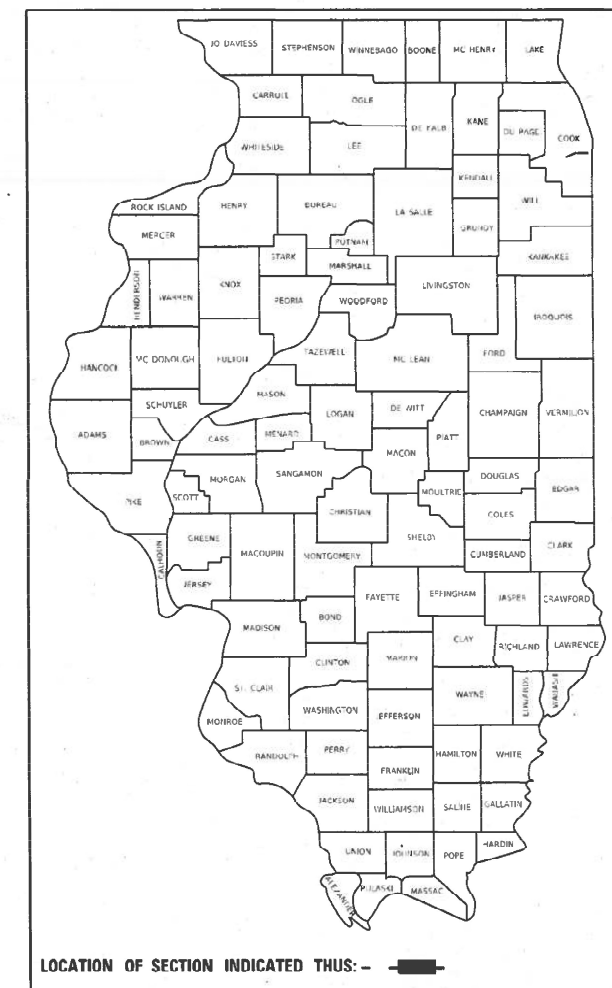


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2021-161-BP	COOK	16	1
		ILLINOIS		CONTRACT NO. 62P83

D-91-062-22



PROPOSED HIGHWAY PLANS

FAP ROUTE 344: 130th St
 1) OVER RR-CSSS & IHB (0.05M W OF I-94) (SN 016-2434)
 2) OVER I-94 (SN 016-2600)
 SECTION 2021-161-BP
 PROJECT NHPP-QNH9(103)
 BRIDGE PAINTING
 COOK COUNTY
 C-91-055-22

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED
IN THE CITY OF CHICAGO

TRAFFIC DATA

130 th Street:

2018 ADT=18200

POSTED SPEED LIMIT=35 MPH

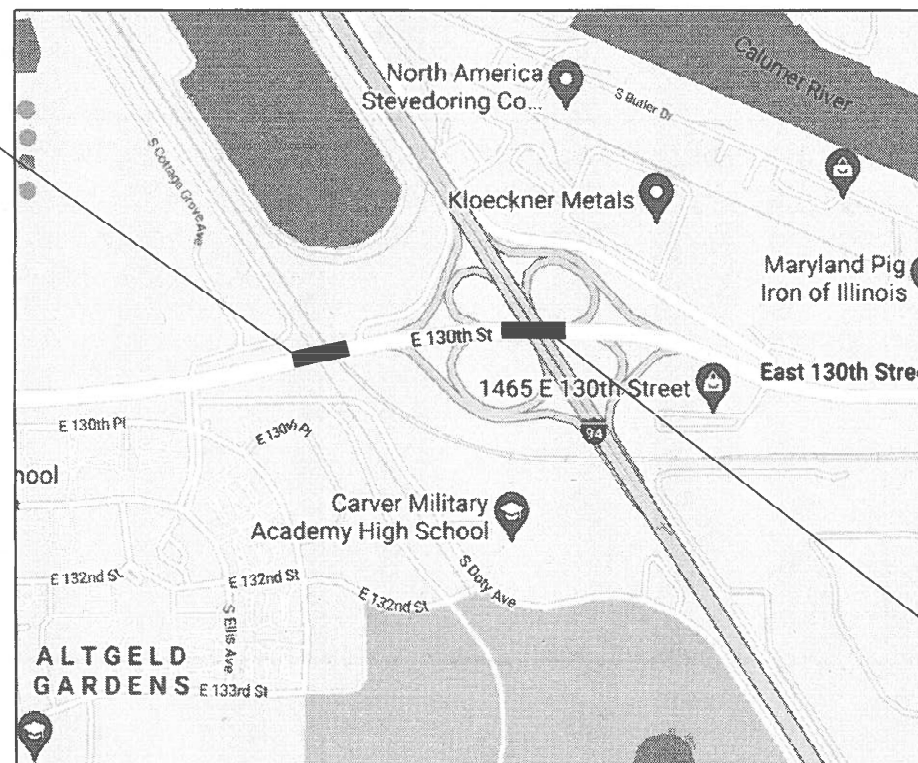
I-94:

2019 ADT=146300

POSTED SPEED LIMIT=55 MPH

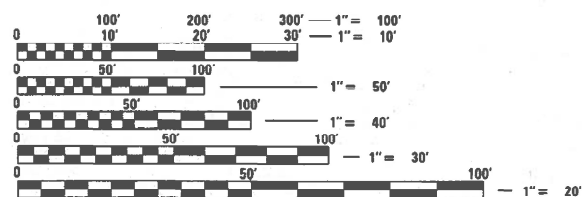
R 14 E

1) SN 016-2434
130th St OVER RR



2) SN 016-2600
130th St OVER I-94

HYDE PARK TOWNSHIP



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.

C.U.A.N.
CHICAGO UTILITY ALERT NETWORK
1-312-744-7000

PROJECT ENGINEER: LEDEZMA, RODRIGO (847) 705-4580
 PROJECT MANAGER: MIDY, J. ALAIN (847) 221-3056

CONTRACT NO. 62P83

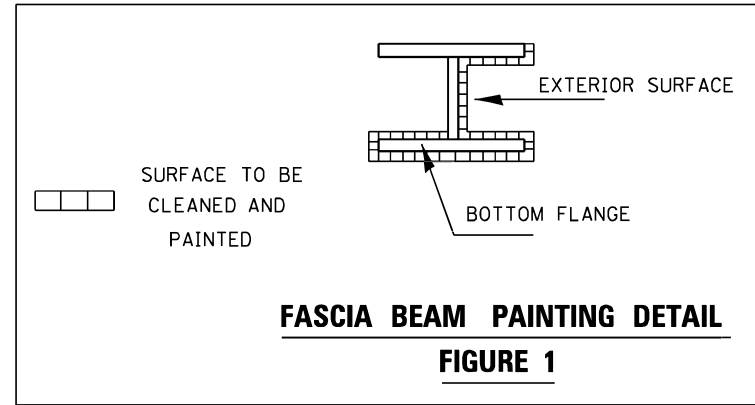
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 20 21
Jose Pin REGIONAL ENGINEER
 February 4 22
[Signature] ENGINEER OF DESIGN AND ENVIRONMENT
 February 4 22
Stephen M. [Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3.	SUMMARY OF QUANTITIES
4-8.	BRIDGE DETAILS SN 016-2434
9-11.	BRIDGE DETAILS SN 016-2600
12.	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)
13.	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE AND MULTI-LANE WEAVE (TC-09)
14.	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)
15.	SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE (TC-18)
16.	ARTERIAL ROAD INFORMATION SIGN (TC-22)



GENERAL PAINT NOTES

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

SN 016-2434

ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN FIVE (5) FT (MEASURED ALONG THE BEAM) OF EITHER SIDE OF DECK JOINT, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10. THE EXTERIOR SURFACES AND TOP AND BOTTOM OF THE BOTTOM FLANGE OF THE FASCIA BEAMS OUTSIDE THE DECK JOINTS FOR THE LENGTH OF THE BRIDGE (SEE FIGURE 1) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10. THESE AREAS SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 -OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES 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 SHALL BE REDDISH BROWN, MUNSELL NO 2. 5YR 3/4.

SN 016-2600

ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING - SSPC-SP10. THESE AREAS SHALL BE PAINTED ACORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 -OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES 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 SHALL BE REDDISH BROWN, MUNSELL NO 2.5YR 3/4.

ALL ITEMS (SUCH AS, BUT NOT LIMITED TO: CONDUITS, BRACKETS AND DECK DRAINS) ATTACHED TO OUTSIDE OF THE FASCIA BEAMS SHOULD BE CLEANED AND PAINTED.

A MINIMUM OF 2 AIR MONITORS WILL BE REQUIRED FOR STRUCTURE 016-2600 TO MONITOR ABRASIVE BLASTING OPERATIONS. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" AND 2 AIR MONITOR WILL BE REQUIRED FOR SN 016-2434.

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE CITY OF CHICAGO.

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) 705-4155 FOR ARTERIALS AND (847) 705-4155 FOR EXPRESSWAY A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINING WORK.

CONTRACTOR SHALL REQUEST AND GAIN THE APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT www.idot1cs.com TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP AND SHOULDER CLOSURES.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE BRIDGE INSPECTORS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND PRESERVE THE EXISTING BRIDGE LIGHTING AT ANY LOCATIONS THAT LIGHTING IS ENCOUNTERED ADJACENT TO AN AREA TO BE CLEANED AND PAINTED.

THE CONTRACTOR SHALL CLOSE LANES ON THE EXPRESSWAY IN ACCORDANCE WITH THE "KEEPING THE EXPRESSWAY OPEN TO TRAFFIC" CONTRACT SPECIAL PROVISIONS.

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHTTIME OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE OUTMOST PRECAUTIONS PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJACENT RESIDENTIAL AREAS.

THE CONTRACTOR SHALL REQUEST AND GAIN THE APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT www.idot1cs.com TWENTY FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP AND SHOULDER CLOSURES. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.

STATE STANDARDS

STD. NO.	DESCRIPTION
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-11	APPROACH TO LANE CLOSURE, FREEWAY / EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY / EXPRESSWAY
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN
701901-08	TRAFFIC CONTROL DEVICES

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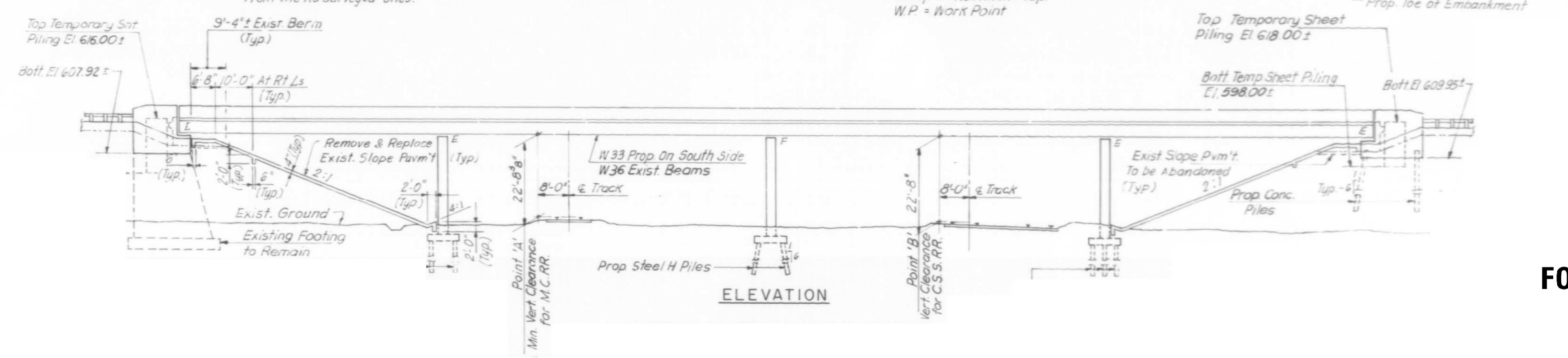
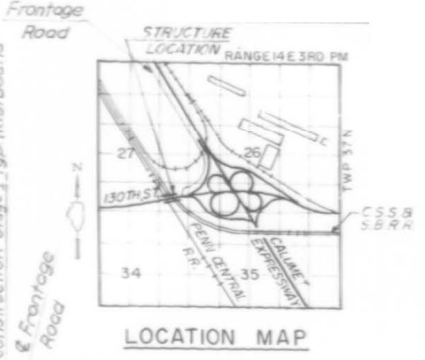
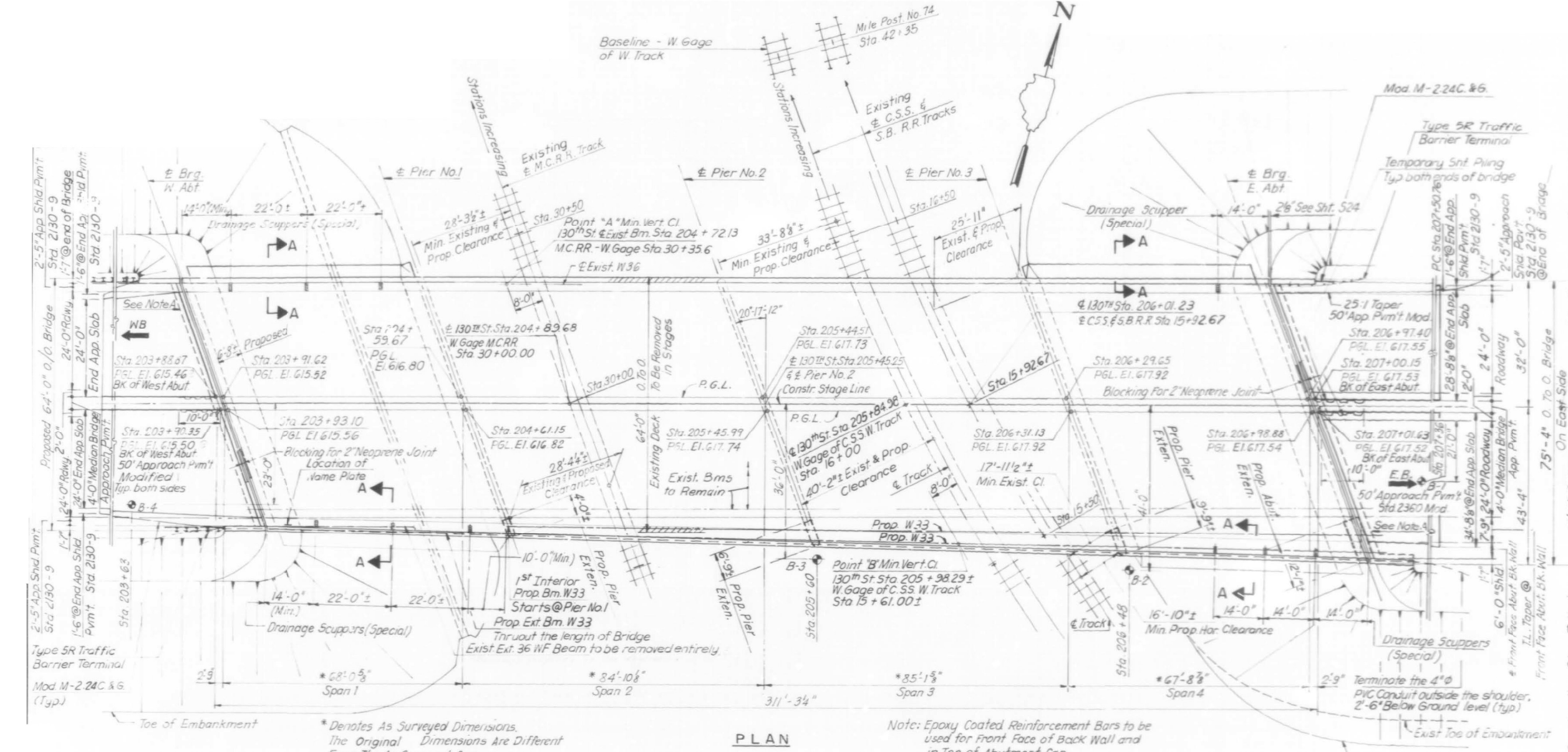
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
130th ST OVER RR AND I-94**

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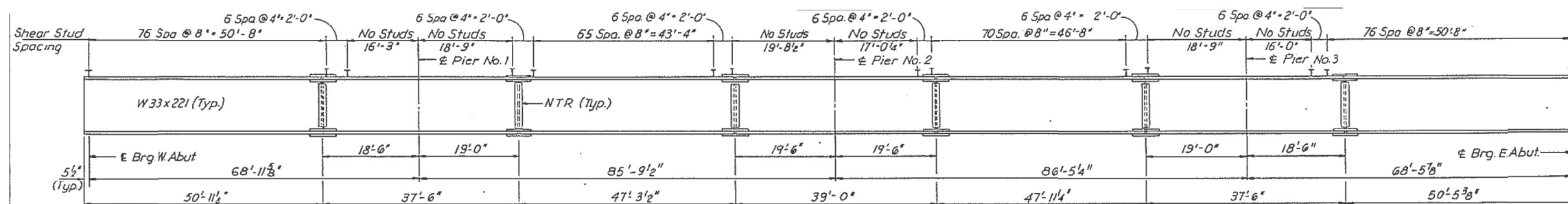
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2021-161-BP	COOK	16	2
			CONTRACT NO. 62P83	
		ILLINOIS FED. AID PROJECT		



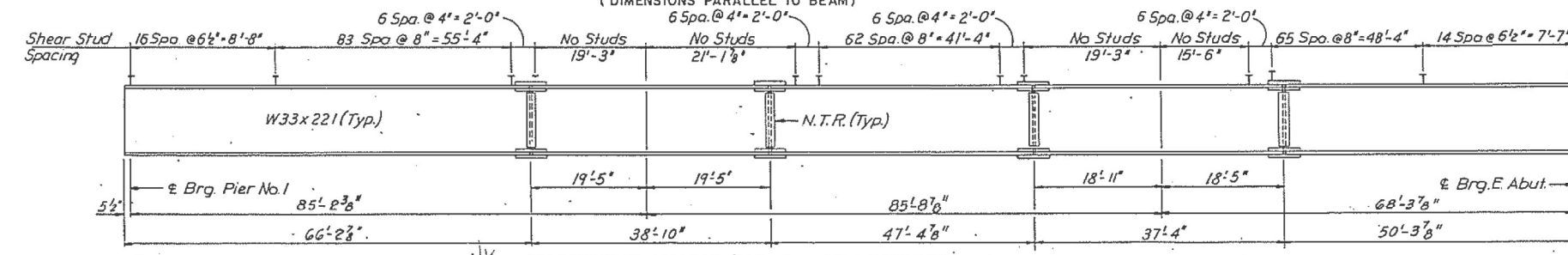
FOR INFORMATION ONLY

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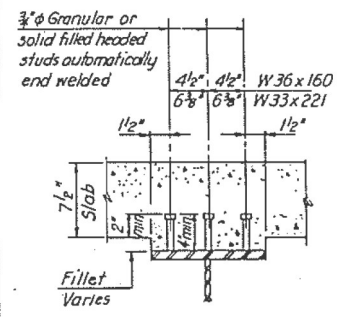
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PLOT DATE = 12/9/2021	DATE -	REVISD -						ILLINOIS FED. AID PROJECT		



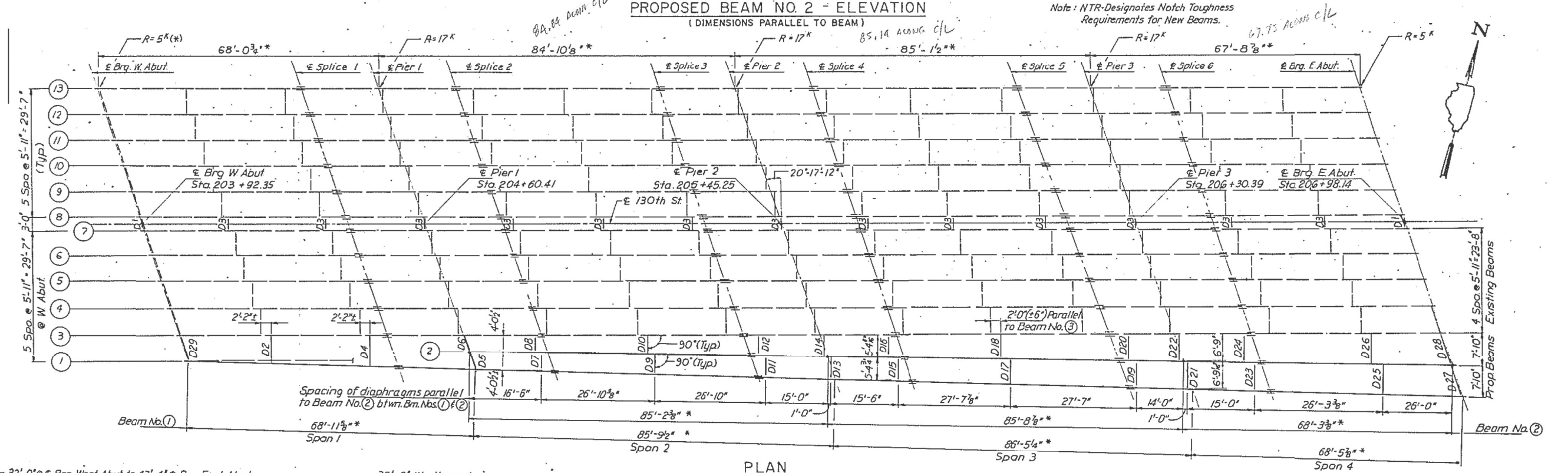
PROPOSED BEAM NO. 1 - ELEVATION
(DIMENSIONS PARALLEL TO BEAM)



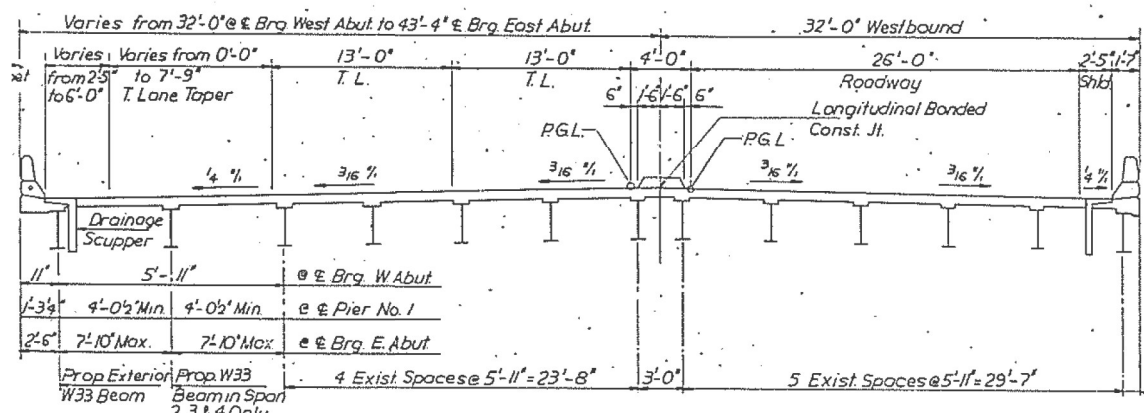
PROPOSED BEAM NO. 2 - ELEVATION
(DIMENSIONS PARALLEL TO BEAM)



SHEAR STUDS
(Total No. of Studs Req'd. = 12,507)



PLAN



FINAL CROSS-SECTION
(Looking West)

FOR INFORMATION ONLY

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DRAWN -	REVISED -	REVISED -
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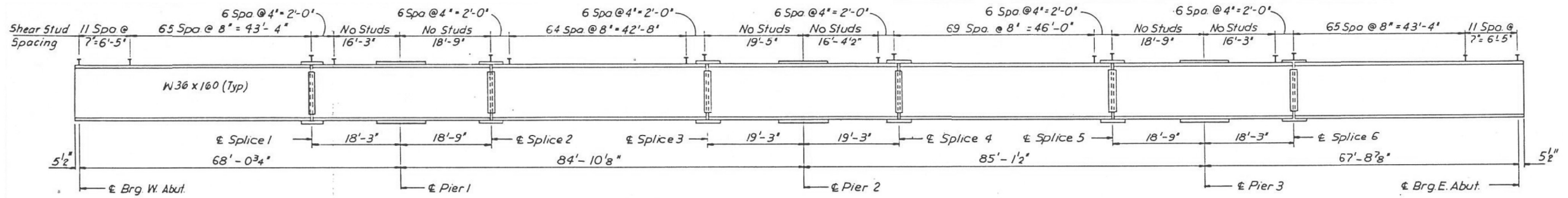
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DETAILS SN 016-2434
130th ST OVER RR

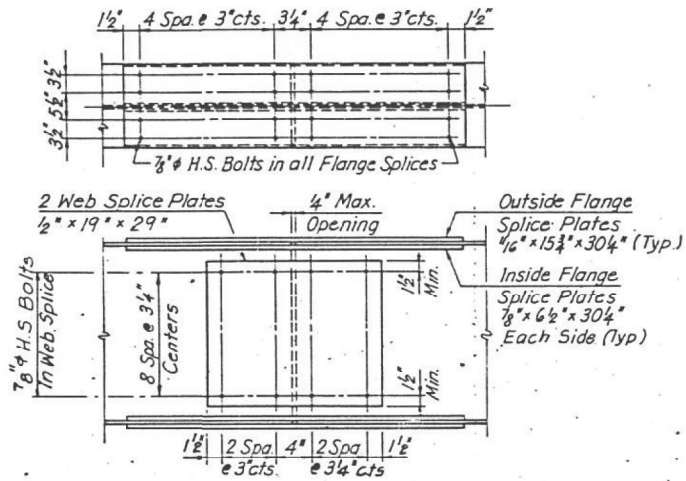
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F.A.P. RTE. 344	SECTION 2021-161-BP	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 5
CONTRACT NO. 62P83				
ILLINOIS FED. AID PROJECT				

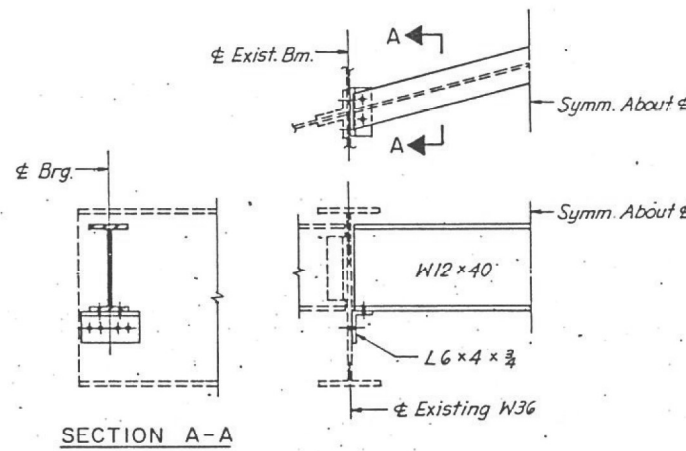
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DATE: 12/9/2021



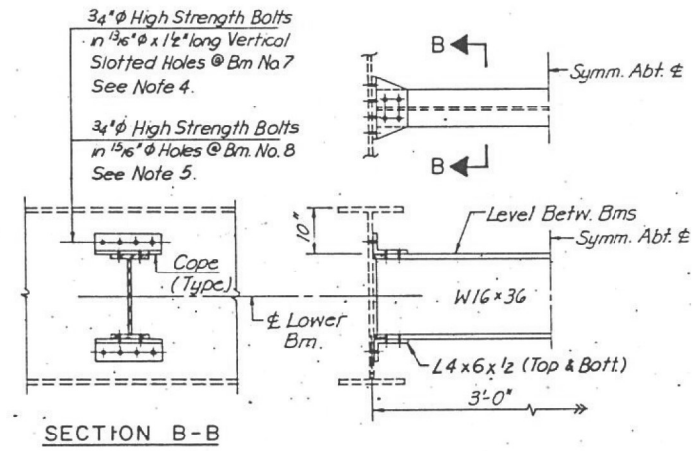
EXISTING BEAM ELEVATION
(See Sht. S9 of S26 for Stud Details)



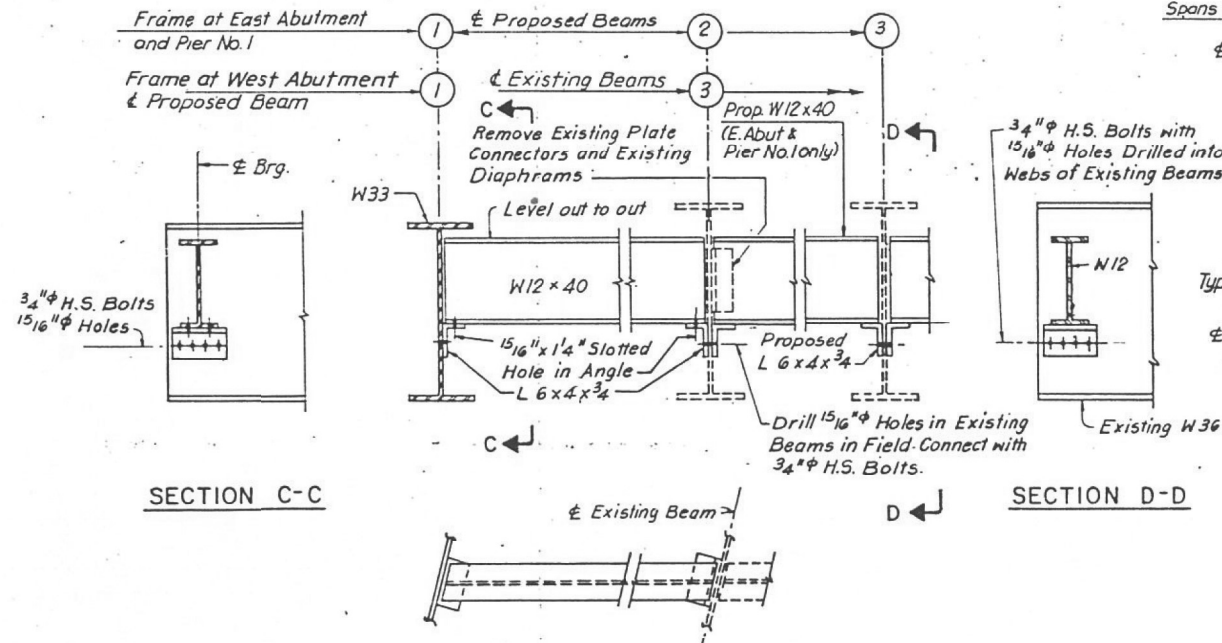
SPlice WITH INSIDE AND OUTSIDE FLANGE PLATES
(Beam Nos. 1 & 2 Only)



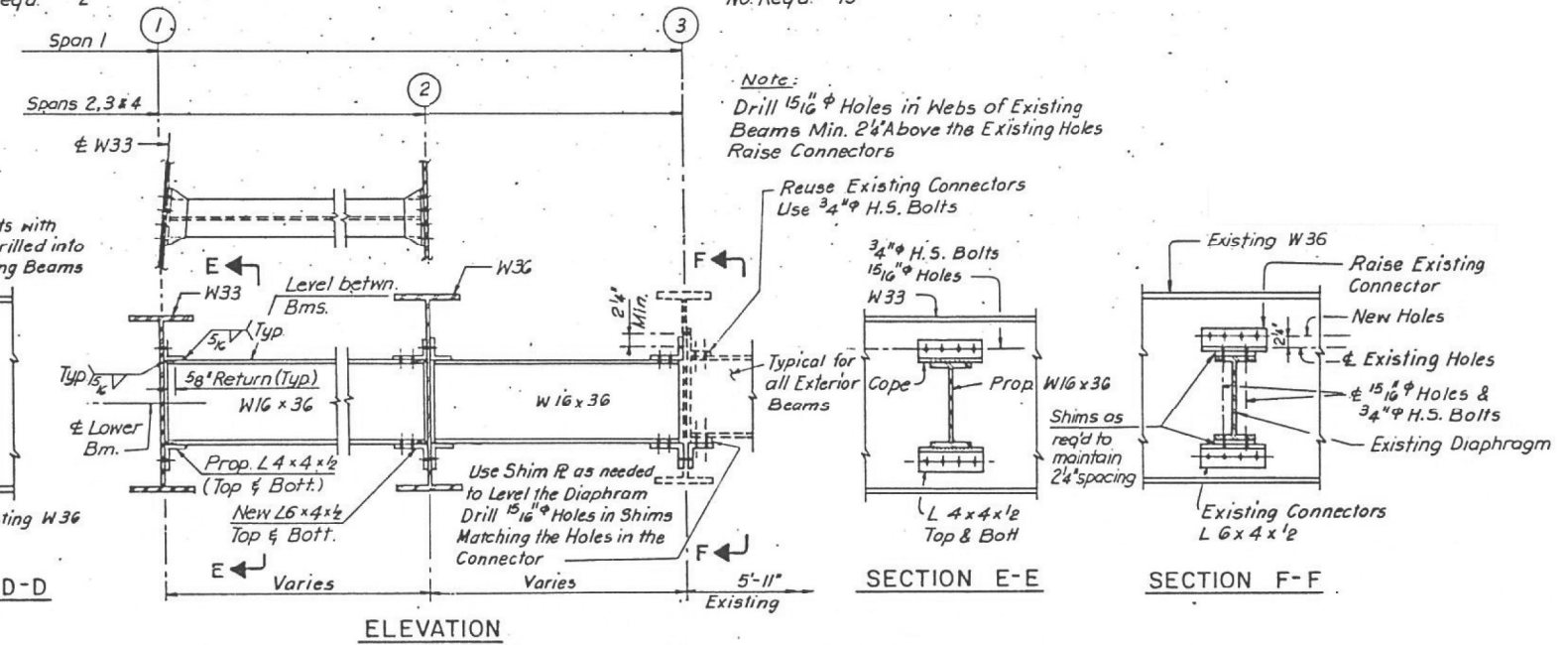
MEDIAN END DIAPHRAGM D1
No. Req'd. 2



MEDIAN INTERIOR DIAPHRAGM D3
No. Req'd. 13



END DIAPHRAGM D5 & D6
END DIAPHRAGM AT ABUTMENTS
(Existing Abutment Similar U.N.)
No. Req'd. 23



INTERIOR DIAPHRAGM
No. Req'd. 139

FOR INFORMATION ONLY

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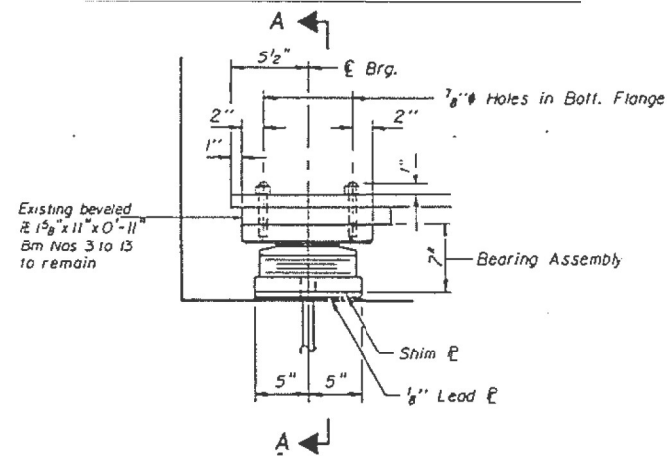
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PLOT DATE = 12/9/2021		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

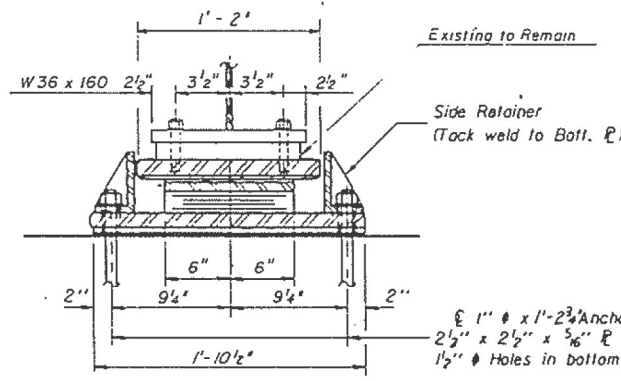
BRIDGE DETAILS SN 016-2434
130th ST OVER RR

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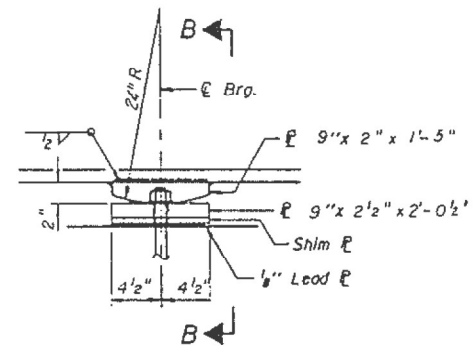
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CONTRACT NO. 62P83			ILLINOIS FED. AID PROJECT	



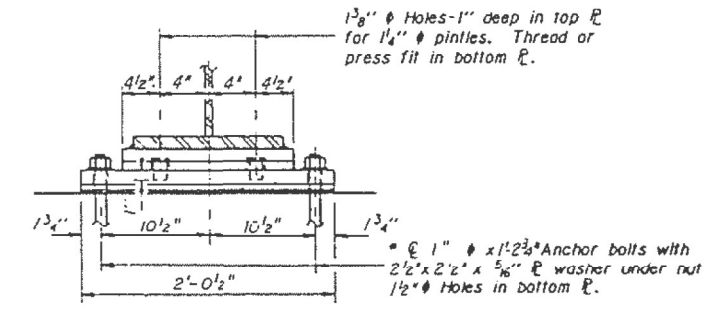
ELEVATION AT ABUT.



SECTION A-A

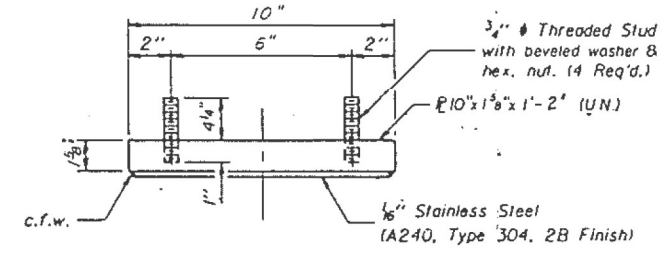


ELEVATION AT PIER #2
FOR PROPOSED BM. NO. 1 & 2

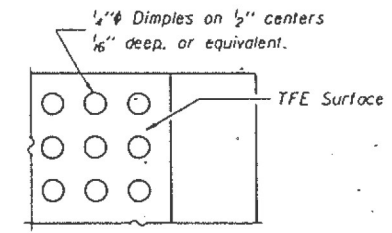


SECTION B-B

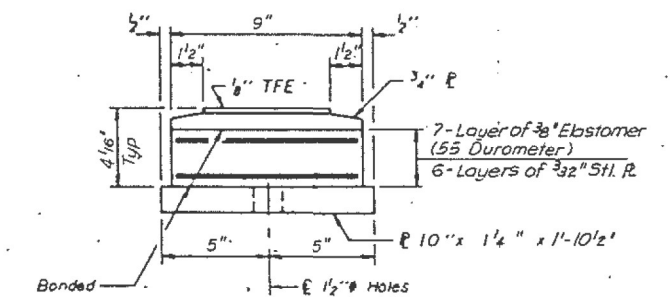
TYPE II TFE ELASTOMERIC EXP. BRG.
EXIST. BEAMS 3 THRU 13 AT WEST & EAST ABUTMENT



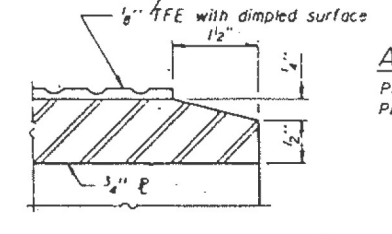
TOP BEARING ASSEMBLY



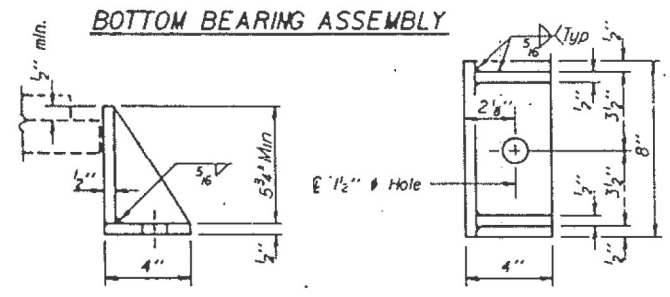
PLAN-TFE SURFACE



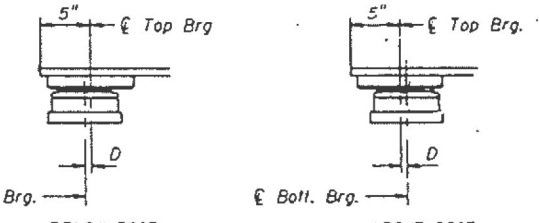
BOTTOM BEARING ASSEMBLY



SECTION THRU TFE



SIDE RETAINER



BELOW 50°F. ABOVE 50°F.

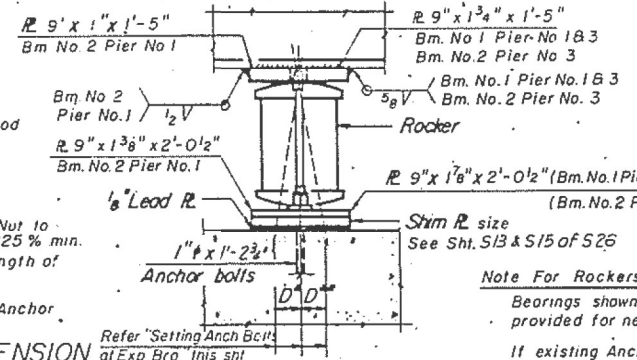
SETTING ANCHOR BOLTS AT EXP. BRG.

$D = \frac{1}{8}$ " per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

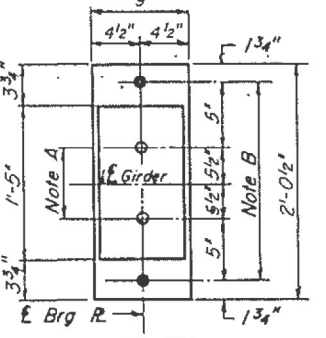
* Notes: Anchor bolts at fixed bearings may be built into the masonry. See sheet S23 for Anchor Bolt installation.

ANCHOR BOLT EXTENSION

Pier #1 & 3
Pier #2



ELEVATION AT PIER #1 & 3
FOR PROPOSED BM NO 1 & 2

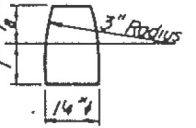


PLAN AT PIER #1 & 3

Note For Rockers & Fixed Bearings:
Bearings shown on this sheet shall be provided for new Beams 1 & 2 only. If existing Anchor Bolts to be extended for Beam 3 thru 13 are inadequate for reuse they shall be removed and new Bolts provided of size shown for Beams 1 & 2. Four inches (4") diameter plugs of concrete shall be removed around each Bolt to a depth necessary to allow cutting off existing Bolts a minimum of 1" below the bottom of new Bolts. Existing Reinforcement Bars shall not be cut in removing Anchor Bolts. If work is performed in winter, holes must be filled with anti-freeze until new bolts are grouted in. All existing fixed bearings to be thoroughly cleaned of all rust, paint & etc. per General Notes Sht. No. S2 of S26.

NOTE B
 $\frac{1}{2}$ " Holes for 1" anchor bolts.
 $\frac{5}{16}$ " x 2 1/2" x 2 1/2" R. Washers under nut.

ROCKER



PINTLE

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	22

FOR INFORMATION ONLY

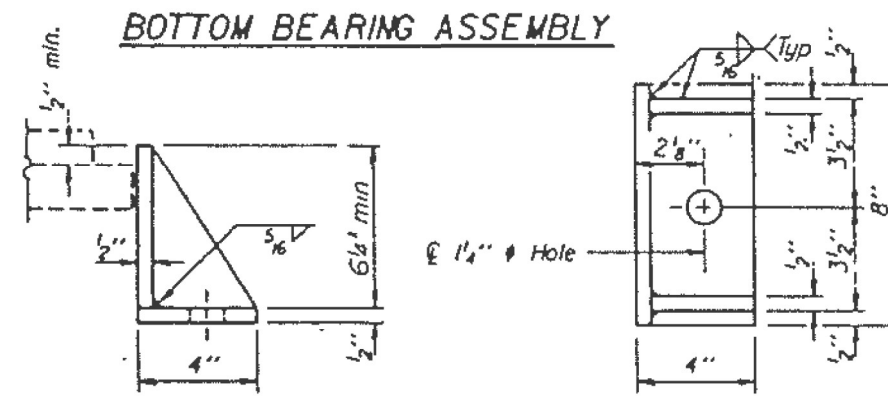
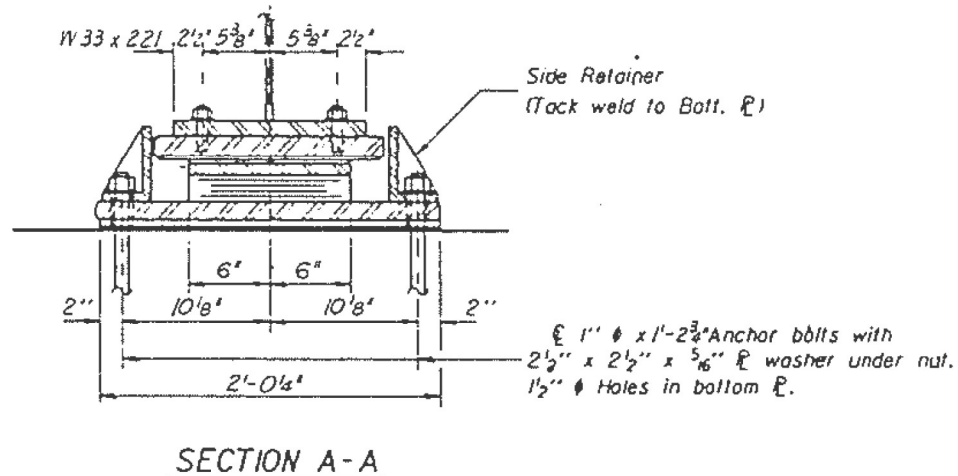
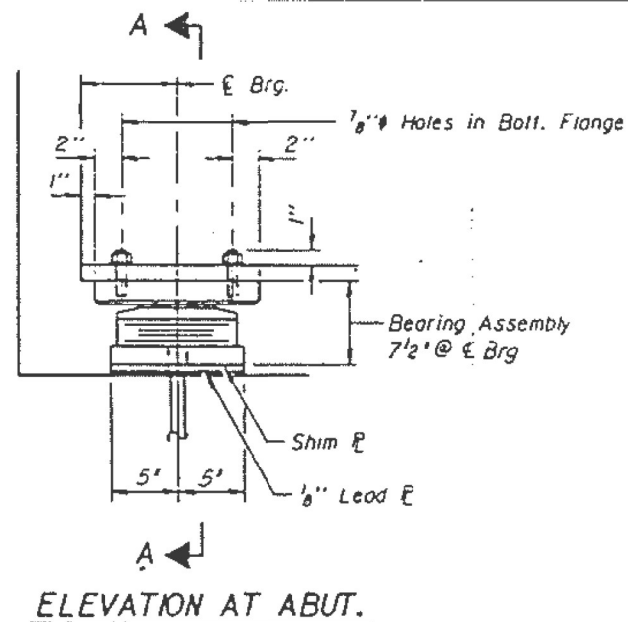
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PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
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	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

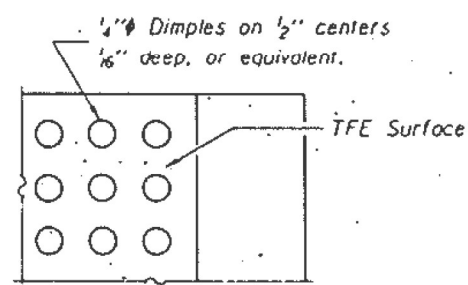
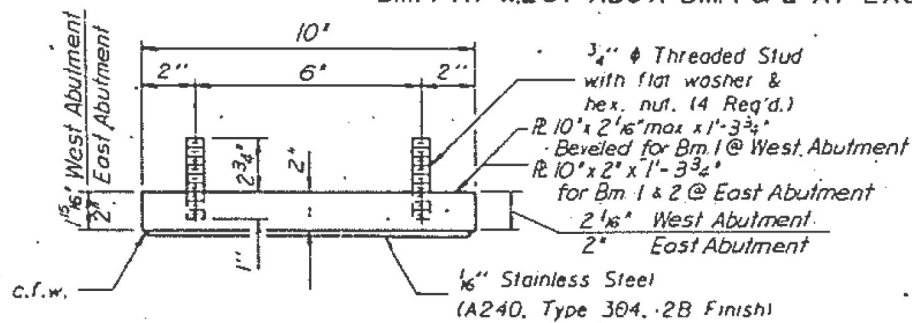
BRIDGE DETAILS SN 016-2434
130th ST OVER RR

F.A.P. RTE. 344	SECTION 2021-161-BP	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62P83	



SIDE RETAINER
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

TYPE II TFE ELASTOMERIC EXP. BRG.
BM. 1 AT WEST ABUT. BM. 1 & 2 AT EAST ABUTMENT

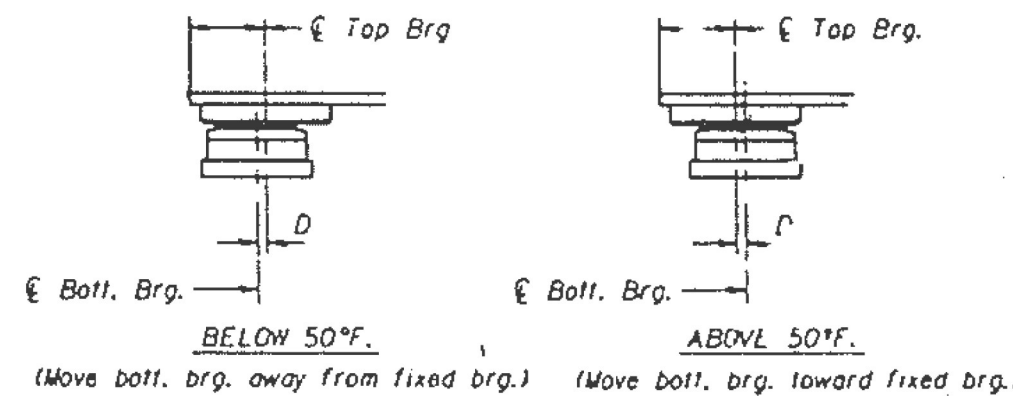


Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification, MMM A 134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

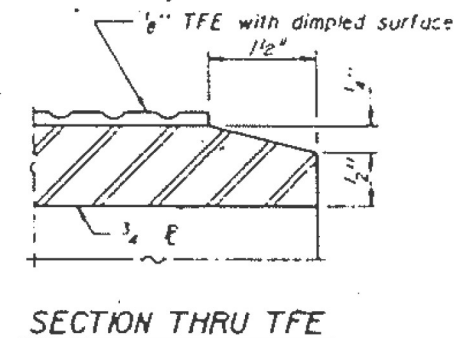
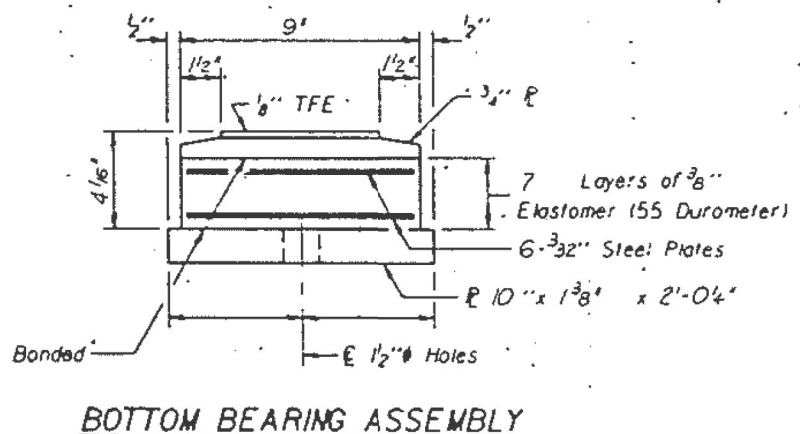
TOP BEARING ASSEMBLY

PLAN-TFE SURFACE



SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per inch of expansion for every 15° temp. change from the normal temp. of 50°F.



BOTTOM BEARING ASSEMBLY

SECTION THRU TFE

FOR INFORMATION ONLY

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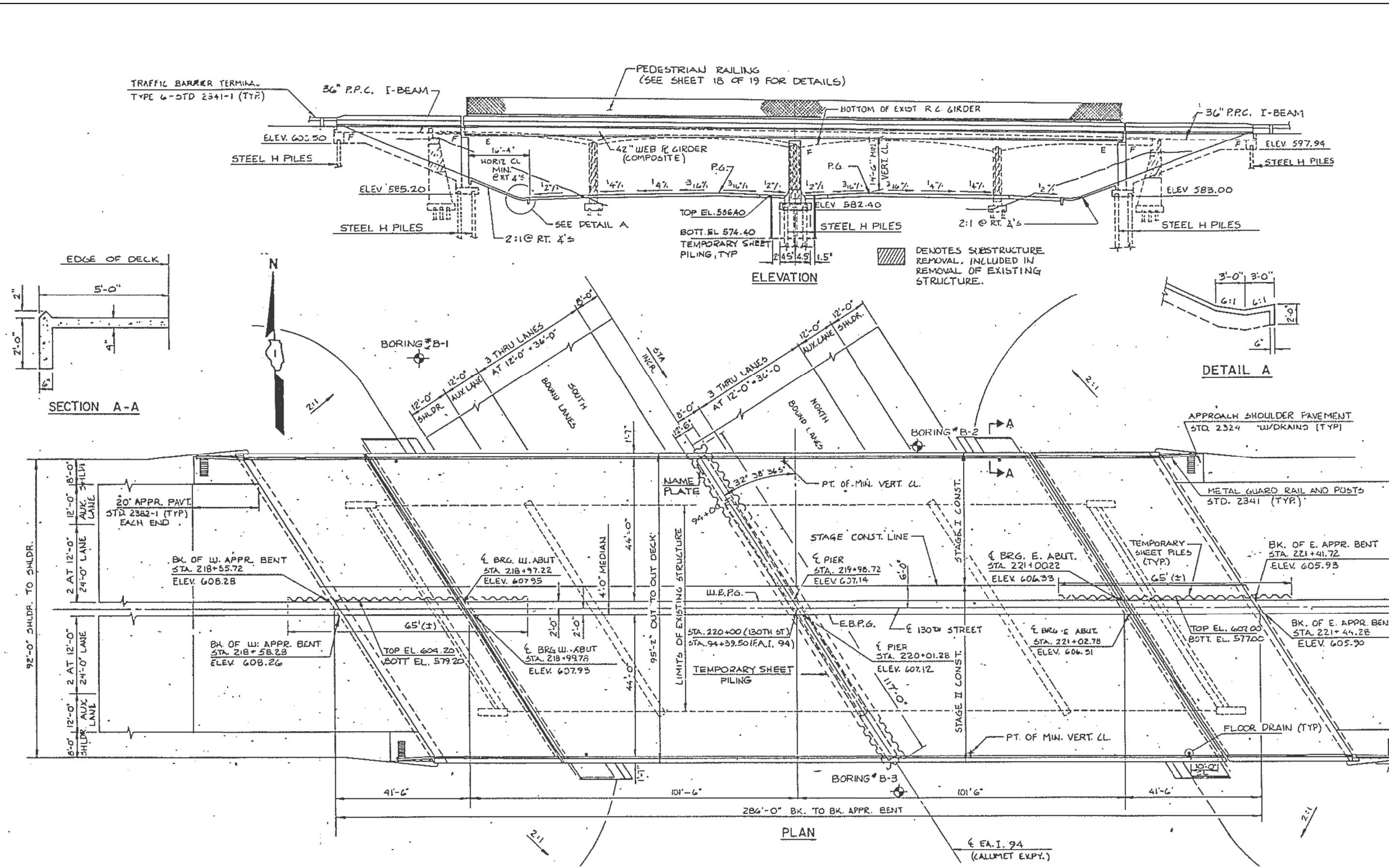
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DETAILS SN 016-2434
130th ST OVER RR

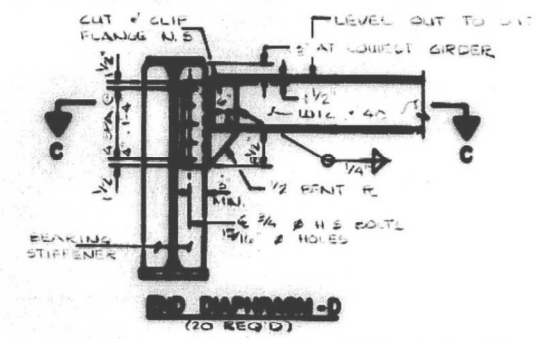
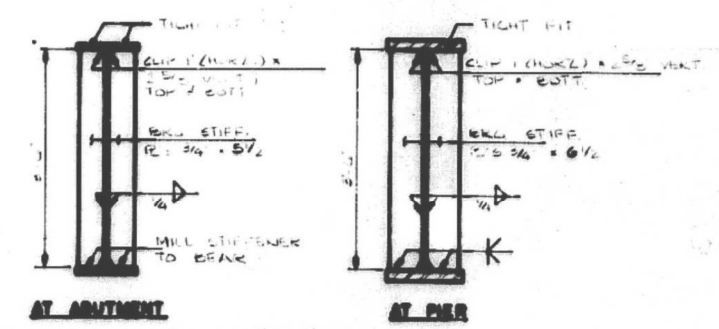
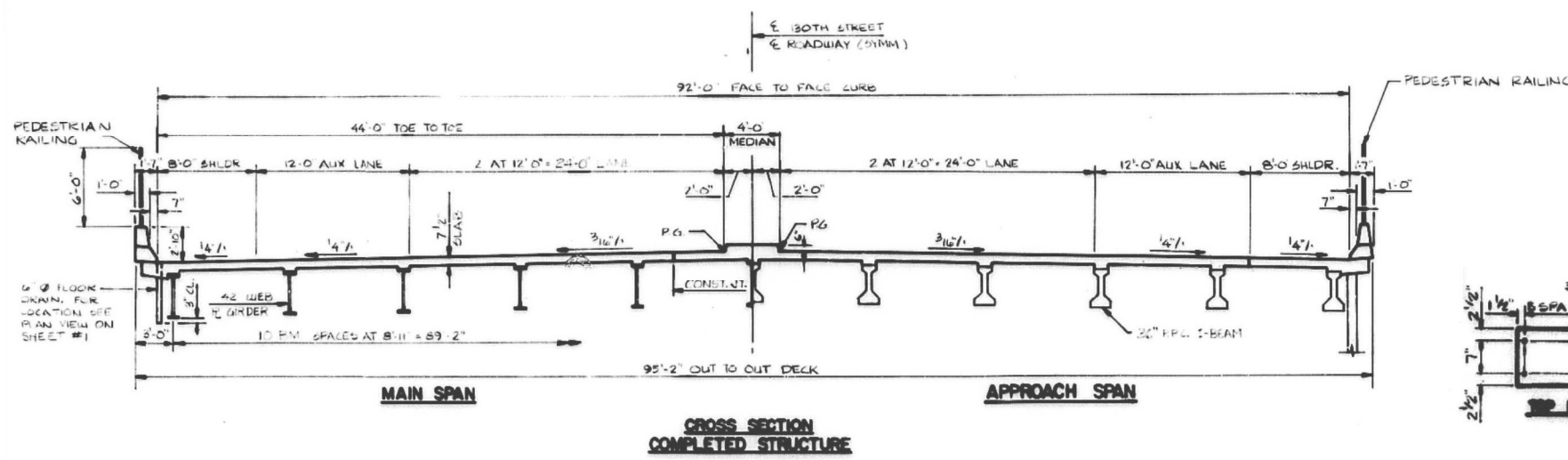
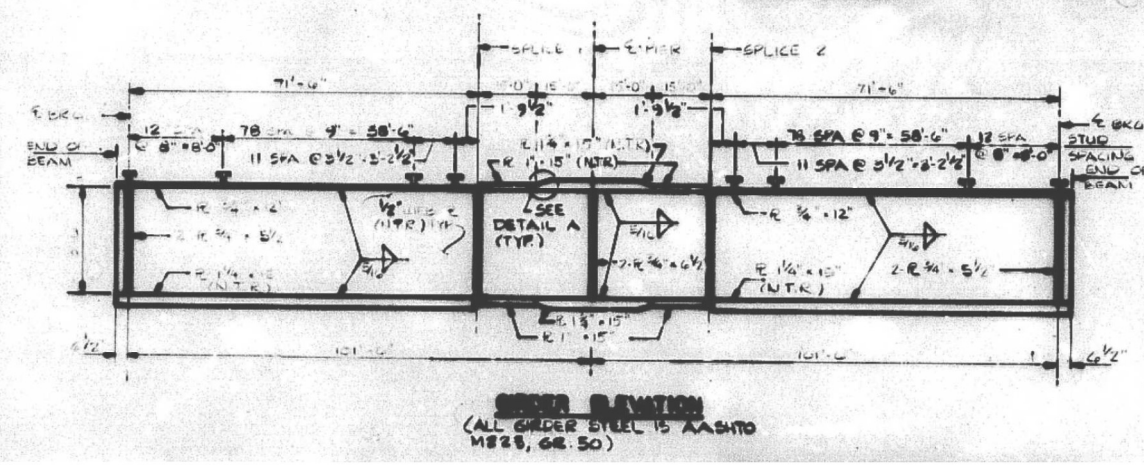
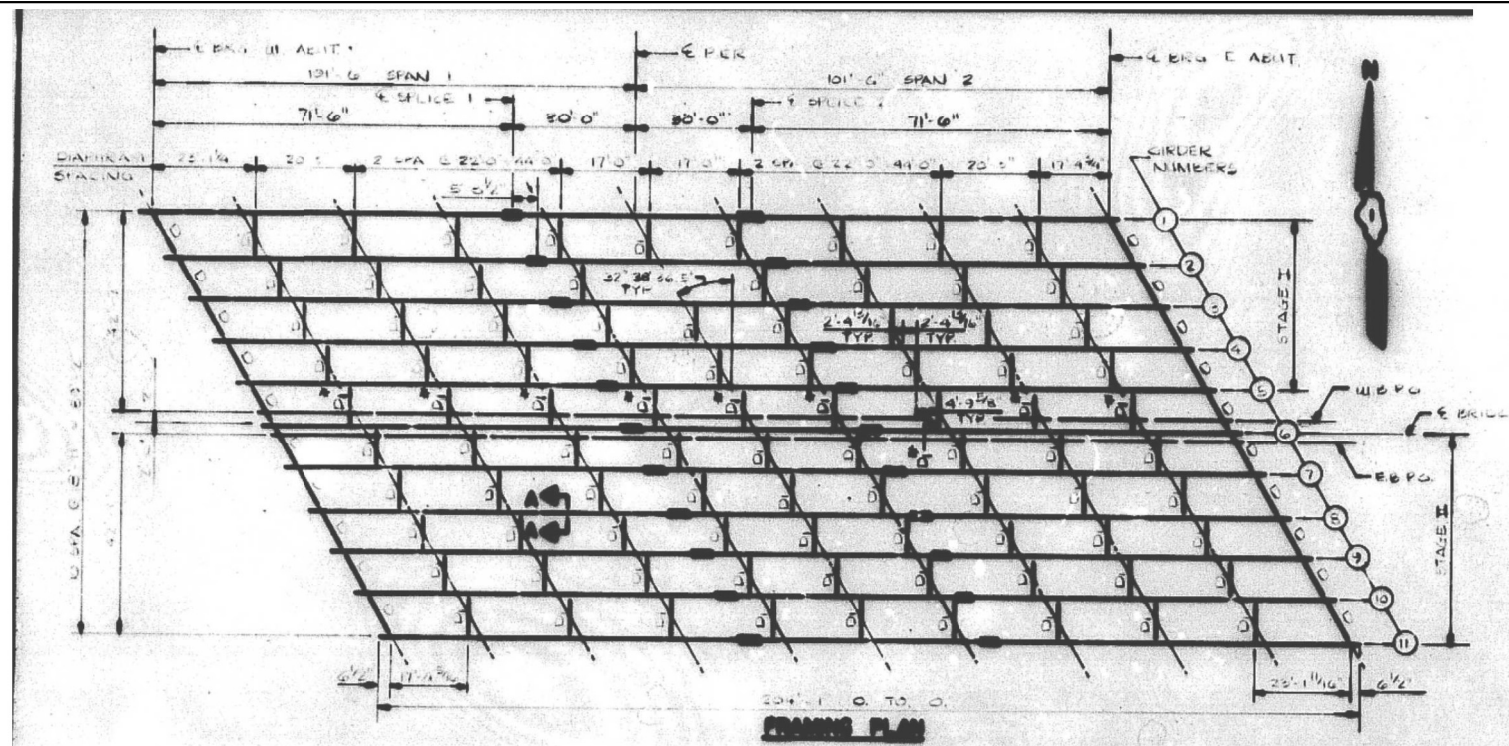
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	344		161	BP		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62P83				
ILLINOIS FED. AID PROJECT				

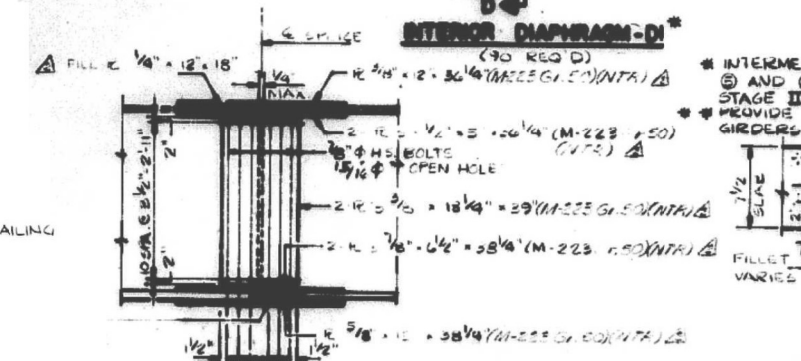
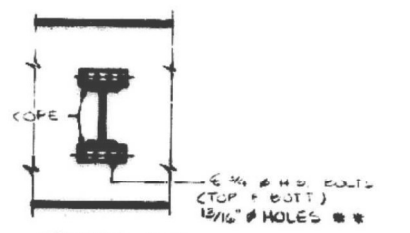
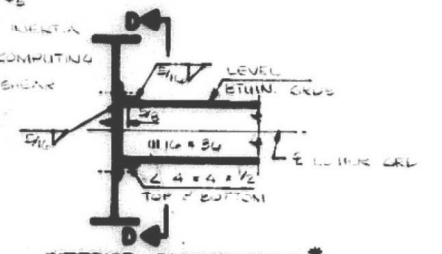


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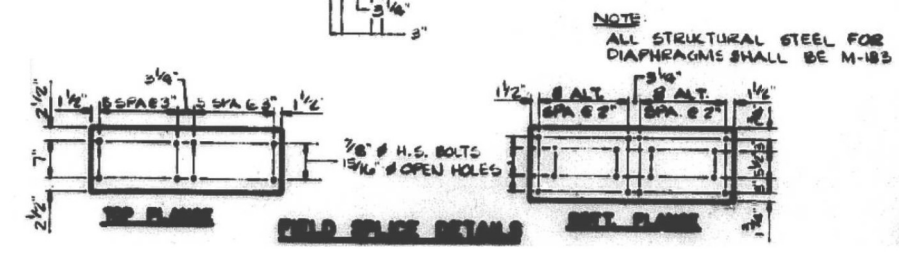
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	DRAWN -	REVISED -	344			2021-161-BP	COOK	16	9		
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	PLOT DATE = 12/9/2021	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



M_x (APPLIED MOMENT) = $1.2 [M_E + 1.5 E + E_s]$
 $(M_E + 1.5 E)$
 I_S AND I_E ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING F_s (TOTAL AND OVERLOAD)
 I_s AND I_e ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING F_s (TOTAL AND OVERLOAD)
 V_R IS THE MAXIMUM $R + IMPACT$ SHEAR RANGES IN SPAN.



* INTERMEDIATE DIAPHRAGMS BETWEEN GIRDERS (C) AND (D) SHALL HAVE BOLTS TIGHTENED ONLY AFTER STAGE II DECK IS IN PLACE.
 * PROVIDE 1/8\"/>



NOTE: ALL STRUCTURAL STEEL FOR DIAPHRAGMS SHALL BE M-183

FOR INFORMATION ONLY

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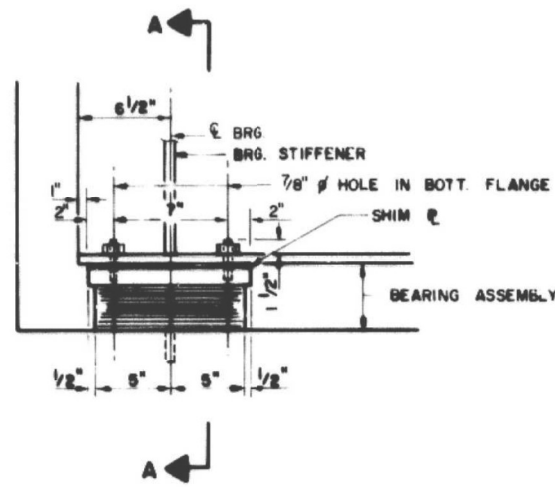
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

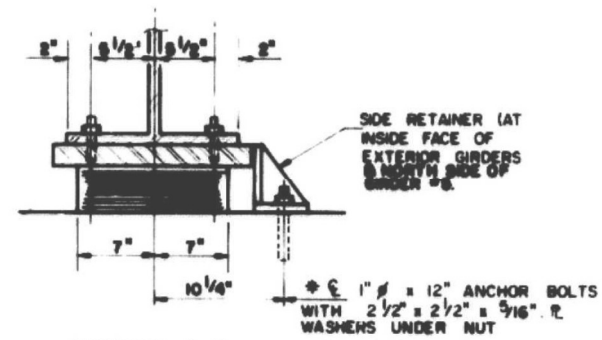
BRIDGE DETAILS SN 016-2600
130th ST OVER I-94

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62P83			ILLINOIS FED. AID PROJECT	



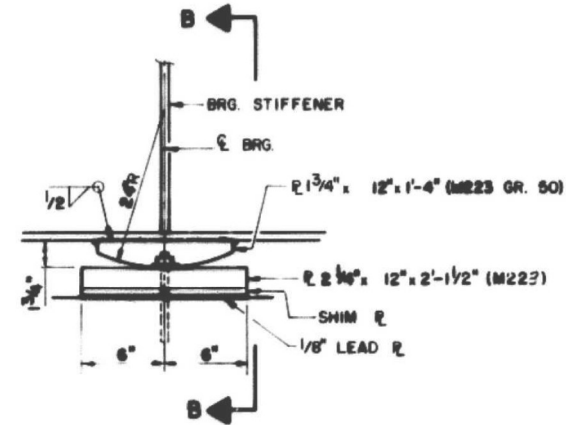
ELEVATION AT ABUTMENT



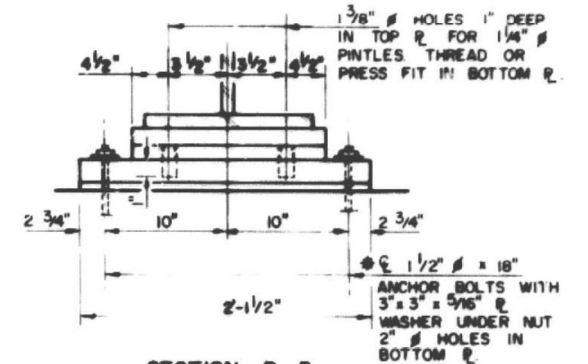
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.
NO. REQ'D = 22

* NOTES ANCHOR BOLTS AT FIXED BEARINGS MAY BE BUILT INTO THE MASONRY. SEE SHEET 17 OF 19 FOR ANCHOR BOLT INSTALLATION.

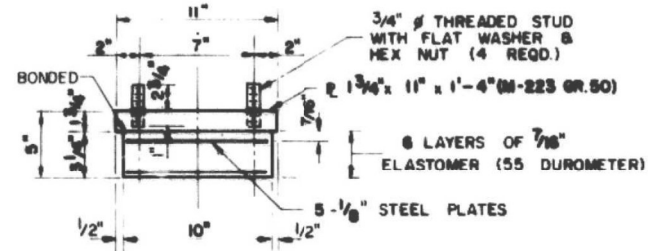


ELEVATION AT PIER



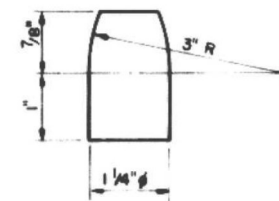
SECTION B-B

FIXED BEARING
NO. REQ'D = 11

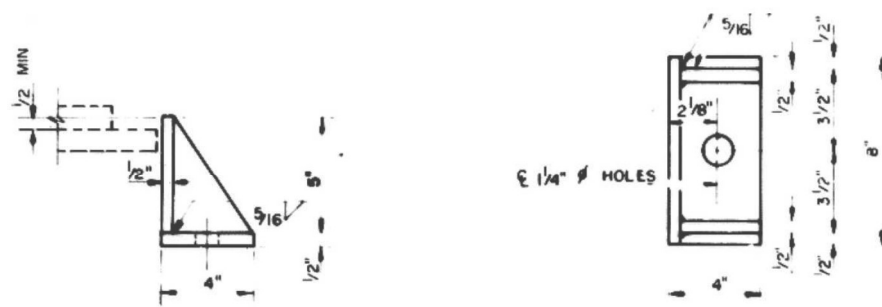


BEARING ASSEMBLY

NOTE: SHIM PLATES SHALL NOT BE PLACED UNDER BRG ASSEMBLY



PINTLE



SIDE RETAINER

EQUIVALENT ROLLED ANGLE WITH STIFFENERS WILL BE ALLOWED IN LIEU OF WELDED PLATES (SIDE RETAINERS SHALL BE M-103)

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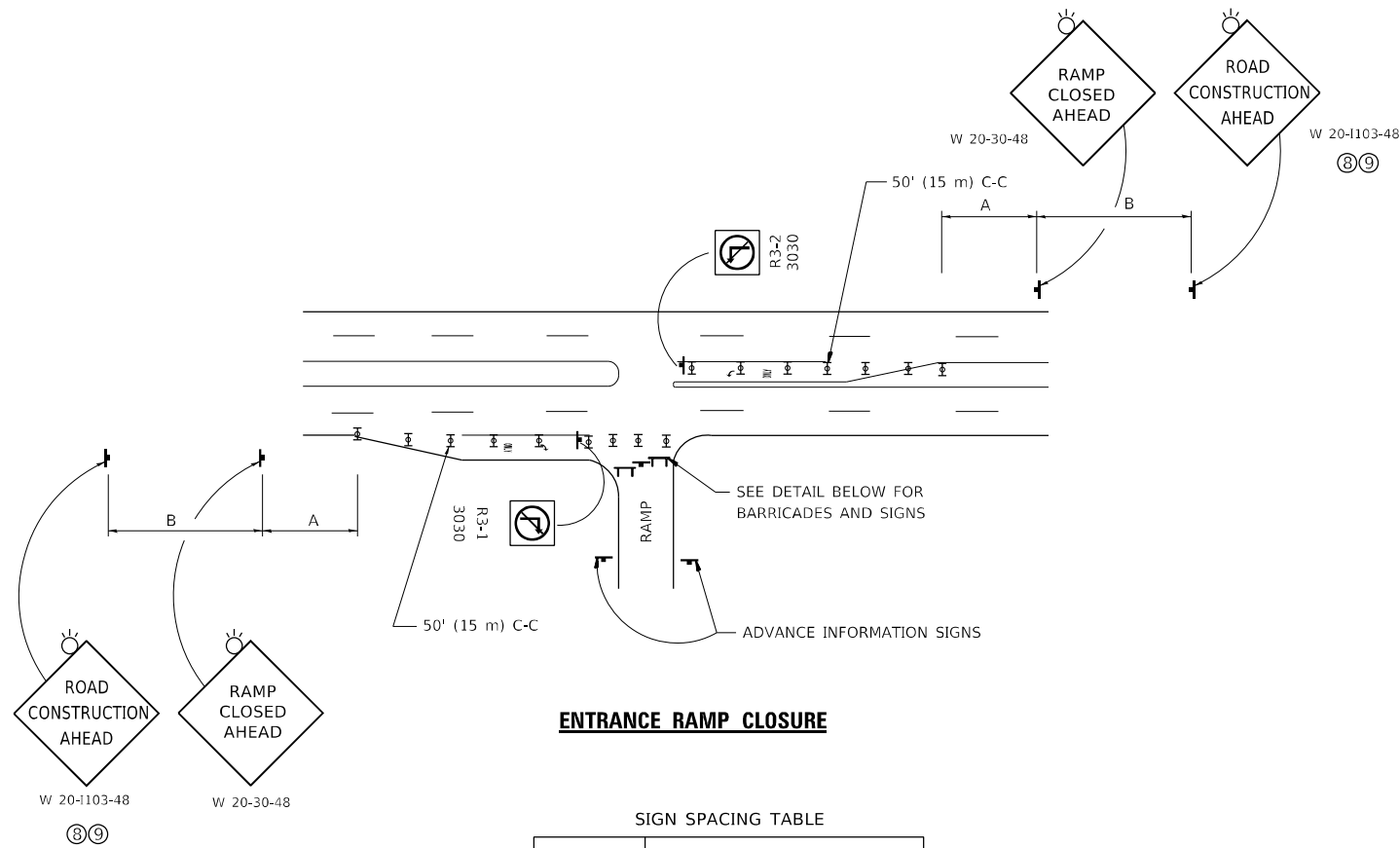
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DETAILS SN 016-2600
130th ST OVER I-94**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2021-161-BP	COOK	16	11
CONTRACT NO. 62P83				
ILLINOIS FED. AID PROJECT				

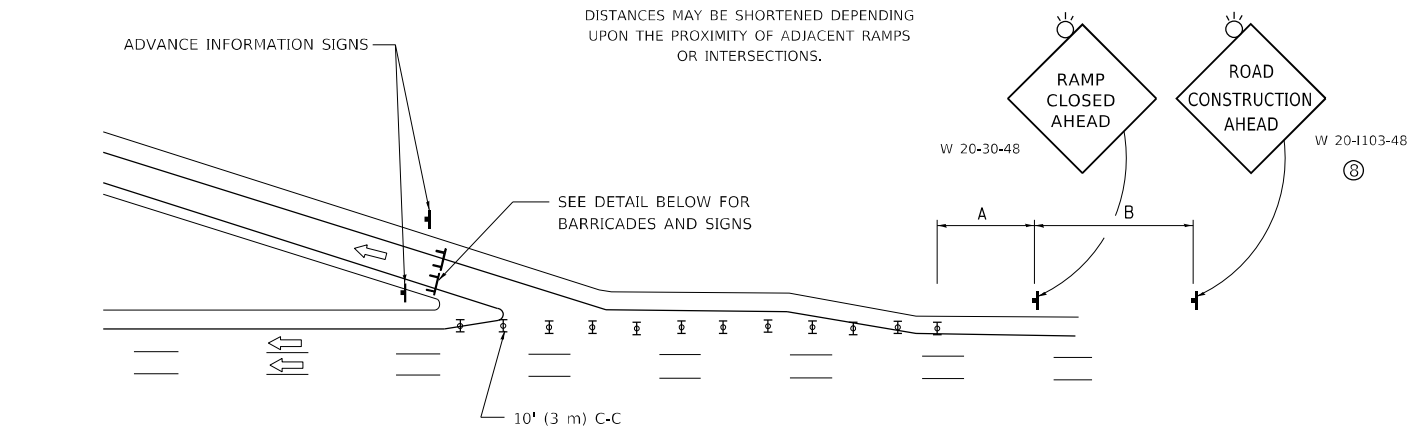


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

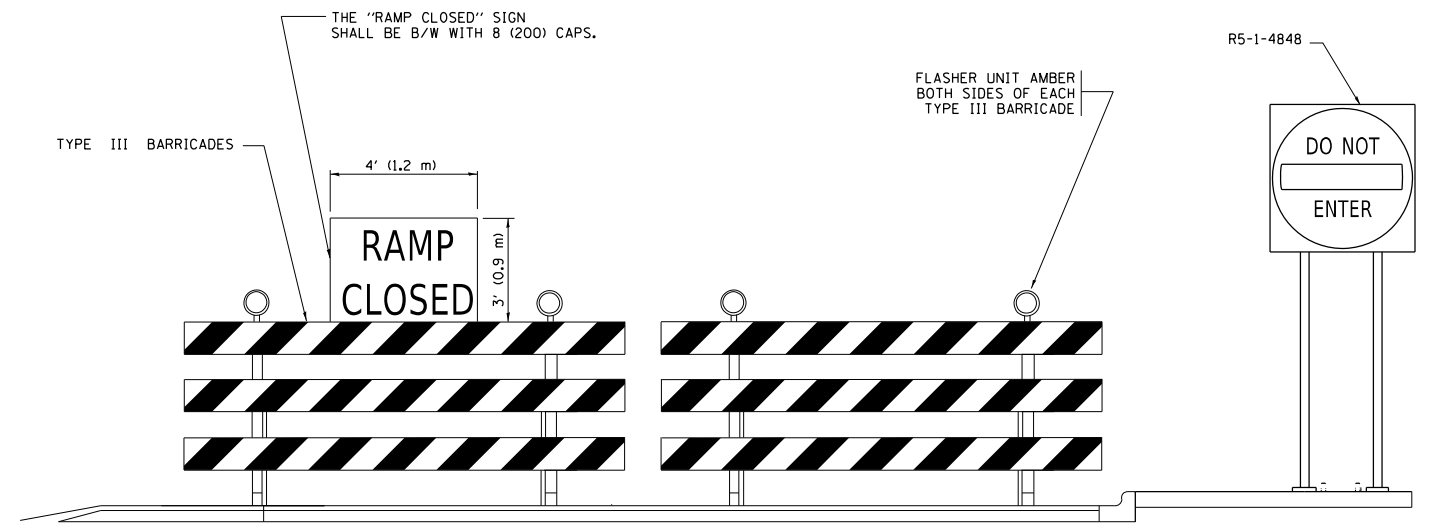
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



EXIT RAMP CLOSURE

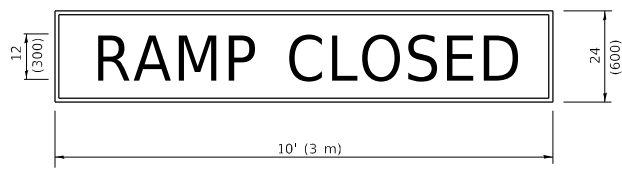
SYMBOLS

- ☐ TYPE II BARRICADE OR DRUM
- ☐ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



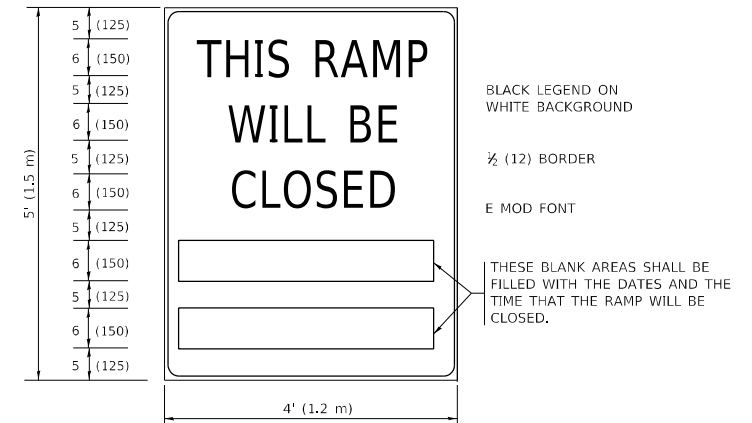
DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY
E MOD FONT
1/2" (12) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.
THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ 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 FOUR (4) DAYS IN LENGTH
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

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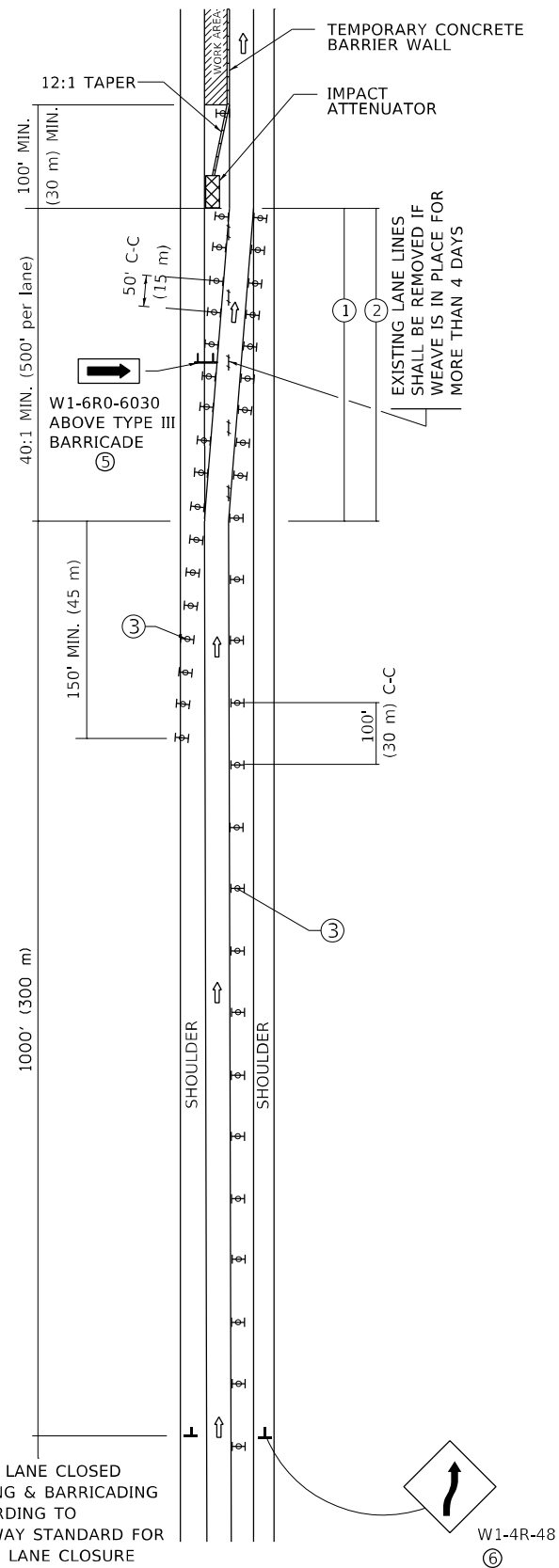
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ENTRANCE_AND_EXIT_RAMP
CLOSURE_DETAILS**

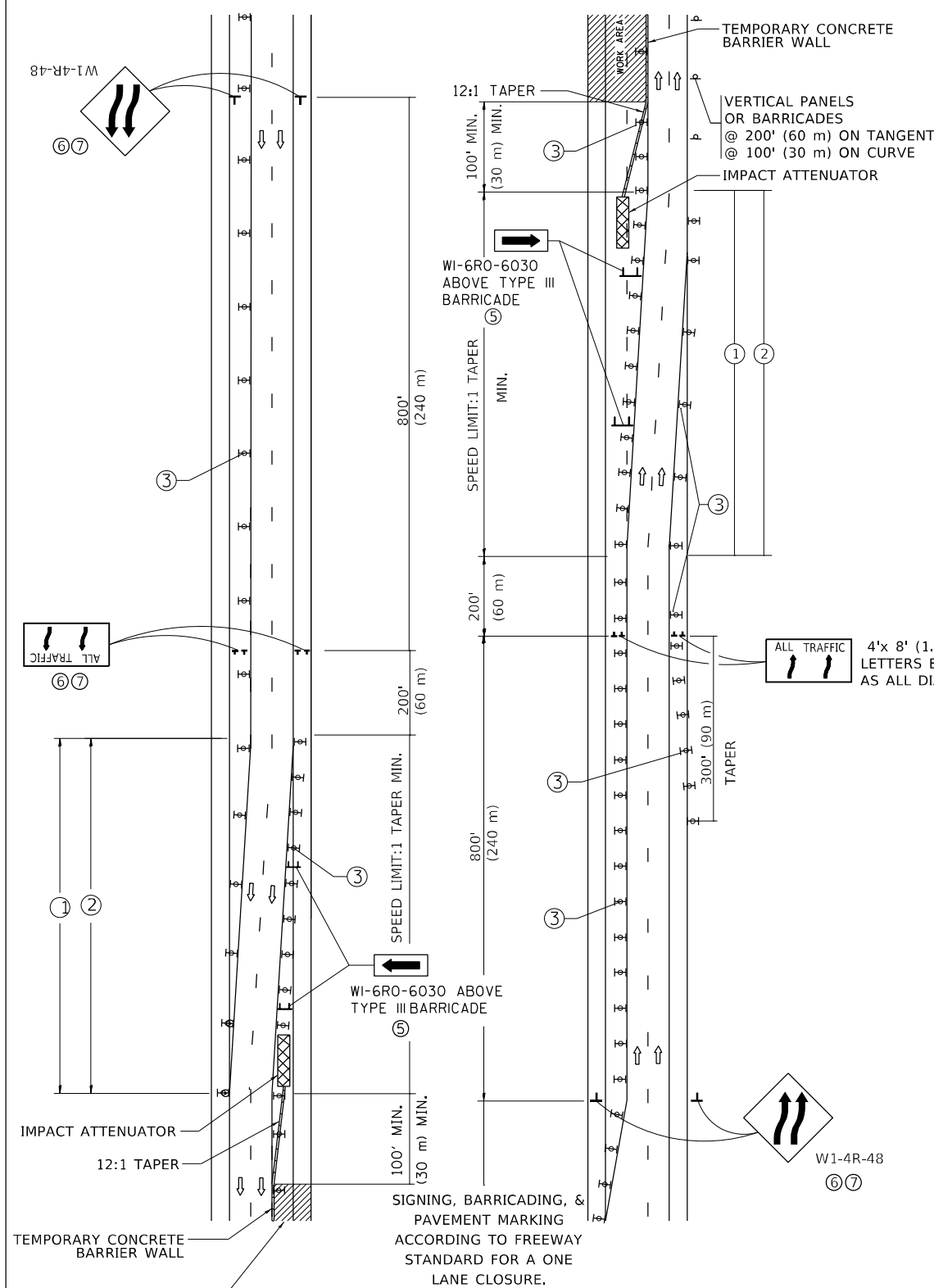
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2021-161-BP	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 12
TC-08		CONTRACT NO. 62P83		
ILLINOIS FED. AID PROJECT				

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES:

- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
- ② 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 WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- ③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ⑤ TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. 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.
- ⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- ⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR
- W1-4R-48
- W24-1-48

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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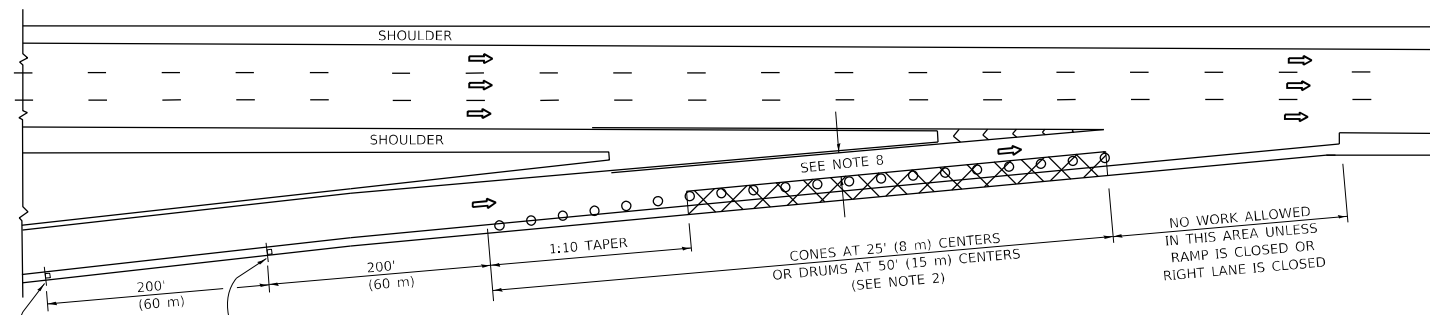
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PLOT DATE = 12/9/2021	DATE - 02-87	REVISED - S.P.B. 12-09
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

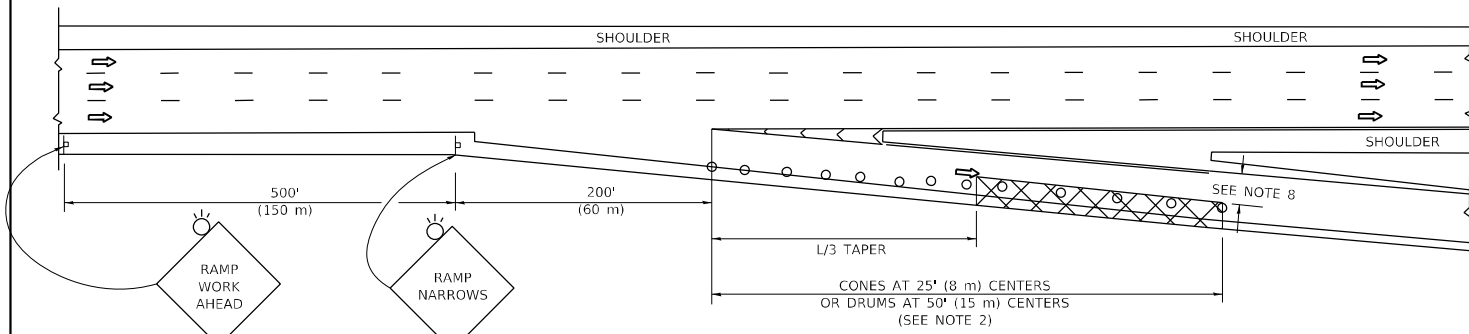
TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE. 344	SECTION 2021-161-BP	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 13
TC-09		CONTRACT NO. 62P83		
ILLINOIS FED. AID PROJECT				

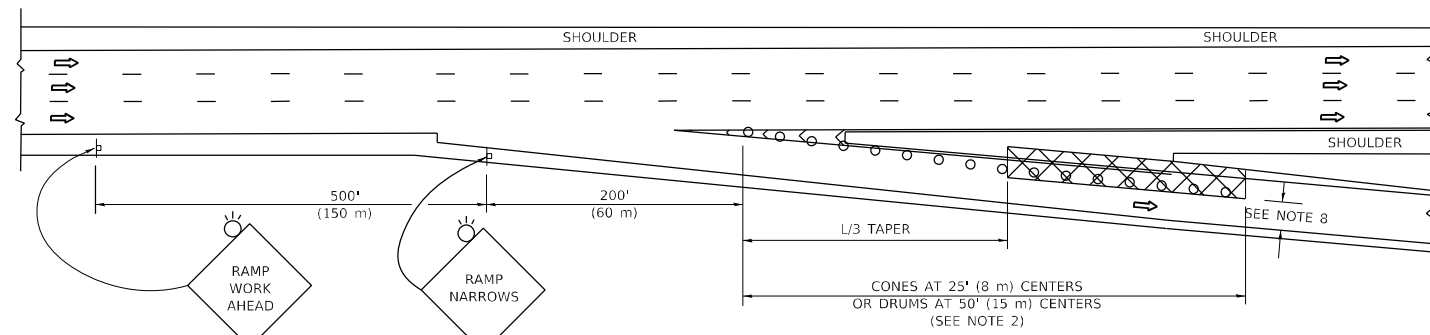
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

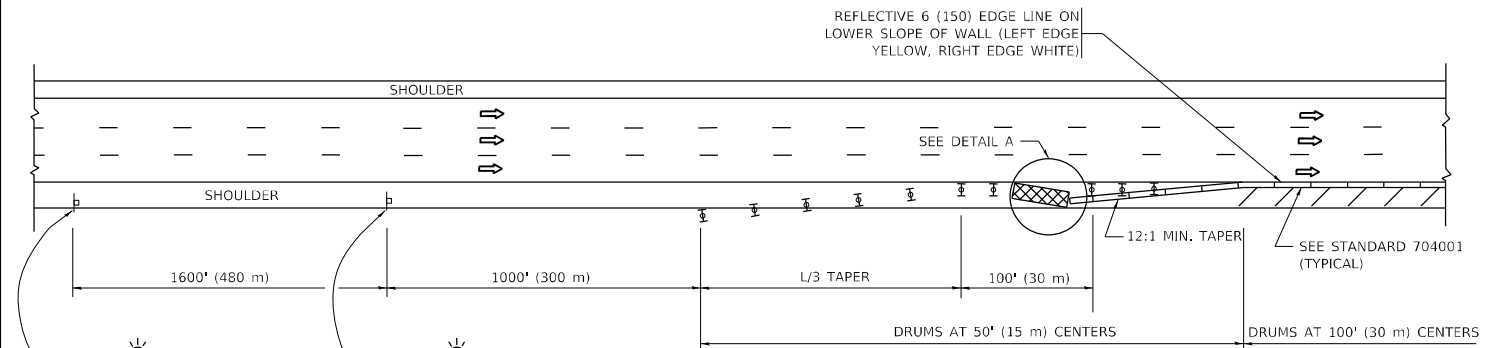
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES:

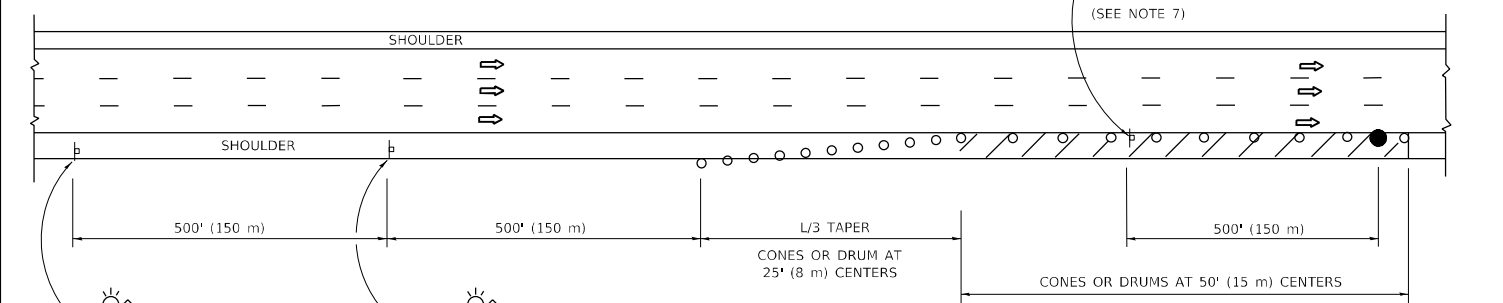
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT			FORMULAS	
45 mph (80 km/h)	METRIC	ENGLISH	L=0.65(W/S)	L=(W/S)
OR GREATER:				
W = WIDTH OF OFFSET IN FEET (METERS)				
S = NORMAL POSTED SPEED MPH (KM/H)				
2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
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.

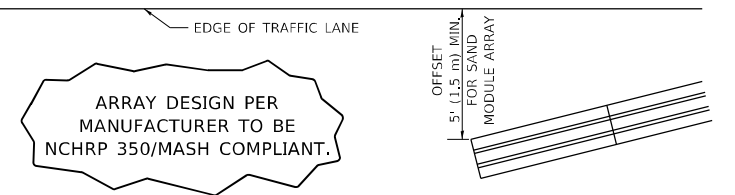
SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



TEMPORARY SHOULDER CLOSURE



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

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. 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 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION
16' MIN. WIDTH CURVE SECTION.
9. TEMPORARY SHOULDER AND NON-SYSTEM INTERCHANGE PARTIAL RAMP CLOSURES ARE ALLOWED WEEKDAYS BETWEEN 9:00 A.M. AND 3:00 P.M. AND BETWEEN 7:00 P.M. AND 5:00 A.M. OR AS APPROVED BY THE EXPRESSWAY TRAFFIC OPERATIONS ENGINEER. PERMANENT SHOULDER AND PARTIAL RAMP CLOSURES WILL ONLY BE PERMITTED IF CALLED FOR IN THE PLANS OR AS APPROVED BY THE EXPRESSWAY OPERATIONS ENGINEER.

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

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

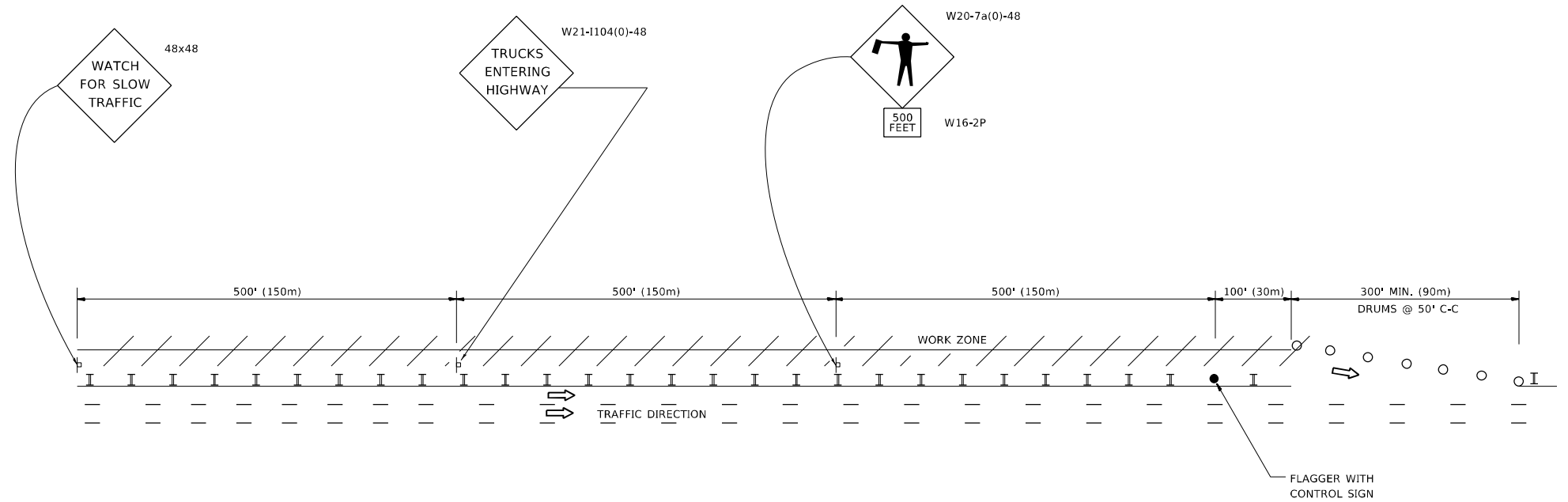
TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

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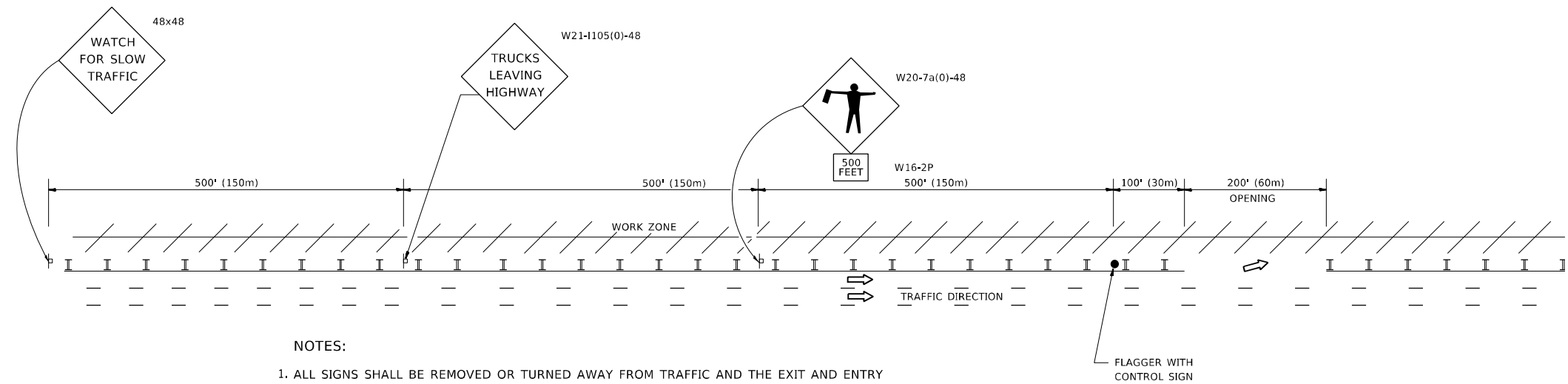
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344	2021-161-8P	COOK	16	14
TC-17		CONTRACT NO. 62P83		
ILLINOIS FED. AID PROJECT				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMP.
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
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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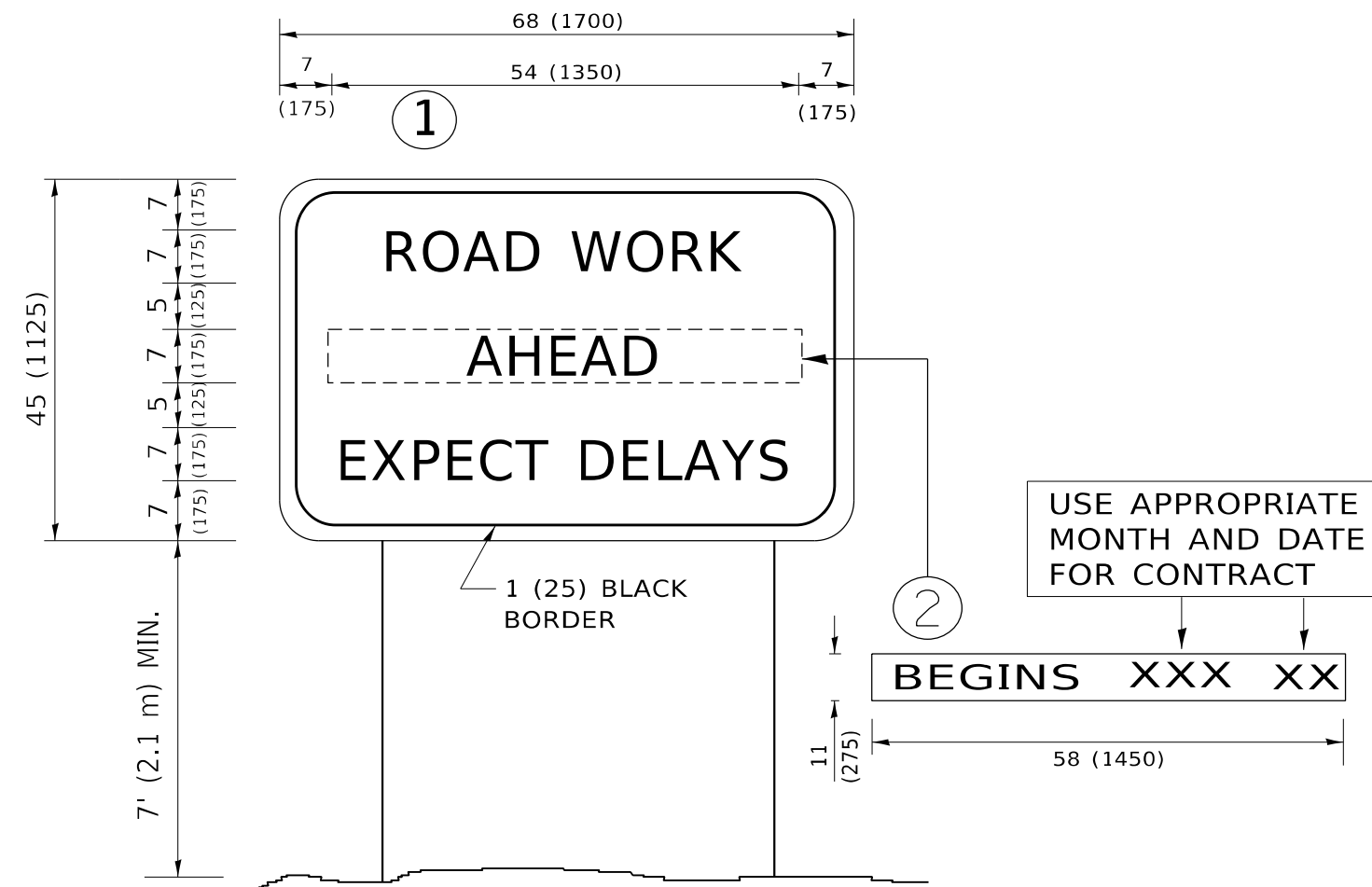
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PLOT DATE = 12/9/2021	DATE -	REVISED - M.D.06-13

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FREEWAY /EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS ON FREEWAYS /EXPRESSWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2021-161-BP	COOK	16	15
TC-18			CONTRACT NO. 62P83	
ILLINOIS FED. AID PROJECT				



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.

MODEL: Default
 FILE NAME: p:\ultra-cad\aw-bee\aw.com\p\w\dot\Documents\DOT Office\Dir\rdet_1\Project\1065222\CADD\data\Design\BtESt.dgn

USER NAME = gorengautab	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 12/9/2021	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2021-161-BP	COOK	16	16
TC-22			CONTRACT NO. 62P83	
ILLINOIS FED. AID PROJECT				