

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End at S Abut	582+88.90	57.58	603.83
A	582+98.90	57.58	603.53
B	583+08.90	57.58	603.23
End of South appr pavement	583+18.90	57.58	602.93

EAST MEDIAN CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End at S Abut	582+70.68	1.50	604.73
A	582+80.68	1.50	604.43
B	582+90.68	1.50	604.13
End of South appr pavement	583+00.68	1.50	603.83

PG EASTBOUND LANES

Location	Station	Offset	Theoretical Grade Elevations
End at S Abut	582+63.37	-21.00	605.35
A	582+73.37	-21.00	605.05
B	582+83.37	-21.00	604.75
End of South appr pavement	582+93.37	-21.00	604.45

PG WESTBOUND LANES

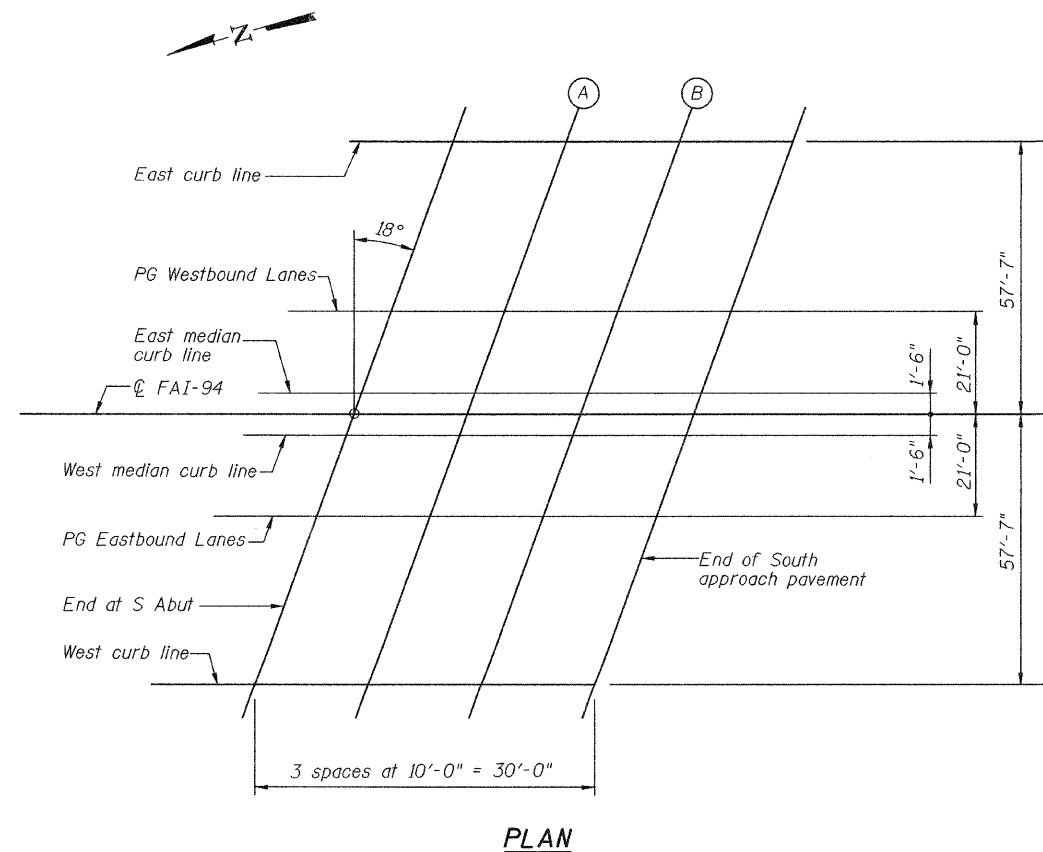
Location	Station	Offset	Theoretical Grade Elevations
End at S Abut	582+77.01	21.00	604.94
A	582+87.01	21.00	604.64
B	582+97.01	21.00	604.34
End of South appr pavement	583+07.01	21.00	604.04

WEST MEDIAN CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End at S Abut	582+69.70	-1.50	604.76
A	582+79.70	-1.50	604.46
B	582+89.70	-1.50	604.16
End of South appr pavement	582+99.70	-1.50	603.86

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End at S Abut	582+51.48	-57.58	604.95
A	582+61.48	-57.58	604.65
B	582+71.48	-57.58	604.35
End of South appr pavement	582+81.48	-57.58	604.05



TOP OF SOUTH APPROACH
SLAB ELEVATIONS
BISHOP FORD EXPRESSWAY (I-94)
LITTLE CALUMET RIVER
COOK COUNTY
STATION
STRUCTURE NUMBER 016-0163

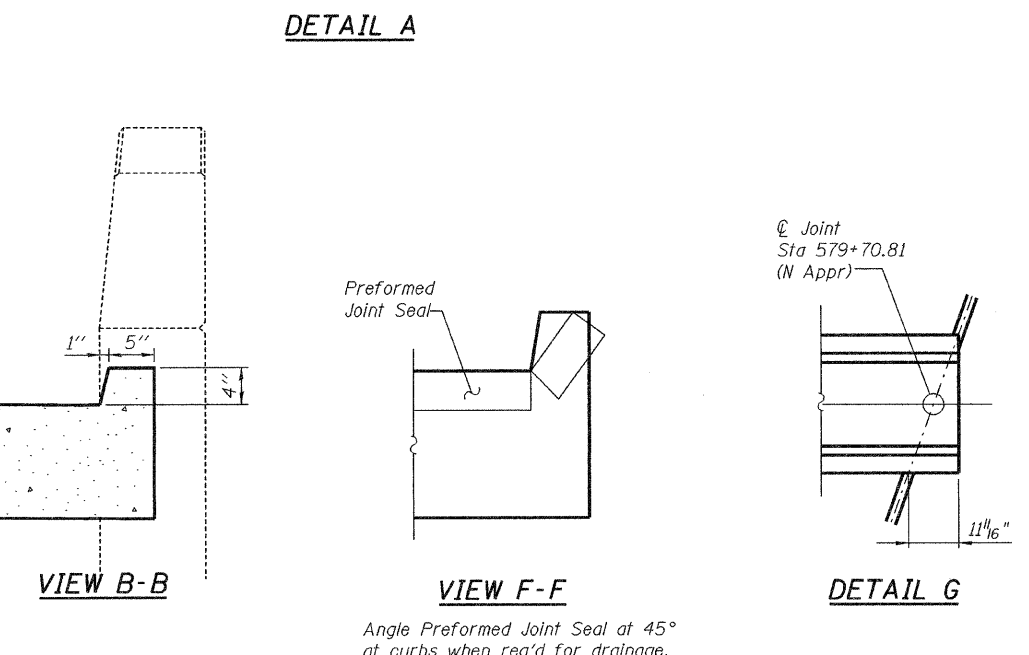
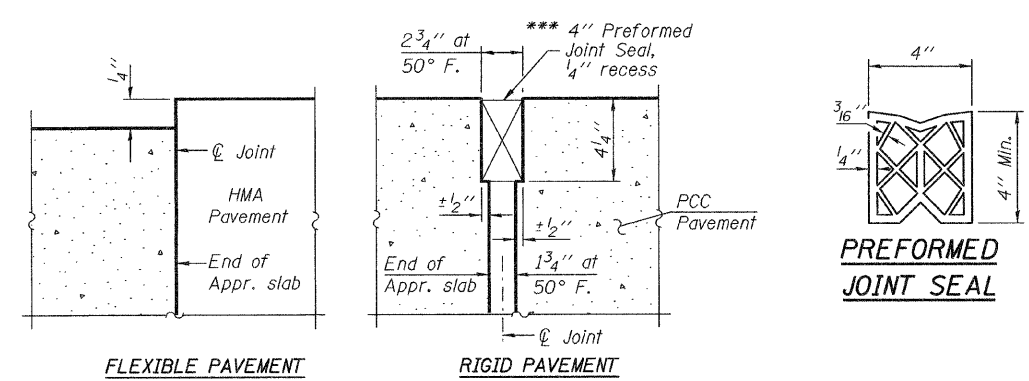
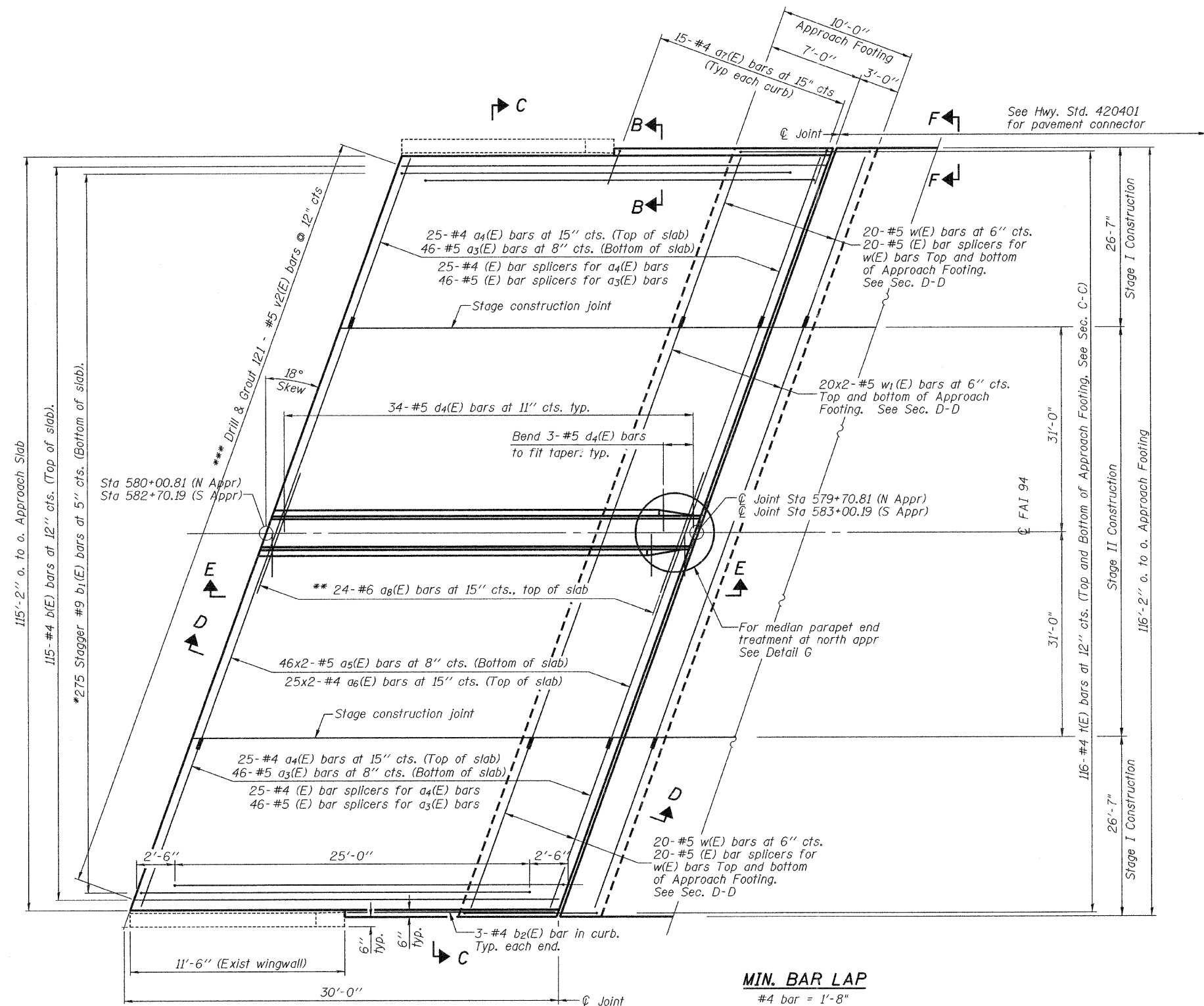
DESIGNED -
CHECKED -
DRAWN -
CHECKED -

HOMER L. CHASTAIN & ASSOCIATES, LLP
CONSULTING ENGINEERS
DECATUR (217) 422-8544
CHICAGO (773) 714-0050
ROCKFORD (815) 489-0050
184-001597

SHEET NO. 15	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
OF 17 SHEETS	94	(0405,ETC,42-7&0707)RS-11	COOK	133	101
BISHOP FORD EXPRESSWAY (I-94)			CONTRACT NO. 60D21		
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

*** Cost Included with Concrete Superstructure.



PLAN

MIN. BAR LAP
#4 bar = 1'-8"
#5 bar = 2'-2"

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

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ROCKFORD (815) 489-0050
184-001397

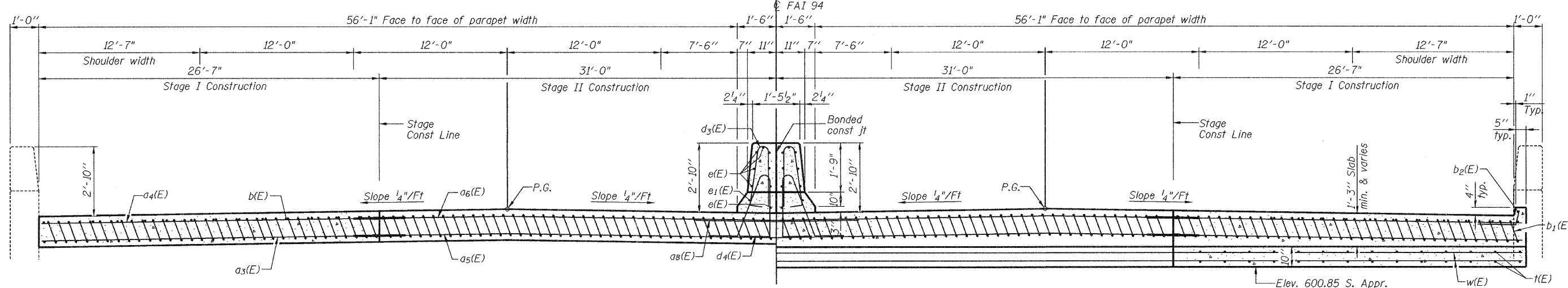
- * Tilt #9_{1b} (E) bars as required to maintain clearance.
- ** Alternate with a(E) bars, typ. median parapet.
- *** Bars shall be drilled and epoxy grouted according to Article 584 of the Standard Specifications.

Notes:
See sheet 17 of 17 for Sections C-C & D-D and View E-E.
a₃(E) thru a₈(E), and w(E) bar spacings measured perpendicular to C Rdwy.

(Sheet 1 of 2)
BRIDGE APPROACH SLAB DETAILS
BISHOP FORD EXPRESSWAY (I-94)
LITTLE CALUMET RIVER
COOK COUNTY
STATION
STRUCTURE NUMBER 016-0163

SHEET NO. 16 OF 17 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	94	(0405,ETC,42-7&07)RS-11	COOK	133	102
BISHOP FORD EXPRESSWAY (I-94)			CONTRACT NO. 60D21		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NEAR ABUTMENT

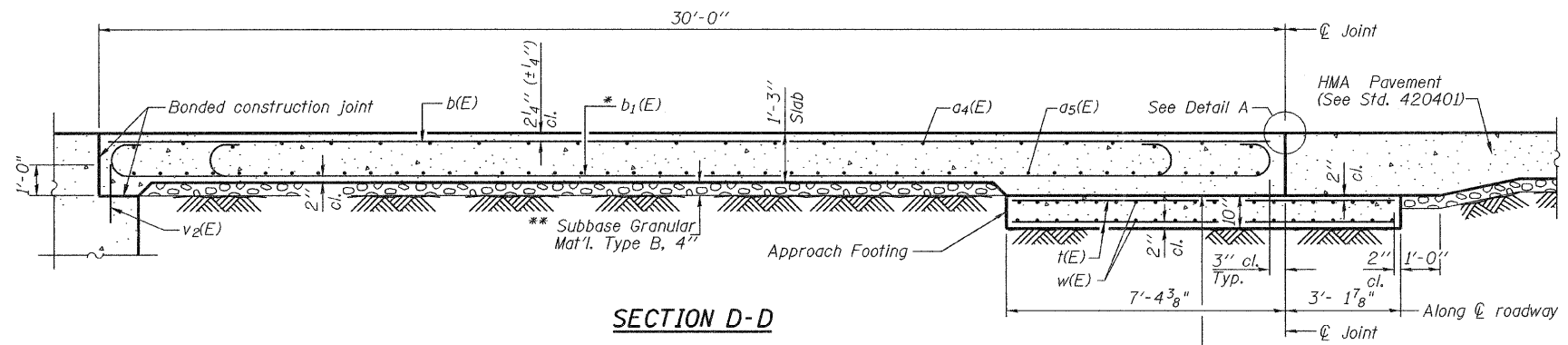
SECTION C-C
(See Plan for dimensions not shown)

AT APPROACH FOOTING

Elev. 600.85 S. Appr.
Elev. 609.75 N. Appr.
(Level out to out)

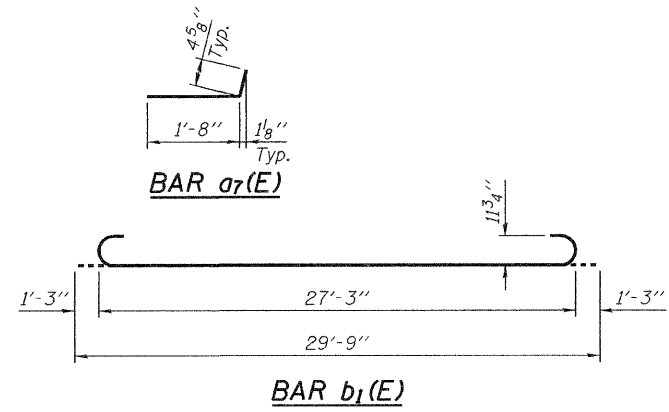
TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a3(E)	184	#5	27'-7"	—
a4(E)	100	#4	27'-7"	—
a5(E)	184	#5	33'-8"	—
a6(E)	100	#4	33'-8"	—
a7(E)	60	#4	2'-1"	—
a8(E)	48	#6	6'-0"	—
b(E)	230	#4	29'-8"	—
b1(E)	550	#9	29'-9"	—
b2(E)	12	#4	18'-0"	—
d3(E)	136	#5	5'-7"	—
d4(E)	136	#5	7'-11"	—
e(E)	32	#4	29'-8"	—
e1(E)	4	#8	29'-8"	—
t(E)	464	#4	10'-3"	—
v2(E)	242	#5	2'-0"	—
w(E)	160	#5	27'-7"	—
w1(E)	160	#5	33'-8"	—
Concrete Superstructure			Cu. Yd.	365.0
Concrete Structures			Cu. Yd.	74.2
Reinforcement Bars, Epoxy Coated			Pound	93,470
Structural Repair of Concrete (Depth Greater Than 5")			Sq. Ft.	4.0



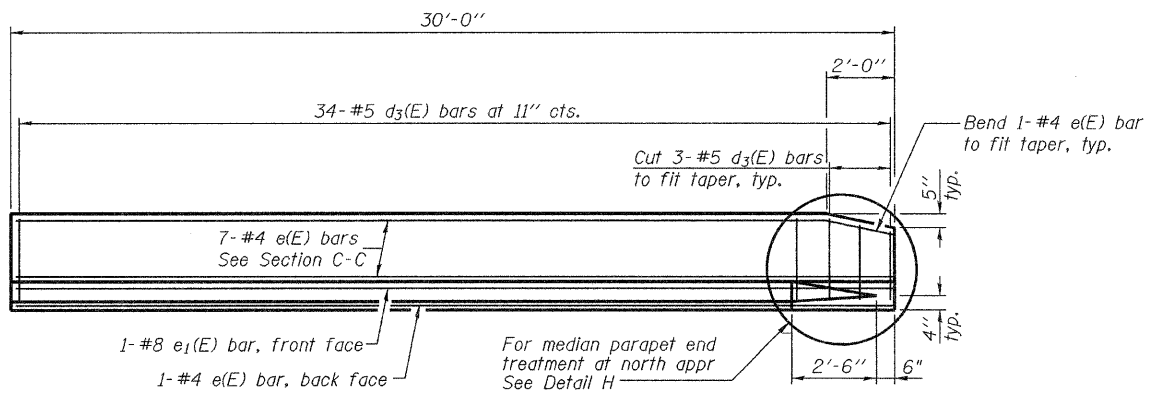
SECTION D-D

* Tilt #9 b1(E) bars as required to maintain clearance.
** Cost included with Concrete Superstructure.

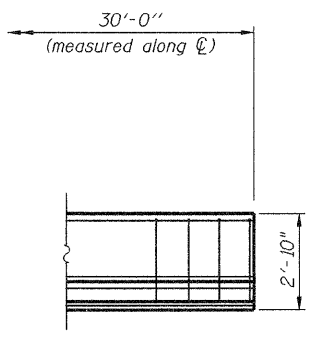


BAR a7(E)

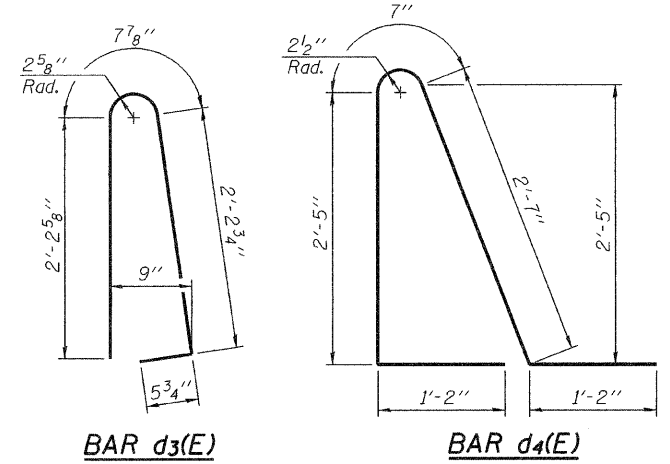
BAR b1(E)



VIEW E-E



DETAIL H



BAR d3(E)

BAR d4(E)

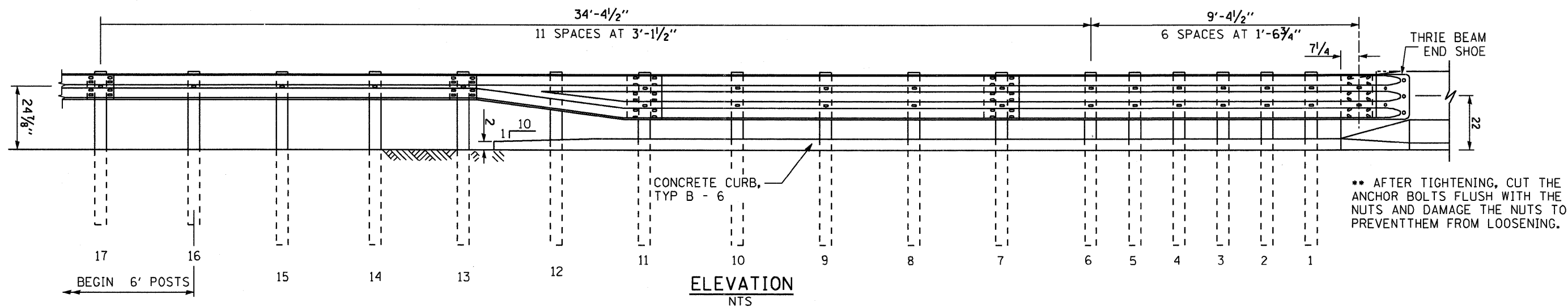
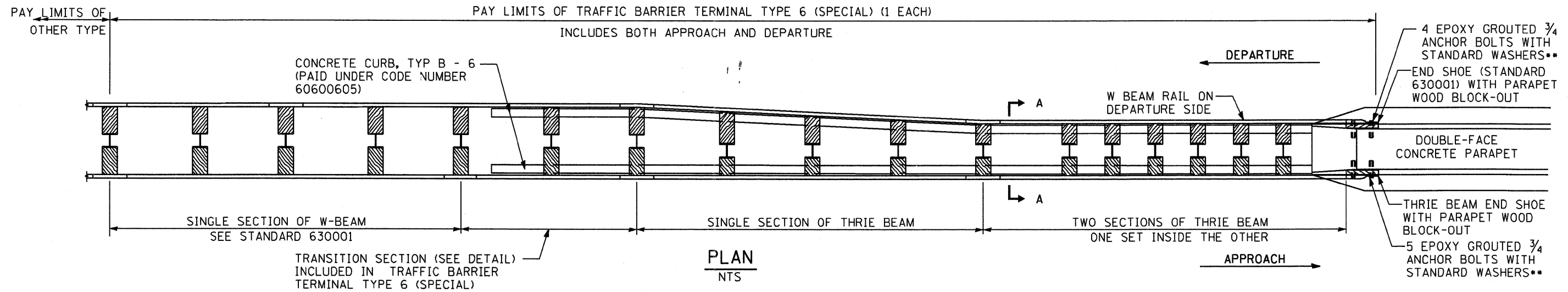
Notes:
See sheet 16 of 17 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 10 of 17.
Cost of excavation for approach footing included with Concrete Structures.

(Sheet 2 of 2)
BRIDGE APPROACH SLAB DETAILS
BISHOP FORD EXPRESSWAY (I-94)
LITTLE CALUMET RIVER
COOK COUNTY
STATION
STRUCTURE NUMBER 016-0163

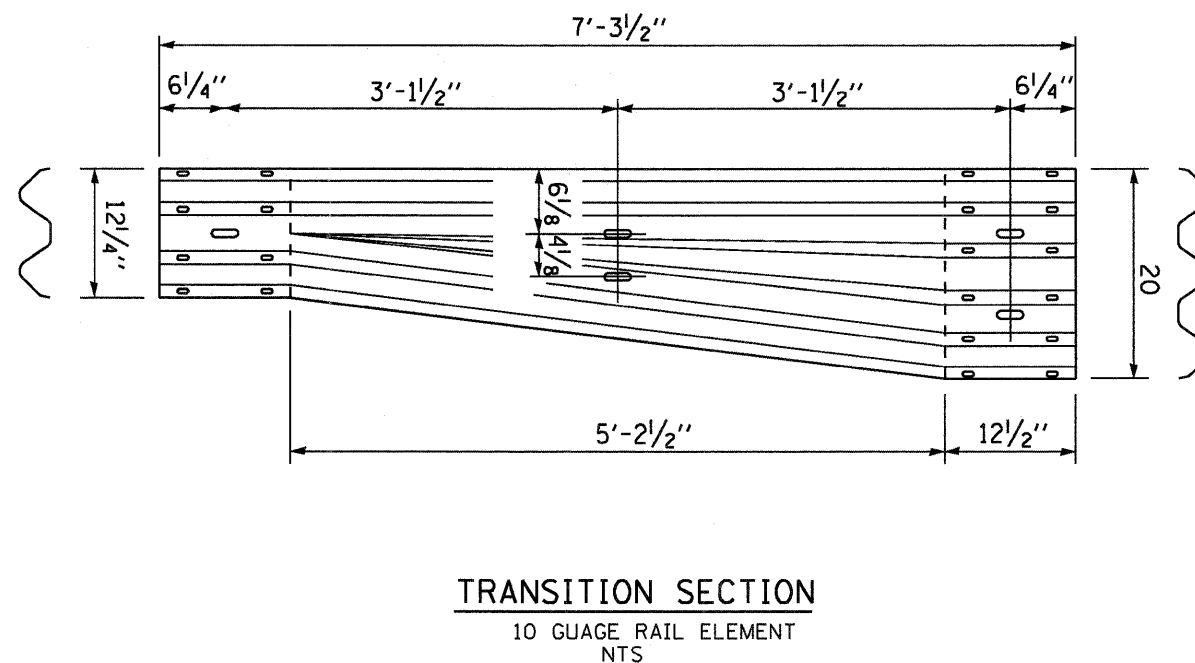
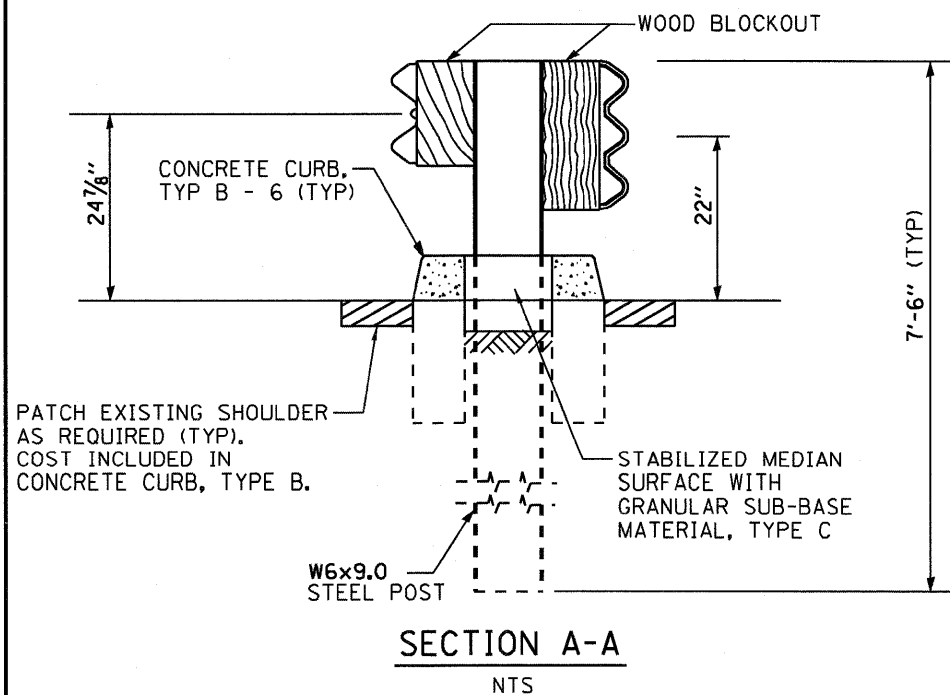
DESIGNED -
CHECKED -
DRAWN -
CHECKED -

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CHICAGO (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

SHEET NO. 17 OF 17 SHEETS	F.A.I. RTE. 94	SECTION (0405,ETC,42-7&0707)RS-11	COUNTY COOK	TOTAL SHEETS 133	SHEET NO. 103
	BISHOP FORD EXPRESSWAY (I-94)		CONTRACT NO. 60D21		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			



** AFTER TIGHTENING, CUT THE ANCHOR BOLTS FLUSH WITH THE NUTS AND DAMAGE THE NUTS TO PREVENT THEM FROM LOOSENING.



GENERAL NOTES

WORK SHALL BE PERFORMED PER SECTIONS 630 AND 631 OF THE STANDARD SPECIFICATIONS.

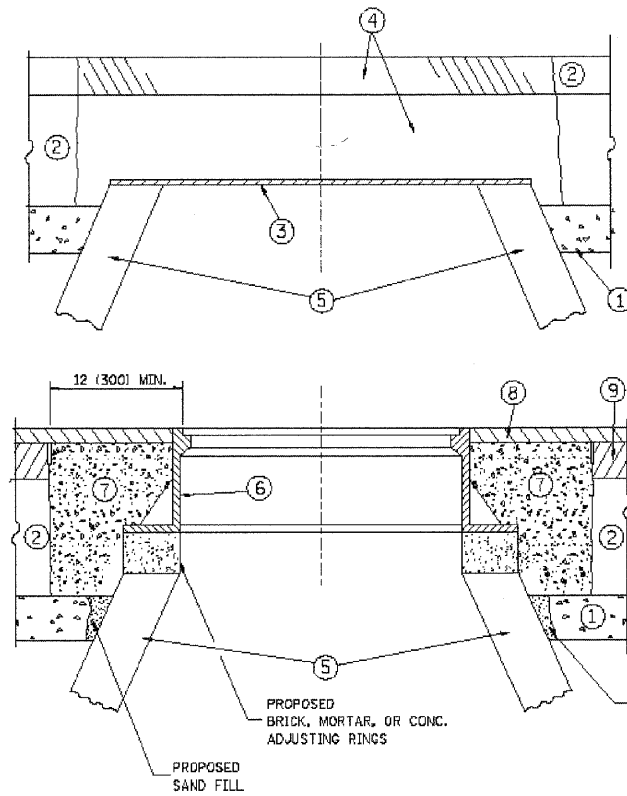
SEE STANDARD 630001 FOR DETAILS OF GUARDRAIL NOT SHOWN.

THRIE BEAM RAIL SHALL BE BOLTED TO BLOCKOUT AT ALL POSTS.

FILE NAME = DI60021-105-BARRIER_TRANSITION_DETAIL.dwg	USER NAME = dwoznioraki	DESIGNED - DRAWN - DMW, CDS	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BISHOP FORD EXPRESSWAY (I-94) TRAFFIC BARRIER TERMINAL TYPE 6 (SPECIAL)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = N/A	CHECKED -	REVISED -	94			(0405,ETC,42-7&0707RS-11	COOK	133	105	
PLOT DATE = 2/5/2009	DATE - 2/5/2009	REVISED -	SCALE: N/A			SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	107
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

• (0405,ETC,42-T&0707RS-11



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

STAGE 2 (AFTER PAVEMENT MILLING)

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

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

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

LOCATION OF STRUCTURES:

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

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

NOTES:

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

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

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

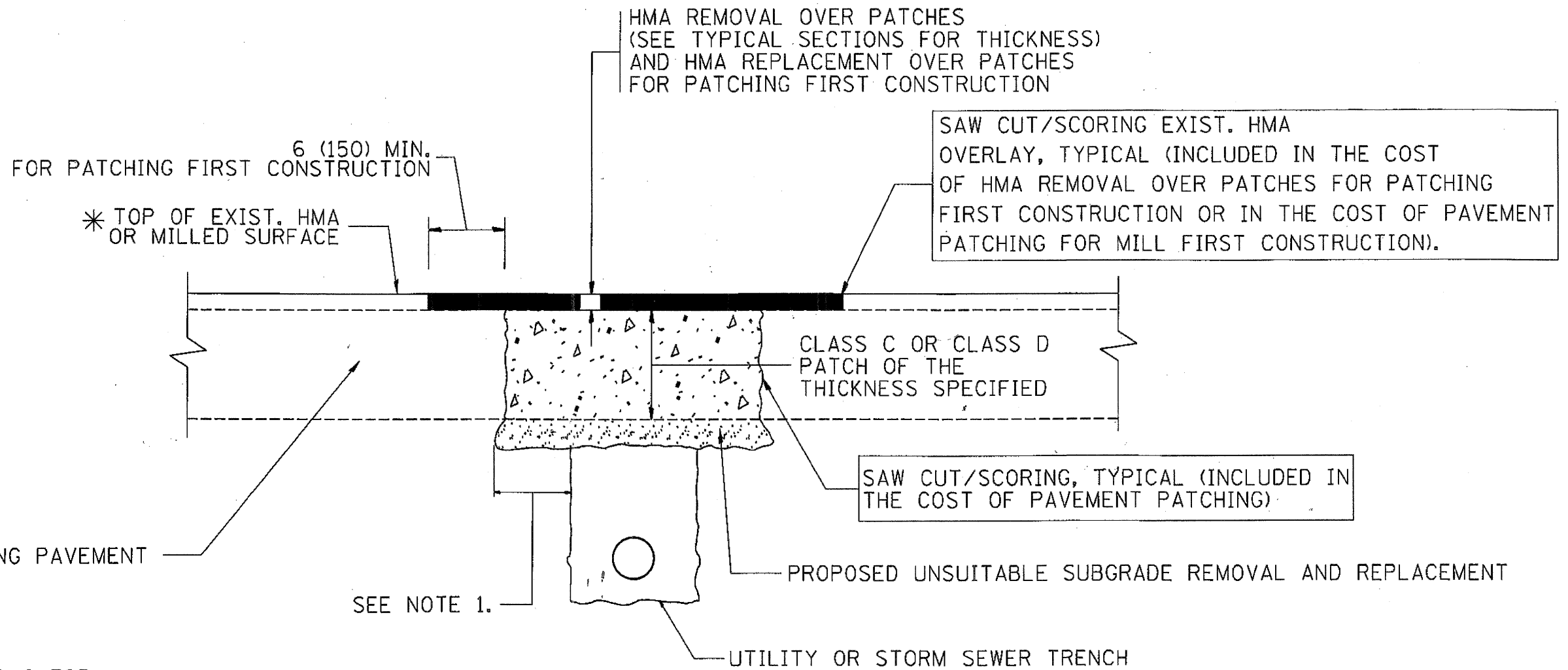
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
**DETAILS FOR
 FRAMES AND LIDS ADJUSTMENT
 WITH MILLING**

SCALE: VERT. NONE
 HORIZ.

DRAWN BY
 CHECKED BY
 BD600-03 (BD-8)



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

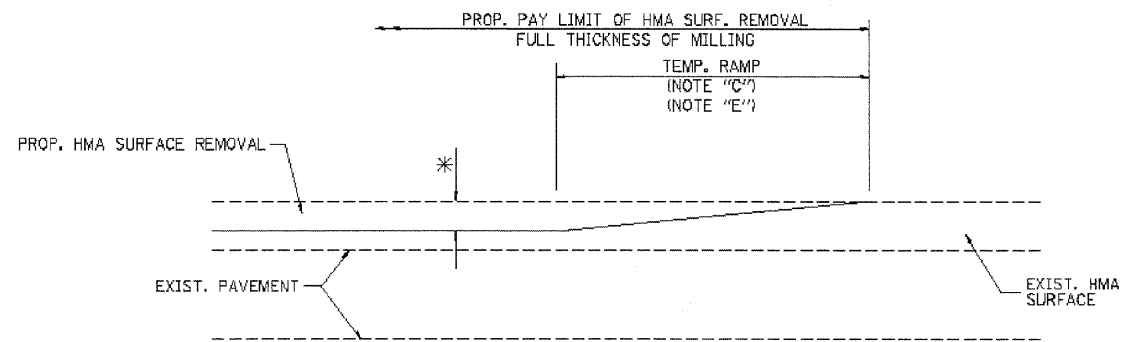
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

16G0D21-108-DISTRICT DETAILS.dgn

FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT		F.A.I. RTE. 94	SECTION COOK	COUNTY	TOTAL SHEETS 133	SHEET NO. 108	
PLOT SCALE = 1/8" = 1' IN.	CHECKED -	REVISOR - R. BORO 01-01-07	REVISOR - R. BORO 09-04-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	BD400-04 (BD-22)		CONTRACT NO. 60D21		
PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISOR - K. ENG 10-27-08			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
10405, ETC. 42-7&0707RS-11												

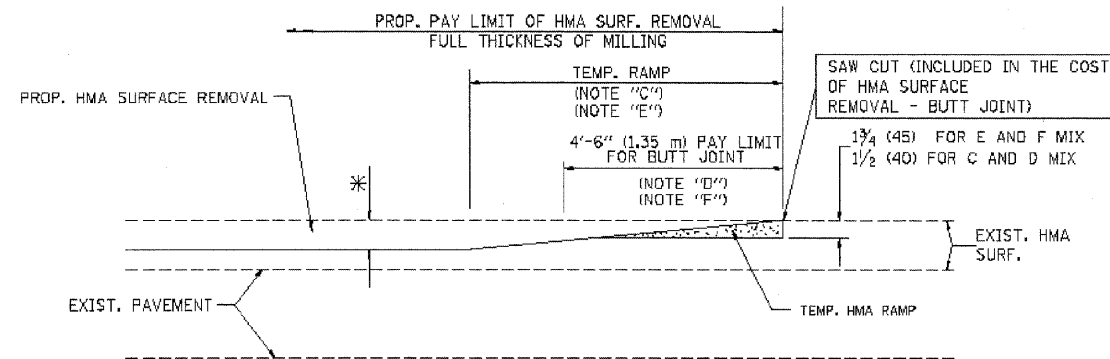
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	109
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

• (0405,ETC,42-T&0707RS-11



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

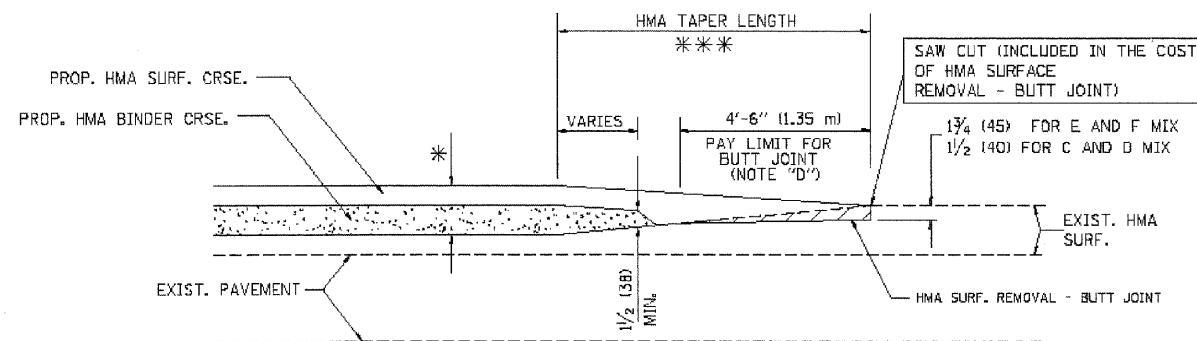
OPTION 1



HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

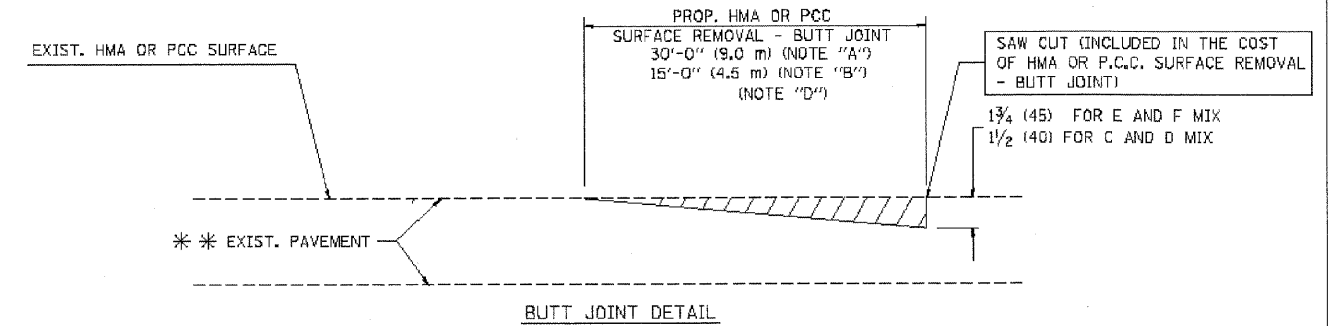
OPTION 2

TYPICAL TEMPORARY RAMP

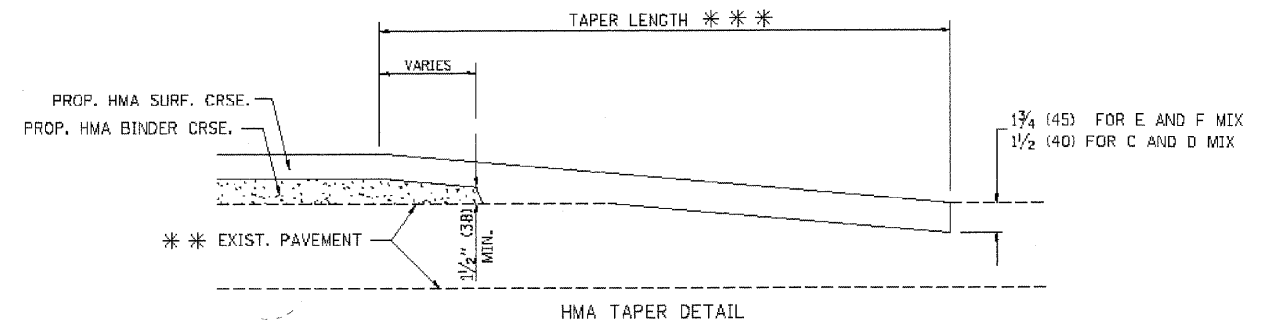


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

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

NOTES

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

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

BASIS OF PAYMENT:

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

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER
DETAILS

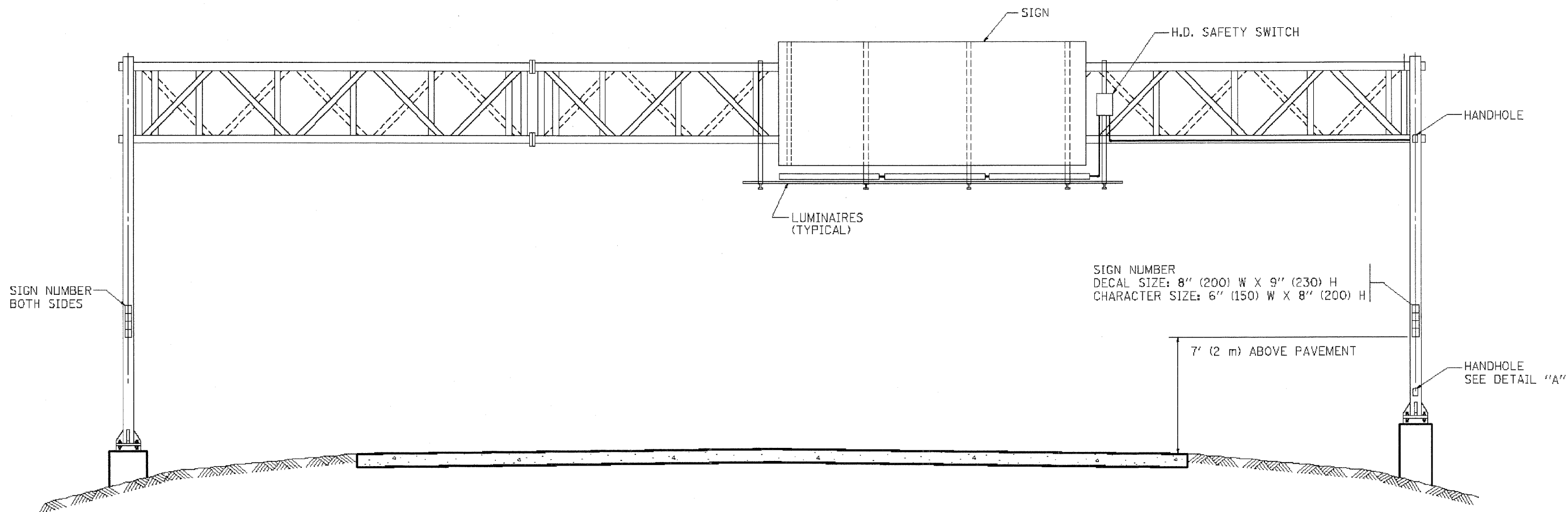
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HORIZ. NONE

DRAWN BY
CHECKED BY

BD400-05 (VI-BD32)

CONTRACT NO. 60021				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	110
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• (0405,ETC,42-7&0707RS-11

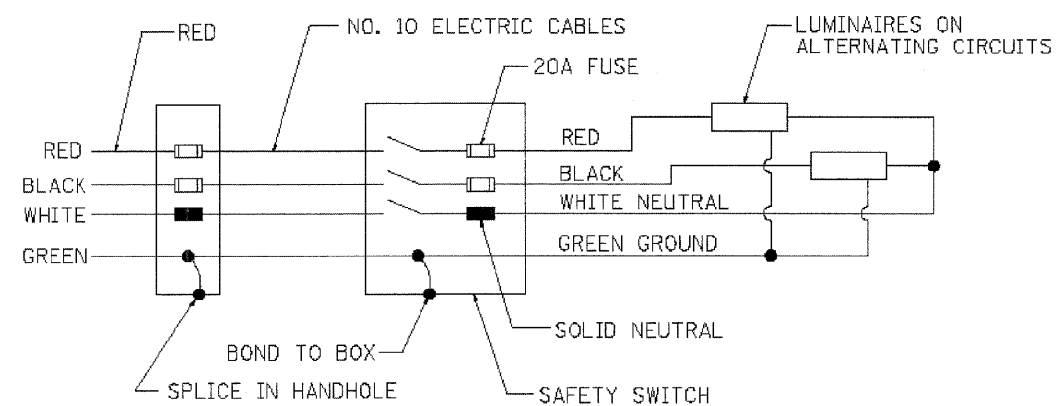


SIGN NUMBER
 DECAL SIZE: 8" (200) W X 9" (230) H
 CHARACTER SIZE: 6" (150) W X 8" (200) H

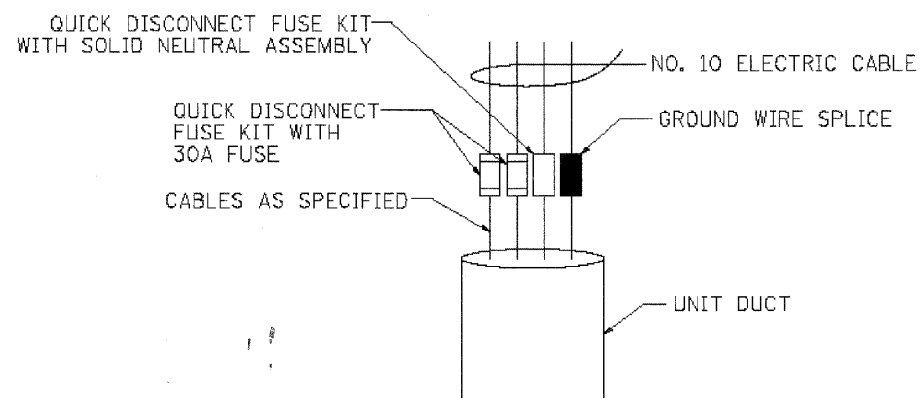
7' (2 m) ABOVE PAVEMENT

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE GALVANIZED RIGID METALIC CONDUIT, PVC COATED (GRMC, PVC)
3. THE USE OF LIQUID TIGHT METAL CONDUIT (TYPE LFMC) SHALL BE LIMITED TO LOCATIONS WHERE MOVEMENT IS ANTICIPATED AND SHALL NOT EXCEED 5' (1.5 m) IN LENGTH
4. ALL WORK INDICATED SHALL BE INCLUDED IN THE PAY ITEM FOR ELECTRIC CONNECTION TO SIGN STRUCTURE
5. THE SAFETY SWITCH SHALL BE LOCATED ON THE SIDE OF THE SIGN STRUCTURE WHICH IS CLOSEST TO THE SHOULDER, OR EDGE OF PAVEMENT.



WIRING DIAGRAM



DETAIL A

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE
	08/19/04

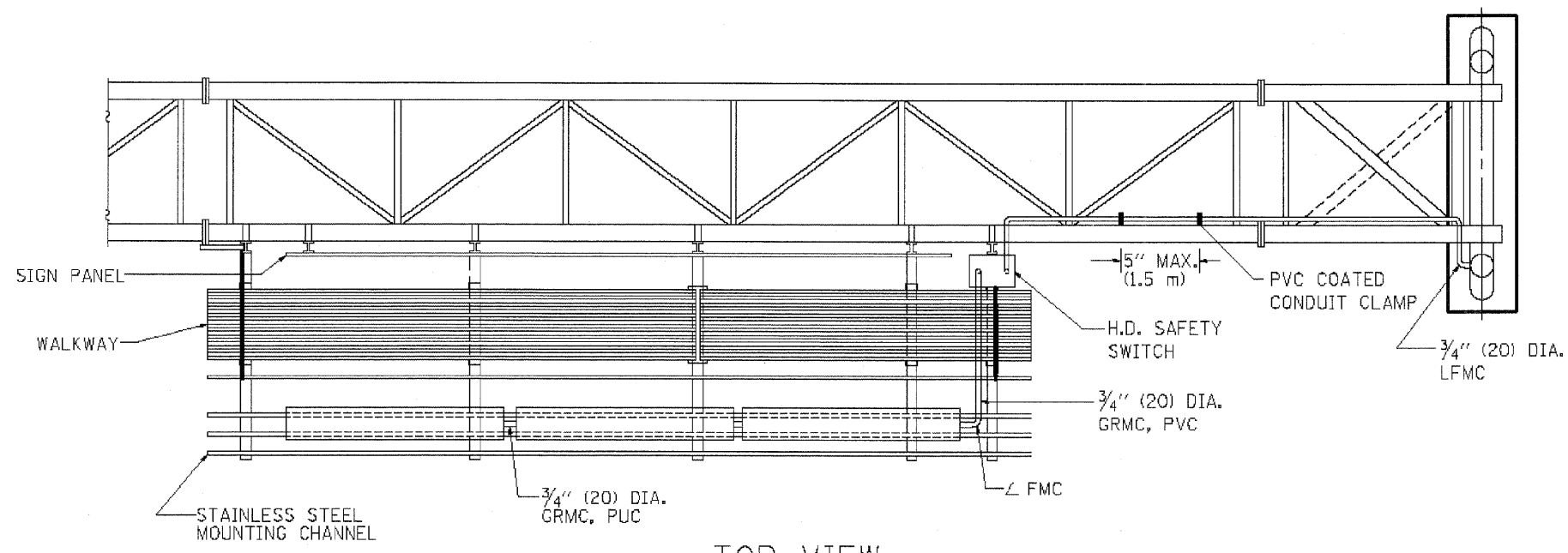
ILLINOIS DEPARTMENT OF TRANSPORTATION

ELECTRIC CONNECTION
 TO SIGN STRUCTURE
 SPAN TYPE
 1 OF 2

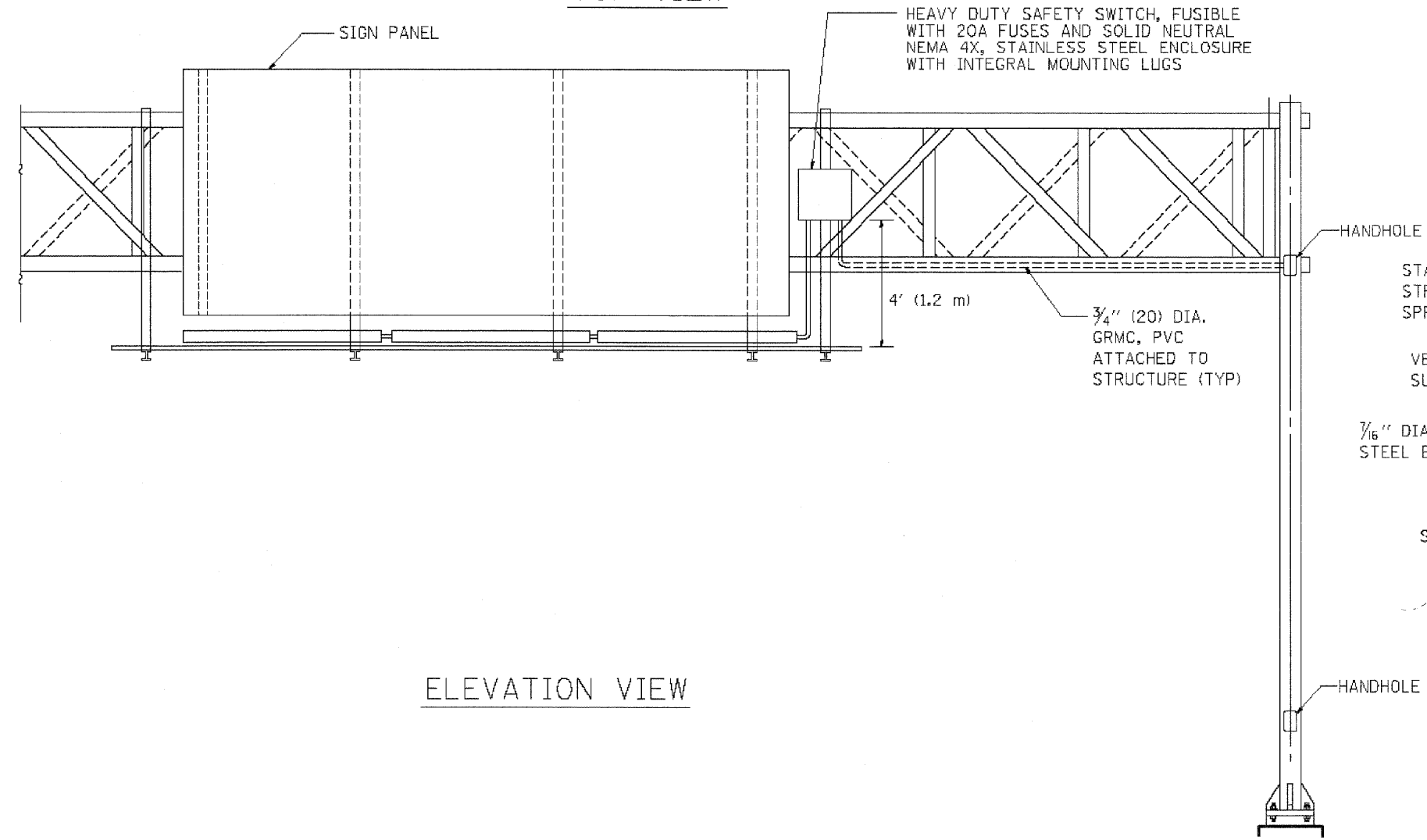
SCALE: VERT. NONE
 HORIZ.

DRAWN BY
 CHECKED BY
 BE-600

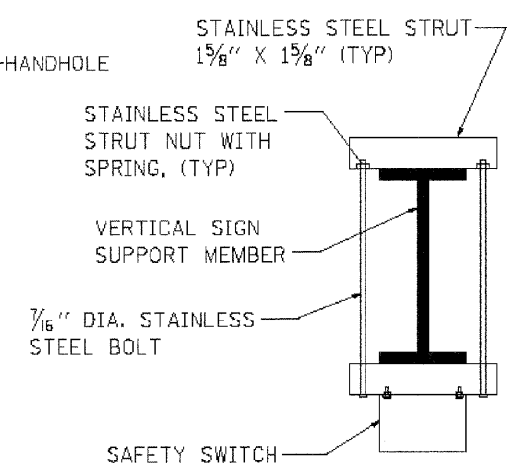
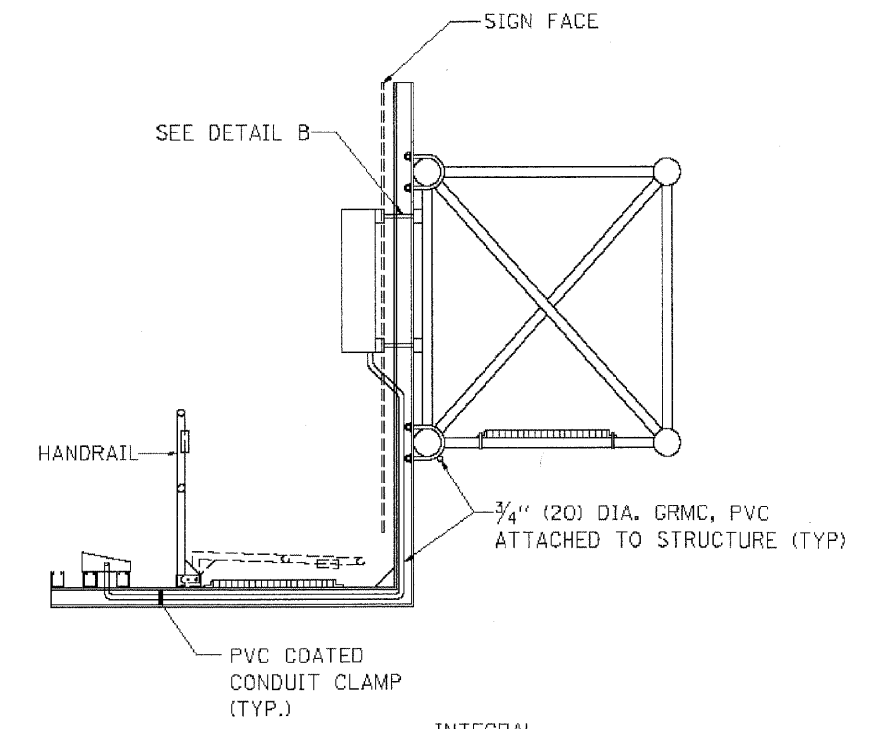
PLOT DATE: 4/10/2007
 FILE NAME: C:\Users\jvandergr...
 PLOT SCALE: 1/8" = 1'-0"
 USER NAME: jvandergr...
 D:\60021-110-DISTRICT DETAILS.dgn



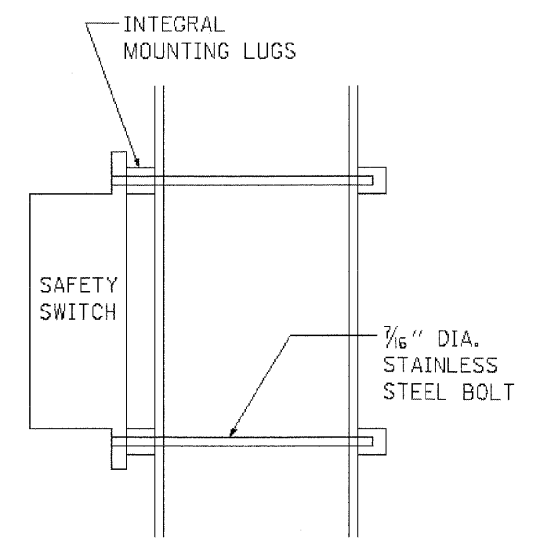
TOP VIEW



ELEVATION VIEW



TOP VIEW



SIDE VIEW

DETAIL B FOR INFORMATION ONLY

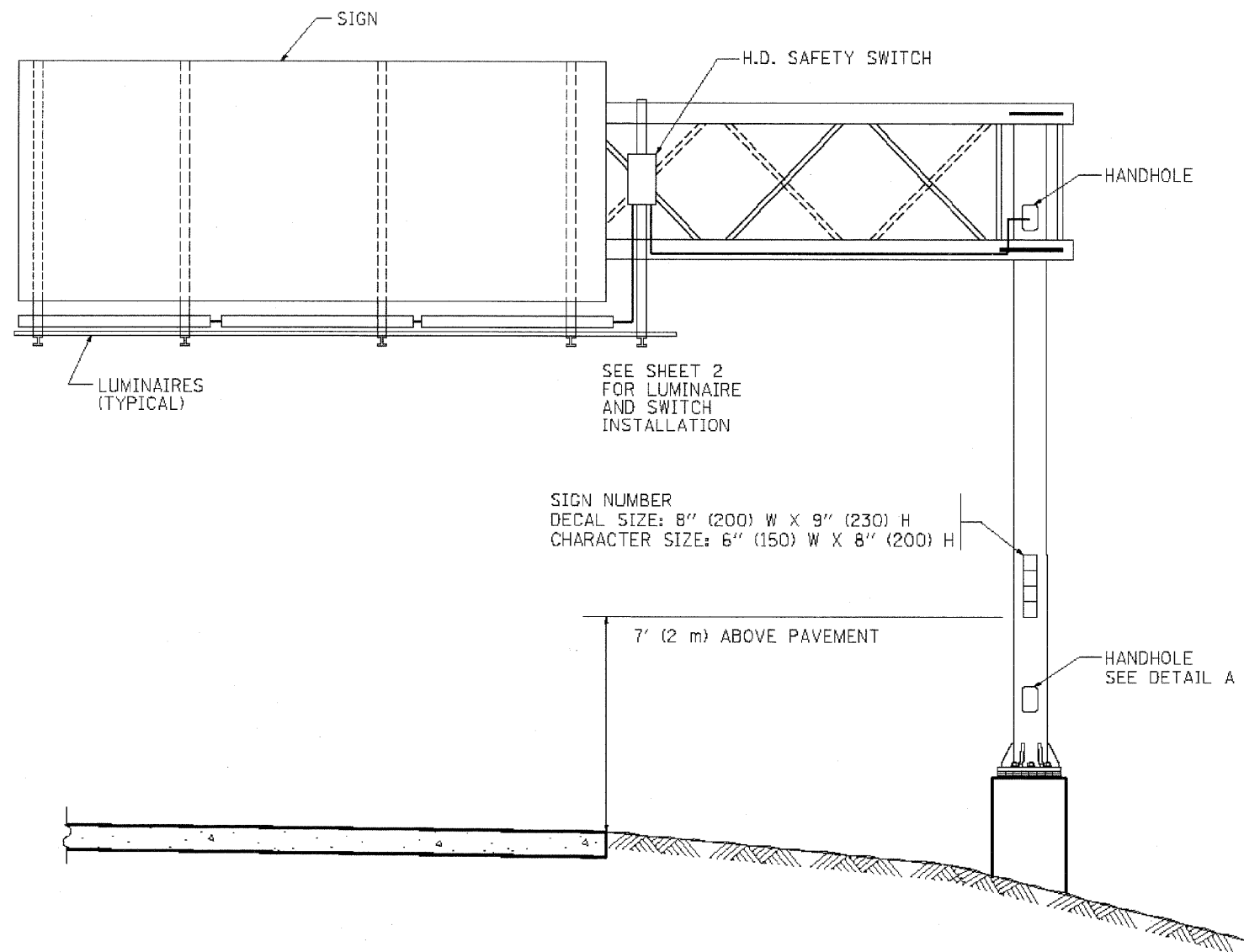
REVISIONS	
NAME	DATE
	08/19/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ELECTRIC CONNECTION TO SIGN STRUCTURE
 SPAN TYPE
 2 OF 2
 SCALE: VERT. NONE
 HORIZ.
 DRAWN BY
 CHECKED BY
 BE-600

PLOT DATE: 4/18/2007
 FILE NAME: K:\asas\asas\asas.dgn
 PLOT SCALE: 1/8"=1'-0"
 USER NAME: asas
 D:\60D21-111-DISTRICT DETAIL.S.dgn

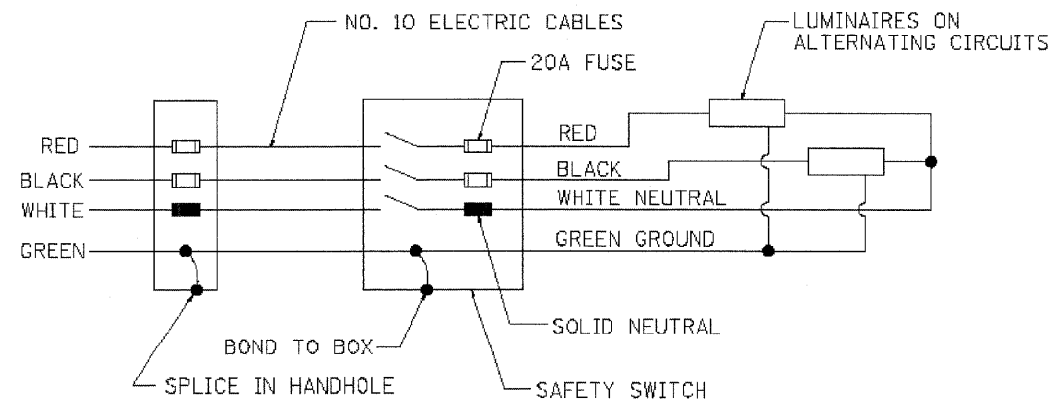
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	112
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

• (0405,ETC,42-1&0701RS-11

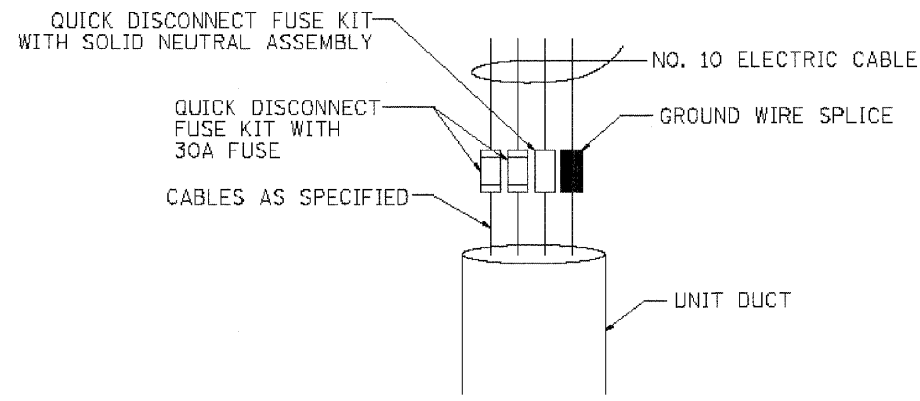


NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE GALVANIZED RIGID METALIC CONDUIT, PVC COATED (GRMC, PVC)
3. THE USE OF LIQUID TIGHT METAL CONDUIT (TYPE LFMC) SHALL BE LIMITED TO LOCATIONS WHERE MOVEMENT IS ANTICIPATED AND SHALL NOT EXCEED 5' (1.5M) IN LENGTH
4. ALL WORK INDICATED SHALL BE INCLUDED IN THE PAY ITEM FOR ELECTRIC CONNECTION TO SIGN STRUCTURE
5. THE SAFETY SWITCH SHALL BE LOCATED ON THE SIDE OF THE SIGN STRUCTURE WHICH IS CLOSEST TO THE SHOULDER, OR EDGE OF PAVEMENT.



WIRING DIAGRAM



DETAIL A

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE
	08/19/04

ILLINOIS DEPARTMENT OF TRANSPORTATION

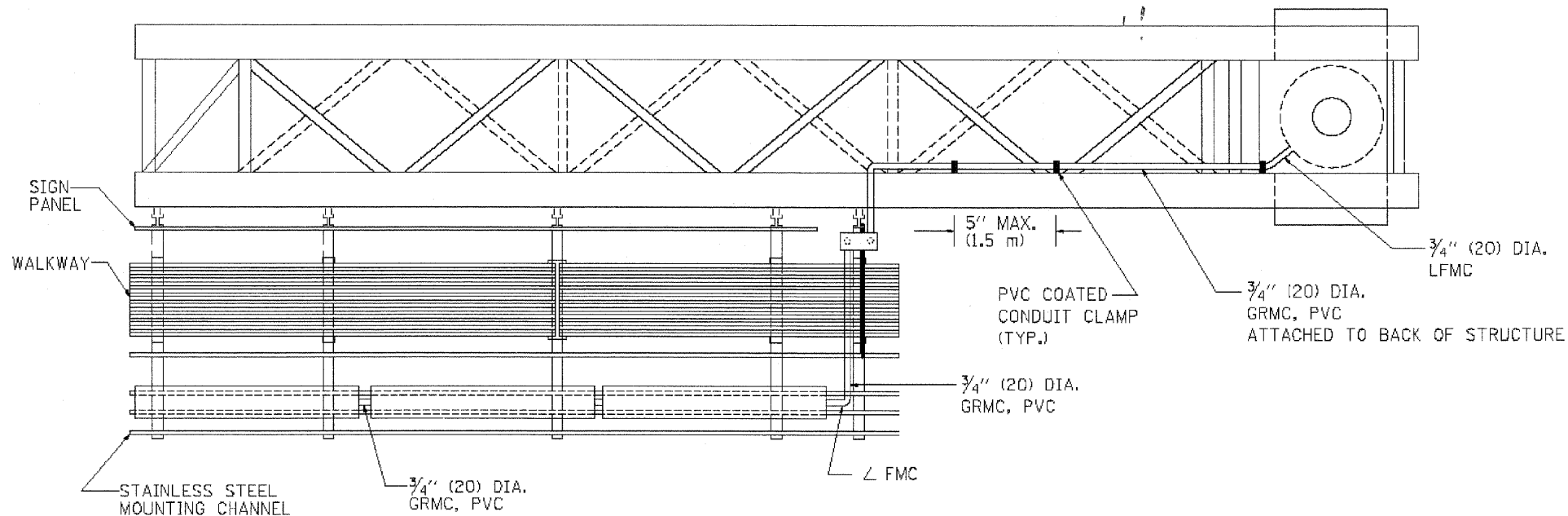
ELECTRIC CONNECTION
TO SIGN STRUCTURE
CANTILEVER TYPE
1 OF 2

SCALE: VERT. NONE
HORIZ.

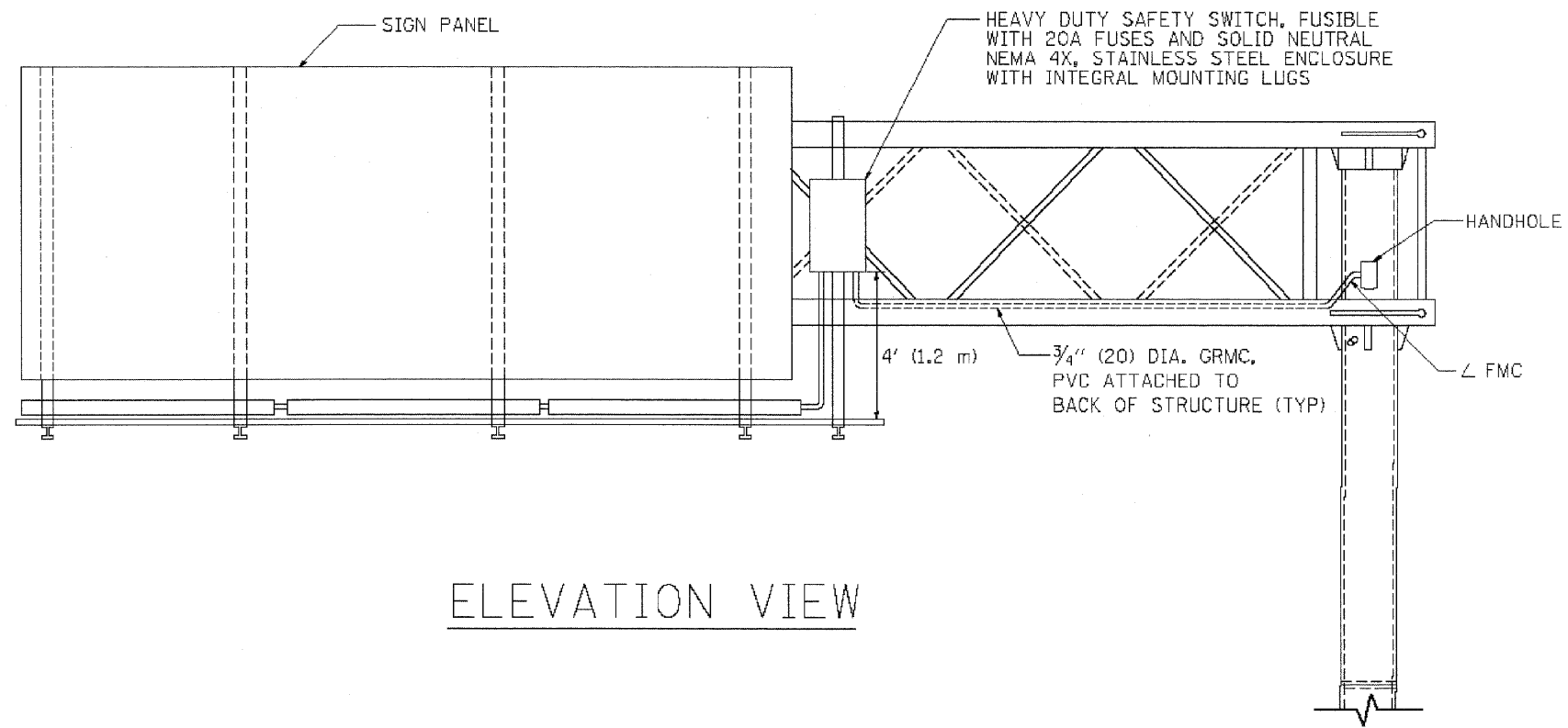
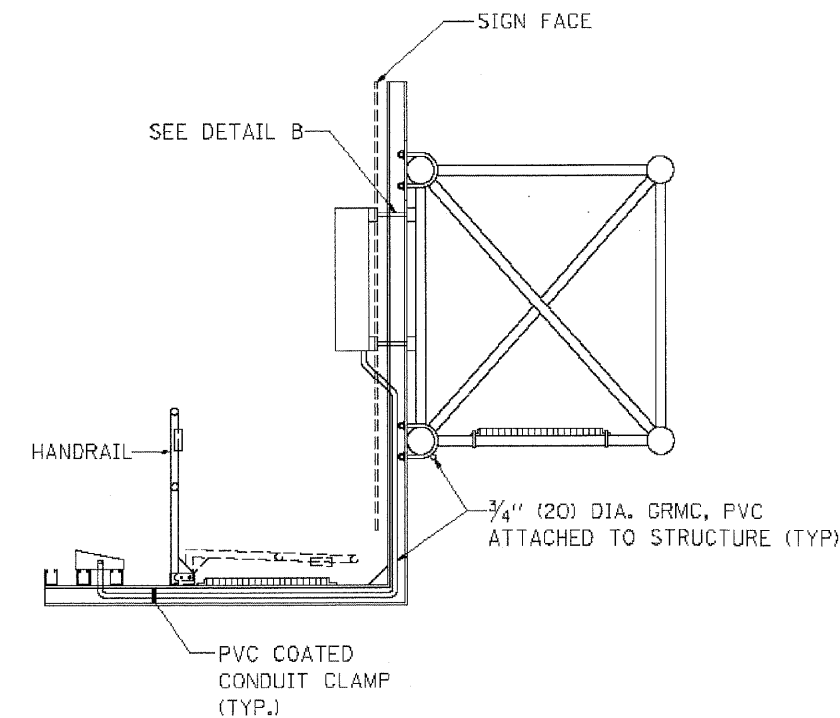
DRAWN BY
CHECKED BY
BE-601

CONTRACT NO. 60021				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	113
STAs		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

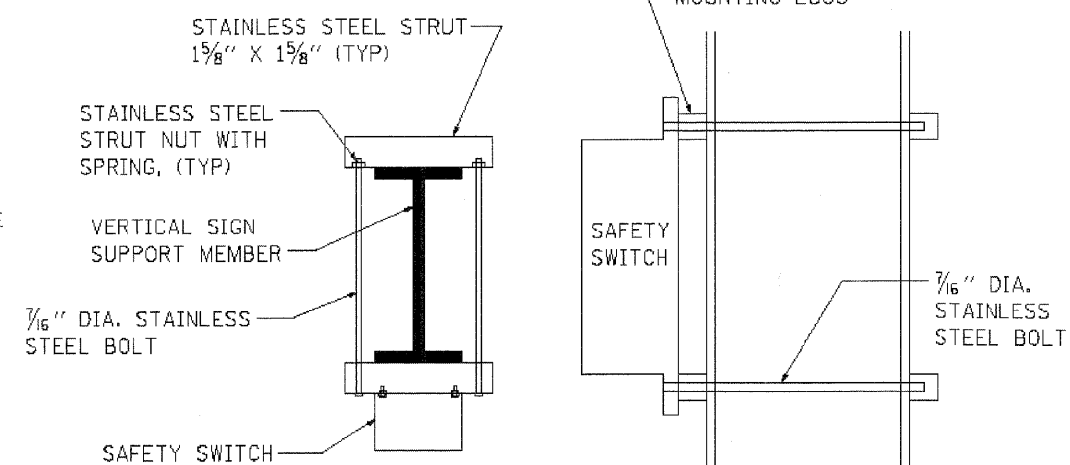
• (0405,ETC,42-7&0707RS-11



TOP VIEW



ELEVATION VIEW



TOP VIEW

SIDE VIEW

DETAIL B

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE
	08/19/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ELECTRIC CONNECTION TO SIGN STRUCTURE
 CANTILEVER TYPE
 2 OF 2

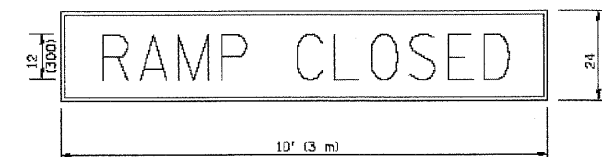
SCALE: VERT. NONE
 HORIZ. NONE
 DRAWN BY
 CHECKED BY
 BE-601

PLOT DATE = 8/19/04
 PLOT NAME = D:\projects\60021\60021.dgn
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = bbarrett
 D:\60021-113-DISTRICT DETAILS.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	114
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• (0405,ETC,42-T&0707RS-11

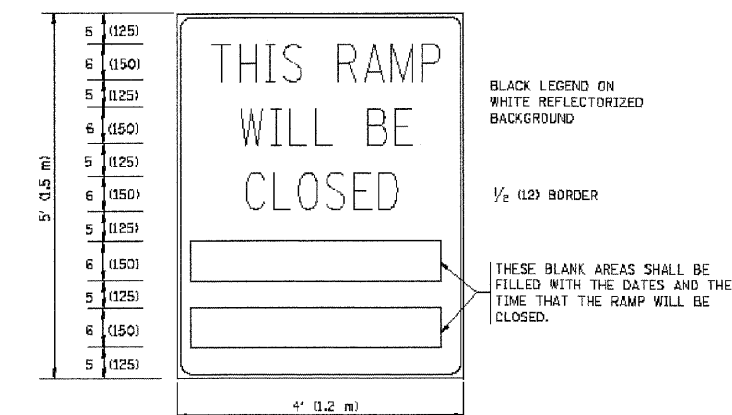
RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND
1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMP.

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND

1/2" (12) BORDER

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

GENERAL NOTES:

- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

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

REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/02
JAF	2/06
SPB	1/07
Revise devices to meet NCHRP 350	4/03

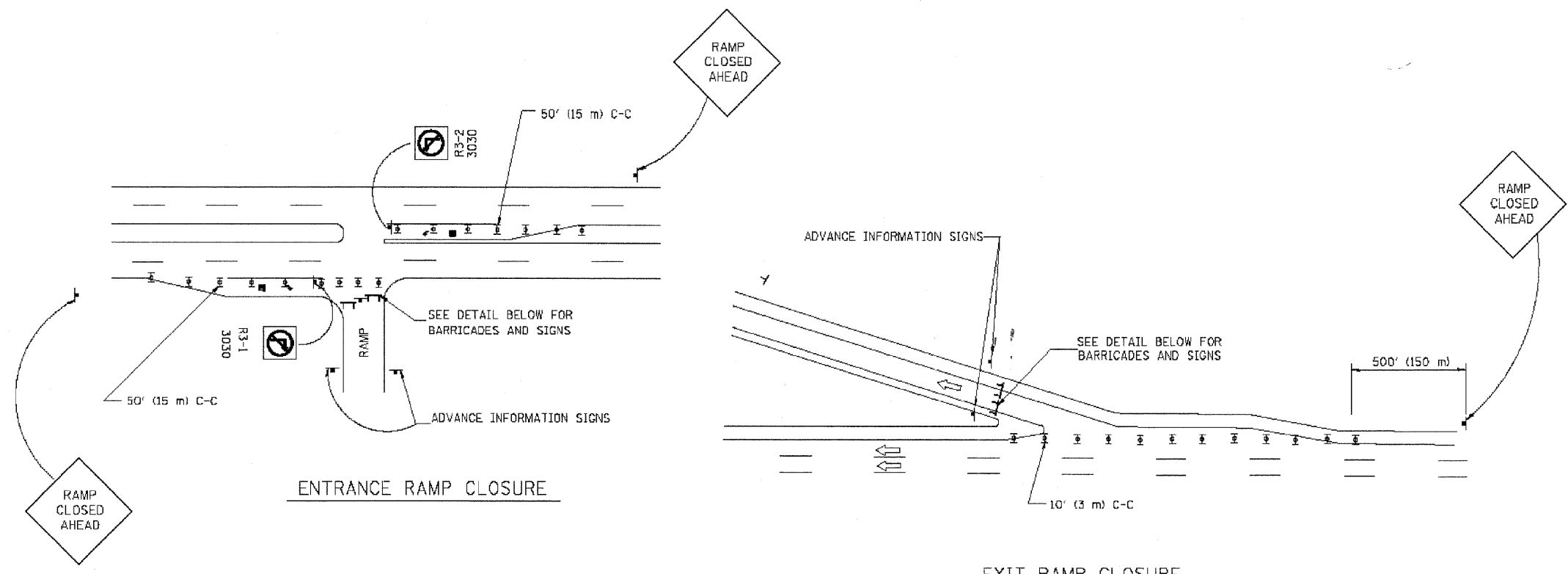
ILLINOIS DEPARTMENT OF TRANSPORTATION

**FREWAY
ENTRANCE AND EXIT RAMP
CLOSURE DETAILS**

SCALE: NONE

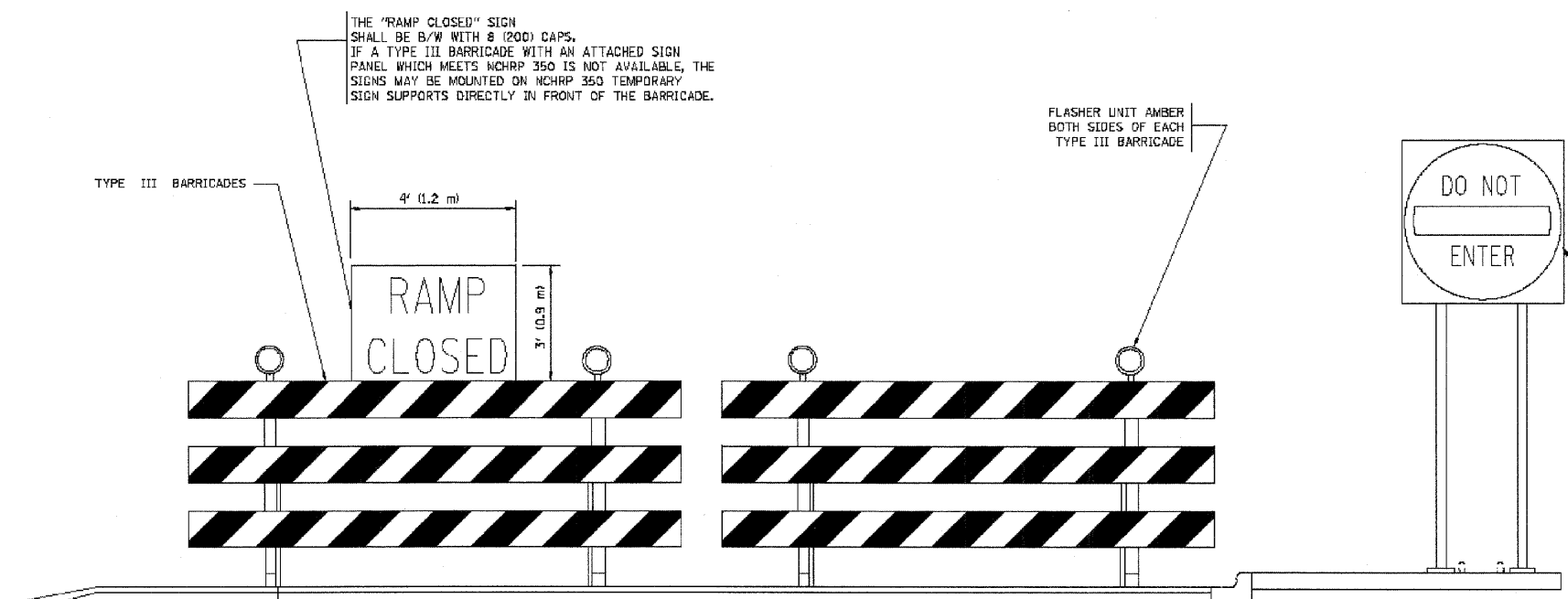
DRAWN BY
CHECKED BY

TC-8



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 8 (200) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.

FLASHER UNIT AMBER BOTH SIDES OF EACH TYPE III BARRICADE



DETAIL FOR REQUIRED BARRICADES & SIGNS

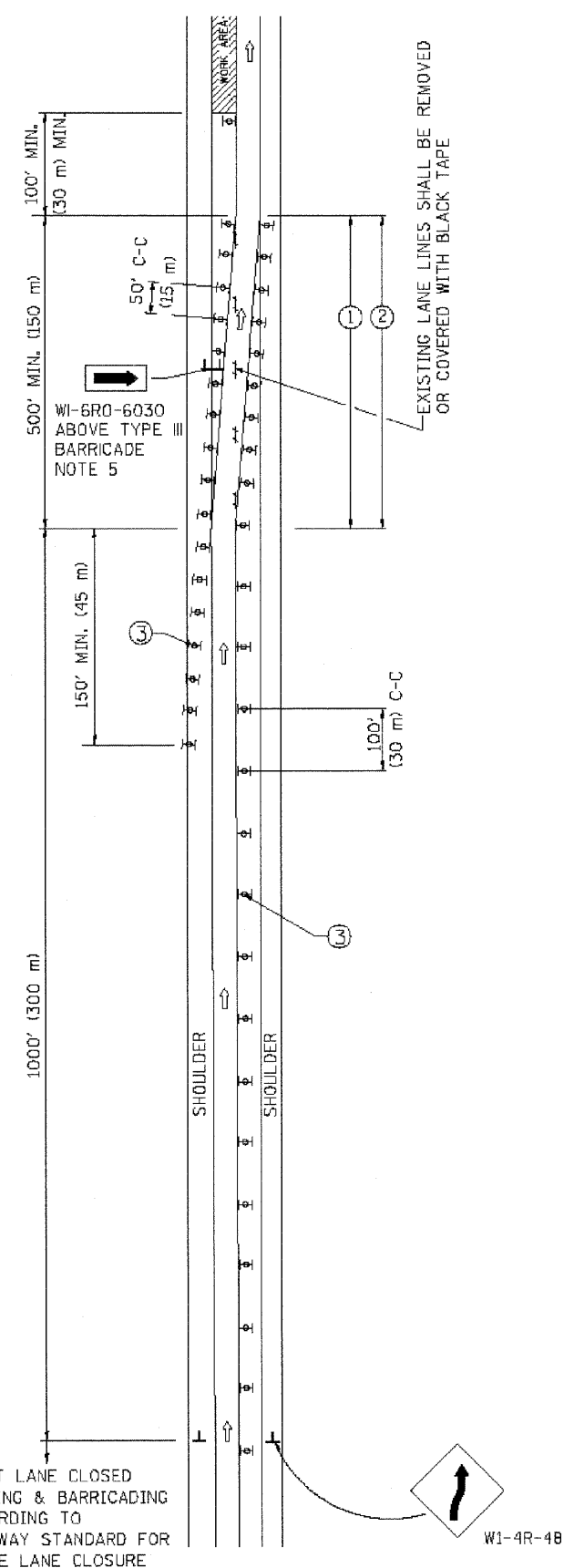
- SYMBOLS**
- ☐ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ☐ TYPE III BARRICADE WITH FLASHING LIGHT

PLOT DATE = 3/6/2007
 FILE NAME = 15000000.dwg
 USER NAME = haward
 D:\60021-114-DISTRICT DETAIL S.dgn

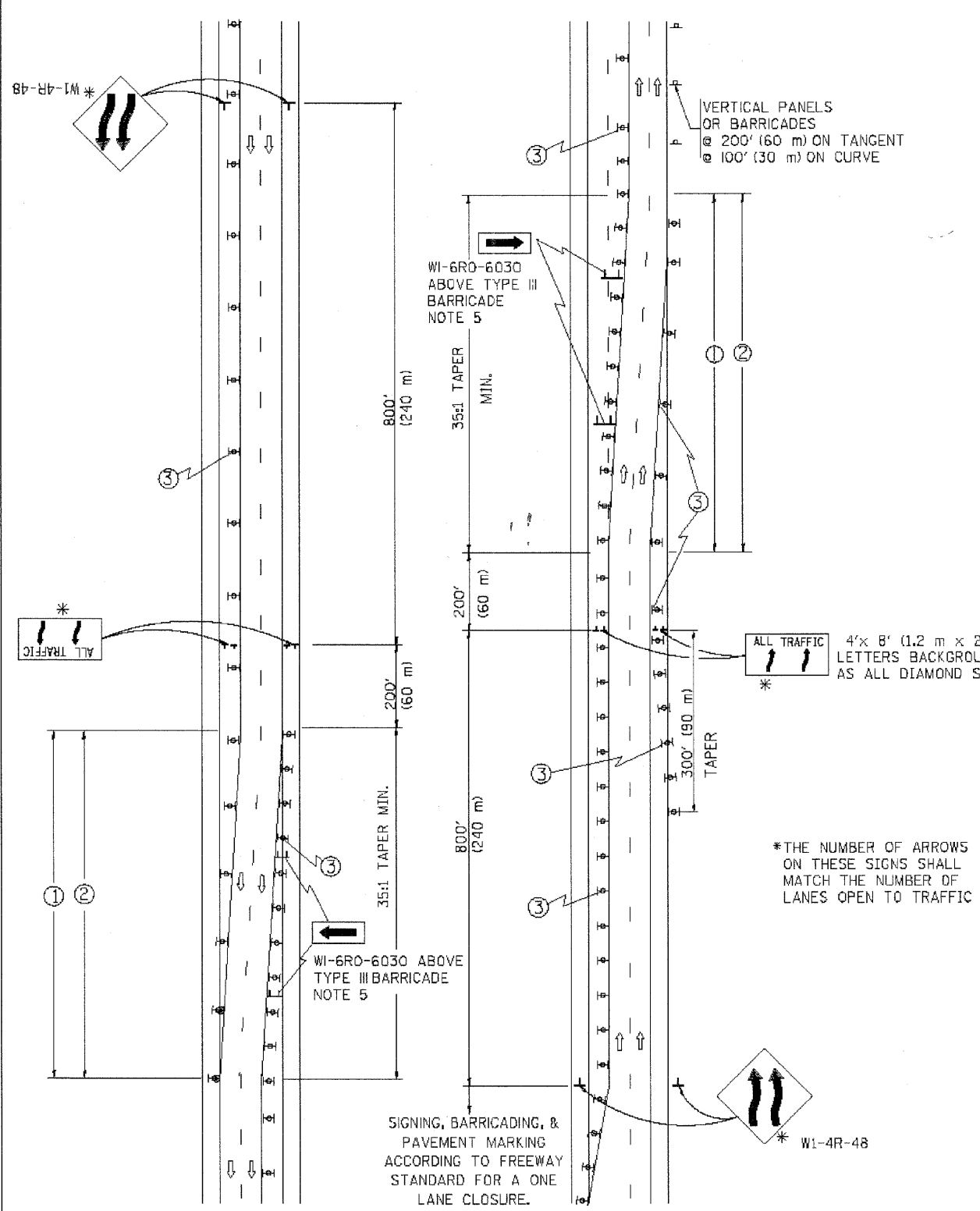
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	115
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

• (0405,ETC,42-7&0707RS-11

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES

- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED OR COVERED WITH BLACK TAPE. PAVEMENT MARKING REMOVAL OR BLACK TAPE SHALL NOT BE REQUIRED FOR LANE CLOSURES UNDER 24 HOURS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVE LANE LINES SHALL BE 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.
- IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	2/87
DWS	1/90
DWS	12/27/94
DWS	11/95
JAF	4/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SINGLE & MULTI-LANE WEAVE

SCALE: NONE

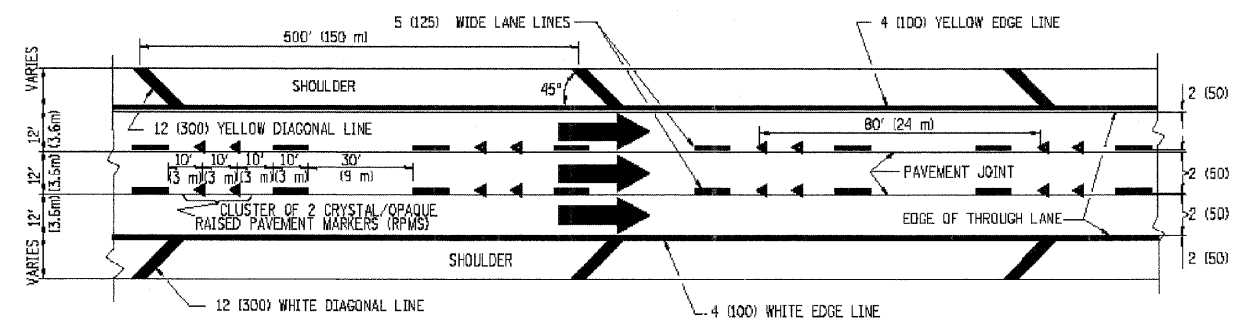
DRAWN BY R.H.
 CHECKED BY
 TC-9

PLT DATE: 3/6/2007
 FILE NAME: C:\Users\jaf\Documents\Traffic.dgn
 USER NAME: jaf
 D160D21-115-DISTRICT DETAILS.dgn

CONTRACT NO. 60021			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
94		COOK	133
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

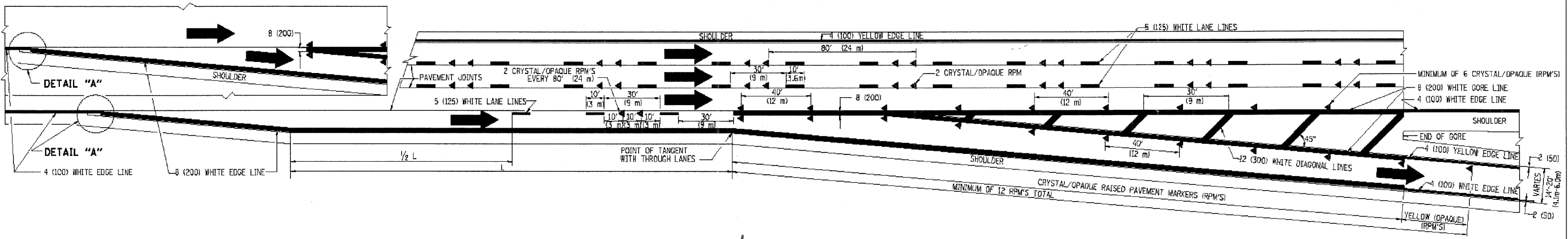
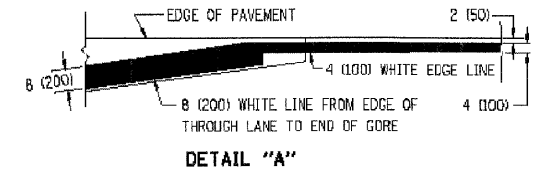
• 10405,ETC,42-7&0707RS-11

THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH
THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH

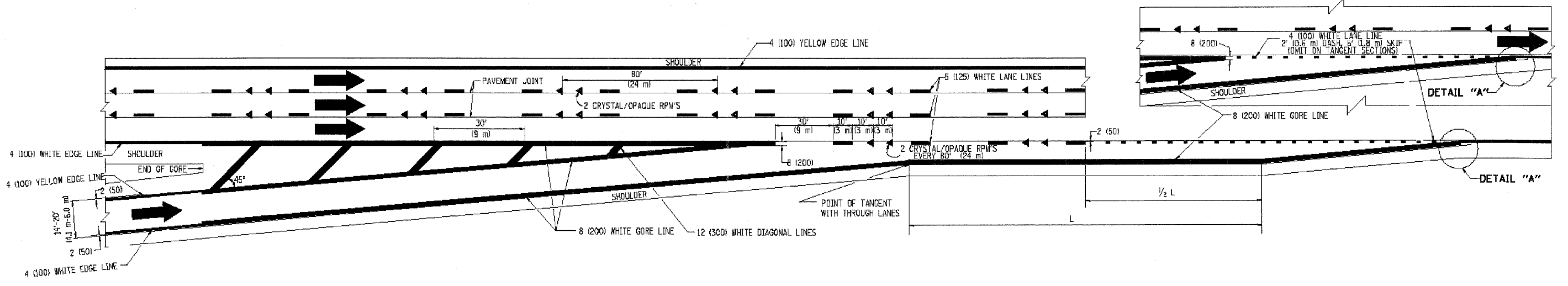


TYPICAL EDGE LINES & LANE LINES

- NOTES:
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
 2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
 3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC



TYPICAL EXIT RAMP PAVEMENT MARKINGS



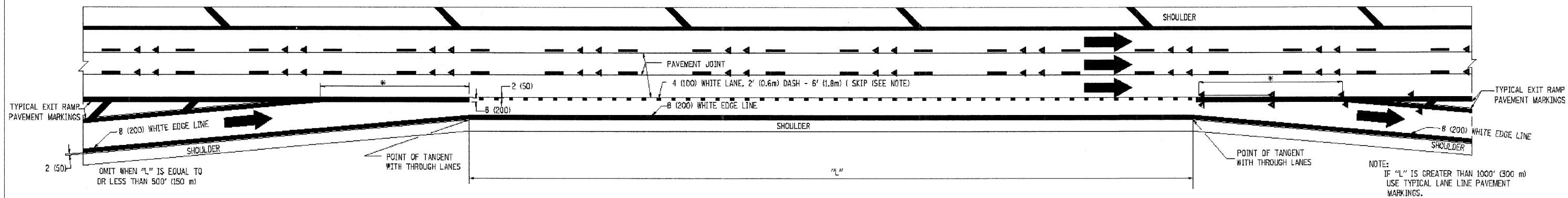
TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
AH	3/96
DWS	7/96
JAF	2/06
SPB	1/07

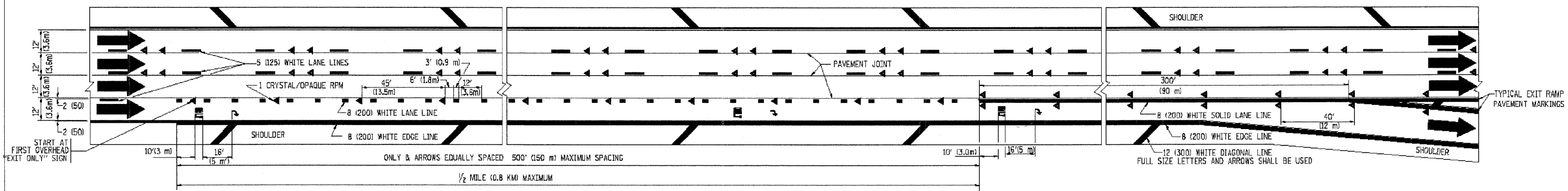
ILLINOIS DEPARTMENT OF TRANSPORTATION
MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS
SCALE: NONE
DRAWN BY C.A.D.D.
CHECKED BY
TC12 SHEET 1 OF 2

PLT DATE: 3/6/2007
FILE NAME: K:\adambard\adambard.dwg
PLT SCALE: 1/8"=1'-0"
PROJECT: DISTRICT 116-DISTRICT DETAILS.dgn

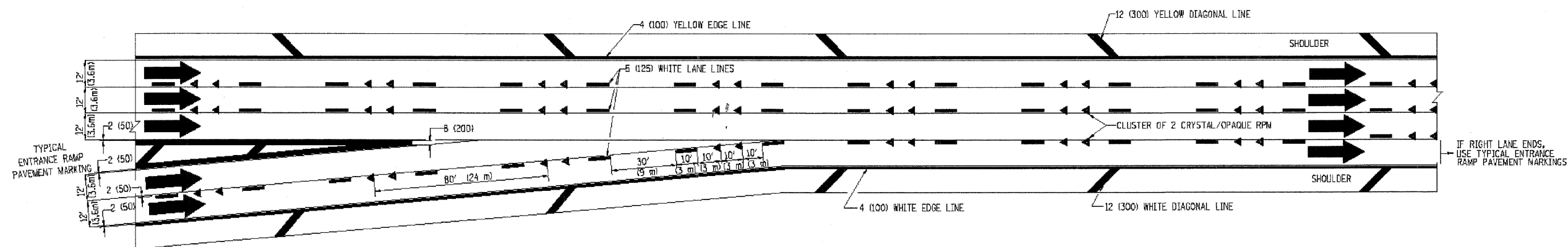
CONTRACT NO. 60021				
F. A. I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	117
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• 10405, ETC, 42-7&0707RS-11				



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS

SCALE: NONE

DRAWN BY C.A.D.D.

CHECKED BY

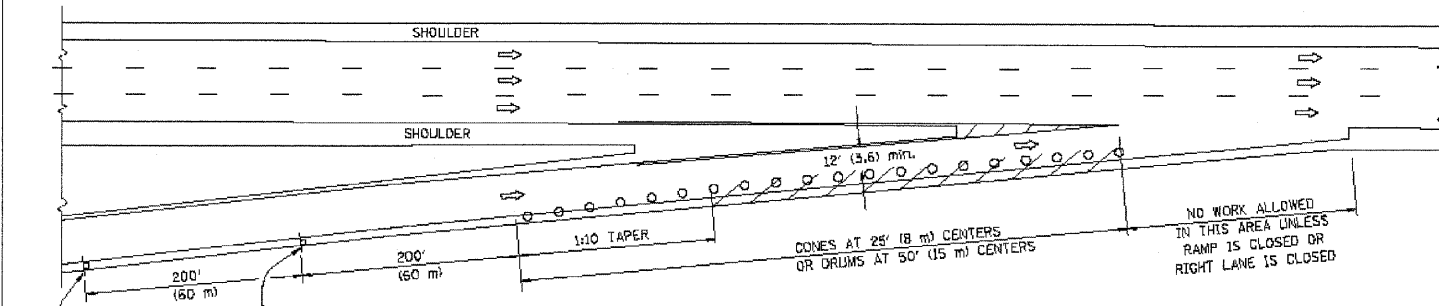
TC12 SHEET 2 OF 2

PLOT DATE: 3/6/2007
FILE NAME: K:\advised\ad2.dgn
PLOT SCALE: 1/8"=1'-0"
USER NAME: j...
D:\002111-DISTRICT DETAILS.dgn

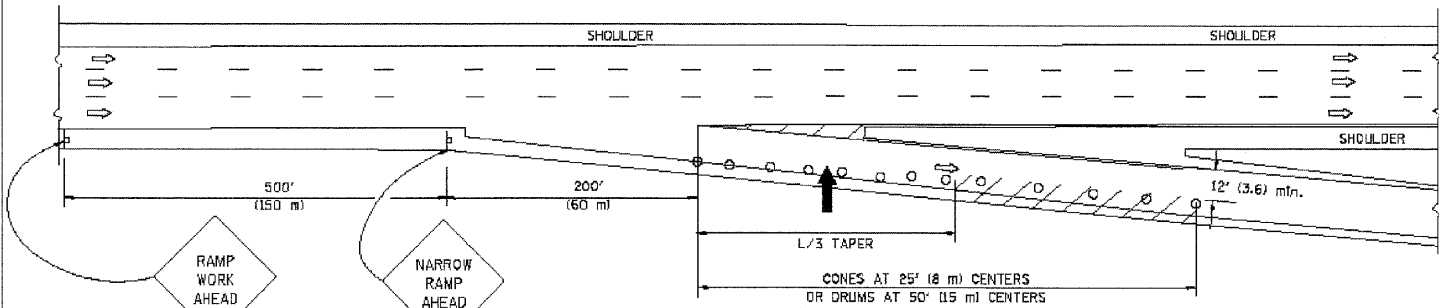
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

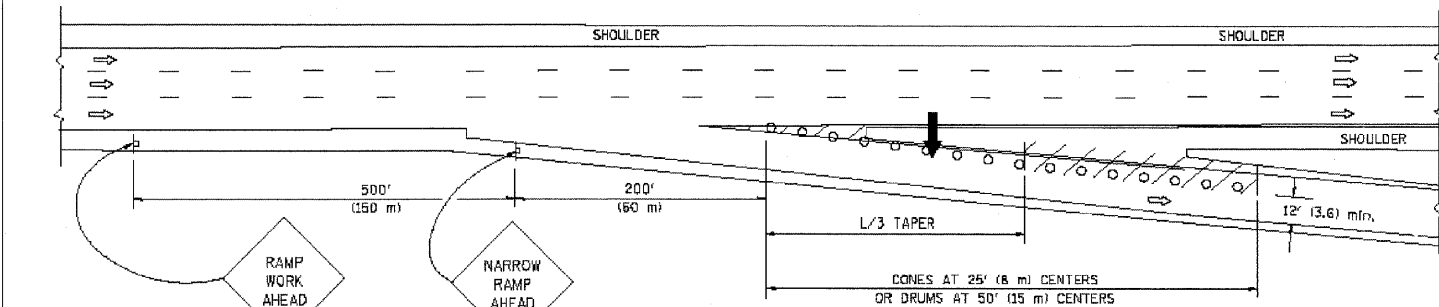
F.A. I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	118
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (0405, ETC. 42-7&0707RS-11)				



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

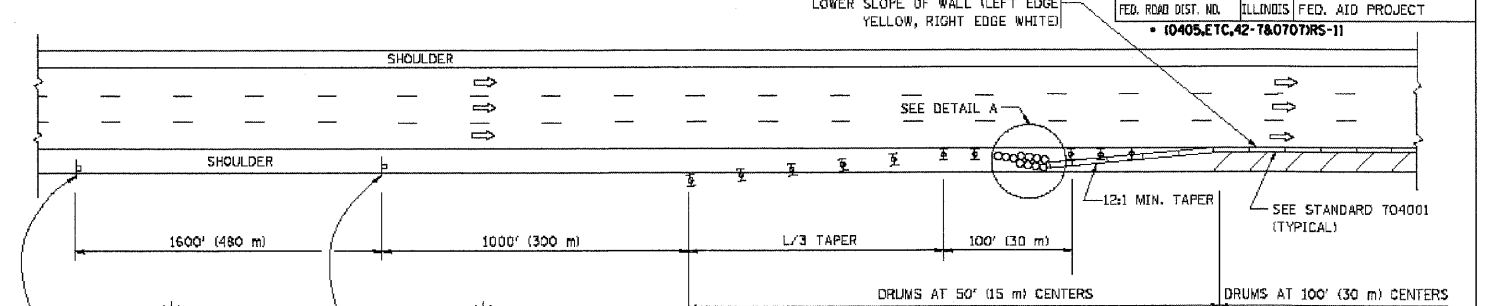
SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

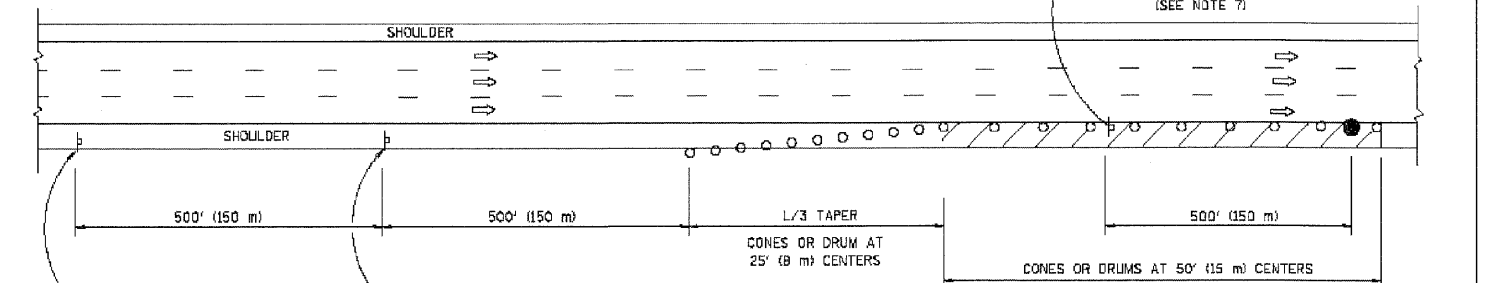
GENERAL NOTES

- THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC ENGLISH
	$L=0.65(W/S)$ $L=(W/S)$
	W = WIDTH OF OFFSET IN FEET (METERS)
	S = NORMAL POSTED SPEED MPH (KM/H)
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

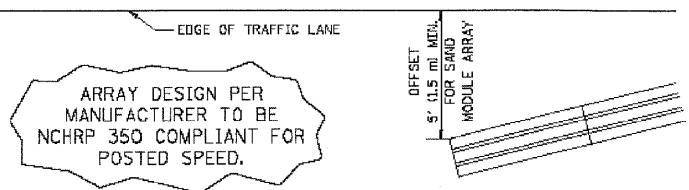


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRDACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
 IMPACT ATTENUATOR, TEMPORARY
 (SEE NOTE 5)

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

REVISIONS	
NAME	DATE
DWS	11/95
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES
 PARTIAL RAMP CLOSURES

SCALE: NONE

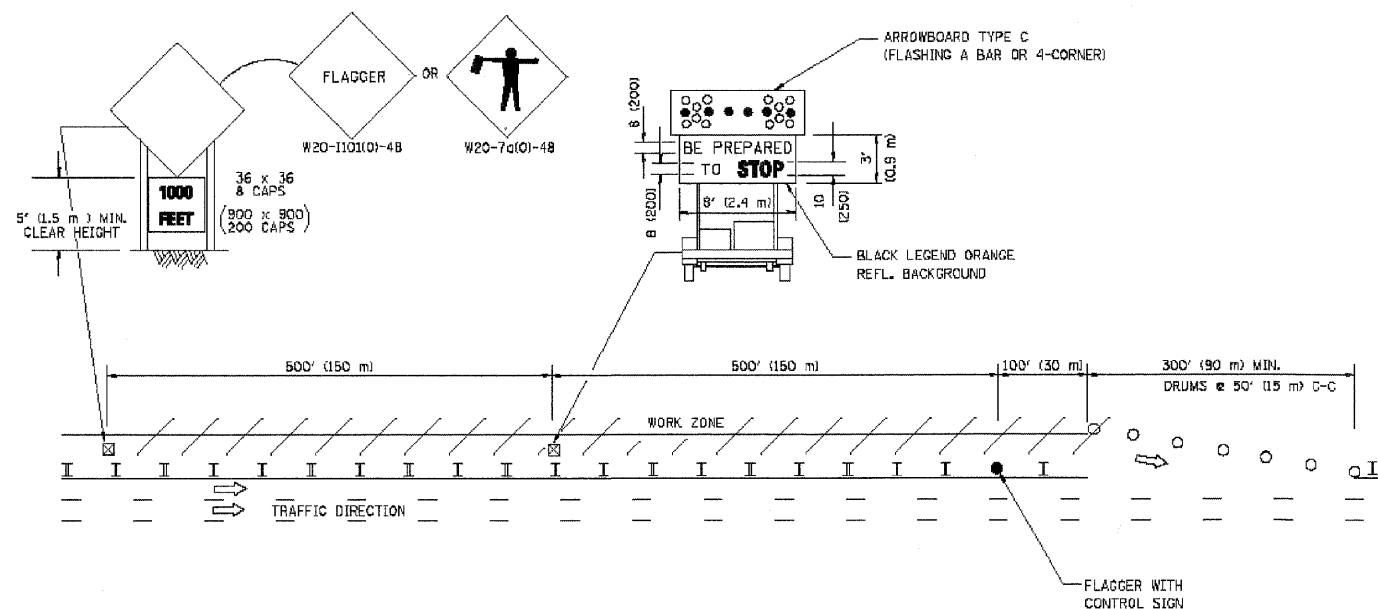
DESIGNED BY: DWS
 DRAWN BY:
 CHECKED BY:
 TC-17

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	119
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

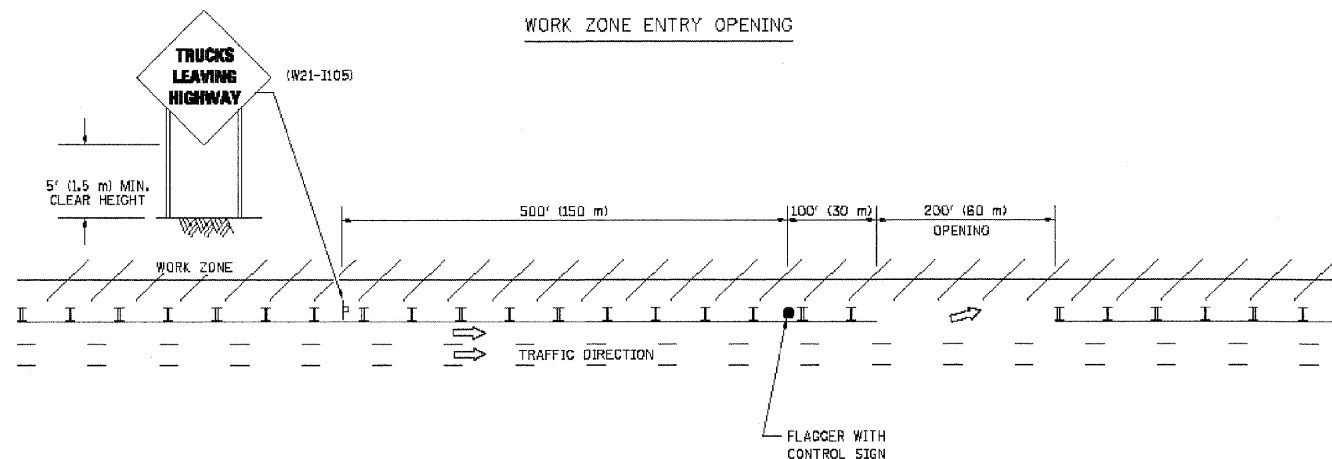
• 10405,ETC,42-T&0707RS-11

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	8/98
JAF	4/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

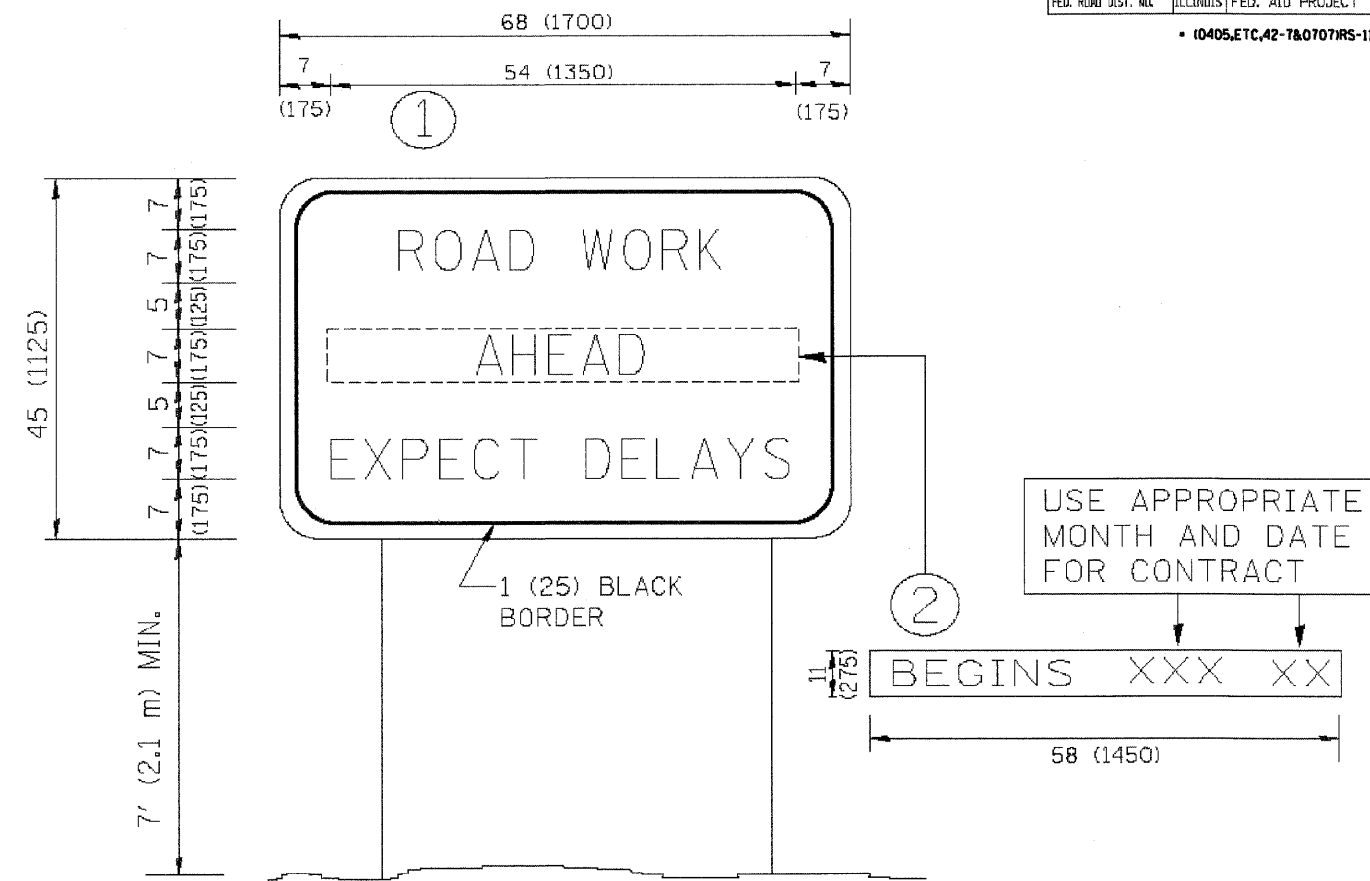
SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

SCALE: NONE

DRAWN BY CADD

CHECKED BY TC-18

CONTRACT NO. 60021			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
94		COOK	133
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	
			• 10405, ETC, 42-7&0707RS-11



NOTES:

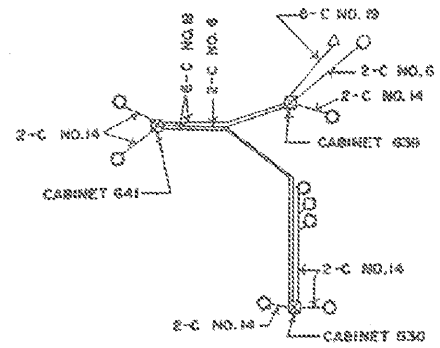
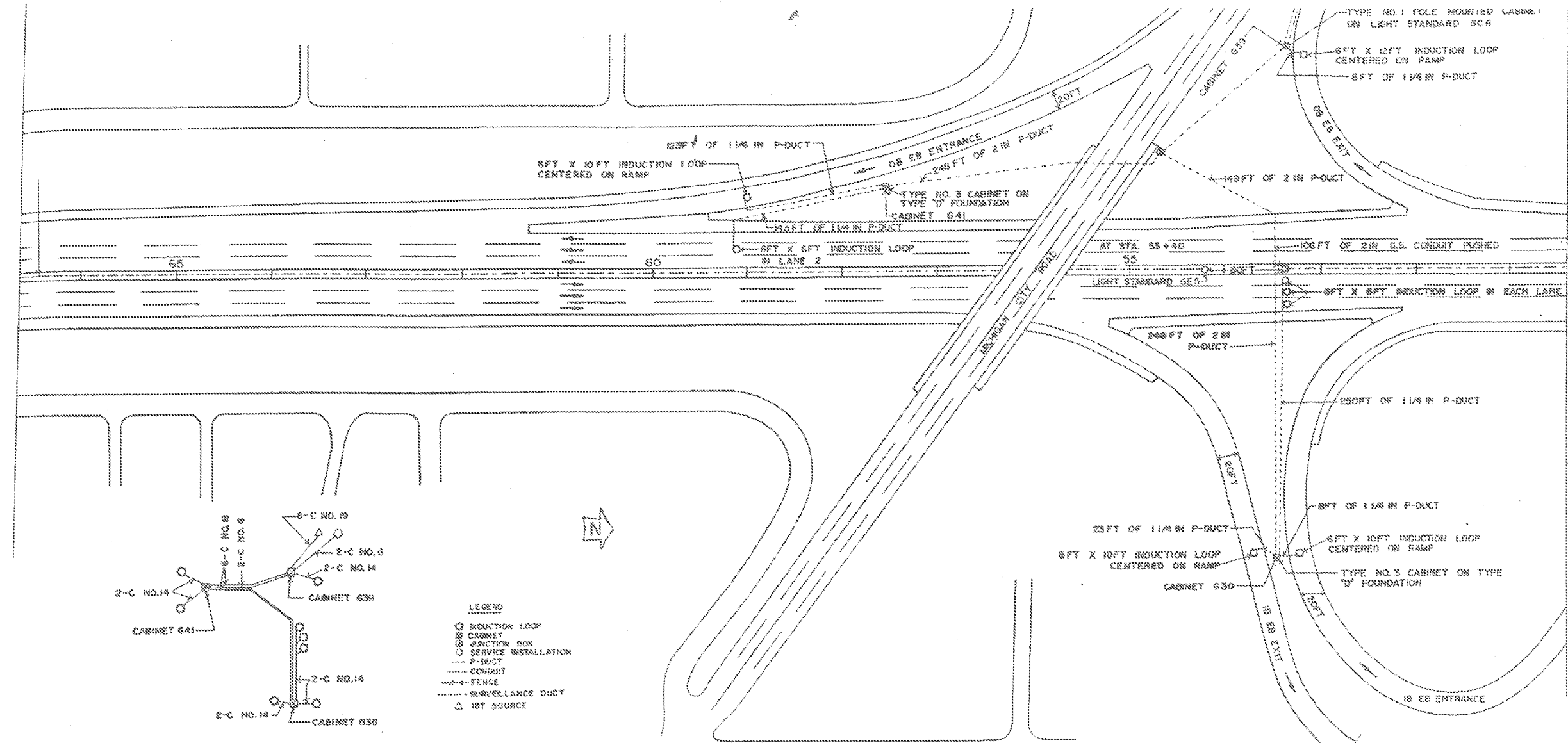
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
**ARTERIAL ROAD
 INFORMATION SIGN**
 SCALE: NONE
 DRAWN BY DESIGN
 CHECKED BY
 TC22

PLOT DATE = 2/20/2007
 FILE NAME = K:\data\60021\60021.dgn
 PLOT SCALE = 80.000 X 1.000
 USER NAME = ramachert
 D:\60021-120-DISTRICT DETAILS.dgn



WIRING DIAGRAM

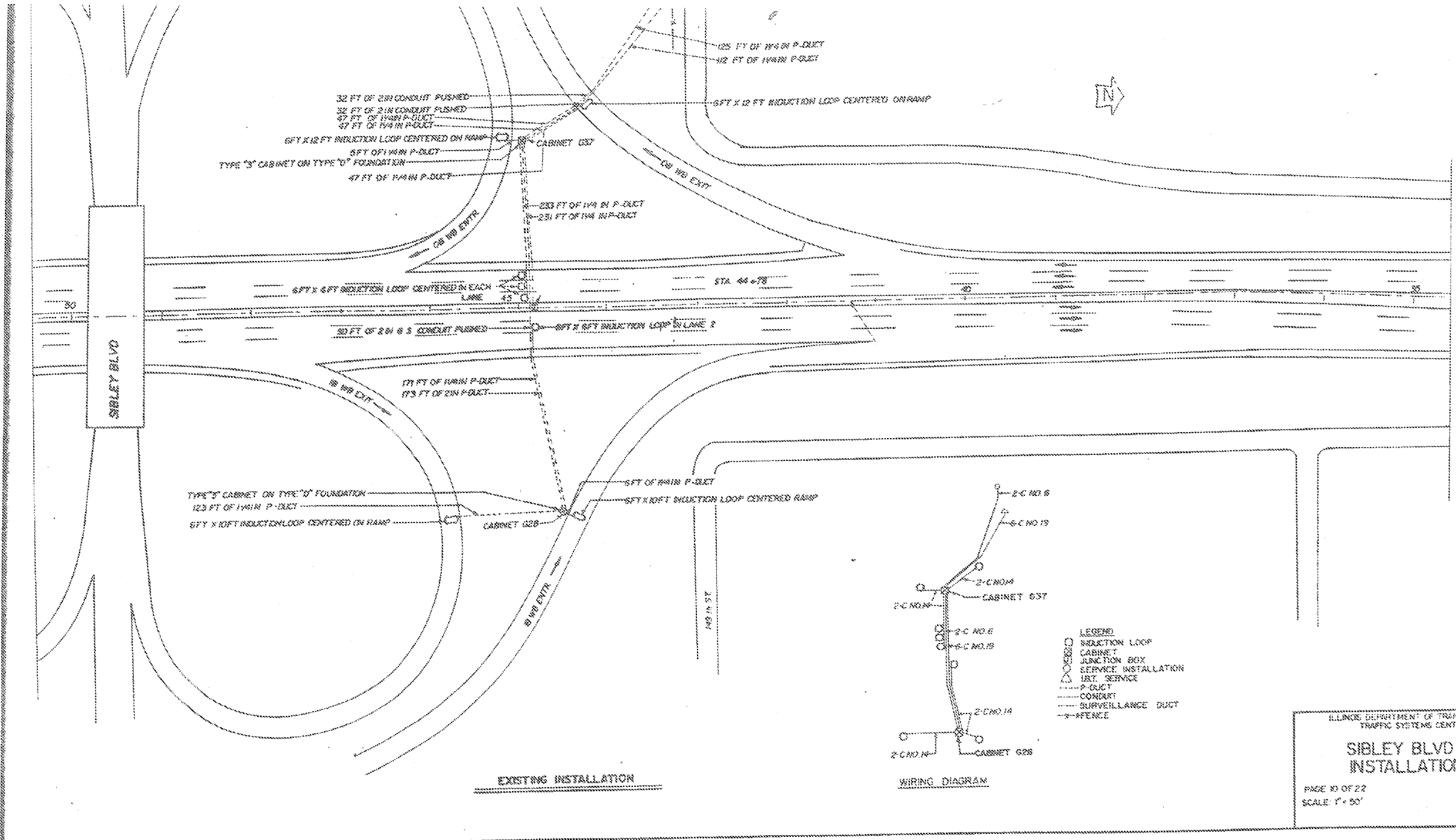
- LEGEND**
- INDUCTION LOOP
 - CABINET
 - ⊗ JUNCTION BOX
 - SERVICE INSTALLATION
 - P-DUCT
 - CONDUIT
 - FENCE
 - SURVEILLANCE DUCT
 - △ 187 SOURCE

EXISTING INSTALLATION

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC SYSTEMS CENTER
**SIBLEY BLVD
 INSTALLATION**
 PAGE 8 OF 22
 SCALE: 1 IN = 50 FT DRAWN BY: SUW

FOR INFORMATION ONLY

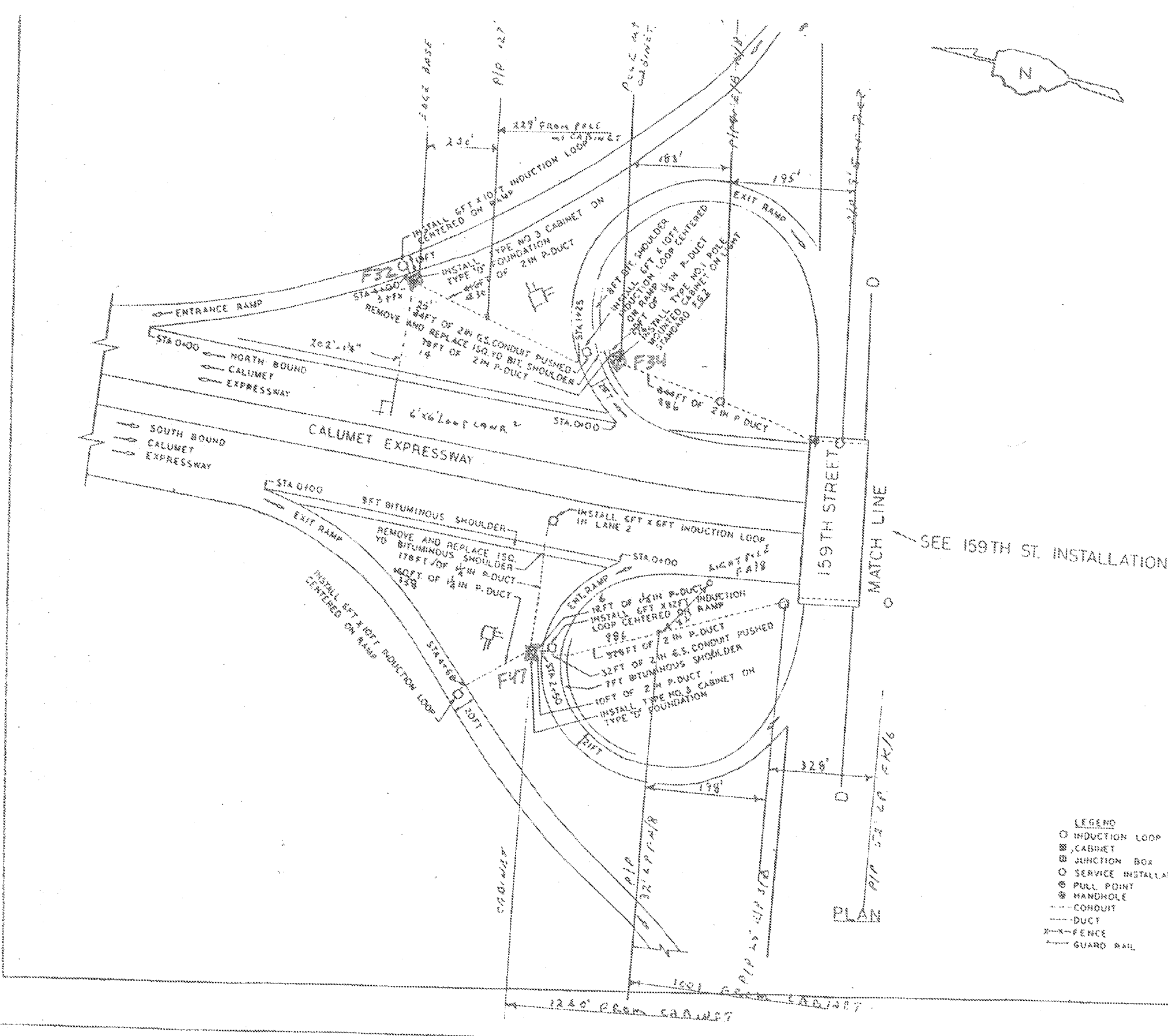
FILE NAME = D:\60021-121-DISTRICT DETAILS.dgn	USER NAME = dwoznierski	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BISHOP FORD EXPRESSWAY (I-94) TRAFFIC SURVEILLANCE			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = N/A	CHECKED -	REVISED -					94	(0405,ETC,42-T&0707RS-11)	COOK	133	121
PLOT DATE = 2/5/2009	DATE = 2/5/2009	REVISOR -	REVISOR -		SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60021	



ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC SYSTEMS CENTER
**SIBLEY BLVD
 INSTALLATION**
 PAGE 10 OF 22
 SCALE: 1" = 50'

FOR INFORMATION ONLY

FILE NAME = DI68021-122-DISTRICT DETAILS.dgn	USER NAME = dwoznioraki	DESIGNED - DRAWN - DMW, GDS	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BISHOP FORD EXPRESSWAY (I-94) TRAFFIC SURVEILLANCE		F.A.I. RTE. 94	SECTION 0405,ETC,42-7&0707RS-11	COUNTY COOK	TOTAL SHEETS 133	SHEET NO. 122	
PLOT SCALE = N/A	CHECKED -	REVISED -	REVISED -		SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	CONTRACT NO. 60021				
PLOT DATE = 2/5/2009	DATE - 2/5/2009	REVISED -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							



SCHEDULE OF QUANTITIES

30.3	2000 LIN. FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 27C
2.557	1042 LIN. FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
2.807	1404 LIN. FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
	120 FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
	120 FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
3.15	200 LIN. FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
	120 FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
	120 FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
8.656	1000 LIN. FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
2.507	1000 LIN. FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 17C
	4 EACH	CONCRETE FOUNDATION, TYPE A
	8 EACH	CONCRETE FOUNDATION, TYPE B
	8 EACH	CONCRETE FOUNDATION, TYPE C
	8 EACH	CONCRETE FOUNDATION, TYPE D
	8 EACH	CONCRETE FOUNDATION, TYPE E
	8 EACH	CONCRETE FOUNDATION, TYPE F
	8 EACH	CONCRETE FOUNDATION, TYPE G
	8 EACH	CONCRETE FOUNDATION, TYPE H
	8 EACH	CONCRETE FOUNDATION, TYPE I
	8 EACH	CONCRETE FOUNDATION, TYPE J
	8 EACH	CONCRETE FOUNDATION, TYPE K
	8 EACH	CONCRETE FOUNDATION, TYPE L
	8 EACH	CONCRETE FOUNDATION, TYPE M
	8 EACH	CONCRETE FOUNDATION, TYPE N
	8 EACH	CONCRETE FOUNDATION, TYPE O
	8 EACH	CONCRETE FOUNDATION, TYPE P
	8 EACH	CONCRETE FOUNDATION, TYPE Q
	8 EACH	CONCRETE FOUNDATION, TYPE R
	8 EACH	CONCRETE FOUNDATION, TYPE S
	8 EACH	CONCRETE FOUNDATION, TYPE T
	8 EACH	CONCRETE FOUNDATION, TYPE U
	8 EACH	CONCRETE FOUNDATION, TYPE V
	8 EACH	CONCRETE FOUNDATION, TYPE W
	8 EACH	CONCRETE FOUNDATION, TYPE X
	8 EACH	CONCRETE FOUNDATION, TYPE Y
	8 EACH	CONCRETE FOUNDATION, TYPE Z

SEE 159TH ST. INSTALLATION

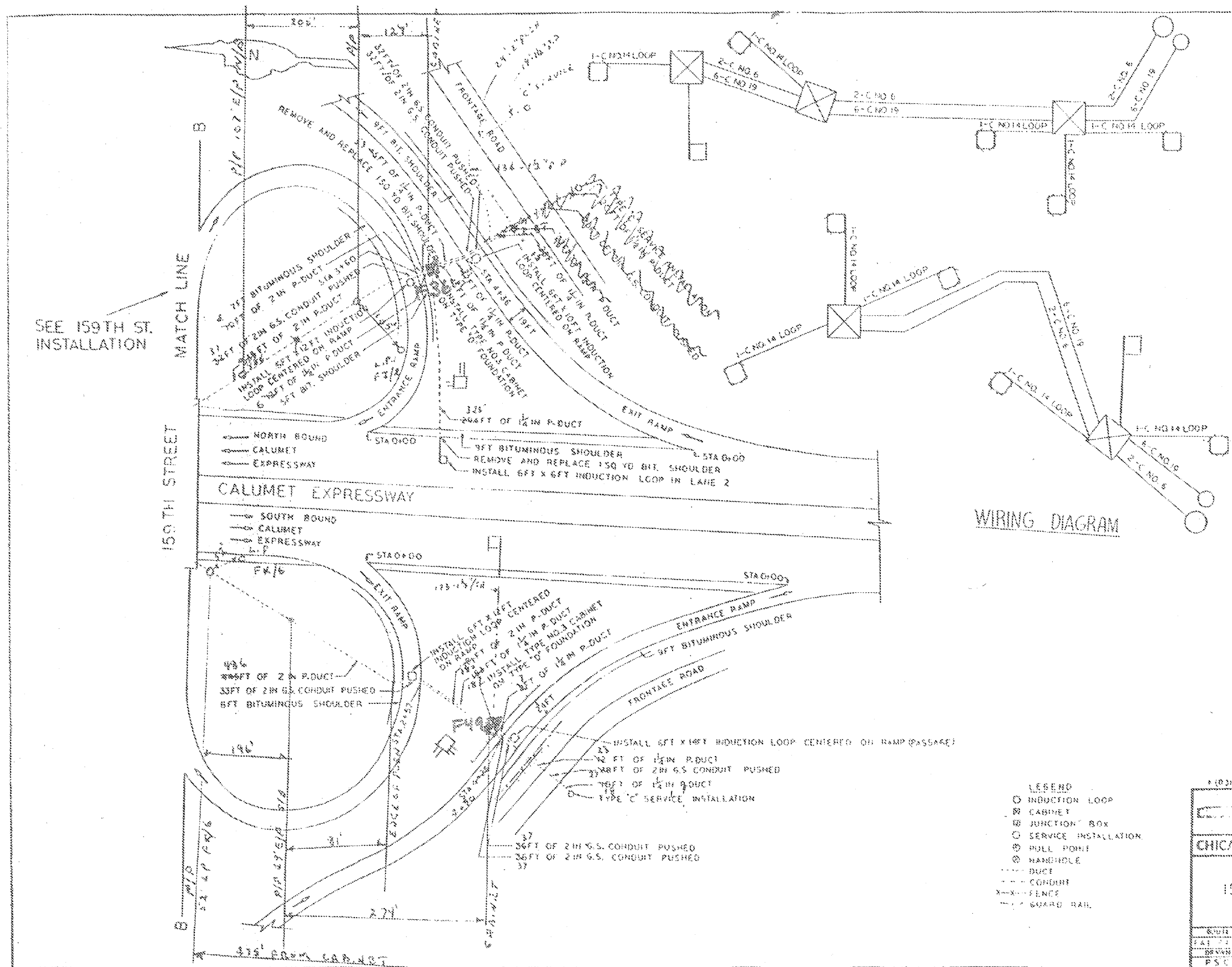
FOR INFORMATION ONLY

STATE OF ILLINOIS
 DIVISION OF HIGHWAYS
 CHICAGO AREA EXPRESSWAY SURVEILLANCE TROOP

159TH STREET INSTALLATION
 (SHEET 1 OF 2)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	10405, ETC, 42-780707RS-11	COOK	133	124
CONTRACT NO. 60021				

- LEGEND
- INDUCTION LOOP
 - ⊗ CABINET
 - ⊕ JUNCTION BOX
 - SERVICE INSTALLATION
 - ⊙ PULL POINT
 - ⊙ HANDHOLE
 - CONDUIT
 - DUCT
 - - - FENCE
 - GUARD RAIL



WIRING DIAGRAM

FOR INFORMATION ONLY

10314-721-3 (E) 4-12426-721-1 (E)D

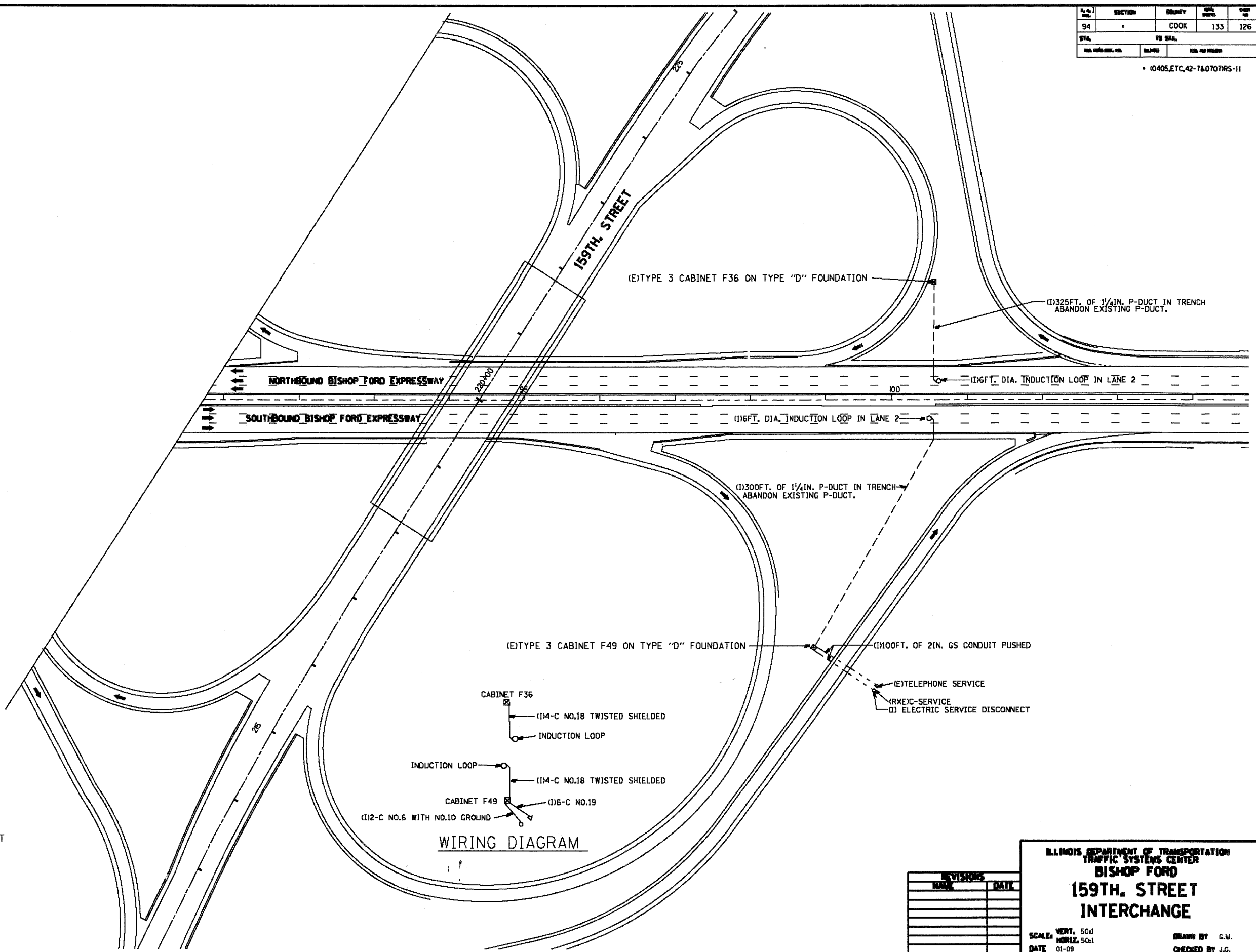
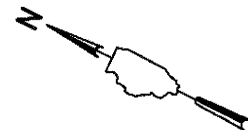
STATE OF ILLINOIS
DIVISION OF HIGHWAYS
CHICAGO AREA EXPRESSWAY SURVEILLANCE PROJECT

159 TH STREET INSTALLATION
(SHEET 2 OF 2)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	0405,ETC,42-7&0707RS-11	COOK	133	125
CONTRACT NO. 60021				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

SECTION	COUNTY	DATE	NO.
94	COOK	133	126
TO STA.		FROM STA.	
NO. OF SHEETS		NO. OF SHEETS	

(10405,ETC,42-7&0707RS-11

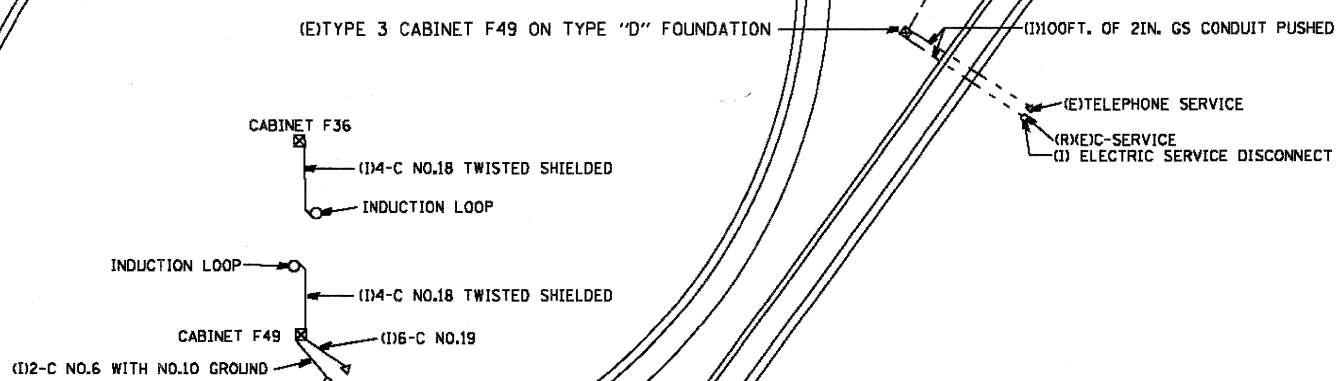


SYMBOL

LEGEND

- INDUCTION LOOP
- ROUND INDUCTION LOOP
- ⊗ TSC CABINET
- △ TELEPHONE SERVICE
- SERVICE INSTALLATION
- ⊞ JUNCTION BOX
- ⊞ HEAVY DUTY HAND HOLE
- - - POLYETHYLENE DUCT
- - - GALVANIZED STEEL CONDUIT
- (E) EXISTING
- (I) INSTALL
- (R) REMOVE
- ▶ FLASHER

WIRING DIAGRAM



REVISIONS	
NO.	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC SYSTEMS CENTER
BISHOP FORD
159TH. STREET
INTERCHANGE

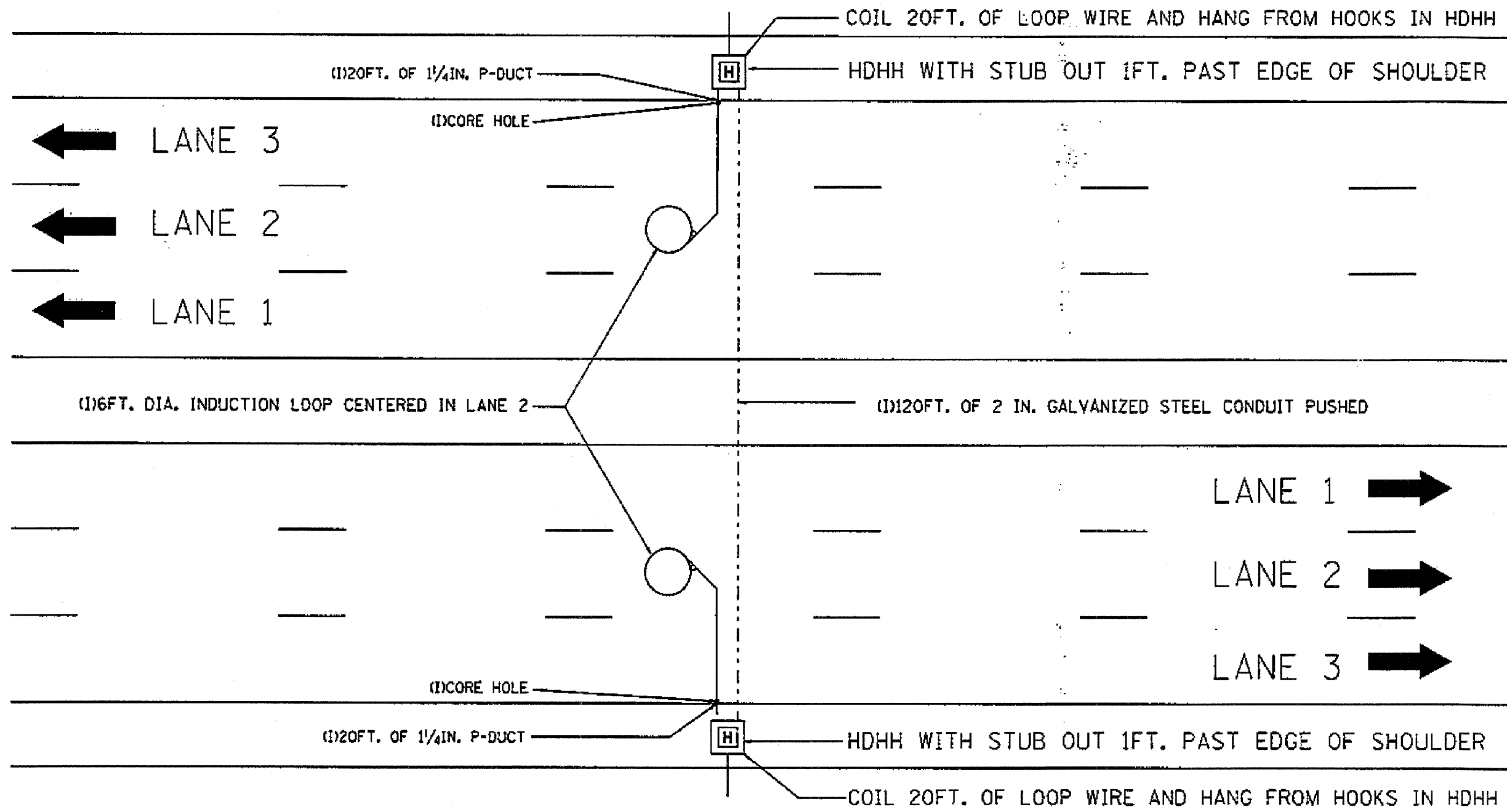
SCALE: VERT. 50x1
 HORIZ. 50x1
 DATE 01-09

DRAWN BY G.N.
 CHECKED BY J.G.

RD-CALLORN D160021-126-DISTRICT DETAILS.dgn

F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	127
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT _____		

(0405,ETC,42-7&0707)RS-11



NOTE:
 THE COST OF LOOP WIRE IN HDHH IS INCIDENTAL TO THE INDUCTION LOOP.
 IT SHALL NOT BE MEASURE FOR PAYMENT.

INSTALL AT STATIONS.

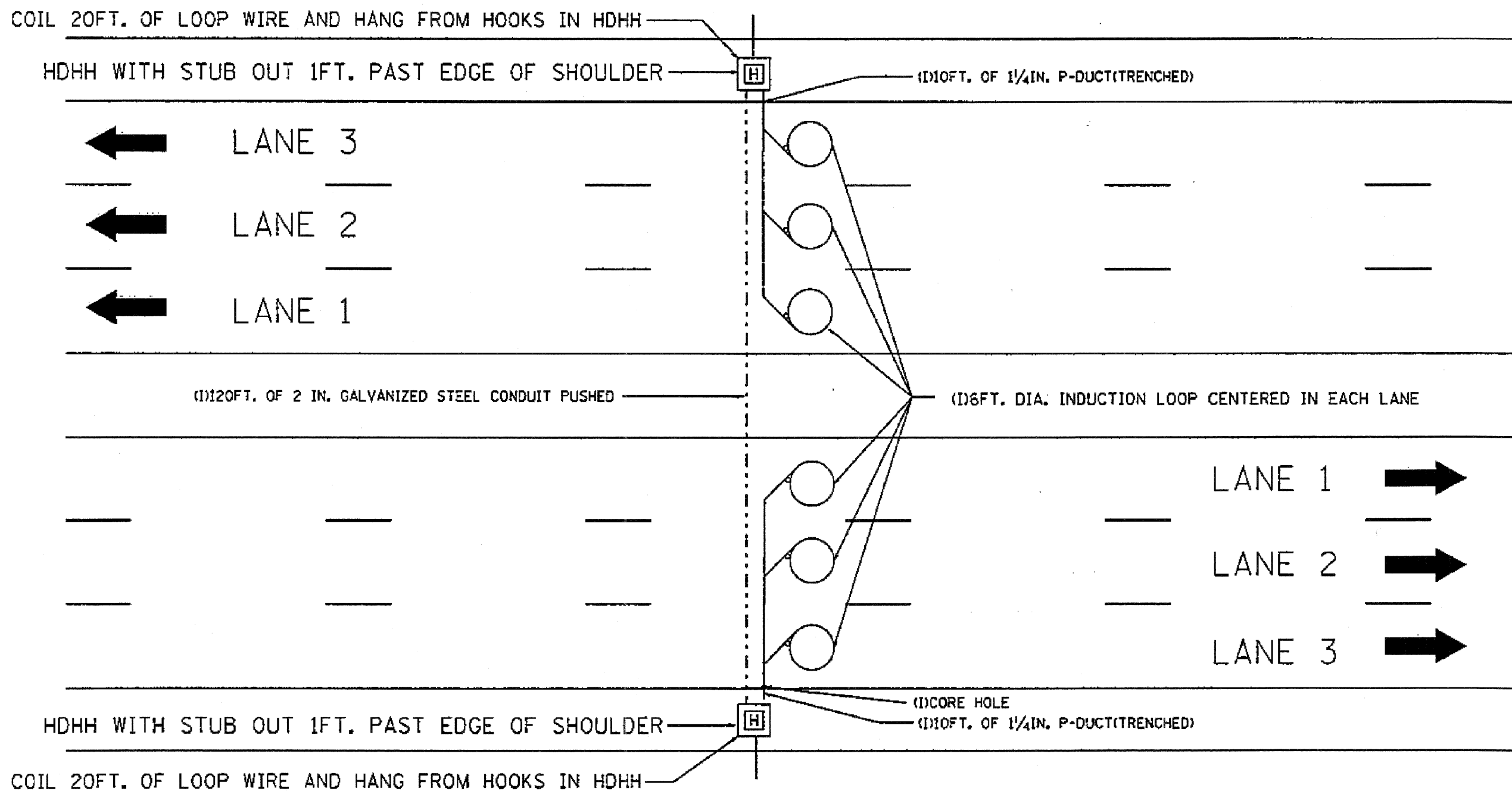
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		ONE LANE COUNT STATION

SCALE: VERT. NONE
 HORIZ. NONE
 DATE: 01-31-07
 DRAWN BY: SA
 CHECKED BY: J.G.

0160021-127-01DISTRICT DETAILS.dgn

F.A.L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	128
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

• 10405, ETC, 42-7&0707RS-11



NOTE:

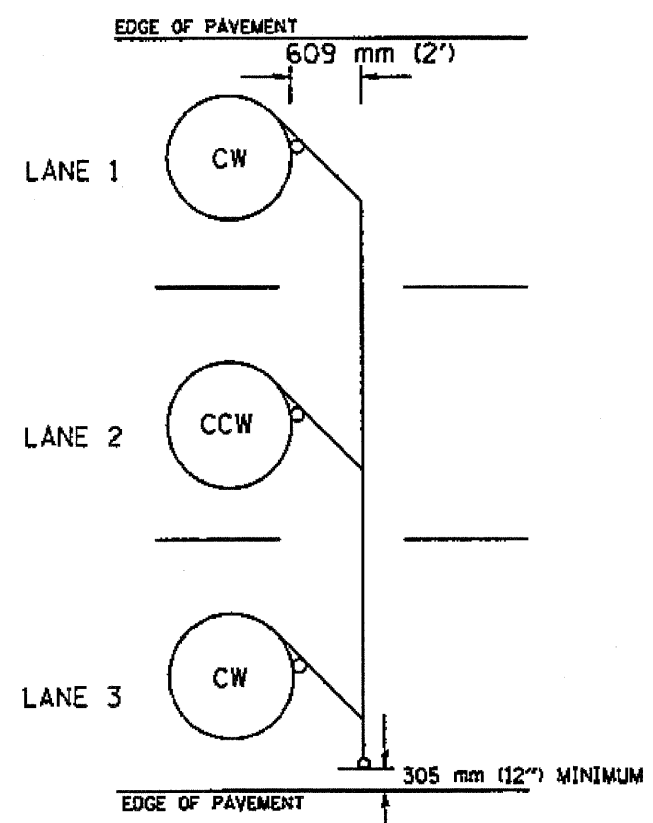
THE COST OF LOOP WIRE IN HDHH IS INCIDENTAL TO THE INDUCTION LOOP. IT SHALL NOT BE MEASURE FOR PAYMENT.

INSTALL AT STATIONS.

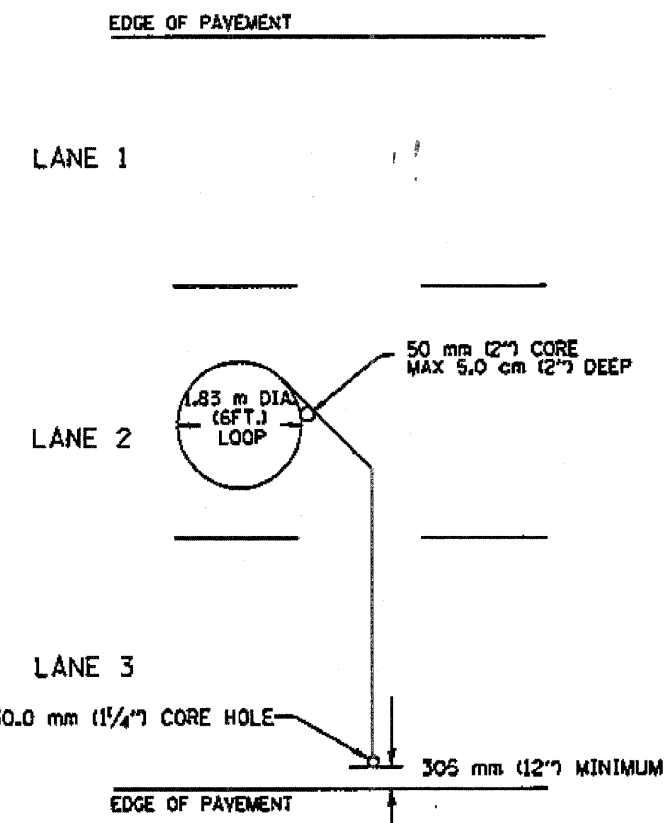
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		3 LANE COUNT STATION
SCALE: VERT. NONE HORIZ. NONE		DRAWN BY G.M.
DATE 01-31-07		CHECKED BY J.C.

P.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	129
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT				

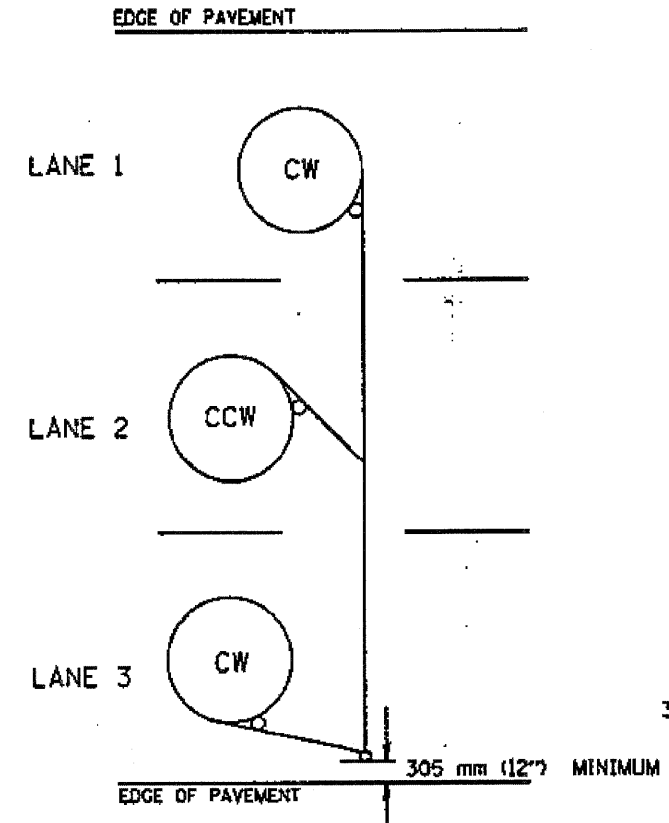
• (0405, ETC, 42-7&07)RS-11



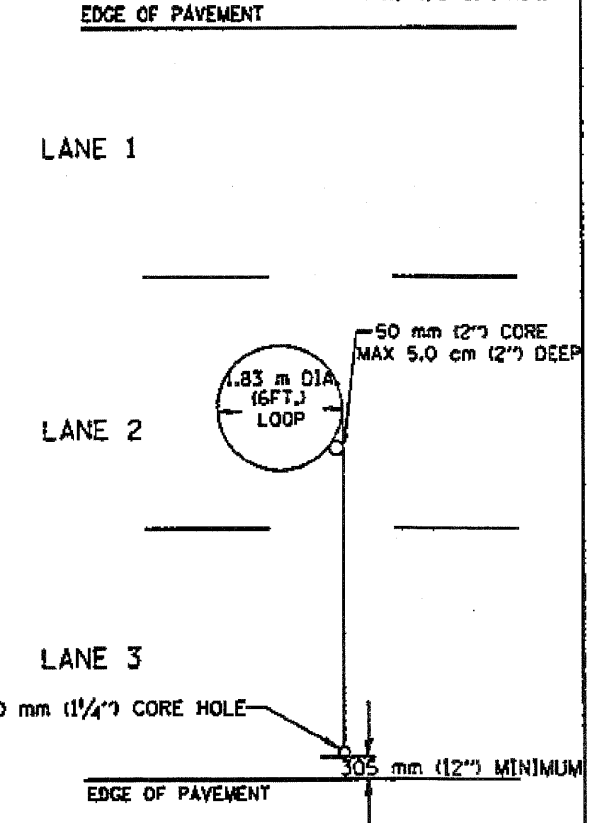
TYPICAL 1.83 m (6FT.) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



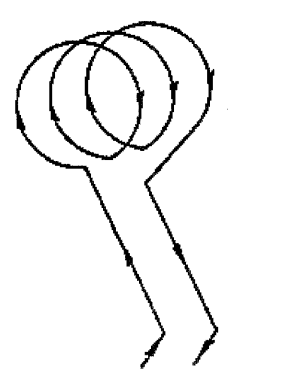
TYPICAL 1.83 m (6') DIA. INDUCTION LOOP
LAYOUT FOR LANE 2



TYPICAL 1.83 m (6') DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



TYPICAL 1.83 m (6') DIA. INDUCTION LOOP
LAYOUT FOR LANE 2



WIRING DETAILS

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 45 m (150FT.) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY. OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

REVISIONS	
NAME	DATE
R.L.	6/94
T.C.	9/96

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
**EXISTING ROUND LOOP
INSTALLATION**

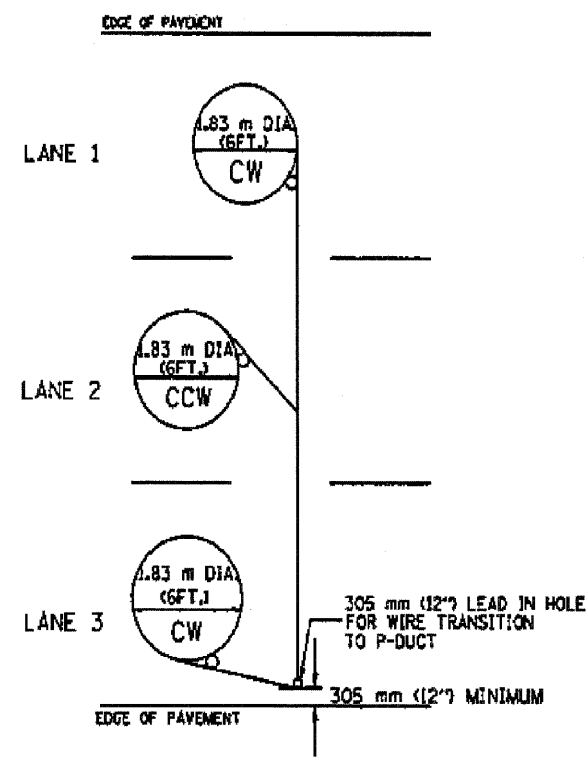
SCALE: VERT. NONE
DATE: 6-22-94

DRAWN BY: G.M.
CHECKED BY: R.L.

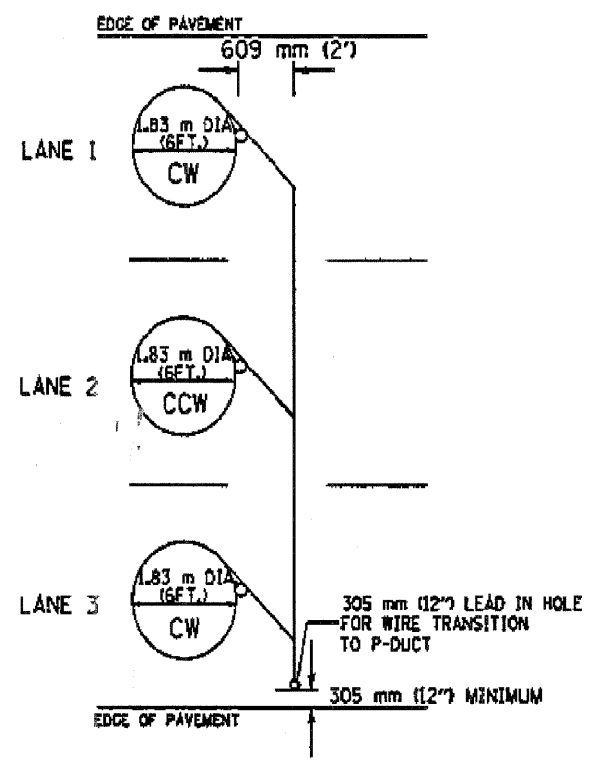
NO. TYPMET.D04
D:\60D21-129-DISTRICT DETAILS.D00
VI-4181

P.A.L. NTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34		COOK	133	130
STA. _____ TO STA. _____		ILLINOIS FDS. AID PROJECT		
FED. ROAD DIST. NO. _____				

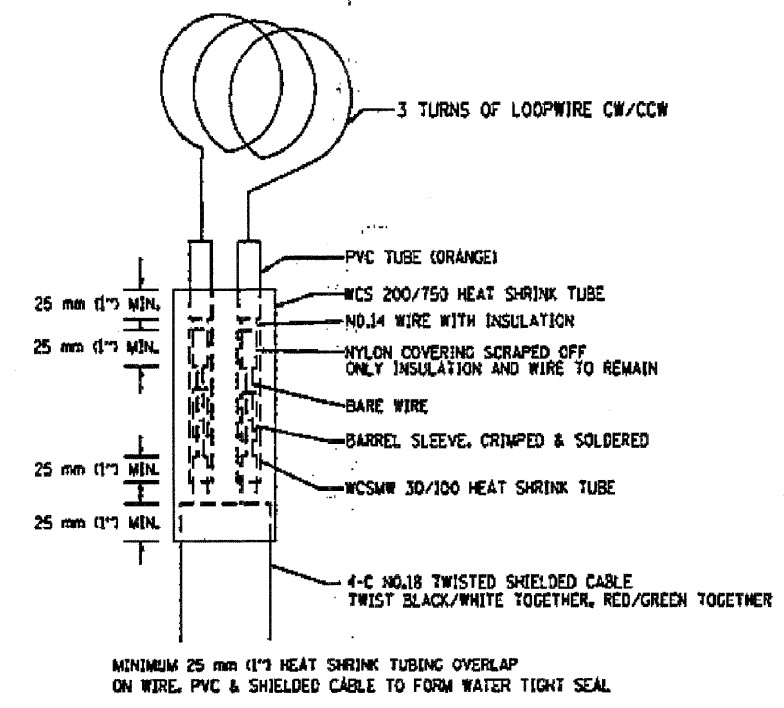
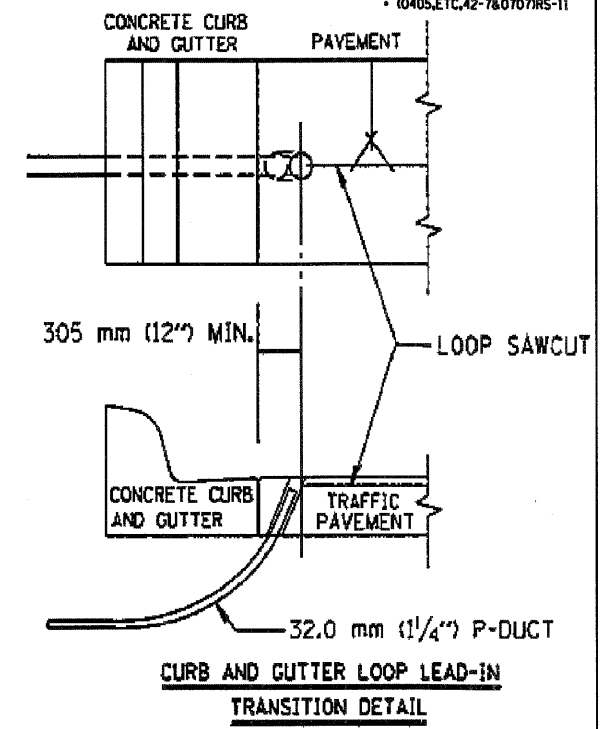
• (0405, ETC, 42-780707RS-11



TYPICAL 1.83 m (6FT.) DIA. INDUCTION LOOP CORE DRILL LAYOUT FOR MULTIPLE LANE ROADWAY



TYPICAL 1.83 m (6') DIA. INDUCTION LOOP CORE DRILL LAYOUT FOR MULTIPLE LANE ROADWAY



LOOP SPlicing REQUIREMENTS

- NOTES**
1. EACH LOOP SHALL BE SPliced TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 45 m (150FT.) OR MORE FROM CABINET.
 2. LOOPS SHALL BE SPliced IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
 3. LOOPS SHALL NOT BE SPliced IN SERIES.
 4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

REVISIONS	
NAME	DATE
R.L.	6/94
T.C.	10/96

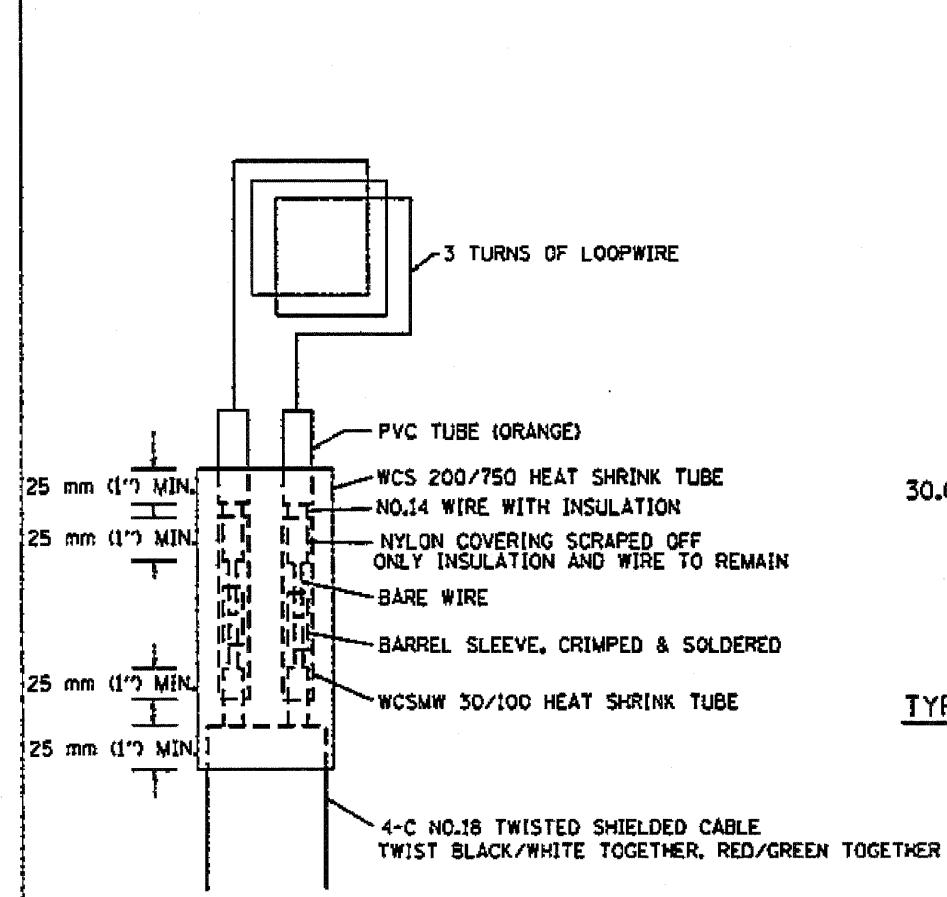
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC SYSTEMS CENTER
**EXISTING
 ROUND INDUCTION LOOP
 TYPICALS**
 SCALE: VERT. NONE
 DATE: 6-22-94
 DRAWN BY: GW
 CHECKED BY: R.L.

D:\60D21-130-DISTRICT DETAILS.dgn

NO. TYPE L.DG4 86

VI-418C

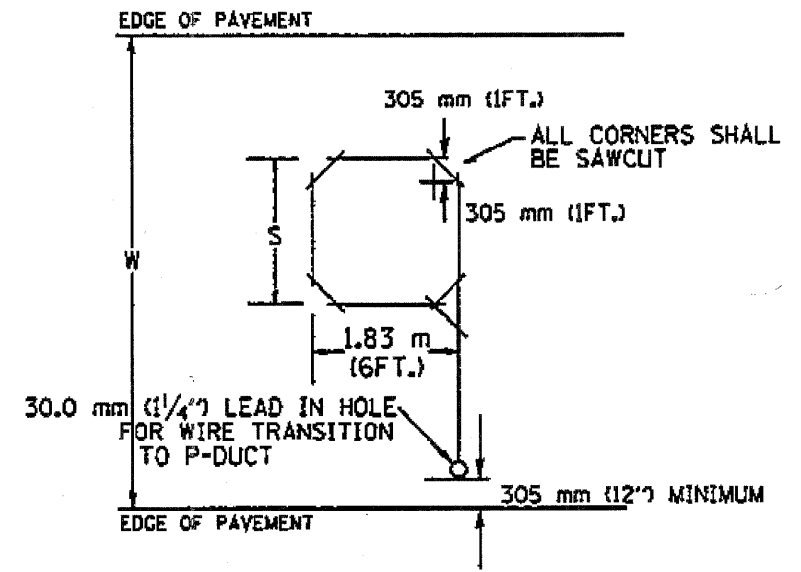
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
98	COOK	ILL.	131	131
STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO. _____		• (0405, ETC, 42-7&07)RS-11		



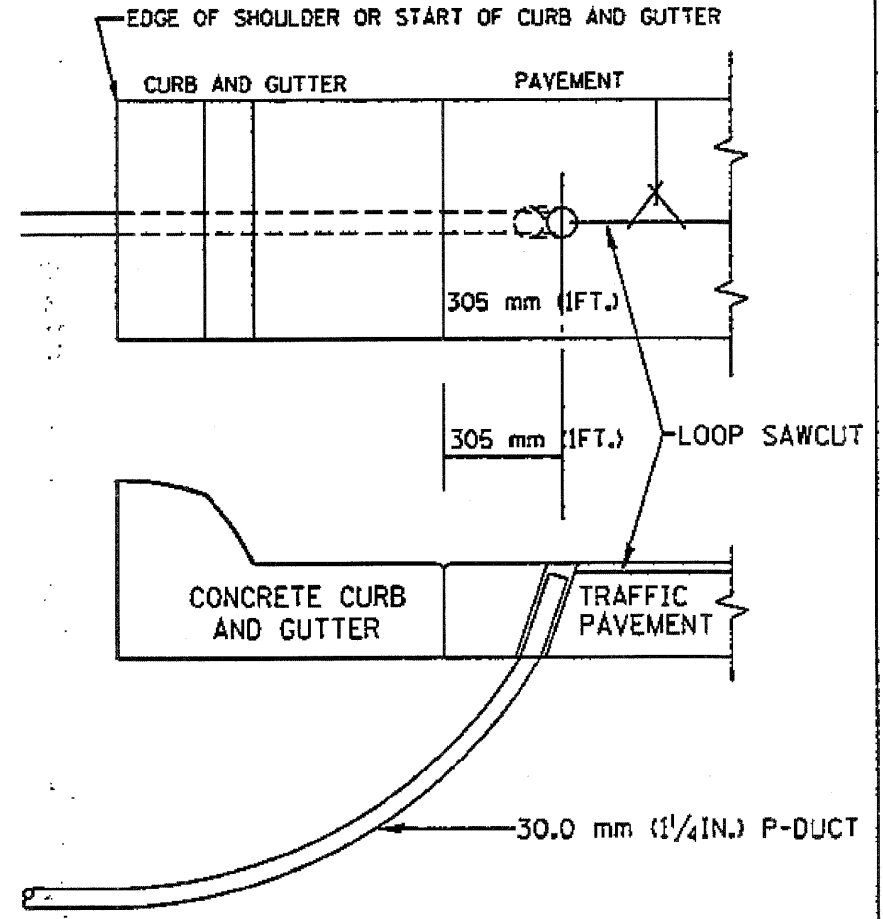
MINIMUM 25 mm (1") HEAT SHRINK TUBING OVERLAP ON WIRE, PVC & SHIELDED CABLE TO FORM WATER TIGHT SEAL

LOOP SPLICING REQUIREMENTS

WIDTH (W)	WIDTH (S)
3.7 m (12')	2.5 m (8')
4.0 m (13')	2.8 m (9')
4.3 m (14')	3.1 m (10')
4.6 m (15')	3.4 m (11')
4.9 m (16')	3.7 m (12')
5.2 m (17')	4.0 m (13')
5.5 m (18')	4.3 m (14')
5.8 m (19')	4.6 m (15')
6.1 m (20')	4.9 m (16')
6.4 m (21')	5.2 m (17')
6.7 m (22')	5.5 m (18')
7.0 m (23')	5.8 m (19')
7.3 m (24')	6.1 m (20')
7.6 m (25')	6.4 m (21')



TYPICAL "S" FT. BY 1.83 m (6FT.) INDUCTION LOOP SAWCUT LAYOUT FOR RAMPS



CURB AND GUTTER LOOP LEAD-IN TRANSITION DETAIL

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 45 m (150FT.) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

REVISIONS	
NAME	DATE
R.L.	6/94
T.C.	11/95
R.L.	05/96
T.C.	10/96

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
RECTANGULAR INDUCTION LOOP TYPICAL
SCALE: VERT. NONE
DATE: 6-22-94
DRAWN BY: GJA
CHECKED BY: R.L.

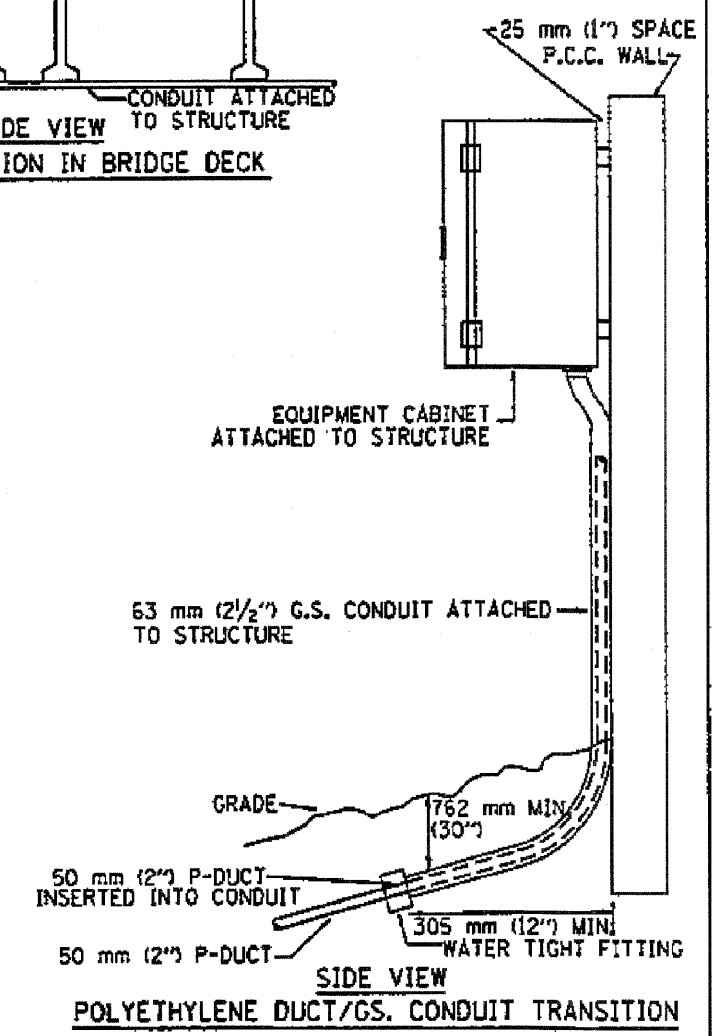
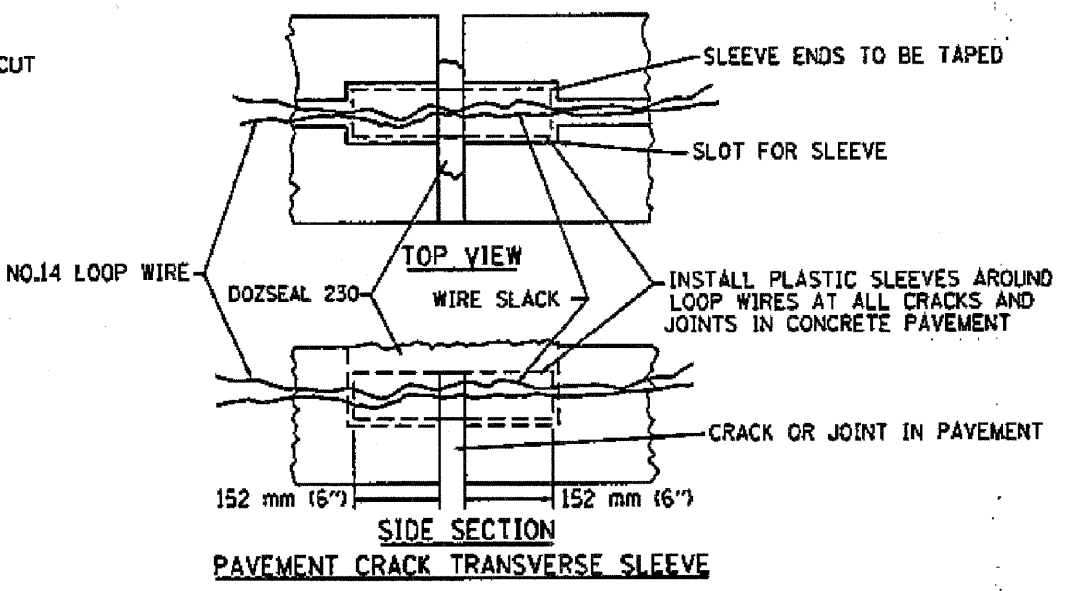
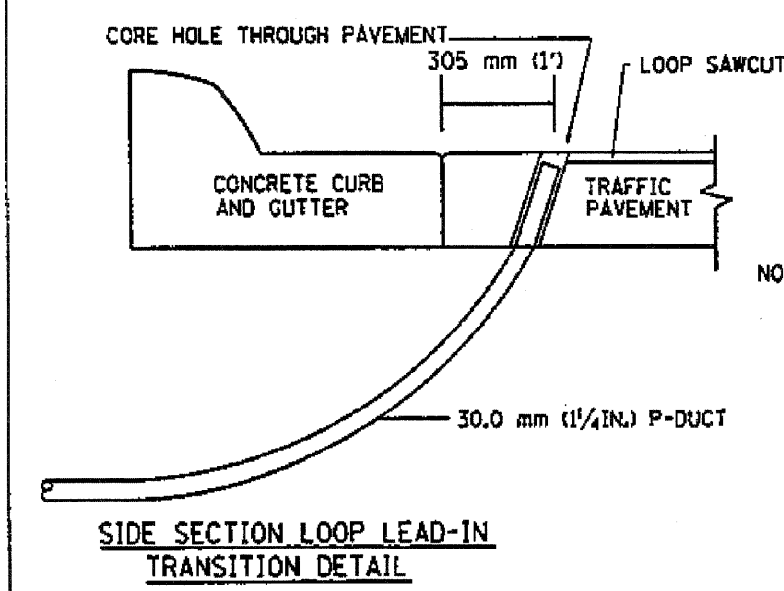
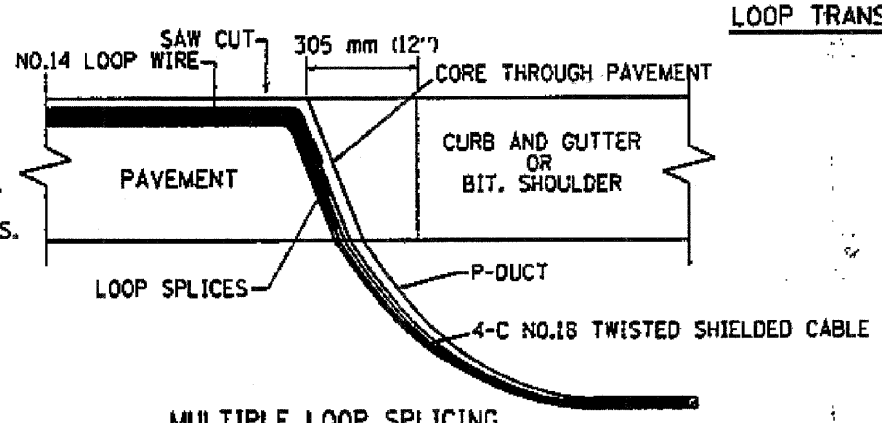
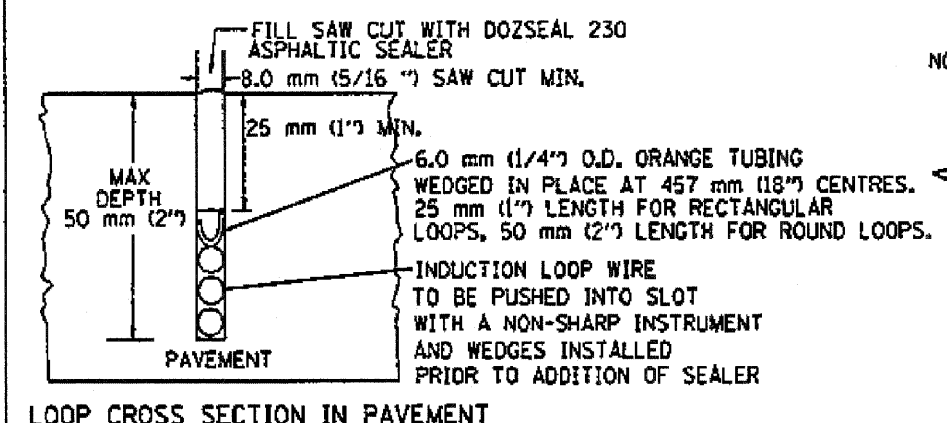
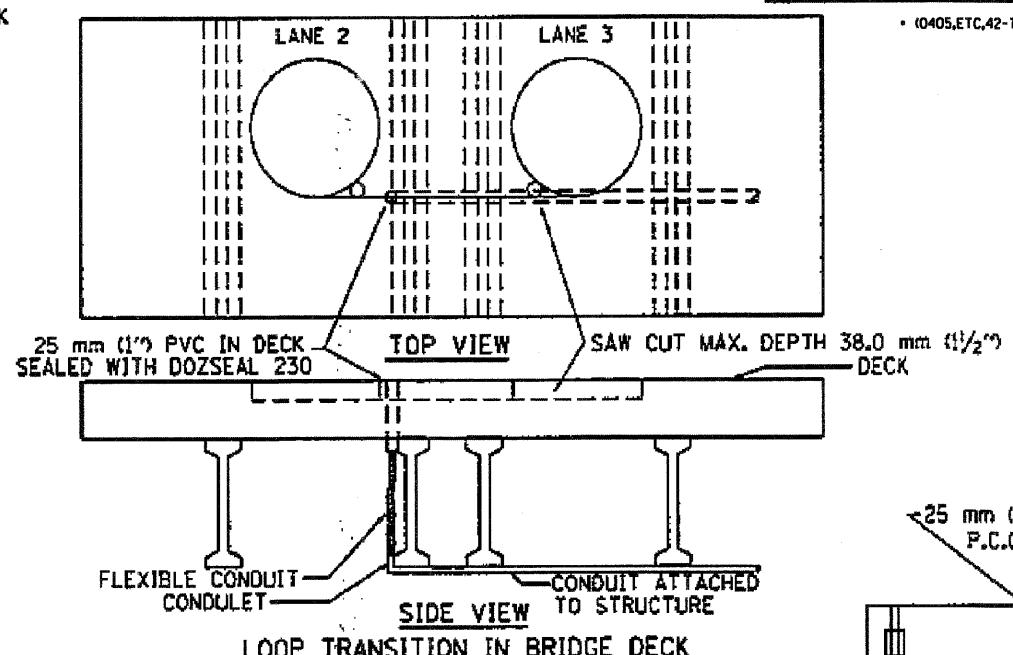
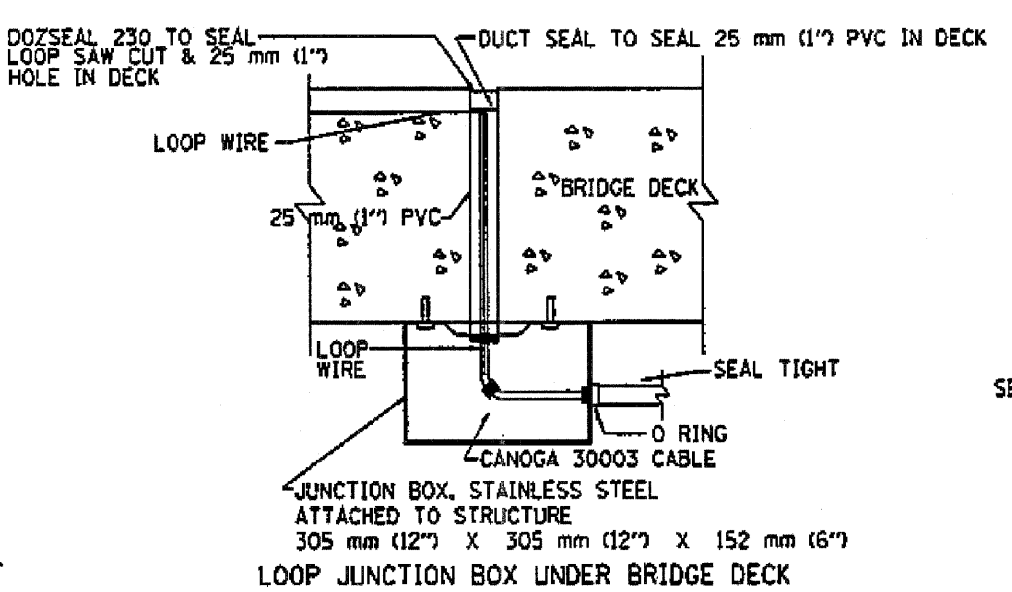
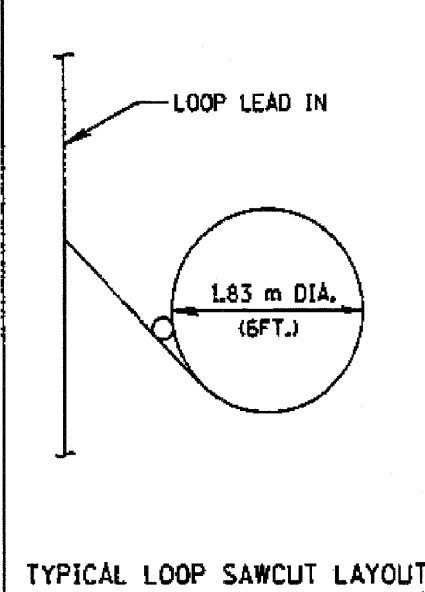
D160021-131-DISTRICT DETAIL S.dgn

NOT TYPE/LOG

VI-4182

F.A.L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	132
STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO. _____				

(0405,ETC,42-780707)RS-11



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER
NAME	DATE	
RL	6/24	LOOP, CONDUIT & DUCT INSTALLATION DETAILS SCALE: VERT. NONE DATE: 6-22-84 DRAWN BY: G.A. CHECKED BY: R.L.
RL	3/28	
T.C.	11/28	
RL	05/26	
T.C.	10/76	

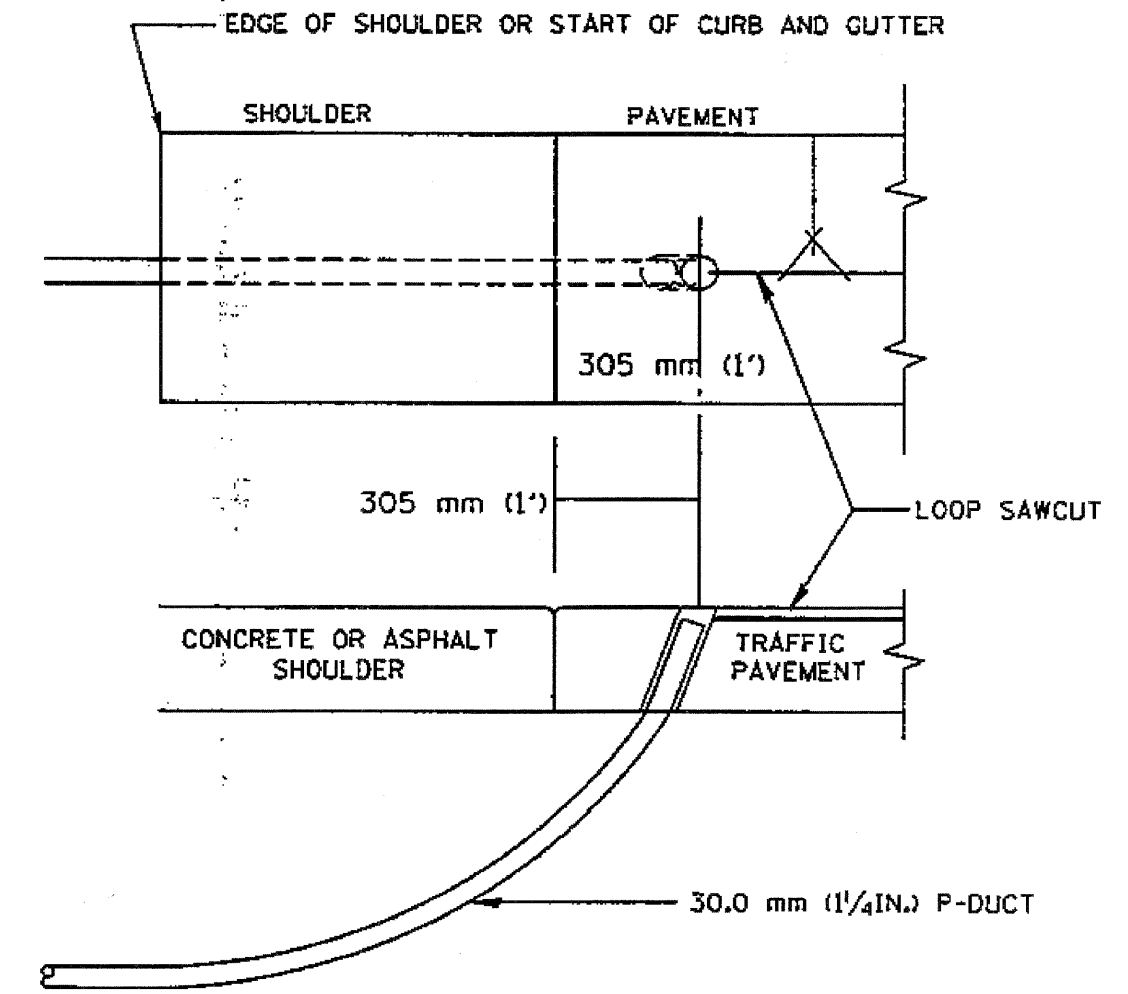
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R:\TYPE\TSC\DRW

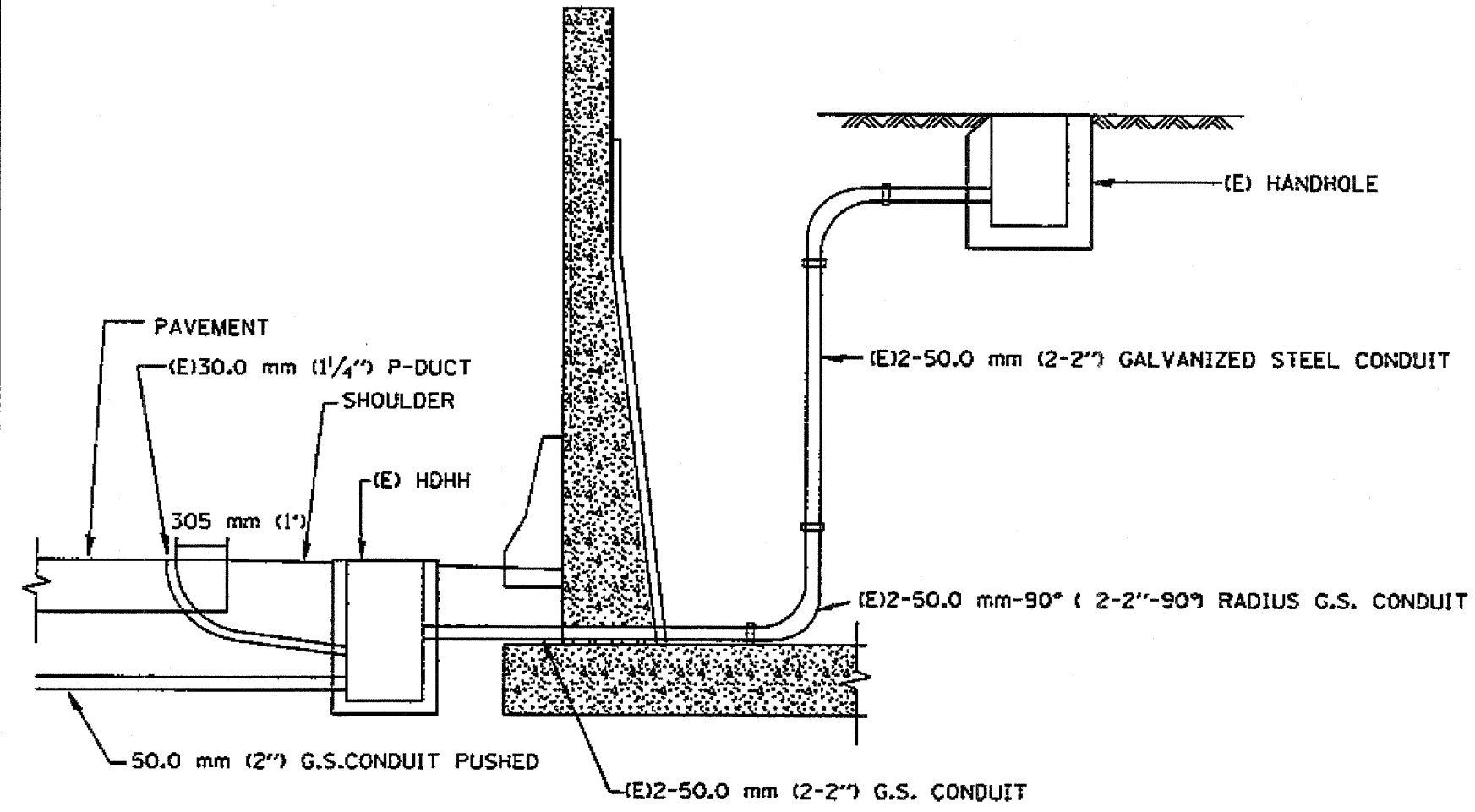
VI-818

F.P. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	133	133
STA. TO STA.		ILLINOIS FED. AID PROJECT		

• 10405,ETC,42-7&0707IRS-11



SHOULDER LOOP LEAD-IN
TRANSITION DETAIL



REVISIONS	
NAME	DATE
R.L.	8/94
T.C.	11/95
R.L.	06/96
T.C.	10/96

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
TYPICAL INDUCTION LOOP LEAD-IN
TRANSITION DIAGRAMS

SCALE: VERT. NONE
HORIZ. DATE 8-22-94
DRAWN BY: G.M.
CHECKED BY: R.L.

NO. TYPMET 2064
 BY: D:\60021-133-DISTRICT DETAILS.dgn
 Y14485