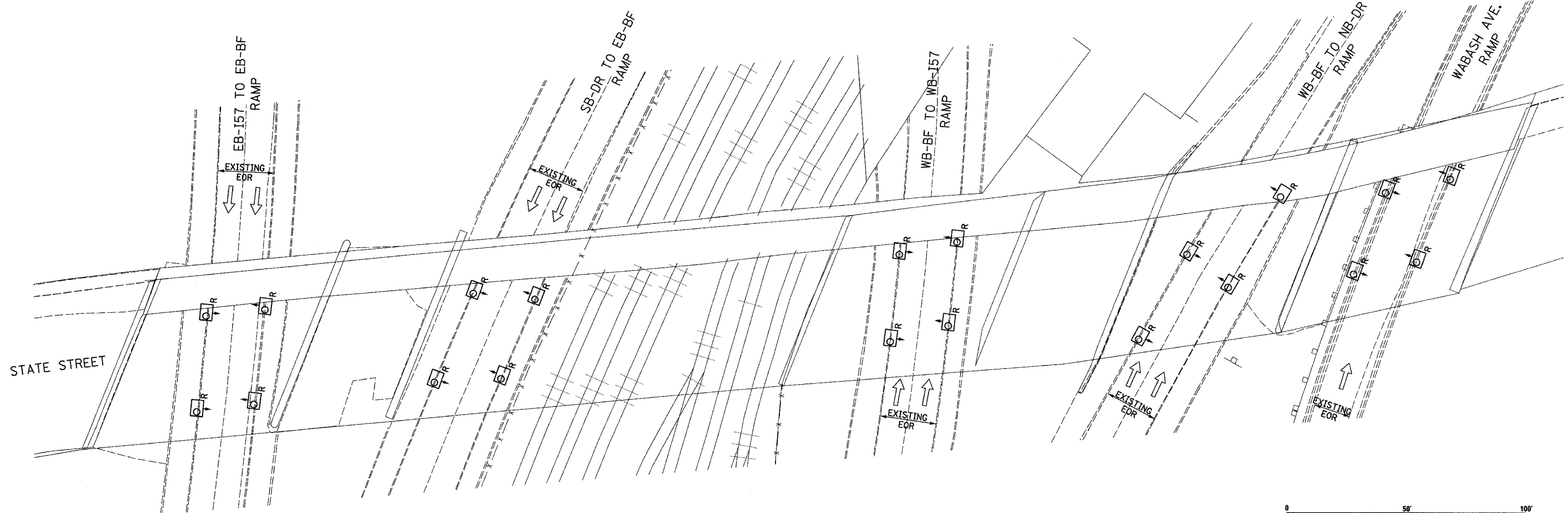
07/14/2004 3:48:53 PM

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		

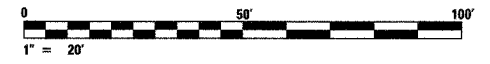
62583



- NOTES**
- 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.



EXISTING UNDERPASS LIGHTING PLAN



UL-05

**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 STATE STREET EXISTING CONDITIONS AND DEMOLITION
SCALE: 1"=20'		DRAWN BY: VG
DATE: OCTOBER 29, 2004		CHECKED BY: TM

10/15/2004 9:53:55 AM

**NOTES**

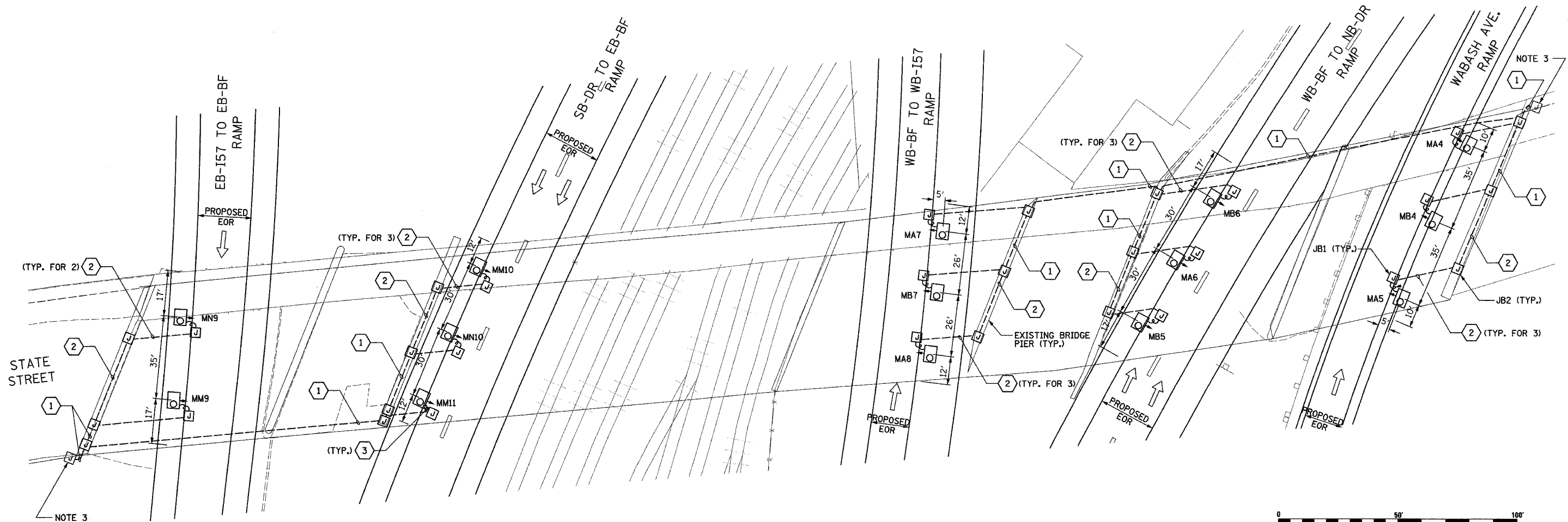
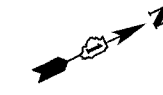
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- ALL PROPOSED UNDERPASS LUMINAIRES SHOWN ON THIS DRAWING SHALL BE PENDANT MOUNTED OFFSET 2 FEET FROM EDGE OF ROADWAY (EOR) UNLESS NOTED OTHERWISE. SEE DRAWING ME-06 FOR PENDANT MOUNTED UNDERPASS LIGHTING DETAILS.
- SPLICE NEW UNDERPASS LIGHTING CIRCUITS TO THE SERVICE CABLES LOCATED IN JUNCTION BOX. SEE DRAWING RLO5-06, RLO6-06, AND RLO7-06 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

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

UNDERPASS LIGHTING PLANS  
STATE STREET  
PROPOSED IMPROVEMENTS

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

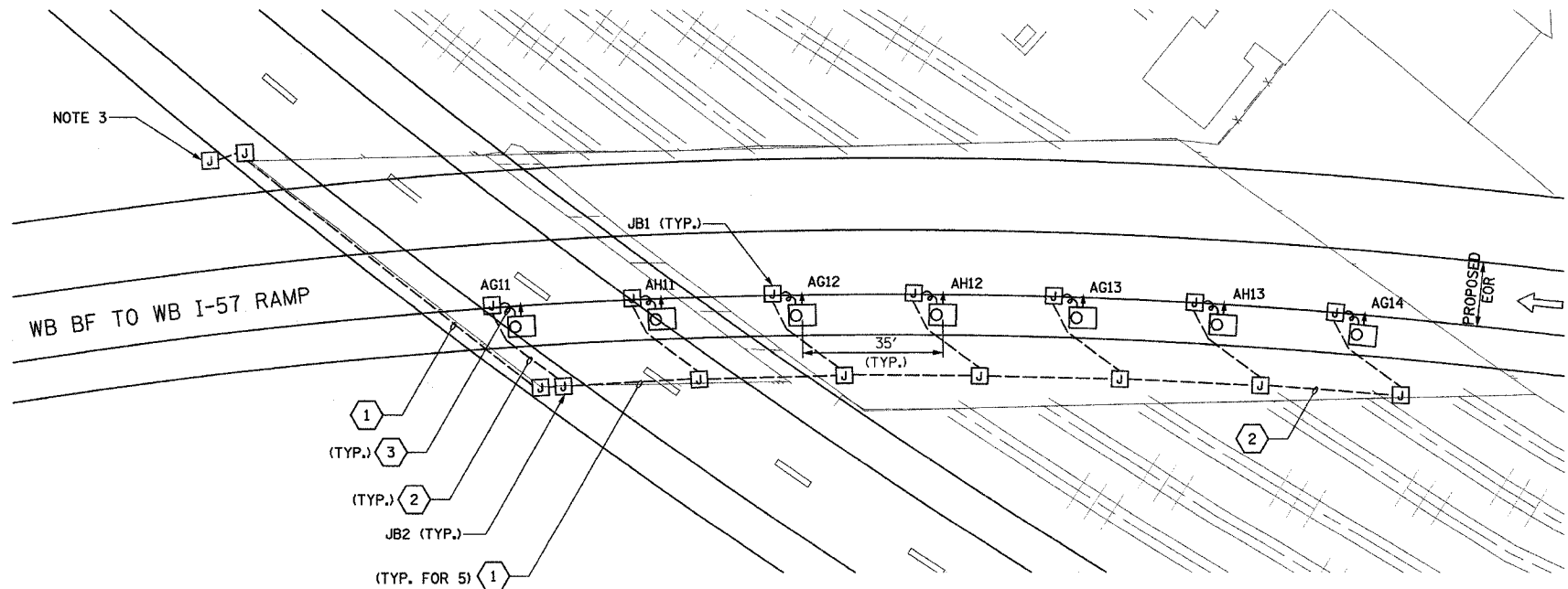
**SINGH** 300 W. ADAMS ST.  
CHICAGO, IL 60606  
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
CONSULTING ENGINEERS FAX: (312) 629-8449

07/15/2004 8:24:40 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 SLOB-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	3-1/2"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:  
2007: ALL UNDERPASS LIGHTING



UL-07

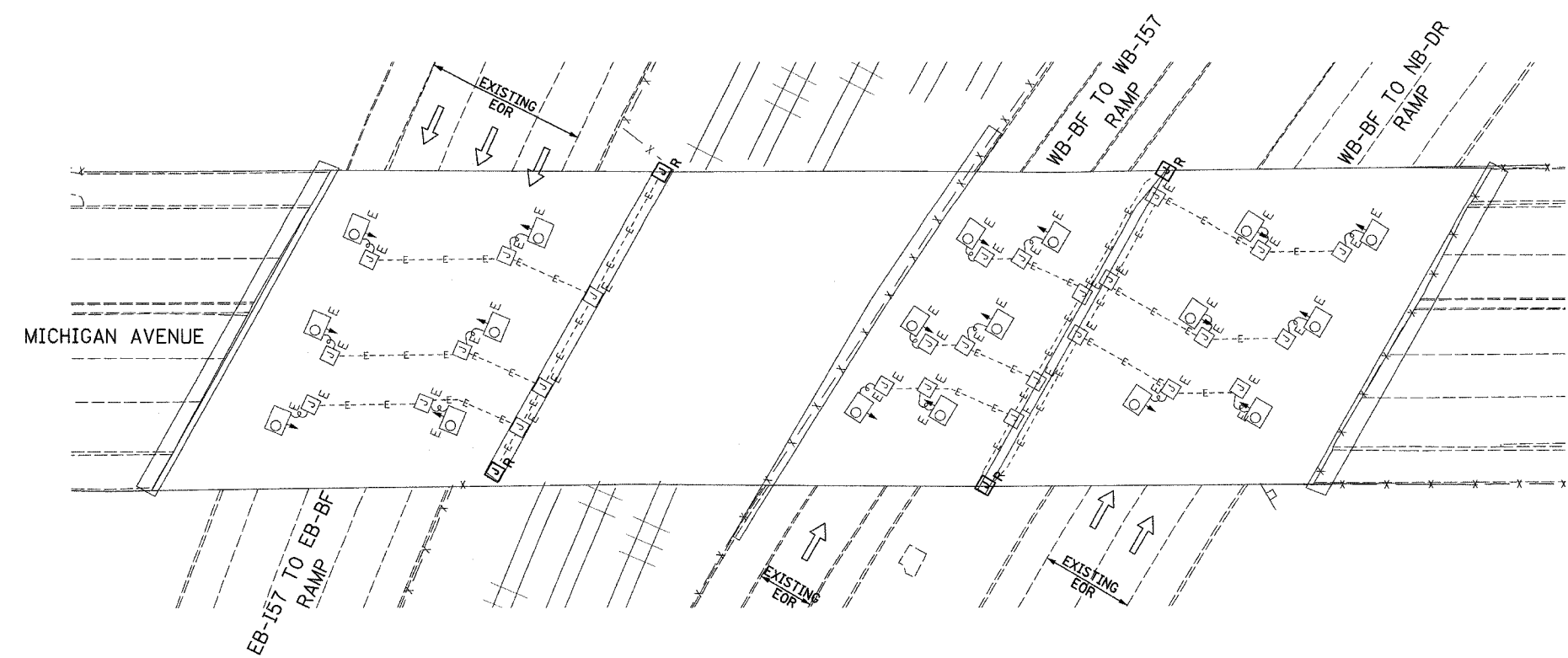
**SINGH** 300 W. ADAMS ST.  
CHICAGO, IL 60606  
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
CONSULTING ENGINEERS FAX: (312) 629-8449

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		<p><b>UNDERPASS LIGHTING PLANS WB-BF TO WB-I57 RAMP PROPOSED IMPROVEMENTS</b></p> <p>SCALE: 1"=20'      DRAWN BY: VG DATE: OCTOBER 29, 2004      CHECKED BY: TM</p>

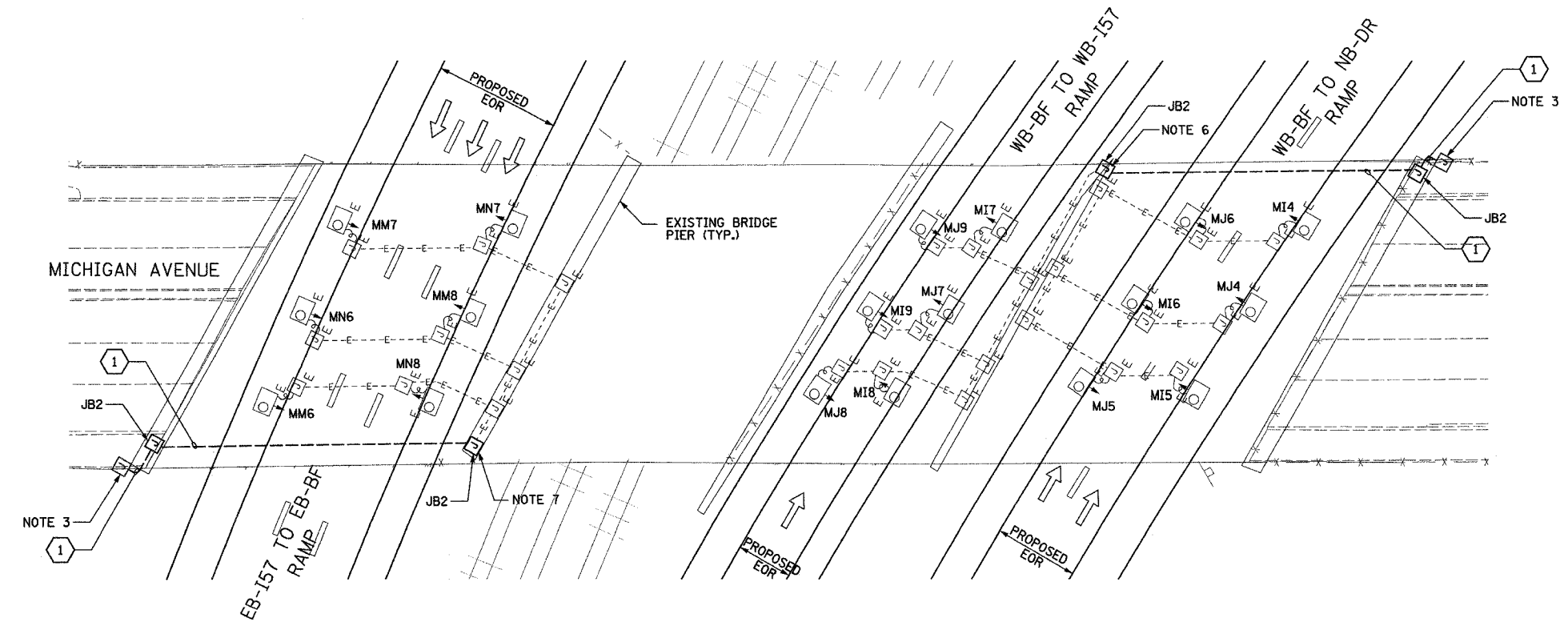
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-03II	COOK	976	363
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

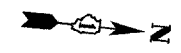
62583



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.
  - 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	3-1/2"Ø PVC, 1-1/2"Ø GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)

**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 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  
MICHIGAN AVENUE

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

DRAWN BY: VG  
CHECKED BY: TM

10/17/2004 3:48:00 PM

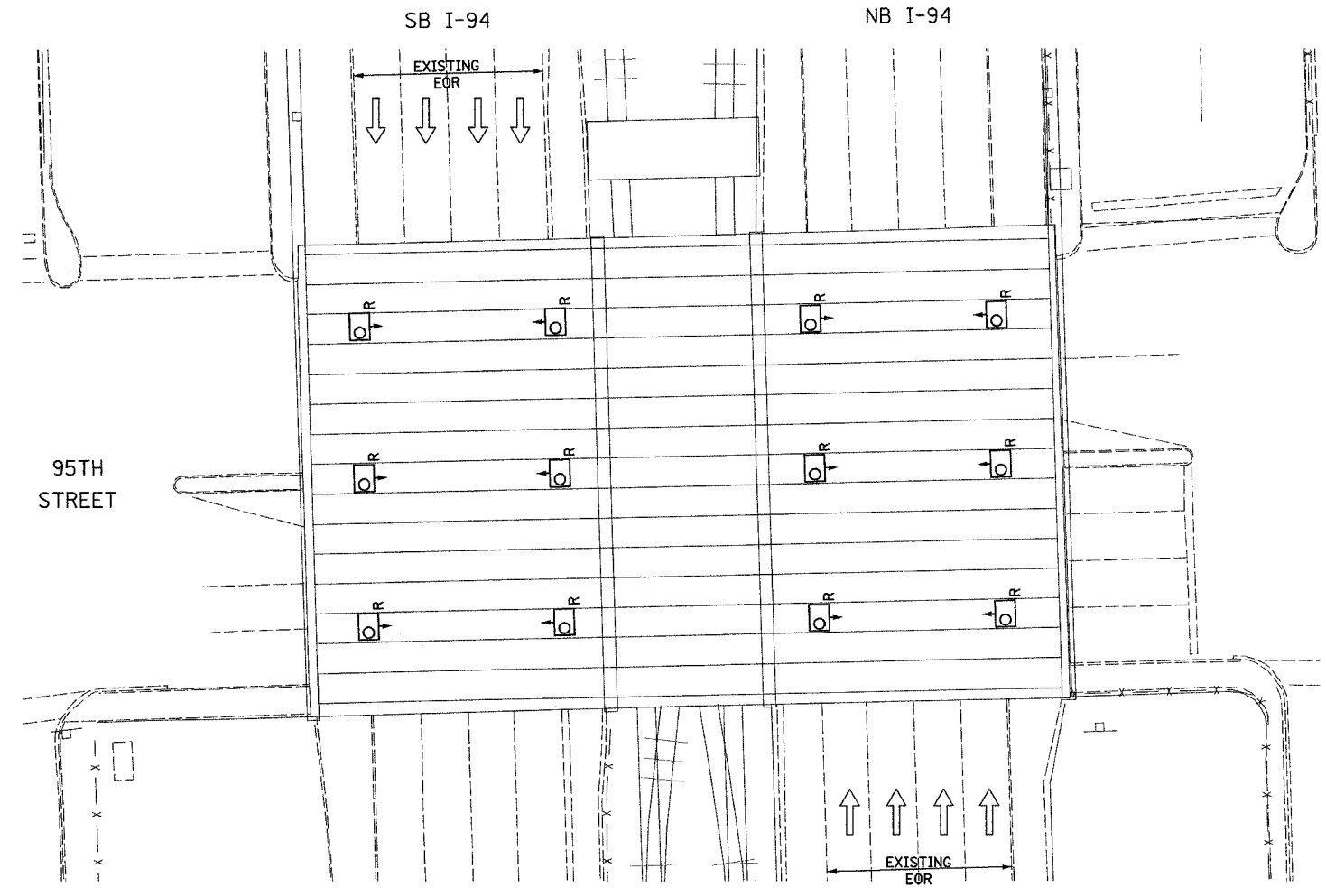
F.A.I. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94 2003-0311	COOK	976	364
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

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

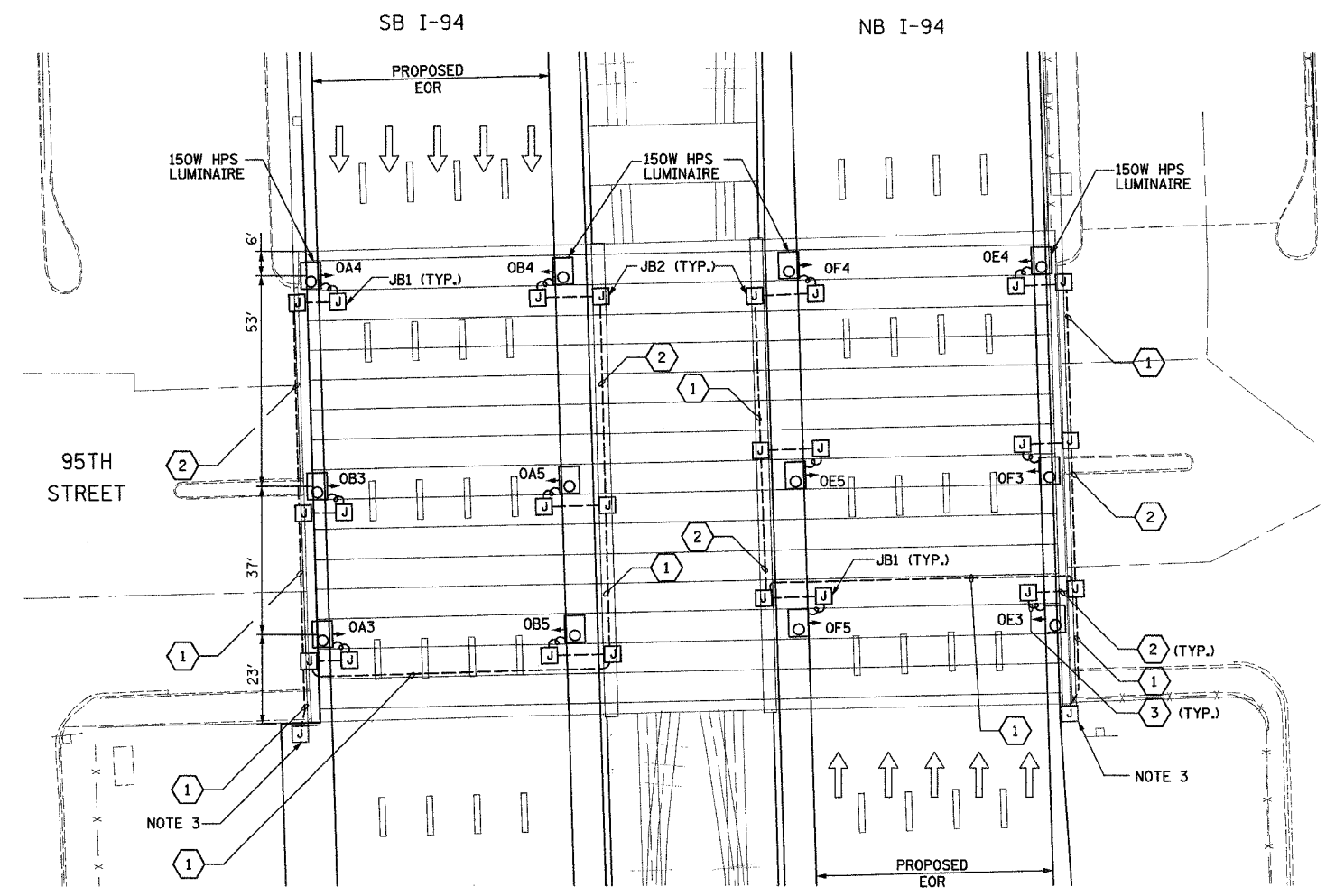
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 95TH STREET EXISTING CONDITIONS AND DEMOLITION
SCALE: 1"=20'		DRAWN BY: VG
DATE: OCTOBER 23, 2004		CHECKED BY: TM

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 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 "0". SEE DRAWING SLO8-03 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.	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:**  
 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

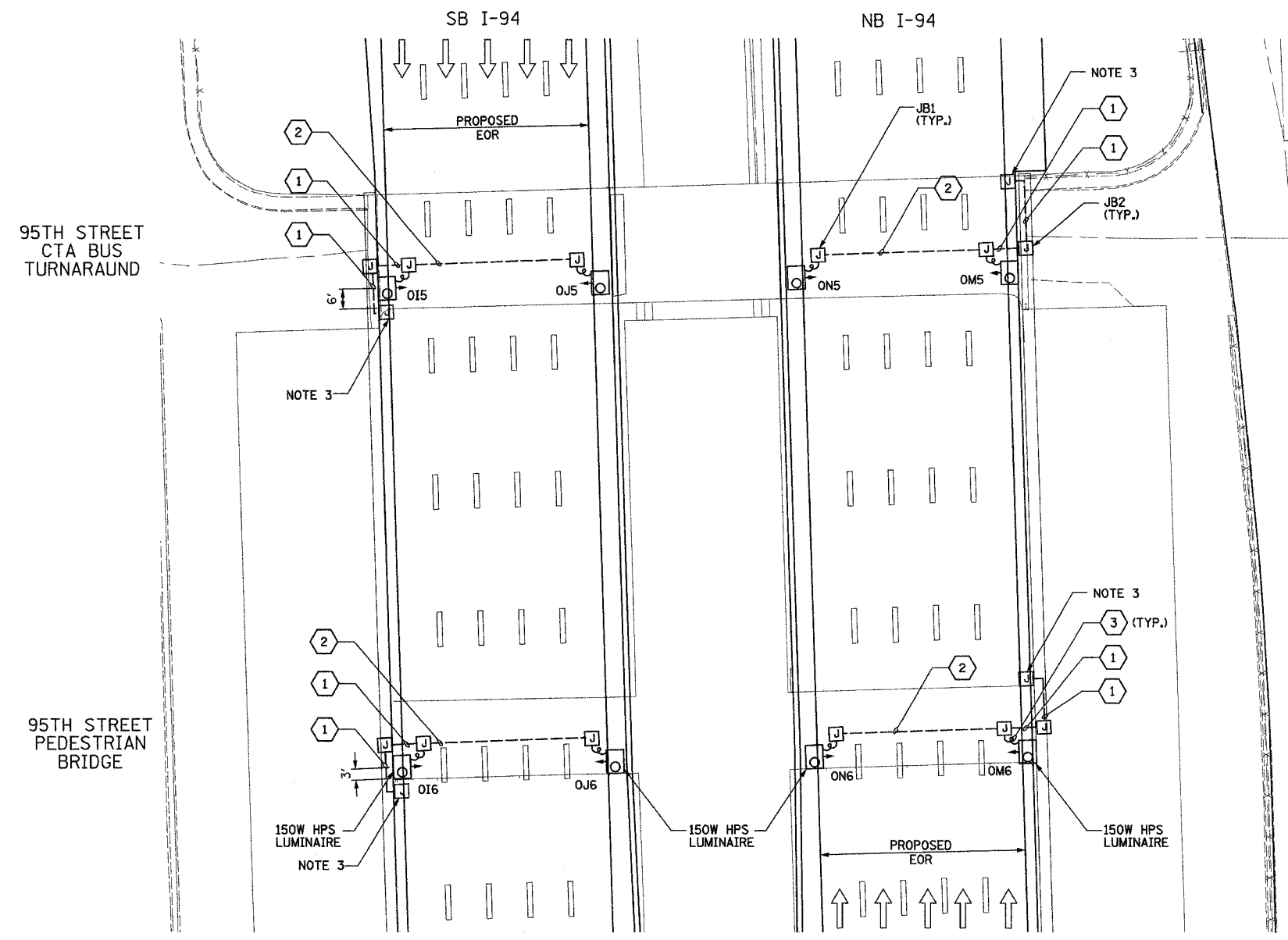
**SINGH** 300 W. ADAMS ST.  
 CHICAGO, IL 60606  
 TEL: (312) 629-0240  
 SINGH & ASSOCIATES, INC. CONSULTING ENGINEERS FAX: (312) 629-8449

07/14/2004 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 SL08-03 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

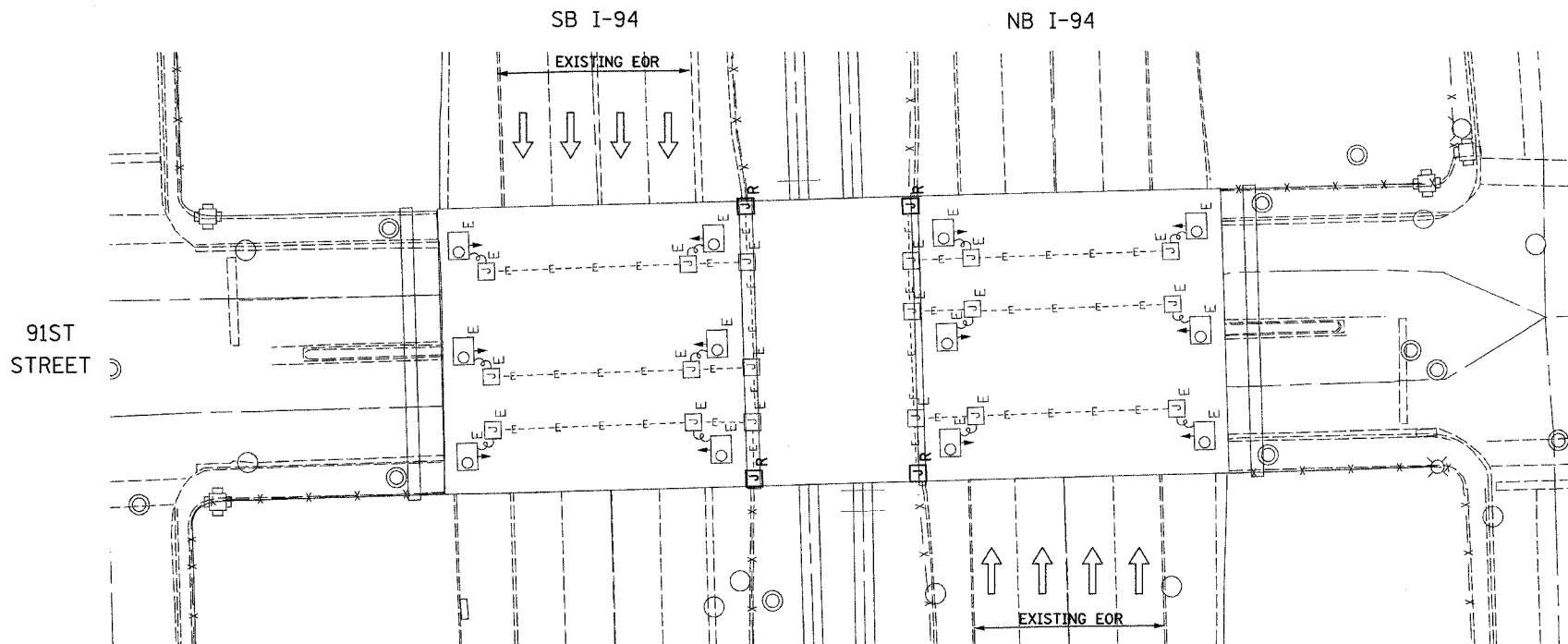


UL-11

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

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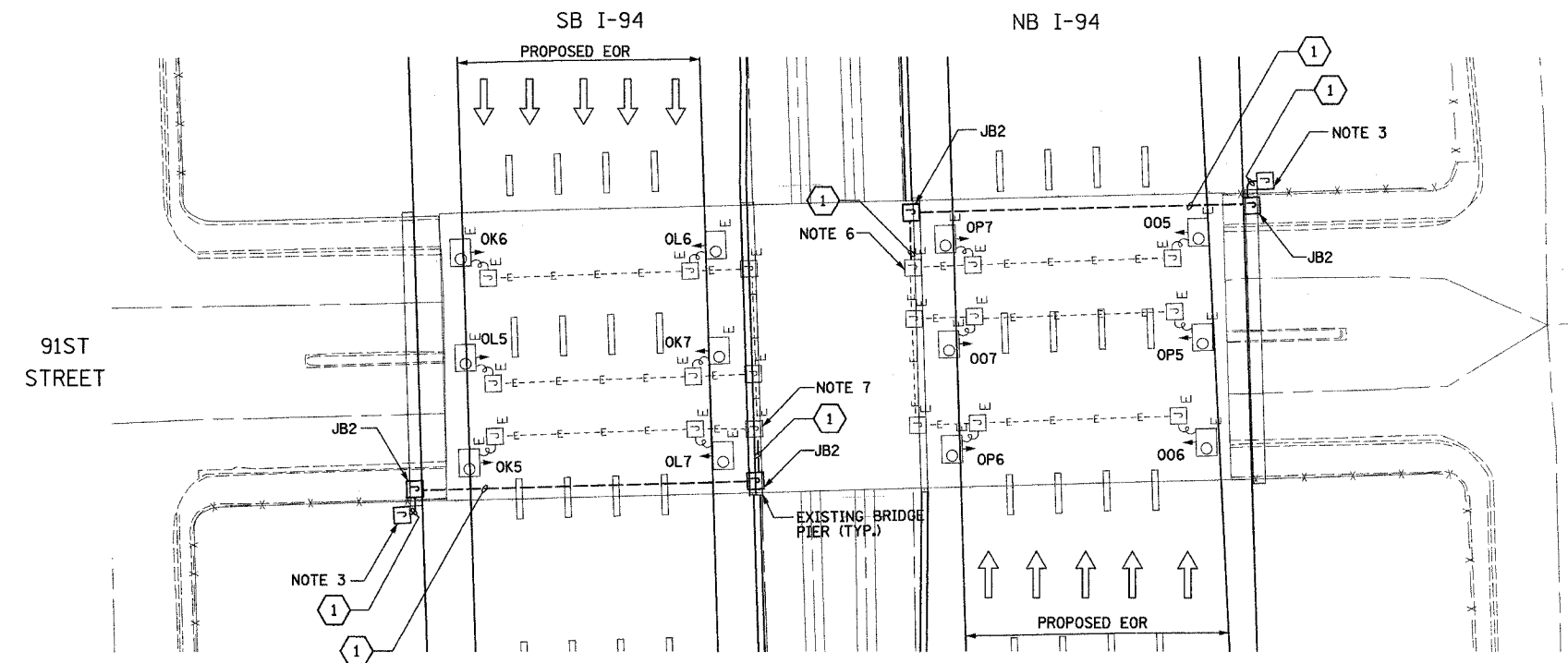


EXISTING UNDERPASS LIGHTING PLAN

- 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 RL06-12 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 "O". SEE DRAWING SL08-03 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



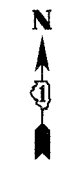
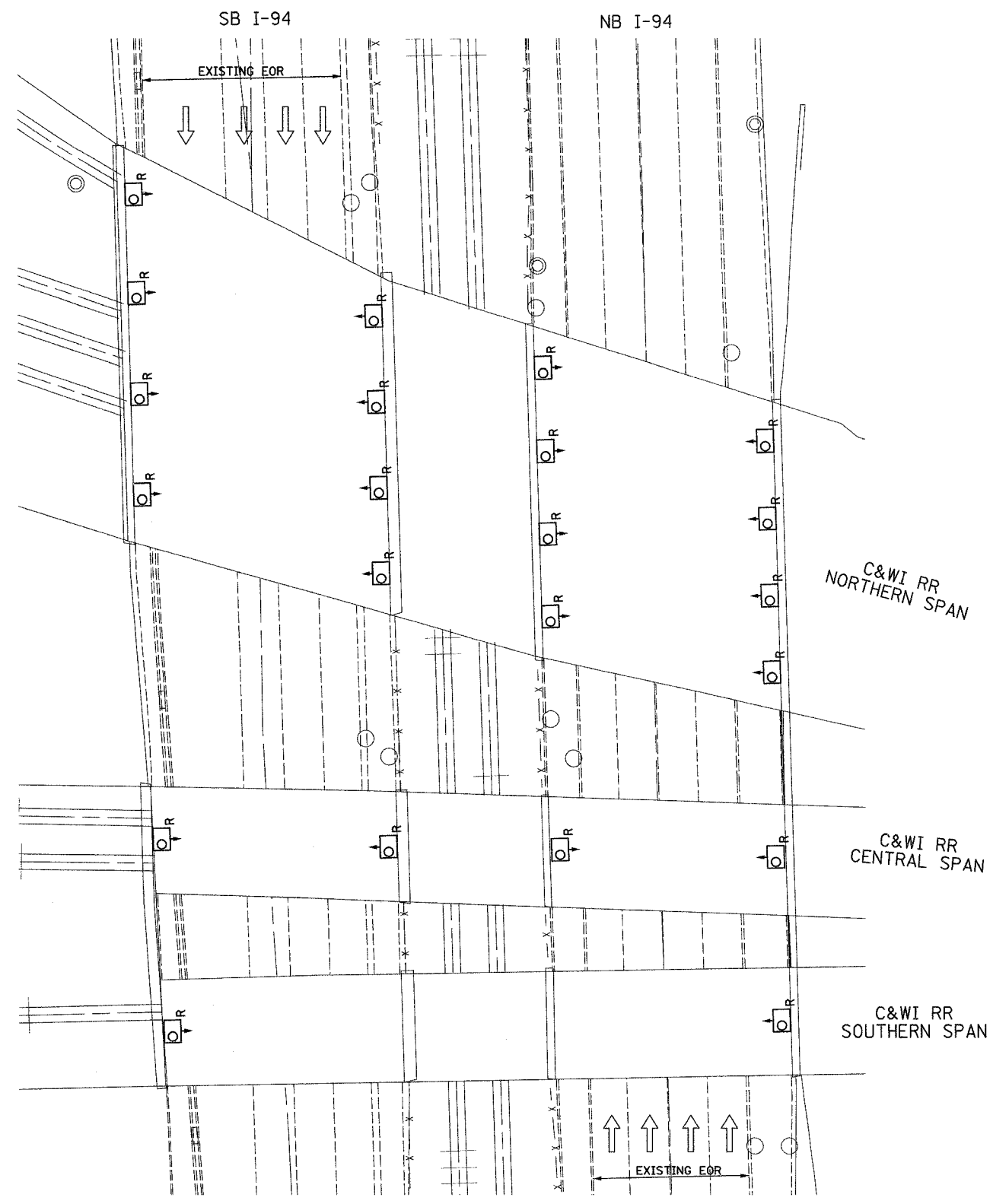
UL-12

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'		DRAWN BY: VG
DATE: OCTOBER 29, 2004		CHECKED BY: TM

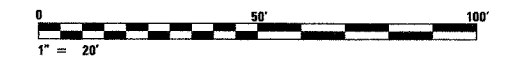
**SINGH** 300 W. ADAMS ST.  
CHICAGO, IL 60606  
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
CONSULTING ENGINEERS FAX: (312) 629-6449

10/14/2004 3:49:08 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	369
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

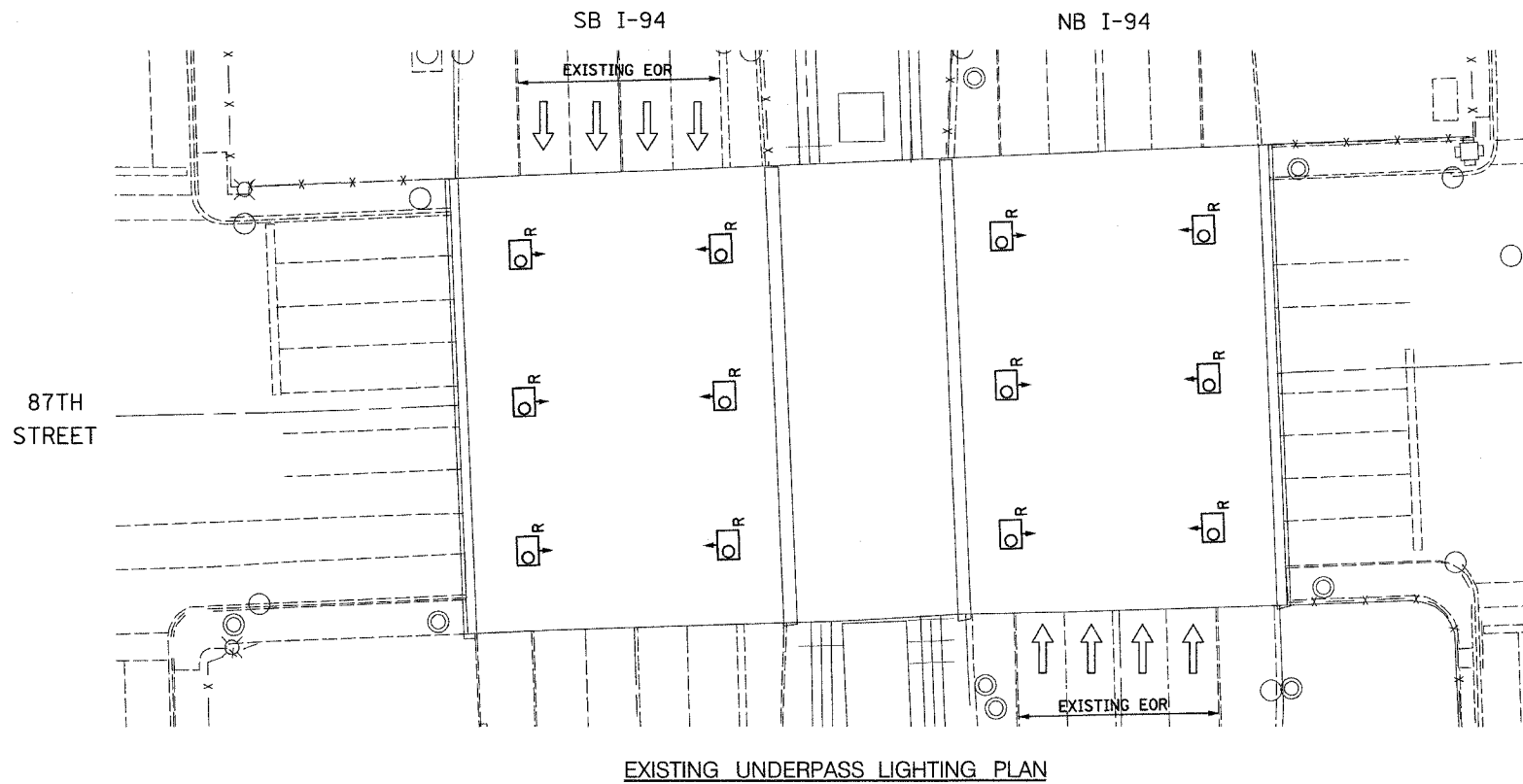
**SINGH** 300 W. ADAMS ST.  
CHICAGO, IL 60606  
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
CONSULTING ENGINEERS FAX: (312) 629-8449

EXISTING UNDERPASS LIGHTING PLAN

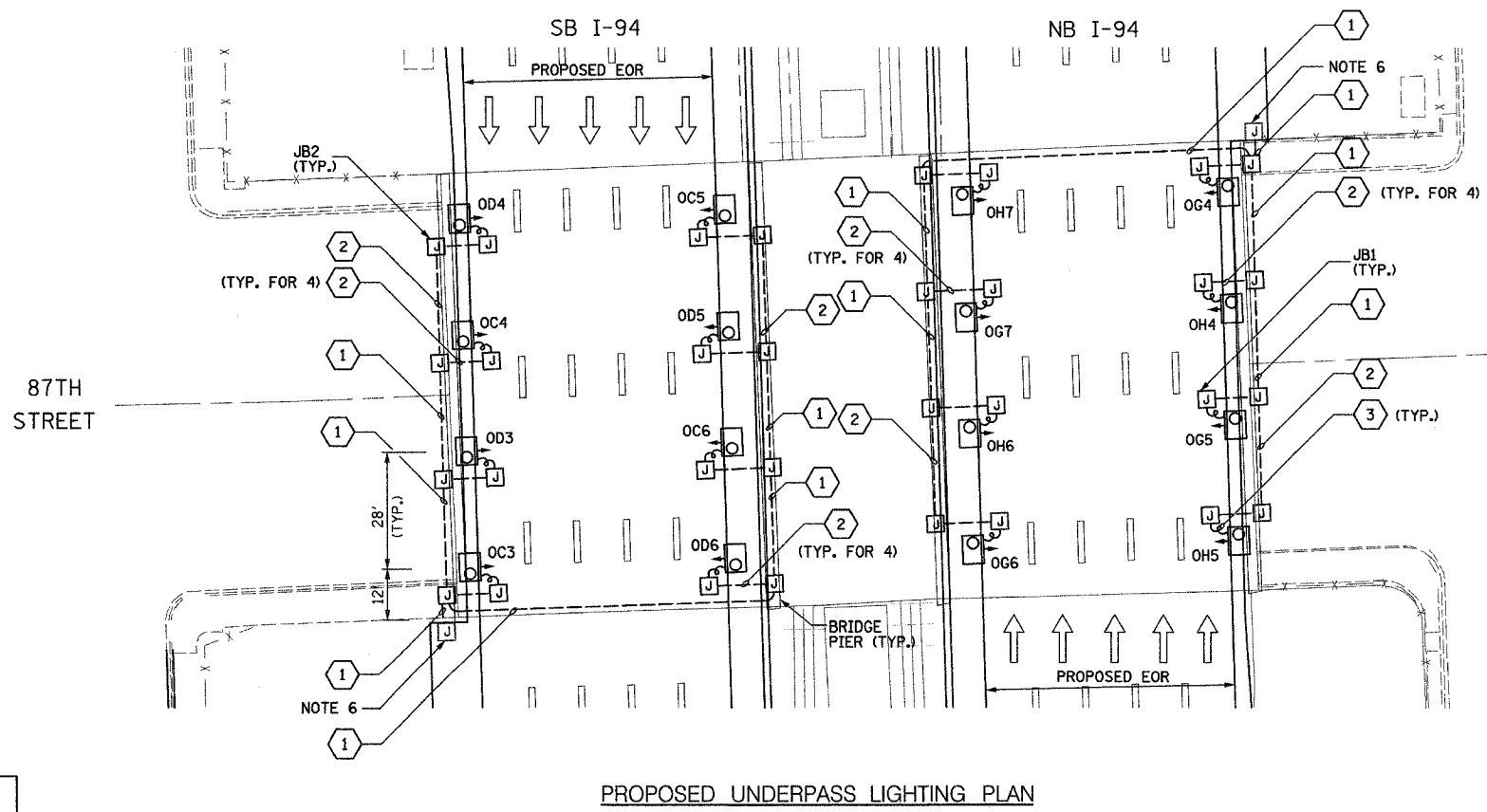
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS C&WI RR OVER FAI-90/94 EXISTING CONDITIONS AND DEMOLITION
SCALE: 1"=20'		DRAWN BY: VG
DATE: OCTOBER 29, 2004		CHECKED BY: TM

10/15/2004 9:54:01 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.
  - 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 RLO6-14 AND RLO7-14 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	
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



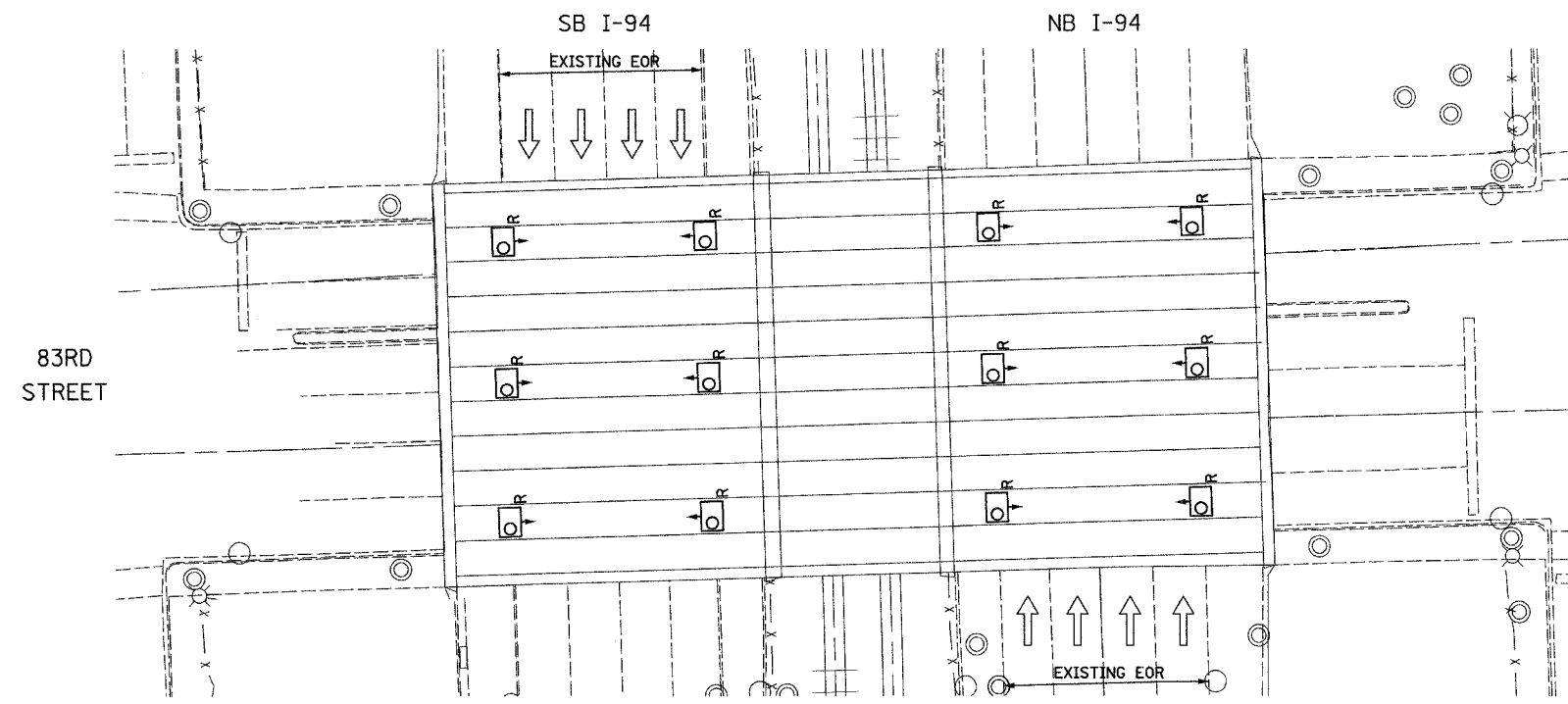
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 87TH STREET  SCALE: 1"=20' DATE: OCTOBER 29, 2004 DRAWN BY: VG CHECKED BY: TM

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

10/14/2004 3:45:15 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	371
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

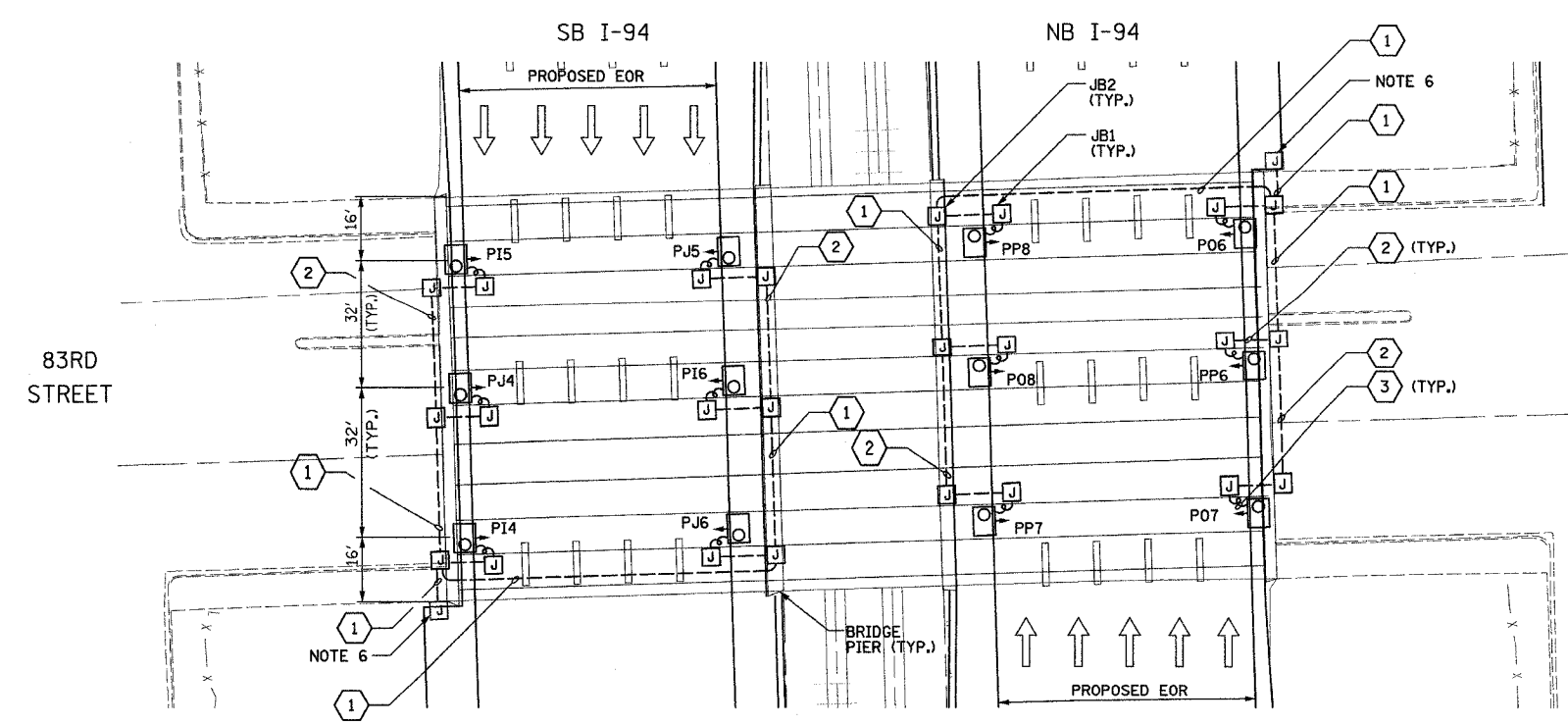
62583



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.
- 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 RLO6-16 AND RLO7-16 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.



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.	SIZE	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)	

SEQUENCE OF WORK:

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



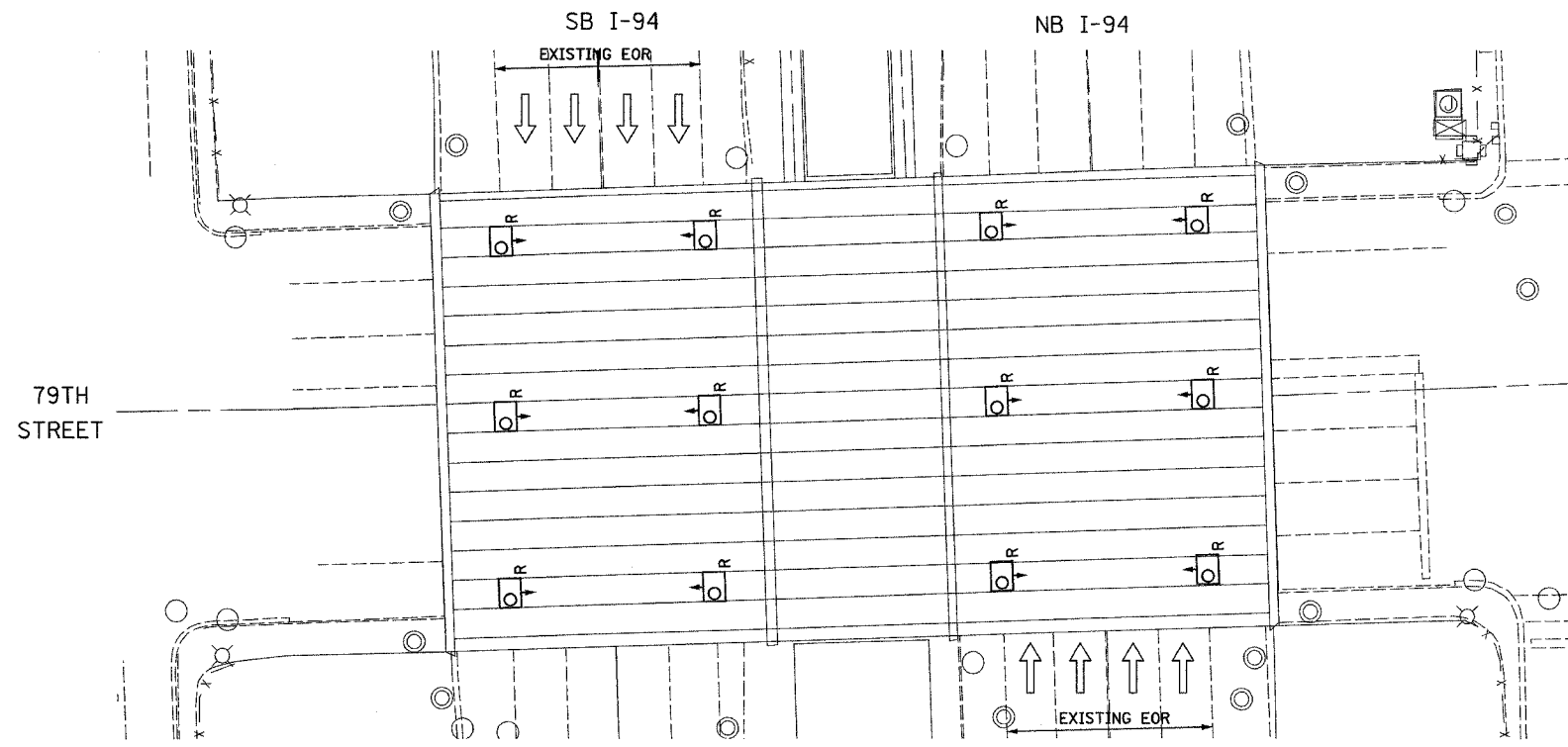
UL-16

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 83RD 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

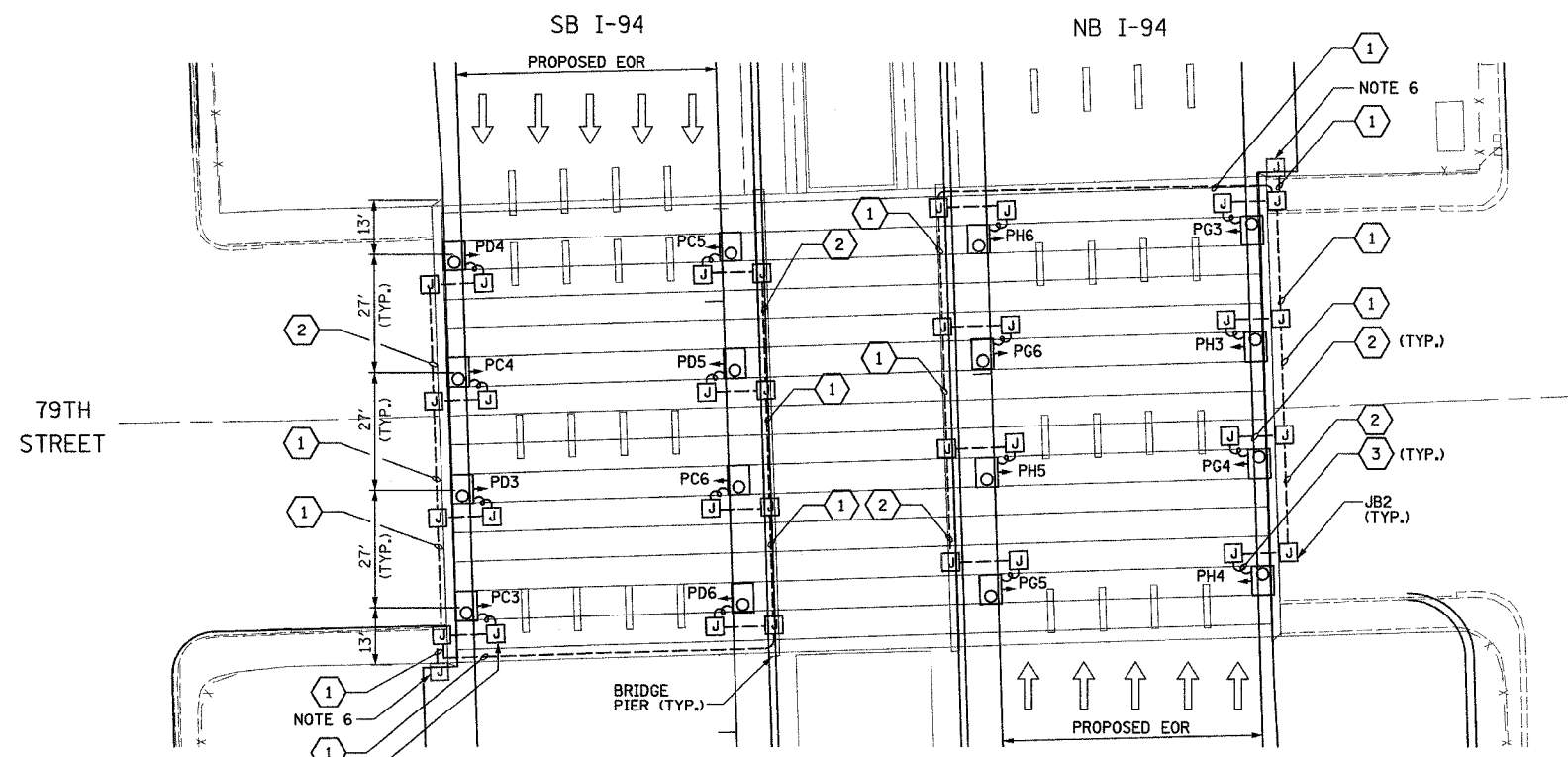
10/18/2004 3:49:19 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-03II	COOK	976	372
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.
  - 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.



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	
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

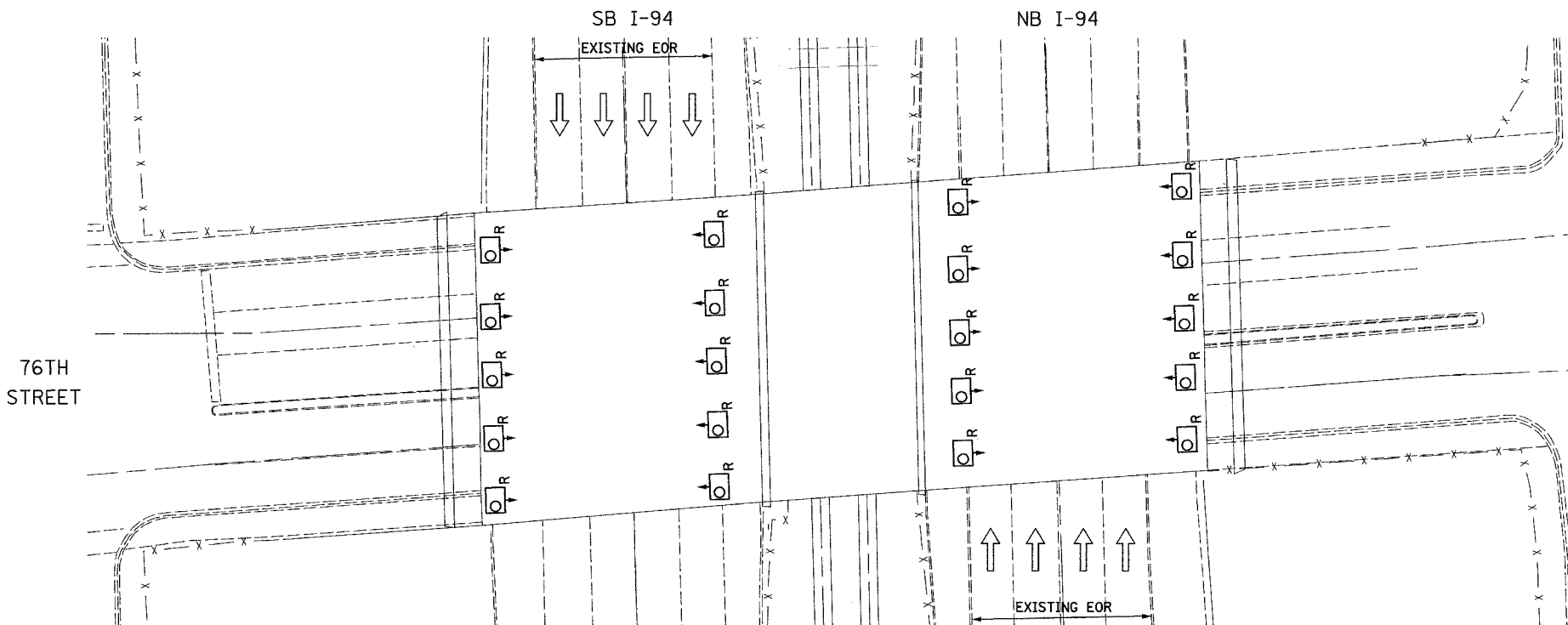
**SINGH** 300 W. ADAMS ST.  
 CHICAGO, IL 60606  
 SINGH & ASSOCIATES, INC. TEL: (312) 629-0240  
 CONSULTING ENGINEERS FAX: (312) 629-8449

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 79TH STREET  SCALE: 1"=20' DATE: OCTOBER 29, 2004 DRAWN BY: VG CHECKED BY: TM

10/14/2004 3:49:21 PM

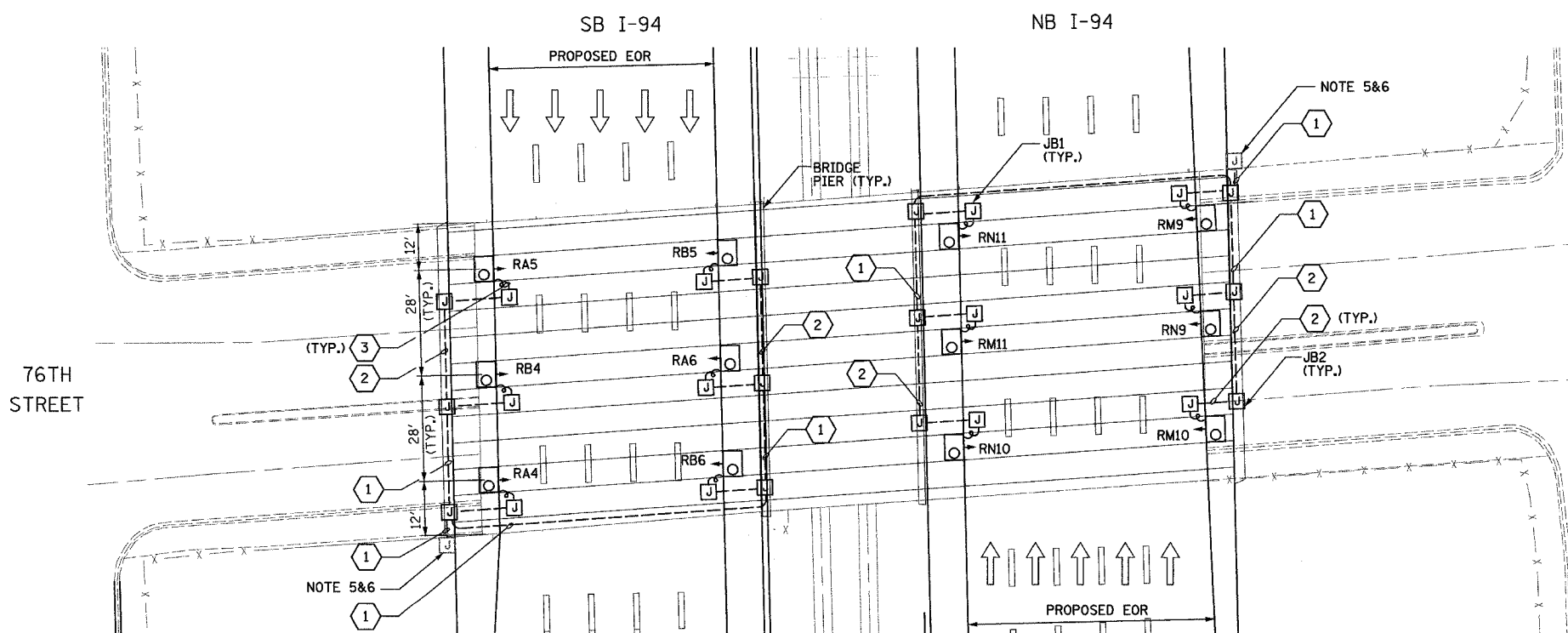


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	373
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	62583			



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 RL06-20 AND RL07-20 FOR CONTINUATION OF UNDERPASS LIGHTING CIRCUIT FEEDS.
- 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 RL06-19 AND RL07-19 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".
- 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.

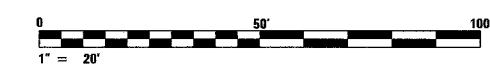


JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"X6"X4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"X10"X6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

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-18

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	F.A.I. 90/94 (DAN RYAN EXPRESSWAY)	
		31st STREET TO I-57	
		UNDERPASS LIGHTING PLANS	
		76TH STREET	
		SCALE: 1"=20'	DRAWN BY: VG
REVISED	01/21/05	DATE: OCTOBER 29, 2004	CHECKED BY: TM

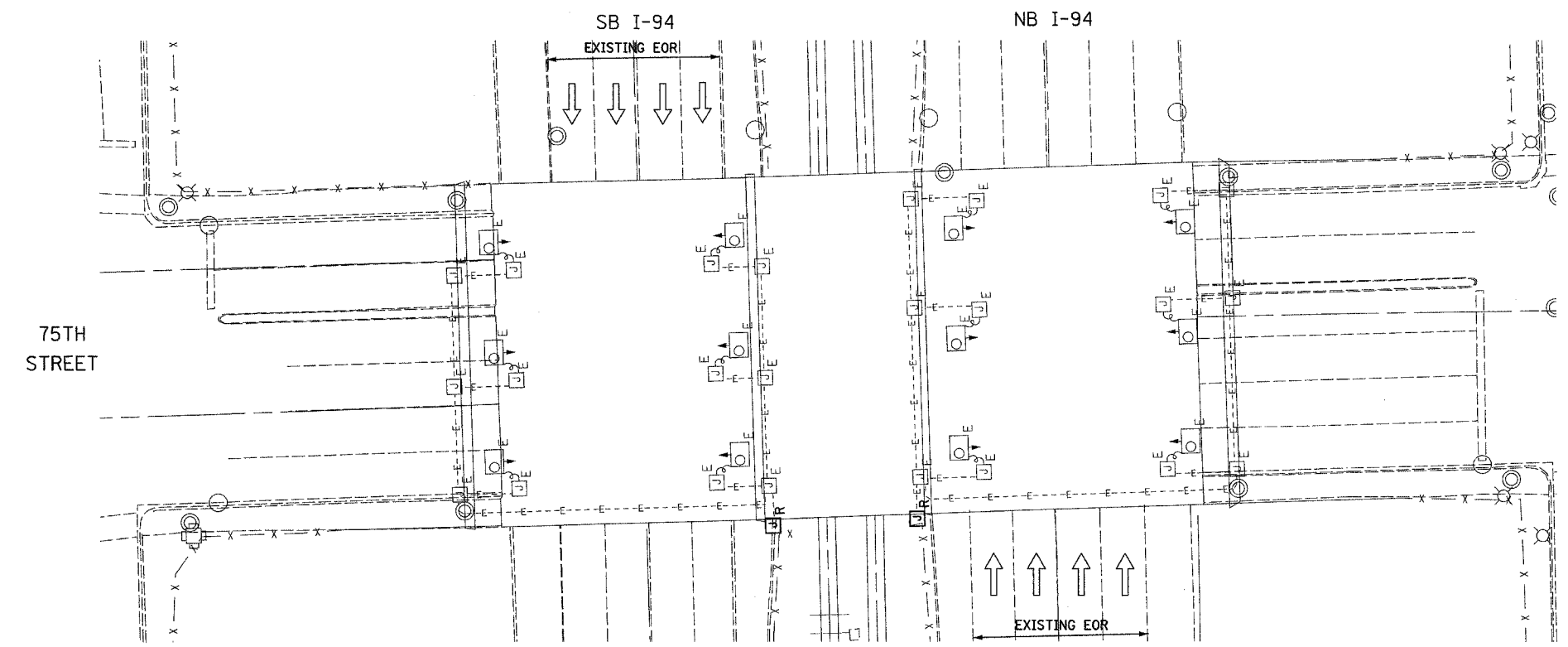
**SINGH**  
SINGH & ASSOCIATES, INC.  
CONSULTING ENGINEERS

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

1/25/2005 12:25:17 PM

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

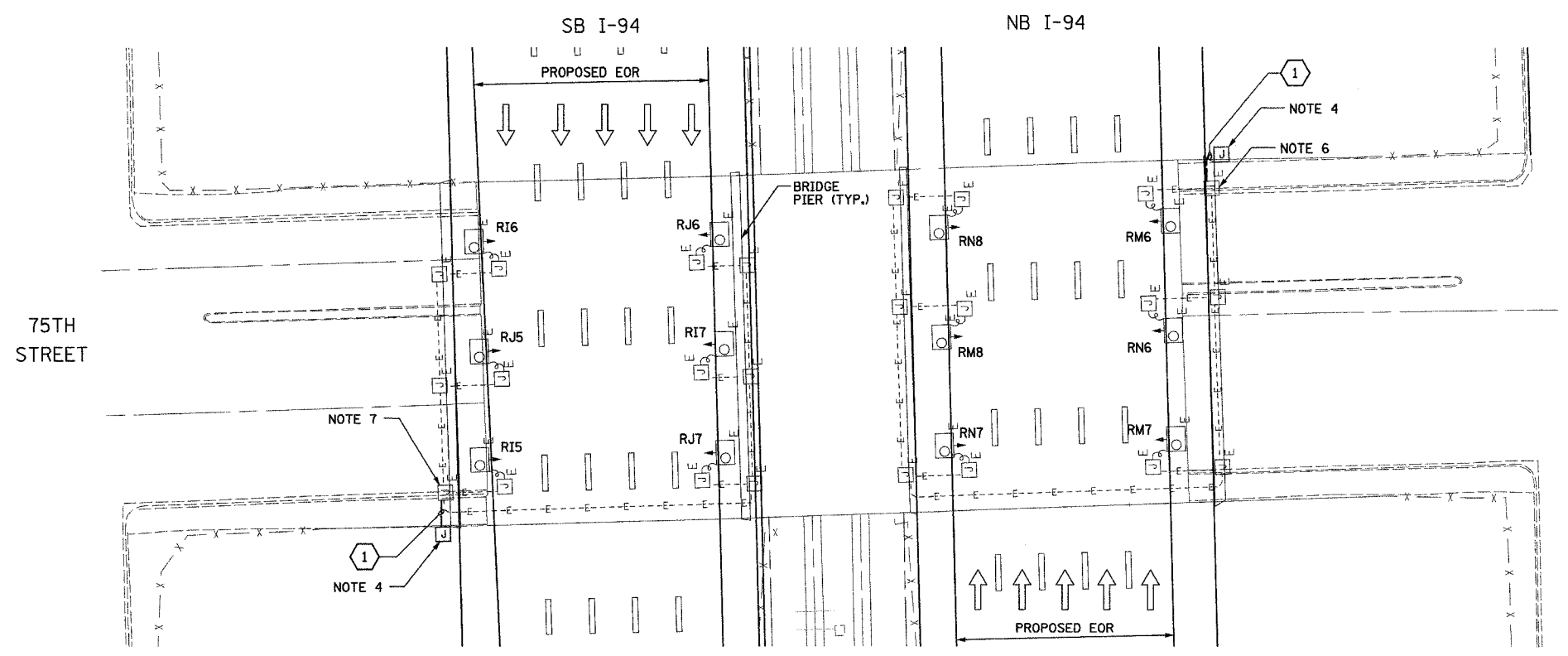
62583



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 RLO6-20 AND RLO7-20 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.



PROPOSED UNDERPASS LIGHTING PLAN

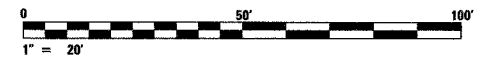
JUNCTION BOX SCHEDULE		
NO.	SIZE	DESCRIPTION
JB1	6"x6"x4"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING
JB2	12"x10"x6"	STAINLESS STEEL, ATTACHED TO STRUCTURE, UNDERPASS LIGHTING

CABLE /CONDUIT SCHEDULE	
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

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

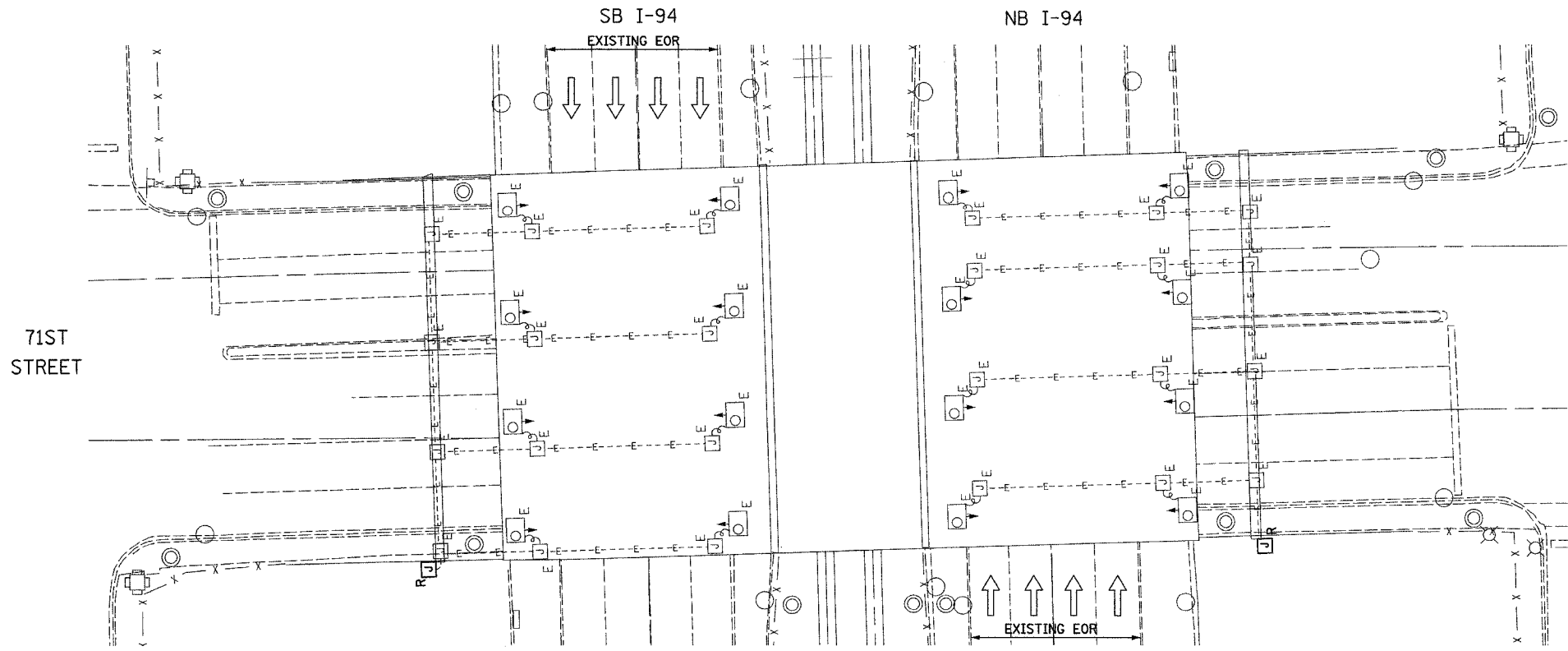
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 75TH STREET

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

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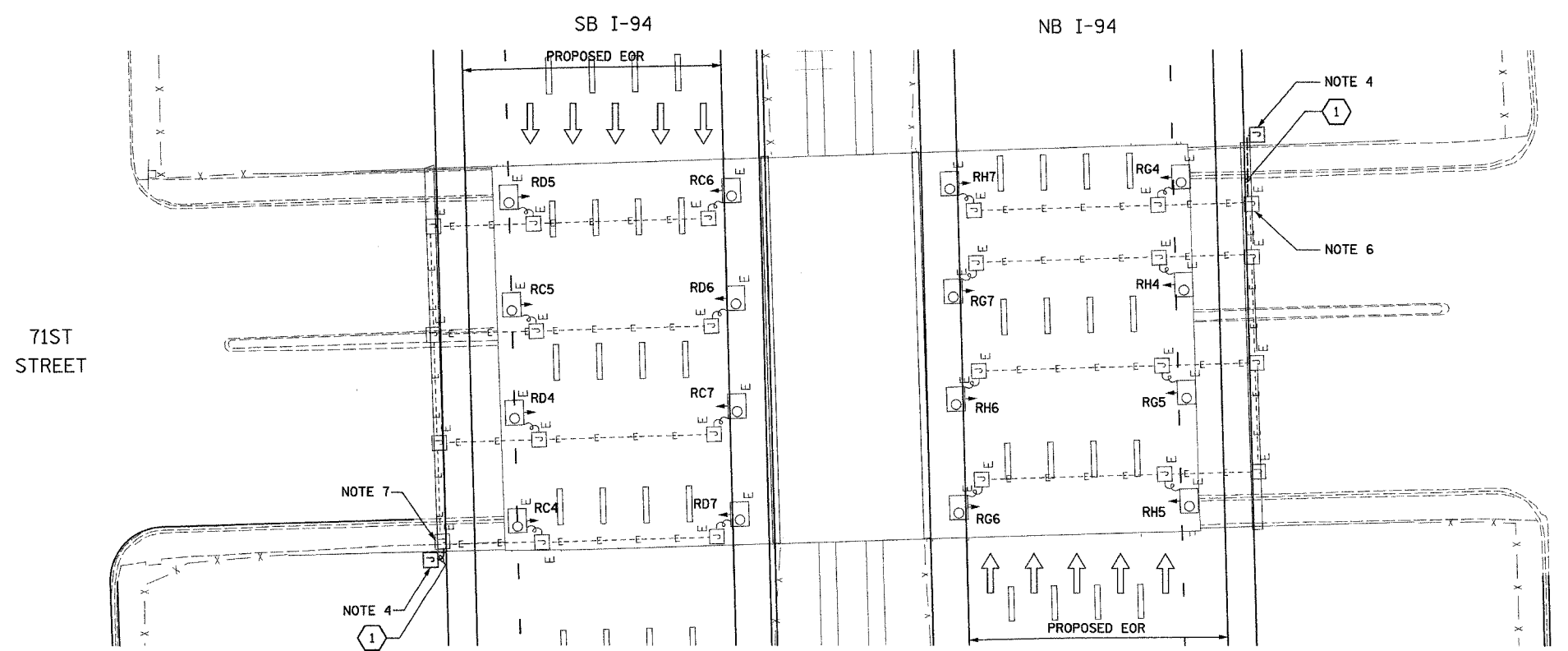
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-03II	COOK	976	375
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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 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.



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	
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		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57
NAME	DATE	
		UNDERPASS LIGHTING PLANS 71ST STREET  SCALE: 1"=20' DATE: OCTOBER 29, 2004

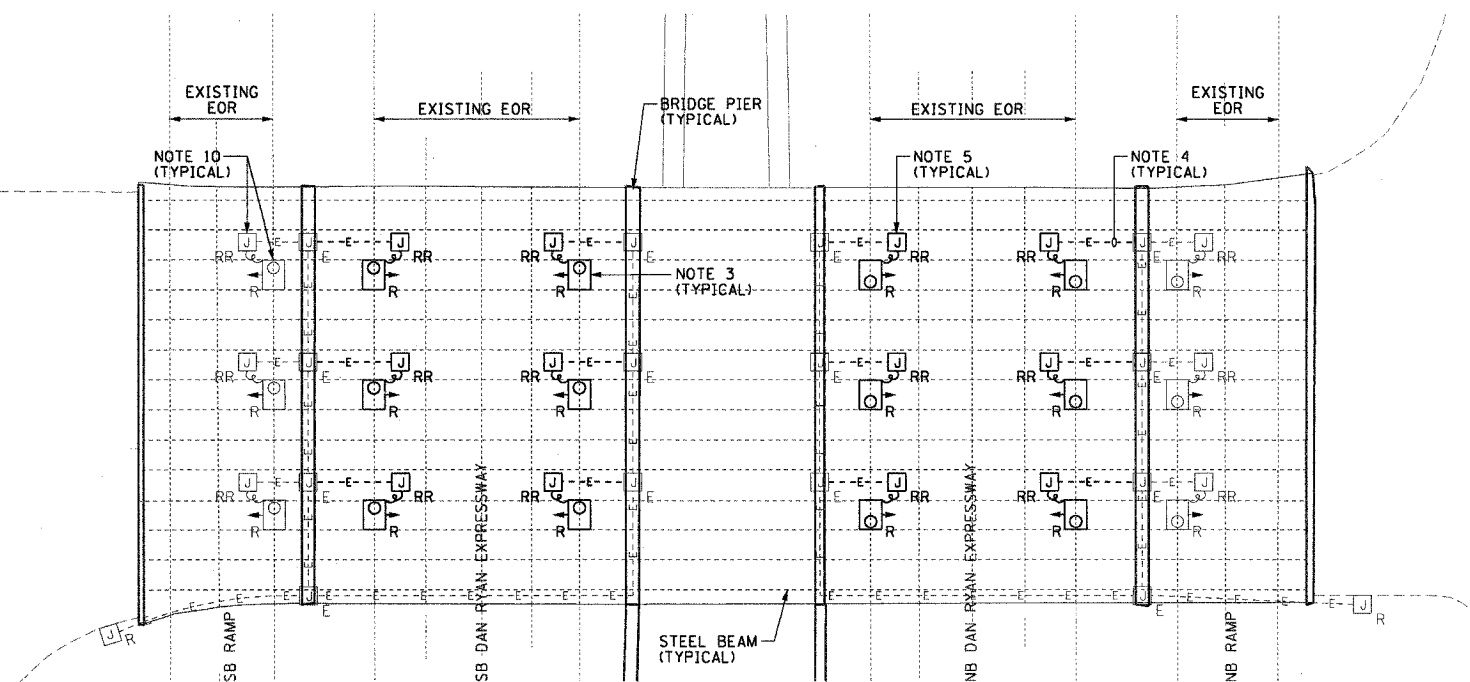
DRAWN BY: VG  
 CHECKED BY: TM

**SINGH** 300 W. ADAMS ST.  
 CHICAGO, IL 60606  
 TEL: (312) 629-0240  
 SINGH & ASSOCIATES, INC. 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	326
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

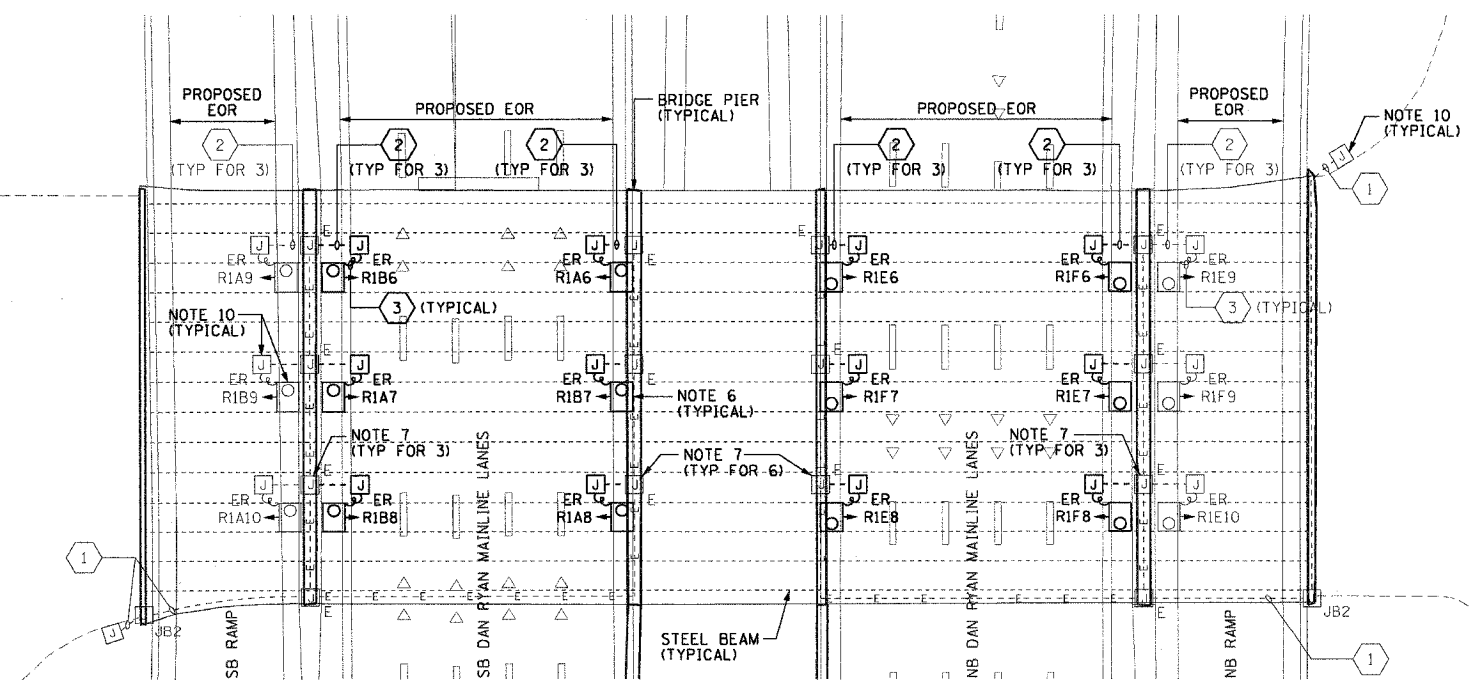
62583



**EXISTING UNDERPASS LIGHTING PLAN**  
(SEE NOTES 2 AND 9)

**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 "RI". SEE DRAWING SLO8-06 FOR SINGLE LINE DIAGRAM OF LIGHTING CONTROLLER "RI".
- 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.



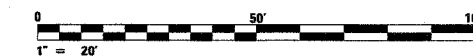
**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 8)

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

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



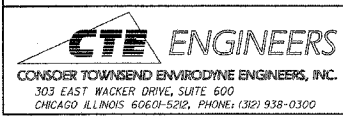
UL-20

REVISIONS	
NAME	DATE

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

**UNDERPASS LIGHTING PLANS**  
**69TH STREET**

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



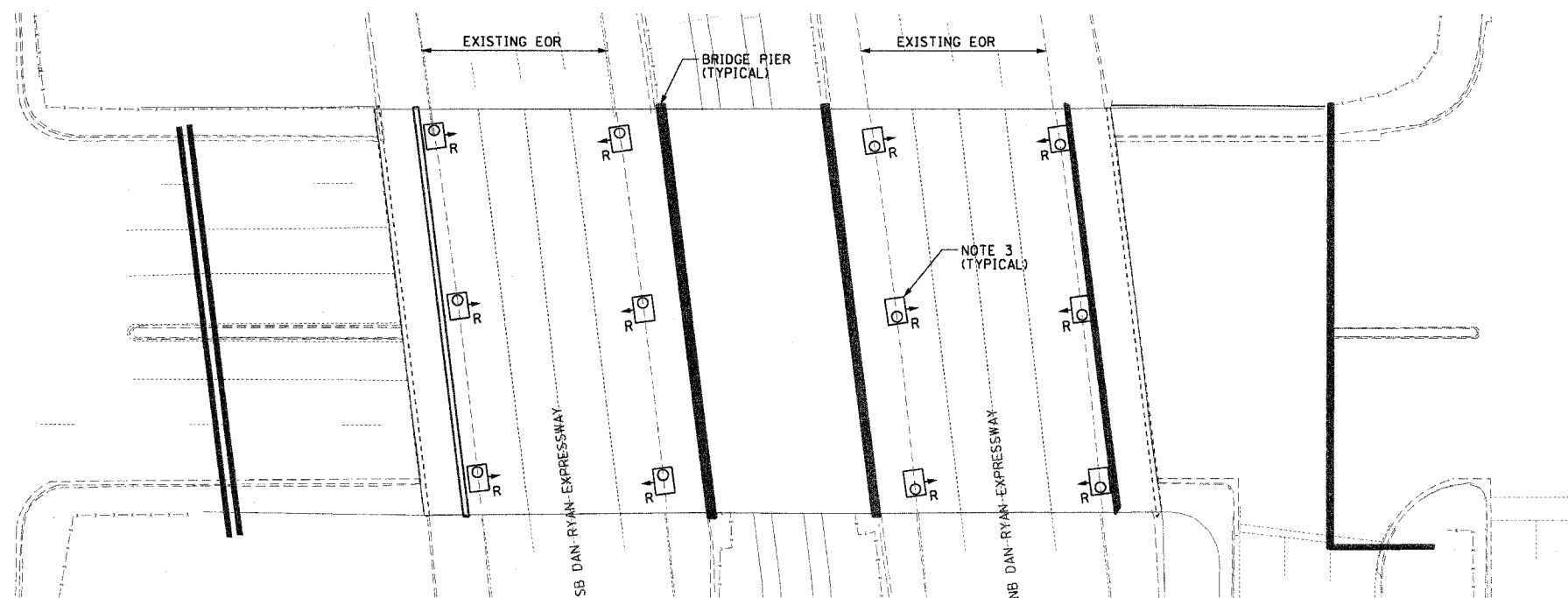
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	377
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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.



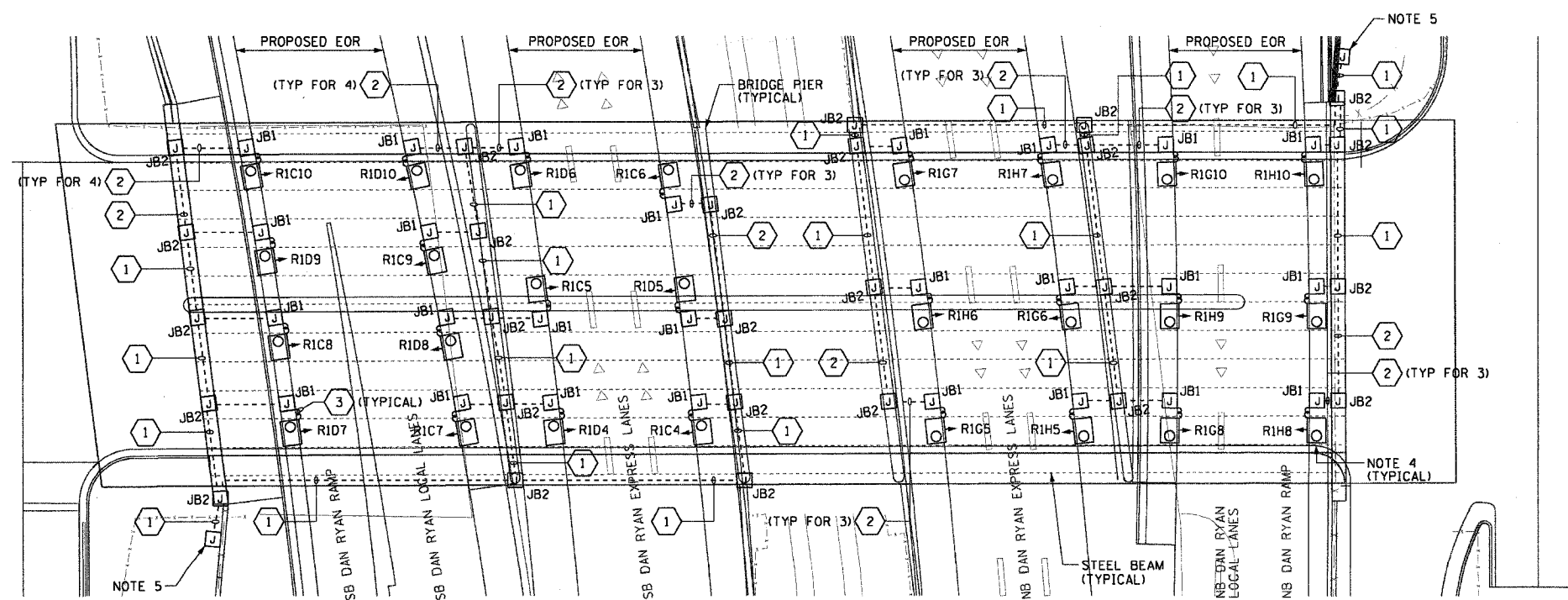
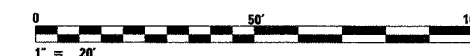
**EXISTING UNDERPASS LIGHTING PLAN**  
(SEE NOTE 2)

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/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):**

- 2004: 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



**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 6)

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO I-57  UNDERPASS LIGHTING PLANS 67TH STREET
NAME	DATE	
		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	379
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.
- 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-26 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 62589, 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 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 6):**

- 2004: INSTALL PRIMARY POWER FEEDS AS SHOWN ON RL-26 (NOTE 5)
- INSTALL UNDERPASS LIGHTING BENEATH THE NORTH HALF OF THE SB DAN RYAN TO EB SKYWAY BRIDGE DECK
- INSTALL UNDERPASS LIGHTING BENEATH THE WB SKYWAY TO NB DAN RYAN BRIDGE DECK
- 2005: INSTALL UNDERPASS LIGHTING BENEATH THE SOUTH HALF OF THE SB DAN RYAN TO EB SKYWAY BRIDGE DECK



UL-22

REVISIONS	
NAME	DATE

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

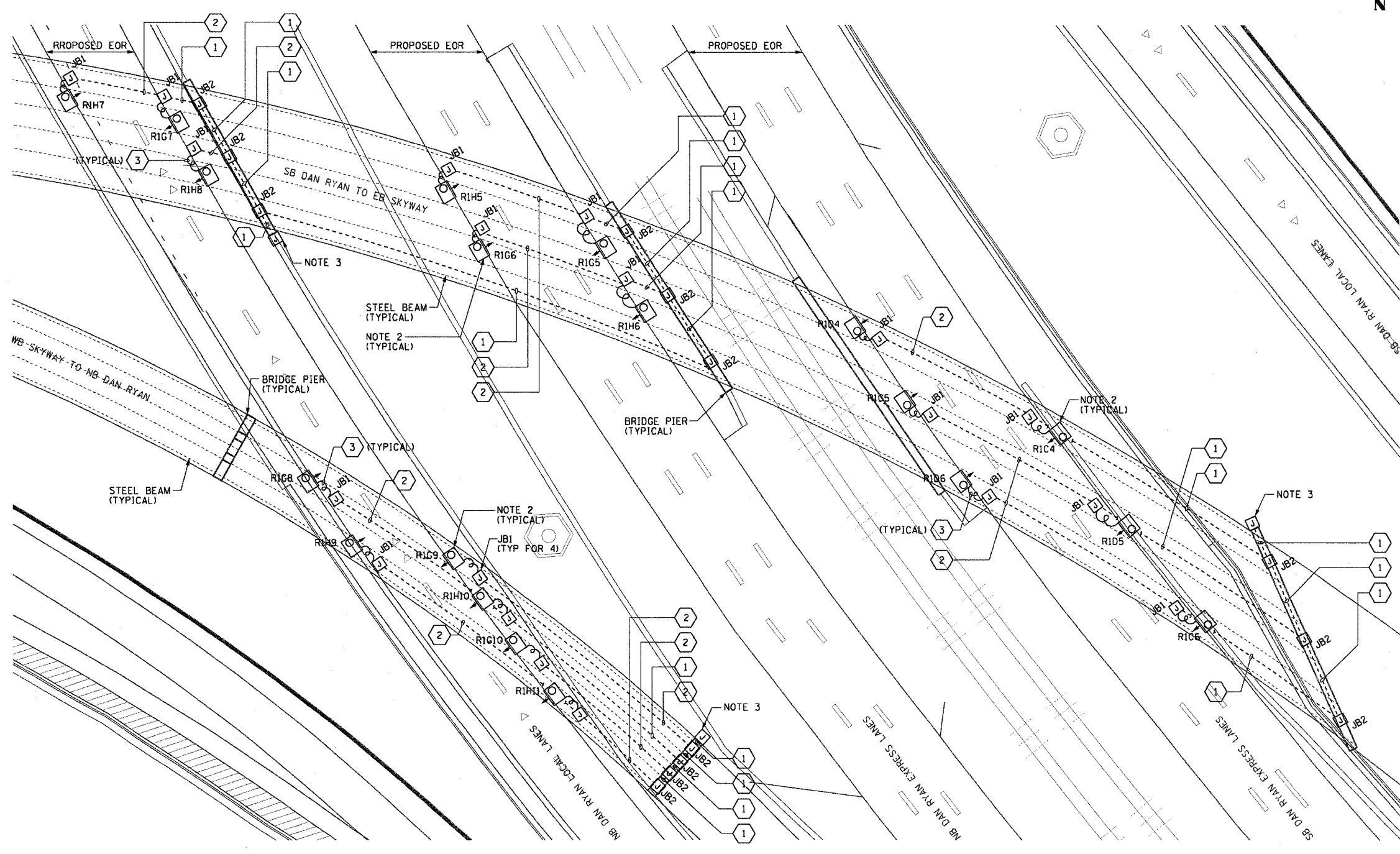
UNDERPASS LIGHTING PLANS  
SKYWAY BRIDGES

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.

**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 4)



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

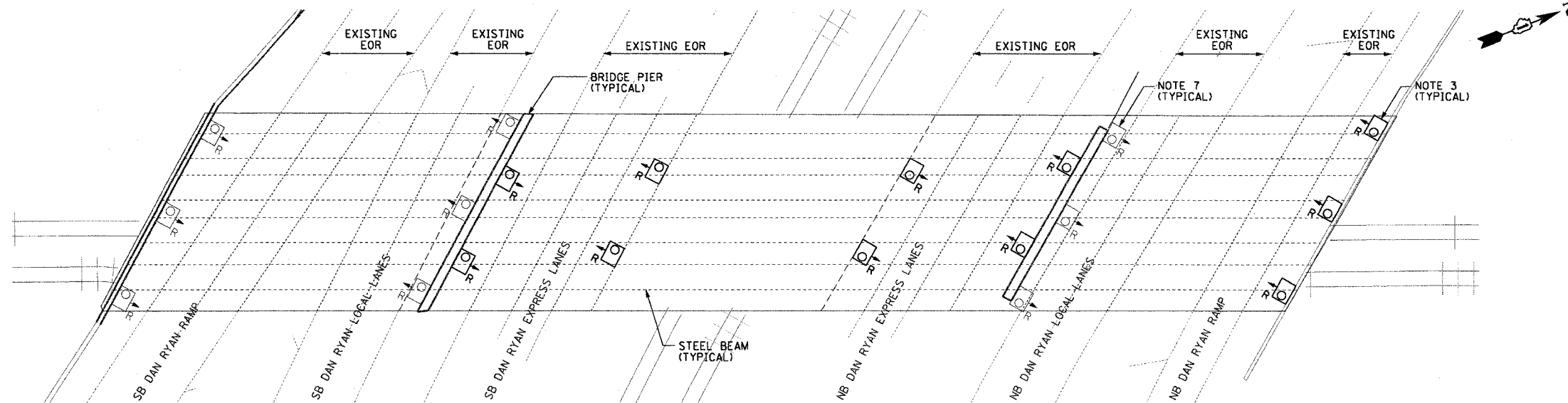
10/15/2004 02:36:29 PM

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		

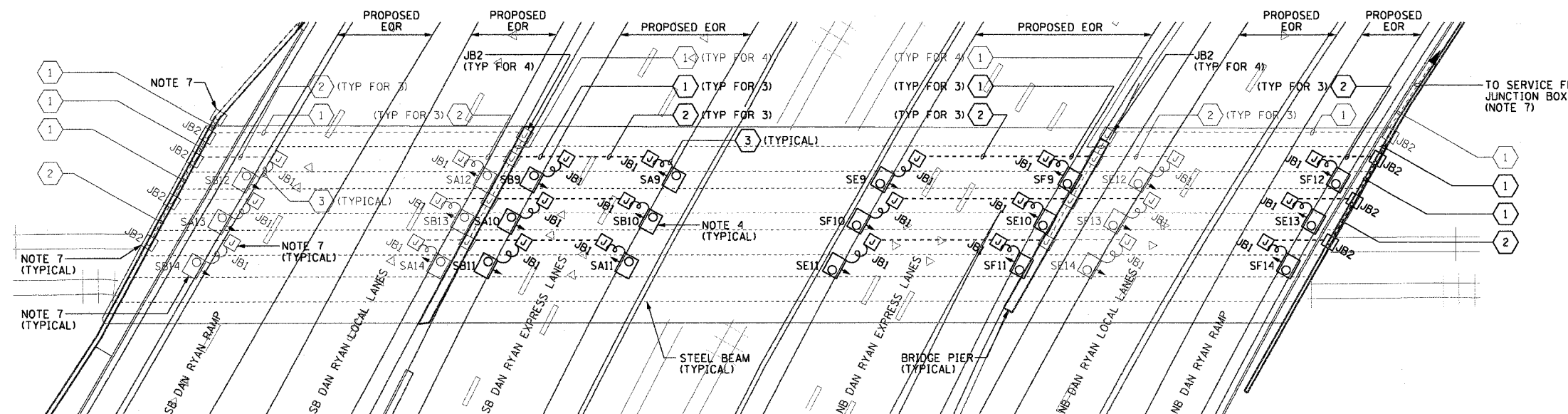
62583

**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	
NAME	DATE

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

UNDERPASS LIGHTING PLANS  
C.R.I. AND P. R.R.

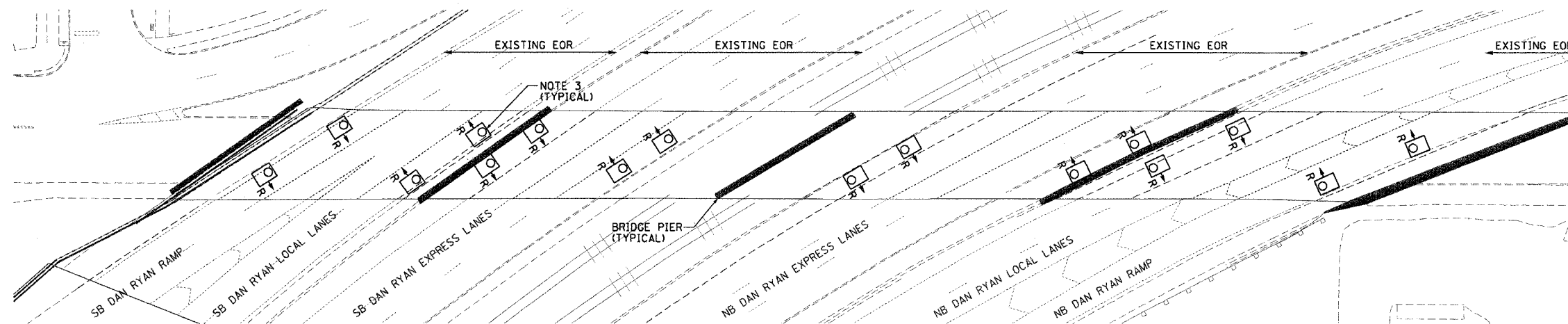
SCALE: 1"=20' DRAWN BY: HAR  
DATE: October 29, 2004 CHECKED BY: WDS

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				

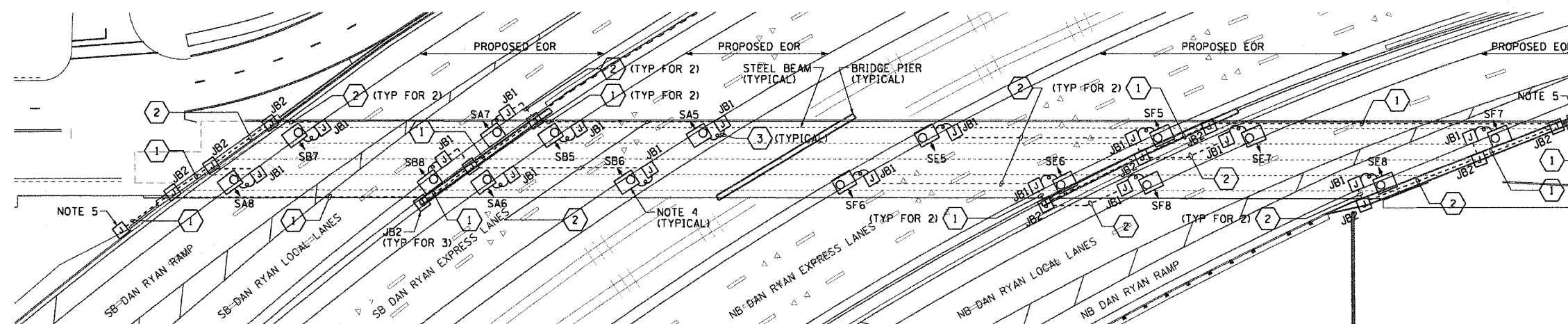
62583

**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 OFF SET 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)



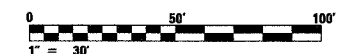
**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 6)

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 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



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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' DRAWN BY: HAR  
DATE: October 29, 2004 CHECKED BY: WDS

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

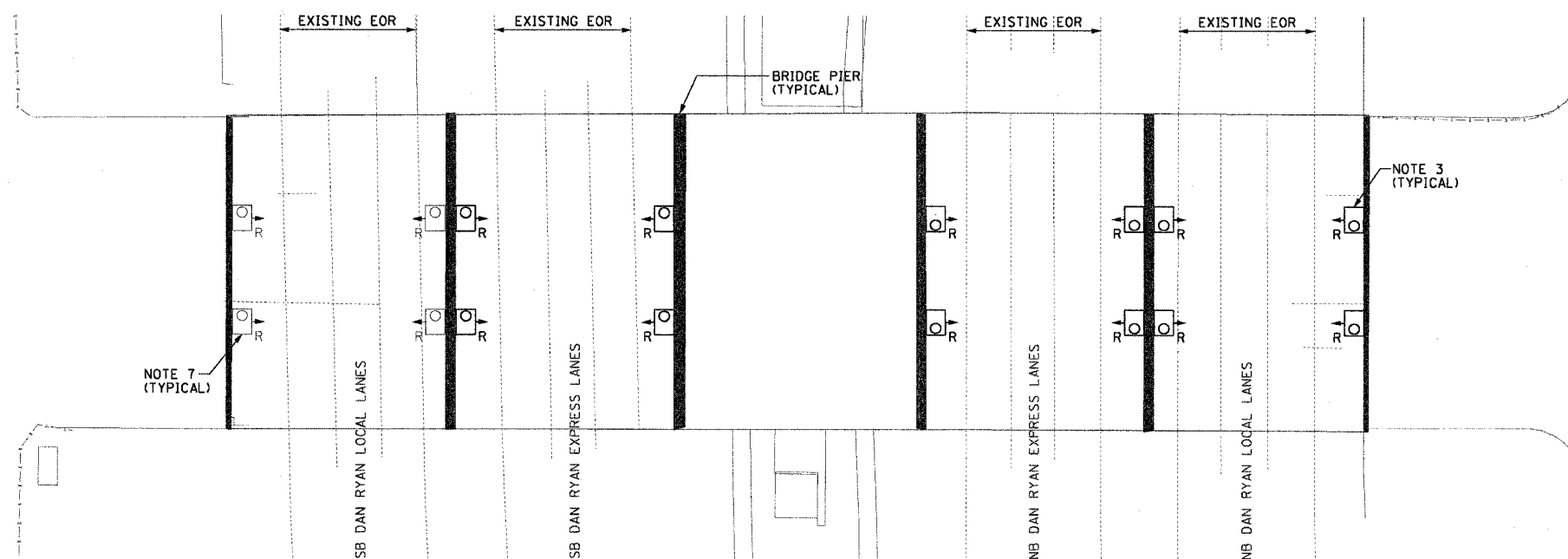


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	381
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

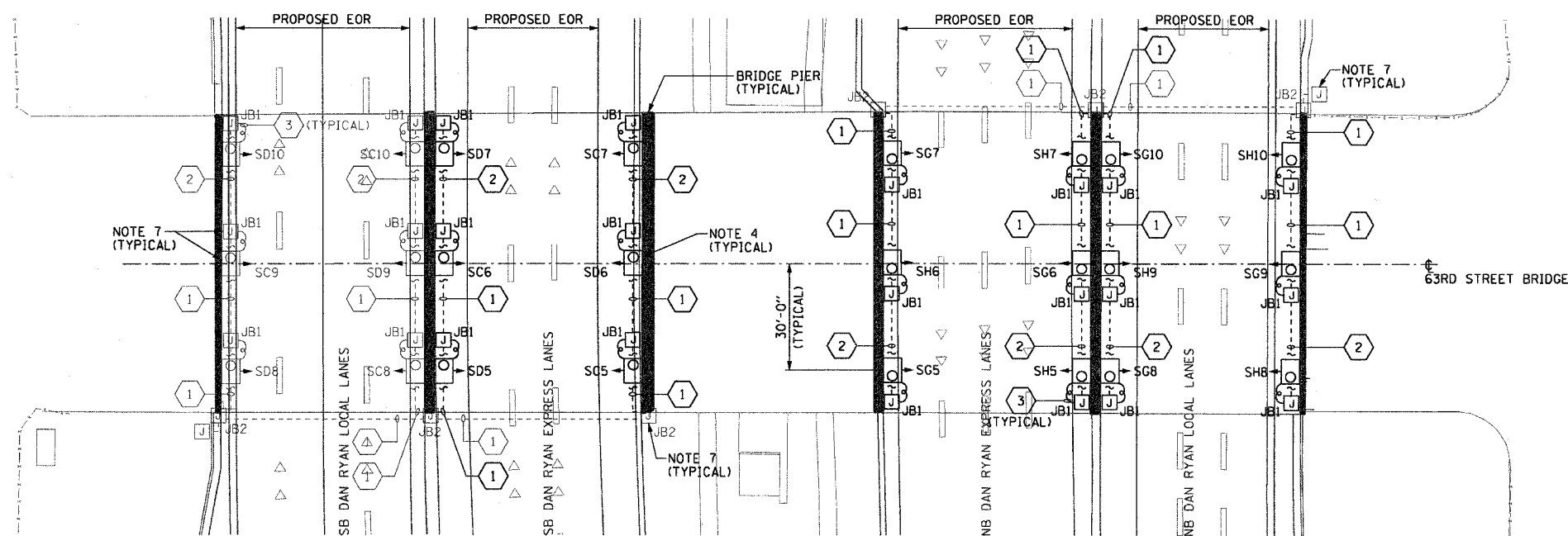
62583

**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.
- 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.



**EXISTING UNDERPASS LIGHTING PLAN**  
(SEE NOTES 2 AND 6)



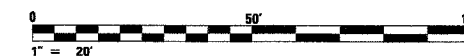
**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 5)

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
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' DRAWN BY: HAR  
DATE: October 29, 2004 CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-031I	COOK	976	382
STA. -	TO STA. -			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62583

**NOTES:**

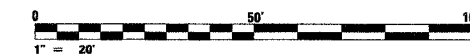
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES MUST INCLUDE THE REMOVAL OF ALL CABLES, CONDUIT, 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 SL08-07 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

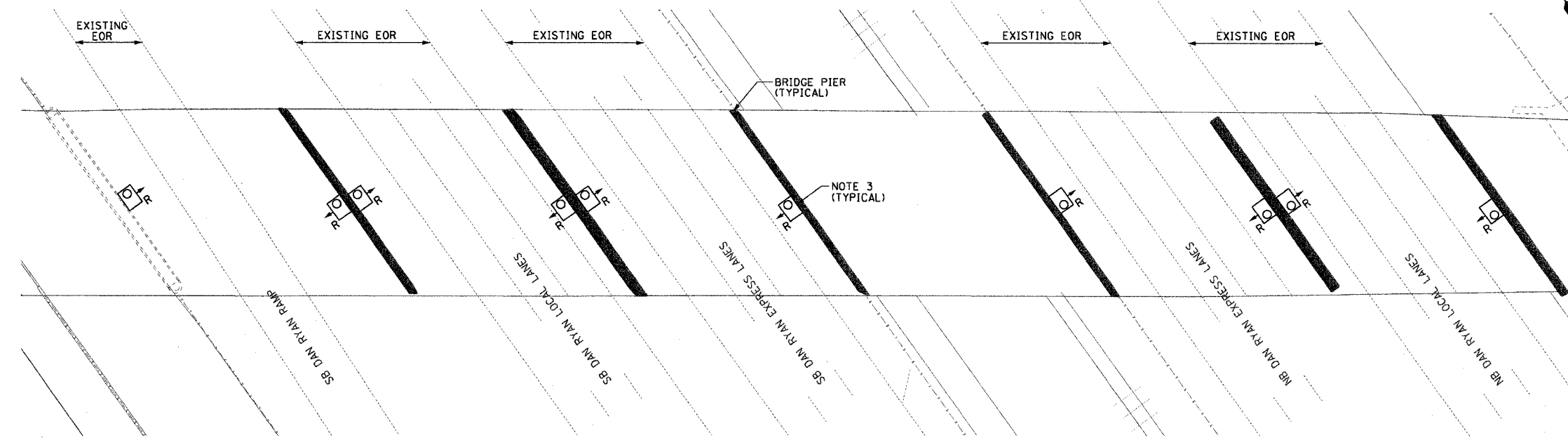
CABLE / CONDUIT SCHEDULE		
NO.	DESCRIPTION	INDICATED ON THIS DRAWING
1	3-1/C*10, 1-1/C*10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
2	2-1/C*10, 1-1/C*10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)	
3	2-1/C*10, 1-1/C*10 GND IN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

**SEQUENCE OF WORK (NOTE 8):**

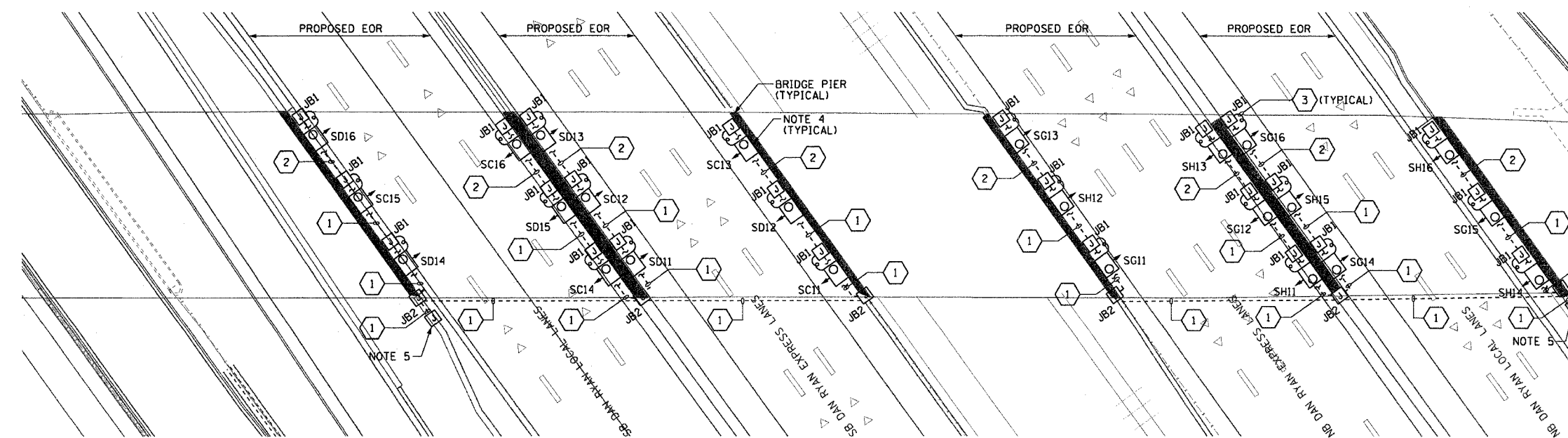
- INSTALL PRIMARY POWER FEEDS AS SHOWN ON RLO5-28 AND RLO5-29 AND CONNECT EXISTING CIRCUITS TO NEW CIRCUITS (NOTE 7)
- REPLACE UNDERPASS LIGHTING IN EXPRESS LANES
- REPLACE UNDERPASS LIGHTING IN LOCAL LANES



UL-26



**EXISTING UNDERPASS LIGHTING PLAN**  
(SEE NOTES 2 AND 7)



**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**  
P.F.T.W. & C. R.R.  
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	283
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62583

**NOTES:**

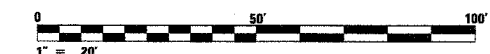
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- REMOVE AND DISPOSE OF EXISTING CABLE AND CONDUIT ATTACHED TO STRUCTURE AND PROVIDE PLUG 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

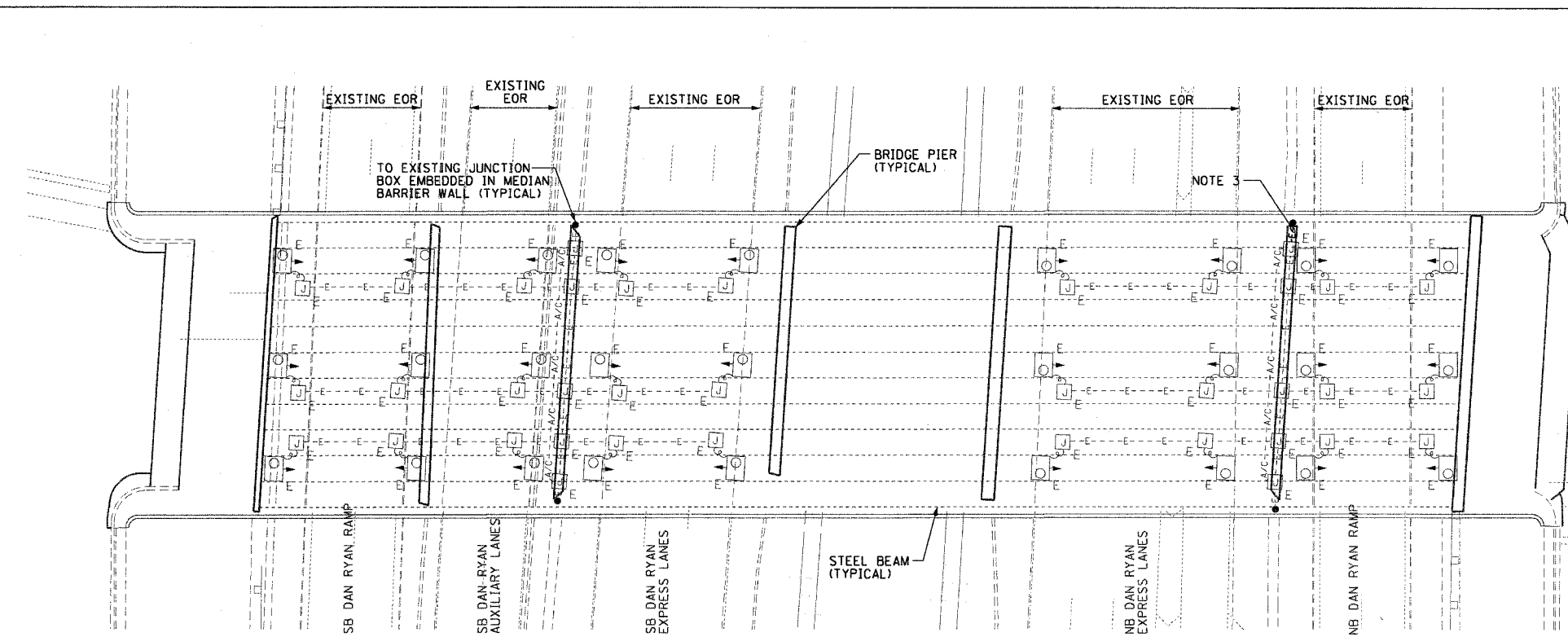
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)  
31st STREET TO I-57

UNDERPASS LIGHTING PLANS  
59TH STREET

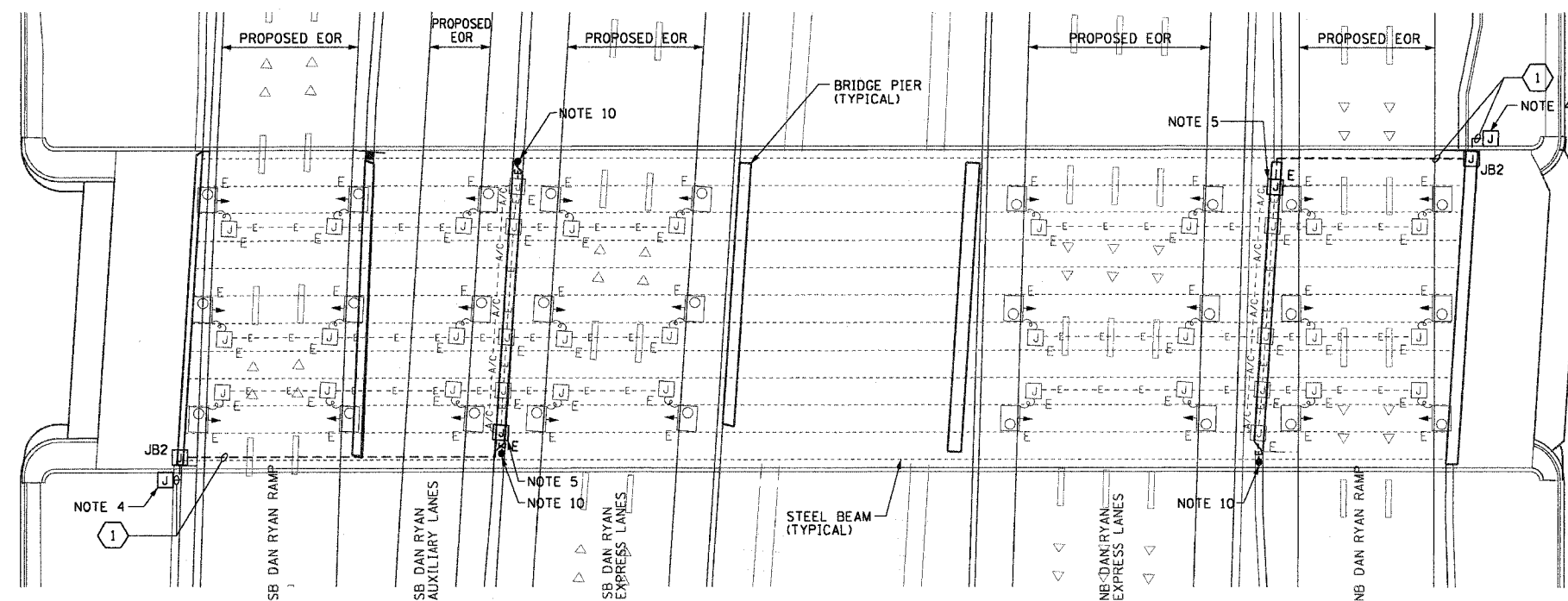
SCALE: 1"=20'  
DATE: October 29, 2004

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)



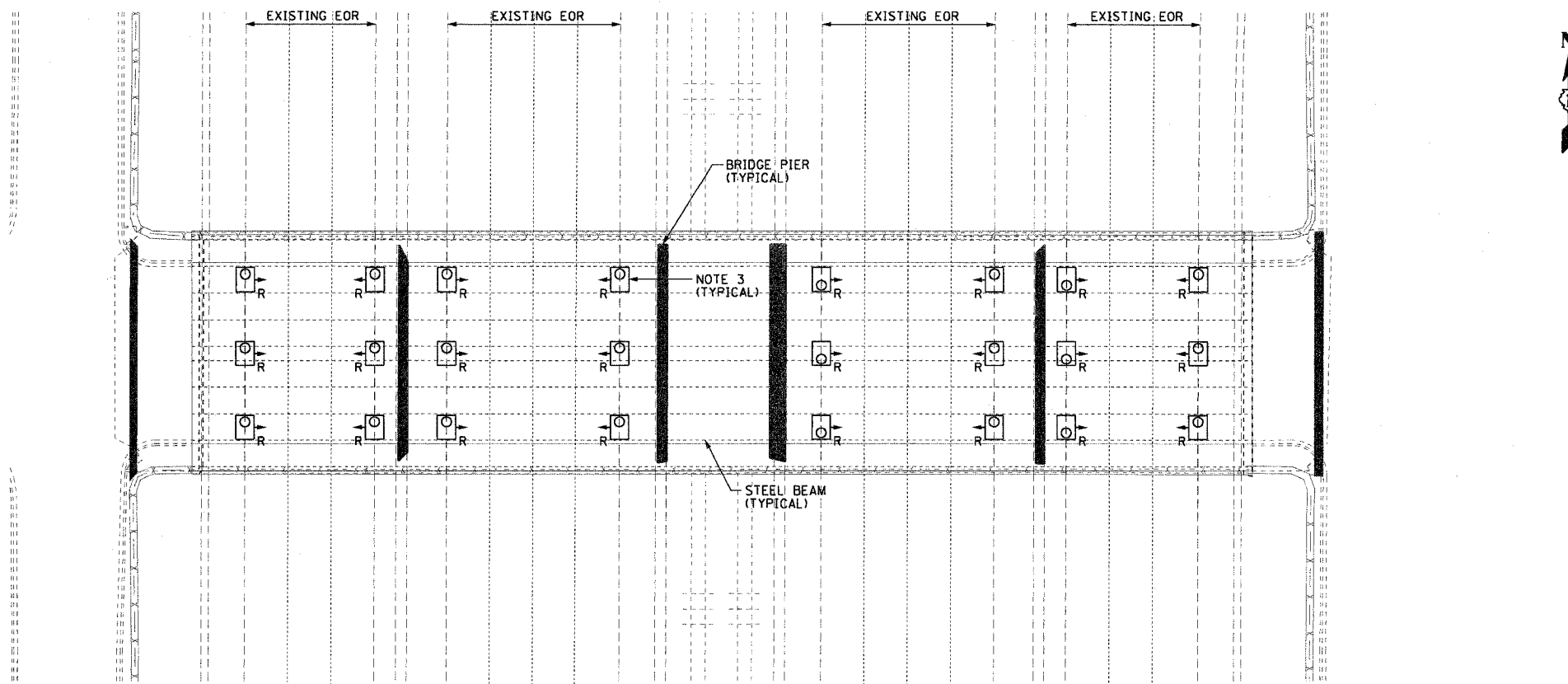
**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTES 6 & 8)

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	304
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)

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

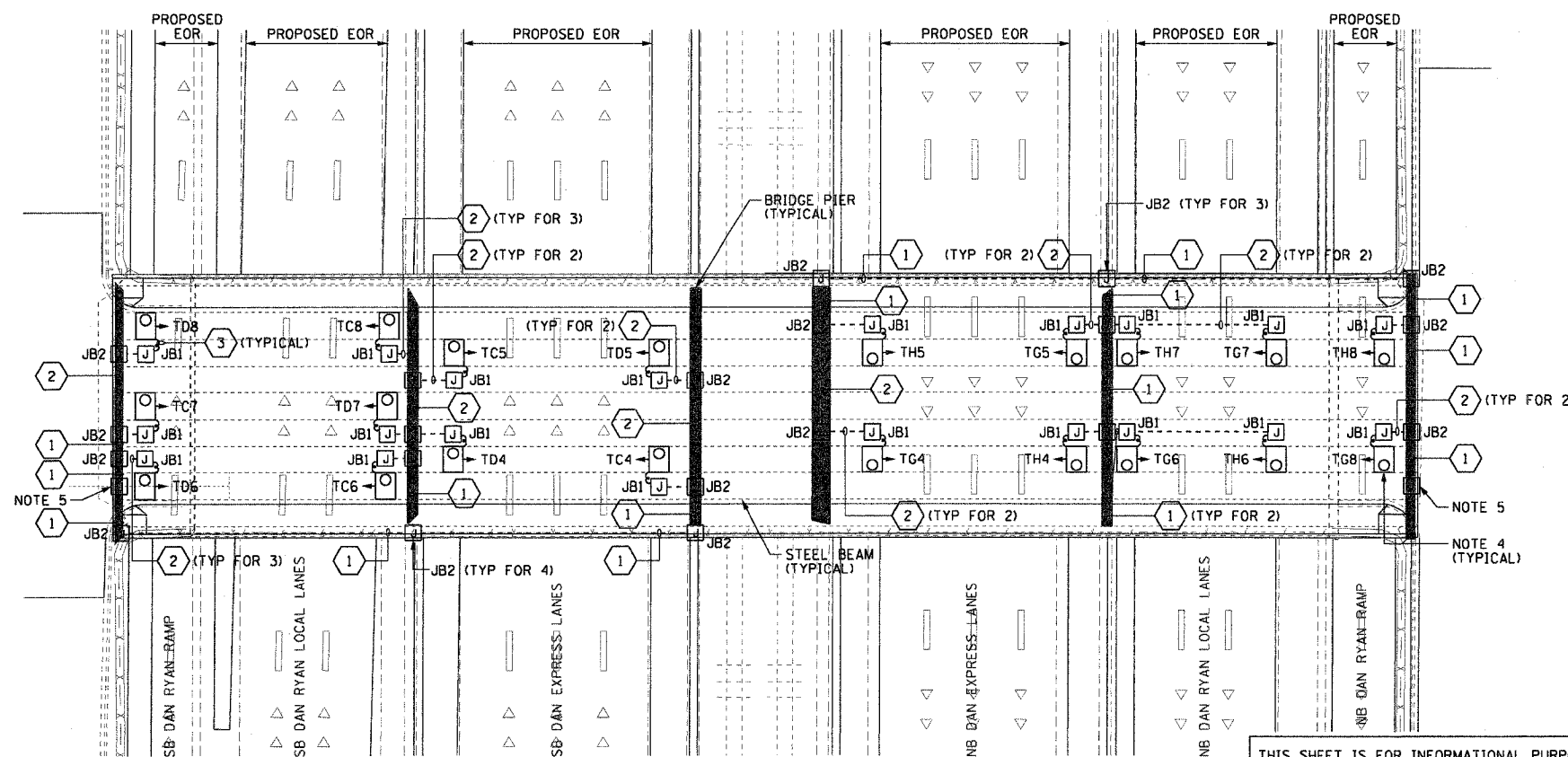
CABLE /CONDUIT SCHEDULE	
1	3-1/2"X10, 1-1/2"X10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	2-1/2"X10, 1-1/2"X10 GND IN 1" DIA PVC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
3	2-1/2"X10, 1-1/2"X10 GND IN 1" DIA LIQUID TIGHT FLEXIBLE CONDUIT (CKTS AS INDICATED ON THIS DRAWING)

**SEQUENCE OF WORK (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



**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 6)

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

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

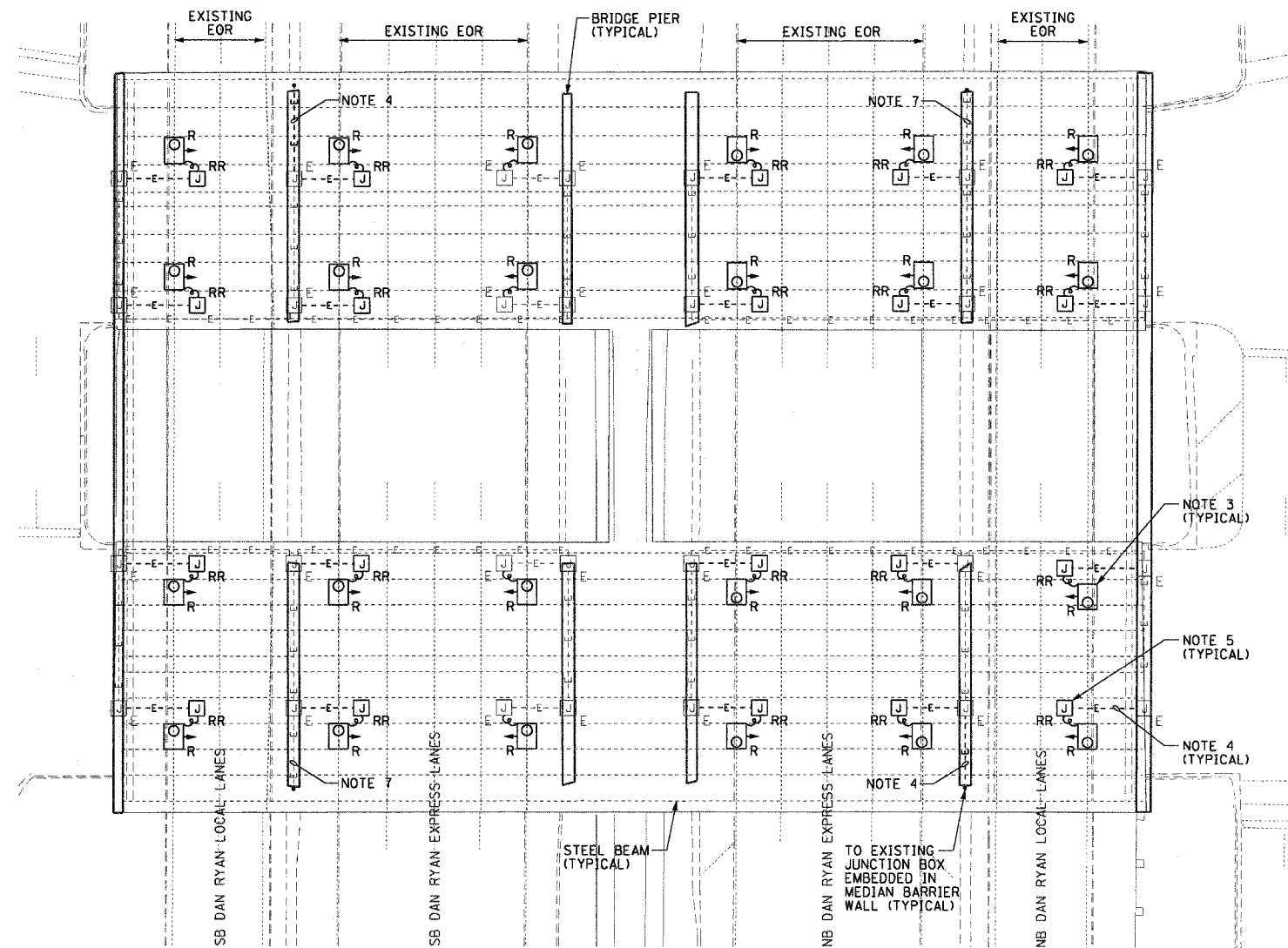
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	386
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

62583

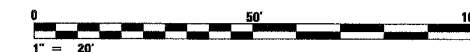


**NOTES:**

- 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.
- 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)



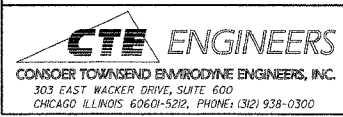
UL-29

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



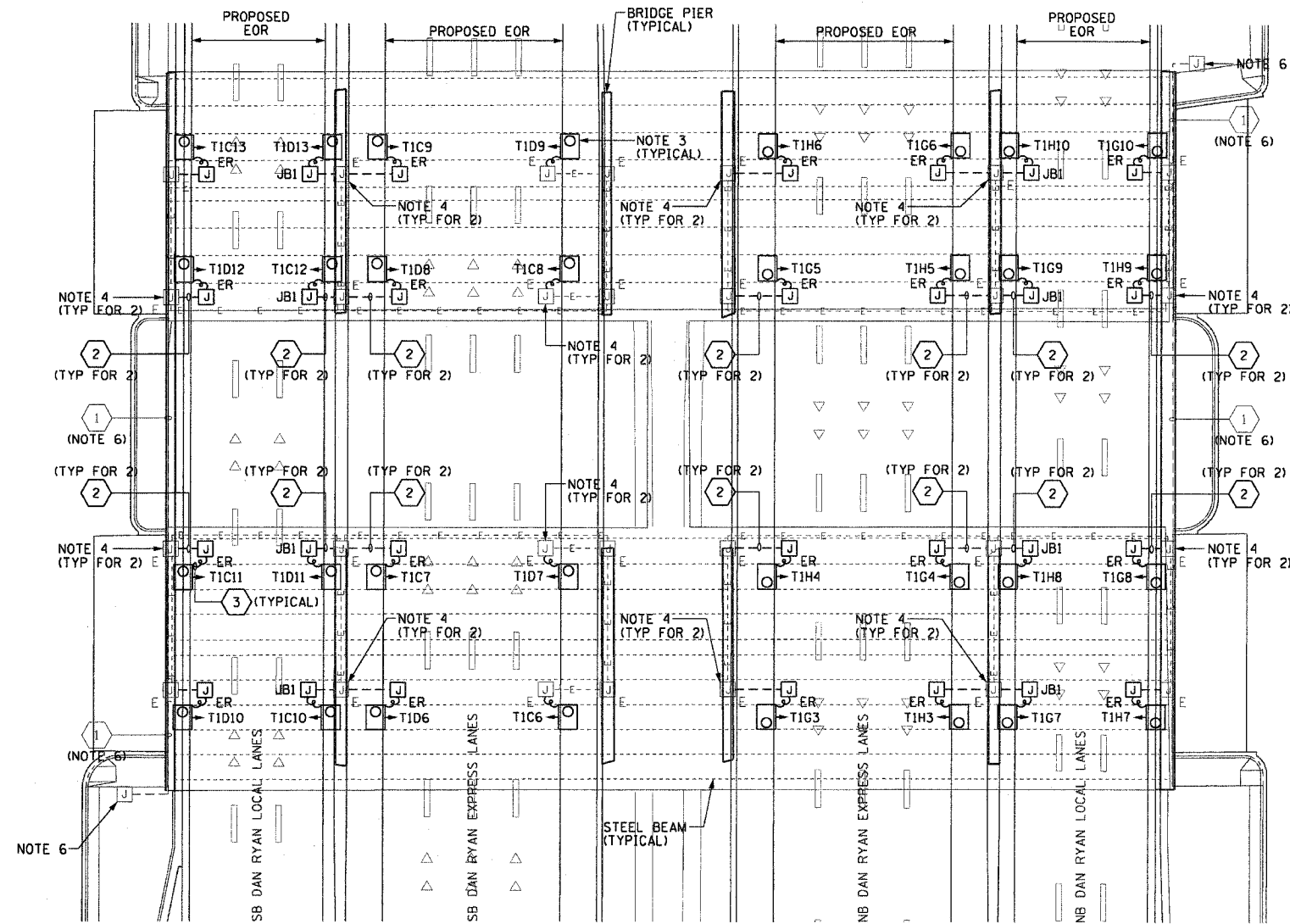
m:\040466\elect\6-cnfr\2b\sh\contract\ Zunder pass\UL29\292929.dwg 10/15/2004 02:36:38 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	388
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 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):**

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



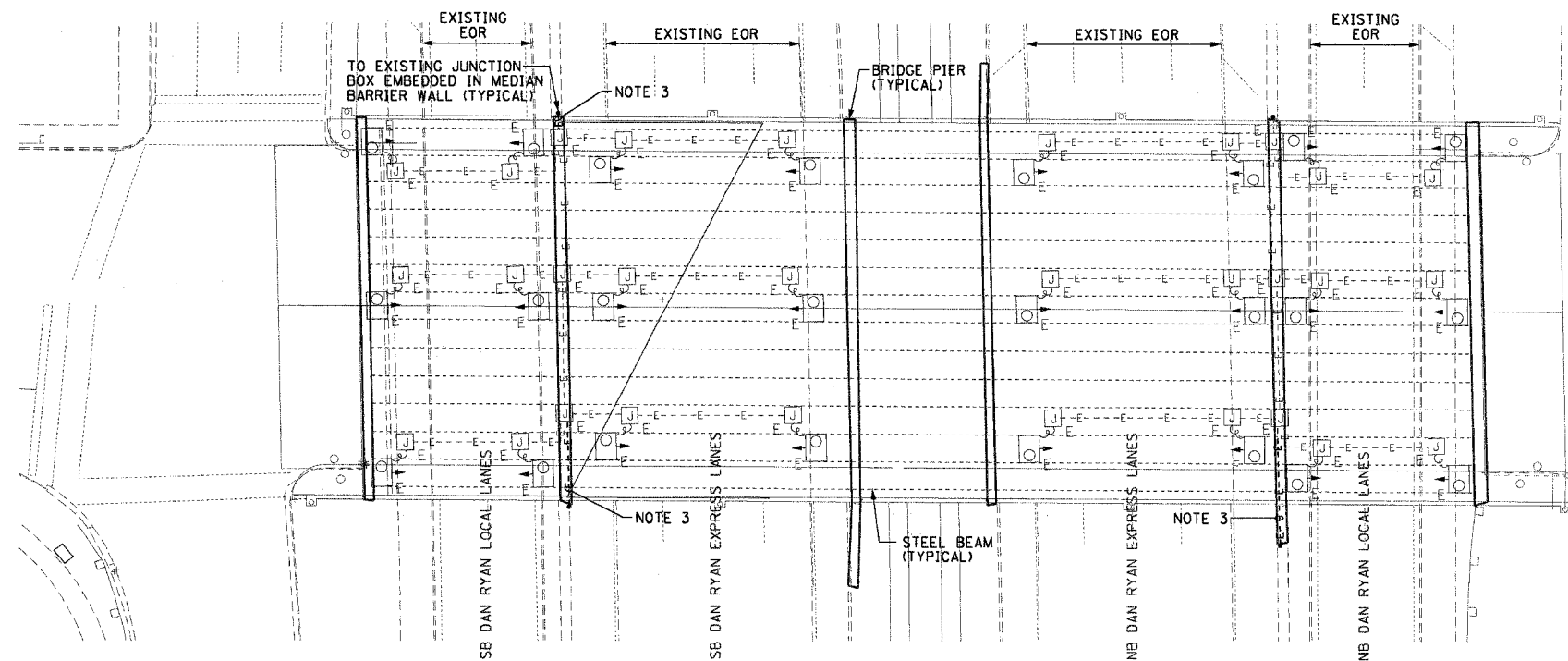
UL-30

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

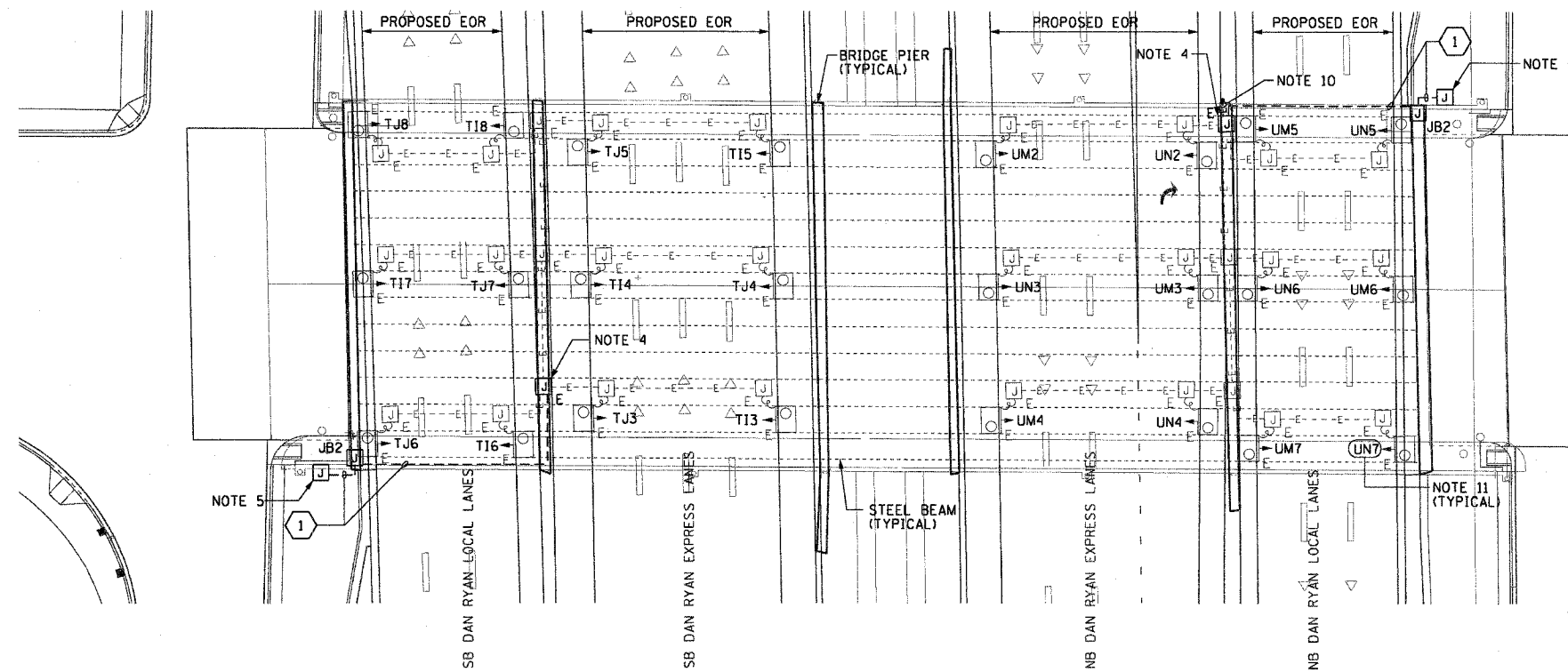
62583

**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)



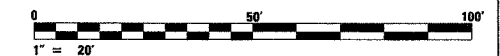
**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 6)

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 RGC 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

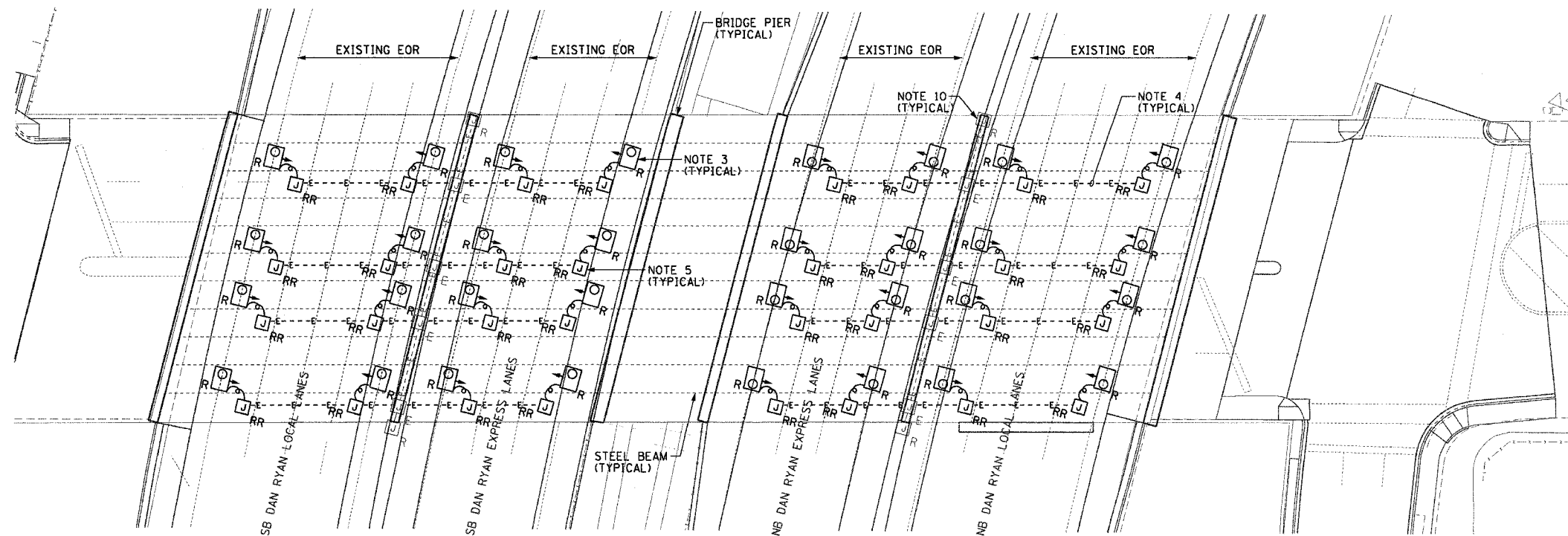
THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY.  
ALL UNDERPASS LIGHTING EQUIPMENT SHOWN WAS  
INSTALLED IN IDOT CONTRACT NO. 62733.

F.A.I. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94 2003-0311	COOK	976	389
STA.	TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

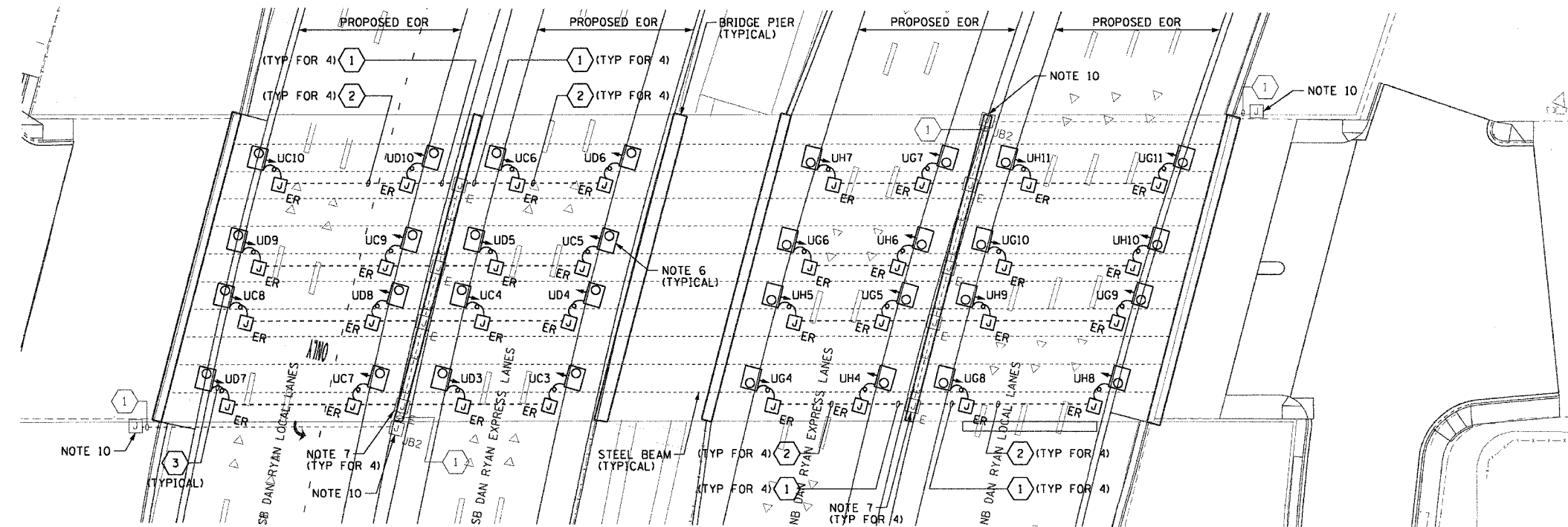
62583

**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 "U". SEE DRAWING SLO8-10 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)



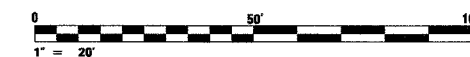
**PROPOSED UNDERPASS LIGHTING PLAN**  
(SEE NOTE 8)

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

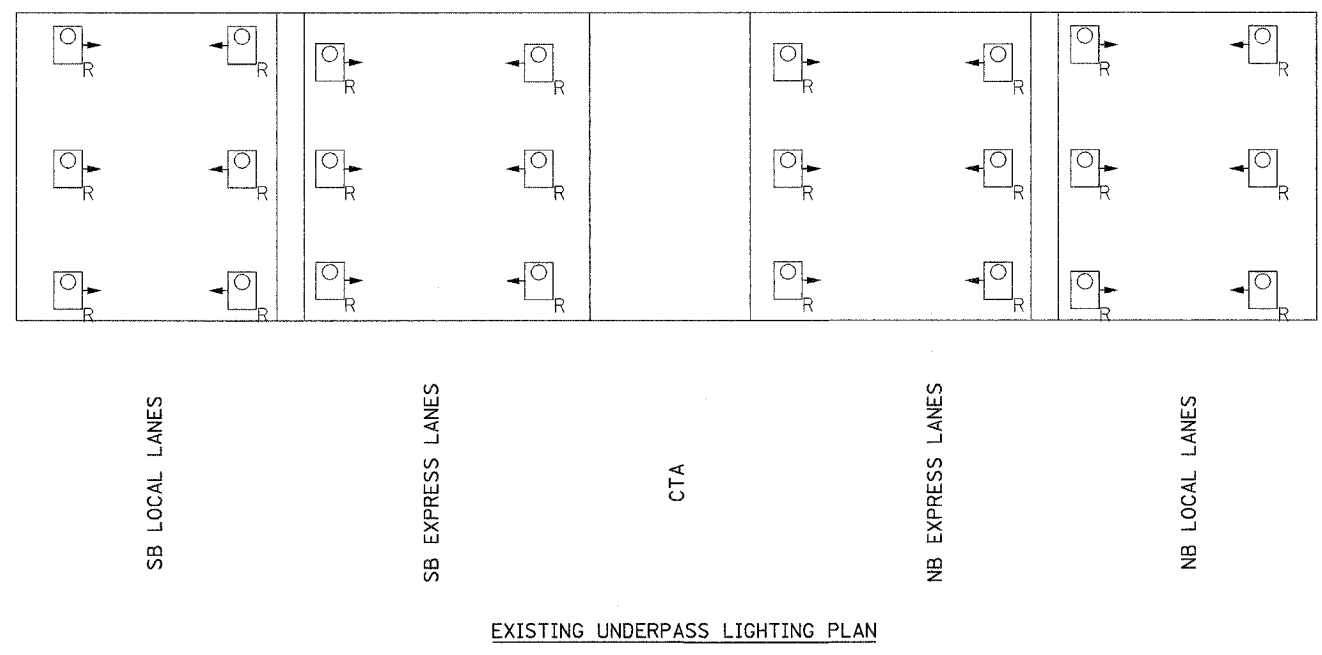
**UNDERPASS LIGHTING PLANS**  
47TH STREET

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



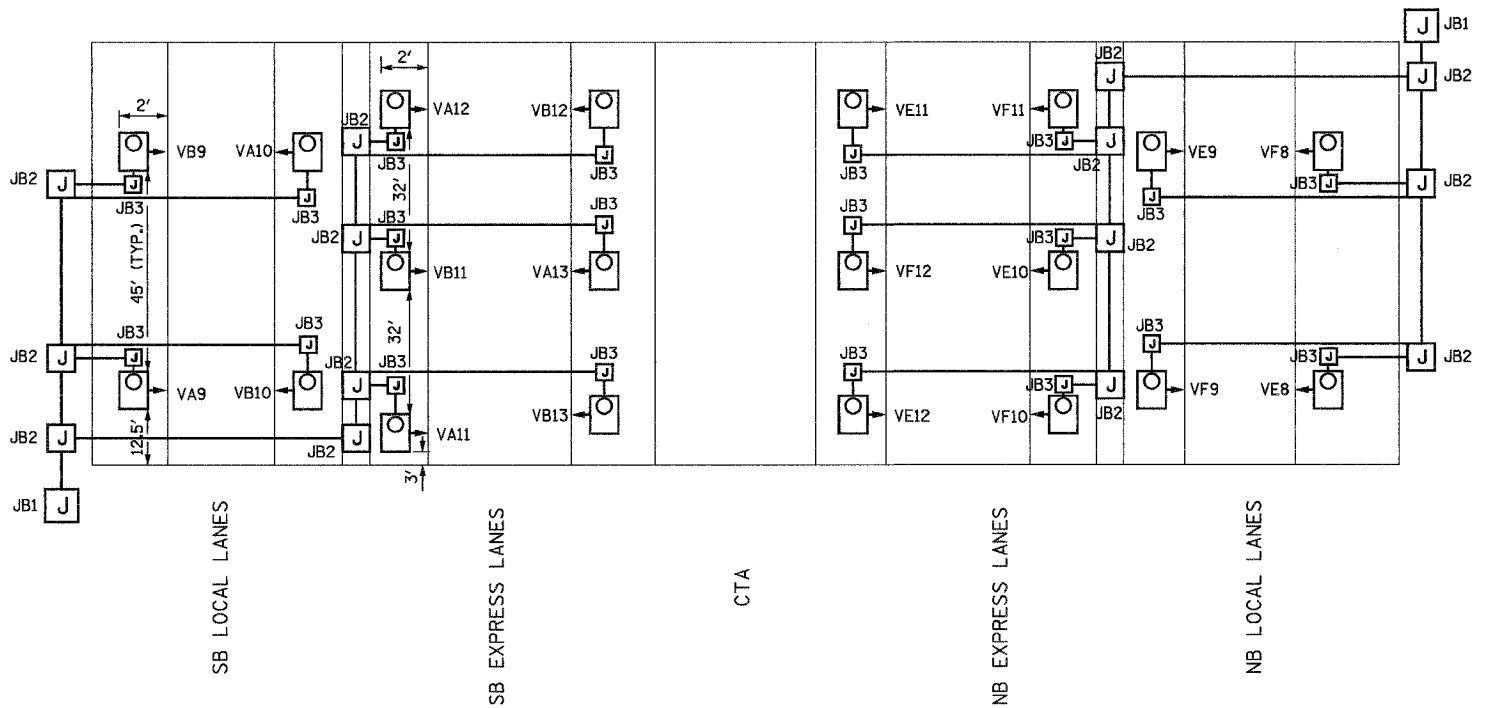


- NOTES:**
- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
  - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
  - SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
  - SEE DRAWING RLO8-40 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.



- 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

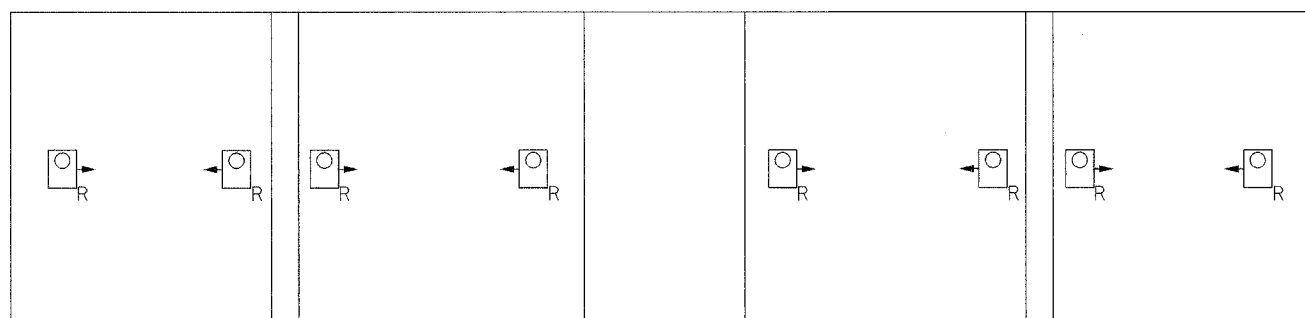
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31st STREET TO I-57  
 UNDERPASS LIGHTING PLAN  
 43rd STREET

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



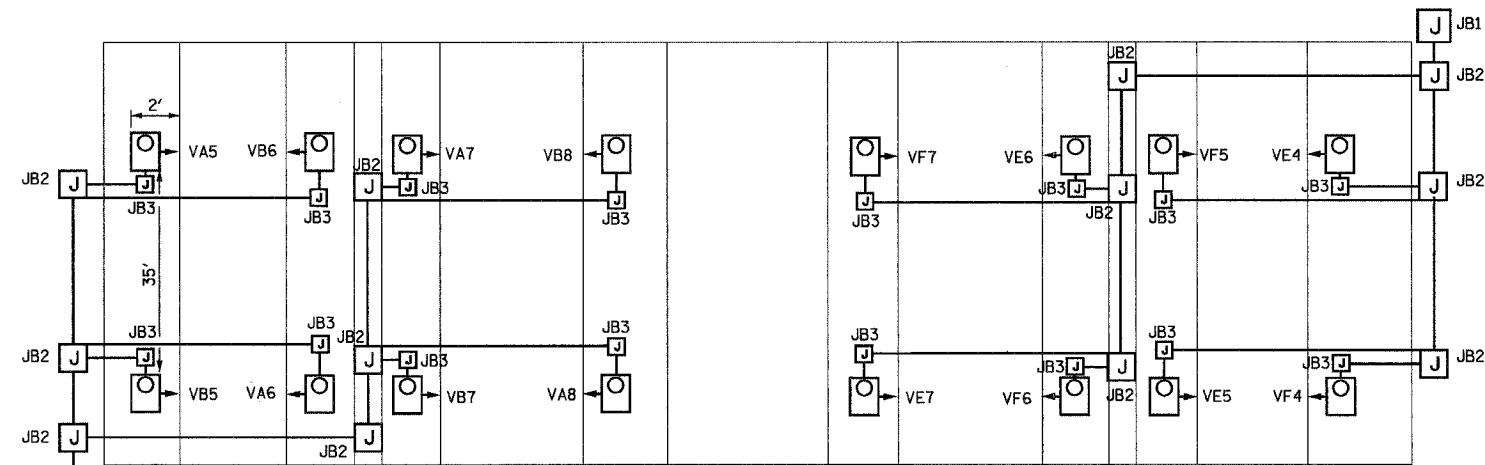


- NOTES:**
- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
  - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
  - SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT 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



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

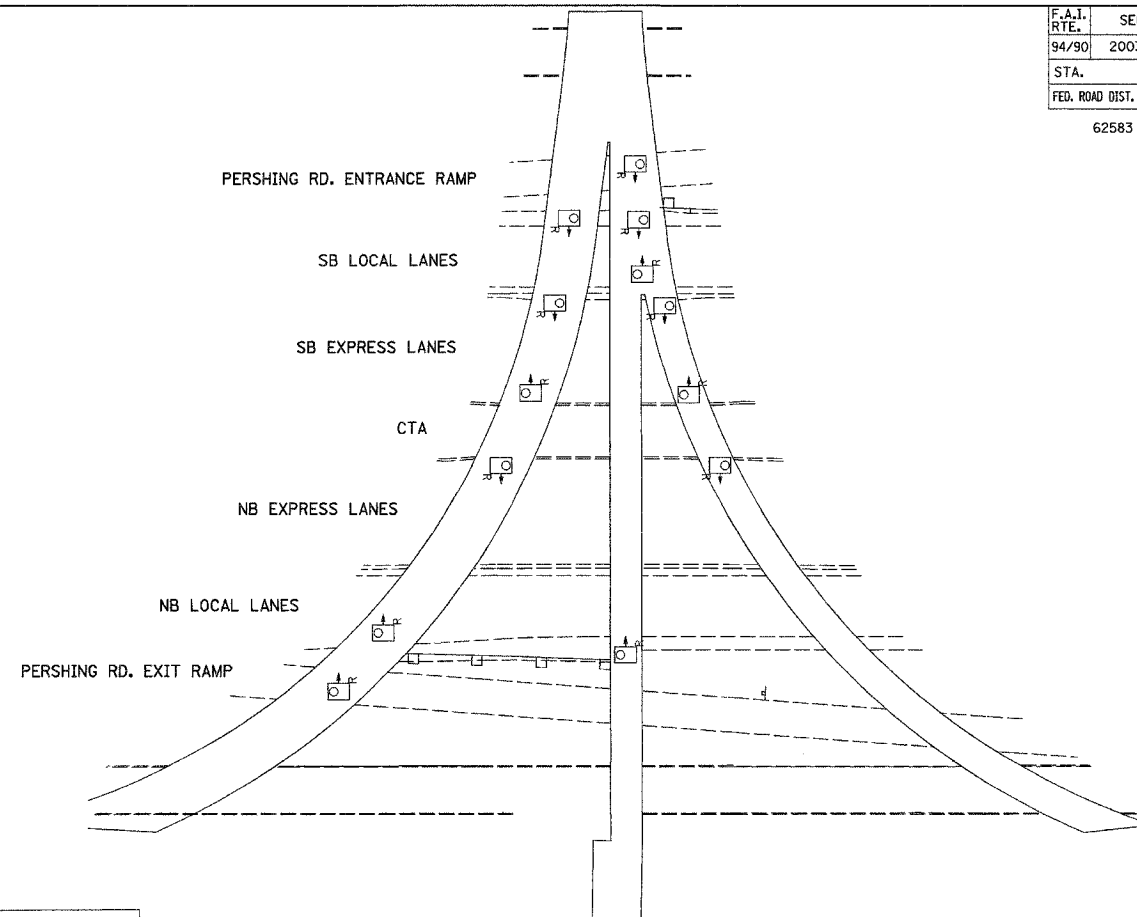
**NOTES:**

- 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.

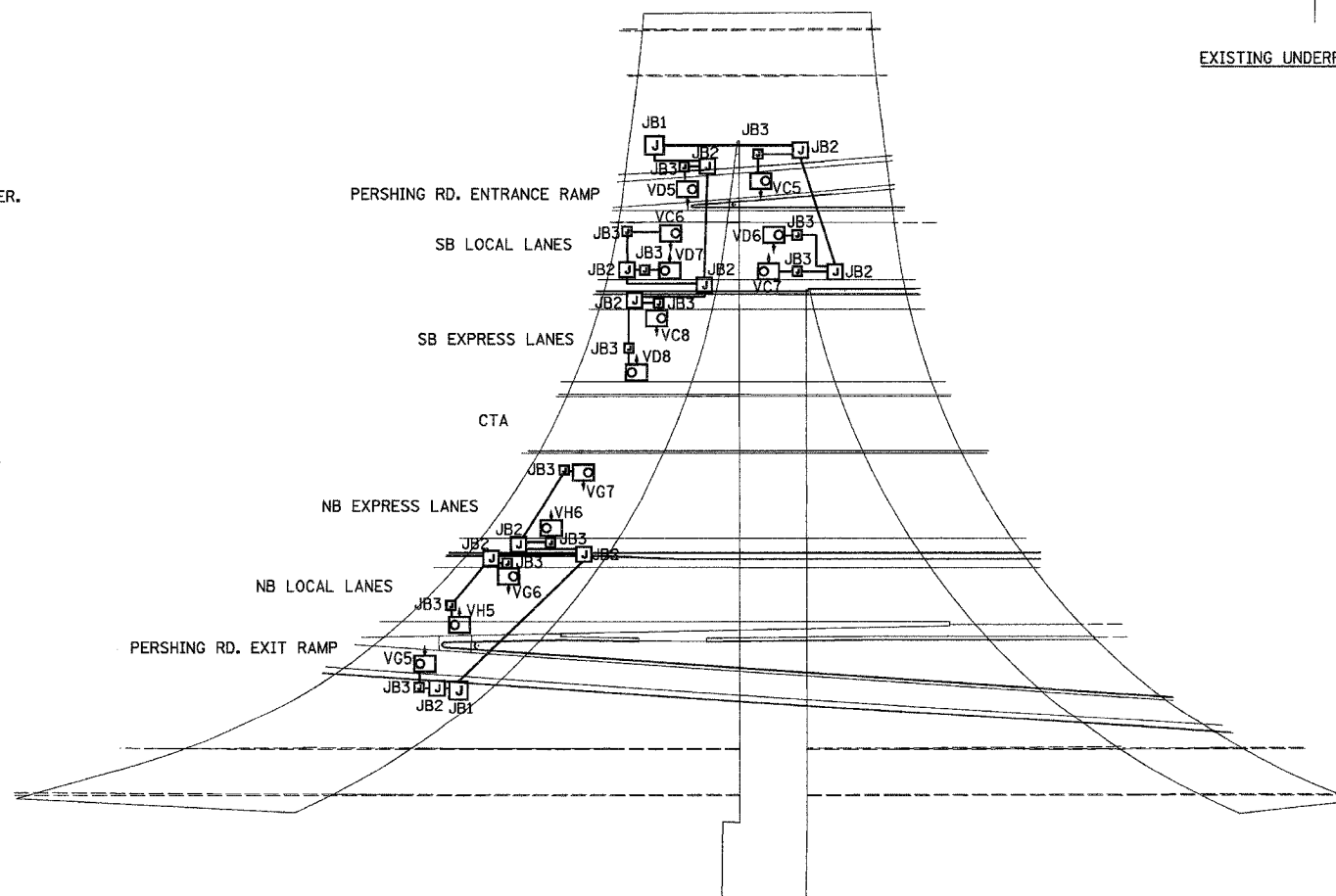
**SEQUENCE OF WORK**

- 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

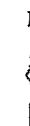
REVISIONS	
NAME	DATE
REVISED	1/21/05

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

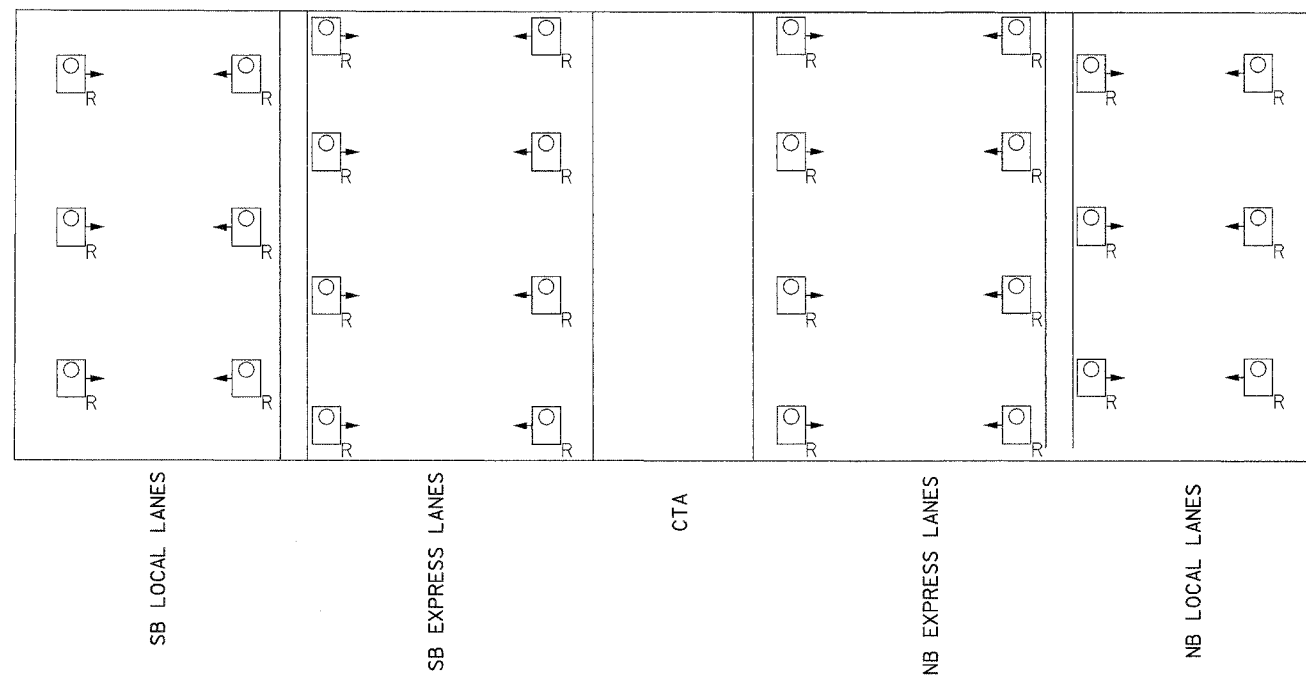


- NOTES:**
- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
  - LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
  - SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
  - SEE DRAWING RLO8-42 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.

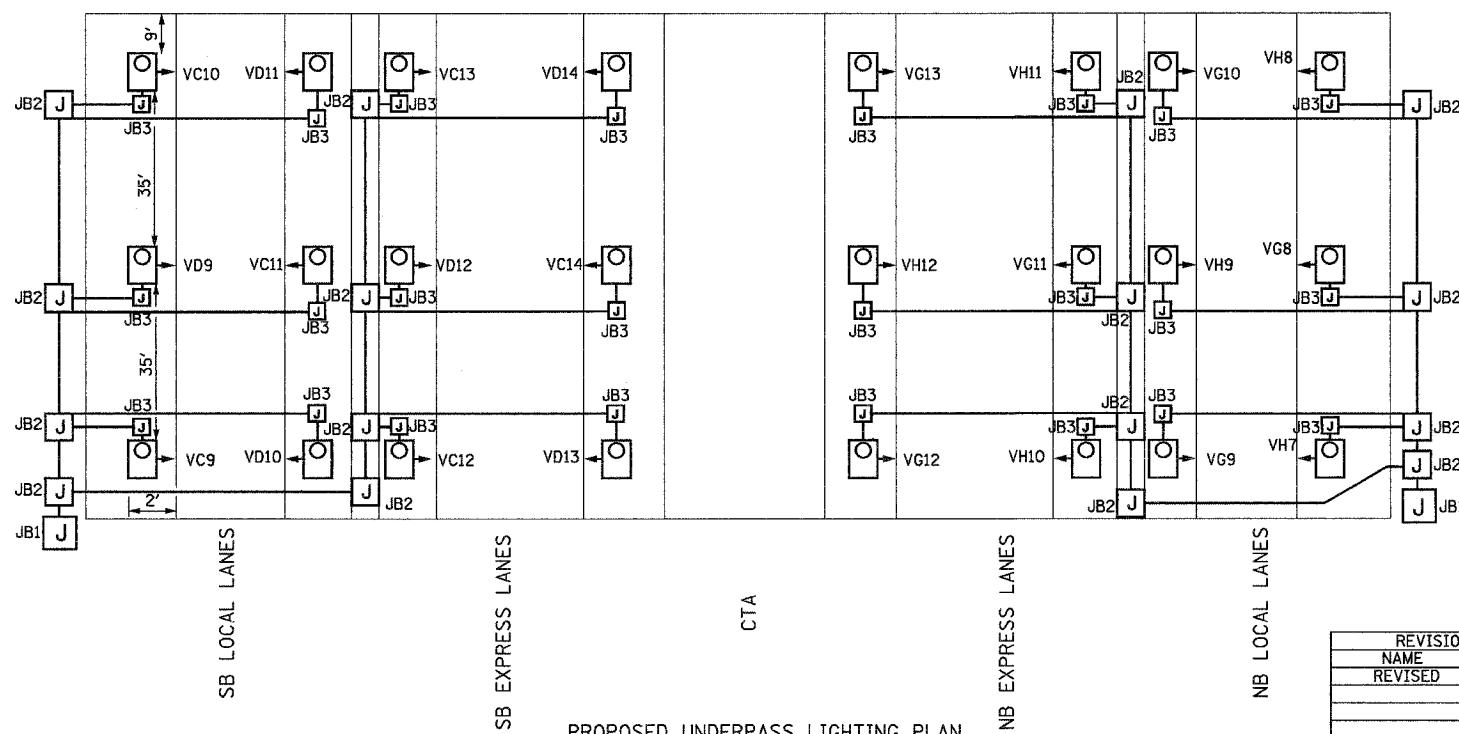
**SEQUENCE OF WORK**

- 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
REVISED	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

62583

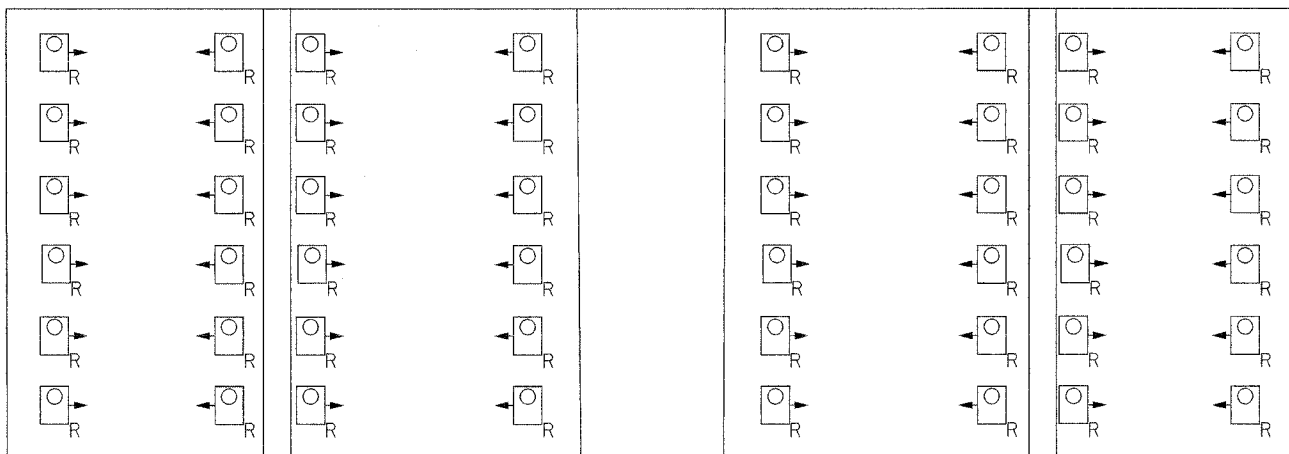


**NOTES:**

- 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.

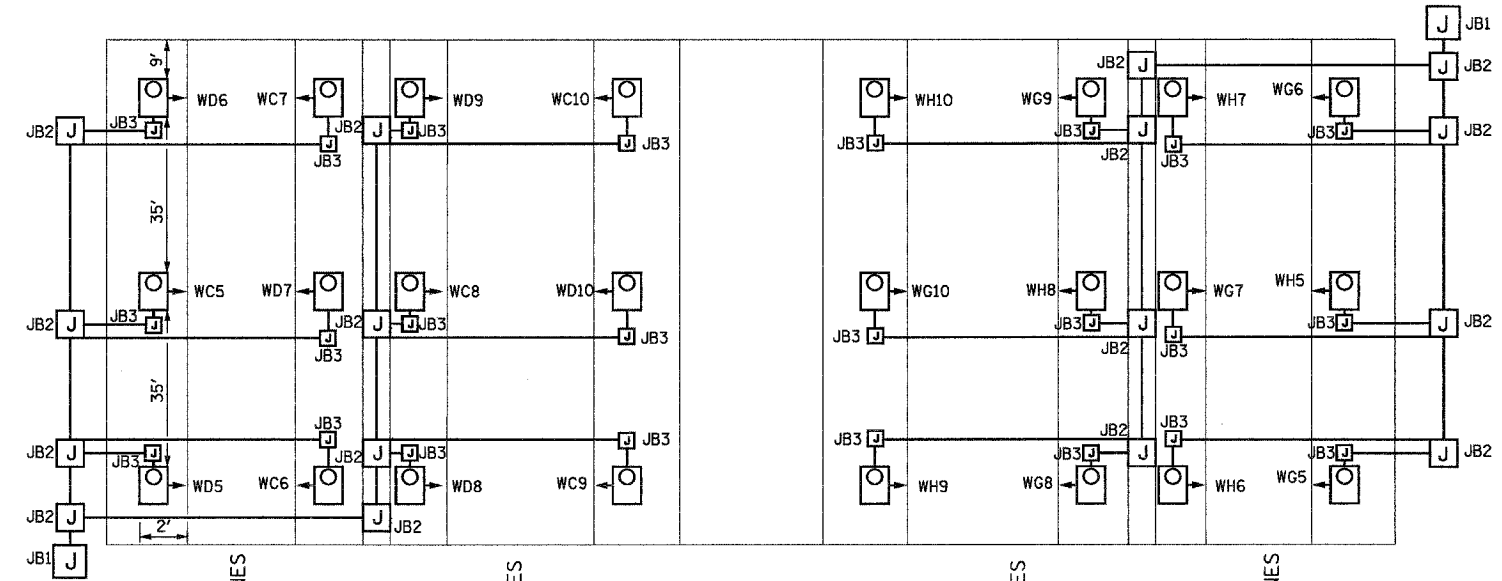
**SEQUENCE OF WORK**

- 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.



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



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

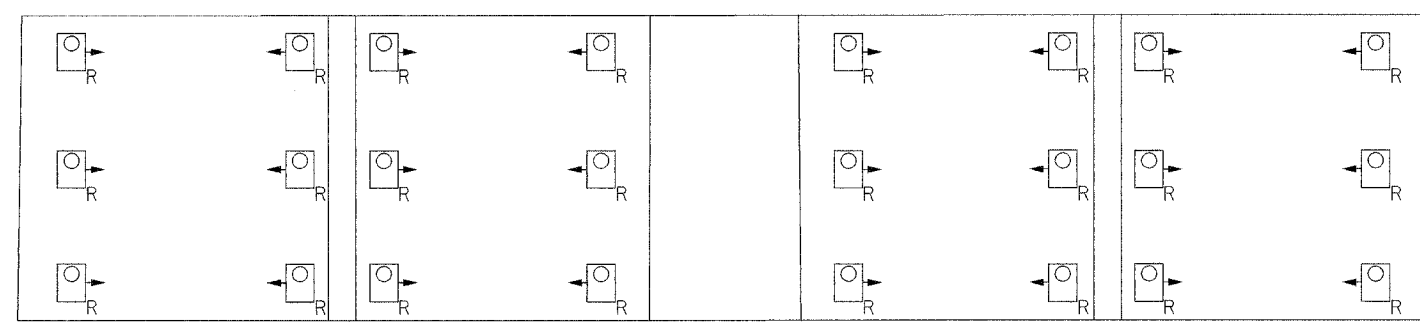
UL-37

62583



**NOTES:**

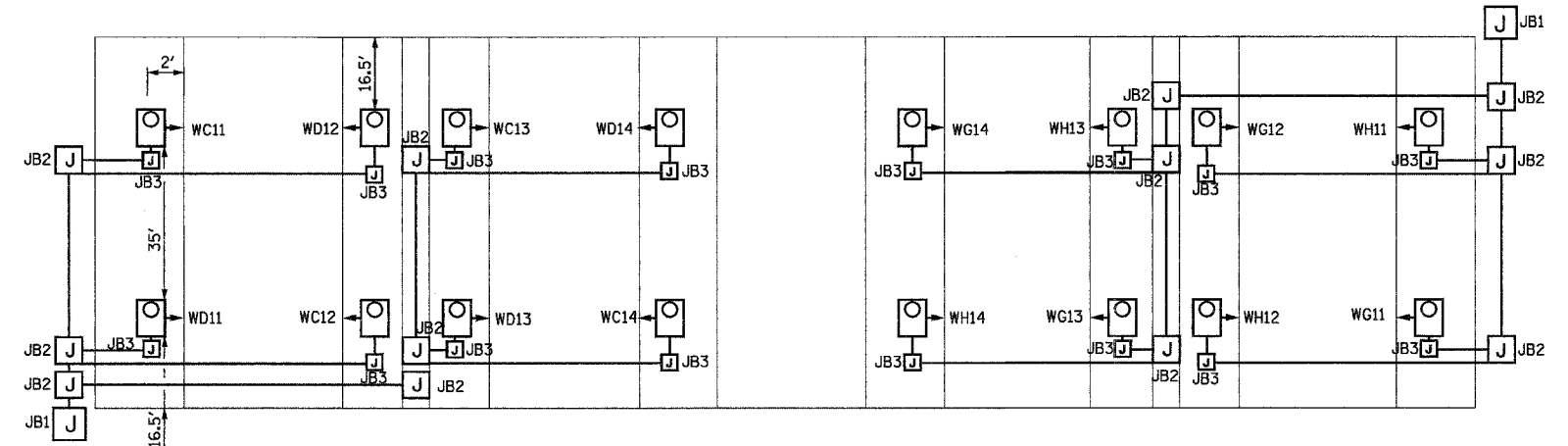
- SEE DRAWING ME-01 FOR ELECTRICAL SYMBOLS, ABBREVIATION, AND NOTES.
- LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- SEE DRAWING ME-06 FOR SUSPENDED UNDERPASS LUMINAIRE MOUNTING AND CABLE & CONDUIT DETAILS.
- 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

FOR INFORMATION ONLY



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

UL-38

03-16-05 PM 01/24/2005

62583



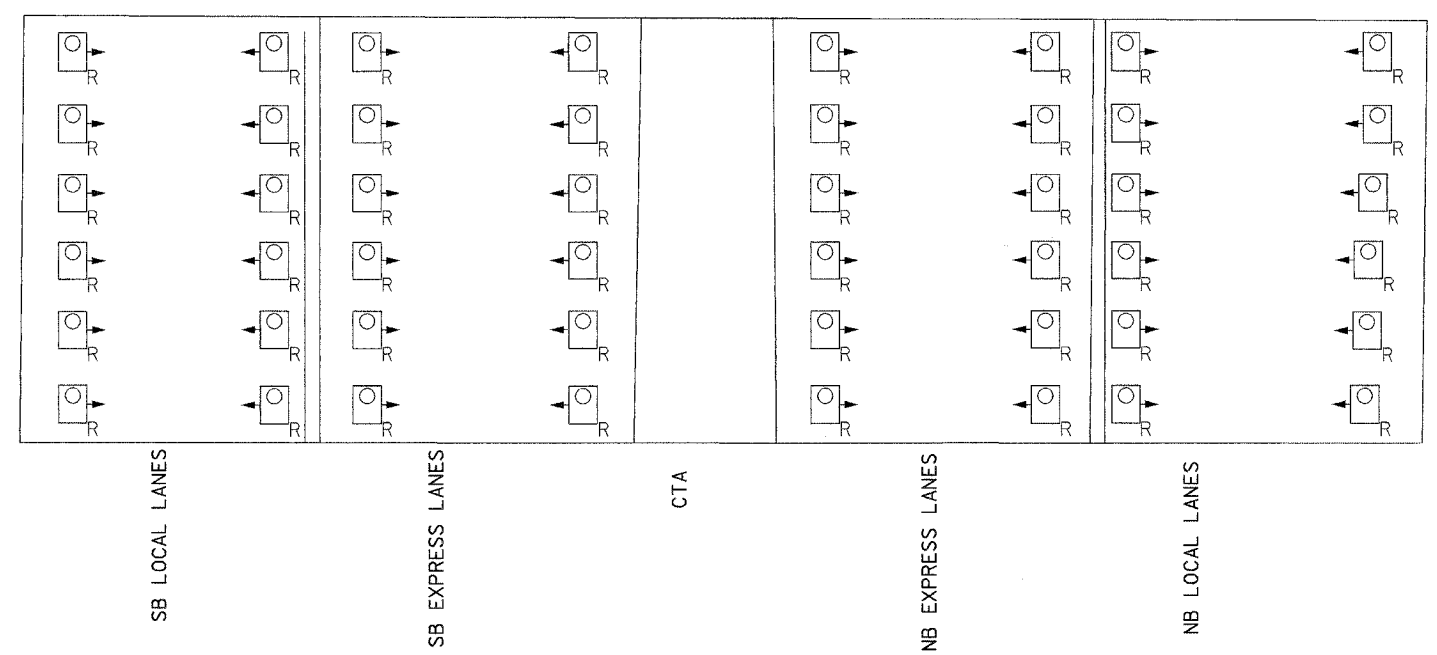
G:\projects\94 329 SH Lighting\UL 31st.dwg

**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 SL08-03 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.

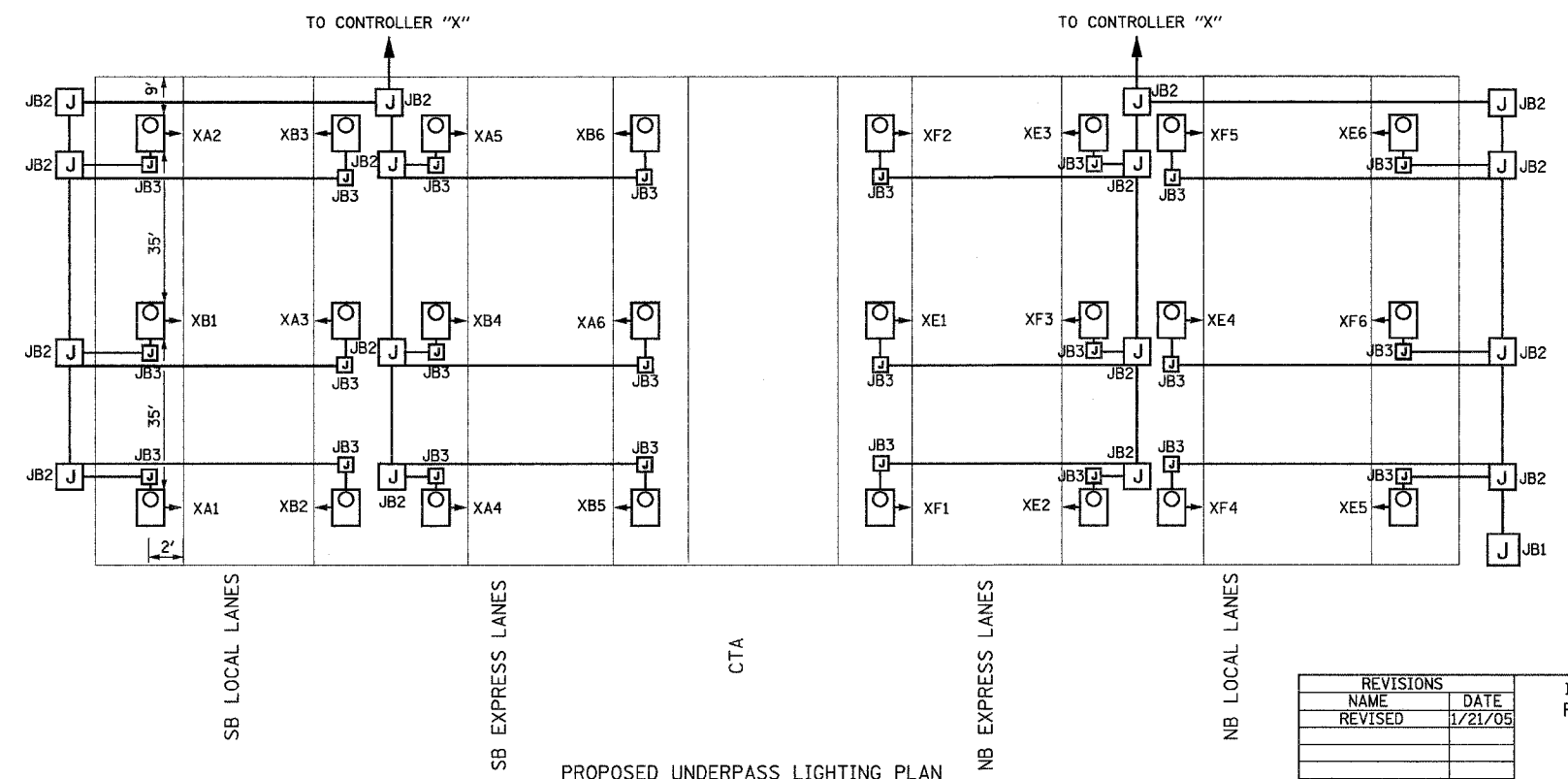
**SEQUENCE OF WORK**

- 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.



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



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

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

03:49:56 PM 01/24/2005

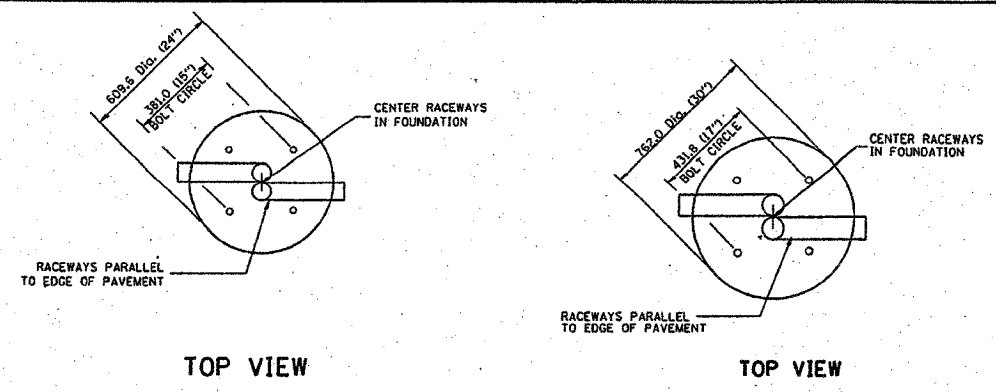




S.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. HIGH DIST. NO. 7	STATE	FED. AID PROJECT		

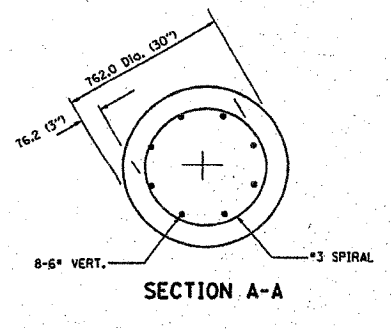
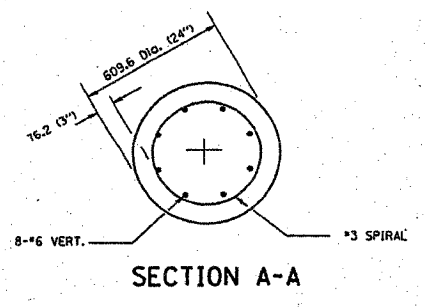
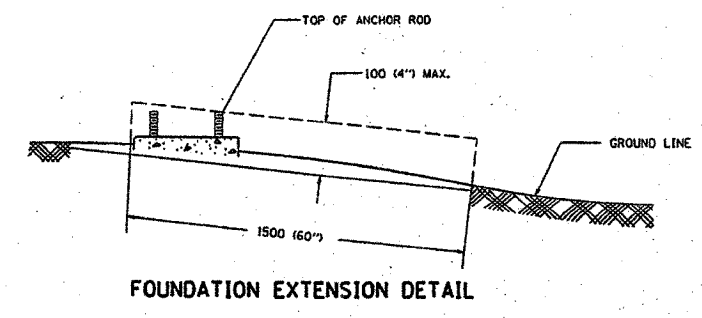
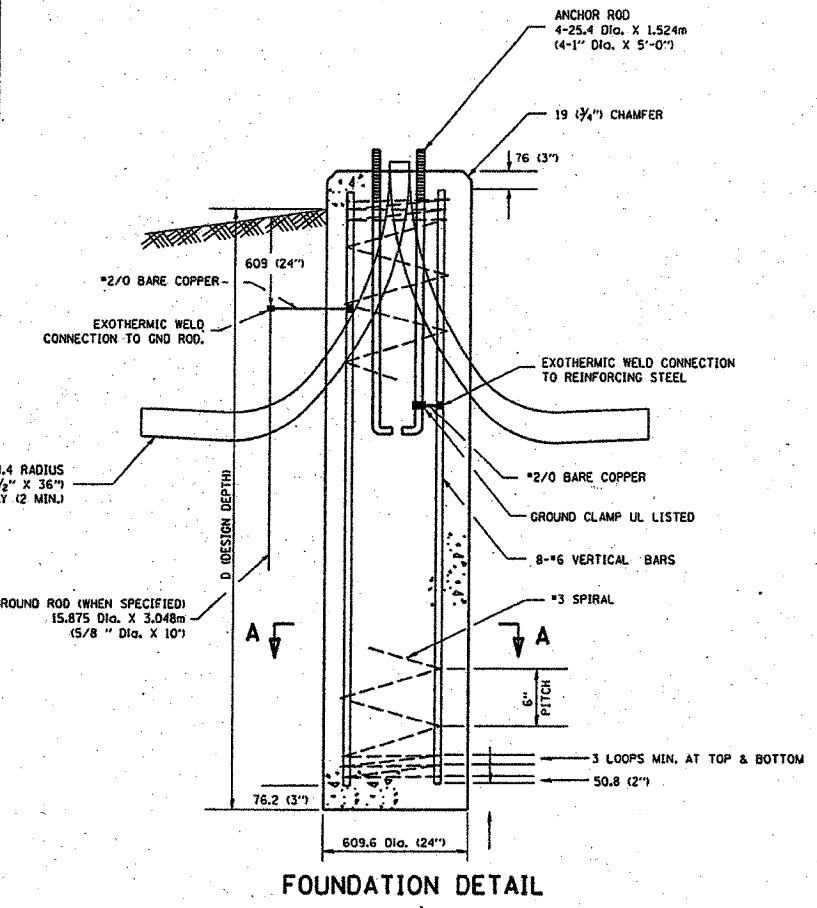
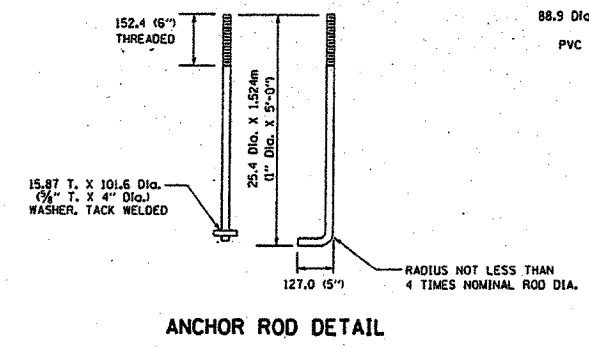
**LIGHT POLE FOUNDATION DEPTH TABLE**  
12.192M (40 FT.) TO 14.478M (47.5 FT.) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SO. FT.	3.96M (13'-0")	4.57M (15'-0")
MEDIUM CLAY Qu = 0.75 TON/SO. FT.	2.09M (9'-6")	3.23M (10'-9")
STIFF CLAY Qu = 1.50 TON/SO. 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")



**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 SL. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020J.3 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG 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 69.9MM (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.



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

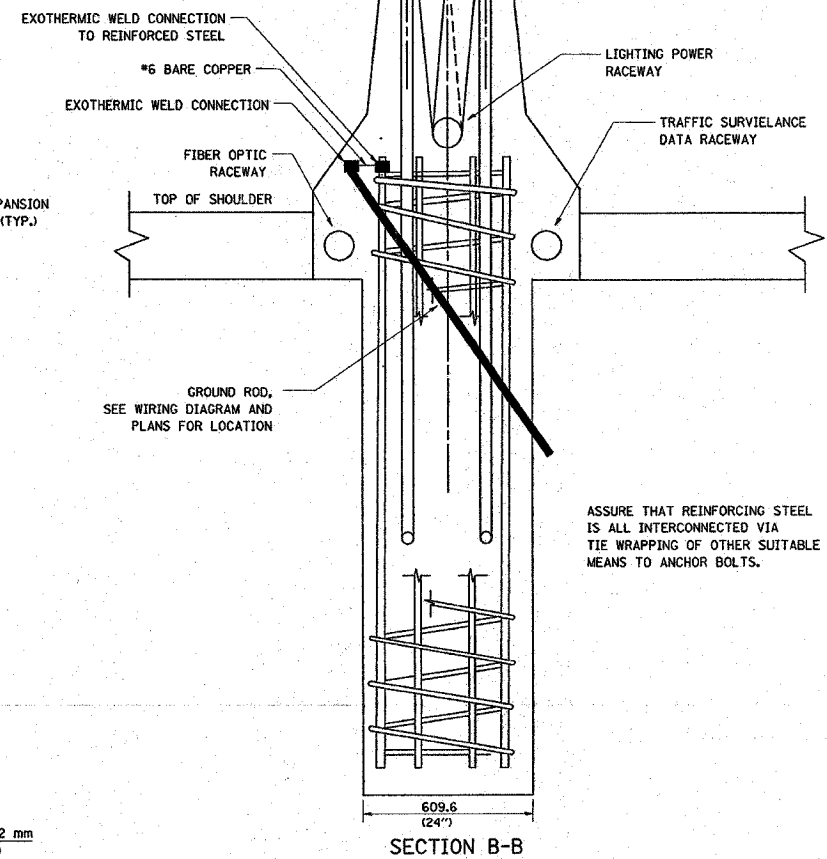
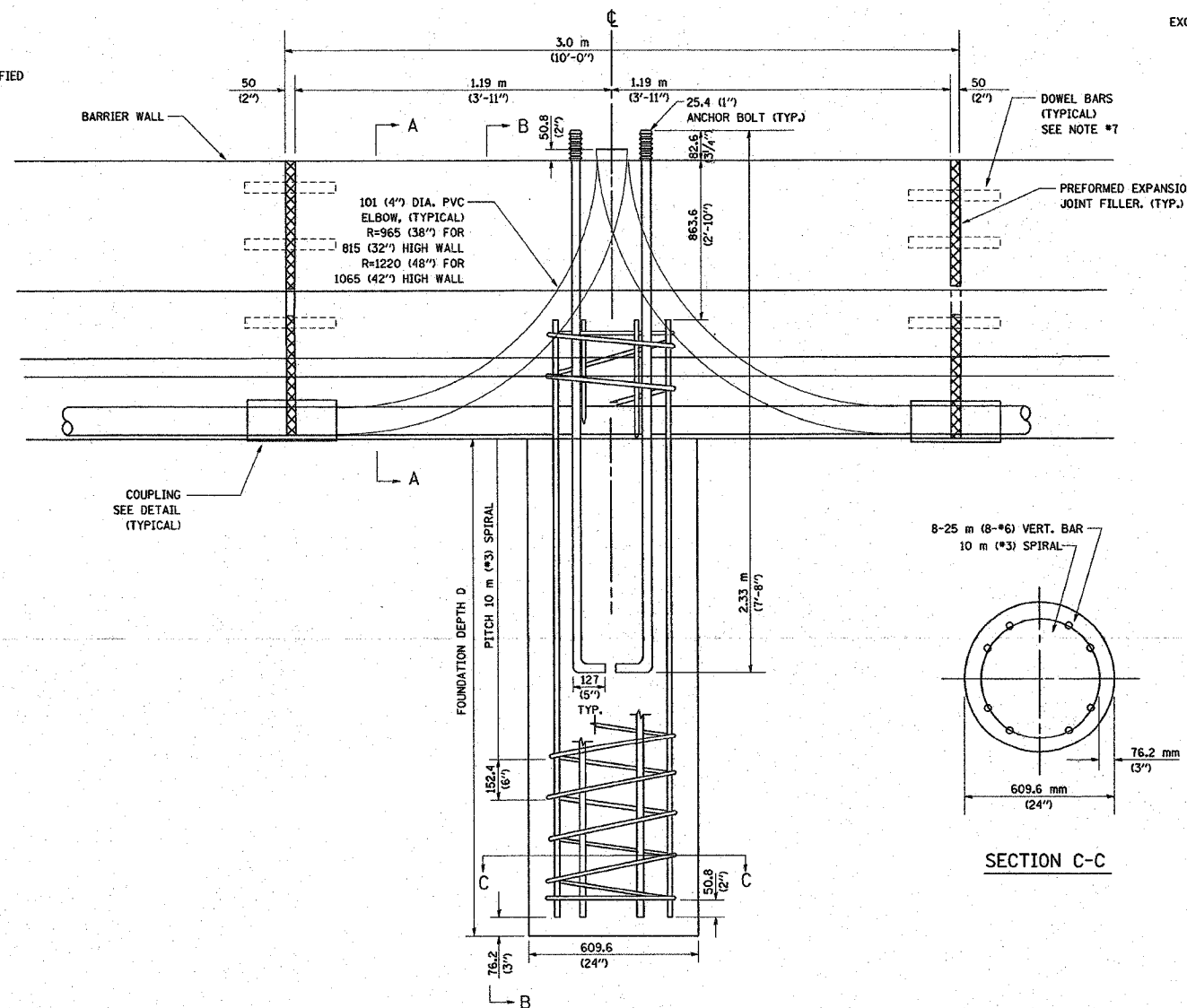
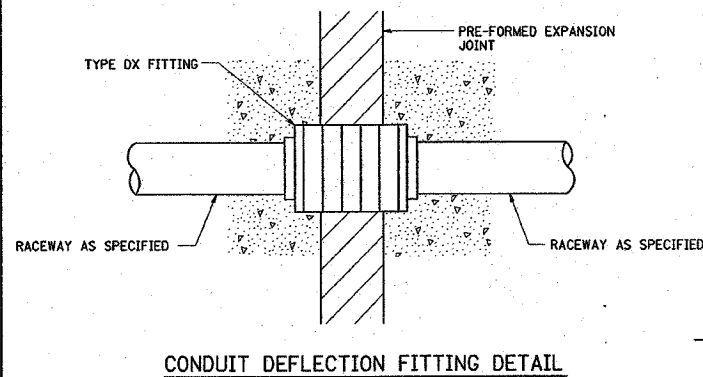
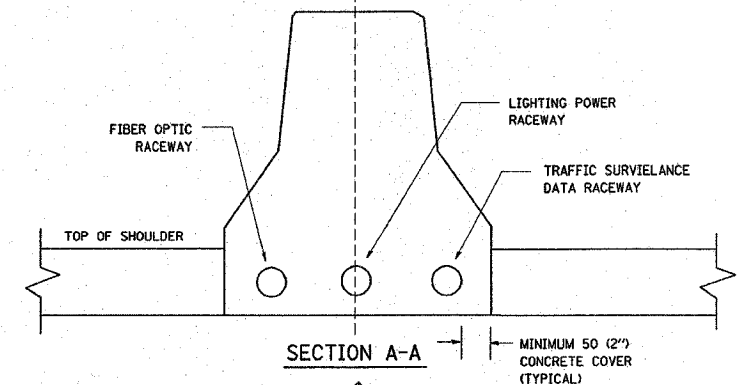
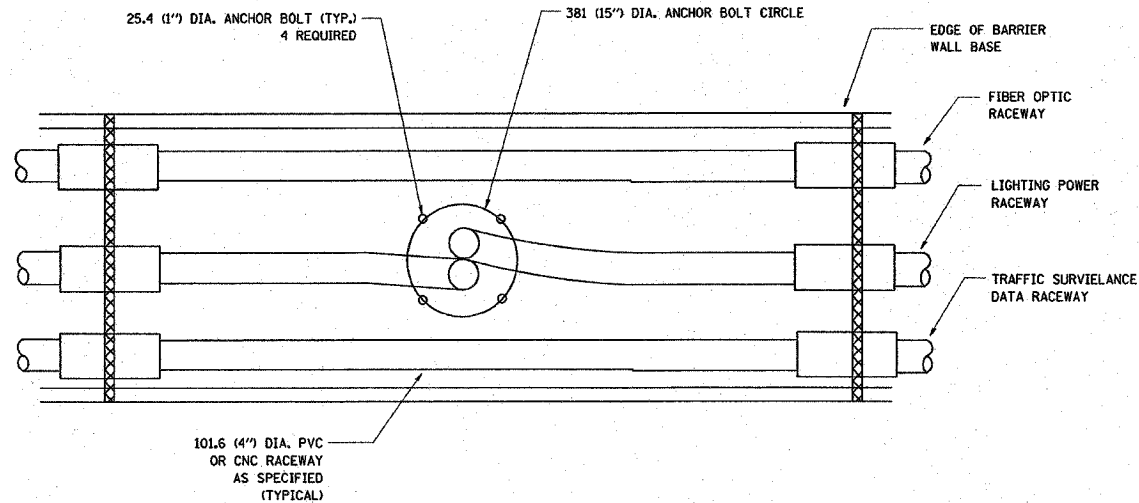
DRAWN BY JMW  
CHECKED BY BE301  
REVISION DATE: 04/22/02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2/4/04	2003-0313	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.



**FOUNDATION DEPTH**

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  
 DRAWN BY CADD  
 CHECKED BY

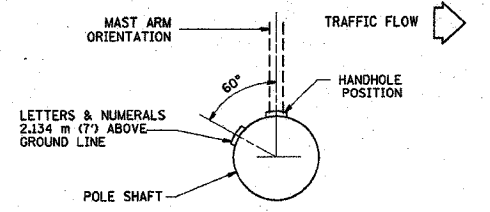
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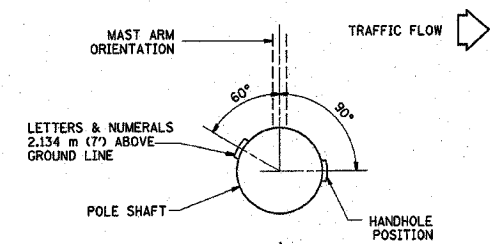
P.L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	STATE	FED. AID PROJECT		

62583

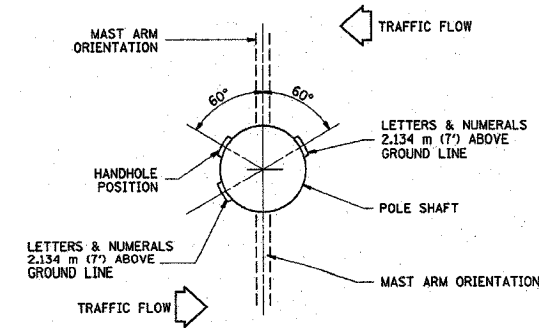
- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
  - MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
  - TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE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



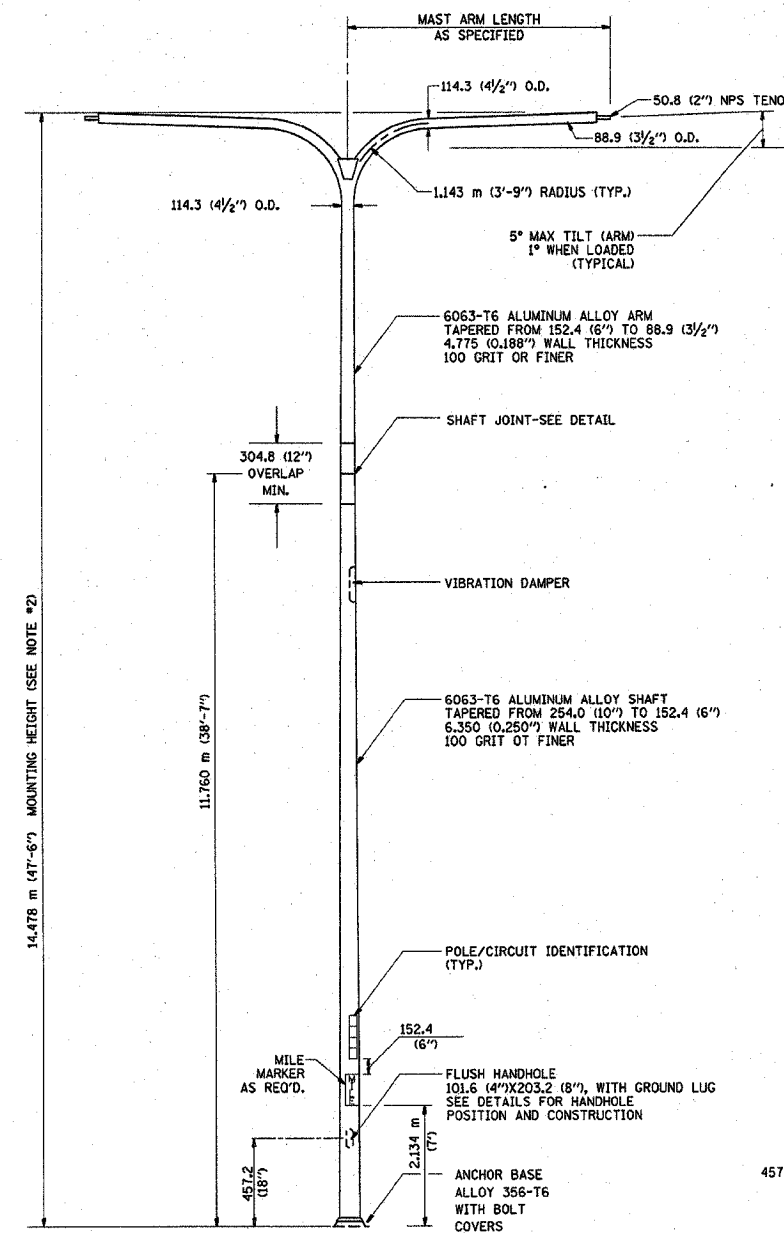
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



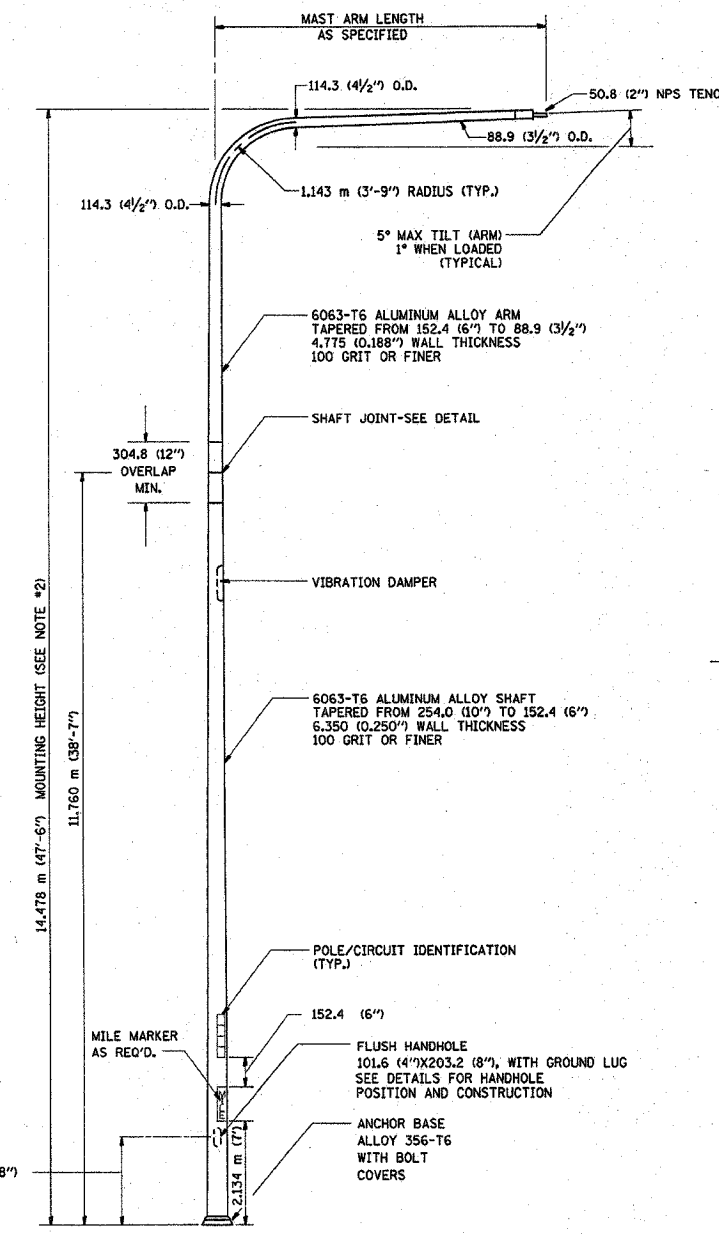
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



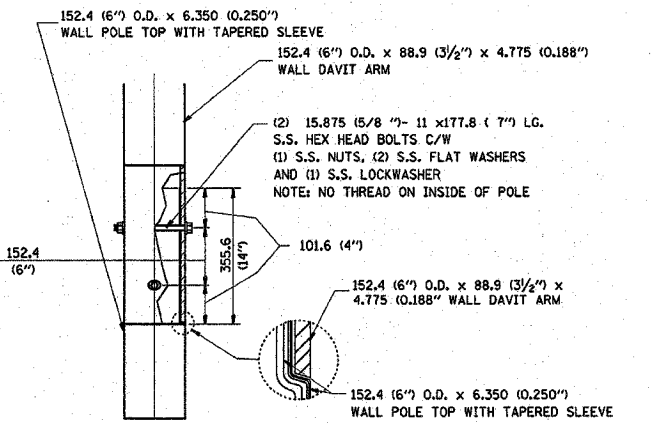
POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



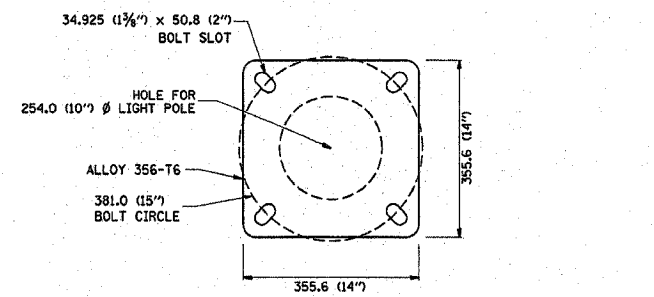
TWIN ARM POLE



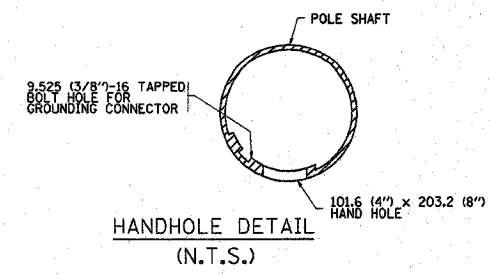
SINGLE ARM POLE



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

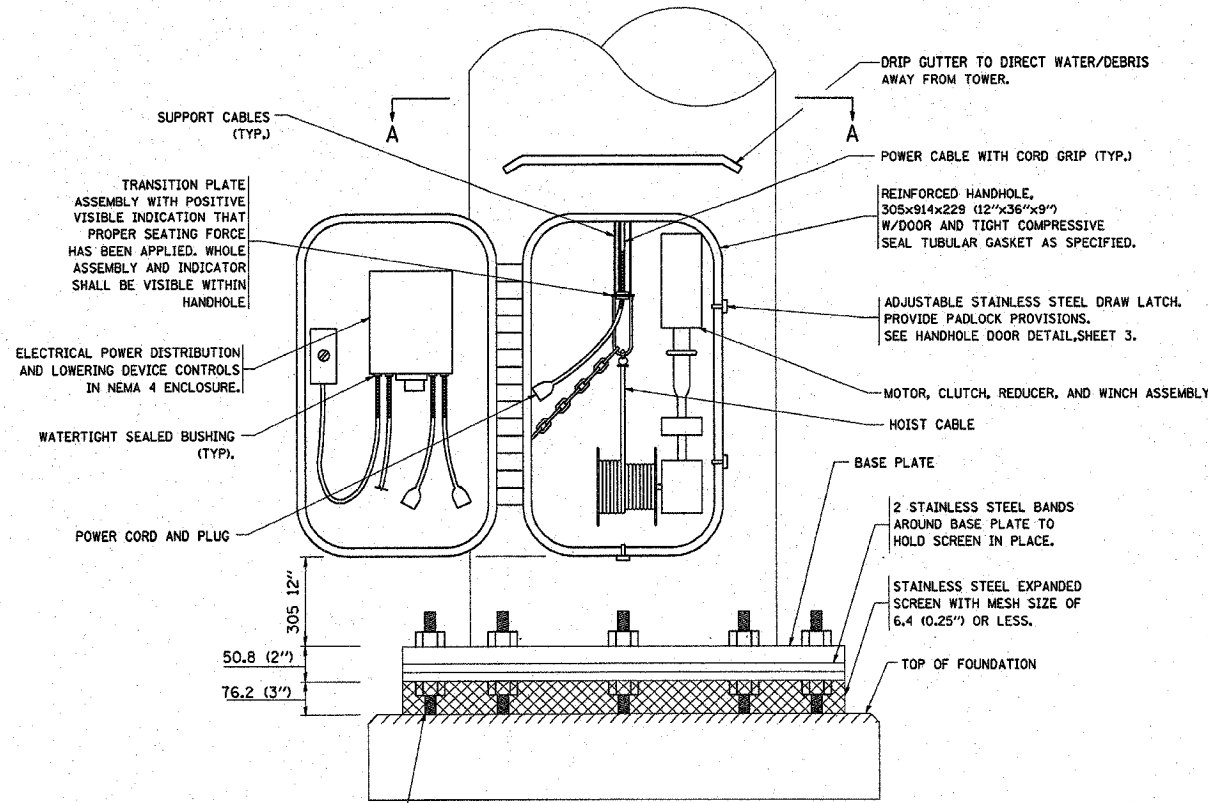
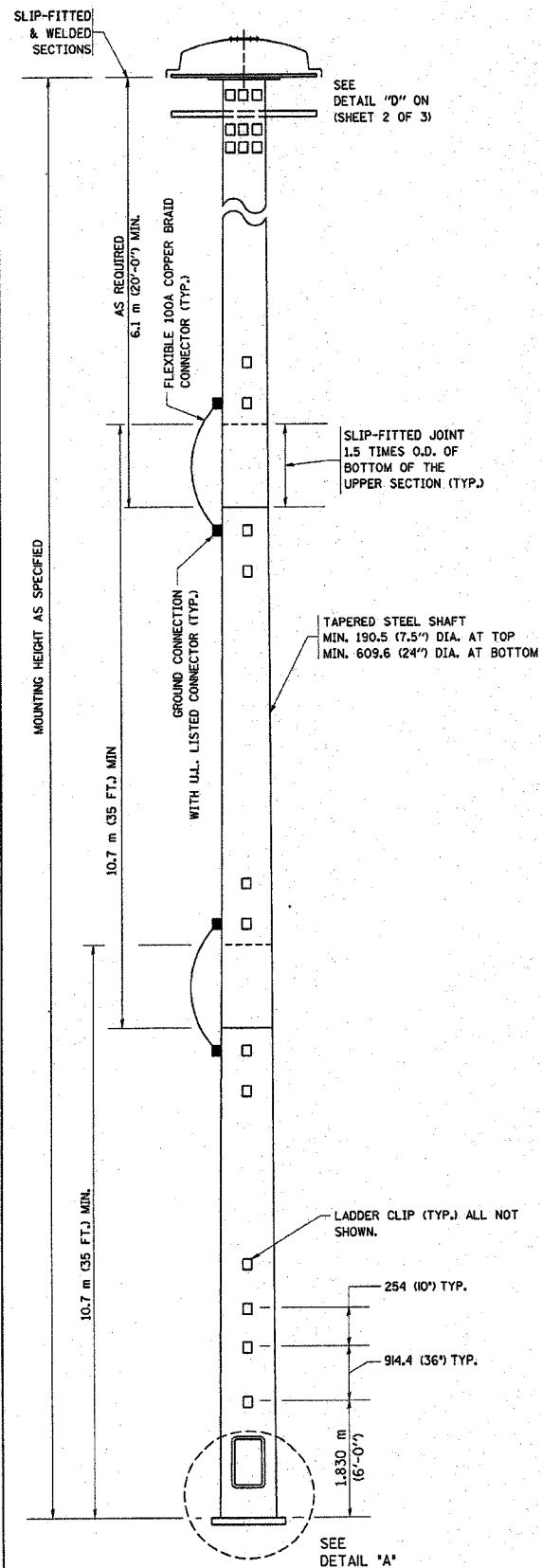
**DAVIT LIGHT POLE**  
14.478 m (47' - 6")  
MOUNTING HEIGHT

SCALE: NONE  
DATE: 08/08/2003

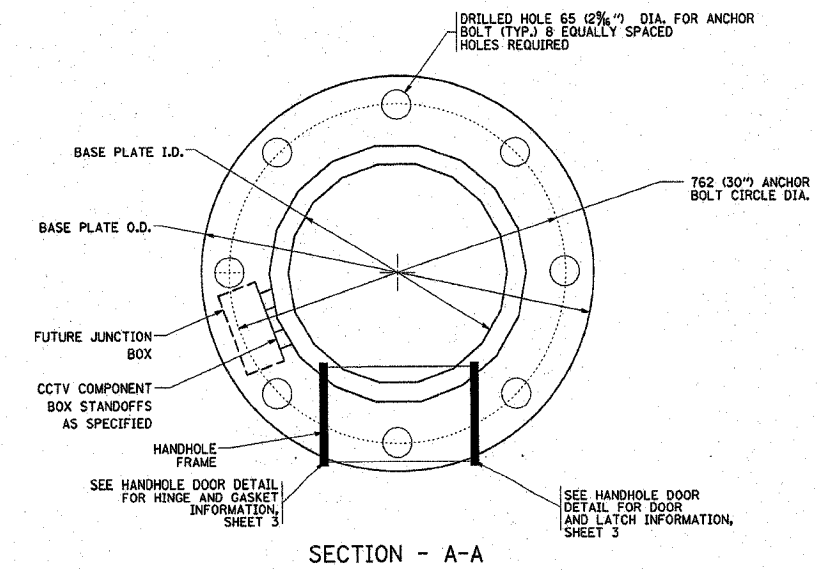
DRAWN BY: LEY  
CHECKED BY: BE-410  
REVISION DATE: 04/22/02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/4	2003-09-2	Cook	976	400
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62583



**DETAIL - "A"**  
3 CABLE LOWERING & SUPPORT MECHANISM SHOWN.



**SECTION - A-A**

**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