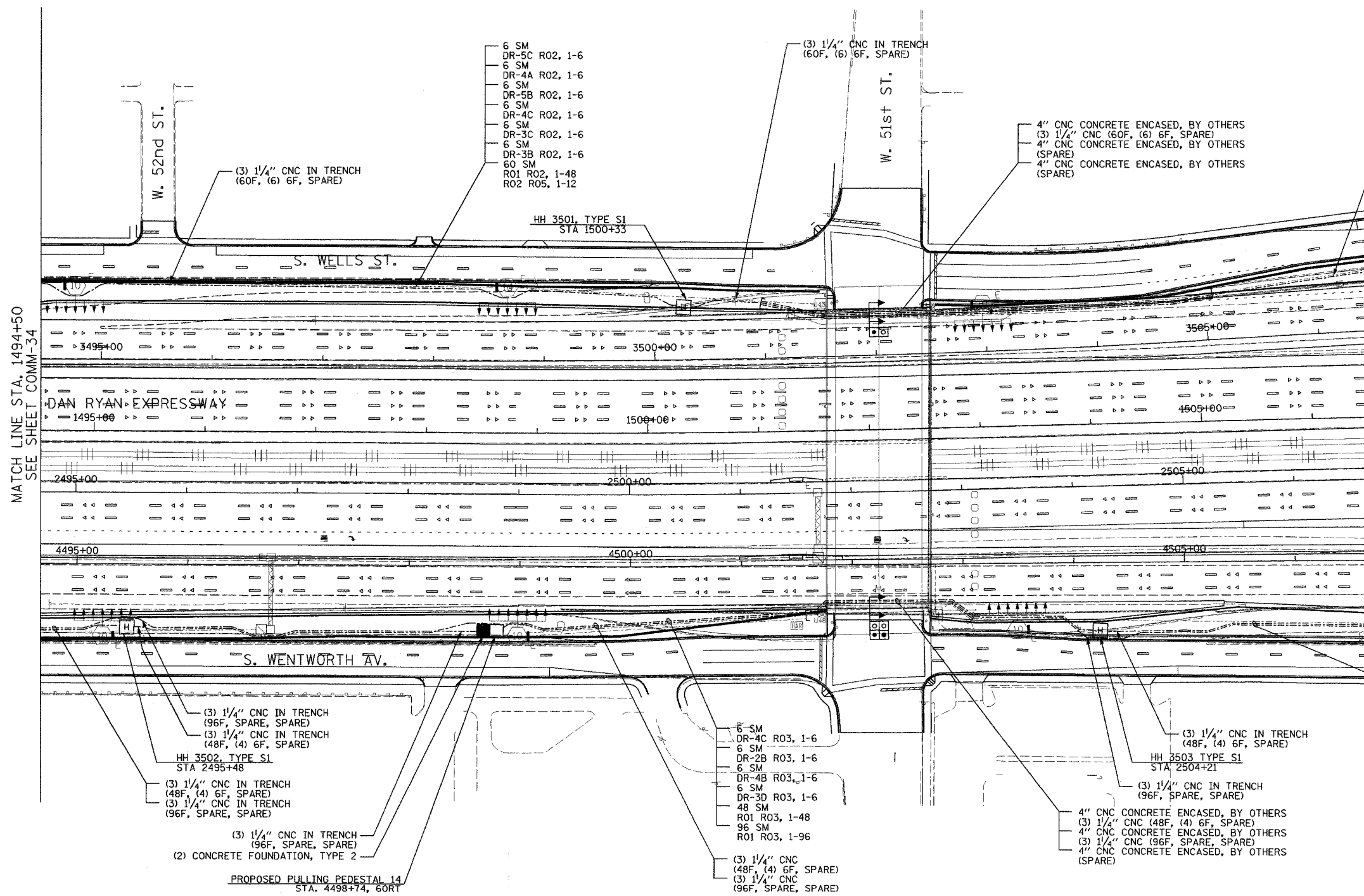
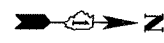


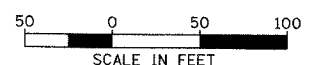
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	201
STA. 1494+50 TO STA. 1506+50		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
62583			



MATCH LINE STA. 1494+50
SEE SHEET COMM-34

MATCH LINE STA. 1506+50
SEE SHEET COMM-36

- NOTES:
1. SEE DRAWING ME-01 AND ME-SYSTEMS AND ABBREVIATIONS UNLESS OTHERWISE STATED, CONDUIT TO BE FURNISHED AT THIS CONTRACT.
 2. TRENCHED CONDUITS INSTALLED ARE TO BE INSTALLED IN COORDINATION WITH OTHER SUBSYSTEMS FOR THE AREA SHOWN.
 3. CONTRACTOR TO ROD AND SCL PRIOR TO INSTALLING AND PULLING CABLES IN CONDUITS.
 4. COMMUNICATIONS CONDUIT SHALL BE INSTALLED WITH 1/2" ELECTRIC HANDHOLES (SEE DETAIL FOR HANDHOLE DETAILS, SEE DRAWING ME-01).



COMM-35

REVISIONS	
NAME	DATE

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

COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

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

DRAWN BY: DHI
CHECKED BY: BA

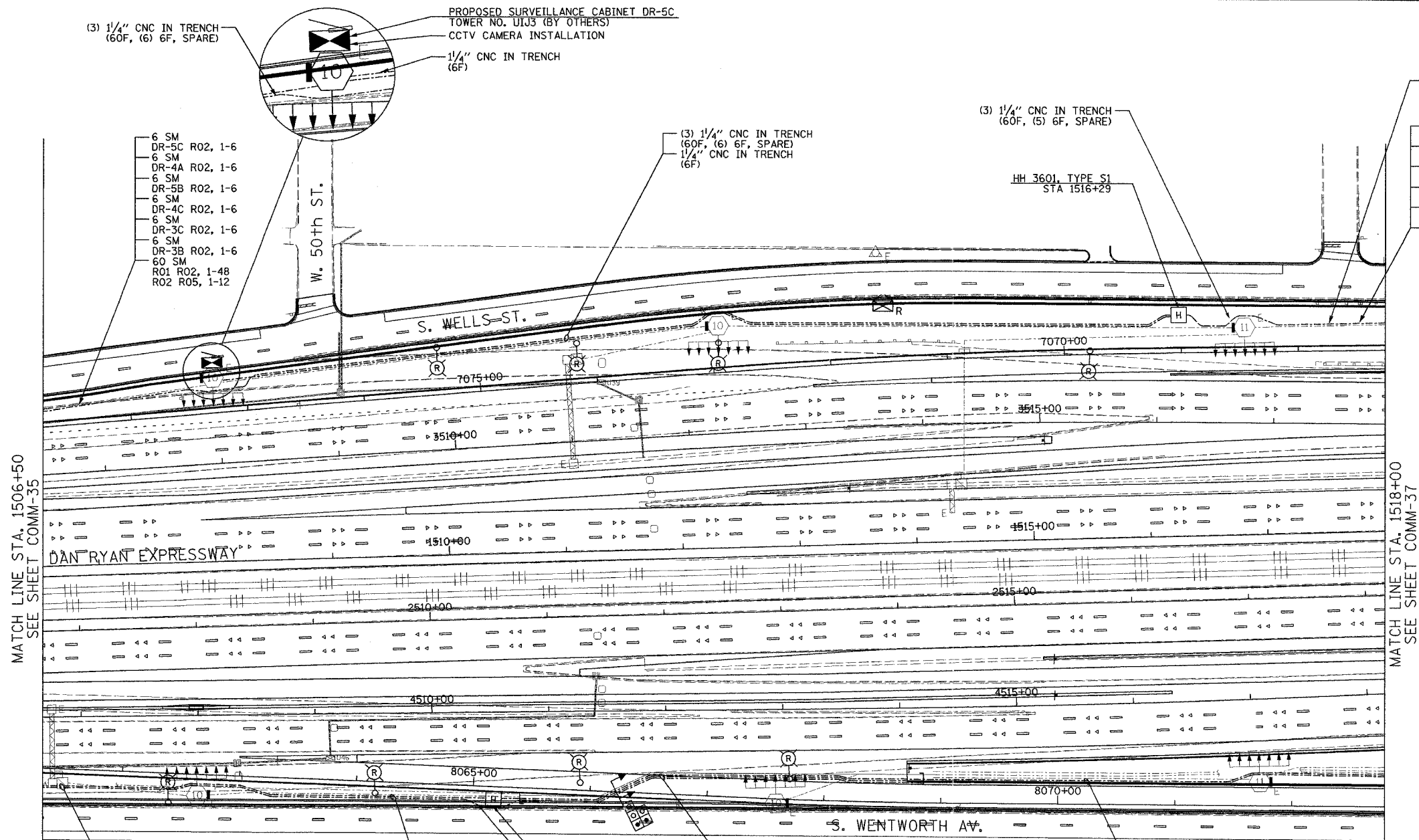
**Edwards
AND Kelcey**

ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	802
STA. 1506+50 TO STA. 1518+00			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
62583			



PROPOSED SURVEILLANCE CABINET DR-5C
TOWER NO. U1J3 (BY OTHERS)
CCTV CAMERA INSTALLATION

(3) 1/4" CNC IN TRENCH
(60F, (6) 6F, SPARE)

1/4" CNC IN TRENCH
(6F)

6 SM
DR-5C R02, 1-6
6 SM
DR-4A R02, 1-6
6 SM
DR-5B R02, 1-6
6 SM
DR-4C R02, 1-6
6 SM
DR-3C R02, 1-6
6 SM
DR-3B R02, 1-6
60 SM
R01 R02, 1-48
R02 R05, 1-12

(3) 1/4" CNC IN TRENCH
(60F, (6) 6F, SPARE)
1/4" CNC IN TRENCH
(6F)

(3) 1/4" CNC IN TRENCH
(60F, (5) 6F, SPARE)

(3) 1/4" CNC IN TRENCH
(60F, (5) 6F, SPARE)

6 SM
DR-4A R02, 1-6
6 SM
DR-5B R02, 1-6
6 SM
DR-4C R02, 1-6
6 SM
DR-3C R02, 1-6
6 SM
DR-3B R02, 1-6
60 SM
R01 R02, 1-48
R02 R05, 1-12

MATCH LINE STA. 1506+50
SEE SHEET COMM-35

MATCH LINE STA. 1518+00
SEE SHEET COMM-37

(3) 1/4" CNC IN TRENCH
(48F, (4) 6F, SPARE)
(3) 1/4" CNC IN TRENCH
(96F, SPARE, SPARE)

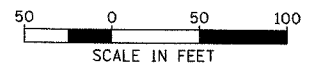
4" CNC CONCRETE ENCASED, BY OTHERS
(3) 1/4" CNC (48F, (4) 6F, SPARE)
4" CNC CONCRETE ENCASED, BY OTHERS
(3) 1/4" CNC (96F, SPARE, SPARE)
4" CNC CONCRETE ENCASED, BY OTHERS
(SPARE)

(3) 1/4" CNC IN TRENCH
(48F, (4) 6F, SPARE)
(3) 1/4" CNC IN TRENCH
(96F, SPARE, SPARE)

6 SM
DR-4C R03, 1-6
6 SM
DR-2B R03, 1-6
6 SM
DR-4B R03, 1-6
6 SM
DR-3D R03, 1-6
48 SM
R01 R03, 1-48
96 SM
R01 R03, 1-96

HH 3603, TYPE S1
STA 8065+18
(3) 1/4" CNC IN TRENCH
(96F, SPARE, SPARE)

- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
 - TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 - THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 - CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



SCALE IN FEET COMM-36

REVISIONS	
NAME	DATE

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

COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

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

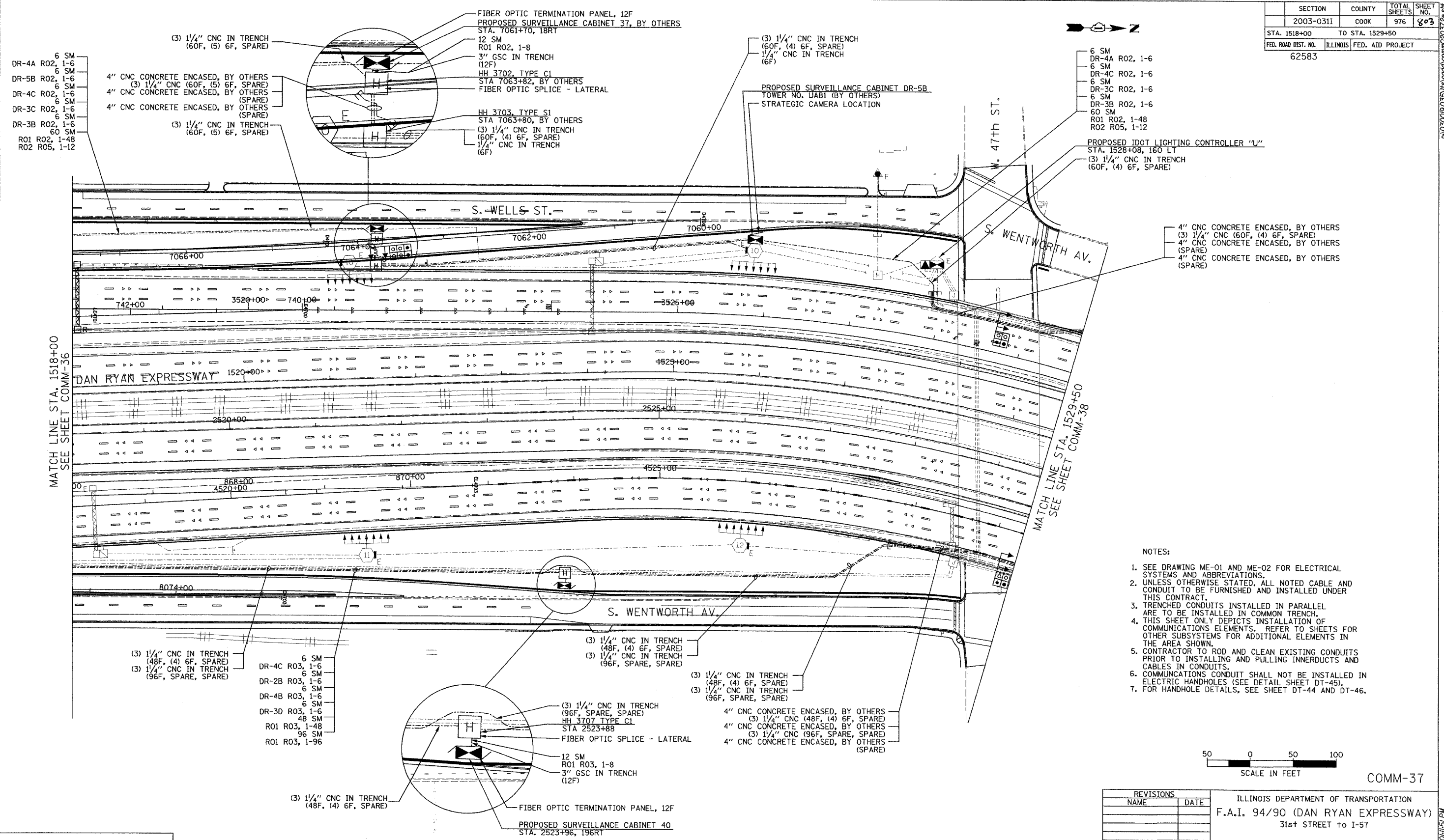
DRAWN BY: DHI
CHECKED BY: BA

**Edwards
AND
Kelcey**

ONE NORTH FRANKLIN
CHICAGO, IL 60606
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	803
STA. 1518+00 TO STA. 1529+50		ILLINOIS FED. AID PROJECT	
FED. ROAD DIST. NO. 62583			



- 6 SM
- DR-4A R02, 1-6
- 6 SM
- DR-5B R02, 1-6
- 6 SM
- DR-4C R02, 1-6
- 6 SM
- DR-3C R02, 1-6
- 6 SM
- DR-3B R02, 1-6
- 60 SM
- R01 R02, 1-48
- R02 R05, 1-12

- (3) 1/4" CNC IN TRENCH (60F, (5) 6F, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (60F, (5) 6F, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)
- (3) 1/4" CNC IN TRENCH (60F, (5) 6F, SPARE)

- FIBER OPTIC TERMINATION PANEL, 12F
- PROPOSED SURVEILLANCE CABINET 37, BY OTHERS
- STA. 7061+70, 18RT
- 12 SM
- R01 R02, 1-8
- 3" GSC IN TRENCH (12F)
- HH 3702, TYPE C1
- STA 7063+82, BY OTHERS
- FIBER OPTIC SPLICE - LATERAL
- HH 3703, TYPE S1
- STA 7063+80, BY OTHERS
- (3) 1/4" CNC IN TRENCH (60F, (4) 6F, SPARE)
- 1/4" CNC IN TRENCH (6F)

- (3) 1/4" CNC IN TRENCH (60F, (4) 6F, SPARE)
- 1/4" CNC IN TRENCH (6F)

- PROPOSED SURVEILLANCE CABINET DR-5B
- TOWER NO. UABI (BY OTHERS)
- STRATEGIC CAMERA LOCATION

- 6 SM
- DR-4A R02, 1-6
- 6 SM
- DR-4C R02, 1-6
- 6 SM
- DR-3C R02, 1-6
- 6 SM
- DR-3B R02, 1-6
- 60 SM
- R01 R02, 1-48
- R02 R05, 1-12

- PROPOSED IDOT LIGHTING CONTROLLER "U"
- STA. 1528+08, 160 LT
- (3) 1/4" CNC IN TRENCH (60F, (4) 6F, SPARE)

- 4" CNC CONCRETE ENCASED, BY OTHERS
- (3) 1/4" CNC (60F, (4) 6F, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)

- (3) 1/4" CNC IN TRENCH (48F, (4) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

- 6 SM
- DR-4C R03, 1-6
- 6 SM
- DR-2B R03, 1-6
- 6 SM
- DR-4B R03, 1-6
- 6 SM
- DR-3D R03, 1-6
- 48 SM
- R01 R03, 1-48
- 96 SM
- R01 R03, 1-96

- (3) 1/4" CNC IN TRENCH (48F, (4) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

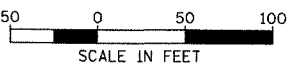
- (3) 1/4" CNC IN TRENCH (48F, (4) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (48F, (4) 6F, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (96F, SPARE, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)

- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)
- HH 3707, TYPE C1
- STA 2523+88
- FIBER OPTIC SPLICE - LATERAL
- 12 SM
- R01 R03, 1-8
- 3" GSC IN TRENCH (12F)
- FIBER OPTIC TERMINATION PANEL, 12F
- PROPOSED SURVEILLANCE CABINET 40
- STA. 2523+96, 196RT

- (3) 1/4" CNC IN TRENCH (48F, (4) 6F, SPARE)

- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
 - TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 - THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 - CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



COMM-37

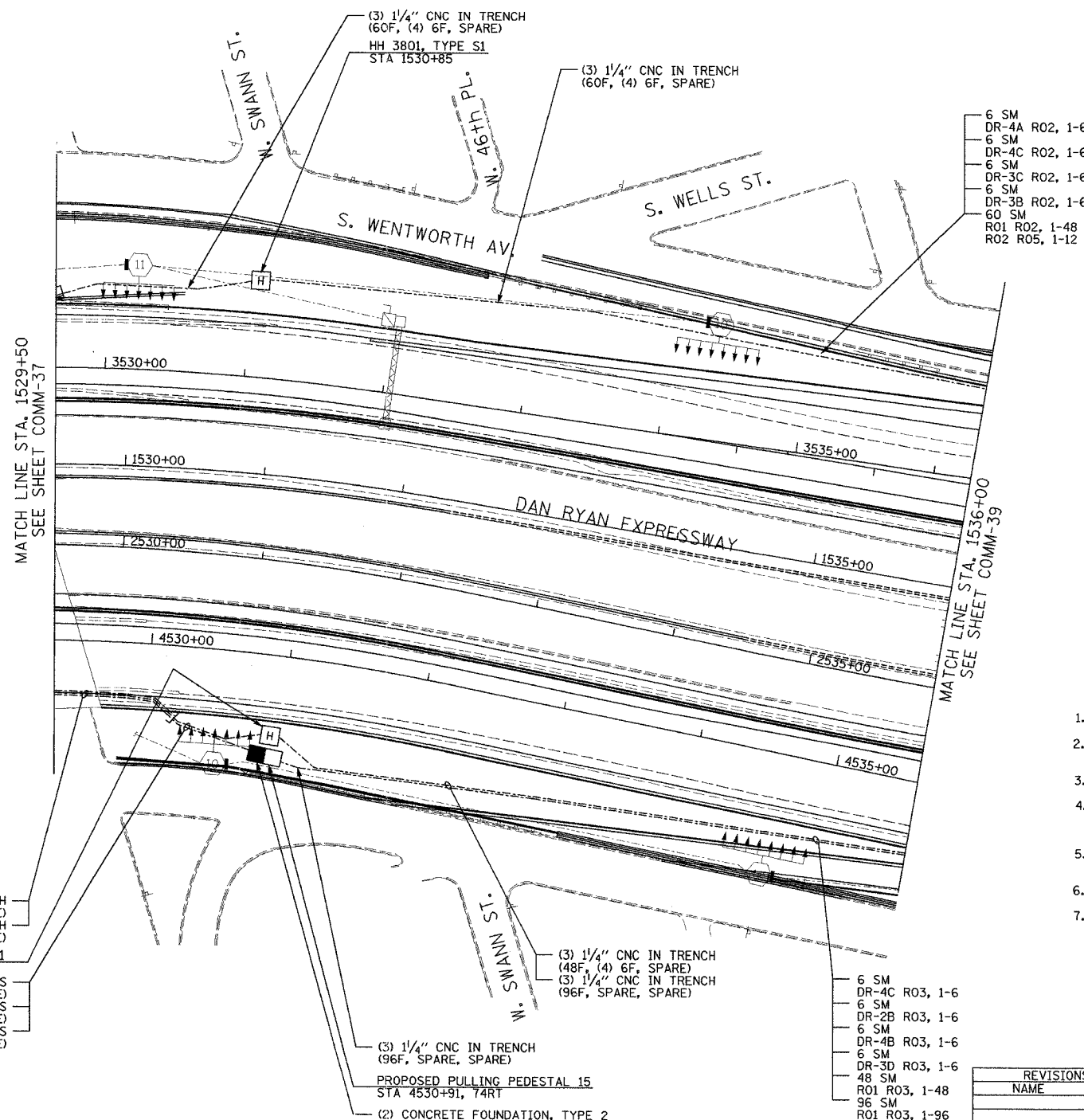
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57
 COMMUNICATIONS BACKBONE CONDUIT
 AND CABLE LAYOUT
 SCALE: 1"=50'
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: BA

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	804
STA. 1529+50 TO STA. 1536+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



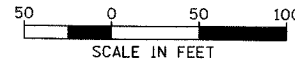
- 6 SM DR-4A R02, 1-6
- 6 SM DR-4C R02, 1-6
- 6 SM DR-3C R02, 1-6
- 6 SM DR-3B R02, 1-6
- 60 SM R01 R02, 1-48
- R02 R05, 1-12

- (3) 1/4" CNC IN TRENCH (48F, (4) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)
- HH 3802 TYPE S1 STA 2531+23
- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (48F, (4) 6F, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (96F, SPARE, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)

- (3) 1/4" CNC IN TRENCH (48F, (4) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

- 6 SM DR-4C R03, 1-6
- 6 SM DR-2B R03, 1-6
- 6 SM DR-4B R03, 1-6
- 6 SM DR-3D R03, 1-6
- 48 SM R01 R03, 1-48
- 96 SM R01 R03, 1-96

- NOTES:
1. SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 6. COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 7. FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



COMM-38

REVISIONS	
NAME	DATE

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

COMMUNICATIONS BACKBONE CONDUIT
 AND CABLE LAYOUT

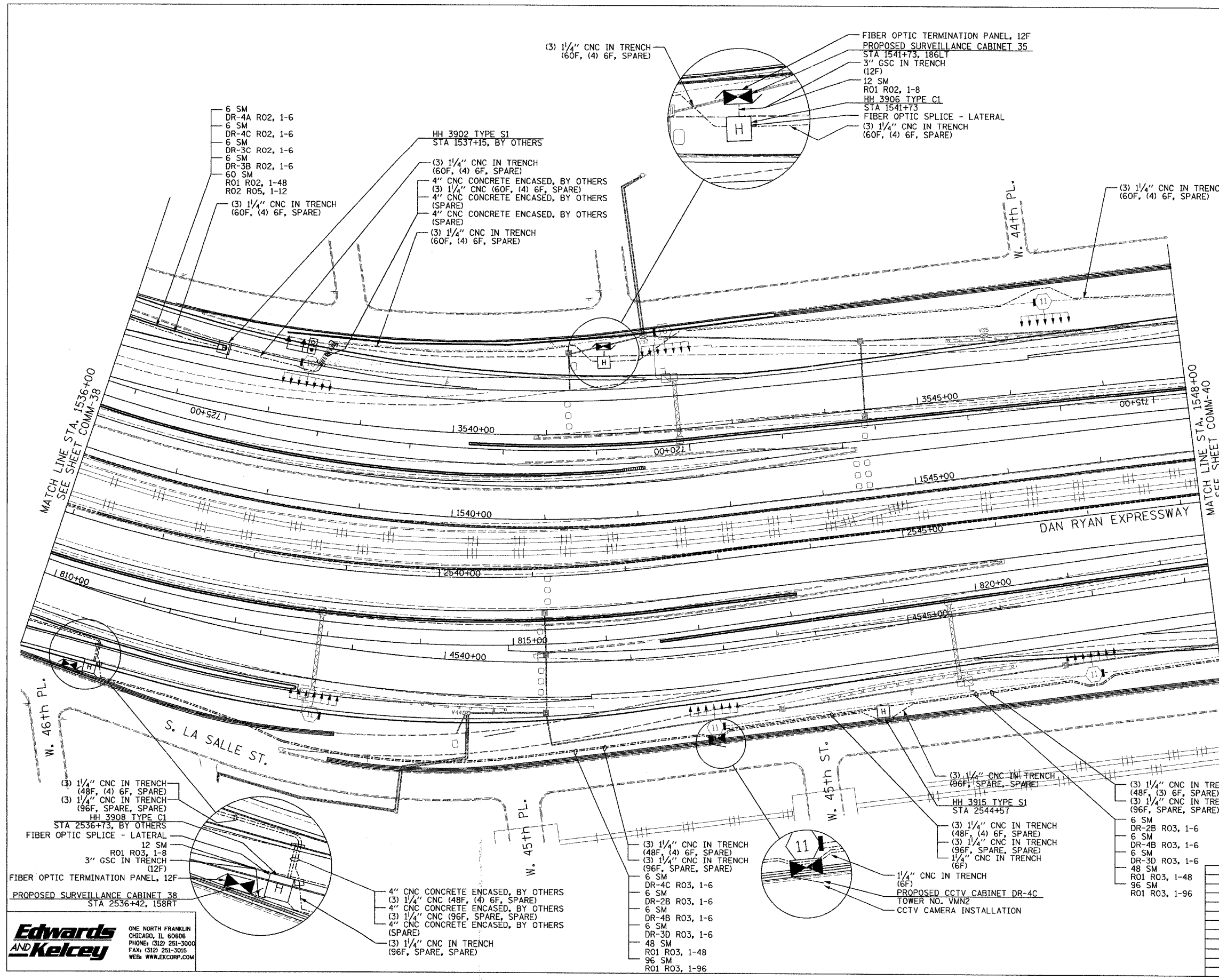
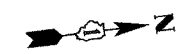
SCALE: 1"=50'
 DATE: October 29, 2004

DRAWN BY: DHI
 CHECKED BY: BA

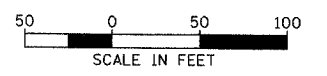
Edwards and Kelcey
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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	805
STA. 1536+00 TO STA. 1548+00		ILLINOIS FED. AID PROJECT	
FED. ROAD DIST. NO.		62583	



- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
 - TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 - THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 - CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



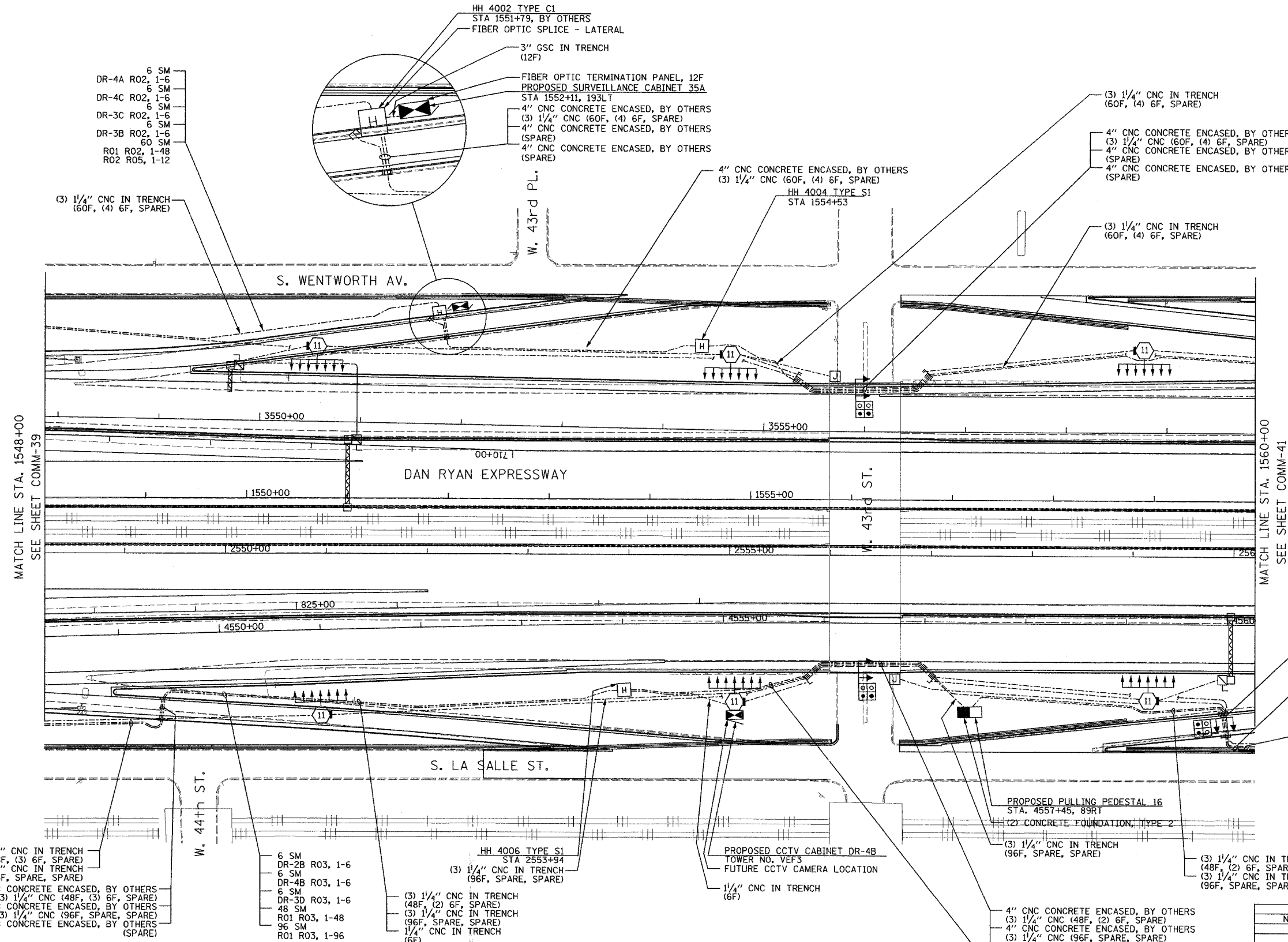
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57
 COMMUNICATIONS BACKBONE CONDUIT
 AND CABLE LAYOUT
 SCALE: 1"=50'
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: BA

**Edwards
 AND Kelcey**
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
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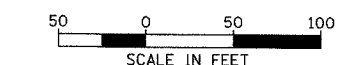
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	806
STA. 1548+00 TO STA. 1560+00			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
62583			



MATCH LINE STA. 1548+00
SEE SHEET COMM-39

MATCH LINE STA. 1560+00
SEE SHEET COMM-41

- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
 - TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 - THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 - CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



COMM-40

- (3) 1/4" CNC IN TRENCH (48F, (3) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (48F, (3) 6F, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (96F, SPARE, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)

- 6 SM DR-2B R03, 1-6
- 6 SM DR-4B R03, 1-6
- 6 SM DR-3D R03, 1-6
- 48 SM R01 R03, 1-48
- 96 SM R01 R03, 1-96

- HH 4006 TYPE S1 STA 2553+94
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)
- 1/4" CNC IN TRENCH (6F)

- PROPOSED CCTV CABINET DR-4B TOWER NO. VEF3
- FUTURE CCTV CAMERA LOCATION
- 1/4" CNC IN TRENCH (6F)

- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (48F, (2) 6F, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (3) 1/4" CNC (96F, SPARE, SPARE)
- 4" CNC CONCRETE ENCASED, BY OTHERS (SPARE)
- (3) 1/4" CNC IN TRENCH (48F, (2) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

- (3) 1/4" CNC IN TRENCH (48F, (2) 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

REVISIONS	
NAME	DATE

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

COMMUNICATIONS BACKBONE CONDUIT AND CABLE LAYOUT

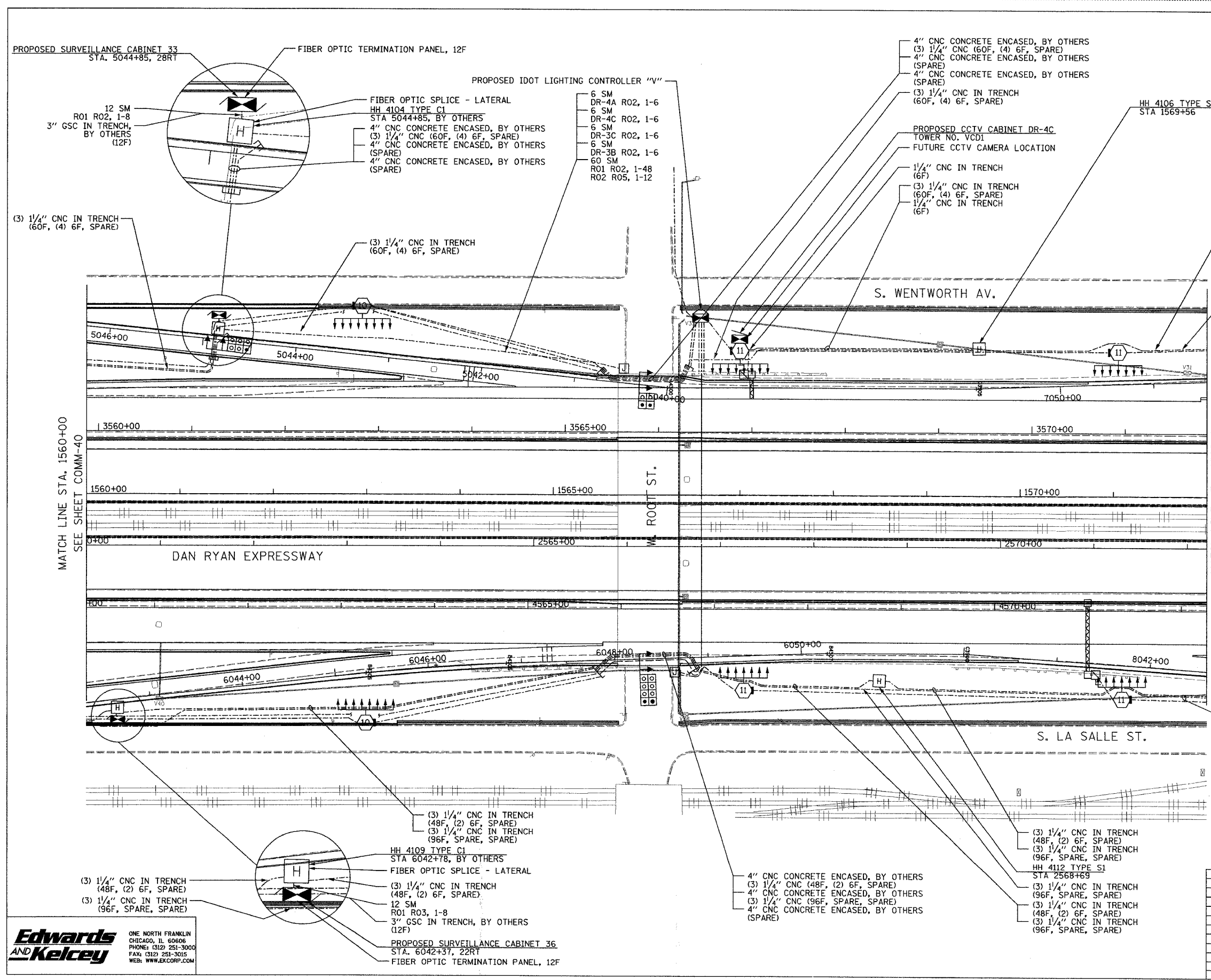
SCALE: 1"=50'
DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: BA

Edwards and Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
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FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

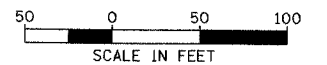
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	807
STA. 1560+00 TO STA. 1572+00			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
62583			



NOTES:

1. SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
2. UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
4. THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
5. CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
6. COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
7. FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



COMM-41

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 COMMUNICATIONS BACKBONE CONDUIT
 AND CABLE LAYOUT
 SCALE: 1"=50'
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: BA

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

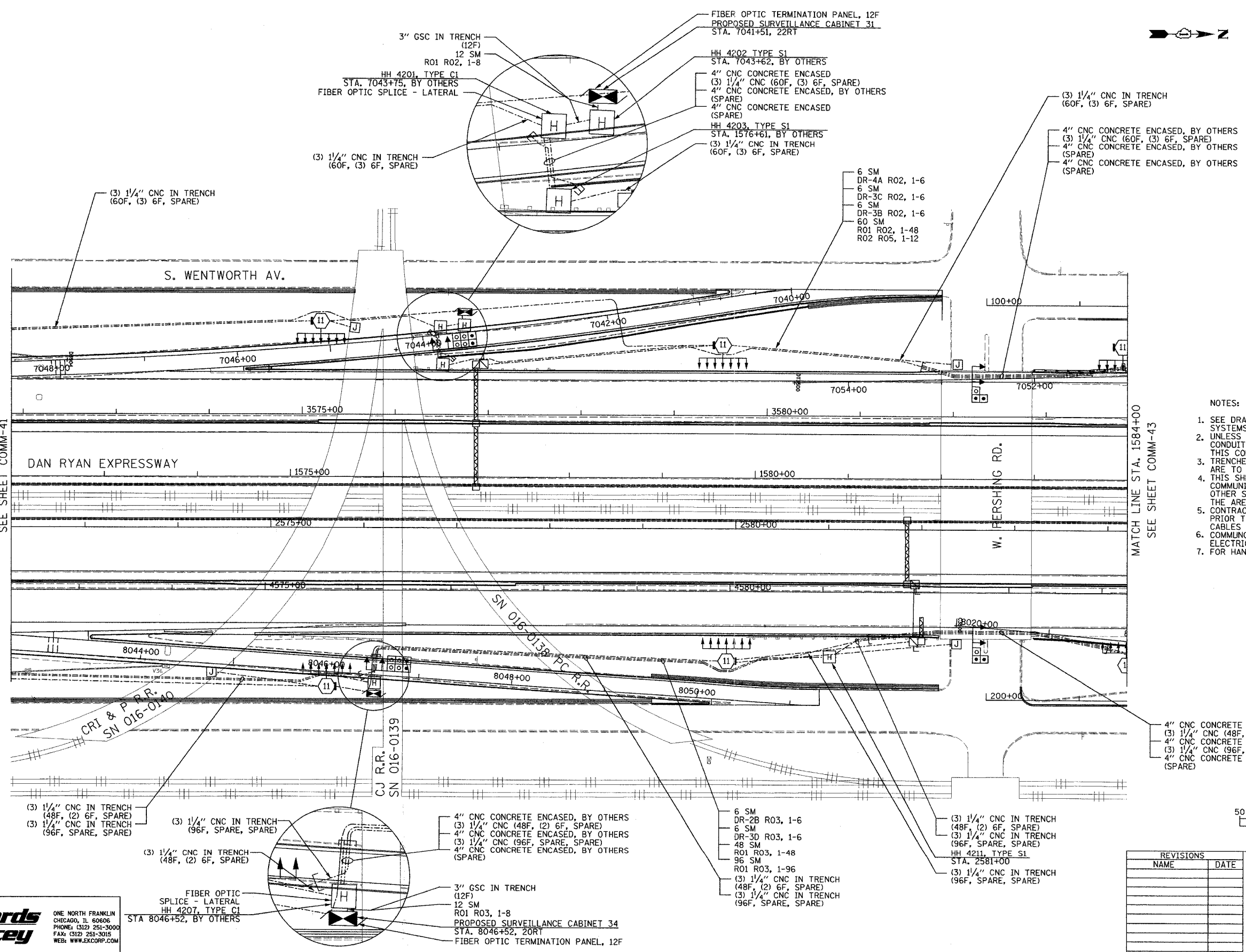
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	808
STA. 1572+00 TO STA. 1584+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
		62583	

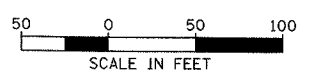


MATCH LINE STA. 1572+00
SEE SHEET COMM-41

MATCH LINE STA. 1584+00
SEE SHEET COMM-43



- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
 - TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 - THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 - CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



COMM-42

REVISIONS	
NAME	DATE

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

COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

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

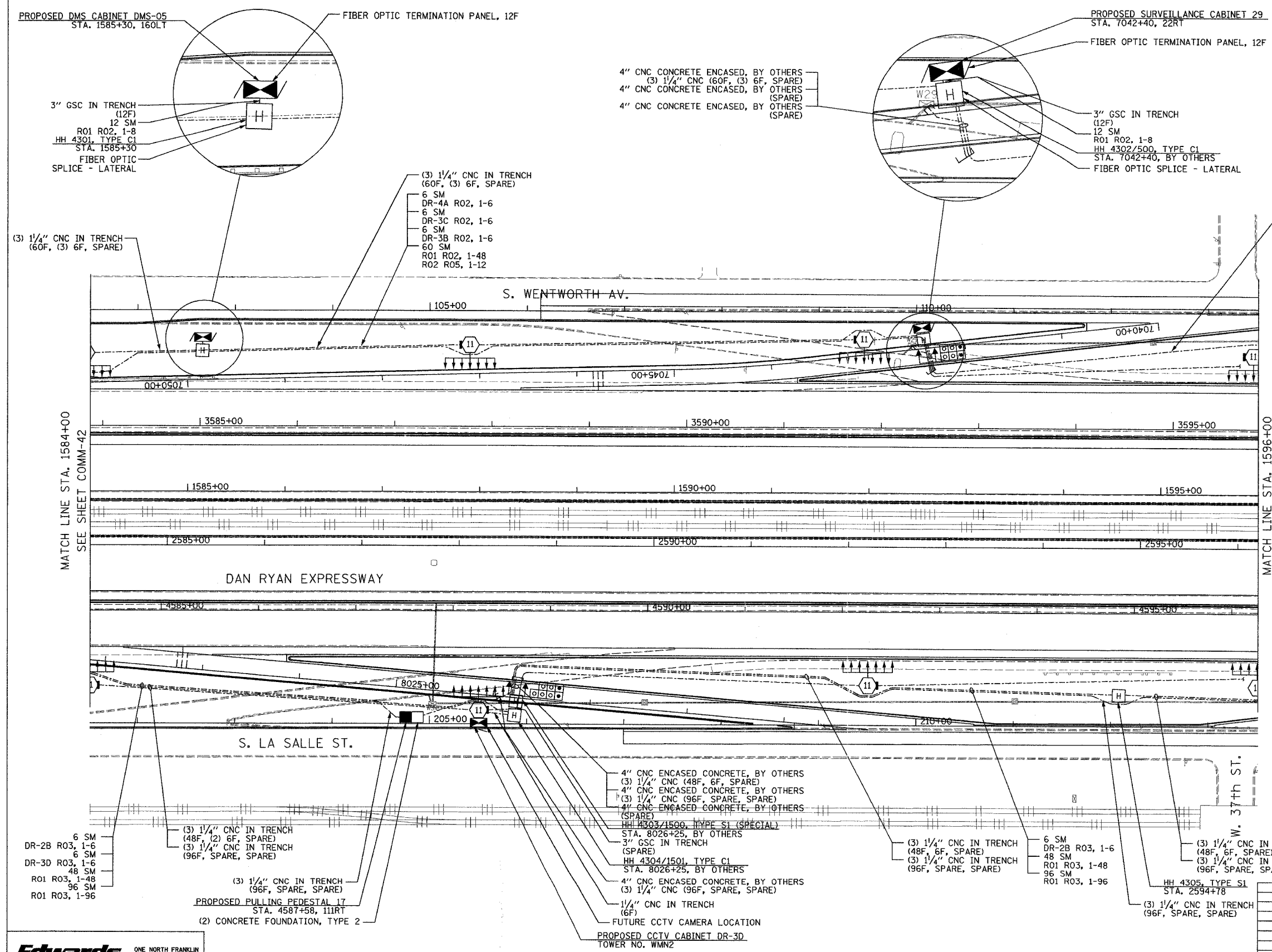
DRAWN BY: DHI
CHECKED BY: BA

Edwards AND Kelcey

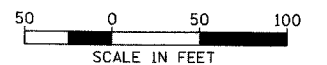
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

10/14/2004 04:50 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	809
STA. 1584+00 TO STA. 1596+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
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 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



REVISIONS	
NAME	DATE

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

COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

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

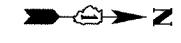
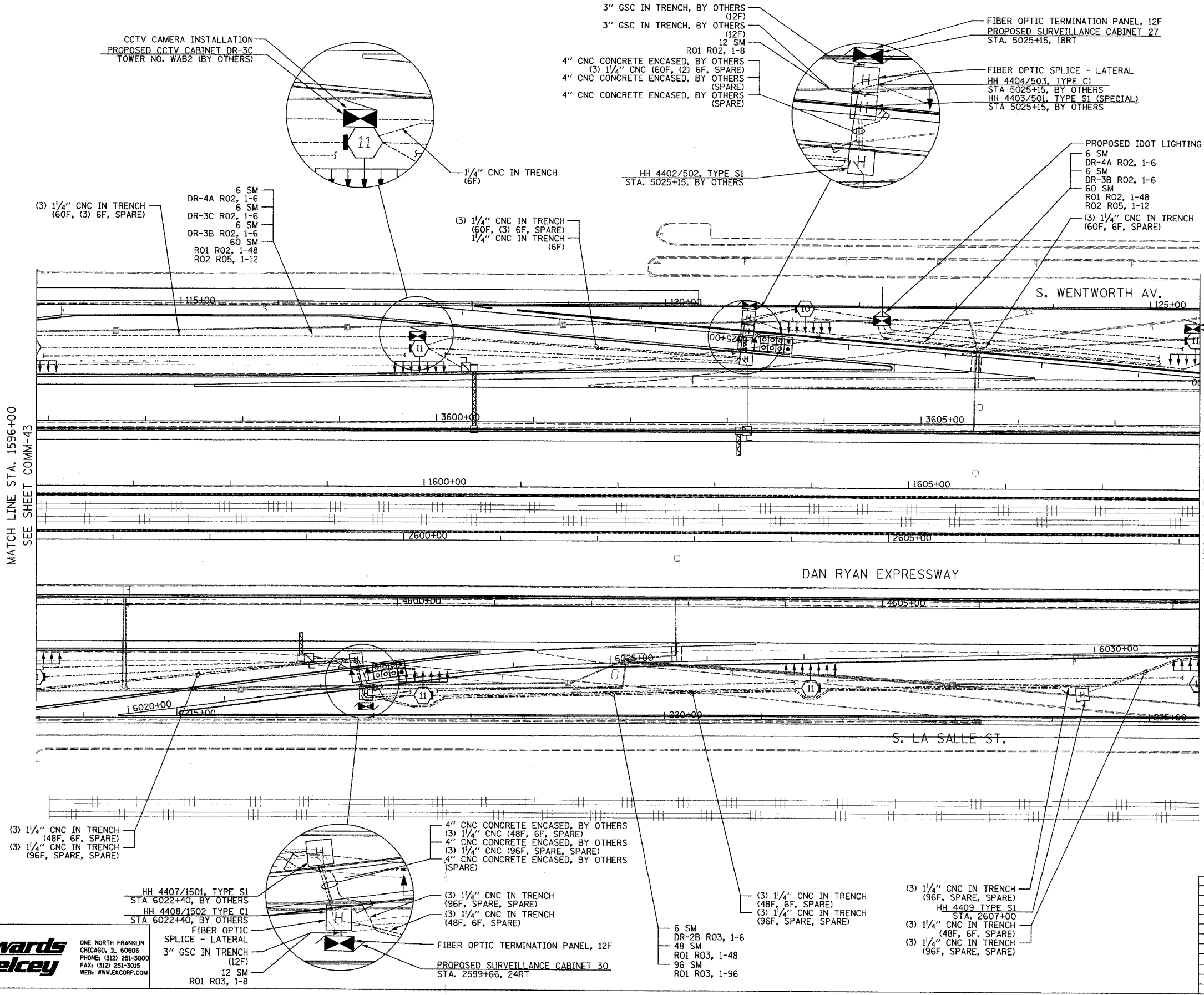
DRAWN BY: DHI
CHECKED BY: BA

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AND
Kelcey**

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FAX: (312) 251-3015
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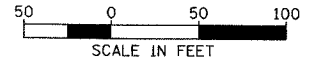
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	810
STA. 1596+00	TO STA. 1608+00		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
62583			



FUTURE CAMERA LOCATION
PROPOSED CCTV CABINET DR-3B
TOWER NO. WCD1 (BY OTHERS)

- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
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 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.

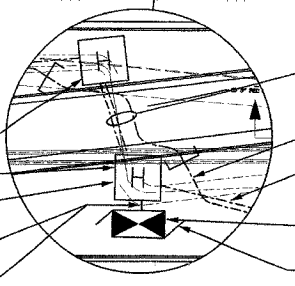


COMM-44

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AND Kelcey**

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PHONE: (312) 251-3000
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WEB: WWW.EXCORP.COM

HH 4407/1501, TYPE S1
STA. 6022+40, BY OTHERS
HH 4408/1502 TYPE C1
STA. 6022+40, BY OTHERS
FIBER OPTIC
SPLICE - LATERAL
3" GSC IN TRENCH
(12F)
12 SM
R01 R03, 1-8



4" CNC CONCRETE ENCASED, BY OTHERS
(3) 1/4" CNC (48F, 6F, SPARE)
4" CNC CONCRETE ENCASED, BY OTHERS
(3) 1/4" CNC (96F, SPARE, SPARE)
4" CNC CONCRETE ENCASED, BY OTHERS
(SPARE)
(3) 1/4" CNC IN TRENCH
(96F, SPARE, SPARE)
(3) 1/4" CNC IN TRENCH
(48F, 6F, SPARE)
FIBER OPTIC TERMINATION PANEL, 12F
PROPOSED SURVEILLANCE CABINET 30
STA. 2599+66, 24RT

(3) 1/4" CNC IN TRENCH
(48F, 6F, SPARE)
(3) 1/4" CNC IN TRENCH
(96F, SPARE, SPARE)
6 SM
DR-2B R03, 1-6
48 SM
R01 R03, 1-48
96 SM
R01 R03, 1-96

(3) 1/4" CNC IN TRENCH
(96F, SPARE, SPARE)
HH 4409 TYPE S1
STA. 2507+00
(3) 1/4" CNC IN TRENCH
(48F, 6F, SPARE)
(3) 1/4" CNC IN TRENCH
(96F, SPARE, SPARE)

REVISIONS	
NAME	DATE

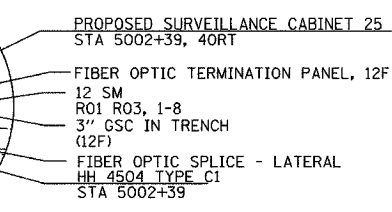
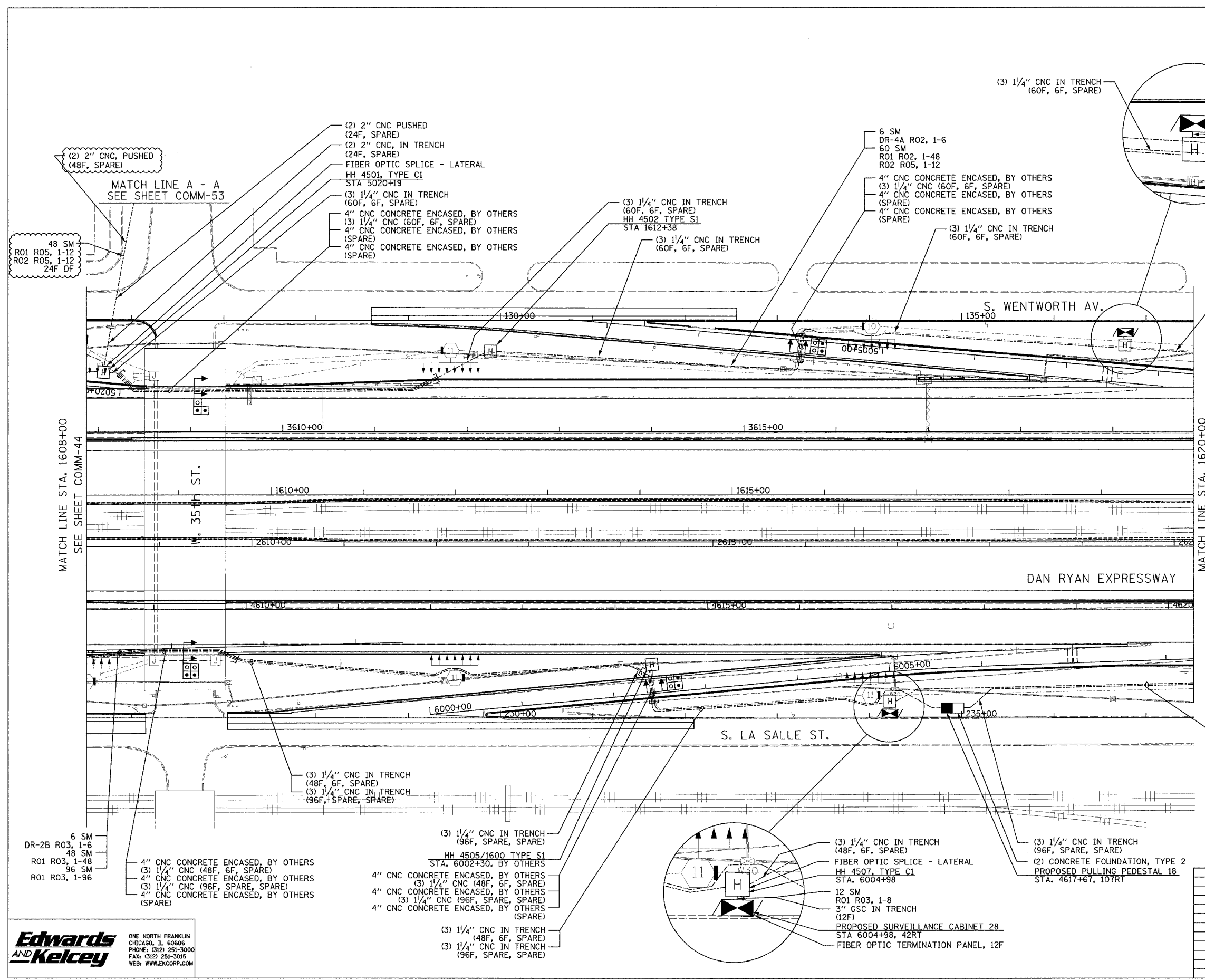
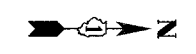
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57

COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

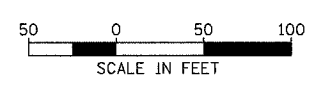
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DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: BA

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	811
STA. 1608+00 TO STA. 1620+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
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 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



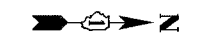
REVISIONS	
NAME	DATE
REVISION 1	10/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57
 COMMUNICATIONS BACKBONE CONDUIT
 AND CABLE LAYOUT
 SCALE: 1"=50'
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: BA

**Edwards
 AND Kelcey**
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

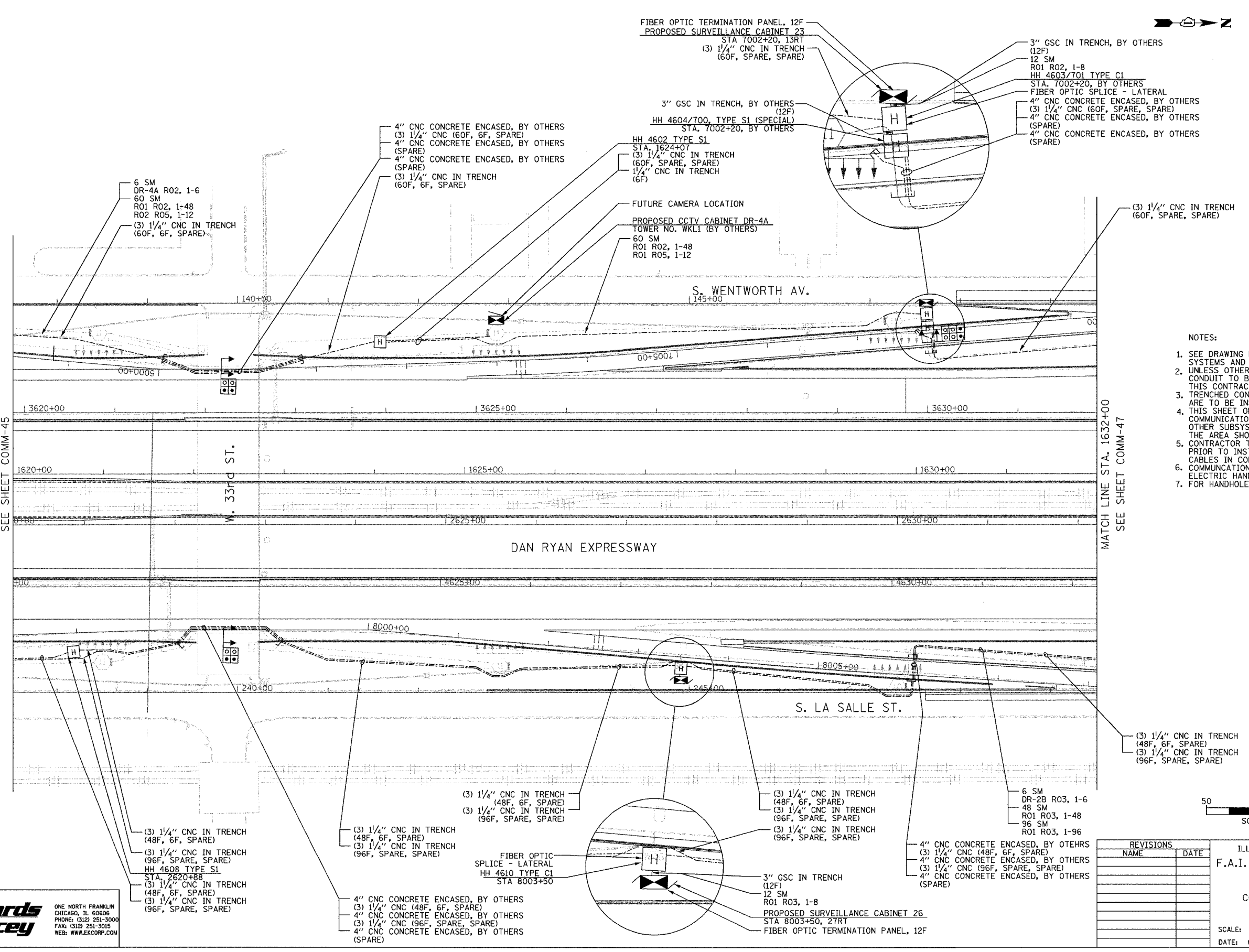
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	812
STA. 1620+00	TO STA. 1632+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
		62583	

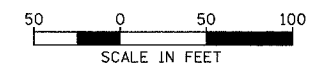


MATCH LINE STA. 1620+00
SEE SHEET COMM-45

MATCH LINE STA. 1632+00
SEE SHEET COMM-47



- NOTES:
1. SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
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 4. THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 6. COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 7. FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.



COMM-46

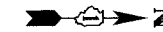
**Edwards
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Kelcey**
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CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT
SCALE: 1"=50'
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: BA

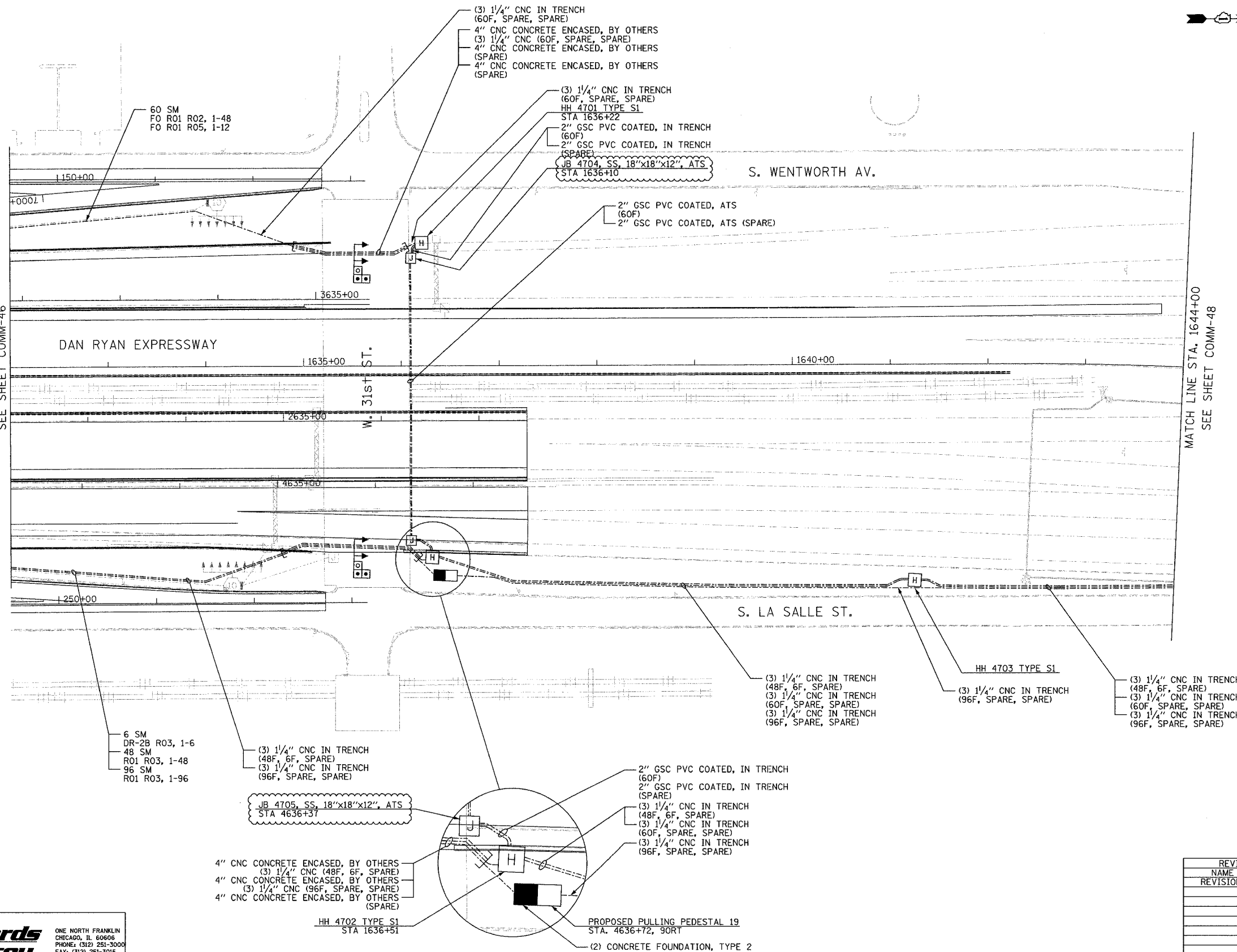
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	813
STA. 1632+00	TO STA. 1644+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			

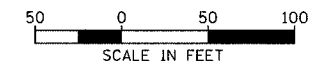


MATCH LINE STA. 1632+00
SEE SHEET COMM-46

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



- NOTES:
- SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
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 - COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 - FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.
 - FOR JUNCTION BOX ATTACHED CONDUIT INSTALLATION, SEE SHEET ME-05.
 - CONTRACTOR SHALL MAINTAIN MINIMUM 24" BENDING RADIUS FOR ALL CONDUIT WITH FIBER OPTIC CABLES.



COMM-47

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
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REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

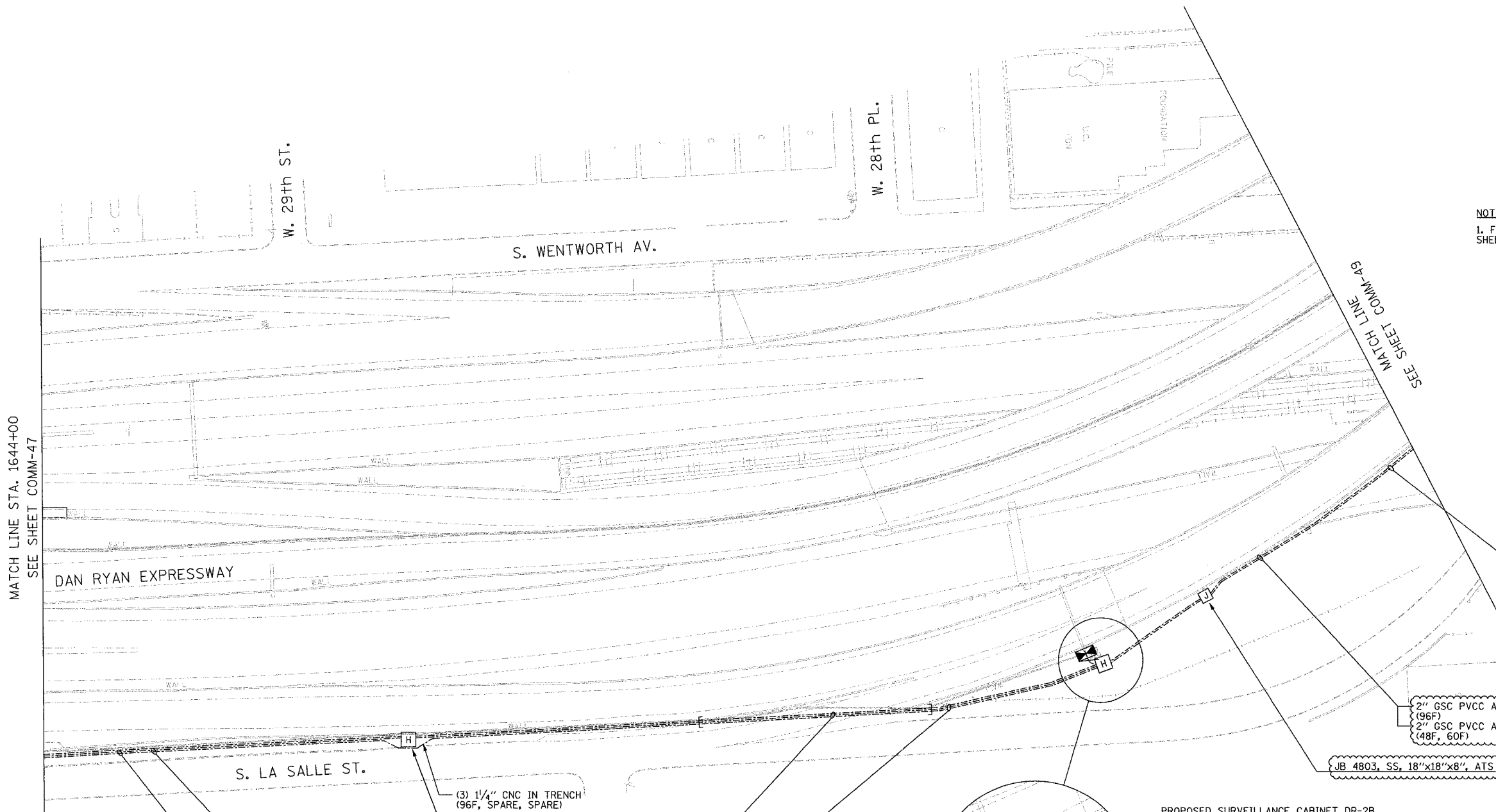
COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

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

DRAWN BY: DHI
CHECKED BY: MJL

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	814
STA. 1644+00	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
		62583	



NOTES:
 1. FOR CONDUIT ATTACHMENT DETAILS, SEE SHEET DT-52.

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

SEE MATCH LINE
 COMM-49

- 48 SM
- RO1 R03, 1-48
- 48 SM
- RO1 R02, 1-48
- 12 SM
- RO1 ETP, 1-12
- 96 SM
- RO1 R03, 1-96

2" GSC PVCC ATS (NOTE 1)
 (96F)
 2" GSC PVCC ATS (NOTE 1)
 (48F, 60F)

JB 4803, SS, 18"x18"x8", ATS

- (3) 1/4" CNC IN TRENCH (48F, 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (60F, SPARE, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)
- 6 SM
- CCTV-14 R03, 1-6
- 48 SM
- RO1 R03, 1-48
- 48 SM
- RO1 R02, 1-48
- 12 SM
- RO1 ETP, 1-12
- 96 SM
- RO1 R03, 1-96

(3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)
 HH 4801 TYPE S1

- 4" CNC PUSHED
- (3) 1/4" CNC (96F, SPARE, SPARE)
- 4" CNC PUSHED
- (3) 1/4" CNC (60F, SPARE, SPARE)
- 4" CNC PUSHED
- (3) 1/4" CNC (48F, 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)
- (3) 1/4" CNC IN TRENCH (60F, SPARE, SPARE)
- (3) 1/4" CNC IN TRENCH (48F, 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

- 1/4" CNC IN TRENCH (6F)
- (3) 1/4" CNC IN TRENCH (60F, SPARE, SPARE)
- (3) 1/4" CNC IN TRENCH (48F, 6F, SPARE)
- (3) 1/4" CNC IN TRENCH (96F, SPARE, SPARE)

PROPOSED SURVEILLANCE CABINET DR-2B

2" GSC IN TRENCH (48F, 60F)
 2" GSC IN TRENCH (96F)

HH 4802 TYPE C1



SCALE IN FEET COMM-48

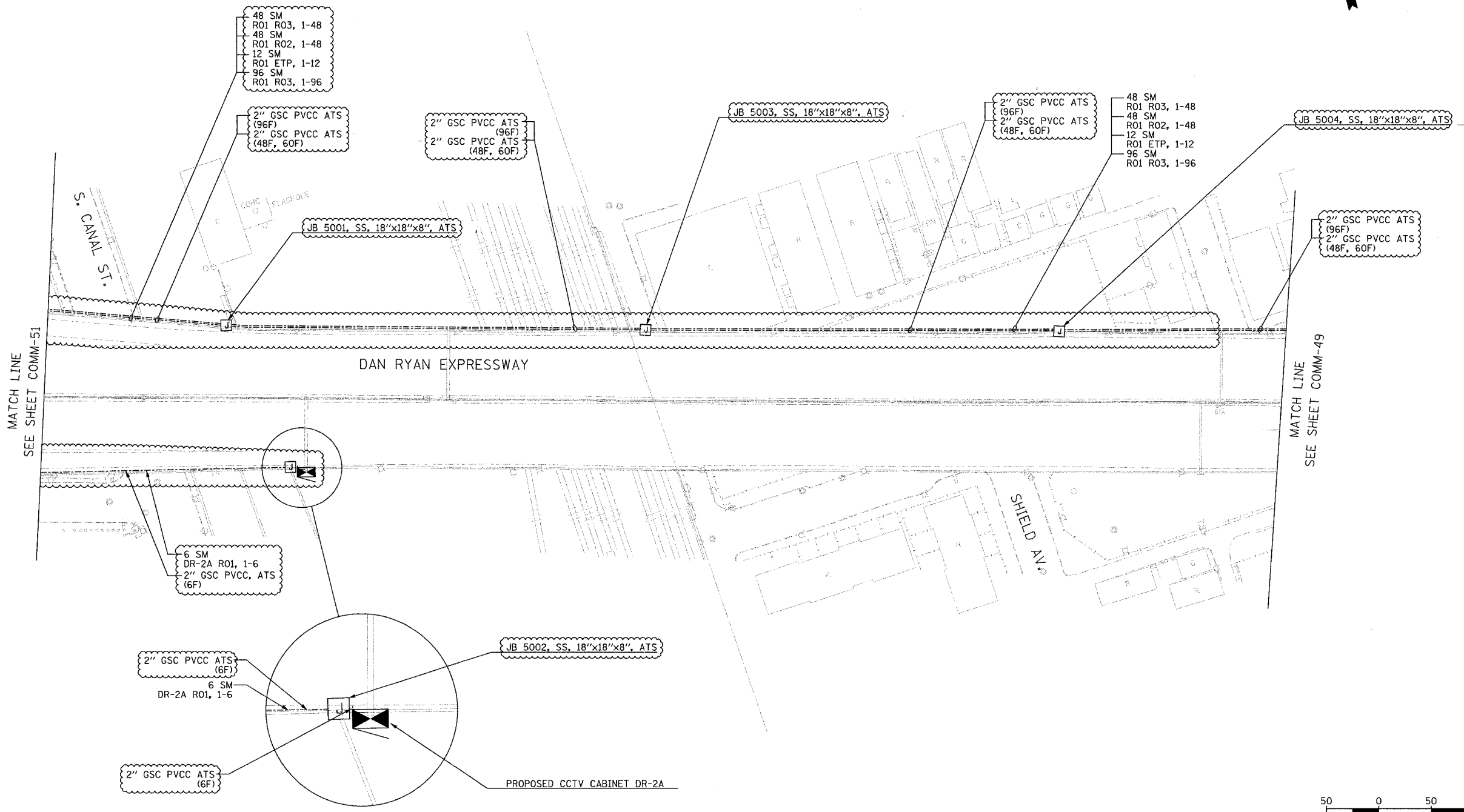
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57
 COMMUNICATIONS BACKBONE CONDUIT AND CABLE LAYOUT
 SCALE: 1"=50'
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: MJL

P:\030019\030311\1644+00\comm\02-48\24.dwg 12/10/2004 02:48:17 PM

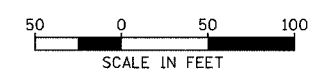
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	816
STA. 1644+00	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



MATCH LINE
SEE SHEET COMM-51

MATCH LINE
SEE SHEET COMM-49

NOTES:
1. FOR CONDUIT AND JUNCTION BOX ATTACHMENT DETAILS, SEE SHEET DT-52.



COMM-50

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

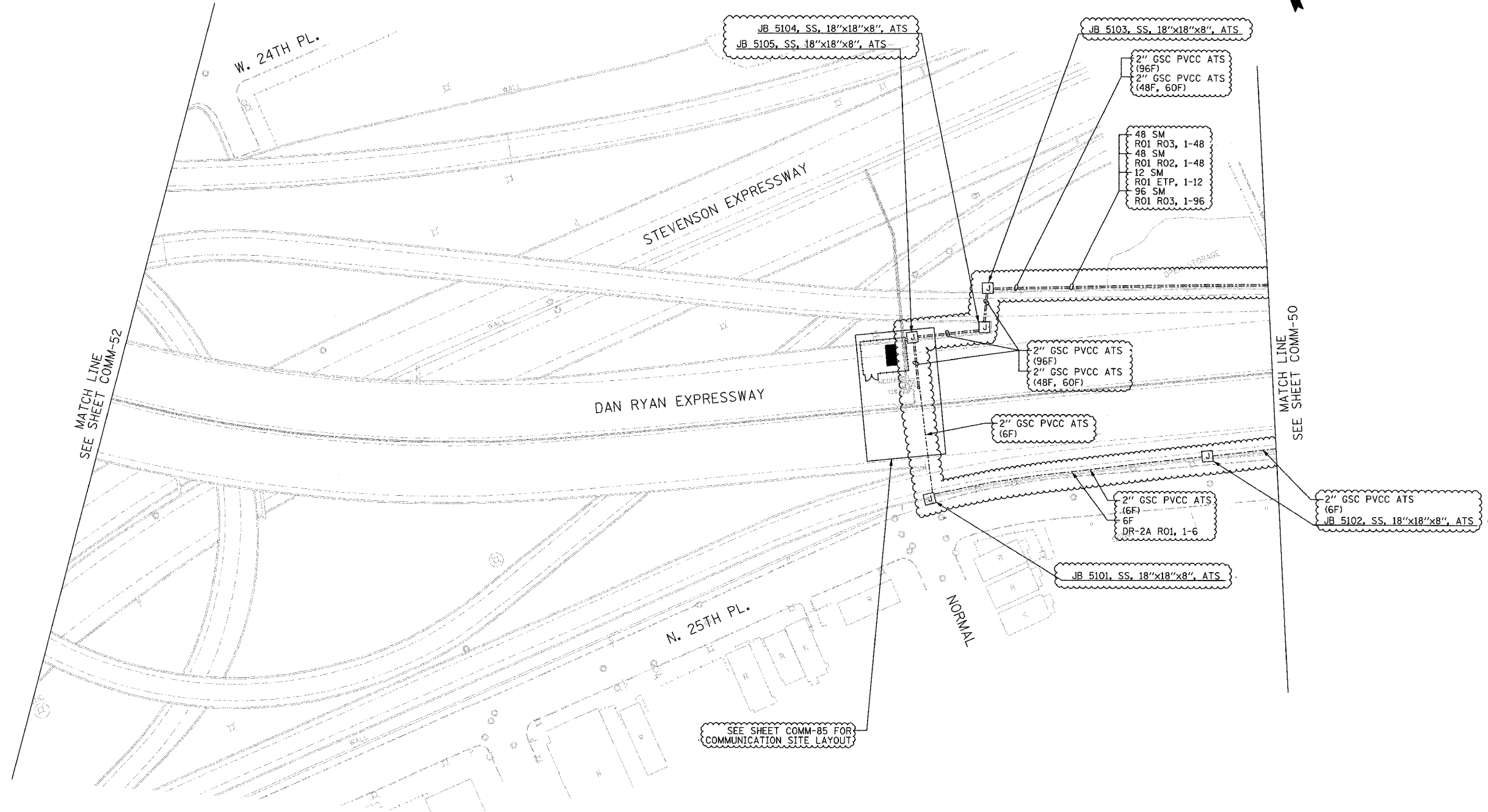
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57

COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

SCALE: 1"=50'
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: MJL

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	817
STA. 1644+00 TO STA.		62583	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

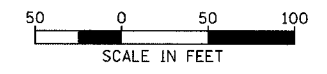


MATCH LINE
SEE SHEET COMM-52

MATCH LINE
SEE SHEET COMM-50

SEE SHEET COMM-85 FOR
COMMUNICATION SITE LAYOUT

- NOTES:
1. PROPOSED COMMUNICATION SHELTER (RO1) SET AT GRADE UNDER DAN RYAN EXPRESSWAY STRUCTURE. SEE SHEET COMM-85 FOR SHELTER SITE LAYOUT.
 2. FOR CONDUIT AND JUNCTION BOX ATTACHMENT DETAILS, SEE SHEET DT-52.



COMM-51

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

COMMUNICATIONS BACKBONE CONDUIT
AND CABLE LAYOUT

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

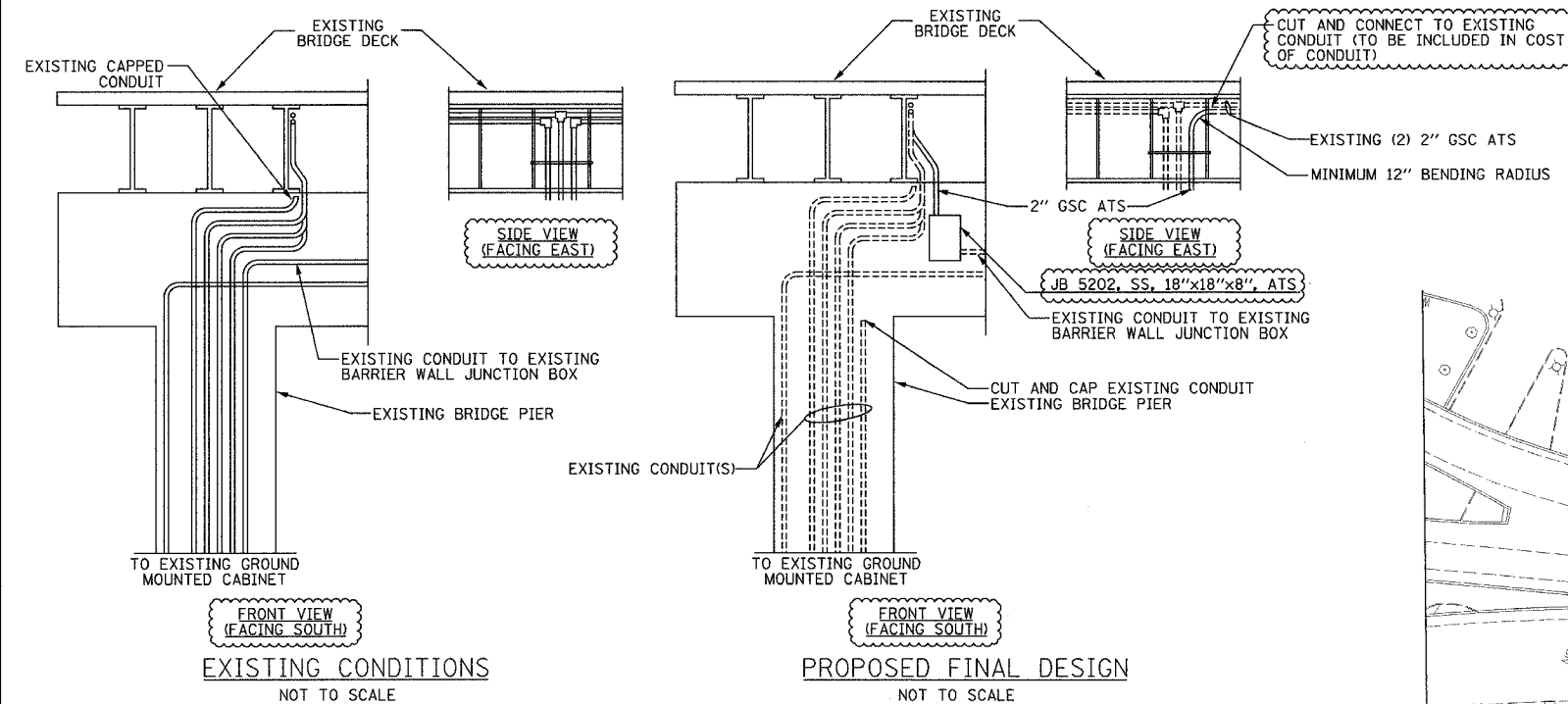
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CHECKED BY: MJL

**Edwards
AND Kelcey**

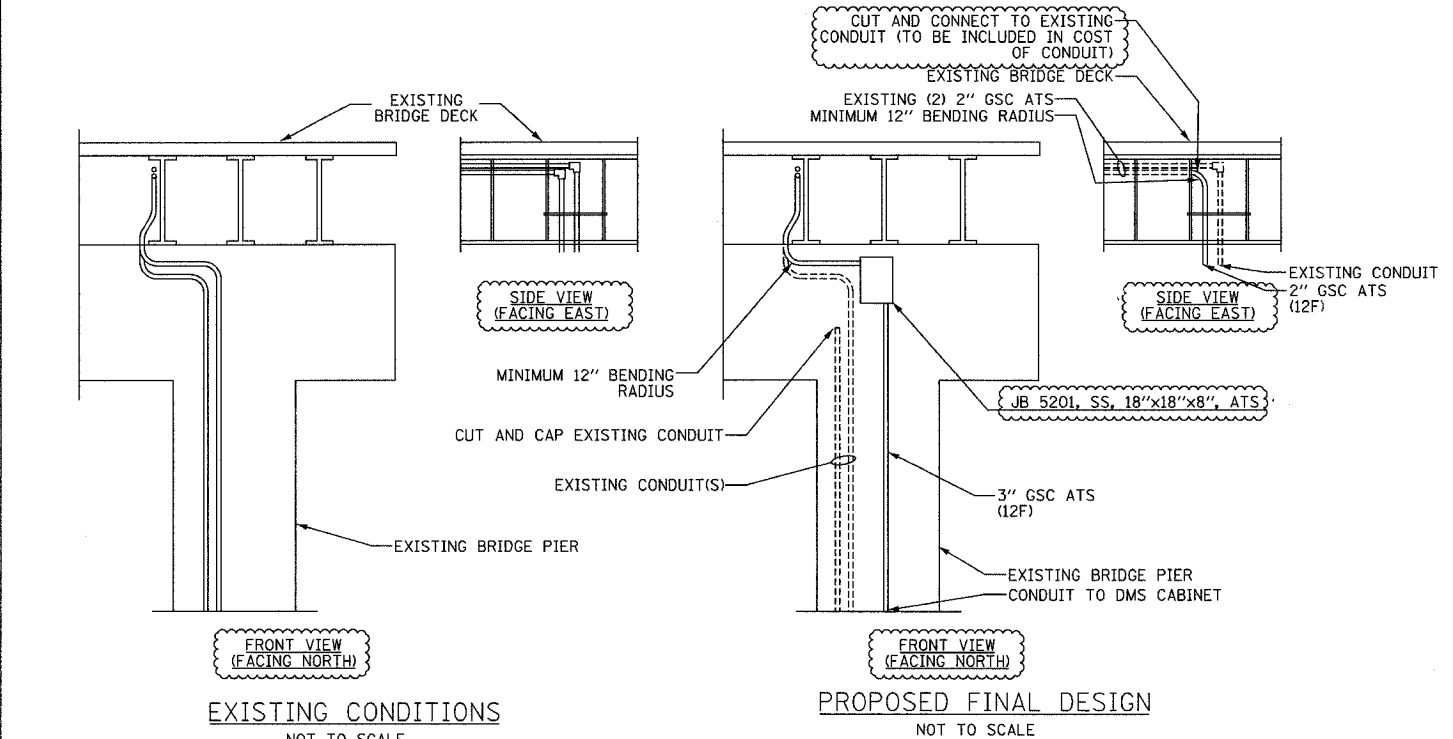
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

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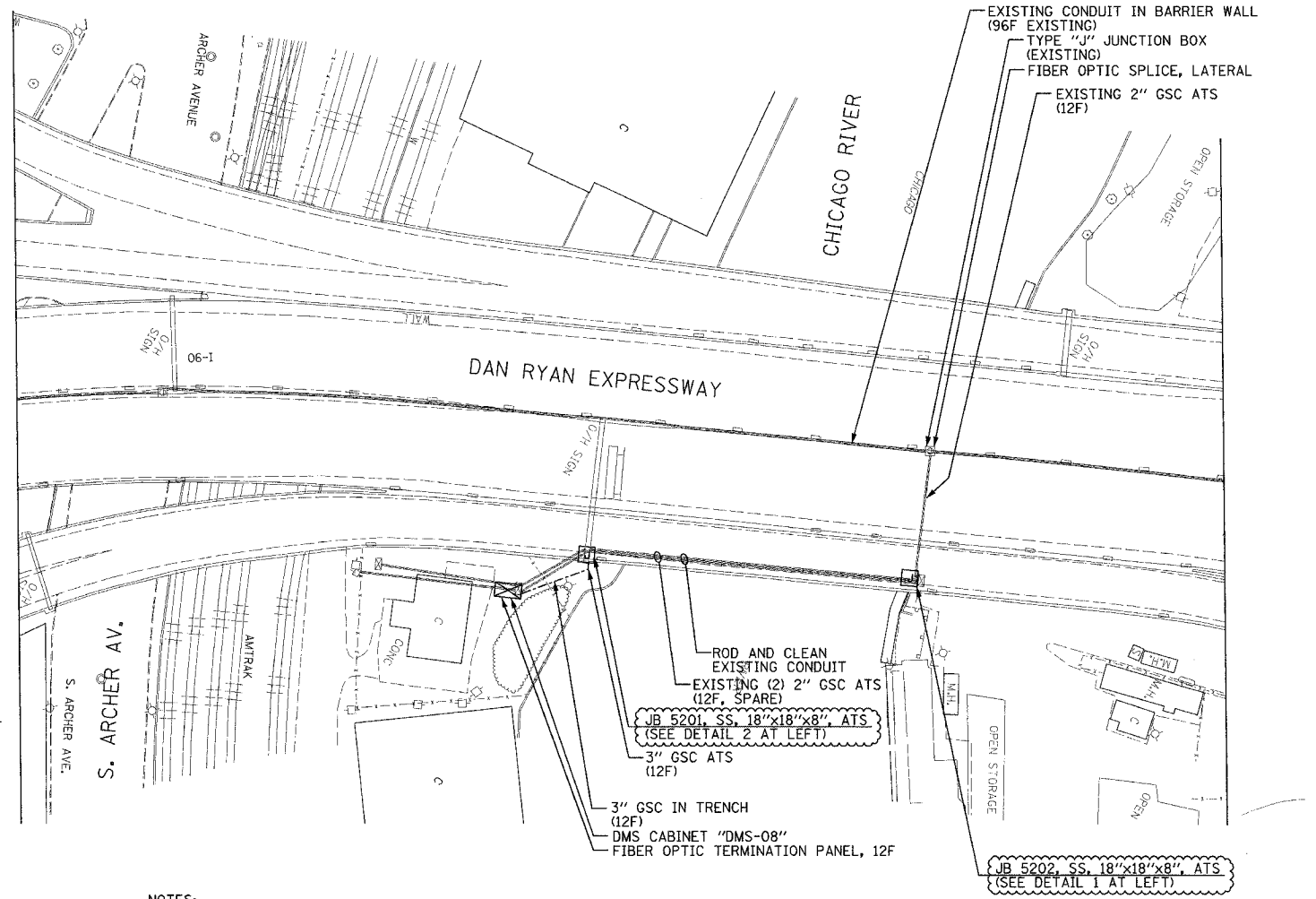
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	818
STA. 1644+00 TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



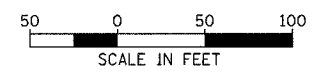
DETAIL 1 (NORTH OF CHICAGO RIVER)



DETAIL 2 (SOUTH OF CHICAGO RIVER)



- NOTES:**
1. SEE DRAWING ME-01 AND ME-02 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE AND CONDUIT TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF COMMUNICATIONS ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. CONTRACTOR TO ROD AND CLEAN EXISTING CONDUITS PRIOR TO INSTALLING AND PULLING INNERDUCTS AND CABLES IN CONDUITS.
 6. COMMUNICATIONS CONDUIT SHALL NOT BE INSTALLED IN ELECTRIC HANDHOLES (SEE DETAIL SHEET DT-45).
 7. FOR HANDHOLE DETAILS, SEE SHEET DT-44 AND DT-46.
 8. THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT THE OPERATION OF THE COMMUNICATION SYSTEM IS NOT IMPACTED. WORK REQUIRING LANE CLOSURES SHALL ONLY BE EXECUTED ON WEEKENDS, HOLIDAY AND SPECIAL EVENT WEEKENDS SHALL BE EXCLUDED. THE CONTRACTOR SHALL COORDINATE AND RECEIVE PRIOR APPROVAL FROM THE ENGINEER FOR ALL WORK THAT COULD IMPACT THE OPERATIONAL SYSTEMS. REQUESTS FOR APPROVAL SHALL BE MADE TO THE ENGINEER A MINIMUM OF 72 HOURS PRIOR TO THE ACTUAL COMMENCEMENT OF WORK.
 9. REFER TO DETAL ME-07C FOR CONDUIT CLAMP INSTALLATION DETAILS.



COMM-52

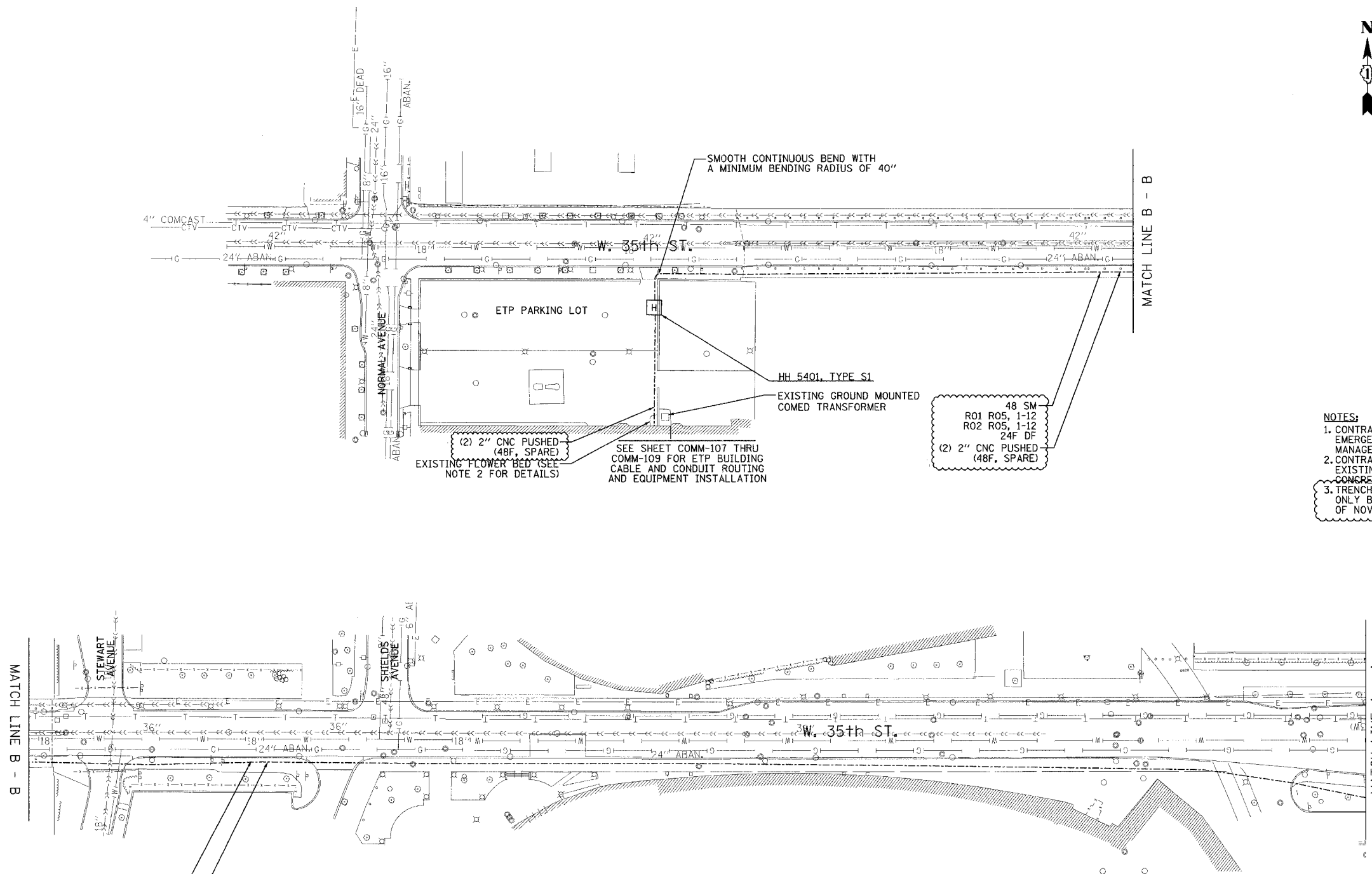
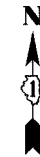
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET TO I-57
 CHICAGO RIVER DMS
 COMMUNICATIONS CONDUIT
 AND CABLE LAYOUT
 SCALE: 1"=50'
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: MJL

Edwards AND Kelcey
 ONE NORTH FRANKLIN
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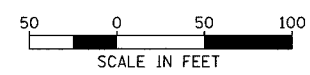
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	820
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



48 SM
R01 R05, 1-12
R02 R05, 1-12
24F DF
(2) 2" CNC PUSHED
(48F, SPARE)

- NOTES:**
- CONTRACTOR SHALL COORDINATE WITH EMERGENCY TRAFFIC PATROL (ETP) BUILDING MANAGER PRIOR TO ANY WORK AT THE ETP.
 - CONTRACTOR SHALL REMOVE AND REPLACE EXISTING FLOWER BED AND PATCH EXISTING CONCRETE SLAB.
 - TRENCH WORK ALONG 35TH STREET SHALL ONLY BE EXECUTED BETWEEN THE MONTHS OF NOVEMBER AND MARCH.

48 SM
R01 R05, 1-12
R02 R05, 1-12
24F DF
(2) 2" CNC PUSHED
(48F, SPARE)



COMM-54

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

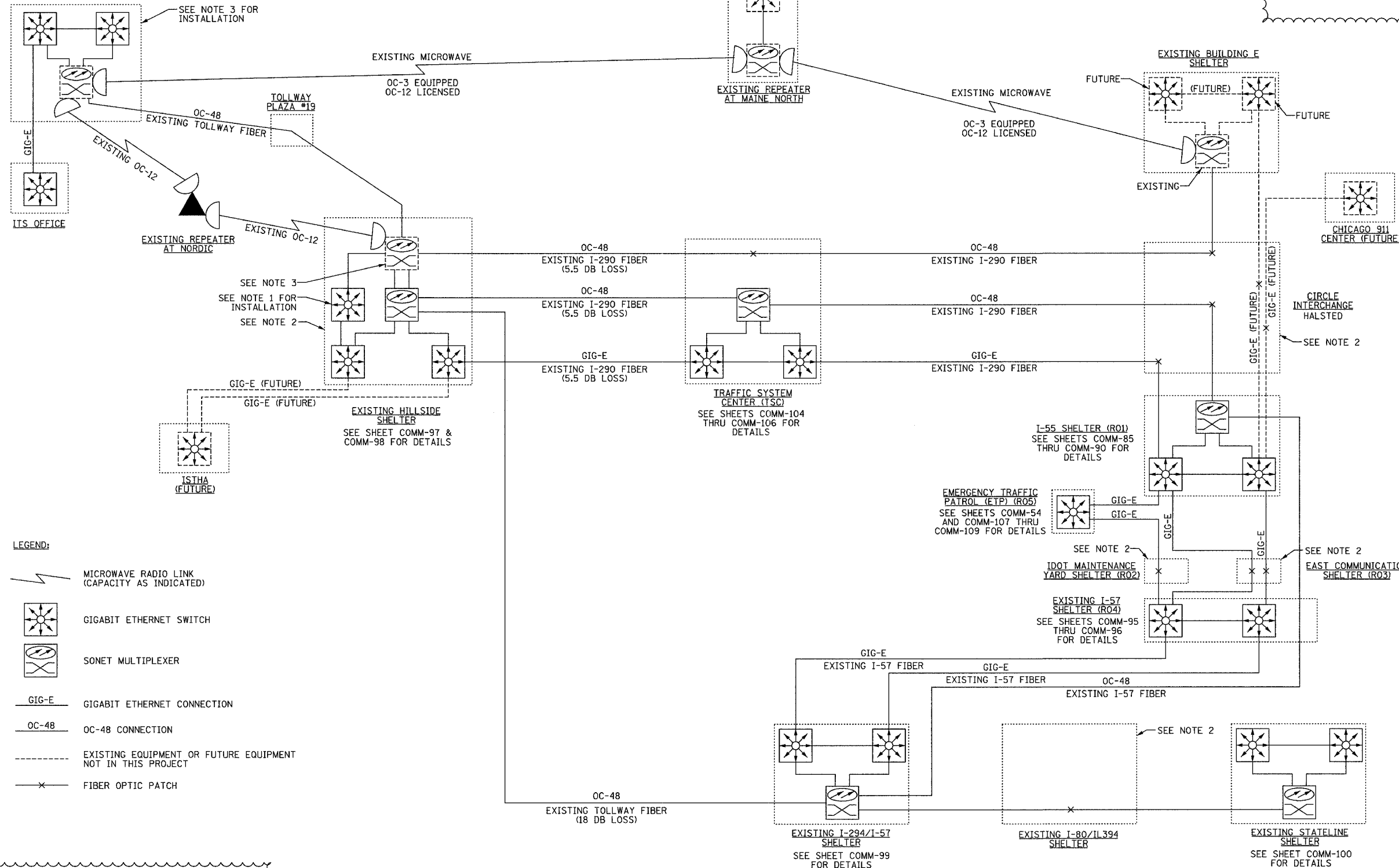
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
EMERGENCY TRAFFIC PATROL
COMMUNICATIONS CONDUIT AND
CABLE LAYOUT
SCALE: 1"=50'
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: MJL

**Edwards
AND
Kelcey**
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12/15/2004 01:48:44 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	821
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				

EXISTING COMMUNICATION CENTER (CC)
SEE SHEETS COMM-101 THRU COMM-103 & DT-12A THRU DT-12I FOR DETAILS



- LEGEND:**
- MICROWAVE RADIO LINK (CAPACITY AS INDICATED)
 - GIGABIT ETHERNET SWITCH
 - SONET MULTIPLEXER
 - GIG-E GIGABIT ETHERNET CONNECTION
 - OC-48 OC-48 CONNECTION
 - EXISTING EQUIPMENT OR FUTURE EQUIPMENT NOT IN THIS PROJECT
 - FIBER OPTIC PATCH

- NOTES:**
1. ONLY PROVIDE THIRD SWITCH IF REQUIRED FOR SYSTEM INTERFACING OR ROUTING.
 2. CONTRACTOR SHALL COORDINATE THE USE OF EXISTING FIBER WITH THE ENGINEER. THE CONTRACTORS SHALL FURNISH AND INSTALL FIBER OPTIC CROSS CONNECTS AT REQUIRING LOCATIONS TO CONCATENATE THE FIBERS.
 3. INTEGRATOR SHALL RECONFIGURE AND REPROVISION EXISTING EQUIPMENT TO INTERFACE WITH NEW GIGABIT ETHERNET SWITCHES.

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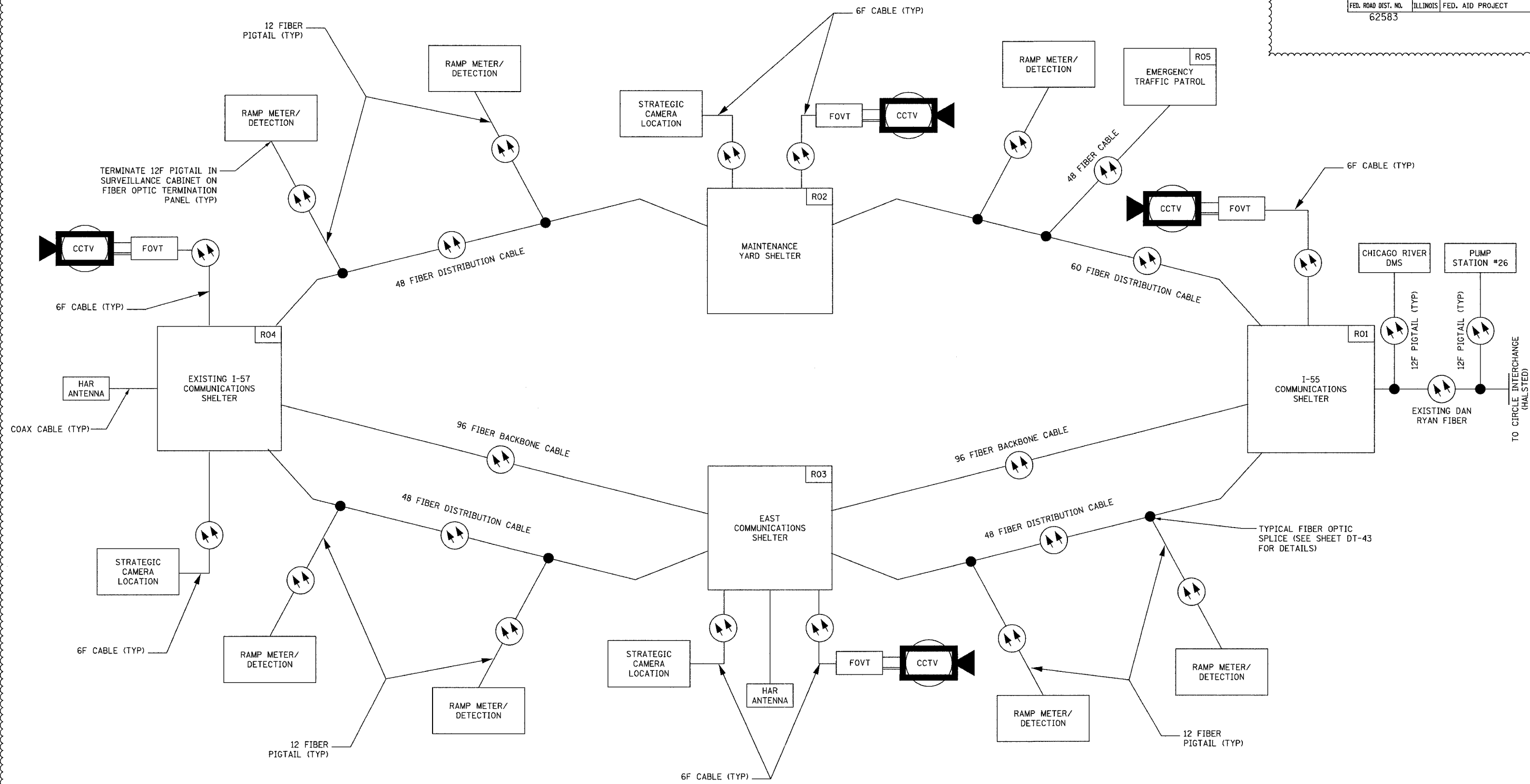
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
IDOT DISTRICT 1
VIDEO DISTRIBUTION SCHEMATIC
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

COMM-55

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	822
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



TO CIRCLE INTERCHANGE (HAL-STEED)

NOTES:
 1. THIS SHEET PROVIDED FOR REFERENCE ONLY AND DEPICTS A TYPICAL FIBER OPTIC CABLE NETWORK.

CCTV CLOSED CIRCUIT TELEVISION
 FOVT FIBER OPTIC VIDEO TRANSMITTER
 HAR HIGHWAY ADVISORY RADIO

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

TYPICAL FIBER OPTIC CABLE NETWORK

SCALE: NOT TO SCALE
 DATE: October 29, 2004

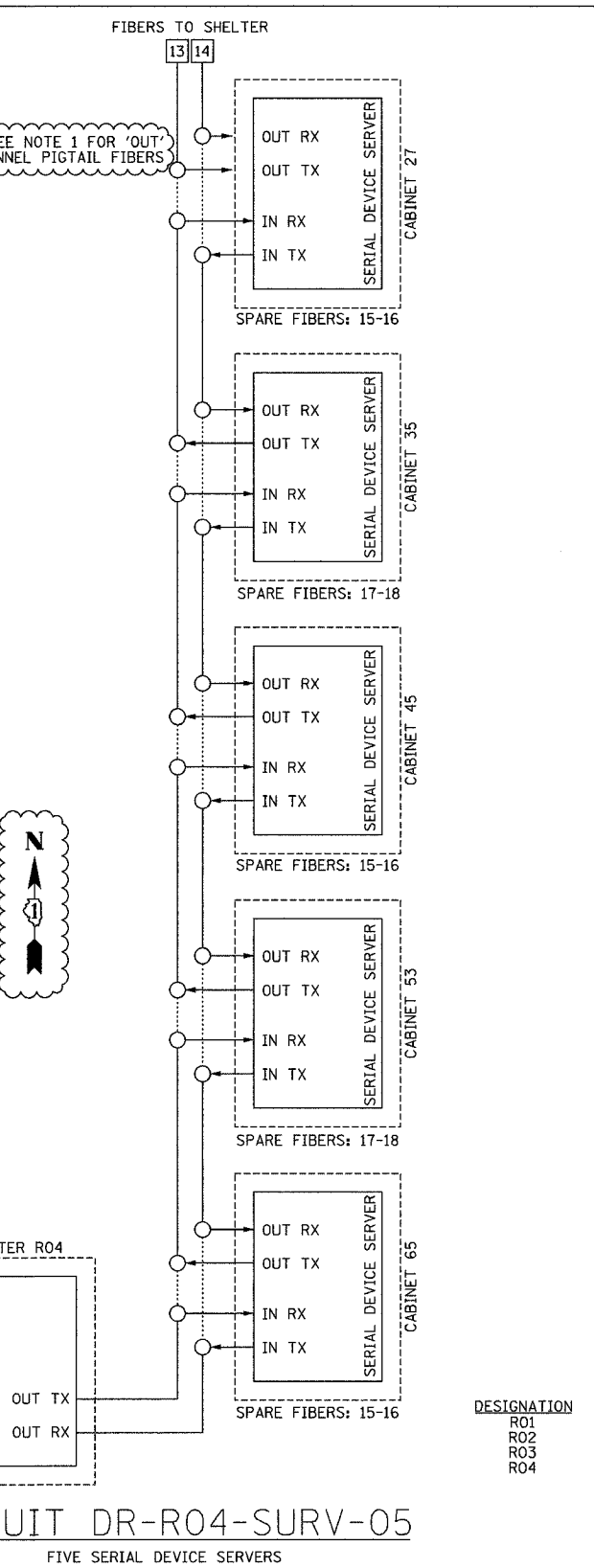
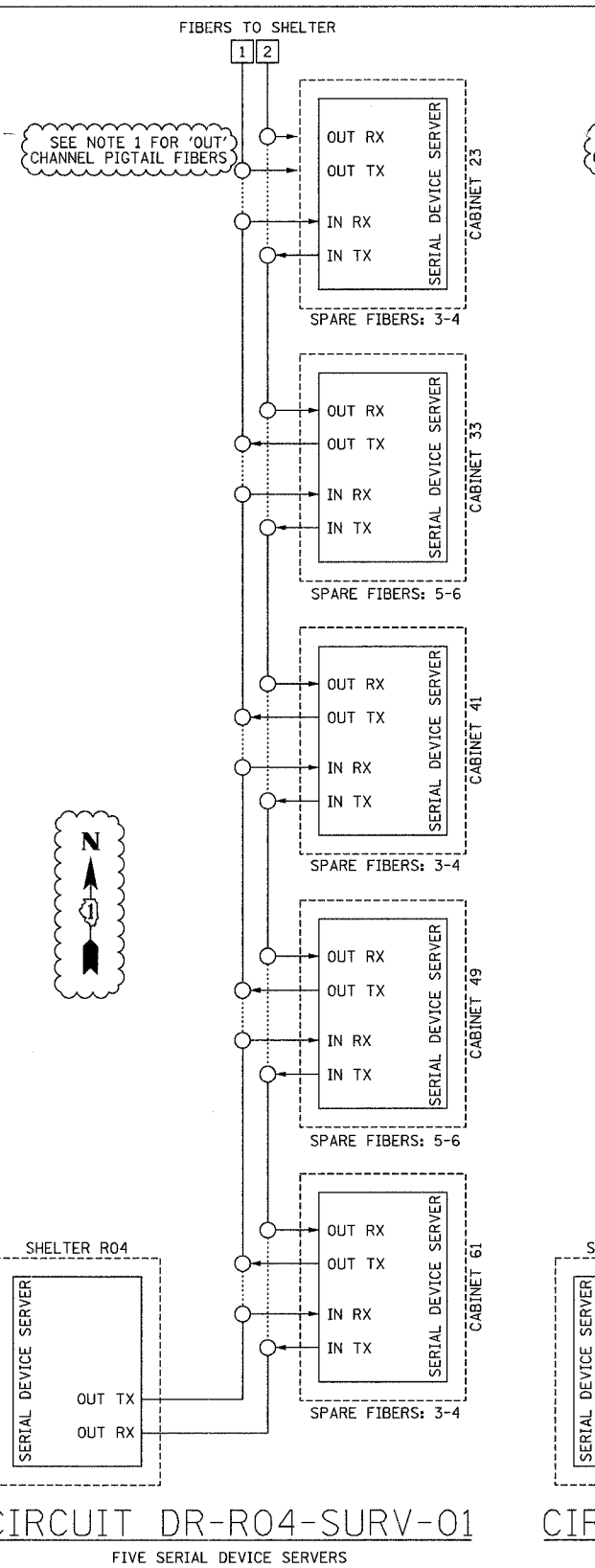
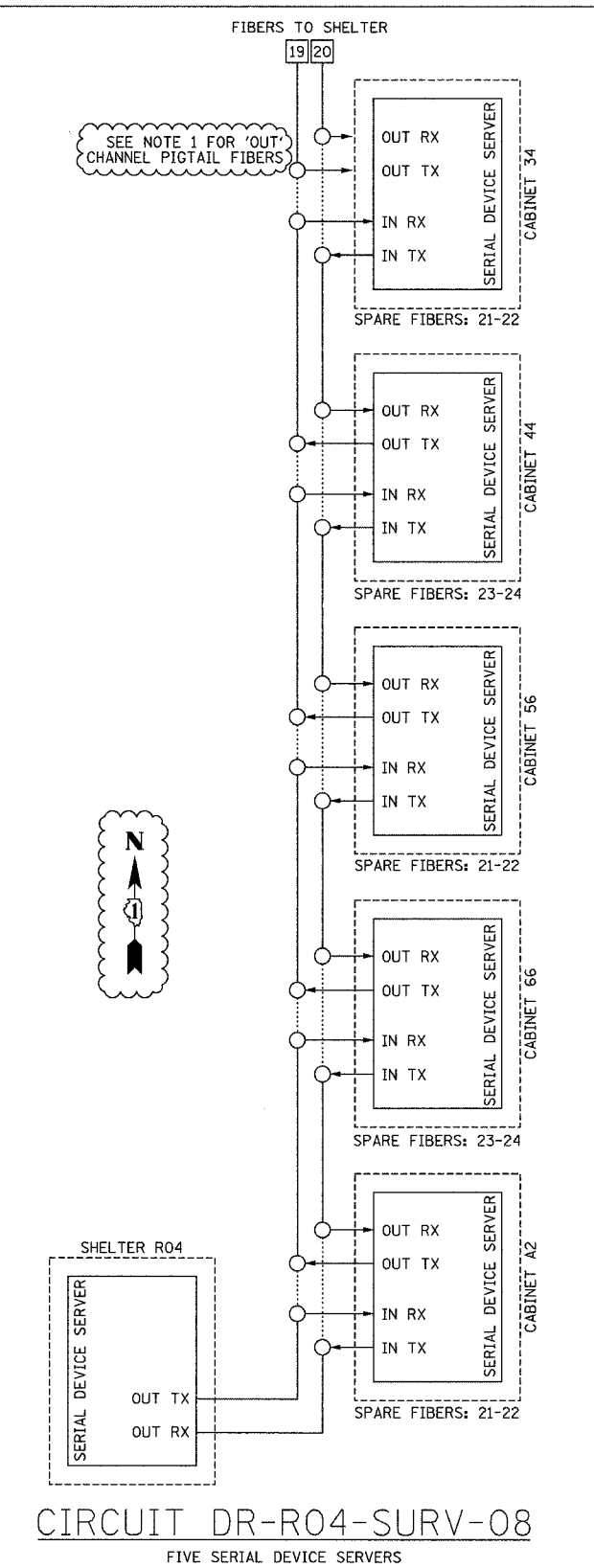
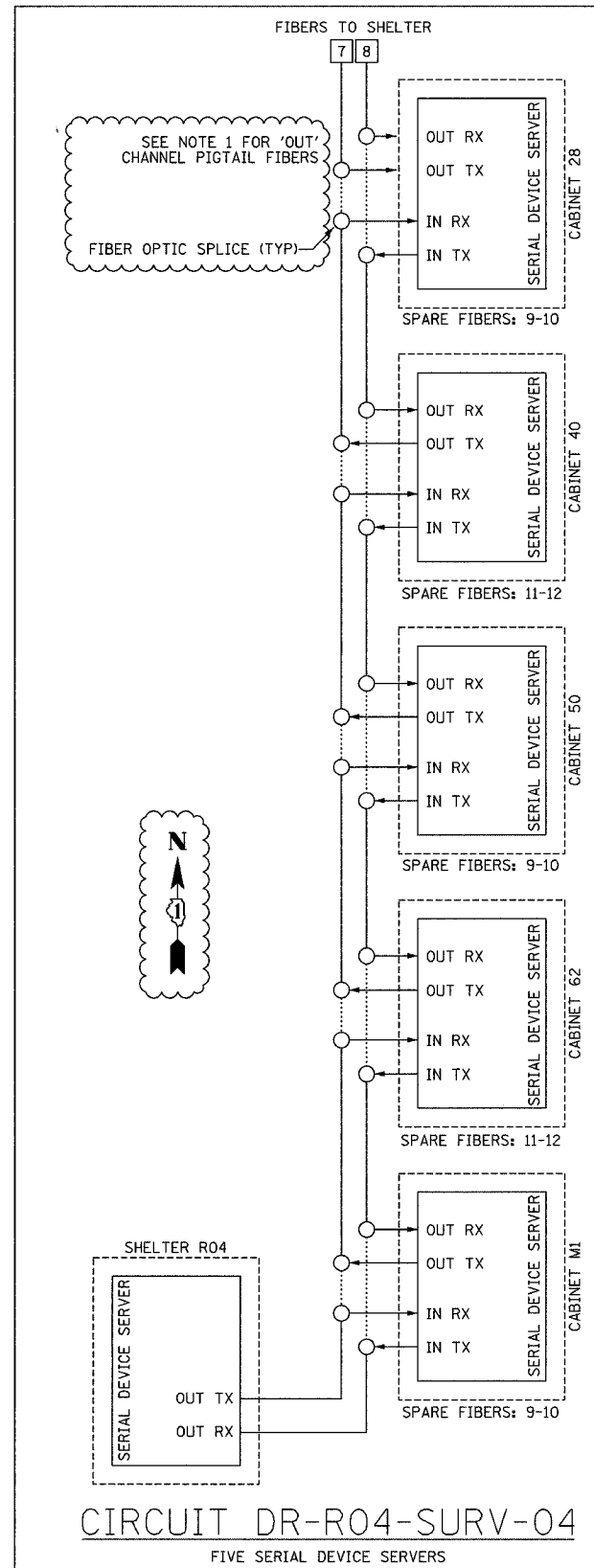
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 CHECKED BY: JEZ

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COMM-56

12/15/2004 01:45:11 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	825
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
62583			



DESIGNATION SHELTER

R01	I-55 SHELTER
R02	IDOT MAINTENANCE YARD SHELTER
R03	EAST SHELTER
R04	EXISTING I-57 SHELTER

Edwards AND Kelcey
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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

- NOTES:
1. FIBERS IN PIGTAIL ARE SPliced TO MAINLINE FIBERS BUT ARE NOT CONNECTED TO EQUIPMENT.
 2. THIS SHEET PROVIDES AN OVERVIEW OF THE SURVEILLANCE SYSTEM. FOR LOCATIONS OF EQUIPMENT INSTALLATION, SEE SHEETS DET-01 THRU DET-47.
 3. CONNECTIONS BETWEEN EQUIPMENT IS BY FIBER OPTIC CABLE INSTALLED UNDER THIS CONTRACT. SEE SHEETS COMM-01 THRU COMM-51 FOR FIBER INSTALLATION PLANS.
 4. FOR FIBER OPTIC SPLICE TABLES, SEE SHEETS COMM-62 THRU COMM-69.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

SURVEILLANCE SYSTEM DIAGRAMS
 (SHEET 1 OF 3)

SCALE: NOT TO SCALE
 DATE: October 29, 2004

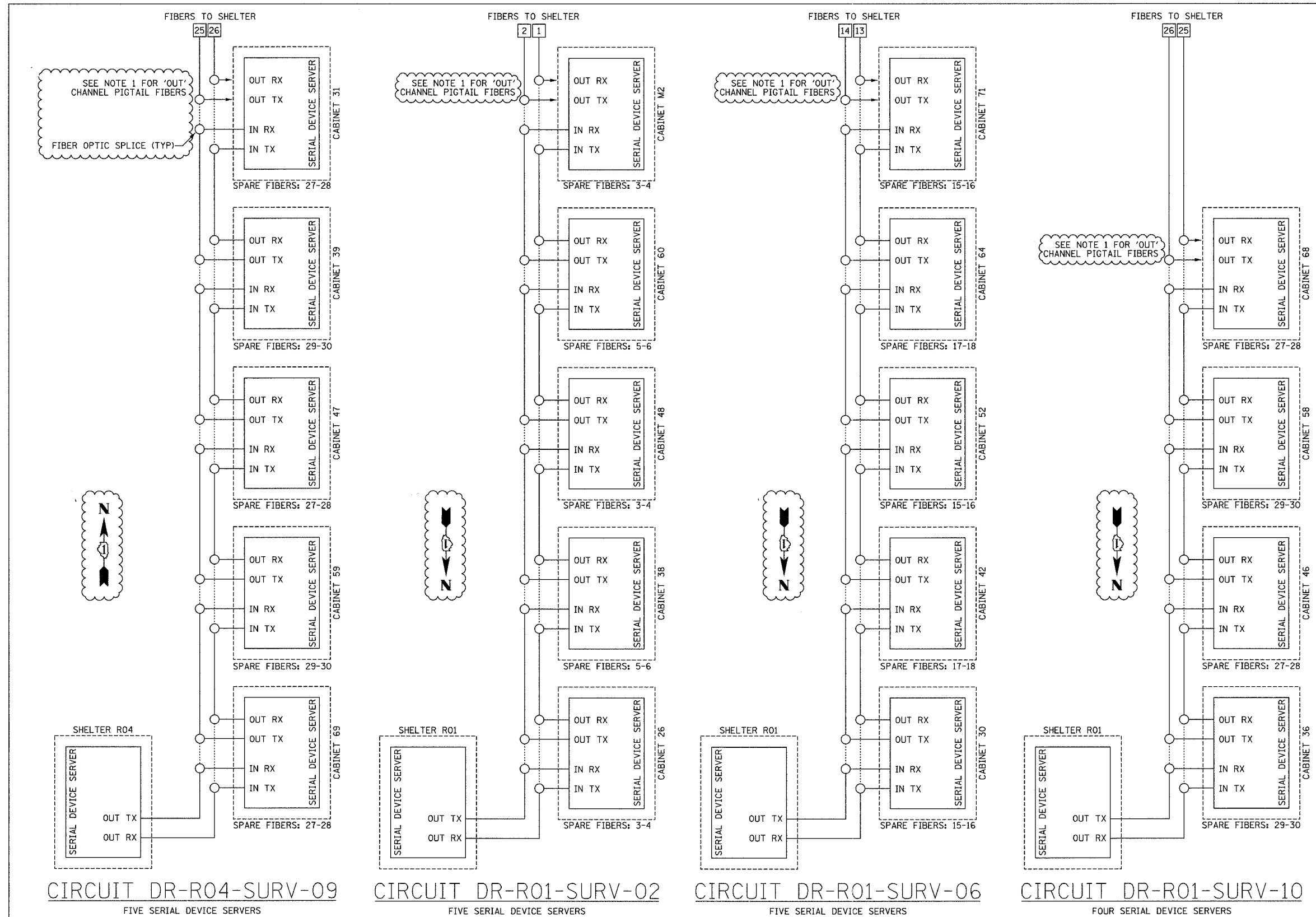
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COMM-59

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	826
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
62583			

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CIRCUIT DR-R04-SURV-09
FIVE SERIAL DEVICE SERVERS

CIRCUIT DR-R01-SURV-02
FIVE SERIAL DEVICE SERVERS

CIRCUIT DR-R01-SURV-06
FIVE SERIAL DEVICE SERVERS

CIRCUIT DR-R01-SURV-10
FOUR SERIAL DEVICE SERVERS

DESIGNATION	SHELTER
R01	I-55 SHELTER
R02	IDOT MAINTENANCE YARD SHELTER
R03	EAST SHELTER
R04	EXISTING I-57 SHELTER

COMM-60

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- NOTES:**
1. FIBERS IN PIGTAIL ARE SPliced TO MAINLINE FIBERS BUT ARE NOT CONNECTED TO EQUIPMENT.
 2. THIS SHEET PROVIDES AN OVERVIEW OF THE SURVEILLANCE SYSTEM. FOR LOCATIONS OF EQUIPMENT INSTALLATION, SEE SHEETS DET-01 THRU DET-47.
 3. CONNECTIONS BETWEEN EQUIPMENT IS BY FIBER OPTIC CABLE INSTALLED UNDER THIS CONTRACT. SEE SHEETS COMM-01 THRU COMM-51 FOR FIBER INSTALLATION PLANS.
 4. FOR FIBER OPTIC SPLICE TABLES, SEE SHEETS COMM-62 THRU COMM-69.

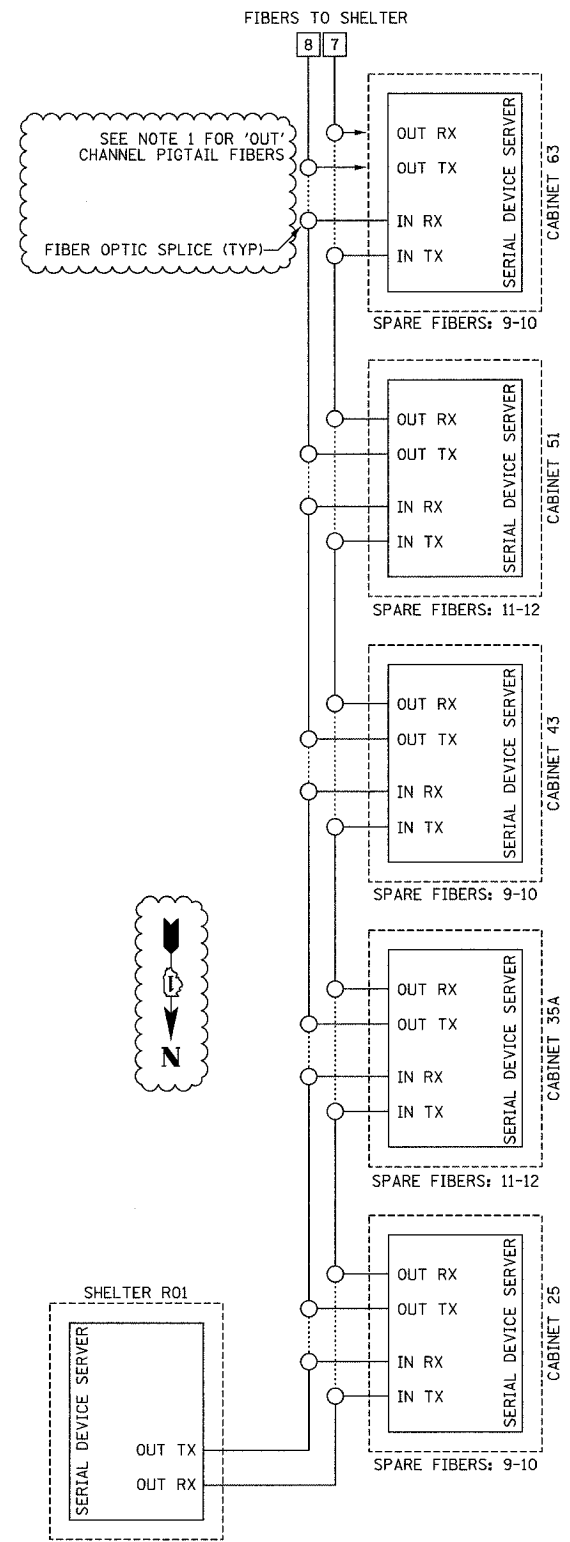
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
SURVEILLANCE SYSTEM DIAGRAMS
(SHEET 2 OF 3)
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

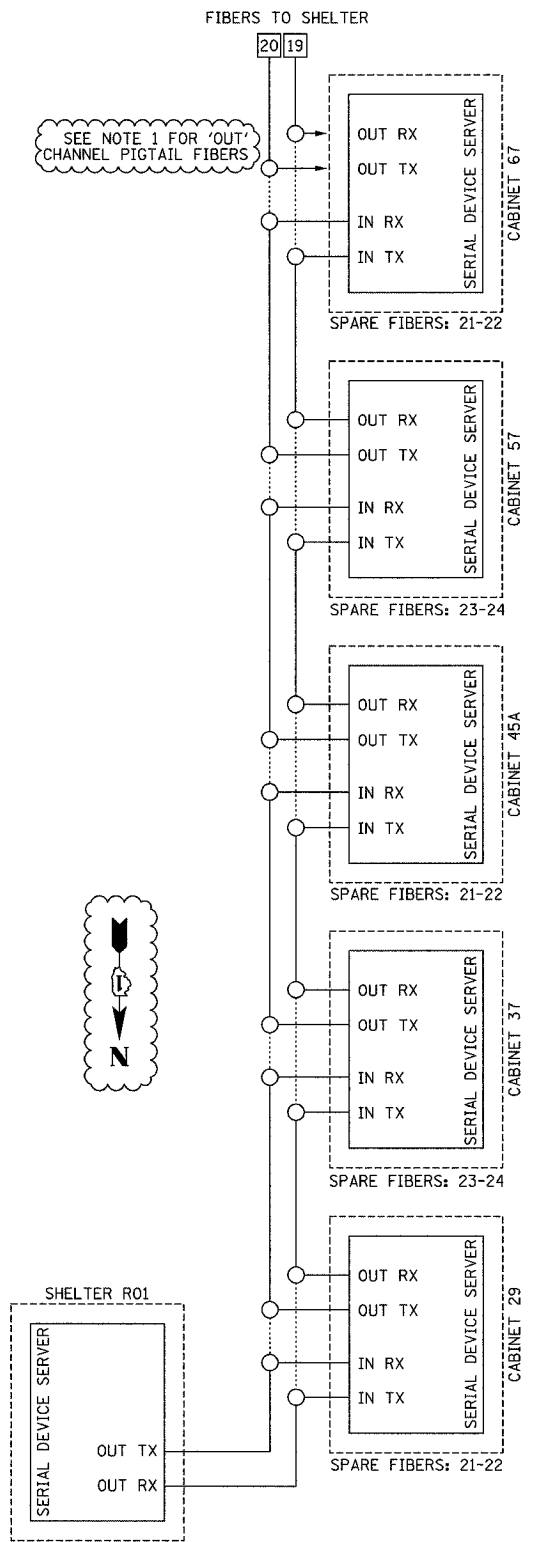
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	827
STA. TO STA.			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
62583			

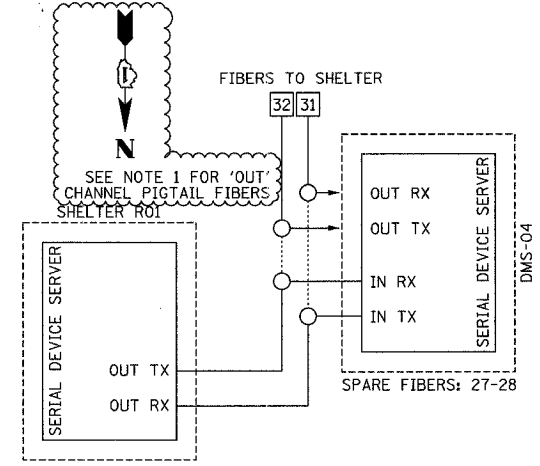
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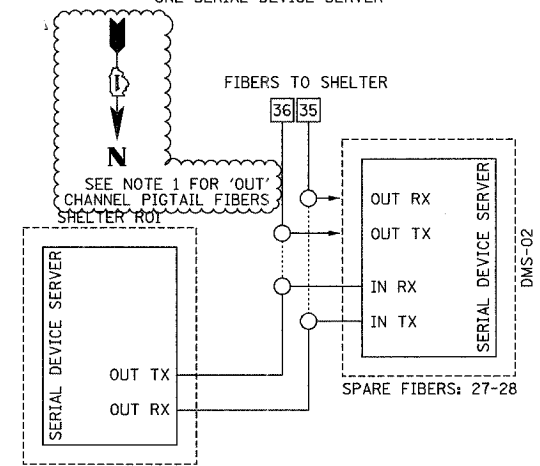
CIRCUIT DR-R01-SURV-03
FIVE SERIAL DEVICE SERVERS



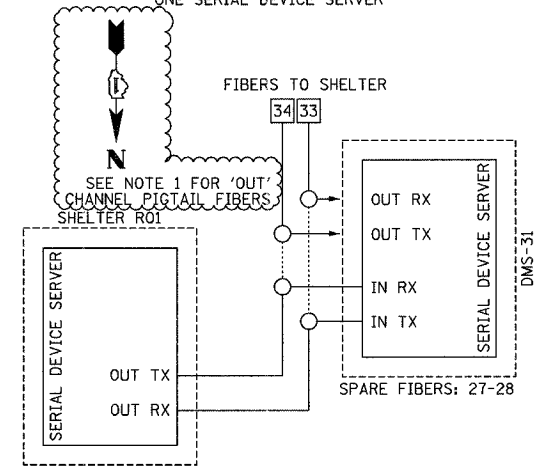
CIRCUIT DR-R01-SURV-07
FIVE SERIAL DEVICE SERVERS



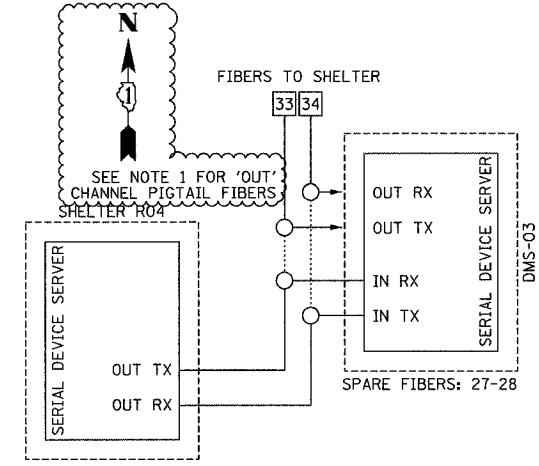
CIRCUIT DR-R01-DMS-02
ONE SERIAL DEVICE SERVER



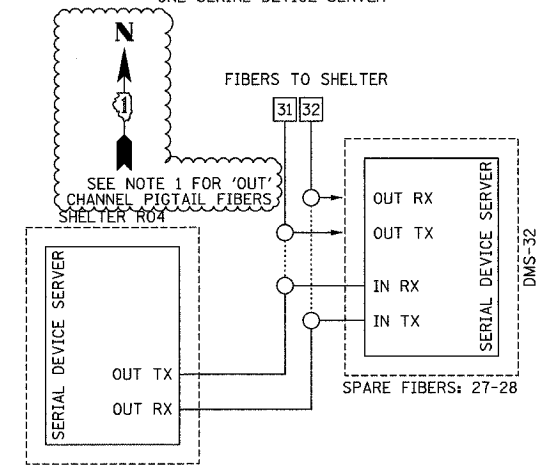
CIRCUIT DR-R01-DMS-06
ONE SERIAL DEVICE SERVER



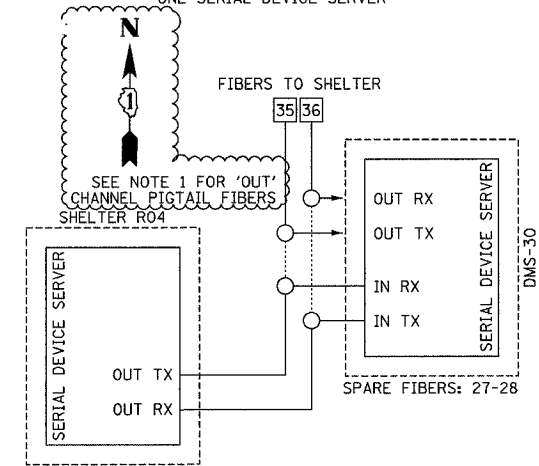
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ONE SERIAL DEVICE SERVER



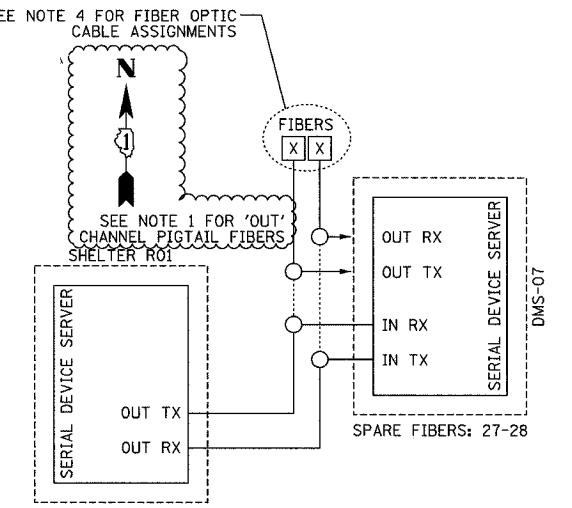
CIRCUIT DR-R04-DMS-04
ONE SERIAL DEVICE SERVER



CIRCUIT DR-R04-DMS-01
ONE SERIAL DEVICE SERVER



CIRCUIT DR-R04-DMS-05
ONE SERIAL DEVICE SERVER



CIRCUIT DR-R01-DMS-07
ONE SERIAL DEVICE SERVER

- NOTES:**
1. FIBERS IN PIGTAIL ARE SPLICED TO MAINLINE FIBERS BUT ARE NOT CONNECTED TO EQUIPMENT.
 2. THIS SHEET PROVIDES AN OVERVIEW OF THE SURVEILLANCE SYSTEM. FOR LOCATIONS OF EQUIPMENT INSTALLATION, SEE SHEETS DET-01 THRU DET-47.
 3. CONNECTIONS BETWEEN EQUIPMENT IS BY FIBER OPTIC CABLE INSTALLED UNDER THIS CONTRACT. SEE SHEETS COMM-01 THRU COMM-51 FOR FIBER INSTALLATION PLANS.
 4. CONTRACTOR SHALL SPLICE PIGTAIL FIBERS TO EXISTING DAN RYAN 96 FIBER CABLE IN BARRIER WALL. CONTRACTOR SHALL COORDINATE WITH ENGINEER FOR FIBER OPTIC CABLE SPLICING ASSIGNMENTS. SEE SHEET COMM-52 FOR SITE PLAN DETAILS.
 5. FOR FIBER OPTIC SPLICE TABLES, SEE SHEETS COMM-62 THRU COMM-69.
- | | |
|-------------|-------------------------------|
| DESIGNATION | SHELTER |
| R01 | I-55 SHELTER |
| R02 | IDOT MAINTENANCE YARD SHELTER |
| R03 | EAST SHELTER |
| R04 | EXISTING I-57 SHELTER |

COMM-61

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REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

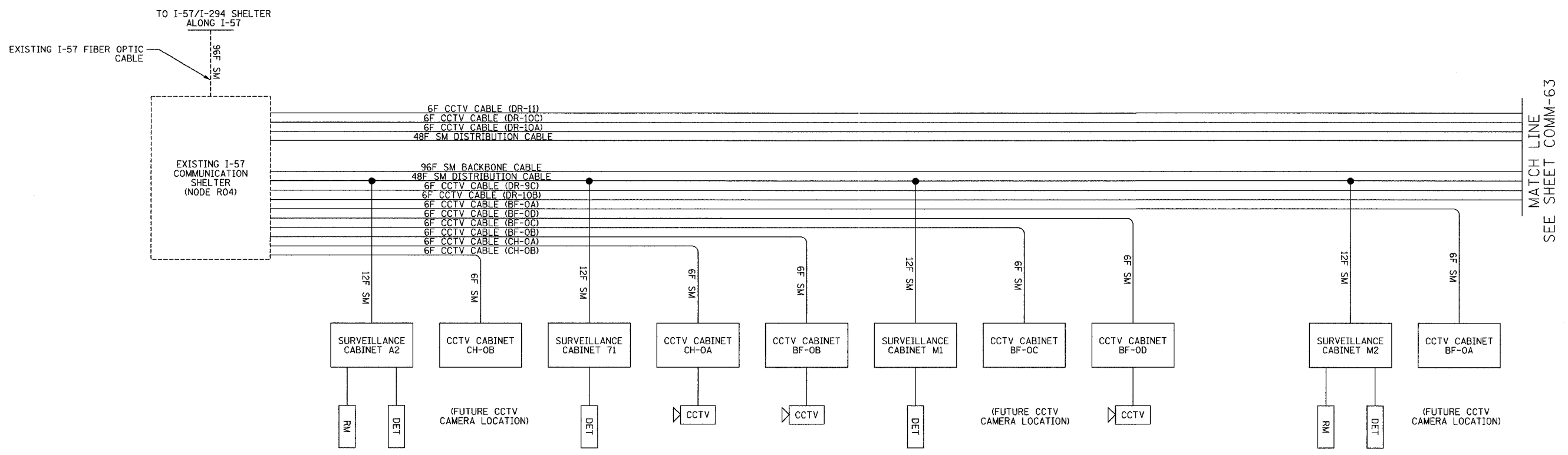
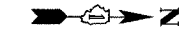
SURVEILLANCE SYSTEM DIAGRAMS
(SHEET 3 OF 3)

SCALE: NOT TO SCALE
DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: JEZ

12/15/2004 01:49:15 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-031I	COOK	976	828
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



LEGEND
 ---- EXISTING EQUIPMENT
 ——— PROPOSED EQUIPMENT

DMS DYNAMIC MESSAGE SIGN SITE
 DET VEHICLE DETECTOR SITE
 RM RAMP METER SITE

LEGEND:
 1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS. FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.

PIGTAIL FIBER NO.	FUNCTION	APPLICATION DESCRIPTION	SURVEILLANCE CABINET A2	SURVEILLANCE CABINET 71	SURVEILLANCE CABINET M1	SURVEILLANCE CABINET M2
1	IN TX	DATA CIRCUIT	R03-R04 20S	R03-R04 13N	R03-R04 8S	R03-R04 1N
2	IN RX		R03-R04 19S	R03-R04 14N	R03-R04 7S	R03-R04 2N
3	OUT RX		R03-R04 20N	R03-R04 13S	R03-R04 8N	R03-R04 1S
4	OUT TX		R03-R04 19N	R03-R04 14S	R03-R04 7N	R03-R04 2S
5		FUTURE	R03-R04 22S	R03-R04 15N	R03-R04 10S	R03-R04 3N
6			R03-R04 21S	R03-R04 16N	R03-R04 9S	R03-R04 4N
7			R03-R04 22N	R03-R04 15S	R03-R04 10N	R03-R04 3S
8			R03-R04 21N	R03-R04 16S	R03-R04 9N	R03-R04 4S
9	IN TX	DMS				
10	IN RX					
11	OUT RX					
12	OUT TX					

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REVISIONS	
NAME	DATE

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

FIBER OPTIC SCHEMATIC
 (SHEET 1 OF 8)

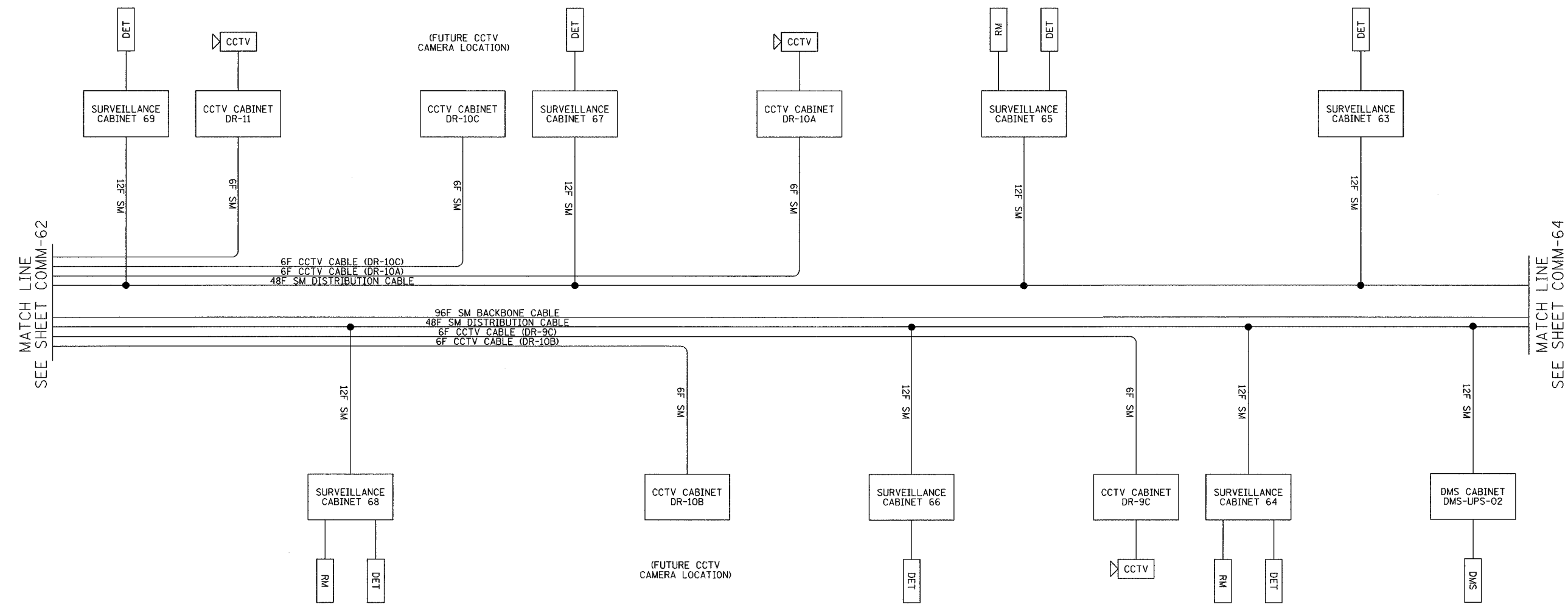
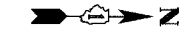
SCALE: NTS
 DATE: October 29, 2004

DRAWN BY: DH1
 CHECKED BY: JEZ

COMM-62

11/19/2004 04:39:42 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	829
STA. TO STA.		FED. AID PROJECT	
62583		62583	



LEGEND
 --- EXISTING EQUIPMENT
 — PROPOSED EQUIPMENT

DMS DYNAMIC MESSAGE SIGN SITE
 DET VEHICLE DETECTOR SITE
 RM RAMP METER SITE

LEGEND:
 1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS. FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.

PIGTAIL FIBER NO.	FUNCTION	APPLICATION DESCRIPTION	SURVEILLANCE CABINET 69	SURVEILLANCE CABINET 68	SURVEILLANCE CABINET 67	SURVEILLANCE CABINET 66	SURVEILLANCE CABINET 65	SURVEILLANCE CABINET 64	SURVEILLANCE CABINET 63	CABINET DMS-UPS-02	
1	IN TX	DATA CIRCUIT	R02-R04 26S	R03-R04 25N	R02-R04 19N	R03-R04 20S	R02-R04 14S	R03-R04 13N	R02-R04 7N		
2	IN RX		R02-R04 25S	R03-R04 26N	R02-R04 20N	R03-R04 19S	R02-R04 13S	R03-R04 14N	R02-R04 8N		
3	OUT RX		R02-R04 26N	R03-R04 25S	R02-R04 19S	R03-R04 20N	R02-R04 14N	R03-R04 13S	R02-R04 7S		
4	OUT TX		R02-R04 25N	R03-R04 26S	R02-R04 20S	R03-R04 19N	R02-R04 13N	R03-R04 14S	R02-R04 8S		
5		FUTURE	R02-R04 28S	R03-R04 27N	R02-R04 21N	R03-R04 24S	R02-R04 16S	R03-R04 17N	R02-R04 9N		
6			R02-R04 27S	R03-R04 28N	R02-R04 22N	R03-R04 23S	R02-R04 15S	R03-R04 18N	R02-R04 10N		
7			R02-R04 28N	R03-R04 27S	R02-R04 21S	R03-R04 24N	R02-R04 16N	R03-R04 17S	R02-R04 9S		
8			R02-R04 27N	R03-R04 28S	R02-R04 22S	R03-R04 23N	R02-R04 15N	R03-R04 18S	R02-R04 10S		
9	IN TX	DMS							R03-R04 35N		
10	IN RX									R03-R04 36N	
11	OUT RX									R03-R04 35S	
12	OUT TX									R03-R04 36S	

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REVISIONS	
NAME	DATE

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

FIBER OPTIC SCHEMATIC
 (SHEET 2 OF 8)

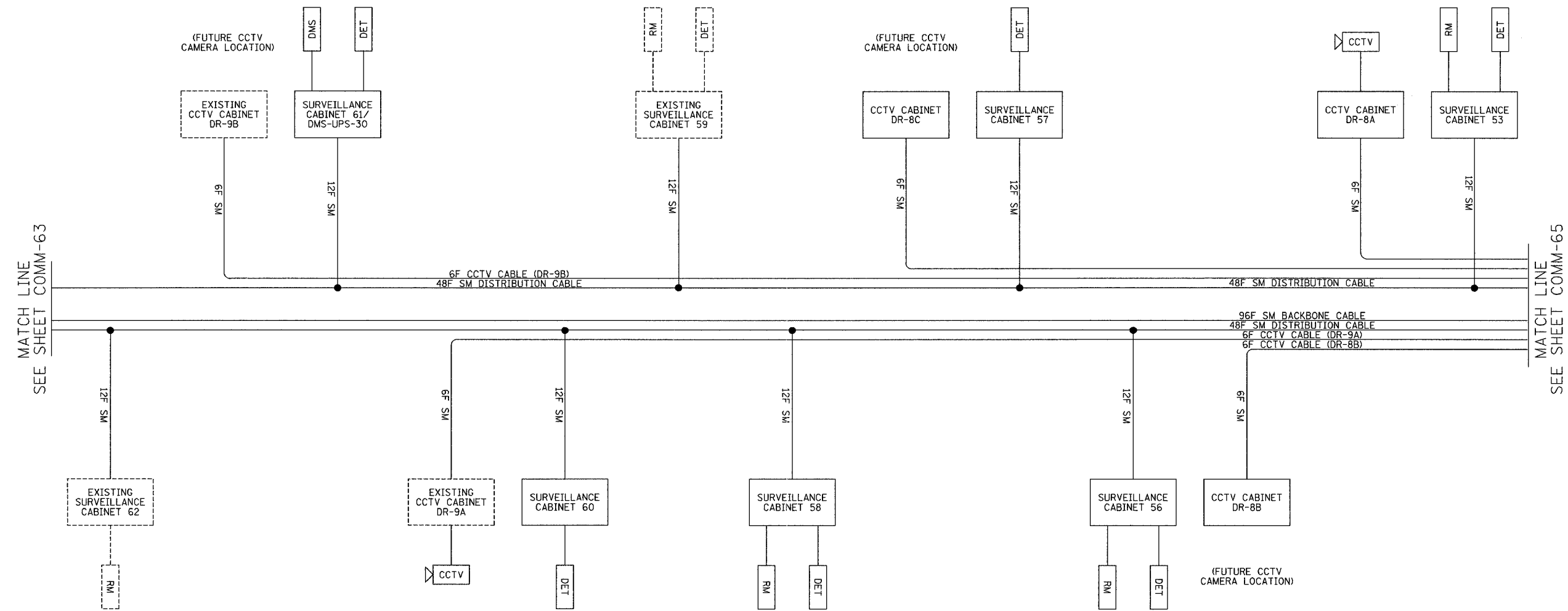
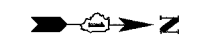
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 DATE: October 29, 2004

DRAWN BY: DH1
 CHECKED BY: JEZ

COMM-63

11/19/2004 04:39:42 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	830
STA.	TO STA.		
FED. ROAD DIST. NO. 62583	ILLINOIS FED. AID PROJECT		



LEGEND
 ---- EXISTING EQUIPMENT
 ——— PROPOSED EQUIPMENT

DMS DYNAMIC MESSAGE SIGN SITE
 DET VEHICLE DETECTOR SITE
 RM RAMP METER SITE

LEGEND:
 1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS. FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.

PICTAIL FIBER NO.	FUNCTION	APPLICATION DESCRIPTION	SURVEILLANCE CABINET 62	SURVEILLANCE CABINET 61/DMS-UPS-30	SURVEILLANCE CABINET 60	SURVEILLANCE CABINET 59	SURVEILLANCE CABINET 58	SURVEILLANCE CABINET 57	SURVEILLANCE CABINET 56	SURVEILLANCE CABINET 53
1	IN TX	DATA CIRCUIT	R03-R04 8S	R02-R04 2S	R03-R04 1N	R02-R04 26S	R03-R04 25N	R02-R04 19N	R03-R04 20S	R02-R04 14S
2	IN RX		R03-R04 7S	R02-R04 1S	R03-R04 2N	R02-R04 25S	R03-R04 26N	R02-R04 20N	R03-R04 19S	R02-R04 13S
3	OUT RX		R03-R04 8N	R02-R04 2N	R03-R04 1S	R02-R04 26N	R03-R04 25S	R02-R04 19S	R03-R04 20N	R02-R04 14N
4	OUT TX	FUTURE	R03-R04 7N	R02-R04 1N	R03-R04 2S	R02-R04 25N	R03-R04 26S	R02-R04 20S	R03-R04 19N	R02-R04 13N
5			R03-R04 12S	R02-R04 4S	R03-R04 5N	R02-R04 30S	R03-R04 29N	R02-R04 23N	R03-R04 21S	R02-R04 18S
6			R03-R04 11S	R02-R04 3S	R03-R04 6N	R02-R04 29S	R03-R04 30N	R02-R04 24N	R03-R04 22S	R02-R04 17S
7			R03-R04 12N	R02-R04 4N	R03-R04 5S	R02-R04 30N	R03-R04 29S	R02-R04 23S	R03-R04 21N	R02-R04 18N
8			R03-R04 11N	R02-R04 3N	R03-R04 6S	R02-R04 29N	R03-R04 30S	R02-R04 24S	R03-R04 22N	R02-R04 17N
9	IN TX	DMS		R02-R04 36S						
10	IN RX				R02-R04 35S					
11	OUT RX				R02-R04 36N					
12	OUT TX				R02-R04 35N					

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NAME	DATE

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

FIBER OPTIC SCHEMATIC
 (SHEET 3 OF 8)

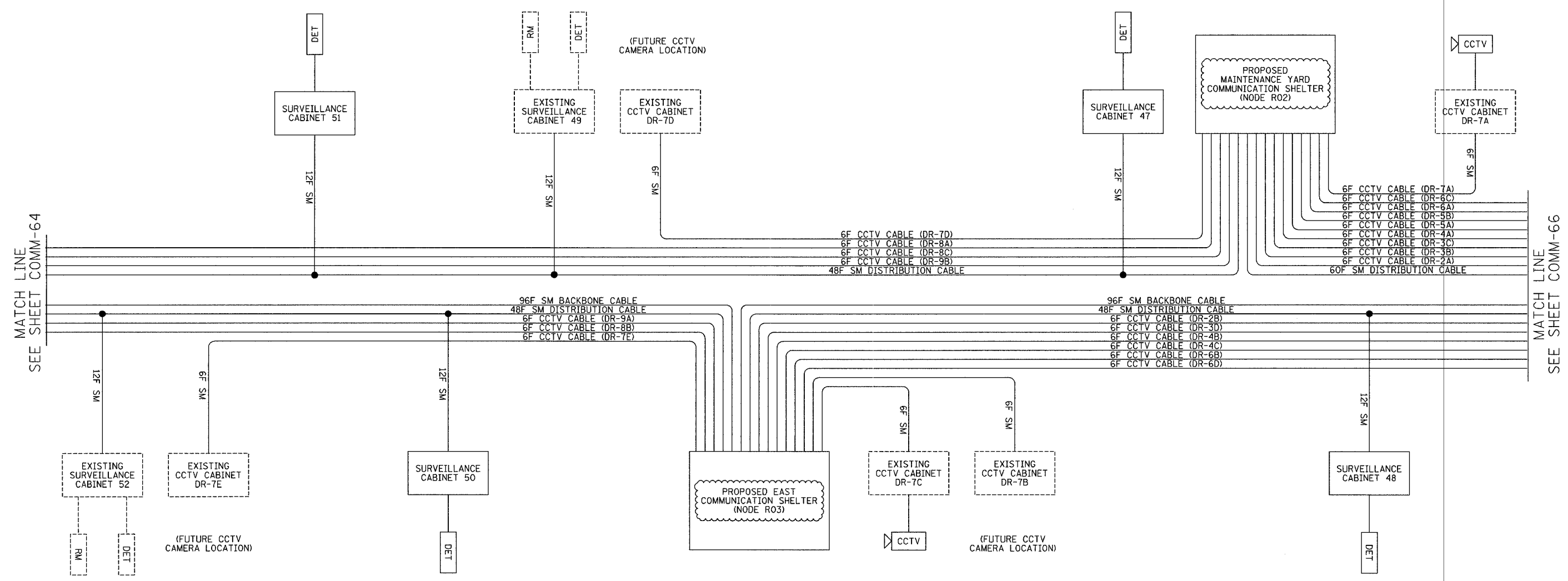
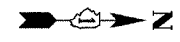
SCALE: NTS
 DATE: October 29, 2004

DRAWN BY: DH1
 CHECKED BY: JEZ

COMM-64

11/19/2004 04:39:43 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	831
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



LEGEND
 --- EXISTING EQUIPMENT
 — PROPOSED EQUIPMENT

DMS DYNAMIC MESSAGE SIGN SITE
 DET VEHICLE DETECTOR SITE
 RM RAMP METER SITE

LEGEND:
 1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS, FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.

PIGTAIL FIBER NO.	FUNCTION	APPLICATION DESCRIPTION	SURVEILLANCE CABINET 52	SURVEILLANCE CABINET 51	SURVEILLANCE CABINET 50	SURVEILLANCE CABINET 49	SURVEILLANCE CABINET 47	SURVEILLANCE CABINET 48
1	IN TX	DATA CIRCUIT	R03-R04 13N	R02-R04 7N	R03-R04 8N	R02-R04 2S	R02-R04 26S	R01-R03 1N
2	IN RX		R03-R04 14N	R02-R04 8N	R03-R04 7N	R02-R04 1S	R02-R04 25S	R01-R03 2N
3	OUT RX		R03-R04 13S	R02-R04 7S	R03-R04 8S	R02-R04 2N	R02-R04 26N	R01-R03 1S
4	OUT TX		R03-R04 14S	R02-R04 8S	R03-R04 7S	R02-R04 1N	R02-R04 25N	R01-R03 2S
5		FUTURE	R03-R04 15N	R02-R04 11N	R03-R04 10N	R02-R04 6S	R02-R04 28S	R01-R03 3N
6			R03-R04 16N	R02-R04 12N	R03-R04 9N	R02-R04 5S	R02-R04 27S	R01-R03 4N
7			R03-R04 15S	R02-R04 11S	R03-R04 10S	R02-R04 6N	R02-R04 28N	R01-R03 3S
8			R03-R04 16S	R02-R04 12S	R03-R04 9S	R02-R04 5N	R02-R04 27N	R01-R03 4S
9	IN TX	DMS						
10	IN RX							
11	OUT RX							
12	OUT TX							

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REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

FIBER OPTIC SCHEMATIC
 (SHEET 4 OF 8)

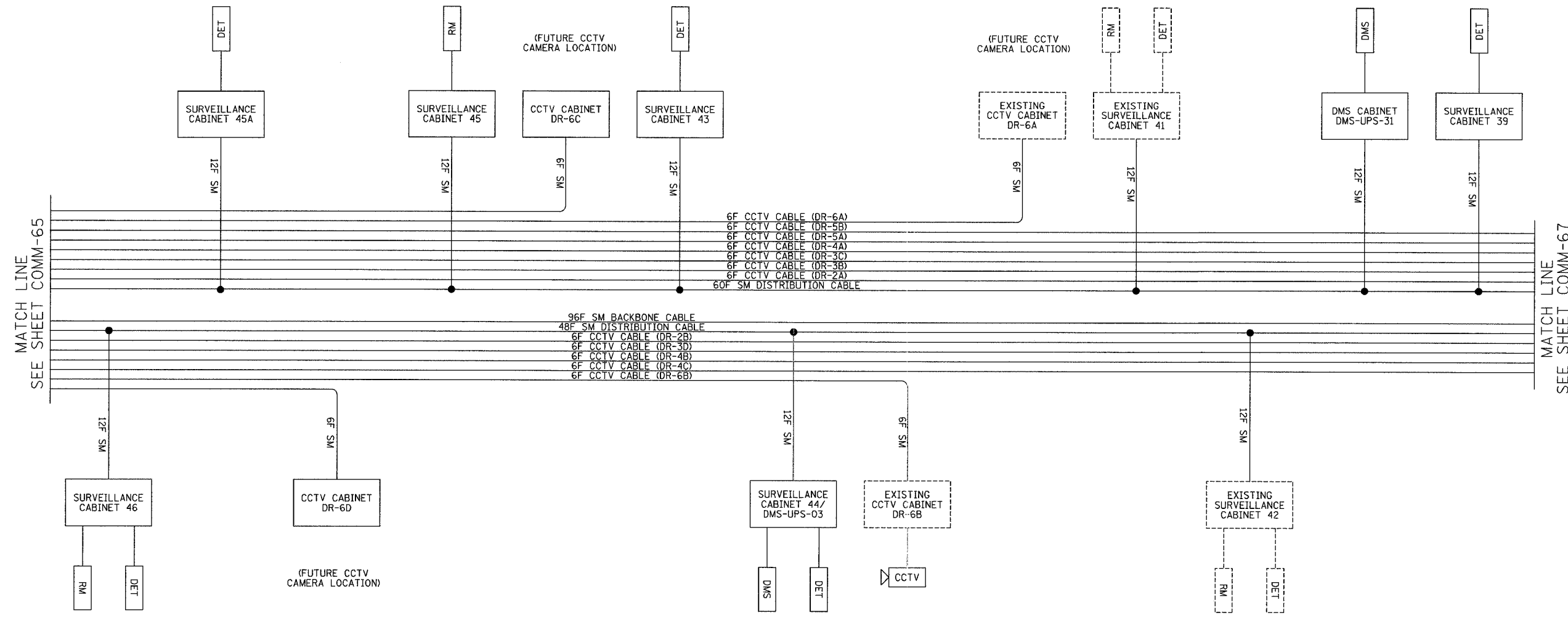
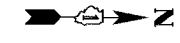
SCALE: NTS
 DATE: October 29, 2004

DRAWN BY: DHI
 CHECKED BY: JEZ

COMM-65

12/15/2004 04:53:33 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	832
STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
		62583	



LEGEND
 --- EXISTING EQUIPMENT
 - - - PROPOSED EQUIPMENT

DMS DYNAMIC MESSAGE SIGN SITE
 DET VEHICLE DETECTOR SITE
 RM RAMP METER SITE

LEGEND:
 1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS. FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.

PIGTAIL FIBER NO.	FUNCTION	APPLICATION DESCRIPTION	SURVEILLANCE CABINET 46	SURVEILLANCE CABINET 45A	SURVEILLANCE CABINET 45	SURVEILLANCE CABINET 43	SURVEILLANCE CABINET 44/DMS-UPS-03	SURVEILLANCE CABINET 41	SURVEILLANCE CABINET 42	DMS-UPS-31 CABINET	SURVEILLANCE CABINET 39
1	IN TX	DATA CIRCUIT	R01-R03 25N	R01-R02 19N	R01-R02 14S	R01-R02 7N	R01-R03 19S	R01-R02 2S	R01-R03 13N		R01-R02 26S
2	IN RX		R01-R03 26N	R01-R02 20N	R01-R02 13S	R01-R02 8N	R01-R03 20S	R01-R02 1S	R01-R03 14N		R01-R02 25S
3	OUT RX		R01-R03 25S	R01-R02 19S	R01-R02 14N	R01-R02 7S	R01-R03 19N	R01-R02 2N	R01-R03 13S		R01-R02 26N
4	OUT TX		R01-R03 26S	R01-R02 20S	R01-R02 13N	R01-R02 8S	R01-R03 20N	R01-R02 1N	R01-R03 14S		R01-R02 25N
5		FUTURE	R01-R03 27N	R01-R02 21N	R01-R02 16S	R01-R02 9N	R01-R03 23S	R01-R02 4S	R01-R03 17N		R01-R02 30S
6			R01-R03 28N	R01-R02 22N	R01-R02 15S	R01-R02 10N	R01-R03 24S	R01-R02 3S	R01-R03 18N		R01-R02 29S
7			R01-R03 27S	R01-R02 21S	R01-R02 16N	R01-R02 9S	R01-R03 23N	R01-R02 4N	R01-R03 17S		R01-R02 30N
8			R01-R03 28S	R01-R02 22S	R01-R02 15N	R01-R02 10S	R01-R03 24N	R01-R02 3N	R01-R03 18S		R01-R02 29N
9	IN TX	DMS					R01-R03 34S			R01-R03 33N	
10	IN RX						R01-R03 33S			R01-R03 34N	
11	OUT RX						R01-R03 34N			R01-R03 33S	
12	OUT TX						R01-R03 33N			R01-R03 34S	

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NAME	DATE

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

FIBER OPTIC SCHEMATIC
 (SHEET 5 OF 8)

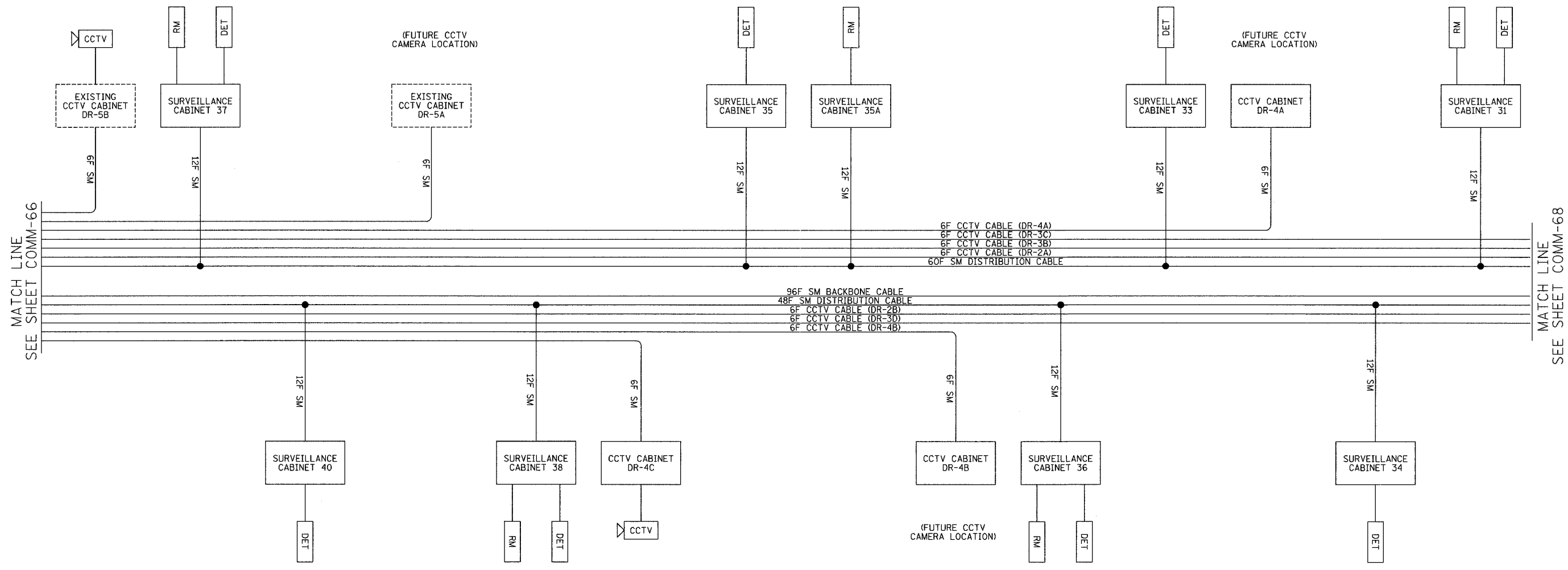
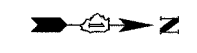
SCALE: NTS
 DATE: October 29, 2004

DRAWN BY: DH1
 CHECKED BY: JEZ

COMM-66

11/19/2004 04:39:43 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	833
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



LEGEND
 ---- EXISTING EQUIPMENT
 ——— PROPOSED EQUIPMENT

DMS DYNAMIC MESSAGE SIGN SITE
 DET VEHICLE DETECTOR SITE
 RM RAMP METER SITE

LEGEND:
 1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS. FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.

PICTAIL FIBER NO.	FUNCTION	APPLICATION DESCRIPTION	SURVEILLANCE CABINET 37	SURVEILLANCE CABINET 40	SURVEILLANCE CABINET 38	SURVEILLANCE CABINET 35	SURVEILLANCE CABINET 35A	SURVEILLANCE CABINET 36	SURVEILLANCE CABINET 33	SURVEILLANCE CABINET 34	SURVEILLANCE CABINET 31
1	IN TX	DATA CIRCUIT	R01-R02 19N	R01-R03 8S	R01-R03 1N	R01-R02 14S	R01-R02 7N	R01-R03 25N	R01-R02 2S	R01-R03 20S	R01-R02 26S
2	IN RX		R01-R02 20N	R01-R03 7S	R01-R03 2N	R01-R02 13S	R01-R02 8N	R01-R03 26N	R01-R02 1S	R01-R03 19S	R01-R02 25S
3	OUT RX		R01-R02 19S	R01-R03 8N	R01-R03 1S	R01-R02 14N	R01-R02 7S	R01-R03 25S	R01-R02 2N	R01-R03 20N	R01-R02 26N
4	OUT TX		R01-R02 20S	R01-R03 7N	R01-R03 2S	R01-R02 13N	R01-R02 8S	R01-R03 26S	R01-R02 1N	R01-R03 19N	R01-R02 25N
5		FUTURE	R01-R02 23N	R01-R03 12S	R01-R03 5N	R01-R02 18S	R01-R02 11N	R01-R03 29N	R01-R02 6S	R01-R03 22S	R01-R02 28S
6			R01-R02 24N	R01-R03 11S	R01-R03 6N	R01-R02 17S	R01-R02 12N	R01-R03 30N	R01-R02 5S	R01-R03 21S	R01-R02 27S
7			R01-R02 23S	R01-R03 12N	R01-R03 5S	R01-R02 18N	R01-R02 11S	R01-R03 29S	R01-R02 6N	R01-R03 22N	R01-R02 28N
8			R01-R02 24S	R01-R03 11N	R01-R03 6S	R01-R02 17N	R01-R02 12S	R01-R03 30S	R01-R02 5N	R01-R03 21N	R01-R02 27N
9	IN TX	DMS									
10	IN RX										
11	OUT RX										
12	OUT TX										

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REVISIONS	
NAME	DATE

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

FIBER OPTIC SCHEMATIC
 (SHEET 6 OF 8)

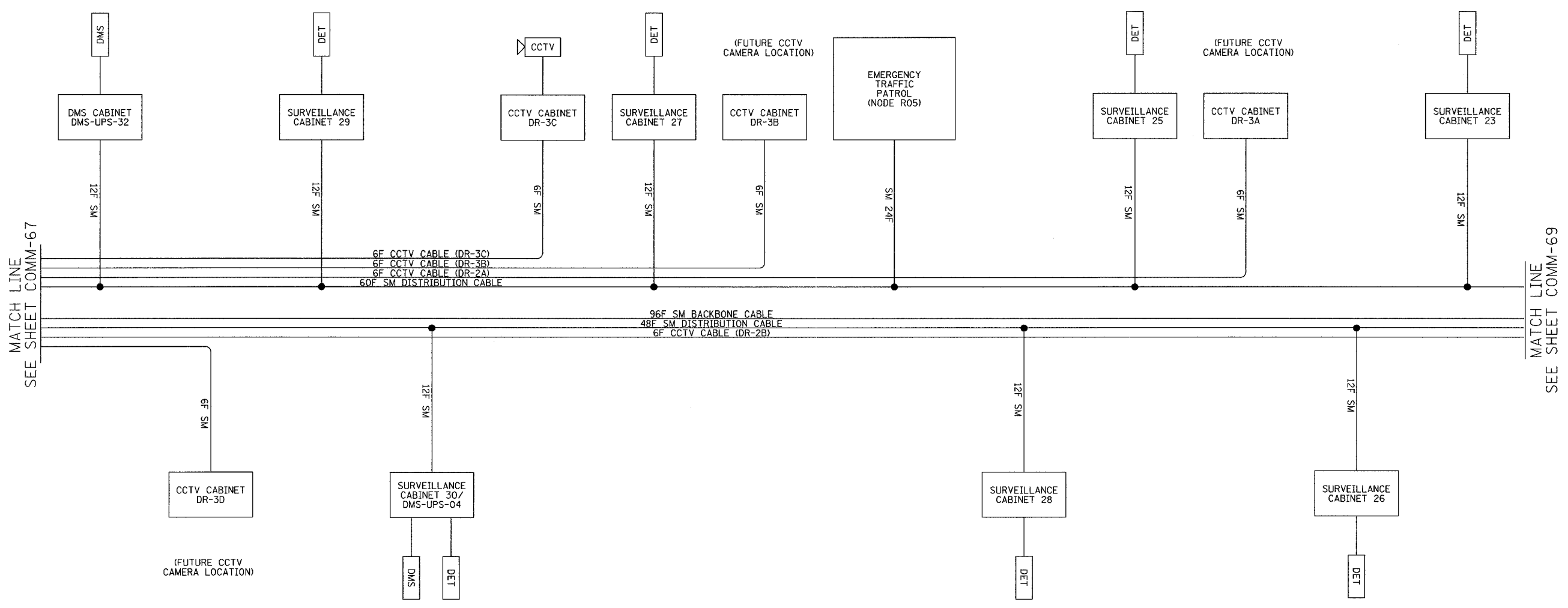
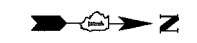
SCALE: NTS
 DATE: October 29, 2004

DRAWN BY: DH1
 CHECKED BY: JEZ

COMM-67

11/19/2004 04:39:43 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	834
STA.	TO STA.		
FED. ROAD DIST. NO. 62583	ILLINOIS FED. AID PROJECT		



MATCH LINE
SEE SHEET COMM-67

MATCH LINE
SEE SHEET COMM-69

LEGEND
 ---- EXISTING EQUIPMENT
 ——— PROPOSED EQUIPMENT
 DMS DYNAMIC MESSAGE SIGN SITE
 DET VEHICLE DETECTOR SITE
 RM RAMP METER SITE

LEGEND:
 1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS. FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.

PIGTAIL FIBER NO.	FUNCTION	APPLICATION DESCRIPTION	DMS-UPS-32 CABINET	SURVEILLANCE CABINET 29	SURVEILLANCE CABINET 30/DMS-UPS-04	SURVEILLANCE CABINET 27	SURVEILLANCE CABINET 28	SURVEILLANCE CABINET 25	SURVEILLANCE CABINET 26	SURVEILLANCE CABINET 23
1	IN TX	DATA CIRCUIT	R01-R02 19N	R01-R03 13N	R01-R02 14S	R01-R03 8S	R01-R02 7N	R01-R03 1N	R01-R02 2S	
2	IN RX		R01-R02 20N	R01-R03 14N	R01-R02 13S	R01-R03 7S	R01-R02 8N	R01-R03 2N	R01-R02 1S	
3	OUT RX		R01-R02 19S	R01-R03 13S	R01-R02 14N	R01-R03 8N	R01-R02 7S	R01-R03 1S	R01-R02 2N	
4	OUT TX		R01-R02 20S	R01-R03 14S	R01-R02 13N	R01-R03 7N	R01-R02 8S	R01-R03 2S	R01-R02 1N	
5		FUTURE	R01-R02 21N	R01-R03 15N	R01-R02 16S	R01-R03 10S	R01-R02 9N	R01-R03 3N	R01-R02 4S	
6			R01-R02 22N	R01-R03 16N	R01-R02 15S	R01-R03 9S	R01-R02 10N	R01-R03 4N	R01-R02 3S	
7			R01-R02 21S	R01-R03 15S	R01-R02 16N	R01-R03 10N	R01-R02 9S	R01-R03 3S	R01-R02 4N	
8			R01-R02 22S	R01-R03 16S	R01-R02 15N	R01-R03 9N	R01-R02 10S	R01-R03 4S	R01-R02 3N	
9	IN TX	DMS	R01-R02 32S	R01-R03 31N						
10	IN RX		R01-R02 31S	R01-R03 32N						
11	OUT RX		R01-R02 32N	R01-R03 31S						
12	OUT TX		R01-R02 31N	R01-R03 32S						

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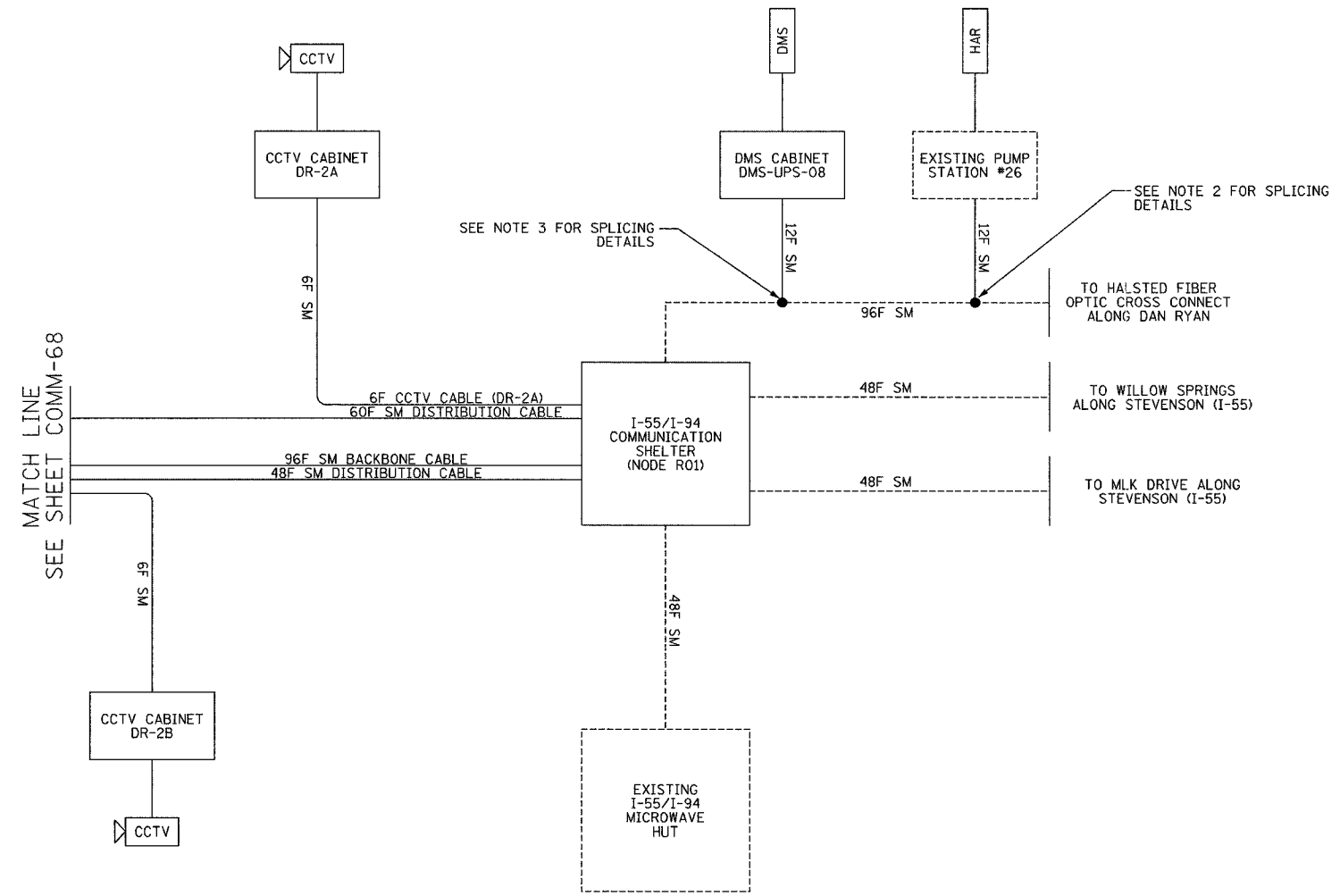
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 FIBER OPTIC SCHEMATIC
 (SHEET 7 OF 8)
 SCALE: NTS
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: JEZ

COMM-68

11/19/2004 04:39:43 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-031I	COOK	976	835
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



LEGEND

- EXISTING EQUIPMENT
- PROPOSED EQUIPMENT

- DMS DYNAMIC MESSAGE SIGN SITE
- DET VEHICLE DETECTOR SITE
- RM RAMP METER SITE

LEGEND:

1. THIS DRAWING DEPICTS THE FIBER OPTIC SPLICING DETAILS. FOR FIBER OPTIC CABLE INSTALLATION DETAILS, SEE SHEETS COMM-01 THRU COMM-52. FOR SURVEILLANCE EQUIPMENT INSTALLATION DETAILS, SEE SHEETS DET-01 THRU DET-47. FOR CCTV EQUIPMENT INSTALLATION DETAILS, SEE SHEETS CCTV-01 THRU CCTV-34.
2. CONTRACTOR TO PATCH TO EXISTING FIBER OPTIC CABLE IN EXISTING DMS CABINET. SEE SHEET COMM-53 FOR INSTALLATION DETAILS.
3. CONTRACTOR SHALL COORDINATE WITH ENGINEER WHEN SPLICING INTO EXISTING 96 FIBER CABLE AT THE CHICAGO RIVER DMS. SEE SHEET COMM-52 FOR INSTALLATION DETAILS.

COMM-69

REVISIONS	
NAME	DATE

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

FIBER OPTIC SCHEMATIC
 (SHEET 8 OF 8)

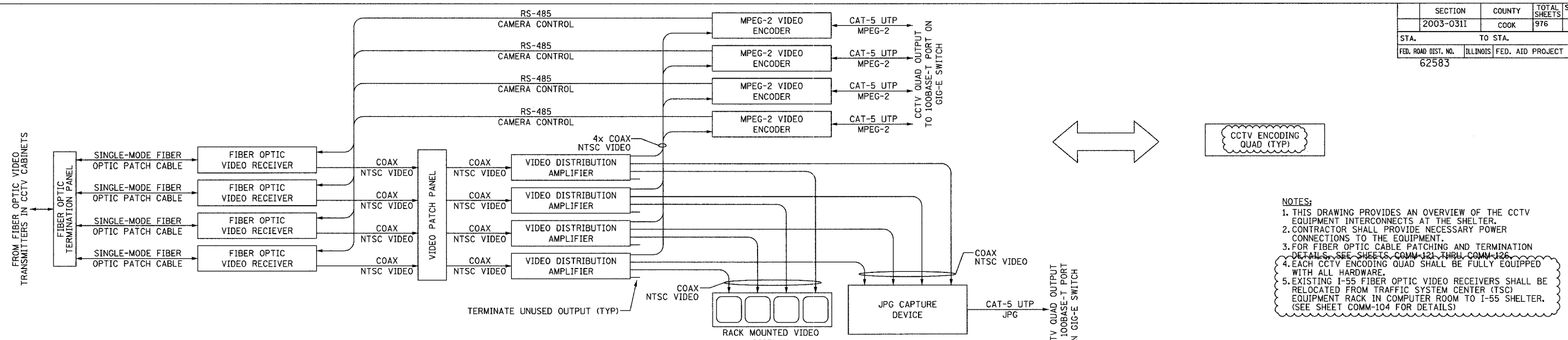
SCALE: NTS
 DATE: October 29, 2004

DRAWN BY: DHI
 CHECKED BY: JEZ

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 CHICAGO, IL 60606
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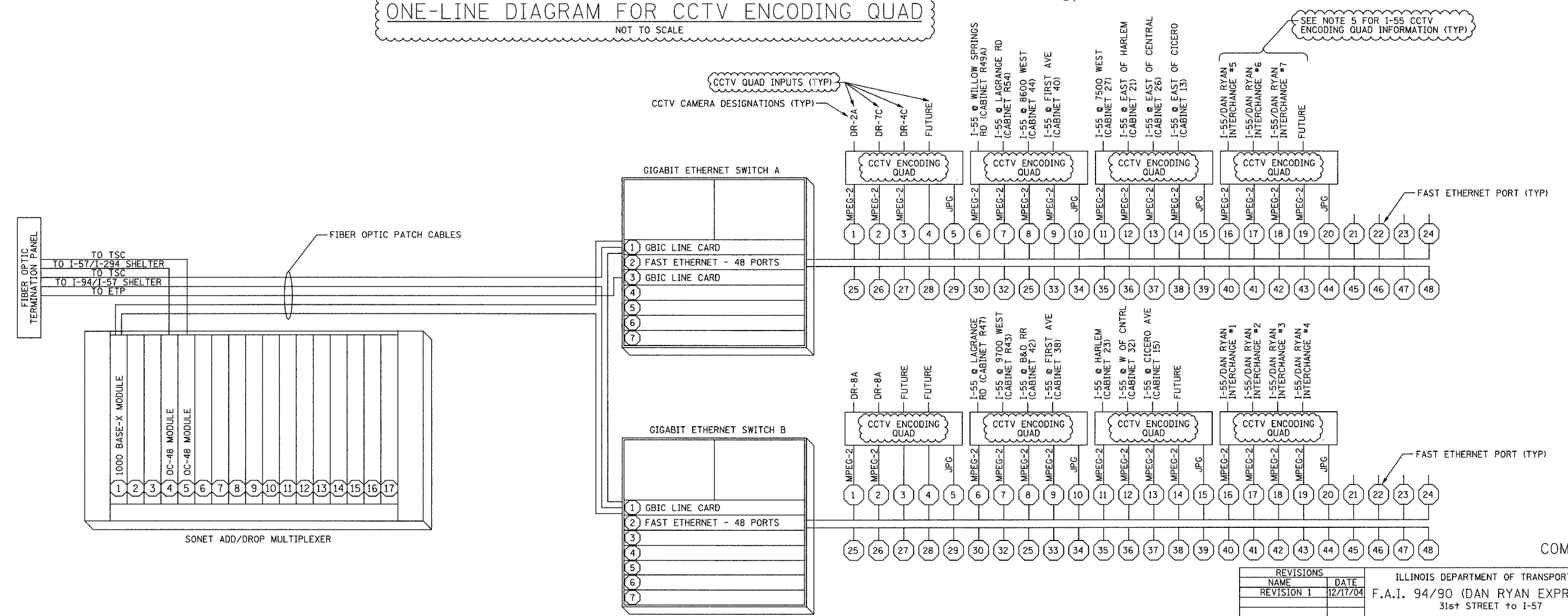
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	836
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



- NOTES:**
1. THIS DRAWING PROVIDES AN OVERVIEW OF THE CCTV EQUIPMENT INTERCONNECTS AT THE SHELTER.
 2. CONTRACTOR SHALL PROVIDE NECESSARY POWER CONNECTIONS TO THE EQUIPMENT.
 3. FOR FIBER OPTIC CABLE PATCHING AND TERMINATION DETAILS, SEE SHEETS COMM-121 THRU COMM-126.
 4. EACH CCTV ENCODING QUAD SHALL BE FULLY EQUIPPED WITH ALL HARDWARE.
 5. EXISTING I-55 FIBER OPTIC VIDEO RECEIVERS SHALL BE RELOCATED FROM TRAFFIC SYSTEM CENTER (TSC) EQUIPMENT RACK IN COMPUTER ROOM TO I-55 SHELTER. (SEE SHEET COMM-104 FOR DETAILS)

ONE-LINE DIAGRAM FOR CCTV ENCODING QUAD
NOT TO SCALE



EQUIPMENT INTERCONNECT DIAGRAM
NOT TO SCALE

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

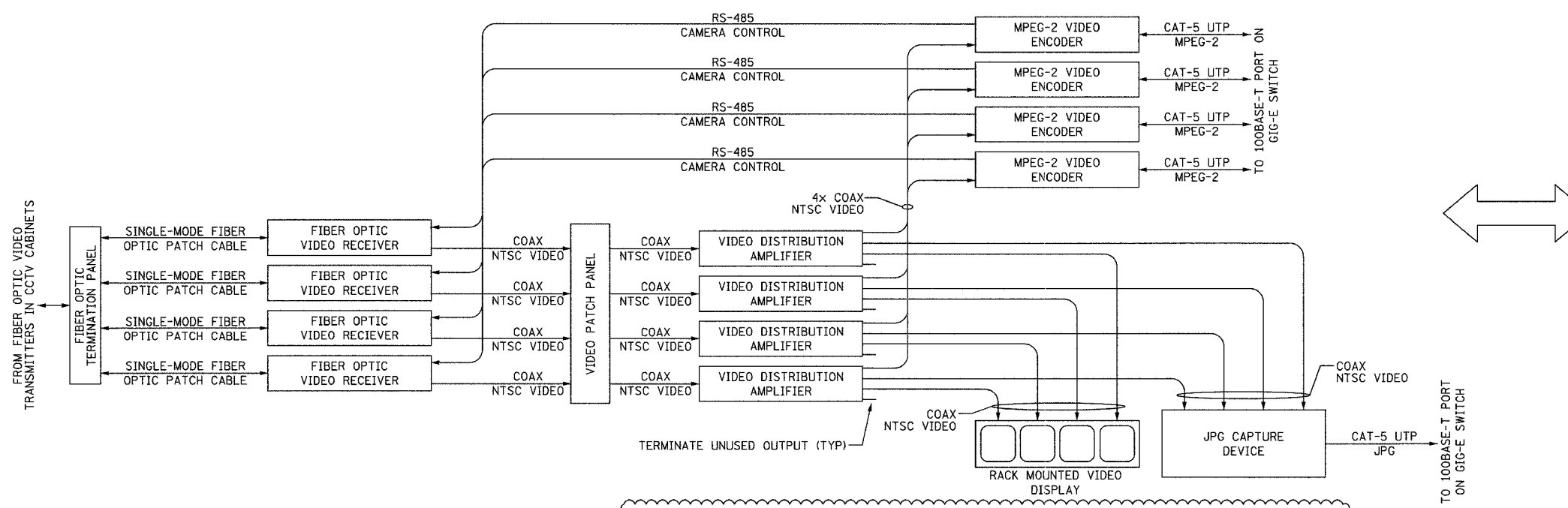
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

I-55 SHELTER (R01)
CCTV DISTRIBUTION SUBSYSTEM
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

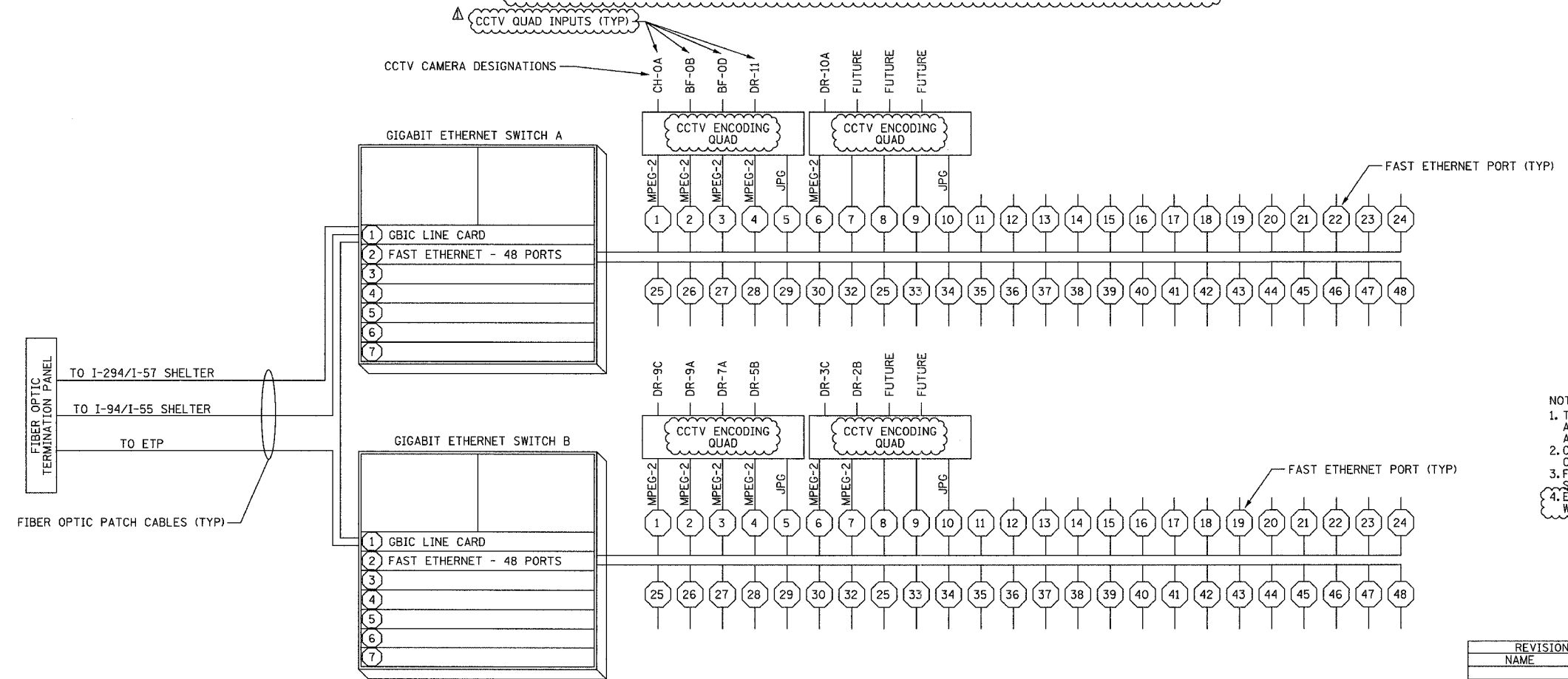
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	837
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
62583			



ONE-LINE DIAGRAM FOR CCTV ENCODING QUAD
NOT TO SCALE



- NOTES:
1. THIS DRAWING IS FOR REFERENCE ONLY AND PROVIDES AN OVERVIEW OF THE CCTV EQUIPMENT INTERCONNECTS AT THE SHELTER.
 2. CONTRACTOR SHALL PROVIDE NECESSARY POWER CONNECTIONS TO THE EQUIPMENT.
 3. FOR FIBER OPTIC CABLE PATCH AND TERMINATION DETAILS, SEE SHEETS COMM-110 THRU COMM-113.
 4. EACH CCTV ENCODING QUAD SHALL BE FULLY EQUIPPED WITH ALL HARDWARE.

COMM-71

REVISIONS	NAME	DATE

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

I-57 SHELTER (R04)
CCTV DISTRIBUTION SUBSYSTEM

SCALE: NOT TO SCALE
DATE: October 29, 2004

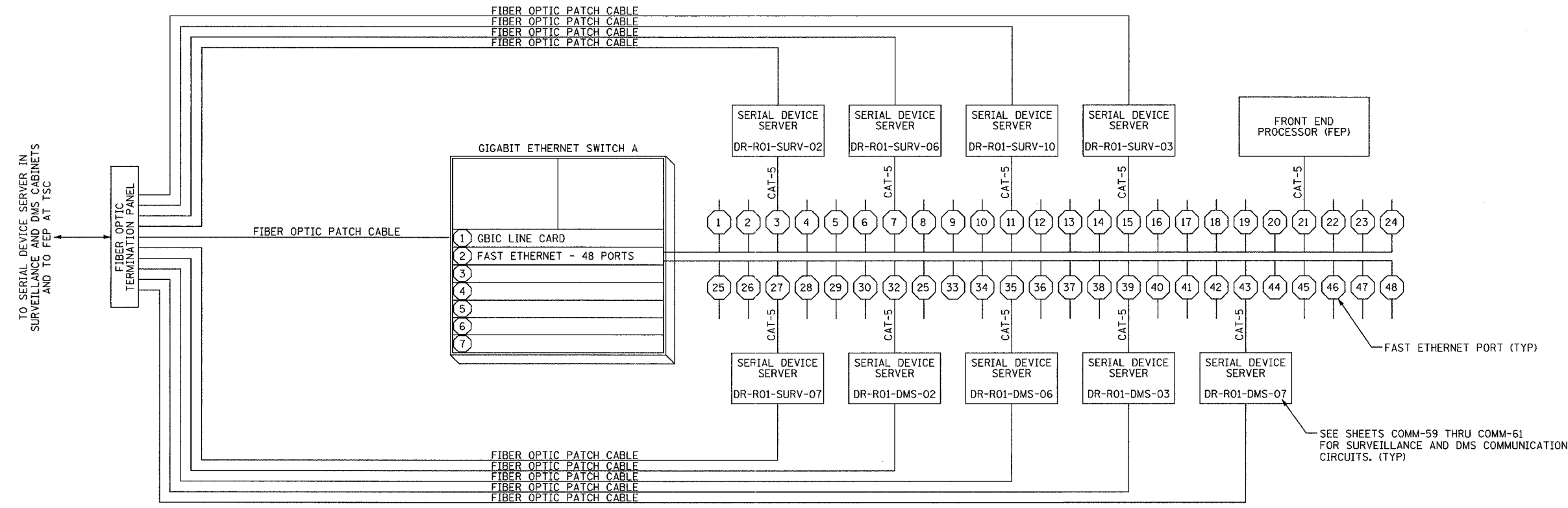
DRAWN BY: DHI
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Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

EQUIPMENT INTERCONNECT DIAGRAM
NOT TO SCALE

12/15/2004 01:45:16 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	838
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



SEE SHEETS COMM-59 THRU COMM-61 FOR SURVEILLANCE AND DMS COMMUNICATION CIRCUITS. (TYP)

COMM-72

NOTES:
1. FOR FIBER OPTIC CABLE PATCHING AND TERMINATION DETAILS, SEE SHEETS COMM-121 THRU COMM-126.

REVISIONS	
NAME	DATE

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

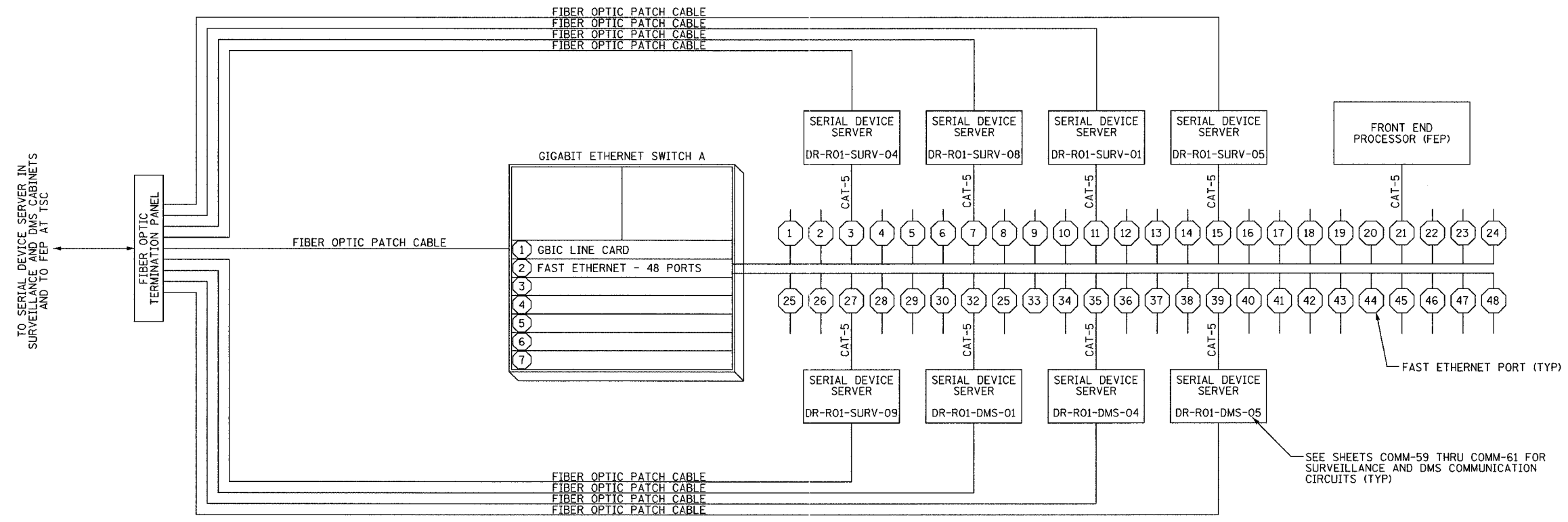
I-55 SHELTER (R01)
TRAFFIC SURVEILLANCE SYSTEM

SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	839
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



COMM-73

NOTES:
 1. FOR FIBER OPTIC CABLE PATCHING AND TERMINATION DETAILS, SEE SHEETS COMM-110 THRU COMM-113.

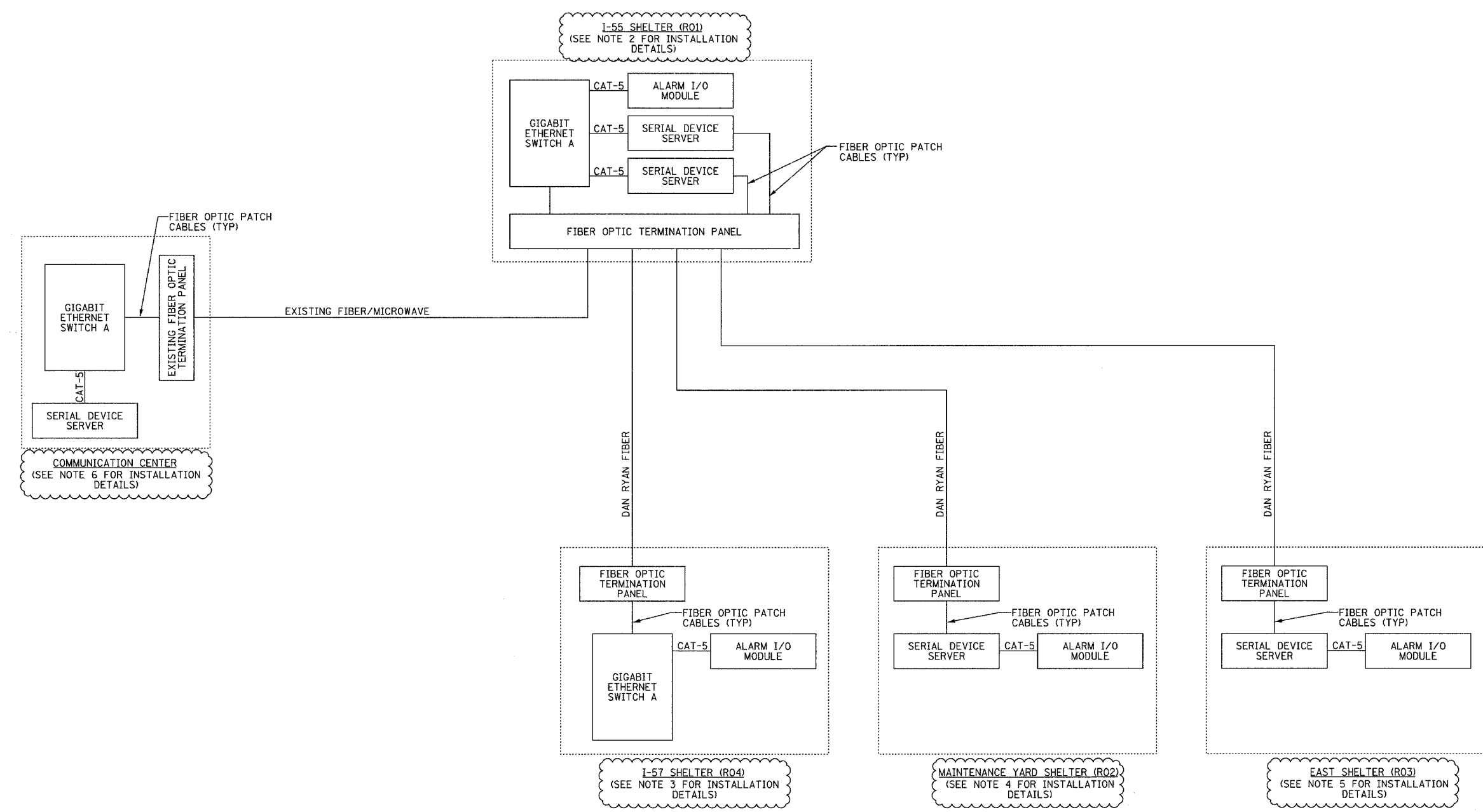
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 I-57 SHELTER (R04)
 TRAFFIC SURVEILLANCE SYSTEM
 SCALE: NOT TO SCALE
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: JEZ

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	840
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



- NOTES:**
1. SEE SHEETS COMM-110 THRU COMM-126 FOR FIBER OPTIC CABLE PATCHING AND TERMINATION DETAILS AT EACH ONE OF THE SHELTER LOCATIONS.
 2. SEE SHEETS COMM-85 THRU COMM-90 FOR INSTALLATION DETAILS AT THE I-55 SHELTER.
 3. SEE SHEETS COMM-95 THRU COMM-96 FOR INSTALLATION DETAILS AT THE I-57 SHELTER.
 4. SEE SHEETS COMM-80 THRU COMM-84 FOR INSTALLATION DETAILS AT THE MAINTENANCE YARD SHELTER.
 5. SEE SHEETS COMM-75 THRU COMM-79 FOR INSTALLATION DETAILS EAST SHELTER.
 6. SEE SHEETS COMM-101 THRU COMM-103 FOR INSTALLATION DETAILS AT THE COMMUNICATION CENTER.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

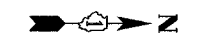
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 SHELTER ALARMS
 SYSTEM SCHEMATIC
 SCALE: NOT TO SCALE
 DATE: October 29, 2004
 DRAWN BY: DHJ
 CHECKED BY: JEZ

COMM-74

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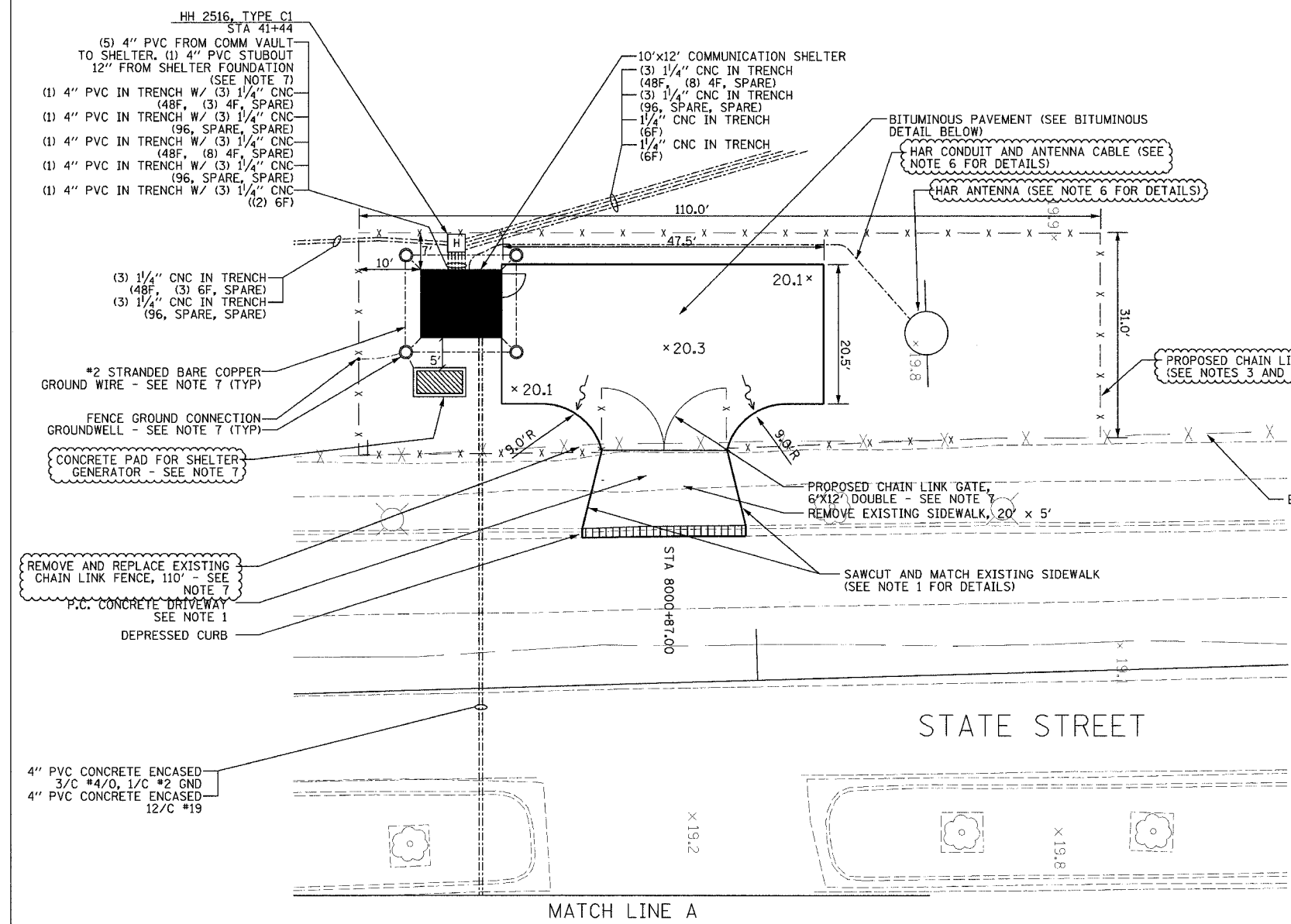
12/15/2004 04:49:17 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	841
STA. 62583	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



4" PVC CONCRETE ENCASED
3/C #4/O, 1/C #2 GND
4" PVC CONCRETE ENCASED
12/C #19

MATCH LINE A
STATE STREET



4" PVC CONCRETE ENCASED
3/C #4/O, 1/C #2 GND
4" PVC CONCRETE ENCASED
12/C #19

HH 7302, TYPE S1

PROPOSED CHAIN LINK FENCE
(SEE NOTES 3 AND 7)

HH 7301, TYPE S1

EXISTING CHAIN LINK FENCE

PROPOSED CHAIN LINK GATE,
6'x12' DOUBLE - SEE NOTE 7
REMOVE EXISTING SIDEWALK, 20' x 5'

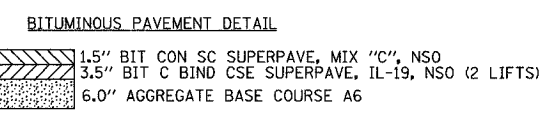
SAWCUT AND MATCH EXISTING SIDEWALK
(SEE NOTE 1 FOR DETAILS)

STATE STREET

66TH PLACE

4" PVC CONCRETE ENCASED
3/C #4/O, 1/C #2 GND
4" PVC CONCRETE ENCASED
12/C #19

4" PVC CONCRETE ENCASED
3/C #4/O, 1/C #2 GND
4" PVC CONCRETE ENCASED
12/C #19

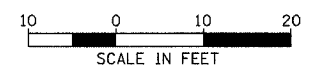


LEGEND

X 20.50	EXISTING GRADES
X 20.50	PROPOSED GRADES

- NOTES:**
- FOR P.C. CONCRETE DRIVEWAY, REFER TO CDOT DETAIL SHEET BD17.
 - CENTERLINE OF PROPOSED DRIVEWAY TO ALIGN WITH CENTER LINE OF 66TH PLACE.
 - FOR COMMUNICATIONS SHELTER DETAILS, REFER TO SHEETS COMM-91 THRU COMM-94.
 - CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND RELOCATING ALL EXISTING UNDERGROUND UTILITIES AS NECESSARY TO CONSTRUCT COMMUNICATIONS SHELTER.
 - FOR ELECTRIC SERVICE INSTALLATION DETAILS, SEE ESD-01.
 - FOR HIGHWAY ADVISOR RADIO TRANSMITTER PLANS, SEE SHEETS HAR-01 THRU HAR-03.
 - DESIGNATED WORK MATERIALS TO BE PAID FOR AS PART OF SHELTER.
 - PAVEMENT AND SIDEWALK REPLACEMENT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONCRETE ENCASED CONDUIT INSTALLATION.

ELECTRIC UTILITY SERVICE CONNECTION
ELECTRIC SERVICE INSTALLATION, 200A, 120/240V
UNDERGROUND TELEPHONE SERVICE INSTALLATION



SCALE IN FEET
COMM-75

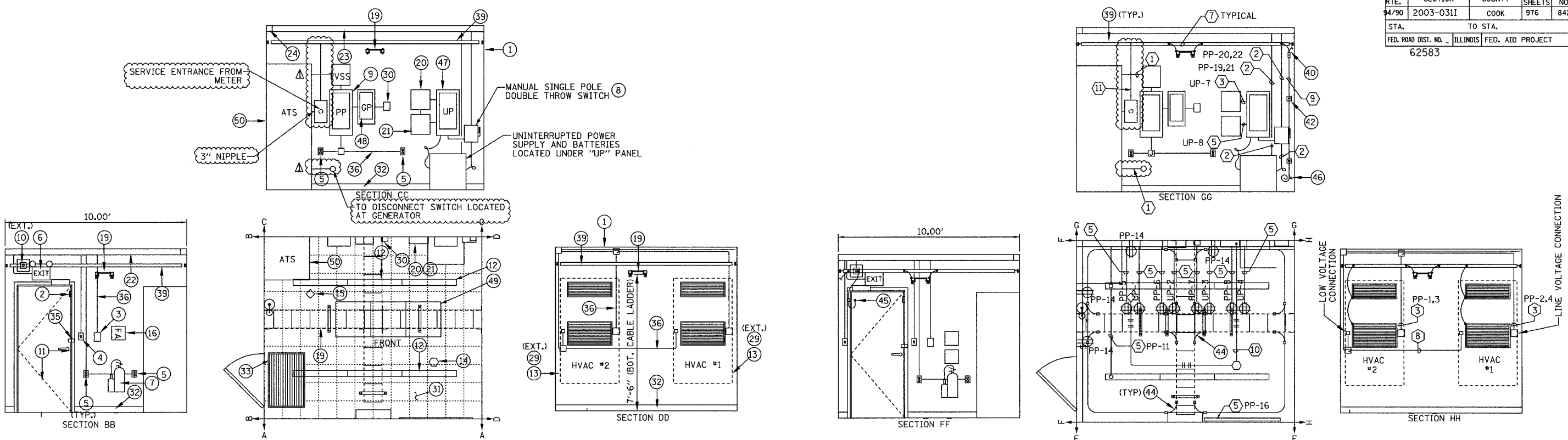
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57
EAST SHELTER (R03) SITE PLAN
SCALE: 1"=10'
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: MJL

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
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F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	842
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



LEGEND

- ⊙ MAIN MATERIAL LIST KEY
- ⊕ ELECETRICAL NOTES KEY
- ◇ PHOTOELECTRIC DETECTOR
- IONIZATION DETECTOR
- ⊞ JUNCTION BOX
- ⌞ LIGHT SWITCH
- ⊕ QUAD RECEPTACLE
- ⊕ DUPLEX RECEPTACLE
- FLUORESCENT LIGHT FIXTURE
- CABLE TRAY
- COMMUNICATION EQUIPMENT RACK

EQUIPMENT LAYOUT

ELECTRICAL LAYOUT

ITEM	DESCRIPTION
1	PREFABRICATED 10'WX12'X9'H (INTERIOR DIMENSION) CONCRETE EQUIPMENT SHELTER
2	DOOR INTRUSION SENSOR
3	DUAL HVAC UNIT CONTROLLER
4	SINGLE POLE LIGHT SWITCH
5	DUPLEX RECEPTACLE
6	COMBINED EMERGENCY LIGHT W/ BATTERY BACKUP
7	10 LB. CARBON DIOXIDE FIRE EXTINGUISHER, WALL MOUNTED
8	TWO POLE, DOUBLE THROW DISCONNECT SWITCH, 240 VAC, NEMA 1 ENCLOSURE
9	NORMAL POWER PANEL "PP", 120/240 VAC, 3W, 225 AMP PANEL
10	35W HIGH PRESSURE SODIUM, VANDAL RESISTANT EXTERIOR MOUNTED FLOODLIGHT, WITH PHOTOCELL
11	36" x 80" INSULATED HOLLOW METAL CORE DOOR AND FRAME
12	FLUORESCENT LIGHT, 2 LAMPS, 30 WATTS EACH, 120 VOLT
13	AIR CONDITIONING UNIT W/ GRILLS
14	CEILING MOUNTED SMOKE DETECTOR (IONIZATION TYPE)
15	CEILING MOUNTED SMOKE DETECTOR (PHOTOELECTRIC TYPE)
16	FIRST AID KIT
17	(NOT USED)
18	TYP. 66 BLOCKS, MODULE 50M - 1500W W/ 2 R66M 50 BLOCKS AND BLOCK COVERS
19	12" CABLE TRAY (SEE SHEET COMM-95 FOR DETAILS)
20	FIRE ALARM PANEL
21	ALARM I/O MODULE
22	4" x 4" x 10" WIREWAY
23	4" x 4" x 20" WIREWAY
24	4" x R" CORNER PIECE
25	6" RECEPTACLE STRIP W/ OUTLETS EVERY 1'
26	CONDUIT ADAPTER

ITEM	DESCRIPTION
27	ELBOW ADAPTER
28	END CAP
29	VANDAL PROOF CAGE FOR HVAC
30	REMOTE ANNUNCIATOR MODULE (PRE-PURCHASED)
31	FLOOR TILES - 1/4" x 12" x 12" COMMERCIAL TILE
32	BASE FINISH, 4" BLACK BASE COVER MOLD 10' x 12" SHELTER
33	24" x 36" RUBBER MAT
34	INSULATION MATERIAL FOR 10' x 20' x 9' FIRE RESISTANT R-19
35	2 1/2" x 2 1/2" x 2" ANGLE PLATES AT EXTERIOR DOOR AND WALL FOR VANDAL PROOF LOCK
36	3/4" CONDUIT
37	1/2" CONDUIT
38	UPS SYSTEM, 10KVA, 240 VAC INPUT, 120 VOLT, TO OUTPUT (PAID FOR AS PART OF SHELTER)
39	INTERIOR COPPER GROUND BUS BAR (SEE SHEET COMM-95 FOR DETAILS)
40	INTERIOR GROUND SYSTEM - GROUND LEAD TO EXTERIOR GROUND SYSTEM
41	INTERIOR GROUND SYSTEM - NON-DIRECTIONAL SPLICE
42	INTERIOR GROUND SYSTEM - GROUND WALL SUPPORT
43	INTERIOR GROUND SYSTEM - GROUND BUS GROUND TAP
44	INTERIOR GROUND SYSTEM - CABLE LADDER BOND
45	INTERIOR GROUND SYSTEM - DOOR BONDING STRIP
46	INTERIOR GROUND SYSTEM - PVC 45% NIPPLE
47	UPS PANEL "UP", 120/240VAC, 2W, 100 AMP PANEL
48	STANDBY GENERAL PANEL "GP"
49	EQUIPMENT RACK (PAID FOR AS PART OF CCTV DISTRIBUTION SUBSYSTEM)
50	AUTOMATIC TRANSFER SWITCH (ATS)
51	WALL MOUNTED FIBER OPTIC TERMINATION PANEL

- 1 (2) #4/0, (1) #4/0 NEUTRAL & (1) #2 GND, 3"C
- 2 (2) #3 & (1) #8 GND, 1"C
- 3 (2) #8 & (1) #10 GND, 3/4"C
- 4 (2) #10 & (1) #12 GND, 3/4"C
- 5 (2) #12 & (1) #12 GND, 3/4"C
- 6 (1) #4 GRD. WIRE, 3/4"C
- 7 COPPER GROUND BUS (SEE SHEET COMM-95 FOR DETAILS)
- 8 QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 1/2" RGS
- 9 (1) #8 BARE COPPER GROUND
- 10 (2) #22 AWG TWISTED PAIR, 3/4"C
- 11 (1) #2 GROUND, 1" C

- NOTES:**
- CONDUIT AND WIRING IS SHOWN DIAGRAMATIC. ACTUAL LOCATION OF EQUIPMENT AND HARDWARE SHALL BE SHOWN IN SHOP DRAWINGS AND SHALL BE APPROVED BY THE ENGINEER.
 - CONTRACTOR SHALL MAINTAIN MINIMUM 36" CLEARANCE WHEN INSTALLING EQUIPMENT RACKS AND EQUIPMENT.
 - ALL CABLE TRAY AND EQUIPMENT SHALL HAVE GROUND WIRE INSTALLED SIZED AS PER ELECTRICAL CODE REQUIREMENTS.
 - SEE SHEETS COMM-114 THRU COMM-117 FOR FIBER OPTIC PATCHING AND TERMINATION INFORMATION.
 - ROUTE ALARM CABLE FROM ALARM OUTPUT DEVICES TO ALARM INPUT PANEL VIA CABLE TRAY. SEE SHEET COMM-78 FOR SHELTER ALARM SCHEMATIC.
 - COORDINATE SERVICE ENTRANCE AND CONDUIT PENETRATION LOCATIONS AS DETAILED PER SHELTER SITE PLAN.

COMM-76

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 EAST SHELTER (R03)
 EQUIPMENT AND ELECTRICAL LAYOUT
 SCALE: NOT TO SCALE
 DATE: October 29, 2004
 DRAWN BY: JM
 CHECKED BY: CS



12/15/2004 01:50:05 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	843

STA. TO STA.
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT
62583

PANEL CIRCUIT AND LOAD SCHEDULE

WIRE SIZE #3/0
1P, 225A
SERVICE: 120/240VAC, 1Ø, 3W
DESIGNATION: IDOT- SHELTER NORMAL POWER (PP)
LOCATION: EAST SHELTER (R03)

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)				LOAD DESCRIPTION
			PHASE					PHASE		UNIT (W)	QTY	
			A	B				A	B			
HVAC UNIT 1 (56K BTU)	1	10300	5150	5150	40	2	6			10300	1	HVAC UNIT 2 (56K BTU)
NORMAL QUAD RECEPTACLE - RACK 1	1	900			20	1	12	900		900	1	NORMAL QUAD RECEPTACLE - RACK 2
NORMAL QUAD RECEPTACLE - RACK 3	1	900			20	1	12	900		900	1	NORMAL QUAD RECEPTACLE - RACK 4
NORMAL QUAD RECEPTACLE - RACK 5	1	900			20	1	12	900		900	1	NORMAL QUAD RECEPTACLE - RACK 6
LIGHTS	8	50		400	20	1	12		35	35	1	EXIT LIGHT
TVSS	1	N/A			60	2	4	900		180	5	DUPLEX RECEPTACLE
OUTDOOR GFCI RECEPTACLE	1	180	180		20	1	12	900		180	5	RECEPTACLE- POWER STRIP
UPS BYPASS (LOAD NOT INCLUDED IN TOTALS)					70	1	3			5000	1	UPS INPUT (10 KVA)
SPARE					20	1	12					SPARE
GENERATOR PANEL "GP"					60	2	6					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE

SUBTOTAL LEFT: 11830
SUBTOTAL RIGHT: 15435
TOTAL LOAD: 27,265 W

VOLTAGE: 120/240V
CYCLES: 60 HZ
PHASE: 1
WIRES: 3

SOLID NEUTRAL: 225 AMPS
MAIN BREAKER: 225 AMP FRAME 225 AMP TRIP
MAIN LUGS: - AMPS MAIN COPPER BUS: 225 AMPS
MOUNTING: TOP BOTTOM

PANEL CIRCUIT AND LOAD SCHEDULE

WIRE SIZE #2
1P, 100A
SERVICE: 120/VAC, 1Ø
DESIGNATION: IDOT- SHELTER UPS POWER (UP)
LOCATION: EAST SHELTER (R03)

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)				LOAD DESCRIPTION
			PHASE					PHASE		UNIT (W)	QTY	
			A	B				A	B			
UPS QUAD RECEPTACLE - CAB 1	1	900	900		20	1	12	900		900	1	UPS QUAD RECEPTACLE - CAB 2
UPS QUAD RECEPTACLE - CAB 3	1	900		900	20	1	12	900		900	1	UPS QUAD RECEPTACLE - CAB 4
UPS QUAD RECEPTACLE - CAB 5	1	900		900	20	1	12	900		900	1	UPS QUAD RECEPTACLE - CAB 6
SECURITY PANEL	1	260		260	20	1	12	260		260	1	FIRE-ALARM CONTROL PANEL
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE

SUBTOTAL LEFT: 1800
SUBTOTAL RIGHT: 1160
TOTAL LOAD: 5,920 W

VOLTAGE: 120/240V
CYCLES: 60 HZ
PHASE: 1
WIRES: 2

SOLID NEUTRAL: 100 AMPS
MAIN BREAKER: 100 AMP FRAME 100 AMP TRIP
MAIN LUGS: - AMPS MAIN COPPER BUS: 100 AMPS
MOUNTING: TOP BOTTOM

- NOTES:**
- INSTALL NEW 225 AMP MAIN CIRCUIT BREAKER DISCONNECT SWITCH WITH NEUTRAL AND GROUND BUS IN NEMA 1 ENCLOSURE.
 - PACKAGED STANDBY GENERATOR AND TRANSFER SWITCH, INSTALLATION ONLY.
 - INSTALL NEW 225 AMP CIRCUIT BREAKER DISCONNECT SWITCH WITH NEUTRAL AND GROUND BUS IN NEMA TYPE 3R ENCLOSURE.
 - MOUNT NEMA 3R DISCONNECT SWITCH TO STRUCTURAL FRAME OF GENERATOR. NOTE: DESIGNATED WORK SHALL BE PAID FOR AS PART OF COMMUNICATION SHELTER.
 - ALL CONDUIT SHALL BE RIGID GALVANIZED STEEL UNLESS OTHERWISE NOTED.
 - ALL WIRE SHALL BE TYPE THWN UNLESS OTHERWISE NOTED.

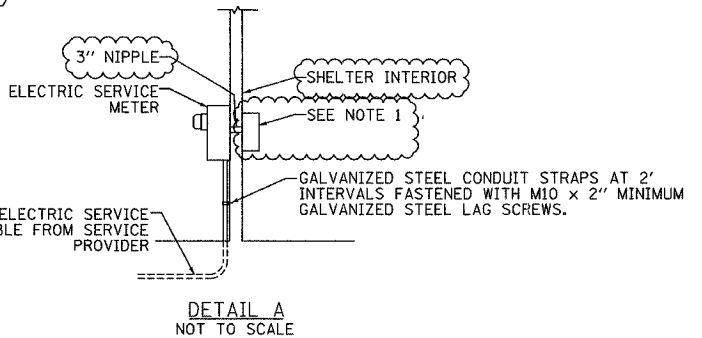
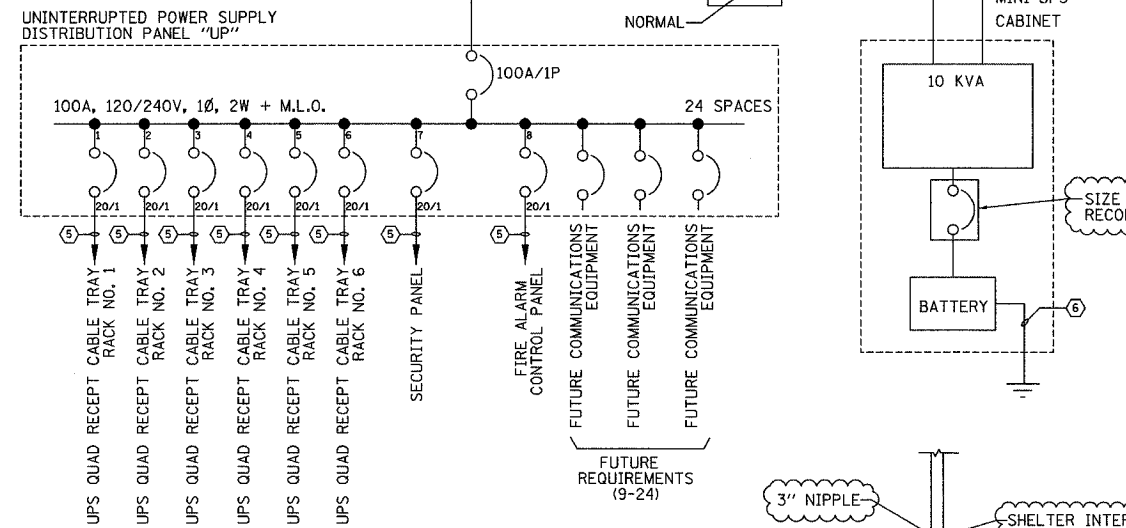
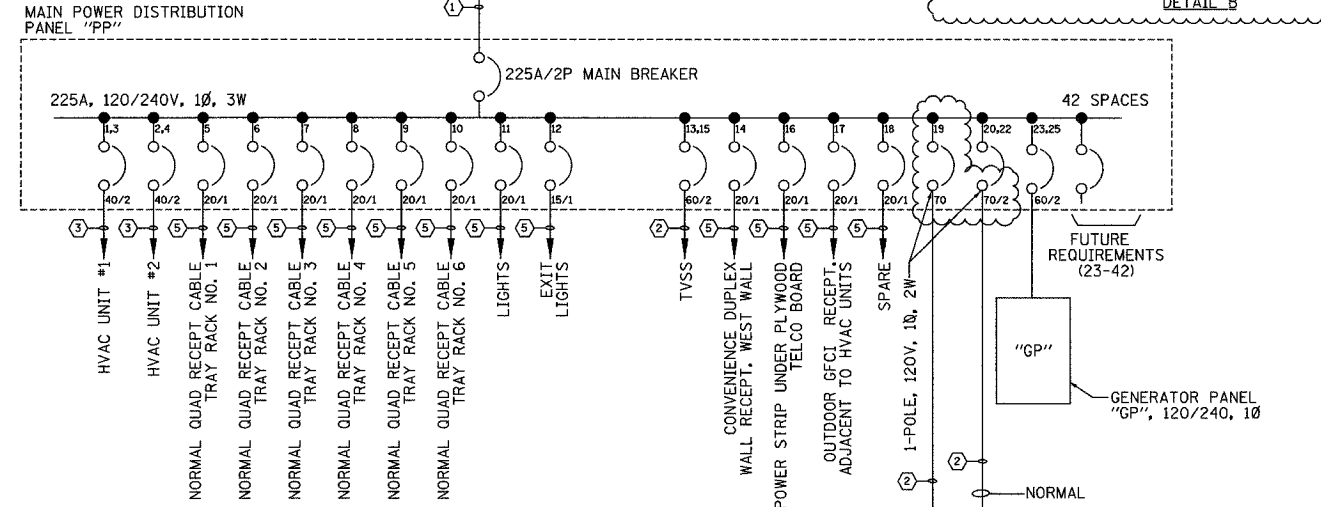
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

**EAST SHELTER (R03)
POWER SINGLE LINE DIAGRAM**

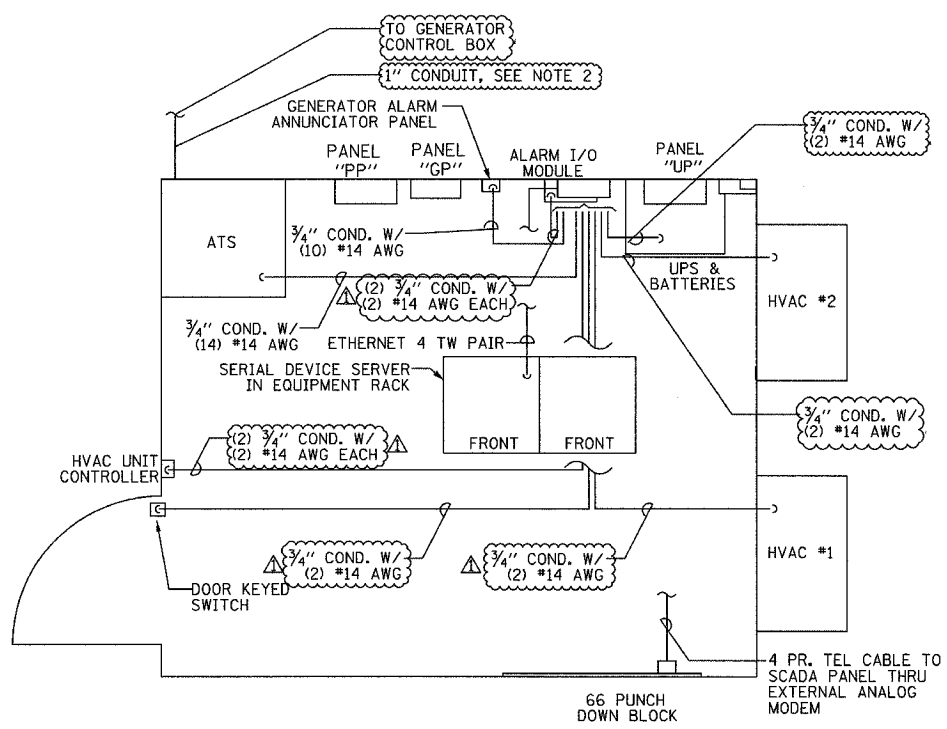
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

- #4/0, (1) #4/0 NEUTRAL & (1) #2 GND, 3" C
- (1) #3, (1) #3 NEUTRAL, & (1) #8 GND, 1" C
- (2) #8 & (1) #10 GND, 3/4" C
- (2) #10 & (1) #12 GND, 3/4" C
- (2) #12 & (1) #12 GND, 3/4" C
- #6 GND WIRE, 3/4" C
- #4/0, BARE COPPER GROUND
- QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 3/4" RGS
- #8 BARE COPPER GROUND
- (3) #4/0, 3" C
- (1) #2 GND, 1" C



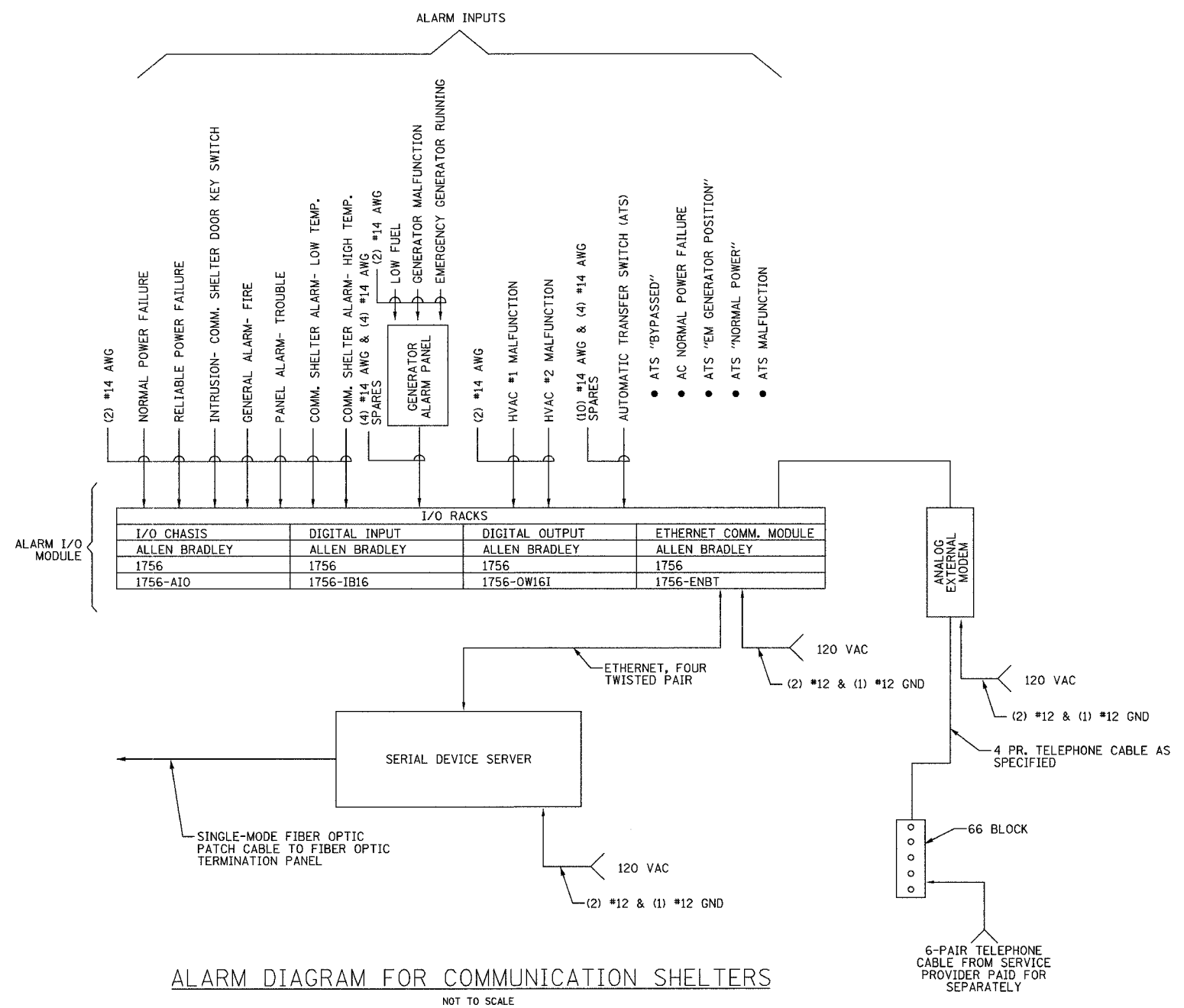
Edwards AND Kelcey
ONE NORTH FRANKLIN CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

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ALARM WIRING LAYOUT
NOT TO SCALE

- NOTES:
1. ALL ALARM WIRE INSULATION SHALL BE THWN UNLESS NOTED OTHERWISE
 2. QUANTITY OF ALARM & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION.

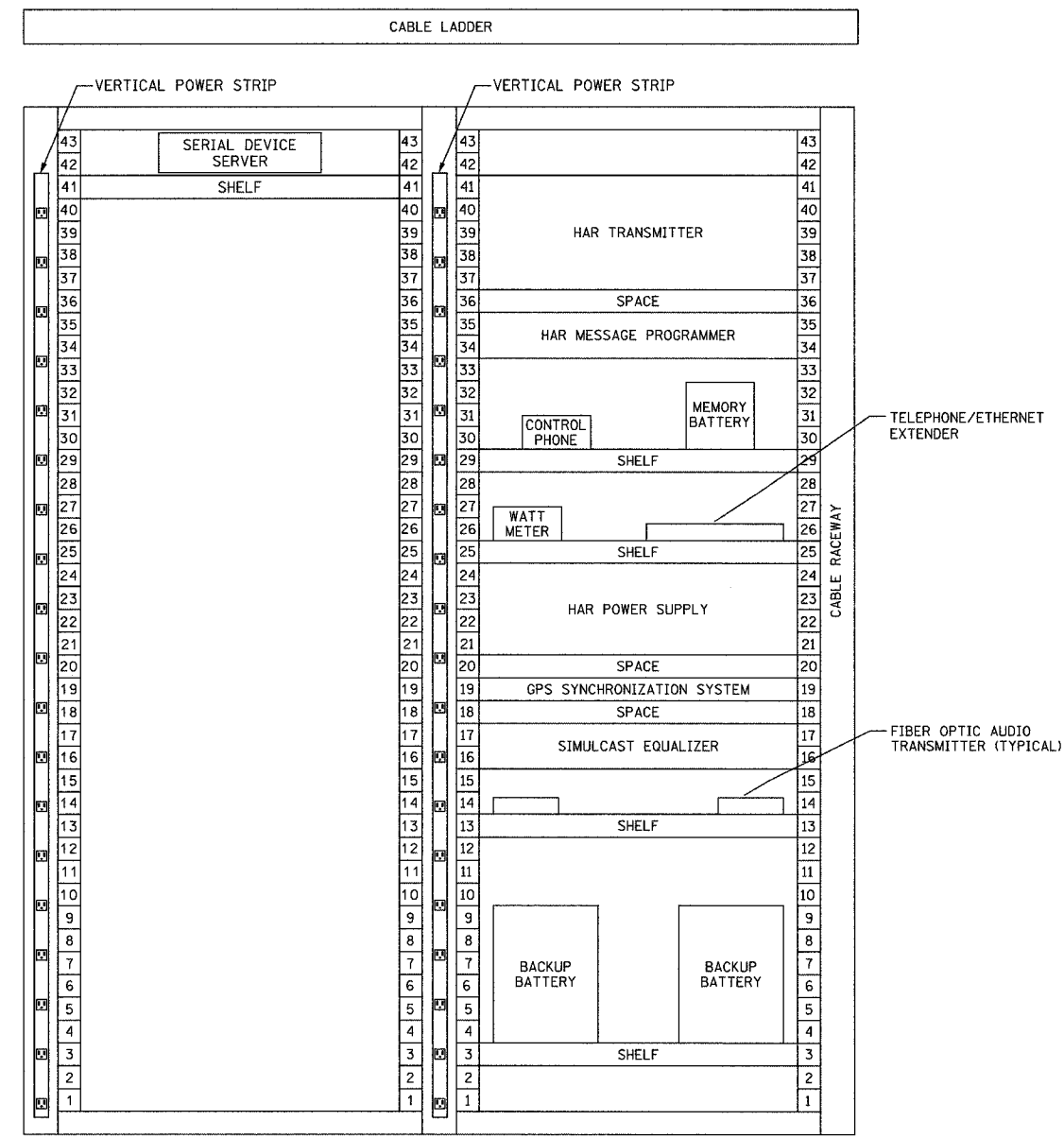


ALARM DIAGRAM FOR COMMUNICATION SHELTERS
NOT TO SCALE

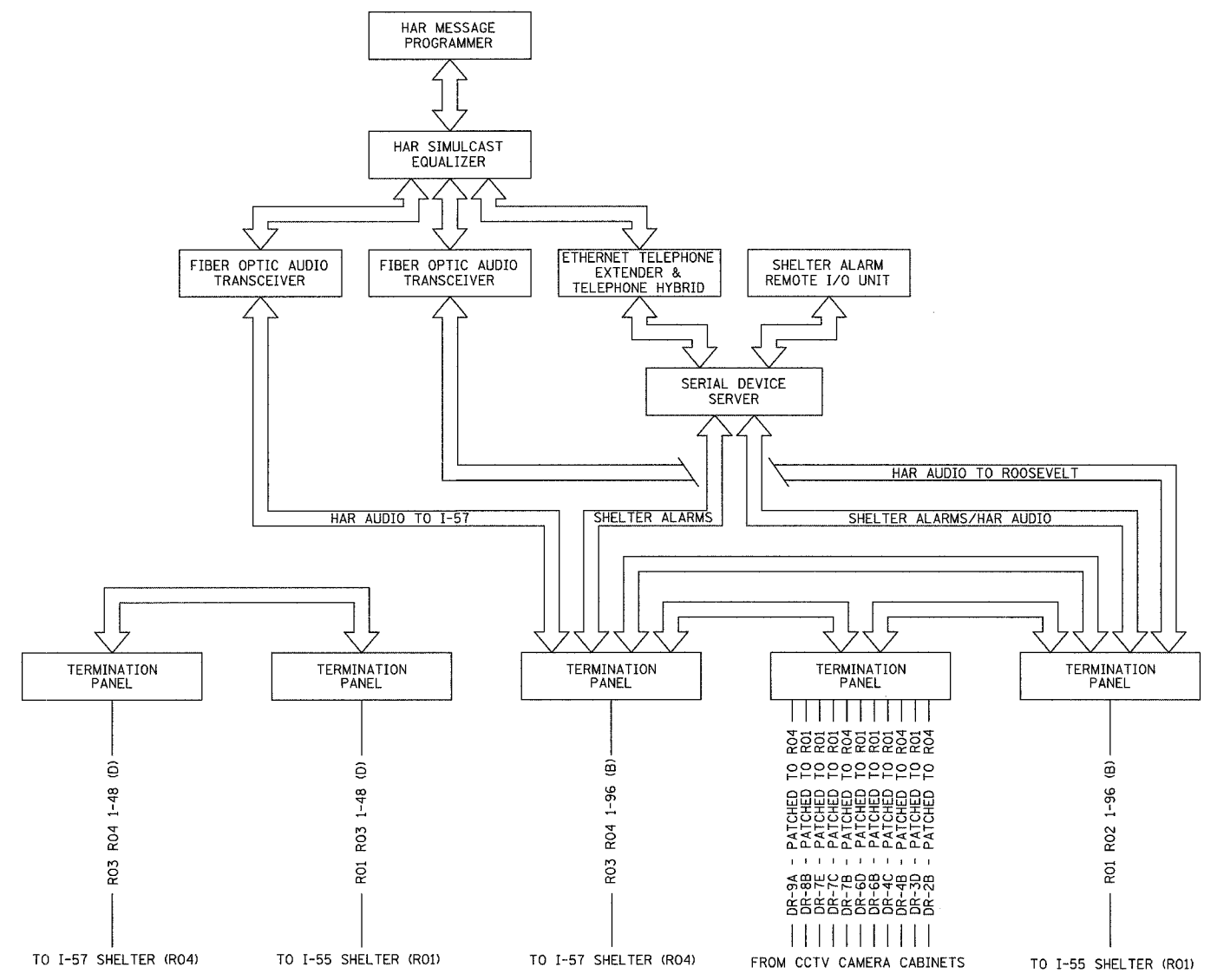
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	845
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



EQUIPMENT RACK ELEVATION
NOT TO SCALE



EAST SHELTER (R03) INTERCONNECTION DIAGRAM
NOT TO SCALE

ABBREVIATIONS
(B) BACKBONE
(D) DISTRIBUTION
HAR HIGHWAY ADVISORY RADIO

NOTES:
1. SEE SHEETS COMM-114 THRU COMM-117 FOR FIBER OPTIC CABLE PATCHING AND TERMINATION DETAILS.
2. ALL INSTALLED HARDWARE SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

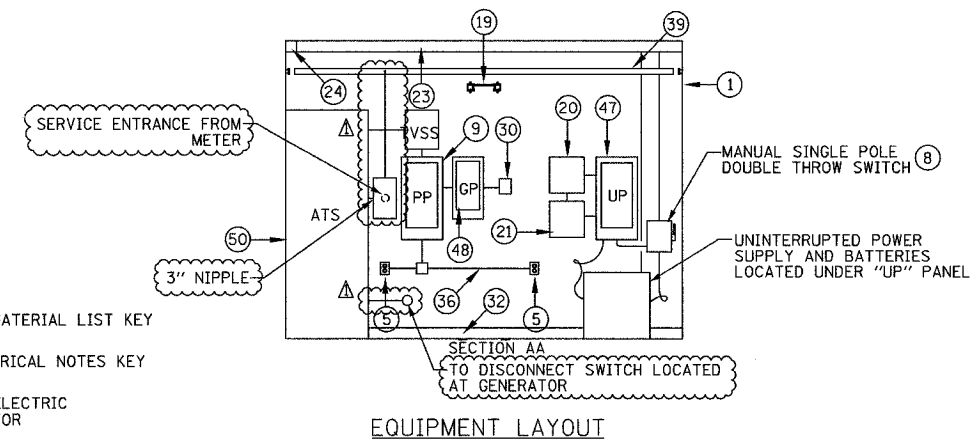
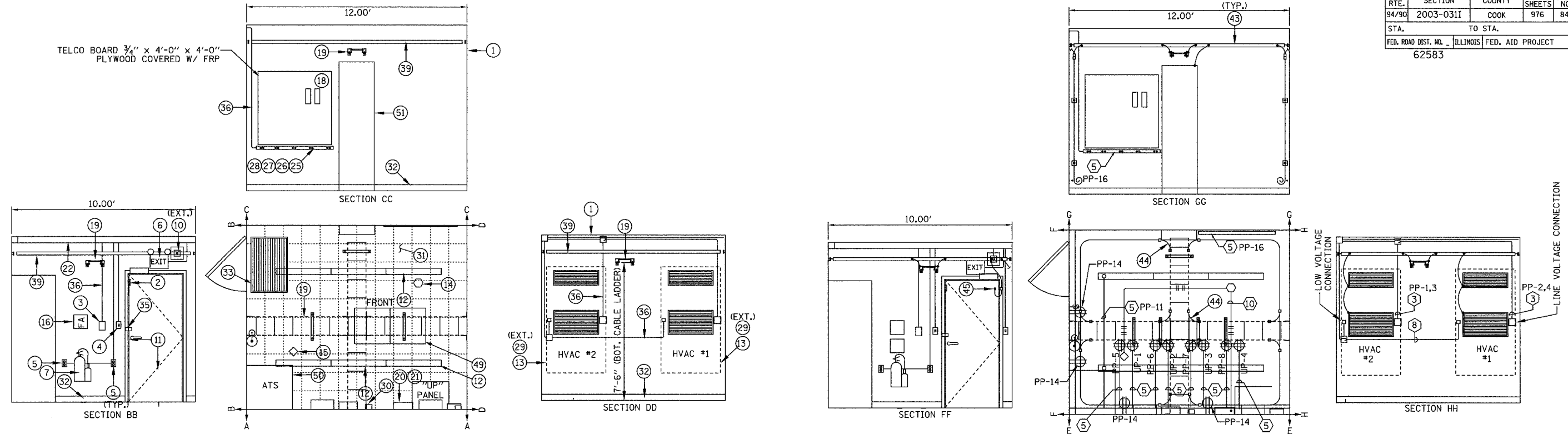
EAST SHELTER (R03)
EQUIPMENT INTERCONNECT DETAILS

SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ



12/15/2004 01:50:07 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-031I	COOK	976	847
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62583				



LEGEND

- ⊙ MAIN MATERIAL LIST KEY
- ⊛ ELECTRICAL NOTES KEY
- ◇ PHOTOELECTRIC DETECTOR
- IONIZATION DETECTOR
- ⊞ JUNCTION BOX
- ⊥ LIGHT SWITCH
- ⊕ QUAD RECEPTACLE
- ⊕ DUPLEX RECEPTACLE
- FLUORESCENT LIGHT FIXTURE
- CABLE TRAY
- COMMUNICATION EQUIPMENT RACK

- ① (2) #4/0, (1) #4/0 NEUTRAL & (1) #2 GND, 3"C
- ② (2) #3 & (1) #8 GND, 1"C
- ③ (2) #8 & (1) #10 GND, 3/4"C
- ④ (2) #10 & (1) #12 GND, 3/4"C
- ⑤ (2) #12 & (1) #12 GND, 3/4"C
- ⑥ (1) #6 GRD. WIRE, 3/4"C
- ⑦ COPPER GROUND BUS (SEE SHEET COMM-95 FOR DETAILS)
- ⑧ QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 1/2" RGS
- ⑨ (1) #8 BARE COPPER GROUND
- ⑩ (2) #22 AWC TWISTED PAIR, 3/4"C
- ⑪ (1) #2 GROUND, 1" C

ITEM	DESCRIPTION
1	PREFABRICATED 10'WX12' LX9'H (INTERIOR DIMENSION) CONCRETE EQUIPMENT SHELTER
2	DOOR INTRUSION SENSOR
3	DUAL HVAC UNIT CONTROLLER
4	SINGLE POLE LIGHT SWITCH
5	DUPLEX RECEPTACLE
6	COMBINED EMERGENCY LIGHT W/ BATTERY BACKUP
7	10 LB. CARBON DIOXIDE FIRE EXTINGUISHER, WALL MOUNTED
8	TWO POLE, DOUBLE THROW DISCONNECT SWITCH, 240 VAC, NEMA 1 ENCLOSURE
9	NORMAL POWER PANEL "PP" 120/240 VAC, 3W, 225 AMP PANEL
10	35W HIGH PRESSURE SODIUM, VANDAL RESISTANT EXTERIOR MOUNTED FLOODLIGHT, WITH PHOTOCELL
11	36" x 80" INSULATED HOLLOW METAL CORE DOOR AND FRAME
12	FLUORESCENT LIGHT, 2 LAMPS 30 WATTS EACH, 120 VOLT
13	AIR CONDITIONING UNIT W/ GRILLS
14	CEILING MOUNTED SMOKE DETECTOR (IONIZATION TYPE)
15	CEILING MOUNTED SMOKE DETECTOR (PHOTOELECTRIC TYPE)
16	FIRST AID KIT
17	(NOT USED)
18	56 BLOCKS, MODULE 50M - 1500W W/ 2 R66M 50 BLOCKS AND BLOCK COVERS
19	12" CABLE TRAY
20	FIRE ALARM PANEL
21	ALARM I/O MODULE
22	4" x 4" x 10' WIREWAY
23	4" x 4" x 20' WIREWAY
24	4" x 8" CORNER PIECE
25	6" RECEPTACLE STRIP W/ OUTLETS EVERY 1'
26	CONDUIT ADAPTER

ITEM	DESCRIPTION
27	ELBOW ADAPTER
28	END CAP
29	VANDAL PROOF CAGE FOR HVAC
30	REMOTE ANNUNCIATOR MODULE (PRE-PURCHASED)
31	FLOOR TILES - 1/2" x 12" x 12" COMMERCIAL TILE
32	BASE FINISH, 4" BLACK BASE COVER MOLD 10' x 12' SHELTER
33	24" x 36" RUBBER MAT
34	INSULATION MATERIAL FOR 10' x 20' x 9' FIRE RESISTANT R-19
35	1/2" x 2" x 2" ANGLE PLATES AT EXTERIOR DOOR AND WALL FOR VANDAL PROOF LOCK
36	3/4" CONDUIT
37	1/2" CONDUIT
38	UPS SYSTEM, 10KVA, 240 VAC INPUT, 120 VOLT, 10 OUTPUT (PAID FOR AS PART OF SHELTER)
39	INTERIOR COPPER GROUND BUS BAR
40	INTERIOR GROUND SYSTEM - GROUND LEAD TO EXTERIOR GROUND TRIAD
41	INTERIOR GROUND SYSTEM - NON-DIRECTIONAL SPLICE
42	INTERIOR GROUND SYSTEM - GROUND WALL SUPPORT
43	INTERIOR GROUND SYSTEM - GROUND BUS GROUND TAP
44	INTERIOR GROUND SYSTEM - CABLE LADDER BOND
45	INTERIOR GROUND SYSTEM - DOOR BONDING STRIP
46	INTERIOR GROUND SYSTEM - PVC 45% NIPPLE
47	UPS PANEL "UP", 120/240VAC, 2W, 100 AMP PANEL
48	STANDBY GENERAL PANEL "GP"
49	EQUIPMENT RACK (PAID FOR AS PART OF CCTV DISTRIBUTION)
50	AUTOMATIC TRANSFER SWITCH (ATS)
51	WALL MOUNTED FIBER OPTIC TERMINATION PANEL

ELECTRICAL LAYOUT

NOTES:

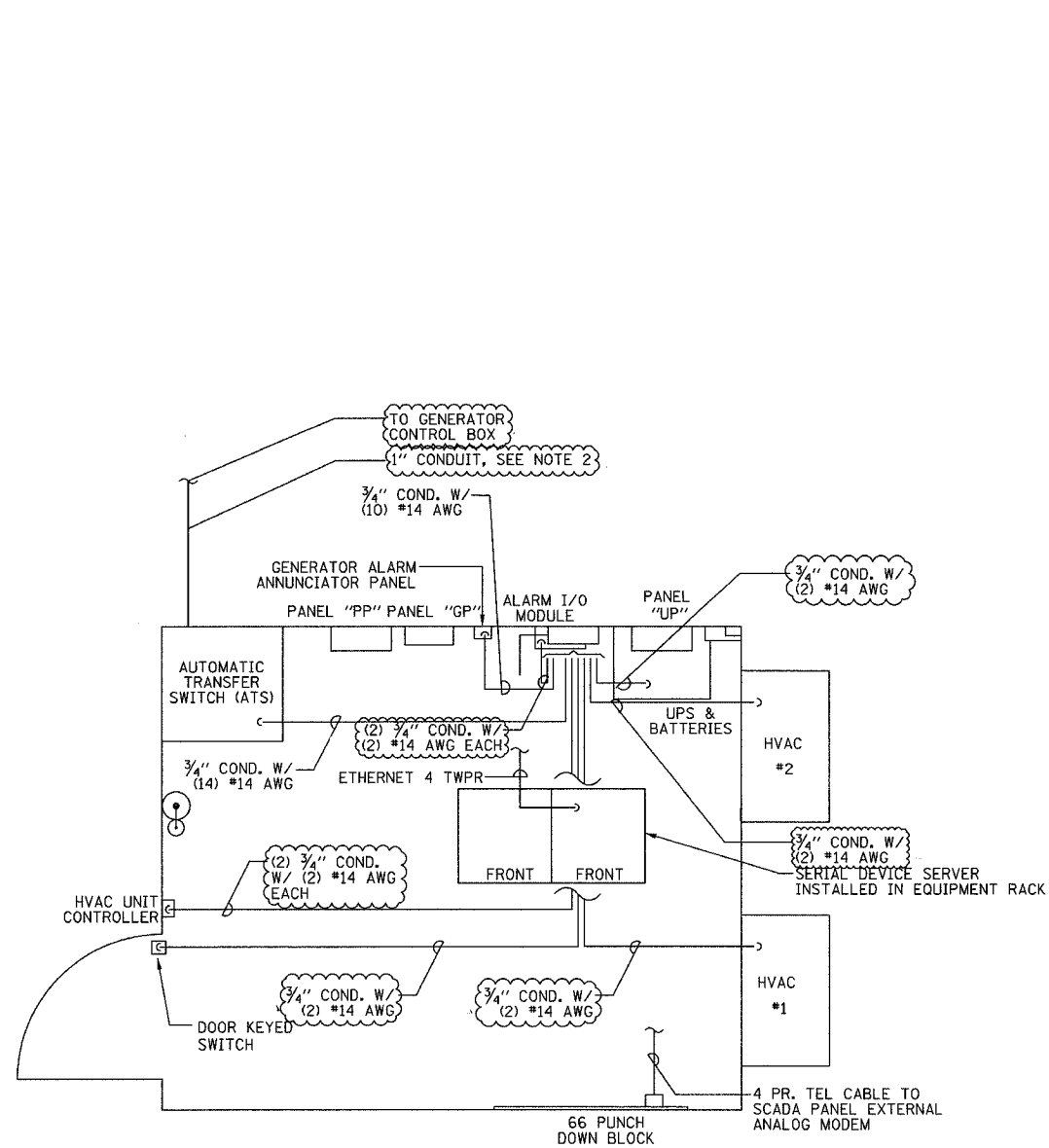
1. CONDUIT AND WIRING IS SHOWN DIAGRAMATIC. ACTUAL LOCATION OF EQUIPMENT AND HARDWARE SHALL BE SHOWN IN SHOP DRAWINGS AND SHALL BE APPROVED BY THE ENGINEER.
2. CONTRACTOR SHALL MAINTAIN MINIMUM 36" CLEARANCE WHEN INSTALLING EQUIPMENT RACKS AND EQUIPMENT.
3. ALL CABLE TRAY AND EQUIPMENT SHALL HAVE GROUND WIRE INSTALLED SIZED AS PER ELECTRICAL CODE REQUIREMENTS.
4. SEE COMMUNICATION DRAWINGS FOR DETAILS ON FIBER OPTIC CABLE TERMINATIONS.
5. ROUTE ALARM CABLE FROM ALARM OUTPUT DEVICES TO ALARM INPUT PANEL VIA CABLE TRAY. SEE SHEET COMM-83 FOR NUMBER AND TYPE OF ALARM INPUTS.
6. COORDINATE SERVICE ENTRANCE AND CONDUIT PENETRATION LOCATIONS AS DETAILED PER SHELTER SITE PLAN.

COMM-81

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31st STREET to I-57
NAME	DATE	
REVISION 1	12/17/04	MAINTENANCE YARD SHELTER (R02) EQUIPMENT AND ELECTRICAL LAYOUT SCALE: _____ DRAWN BY: JM DATE: October 29, 2004 CHECKED BY: CS

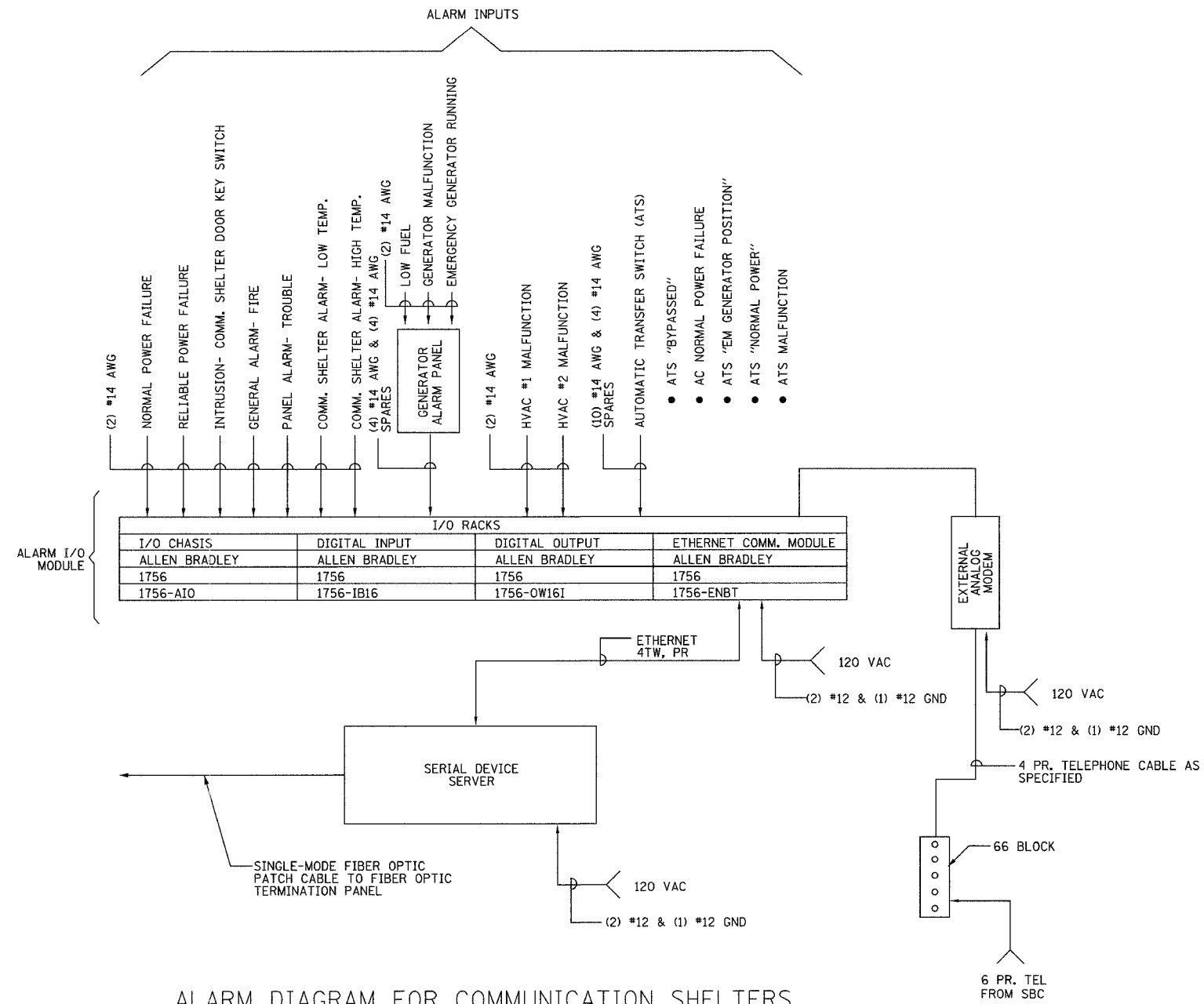
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ALARM WIRING LAYOUT
NOT TO SCALE

- NOTES:
1. ALL ALARM WIRE INSULATION SHALL BE THWN UNLESS NOTED OTHERWISE.
 2. QUANTITY OF ALARM & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION



ALARM DIAGRAM FOR COMMUNICATION SHELTERS
NOT TO SCALE



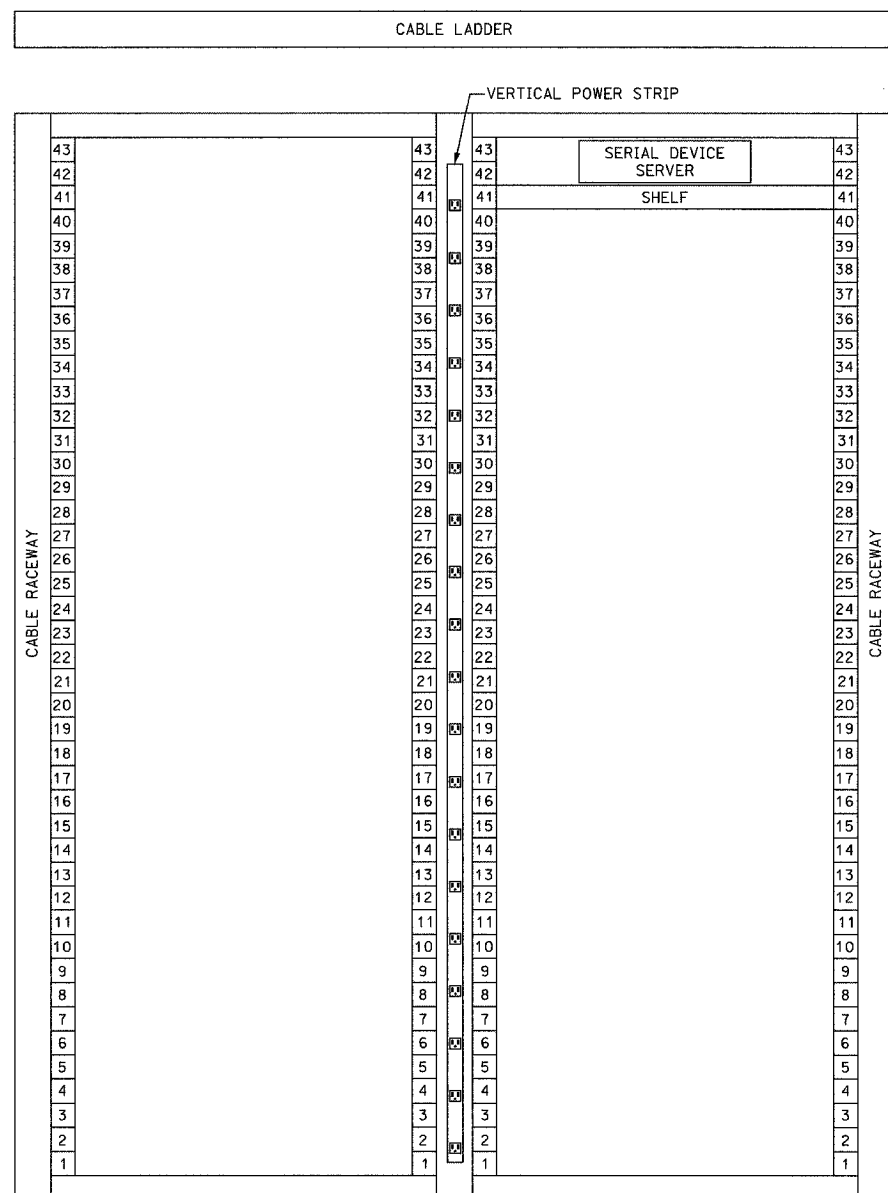
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
MAINTENANCE YARD SHELTER (R02)
ALARM SCHEMATIC
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

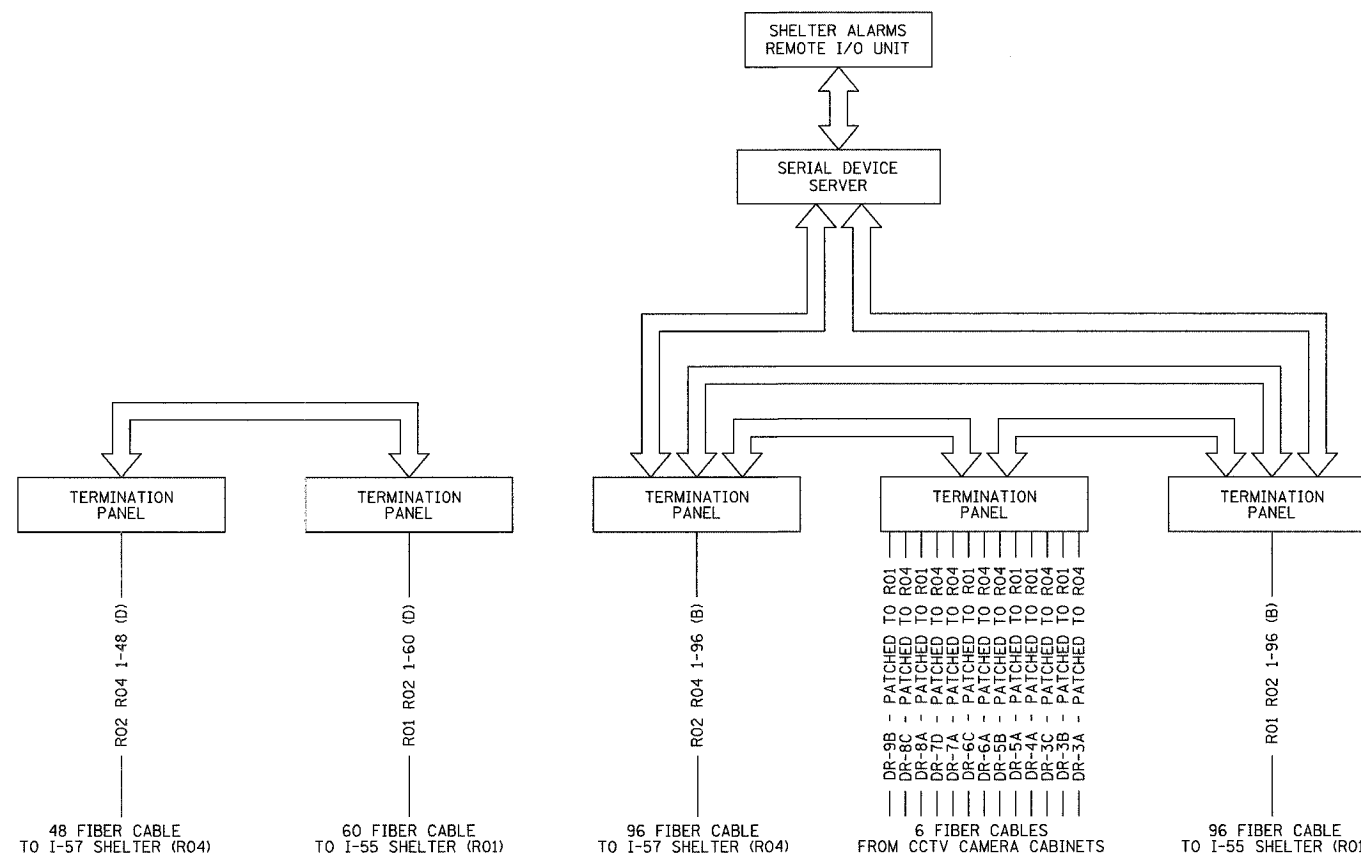
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COMM-83

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	850
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



EQUIPMENT RACK ELEVATION
NOT TO SCALE



MAINTENANCE YARD SHELTER (R02) INTERCONNECTION DIAGRAM
NOT TO SCALE

ABBREVIATIONS
(B) BACKBONE
(D) DISTRIBUTION

NOTES:
1. FOR FIBER OPTIC PATCHING AND TERMINATION DETAILS, SEE SHEETS COMM-118 THRU COMM-120.
2. ALL INSTALLED HARDWARE SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

MAINTENANCE YARD SHELTER (R02)
EQUIPMENT INTERCONNECT DETAILS

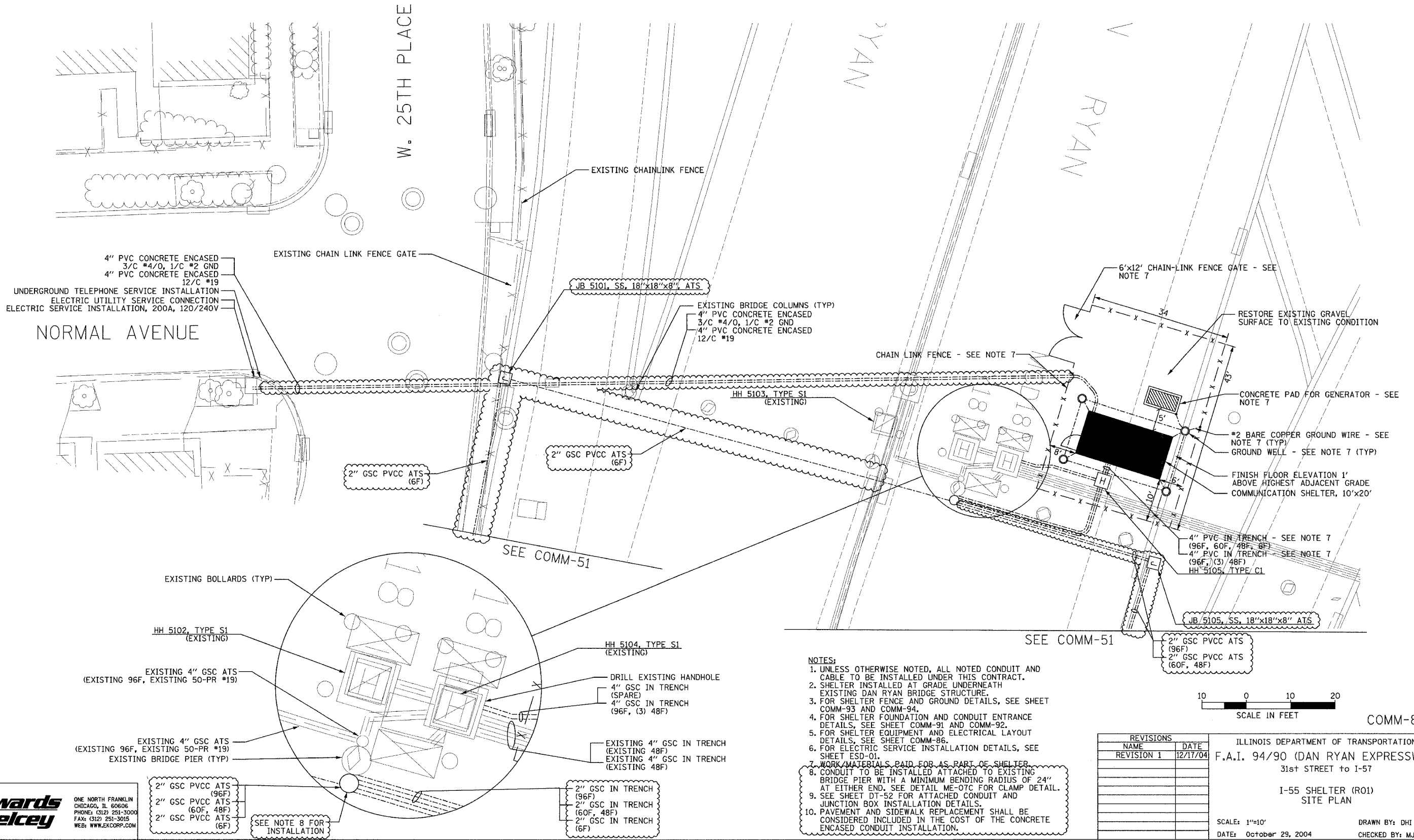
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ



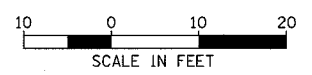
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

12/15/2004 01:50:50 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	851
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



- NOTES:**
- UNLESS OTHERWISE NOTED, ALL NOTED CONDUIT AND CABLE TO BE INSTALLED UNDER THIS CONTRACT.
 - SHELTER INSTALLED AT GRADE UNDERNEATH EXISTING DAN RYAN BRIDGE STRUCTURE.
 - FOR SHELTER FENCE AND GROUND DETAILS, SEE SHEET COMM-93 AND COMM-94.
 - FOR SHELTER FOUNDATION AND CONDUIT ENTRANCE DETAILS, SEE SHEET COMM-91 AND COMM-92.
 - FOR SHELTER EQUIPMENT AND ELECTRICAL LAYOUT DETAILS, SEE SHEET COMM-86.
 - FOR ELECTRIC SERVICE INSTALLATION DETAILS, SEE SHEET ESD-01.
 - WORK/MATERIALS PAID FOR AS PART OF SHELTER.
 - CONDUIT TO BE INSTALLED ATTACHED TO EXISTING BRIDGE PIER WITH A MINIMUM BENDING RADIUS OF 24" AT EITHER END. SEE DETAIL ME-07C FOR CLAMP DETAIL.
 - SEE SHEET DT-52 FOR ATTACHED CONDUIT AND JUNCTION BOX INSTALLATION DETAILS.
 - PAVEMENT AND SIDEWALK REPLACEMENT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONCRETE ENCASED CONDUIT INSTALLATION.



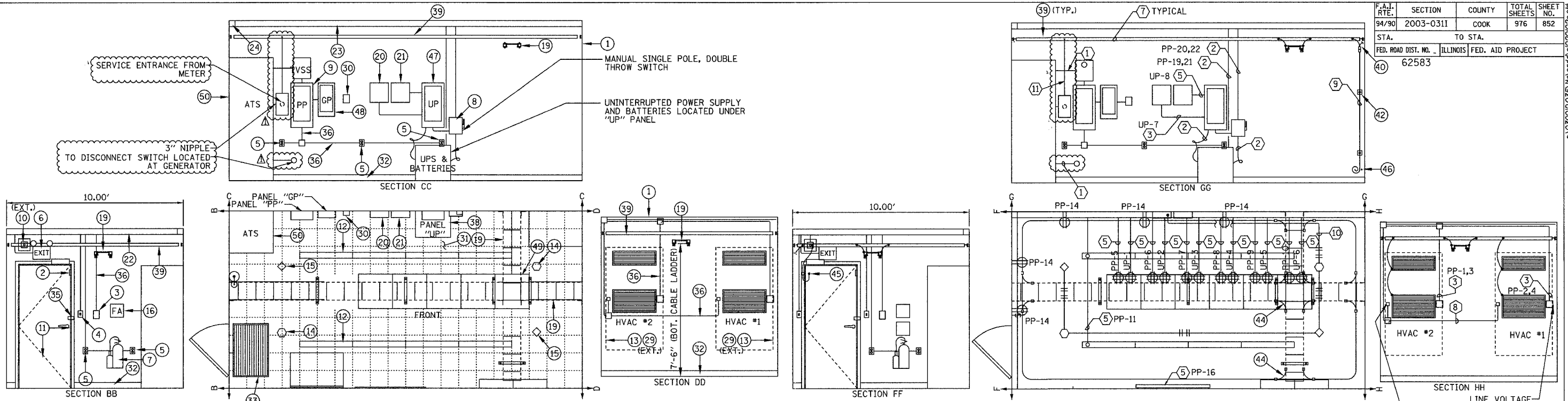
COMM-85

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 I-55 SHELTER (R01)
 SITE PLAN
 SCALE: 1"=10'
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: MJL

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EDKORP.COM

12/15/2004 01:51:01 PM P:\0300190.95\15s\road\pp0200328a.rvt



EQUIPMENT LAYOUT
NOT TO SCALE

ELECTRICAL LAYOUT
NOT TO SCALE

LEGEND

- ⊙ MAIN MATERIAL LIST KEY
- ⊕ ELECTRICAL NOTES KEY
- ◇ PHOTOELECTRIC DETECTOR
- ⊕ IONIZATION DETECTOR
- ⊞ JUNCTION BOX
- ⊥ LIGHT SWITCH
- ⊕ QUAD RECEPTACLE
- ⊕ DUPLEX RECEPTACLE
- FLUORESCENT LIGHT FIXTURE
- CABLE TRAY
- COMMUNICATION EQUIPMENT RACK

ITEM	DESCRIPTION
1	PREFABRICATED 10' W x 12' L x 9' H (INTERIOR DIMENSION) CONCRETE EQUIPMENT SHELTER
2	DOOR INTRUSION SENSOR
3	DUAL HVAC UNIT CONTROLLER
4	SINGLE POLE LIGHT SWITCH
5	DUPLEX RECEPTACLE
6	COMBINED EMERGENCY LIGHT W/ BATTERY BACKUP
7	10 LB. CARBON DIOXIDE FIRE EXTINGUISHER, WALL MOUNTED
8	TWO POLE, DOUBLE THROW DISCONNECT SWITCH, 240 VAC, NEMA 1 ENCLOSURE
9	NORMAL POWER PANEL "PP", 120/240 VAC, 3W, 225 AMP PANEL
10	35W HIGH PRESSURE SODIUM, VANDAL RESISTANT EXTERIOR MOUNTED FLOODLIGHT, WITH PHOTOCCELL
11	36" x 80" INSULATED HOLLOW METAL CORE DOOR AND FRAME
12	FLUORESCENT LIGHT, 2 LAMPS 30 WATTS EACH, 120 VOLT
13	AIR CONDITIONING UNIT W/ GRILLS
14	CEILING MOUNTED SMOKE DETECTOR (IONIZATION TYPE)
15	CEILING MOUNTED SMOKE DETECTOR (PHOTOELECTRIC TYPE)
16	FIRST AID KIT
17	(NOT USED)
18	50 AMP BLOCKS, MODULE 50M - 1500W W/ 2 R66M 50 BLOCKS AND BLOCK COVERS
19	12" CABLE TRAY (SEE SHEET COMM-95 FOR DETAILS)
20	FIRE ALARM PANEL
21	ALARM I/O MODULE
22	4" x 4" x 10" WIREWAY
23	4" x 4" x 20" WIREWAY
24	4" x R" CORNER PIECE
25	6' RECEPTACLE STRIP W/ OUTLETS EVERY 1'
26	CONDUIT ADAPTER

ITEM	DESCRIPTION
27	ELBOW ADAPTER
28	END CAP
29	VANDAL PROOF CAGE FOR HVAC
30	REMOTE ANNUNCIATOR MODULE (PRE-PURCHASED)
31	FLOOR TILES - 12" x 12" COMMERCIAL TILE
32	BASE FINISH, 4" BLACK BASE COVER MOLD 10' x 12' SHELTER
33	24" x 36" RUBBER MAT
34	INSULATION MATERIAL FOR 10' x 20' x 9' FIRE RESISTANT R-19
35	1/2" x 2" ANGLE PLATES AT EXTERIOR DOOR AND WALL FOR VANDAL PROOF LOCK
36	3/4" CONDUIT
37	3/4" CONDUIT
38	UPS SYSTEM, 10KVA, 240 VAC INPUT, 120 VOLT, 10 OUTPUT (TO PAID FOR AS PART OF SHELTER)
39	INTERIOR COPPER GROUND BUS BAR (SEE SHEET COMM-95 FOR DETAILS)
40	INTERIOR GROUND SYSTEM - GROUND LEAD TO EXTERIOR GROUND SYSTEM
41	INTERIOR GROUND SYSTEM - NON-DIRECTIONAL SPLICE
42	INTERIOR GROUND SYSTEM - GROUND WALL SUPPORT
43	INTERIOR GROUND SYSTEM - GROUND BUS GROUND TAP
44	INTERIOR GROUND SYSTEM - CABLE LADDER BOND
45	INTERIOR GROUND SYSTEM - DOOR BONDING STRIP
46	INTERIOR GROUND SYSTEM - PVC 45° NIPPLE
47	UPS PANEL "UP", 120/240VAC, 2W, 100 AMP PANEL
48	STANDBY GENERAL PANEL "GP"
49	EQUIPMENT RACK (PAID FOR AS PART OF CCTV DISTRIBUTION SUBSYSTEM)
50	AUTOMATIC TRANSFER SWITCH (ATS)
51	WALL MOUNTED FIBER OPTIC TERMINATION PANEL

- ① (2) #4/0, (1) #4/0 NEUTRAL & (1) #2 GND, 3" C
- ② (2) #3 & (1) #8 GND, 1" C
- ③ (2) #8 & (1) #10 GND, 3/4" C
- ④ (2) #10 & (1) #12 GND, 3/4" C
- ⑤ (2) #12 & (1) #12 GND, 3/4" C
- ⑥ (1) #6 GRD. WIRE, 3/4" C
- ⑦ COPPER GROUND BUS (SEE SHEET COMM-95 FOR DETAILS)
- ⑧ QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 3/4" RGS
- ⑨ (1) #8 BARE COPPER GROUND
- ⑩ (2) #22 AWG TWISTED PAIR, 3/4" C
- ⑪ (1) #2 GROUND 1" C

NOTES:

- CONDUIT AND WIRING IS SHOWN DIAGRAMATIC. ACTUAL LOCATION OF EQUIPMENT AND HARDWARE SHALL BE SHOWN IN SHOP DRAWINGS AND SHALL BE APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL MAINTAIN MINIMUM 36" CLEARANCE WHEN INSTALLING EQUIPMENT RACKS AND EQUIPMENT.
- ALL CABLE TRAY AND EQUIPMENT SHALL HAVE GROUND WIRE INSTALLED SIZED AS PER ELECTRICAL CODE REQUIREMENTS.
- SEE SHEETS COMM-121 THRU COMM-126 FOR FIBER OPTIC CABLE PATCHING AND TERMINATION DETAILS.
- ROUTE ALARM CABLE FROM ALARM OUTPUT DEVICES TO ALARM INPUT PANEL VIA CABLE TRAY. SEE SHEET COMM-88 FOR NUMBER AND TYPE OF ALARM INPUTS.
- COORDINATE CONDUIT ENTRANCE LOCATIONS AS DETAILED PER SHELTER SITE PLAN COMM-85.
- SEE COMMUNICATION DRAWINGS SHEET COMM-90 FOR EQUIPMENT RACK LAYOUT.

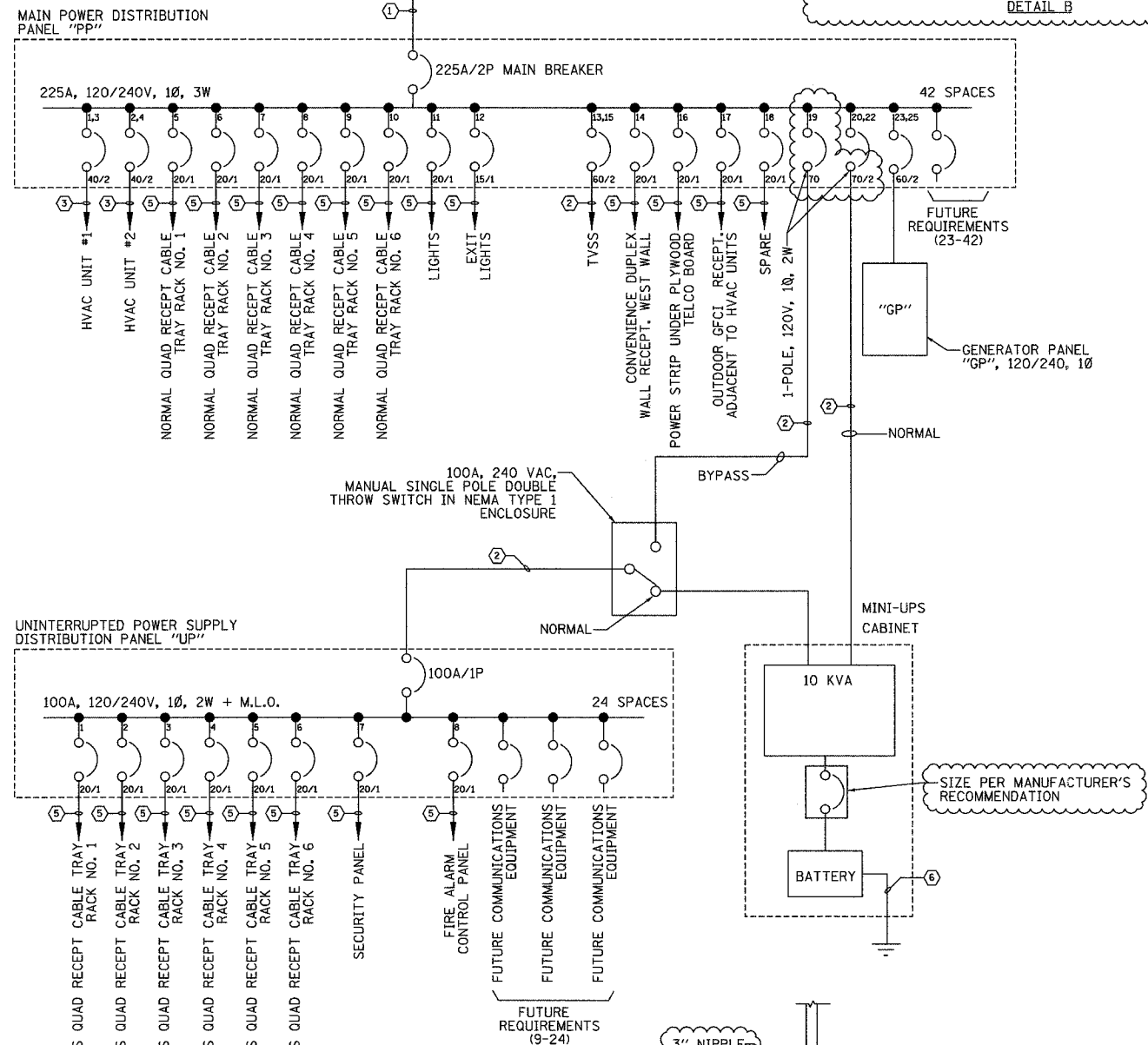
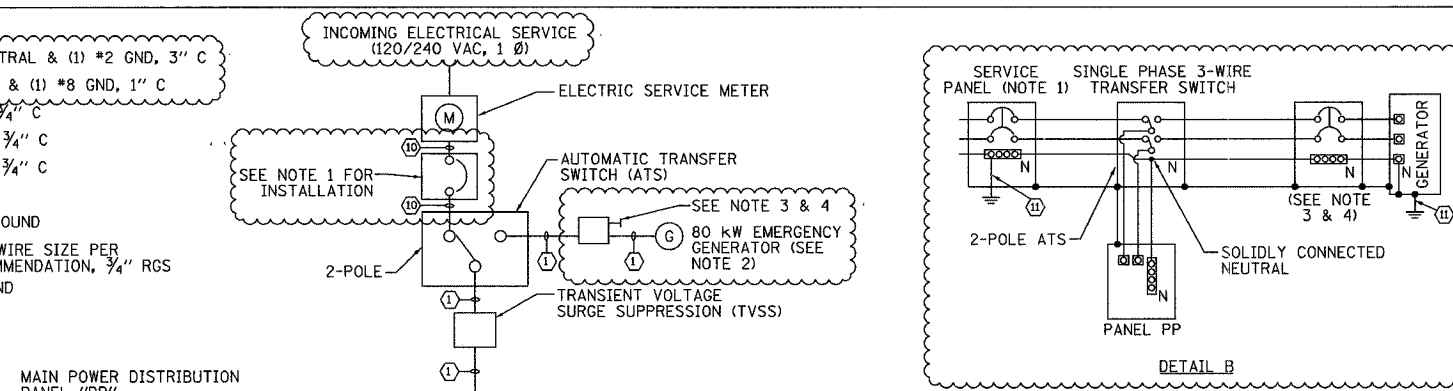
COMM-86

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

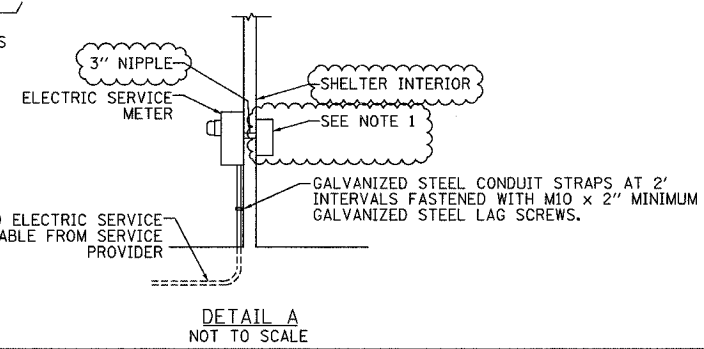
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57

I-55 SHELTER (R01)
EQUIPMENT AND ELECTRICAL LAYOUT
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

- ① (2) #4/0, (1) #4/0 NEUTRAL & (1) #2 GND, 3" C
- ② (1) #3, (1) #3 NEUTRAL, & (1) #8 GND, 1" C
- ③ (2) #8 & (1) #10 GND, 3/4" C
- ④ (2) #10 & (1) #12 GND, 3/4" C
- ⑤ (2) #12 & (1) #12 GND, 3/4" C
- ⑥ #6 GND WIRE, 3/4" C
- ⑦ #4/0, BARE COPPER GROUND
- ⑧ QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 3/4" RGS
- ⑨ #8 BARE COPPER GROUND
- ⑩ (3) #4/0, 3" C
- ⑪ (1) #2 GND, 1" C



SINGLE LINE DIAGRAM
NOT TO SCALE



DETAIL A
NOT TO SCALE

PANEL CIRCUIT AND LOAD SCHEDULE

LOAD DESCRIPTION	QTY	UNIT (Ø)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	WIRE SIZE	WIRE SIZE
			A	B					
HVAC UNIT 1 (36K BTU)	1	10300	5150		40	2	6		
HVAC UNIT 2 (36K BTU)	1	10300		5150	40	2	6		
NORMAL QUAD RECEPTACLE - RACK 1	1	900	900		20	1	12		
NORMAL QUAD RECEPTACLE - RACK 2	1	900		900	20	1	12		
NORMAL QUAD RECEPTACLE - RACK 3	1	900	900		20	1	12		
NORMAL QUAD RECEPTACLE - RACK 4	1	900		900	20	1	12		
NORMAL QUAD RECEPTACLE - RACK 5	1	900	900		20	1	12		
NORMAL QUAD RECEPTACLE - RACK 6	1	900		900	20	1	12		
LIGHTS	8	50		400	20	1	12		
TVSS	1	N/A			60	2	4		
OUTDOOR GFCI RECEPTACLE	1	180		180	20	1	12		
SUBTOTAL LEFT								1900	6150
SUBTOTAL RIGHT								11830	15435
								TOTAL LOAD	
								27265	W
VOLTAGE: 120/240V			CYCLES: 60 Hz			PHASE: 1		WIRES: 3	
SOLID NEUTRAL: 225 AMPS			MAIN BREAKER: 225		AMP FRAME: 225		AMP TRIP		
MAIN LUGS: - AMPS			MAIN COPPER BUS: 225		AMPS				
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>									

SERVICE : 120/240VAC, 1Ø, 3W
DESIGNATION : IDOT- SHELTER NORMAL POWER (PP)
LOCATION : I-55 SHELTER (R01)

LOAD DESCRIPTION	QTY	UNIT (Ø)	LOAD PER PHASE(W)		UNIT	QTY	DESCRIPTION		
			A	B					
HVAC UNIT 2 (36K BTU)	1	10300		5150	10300	1	HVAC UNIT 2 (36K BTU)		
NORMAL QUAD RECEPTACLE - RACK 1	1	900	900		900	1	NORMAL QUAD RECEPTACLE - RACK 2		
NORMAL QUAD RECEPTACLE - RACK 2	1	900		900	900	1	NORMAL QUAD RECEPTACLE - RACK 4		
NORMAL QUAD RECEPTACLE - RACK 3	1	900	900		900	1	NORMAL QUAD RECEPTACLE - RACK 6		
NORMAL QUAD RECEPTACLE - RACK 4	1	900		900	900	1	NORMAL QUAD RECEPTACLE - RACK 6		
NORMAL QUAD RECEPTACLE - RACK 5	1	900	900		900	1	NORMAL QUAD RECEPTACLE - RACK 6		
NORMAL QUAD RECEPTACLE - RACK 6	1	900		900	900	1	NORMAL QUAD RECEPTACLE - RACK 6		
LIGHTS	8	35		35	35	1	EXIT LIGHT		
TVSS	1	180			180	5	DUPLX RECEPTACLE		
OUTDOOR GFCI RECEPTACLE	1	180		180	180	5	RECEPTACLE- POWER STRIP		
SUBTOTAL LEFT									
SUBTOTAL RIGHT									
TOTAL LOAD									
27265									
VOLTAGE: 120/240V			CYCLES: 60 Hz			PHASE: 1		WIRES: 3	
SOLID NEUTRAL: 225 AMPS			MAIN BREAKER: 225		AMP FRAME: 225		AMP TRIP		
MAIN LUGS: - AMPS			MAIN COPPER BUS: 225		AMPS				
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>									

PANEL CIRCUIT AND LOAD SCHEDULE

LOAD DESCRIPTION	QTY	UNIT (Ø)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	WIRE SIZE	WIRE SIZE
			A	B					
UPS QUAD RECEPTACLE - CAB 1	1	900	900		20	1	12		
UPS QUAD RECEPTACLE - CAB 2	1	900		900	20	1	12		
UPS QUAD RECEPTACLE - CAB 3	1	900	900		20	1	12		
UPS QUAD RECEPTACLE - CAB 4	1	900		900	20	1	12		
UPS QUAD RECEPTACLE - CAB 5	1	900	900		20	1	12		
UPS QUAD RECEPTACLE - CAB 6	1	900		900	20	1	12		
SECURITY PANEL	1	260		260	20	1	12		
SUBTOTAL LEFT								1800	1160
SUBTOTAL RIGHT								3600	2320
								TOTAL LOAD	
								5920	W
VOLTAGE: 120/240V			CYCLES: 60 Hz			PHASE: 1		WIRES: 2	
SOLID NEUTRAL: 100 AMPS			MAIN BREAKER: 100		AMP FRAME: 100		AMP TRIP		
MAIN LUGS: - AMPS			MAIN COPPER BUS: 100		AMPS				
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>									

SERVICE : 120/VAC, 1Ø
DESIGNATION : IDOT- SHELTER UPS POWER (UP)
LOCATION : I-55 SHELTER (R01)

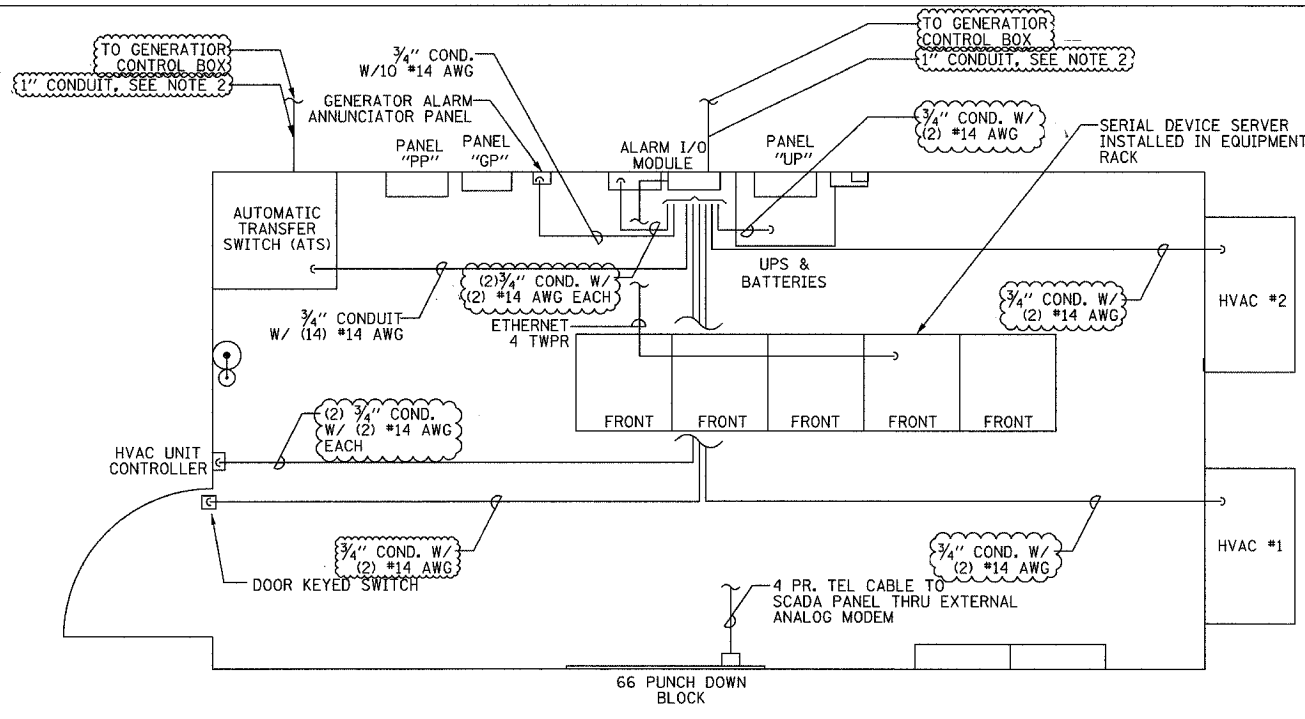
LOAD DESCRIPTION	QTY	UNIT (Ø)	LOAD PER PHASE(W)		UNIT	QTY	DESCRIPTION		
			A	B					
UPS QUAD RECEPTACLE - CAB 1	1	900	900		900	1	UPS QUAD RECEPTACLE - CAB 2		
UPS QUAD RECEPTACLE - CAB 2	1	900		900	900	1	UPS QUAD RECEPTACLE - CAB 4		
UPS QUAD RECEPTACLE - CAB 3	1	900	900		900	1	UPS QUAD RECEPTACLE - CAB 6		
UPS QUAD RECEPTACLE - CAB 4	1	900		900	900	1	UPS QUAD RECEPTACLE - CAB 6		
UPS QUAD RECEPTACLE - CAB 5	1	900	900		900	1	UPS QUAD RECEPTACLE - CAB 6		
UPS QUAD RECEPTACLE - CAB 6	1	900		900	900	1	UPS QUAD RECEPTACLE - CAB 6		
SECURITY PANEL	1	260		260	260	1	FIRE-ALARM CONTROL PANEL		
SUBTOTAL LEFT									
SUBTOTAL RIGHT									
TOTAL LOAD									
5920									
VOLTAGE: 120/VAC			CYCLES: 60 Hz			PHASE: 1		WIRES: 2	
SOLID NEUTRAL: 100 AMPS			MAIN BREAKER: 100		AMP FRAME: 100		AMP TRIP		
MAIN LUGS: - AMPS			MAIN COPPER BUS: 100		AMPS				
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>									

- NOTES:**
- INSTALL NEW 225 AMP MAIN CIRCUIT BREAKER DISCONNECT SWITCH WITH NEUTRAL AND GROUND BUS IN NEMA 1 ENCLOSURE.
 - PACKAGED STANDBY GENERATOR AND TRANSFER SWITCH, INSTALLATION ONLY.
 - INSTALL NEW 225 AMP CIRCUIT BREAKER DISCONNECT SWITCH WITH NEUTRAL AND GROUND BUS IN NEMA TYPE 3R ENCLOSURE.
 - MOUNT NEMA 3R DISCONNECT SWITCH TO STRUCTURAL FRAME OF GENERATOR. NOTE: DESIGNATED WORK SHALL BE PAID FOR AS PART OF COMMUNICATION SHELTER.
 - ALL CONDUIT SHALL BE RIGID GALVANIZED STEEL UNLESS OTHERWISE NOTED.
 - ALL WIRE SHALL BE TYPE THWN UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

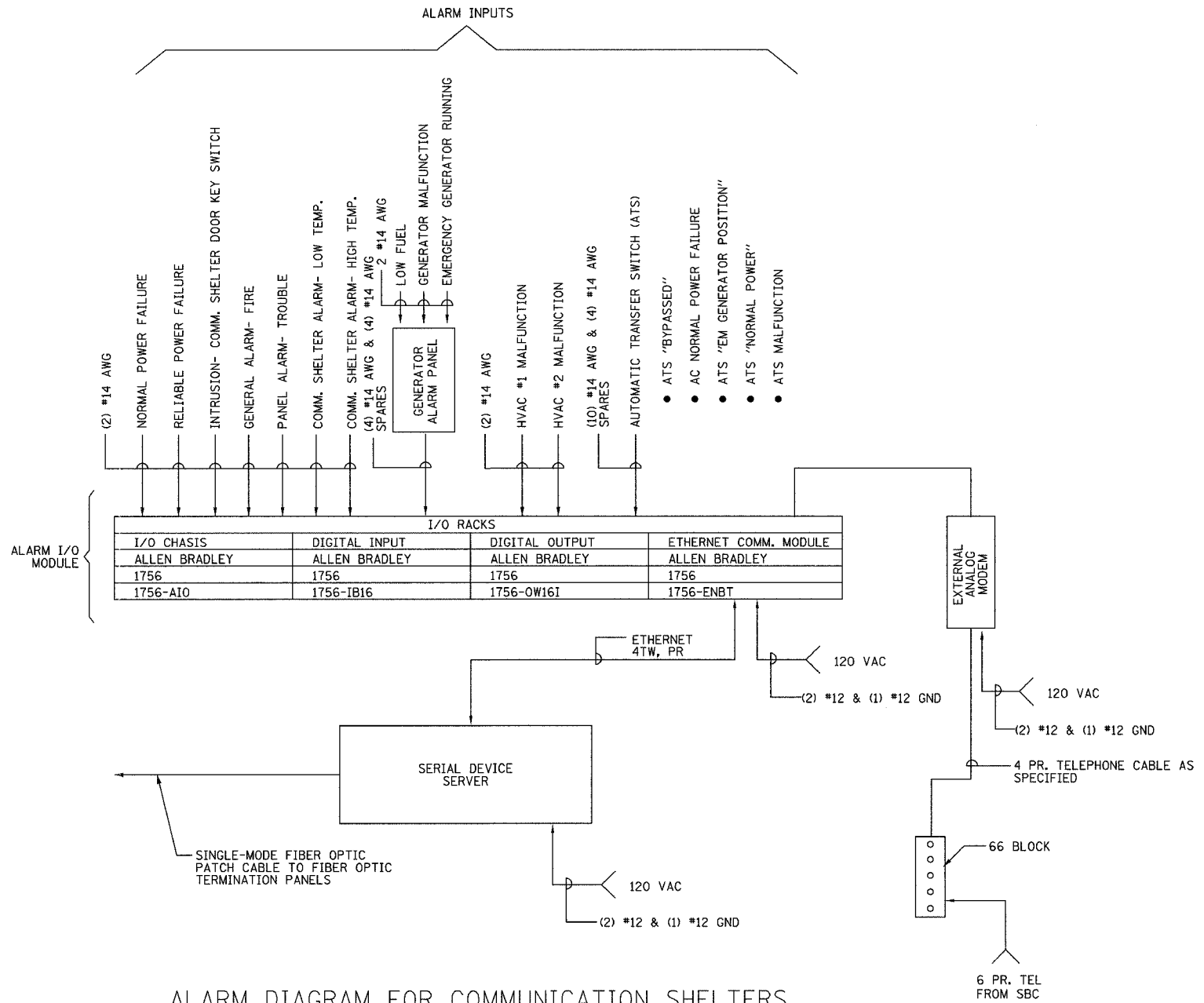
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
I-55 SHELTER (R01)
POWER SINGLE LINE DIAGRAM
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	854
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



ALARM WIRING LAYOUT
NOT TO SCALE

- NOTES:
1. ALL ALARM WIRE INSULATION SHALL BE THWN UNLESS NOTED OTHERWISE.
 2. QUANTITY OF ALARM & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION.



ALARM DIAGRAM FOR COMMUNICATION SHELTERS
NOT TO SCALE

COMM-88

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NAME	DATE
REVISION 1	12/17/04

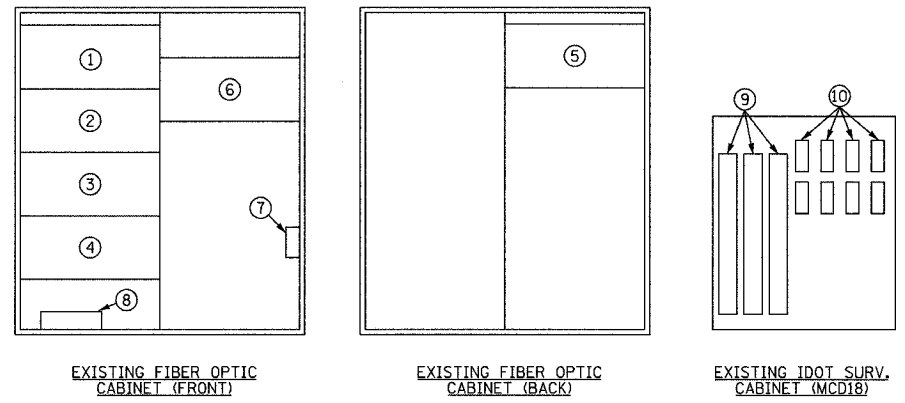
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57

I-55 SHELTER (R01)
ALARM SCHEMATIC

SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	855
STA.		TO STA.		
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		
62583				



SYMBOLS
 // CABLE TO BE REMOVED

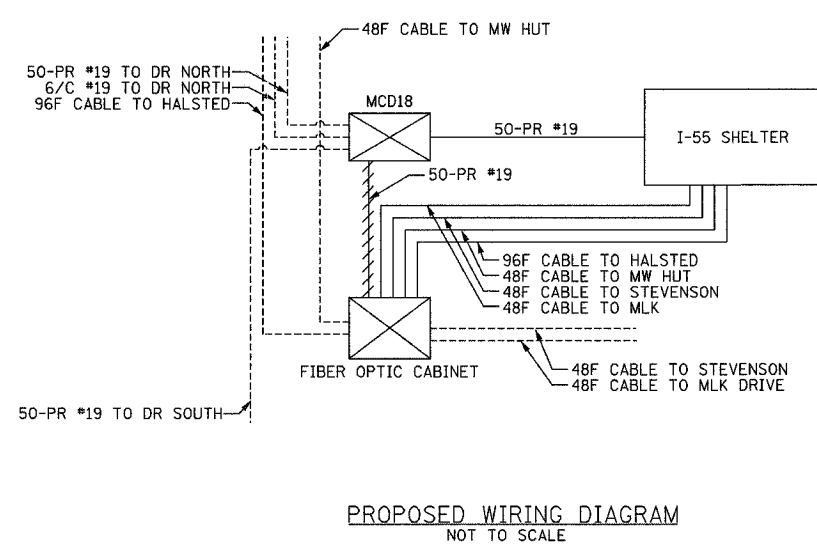
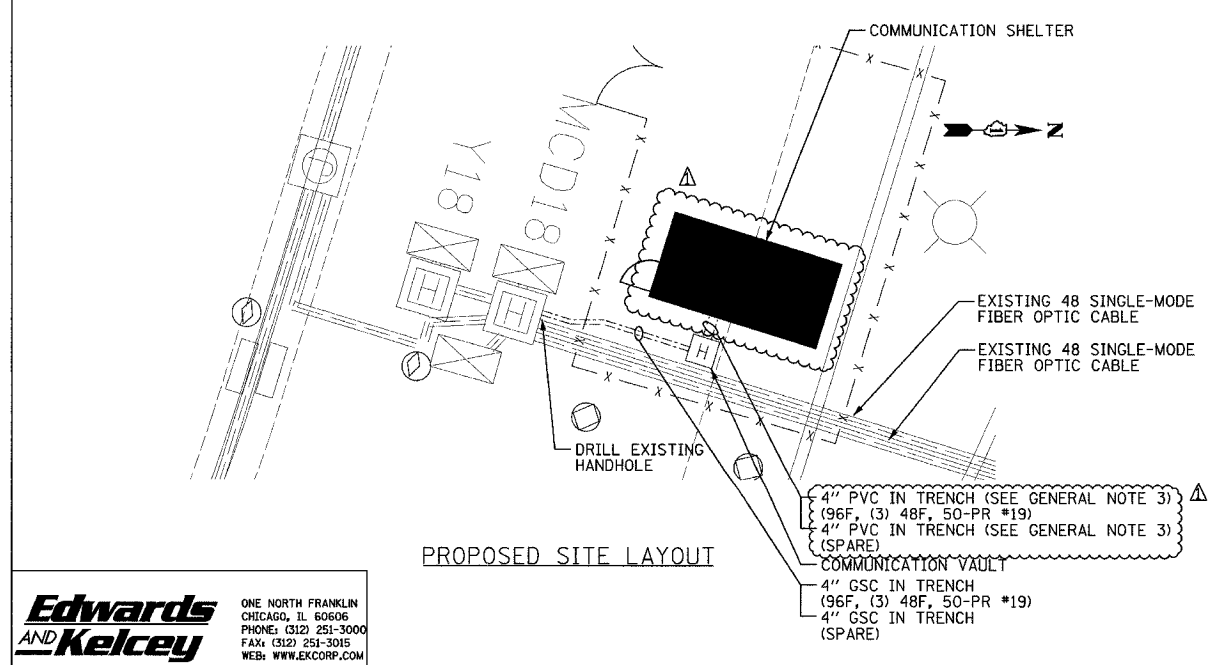
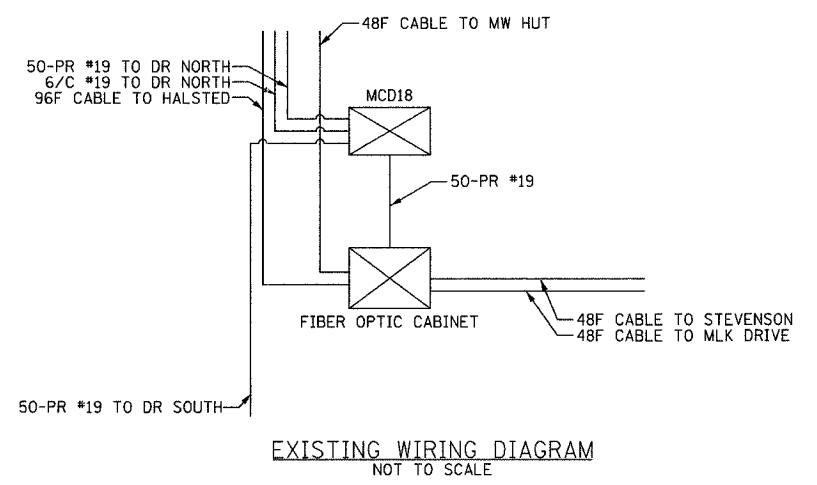
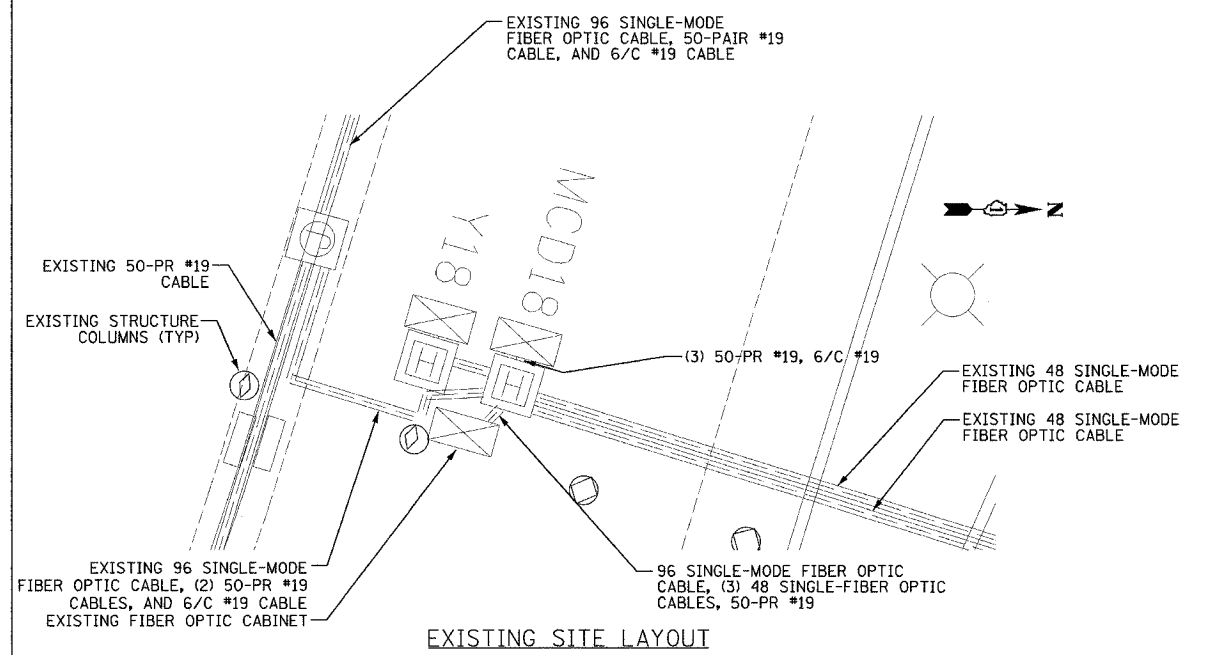
ABBREVIATIONS
 DR DAN RYAN
 MLK MARTIN LUTHER KING
 MW MICROWAVE
 PR PAIR

GENERAL NOTES
 1. SEE SHEET COMM-85 FOR I-55/I-94 COMMUNICATION SHELTER SITE LAYOUT.
 2. THIS SHEET DETAILS ONLY THE CUTOVER STAGING PLANS FOR THE I-55/DAN RYAN COMMUNICATION SHELTER. SEE COMMUNICATION AND CCTV SHEETS FOR ALL EQUIPMENT, CONDUIT, AND CABLE INSTALLATION AT THE SHELTER.
 3. WORK/MATERIALS PAID FOR AS PART OF THE SHELTER.

CONSTRUCTION PHASING:
 1. THE SEQUENCES OF WORK DO NOT IDENTIFY EVERY DETAIL OF THE WORK TO BE DONE NOR DO THEY DEFINE THE METHODS AND MATERIALS TO BE USED, EXCEPT AS EXPLICITLY REQUIRED BY IDOT OR OTHER AGENCIES HAVING JURISDICTION.
 2. WORK THAT IMPACTS THE NORMAL OPERATION OF THE TRAFFIC MANAGEMENT OR COMMUNICATIONS SYSTEMS SHALL ONLY BE EXECUTED ON WEEKENDS FROM 10 PM FRIDAY EVENING TO 4 AM MONDAY MORNING. HOLIDAY AND SPECIAL EVENT WEEKENDS WILL BE EXCLUDED. THE CONTRACTOR SHALL COORDINATE AND RECEIVE PRIOR APPROVAL FROM THE ENGINEER FOR ALL WORK THAT COULD DEGRADE OR IMPAIR THE OPERATIONAL SYSTEMS. REQUESTS FOR APPROVAL SHALL BE MADE TO THE ENGINEER A MINIMUM OF 72 HOURS PRIOR TO THE ACTUAL COMMENCEMENT OF WORK.

SEQUENCE OF WORK - PRELIMINARY
 1. THE CONTRACTOR SHALL INSTALL THE I-55/DAN RYAN COMMUNICATION SHELTER PER THE PLANS AND SPECIAL PROVISIONS INCLUDING ALL THE UNDERGROUND CONDUIT, HANDHOLES, COMMUNICATION VAULTS, AND ELECTRIC SERVICE. SEE SHEETS COMM-85 THRU COMM-90 FOR DETAILS.
 2. DRILL EXISTING HAND HOLE AS IDENTIFIED ON THE PLANS. INSTALL TWO (2) 4" GSC CONDUITS IN TRENCH BETWEEN DRILLED HAND HOLE AND NEW COMMUNICATION VAULT AS SHOWN ON THE PLANS.
 3. INSTALL THE WALL MOUNTED FIBER OPTIC TERMINATION PANELS IN THE COMMUNICATION SHELTER AS IDENTIFIED ON SHEET COMM-86.
 4. INSTALL ONE (1) 96 SINGLE-MODE FIBER OPTIC CABLE AND THREE (3) 48 SINGLE-MODE FIBER OPTIC CABLES FROM THE SHELTER TO THE EXISTING FIBER OPTIC CABINET. TERMINATE THE FIBER OPTIC CABLES IN THE SHELTER ON THE WALL MOUNTED TERMINAL PANELS.
 5. PREPARE EQUIPMENT RACK SPACE IN THE SHELTER FOR THE EXISTING T1 MULTIPLEXER/CHANNEL BANK AND EXISTING T1/FIBER OPTIC MEDIA CONVERTER. SEE SHEET COMM-86 AND COMM-90 FOR PROPOSED SHELTER EQUIPMENT LAYOUT.
 6. INSTALL ONE (1) 50-PAIR COPPER TWISTED CABLE FROM EXISTING IDOT CABINET MCD18 TO THE SHELTER EQUIPMENT RACK SPACE IDENTIFIED IN STEP PRELIM-5.

SEQUENCE OF WORK - CUTOVER
 1. DISCONNECT THE EQUIPMENT FROM THE POWER IN FIBER OPTIC CABINET AND MCD18 CABINET.
 2. DISCONNECT EXISTING FIBER OPTIC CABLES IN FIBER OPTIC CABINET FROM EXISTING TERMINATION PANELS. SPLICE NEW FIBER OPTIC CABLES IDENTIFIED IN STEP PRELIM-4 TO EXISTING FIBER OPTIC CABLES IN FIBER OPTIC CABINET USING FIBER OPTIC SPLICE CLOSURE AS IDENTIFIED IN THE SPECIAL PROVISIONS.
 3. MOVE EXISTING T1 MULTIPLEXER/CHANNEL BANK AND T1/FIBER OPTIC MEDIA CONVERTER FROM FIBER OPTIC CABINET TO SHELTER EQUIPMENT RACK IDENTIFIED IN STEP PRELIM-5. DOCUMENT THE FIBERS USED BY THE T1/FIBER OPTIC MEDIA CONVERTER PRIOR TO DISCONNECTING THE FIBER FROM THE EQUIPMENT.
 4. INSTALL FIBER OPTIC PATCH CABLES FROM WALL MOUNTED TERMINATION PANEL TO T1/FIBER OPTIC MEDIA CONVERTER CONNECTING THE EQUIPMENT TO THE SAME FIBERS IDENTIFIED IN STEP CUTOVER-3.
 5. REMOVE EXISTING 50-PAIR #19 CABLE BETWEEN FIBER OPTIC CABINET AND CABINET MCD18. DOCUMENT THE EXISTING TWISTED PAIR CONNECTIONS.
 6. CONNECT 50-PAIR CABLE, AS IDENTIFIED IN STEP PRELIM-6, TO THE PUNCH DOWN BLOCKS IN CABINET MCD18, AS NOTED IN STEP CUTOVER-5.
 7. CONNECT 50-PAIR CABLE, IDENTIFIED IN STEP PRELIM-6, TO THE T1 MULTIPLEXER/CHANNEL BANK IN THE SHELTER EQUIPMENT RACK.
 8. CONNECT T1 MULTIPLEXER/CHANNEL BANK TO T1/FIBER OPTIC MEDIA CONVERTER.
 9. APPLY POWER TO THE EQUIPMENT IDENTIFIED IN STEP CUTOVER-3.
 10. RESTORE POWER TO FIBER OPTIC CABINET AND CABINET MCD18.

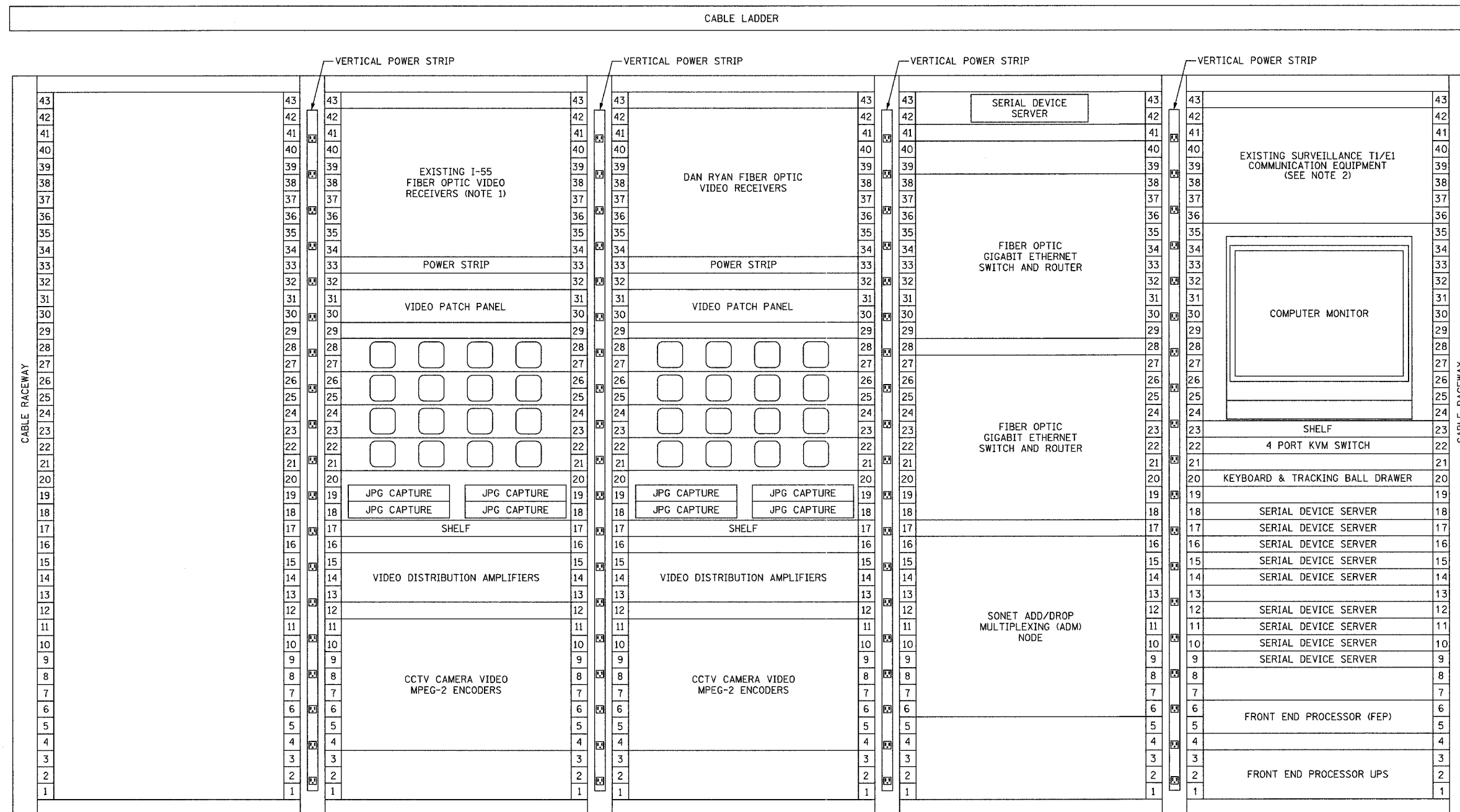


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REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 I-55 SHELTER (R01)
 CUTOVER STAGING PLAN
 SCALE: NOT TO SCALE
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: JEZ

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EQUIPMENT RACK ELEVATION
NOT TO SCALE

ABBREVIATIONS
(B) BACKBONE
(D) DISTRIBUTION
CCTV CLOSED CIRCUIT TELEVISION
KVM KEYBOARD/VIDEO/MOUSE

- NOTES:**
- EXISTING EQUIPMENT RELOCATED FROM THE TRAFFIC SYSTEM CENTER (TSC).
 - EXISTING EQUIPMENT RELOCATED FROM IDOT FIBER OPTIC CABINET. SEE SHEET COMM-89 FOR DETAILS.
 - ALL INSTALLED HARDWARE SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

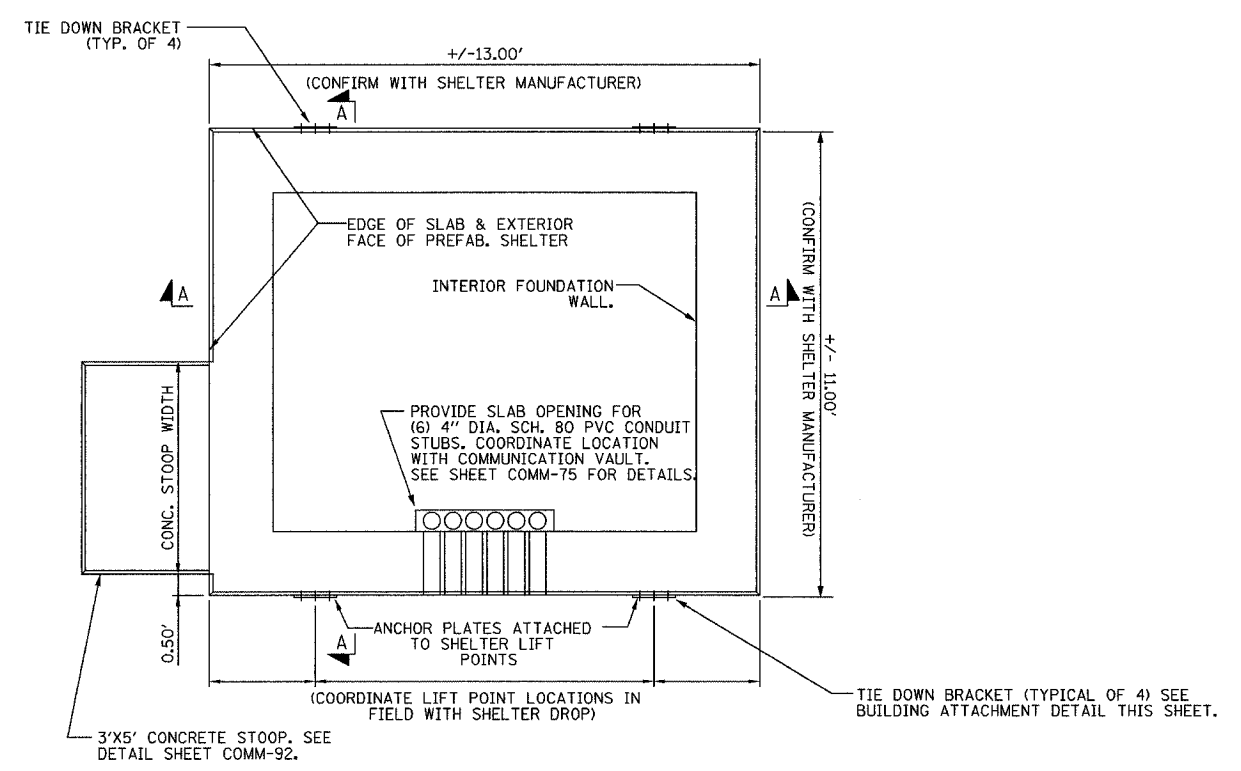
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NAME	DATE
REVISION 1	12/17/04

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

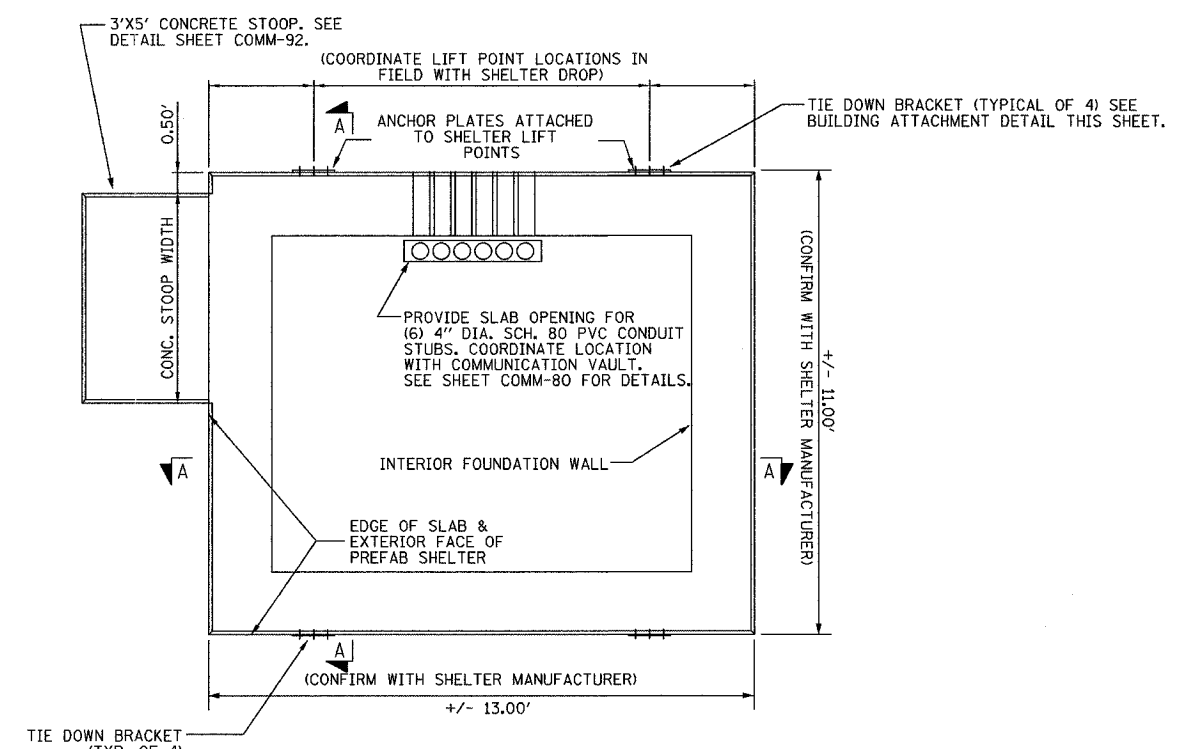
I-55 SHELTER (R01)
EQUIPMENT RACK ELEVATION

SCALE: NOT TO SCALE DRAWN BY: DHI
DATE: October 29, 2004 CHECKED BY: JEZ

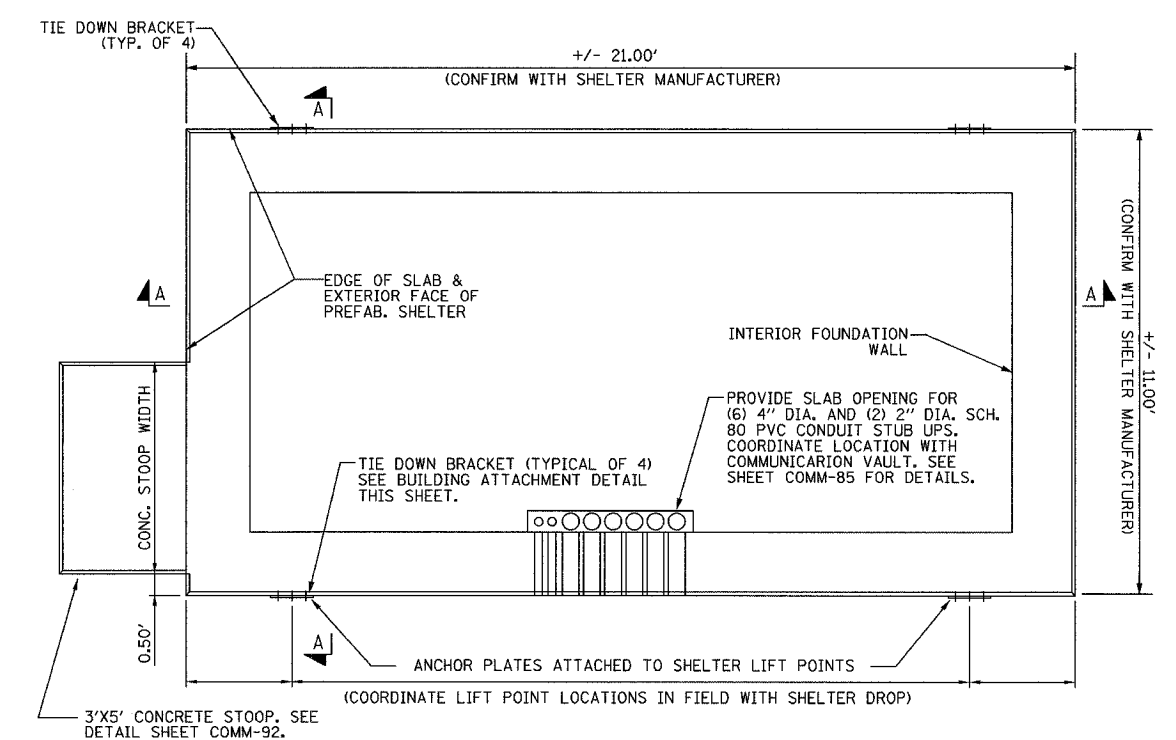
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-031I	COOK	976	857
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	62583			



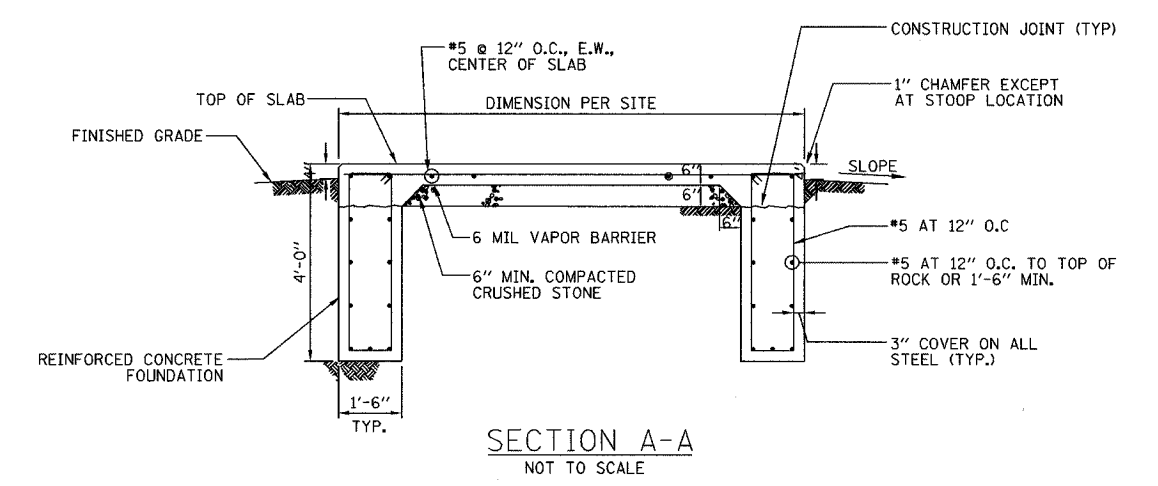
EAST SKYWAY SHELTER (R03) FOUNDATION PLAN
NOT TO SCALE



MAINTENANCE YARD SHELTER (R02) FOUNDATION PLAN
NOT TO SCALE



I-55 SHELTER (R01) FOUNDATION PLAN
NOT TO SCALE



SECTION A-A
NOT TO SCALE

- NOTES:**
- CONTRACTOR SHALL DEBURR ALL SHARP EDGES AND HOLES.
 - SURFACING OF FINISHED SLAB SHALL BE LEVEL & FLAT WITHIN +/- 1/4".
 - CONTRACTOR SHALL COORDINATE THE INSTALLATION OF SHELTER ON TO ITS FOUNDATION WITH THE SHELTER FABRICATOR.
 - ALL REINFORCING BARS SHALL BE EPOXY COATED AND SHALL BE WIRE LASHED AT ALL INTERSECTIONS.
 - IF ROCK IS ENCOUNTERED, CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY. DO NOT PROCEED UNTIL ENGINEER ISSUES REVISED FOUNDATION DESIGN BASED ON SUBSURFACE CONDITIONS.
 - COORDINATE CONDUIT ENTRY LOCATION WITH ENGINEER PER SITE PLAN DETAIL SHEET AND COMMUNICATION SHELTER FOUNDATION.

REVISIONS	
NAME	DATE

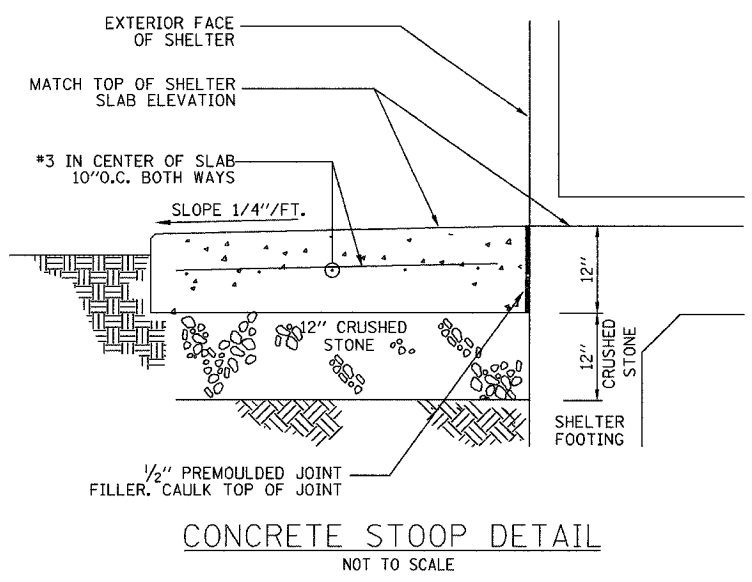
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
SHELTER FOUNDATION DETAILS
(SHEET 1 OF 2)

SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

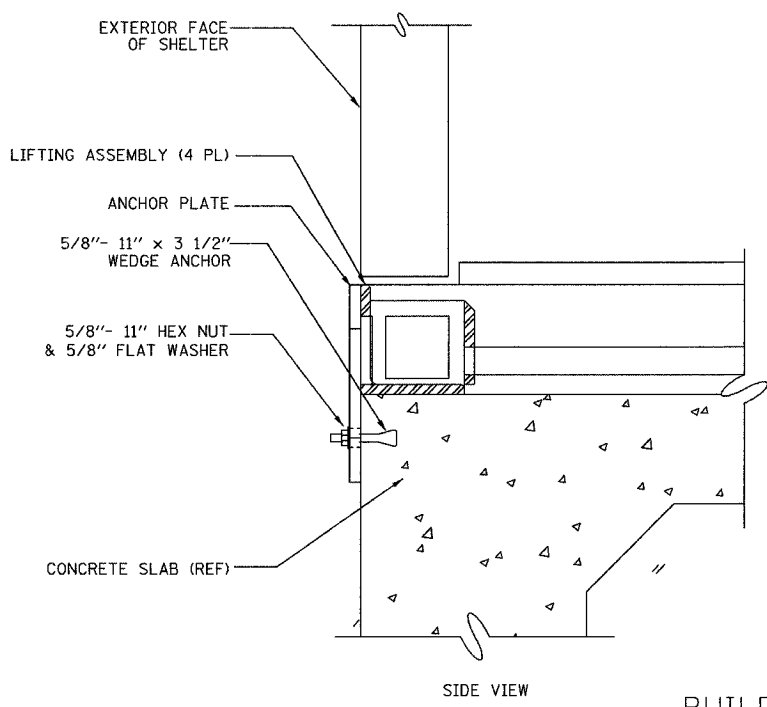


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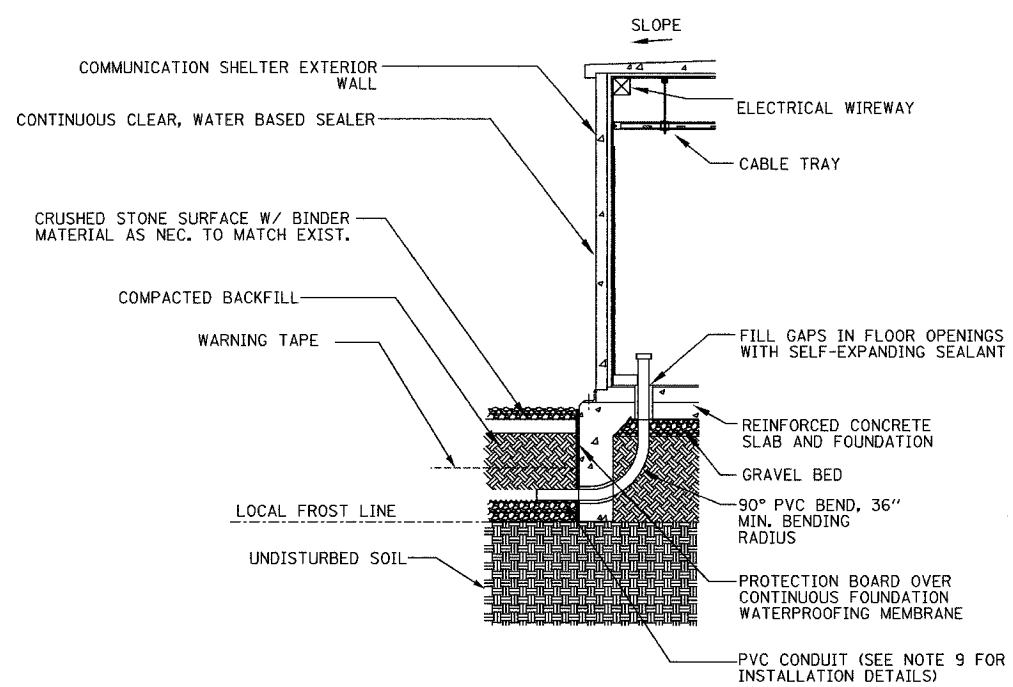
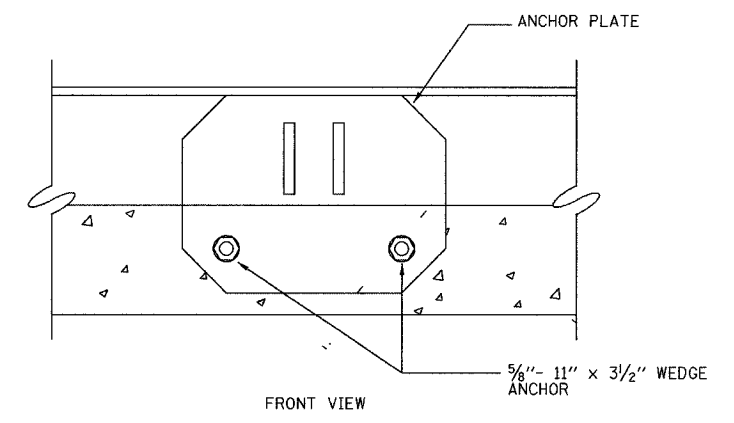
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	858
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



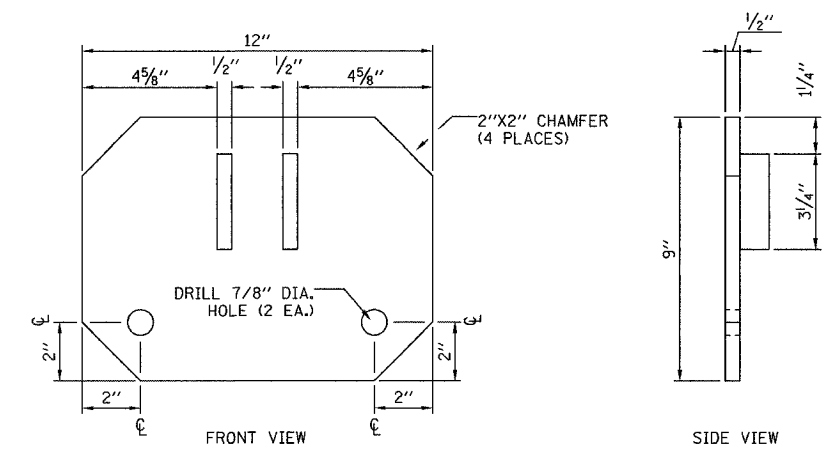
CONCRETE STOOP DETAIL
NOT TO SCALE



BUILDING ATTACHMENT DETAIL
NOT TO SCALE



CONDUIT ENTRANCE DETAIL
NOT TO SCALE



ANCHOR PLATE DETAIL
NOT TO SCALE

- NOTES:**
1. FOR ANCHOR PLATES, USE 1/2" THICK A36 STEEL.
 2. FINISH: ZINC HOT-DIP GALVANIZED PER ASTM A123.
 3. DEBURR ALL SHARP EDGES AND HOLES.
 4. ANCHOR PLATES PROVIDED BY SHELTER MANUFACTURER.
 5. SURFACING OF FINISHED SLAB SHALL BE LEVEL & FLAT WITHIN +1/4".
 6. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF SHELTER ON TO ITS FOUNDATION WITH THE SHELTER FABRICATOR, MAKE ALL CONNECTIONS NECESSARY & INSTALL EQUIPMENT AS INDICATED.
 7. IF ROCK IS ENCOUNTERED, CONTACT ENGINEER IMMEDIATELY. DO NOT PROCEED UNTIL ENGINEER ISSUES REVISED FOUNDATION DESIGN BASED ON SUBSURFACE CONDITIONS.
 8. COORDINATE CONDUIT ENTRY LOCATION WITH ENGINEER PER SITE PLAN DETAIL SHEET AND COMMUNICATION SHELTER FOUNDATION.

REVISIONS	
NAME	DATE

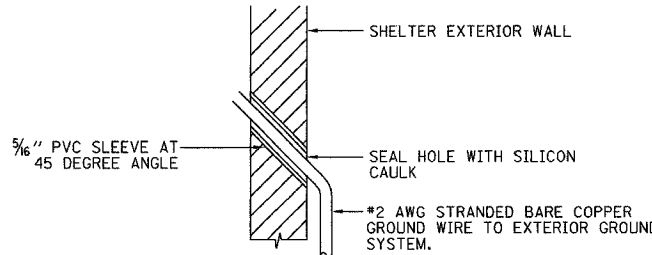
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
SHELTER FOUNDATION DETAILS
(SHEET 2 OF 2)

SCALE: NOT TO SCALE
DATE: October 29, 2004

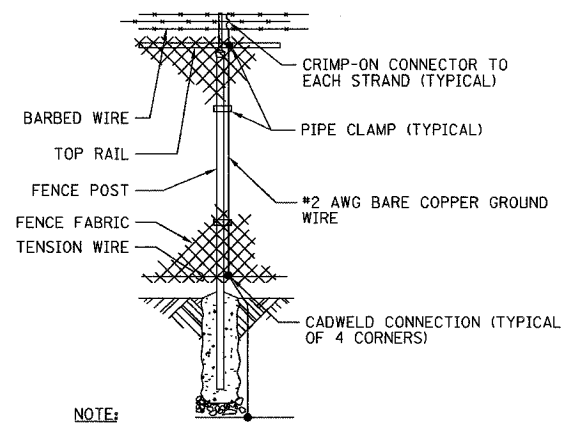
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	859
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



WALL GROUND PENETRATION DETAIL
NOT TO SCALE

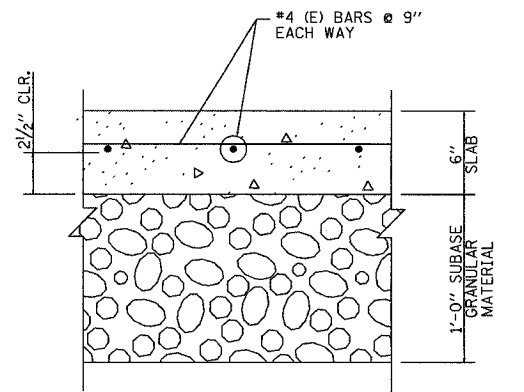


FENCE GROUNDING
NOT TO SCALE

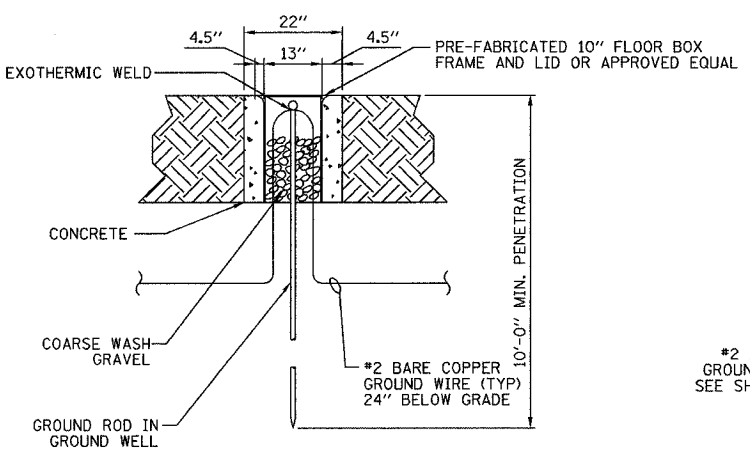
- NOTES:**
1. PROVIDE A COMPLETE AND CONTINUOUS GROUND SYSTEM IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
 2. BOND TO THE INTERIOR GROUND BUS ANY METAL OBJECTS PASSING OR CROSSING WITHIN ONE FOOT OF THE RING. ADDITIONAL GROUNDING IS SITE SPECIFIC AND SHALL BE SHOWN ON INTERIOR ELECTRICAL LAYOUT.
 3. DETAIL SHOWS INSTALLATION IN UNPAVED AREA. WHEN INSTALLING IN A PAVED AREA INCORPORATE GROUND WELL IN THE POUR. (GROUND WELLS SHALL NOT BE INSTALLED IN VEHICULAR TRAFFIC AREAS)
 4. GROUND WELLS ARE REQUIRED AT EVERY GROUND ROD.
 5. WEIGHTS OF ALL FENCE PIPE MEMBERS SHALL MEET THE MINIMUM REQUIREMENTS OF A.S.A. SCHEDULE 40.
 6. BARBED WIRE EXTENSION ARMS SHALL BE ANGLED FROM THE VERTICAL.
 7. GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER BRAIDE WITH SLEEVES ON EACH END FOR EXOTHERMIC WELDING.
 8. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

GROUND WIRE SIZES			
DESCRIPTION	WIRE	INSULATION/ COATING	SOLID OR STRANDED
EXTERIOR RING AND BELOW GROUND CONNECTIONS	#2	BARE	STRANDED
AC SERVICE GRND.	#2	INSULATED	STRANDED
ALL BONDING JUMPERS	#2	INSULATED	STRANDED

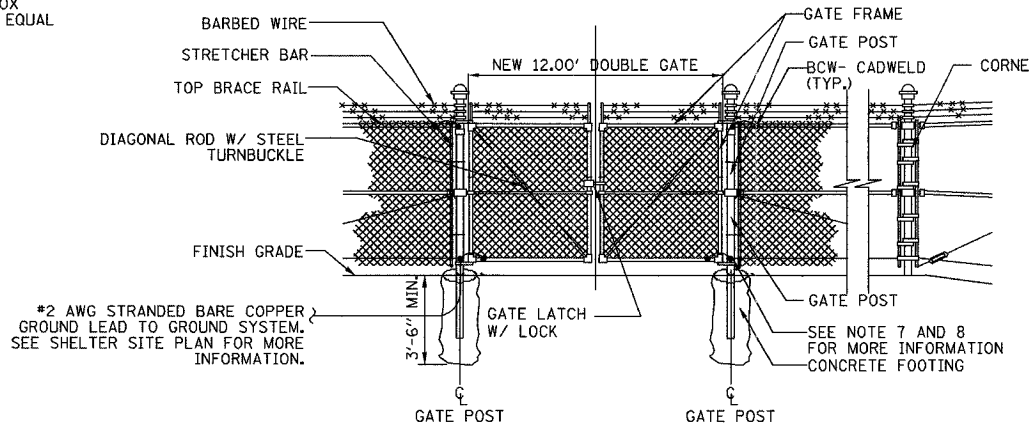
INSULATION WHERE SPECIFIED SHALL BE THWN, COLOR CODED GREEN



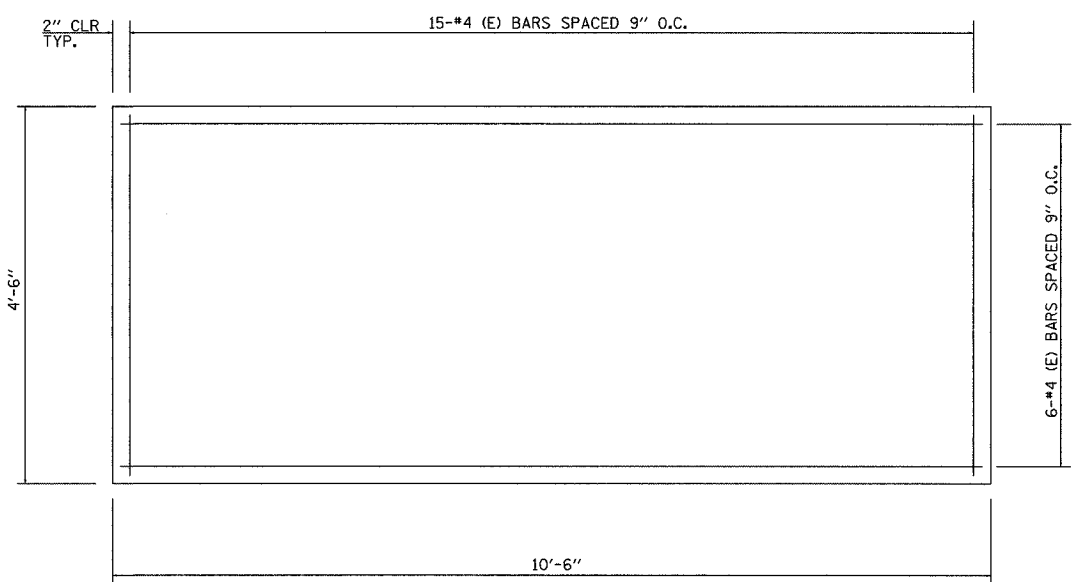
TYPICAL GENERATOR CONCRETE PAD SECTION



GROUND WELL DETAIL
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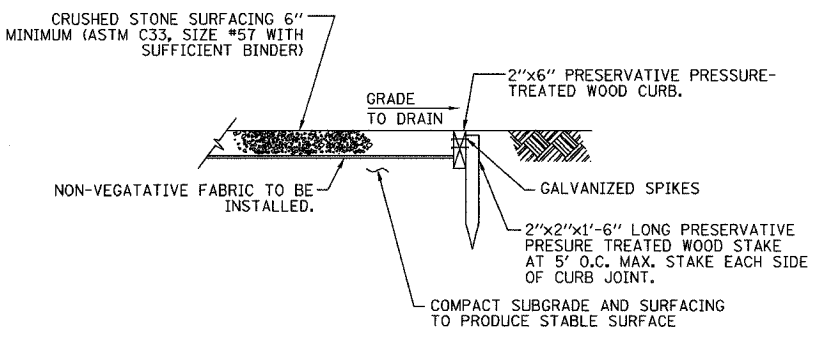


CHAIN LINK FENCE
NOT TO SCALE

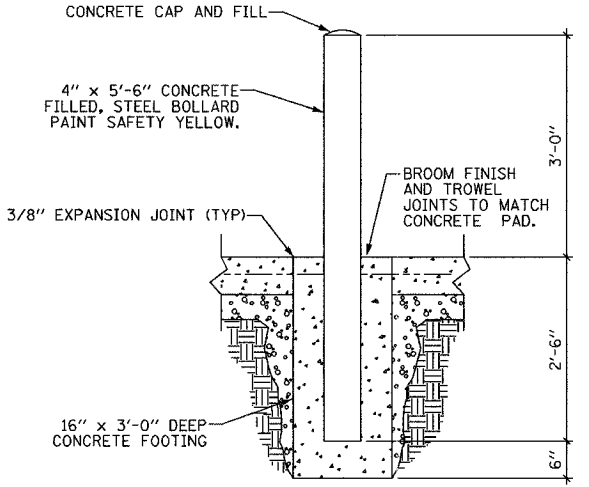


GENERATOR CONCRETE PAD PLAN

f'c = 3500 psi
ALL BARS DESIGNATED "E" SHALL BE EPOXY COATED



WEED BARRIER DETAIL
NOT TO SCALE



CONCRETE BOLLARD DETAIL
NOT TO SCALE

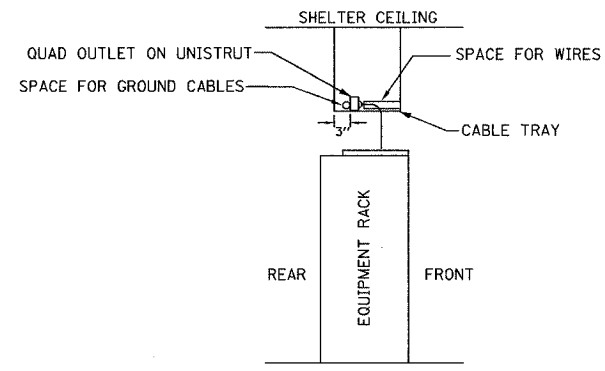
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CHICAGO, IL 60606
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REVISIONS	
NAME	DATE

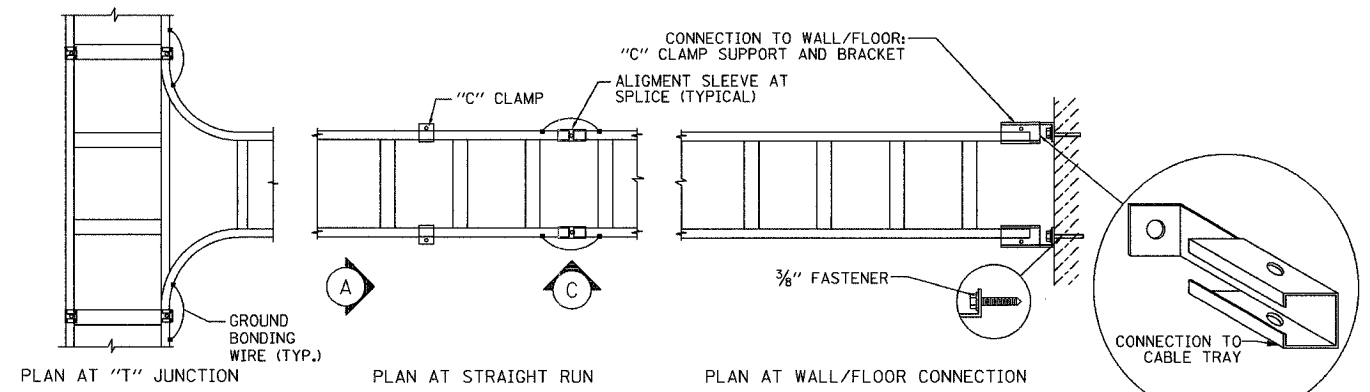
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
SHELTER DETAILS
(SHEET 1 OF 2)
SCALE: NOT TO SCALE
DATE: October 29, 2004
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO. 62583		ILLINOIS FED. AID PROJECT		

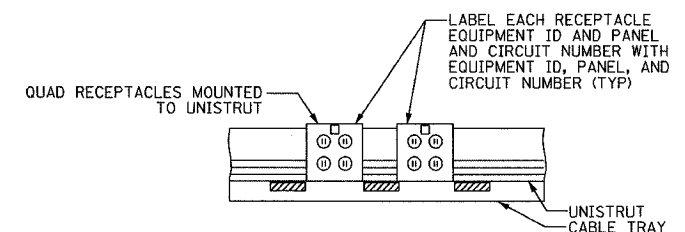


TYPICAL EQUIPMENT RACK CROSS SECTION
NOT TO SCALE

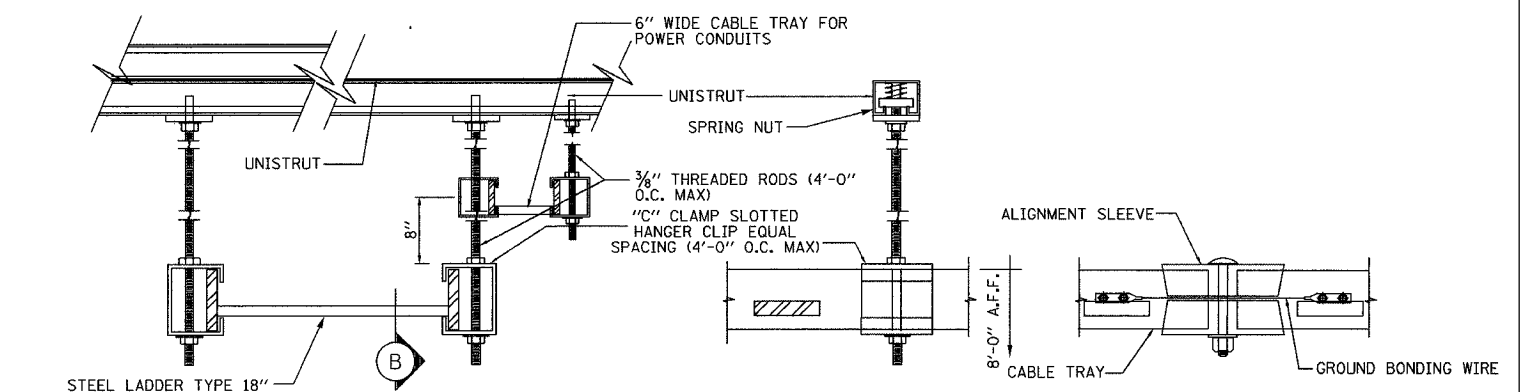


CABLE TRAY- DETAILED PLAN VIEW
NOT TO SCALE

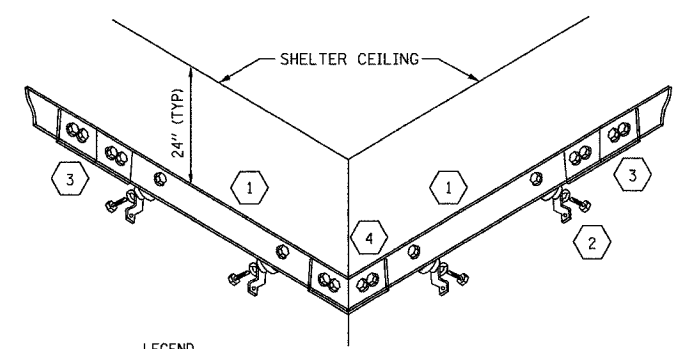
- NOTES:**
1. ALL BENDS IN THE INTERIOR GROUND WIRE SHALL BE 12-INCH NOMINAL AND 8-INCH MINIMUM.
 2. INSTALL INTERIOR GROUND BUS 7" 6" FROM THE FLOOR AND NOT CLOSER THAN 3" FROM THE CEILING UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 3. EACH SECTION OF INTERIOR CABLE TRAY SHALL BE BONDED TOGETHER USING TWO #6 AWG JUMPERS (ONE ON EACH SIDE) TO FORM AN ELECTRICALLY CONTINUOUS TRAY.
 4. ALL GROUNDING CONNECTIONS TO THE GROUND BUS AND EQUIPMENT SHALL BE MADE WITH DOUBLE HOLE HYDRAULICALLY INDENTED LUGS.



CABLE TRAY OUTLETS
NOT TO SCALE
(UPS RECEPTACLES TO BE ORANGE)

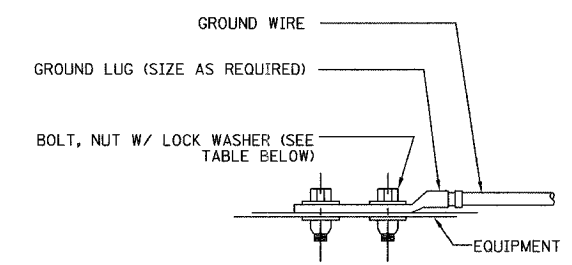


A SECTION THROUGH CABLE TRAY NOT TO SCALE
B SECTION AT "C" CLAMP NOT TO SCALE
C ELEVATION AT SPLICE NOT TO SCALE

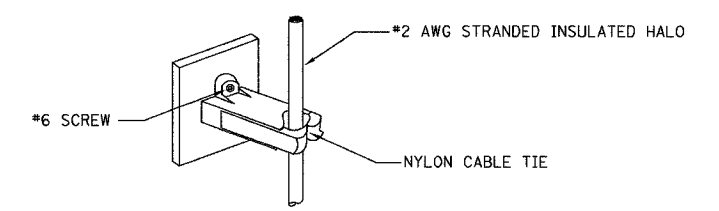


- LEGEND**
- 1 1/4" X 4" X (LENGTH) COPPER GROUND BAR
 - 2 STAND-OFF INSULATORS, MOUNTING BRACKETS AND HARDWARE
 - 3 2" X 6" SPLICE PLATE
 - 4 (1/4" THICK) 2" WIDE -90 DEGREE ELBOW
 - 5 STAINLESS STEEL MOUNTING BRACKET
 - 6 3/4" HEX HEAD CAP SCREW (2 PER MOUNT)
 - 7 LOCK WASHER AND FLAT WASHER (2 PER MOUNT)
 - 8 2" X 2" STAND-OFF INSULATOR

GROUND BUS SYSTEM
NOT TO SCALE



TYPICAL EQUIPMENT GROUND CONNECTION
NOT TO SCALE



GROUND WIRE STANDOFF DETAIL
NOT TO SCALE

WIRE SIZE	LUG #	BOLT SIZE
#4/0	53212	1/2" - 20 NC x 1/2" S.S. BOLT & NUT W/LOCK WASHERS
#2	53207	1/4" - 20 NC x 1/2" S.S. BOLT & NUT W/LOCK WASHERS
#6	53205	

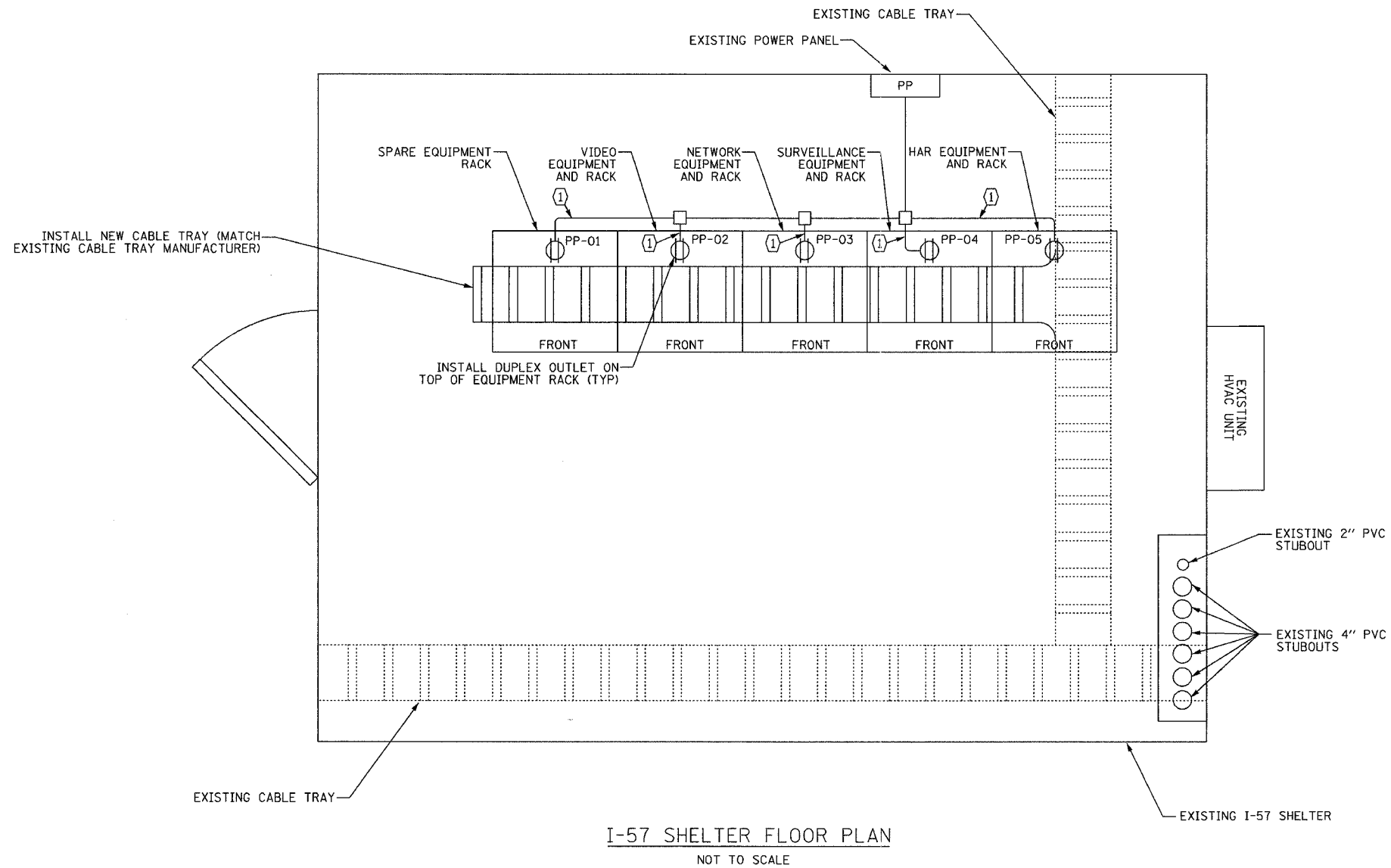
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
SHELTER DETAILS
(SHEET 2 OF 2)
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	861
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



I-57 SHELTER FLOOR PLAN
NOT TO SCALE

- NOTES:**
- EQUIPMENT LAYOUT BASED ON PRELIMINARY SHELTER INSPECTION. CONTRACTOR MAY NEED TO FIELD LOCATE EQUIPMENT RACKS AND EQUIPMENT. COORDINATE WITH THE ENGINEER THE FINAL LOCATION OF ALL EQUIPMENT.
 - CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" CLEARANCE WHEN INSTALLING NEW RACKS AND EQUIPMENT.
- ① (2) #12, (1) #12 GND, 3/4" EMT CONDUIT

REVISIONS	
NAME	DATE

COMM-95

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

I-57 SHELTER (R04)
EQUIPMENT LAYOUT

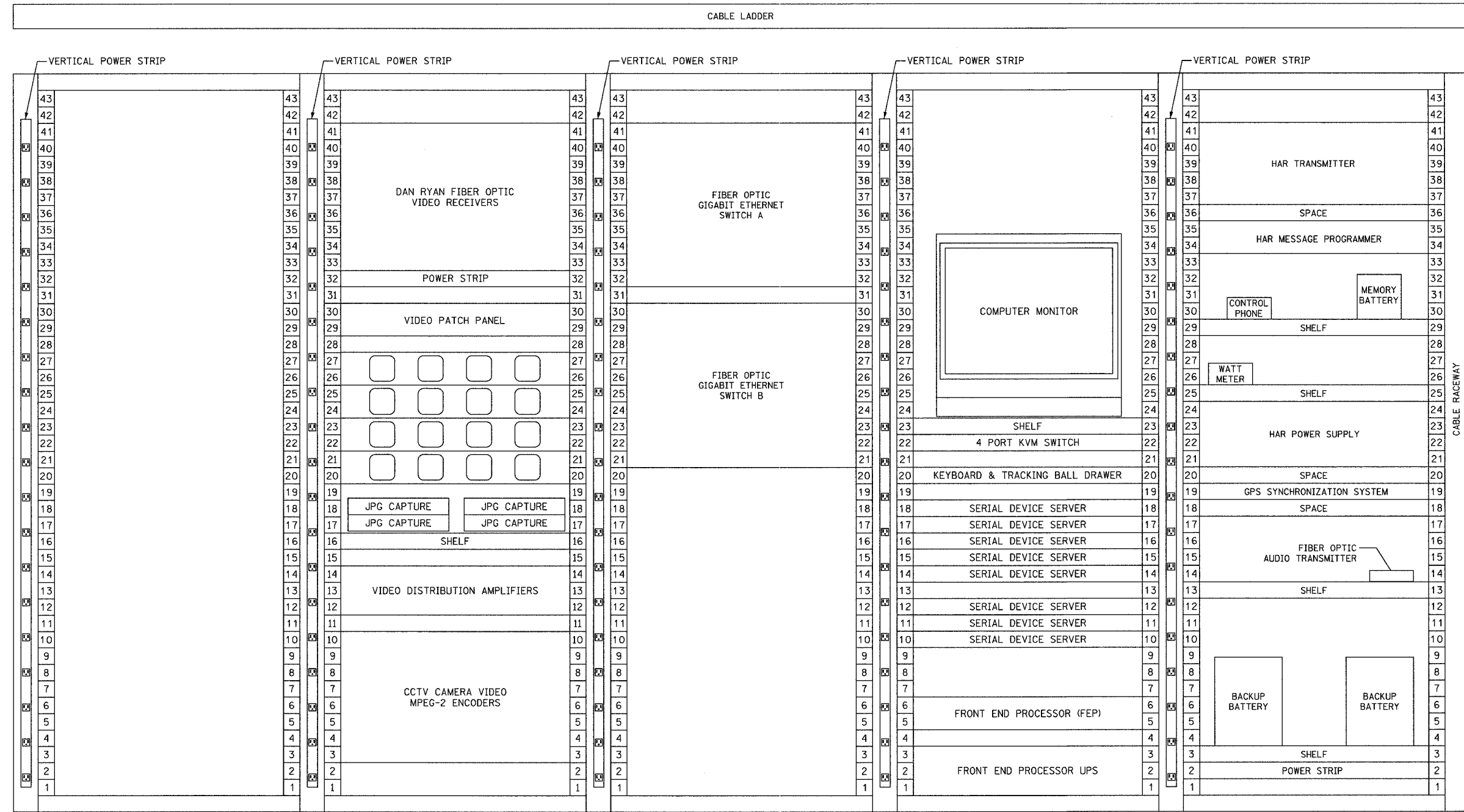
SCALE: NOT TO SCALE DRAWN BY: DHI
DATE: October 29, 2004 CHECKED BY: JEZ

**Edwards
AND
Kelcey**

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P:\03009035\VTSC\ADD\01020342E.SHT 11/23/2004 12:45:06 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	862
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



ABBREVIATIONS
 (B) BACKBONE
 (D) DISTRIBUTION
 FO FIBER OPTIC
 HAR HIGHWAY ADVISORY RADIO
 KVM KEYBOARD/VIDEO/MOUSE

NOTES:
 1. FOR I-57 SHELTER CCTV DISTRIBUTION SUBSYSTEM WIRING DIAGRAM, SEE SHEET COMM-71.
 2. FOR I-57 SHELTER TRAFFIC SUIVEILLANCE SYSTEM WIRING DIAGRAM, SEE SHEET COMM-73.
 3. ALL INSTALLED HARDWARE SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

I-57 SHELTER (R04)
 EQUIPMENT RACK ELEVATION

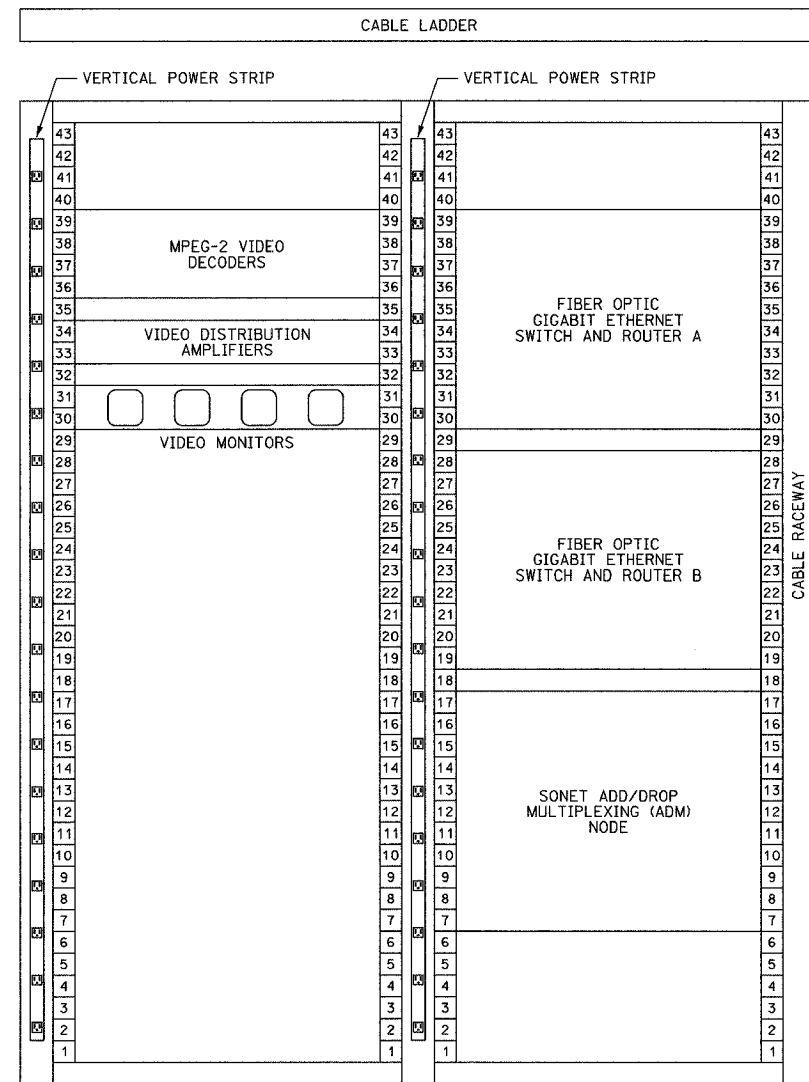
SCALE: NOT TO SCALE
 DATE: October 29, 2004

DRAWN BY: DHI
 CHECKED BY: JEZ

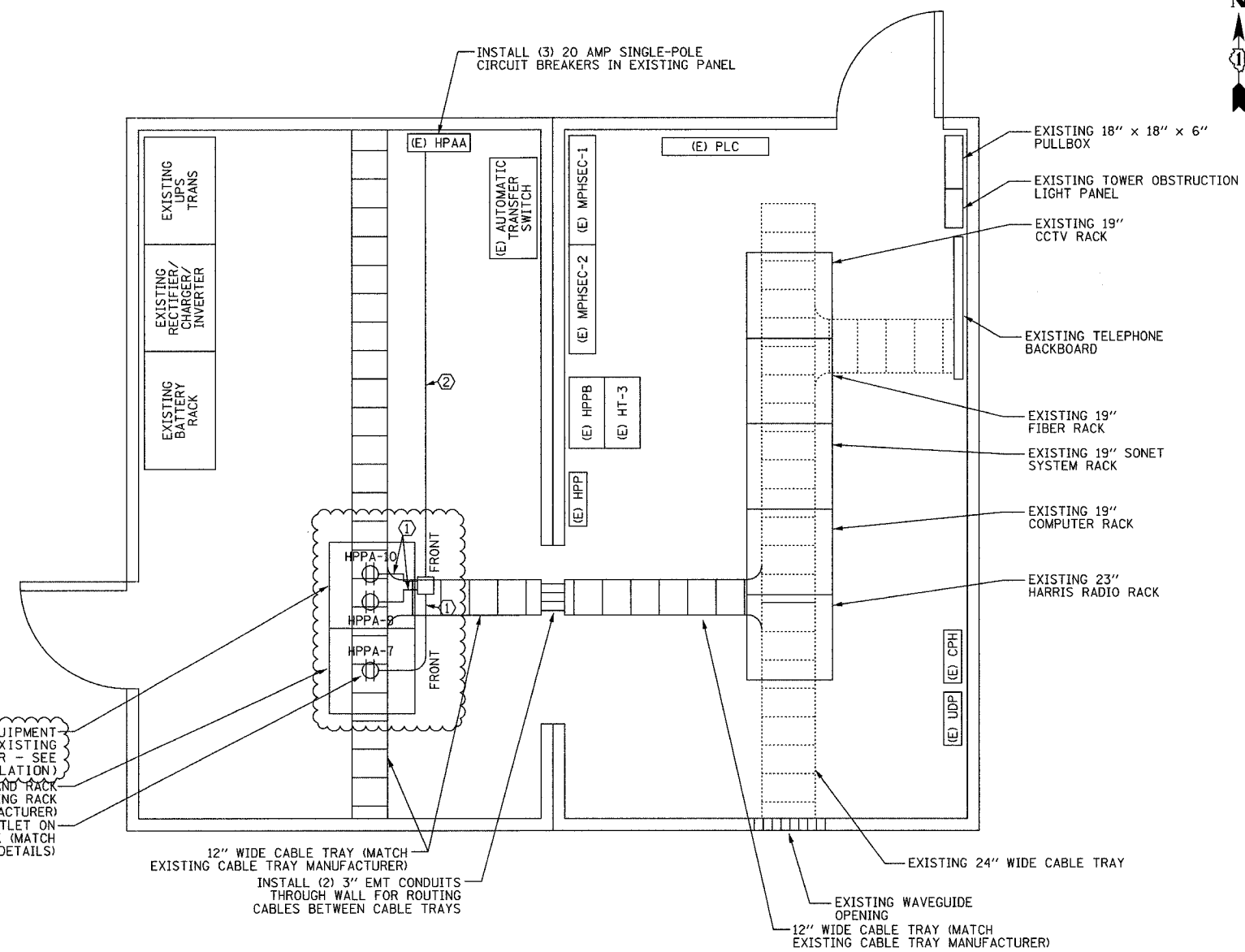


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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				

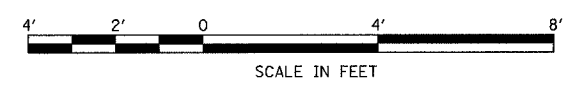


EQUIPMENT RACK ELEVATION
NOT TO SCALE



- ① (2) #12 & (1) #12 GND, 3/4" C
- ② (2) [(2) #12 & (1) #12 GND], 1" C
- ⊕ DUPLEX RECEPTACLE
- (E) EXISTING EQUIPMENT

EQUIPMENT LAYOUT PLAN



- NOTES:
- UNLESS OTHERWISE NOTED, ALL EQUIPMENT IS TO BE INSTALLED UNDER THIS CONTRACT.
 - FOR EQUIPMENT WIRING DIAGRAM, SEE SHEET COMM-98.
 - CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" CLEARANCE WHEN INSTALLING NEW RACKS AND EQUIPMENT.
 - INSTALL GIGABIT ETHERNET SWITCHES ON SEPARATE ELECTRICAL CIRCUITS.
 - ALL INSTALLED EQUIPMENT SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

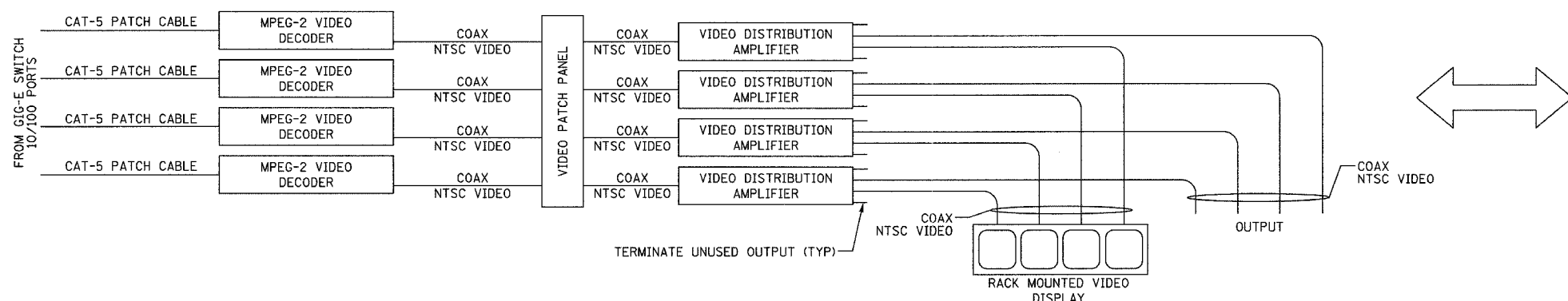
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
HILLSIDE SHELTER
EQUIPMENT LAYOUT
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DH1
CHECKED BY: JEZ

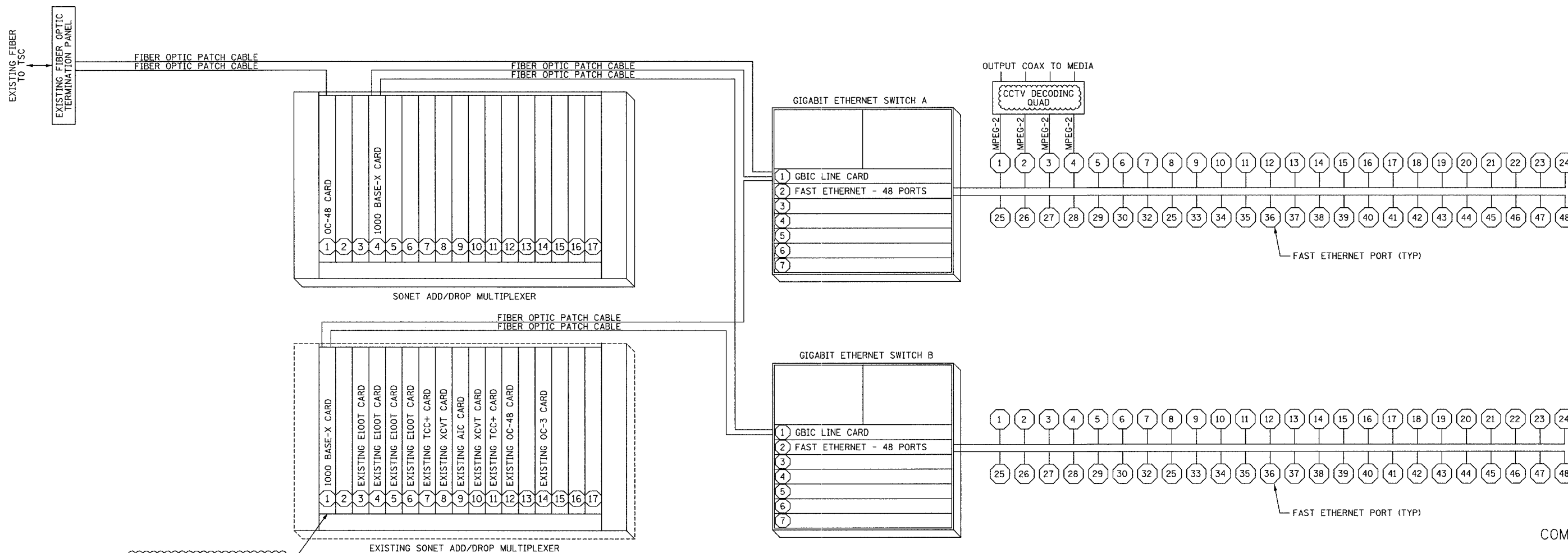
Edwards AND Kelcey
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PHONE: (312) 251-3000
FAX: (312) 251-3015
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P:\030019\0311\Vis\card\020292e.rvt 12/15/2004 01:51:35 PM

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9/4/90	2003-0311	COOK	976	864
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



ONE-LINE DIAGRAM FOR CCTV DECODING QUAD
NOT TO SCALE



INSTALL NEW CARD IN EXISTING SONET MULTIPLEXER

- NOTES:
1. THIS DRAWING PROVIDES AN OVERVIEW OF THE CCTV EQUIPMENT INTERCONNECTS AT THE SHELTER.
 2. CONTRACTOR SHALL PROVIDE NECESSARY POWER CONNECTIONS TO THE EQUIPMENT.
 3. EACH CCTV DECODING QUAD SHALL BE FULLY EQUIPPED WITH ALL HARDWARE.

EQUIPMENT INTERCONNECT DIAGRAM
NOT TO SCALE

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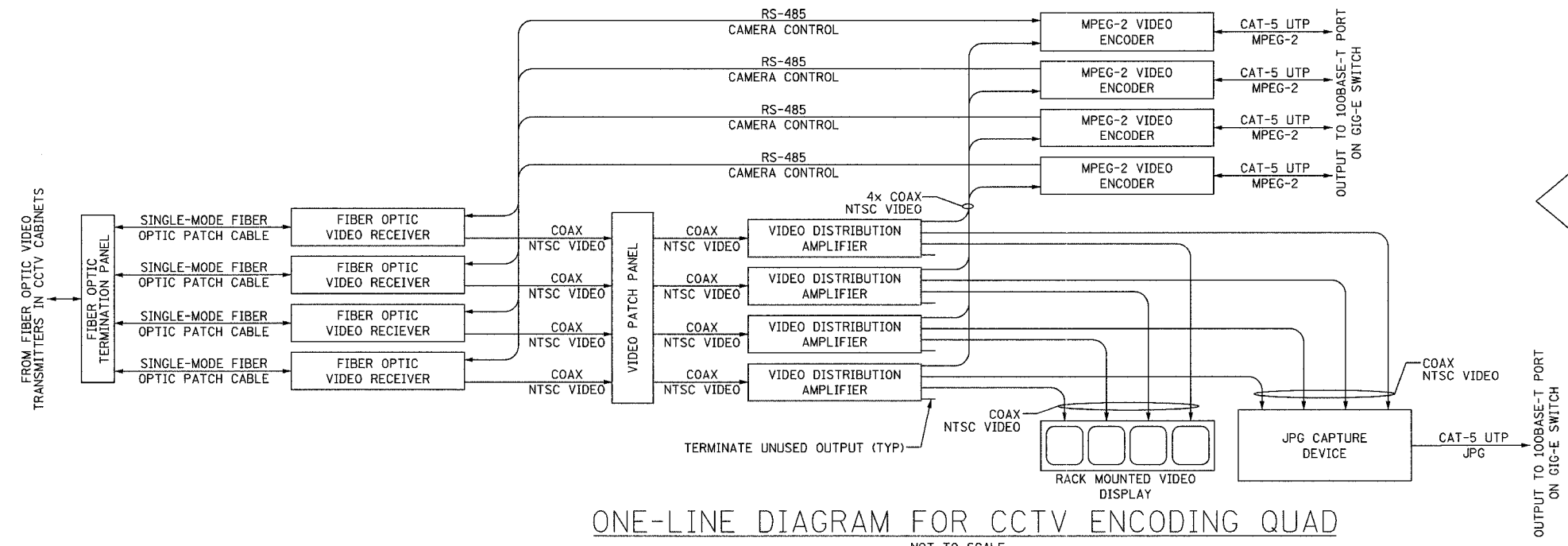
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
HILLSIDE SHELTER
EQUIPMENT WIRING DIAGRAM
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

COMM-98

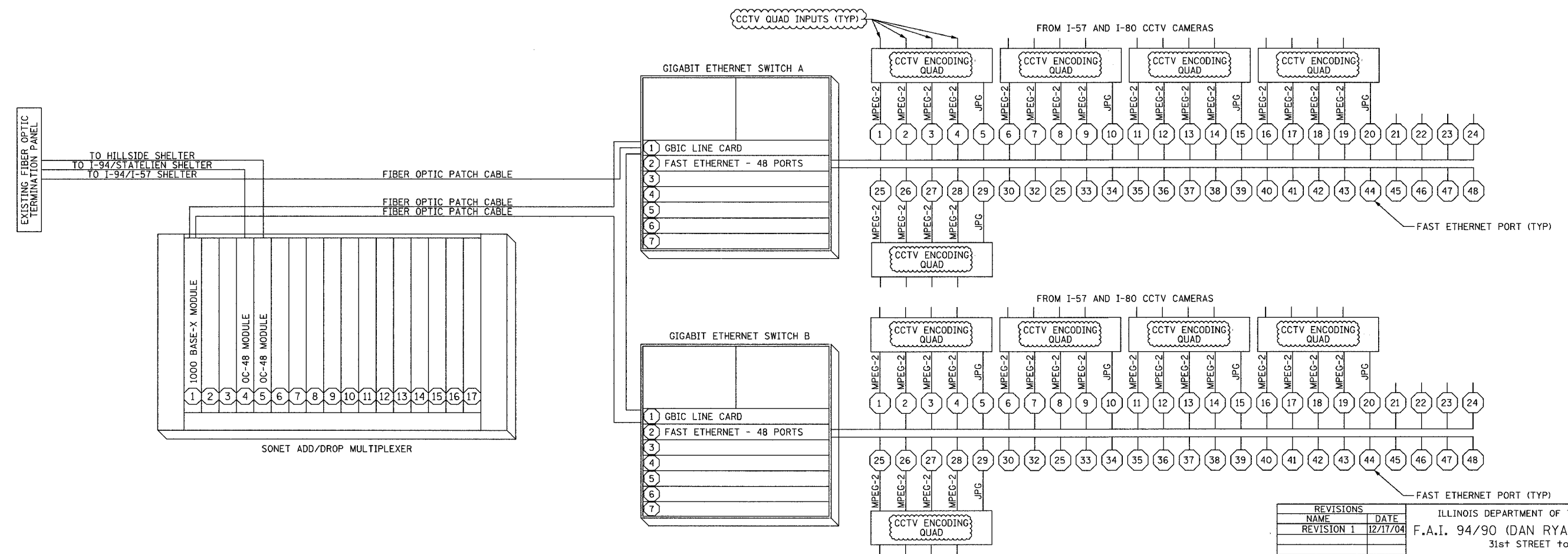
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	865
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



ONE-LINE DIAGRAM FOR CCTV ENCODING QUAD
NOT TO SCALE

- NOTES:
1. THIS DRAWING IS FOR REFERENCE ONLY AND PROVIDES AN OVERVIEW OF THE CCTV EQUIPMENT INTERCONNECTS AT THE SHELTER.
 2. CONTRACTOR SHALL PROVIDE NECESSARY POWER CONNECTIONS TO THE EQUIPMENT.
 3. EACH CCTV ENCODING QUAD SHALL BE FULLY EQUIPPED WITH HARDWARE.



EQUIPMENT INTERCONNECT DIAGRAM
NOT TO SCALE

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

I-294/I-57 SHELTER
WIRING DIAGRAM

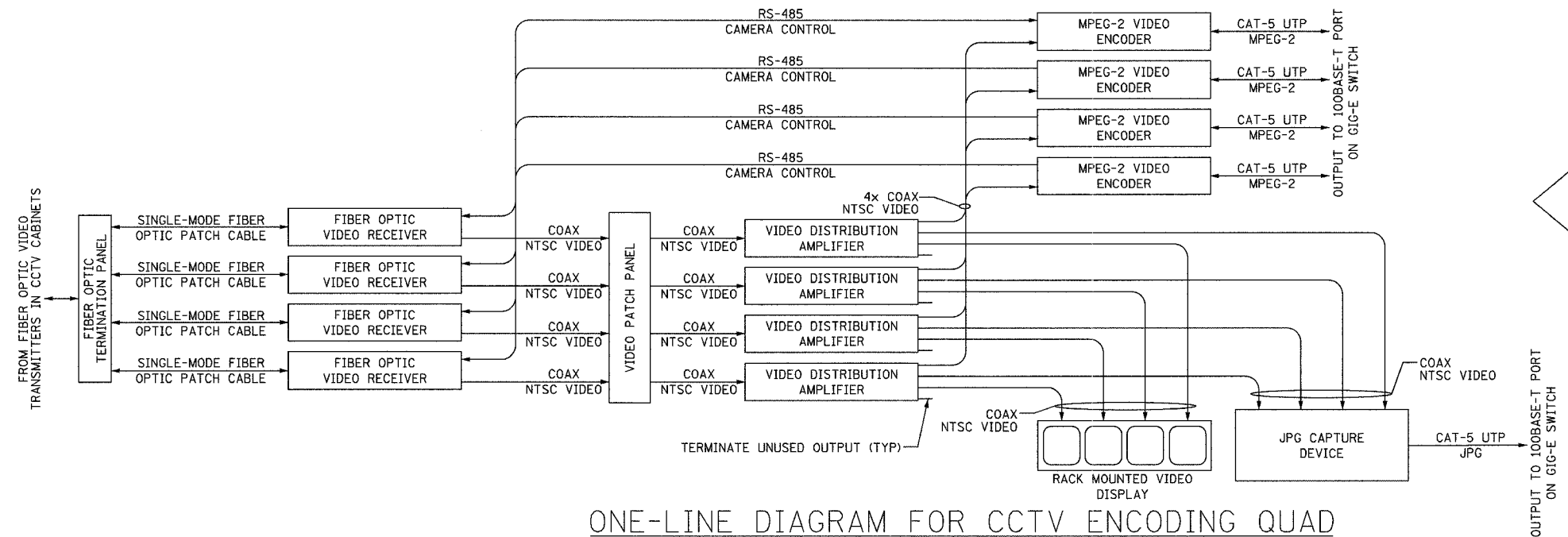
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DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: JEZ

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

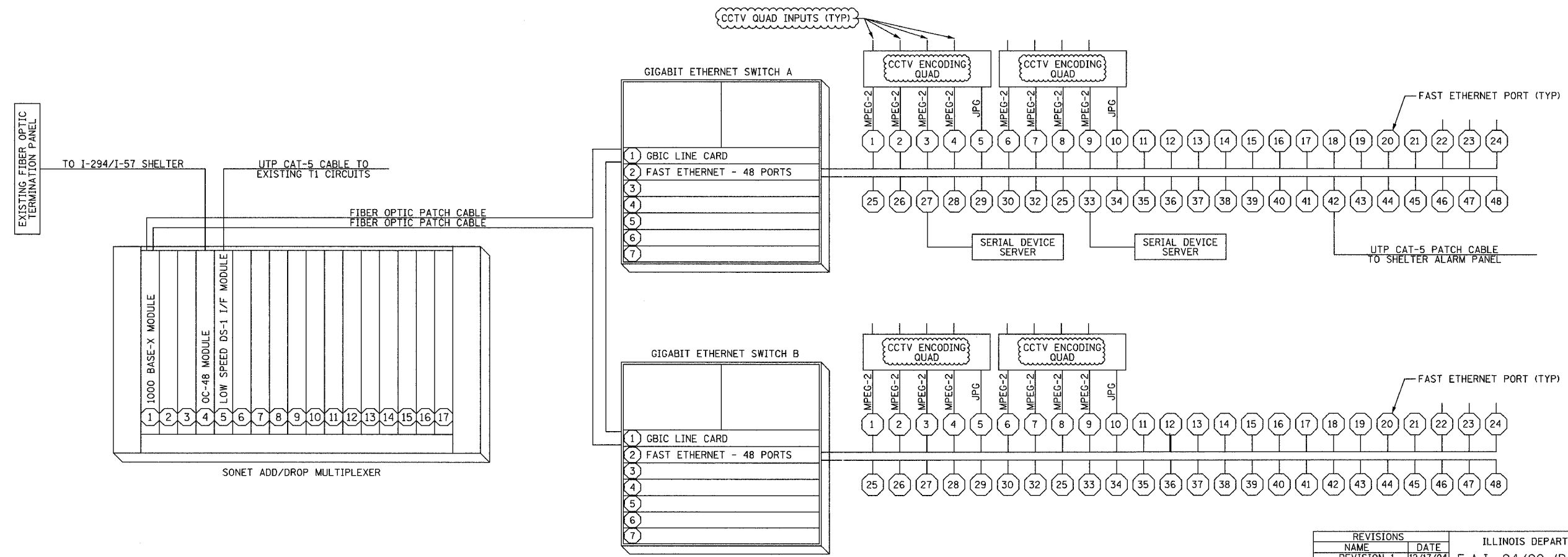
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94/90	2003-0311	COOK	976	866
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



ONE-LINE DIAGRAM FOR CCTV ENCODING QUAD
NOT TO SCALE

- NOTES:
1. THIS DRAWING IS FOR REFERENCE ONLY AND PROVIDES AN OVERVIEW OF THE CCTV EQUIPMENT INTERCONNECTS AT THE SHELTER.
 2. CONTRACTOR SHALL PROVIDE NECESSARY POWER CONNECTIONS TO THE EQUIPMENT.
 3. EACH CCTV ENCODING QUAD SHALL BE FULLY EQUIPPED WITH ALL HARDWARE.



EQUIPMENT INTERCONNECT DIAGRAM
NOT TO SCALE

COMM-100

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

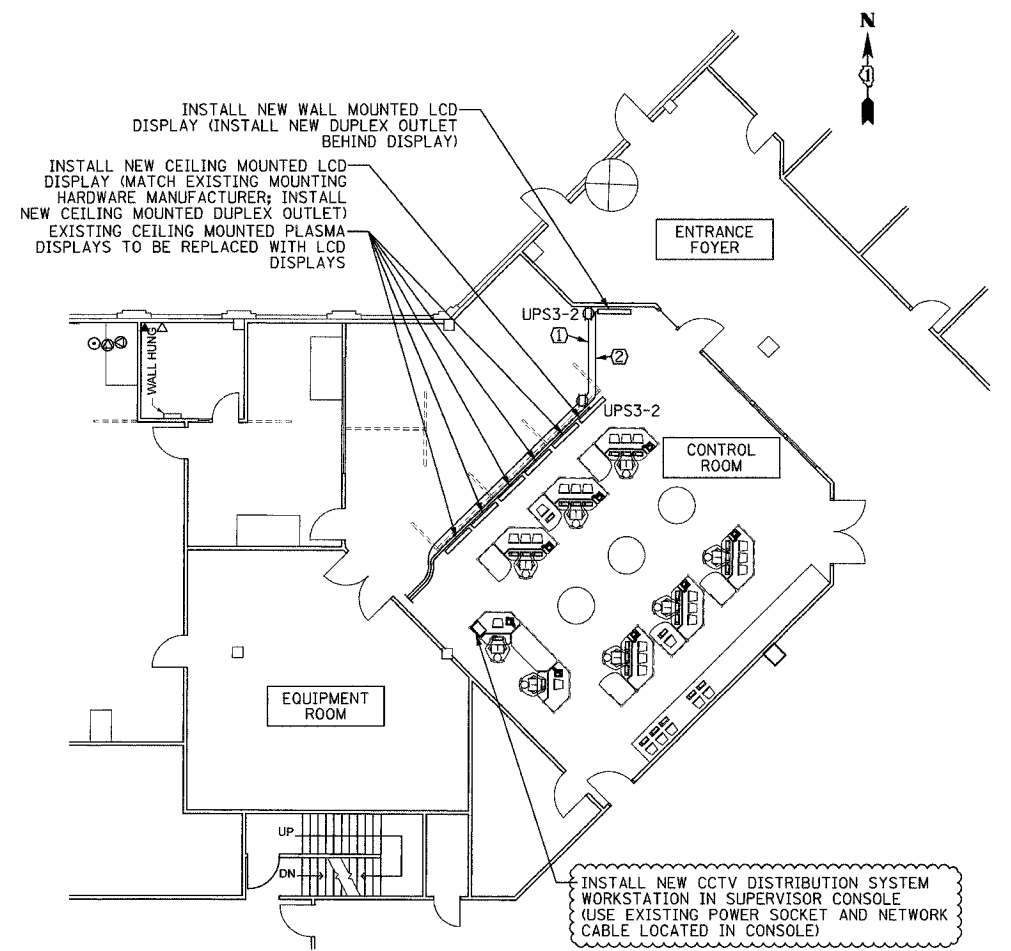
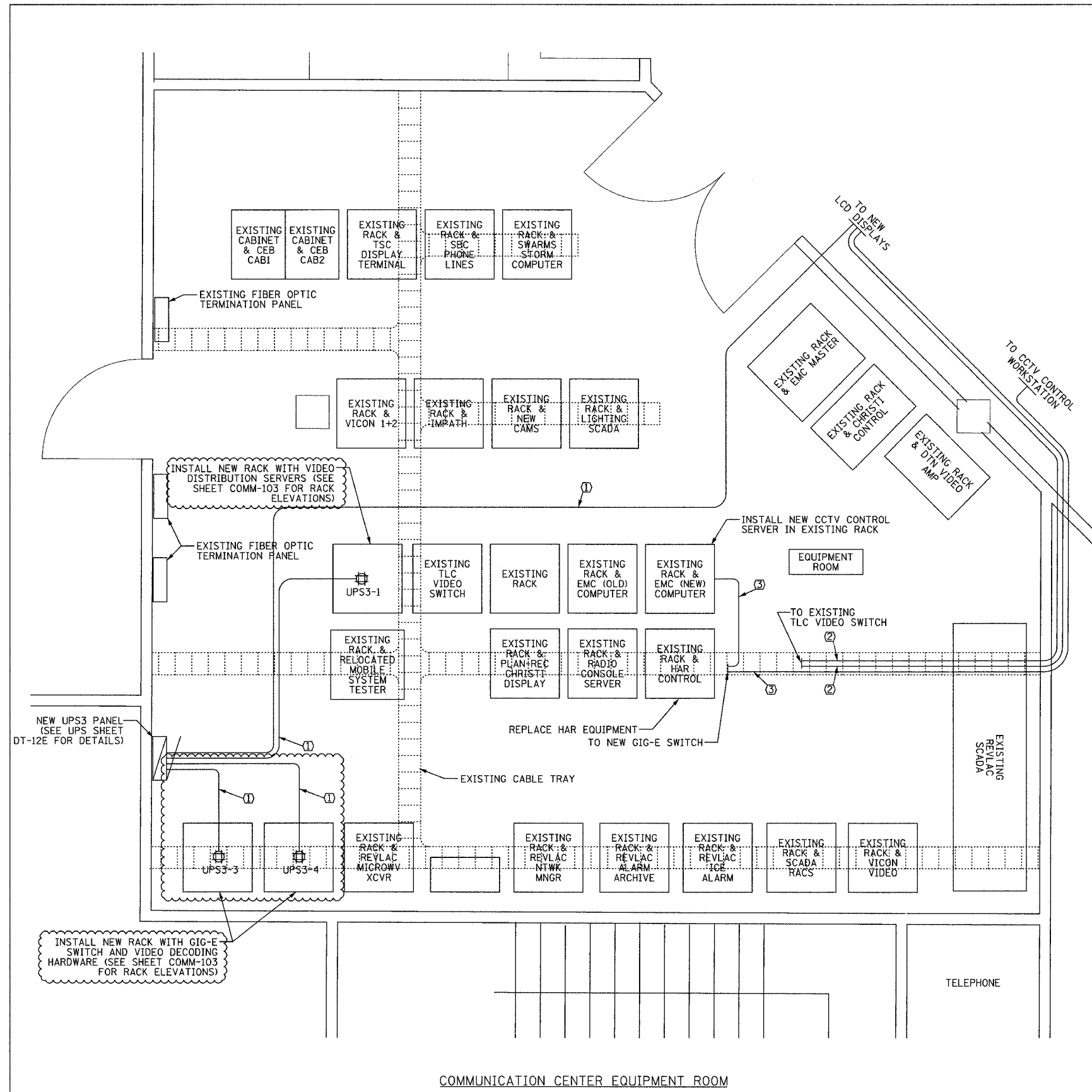
I-94/STATELINE SHELTER
WIRING DIAGRAM

SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	867
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			

- NOTES:
- EQUIPMENT LOCATIONS ARE BASED ON CURRENT CONDITIONS AND ARE ANTICIPATED TO CHANGE. THE CONTRACTOR SHALL COORDINATE THE ACTUAL LOCATION OF NEW EQUIPMENT WITH SITE PERSONNEL, SUBJECT TO THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHOULD ANTICIPATE THAT CHANGES TO THE LOCATION DO NOT AFFECT OVERALL SCOPE OF WORK OR MATERIALS FURNISHED.
 - CONTRACTOR SHALL PROVIDE ADDITIONAL CABLE TO MOVE RACKS FORWARD TO PROVIDE ACCESS TO REAR OF CABINET.
 - MOBILE SYSTEM TESTER TO BE RELOCATED BY IDOT.
- ① (2) #12 & (1) #12 GND, 3/4" C
 ② PLENUM RATED COAX CABLE
 ③ PLENUM RATED CAT-5 CABLE



COMMUNICATION CENTER MAIN FLOOR

COMM-101

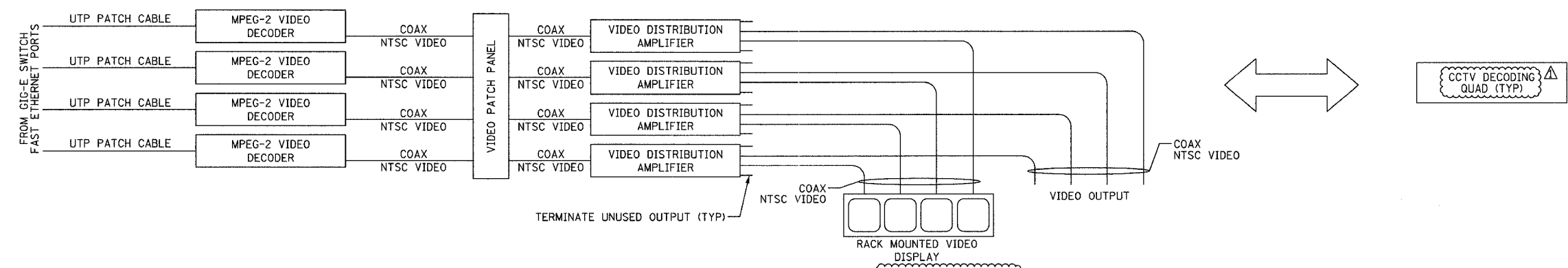
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 COMMUNICATIONS CENTER (SCHAUMBURG)
 SITE PLAN
 SCALE: NOT TO SCALE
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: JEZ

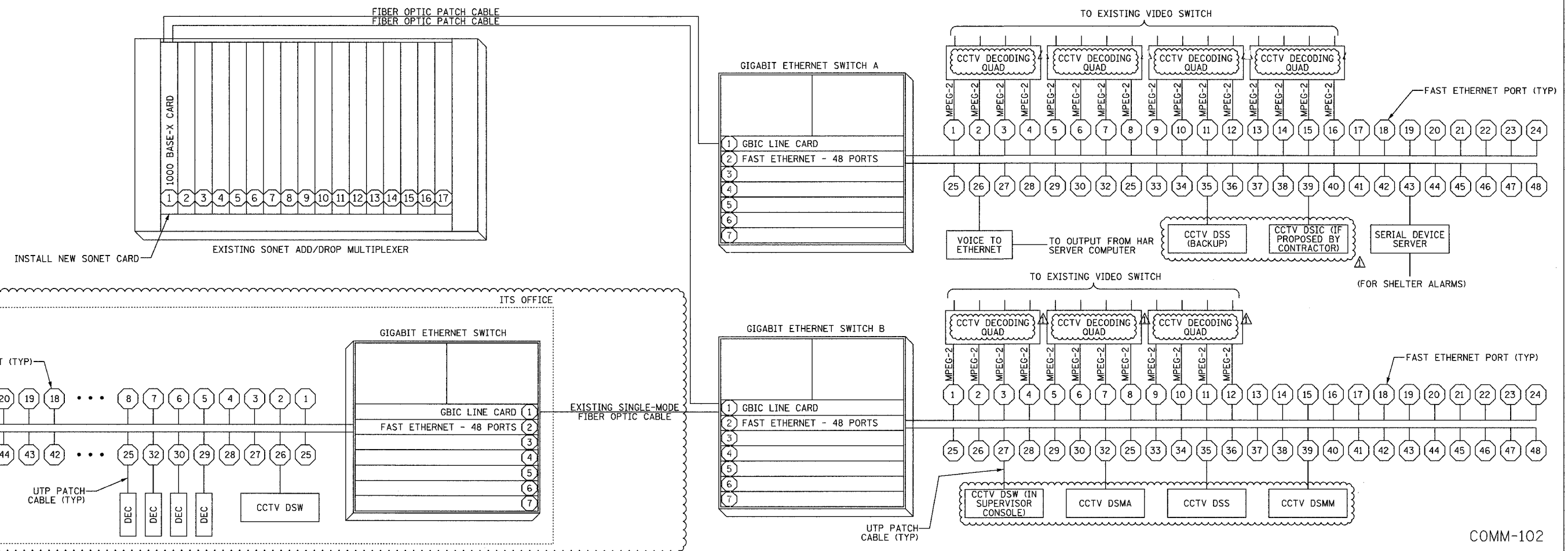
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	868
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



ONE-LINE DIAGRAM FOR CCTV DECODING QUAD
NOT TO SCALE



EQUIPMENT INTERCONNECT DIAGRAM
NOT TO SCALE

- NOTES:**
1. THIS DRAWING IS FOR REFERENCE ONLY AND PROVIDES AN OVERVIEW OF THE CCTV EQUIPMENT INTERCONNECTS AT THE COMMUNICATION SHELTER.
 2. CONTRACTOR SHALL PROVIDE NECESSARY POWER CONNECTIONS TO THE EQUIPMENT.
 3. EACH CCTV DECODING QUAD SHALL BE FULLY EQUIPPED WITH ALL HARDWARE.

LEGEND:

DEC	MPEG-2 DECODER
DSIC	DISTRIBUTION SYSTEM IMAGE CAPTURE
DSMA	DISTRIBUTION SYSTEM VIDEO MANAGEMENT & ARCHIVING
DSMM	DISTRIBUTION SYSTEM MAINTENANCE MONITOR
DSS	DISTRIBUTION SYSTEM SERVER
DSW	DISTRIBUTION SYSTEM WORKSTATION

REVISIONS

NAME	DATE
REVISION 1	12/17/04

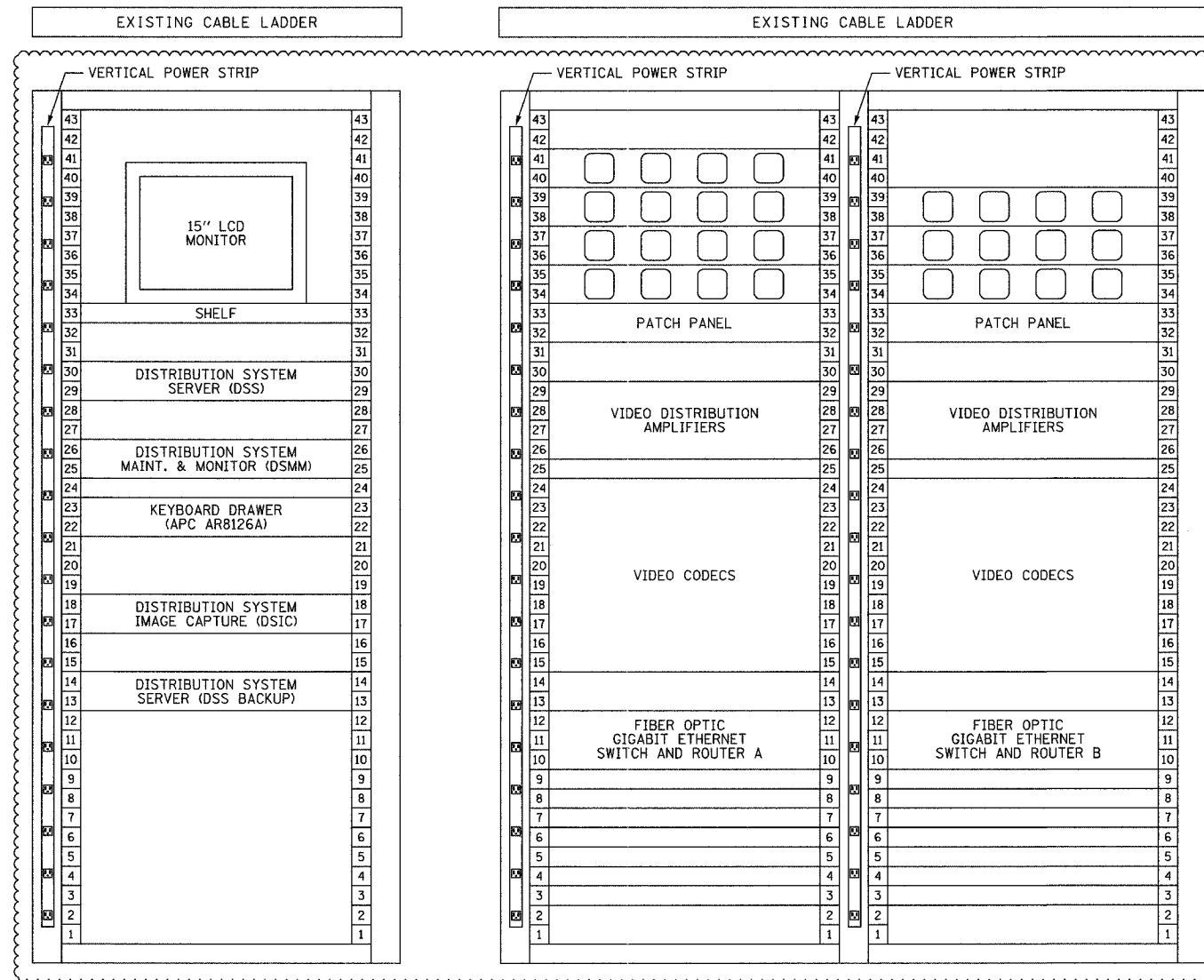
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57

SCHAUBURG COMMUNICATION CENTER
EQUIPMENT WIRING DIAGRAM

SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ



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EQUIPMENT RACK ELEVATION
NOT TO SCALE

NOTES:
1. ALL INSTALLED HARDWARE SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

LEGEND:
 DSIC DISTRIBUTION SYSTEM IMAGE CAPTURE
 DSMA DISTRIBUTION SYSTEM VIDEO MANAGEMENT & ARCHIVING
 DSMM DISTRIBUTION SYSTEM MAINTENANCE MONITOR
 DSS DISTRIBUTION SYSTEM SERVER
 DSW DISTRIBUTION SYSTEM WORKSTATION

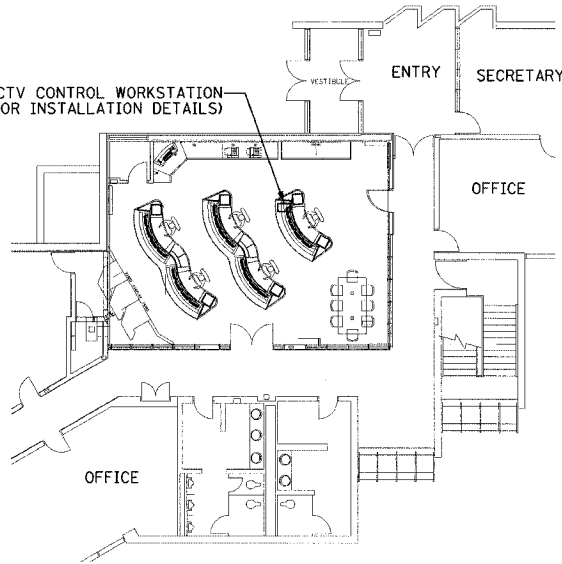
REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 SCHAUMBURG COMMUNICATION CENTER
 EQUIPMENT RACK ELEVATION
 SCALE: NOT TO SCALE
 DATE: October 29, 2004
 DRAWN BY: DHI
 CHECKED BY: JEZ

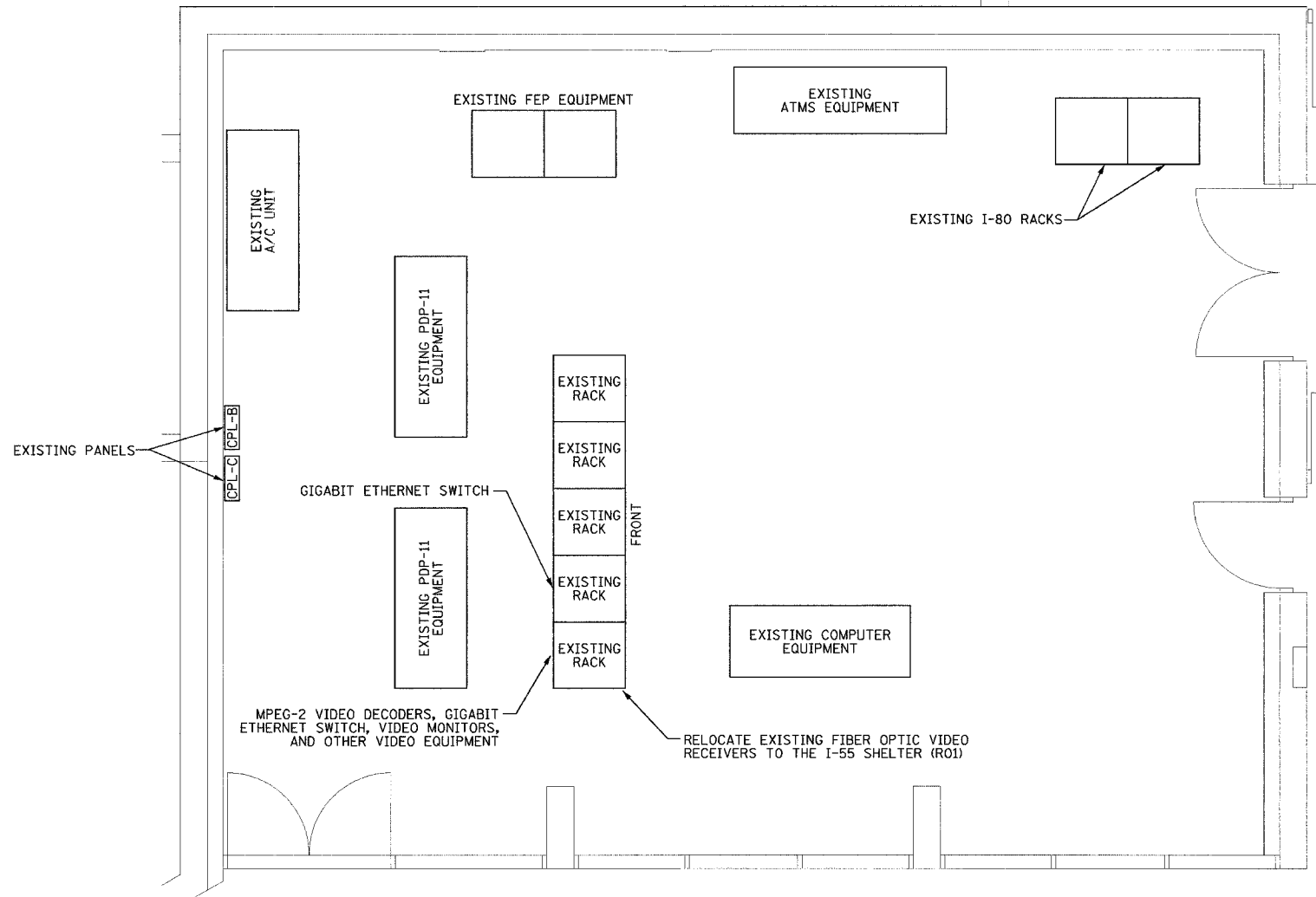
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-03II	COOK	976	870
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



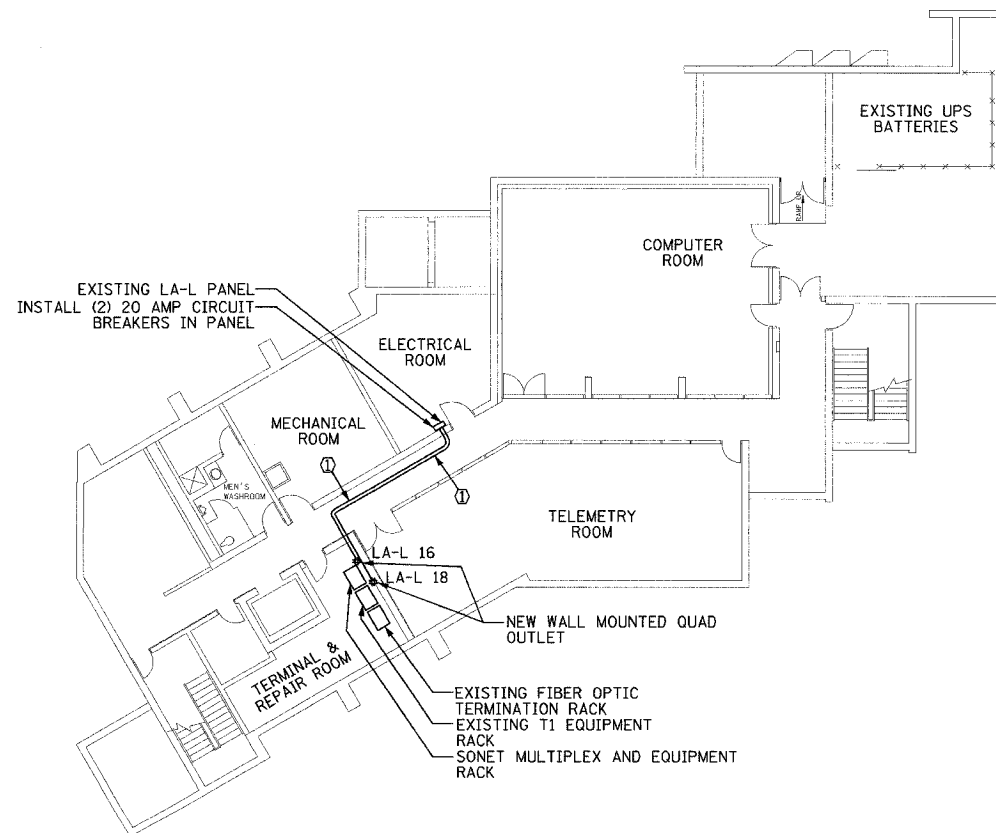
NEW CCTV CONTROL WORKSTATION
(SEE NOTE 3 FOR INSTALLATION DETAILS)



PARTIAL MAIN LEVEL FLOOR PLAN

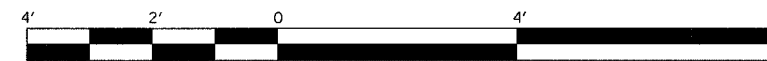


COMPUTER ROOM



PARTIAL LOWER LEVEL FLOOR PLAN

Ⓛ (2) #12 & (1) #12 GND, 3/4" C



- NOTES:**
- CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF ALL EQUIPMENT WITH THE ENGINEER.
 - UNLESS OTHERWISE NOTED, ALL EQUIPMENT IS TO BE INSTALLED UNDER THIS CONTRACT.
 - CCTV CONTROL WORKSTATION SHALL USE EXISTING POWER AND DATA PORTS LOCATED IN CONSOLE.

REVISIONS	
NAME	DATE

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

TRAFFIC SYSTEMS CENTER (TSC)
SITE PLAN

SCALE: NOT TO SCALE
DATE: October 29, 2004

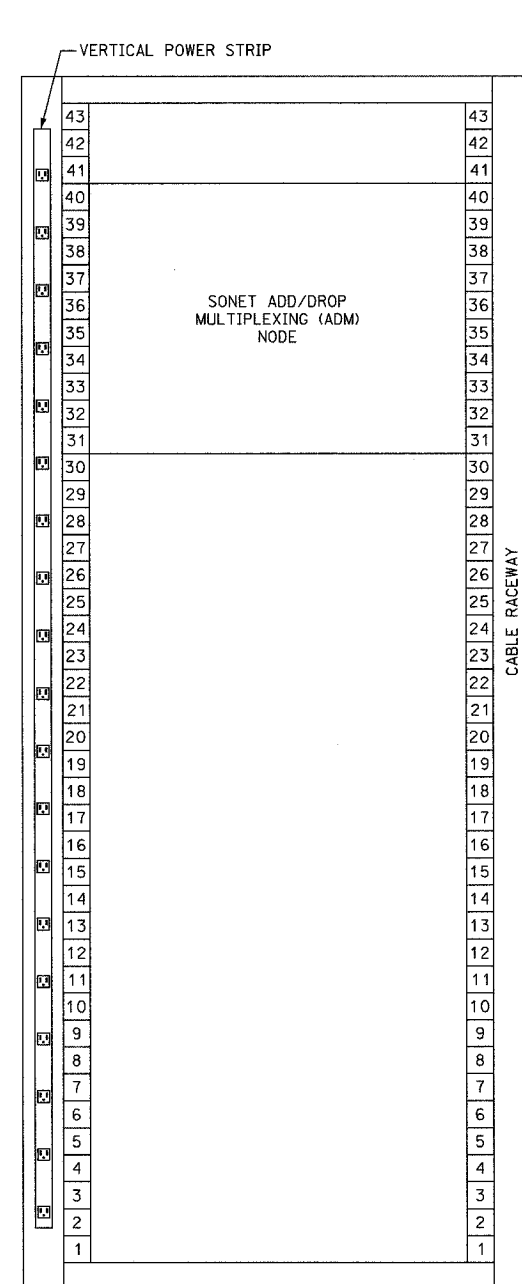
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CHECKED BY: JEZ

COMM-104

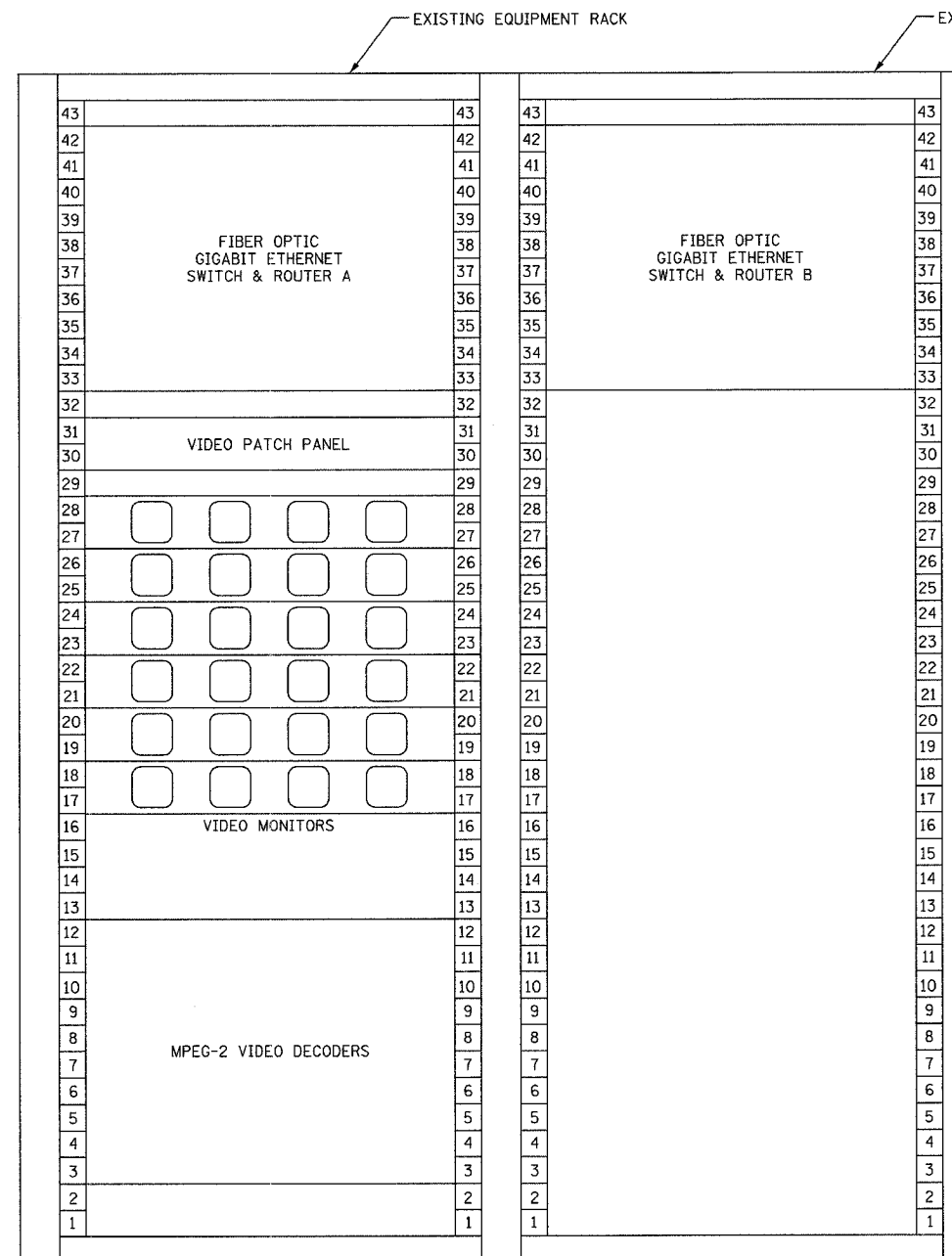
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CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EDCORP.COM

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	872
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



TERMINAL & REPAIR ROOM
EQUIPMENT RACK LAYOUT
NOT TO SCALE



COMPUTER ROOM
EQUIPMENT RACK LAYOUT
NOT TO SCALE

ABBREVIATIONS
FOVT FIBER OPTIC VIDEO TRANSCEIVER

NOTES:
1. ALL INSTALLED HARDWARE SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

TRAFFIC SYSTEMS CENTER (TSC)
RACK ELEVATION

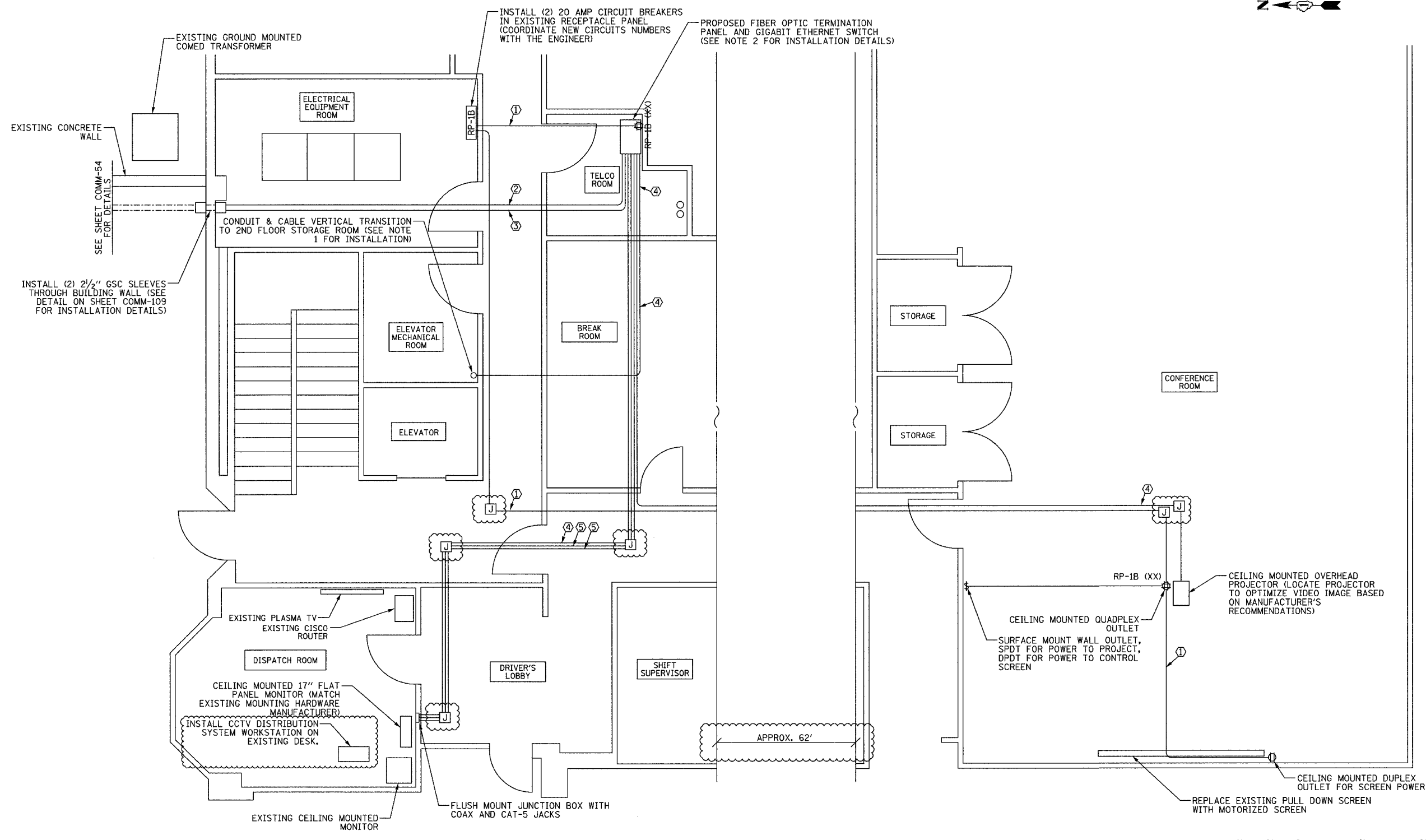
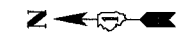
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

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ONE NORTH FRANKLIN
CHICAGO, IL 60606
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FAX: (312) 251-3015
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COMM-106

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	873
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



PARTIAL FIRST FLOOR PLAN
NOT TO SCALE



- NOTES:**
- CONTRACTOR SHALL COORDINATE WITH EMERGENCY TRAFFIC PATROL (ETP) BUILDING ENGINEER PRIOR TO PERFORMING ANY WORK. CONTRACTOR SHALL COORDINATE THE CONDUIT AND CABLE ROUTING WITHIN THE ETP BUILDING.
 - CONTRACTOR SHALL INSTALL NEW COMMUNICATION EQUIPMENT IN WALL MOUNTED EQUIPMENT RACK. SEE SHEET COMM-109 FOR EQUIPMENT ELEVATION DETAILS.
 - WHEN POSSIBLE, CONTRACTOR SHALL CONCEAL CABLE AND CONDUIT INSTALLATION IN CEILING SPACE.

- CABLE/CONDUIT IDENTIFIERS**
- ① (2) #12 AND (1) #12 GND, 3/4" EMT
 - ② 24-FIBER OPTIC CABLE, 2" EMT
 - ③ SPARE, 2" EMT
 - ④ COAX CABLE
 - ⑤ UTP CAT-5 CABLE

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

EMERGENCY TRAFFIC PATROL (ETP)
SITE PLAN

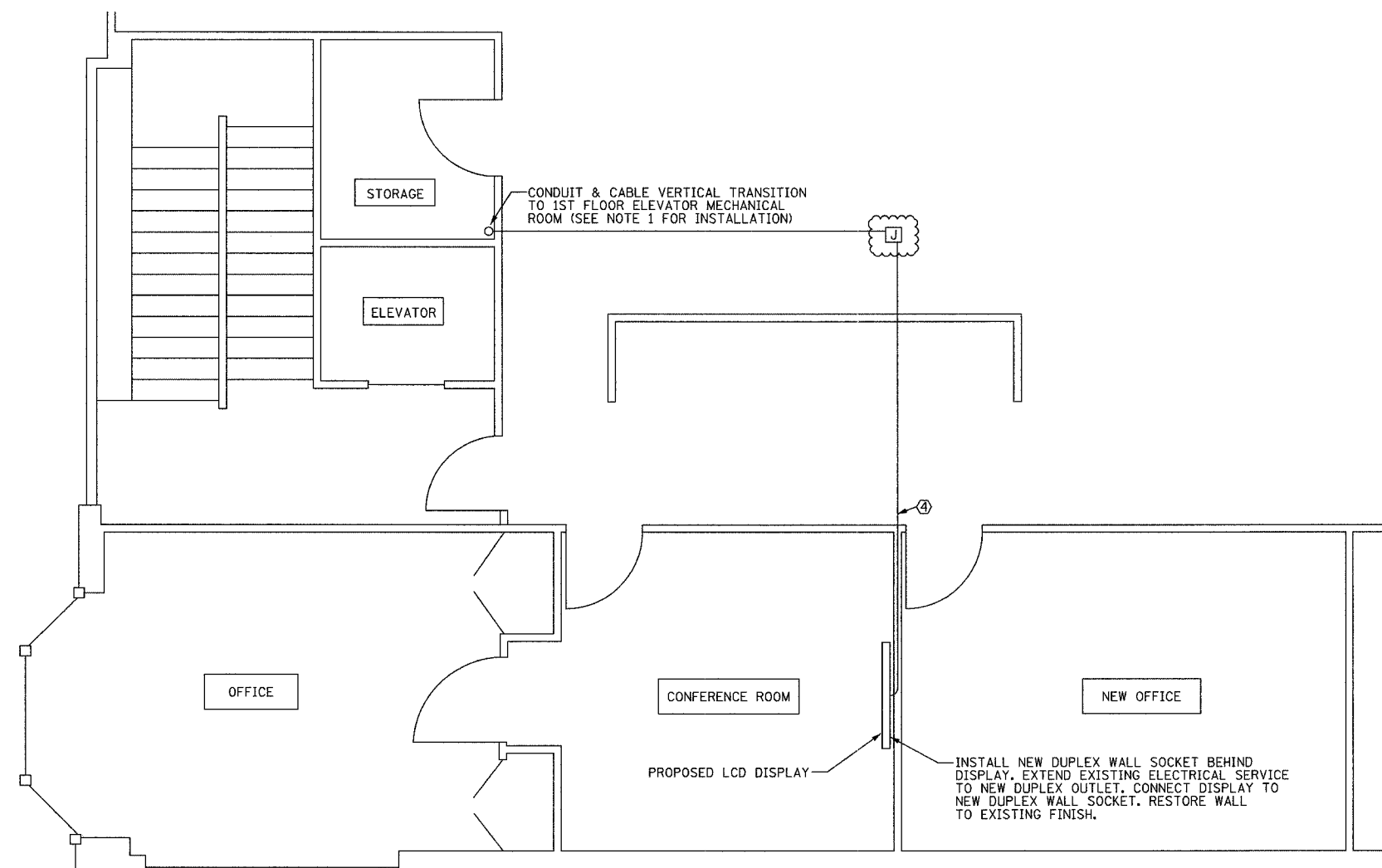
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DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: JEZ

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ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	874
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
62583			



PARTIAL SECOND FLOOR PLAN



COMM-108

NOTES:

- CONTRACTOR SHALL COORDINATE WITH EMERGENCY TRAFFIC PATROL (ETP) BUILDING ENGINEER PRIOR TO PERFORMING ANY WORK. CONTRACTOR SHALL COORDINATE THE CONDUIT AND CABLE ROUTING WITHIN THE ETP BUILDING.
- WHEN POSSIBLE, CONTRACTOR SHALL CONCEAL CABLE AND CONDUIT INSTALLATION IN CEILING SPACE.

CABLE/CONDUIT IDENTIFIERS

- ① (2) #12 AND (1) #12 GND, 3/4" C
- ② 24-FIBER OPTIC CABLE, 2" C
- ③ SPARE, 2" C
- ④ RG-6 COAX CABLE, 3/4" C

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

EMERGENCY TRAFFIC PATROL (ETP)
 SITE PLAN

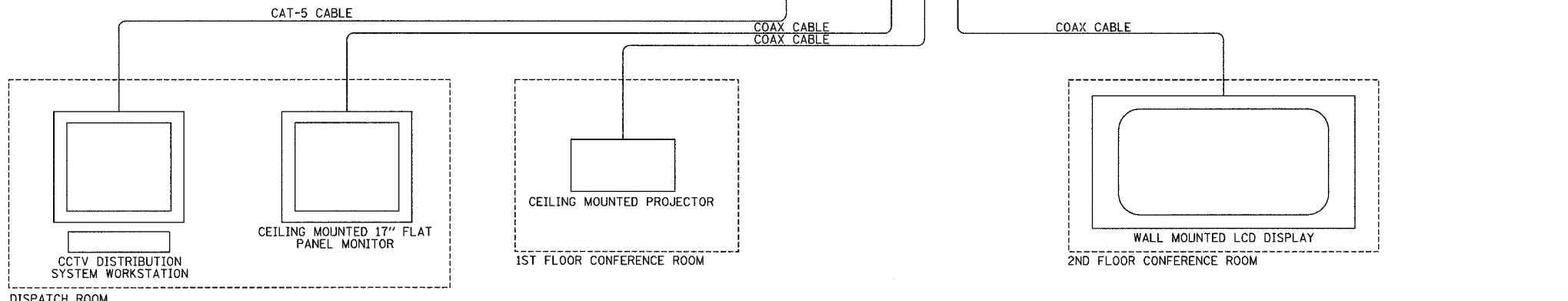
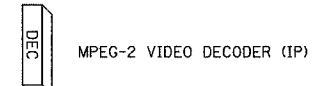
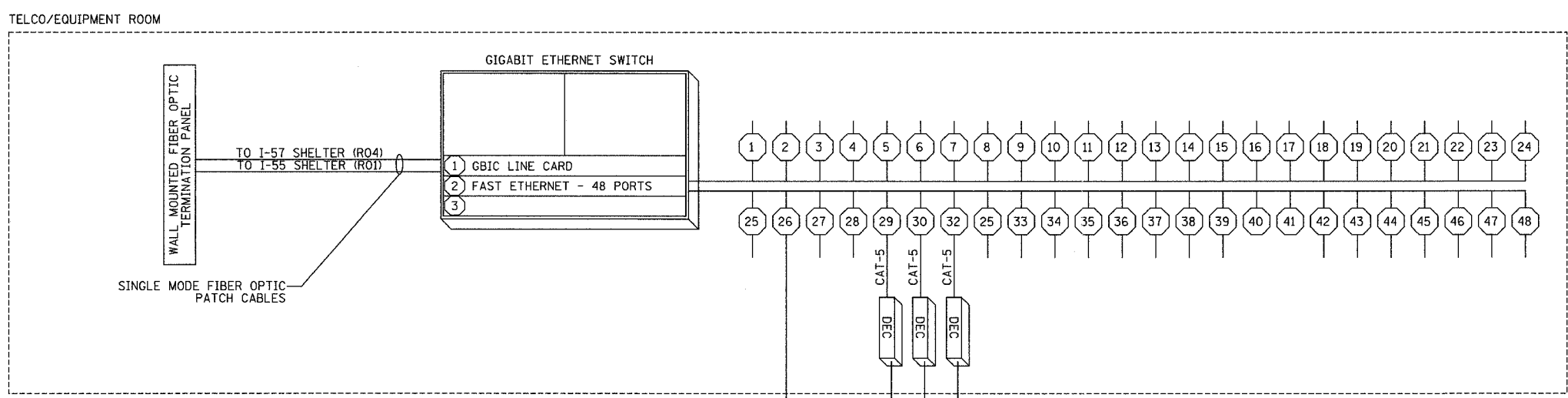
SCALE: NOT TO SCALE
 DATE: October 29, 2004

DRAWN BY: DHI
 CHECKED BY: JEZ

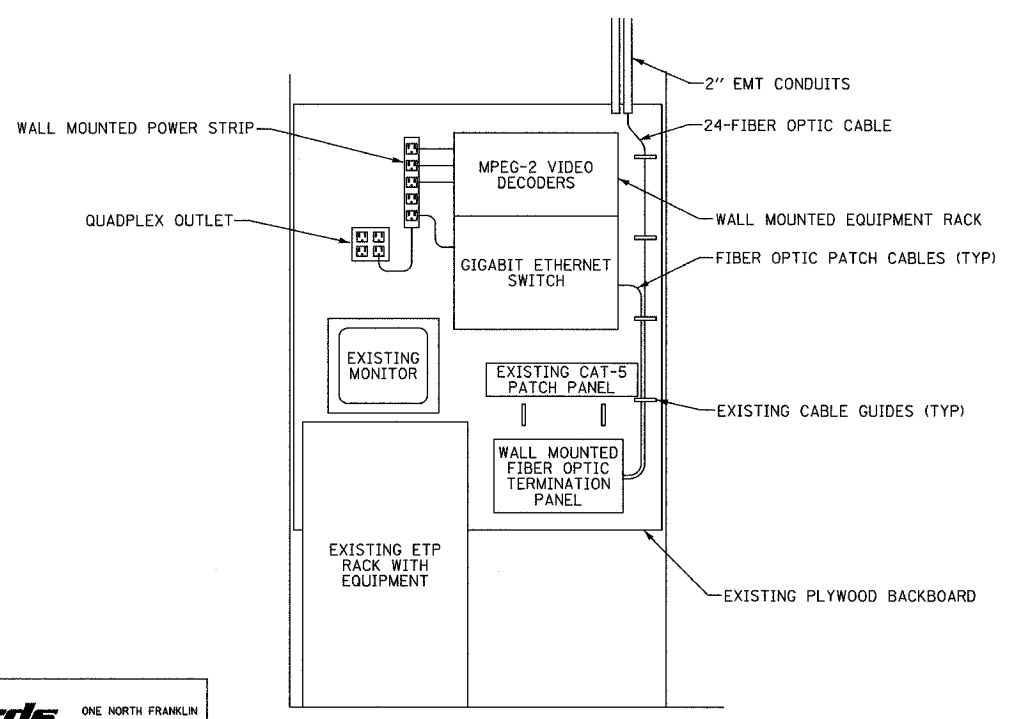
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

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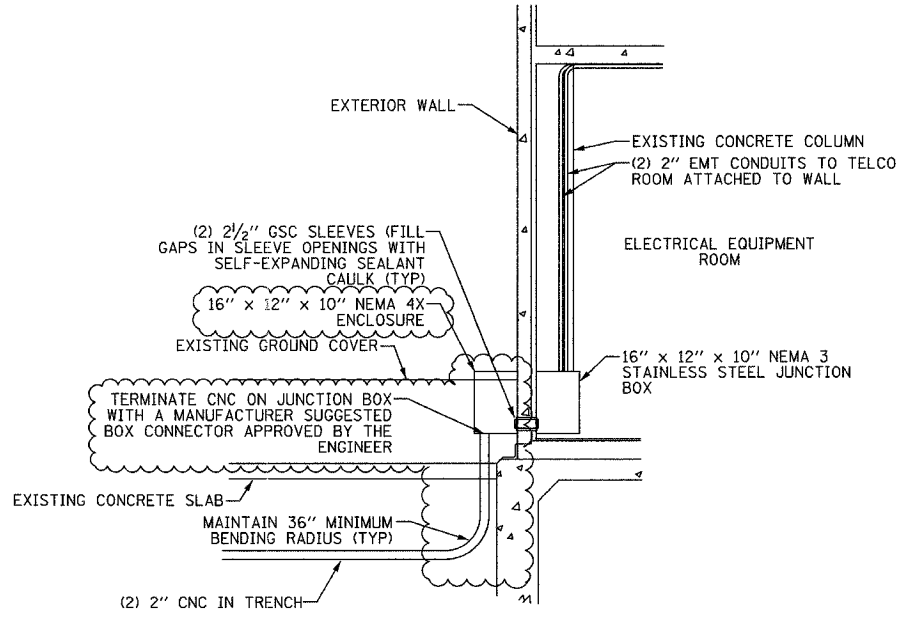
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	875
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62583				



EQUIPMENT WIRING DIAGRAM
NOT TO SCALE



TELCO ROOM EQUIPMENT ELEVATION
NOT TO SCALE



CONDUIT ENTRANCE DETAIL
NOT TO SCALE

NOTES:
1. ALL INSTALLED HARDWARE SHALL HAVE ENGRAVED NAMEPLATES WITH AN ATTACHMENT METHOD AND DESIGNATION APPROVED BY THE ENGINEER.

REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

EMERGENCY TRAFFIC PATROL (ETP)
WIRING DIAGRAM & DETAILS

SCALE: NOT TO SCALE
DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: JEZ

Edwards AND Kelcey
ONE NORTH FRANKLIN
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12/15/2004 04:52:54 PM P:\030103\0311\15\wcd\020322.e37

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	876
STA. TO STA.		FED. AID PROJECT	
62583			

FIBER OPTIC CABLE R02 R04, 1-48, DIST	TERMINATION	FUNCTION	COMMENTS
1N	SERIAL DEVICE SERVER	TX	
2N	SERIAL DEVICE SERVER	RX	
3N		BACKUP	
4N		BACKUP	
5N		BACKUP	
6N		BACKUP	
7N			
8N			
9N			
11N			
11N			
12N			
13N	SERIAL DEVICE SERVER	TX	
14N	SERIAL DEVICE SERVER	RX	
15N		BACKUP	
16N		BACKUP	
17N		BACKUP	
18N		BACKUP	
19N			
20N			
21N			
22N			
23N			
24N			
25N	SERIAL DEVICE SERVER	TX	
26N	SERIAL DEVICE SERVER	RX	
27N		BACKUP	
28N		BACKUP	
29N		BACKUP	
30N		BACKUP	
31N	SERIAL DEVICE SERVER	TX	
32N	SERIAL DEVICE SERVER	RX	
33N			
34N			
35N	SERIAL DEVICE SERVER	TX	
36N	SERIAL DEVICE SERVER	RX	
37N			
38N			
39N	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
40N			
41N	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
42N	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
43N			
44N	GIG-E SWITCH	TX	
45N	GIG-E SWITCH	RX	
46N	SERIAL DEVICE SERVER	TX	
47N	SERIAL DEVICE SERVER	RX	
48N			

I-57 SHELTER (R04) 48-FIBER DISTRIBUTION TERMINATION PANEL

FIBER OPTIC CABLE R03 R04, 1-48, DIST	TERMINATION	FUNCTION	COMMENTS
1N			
2N			
3N			
4N			
5N			
6N			
7N	SERIAL DEVICE SERVER	TX	
8N	SERIAL DEVICE SERVER	RX	
9N		BACKUP	
10N		BACKUP	
11N		BACKUP	
12N		BACKUP	
13N			
14N			
15N			
16N			
17N			
18N			
19N	SERIAL DEVICE SERVER	TX	
20N	SERIAL DEVICE SERVER	RX	
21N		BACKUP	
22N		BACKUP	
23N		BACKUP	
24N		BACKUP	
25N			
26N			
27N			
28N			
29N			
30N			
31N			
32N			
33N	SERIAL DEVICE SERVER	TX	
34N	SERIAL DEVICE SERVER	RX	
35N			
36N			
37N			
38N			
39N			
40N			
41N			
42N			
43N			
44N			
45N			
46N			
47N			
48N			

I-57 SHELTER (R04) 48-FIBER DISTRIBUTION TERMINATION PANEL



ONE NORTH FRANKLIN
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REVISIONS	
NAME	DATE

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

I-57 SHELTER (R04)
FIBER OPTIC TERMINATION TABLES
(SHEET 1 OF 4)

SCALE: NTS
DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: JEZ

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11/22/2004 04:25:53 PM

FIBER OPTIC CABLE R03 R04, I-96, BB	TERMINATION	FUNCTION	COMMENTS
1N	GIG-E SWITCH	TX	CCTV, DATA, AND SURVEILLANCE
2N	GIG-E SWITCH	RX	CCTV, DATA, AND SURVEILLANCE
3N			
4N			
5N	PATCH TO I-57 96F	TX	SONET
6N	PATCH TO I-57 96F	RX	SONET
7N	SERIAL DEVICE SERVER	TX	SHELTER ALARMS
8N	SERIAL DEVICE SERVER	RX	SHELTER ALARMS
9N	FIBER OPTIC AUDIO TRANSCEIVER	TX	I-57 HAR AUDIO
11N	FIBER OPTIC AUDIO TRANSCEIVER	RX	I-57 HAR AUDIO
11N			
12N			
13N	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	CCTV: DR-9A
14N			CCTV: DR-7B
15N			CCTV: DR-4B
16N	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	CCTV: DR-2B
17N			
18N			
19N			
20N			
21N			
22N			
23N			
24N			
25N			
26N			
27N			
28N			
29N			
30N			
31N			
32N			
33N			
34N			
35N			
36N			
37N			
38N			
39N			
40N			
41N			
42N			
43N			
44N			
45N			
46N			
47N			
48N			

FIBER OPTIC CABLE R03 R04, I-96, BB	TERMINATION	FUNCTION	COMMENTS
49N			
50N			
51N			
52N			
53N			
54N			
55N			
56N			
57N			
58N			
59N			
60N			
61N			
62N			
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95N			
96N			

I-57 SHELTER (R04) 96-FIBER BACKBONE TERMINATION TABLE

COMM-111



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
I-57 SHELTER (R04)
FIBER OPTIC TERMINATION TABLES
(SHEET 2 OF 4)
SCALE: NTS
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JZ

11/23/2004 10:11:23 AM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	878
STA. TO STA.		FED. AID PROJECT	
62583			

FIBER OPTIC CABLE DR/CH/BF XX, I-6	TERMINATION	FUNCTION	COMMENTS
1			
2			
3			CCTV: CH-0B (STRATEGIC CAMERA SITE)
4			
5			
6			
1	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
2			
3			CCTV: CH-0A (CCTV CAMERA SITE)
4			
5			
6			
1	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
2			
3			CCTV: BF-0B (CCTV CAMERA SITE)
4			
5			
6			
1			
2			
3			CCTV: BF-0C (STRATEGIC CAMERA SITE)
4			
5			
6			
1	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
2			
3			CCTV: BF-0D (CCTV CAMERA SITE)
4			
5			
6			
1			
2			
3			CCTV: BF-0A (STRATEGIC CAMERA SITE)
4			
5			
6			
1	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
2			
3			CCTV: DR-11 (CCTV CAMERA SITE)
4			
5			
6			
1			
2			
3			CCTV: DR-10C (STRATEGIC CAMERA SITE)
4			
5			
6			
1			
2			
3			CCTV: DR-10B (STRATEGIC CAMERA SITE)
4			
5			
6			
1	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
2			
3			CCTV: DR-10A (CCTV CAMERA SITE)
4			
5			
6			
1	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
2			
3			CCTV: DR-9C (CCTV CAMERA SITE)
4			
5			
6			
1			
2			
3			
4			
5			
6			

I-57 SHELTER (R04) CCTV TERMINATION TABLE

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
I-57 SHELTER (R04)
FIBER OPTIC TERMINATION TABLES
(SHEET 3 OF 4)
SCALE: NOT TO SCALE DRAWN BY: DHI
DATE: October 29, 2004 CHECKED BY: JZ

11/22/2004 04:25:54 PM

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	879
STA. TO STA.		FED. AID PROJECT	
62583			

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EXISTING FIBER OPTIC CABLE ALONG I-57	TERMINATION	FUNCTION	COMMENTS
1S			
2S			
3S			
4S			
5S			
6S			
7S			
8S			
9S			
11S			
11S			
12S			
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41S			
42S			
43S			
44S			
45S			
46S			
47S			
48S			

EXISTING FIBER OPTIC CABLE ALONG I-57	TERMINATION	FUNCTION	COMMENTS
49S			
50S			
51S			
52S			
53S			
54S			
55S			
56S			
57S			
58S			
59S			
60S			
61S			
62S			
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96S			

I-57 SHELTER (R04) 96-FIBER CABLE TERMINATION TABLE

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 I-57 SHELTER (R04)
 FIBER OPTIC TERMINATION TABLES
 (SHEET 4 OF 4)
 SCALE: NOT TO SCALE DRAWN BY: DH1
 DATE: October 29, 2004 CHECKED BY: JEZ

11/22/2004 04:25:55 PM

FIBER OPTIC CABLE R03 R04, 1-48, DIST	TERMINATION	FUNCTION	COMMENTS
1S	PATCH TO R03-R04 DIST FIBER 1N		SURVEILLANCE CIRCUIT: DR-R01-SURV-02
2S	PATCH TO R03-R04 DIST FIBER 2N		
3S			
4S			
5S			SURVEILLANCE CIRCUIT: DR-R04-SURV-04
6S			
7S	PATCH TO R01-R03 DIST FIBER 7N		
8S	PATCH TO R01-R03 DIST FIBER 8N		
9S			SURVEILLANCE CIRCUIT: DR-R01-SURV-06
10S			
11S			
12S			
13S	PATCH TO R01-R03 DIST FIBER 13N		SURVEILLANCE CIRCUIT: DR-R04-SURV-08
14S	PATCH TO R01-R03 DIST FIBER 14N		
15S			
16S			
17S			SURVEILLANCE CIRCUIT: DR-R01-SURV-10
18S			
19S	PATCH TO R01-R03 DIST FIBER 19N		
20S	PATCH TO R01-R03 DIST FIBER 20N		
21S			SURVEILLANCE CIRCUIT: DR-R01-DMS-02
22S			
23S			
24S			
25S	PATCH TO R01-R03 DIST FIBER 25N		SURVEILLANCE CIRCUIT: DR-R04-DMS-04
26S	PATCH TO R01-R03 DIST FIBER 26N		
27S			
28S			
29S			SURVEILLANCE CIRCUIT: DR-R01-DMS-06
30S			
31S	PATCH TO R01-R03 DIST FIBER 31N		
32S	PATCH TO R01-R03 DIST FIBER 32N		
33S	PATCH TO R01-R03 DIST FIBER 33N		
34S	PATCH TO R01-R03 DIST FIBER 34N		
35S	PATCH TO R01-R03 DIST FIBER 35N		
36S	PATCH TO R01-R03 DIST FIBER 36N		
37S			
38S			
39S			
40S			
41S			
42S			
43S			
44S			
45S			
46S			
47S			
48S			

EAST SHELTER (R03) 48-FIBER DISTRIBUTION TERMINATION TABLE

FIBER OPTIC CABLE R01 R03, 1-48, DIST	TERMINATION	FUNCTION	COMMENTS
1N	PATCH TO R03-R04 DIST FIBER 1S		SURVEILLANCE CIRCUIT: DR-R01-SURV-02
2N	PATCH TO R03-R04 DIST FIBER 2S		
3N			
4N			
5N			SURVEILLANCE CIRCUIT: DR-R04-SURV-04
6N			
7N	PATCH TO R03-R04 DIST FIBER 7S		
8N	PATCH TO R03-R04 DIST FIBER 8S		
9N			SURVEILLANCE CIRCUIT: DR-R01-SURV-06
10N			
11N			
12N			
13N	PATCH TO R03-R04 DIST FIBER 13S		SURVEILLANCE CIRCUIT: DR-R04-SURV-08
14N	PATCH TO R03-R04 DIST FIBER 14S		
15N			
16N			
17N			SURVEILLANCE CIRCUIT: DR-R01-SURV-10
18N			
19N	PATCH TO R03-R04 DIST FIBER 19S		
20N	PATCH TO R03-R04 DIST FIBER 20S		
21N			SURVEILLANCE CIRCUIT: DR-R01-DMS-02
22N			
23N			
24N			
25N	PATCH TO R03-R04 DIST FIBER 25S		SURVEILLANCE CIRCUIT: DR-R04-DMS-04
26N	PATCH TO R03-R04 DIST FIBER 26S		
27N			
28N			
29N			SURVEILLANCE CIRCUIT: DR-R01-DMS-06
30N			
31N	PATCH TO R03-R04 DIST FIBER 31S		
32N	PATCH TO R03-R04 DIST FIBER 32S		
33N	PATCH TO R03-R04 DIST FIBER 33S		
34N	PATCH TO R03-R04 DIST FIBER 34S		
35N	PATCH TO R03-R04 DIST FIBER 35S		
36N	PATCH TO R03-R04 DIST FIBER 36S		
37N			
38N			
39N			
40N			
41N			
42N			
43N			
44N			
45N			
46N			
47N			
48N			

EAST SHELTER (R03) 48-FIBER DISTRIBUTION TERMINATION TABLE



REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

EAST SHELTER (R03)
FIBER OPTIC TERMINATION TABLES
(SHEET 1 OF 4)

SCALE: NTS
DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: JEZ

COMM-114

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FIBER OPTIC CABLE R03 R04, I-96, BB	TERMINATION	FUNCTION	COMMENTS
1S	PATCH TO R01 R03 BB FIBER 1N		CCTV, DATA, AND SURVEILLANCE
2S	PATCH TO R01 R03 BB FIBER 2N		CCTV, DATA, AND SURVEILLANCE
3S			
4S			
5S	PATCH TO R01 R03 BB FIBER 5N		SONET
6S	PATCH TO R01 R03 BB FIBER 6N		SONET
7S	SERIAL DEVICE SERVER TX		HAR/SHELTER ALARMS
8S	SERIAL DEVICE SERVER RX		HAR/SHELTER ALARMS
9S	FIBER OPTIC AUDIO TRANSCEIVER TX		HAR AUDIO TO I-57 HAR
10S	FIBER OPTIC AUDIO TRANSCEIVER RX		HAR AUDIO TO I-57 HAR
11S			
12S			
13S	PATCH TO DR-9A R03 FIBER 1		CCTV: DR-9A
14S	PATCH TO DR-7C R03 FIBER 1		CCTV: DR-7B
15S	PATCH TO DR-4B R03 FIBER 1		CCTV: DR-4B
16S	PATCH TO DR-2B R03 FIBER 1		CCTV: DR-2B
17S			
18S			
19S			
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FIBER OPTIC CABLE R03 R04, I-96, BB	TERMINATION	FUNCTION	COMMENTS
49S			
50S			
51S			
52S			
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54S			
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56S			
57S			
58S			
59S			
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EAST SHELTER (R03) 96-FIBER BACKBONE TERMINATION TABLE

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REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

EAST SHELTER (R03)
FIBER OPTIC TERMINATION TABLES
(SHEET 2 OF 4)

SCALE: NTS DRAWN BY: DHI
DATE: October 29, 2004 CHECKED BY: JEZ

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FIBER OPTIC CABLE R01 R03, I-96, BB	TERMINATION	FUNCTION	COMMENTS
1N	PATCH TO R03 R04 FIBER 1		CCTV, DATA, AND SURVEILLANCE
2N	PATCH TO R03 R04 FIBER 2		CCTV, DATA, AND SURVEILLANCE
3N			
4N			
5N	PATCH TO R03 R04 FIBER 5		SONET
6N	PATCH TO R03 R04 FIBER 6		SONET
7N	SERIAL DEVICE SERVER	TX	HAR/SHELTER ALARMS
8N	SERIAL DEVICE SERVER	RX	HAR/SHELTER ALARMS
9N	FIBER OPTIC AUDIO TRANSCEIVER	TX	HAR AUDIO TO ROOSEVELT HAR
11N	FIBER OPTIC AUDIO TRANSCEIVER	RX	HAR AUDIO TO ROOSEVELT HAR
12N			
13N	PATCH TO DR-8B R03 FIBER 1		CCTV: DR-8B
14N	PATCH TO DR-7E R03 FIBER 1		CCTV: DR-7E
15N	PATCH TO DR-7C R03 FIBER 1		CCTV: DR-7C
16N	PATCH TO DR-6D R03 FIBER 1		CCTV: DR-6D
17N	PATCH TO DR-6B R03 FIBER 1		CCTV: DR-6B
18N	PATCH TO DR-4C R03 FIBER 1		CCTV: DR-4C
19N	PATCH TO DR-3D R03 FIBER 1		CCTV: DR-3D
20N			
21N			
22N			
23N			
24N			
25N			
26N			
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48N			

FIBER OPTIC CABLE R01 R03, I-96, BB	TERMINATION	FUNCTION	COMMENTS
49N			
50N			
51N			
52N			
53N			
54N			
55N			
56N			
57N			
58N			
59N			
60N			
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EAST SHELTER (R03) 96-FIBER BACKBONE TERMINATION TABLE

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REVISIONS	
NAME	DATE
REVISION 1	12/17/04

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

EAST SHELTER (R03)
FIBER OPTIC TERMINATION TABLES
(SHEET 3 OF 4)

SCALE: NTS
DATE: October 29, 2004

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	883
STA. 62583		TO STA.	
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT		

FIBER OPTIC CABLE DR-XX R03, 1-6	TERMINATION	FUNCTION	COMMENTS
1	PATCH TO R03-R04 FIBER 13, BB	CCTV VIDEO TX/RX	CCTV: DR-9A (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01 R03 FIBER 13, BB	CCTV VIDEO TX/RX	CCTV: DR-8B (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01 R03 FIBER 14, BB	CCTV VIDEO TX/RX	CCTV: DR-7E (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01 R03 FIBER 15, BB	CCTV VIDEO TX/RX	CCTV: DR-7C (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R03 R04 FIBER 14, BB	CCTV VIDEO TX/RX	CCTV: DR-7B (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R03 FIBER 16, BB	CCTV VIDEO TX/RX	CCTV: DR-6D (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R03 FIBER 17, BB	CCTV VIDEO TX/RX	CCTV: DR-6B (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R03 FIBER 18, BB	CCTV VIDEO TX/RX	CCTV: DR-4C (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R03-R04 FIBER 15, BB	CCTV VIDEO TX/RX	CCTV: DR-4B (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R03 FIBER 19, BB	CCTV VIDEO TX/RX	CCTV: DR-3D (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R03-R04 FIBER 16, BB	CCTV VIDEO TX/RX	CCTV: DR-2B (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1			
2			
3			
4			
5			
6			

EAST SHELTER (R03) CCTV FIBER TERMINATION TABLE

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REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 EAST SHELTER (R03)
 FIBER OPTIC TERMINATION TABLES
 (SHEET 4 OF 4)
 SCALE: NTS
 DATE: October 29, 2004
 DRAWN BY: DH1
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COMM-117

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FIBER OPTIC CABLE R01 R02, 1-4B, DIST R02 R05, 1-12, DIST	TERMINATION	FUNCTION	COMMENTS
1N	PATCH TO R02-R04 DIST FIBER 1S		
2N	PATCH TO R02-R04 DIST FIBER 2S		
3N			SURVEILLANCE CIRCUIT: DR-R04-SURV-01
4N			
5N			
6N			
7N	PATCH TO R02-R04 DIST FIBER 7S		
8N	PATCH TO R02-R04 DIST FIBER 8S		
9N			SURVEILLANCE CIRCUIT: DR-R01-SURV-03
11N			
12N			
13N	PATCH TO R02-R04 DIST FIBER 13S		
14N	PATCH TO R02-R04 DIST FIBER 14S		
15N			SURVEILLANCE CIRCUIT: DR-R04-SURV-05
16N			
17N			
18N			
19N	PATCH TO R02-R04 DIST FIBER 19S		
20N	PATCH TO R02-R04 DIST FIBER 20S		
21N			SURVEILLANCE CIRCUIT: DR-R01-SURV-07
22N			
23N			
24N			
25N	PATCH TO R02-R04 DIST FIBER 25S		
26N	PATCH TO R02-R04 DIST FIBER 26S		
27N			SURVEILLANCE CIRCUIT: DR-R04-SURV-09
28N			
29N			
30N			
31N	PATCH TO R02-R04 DIST FIBER 31S		SURVEILLANCE CIRCUIT: DR-R04-DMS-01
32N	PATCH TO R02-R04 DIST FIBER 32S		SURVEILLANCE CIRCUIT: DR-R01-DMS-03
33N	PATCH TO R02-R04 DIST FIBER 33S		SURVEILLANCE CIRCUIT: DR-R04-DMS-05
34N	PATCH TO R02-R04 DIST FIBER 34S		CCTV: DR-9B
35N	PATCH TO R02-R04 DIST FIBER 35S		CCTV: DR-8A
36N	PATCH TO R02-R04 DIST FIBER 36S		CCTV: DR-6C
37N	PATCH TO DR-9B R02 FIBER 1		CCTV: DR-5A
38N	PATCH TO DR-8A R02 FIBER 1		CCTV: DR-4A
39N	PATCH TO DR-6C R02 FIBER 1		CCTV: DR-3B
40N	PATCH TO DR-5A R02 FIBER 1		
41N	PATCH TO DR-4A R02 FIBER 1		
42N	PATCH TO DR-3B R02 FIBER 1		
43N			
44N			
45N			
46N	SERIAL DEVICE SERVER	TX	SHELTER ALARMS
47N	SERIAL DEVICE SERVER	RX	SHELTER ALARMS
48N			
49N	PATCH TO R02-R04 DIST FIBER 44S		
50N	PATCH TO R02-R04 DIST FIBER 45S		
51N			
52N			
53N			
54N			
55N			EMERGENCY TRAFFIC PATROL
56N			
57N			
58N			
59N			
60N			

MAINTENANCE YARD SHELTER (R02) 60-FIBER DISTRIBUTION TERMINATION TABLE

FIBER OPTIC CABLE R02 R04, 1-4B, DIST	TERMINATION	FUNCTION	COMMENTS
1S	PATCH TO R01-R02 DIST FIBER 1N		
2S	PATCH TO R01-R02 DIST FIBER 2N		
3S			SURVEILLANCE CIRCUIT: DR-R04-SURV-01
4S			
5S			
6S			
7S	PATCH TO R01-R02 DIST FIBER 7N		
8S	PATCH TO R01-R02 DIST FIBER 8N		
9S			SURVEILLANCE CIRCUIT: DR-R01-SURV-03
10S			
11S			
12S			
13S	PATCH TO R01-R02 DIST FIBER 13N		
14S	PATCH TO R01-R02 DIST FIBER 14N		
15S			SURVEILLANCE CIRCUIT: DR-R04-SURV-05
16S			
17S			
18S			
19S	PATCH TO R01-R02 DIST FIBER 20N		
20S	PATCH TO R01-R02 DIST FIBER 21N		
21S			SURVEILLANCE CIRCUIT: DR-R01-SURV-07
22S			
23S			
24S			
25S	PATCH TO R01-R02 DIST FIBER 25N		
26S	PATCH TO R01-R02 DIST FIBER 26N		
27S			SURVEILLANCE CIRCUIT: DR-R04-SURV-09
28S			
29S			
30S			
31S	PATCH TO R01-R02 DIST FIBER 31N		SURVEILLANCE CIRCUIT: DR-R04-DMS-01
32S	PATCH TO R01-R02 DIST FIBER 32N		SURVEILLANCE CIRCUIT: DR-R01-DMS-03
33S	PATCH TO R01-R02 DIST FIBER 33N		SURVEILLANCE CIRCUIT: DR-R04-DMS-05
34S	PATCH TO R01-R02 DIST FIBER 34N		CCTV: DR-8C
35S	PATCH TO R01-R02 DIST FIBER 35N		CCTV: DR-7D
36S	PATCH TO R01-R02 DIST FIBER 36N		CCTV: DR-7A
37S	PATCH TO DR-8C R02 FIBER 1		CCTV: DR-6A
38S	PATCH TO DR-7D R02 FIBER 1		CCTV: DR-5B
39S	PATCH TO DR-7A R02 FIBER 1		CCTV: DR-3C
40S	PATCH TO DR-6A R02 FIBER 1		CCTV: DR-3A
41S	PATCH TO DR-5B R02 FIBER 1		
42S	PATCH TO DR-5C R02 FIBER 1		
43S	PATCH TO DR-3A R02 FIBER 1		
44S	PATCH TO R01-R02 DIST FIBER 49N		EMERGENCY TRAFFIC PATROL
45S	PATCH TO R01-R02 DIST FIBER 50N		EMERGENCY TRAFFIC PATROL
46S	SERIAL DEVICE SERVER	TX	SHELTER ALARMS
47S	SERIAL DEVICE SERVER	RX	SHELTER ALARMS
48S			

MAINTENANCE YARD SHELTER (R02) 48-FIBER DISTRIBUTION TERMINATION TABLE

COMM-118



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REVISIONS	
NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
MAINTENANCE YARD SHELTER (R02)
FIBER OPTIC TERMINATION TABLES
(SHEET 1 OF 3)
SCALE: NTS
DATE: October 29, 2004
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CHECKED BY: JEZ

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-031I	COOK	976	885
STA.	TO STA.		
FED. ROAD DIST. NO. - ILLINOIS	FED. AID PROJECT		
62583			

FIBER OPTIC CABLE DR-XX R02, 1-6	TERMINATION	FUNCTION	COMMENTS
1	PATCH TO R01-R02 DIST FIBER 37N	CCTV VIDEO TX/RX	CCTV: DR-9B (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R02-R04 DIST FIBER 37S	CCTV VIDEO TX/RX	CCTV: DR-8C (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R02 DIST FIBER 38N	CCTV VIDEO TX/RX	CCTV: DR-8A (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R02-R04 DIST FIBER 38S	CCTV VIDEO TX/RX	CCTV: DR-7D (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R02-R04 DIST FIBER 39S	CCTV VIDEO TX/RX	CCTV: DR-7A (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R02 DIST FIBER 39N	CCTV VIDEO TX/RX	CCTV: DR-6C (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R02-R04 DIST FIBER 40S	CCTV VIDEO TX/RX	CCTV: DR-6A (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R02-R04 DIST FIBER 41S	CCTV VIDEO TX/RX	CCTV: DR-5B (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R02 DIST FIBER 40N	CCTV VIDEO TX/RX	CCTV: DR-5A (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R02 DIST FIBER 41N	CCTV VIDEO TX/RX	CCTV: DR-4A (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			

MAINTENANCE YARD SHELTER (R02) CCTV FIBER TERMINATION TABLE

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
MAINTENANCE YARD SHELTER (R02)
FIBER OPTIC TERMINATION TABLES
(SHEET 2 OF 3)
SCALE: NTS
DATE: October 29, 2004
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-0311	COOK	976	886
STA. TO STA.		FED. AID PROJECT	
62583			

FIBER OPTIC CABLE CH/BF/DR XX R02, 1-6	TERMINATION	FUNCTION	COMMENTS
1	PATCH TO R02-R04 DIST FIBER 42S	CCTV VIDEO TX/RX	CCTV: DR-3C (CCTV CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R01-R02 DIST FIBER 42N	CCTV VIDEO TX/RX	CCTV: DR-3B (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			
1	PATCH TO R02-R04 DIST FIBER 43S	CCTV VIDEO TX/RX	CCTV: DR-3A (STRATEGIC CAMERA SITE)
2			
3			
4			
5			
6			

MAINTENANCE YARD SHELTER (R02) CCTV FIBER TERMINATION TABLE

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AND Kelcey**
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
MAINTENANCE YARD SHELTER (R02)
FIBER OPTIC TERMINATION TABLES
(SHEET 3 OF 3)
SCALE: NTS
DATE: October 29, 2004
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FIBER OPTIC CABLE R01 R02, 1-48, DIST R01 R05, 1-12, DIST	TERMINATION	FUNCTION	COMMENTS
1S			
2S			
3S			
4S			
5S			
6S			
7S	SERIAL DEVICE SERVER	TX	
8S	SERIAL DEVICE SERVER	RX	
9S			
10S			
11S			
12S			
13S			
14S			
15S			
16S			
17S			
18S			
19S	SERIAL DEVICE SERVER	TX	
20S	SERIAL DEVICE SERVER	RX	
21S			
22S			
23S			
24S			
25S			
26S			
27S			
28S			
29S			
30S			
31S			
32S			
33S	SERIAL DEVICE SERVER	TX	
34S	SERIAL DEVICE SERVER	RX	
35S			
36S			
37S			
38S	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	
39S			
40S			
41S			
42S			
43S			
44S			
45S			
46S	SERIAL DEVICE SERVER	TX	
47S	SERIAL DEVICE SERVER	RX	
48S			
49S	GIG-E SWITCH	TX	
50S	GIG-E SWITCH	RX	
51S			
52S			
53S			
54S			
55S			
56S			
57S			
58S			
59S			
60S			

I-55 SHELTER (R01) 60-FIBER DISTRIBUTION TERMINATION PANEL

FIBER OPTIC CABLE R01 R03, 1-48, DIST	TERMINATION	FUNCTION	COMMENTS
1S	SERIAL DEVICE SERVER	TX	
2S	SERIAL DEVICE SERVER	RX	
3S			
4S			
5S			
6S			
7S			
8S			
9S			
10S			
11S			
12S			
13S	SERIAL DEVICE SERVER	TX	
14S	SERIAL DEVICE SERVER	RX	
15S			
16S			
17S			
18S			
19S			
20S			
21S			
22S			
23S			
24S			
25S	SERIAL DEVICE SERVER	TX	
26S	SERIAL DEVICE SERVER	RX	
27S			
28S			
29S			
30S			
31S	SERIAL DEVICE SERVER	TX	
32S	SERIAL DEVICE SERVER	RX	
33S			
34S			
35S	SERIAL DEVICE SERVER	TX	
36S	SERIAL DEVICE SERVER	RX	
37S			
38S			
39S			
40S			
41S			
42S			
43S			
44S			
45S			
46S			
47S			
48S			

I-55 SHELTER (R01) 48-FIBER DISTRIBUTION TERMINATION PANEL



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NAME	DATE
REVISION 1	12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
I-55 SHELTER (R01)
FIBER OPTIC TERMINATION TABLES
(SHEET 1 OF 6)
SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: DHI
CHECKED BY: JEZ

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FIBER OPTIC CABLE R01 R03, 1-96, BB	TERMINATION	FUNCTION	COMMENTS
1S	GIG-E SWITCH	TX	CCTV, DATA, AND SURVEILLANCE
2S	GIG-E SWITCH	RX	CCTV, DATA, AND SURVEILLANCE
3S			
4S			
5S	SONET MULTIPLEX	TX	SONET
6S	SONET MULTIPLEX	RX	SONET
7S	SERIAL DEVICE SERVER	TX	HAR/SHELTER ALARMS
8S	SERIAL DEVICE SERVER	RX	HAR SHELTER ALARMS
9S	PATCH TO EXISTING DAN RYAN FIBER XN		HAR AUDIO TO ROOSEVELT HAR
10S	PATCH TO EXISTING DAN RYAN FIBER XN		HAR AUDIO TO ROOSEVELT HAR
11S			
12S			
13S			CCTV: DR-8B
14S			CCTV: DR-7E
15S	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	CCTV: DR-7C
16S			CCTV: DR-6D
17S	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	CCTV: DR-6B
18S	FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	CCTV: DR-4C
19S			CCTV: DR-3D
20S			
21S			
22S			
23S			
24S			
25S			
26S			
27S			
28S			
29S			
30S			
31S			
32S			
33S			
34S			
35S			
36S			
37S			
38S			
39S			
40S			
41S			
42S			
43S			
44S			
45S			
46S			
47S			
48S			

FIBER OPTIC CABLE R01 R03, 1-96, BB	TERMINATION	FUNCTION	COMMENTS
49S			
50S			
51S			
52S			
53S			
54S			
55S			
56S			
57S			
58S			
59S			
60S			
61S			
62S			
63S			
64S			
65S			
66S			
67S			
68S			
69S			
70S			
71S			
72S			
73S			
74S			
75S			
76S			
77S			
78S			
79S			
80S			
81S			
82S			
83S			
84S			
85S			
86S			
87S			
88S			
89S			
90S			
91S			
92S			
93S			
94S			
95S			
96S			

I-55 SHELTER (R01) 96-FIBER BACKBONE TERMINATION PANEL

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NOTES:
1. CONTRACTOR SHALL COORDINATE FIBER ASSIGNMENTS WHEN PATCHING TO EXISTING DAN RYAN FIBER RUNNING TO THE HALSTED FIBER INTERCONNECT SHELTER.

REVISIONS	
NAME	DATE

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

I-55 SHELTER (R01)
FIBER OPTIC TERMINATION TABLES
(SHEET 2 OF 6)

SCALE: NTS
DATE: October 29, 2004

DRAWN BY: DHI
CHECKED BY: JEZ

11/23/2004 10:31:09 AM

EXISTING FIBER OPTIC CABLE 'N TO HALSTED INTER.	TERMINATION	FUNCTION	COMMENTS
1N		CMS CONTROLS	CMS-7 CONTROLS
2N			
3N			
4N			
5N			
6N			
7N			
8N			
9N			
11N			
11N			
12N			
13N			
14N			
15N			
16N			
17N			
18N			
19N			
20N			
21N	EXISTING T1 EQUIPMENT	TX	I-55 T1 SURVEILLANCE DATA KING DRIVE TO TRI-STATE
22N	EXISTING T1 EQUIPMENT	RX	I-55 T1 SURVEILLANCE DATA KING DRIVE TO TRI-STATE
23N		CMS CONTROLS	CMS-23 CONTROLS
24N		CMS CONTROLS	CMS-5 CONTROLS
25N			
26N			
27N			
28N			
29N			
30N			
31N			
32N			
33N			
34N			
35N			
36N			
37N			
38N			
39N			
40N			
41N			
42N			
43N			
44N			
45N			
46N			
47N			
48N			

EXISTING FIBER OPTIC CABLE 'N TO HALSTED INTER.	TERMINATION	FUNCTION	COMMENTS
49N			
50N			
51N			
52N			
53N			
54N			
55N			
56N			
57N			
58N			
59N			
60N			
61N			
62N			
63N			
64N			
65N			
66N			
67N			
68N			
69N			
70N			
71N			
72N			
73N			
74N			
75N			
76N			
77N			
78N			
79N			
80N			
81N			
82N			
83N			
84N			
85N			
86N			
87N			
88N			
89N			
90N			
91N			
92N			
93N			
94N			
95N			
96N			

EXISTING DAN RYAN 96-FIBER CABLE TERMINATION TABLE

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REVISIONS	
NAME	DATE

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

I-55 SHELTER (R01)
FIBER OPTIC TERMINATION TABLES
(SHEET 4 OF 6)

SCALE: NOT TO SCALE DRAWN BY: DH1
DATE: October 29, 2004 CHECKED BY: JEZ

11/22/2004 04:25:55 PM

EXISTING I-55 FIBER OPTIC CABLE TO KING DRIVE	TERMINATION	FUNCTION	COMMENTS
1E	PATCH TO EXISTING DAN RYAN FIBER IN	CMS CONTROLS	CMS-7 CONTROLS
2E			
3E			
4E			
5E			
6E			
7E			
8E			
9E			
11E			
11E			
12E			
13E			
14E			
15E			
16E			
17E			
18E			
19E			
20E			
21E			
22E			
23E			
24E			
25E			
26E			
27E			
28E			
29E			
30E			
31E			
32E			
33E			
34E			
35E			
36E			
37E			
38E			
39E			
40E			
41E			
42E			
43E			
44E			
45E			
46E			
47E			
48E			

EXISTING I-55 FIBER OPTIC CABLE TO WILLOW SPRINGS	TERMINATION	FUNCTION	COMMENTS
1W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET R49A WILLOW SPRINGS ROAD (CAMERA #4)
2W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET R54 LAGRANGE ROAD (CAMERA #5)
3W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 44 8600 WEST (CAMERA #6)
4W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 40 FIRST AVENUE (CAMERA #7)
5W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 27 7500 WEST (CAMERA #8)
6W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 21 EAST OF HARLEM (CAMERA #9)
7W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 26 EAST OF CENTRAL (CAMERA #10)
8W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 13 EAST OF CICERO (CAMERA #11)
9W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET CMS-23 WEST OF FIRST AVE (CAMERA #12)
11W			
11W		CMS CONTROLS	CMS-23 CONTROLS
12W			
13W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET R47 LAGRANGE ROAD (CAMERA #13)
14W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET R43 9700 WEST (CAMERA #14)
15W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 42 B&O RAILROAD (CAMERA #15)
16W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 38 FIRST AVENUE (CAMERA #16)
17W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 23 HARLEM (CAMERA #17)
18W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 32 WEST OF CENTRAL (CAMERA #18)
19W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET 15 CICERO AVENUE (CAMERA #19)
20W	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO RX/TX	CCTV CABINET CMS-5 WEST OF KEDZIE (CAMERA #20)
21W			
22W		CMS CONTROLS	CMS-5 CONTROLS
23W			
24W			
25W			
26W			
27W			
28W			
29W			
30W			
31W			
32W			
33W			
34W			
35W			
36W			
37W			
38W			
39W			
40W			
41W			
42W			
43W			
44W			
45W			
46W			
47W			
48W			

EXISTING I-55 FIBER OPTIC CABLE TERMINATION TABLES

- NOTES:
- EXISTING TSC FIBER OPTIC VIDEO RECEIVERS RELOCATED FROM TSC TO THE I-55 SHELTER AS PART OF THE WORK UNDER THIS CONTRACT.
 - FIBER ASSIGNMENTS SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 I-55 SHELTER (R01)
 FIBER OPTIC TERMINATION TABLES
 (SHEET 5 OF 6)
 SCALE: NOT TO SCALE DRAWN BY: DHI
 DATE: October 29, 2004 CHECKED BY: JEZ



COMM-125

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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2003-03II	COOK	976	892
STA.	TO STA.		
FED. ROAD DIST. NO. - ILLINOIS	FED. AID PROJECT		
62583			

EXISTING FIBER OPTIC CABLE	TERMINATION	FUNCTION	COMMENTS
1	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	BEO CCTV I-55/DAN RYAN INTERCHANGE (CAMERAS 1, 2, 3, 4)
2	EXISTING FIBER OPTIC VIDEO RECEIVER	CCTV VIDEO TX/RX	BEO CCTV I-55/DAN RYAN INTERCHANGE (CAMERAS 5, 6, 7)
3			
4			
5	RS-422 CAMERA CONTROL TRANSCEIVER	CAMERA CONTROL	
6			
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EXISTING MICROWAVE HUT 48F CABLE TERMINATION TABLE

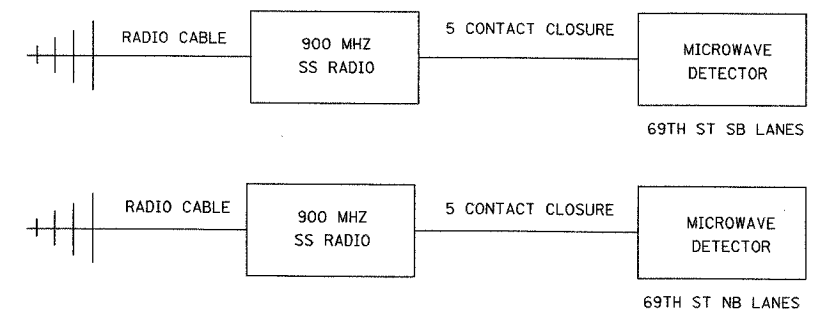
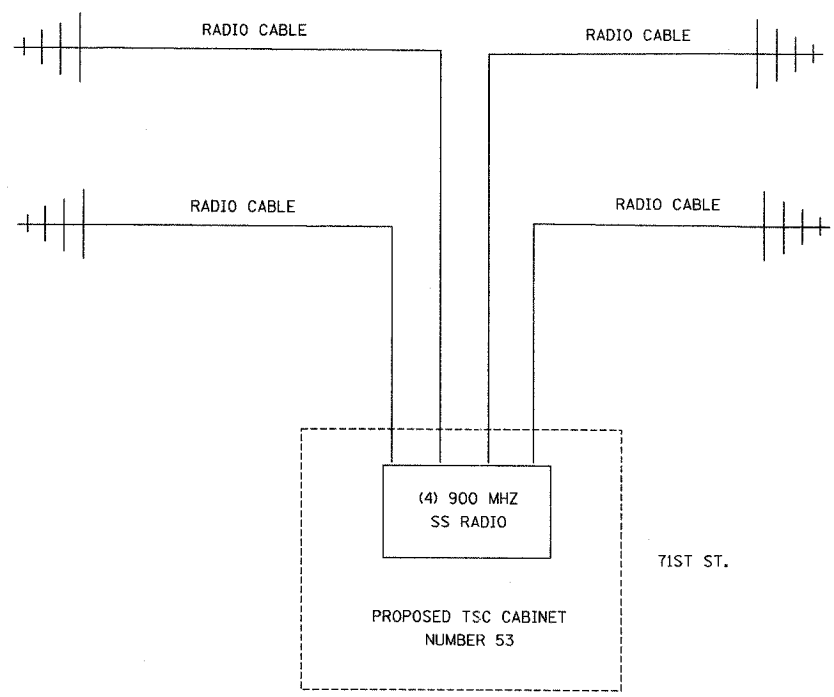
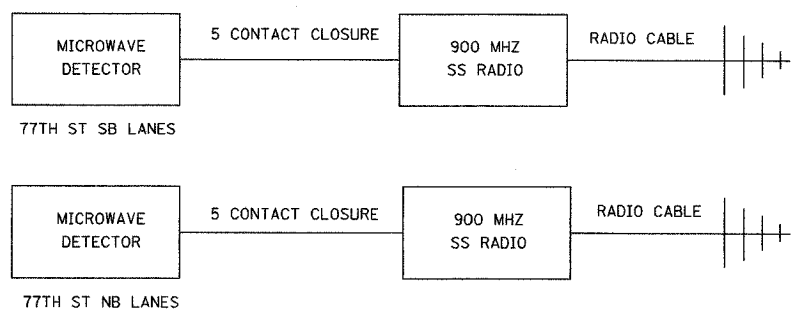
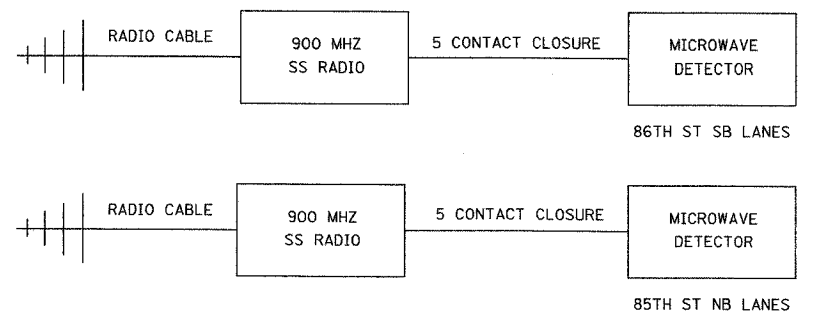
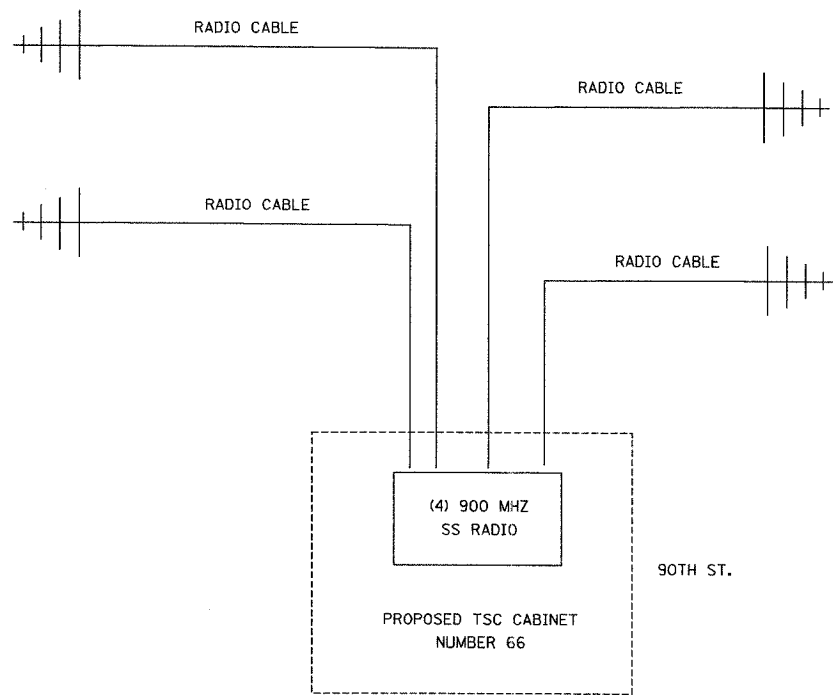
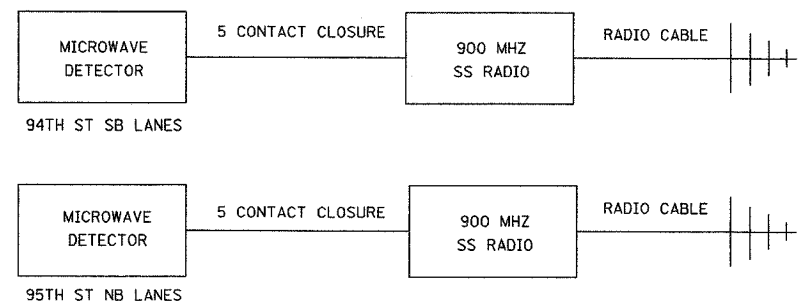
NOTES:

- EXISTING TSC FIBER OPTIC VIDEO RECEIVERS RELOCATED FROM TSC TO THE I-55 SHELTER AS PART OF THE WORK UNDER THIS CONTRACT.
- FIBER ASSIGNMENTS SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 I-55 SHELTER (R01)
 FIBER OPTIC TERMINATION TABLES
 (SHEET 6 OF 6)
 SCALE: NOT TO SCALE DRAWN BY: DH1
 DATE: October 29, 2004 CHECKED BY: JEZ

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	893
STA.		TO STA.		
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		
62583				



NOTE:
1. SEE SHEETS DT-53, DT-54, DT-55 FOR SITE INSTALLATION DETAILS.

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

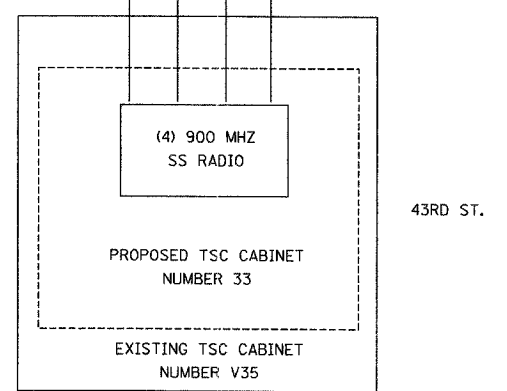
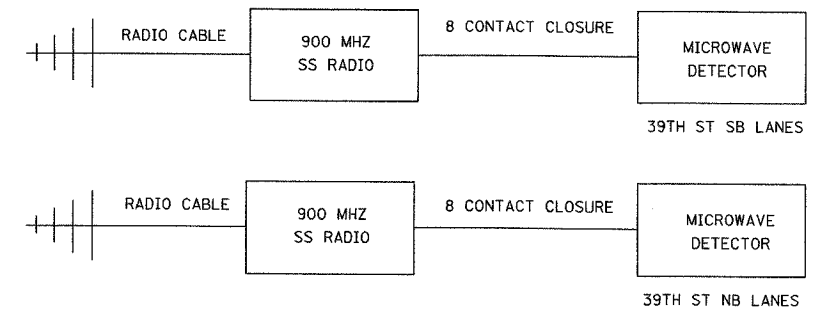
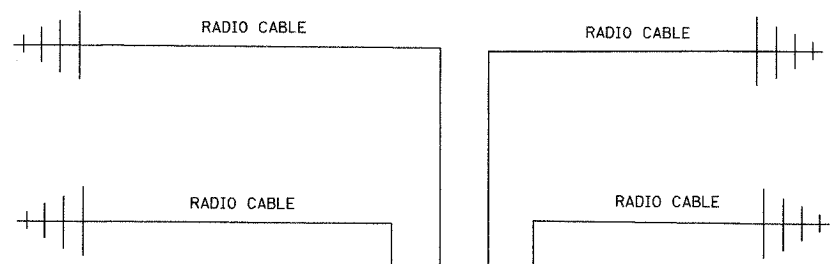
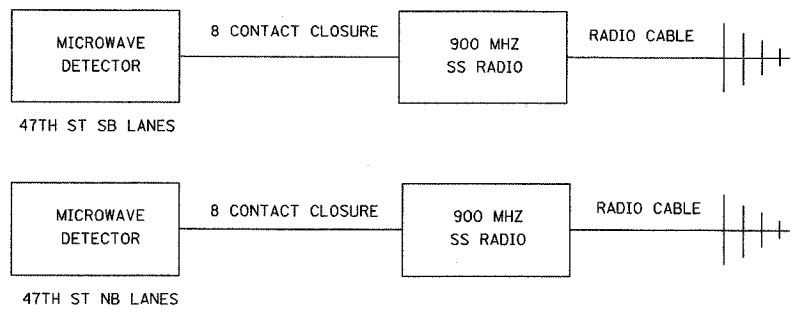
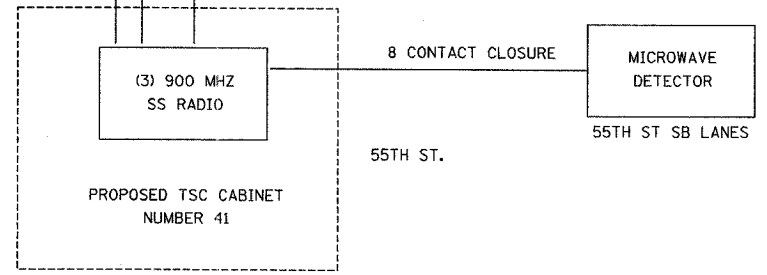
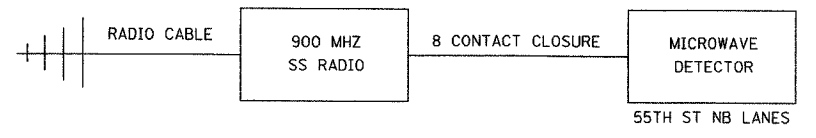
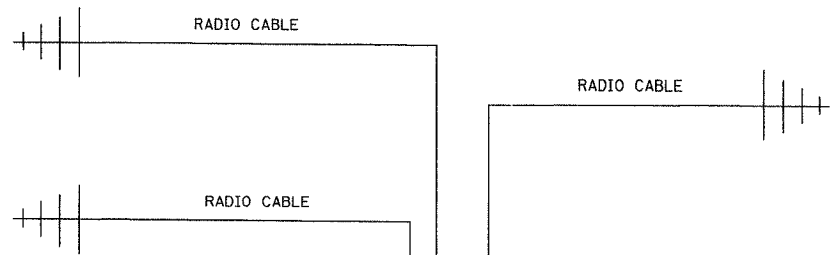
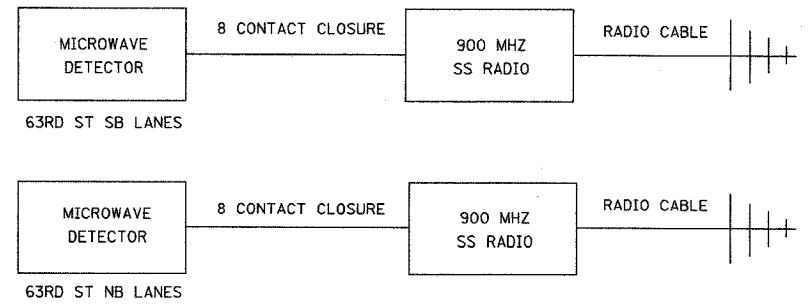
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
TEMPORARY DETECTION
COMMUNICATIONS LAYOUT
(Sheet 1 of 3)
SCALE: N.T.S. DRAWN BY: DHI
DATE: October 29, 2004 CHECKED BY: JEZ

COMM-127

10/19/2004 04:49:09 PM P:\03009035\100000020352a.rvt

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-031I	COOK	976	294
STA.		TO STA.		
FED. ROAD DIST. NO. 62583		ILLINOIS FED. AID PROJECT		



- NOTE:
- SEE SHEETS DT-53, DT-54, DT-55 FOR SITE INSTALLATION DETAILS.
 - EXISTING TSC CABINETS TO BE UTILIZED UNTIL REMOVAL.

REVISIONS	
NAME	DATE

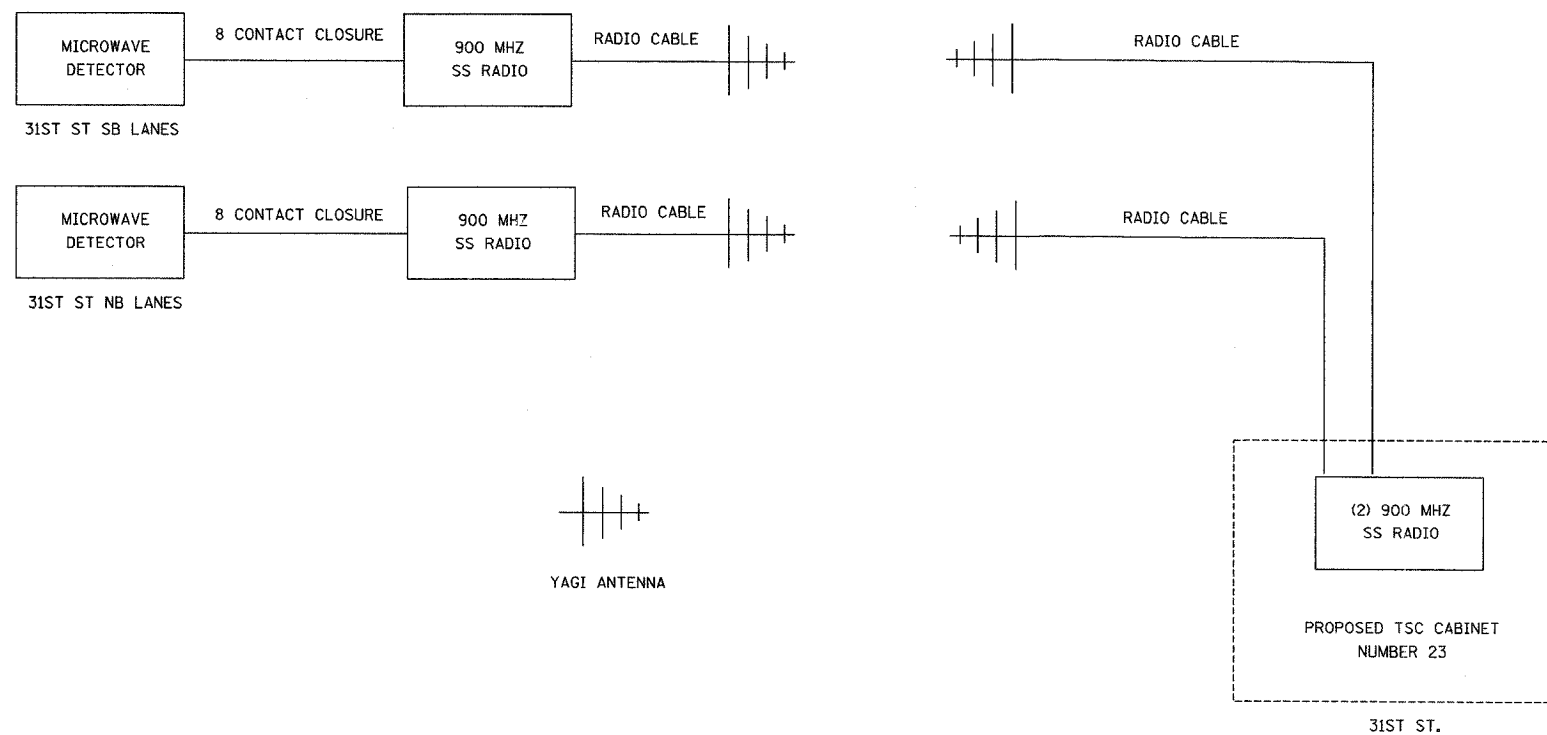
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31st STREET to I-57
 TEMPORARY DETECTION
 COMMUNICATIONS LAYOUT
 (Sheet 2 of 3)
 SCALE: N.T.S. DRAWN BY: DHI
 DATE: October 29, 2004 CHECKED BY: JEZ

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

COMM-128

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	895
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				



NOTE:
1. SEE SHEETS DT-53, DT-54, DT-55 FOR SITE INSTALLATION DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57
TEMPORARY DETECTION
COMMUNICATIONS LAYOUT
(Sheet 3 of 3)
SCALE: N.T.S. DRAWN BY: DHI
DATE: October 29, 2004 CHECKED BY: JEZ

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

COMM-129

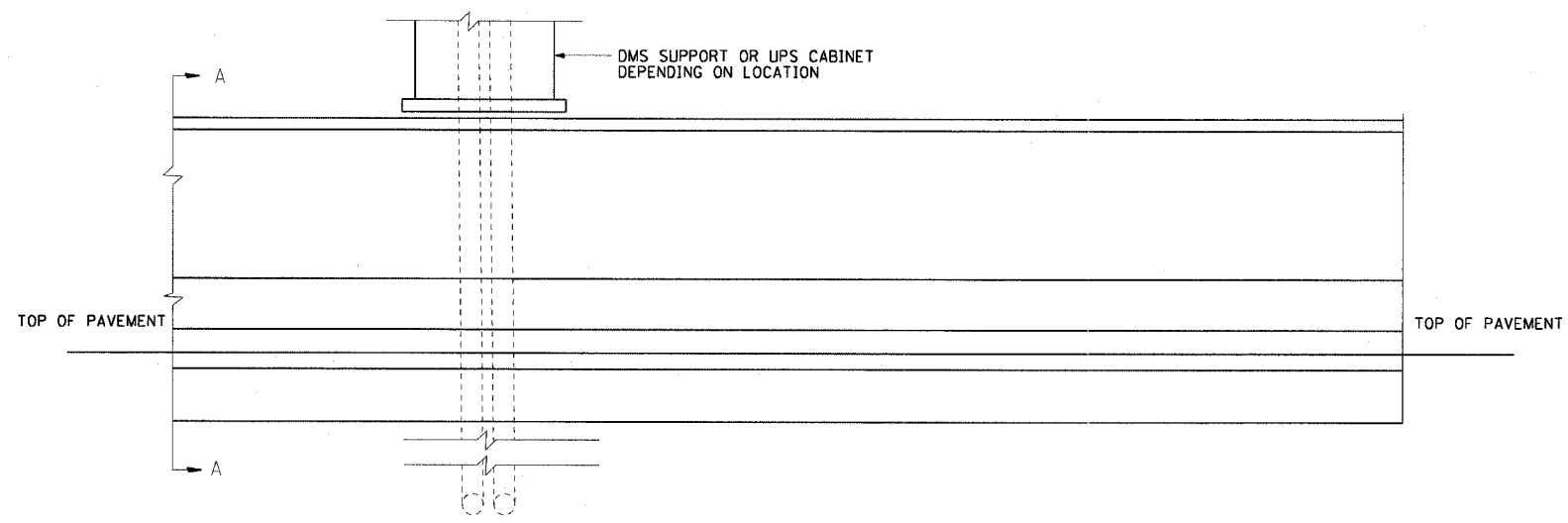
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F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	896
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

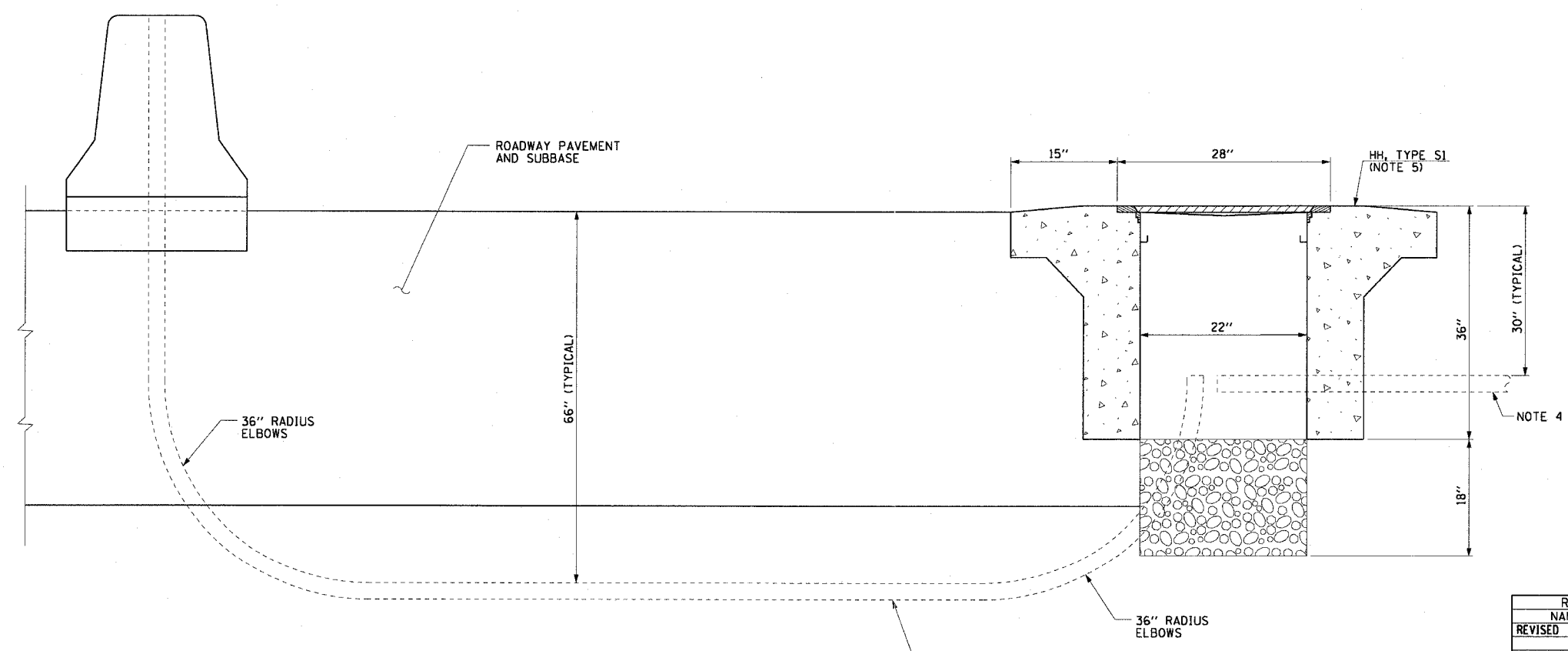
62583

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- UNLESS OTHERWISE STATED, ALL CONDUIT TO BE FURNISHED AND INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT.
- UNLESS OTHERWISE STATED, ALL ELECTRIC CABLE TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
- CONDUIT AND CABLE SIZES AS SHOWN ON THE PLAN SHEETS DMS-01 THROUGH DMS-08.
- HANDHOLE AND CONDUIT ENTRY CONFIGURATION IS TYPICAL. DEPENDING ON LOCATION HH MAY BE INSTALLED IN SHOULDER OR IN GRASS OUTSIDE OF THE ROADWAY CURB AND GUTTER. WHEN TWO HANDHOLES ARE SHOWN ON THE PLAN SHEETS, DMS-01 THROUGH DMS-08, ONE CONDUIT WILL BE INSTALLED IN EACH HANDHOLE TO KEEP POWER AND CONTROL CABLES SEPARATE.



1 MEDIAN WALL DUCT DETAIL ELEVATION
DT-01



2 SECTION A-A
DT-01

REVISIONS	
NAME	DATE
REVISED	1/21/05

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

DUCT DETAIL FOR CANTELEVER MOUNTED
DMS (NO JUNCTION BOX IN BARRIER WALL)

SCALE: NONE
DATE: October 29, 2004

DRAWN BY: HAR
CHECKED BY: BMW

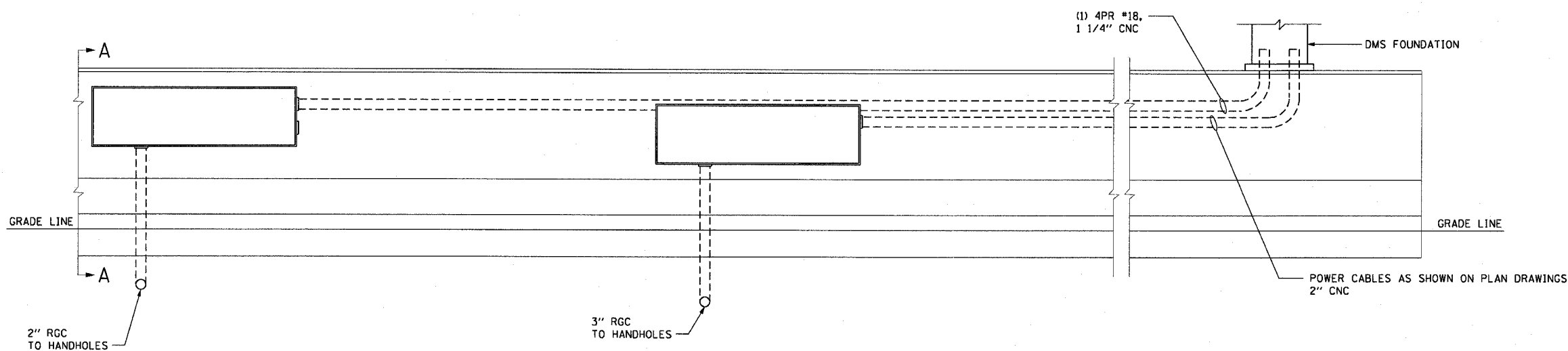
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	897
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

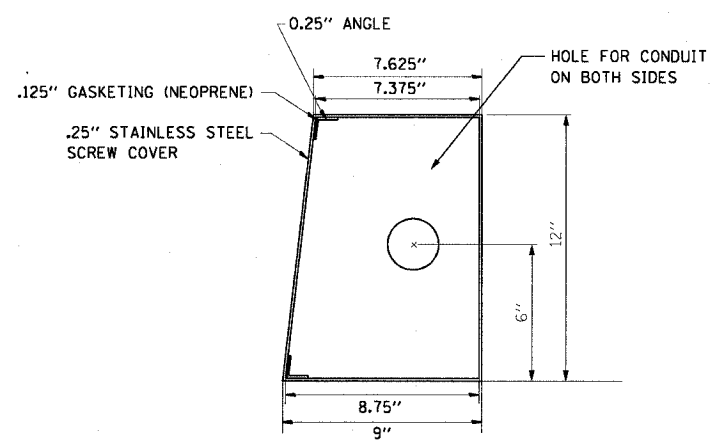
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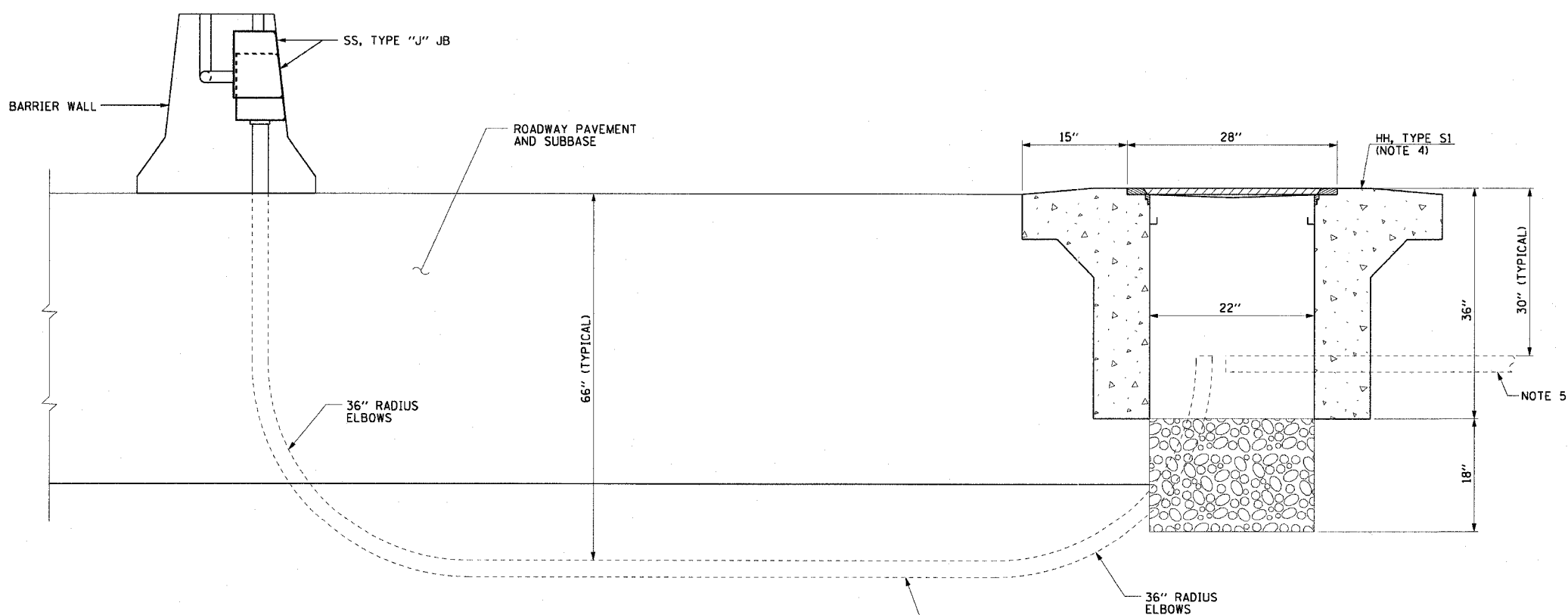
1. SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
2. ALL WELDS MUST BE CONTINUOUS AND LEAK PROOF. BOX AND COVER MUST BE .25" TYPE 316 STAINLESS STEEL.
3. ALL CONDUIT AND JUNCTION BOXES SHOWN IN BARRIER WALLS OR UNDER PAVEMENT ARE FURNISHED AND INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT. ALL ELECTRIC CABLES ARE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
4. HANDHOLE AND CONDUIT ENTRY CONFIGURATION IS TYPICAL, DEPENDING ON LOCATION HH MAY BE INSTALLED IN SHOULDER OR IN GRASS OUTSIDE OF THE ROADWAY CURB AND GUTTER. WHEN TWO HANDHOLES ARE SHOWN ON THE PLAN SHEETS, DMS-01 THROUGH DMS-08, ONE CONDUIT WILL BE INSTALLED IN EACH HANDHOLE TO KEEP POWER AND CONTROL CABLES SEPARATE.
5. CONDUIT AND CABLE SIZES AS SHOWN ON THE PLAN SHEETS DMS-01 THROUGH DMS-08.



1 BARRIER WALL DUCT DETAIL ELEVATION
DMS-10 NOT TO SCALE



3 SPECIAL JUNCTION BOX
DMS-10 TYPE "J" - SIDE VIEW
NOTE 2



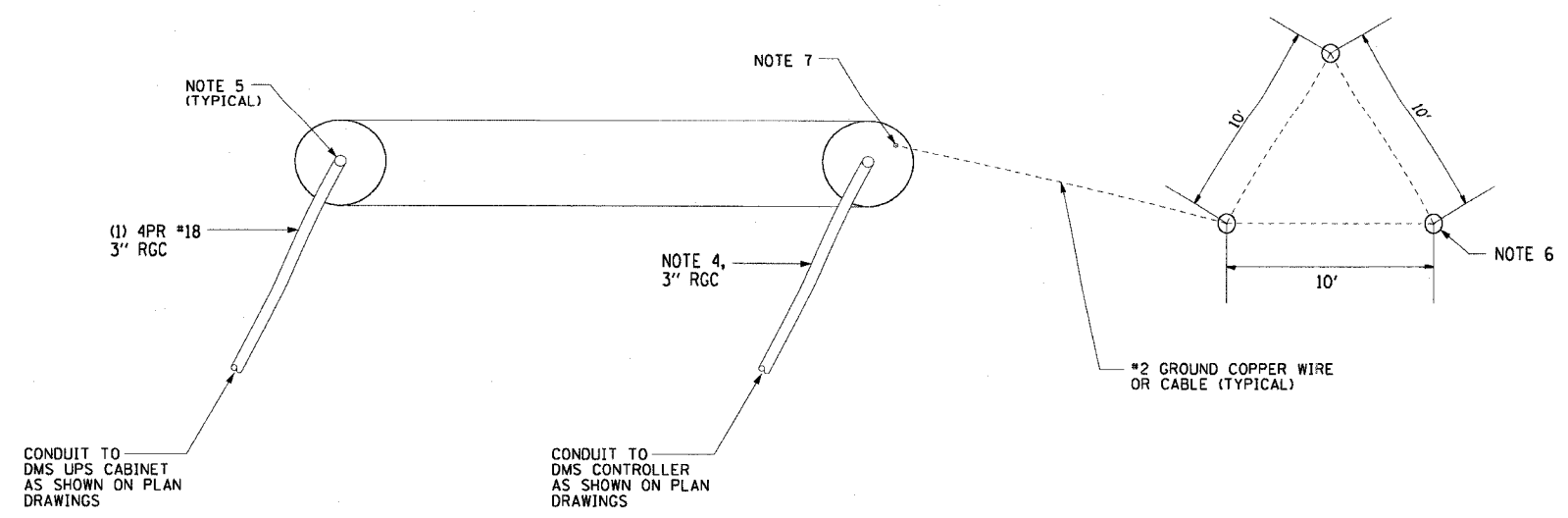
2 SECTION A-A
DT-01

REVISIONS	
NAME	DATE
REVISED	1/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st STREET TO I-57
DUCT DETAIL FOR CANTILEVER MOUNTED
DMS (JUNCTION BOX IN BARRIER WALL)
SCALE: NOT TO SCALE DRAWN BY: KCM
DATE: October 29, 2004 CHECKED BY: WDS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	898
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

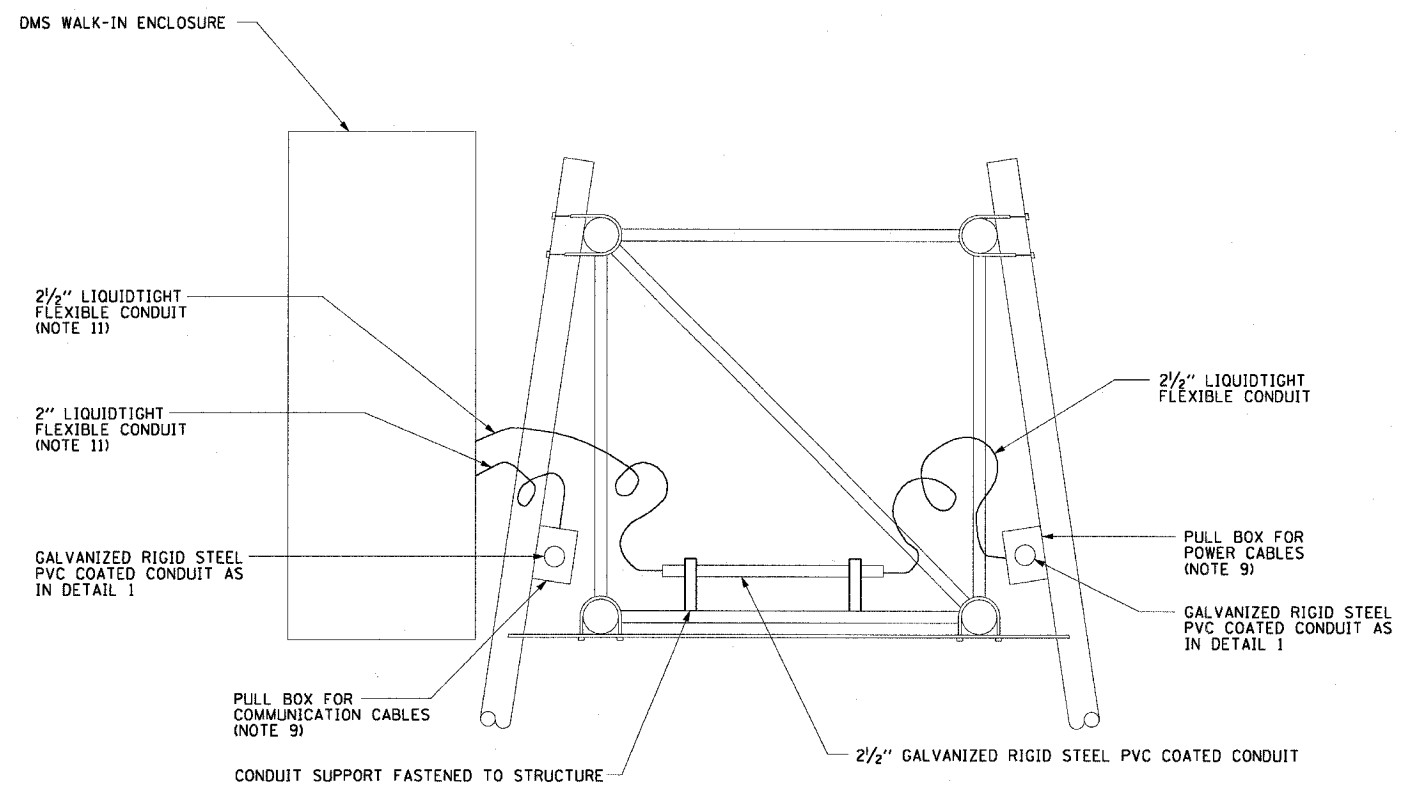
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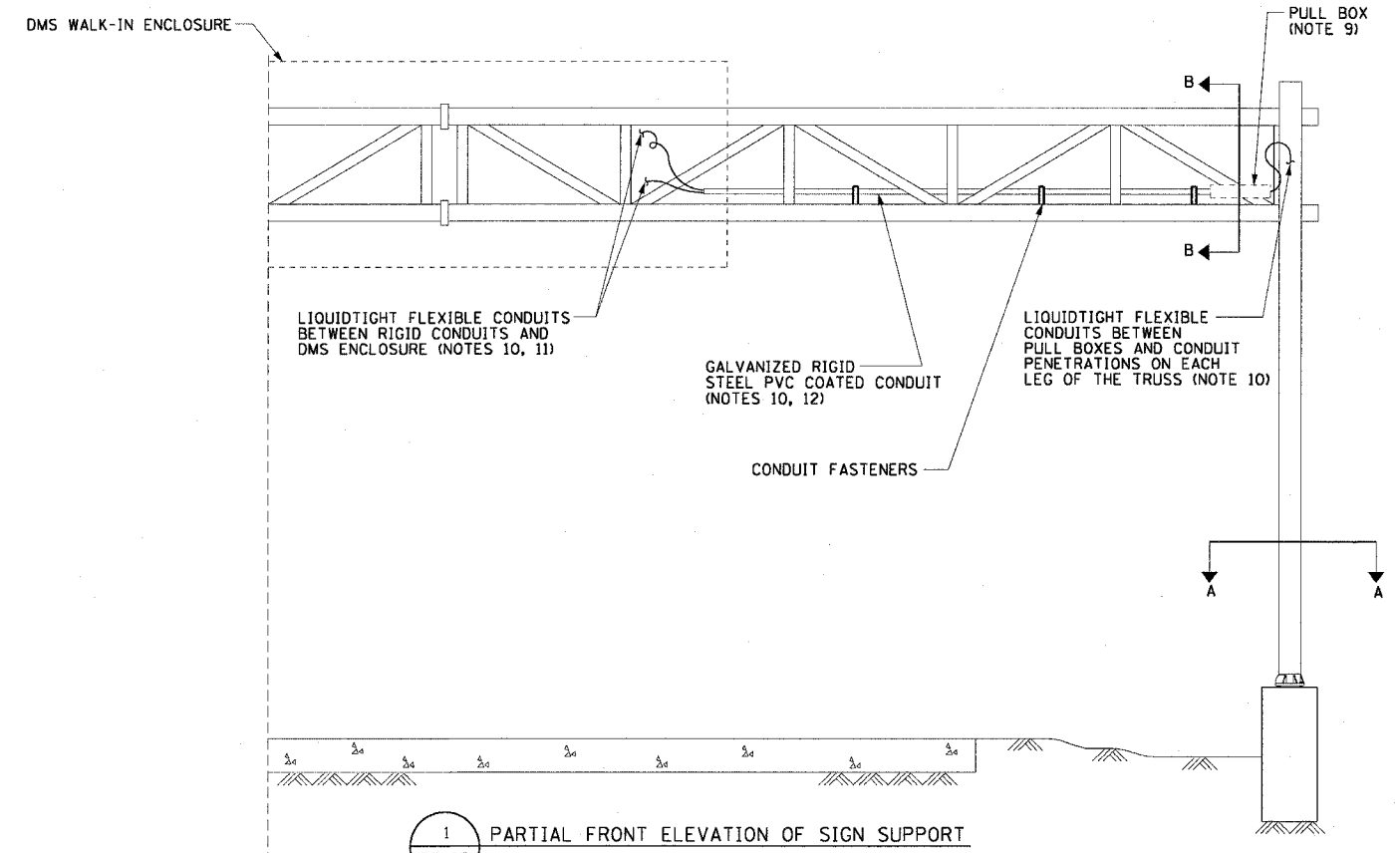
2 SECTION A-A, CONDUIT STUB-UP AT DMS FOUNDATION
DT-03 NOTE B

NOTES:

- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- UNLESS OTHERWISE STATED, ALL CONDUIT TO BE FURNISHED AND INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT.
- UNLESS OTHERWISE STATED, ALL ELECTRIC CABLE TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
- POWER CABLES MUST BE AS SHOWN ON DRAWINGS, DMS-01 THROUGH DMS-08.
- CONDUITS MUST BE STUBBED UP 6" INSIDE THE HOLLOW TRUSS SUPPORT. CABLES MUST BE PULLED TO THE TOP OF THE TRUSS SUPPORT THROUGH THE HOLLOW TRUSS. SEE DETAIL "3" ON THIS DRAWING. PULL WIRE MUST BE INSTALLED IN EACH OF THE SPARE CONDUITS. SPARE CONDUITS MUST BE CAPPED INSIDE THE TRUSS.
- 3/4" X 10' LONG, COPPER WELD GROUND ROD DRIVEN INTO GROUND 9' (TYPICAL FOR 3).
- GROUND COPPER WIRE MUST BE TERMINATED TO THE ANCHOR ROD USING APPROVED CLAMPS FOR GROUNDING. THE ANCHOR ROD MUST BE GROUND OR FILED TO BRIGHT METAL AT CLAMP AND CABLE CONNECTION LOCATION. GROUNDING BUSHING MUST BE INSTALLED ON EACH CONDUIT AND TIED TO THE GROUNDING SYSTEM AT THE TRUSS SUPPORT FOUNDATION.
- ALL RODS, CABLES, CONDUITS, CAPS, AND CLAMPS ASSOCIATED WITH THE GROUNDING SYSTEM AT THE SUPPORT FOUNDATION WILL BE FURNISHED AND INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT.
- 6" X 6" X 40" STAINLESS STEEL PULL BOX, WITH CONTINUOUS HINGED COVER (TYPICAL).
- CONDUITS MUST BE 2 1/2" FOR POWER CABLES AND 2" FOR COMMUNICATIONS CABLES.
- THE DYNAMIC MESSAGE SIGN MUST BE PENETRATED FROM THE BACK THROUGH THE OPENINGS PROVIDED BY THE DMS ENCLOSURE MANUFACTURER. CONNECTION BETWEEN THE CONDUIT AND THE DMS ENCLOSURE MUST BE LIQUIDTIGHT FLEXIBLE CONDUIT.
- CONDUITS MUST BE ROUTED LOW AND AS CLOSE AS POSSIBLE TO THE TRUSS SUPPORT, AND MUST BE FASTENED TO THE SUPPORT ON THE INSIDE.
- THE COST OF FURNISHING AND INSTALLING CONDUITS, CABLES, FASTENERS, PULL BOXES, AND LIQUIDTIGHT FLEXIBLE CONDUITS IS CONSIDERED INCIDENTAL TO THE COST OF DMS INSTALLATION.



3 SECTION B-B, PARTIAL SIDE ELEVATION OF SIGN SUPPORT
DT-03



1 PARTIAL FRONT ELEVATION OF SIGN SUPPORT
DT-03

REVISIONS	
NAME	DATE
REVISED	1/21/05

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

DUCT AND MOUNTING DETAILS FOR
FULL SPAN TRUSS MOUNTED DMS

SCALE: NONE
DATE: October 29, 2004

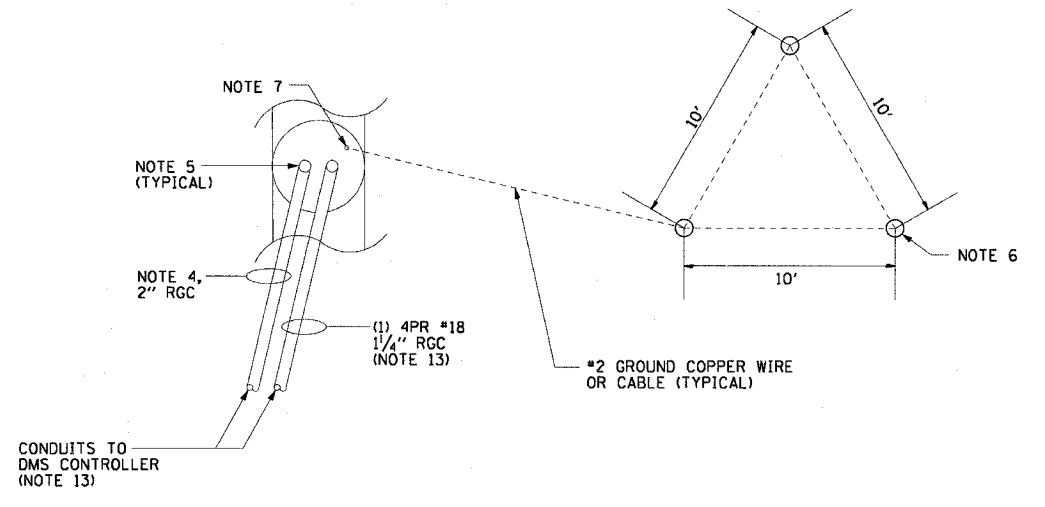
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CHECKED BY: BMW

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	899
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

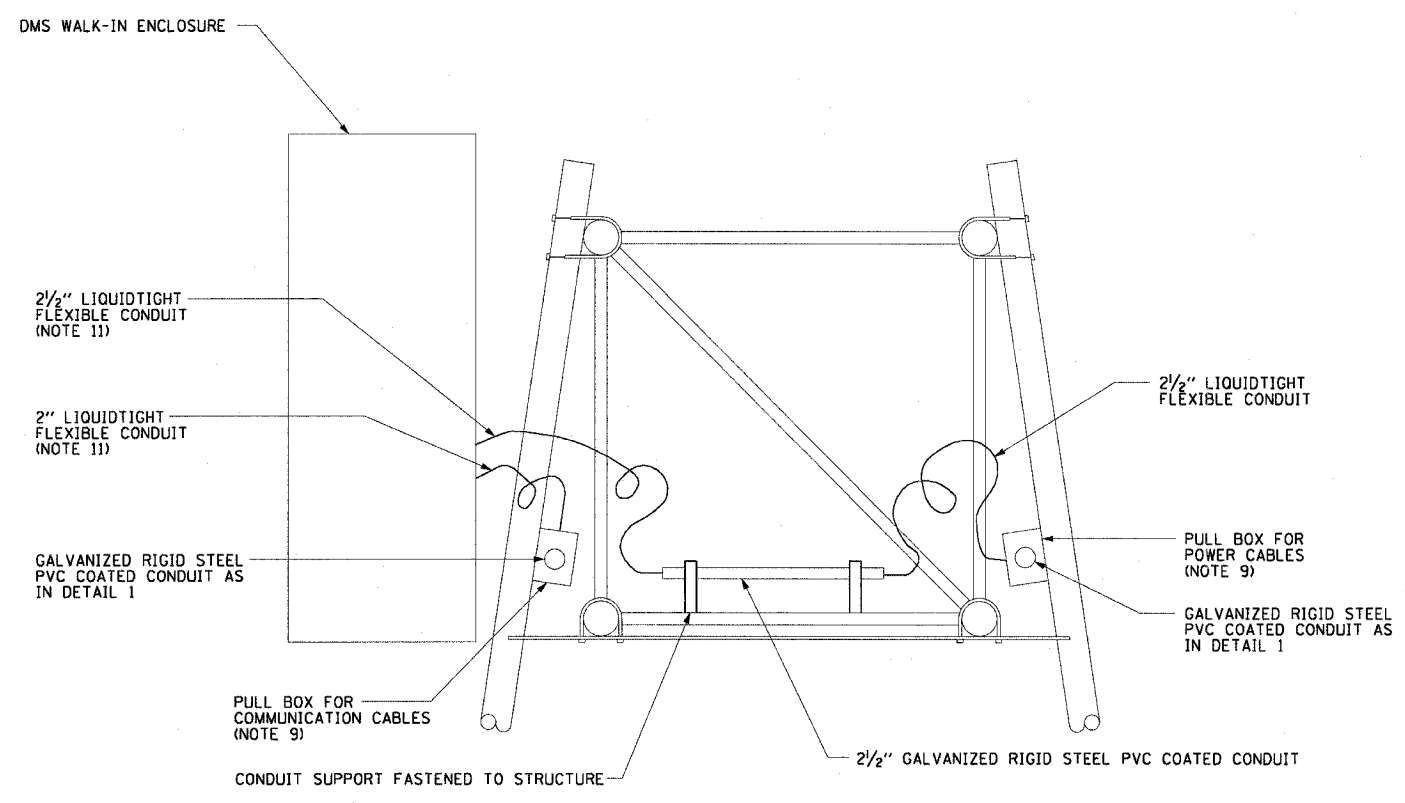
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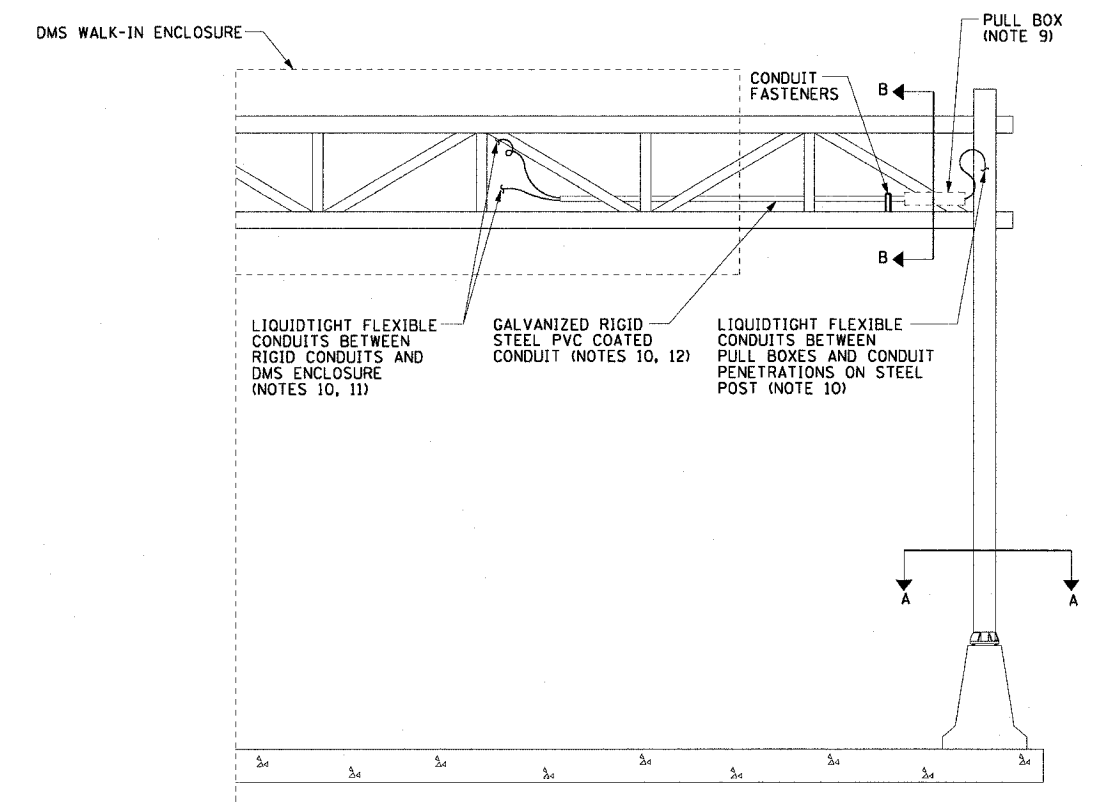
- SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- UNLESS OTHERWISE STATED, ALL CONDUIT TO BE FURNISHED AND INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT.
- UNLESS OTHERWISE STATED, ALL ELECTRIC CABLE TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT.
- POWER CABLES MUST BE AS SHOWN ON DRAWINGS, DMS-01 THROUGH DMS-08.
- CONDUITS MUST BE STUBBED UP 6" INSIDE THE HOLLOW TRUSS SUPPORT. CABLES MUST BE PULLED TO THE TOP OF THE TRUSS SUPPORT THROUGH THE HOLLOW TRUSS. SEE DETAIL "3" ON THIS DRAWING. PULL WIRE MUST BE INSTALLED IN EACH OF THE SPARE CONDUITS. SPARE CONDUITS MUST BE CAPPED INSIDE THE TRUSS.
- 3/4" X 10' LONG, COPPER WELD GROUND ROD DRIVEN INTO GROUND 9" (TYPICAL FOR 3).
- GROUND COPPER WIRE MUST BE TERMINATED TO THE ANCHOR ROD USING APPROVED CLAMPS FOR GROUNDING. THE ANCHOR ROD MUST BE GROUND OR FILED TO BRIGHT METAL AT CLAMP AND CABLE CONNECTION LOCATION. GROUNDING BUSHING MUST BE INSTALLED ON EACH CONDUIT AND TIED TO THE GROUNDING SYSTEM AT THE TRUSS SUPPORT FOUNDATION.
- ALL RODS, CABLES, CONDUITS, CAPS, AND CLAMPS ASSOCIATED WITH THE GROUNDING SYSTEM AT THE SUPPORT FOUNDATION WILL BE FURNISHED AND INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT.
- 6" X 6" X 40" STAINLESS STEEL PULL BOX, WITH CONTINUOUS HINGED COVER (TYPICAL).
- CONDUITS MUST BE 2 1/2" FOR POWER CABLES AND 2" FOR COMMUNICATIONS CABLES.
- THE DYNAMIC MESSAGE SIGN MUST BE PENETRATED FROM THE BACK THROUGH THE OPENINGS PROVIDED BY THE DMS ENCLOSURE MANUFACTURER. CONNECTION BETWEEN THE CONDUIT AND THE DMS ENCLOSURE MUST BE LIQUIDTIGHT FLEXIBLE CONDUIT.
- CONDUITS MUST BE ROUTED LOW AND AS CLOSE AS POSSIBLE TO THE TRUSS SUPPORT, AND MUST BE FASTENED TO THE SUPPORT ON THE INSIDE.
- CONDUITS ARE ROUTED TO UPS CABINET FOR SIGN, DMS-31. (1) 4PR #18 CABLE NOT NEEDED FOR DMS-31.
- THE COST OF FURNISHING AND INSTALLING CONDUITS, CABLES, FASTENERS, PULL BOXES, AND LIQUIDTIGHT FLEXIBLE CONDUITS IS CONSIDERED INCIDENTAL TO THE COST OF DMS INSTALLATION.



2 SECTION A-A, CONDUIT STUB-UP AT DMS FOUNDATION
DT-04 NOTE 8



3 SECTION B-B, PARTIAL SIDE ELEVATION OF SIGN SUPPORT
DT-04



1 PARTIAL FRONT ELEVATION OF SIGN SUPPORT
DT-04

DT-04

REVISIONS	
NAME	DATE
REVISED	1/21/05

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

**DMS MOUNTING DETAILS FOR
CANTILEVER SUPPORT**

SCALE: NONE
DATE: October 29, 2004

DRAWN BY: BHP/HR
CHECKED BY: BMW

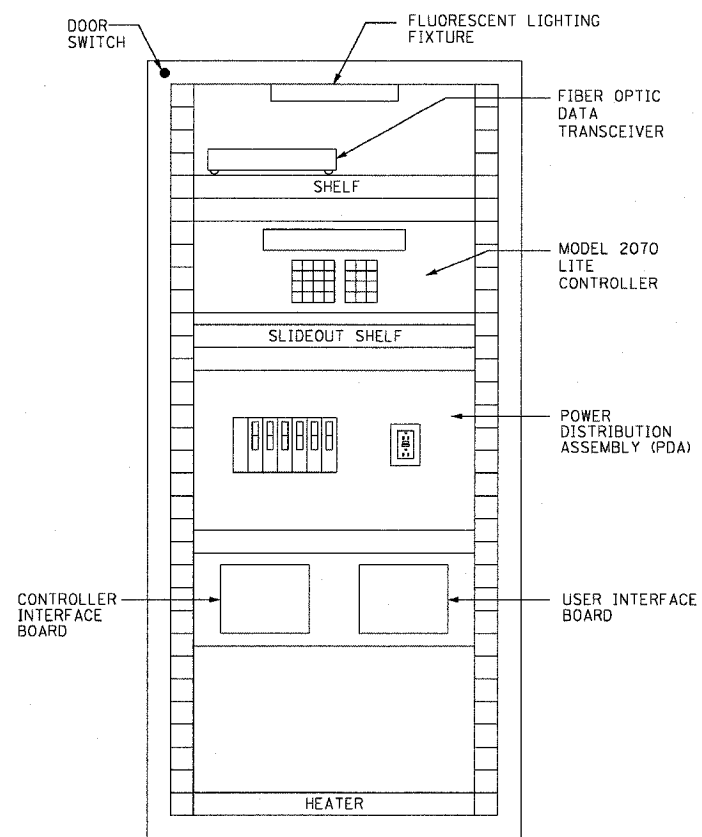
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2003-0311	COOK	976	900
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

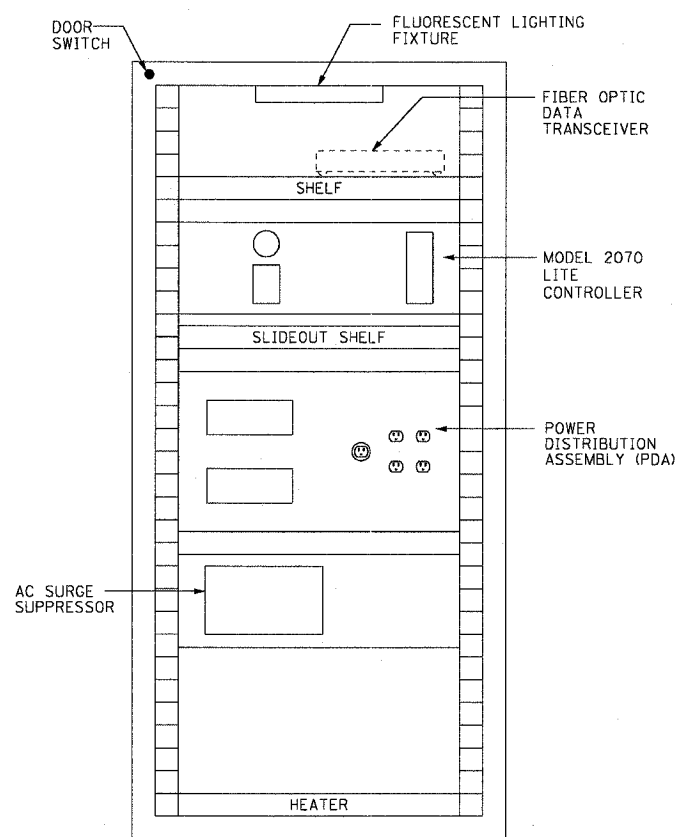
62583

NOTES:

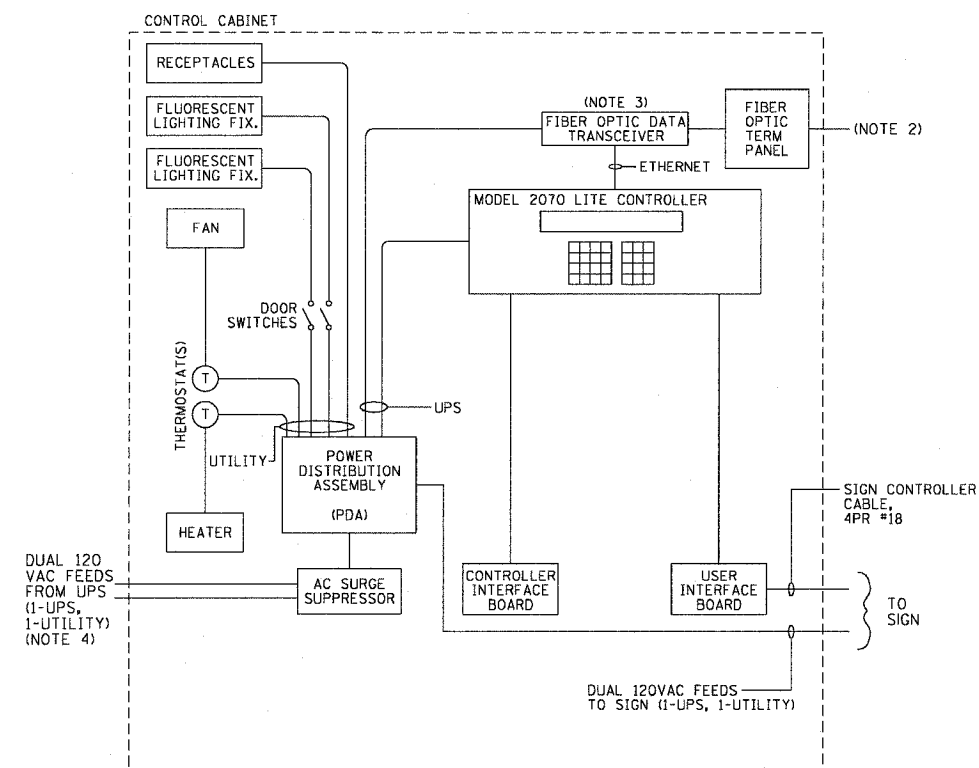
1. SEE DRAWINGS ME-01 AND ME-02 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
2. FIBER OPTIC CABLE AND TERMINATIONS AS SHOWN ON COMM PLANS AND DETAIL SHEETS.
3. A DEDICATED LEASED LINE CONNECTION AND MODEM WILL BE TEMPORARILY USED FOR SIGNS DMS-30, DMS-02, AND DMS-08. TEMPORARY CONNECTIONS WILL REQUIRE FIBER OPTIC DATA TRANSCEIVERS ONCE THE COMMUNICATION NETWORK IS IN PLACE.
4. SEE DRAWING DT-06 FOR CONNECTION TO UPS CABINET.



CONTROL CABINET LAYOUT
FRONT VIEW (TYPICAL)
(MODEL 334)



CONTROL CABINET LAYOUT
BACK VIEW (TYPICAL)
(MODEL 334)



CONTROL CABINET SINGLE
LINE DIAGRAM (TYPICAL)
(MODEL 334)

REVISIONS	
NAME	DATE
REVISED	1/21/05