

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15+1=16	1

FOR INDEX OF SHEETS SEE SHEET 2

CONTRACT NO. 60B93

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE
PROPOSED HIGHWAY PLANS

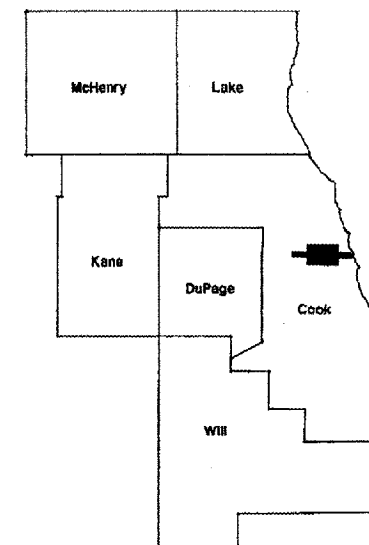
FAI ROUTE 55: I-55
AT US 41 (LAKE SHORE DRIVE)
SECTION 2006-0361

PERMANENT PROTECTIVE SHIELDING
COOK COUNTY

C-91-024-07

SN 016-0036, SN 016-1045, SN 016-1048,
SN 016-1052, SN 016-1055, SN 016-1075

D-91-024-07



LOCATION OF IMPROVEMENT INDICATED THUS:

IMPROVEMENTS ARE LOCATED IN
THE CITY OF CHICAGO

LOCATION OF
IMPROVEMENT

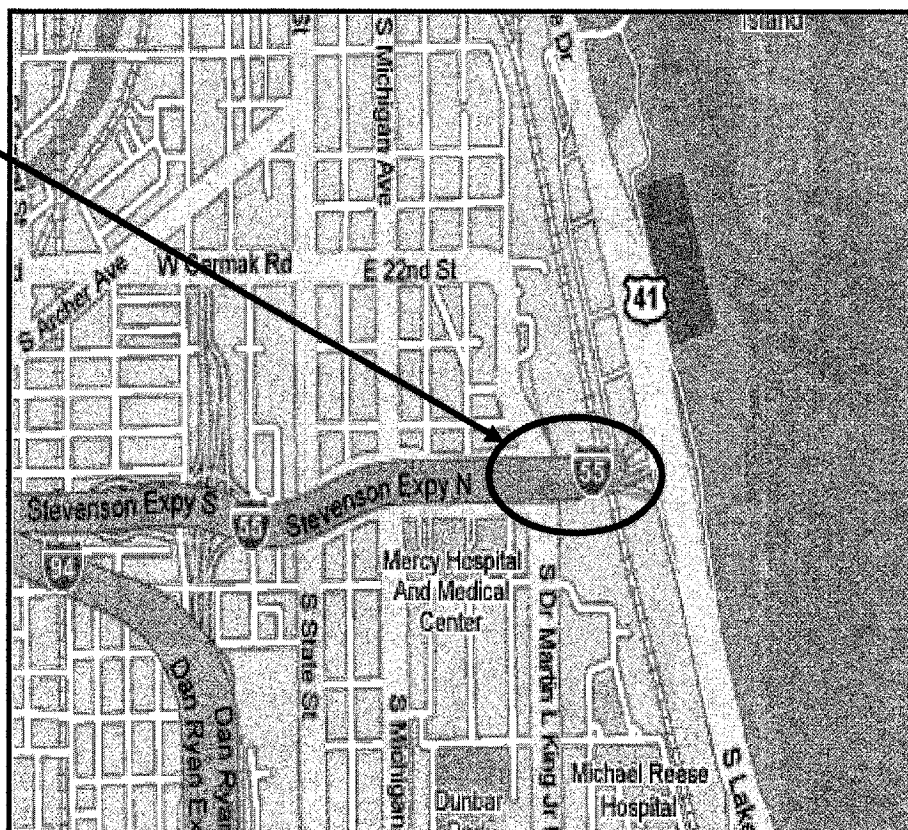
TRAFFIC DATA:

DR MARTIN LUTHER KING DR
SPEED LIMIT= 30 MPH
2006 ADT = 17,600

US 41/ LAKE SHORE DR
SPEED LIMIT = 55 MPH
2006 ADT = 106,100

R 14 E

T 39 N



SOUTH CHICAGO TOWNSHIP

DISTRICT ONE - DESIGN - PLAN PREPARATION ENGINEER:
KEN ENG / ROBERT BORO (847) 705-4178

CONTRACT NO. 60B93

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: January 2, 2007
Dione O'Keefe / C
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 2, 2007
Eric E. Haran / P
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

February 2, 2007
Milton R. Sees, P.E. / P
DIRECTOR, DIVISION OF HIGHWAYS

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OF THE STATE OF ILLINOIS

C.U.A.N.
CHICAGO UTILITY ALERT NETWORK
(312) 744-7000

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK		2

CONTRACT NO: 60A93

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	GENERAL BRIDGE PLAN
5 - 12	BRIDGE PLANS
12A.	PERMANENT PROTECTIVE SHIELD DETAIL
* 13 - 15	DISTRICT DETAILS
* 13, 14	DELETED

STATE STANDARDS

STANDARD NO	DESCRIPTION
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701400-02	APPROACH TO LANE CLOSURE, FREEWAY/ EXPRESSWAY
701401-03	LANE CLOSURE, FREEWAY/ EXPRESSWAY
701446	TWO LANE CLOSURE, FREEWAY/ EXPRESSWAY
701601-04	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
702001-06	TRAFFIC CONTROL DEVICES

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL C.U.A.N. AT 312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL BE AWARE THAT SOME LOCATIONS MAY HAVE ELECTRICAL CONDUITS AND/ OR FIBERGLASS DRAIN PIPES.

TO COORDINATE ACCESS TO THE McCORMICK PLACE PARKING LOT CALL PHIL JORDAN AT (312)808-3165.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

THE CONTRACTOR SHALL ADJUST THE PROTECTIVE SHIELDING TO RIDE ABOVE THE EXISTING LIGHTING FIXTURES IN ORDER TO MAINTAIN THE EXISTING LEVEL OF LIGHTING OF THE ROADWAY UNDERNEATH. DETAILS SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. A CLEARANCE OF 1 1/2" ± 1/4" AROUND THE FIXTURE SHALL BE PROVIDED FOR THE FUTURE MAINTENANCE.

ANY DAMAGES TO THE CONDUITS OR PIPES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR AT HIS/ HER EXPENSE.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS IN THE FIELD AND MAKE NECESSARY ADJUSTMENTS PRIOR TO ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

TO COORDINATE ACCESS TO STRUCTURS SN 016-0036 AND SN 016-1055 THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE STEVENSON YARD AT (708)485-2446 TO GET THE KEYS TO THE GATES.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM BRIDGE MAINTENACE ENGINEERS.

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINIG RESIDENTIAL AREAS.

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
STATE STANDARDS
GENERAL NOTES

Rev.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-036I	COOK	15	3

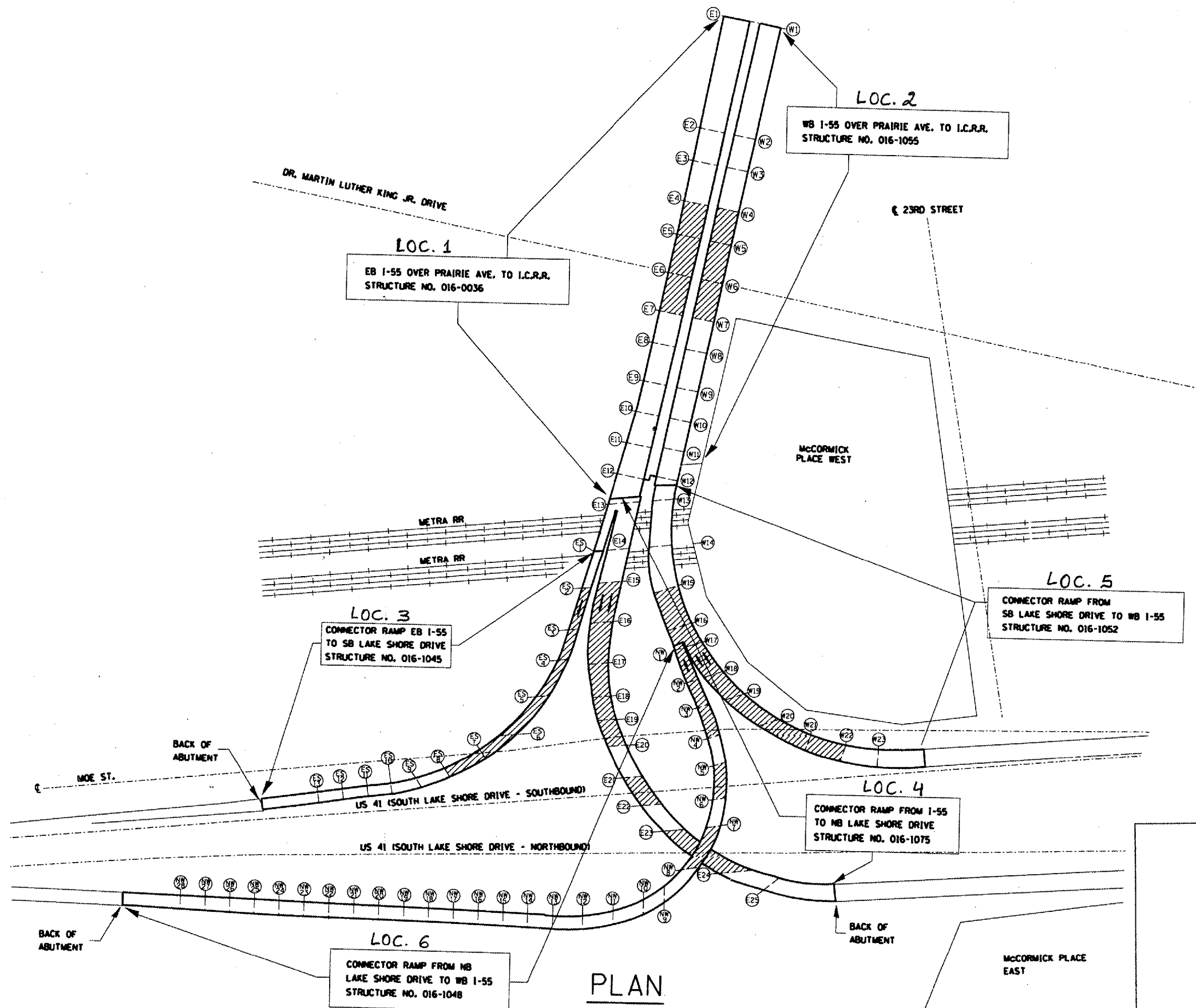
CONTRACT: 60B93

SUMMARY OF QUANTITIES

CODE NO.	DESCRIPTION	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: SFTY - 2A					
				LOC. 1 016-0036	LOC. 2 016-1055	LOC. 3 016-1045	LOC. 4 016-1075	LOC. 5 016-1052	LOC. 6 016-1048
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	0.33	0.33	0.33	0.33	0.34	0.34
67100100	MOBILIZATION	L SUM	1	0.17	0.17	0.17	0.17	0.16	0.16
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.25	0.25	0.25		0.25	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2				1		1
X0322066	PROTECTIVE SHIELD (PERMANENT)	SQ YD	10622	1613	1613	1431	2740.7	2186.8	1037.5
X0322467	TEMPORARY INFORMATION SIGN FOR LANE CLOSURE	SQ FT	192	48	48	48		48	
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1				0.5		0.5
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1			0.33	0.34	0.33	

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	4

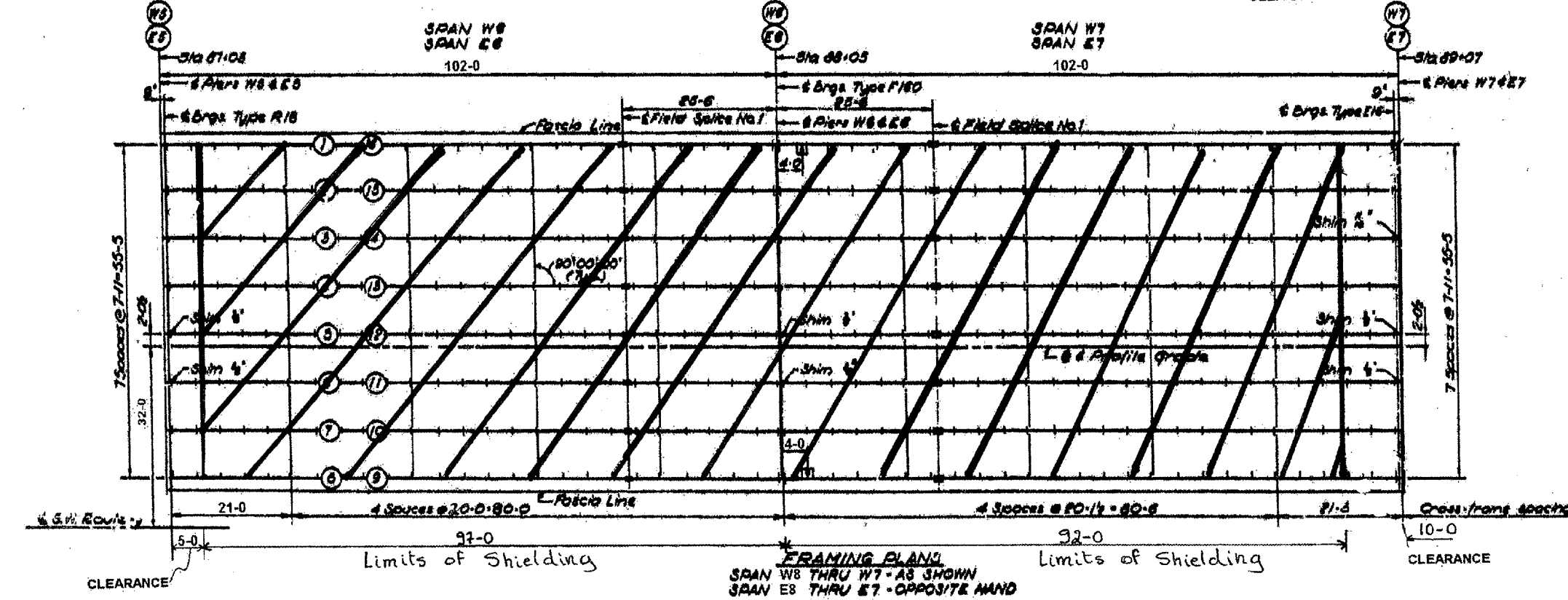
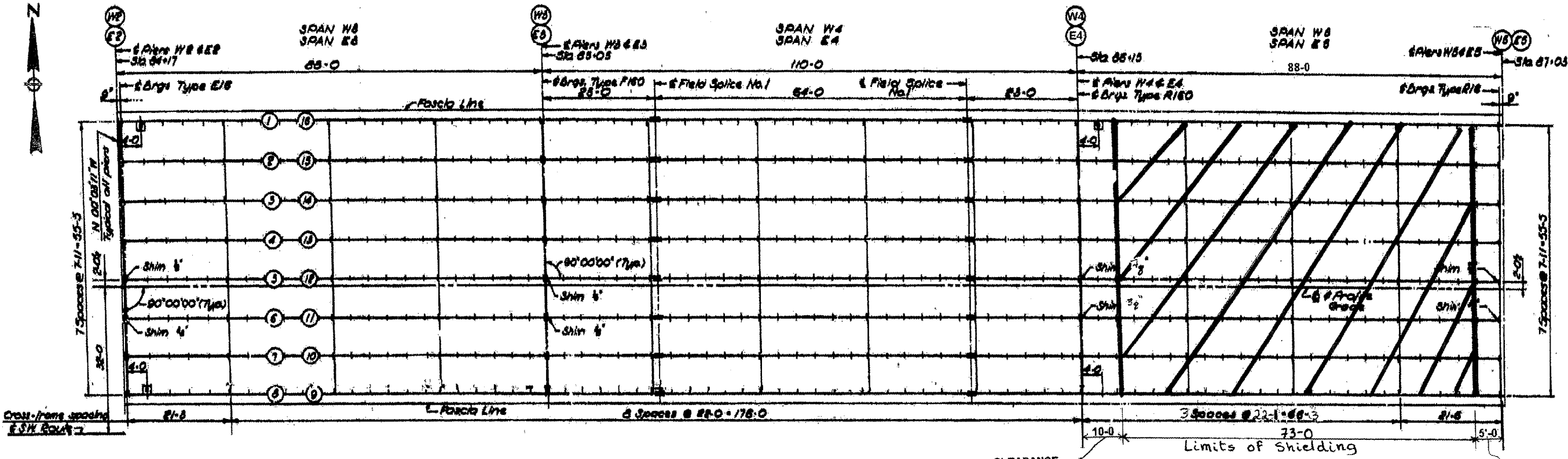


PLAN

ILLINOIS DEPARTMENT OF
TRANSPORTATION

I-55 AT US 41
GENERAL PLAN

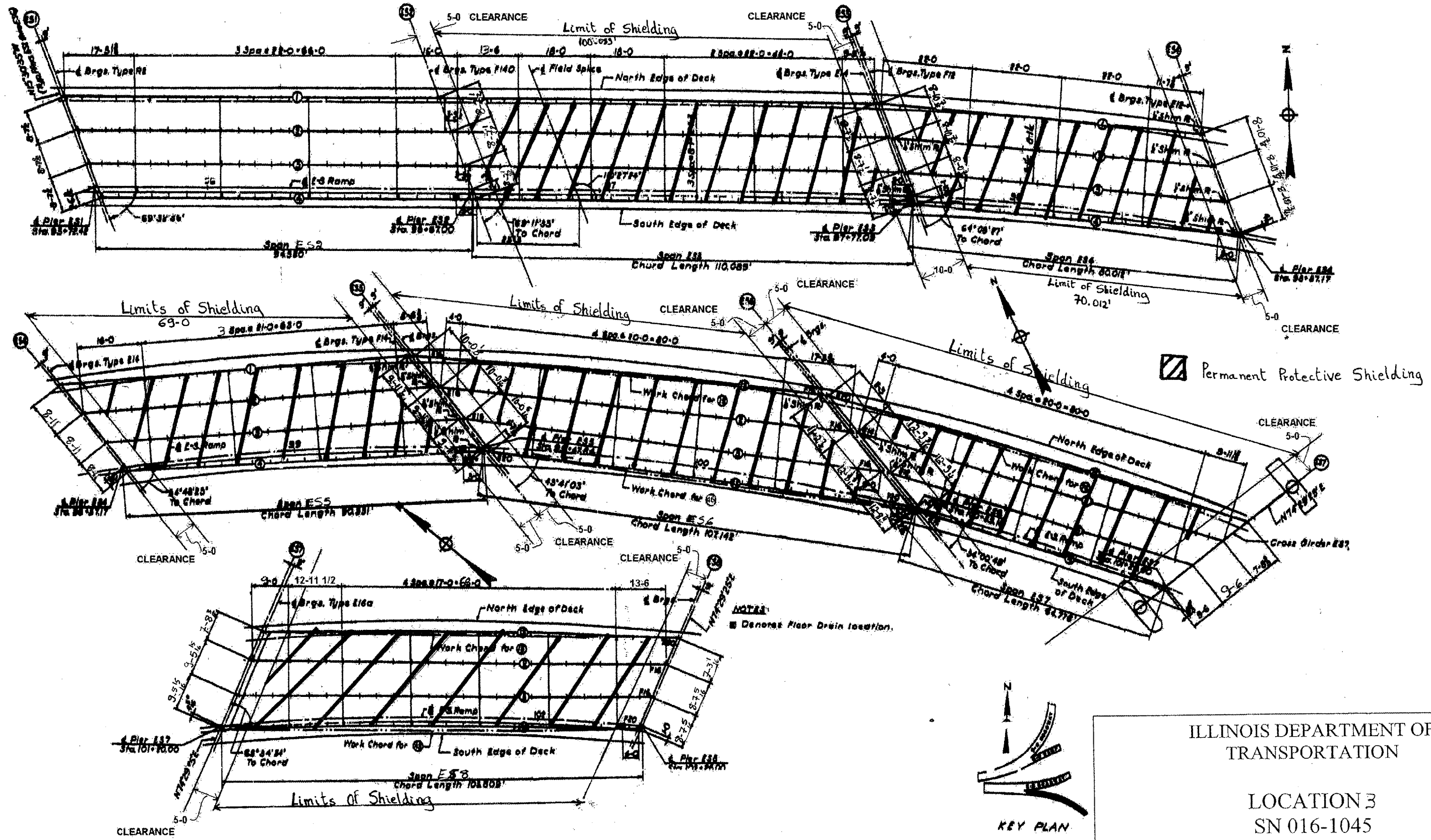
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	5



NOTES:
 □ - Denotes Floor Drain location.
 ▨ Permanent Protective Shielding

ILLINOIS DEPARTMENT OF
 TRANSPORTATION
 LOCATION 1 & 2
 SN 016-0036
 SN 016-1055

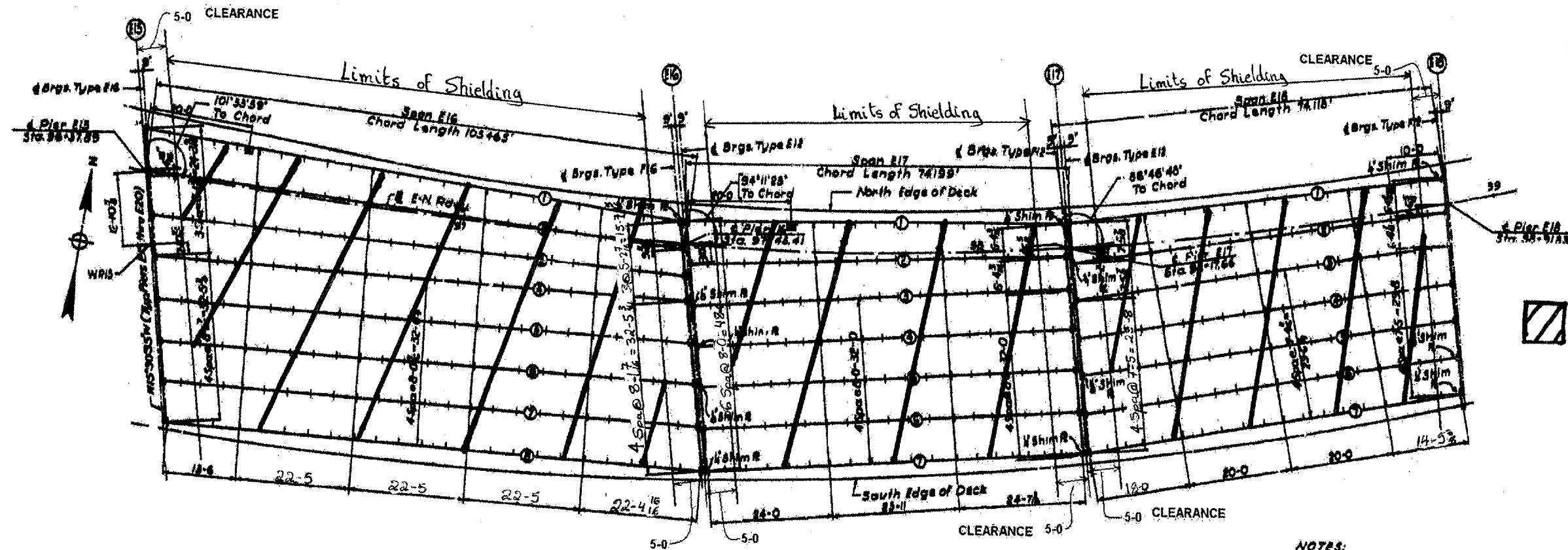
ROUTE FAI 55	SECTION 2006-0361	COUNTY COOK	TOTAL SHEETS 15	SHEET NUMBER 6
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ILLINOIS DEPARTMENT OF
TRANSPORTATION

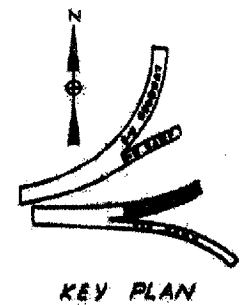
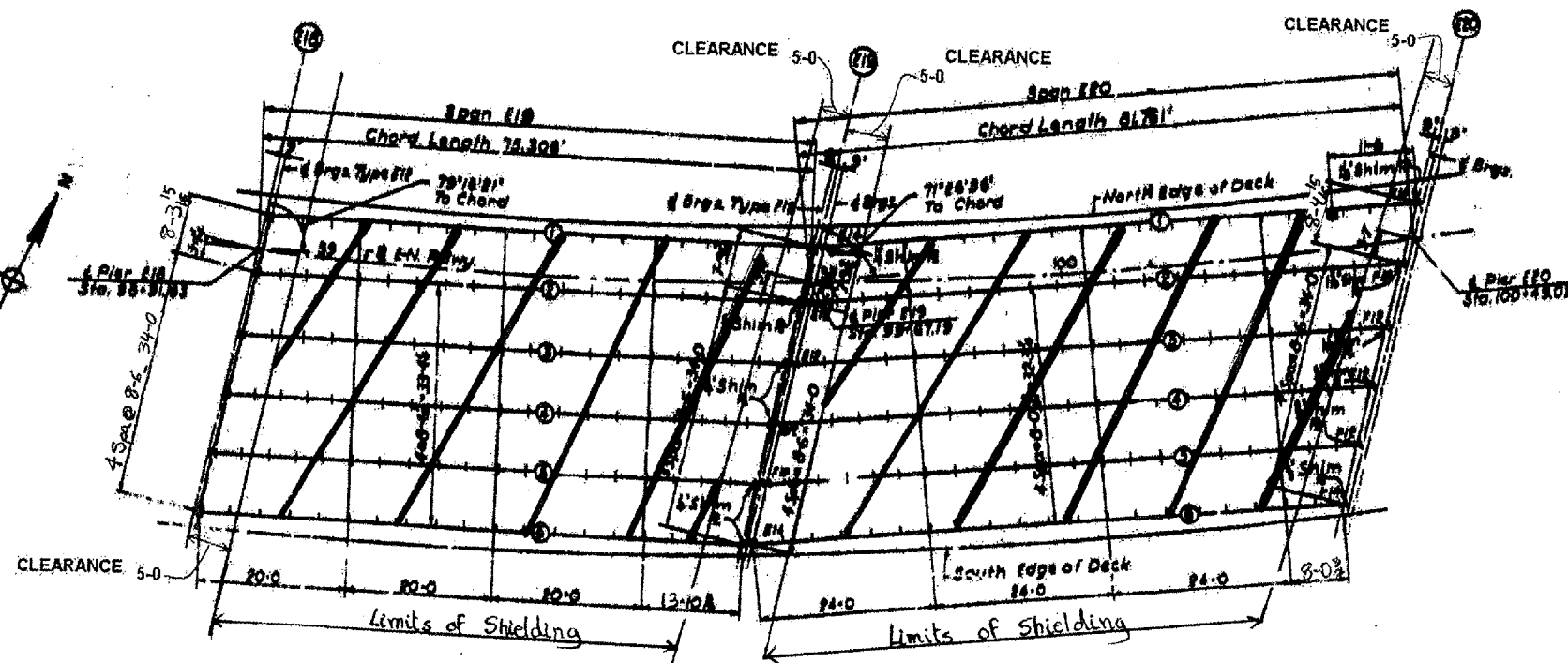
LOCATION 3
SN 016-1045

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	7



 Permanent Protective Shielding

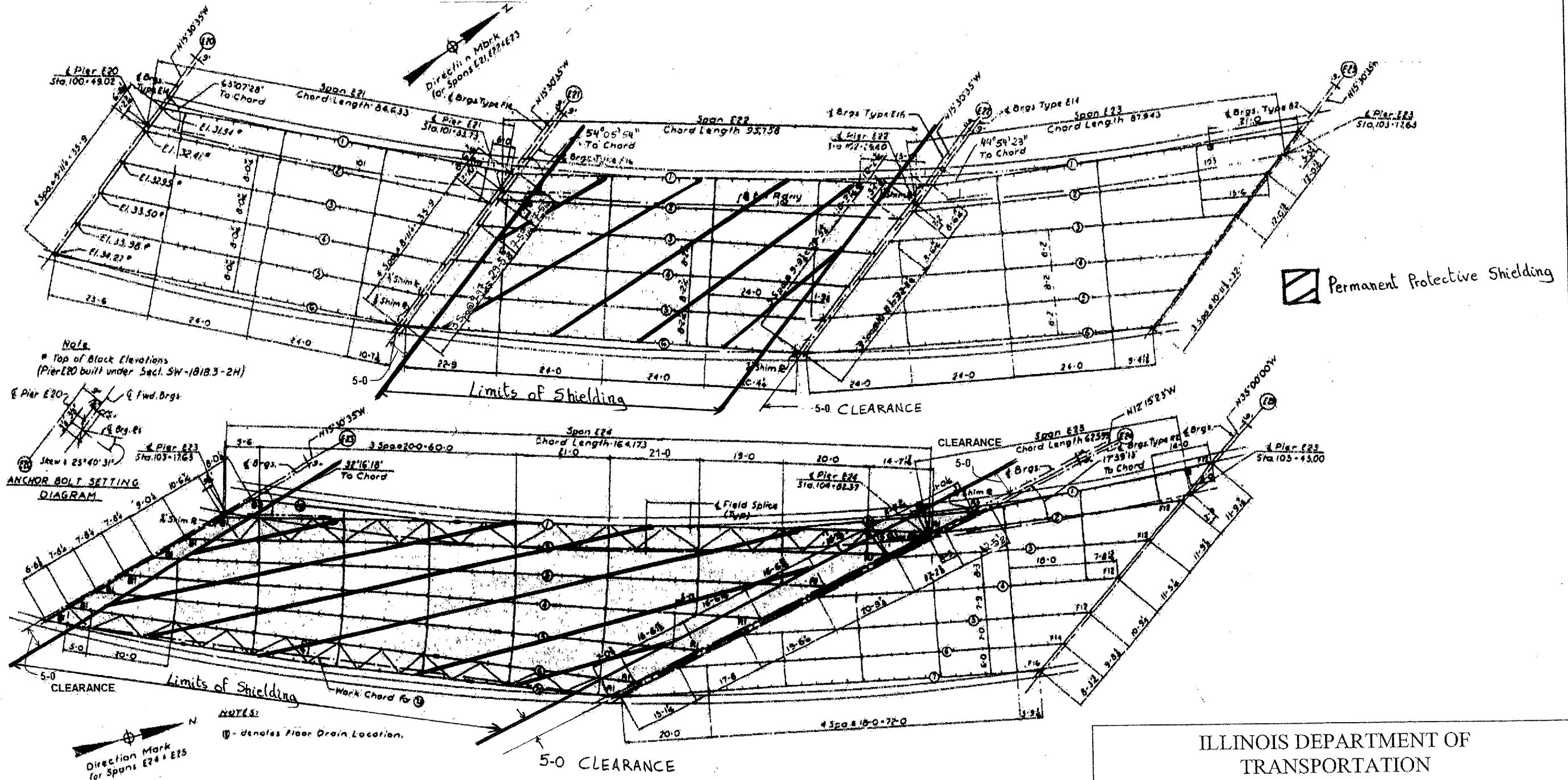
NOTES:
 Denotes Floor Drain Location



ILLINOIS DEPARTMENT OF
 TRANSPORTATION

LOCATION 4
 SN 016-1075

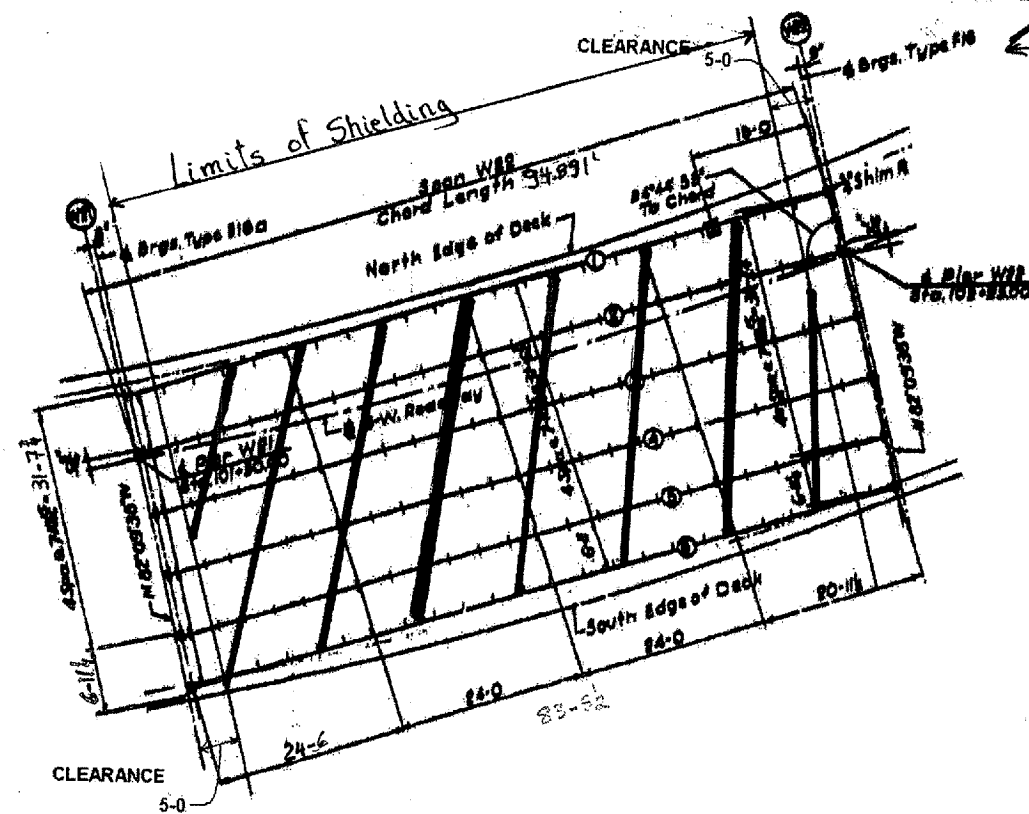
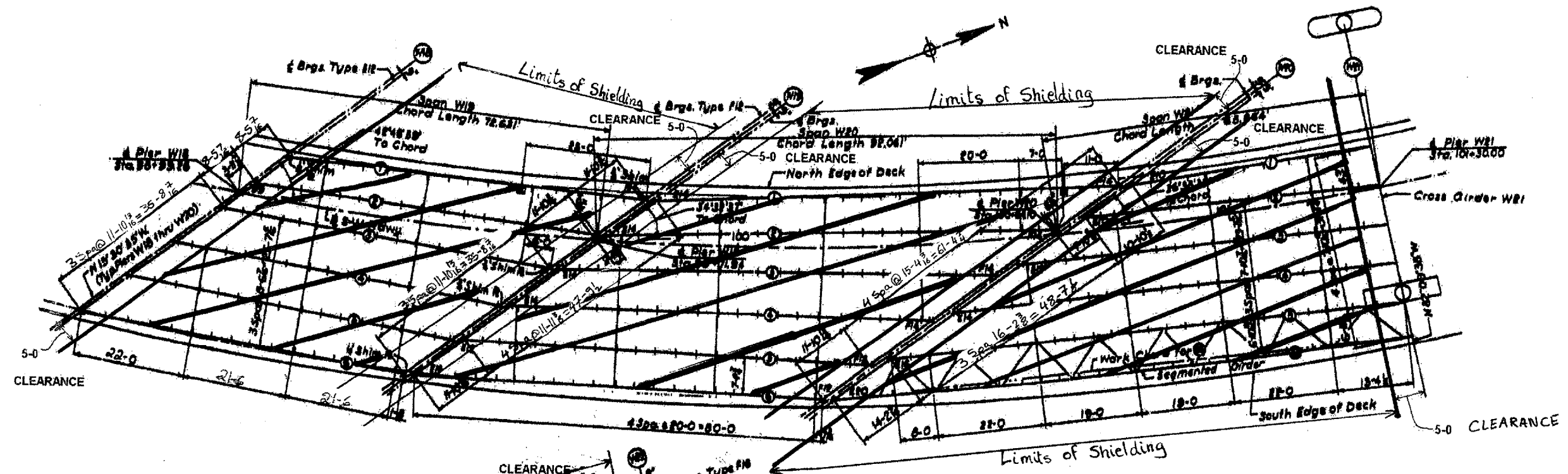
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	8




ILLINOIS DEPARTMENT OF
TRANSPORTATION

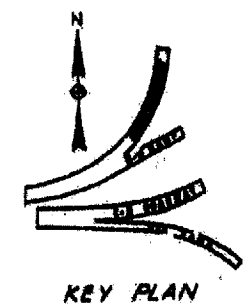
LOCATION 4
SN 016-1075

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	9



NOTES:
 □ Denotes Floor Drain location.

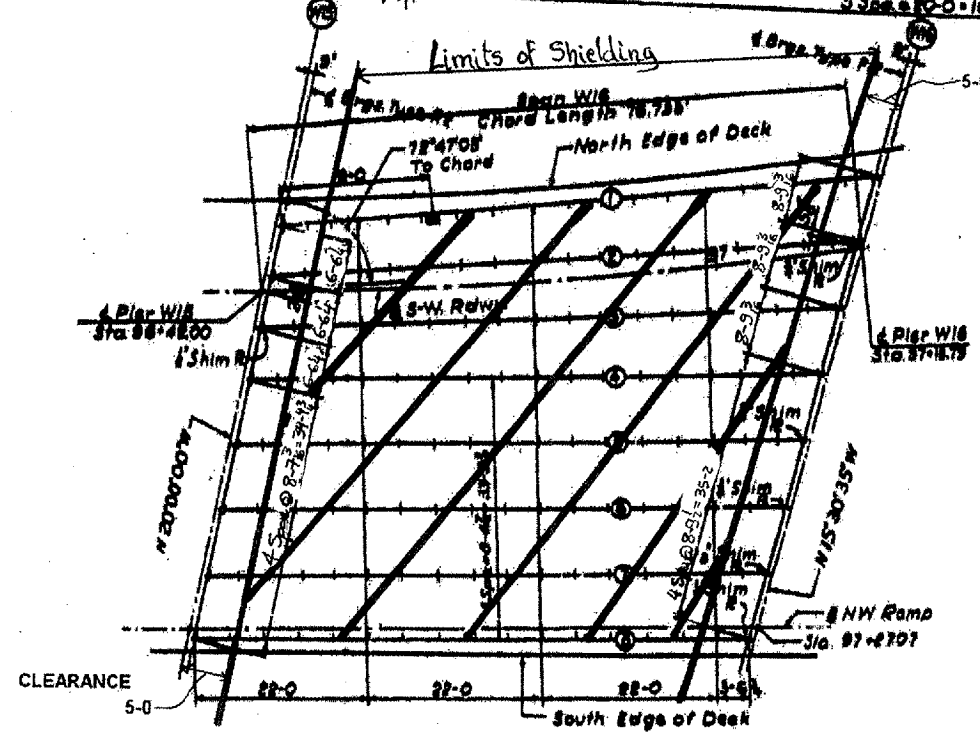
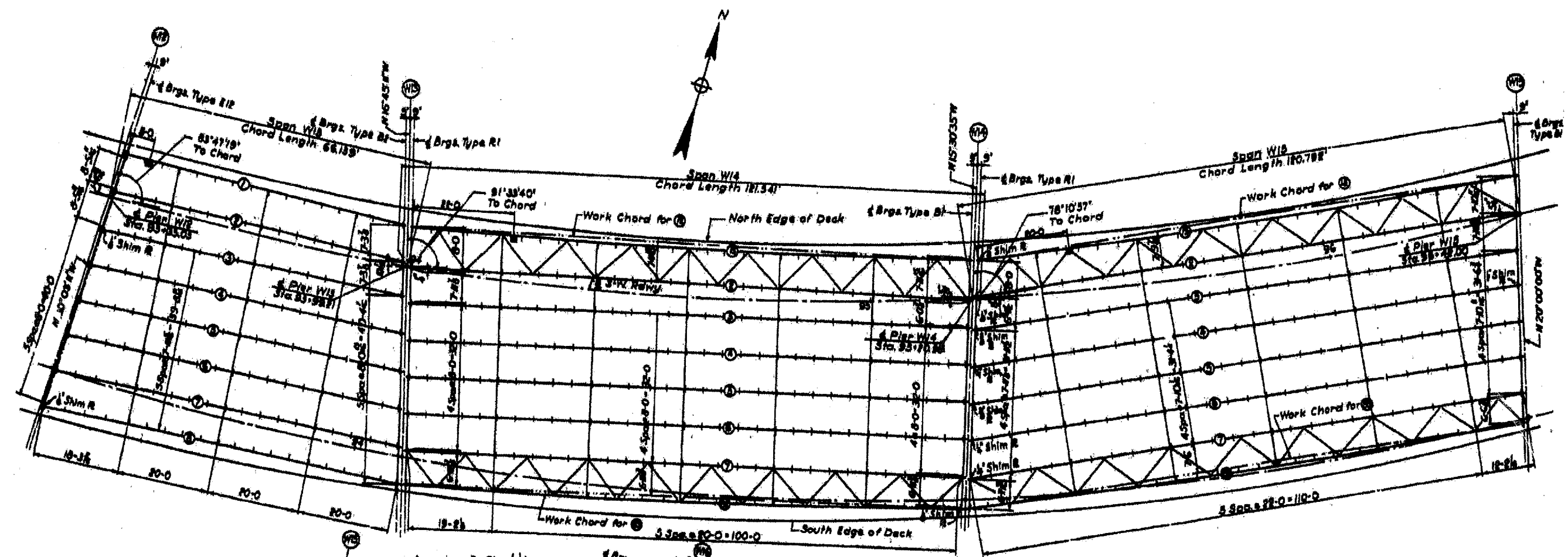
 Permanent Protective Shielding




ILLINOIS DEPARTMENT OF
 TRANSPORTATION

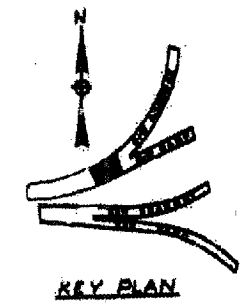
LOCATION 5
 SN 016-1052

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	10



NOTES:
 ■ Denotes Floor Drain location.

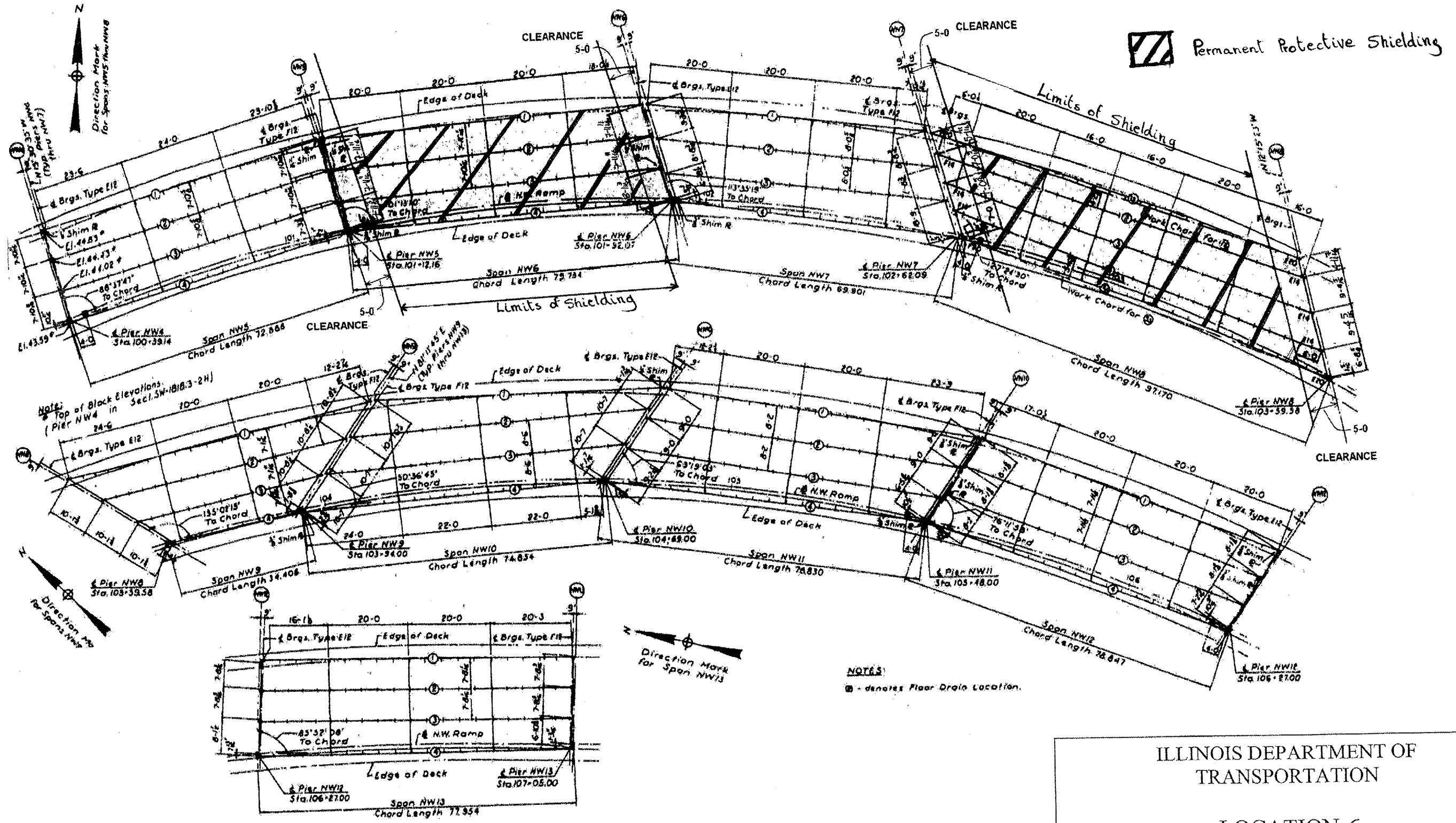
 Permanent Protective Shielding



ILLINOIS DEPARTMENT OF
 TRANSPORTATION

LOCATION 5
 SN 016-1052

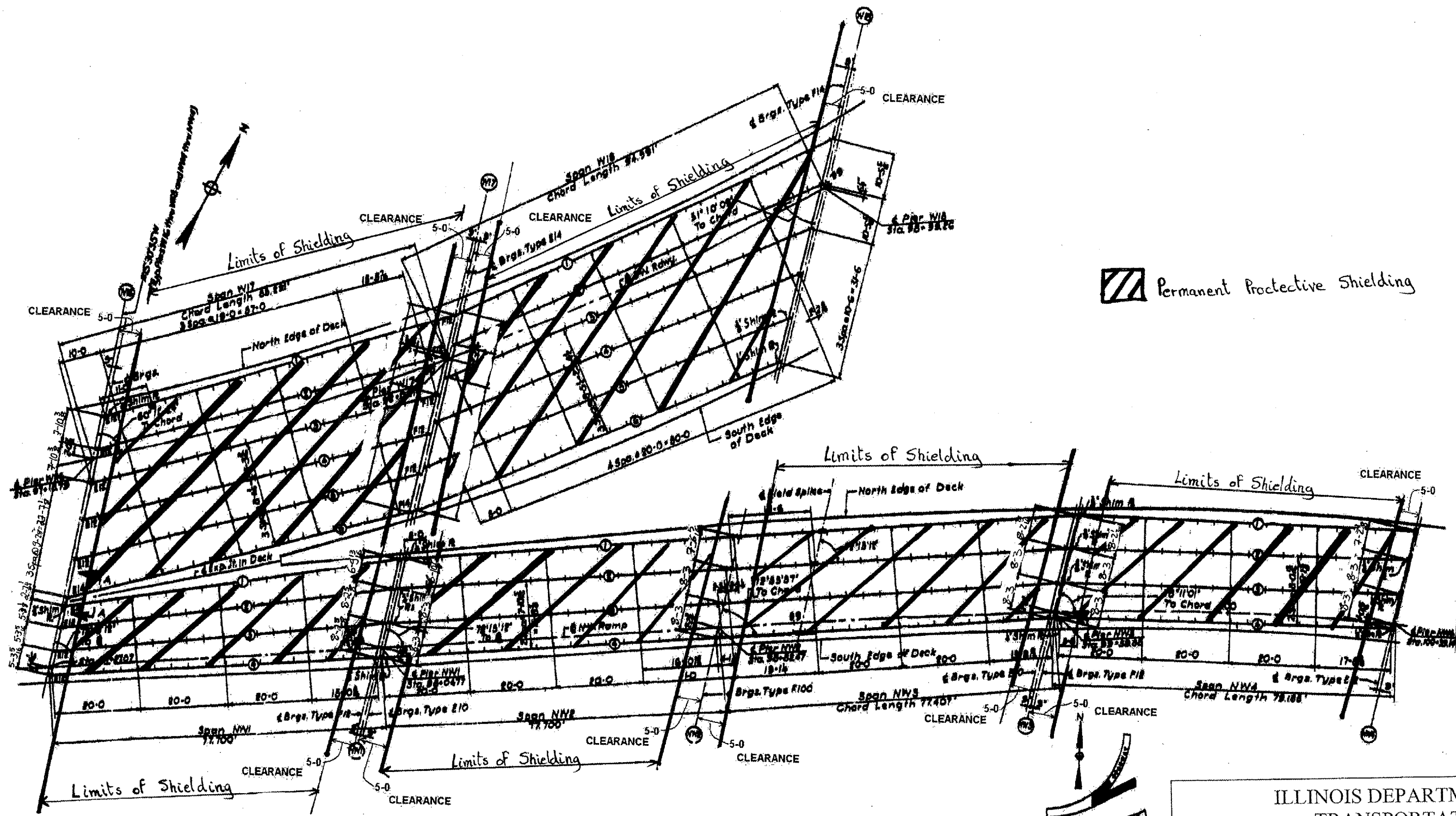
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	11




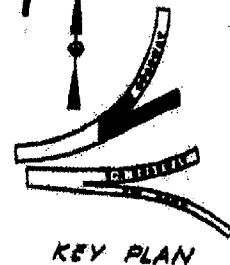
ILLINOIS DEPARTMENT OF
TRANSPORTATION

LOCATION 6
SN 016-1048

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	2006-0361	COOK	15	12

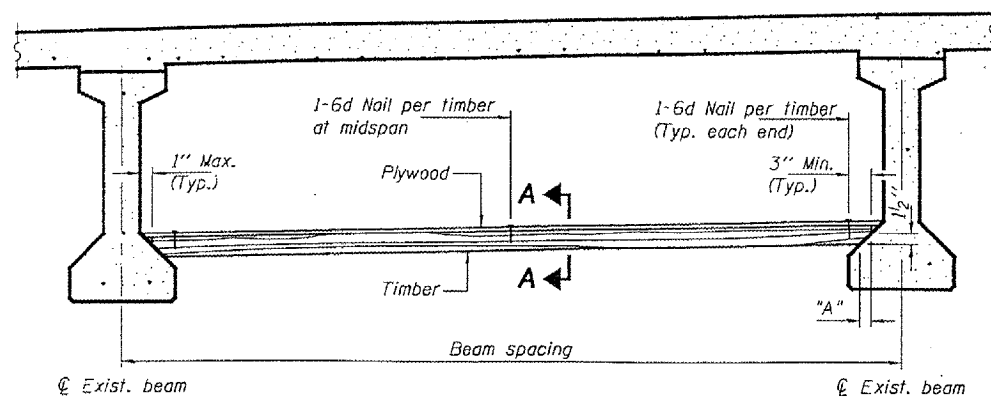


 Permanent Protective Shielding

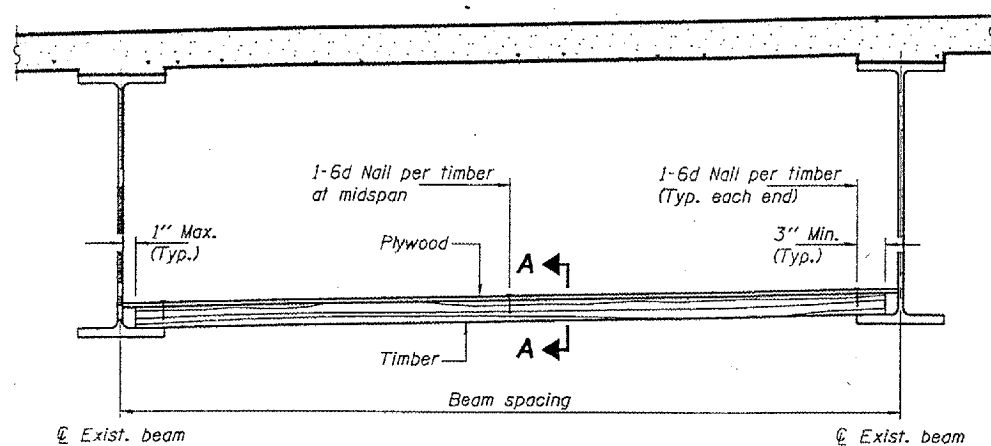


ILLINOIS DEPARTMENT OF
TRANSPORTATION

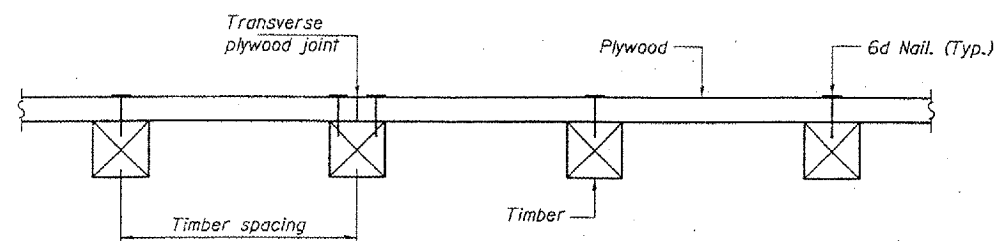
LOCATION 5 & 6
SN 016-1052
SN 016-1048



PPC I-BEAMS AND BULB-T'S



STEEL BEAMS



SECTION A-A

TIMBER SPACING

Beam Spacing (ft.)	Timber Sizes (in.)		
	4" x 4" with min. Fb=775 psi Fv=135 psi	4" x 6" with min. Fb=775 psi Fv=135 psi	6" x 6" with min. Fb=575 psi Fv=125 psi
	Maximum Timber Spacing (in.)		
4.5	16	16	16
4.75	16	16	16
5.0	16	16	16
5.25	16	16	16
5.5	16	16	16
5.75	16	16	16
6.0	16	16	16
6.25	12	16	16
6.5	12	16	16
6.75	12	16	16
7.0	8	16	16
7.25	8	16	16
7.5	8	16	16
7.75	8	16	16
8.0	8	12	16
8.25	8	12	16
8.5	6	12	12
8.75	6	12	12
9.0	6	8	12

PPC I-BEAMS AND BULB-T'S

BEAM	"A"
36" I-Beam	1 1/2"
42" I-Beam	1 1/2"
48" I-Beam	1 1/2"
54" I-Beam	1 5/8"
63" Bulb-T	3 3/8"
72" Bulb-T	3 3/8"

Notes: See special provision for Permanent Protective Shield System. Timber sizes shown are nominal sizes. Rough sawn timber of the dimensions shown will also be considered acceptable. The minimum Fb and Fv values shown are the tabulated design values given in the National Design Specification for Wood Construction for No. 2 Spruce-Pine-Fir without adjustment factors applied. Better grades or other species with equal or higher allowable stresses will also be considered acceptable. The timber spacings shown have been determined using allowable stresses with all adjustment factors necessary for the anticipated service conditions. All timber shall be treated. Plywood shall be 5/8" Exterior type plywood. Plywood shall be placed such that the face grain is perpendicular to the timber supports. When less than a full sheet (4' width) of plywood is used, the width of the strip used shall not be less than 2'. Transverse plywood joints shall be supported by timbers. When 4" x 6" timbers are used, they shall be placed such that the wide face is horizontal and the narrow face is vertical. Design load = 200 psf.

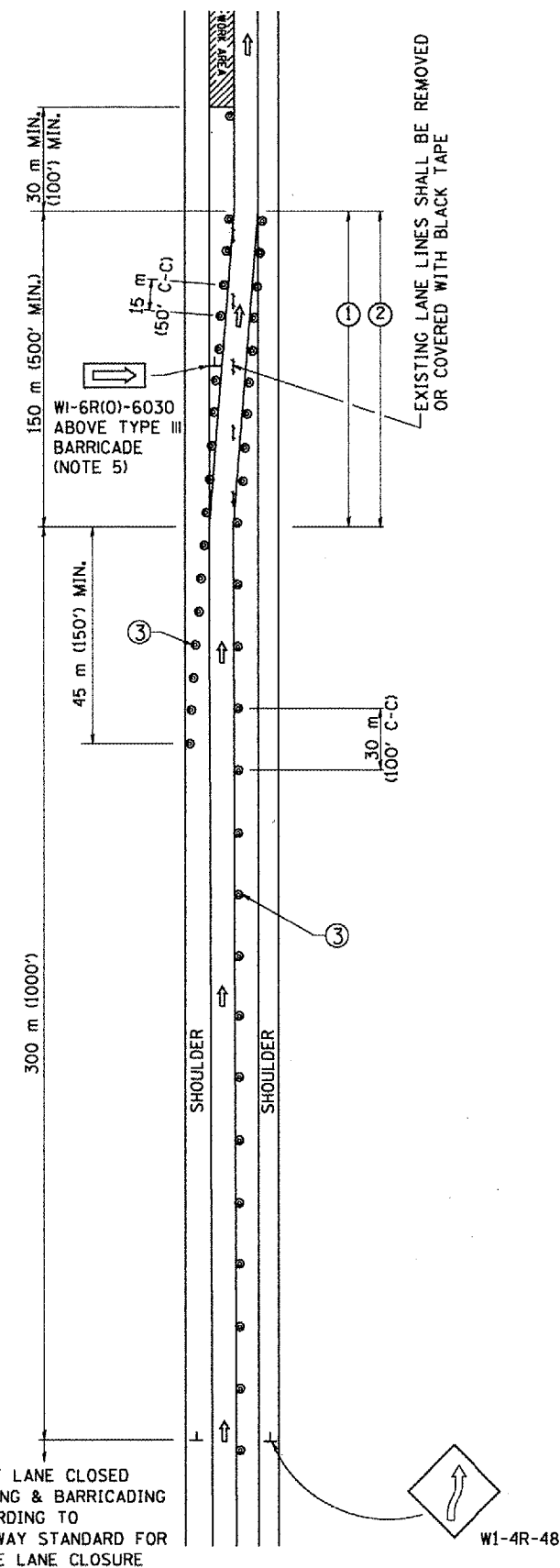
BILL OF MATERIAL

Item	Unit	Total
Protective Shield (Permanent)	Sq. Yd.	40622

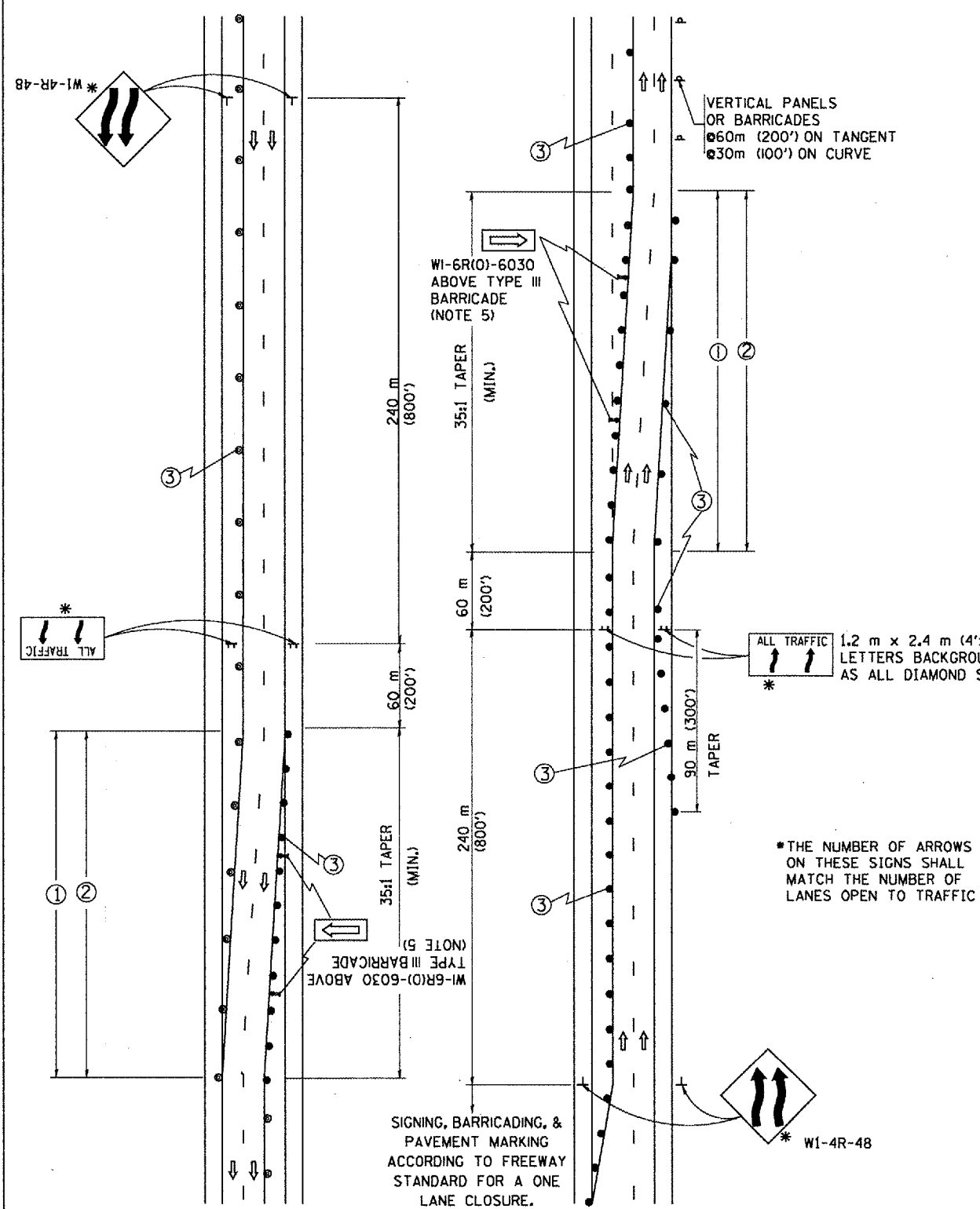
PERMANENT PROTECTIVE SHIELD

F.A.Z. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2006-036L	COOK	15	14
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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 90 m (300') 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 3 M-9 M (10'-30') SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 15 m (50') C-C SPACING IN TAPERS AND 30 m (100') 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
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	2/87
DWS	1/90
DWS	12/27/94
DWS	11/96
JAF	4/03
JAF	2/06

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

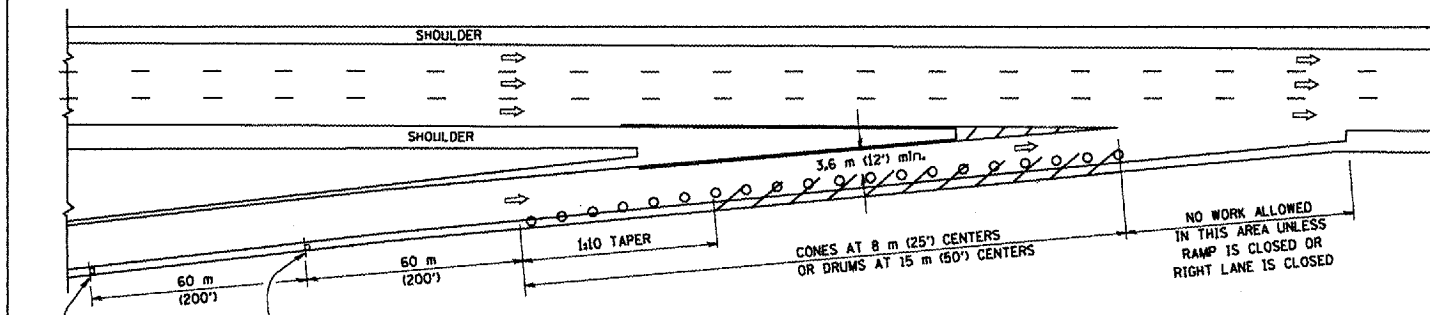
SCALE:
 DATE: 3/1/2006

DRAWN BY R.H.
 CHECKED BY

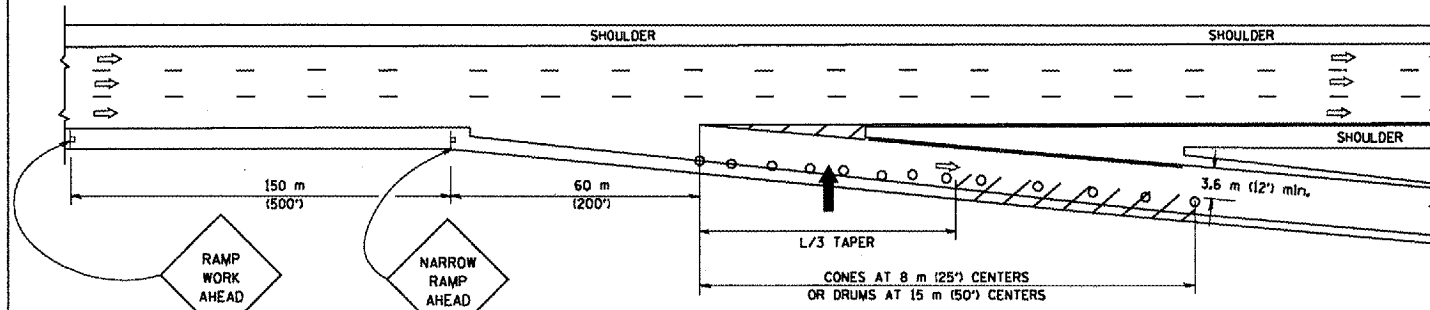
TC-9
 REVISION DATE: 02/28/06

PLOT DATE: 3/1/2006
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 PLOT SCALE: 1/8" = 1'-0"
 USER NAME: jaf

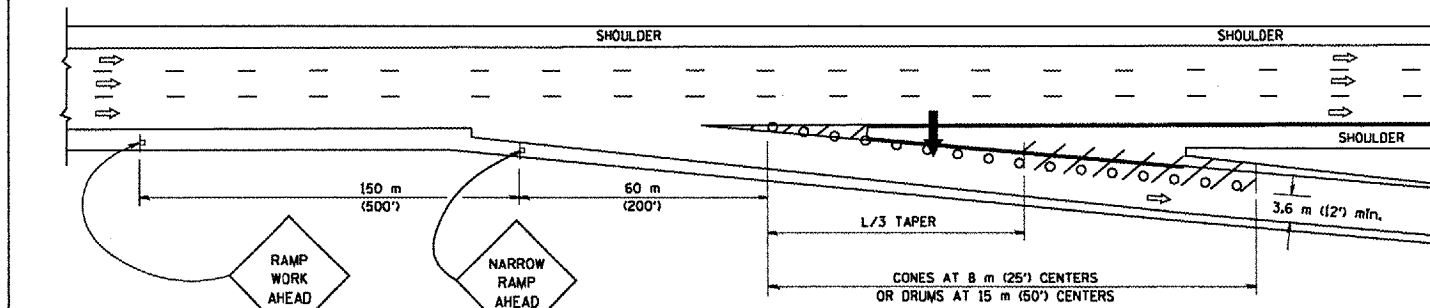
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

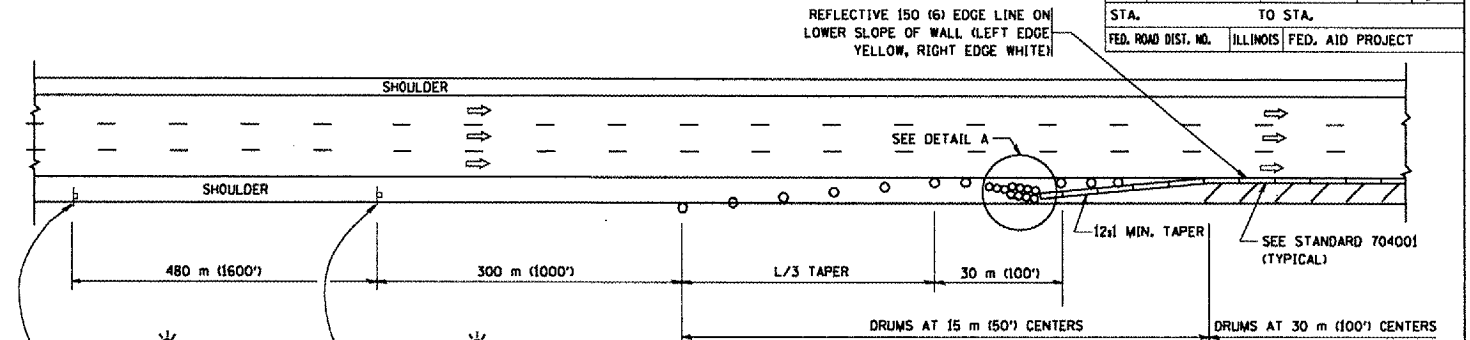
- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

GENERAL NOTES

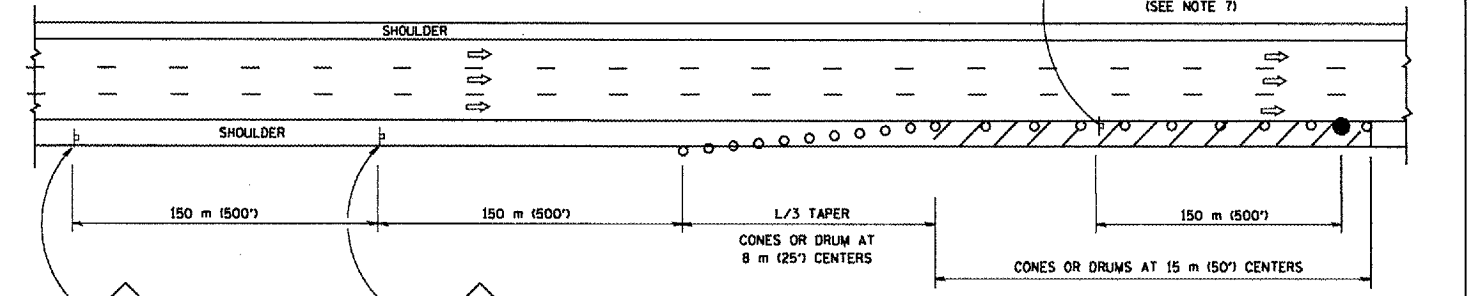
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
80 Km/h (45 mph) OR GREATER:	METRIC ENGLISH
	$L=0.65(WKS)$ $L=(W/5)$
	$W =$ WIDTH OF OFFSET IN METERS (FEET)
	$S =$ NORMAL POSTED SPEED KM/H (MPH)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

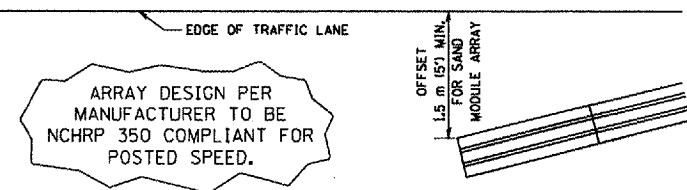
SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE



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

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

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
FOR FREEWAY
SHOULDER CLOSURES
PARTIAL RAMP CLOSURES
DESIGNED BY: DWS
DRAWN BY:
CHECKED BY:
TC-17
SCALE: NONE
DATE: 3/1/2006
REVISION DATE: 02/28/06

PLOT DATE: 3/1/2006
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 USER NAME: jaf