

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

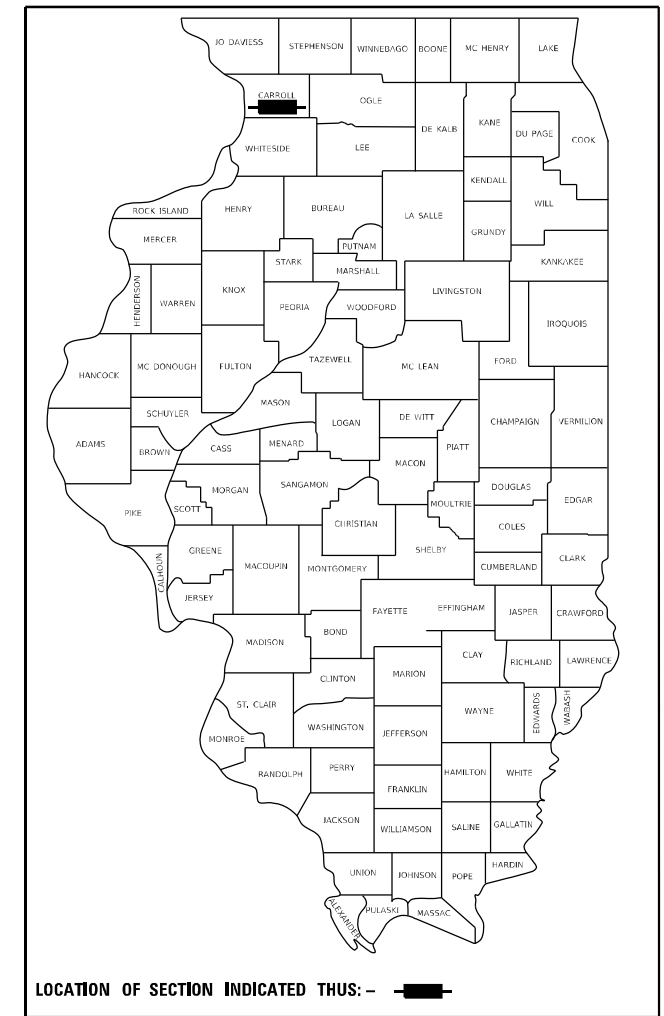
**PROPOSED
HIGHWAY PLANS**

FAP 308 (IL 84)
SECTION: (104BY-R)BP
PROJECT: NHPP-8D7F(660)
TYPE of IMPROVEMENT: BRIDGE PAINTING
CARROLL COUNTY

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR STATE STANDARDS, SEE SHEET NO. 2

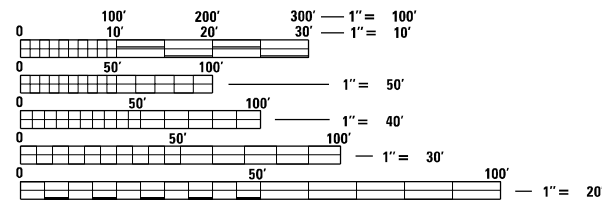
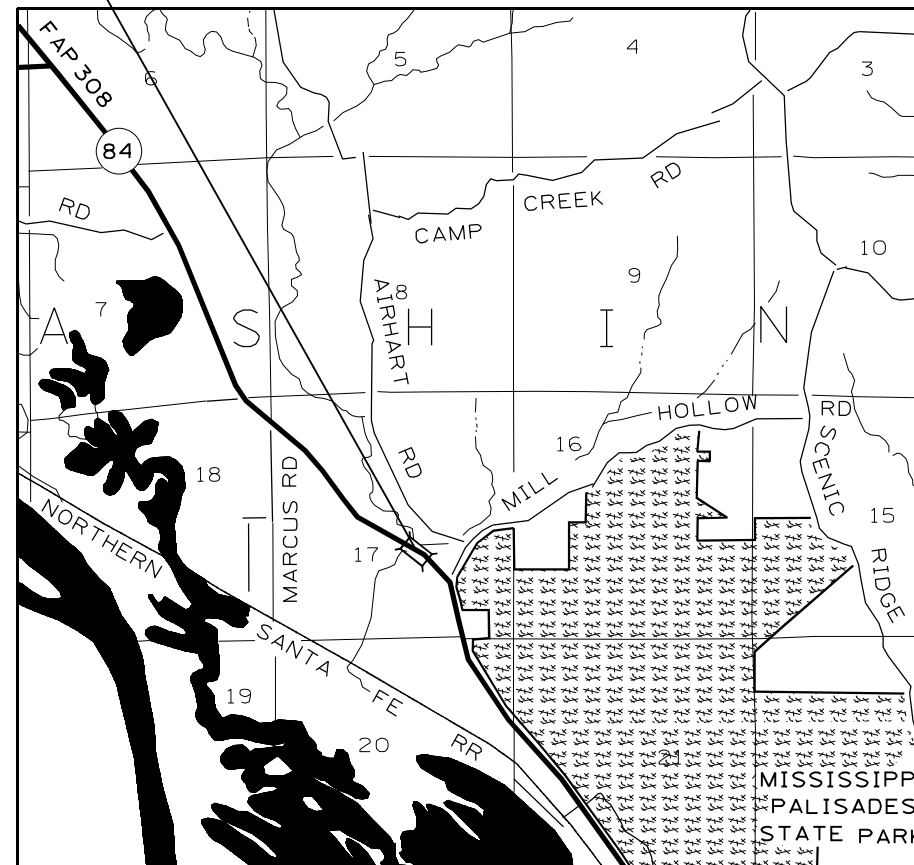
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	(104BY-R)BP	CARROLL	11	1
		ILLINOIS	CONTRACT NO. 64R41	

D-92-006-22



SN 008-0015

C-92-027-22



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.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: DAVID DOSS (815) 284-5416
PROJECT MANAGER: MAHMOUD ETEMADI (815) 284-5393

CONTRACT NO. 64R41

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 06, 20 21
David Doss
REGIONAL ENGINEER

February 4, 20 22
Steph M. Travis
ENGINEER OF DESIGN AND ENVIRONMENT

February 4, 20 22
Steph M. Travis
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 2

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS / STATE STANDARDS / GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 EXISTING ROADWAY TYPICAL
- 5 STAGING TYPICALS (SN 008-0015)
- 6-7 TRAFFIC CONTROL & PROTECTION, STANDARD 701321 (SPECIAL) FOR SN 008-0015
- 8-11 EXISTING PLAN SHEETS SN 008-0015 (FOR INFORMATION ONLY)

STATE STANDARDS

- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24'' (600mm) FROM PAVEMENT EDGE
- 701201-05 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
- 701206-05 LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS > 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701901-08 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

GENERAL NOTES

LOCATION 1 - SN 008-0015

THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING CLASS 2A SHALL BE USED. THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR CLEANING AND PAINTING STEEL BRIDGE NO. 1.

FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS AND INCORPORATED INTO THE SEEDBED PRIOR TO SEEDING OR PLACEMENT OF SOD AT THE RATE SPECIFIED IN SECTIONS 250 AND 252 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST OF CLEANING AND PAINTING STEEL BRIDGE NO. 1.

MULCH METHOD II SHALL BE APPLIED OVER ALL SEEDED AREAS. THIS SHALL BE INCLUDED IN THE COST OF THE CLEANING AND PAINTING STEEL BRIDGE NO. 1.

LOCATION 1 SN 008-0015

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

TEMPORARY IMPACT ATTENUATORS WILL BE MEASURED AS EACH FOR EACH ATTENUATOR SUPPLIED ON THE JOB AS SPECIFIED IN THE PLANS, AND SHALL INCLUDE THE COST OF RENTING/OWNING THE ATTENUATOR FOR THE TIME REQUIRED ON THE JOB PLUS HAULING TO AND FROM THE PROJECT SITE, AS WELL AS ONE PLACEMENT AND REMOVAL FROM THE ROADWAY. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, TEMPORARY OF THE TYPE SPECIFIED.

RELOCATE TEMPORARY IMPACT ATTENUATOR WILL BE PAID FOR AS EACH AND WILL BE PAID FOR EACH TIME THE ATTENUATOR IS REQUIRED BY STAGING TO BE PICKED UP AND MOVED TO A DIFFERENT LOCATION ON THE PROJECT, WHETHER IT IS TO ANOTHER LOCATION ON THE ROADWAY OR TO A STORAGE/STAGING LOCATION FOR THE PROJECT. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, RELOCATE OF THE TYPE SPECIFIED.

THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 704 OF THE STANDARD SPECIFICATIONS. TEMPORARY CONCRETE BARRIER WILL BE MEASURED IN FEET ALONG THE CENTERLINE OF THE BARRIER AND SHALL INCLUDE THE COST OF RENTING/OWNING THE BARRIER FOR THE TIME REQUIRED ON THE JOB PLUS HAULING TO AND FROM THE PROJECT SITE, AS WELL AS ONE PLACEMENT AND REMOVAL FROM THE ROADWAY IN ACCORDANCE WITH SECTION 704 OF THE STANDARD AND SPECIFICATION. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR TEMPORARY CONCRETE BARRIER.

RELOCATE TEMPORARY CONCRETE BARRIER WILL BE PAID FOR IN FEET ALONG THE CENTERLINE OF THE BARRIER, AND WILL BE PAID FOR EACH TIME THE BARRIER IS REQUIRED BY STAGING TO BE PICKED UP AND MOVED TO A DIFFERENT LOCATION ON THE PROJECT, WHETHER IT IS TO ANOTHER LOCATION ON THE ROADWAY OR TO A STORAGE/STAGING LOCATION FOR THE PROJECT. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR RELOCATE TEMPORARY CONCRETE BARRIER.

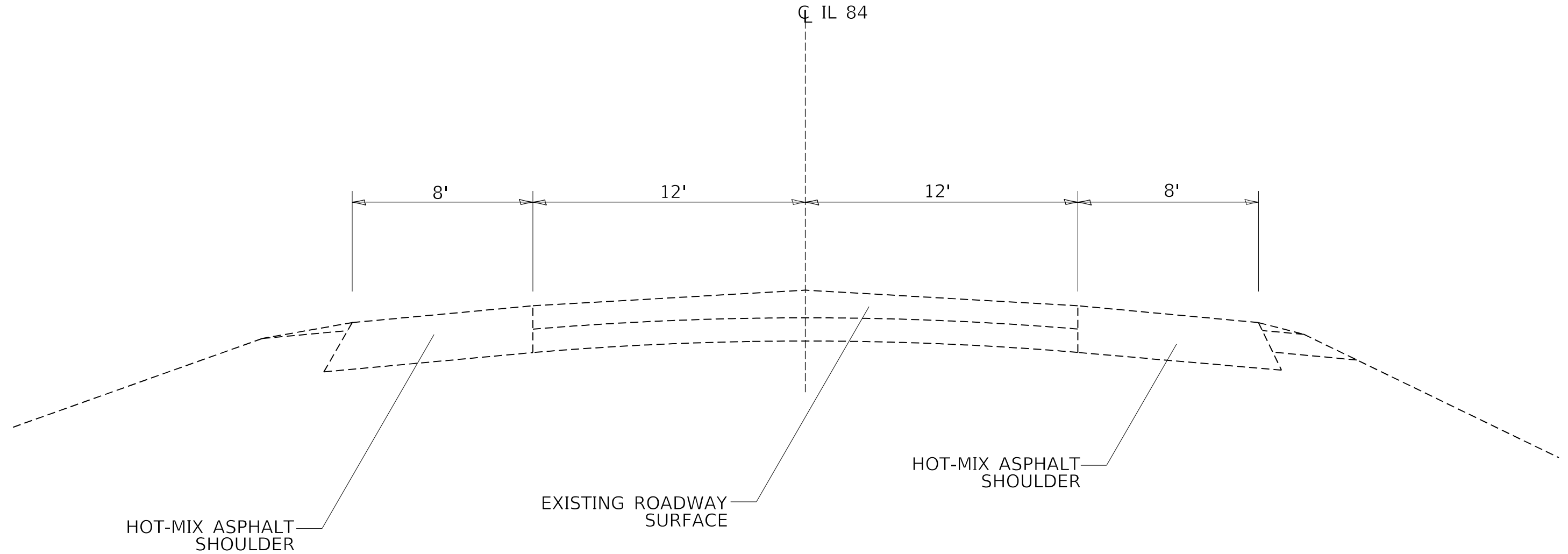
THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.

THE SSPC OP1 & OP2 CONTRACT CERTIFICATIONS WILL BE REQUIRED FOR THIS CONTRACT.

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EXISTING TYPICAL SN 008-0015



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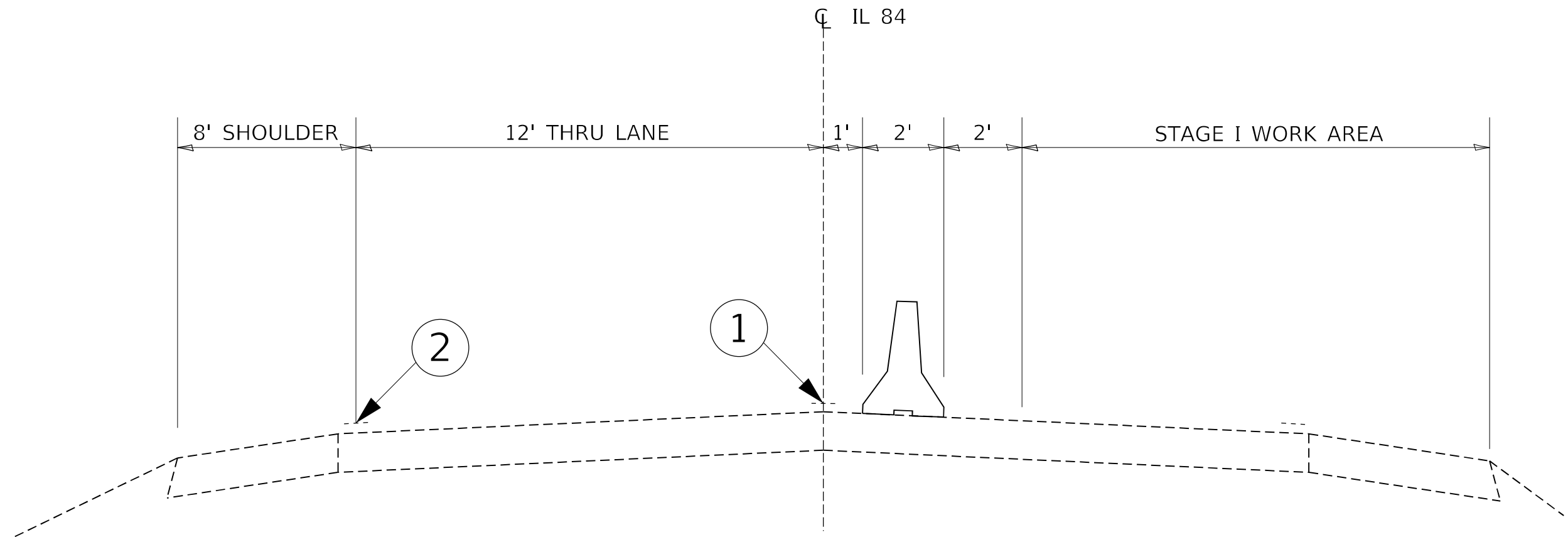
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SN 008-0015			
SCALE: _____	SHEET ____	OF ____ SHEETS	STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	(104BY-R)BP	CARROLL	11	4
CONTRACT NO. 64R41			ILLINOIS FED. AID PROJECT	

STAGING TYPICAL SN 008-0015



- ① TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND ALONG-SIDE THE WORK AREA. THE RIGHT EDGE LINE SHALL BE WHITE AND THE LEFT EDGE LINE SHALL BE YELLOW.
- ② EXISTING PAVEMENT MARKING LINE

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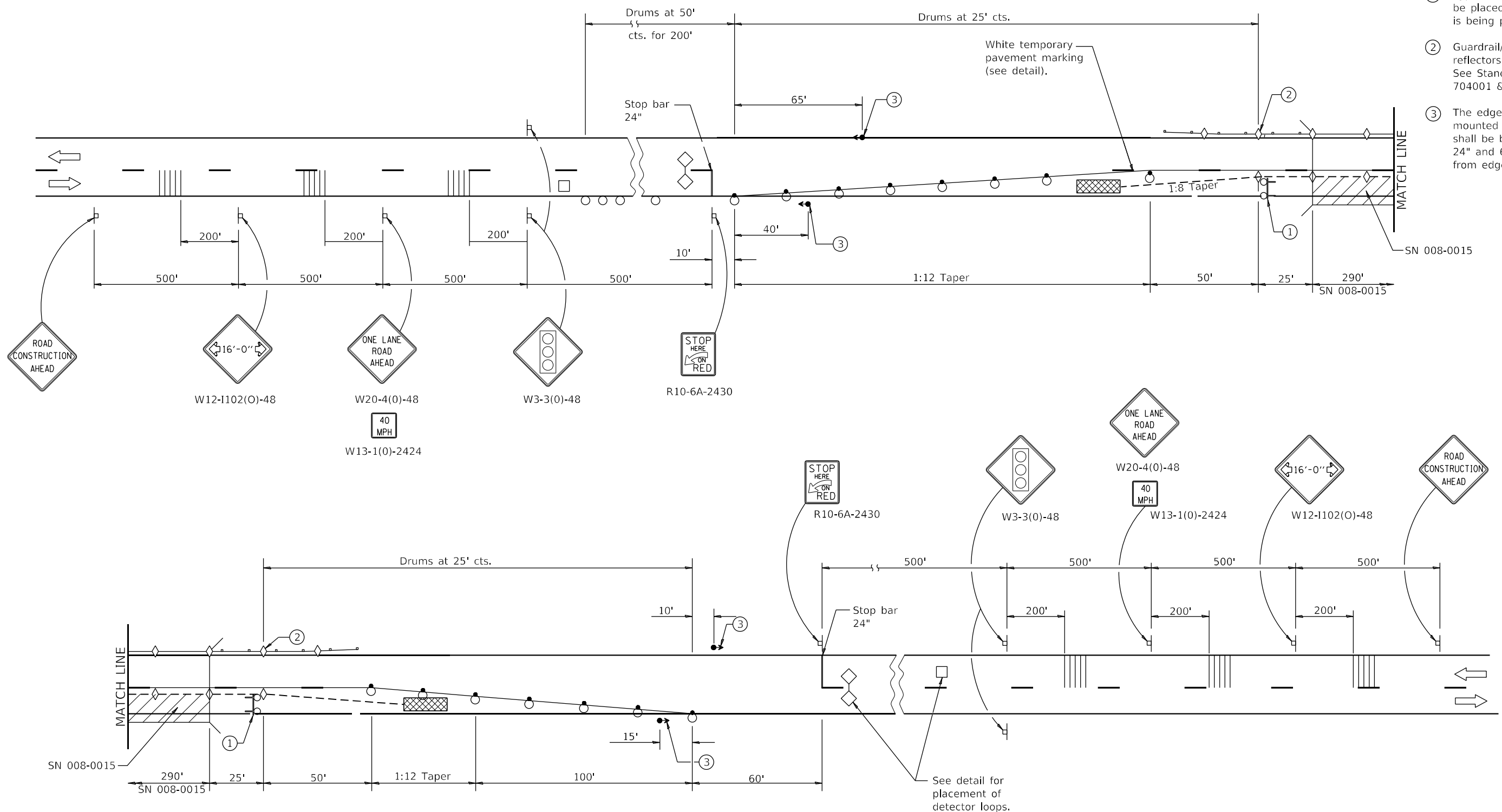
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGING TYPICAL
SN 008-0015**

SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	(104BY-R)BP	CARROLL	11	5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64R41	

- ① Type III barricade to be placed when no work is being performed.
- ② Guardrail/barrier wall reflectors at 25' cts. See Standards 704001 & 782006.
- ③ The edge of the post mounted signal head shall be between 24" and 6' from edge of shoulder.



SYMBOLS

- Work area
- Sign
- Type III barricade with flashing lights
- Traffic signal
- Drum with steady burning bi-directional light
- Temporary concrete barrier
- Temporary rumble strip (when specified)
- Double vertical panel (see detail)
- Detector loops
- Impact attenuator
- Crystal, bidirectional guardrail/barrier wall reflector
- Drum

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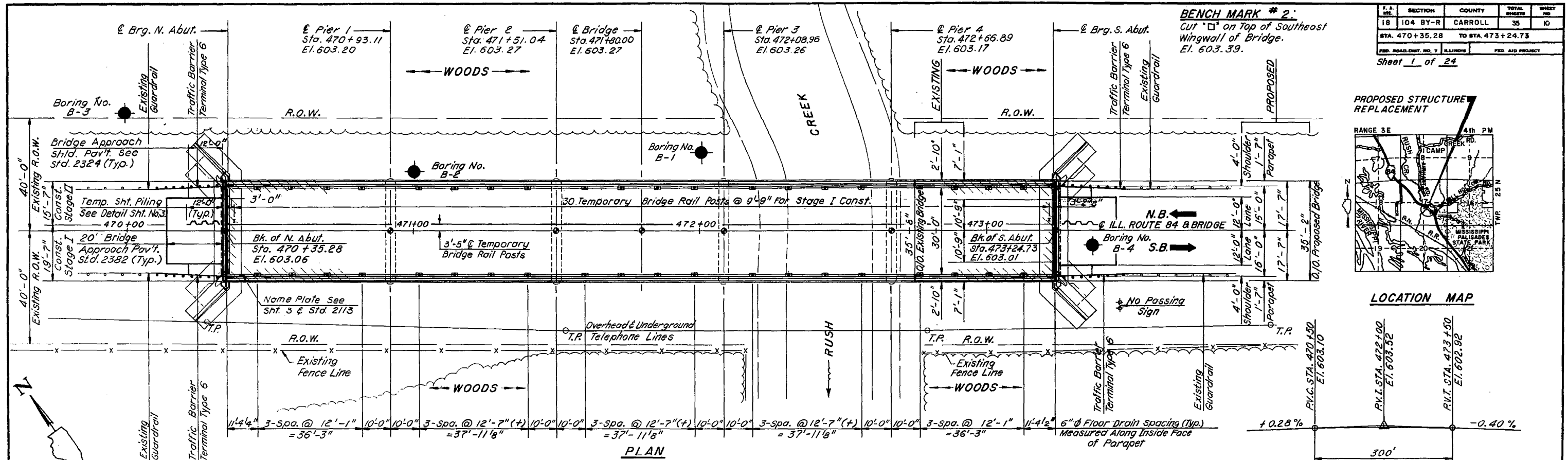
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL & PROTECTION, STANDARD 701321 (SPECIAL)
FOR LOCATION SN 008-0015**

F.A.P. RTE. 308	SECTION (104BY-R)BP	COUNTY CARROLL	TOTAL SHEETS 11	SHEET NO. 6
CONTRACT NO. 64R41				
ILLINOIS FED. AID PROJECT				

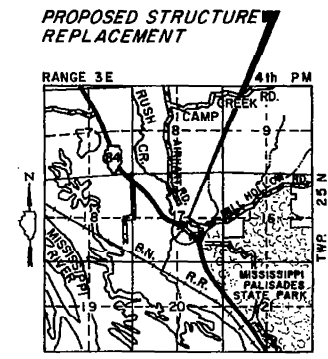
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FOR INFORMATION ONLY

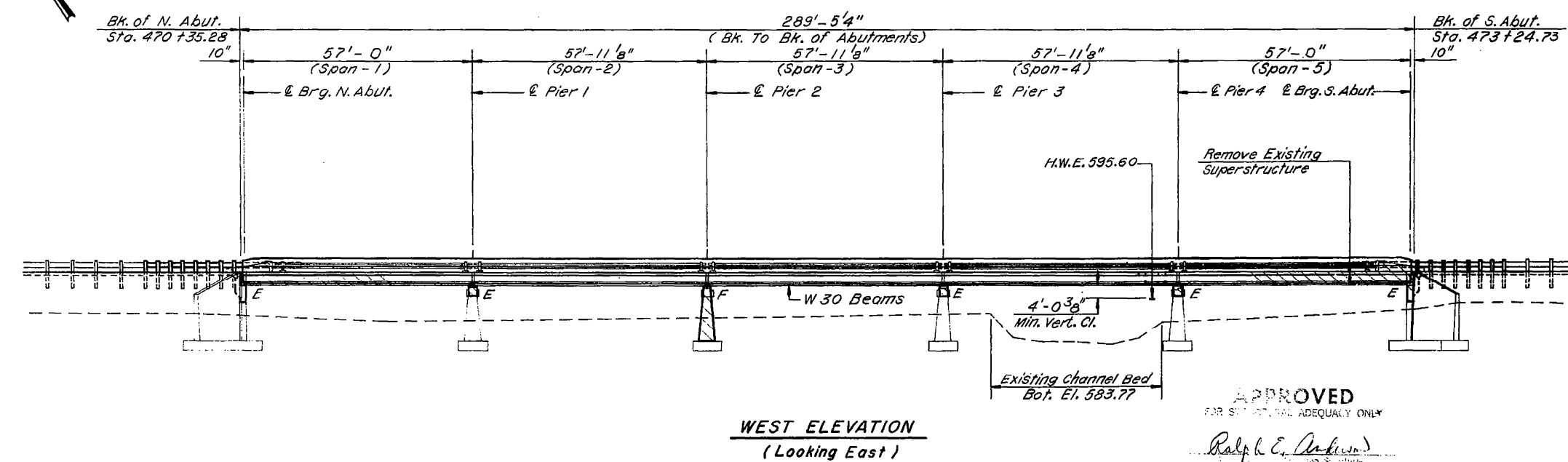


F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
18	104 BY-R	CARROLL	35	10
STA. 470+35.28		TO STA. 473+24.73		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Sheet 1 of 24



EXISTING & PROPOSED PROFILE ALONG C ILL. ROUTE 84



NOTES:
 Contractor to anchor temp. sheeting to existing abutment wall. Connection shall be approved by the Engineer. Sheeting within limits of footing shall have their tip elevation at top of footing.
 See sheet No. 3 for general notes & total bill of material.

DESIGN CRITERIA:
 A.A.S.H.T.O. Standard Specifications for Highway Bridges 1989, and Seismic Retrofitting Guides for Highway Bridges

DESIGN STRESS
 $f_y = 60,000 \text{ psi}$ (Reinforcement)
 $f'_c = 3,500 \text{ psi}$ (Concrete)

DESIGN STRESSES (STRUCTURAL STEEL):
 $f_y = 36,000 \text{ p.s.i.}, M 183.$

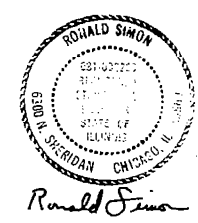
LOADING:
 HS 20-44
 Future Wearing Surface = 25 p.s.f.

WATERWAY INFORMATION

Drainage Area = 76.77 Mil. Low Grade El. 598.60 at Sta. 486+20

Flood	Freq. Yr.	Q. C.F.S.	Opening Sq. Ft.		Head-Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	8886	1592	1592	0.92	0.92	596.52	596.52
Base	100	10163	1747	1747	1.16	1.16	597.36	597.36
Overtopping	400	12647	2020	2020	1.57	1.57	598.77	598.77

LEGEND:
 Existing Superstructure or Concrete Removal



APPROVED
 FOR SUBMITTAL ADEQUATELY ONLY
 Ralph E. Anderson

STRUCTURE NO. 008-0015

EXISTING STRUCTURE DESCRIPTION:
 The existing bridge consists of five spans of cast-in-place concrete T-beams with P.C. deck beams on each side, supported by solid piers and closed abutments.

JACK E. LEIBCH & ASSOCIATES
 TRANSPORTATION ENGINEERING
 EVANSTON, ILLINOIS

REVISIONS	
NAME	DATE

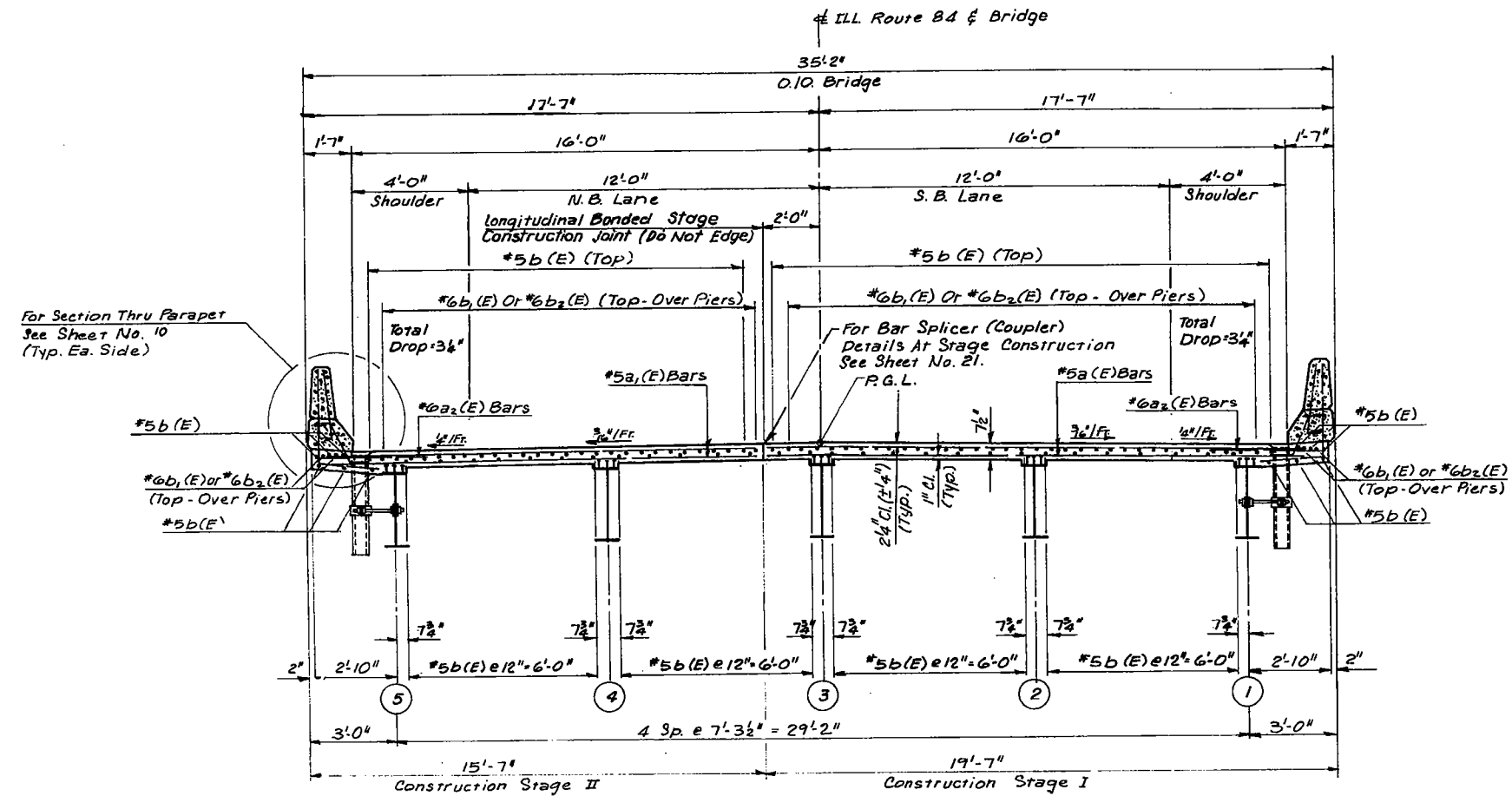
ILLINOIS DIVISION OF HIGHWAYS
 PLAN & ELEVATION
 STRUCTURE NO. 008-0015
 ILLINOIS ROUTE 84 (F.A.-18)
 OVER RUSH CREEK
 SECTION 104 BY-R
 CARROLL COUNTY
 STA. 471+80

SCALE: VERT. HORIZ.
 DATE: 8-26-87

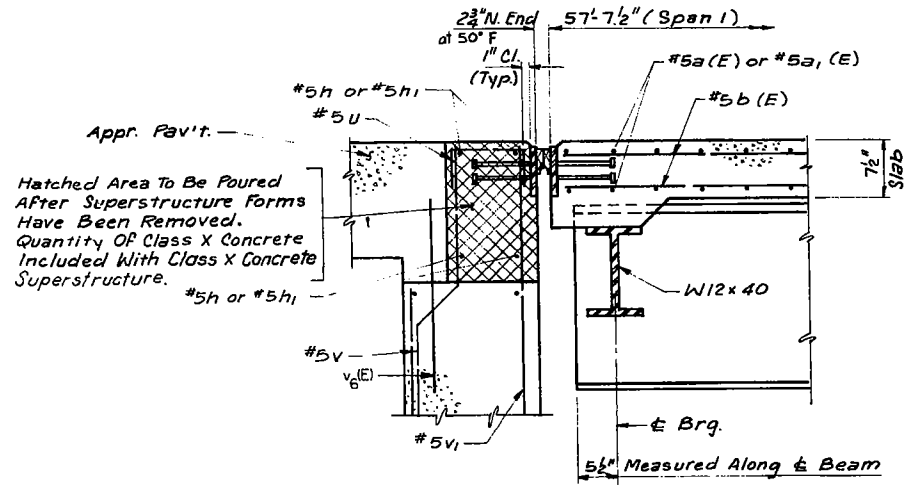
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FOR INFORMATION ONLY

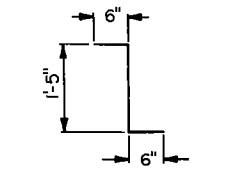
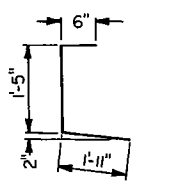
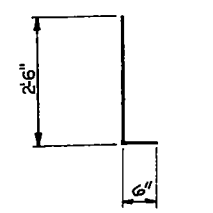
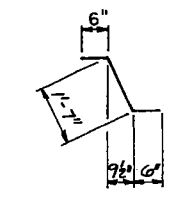
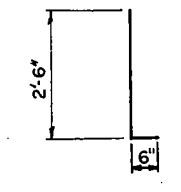
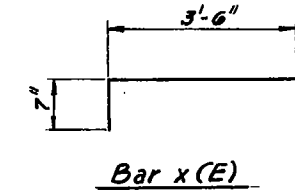
F. A. ETL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
18	104 BY-R	CARROLL	35	18
STA. 470+38.28		TO STA. 473+24.75		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
Sheet 9 of 24				



TYPICAL CROSS SECTION
(SECTION LOOKING SOUTH)



SECTION C-C



BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
a(E)	1012	5	19'-1"	—
a1(E)	1012	5	15'-1"	—
a2(E)	578	6	4'-0"	—
b(E)	720	5	29'-9"	—
b1(E)	70	6	24'-9"	—
b2(E)	70	6	20'-8"	—
b3(E)	16	8	25'-7"	—
b4(E)	16	8	9'-6"	—
b5(E)	16	8	21'-1"	—
b6(E)	16	8	7'-11"	—
b7(E)	16	5	28'-0"	—
b8(E)	16	5	9'-6"	—
b9(E)	16	5	20'-8"	—
b10(E)	16	5	7'-11"	—
b11(E)	8	5	21'-6"	—
b12(E)	8	8	22'-5"	—
d(E)	630	5	3'-0"	L
d1(E)	618	5	2'-7"	~
d2(E)	578	4	3'-0"	L
e(E)	72	4	15'-6"	—
e1(E)	48	4	9'-6"	—
e2(E)	48	4	19'-6"	—
e3(E)	48	4	7'-11"	—
e4(E)	24	4	20'-4"	—
x(E)	28	5	4'-1"	┌
d3(E)	578	4	3'-10"	L
d4(E)	12	5	2'-5"	L
Item	Unit	Quantity		
Floor Drains	Each	40		
Protective Coat	Sq. Yd.	235		
Class X Concrete Superstructure	Cu. Yd.	311.0		
Reinforcement Bars (Epoxy Coated)	Lbs.	79770		

NOTES:
Reinforcement Bars Designated (E) Shall Be Epoxy Coated.

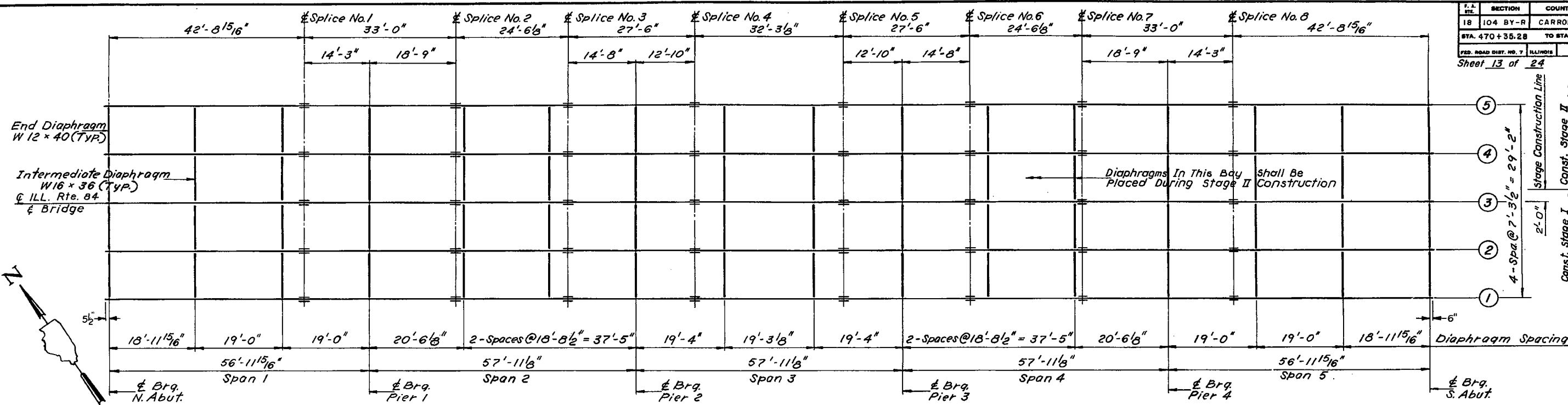
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JACK E. LEISCH & ASSOCIATES TRANSPORTATION ENGINEERING EVANSTON, ILLINOIS		ILLINOIS DIVISION OF HIGHWAYS SUPERSTRUCTURE CROSS SECTION & DETAILS STRUCTURE NO. 008-0015 ILLINOIS ROUTE 84 (F.A.-18) OVER RUSH CREEK SECTION 104 BY-R CARROLL COUNTY STA. 471+80	
REVISIONS		SCALE	DRAWN BY JC
NAME	DATE		

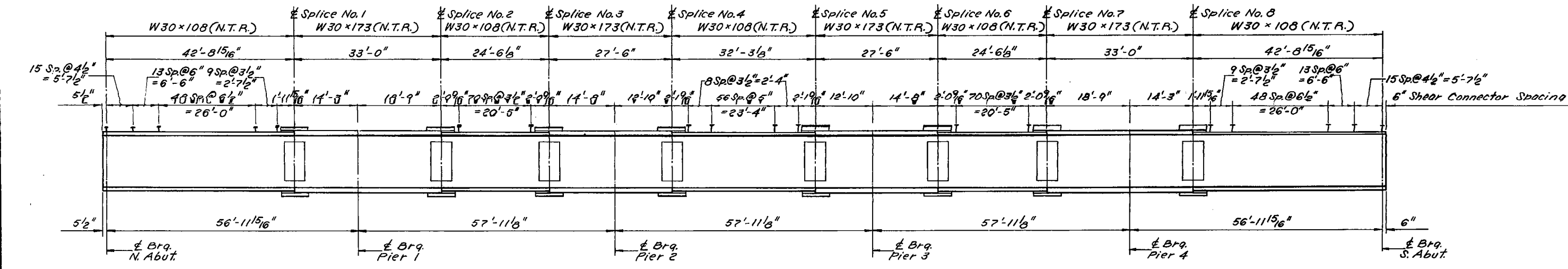
FOR INFORMATION ONLY

F. A. STA.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
18	104 BY-R	CARROLL	35	22
STA. 470+35.28		TO STA. 473+24.73		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Sheet 13 of 24



FRAMING PLAN



ELEVATION

* Elevations Are Before Any Deflection And Are To Be Used For Fabrication Only.
 ** Elevations Are For Top of Beam (W 30x173)

Notes:
 Work This Sheet With Sheet No's 14 Thru 16.
 N.T.R.: Designates Notch Toughness Requirements.

* TOP OF BEAM ELEVATIONS															
Beam	Location	£ Brq. N. Abut.	£ Splice No. 1**	£ Brq. Pier 1	£ Splice No. 2**	£ Splice No. 3**	£ Brq. Pier 2	£ Splice No. 4**	£ Splice No. 5**	£ Brq. Pier 3	£ Splice No. 6**	£ Splice No. 7**	£ Brq. Pier 4	£ Splice No. 8**	£ Brq. S. Abut.
1		602.153	602.159	602.185	602.217	602.245	602.253	602.260	602.255	602.245	602.232	602.200	602.159	602.130	602.109
2		602.281	602.287	602.312	602.344	602.373	602.380	602.387	602.383	602.372	602.360	602.325	602.287	602.257	602.236
3		602.394	602.401	602.426	602.458	602.487	602.494	602.501	602.496	602.486	602.474	602.439	602.400	602.371	602.350
4		602.281	602.287	602.312	602.344	602.373	602.380	602.387	602.383	602.372	602.360	602.325	602.287	602.257	602.236
5		602.153	602.159	602.185	602.217	602.245	602.253	602.260	602.255	602.245	602.232	602.200	602.159	602.130	602.109

JACK E. LEISCH & ASSOCIATES
 TRANSPORTATION ENGINEERING
 EVANSTON, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
 FRAMING PLAN
 STRUCTURE NO. 008-0015
 ILLINOIS ROUTE 84 (F.A.-18)
 OVER RUSH CREEK
 SECTION 104 BY-R
 CARROLL COUNTY
 STA. 471+80

SCALE: DRAWN BY G. P. A.
 DATE 8-26-87 CHECKED BY R. D. P.

REVISIONS	
NAME	DATE

