

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

PAULINA STREET GRADE SEPARATION

COOK COUNTY
CONGRESS STREET EXPRESSWAY

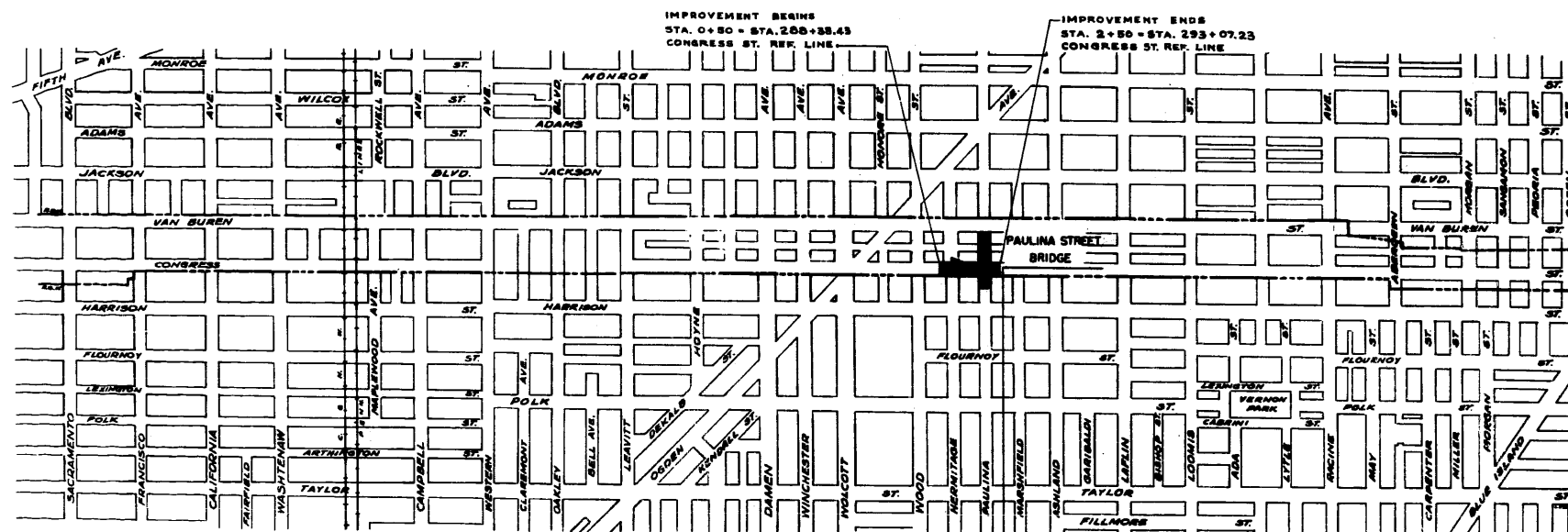
F. A. ROUTE 131 SECTION 3-B-5 & 3-F-5

PROJECT U.I.261(68)

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. 131	3-B-5 3-F-5	COOK	29	1
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT U.I.261(68)				

INDEX OF SHEETS

SHEET NO.	TITLE SHEET.
1.	QUANTITIES & GENERAL NOTES.
2.	LOCATION PLAN & PROFILE.
3.	N. & S. APPROACHES - EXISTING PAVEM'T & UTILITIES.
4.	CONGRESS & PAULINA STS. - PROPOSED PAVING PLAN & UTILITIES.
5.	TEMPORARY DETOUR.
6.	N. & S. APPROACH DETOURS & BARRICADE DETAILS.
7.	APPROACH SLAB DETAILS.
8.	EXCAVATION & BACKFILL PAY LIMITS.
9.	BORING DATA.
10.	DESIGN DATA.
11.	ARCHITECTURAL ELEVATION & DETAILS.
12.	PILING PLAN.
13.	DECK FRAMING PLAN.
14.	DIAFRAM CONNECTIONS & DETAILS.
15.	BEARING & SPLICE DETAILS.
16.	EXPANSION JOINT DETAILS.
17.	PIERS & DETAIL SECTIONS.
18.	PIER REINFORCEMENT.
19.	ABUTMENT PLAN & ELEVATION.
20.	WINGWALL PLAN, ELEVATION & SECTIONS.
21.	ABUTMENT REINFORCEMENT.
22.	REINFORCEMENT OF WINGWALL & SECTIONS.
23.	CONCRETE DECK DETAILS.
24.	CONCRETE DECK REINFORCEMENT.
25.	REINFORCEMENT BAR LIST.
26.	STANDARD MANHOLES & PAVING DETAILS.
27.	STANDARD NAME PLATES & METAL JOINTS.
28.	STANDARD CONSTRUCTION SIGNS
29.	& SITE PLAN OF BENCH MARKS.
29A	STANDARD 10-218, 2015R, 2016R, 1971S
29B	STANDARD 1516R, 1775R, 10-SS-501



SEC. 3-B-5 Includes the construction of a W-Beam Grade Separation Structure and Paved Approaches (on Paulina Street over Congress St. Expressway), spans 2 @ 65'-9 1/2", 2 @ 69'-13 1/2" @ Sta. 292+24.23 (reference line) at the intersection of Paulina St. and Congress Street Expressway, with the exception of furnishing and fabricating structural steel, furnishing and applying shop coat of paint & delivery of structural steel, C. & N.W. Railway Siding at Kirgic & Morgan Sts.; * and also includes miscellaneous Road Work.

SEC. 3-F-5 Includes furnishing and fabrication of Structural Steel, furnishing and applying shop coat of paint and delivery of the Structural Steel for C. & N.W. Railway Siding at Kirgic & Morgan Sts.; * for a W-Beam Grade Separation Structure (on Paulina Street over Congress St. Expressway), spans 2 @ 65'-9 1/2" & 2 @ 69'-13 1/2" @ Sta. 292+24.23 (reference line) at the intersection of Paulina Street and Congress Street Expressway.

* except that delivery of Steel may be made by truck, f.o.b. job site, if satisfactory arrangements can be made with the contractor for Sec. 3-B-5,



LOCATION OF SECTION INDICATED THUS

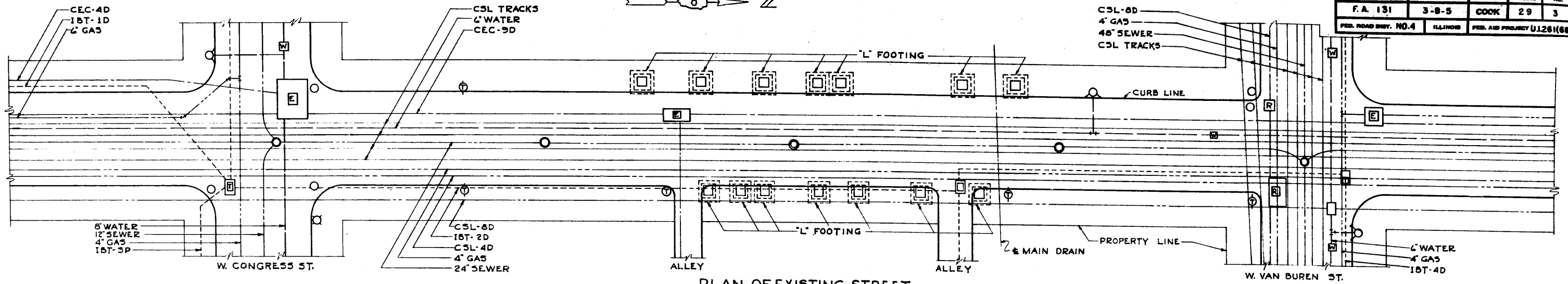
NET LENGTH OF IMPROVEMENT 468.80 FT. = 0.888 MI.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
SUBMITTED 5-25-53
EXAMINED 7-13-53
PASSED 7-13-53
APPROVED 7-13-53
APPROVED 7-13-53

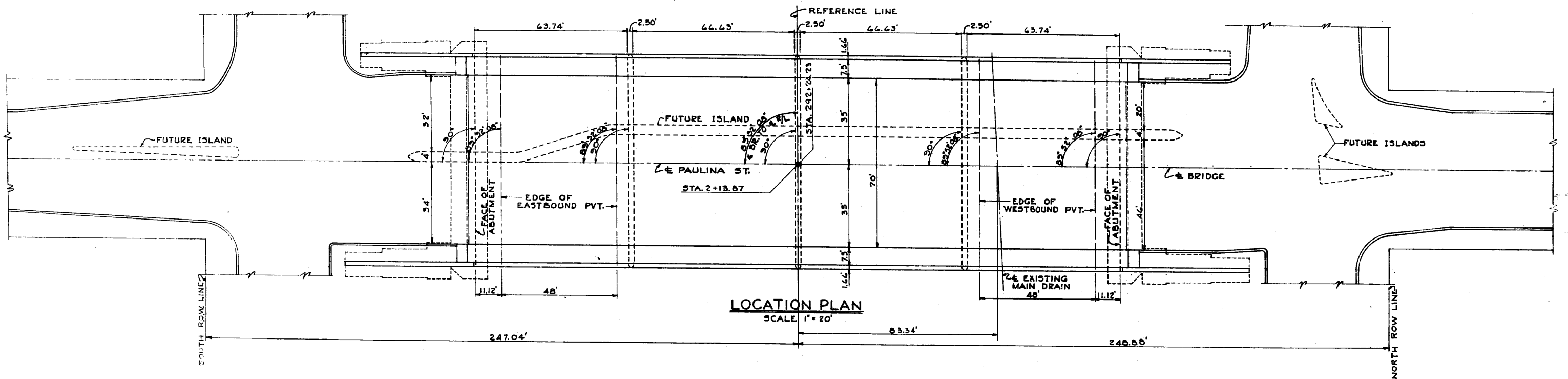
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL

APPROVED
DISTRICT ENGINEER DATE

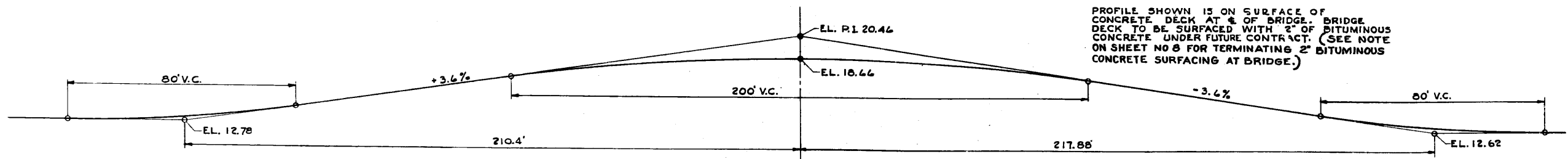
BOARD ISSUE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ROUTE 80	3-B-5	COOK	29	3
F.A. 131				
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.1261(68)		



PLAN OF EXISTING STREET
SCALE 1" = 20'



LOCATION PLAN
SCALE 1" = 20'



PROFILE SHOWN IS ON SURFACE OF CONCRETE DECK AT E OF BRIDGE. BRIDGE DECK TO BE SURFACED WITH 2" OF BITUMINOUS CONCRETE UNDER FUTURE CONTRACT. (SEE NOTE ON SHEET NO 8 FOR TERMINATING 2" BITUMINOUS CONCRETE SURFACING AT BRIDGE.)

PROFILE
SCALE HORIZ. 1" = 20', VERT. 1" = 5'

NOTES

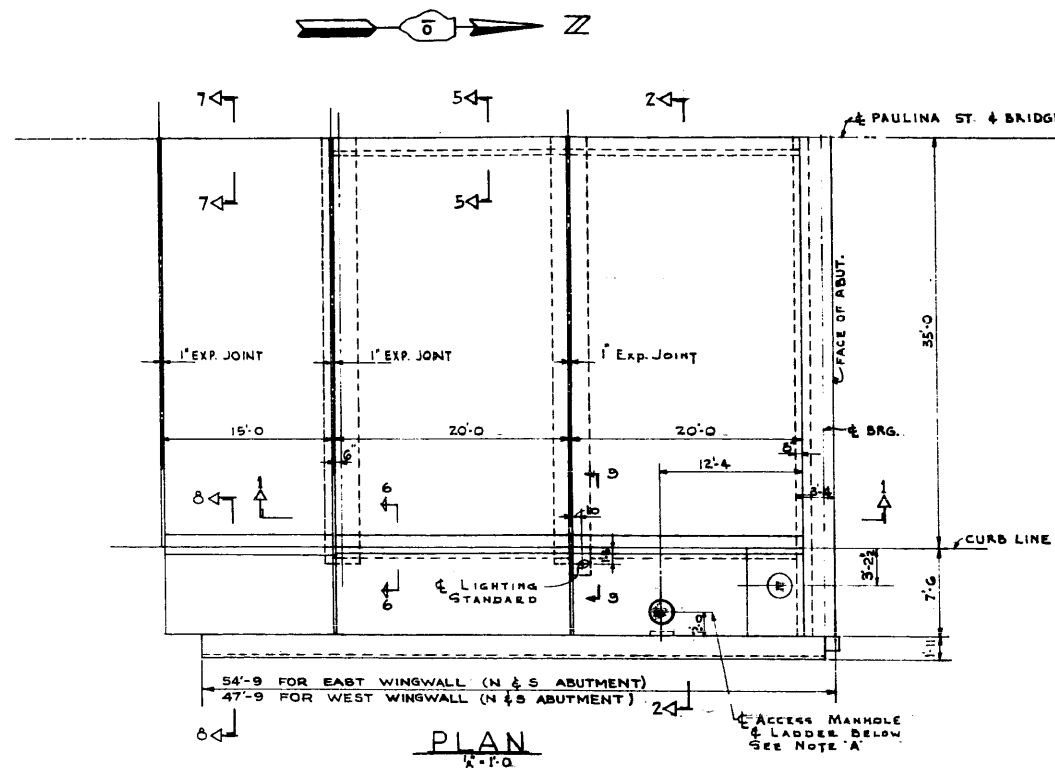
FOR PAVEMENT, SEWER DETAILS, & TEMPORARY CAR TRACK LOCATION SEE SHS. 4, 6, & 8.
FOR EXCAVATION AND BACKFILL PAYLIMITS SEE SH. 9.
THE LOCATION AND SIZES OF THE CONDUITS, PIPES, MANHOLES, AND OTHER SUB-SURFACE UTILITY EQUIPMENT SHOWN ON THIS DRAWING ARE BASED ON THE BEST INFORMATION OBTAINABLE AND ARE BELIEVED TO BE ACCURATE BUT CANNOT BE GUARANTEED. ADDITIONAL ABANDONED UTILITIES MAY BE ENCOUNTERED. FOR PROCEDURE IN HANDLING THESE ABANDONED UTILITIES SEE SPECIAL PROVISIONS.

DE LEUW, CATHY & CO. ENGINEERS
DESIGNED BY _____
DRAWN BY A. K. MAGENNIS
CHECKED J. R. SASSAMAN O. NELSON
IN CHARGE

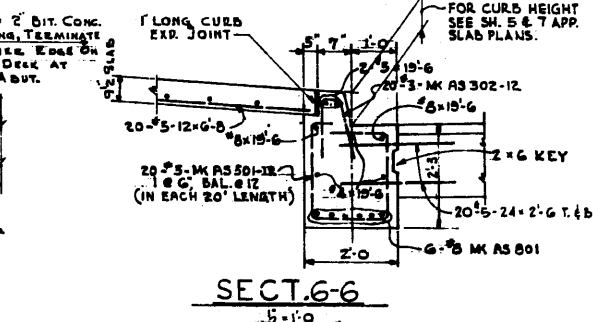
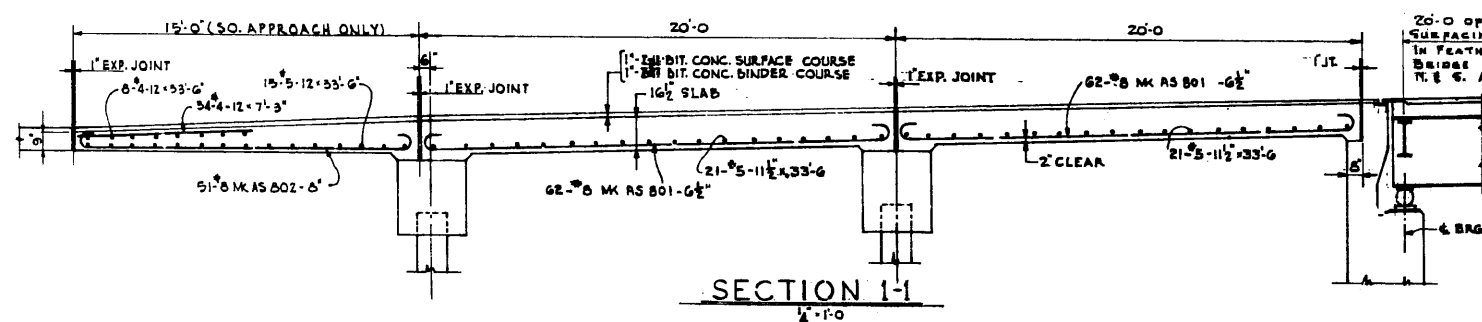
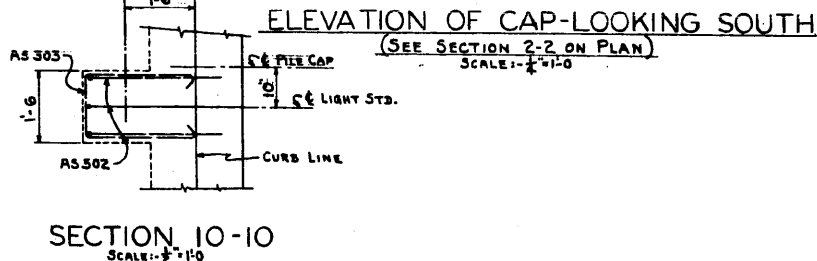
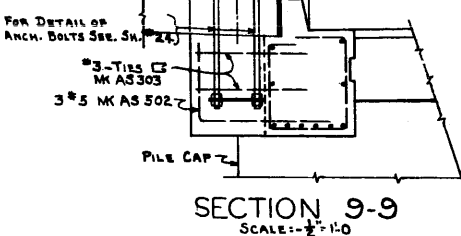
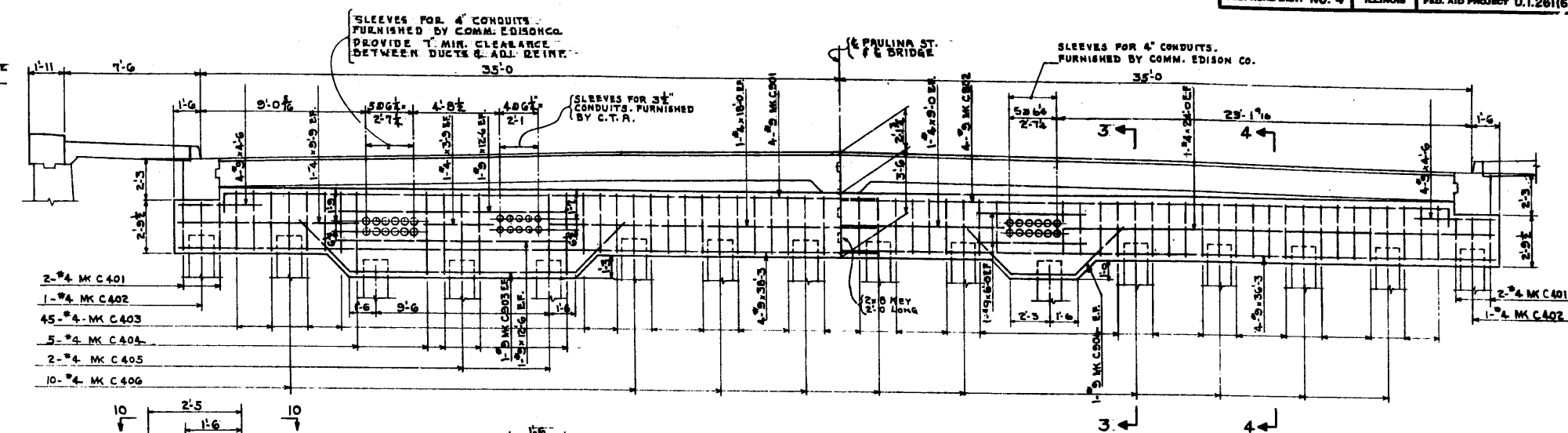
CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5
LOCATION PLAN & PROFILE

SCALE: AS NOTED

BOND ISSUE	SECTION	COUNTY	TOTAL	SHEET
ROUTE NO.	3-B-5	COOK	SHEETS	NO.
F.A. 131				8
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.1261(68)		



NOTE A: MANHOLE, CLOW NATIONAL F3335 FRAME & COVER, OR EQUAL, LOCATED IN EAST WALK OF N. & S. BRIDGE APPROACHES. LIGHTING STANDARD LOCATED IN EAST WALK OF N. & S. BRIDGE APPROACHES.

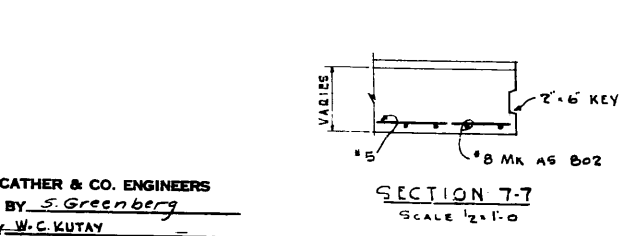
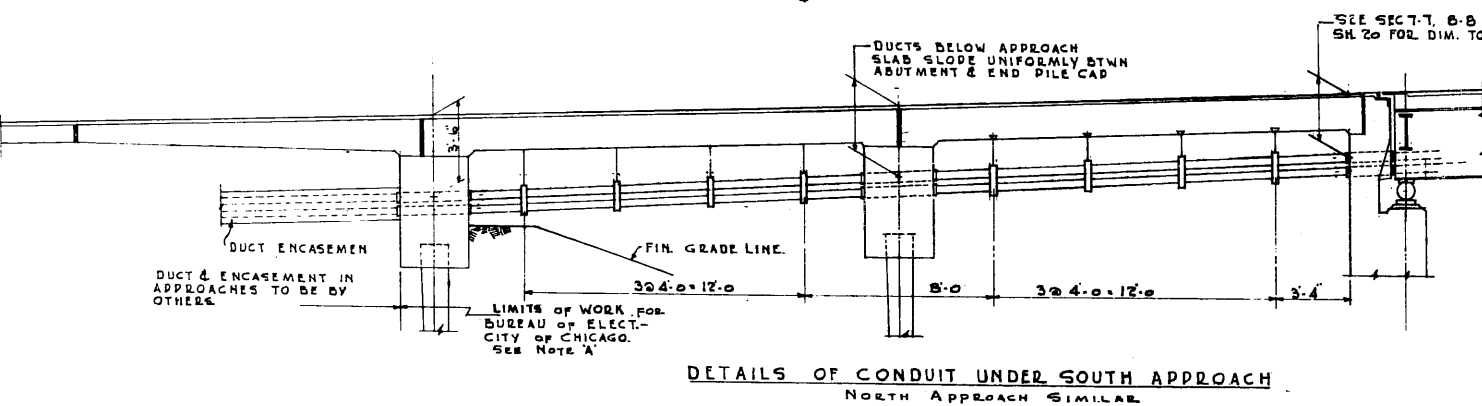


GENERAL NOTES FOR CONCRETE AND REINFORCEMENT

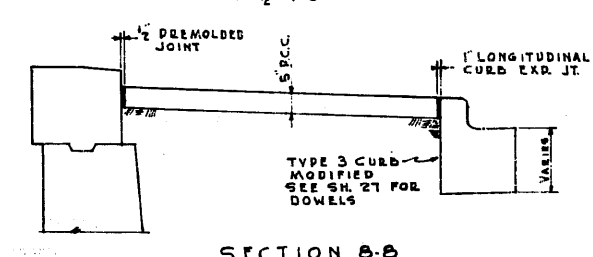
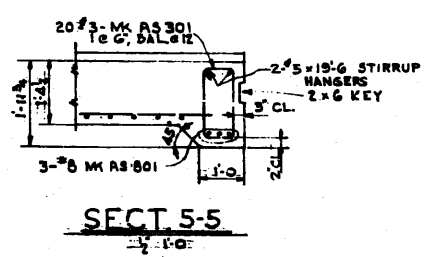
CONCRETE:
 $f_c = 3500$ psi, ULTIMATE STRENGTH IN 28 DAYS.
 $f_c = 1000$ psi, $n = 10$
 ALL CONCRETE SHALL BE CLASS X UNLESS OTHERWISE NOTED. CONCRETE DECKS SHALL BE POURED IN ONE COMPLETE OPERATION BETWEEN CONSTRUCTION JOINTS WHICH ARE CLEARLY SHOWN ON THE PLANS. SEE SHEET NO. 25 FOR PLAN OF DECK CONSTRUCTION JOINTS.
 CONCRETE SHALL BE FINISHED IN ACCORDANCE WITH ART. 51.15 (a) OF THE STANDARD SPECIFICATIONS OF THE STATE OF ILLINOIS. EXPOSED SURFACES ARE TO BE RUBBED IN ACCORDANCE WITH ART. 52.14 OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE NOTED ALL EXPOSED CORNERS SHALL BE CHAMFERED $\frac{1}{4}$ ".

REINFORCEMENT:
 $f_s = 20,000$ psi. REINFORCING SHOWN TO BE OF INTERMEDIATE GRADE BILLET STEEL AND TO COMPLY WITH SPECIFICATION FOR BILLET-STEEL FOR CONCRETE REINFORCEMENT, ASTM DESIGNATION A15, DEFORMATIONS, TYPE AND WEIGHTS TO CONFORM TO ASTM DESIGNATION A305.
 BAR BENDING, PLACING, CLEARANCES ETC., UNLESS OTHERWISE SHOWN, SHALL BE IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 5TH EDITION, DATED 1949, AND THE MANUAL OF STANDARD PRACTICE OF THE AMERICAN CONCRETE INSTITUTE, AS AMENDED FOR NEW-TYPE BAR ASTM A305.
 ALL BARS TO BE LAPPED 24 DIAMETERS AT SPLICES UNLESS OTHERWISE SHOWN. BAR EXTENSIONS TO BE AS DIMENSIONED OR TO SCALE.
 BAR NUMBERS ARE BASED ON THE NUMBER OF $\frac{1}{8}$ INCHES IN THE NOMINAL DIAMETER OF AN EQUIVALENT ROUND BAR.
 BAR SPACING IS GIVEN IN INCHES, THUS $\frac{1}{2}$ "-12" = $\frac{1}{2}$ " @ 12" CTR. TO CTR.

CLASS X CONCRETE IN 2 APPROACHES = 502 CY.
 REINFORCEMENT IN 2 APPROACHES = 69,731 LBS.



DE LEUW, CATHY & CO. ENGINEERS
 DESIGNED BY S. Greenberg
 DRAWN BY W. C. KUTAY
 CHECKED O. NELSON
 IN CHARGE W. C. KUTAY



CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
 SECTION 3-B-5
 APPROACH SLAB DETAILS
 SCALE: AS NOTED

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 131	3-B-5	COOK	29	10
FED. ROAD DIST. NO. 4	ILLINOIS	FED. 48 PROJECT U.1.24(60)		

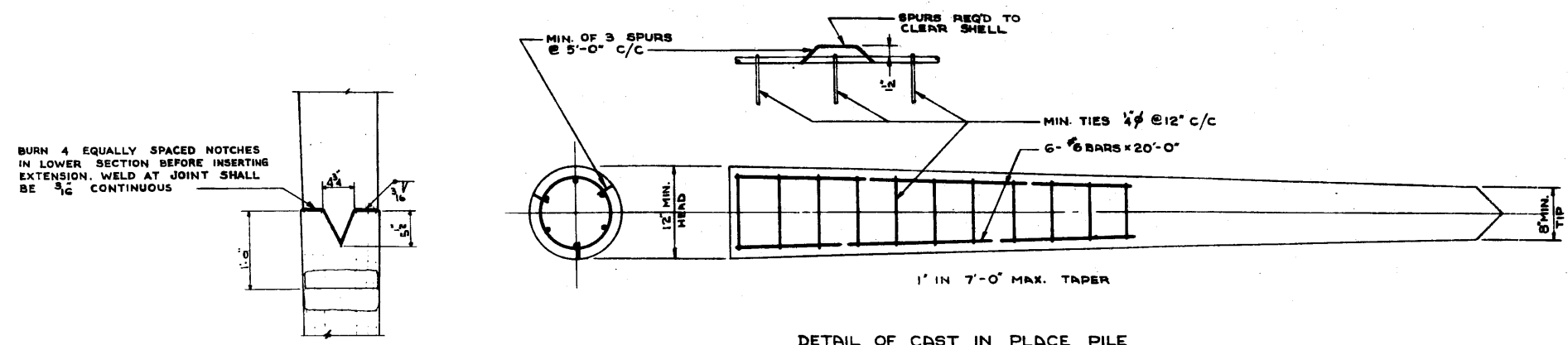
BORING NOTES

FIGURES UNDER COLUMN HEADED "BLOWS/FT." INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE SAMPLING SPOON ONE FOOT, USING 140 LB. WEIGHT FALLING 30 INCHES. SPOON INSIDE DIA. OUTSIDE DIA.

FOR LOCATION OF BORINGS SEE SHEET NO. 9.

ELEVATIONS SHOWN ARE BASED ON THE STANDARD CHICAGO CITY DATUM.

BORING DATA SHOWN AS A GUIDE FOR BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED.



DETAIL OF CAST IN PLACE PILE

PILE NOTES:

PILES WITH A MIN. SHELL THICKNESS OF 3/8" OR GREATER IF REQUIRED FOR DRIVING CONDITIONS NEED NOT BE REINFORCED, EXCEPT PILES SUPPORTING THE APPROACH SLABS, FOR WHICH SEE NOTE "A"

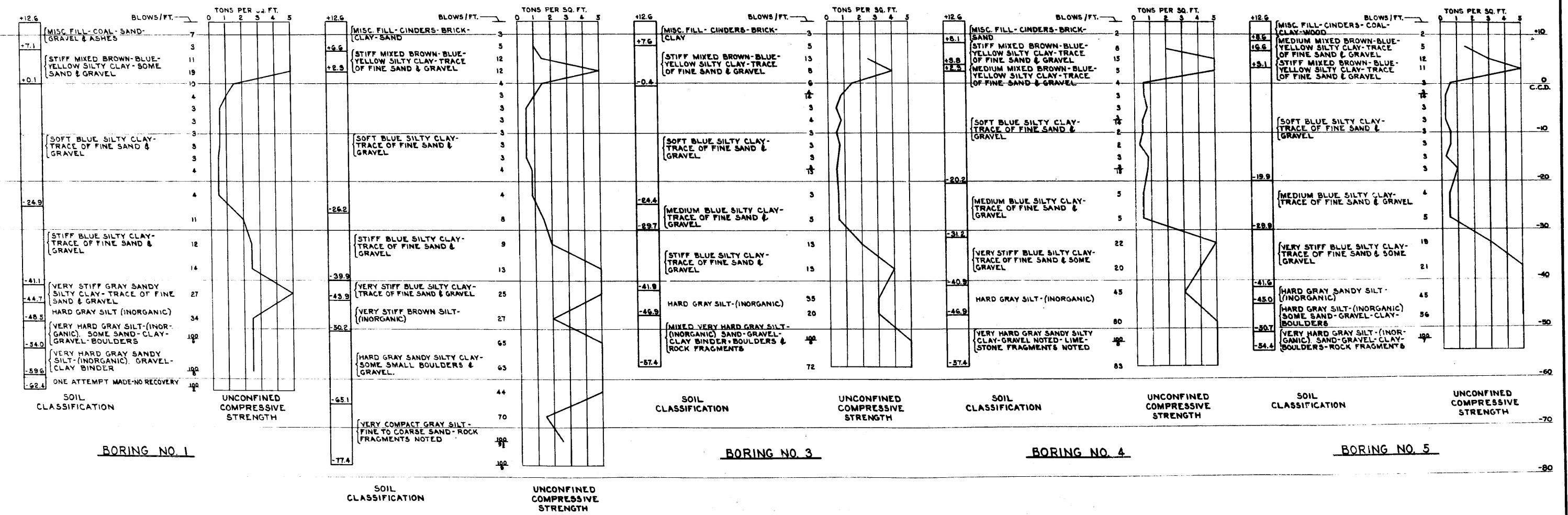
PILES DRIVEN WITH A MANDREL MAY BE OF LESS THAN 3/8" WALL THICKNESS & SHALL BE REINFORCED WITH 6-#6 BARS X 20'-0" LONG CAST IN THE UPPER SECTION OF THE PILE.

NOTE "A"

ALL PILES SUPPORTING APPROACH SLABS SHALL BE REINFORCED WITH 6-#6 BARS X 20'-0" LONG CAST IN THE UPPER SECTION OF THE PILE.

ALL PILING REINFORCEMENT MUST BE FABRICATED IN A CAGE WITH SPURS TIES ETC AS SHOWN & LOWERED INTO SHELL AS A UNIT.

SEE ART. 62.4 OF THE STANDARD SPECIFICATION.



DE LEUW, CATHER & CO. ENGINEERS
 DESIGNED BY
 DRAWN BY H.W. LYON
 CHECKED J.B. SASSMAN O. NELSON
 IN CHARGE

CONGRESS STREET EXPRESSWAY
 PAULINA STREET BRIDGE
 SECTION 3-B-5
 BORING DATA

SCALE: AS NOTED

ROAD ISSUE	SECTION	COUNTY	TOTAL	DATE
ROUTE NO.	3-B-5	COOK	29	11
F.A. 131				
FILE NO. 104	ILLINOIS	FILE AND PROJECT	U.126100	

DESIGN DATA

LOADINGS:

DEAD LOAD

CONCRETE 150#/C.F.
2" WEARING SURFACE 25#/S.F.

LIVE LOAD

H20-S16-44 AASHTO SPEC. OF 1949
16" WHEEL LOAD USED IN DESIGN OF
CONCRETE DECK AND APPROACH SLAB.

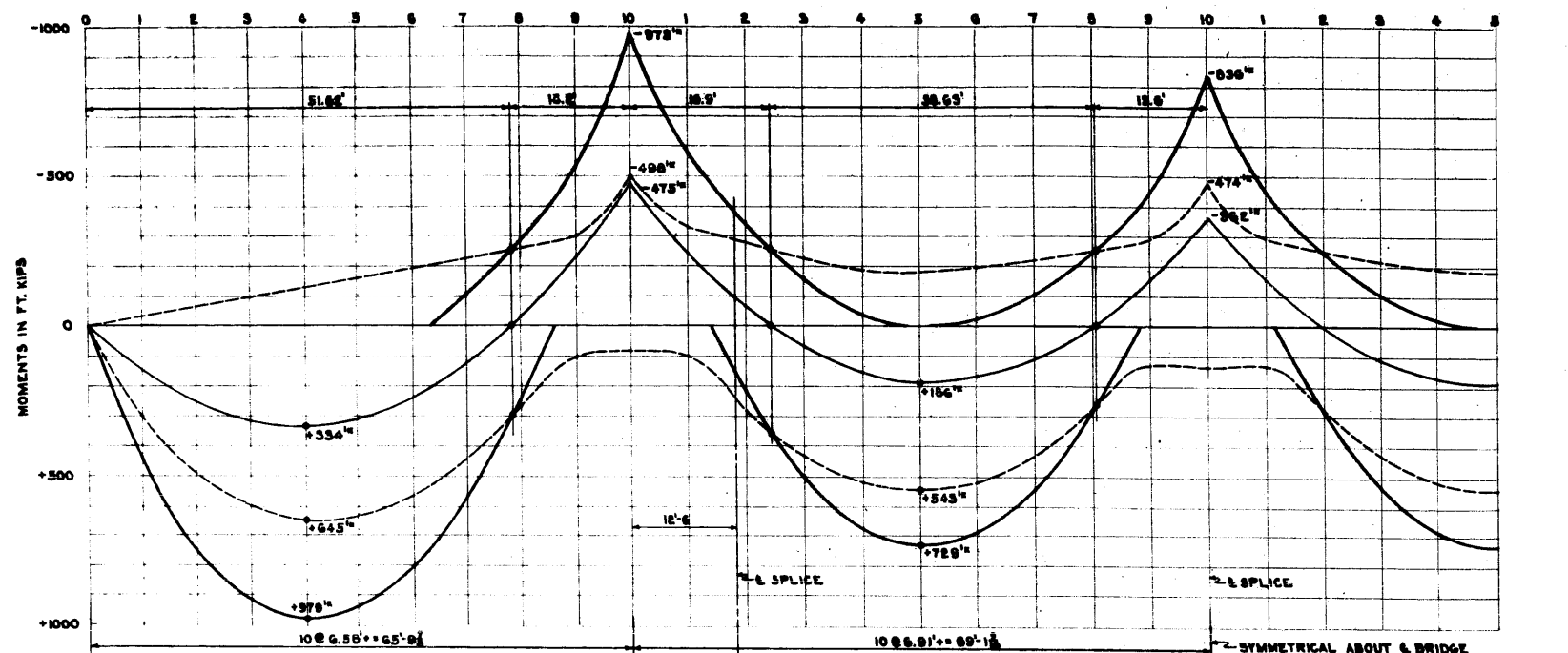
EARTH PRESSURE

UNIT WEIGHT 116#/C.F.
MAX. LATERAL PRESSURE 46%/S.F.
MIN. LATERAL PRESSURE 31%/S.F.
WALL FRICTION NEGLECTED

TEMPERATURE

EXPANSION COEFFICIENT FOR CONCRETE
.000006

ALL DESIGN CRITERIA, LOADS AND DISTRI-
BUTION, FORCES, WORKING STRESSES, CON-
STRUCTION AND SPECIFICATIONS TO CONFORM
TO AASHTO STANDARD SPECIFICATIONS FOR
HIGHWAY BRIDGES, 5TH EDITION, 1949, UNLESS
OTHERWISE NOTED.



MOMENT DIAGRAM

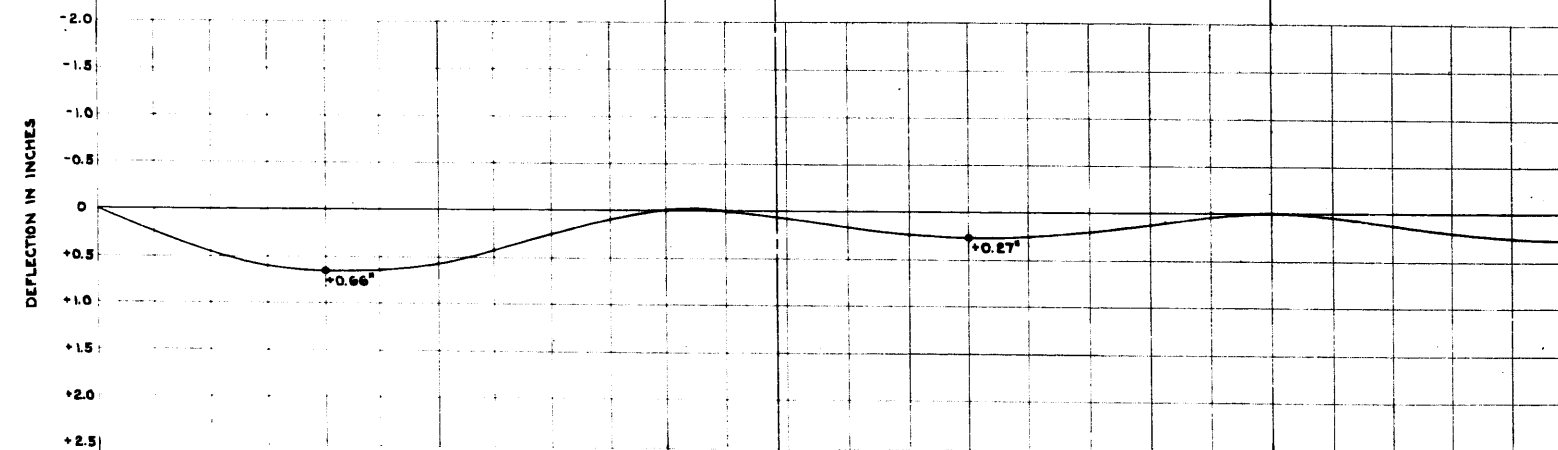
INTERIOR STRINGER

HORIZ. SCALE 1"=10'

VERT. SCALE 1"=300'

LEGEND

— DEAD LOAD
- - - L.L. - H20-S16-44 - IMPACT INCLUDED
... TOTAL LOAD (D.L. + MAX. L.L. + IMPACT)

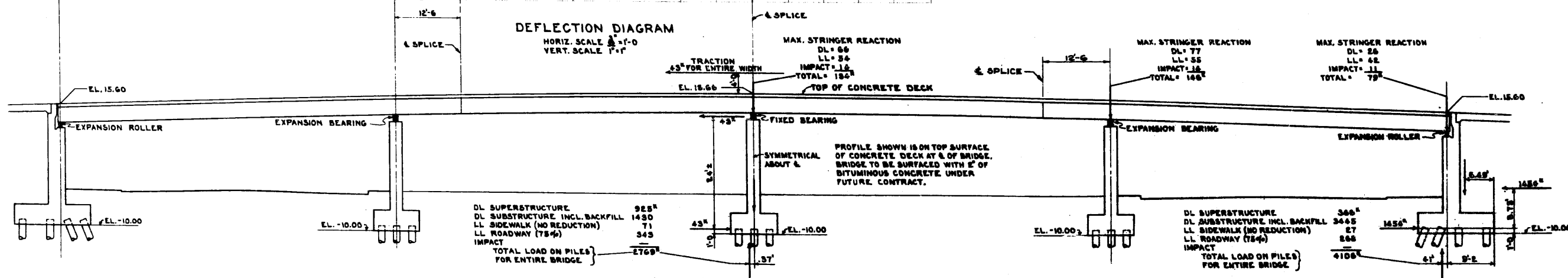


DEFLECTION DIAGRAM

INTERIOR STRINGER

HORIZ. SCALE 1"=10'

VERT. SCALE 1"=1"



REACTION DIAGRAM

SCALE 1"=10'

DE LEUW, CATHIER & CO. ENGINEERS

DESIGNED BY R.E. HEWITSON

DRAWN BY H.W. LYON

CHECKED O. NELSON

IN CHARGE J. NELSON

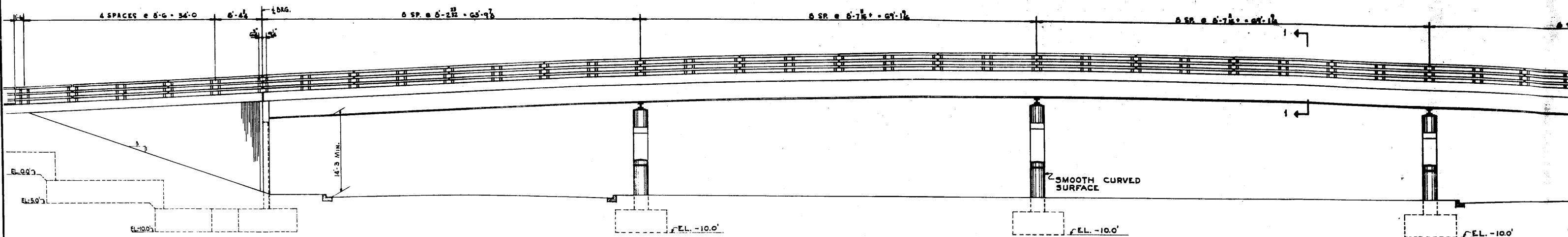
CONGRESS STREET EXPRESSWAY

PAULINA STREET BRIDGE

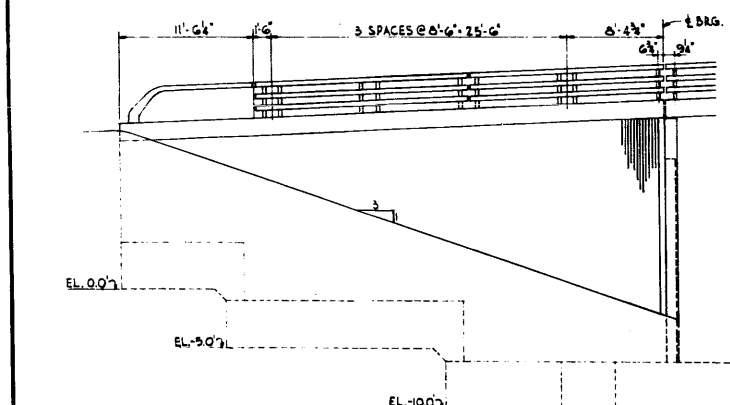
SECTION 3-B-5

DESIGN DATA

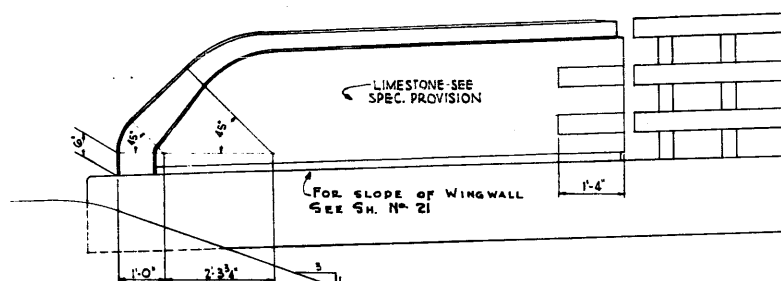
SCALE AS NOTED



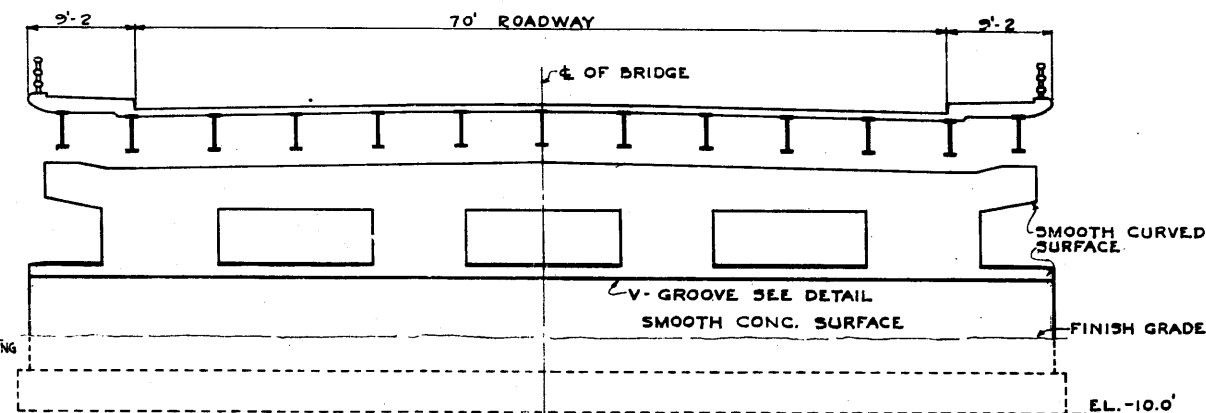
EAST ELEVATION OF BRIDGE
WEST ELEVATION OPPOSITE HAND
SCALE 1/8" = 1'-0"



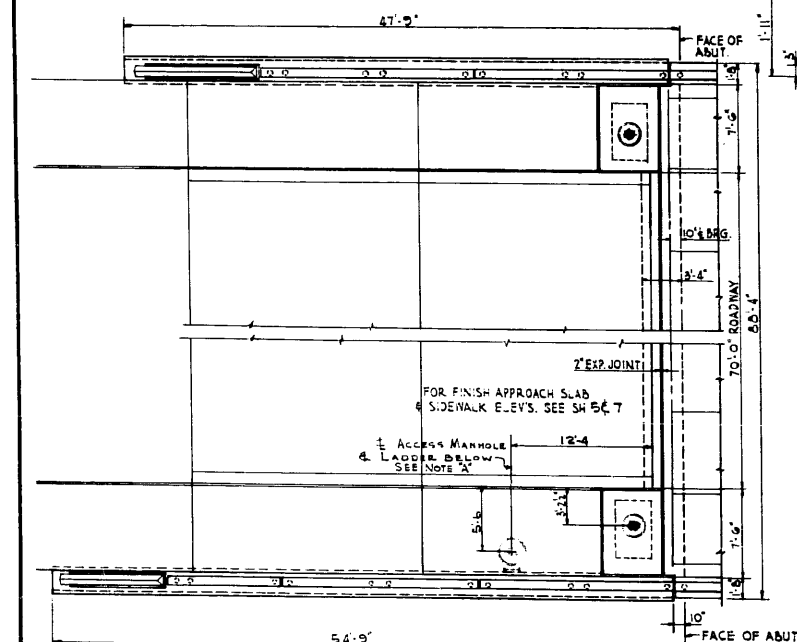
ELEVATION WEST WINGWALL NORTH ABUT.
SCALE 1/8" = 1'-0"



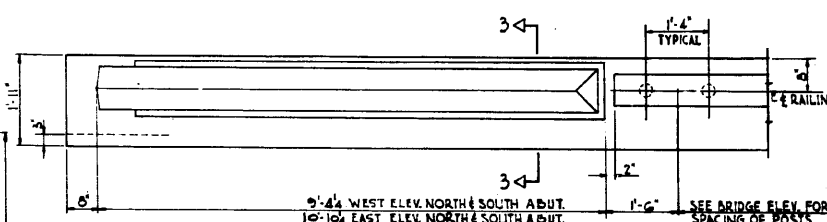
ELEVATION OF PYLON
SCALE 1/2" = 1'-0"



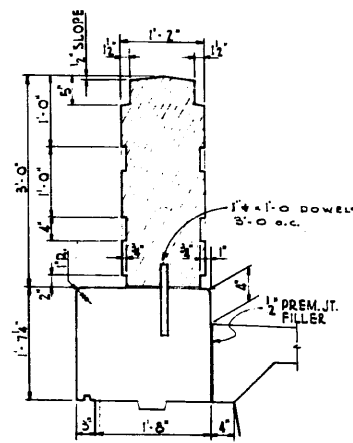
ELEVATION OF PIER
SCALE 1/8" = 1'-0"



PARTIAL PLAN OF SOUTH BRIDGE APPROACH
SEE NORTH & SOUTH APPROACH SLAB
SECTIONS & ELEVATIONS ON SH. 5 & 7
SCALE 1/8" = 1'-0"



PLAN OF PYLON
SCALE 1/2" = 1'-0"



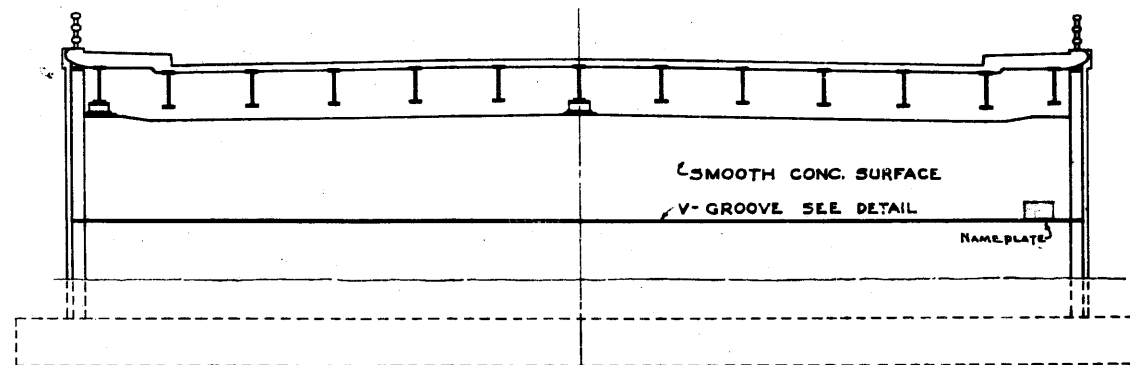
SECTION 3-3
SCALE 3/4" = 1'-0"

CONGRESS ST. EXPRESSWAY
AT
PAULINA STREET
F.A. ROUTE 131 SEC. 36-5 37-5
F.A. PROJ. U.I. 26(68)
STATION 192+24.25
LOADING H20-S16
1953

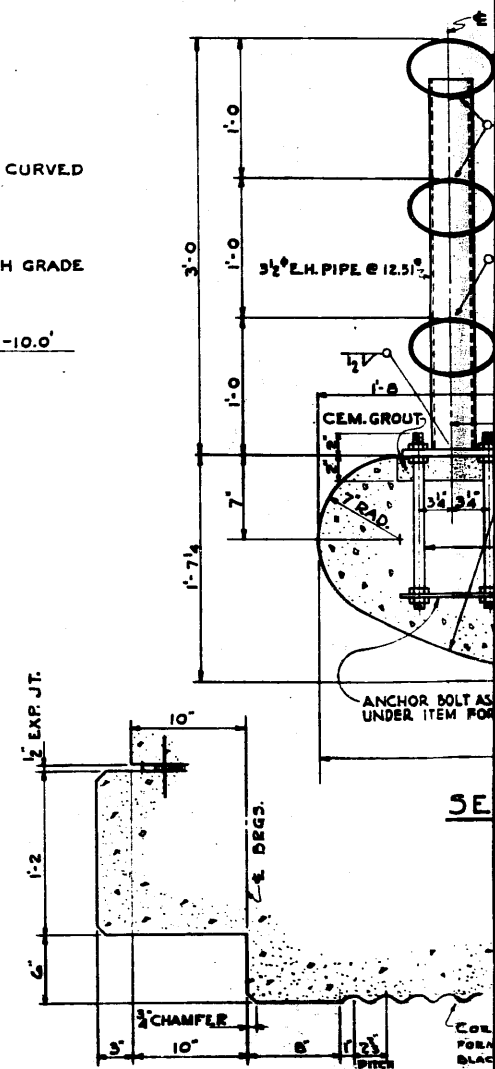
SO. ABUT. STANDARD 2066
INSCRIPTION TO BE USED ON
NAME PL. SEE SH. 20
FOR LOCATION

BUILT BY
STATE OF ILLINOIS
WITH THE CO-OPERATION OF
CITY OF CHICAGO
COUNTY OF COOK
FEDERAL GOVERNMENT
1953

N. ABUT. STANDARD 2067



ELEVATION OF SOUTH ABUTMENT
SCALE 1/8" = 1'-0"

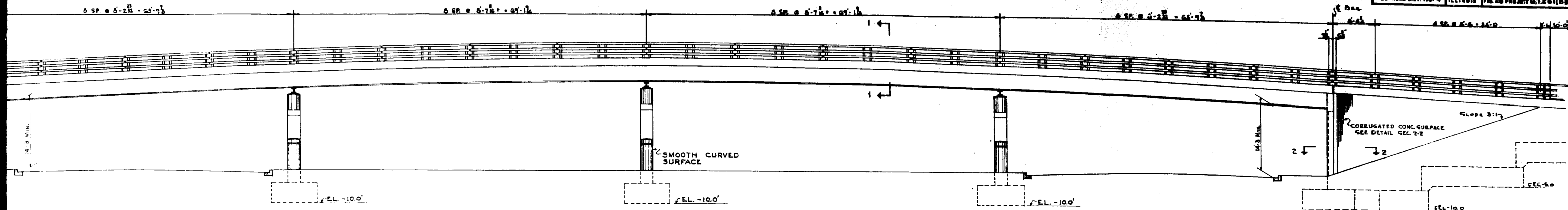


SECTION 2-2
SCALE 1/2" = 1'-0"

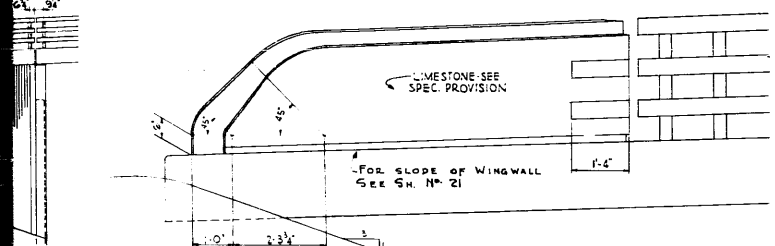
DE LEUW, CATHER & CO ENGINEERS
DESIGNED BY
DRAWN BY A.K. MAGENNIS
CHECKED O. NELSON
IN CHARGE

NOTE: MANHOLE CLOW NATIONAL F3336
FRAME & COVER OR EQUAL. INCLUDE
IN CLASS X CONCRETE.

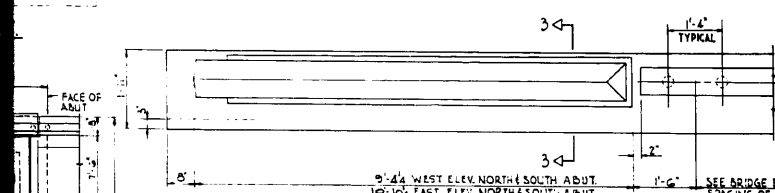
BOND ISSUE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 131	3-B-5	COOK	29	12
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT NO. 1261(60)				



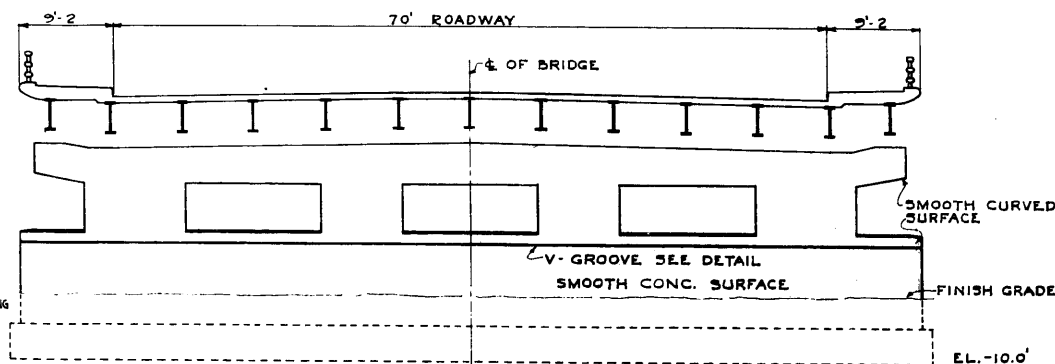
EAST ELEVATION OF BRIDGE
WEST ELEVATION OPPOSITE HAND
SCALE 1/8"=1'-0"



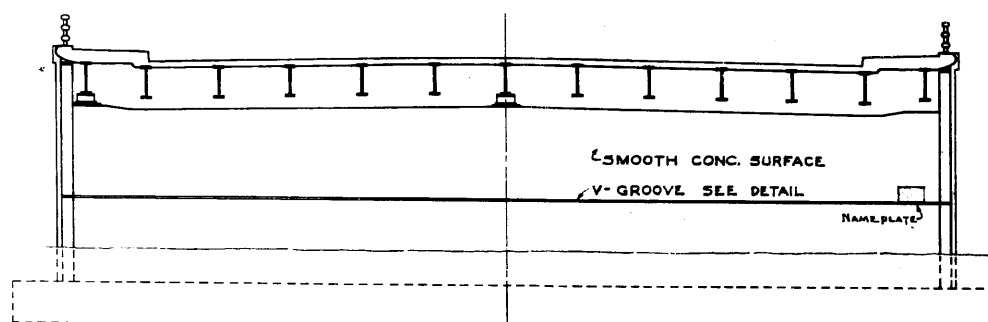
ELEVATION OF PYLON
SCALE 1/2"=1'-0"



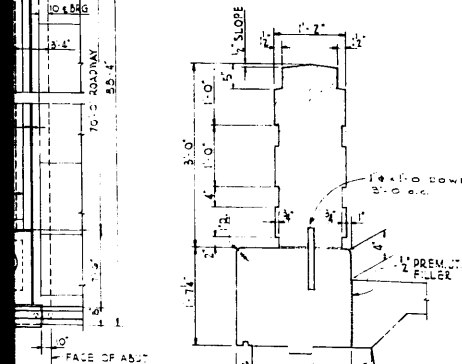
PLAN OF PYLON
SCALE 1/2"=1'-0"



ELEVATION OF PIER
SCALE 1/8"=1'-0"



ELEVATION OF SOUTH ABUTMENT
SCALE 1/8"=1'-0"



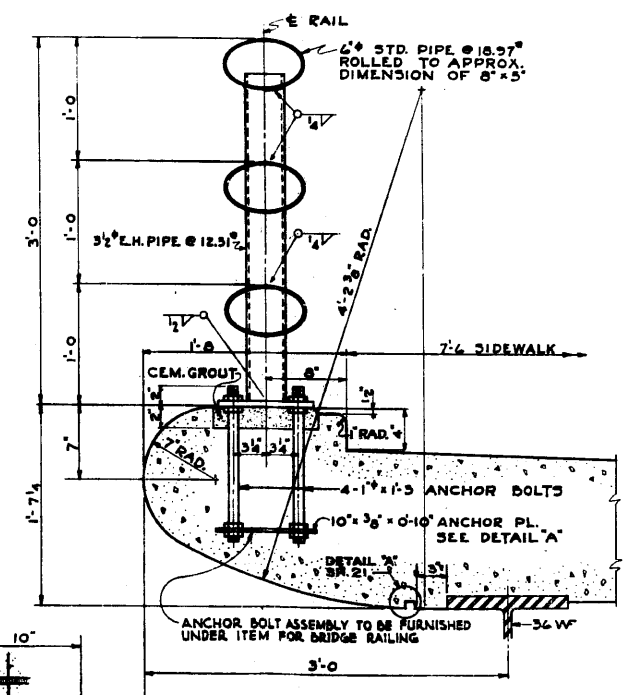
SECTION 3-3
SCALE 1/2"=1'-0"

CONGRESS ST. EXPRESSWAY
AT
PAULINA STREET
FA. ROUTE 131 SEC. 38-5 3P-5
FA. PROJ. U.I. 20(60)
STATION 292+24.25
LOADING H20-S16
1953

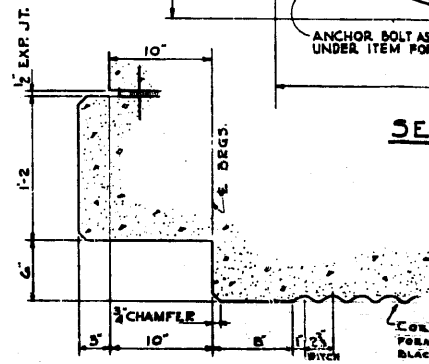
S.O. ABUT. STANDARD 2006
INSCRIPTION TO BE USED ON
NAME PL. SEE SH. 20
FOR LOCATION

BUILT BY
STATE OF ILLINOIS
WITH THE CO-OPERATION OF
CITY OF CHICAGO
COUNTY OF COOK
FEDERAL GOVERNMENT
1953

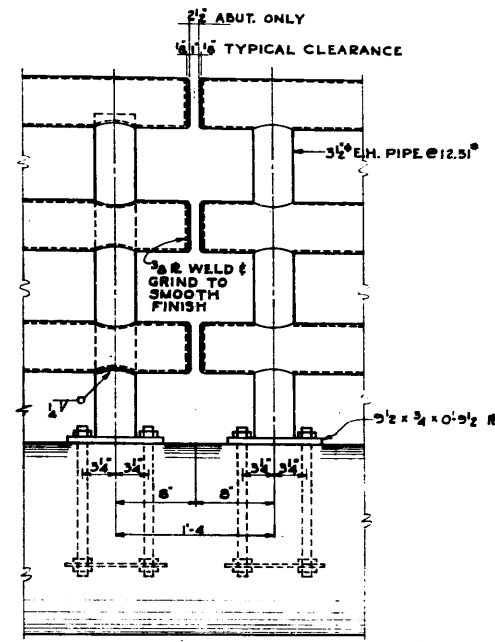
N. ABUT. STANDARD 2007



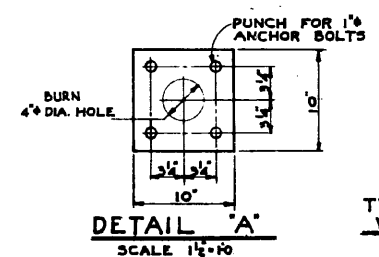
SECTION 1-1
SCALE 1/2"=1'-0"



SECTION 2-2
SCALE 1/2"=1'-0"



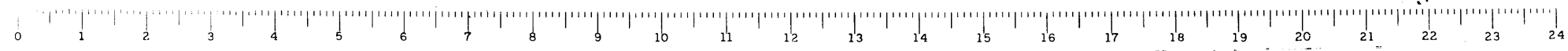
**TYPICAL SECTION
V-GROOVE DETAIL**



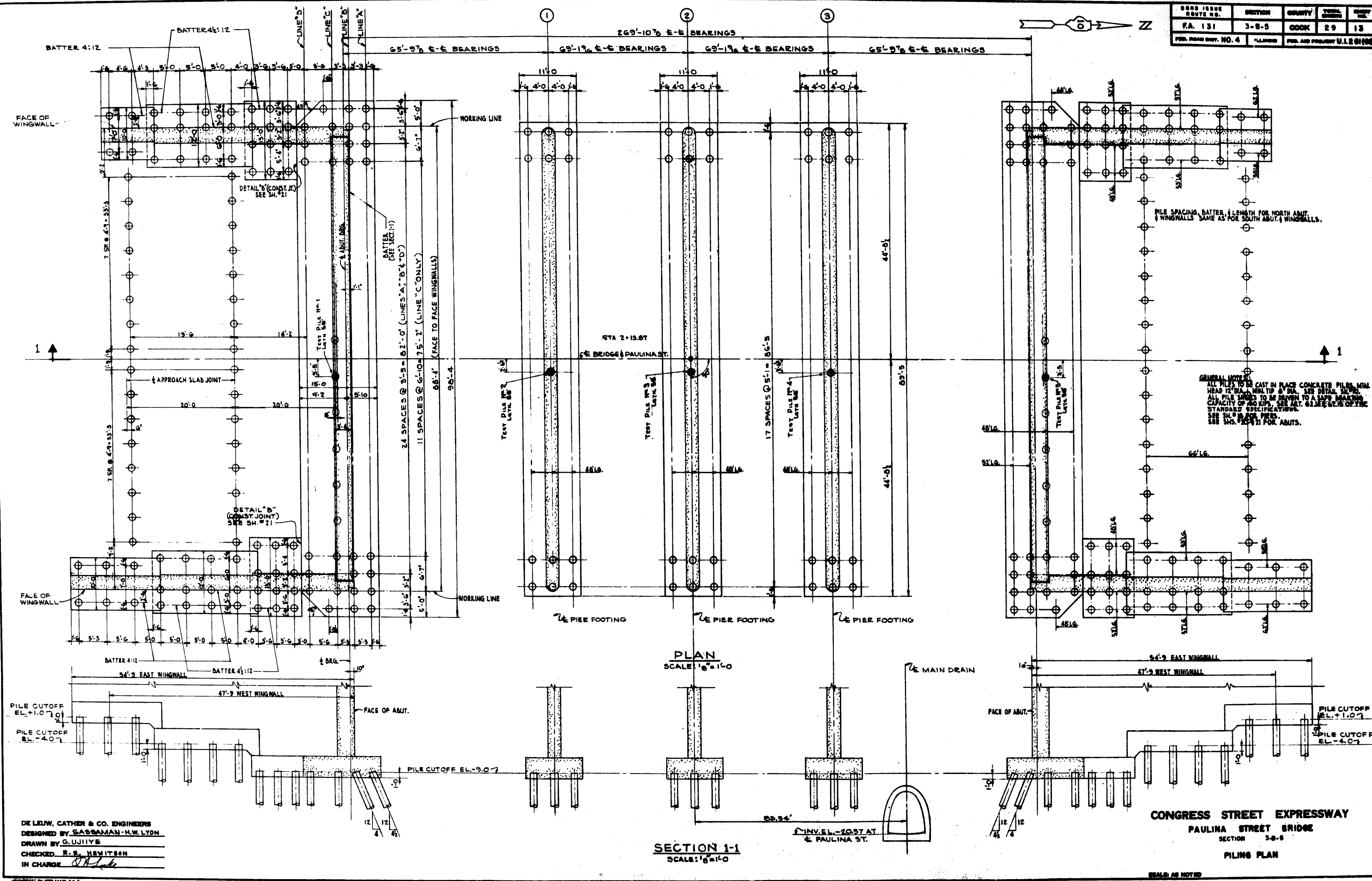
DETAIL 'A'
SCALE 1/2"=1'-0"

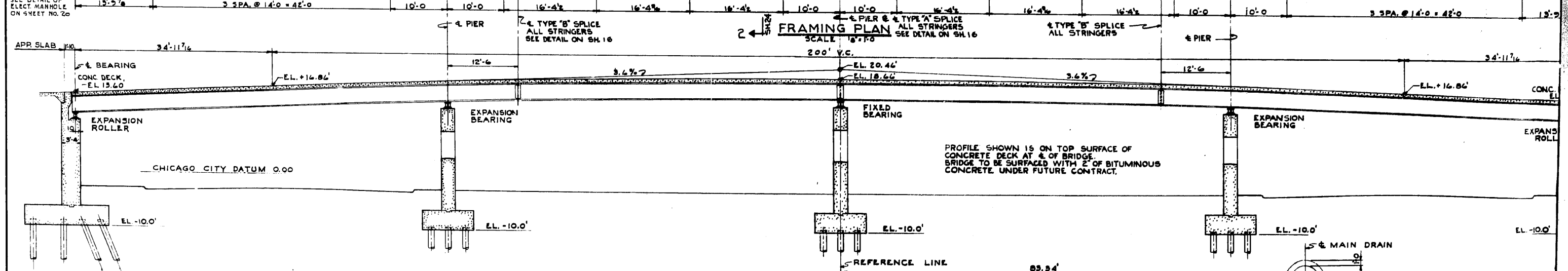
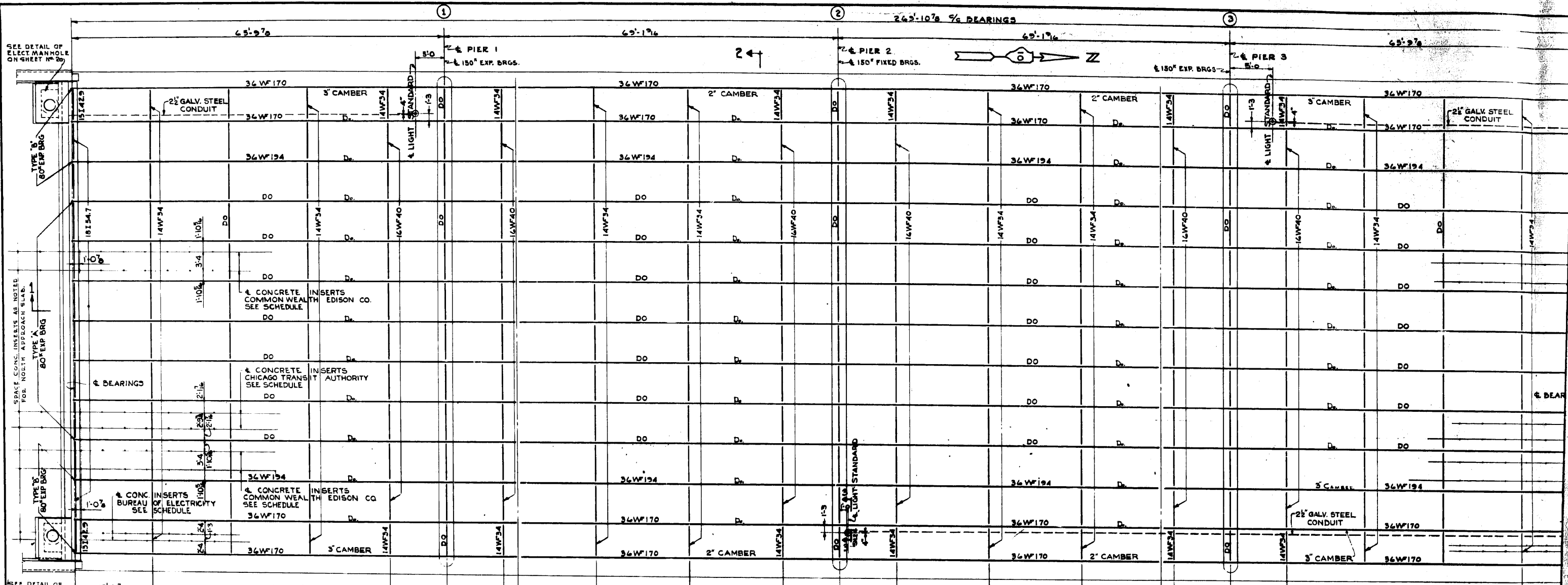
CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5
ARCHITECTURAL ELEVATION & DETAILS

CLASH NATIONAL F3335
COVER OR EQUAL INCLUDES
CONCRETE



BRIDGE ISSUE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 131	3-B-5	COOK	29	13
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I. 204(000)		

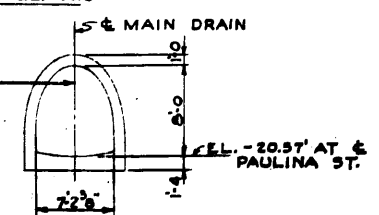




SECTION 1-1
SCALE 1/8"=1'-0"

DE LEUW, CATHY & CO. ENGINEERS
DESIGNED BY R.E. HEWITSON-HWILYON
DRAWN BY A.K. MAGENNIS
CHECKED BY R. S. SAMMAN O. NELSON
IN CHARGE *[Signature]*

PROFILE SHOWN IS ON TOP SURFACE OF
CONCRETE DECK AT E. OF BRIDGE.
BRIDGE TO BE SURFACED WITH 2" OF BITUMINOUS
CONCRETE UNDER FUTURE CONTRACT.



SEE DETAIL OF
ELECT. MANHOLE
ON SHEET NO. 20

TYPE 'B' 80\"/>

ROAD ISSUE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 131	3-B-5-3-F-5	COOK	29	14
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I. 261(60)		

BRIDGE DECK NOTES

SEE THIS SHEET FOR PROFILE OF ROADWAY AND SH. #14 FOR SECTION 2-1' CROSS-SECTION OF BRIDGE DECK, ALSO 'DECK CONST. JTS' AND DEAD LOAD DEFLECTION FOR CONCRETE' ON SH. #15.

THE CONCRETE SURFACE OF CURB AND WALK IS INTENDED TO CONFORM TO THE ROADWAY PROFILE AND CROSS-SECTIONS. FORMS AND SCREEDS SHOULD BE SET ABOVE THE THEORETICAL ELEVATIONS BY THE AMOUNT SHOWN ON THE DIAGRAM DEAD LOAD DEFLECTION FOR CONCRETE. THE CONCRETE DECK OF THE ROADWAY SHOULD BE POURED TO THE THICKNESS SHOWN.

THE STRINGERS HAVE BEEN CAMBERED TO PROVIDE FOR VERTICAL CURVE OF THE ROADWAY PLUS DEAD LOAD DEFLECTION.

SEE SHEET NO. 16 FOR CAMBER DIAGRAM.

TOTAL ESTIMATED WEIGHT OF DECK STRUCTURAL STEEL INCLUDING SPLICES & DIAPHRAGMS = 407,298 LBS.

SEE SH. 24 FOR DETAIL OF CONDUIT HANGERS, INSERTS ETC.

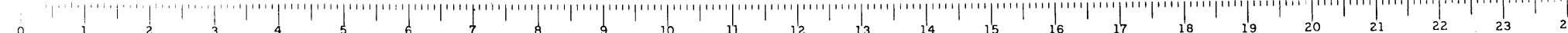
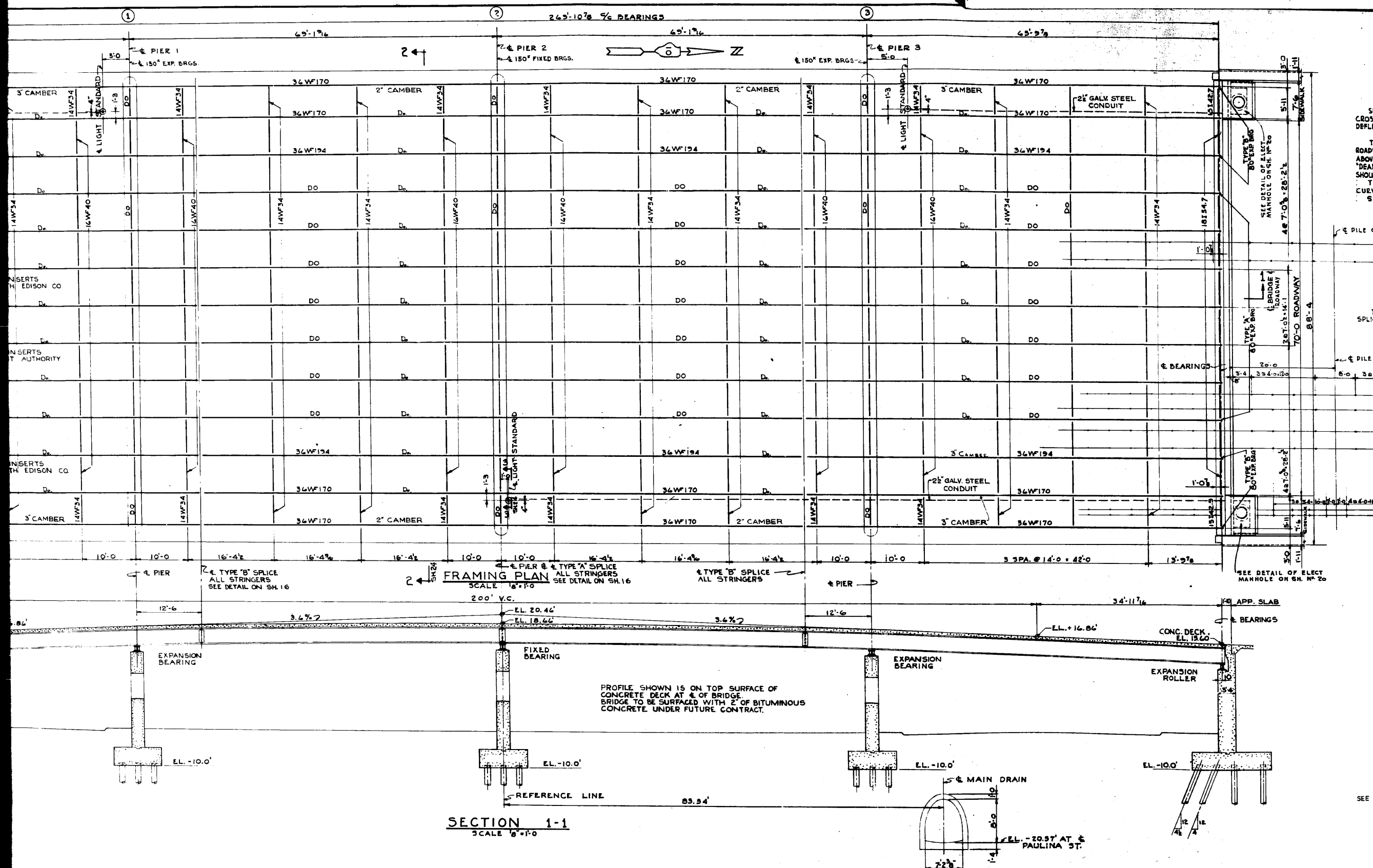
SEE SH. 2 FOR DETAIL OF CONSTRUCTION UNDER APPROACH SLAB.

CONCRETE INSERT SPACING SCHEDULE			
BUREAU OF ELECTRICITY COMMON WEALTH EDISON CO. CHICAGO TRANSIT AUTHORITY			
SPACING FROM S. ABUT.		SPACING FROM PIER #2	
FROM 4 BRG.	1'-0"	FROM 4 BRG.	1'-0"
3 @ 3'-11"	11'-9"	2 @ 4'-0"	8'-0"
TO DIAFRAM	1'-0"	TO DIAFRAM	1'-0"
FROM	3'-0"	FROM	3'-0"
2 @ 4'-0"	8'-0"	3 @ 4'-0"	12'-0"
TO DIAFRAM	3'-0"	TO DIAFRAM	1'-4 1/2"
FROM	1'-0"	FROM	2'-9 1/2"
3 @ 4'-0"	12'-0"	3 @ 4'-1"	12'-3"
TO DIAFRAM	1'-0"	TO DIAFRAM	1'-4"
FROM	3'-0"	FROM	2'-9"
2 @ 4'-0"	8'-0"	3 @ 4'-2"	12'-6"
TO DIAFRAM	3'-0"	TO DIAFRAM	1'-1 1/2"
FROM	1'-0"	FROM	3'-0"
2 @ 4'-0"	8'-0"	1 @ 4'-0"	4'-0"
TO 4 BRG. PIER #1	1'-0"	TO 4 BRG. PIER #3	3'-0"
TOTAL	65'-9 1/2"	TOTAL	65'-9 1/2"
FROM 4 BRG. PIER #1	3'-0"	FROM 4 BRG. PIER #3	1'-0"
1 @ 4'-0"	4'-0"	2 @ 4'-0"	8'-0"
TO DIAFRAM	3'-0"	TO DIAFRAM	1'-0"
FROM	1'-1 1/2"	FROM	3'-0"
3 @ 4'-2"	12'-6"	TO DIAFRAM	8'-0"
TO DIAFRAM	2'-9"	TO DIAFRAM	3'-0"
FROM	1'-4"	FROM	1'-0"
3 @ 4'-1"	12'-3"	3 @ 4'-0"	12'-0"
TO DIAFRAM	2'-9 1/2"	TO DIAFRAM	1'-0"
FROM	1'-4 1/2"	FROM	3'-0"
3 @ 4'-0"	12'-0"	2 @ 4'-0"	8'-0"
TO DIAFRAM	3'-0"	TO DIAFRAM	3'-0"
FROM	1'-0"	FROM	1'-0"
2 @ 4'-0"	8'-0"	3 @ 3'-11"	11'-9"
TO 4 BRG. PIER #2	1'-0"	TO 4 BRG. NABUT	1'-0"
TOTAL	65'-9 1/2"	TOTAL	65'-9 1/2"

SEE SHEET NO. 15 FOR GENERAL NOTES FOR STRUCTURAL STEEL

CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5 3-F-5
DECK FRAMING PLAN

SCALE: AS NOTED



BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 131	3-B-5 F.S.	COOK	29	18
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I.261(60)		

GENERAL NOTES

STRUCTURAL STEEL - RIVETING, WELDING, PAINTING

DESIGN SPECS. -

AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS' STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 5TH EDITION, DATED 1949, AND THE AMERICAN WELDING SOCIETY STANDARD SPECIFICATION FOR WELDED HIGHWAY AND RAILWAY BRIDGES. SEE ALSO SPECIAL PROVISIONS.

CONSTRUCTION SPECS. -

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF ILLINOIS, 1952.

ALL STRUCTURAL STEEL TO CONFORM TO THE SPECIFICATIONS FOR STEEL FOR BRIDGES AND BUILDINGS, A.S.T.M. DESIGNATION A7 EXCEPT WHERE NOTED OTHERWISE. $f_y = 18,000$ P.S.I.

RIVETS TO BE $\frac{7}{8}$ " AND HOLES $\frac{1}{4}$ " EXCEPT AS NOTED.

ALL RIVET HOLES IN BEAM SPLICES TO BE SUB-PUNCHED $\frac{1}{4}$ " AND REAMED TO SIZE OR DRILLED IN PLACE.

BEAMS TO BE ERECTED FULL-LENGTH IN SHOP BEFORE REAMING AND INSPECTION.

STRUCTURAL STEEL AND HANDRAILS SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT. PARTS INACCESSIBLE AFTER ERECTION SHALL HAVE TWO SHOP COATS OF RED LEAD PAINT. FOR FIELD PAINT SEE SPECIAL PROVISIONS.

SHOP INSPECTION BY ILLINOIS DIVISION OF HIGHWAYS.

BEARING AND SPLICE NOTES

STEEL FOR EXPANSION ROLLERS, BEARINGS AND SPLICES SHALL CONFORM TO THE REQUIREMENTS OF ART. 124.3 AND 124.3 (D) OF THE STANDARD SPECIFICATIONS WHERE APPLICABLE.

ALL ROLLERS, ROCKERS AND BEARING PLATES SHALL BE FINISHED IN ACCORDANCE WITH ART. 58.4 (M) OF THE STANDARD SPECIFICATIONS AND WITH ANCHOR BOLTS TO BE SET IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THESE ITEMS ARE INCLUDED FOR PAYMENT AS STRUCTURAL STEEL.

THICKNESS OF SOLE PLATES IS GIVEN AT THE CENTERLINE OF BEARING. SOLE PLATES TO BE PLANNED TO COMPENSATE FOR SLOPE OF STRINGER AND STRINGER FLANGE VARIATION FROM NORMAL.

SEE FRAMING PLAN SH.14 FOR BEARING LOCATIONS.

FINISHED SURFACES OF BEARINGS AND ROLLERS TO BE SHOP COATED WITH WHITE LEAD AND TALLOW, OTHER SURFACES TO BE PAINTED.

SPLICE PLATES TO BE MATCH MARKED FOR SHIPMENT.

EXPANSION JOINT NOTES

SEE GENERAL NOTES FOR STRUCTURAL STEEL THIS SH.

EXPANSION JOINT ASSEMBLY SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE JOINT. IT SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.

COPPER BEARING STEEL CONFORMING TO ASTM-A7 WITH 2% COPPER ADDED SHALL BE USED FOR ALL EXPOSED PARTS.

ALL PARTS OF JOINT ASSEMBLY INCLUDING BRACKETS, STRAP ANCHORS AND ANCHOR BOLTS SHALL BE INCLUDED IN STRUCTURAL STEEL FOR PAYMENT.

JOINT SETTING INSTRUCTIONS

ALL DIMENSIONS MARKED 'N' SHOWN ON JOINT DETAILS ARE COMPUTED FOR THE SPACE AT THAT POINT BASED ON AN ASSUMED TEMPERATURE OF 50°F. THE DIMENSION 'N' ALSO INCLUDES A ONE INCH ALLOWANCE FOR POSSIBLE FORWARD MOVEMENT AT THE TOP OF THE ABUTMENT DUE TO EARTH PRESSURE, THRUST OF APPROACH SLAB ETC. DIMENSION 'N' WILL INCREASE OR DECREASE APPROXIMATELY ONE EIGHT INCH FOR EACH 10° DROP OR RISE IN TEMPERATURE, RESPECTIVELY FROM THE MEAN 50°. AT TIME CONCRETE ANCHORING JOINT ON ABUTMENT IS POURED, DIMENSION NOTED 2" N/ SHOULD BE ADJUSTED FOR TEMPERATURE AS INDICATED IN THE SCHEDULE. NOT LATER THAN 6 HOURS AFTER CONCRETE HAS BEEN POURED JOINT CONNECTION BOLTS SHOULD BE REMOVED.

WEIGHT OF DIAFRAMS INCLUDED IN DECK STRUCTURAL STEEL.

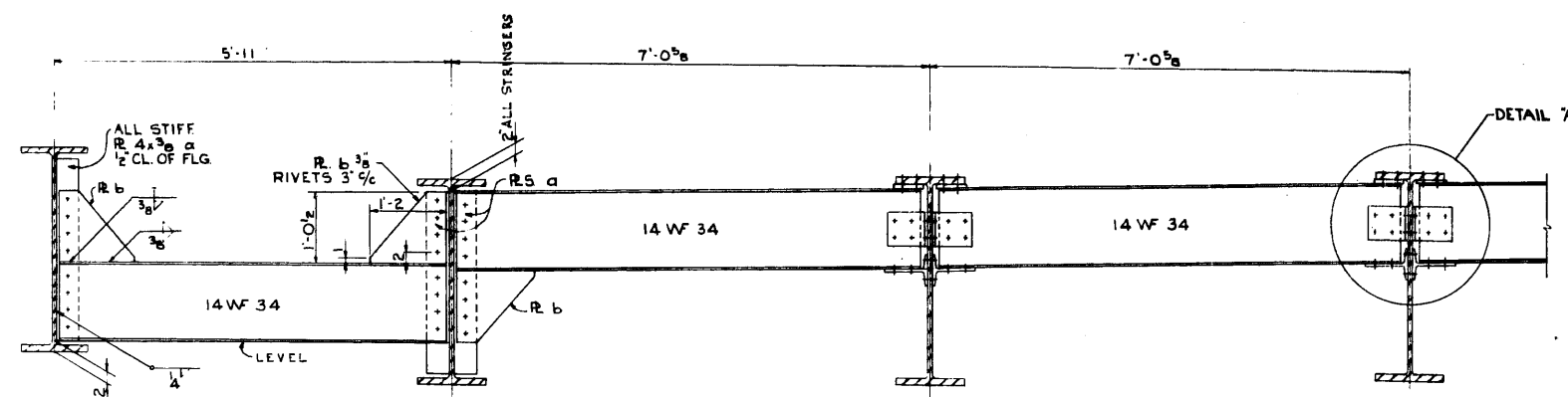
CONGRESS STREET EXPRESSWAY

AULINA STREET BRIDGE

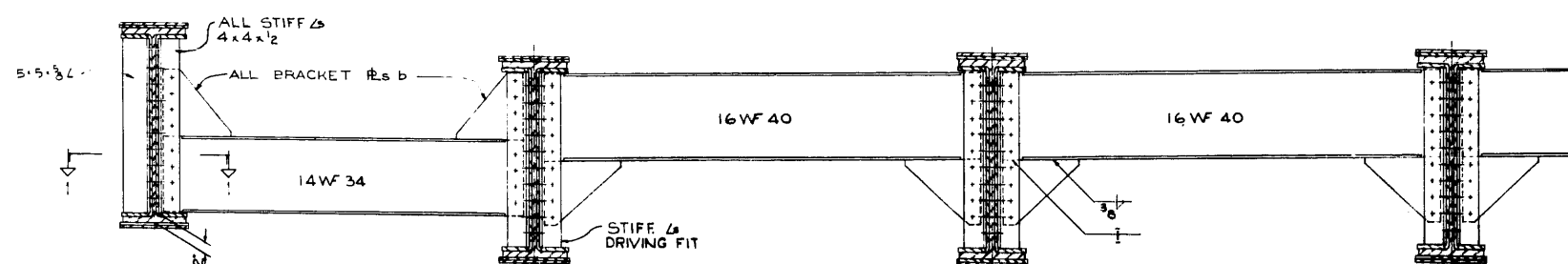
SECTIONS 3-B-5 3-F-5

DIAFRAM CONNECTIONS & DETAILS

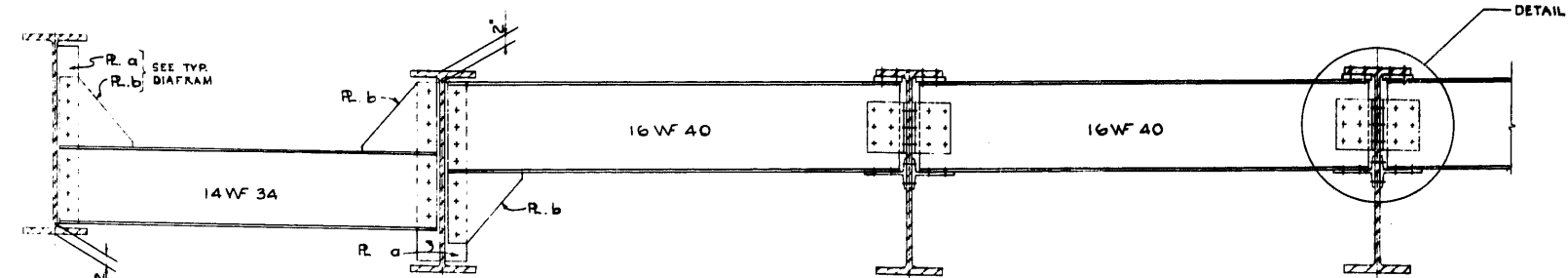
SCALE: AS NOTED



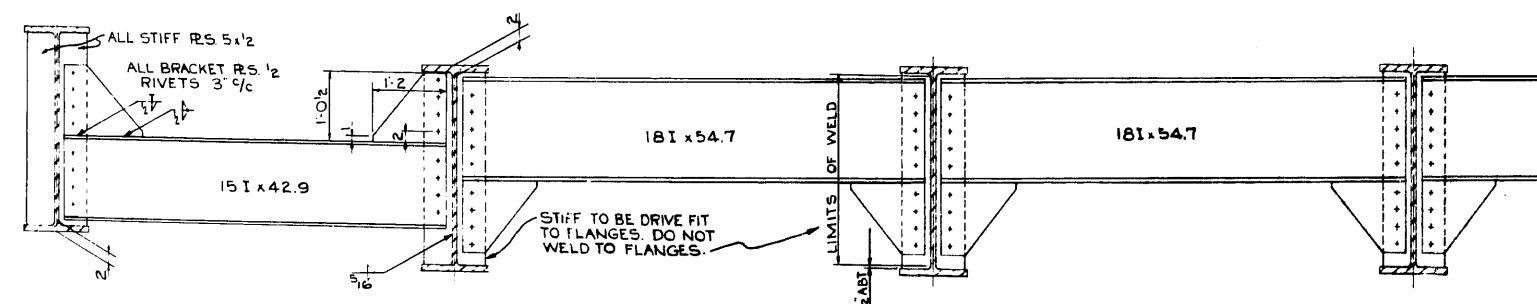
TYPICAL DIAFRAM
SCALE $\frac{3}{4}$ "=1'-0"



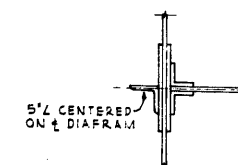
DIAFRAM AT PIER 2
SCALE $\frac{3}{4}$ "=1'-0"



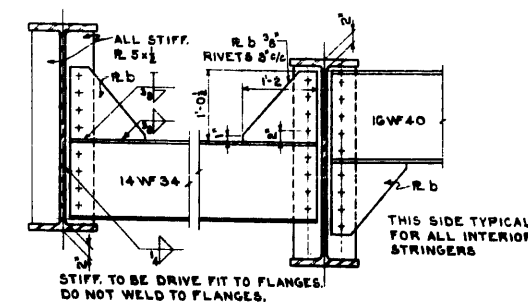
DIAFRAM AT DECK CONST JOINT
SCALE $\frac{3}{4}$ "=1'-0"



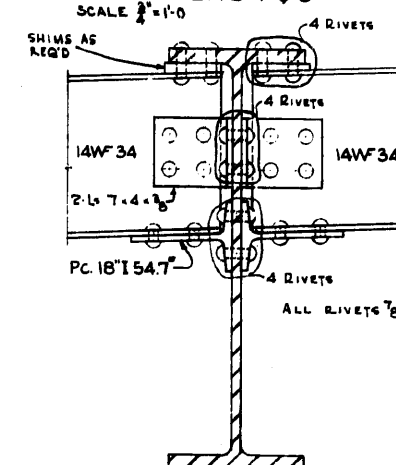
DIAFRAM AT ABUTMENT
SCALE $\frac{3}{4}$ "=1'-0"



SECTION 1-1
SCALE $\frac{3}{4}$ "=1'-0"



DIAFRAM AT PIERS 1 & 3
SCALE $\frac{3}{4}$ "=1'-0"



DETAIL "A"
DETAIL "B" SIMILAR
SCALE $\frac{1}{2}$ "=1'-0"

DE LEUW, CATHAR & CO. ENGINEERS

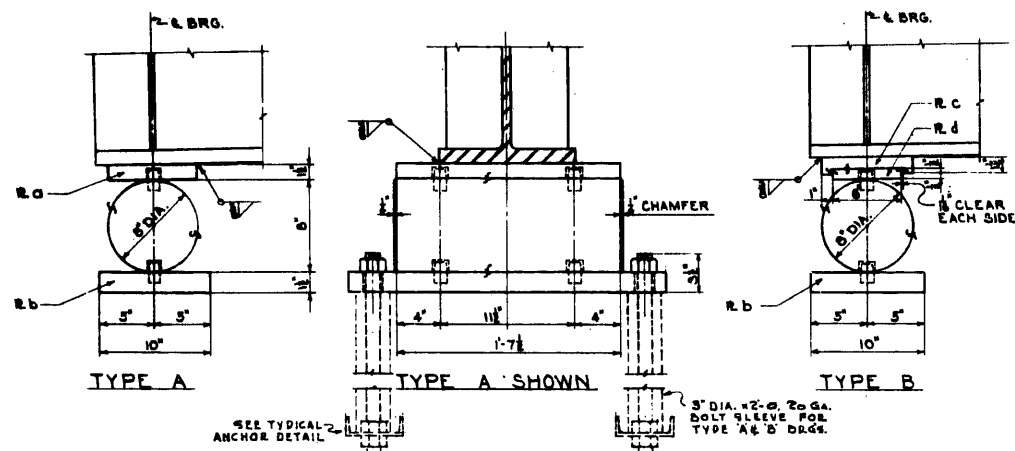
DESIGNED BY S. Greenberg

DRAWN BY J. R. GASSMAN

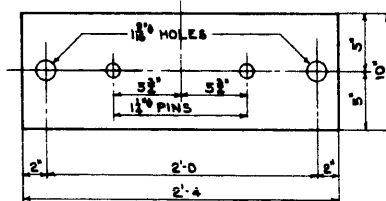
CHECKED O. NELSON, W. C. TAYLOR

IN CHARGE J. H. NELSON

BRIDGE ISSUE	SECTION	COUNTY	TOTAL	SHEET
ROUTE NO.	3-B-5 3-F-5	COOK	29	16
F.A. 131				
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I. 261(68)		

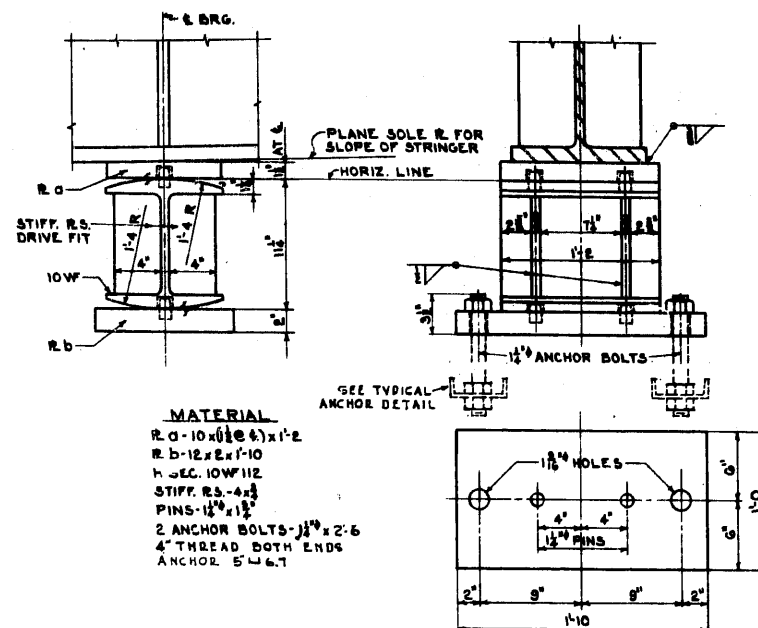


MATERIAL-TYPE A
 R.C. 8x12x1-7
 R.B. 10x12x2-4
 ROLLER 8x1-8
 PINS 1/2x1-1/2
 2 ANCHOR BOLTS 1/2x2-6
 4 THREAD BOTH ENDS
 ANCHOR 5-6.7

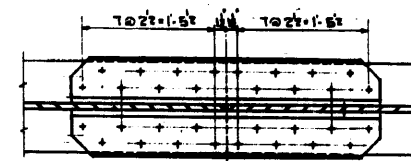
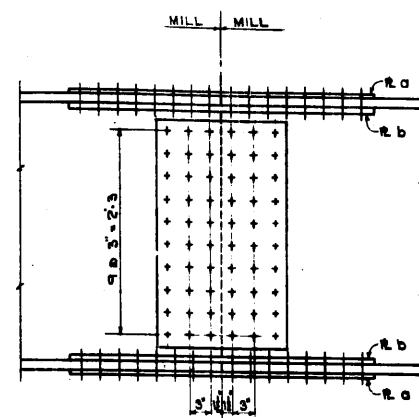
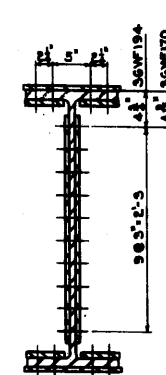
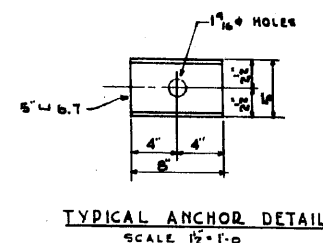


80° EXPANSION BEARING
 SCALE 1/2"=1'-0"

MATERIAL-TYPE B
 R.B. 10x12x2-4
 R.C. 8x12x1-7
 R.D. 6x1x1-7
 ROLLER 8x1-8
 PINS 1/2x1-1/2
 2 ANCHOR BOLTS 1/2x2-6
 4 THREAD BOTH ENDS
 ANCHOR 5-6.7



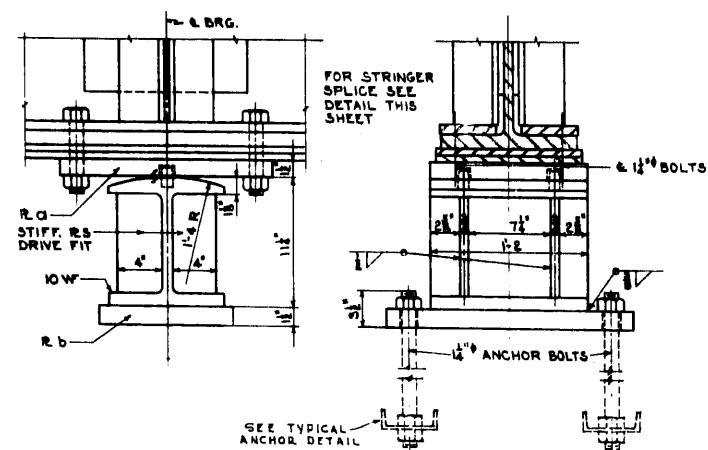
150° EXPANSION BEARING
 SCALE 1/2"=1'-0"



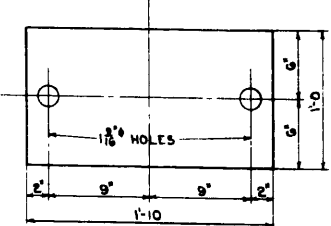
MATERIAL - 36WF170
 FLANGE R.C. 13x1/2x5-5
 R.B. 5x1/2x5-5
 WEB R.C. 18x1/2x2-6
 1/2" RIVETS



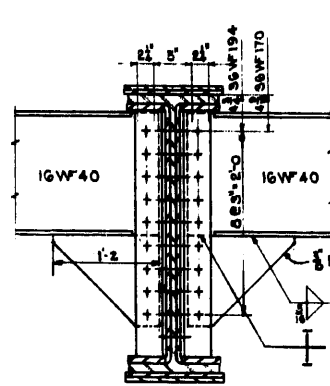
MATERIAL - 36WF194
 FLANGE R.C. 13x1/2x5-5
 R.B. 5x1/2x5-5
 WEB R.C. 18x1/2x2-6
 1/2" RIVETS



MATERIAL
 R.C. 14x12x1-7
 R.B. 12x12x1-10
 H SEC. 10W112
 STIFF R.S. 4x1/2
 PINS 1/2x1-1/2
 4-1/2" BOLTS
 2 ANCHOR BOLTS 1/2x2-6
 4 THREAD BOTH ENDS
 ANCHOR 5-6.7

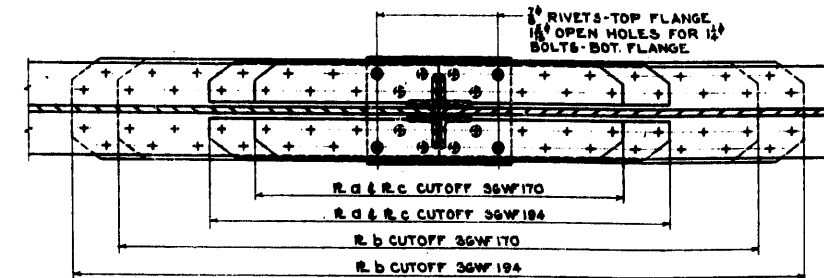
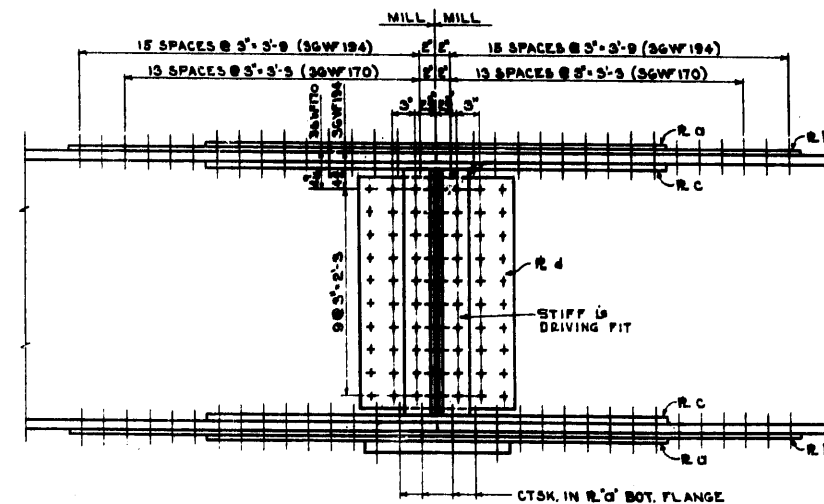


150° FIXED BEARING
 SCALE 1/2"=1'-0"



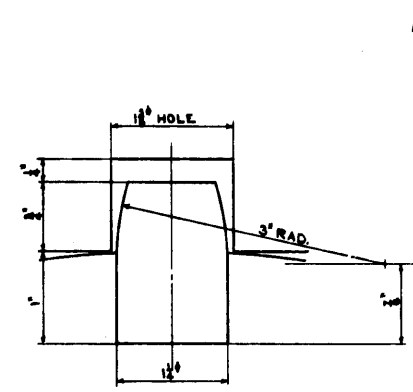
MATERIAL - 36WF194
 FLANGE R.C. 13x1/2x5-1
 R.B. 13x1/2x5-1
 R.C. 5x1/2x5-1
 WEB R.C. 20x1/2x2-6
 4 L.S. 4x4x1/2
 1/2" RIVETS

MATERIAL - 36WF170
 FLANGE R.C. 13x1/2x4-1
 R.B. 13x1/2x4-1
 R.C. 5x1/2x4-1
 WEB R.C. 20x1/2x2-6
 4 L.S. 4x4x1/2
 1/2" RIVETS



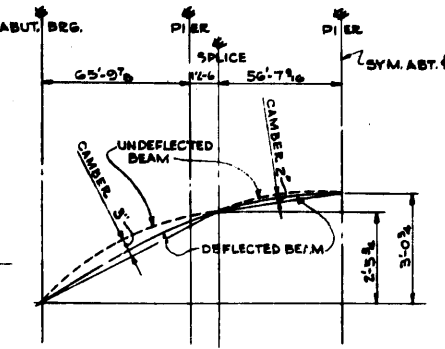
TYPE 'A' SPLICE
 SCALE 1"=1'-0"

TYPE 'B' SPLICE
 SCALE 1"=1'-0"



1/2" PIN PRESS FIT INTO
 ROLLER, ROCKER OR BED R.
 1/2" DRILLED HOLE IN SOLE
 R. OR ROLLER.
 SEE DETAILS OF BEARINGS.

DETAIL OF PINS
 FULL SIZE



NOTE:
 CAMBER ORDERED TO PROVIDE
 FOR DEAD LOAD DEFLECTION PLUS
 VERTICAL CURVE OF ROADWAY.
 DEFLECTED BEAM LINE IS APPROXIMATELY
 PARALLEL TO THE ROADWAY PROFILE.

CAMBER DIAGRAM

WEIGHT OF SPLICES INCLUDED IN DECK STRUCTURAL
 STEEL.
 TOTAL ESTIMATED WEIGHT OF BEARING
 INCLUDING ANCHOR BOLTS 31,489 LBS.

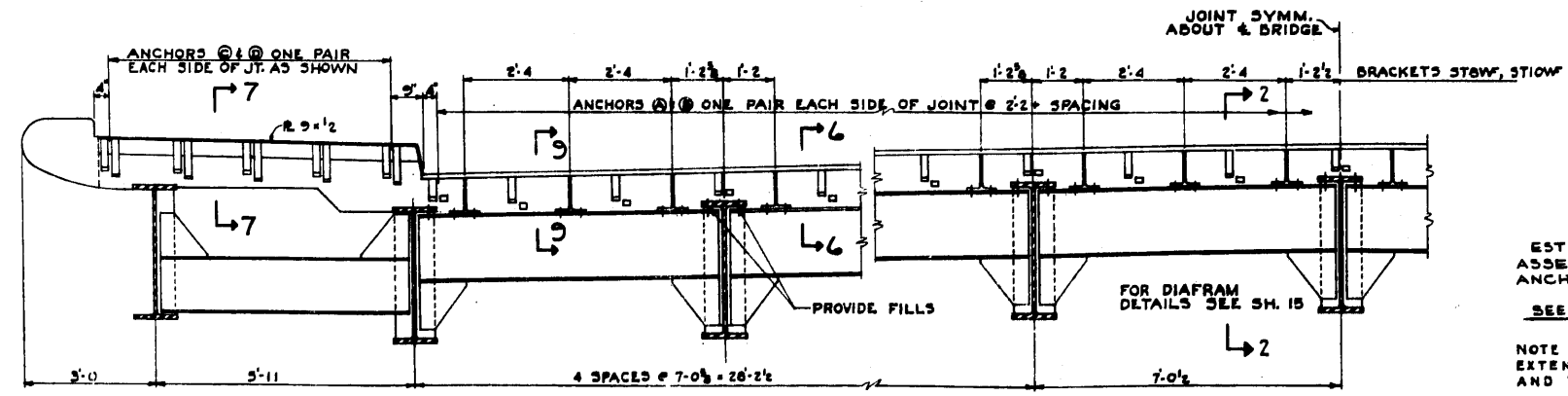
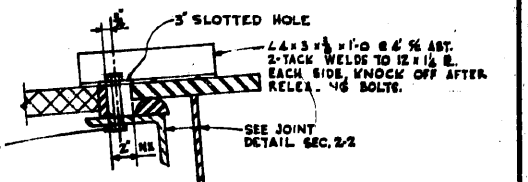
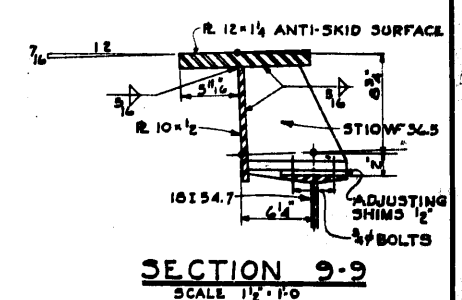
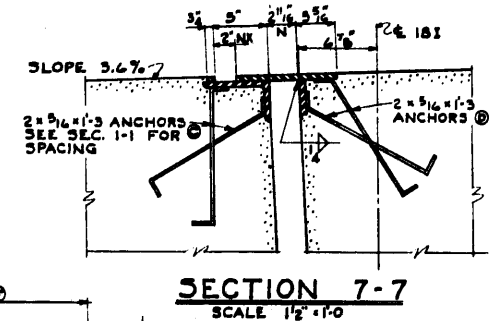
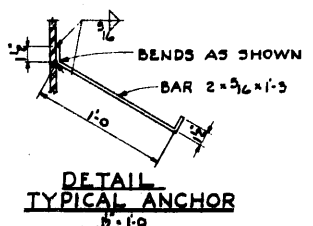
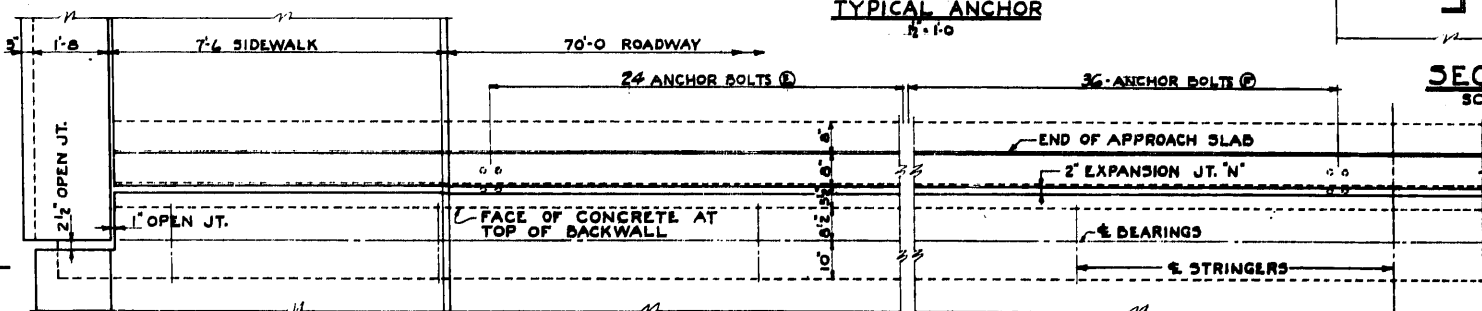
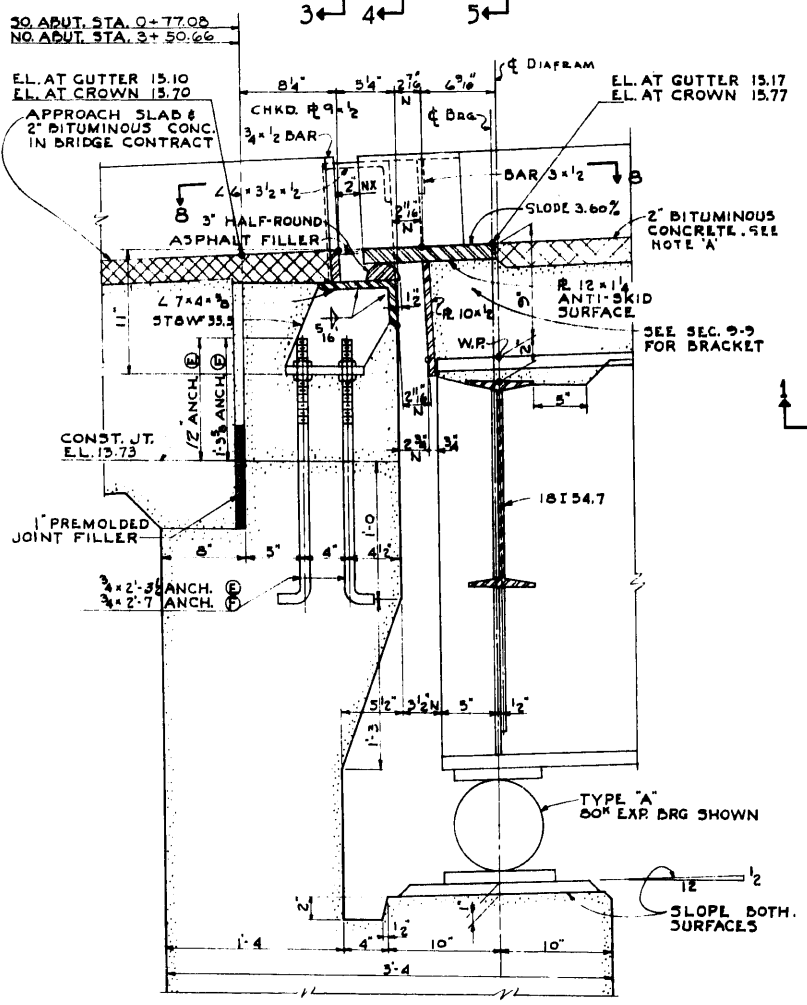
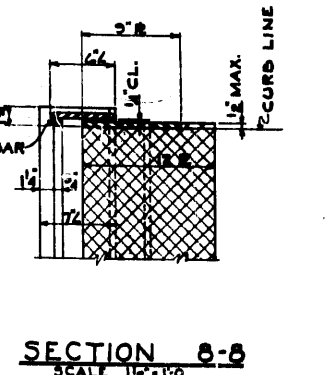
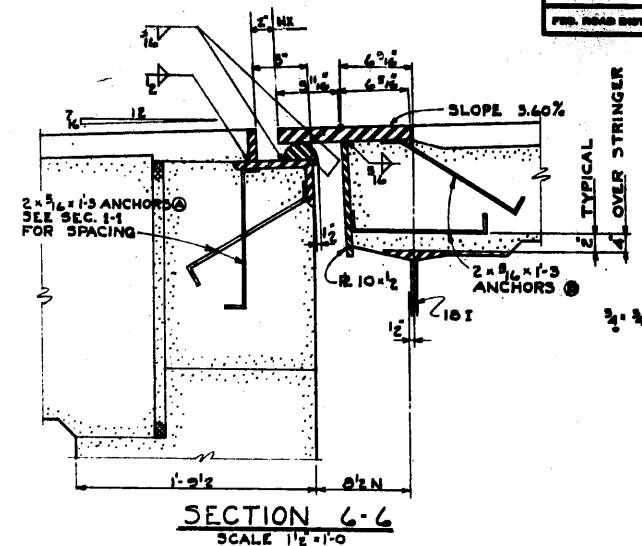
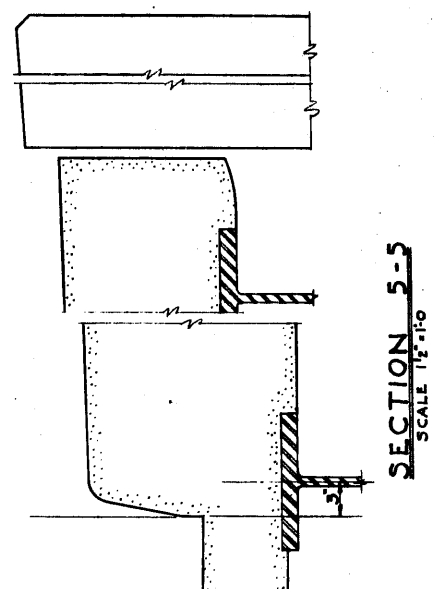
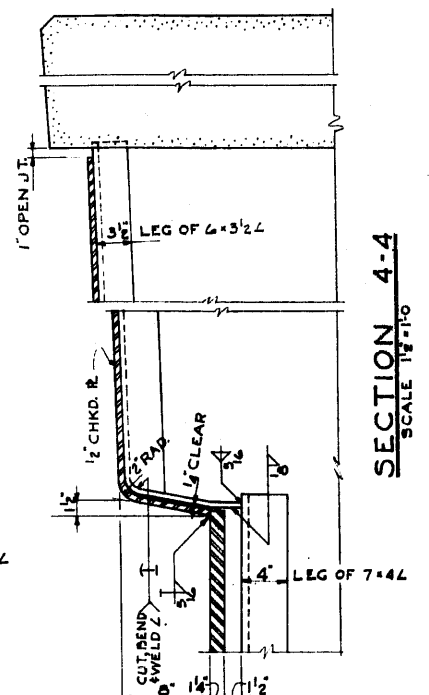
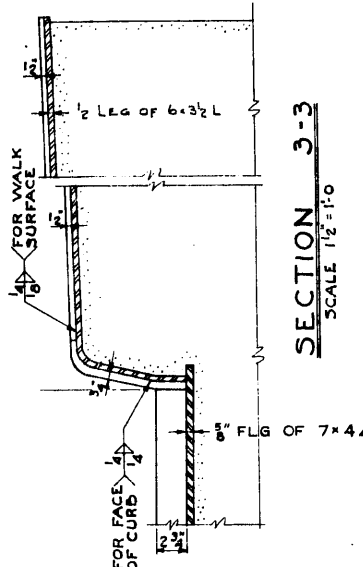
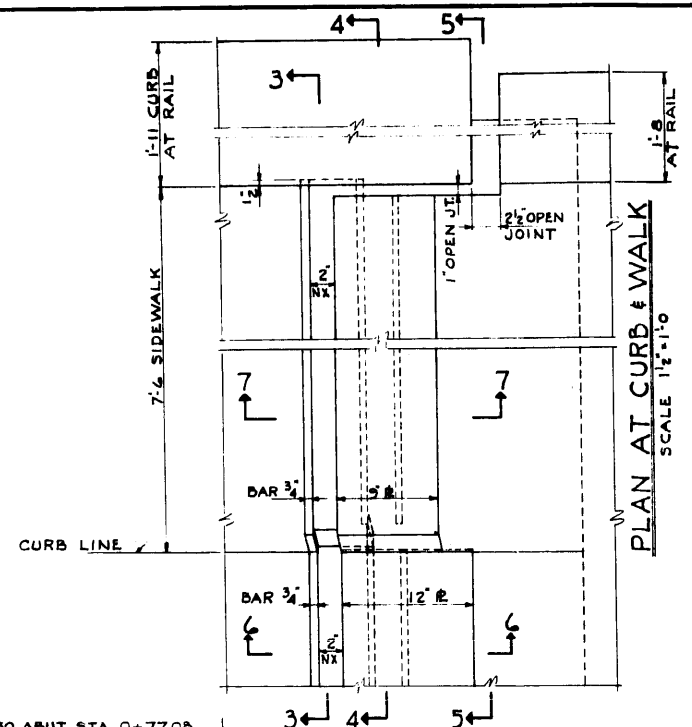
CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
 SECTION 3-B-5 3-F-5
BEARING & SPLICE DETAILS

DE LEUW, CATHY & CO. ENGINEERS
 DESIGNED BY H.W. LYON R.E. HENNINGSON
 DRAWN BY H.W. LYON
 CHECKED O.N. SLOAN, W.C. KUTAY
 IN CHARGE

SEE SH. 15 FOR BEARING
 & SPLICE NOTES.

SCALE AS NOTED

COND. ISSUE	SECTION	COUNTY	TOTAL	SHEET
ROUTE NO.	3-B-5 3-F-8	COOK	29	17
FA. 131				
PRD. ROAD DIST. NO. 4	ILLINOIS	PRD. AID PROJECT U.I.E. 61166		



JOINT ADJUSTING SCHEDULE					
TEMPERATURE	110°	90°	70°	50°	30°
DIMENSION MARKED 2" IN	14"	12"	10"	8"	6"

ESTIMATED WEIGHT OF COMPLETE EXPANSION JOINT ASSEMBLIES ON BRIDGE INCLUDING SIDEWALK, ALSO ANCHOR STRAPS AND BOLTS, 23,550 POUNDS.

SEE SH. 15 FOR EXPANSION JOINT NOTES.

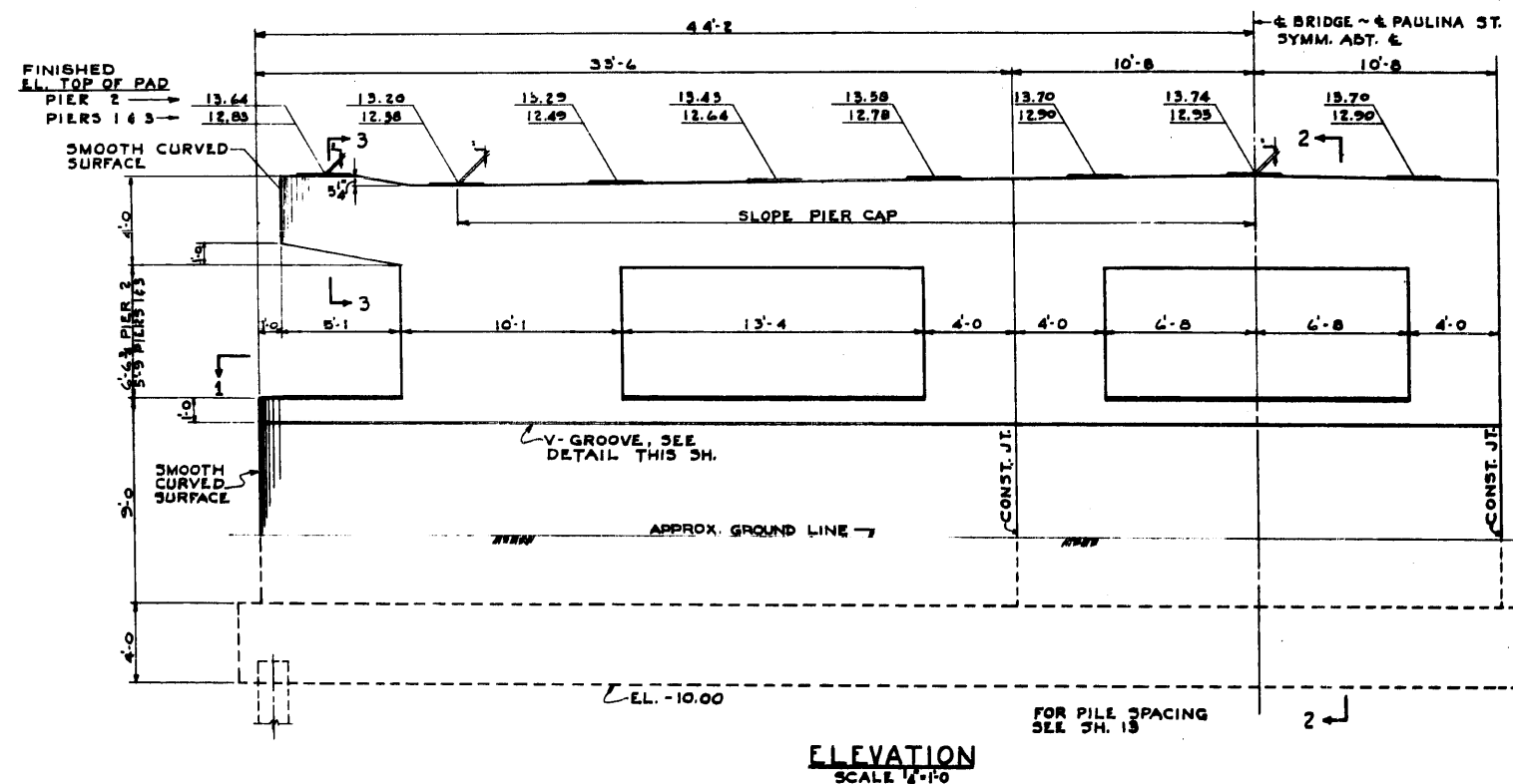
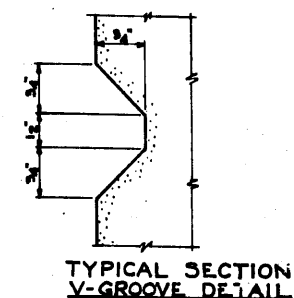
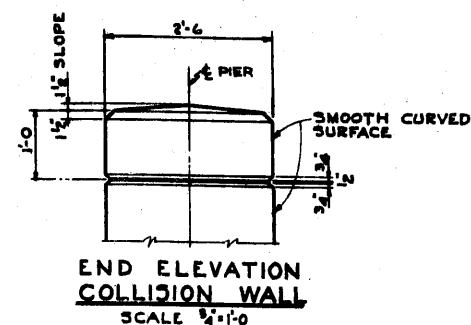
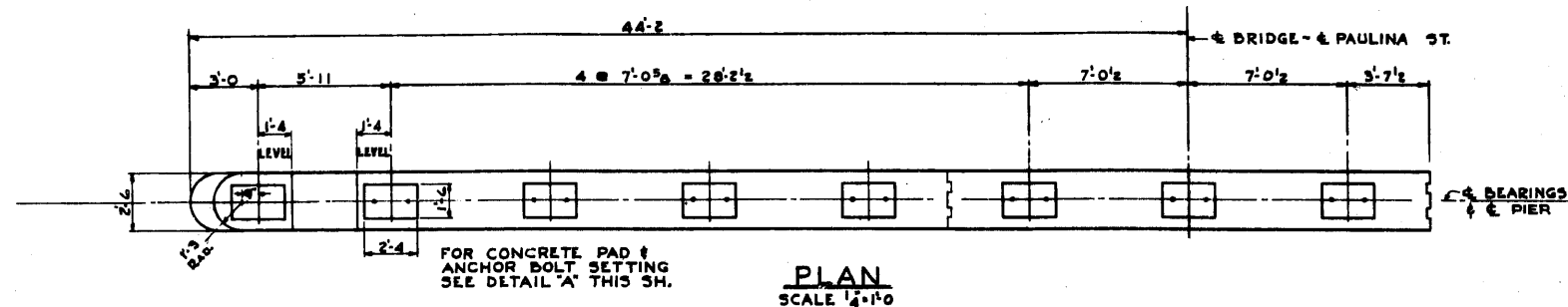
NOTE 'A' 2" BITUMINOUS CONCRETE SURFACING TO EXTEND 20'-0" ON BRIDGE DECK, AT N. & S. ABUT. AND TERMINATE IN A FEATHER EDGE.

DE LEUW, CATHAR & CO. ENGINEERS
DESIGNED BY I. H. LUKS
DRAWN BY A. K. MAGLENNIS
CHECKED O. NELSON
IN CHARGE

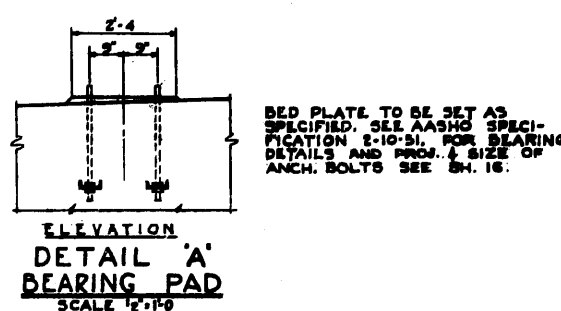
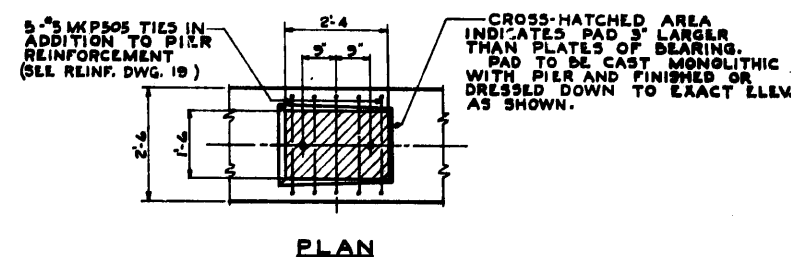
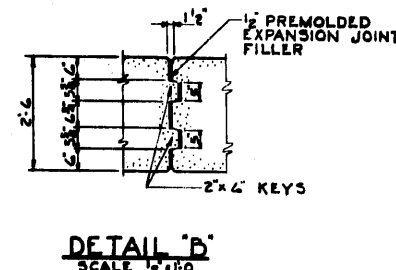
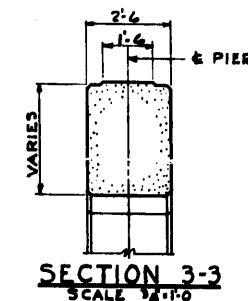
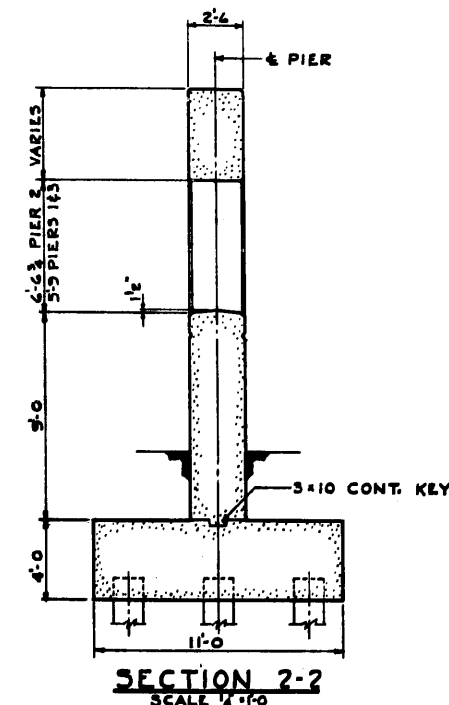
CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5 3-F-5
EXPANSION JOINT DETAILS

SCALE: AS NOTED

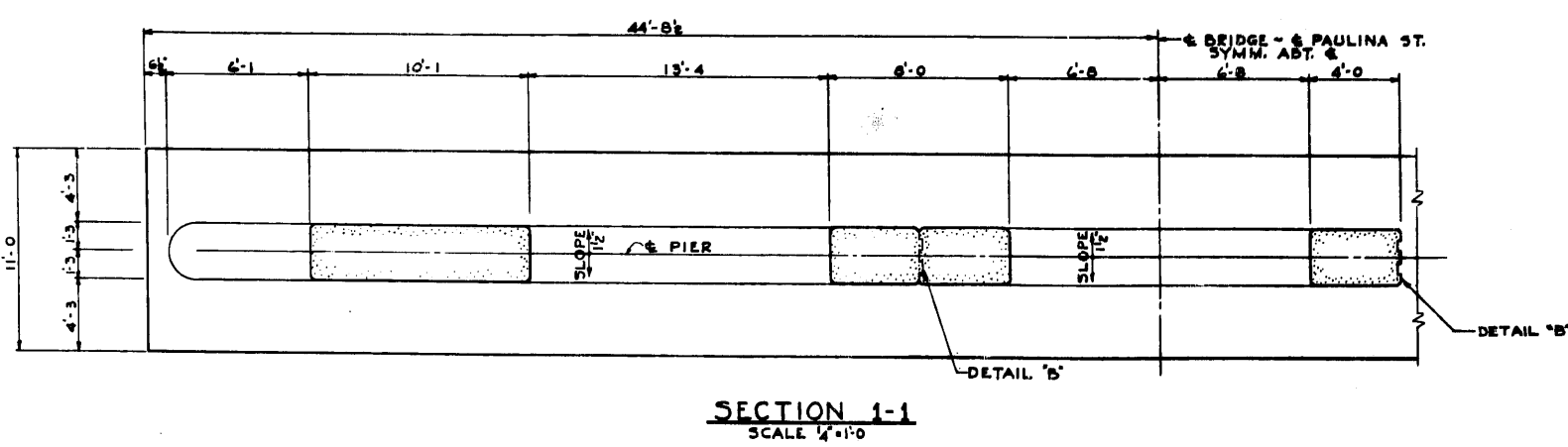
CONTRACT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P.A. 181	3-B-5	COOK	29	18
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I.261(68)		



CHAMFER ALL CORNERS OF PIER CAP, COLUMNS AND PIER WALL 1/4" UNLESS OTHERWISE DETAILED.



SEE SH. 18 FOR REINFORCEMENT.

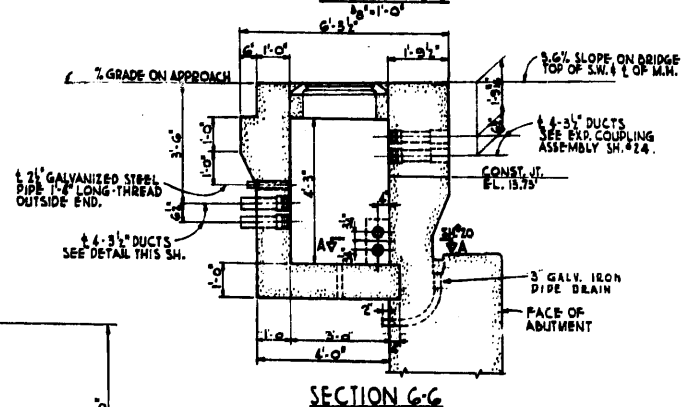
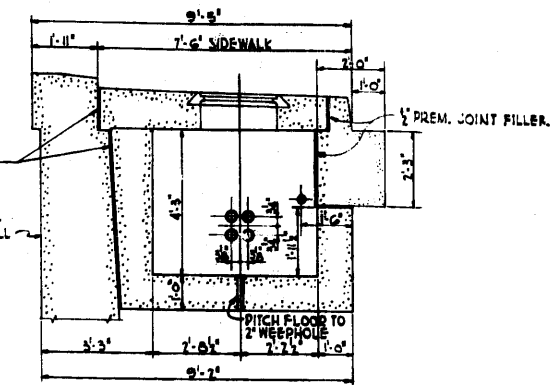
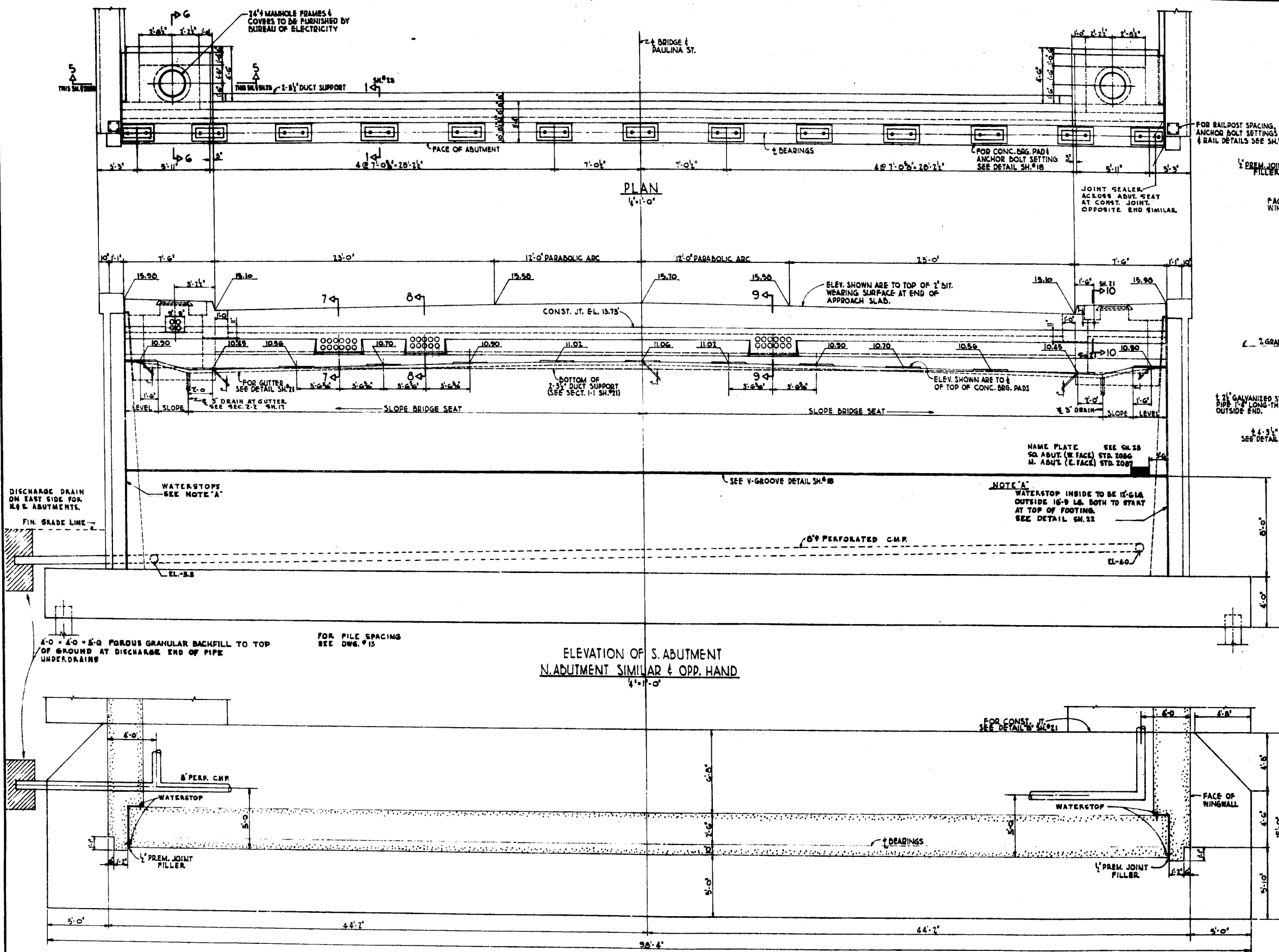


DE LEUW, CATHY & CO. ENGINEERS
DESIGNED BY J.D. SASSAMAN
DRAWN BY A.K. MAGENNIS
CHECKED O. NELSON, R.E. HEWITSON
IN CHARGE

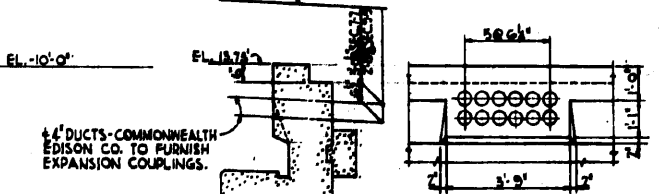
CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5
PIERS & DETAIL SECTIONS

SCALE AS NOTED

SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. 131	3-B-5	COOK	29	20
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.1.261(66)		

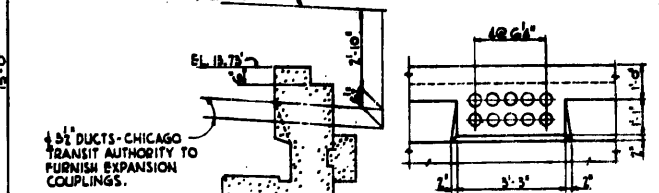


PROFILE LINE AT CROWN
(TOP OF 2\"/>



SECTIONS 7-7 & 9-9
COMMONWEALTH EDISON CO.
3\"/>

PROFILE LINE AT CROWN
(TOP OF 2\"/>



SECTION 8-8
CHICAGO TRANSIT AUTHORITY
3\"/>

CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5
ABUTMENT PLAN AND ELEVATION

DE LEUW, CATHIER & CO. ENGINEERS
DESIGNED BY J. R. CASSAMAN
DRAWN BY BROZOVIC, G. R.
CHECKED O. NELSON, R. E. HEWITSON
IN CHARGE

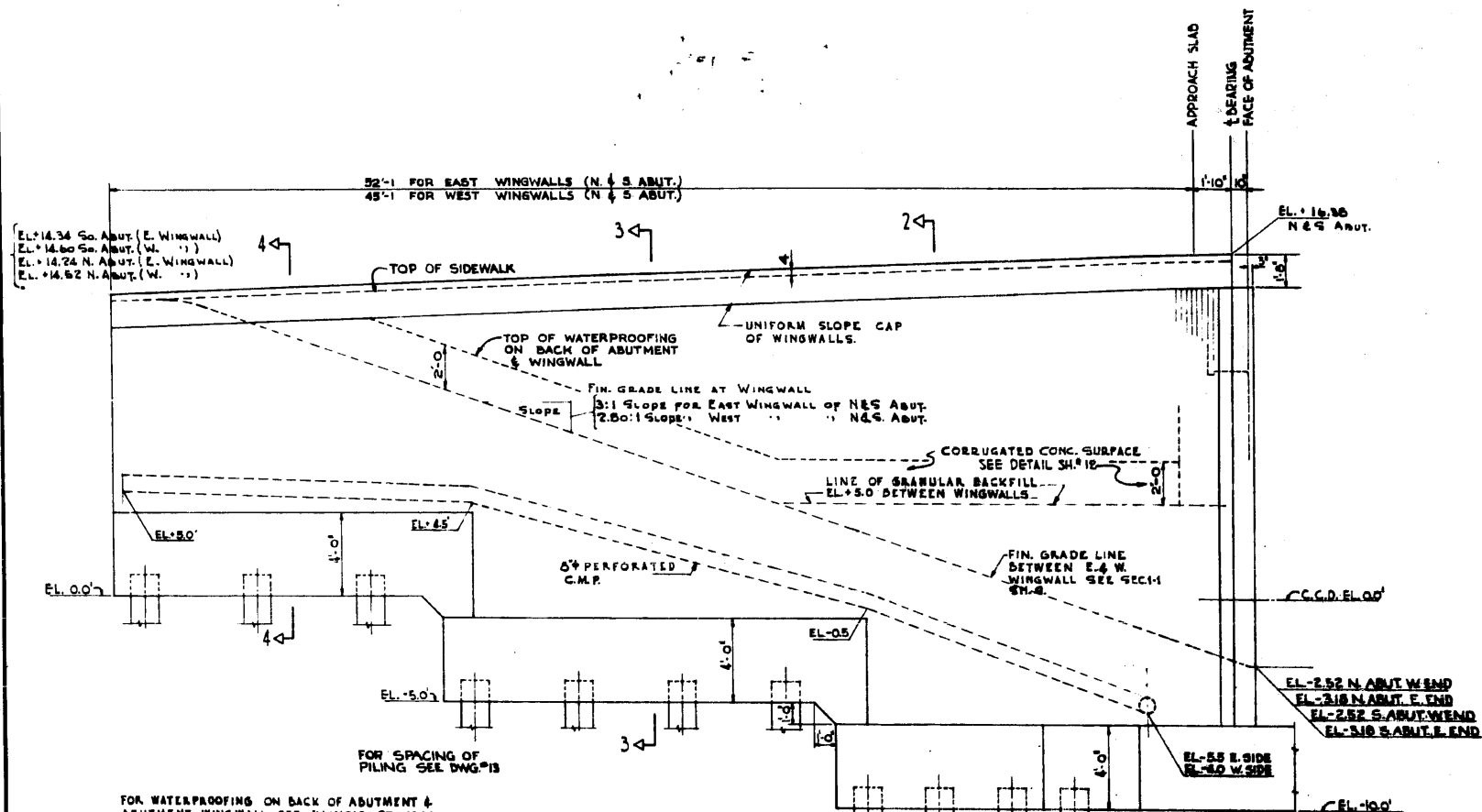
NOTE:
BOTH ABUTMENT ARE IDENTICAL.

FOOTING PLAN
1\"/>

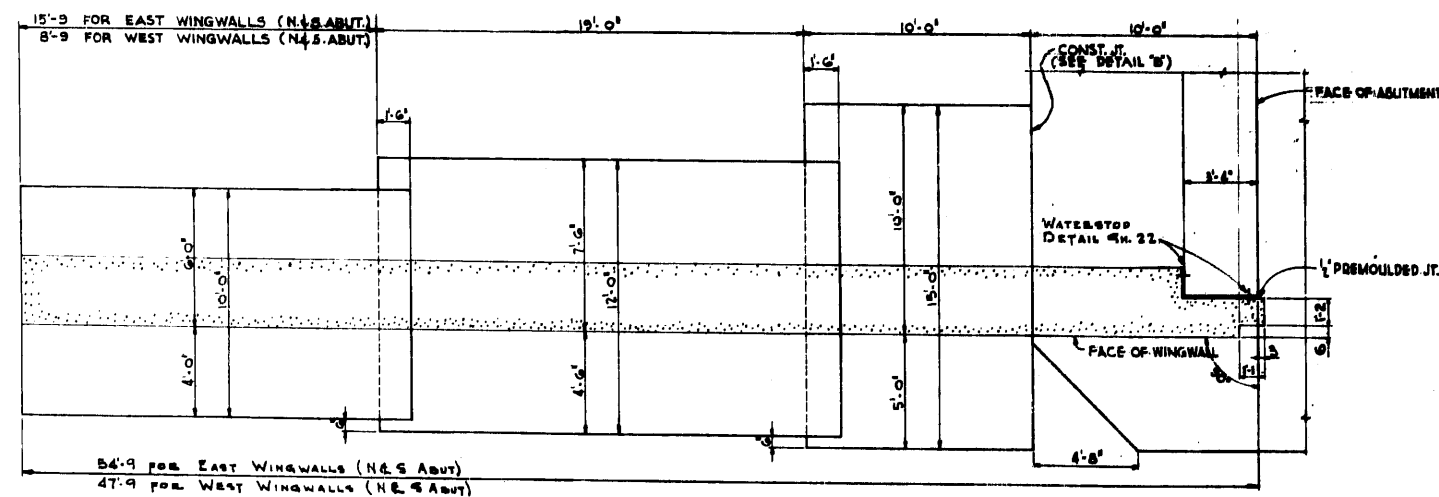
FOR WATERPROOFING ON BACK OF ABUTMENT &
ABUTMENT WINGWALL SEE ILLINOIS STANDARD
SPECIFICATIONS & SPECIAL PROVISIONS. INCLUDE
IN COST OF CLASS X CONCRETE.

SCALE: AS NOTED

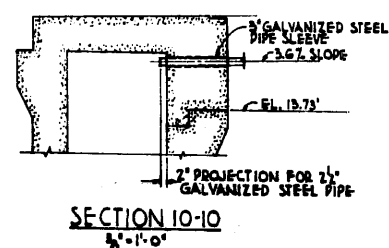
STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL. 131	3-8-5	COOK	29	21
F. A. 131				
F. A. 131				
F. A. 131				



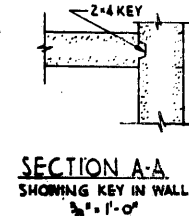
ELEVATION OF EAST WINGWALLS
WINGWALL ELEV. SHOWN FOR SO. ABUTMENT.
N. ABUTMENT OPPOSITE HAND. WEST WINGWALLS
SIMILAR EXCEPT AS NOTED.
1/4\"/>



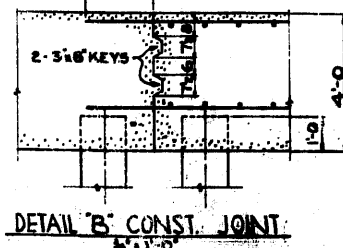
FOOTING PLAN
1/4\"/>



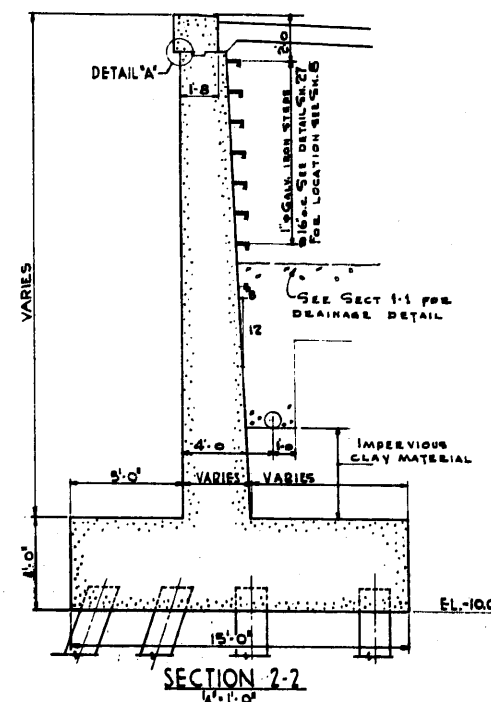
SECTION 10-10
1/4\"/>



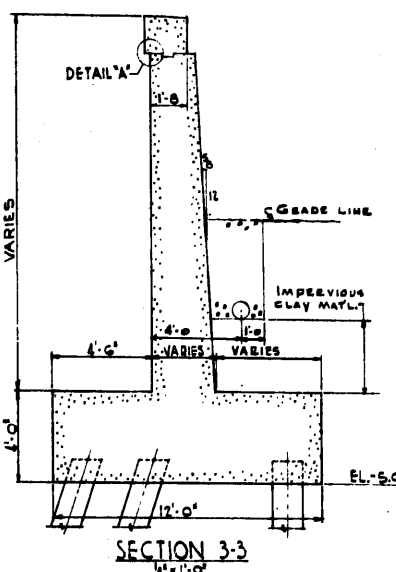
SECTION A-A
SHOWING KEY IN WALL
3/8\"/>



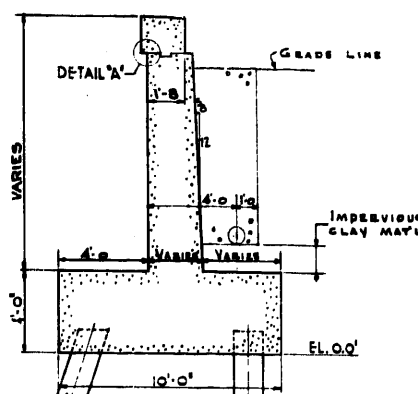
DETAIL B' CONST. JOINT
1/4\"/>



SECTION 2-2
1/4\"/>



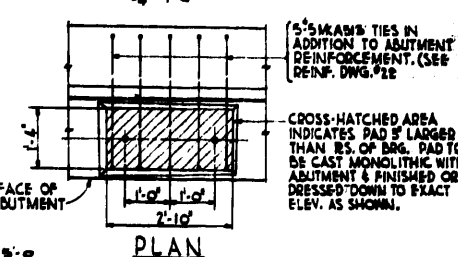
SECTION 3-3
1/4\"/>



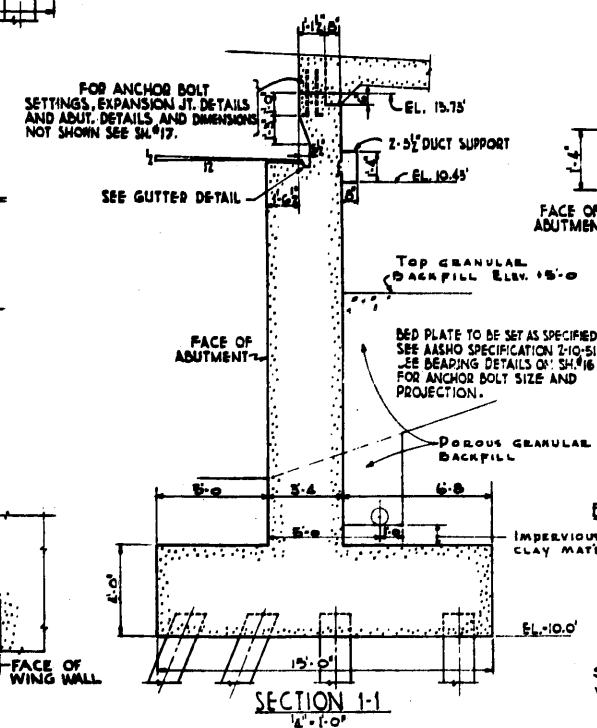
SECTION 4-4
1/4\"/>



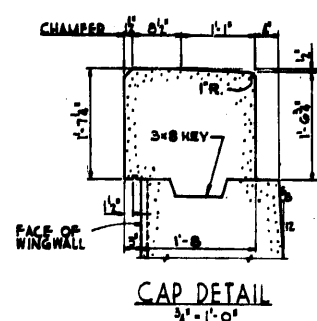
GUTTER DETAIL
3/4\"/>



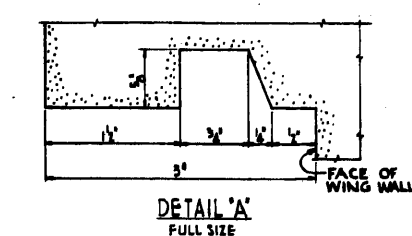
PLAN
1/4\"/>



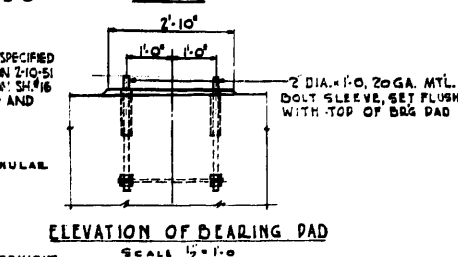
SECTION 1-1
1/4\"/>



CAP DETAIL
3/4\"/>



DETAIL A' FULL SIZE
1/4\"/>



ELEVATION OF BEARING PAD
SCALE 1/2\"/>

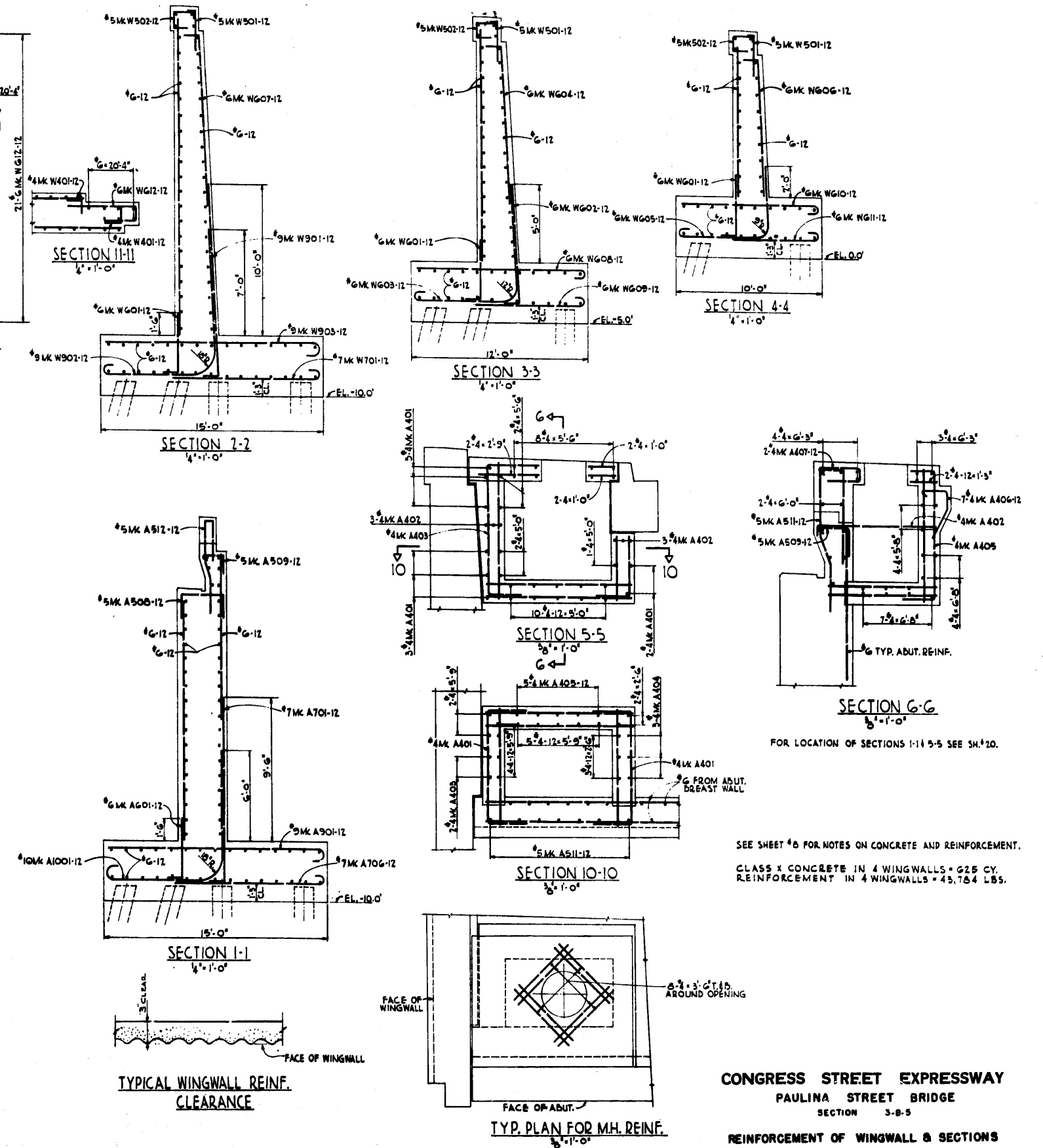
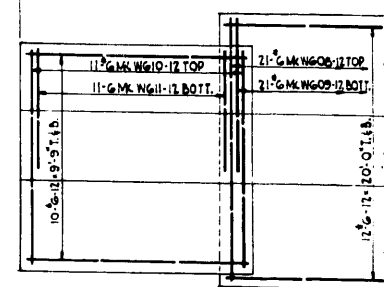
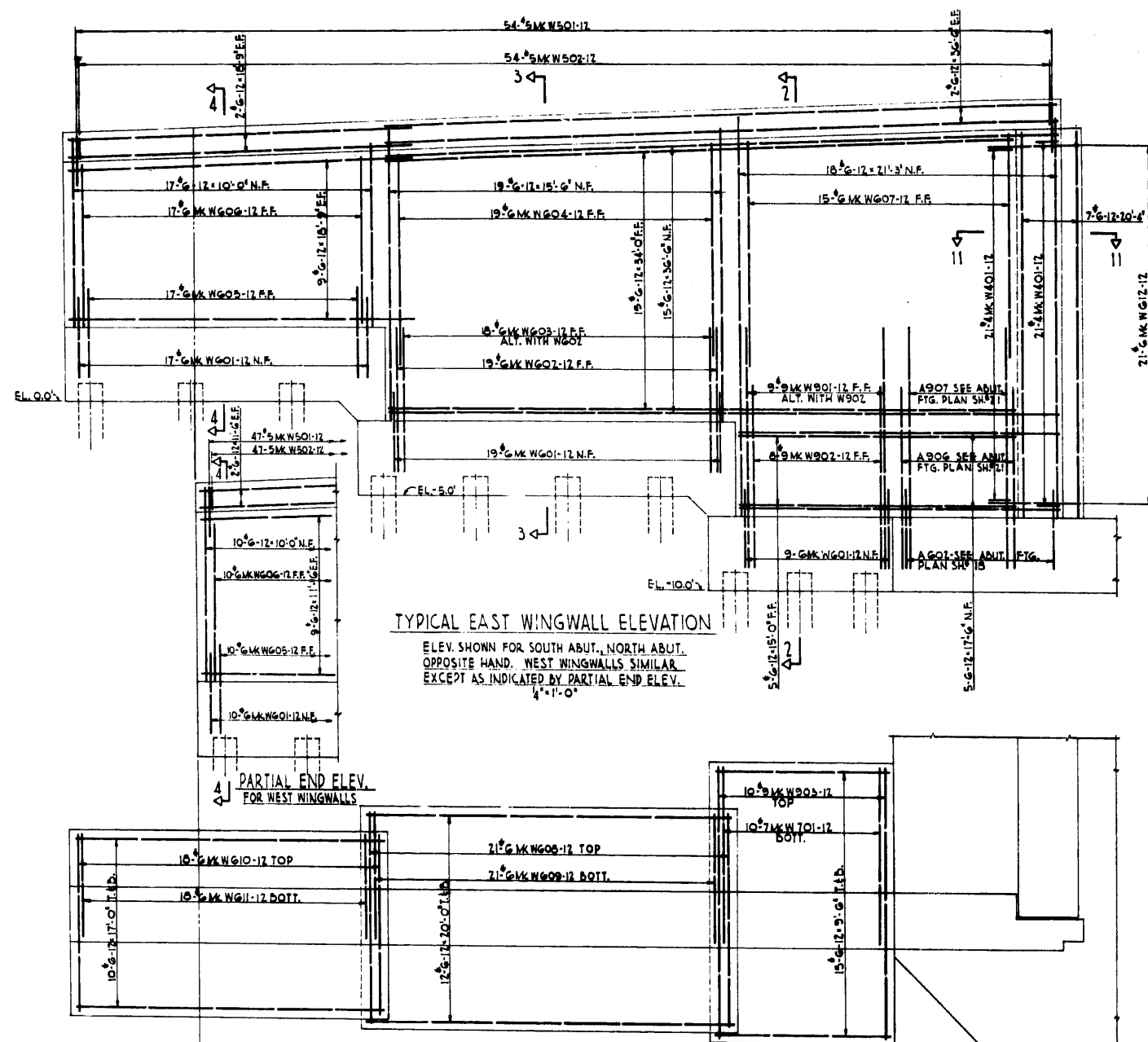
SEE SHEET NO. 24 FOR REINFORCEMENT OF WINGWALLS.

CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-8-5
WINGWALL PLAN, ELEVATION & SECTIONS

SCALE: AS NOTED

DE LIEW, CATHY & CO. ENGINEERS
DESIGNED BY J. D. SAGMAN
DRAWN BY BROZOVIC, G. R.
CHECKED R. E. HEWITSON
IN CHARGE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. 131	3-B-5	COOK	29	23
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I. 201(66)		

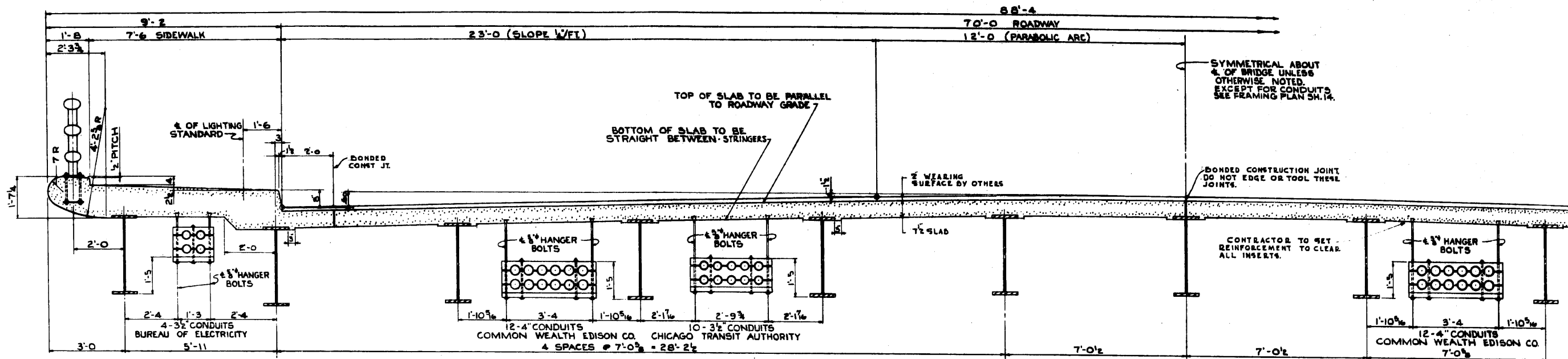


DE LEUW, CATHAR & CO. ENGINEERS
DESIGNED BY J. L. SASSMAN
DRAWN BY BROZOVIC, G.P.
CHECKED O. NELSON
IN CHARGE

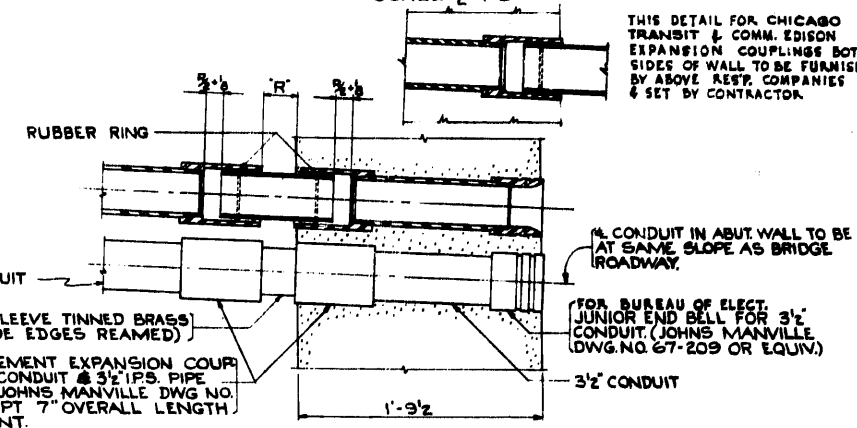
CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5
REINFORCEMENT OF WINGWALL & SECTIONS

SCALE: AS NOTED

CONC. ISSUE	SECTION	COUNTY	TOTAL	SHEET
ROUTE NO.			QUANTITY	NO.
F.A. 131	3-B-5 3-F-5	COOK	29	24
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I.25(40)		

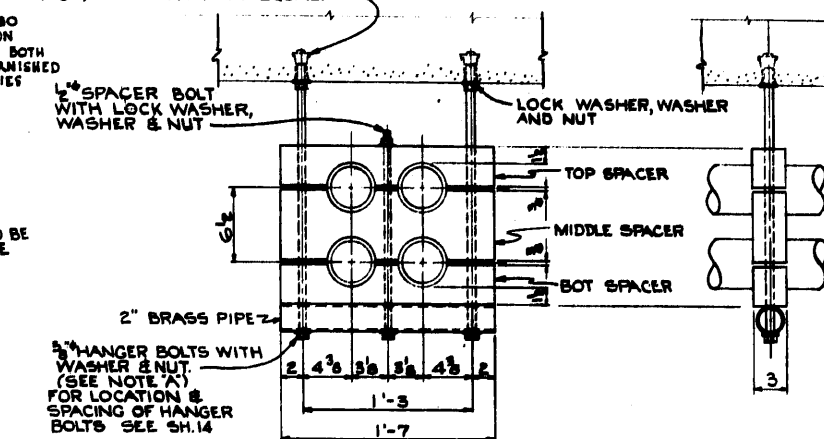


SECTION 2-2
SEE SH. 10
SCALE 2"-1'-0"

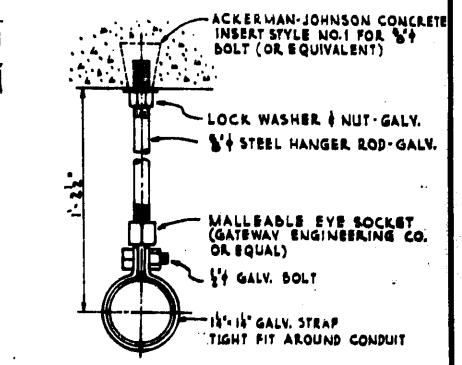


EXPANSION COUPLING ASSEMBLY AT ABUTMENT
FOR BUREAU OF ELECTRICITY AS SHOWN
FOR COMM. EDISON AS SHOWN & NOTED ABOVE
SCALE 1 1/2"-1'-0"

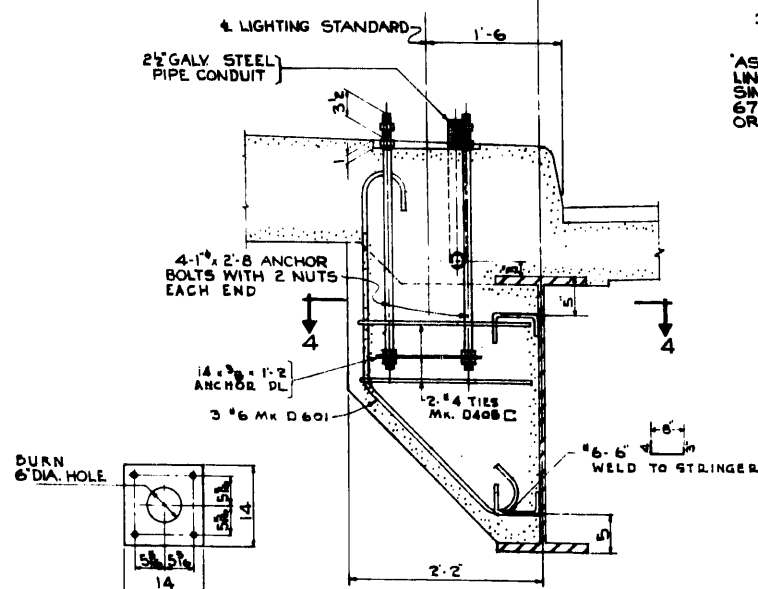
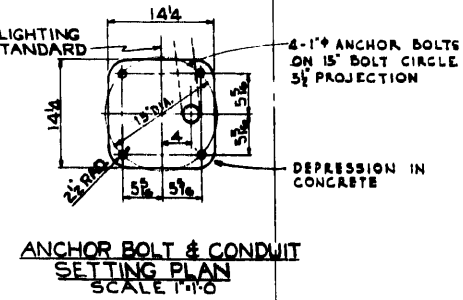
ACKERMAN JOHNSON CONCRETE INSERTS
(5/8") STYLE NO. 1 OR EQUAL



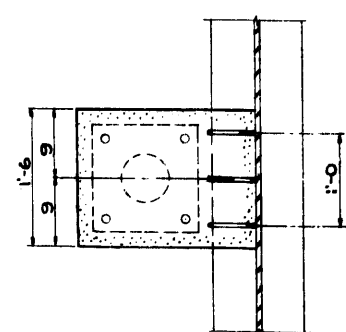
FOUR-DUCT CONDUIT HANGER
BUREAU OF ELECTRICITY
SCALE 1 1/2"-1'-0"



DETAIL OF 24" CONDUIT HANGER
SCALE 5"-1'-0"



SECTION 3-3
SEE SH. 14
SCALE 1"-1'-0"



SECTION 4-4
SCALE 1"-1'-0"

NOTES:

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ELECTRICAL MATERIAL REQUIRED BY THE BUREAU OF ELECTRICITY FOR THE BRIDGE PROPER WITHIN THE LIMITS SHOWN ON SH. 14 EXCEPT THE ELECTRIC LAMP POLES. SEE NOTE BELOW FOR MANHOLE FRAMES & COVERS.

THE COMMON WEALTH EDISON CO. AND CHICAGO TRANSIT AUTHORITY WILL FURNISH TO THE CONTRACTOR CONCRETE INSERTS AND ABUTMENT EXPANSION COUPLINGS FOR INSTALLATION AS PART OF THE BRIDGE CONTRACT.

ALL CONDUIT, CONDUIT COUPLINGS AND SPACERS TO BE JOHNS MANVILLE TRANSITE OR EQUAL. HOLES IN BRASS PIPE AND SPACERS TO BE DRILLED 1/4" FOR 1/2" BOLTS AND 3/8" FOR 1/2" BOLTS.

(A) ALL HANGER AND SPACER BOLTS, WASHERS AND NUTS SHALL BE STAINLESS STEEL. CUT HANGER BOLT FLUSH WITH LOWER NUT, PEEN CENTER PUNCH OR SPOT WELD AT THREAD LINE TO PREVENT NUT FROM TURNING.

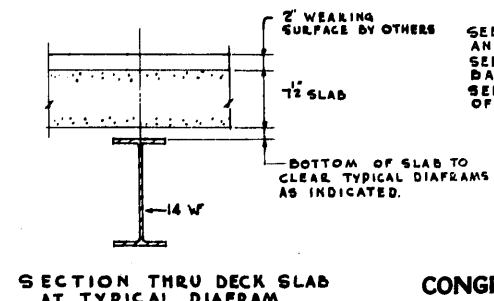
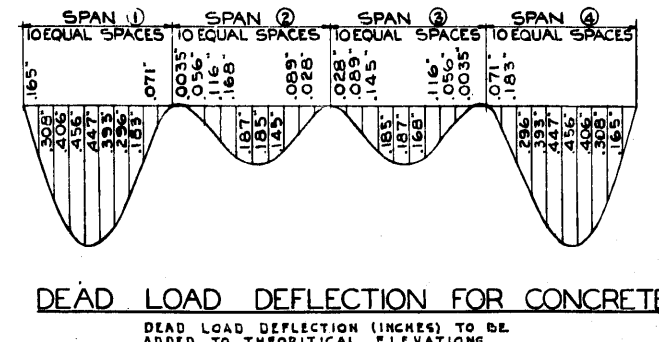
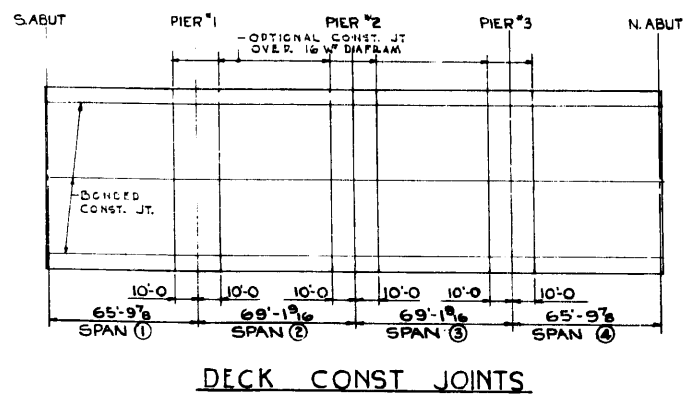
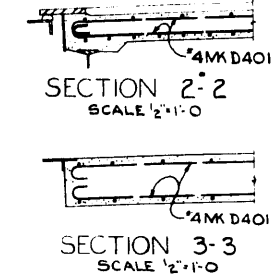
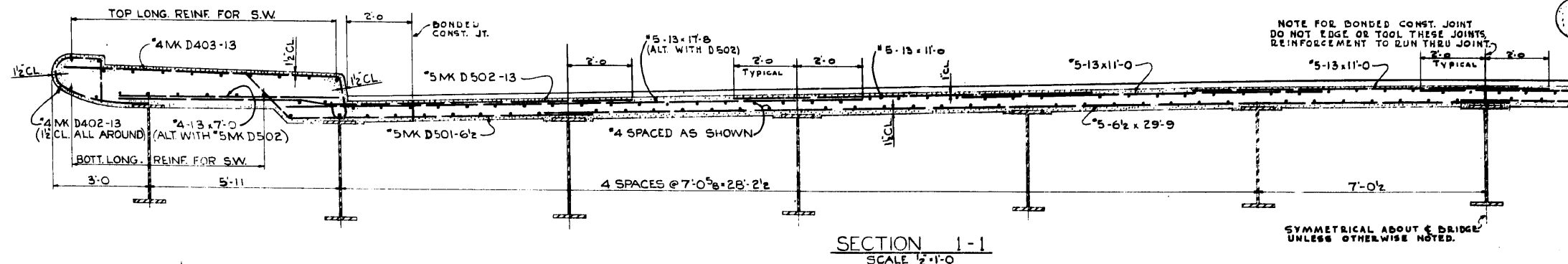
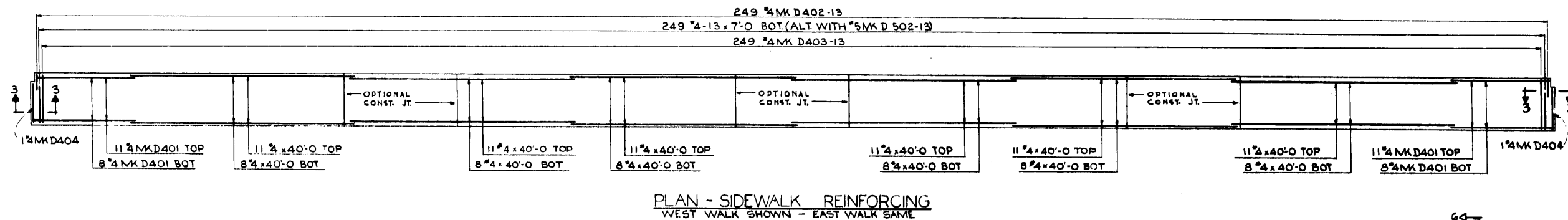
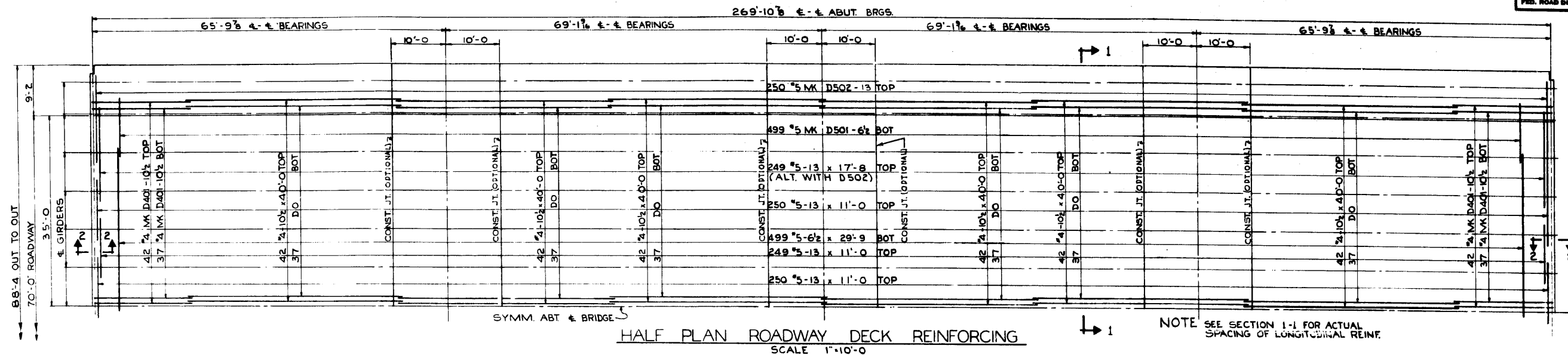
THE BUREAU OF ELECTRICITY WILL FURNISH THE 24" MANHOLE FRAMES AND COVERS, DWG. 10797 TO THE CONTRACTOR FOR INSTALLATION AS PART OF THE BRIDGE CONTRACT (FOR THE 4 ELECTRICAL MANHOLES).

CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5 3-F-5
CONCRETE DECK DETAILS

DE LEUW, CATHY & CO. ENGINEERS
DESIGNED BY
DRAWN BY J. B. SASSMAN
CHECKED O. NELSON
IN CHARGE

SCALE: AS NOTED

ROAD ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 131	3-B-5	COOK	29	25
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I.261(60)		



CLASS X CONCRETE IN DECK - 652 CY.
REINFORCEMENT IN DECK - 121,464 LBS.

SEE SHEET NO. 26 FOR NOTES ON CONCRETE AND REINFORCEMENT.
SEE SHEET NO. 26 FOR REINFORCEMENT BAR LIST.
SEE SHEET NO. 14 & SHEET NO. 24 FOR LOCATION OF CONDUITS & INSERTS & DETAILS OF CONST.

CONCRETE DECK REINFORCEMENT

SCALE: AS NOTED

DE LEUW, CATHIE & CO. ENGINEERS
DESIGNED BY W.C. KUTAY
DRAWN BY J.B. SASSMAN
CHECKED: HEWITSON O. NELSON
IN CHARGE: [Signature]

STRAIGHT BAR SCHEDULE

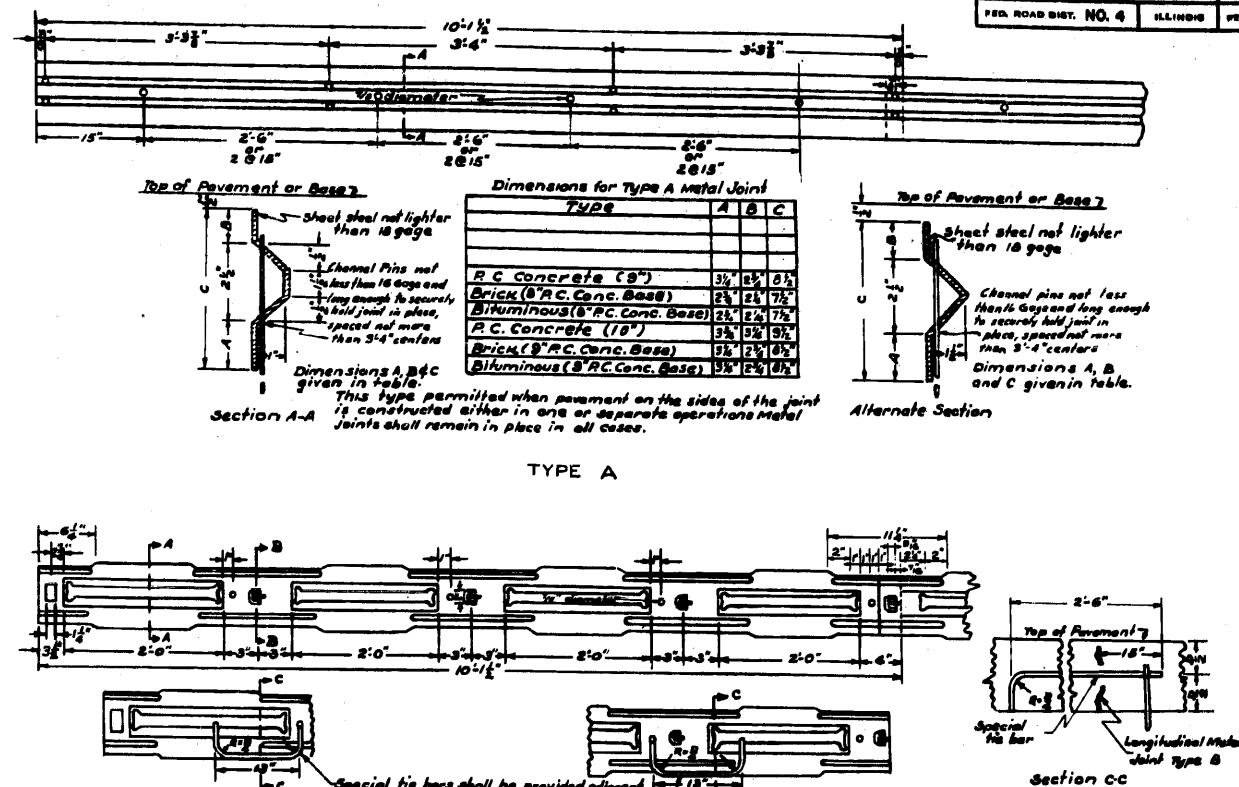
ITEM	NO. OF BARS	SIZE	LENGTH	WEIGHT
ABUTMENT REINF.				
16	*4	1'-0		
8		1'-3		
20		2'-6		
8		2'-9		
64		3'-6		
52		5'-0		
40		5'-6		
16		5'-8		
44		5'-9		
8		6'-0		
28		6'-3		
44	*4	6'-8		
WEIGHT #4 BARS	1112			
82	*6	7'-8		
172		11'-3		
4		12'-10		
4		14'-10		
80		16'-2		
80		16'-6		
12		16'-8		
4		16'-10		
4		18'-10		
44		20'-10		
284	*6	40'-0		
WEIGHT #6 BARS	26897			
32	*7	12'-0		
WEIGHT #7 BARS	785			
44	*9	16'-9		
WINGWALL REINF.				
120	*6	9'-6		
40		9'-9		
54		10'-0		
44		11'-0		
20		15'-0		
76		15'-6		
40		17'-0		
20		17'-6		
44		18'-3		
96		20'-0		
28		20'-4		
72		21'-3		
60		34'-0		
76	*6	36'-6		
WEIGHT #6 BARS	22143			
DECK REINF.				
498	*4	7'-0		
1176	*4	40'-0		
WEIGHT #4 BARS	33751			
1497	*5	11'-0		
498	*5	17'-8		
998	*5	29'-9		
WEIGHT #5 BARS	57521			
PIER REINF.				
24	*5	3'-0		
24		6'-3		
12		21'-0		
24	*5	27'-0		
WEIGHT #5 BARS	1170			
36	*6	6'-3		
294		8'-0		
18		8'-9		
112		17'-9		
112		18'-0		
56	*6	18'-6		

BENT BAR SCHEDULE

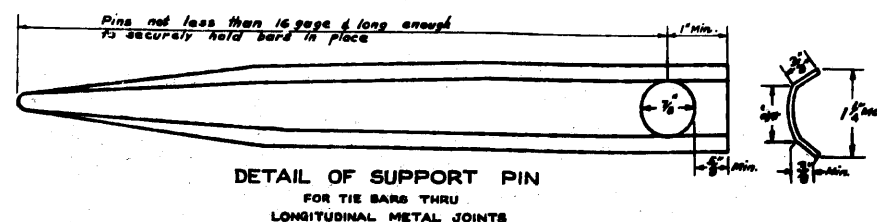
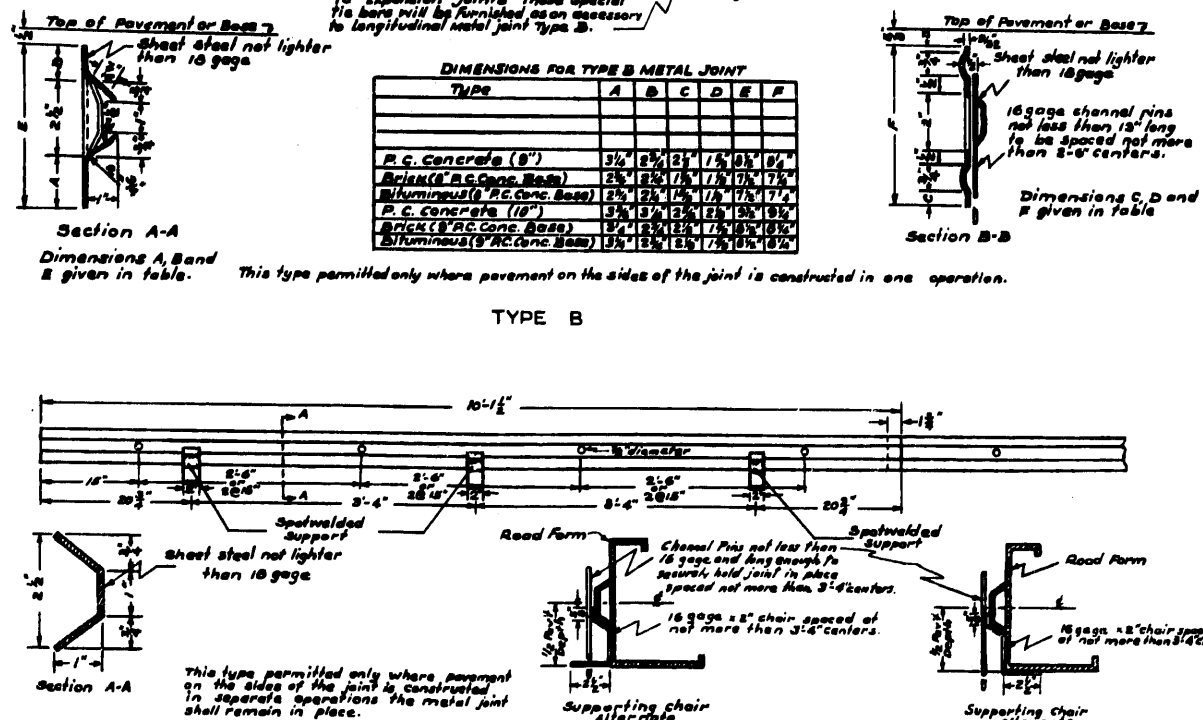
ITEM	NO. OF BARS	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	PIN DIA.	WEIGHT
ABUTMENT REINF.													
32	*4	8'-6		A401	B	5'-0	1'-9	1'-9					
24		6'-0		A402	B	5'-6	6'						
8		9'-9		A403	B	5'-9	1'-6	2'-6					
12		4'-2		A404	B	2'-8	1'-6						
20		8'-3		A405	B	5'-9	1'-6	1'-0					
28		5'-3		A406	M	4'-2	1'-2	8'	1'-9	7'	1'-2		
8	*4	4'-4 1/2		A407	M	4'-2	1'-10	8'	1'-6				
WEIGHT #4 BARS	996												
172	*5	6'-6		A508	B	5'-0	1'-9	1'-9					
80		8'-9 1/2		A509	F	1'-5	1'-3	5'					
32		9'-9 1/2		A511	K	2'-3	1'-4	2'-8					
60		8'-1 1/2		A512	K	2'-3	1'-4	1'-10					
130	*5	6'-0		A513	B	5'-0	1'-6	1'-6					
WEIGHT #5 BARS	4100												
172	*6	4'-9		A601	B	4'-3	6'						
36	*6	5'-3		A602	B	4'-3	1'-0						
WEIGHT #6 BARS	1511												
172	*7	13'-4		A701	B	12'-4	1'-0						
4		12'-2		A702	A	10'-6	10'	10'	7'				
4		13'-2		A703	A	11'-6	10'	10'	7'				
4		14'-2		A704	A	12'-6	10'	10'	7'				
4		15'-2		A705	A	13'-6	10'	10'	7'				
136		10'-9		A706	A	8'-1	10'		7'				
12	*7	17'-7		A707	A	16'-9	10'		7'				
WEIGHT #7 BARS	6556												
136	*9	15'-7		A901	A	14'-6	1'-1	10'					
4		11'-7		A902	A	10'-6	1'-1	10'					
4		12'-7		A903	A	11'-6	1'-1	10'					
4		13'-7		A904	A	12'-6	1'-1	10'					
4		14'-7		A905	A	13'-6	1'-1	10'					
28		18'-2		A906	G	6'-3	2'-4	8'-4	1'-9	11 1/4"			
24	*9	14'-2		A907	N	1'-0	12'-9	5'					
WEIGHT #9 BARS	10802												
168	*10	17'-1		A1001	G	6'-3	2'-4	7'-3	1'-3	11 1/4"			
WEIGHT #10 BARS	12347												
WINGWALL REINF.													
168	*4	2'-0		W401	B	1'-0	1'-0	0					
WEIGHT #4 BARS	224												
202	*5	3'-2		W501	B	2'-8	6'	0					
202	*5	4'-4		W502	P	6'	1'-7	1'-3	1'-0				
WEIGHT #5 BARS	1581												
168	*6	5'-3		W601	B	4'-3	1'-0	0					
76		8'-10		W602	N	1'-0	7'-10	5'					
72		15'-1		W603	G	6'-1	1'-7	6'-9	8'	6'	4 1/4"		
76		11'-6		W604	B	10'-6	1'-0	0					
54		11'-4		W605	G	5'-6	1'-2	4'-0	8'	6'	2 1/4"		
54		9'-7		W606	B	8'-7	1'-0	0					
60		13'-0		W607	B	12'-0	1'-0	0					
84		12'-4		W608	A	11'-8	8'	0	6'				
84		7'-8		W609	A	7'-0	8'	0	6'				
58		10'-4		W610	A	9'-8	8'	0	6'				
58		6'-6		W611	A	5'-10	8'	0	6'				
84	*6	8'-4		W612	B	10'	5'-0	2'-6					
WEIGHT #6 BARS	13169												
40	*7	10'-8		W701	A	9'-10	10'	0	7'				
WEIGHT #7 BARS	875												
36	*9	13'-10		W901	N	1'-0	12'-10	5'					
32	*9	18'-0		W902	G	6'-3	2'-4	8'-4	1'-1	10'	5 1/4"		
40	*9	15'-9		W903	A	14'-8	1'-1	0	10'				
WEIGHT #9 BARS	5794												
DECK REINF.													
392	*4	19'-3		D401	A	18'-9	*6	0					
498		5'-8		D402	R	SEE DETAIL	TYPE 'R'						
498		9'-11		D403	S	6'-4	1'-1	6'	4'	5'	2 1/2"	3'	
4		11'-10		D404	T	5'-8	5'-7	6'					
6	*4	5'-7		D405	V	1'-10	1'-2	1'-10	4'				
WEIGHT #4 BARS	10282												
998	*5	11'-4		D501	K	9'-4	1'-5	0	1'-5	2'-0	0	0	
500	*5	15'-10		D502	K	9'-6	9'	5'-6	2'	10'	0	0	
WEIGHT #5 BARS	20049												
9	*6	6'-0		D601	Y	5'	2'-8	2'-0	1'-10	6'			
WEIGHT #6 BARS	81												
72	*8	6'-7		P301	E	2'-2	9 1/2"	4'					
72	*8	3'-0		P302	A	2'-2	5'	5'					
WEIGHT #8 BARS	259												
72	*5	12'-9		P501	F	9'-9	2'-2	5'	5'				
72		9'-0		P502	E	1'-11	2'-2	5'	5'				
144		11'-2		P503	E	5'-8	1'-6	5'	5'				
152		10'-3		P504	E	1'-4 1/2	3'-4	5'					
195		5'-2		P505	B	2'-2	1'-6	1'-0					
72		5'-3		P506	E	1'-4 1/2	3'-1	3'					
30		5'-11		P507	C	1'-8	3'-5	1'-3	2'-2				
96		6'-0		P508	B	2'-0	2'-0	2'-0					
96	*5	11'-0		P509	E	1'-4	3'-5	5'					
WEIGHT #5 BARS	9034												
147	*6	6'-6		P601	D	2'-5	1'-2	1'-0	1'-0	2'-3			
546	*6	5'-0		P602	B	4'-6	6'	0					
54	*6	6'-5		P603	C	1'-6	3'-5	1'-6	2'-2				
WEIGHT #6 BARS	6087												
270	*9	12'-5		P901	A	10'-6	1'-1	1'-1					
WEIGHT #9 BARS	11651												
18	*10	26'-10		P1001	B	20'-10	5'-0	5'-0					
56	*10	34'-0		P1002	B	31'-0	5'-0	0					
56	*10	10'-3		P1003	H	7'-0	2'-0	1'-3	11 1/4"				
WEIGHT #10 BARS	8903												
APPROACH REINF.													
16	*4	10'-11		C401	E	2'-8	2'-5	4'					
8		9'-6		C402	U	1'-8	2'-5	6'	6'				
188		12'-5		C403	E	2'-8	5'-2	4'					
20		14'-11		C404	B	2'-8	4'-5	4'					
8		13'-6		C405	U	2'-8	4'-5	6'	6'				
40	*4	11'-0		C406	U	2'-8	3'-2	6'	6'				
WEIGHT #4 BARS	2226												
16	*9	36'-5		C901	B	35'-9	1'-0	0					
16		34'-9		C902	B	33'-9	1'-0	0					
8		20'-3		C903	X	12'-3	4'-0	4'-0	2'-10				
8	*9	17'-6		C904	X	3'-6	4'-0	4'-0	2'-10				
WEIGHT #9 BARS	4753												
160	*3	5'-2		A3301	E	7'	1'-8	4'					
160	*3	2'-10		A3302	L	1'-3	3'	1'-3	2'	1'-3			
4	*3	6'-6		A3303	V	2'-4	1'-2	2'-4	4'				
WEIGHT #3 BARS	491												
160	*5	7'-0		A5501	W	1'-7	1'-10	6'	1'-10	1'-3			
6	*5	4'-5		A5502	B	2'-9	1'-8	0					
WEIGHT #5 BARS	119												

DE LEUW CATHAR & CO. ENGINEERS
DESIGNED BY _____
DRAWN BY _____
CHECKED O. NELSON
IN CHARGE [Signature]

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. 131	5-B-5	COOK	29	28
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT U.I. 261(68)		



TYPE	A	B	C	D	E	F
P.C. Concrete (8")	3/4"	2 1/2"	2 1/4"	1 1/2"	3/4"	1 1/2"
Brick (P.C. Conc. Base)	2 1/2"	2 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Biluminous (P.C. Conc. Base)	2 1/2"	2 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
P.C. Concrete (10")	5/8"	2 1/2"	2 1/4"	1 1/2"	3/4"	1 1/2"
Brick (P.C. Conc. Base)	2 1/2"	2 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Biluminous (P.C. Conc. Base)	2 1/2"	2 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"



CONGRESS STREET EXPRESSWAY
PAULINA STREET BRIDGE
SECTION 3-B-5
STANDARD NAME PLATES & METAL JOINTS

SCALE: AS NOTED