

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	1999-031BP	COOK	14	1

* VARIOUS ROUTES

D-91-057-99



LOCATION OF SECTION INDICATED THUS: - [shaded box] -

INDEX OF SHEETS

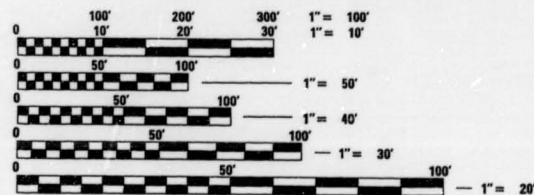
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STATE STANDARDS
2. SUMMARY OF QUANTITIES
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LOCATION MAP
GENERAL NOTES
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14. PARTIAL RAMP AND SHOULDER CLOSURE DETAILS

VARIOUS DISTRICT WIDE

1. 22ND STREET (CERMAK ROAD) OVER VARIOUS LOCATIONS 2. WILLOW ROAD OVER VARIOUS LOCATIONS

SECTION: 1999-031 BP BRIDGE PAINTING COOK COUNTY C-91-057-99

THIS IMPROVEMENT IS LOCATED
IN THE VILLAGES OF
BROADVIEW AND NORTHFIELD.



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

1. SN: 016-0631 22ND STREET / CERMAK ROAD OVER IHB RR & GARDNER STREET
SN: 016-0632 22ND STREET / CERMAK ROAD OVER 25TH AVENUE
2. SN: 016-0536 WILLOW ROAD OVER I-94 / EDENS EXPRESSWAY
SN: 016-0818 WILLOW ROAD OVER SKOKIE RIVER

TRAFFIC DATA

- 1.) 1994 ADT = 12,500
- 2.) 1994 ADT = 152,300

SPEED LIMIT

- 1.) 35 MPH
- 2.) 55 MPH

STATE STANDARDS

701101, 701401, 701411, 701606, 702001

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 6 19 99
John R. Kay DISTRICT ENGINEER

ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION

May 7 19 99
Bill Hunkeler ENGINEER OF DESIGN AND ENVIRONMENT

May 7 19 99
James P. Stipan DIRECTOR, DIVISION OF HIGHWAYS

FOR LOCATION MAP SEE SHEET NO. 2.

PRINTED BY AUTHORITY OF THE
STATE OF ILLINOIS

DISTRICT ONE BUREAU OF MAINTENANCE: K. ANTONSON
MAINTENANCE DESIGN ENGINEER: B. EPINO / L. EWERS (847) 705-4178

CONTRACT NO. 60690

TAMERAN

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 1999-031BP	COOK	14	2
STA	TO STA		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

LOCATION MAP

* VARIOUS ROUTES

SUMMARY OF QUANTITIES

LIBRAI
100% STATE

CODE NO.	ITEM	UNIT	QUANTITY
50600600	CLEANING AND PAINTING STEEL, BRIDGE NO. 1	L. SUM	1
50600700	CLEANING AND PAINTING STEEL, BRIDGE NO. 2	L. SUM	1
50600800	CLEANING AND PAINTING STEEL, BRIDGE NO. 3	L. SUM	1
50600900	CLEANING AND PAINTING STEEL, BRIDGE NO. 4	L. SUM	1
50606200	BLASTING RESIDUE CONTAINMENT AND DISPOSAL	L. SUM	1
50606300	POWER TOOL CLEANING RESIDUE CONTAINMENT AND DISPOSAL	L. SUM	1
70100800	TRAFFIC CONTROL AND PROTECTION STANDARD 701401	L. SUM	1
70102625	TRAFFIC CONTROL AND PROTECTION STANDARD 701606	L. SUM	1
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAY)	L. SUM	1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L. SUM	1
67100100	MOBILIZATION	L. SUM	1

GENERAL NOTES FOR PAINT

PAINTING EXISTING STEEL OF HIGHWAY GRADE SEPARATION STRUCTURES (STRUCTURE NUMBERS 016-0631, 016-0632, 016-0536):

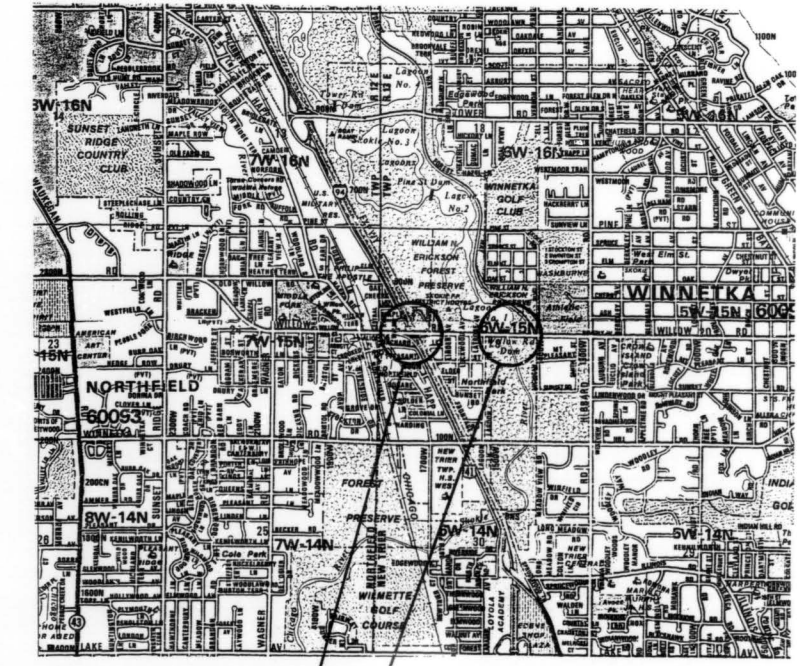
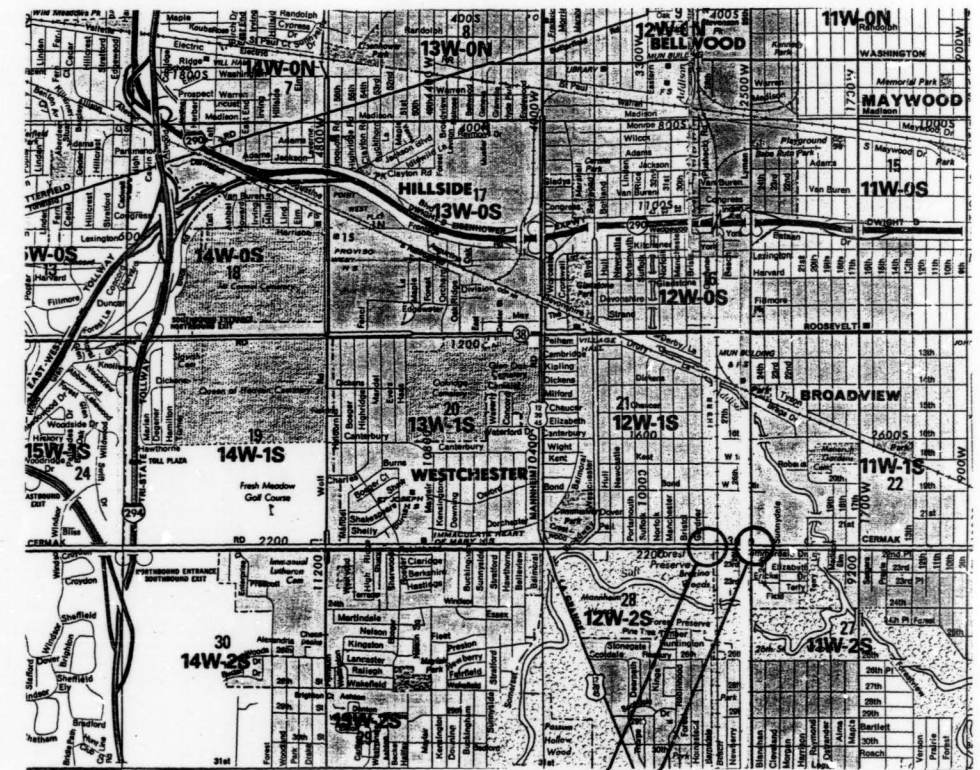
CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES".

- ALL EXISTING STRUCTURAL STEEL, INCLUDING BEARING DEVICES, WITHIN 1.5M (5 FEET) OF EITHER SIDE OF EXPANSION JOINTS SHALL BE CLEANED BY METHOD 1.
- THE EXTERIOR AND THE BOTTOM FLANGE OF THE FASCIA BEAMS, INCLUDING REMAINING FASCIA BEAM BEARING DEVICES, SHALL BE CLEANED BY METHOD 3.
- ALL REMAINING EXISTING STRUCTURAL STEEL AND BEARING DEVICES SHALL BE CLEANED BY METHOD 2.
- THE ALUMINUM EPOXY MASTIC/ACRYLIC PAINT SYSTEM SHALL BE USED FOR PAINTING OF THE EXISTING STRUCTURAL STEEL.
- THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES, INCLUDING BEARING DEVICES, SHALL BE GRAY, MUNSELL NO. 5B 7/1.
- THE COLOR OF THE FINAL FINISH COAT FOR THE EXTERIOR AND BOTTOM FLANGE OF THE FASCIA BEAMS, INCLUDING FASCIA BEAM BEARING DEVICES, SHALL BE REDDISH BROWN, MUNSELL NO. 2.5YR 3/4.

PAINTING EXISTING STEEL OF RAILROAD AND STREAM CROSSING STRUCTURES (STRUCTURAL NUMBERS 016-0818):

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND REPAINTING ZINC/VINYL COATED STRUCTURES".

- ALL EXISTING STRUCTURAL STEEL, INCLUDING BEARING DEVICES, SHALL BE CLEANED.
- THE EXISTING STRUCTURAL STEEL WAS PREVIOUSLY PAINTED WITH INORGANIC ZINC. LEAD-BASED PAINT IS NOT PRESENT ON EXISTING STRUCTURAL STEEL.
- THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES, INCLUDING BEARING DEVICES, SHALL BE GRAY, MUNSELL NO. 5B 7/1.
- THE COLOR OF THE FINAL FINISH COAT FOR THE EXTERIOR AND BOTTOM FLANGE OF THE FASCIA BEAMS, INCLUDING FASCIA BEAM BEARING DEVICES, SHALL BE REDDISH BROWN, MUNSELL NO. 2.5YR 3/4.



BRIDGE NO. 1
SN: 016-0631
22ND ST. OVER IHB RR & GARDNER ST.

BRIDGE NO. 2
SN: 016-0632
22ND ST. OVER 25TH AVE.

BRIDGE NO. 3
SN: 016-0536
WILLOW RD. OVER I-94/EDENS EXPWY

BRIDGE NO. 4
SN: 016-0818
WILLOW RD. OVER SKOKIE RIVER

GENERAL NOTES

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4155 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

GENERAL NOTES

- BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH UNBALLASTED TYPE I OR TYPE II BARRICADE USED. (ONE [1] WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL). THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT THE COSTS SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES FOR THE CONSTRUCTION ITEMS INVOLVED, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

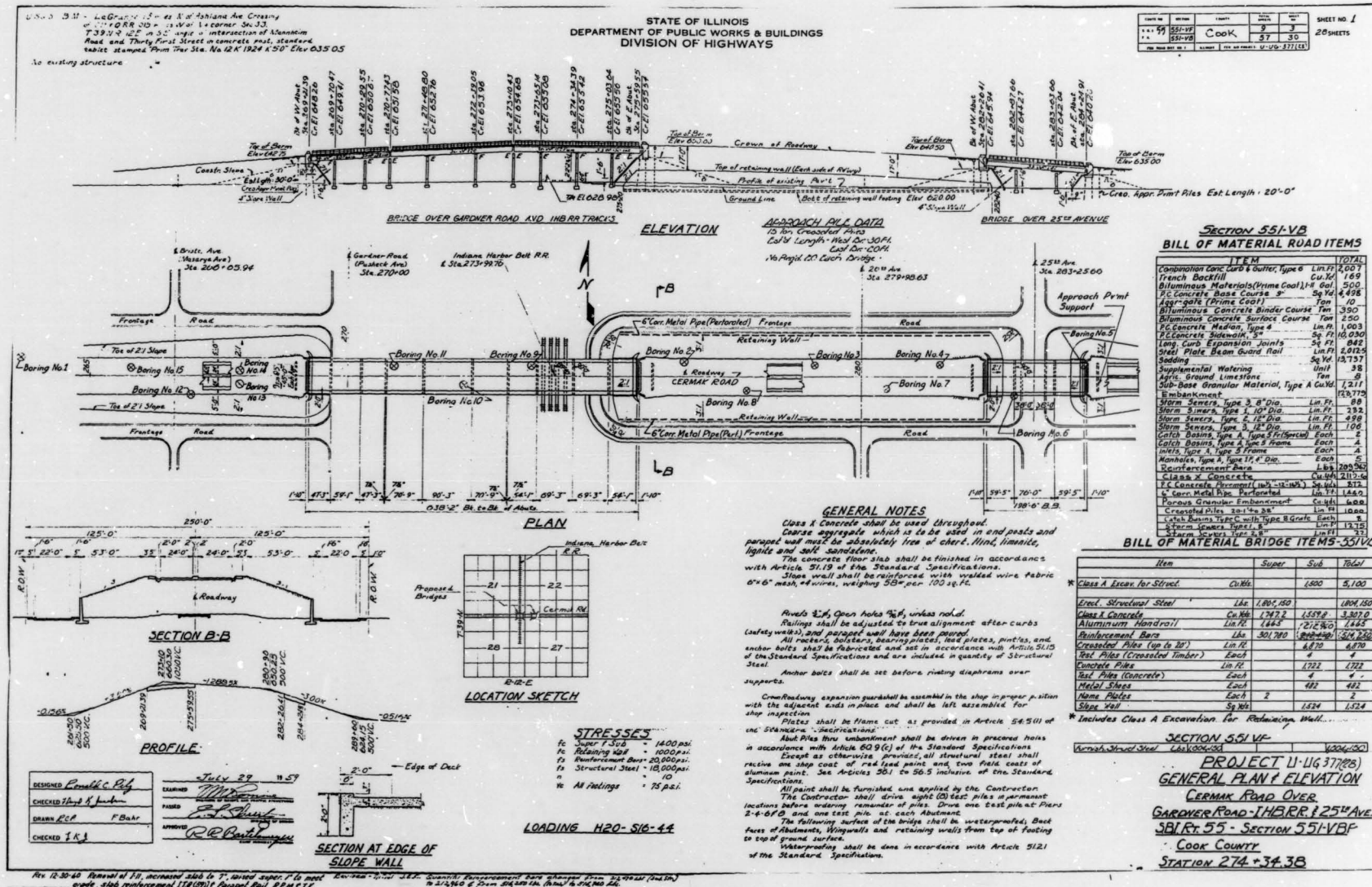
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
GENERAL NOTES FOR PAINT
GENERAL NOTES
LOCATION MAP

SCALE: VERT. _____
HORIZ. _____
DATE _____

DRAWN BY _____
DESIGNED BY _____
CHECKED BY _____



FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1 SN: 016-0631 &
BRIDGE NO. 2 SN: 016-0632
22nd STREET (CERMAK ROAD)
OVER
IHB RR & GARDNER & 25th AVENUE

SCALE: VERT. _____
HORIZ. _____
DATE _____

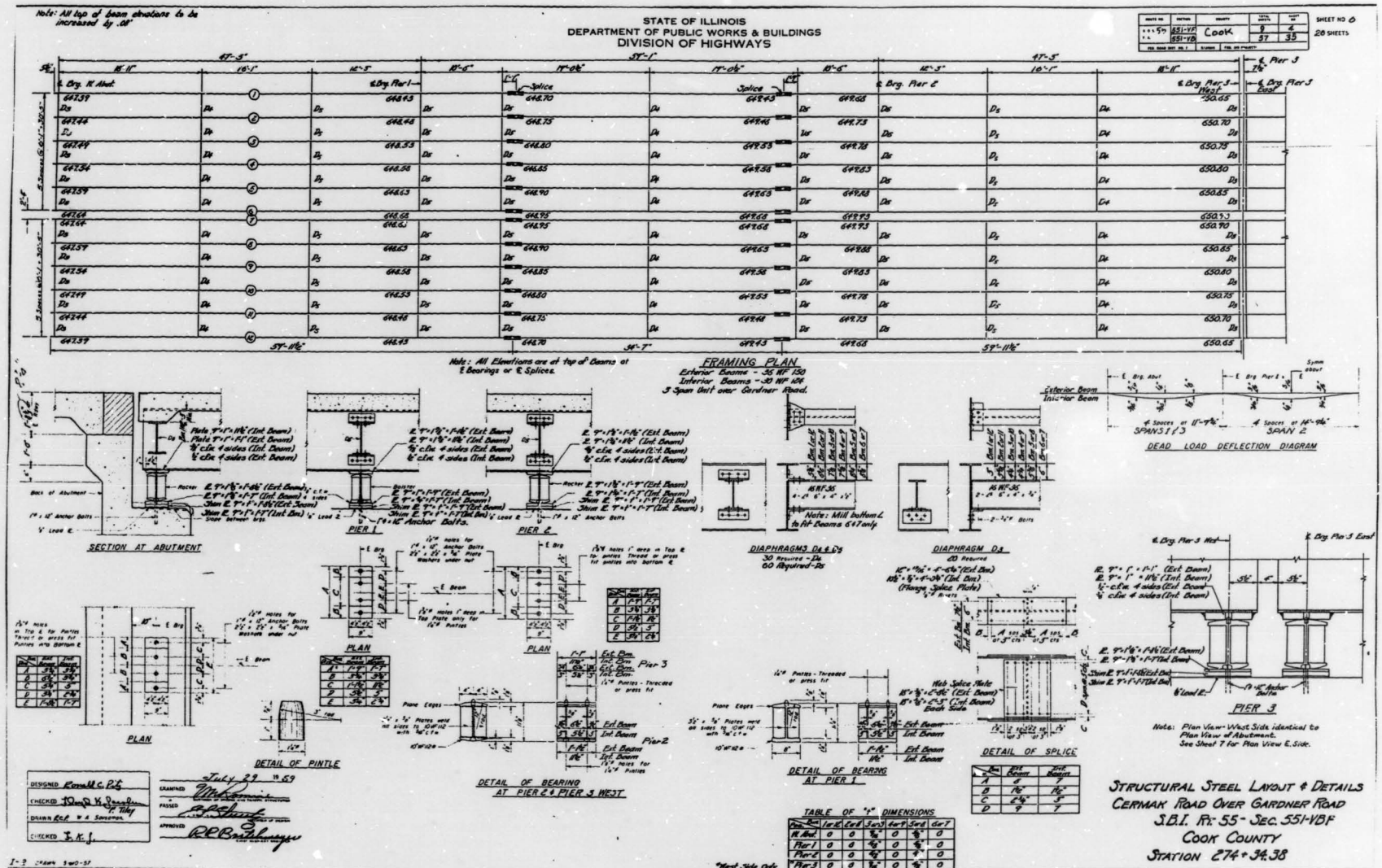
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DESIGNED BY _____
CHECKED BY _____

REVISIONS	
NAME	DATE

S. L. INDUSTRIES 881818

F. A. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1999-031BP	COOK	14	4
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

* VARIOUS ROUTES



FOR INFORMATION ONLY

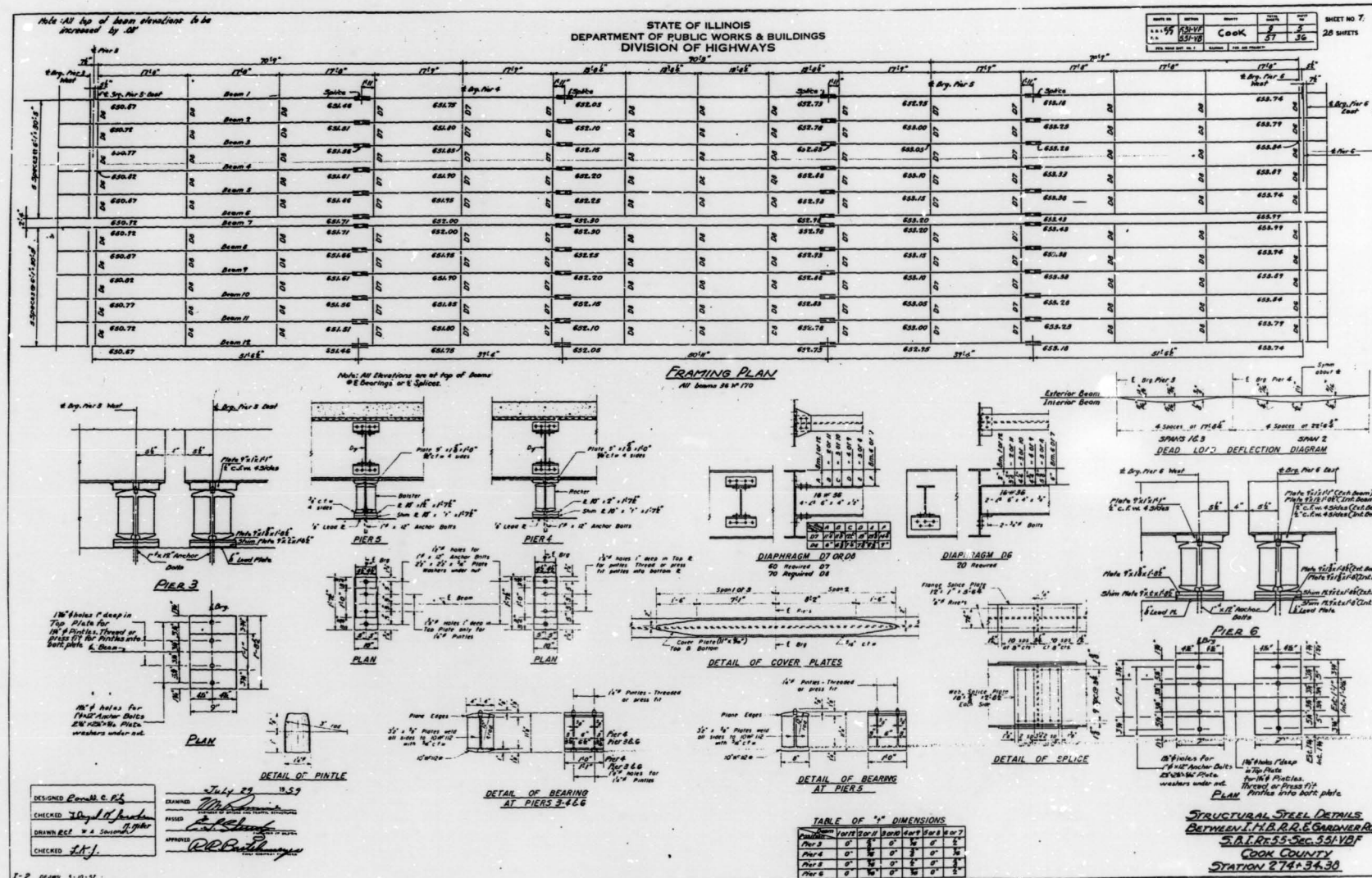
ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 1 SN: 016-0631
22nd STREET (CERMAK ROAD)
OVER
IHB RR & GARDNER STREET

REVISIONS	
NAME	DATE

SCALE: VERT. DRAWN BY
HORIZ. DESIGNED BY
DATE CHECKED BY

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1999-031BP	COOK	14	5
STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS	
		FED. AID PROJECT	

* VARIOUS ROUTES



FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 1 SN: 016-0631
22nd STREET (CERMAK ROAD) OVER
IHB RR & GARDNER STREET

SCALE: VERT. HORIZ.
DATE

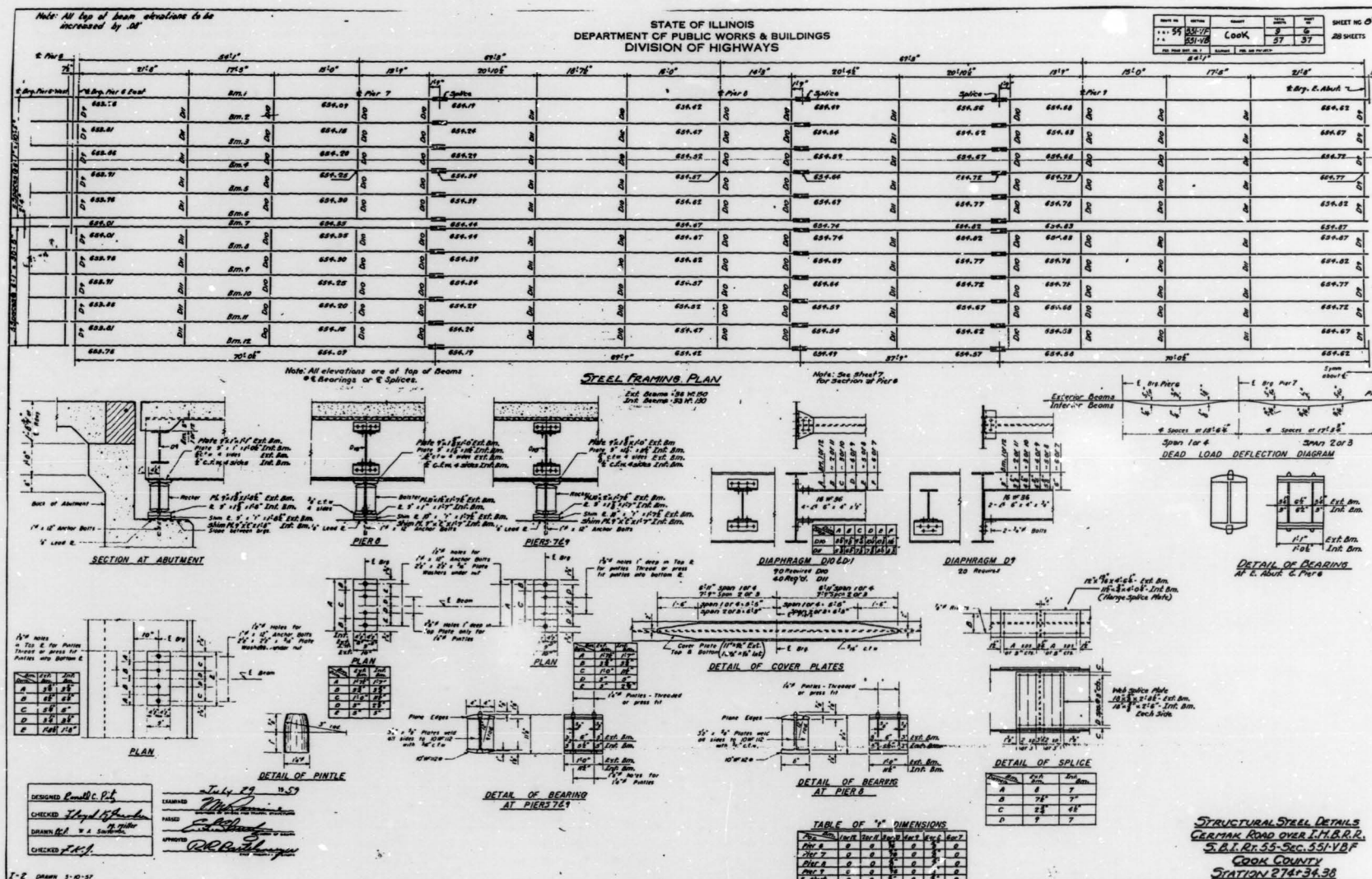
DRAWN BY
DESIGNED BY
CHECKED BY

REVISIONS	
NAME	DATE



F. & E. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 1999-031BP	COOK	14	6	
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

* VARIOUS ROUTES



FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 1 SN: 016-0631
22nd STREET (CERMAK ROAD)
OVER
IHB RR & GARDNER STREET

REVISIONS	
NAME	DATE

SCALE: VERT. HORIZ.
DATE



F. A. MILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1999-0318P	COOK	14	7
STA. TO STA.			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT	

* VARIOUS ROUTES

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 7
25 SHEETS

STATION	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
64477									
64500									
64507									
64516									
64517									
64520									
64527									
64534									
64541									
64548									
64555									
64562									
64569									
64576									
64583									
64590									
64597									

FRAMING PLAN
Elevations shown are of top of beams.
All steel 33W/14

Note: All elevations are of top of beams @ Bearings or Girders.

DESIGNED R. P. R.
CHECKED J. H. P.
DRAWN J. H. P.
DATE July 22, 1957

Beam	H	T	B	W
Abut	0	0	0	0
Pier I	0	0	0	0
Pier II	0	0	0	0
End	0	0	0	0

STRUCTURAL STEEL LAYOUT & DETAILS
CERMAK ROAD OVER 25th AVE.
S.B.T. RT. 55 - SECTION 55H01
COOK COUNTY
STATION 274 + 34.38

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 2 SN: 016-0632

22nd STREET (CERMAK ROAD)
OVER
25th AVENUE

REVISIONS	
NAME	DATE

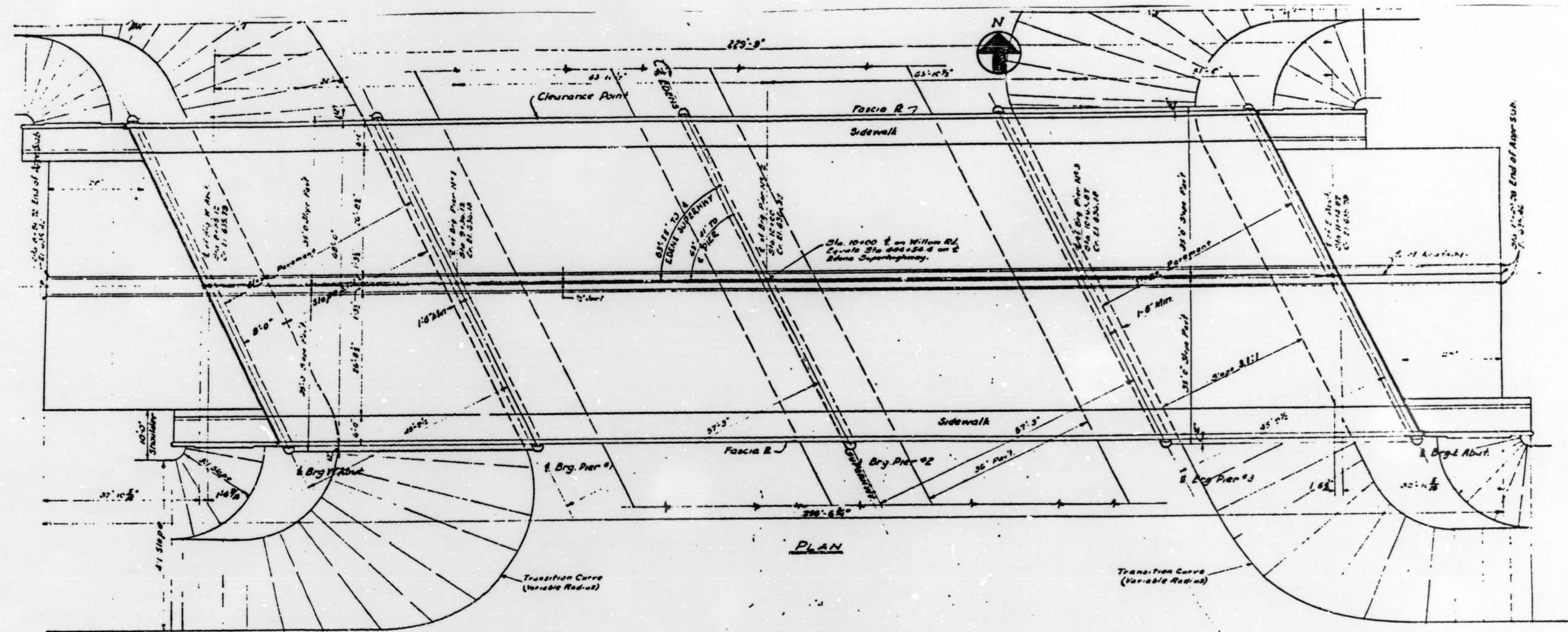
SCALE: VERT. _____
HORIZ. _____
DATE _____

DRAWN BY _____
DESIGNED BY _____
CHECKED BY _____

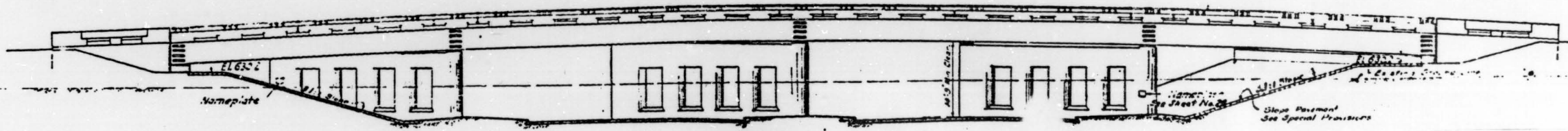
S. E. INDUSTRIES, CHICAGO

D C B A 0 A B C D
TAMERAN

FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1999-031BP	COOK	14	8	
STA.	TO STA.		FED. AID PROJECT	
* VARIOUS ROUTES				



PLAN



ELEVATION

FOR INFORMATION ONLY

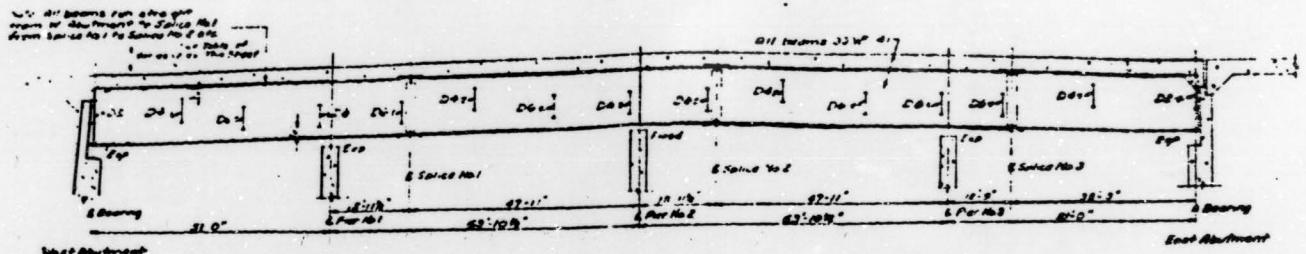
ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE NO. 3 SN: 016-0536
 WILLOW ROAD
 OVER
 I-94, US 41 (EDENS EXPRESSWAY)

REVISIONS	
NAME	DATE

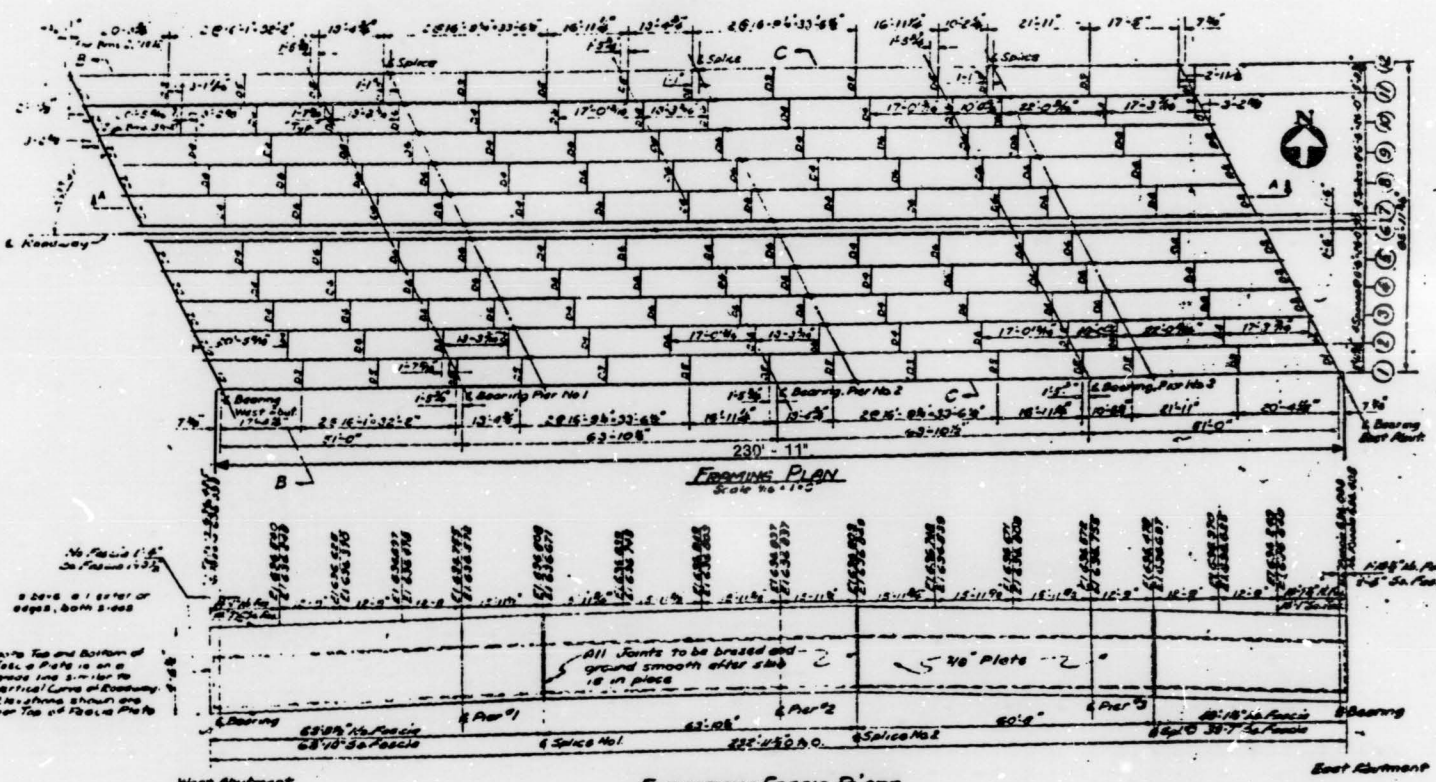
SCALE: VERT. DRAWN BY
 HORIZ. DESIGNED BY
 DATE CHECKED BY



P. 1 SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 1999-031BP	COOK	ILLINOIS	14	9
STA. TO STA.		FED. AID PROJECT		
* VARIOUS ROUTES				



SECTION A-A

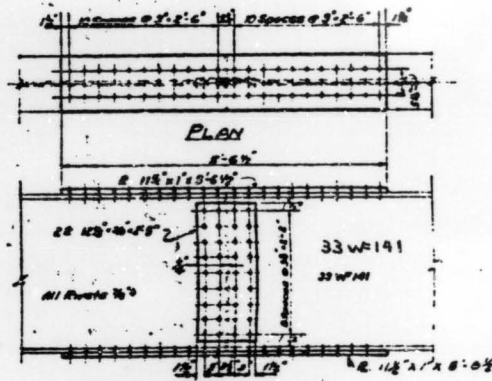


FRAMING PLAN

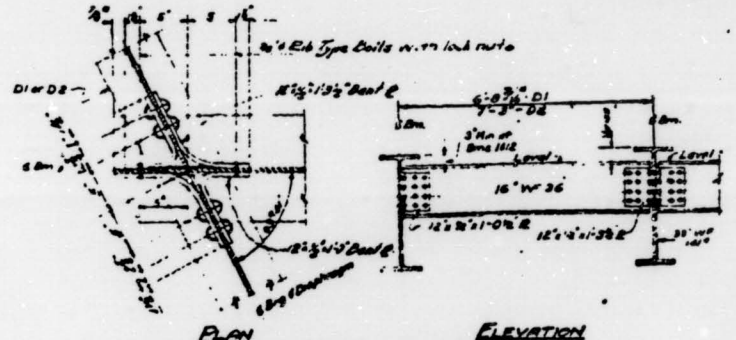
No. 100-110
20'-0" x 1'-0" or
larger, both 2'-0"

with Top and Bottom of
Fascia Plate is set
ground and 2'-0" for
vertical Curve of Roadway.
Elevations shown are
for Top of Fascia Plate.

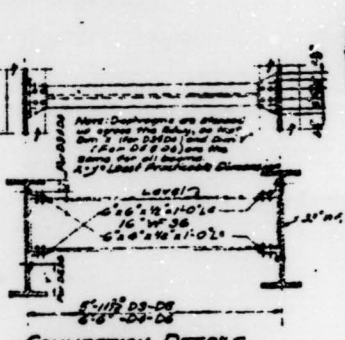
ELEVATION-FASCIA PLATE
(Full not shown. See E-1 for details of Fascia)



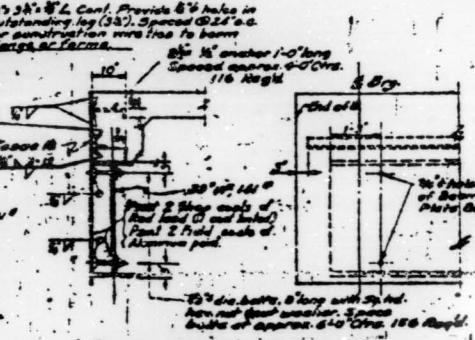
DETAIL OF SPlice PLATES
Scale 1/4"=1'-0"



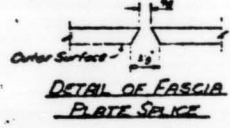
DETAIL OF CONNECTION-DIAPHRAGMS



CONNECTION DETAILS
DIAPHRAGMS D316E



DETAIL-MOUNTING FASCIA PLATE



DETAIL OF FASCIA
PLATE SPlice

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 3 SN: 016-0536
WILLOW ROAD
OVER
I-94, US 41 (EDENS EXPRESSWAY)

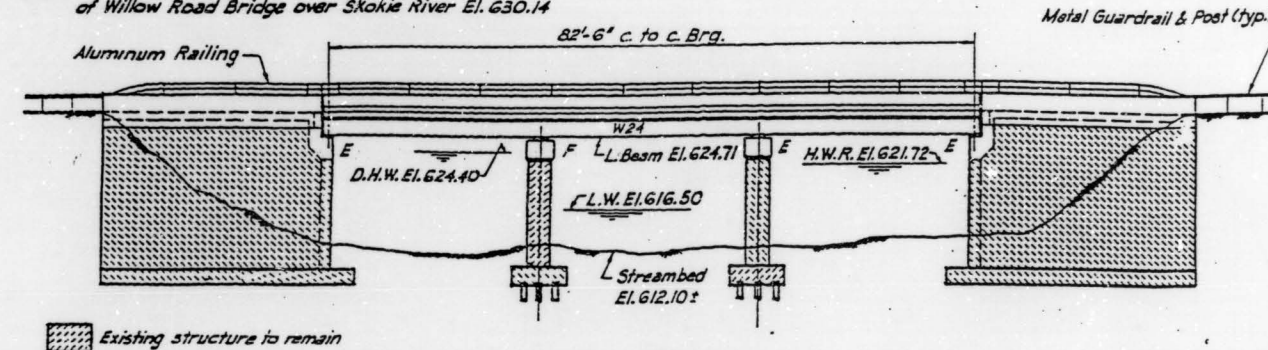
REVISIONS	
NAME	DATE

SCALE: VERT. HORIZ. DATE
DRAWN BY DESIGNED BY CHECKED BY

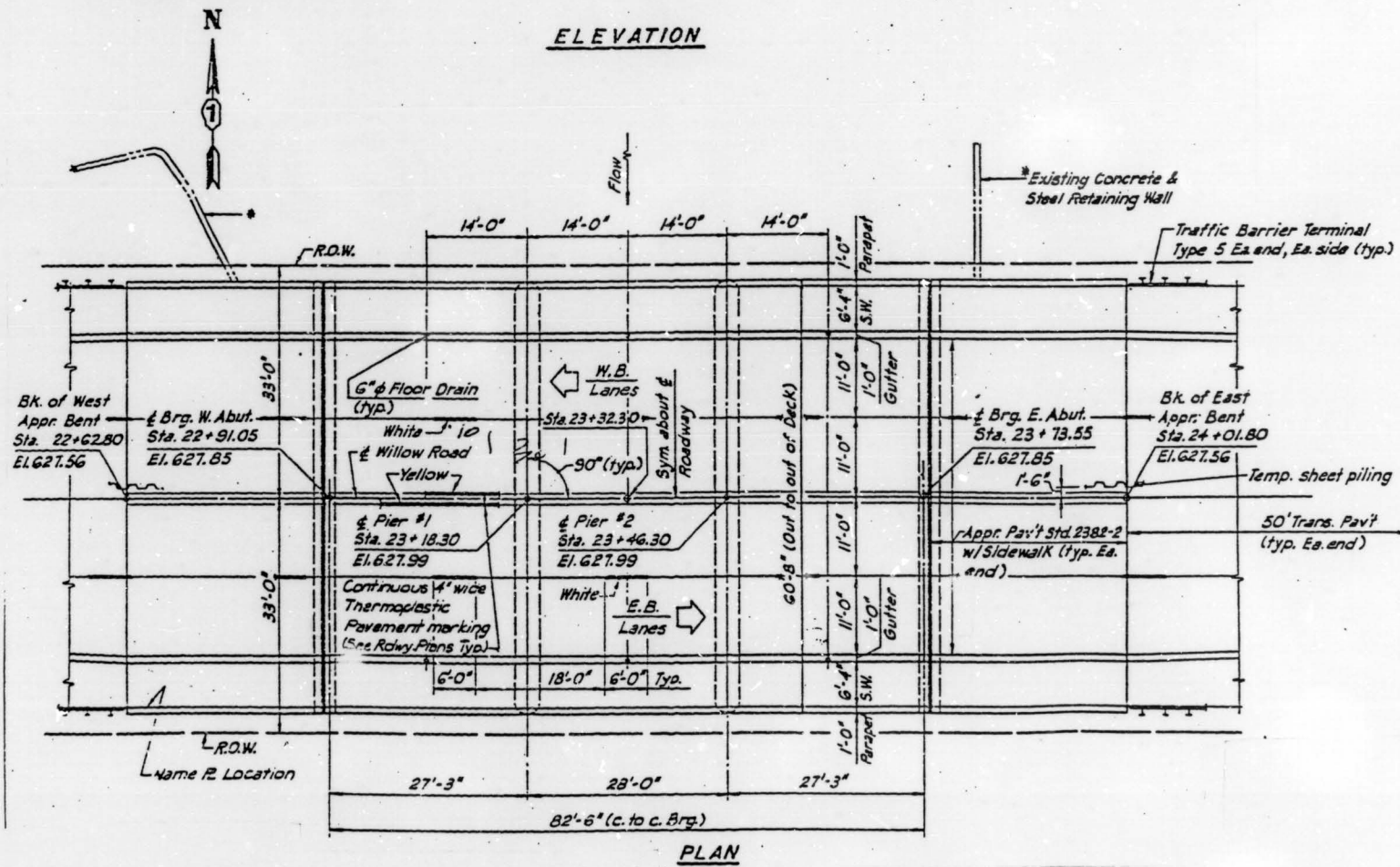
SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1999-031BP	COOK	14	10
STA. TO STA.		ILLINOIS FED AID PROJECT	

* VARIOUS ROUTES

B.M. - Chiseled square in west end of South Abutment wall of Willow Road Bridge over Skokie River El. 630.14



ELEVATION



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE NO. 4 SN: 016-0818
 WILLOW ROAD
 OVER
 SKOKIE RIVER

REVISIONS	
NAME	DATE

SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY _____
 DESIGNED BY _____
 CHECKED BY _____

B.M. INDUSTRIES 88318

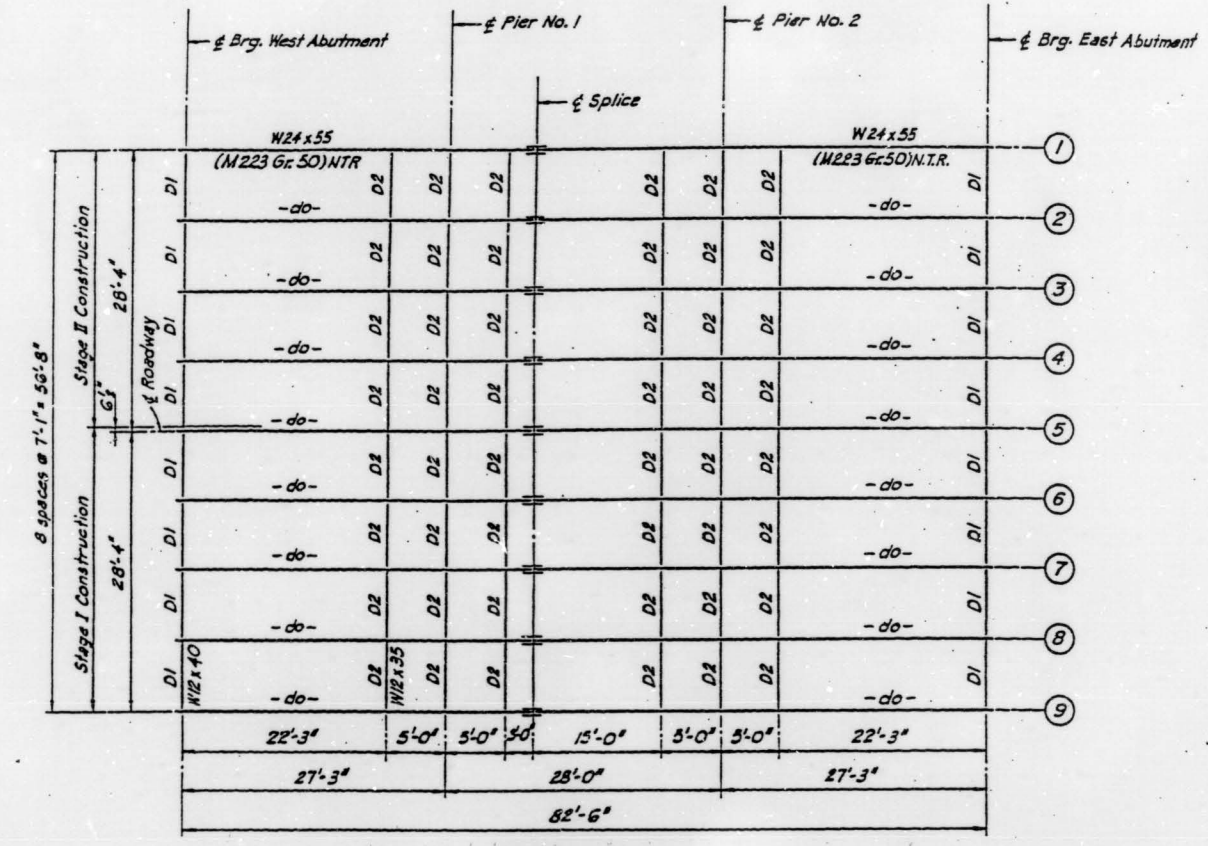
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TAMERAN

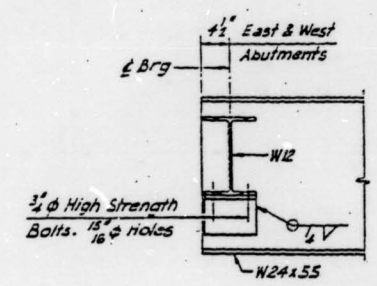
REVISION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1999-031BP	COOK	14	11
STA.	TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	

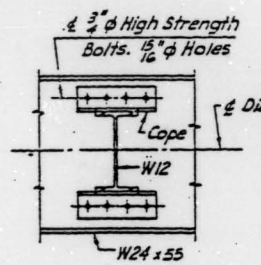
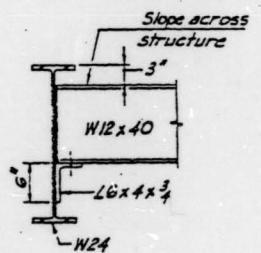
* VARIOUS ROUTES



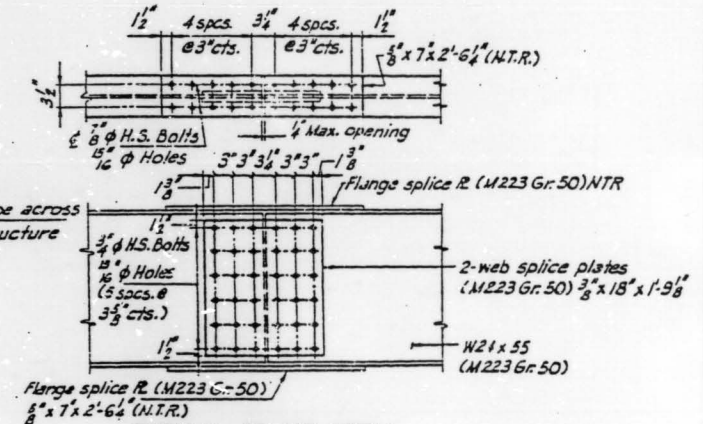
FRAMING PLAN



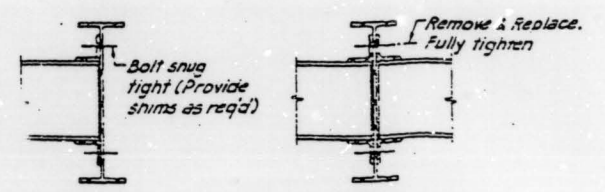
END DIAPHRAGM D1
16 REQUIRED



INTERIOR DIAPHRAGM D2
48 REQUIRED



TYPICAL SPLICE DETAIL



STAGE I STAGE II
STAGE CONSTRUCTION DETAIL

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 4 SN: 016-0818

WILLOW ROAD
OVER
SKOKIE RIVER

REVISIONS	
NAME	DATE

SCALE: VERT.
HORIZ.
DATE

DRAWN BY
DESIGNED BY
CHECKED BY

B & S ENGINEERING, CHICAGO

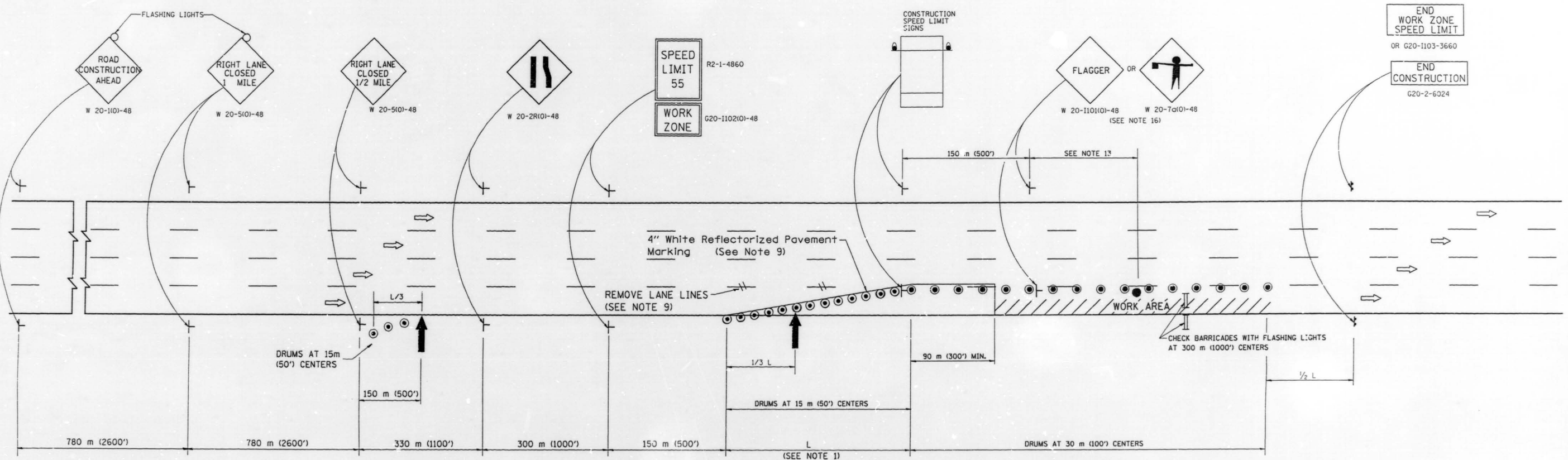


F. A. SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	1999-031BP	COOK	14	12
STA.		TO STA.		
FED. ROAD DIST. NO. 7	BLINDS	FED. AID PROJECT		

* VARIOUS ROUTES

END WORK ZONE SPEED LIMIT
OR G20-1103-3660

END CONSTRUCTION
G20-2-6024



SYMBOLS

- BARRICADES WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS
- ARROWBOARD
- WORK AREA
- 450 x 450 (18 BY 18) MIN. ORANGE FLAG
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

GENERAL NOTES

- THE "L" DISTANCE EQUALS THE LANE WIDTH TIMES THE TAPER RATIO.

NORMAL POSTED SPEED		TAPER RATIO (length to pavement width)	
km/h	mph	m/mm	ft/ft
110	65	20/300	65/1
100	60	18/300	60/1
90	55	17/300	55/1
80 or less	45 or less	14/300	45/1
- WHEN THERE IS NO WORK BEING PERFORMED, THE FLAGGER WILL NOT BE REQUIRED. IF THE FLAGGER IS NOT PRESENT, THE FLAGGER AND WORKER SIGNS SHALL BE REMOVED OR COVERED.
- THIS STANDARD ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE LEFT LANE. UNDER THESE CONDITIONS **LEFT LANE CLOSED** SIGNS SHALL BE SUBSTITUTED FOR **RIGHT LANE CLOSED** SIGNS.
- CONES MAY BE SUBSTITUTED FOR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 700 (28) IN HEIGHT.
- STEADY BURNING LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME LANE 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.
- REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 90 m (300') ALONGSIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE EDGE LINE SHALL BE YELLOW FOR LEFT LANE CLOSURES. CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED.
- WHEN A RAMP INTERSECTS THE HIGHWAY WORK AREA, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED IN ACCORDANCE WITH STANDARD T01411 OR AS DIRECTED BY THE ENGINEER.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS. THE LATERAL PLACEMENT OF THE FLAGGER MAY BE VARIED FROM THAT SHOWN. THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF WORKERS.
- ALL VEHICLES, EQUIPMENT, MEN AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- THE CONSTRUCTION SPEED LIMIT SIGNS AND THE FLAGGER SIGNS SHALL BE MOVED AS NECESSARY TO MAINTAIN A SPACING OF 150 m (500') TO 750 m (2500') BETWEEN THE FLAGGER SIGN AND EACH SEPARATE WORK ACTIVITY.
- FOR DAYTIME LANE CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE **ROAD CONSTRUCTION AHEAD** SIGNS.
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY LANE CLOSURES.
- AT ALL TIMES WHEN WORKERS ARE PRESENT, A FLAGGER SHALL BE POSITIONED IN ADVANCE OF THE FIRST WORK OPERATION AS SHOWN (SEE NOTE 2). AN ADDITIONAL FLAGGER, AS REQUIRED BY PARAGRAPH 3 OF ARTICLE 701.04C OF THE STANDARD SPECIFICATIONS, SHALL BE POSITIONED IN ADVANCE OF EACH SEPARATE ACTIVITY OF THE OPERATION THAT REQUIRES FREQUENT ENCROACHMENT INTO A LANE OPEN TO TRAFFIC. HOWEVER, IF WORK AREA IS PROTECTED BY TEMPORARY BARRIER WALL AND NO TRUCKING OPERATION IS IN PROGRESS, THE FLAGGER AND FLAGGER SIGNING MAY BE OMITTED.

All dimensions are in millimeters (inches) unless otherwise shown.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1

APPROVED _____
DISTRICT ENGINEER

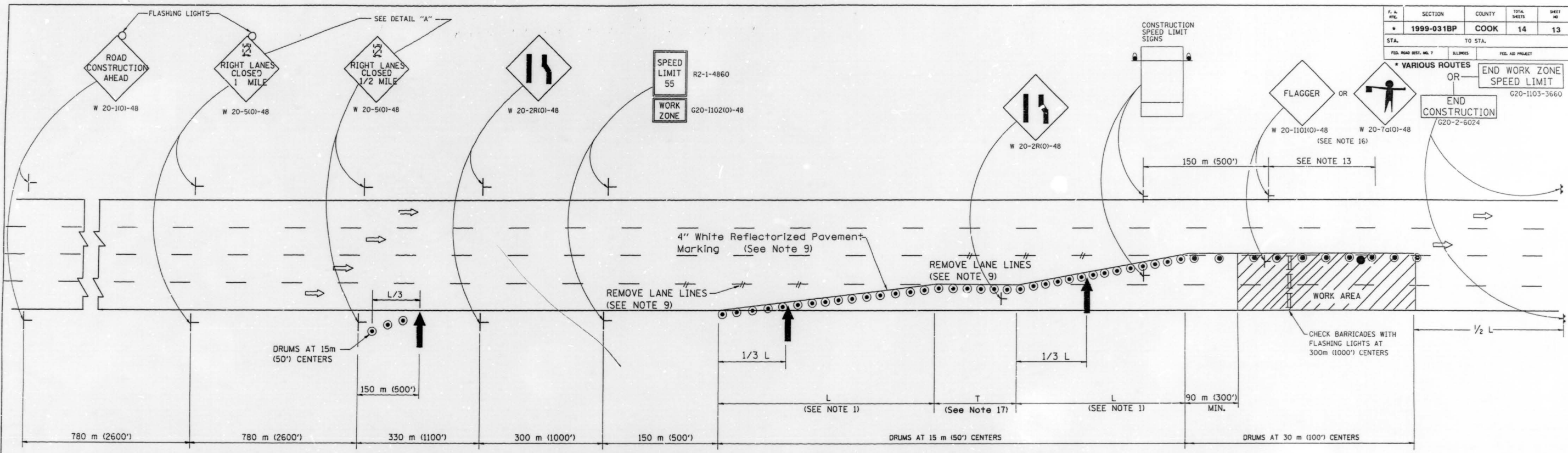
REVISIONS	
NAME	DATE
DWS	1/85
DWS	1/87
DWS	1/90
DWS	7/94
DWS	10/28/94
DWS	11/96

SCALE: NONE
DATE: 03/15/99
DRAWN BY: _____
CHECKED BY: _____

**DISTRICT ONE
FREEWAY STANDARD
ONE LANE CLOSURE**



F. L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	1999-031BP	COOK	14	13
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
* VARIOUS ROUTES		OR		
END WORK ZONE		SPEED LIMIT		
G20-1103-3660		G20-1103-3660		
END CONSTRUCTION		SPEED LIMIT		
G20-2-6024		G20-2-6024		



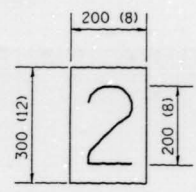
SYMBOLS

- BARRICADES WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS
- ARROWBOARD
- WORK AREA
- 450 x 450 (18 BY 18) (MINIMUM) ORANGE FLAG
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

GENERAL NOTES

1. THE "L" DISTANCE EQUALS THE LANE WIDTH TIMES THE TAPER RATIO.

NORMAL POSTED SPEED		TAPER RATIO	
km/h	mph	m/mm	ft/ft
110	65	20/300	65/1
100	60	18/300	60/1
90	55	17/300	55/1
80 or less	45 or less	14/300	45/1
2. WHEN THERE IS NO WORK BEING PERFORMED, THE FLAGGER WILL NOT BE REQUIRED. IF THE FLAGGER IS NOT PRESENT, THE FLAGGER AND WORKER SIGNS SHALL BE REMOVED OR COVERED.
3. THIS STANDARD ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE LEFT LANE. UNDER THESE CONDITIONS LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR RIGHT LANE CLOSED SIGNS.
4. CONES MAY BE SUBSTITUTED FOR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 700 (28) IN HEIGHT.
5. STEADY BURNING LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS
6. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME LANE CLOSURES.
7. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
8. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
9. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 90 m (300') ALONGSIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE EDGE LINE SHALL BE YELLOW FOR LEFT LANE CLOSURES.
10. WHEN A RAMP INTERSECTS THE HIGHWAY WORK AREA, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED IN ACCORDANCE WITH STANDARD 701411 OR AS DIRECTED BY THE ENGINEER.
11. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS. THE LATERAL POSITION OF THE FLAGGER MAY BE VARIED FROM THAT SHOWN. THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.
12. ALL VEHICLES, EQUIPMENT, MEN AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
13. THE CONSTRUCTION SPEED LIMIT SIGNS AND THE FLAGGER SIGN SHALL BE MOVED AS NECESSARY TO MAINTAIN A SPACING OF 150 m (500') TO 750 m (2500') BETWEEN THE FLAGGER AND THE FLAGGER SIGN.
14. FOR DAYTIME LANE CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE ROAD CONSTRUCTION AHEAD SIGN.
15. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY LANE CLOSURES.
16. AT ALL TIMES WHEN WORKERS ARE PRESENT, A FLAGGER SHALL BE POSITIONED IN ADVANCE OF THE FIRST WORK OPERATION AS SHOWN (SEE NOTE 2). AN ADDITIONAL FLAGGER, AS REQUIRED BY PARAGRAPH 3 OF ARTICLE 701.04C OF THE STANDARD SPECIFICATIONS, SHALL BE POSITIONED IN ADVANCE OF EACH SEPARATE ACTIVITY OF THE OPERATION THAT REQUIRES FREQUENT ENCROACHMENT INTO A LANE OPEN TO TRAFFIC. HOWEVER, IF WORK AREA IS PROTECTED BY TEMPORARY BARRIER WALL AND NO TRUCKING OPERATION IS IN PROGRESS, THE FLAGGER AND FLAGGER SIGNING MAY BE OMITTED.
17. THE TANGENT SECTION SHALL BE OMITTED WHEN CLOSURE TIME IS 4 DAYS OR LESS. TANGENT LENGTH "T" SHALL BE EQUAL TO "L" FOR CLOSURE TIMES GREATER THAN 4 DAYS BUT LESS THAN 14 DAYS. TANGENT LENGTH "T" SHALL BE EQUAL TO "2L" FOR CLOSURE TIMES OF 14 DAYS OR GREATER.



ILLINOIS DIVISION OF HIGHWAYS
DEPARTMENT OF TRANSPORTATION
DISTRICT 1

APPROVED _____
DISTRICT ENGINEER

REVISIONS	
NAME	DATE
DWS	3/85
DWS	1/87
DWS	1/90
DWS	7/94
DWS	10/28/94
DWS	11/96

All dimensions are in millimeters (inches) unless otherwise shown.

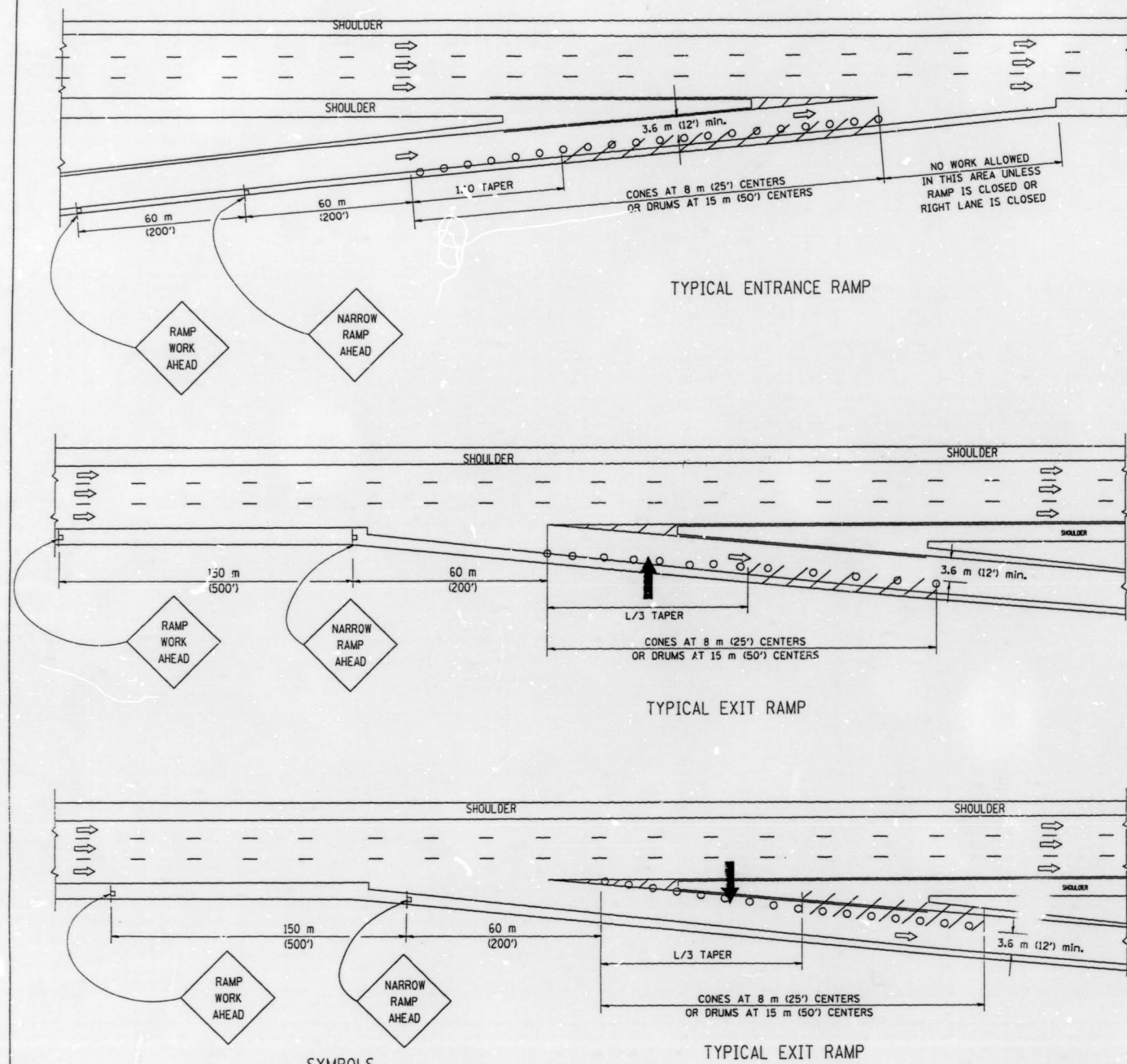
DISTRICT ONE
FREEWAY STANDARD
TWO LANE CLOSURE

SCALE: NONE
DATE 03/15/99

DRAWN BY
CHECKED BY



PARTIAL RAMP CLOSURE DETAILS



- SYMBOLS**
- ↑ ARROWBOARD
 - ▨ WORK AREA
 - ◇ 450 x 450 (18 x 18) MINIMUM ORANGE FLAG
 - ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
 - FLAGGER WITH CONTROL SIGN
 - ⊙ DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
 - CONES - 700 (28) IN HEIGHT

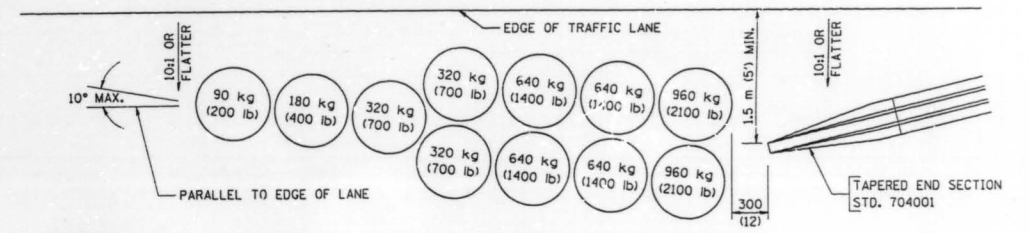
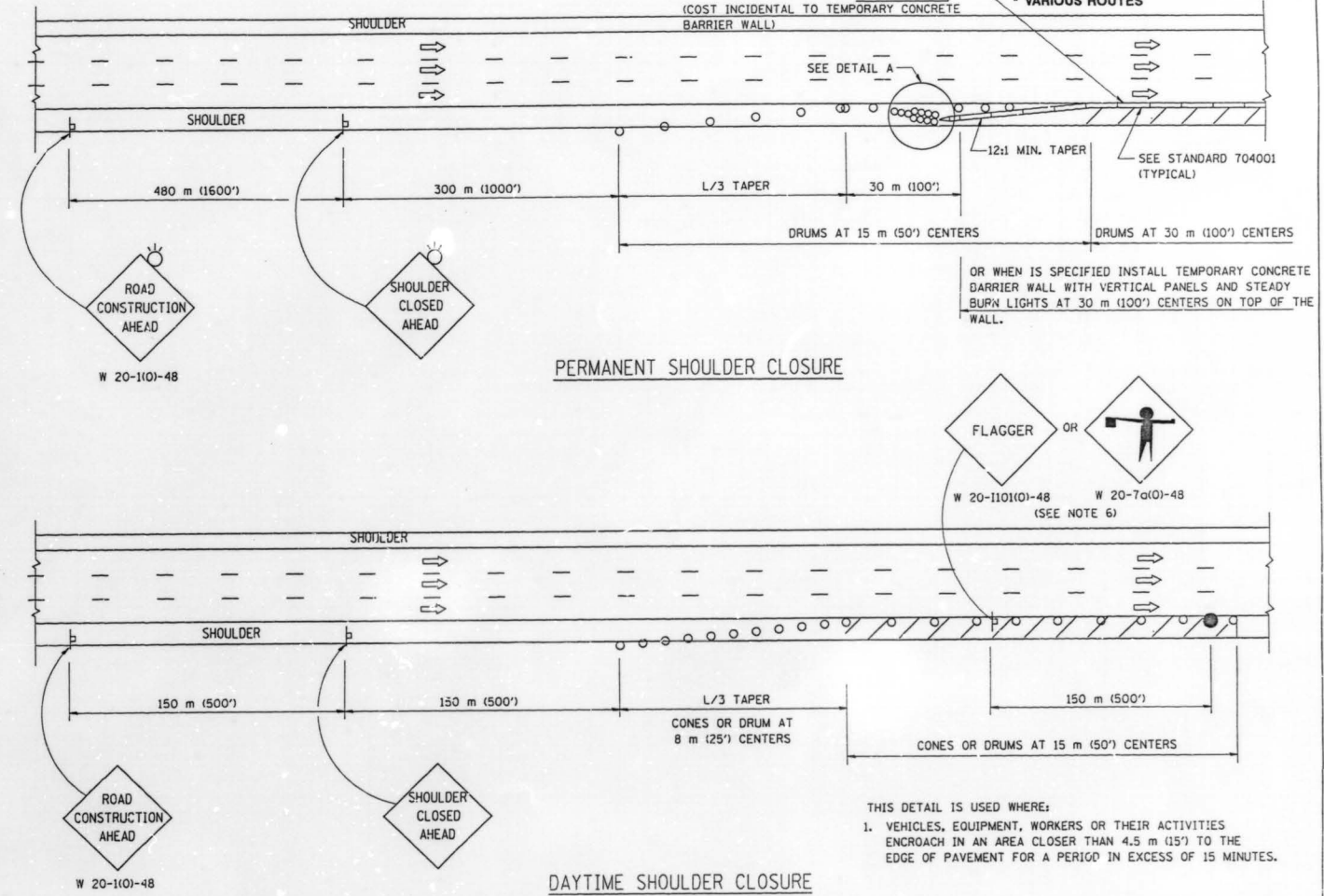
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
80 km/h (45 mph) OR GREATER:	METRIC ENGLISH
	$L = 0.65(WKS)$ $L = (WKS)$
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.
5. THE SAND MODULE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY BARRIER END SECTION IS OUTSIDE THE CLEAR ZONE OR IS TIED INTO THE EXISTING GUARDRAIL.
6. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.
7. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.

SHOULDER CLOSURE DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 1999-031BP	COOK		14	14
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

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

REVISIONS	
NAME	DATE
DWS	11/96

SCALE: NONE
DATE: 03/15/99
DRAWN BY: DWS
CHECKED BY: