

60T55

COOK

J&R

#102

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348 & 358	2012-032BR	COOK	10	1

06-15-12 LETTING ITEM 102

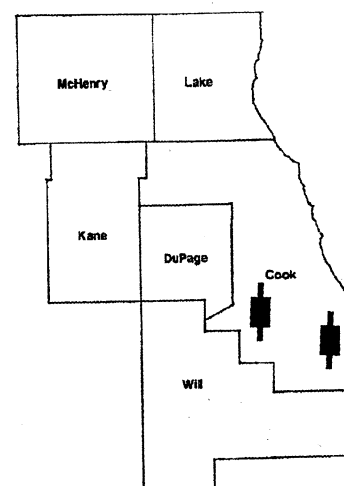
FOR INDEX OF SHEETS SEE SHEET 2

IMPROVEMENTS ARE LOCATED IN THE VILLAGES OF BURNHAM AND FOREST VIEW.

CONTRACT NO 60T55

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

D-91-388-12



LOC. 1) FAP ROUTE 348: IL 43 NB (HARLEM AVE.)
OVER CN & MWRD (SLUDGE) RR (SN 016-0314)
LOC. 2) FAP ROUTE 358: TORRENCE AVE.
OVER GRAND CAL. RIVER (SN 016-0934)
SECTION: 2012-032 BR
PCC DECK BEAM SUPPORTS
COOK COUNTY
C-91-388-12

LOCATION OF IMPROVEMENT INDICATED THUS: ■

100%
01-04-2013

SEE LOCATION MAPS
SHEETS 4 & 5

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: May 3, 2012
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11 2012
John D. Baranelli, PE
actmy ENGINEER OF DESIGN AND ENVIRONMENT

May 11 2012
William R. Freyer
actmy DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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

PROJECT ENGINEER ROBERT BORO (847) 705-4237
PROJECT MANAGER ISSAM RAYYAN

CONTRACT NO. 60T55 **016-0314**

FOR INFORMATION ONLY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348 & 358	2012-032BR	COOK	10	2

CONTRACT NO 60T55

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 - 5 LOCATION MAPS
- 6 - 7 BRIDGE REPAIRS (SN 016-0314) LOCATION 1
- 8 - 9 BRIDGE REPAIRS (SN 016-0934) LOCATION 2
- 10 ARTERIAL ROAD INFORMATION SIGN (TC-22)

STATE STANDARDS

- 701301 - 04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701426 - 04 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
- 701606 - 08 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701601 - 07 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701901 - 02 TRAFFIC CONTROL DEVICES

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 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 VILLAGE OF FOREST VIEW.

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) 741- 4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM BRIDGE INSPECTORS.

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

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

ILLINOIS DEPARTMENT OF TRANSPORTATION
INDEX OF SHEETS
LIST OF STATE STANDARDS
GENERAL NOTES

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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 at the unit price bid for the work.

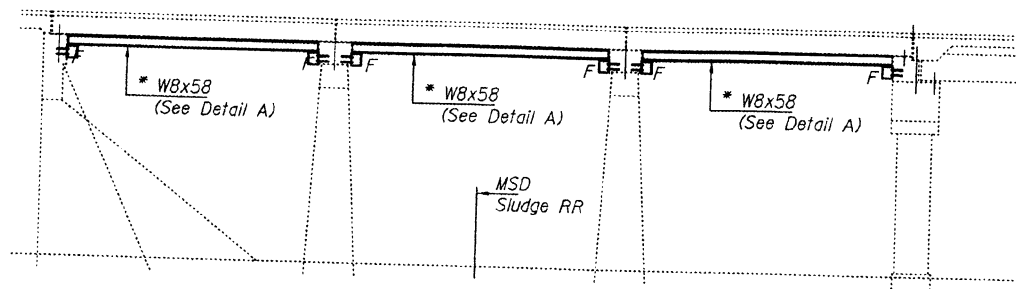
The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures.

See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods; Minimum embedment 9".

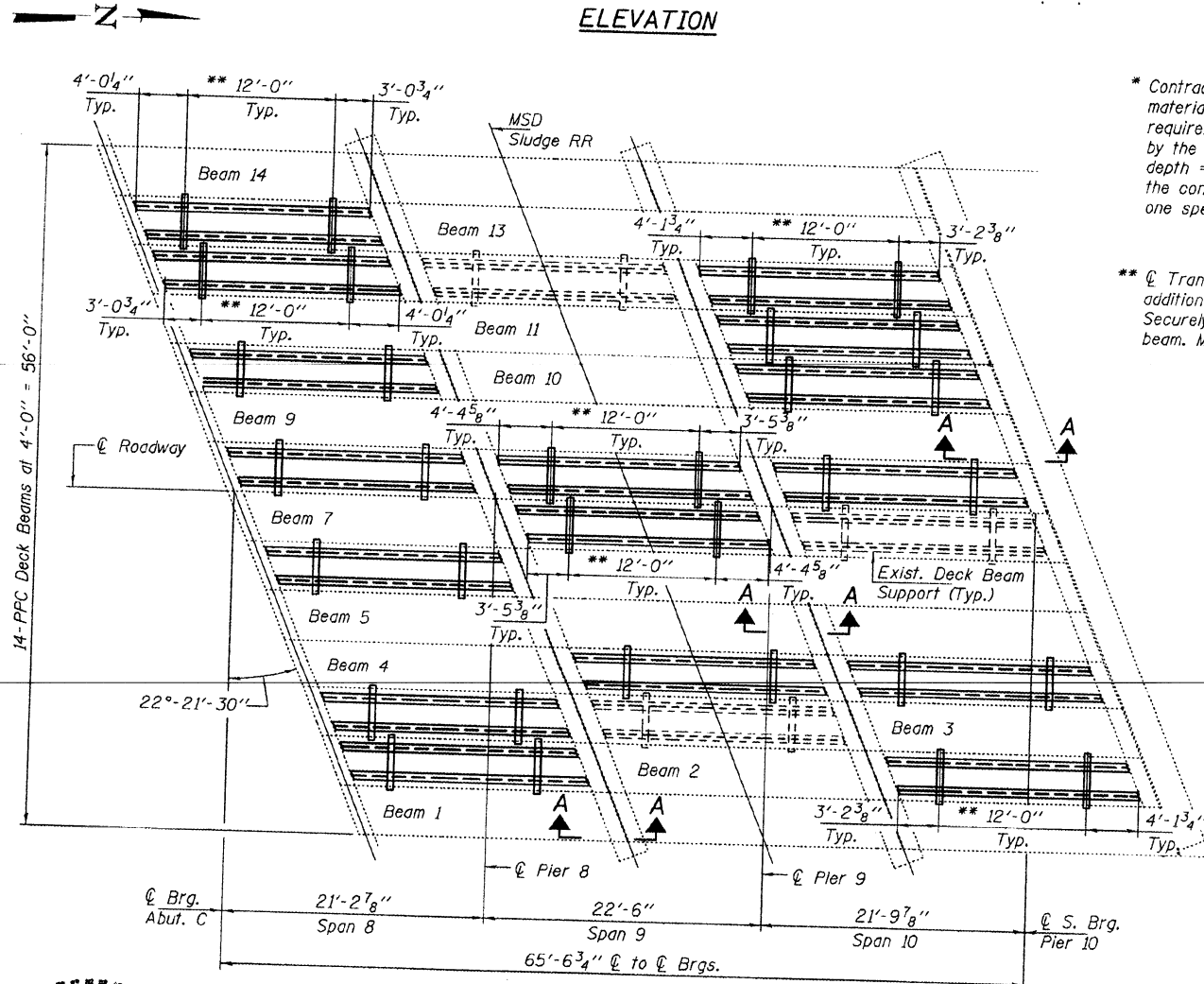
If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.

The cost of epoxy grouting threaded rods on the pier cap, abutments and beams shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See Special Provisions.



ELEVATION

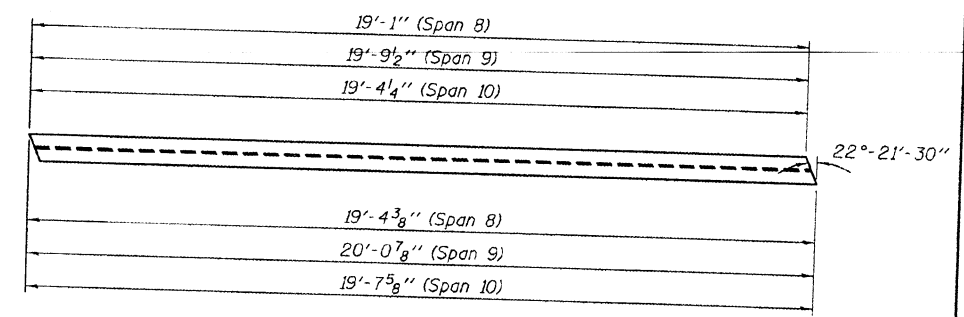


PLAN

For Section A-A, see sheet 2 of 2.

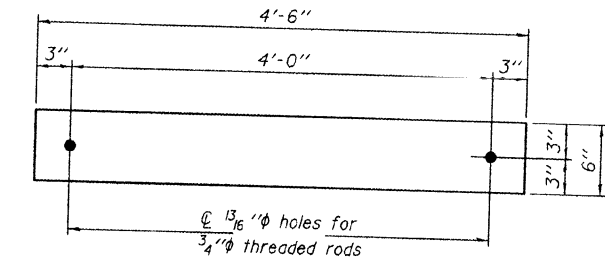
* Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth = 8". No additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans. (Min. Sx = 52 in³)

** @ Transverse tie R's (2 per span). Place additional shims at midpoints between tie R's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.



DETAIL A

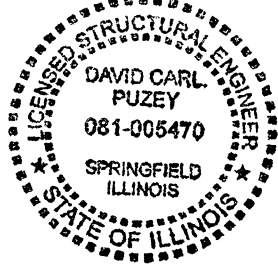
W8x58 x 19'-4 3/8" (14 Req'd)
 W8x58 x 20'-0 7/8" (6 Req'd)
 W8x58 x 19'-7 5/8" (12 Req'd)



TRANSVERSE TIE R'S
 R A 1/2" x 1'-6" x 6" (32 Req'd)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	41,830



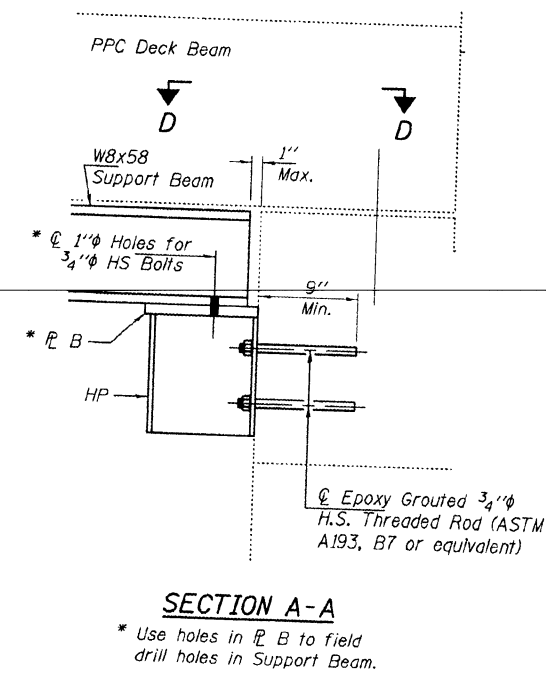
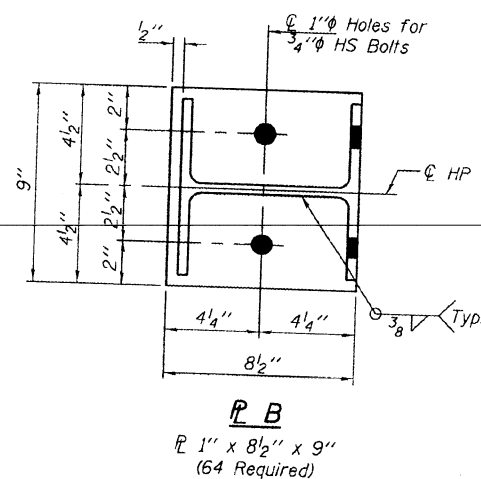
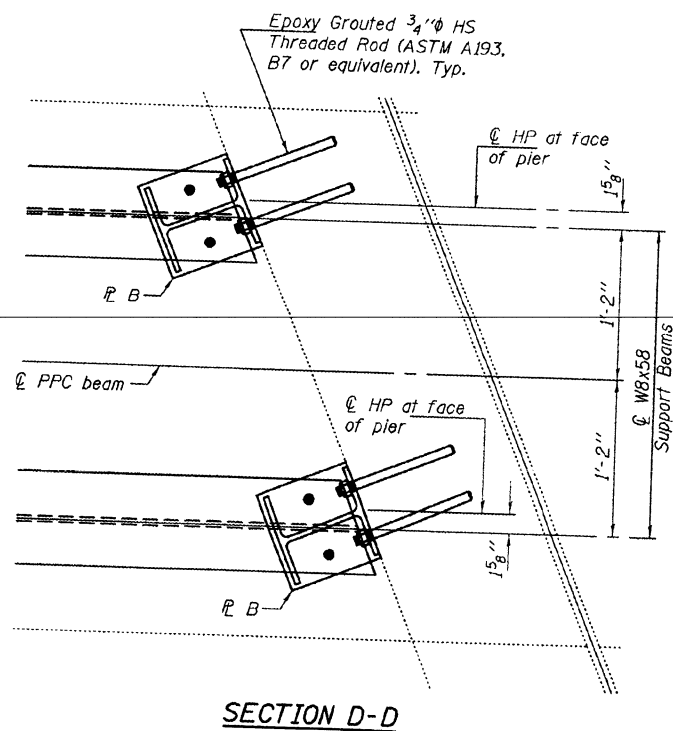
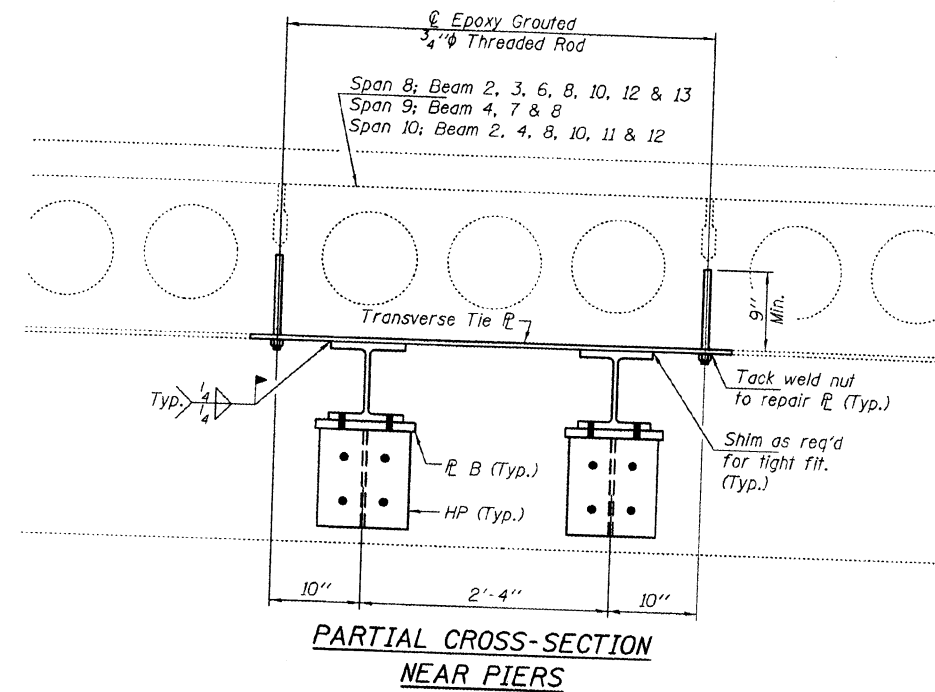
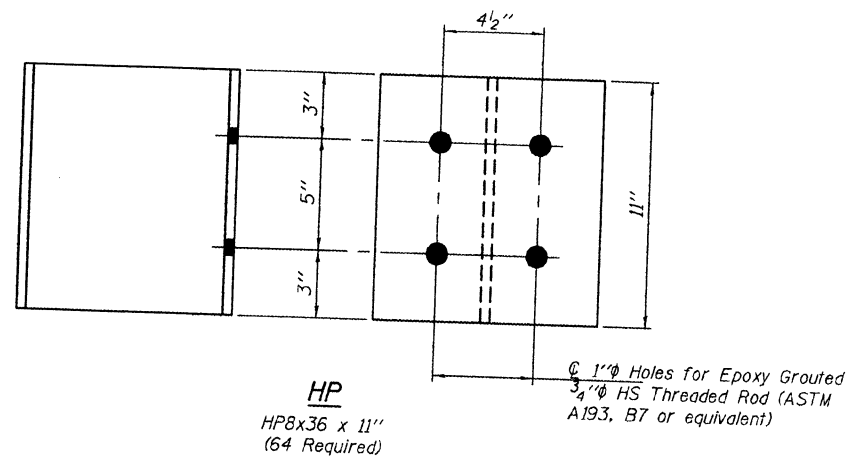
DESIGNED: <i>Von Ritz</i>	EXAMINED: <i>James F. [Signature]</i>	DATE: MAY 22, 2012
CHECKED: <i>Victor B. [Signature]</i>	PASSED: <i>[Signature]</i>	
DRAWN: Kyle M. Steffen	ACTING ENGINEER OF BRIDGES AND STRUCTURES	
CHECKED: V.P.		

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLAN AND ELEVATION
 016-0314

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2012-032BR	COOK	10	6
CONTRACT NO. 60T55				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY



DESIGNED VP	EXAMINED	DATE
CHECKED VHV	<i>Joanne F. J...</i>	MAY 22, 2012
DRAWN Kyle M. Steffen	ACTING ENGINEER OF STRUCTURAL SERVICES	
CHECKED VP VHV	PASSED	

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS
SN 016-0314

SHEET NO. 2 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2012-0328R	COOK	10	7
CONTRACT NO. 60T55				
ILLINOIS FED. AID PROJECT				

60P28

COOK

#140

06-17-11 LETTING ITEM 140

FOR INDEX OF SHEETS SEE SHEET 2

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	0708.08-BR	COOK	6	1

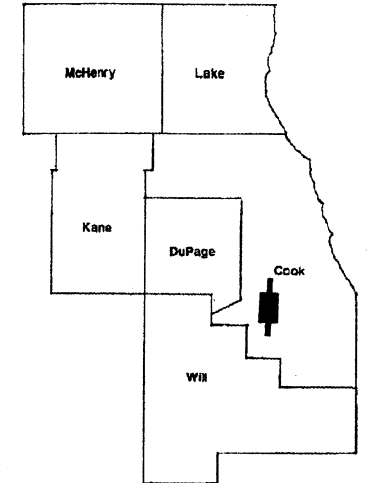
100%
2-3-2012

IMPROVEMENT IS LOCATED IN THE VILLAGE OF FOREST VIEW.

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

CONTRACT NO 60P28

D-91-499-11



FAP ROUTE 348: IL 43 NB (HARLEM AVE)
OVER CN & MWRD (SLUDGE) RR
SECTION: 0708.08-BR
PCC DECK BEAM SUPPORTS
COOK COUNTY
C-91-499-11

016-0314

R 12 E R 13 E

LOCATION OF IMPROVEMENT INDICATED THUS: [Symbol]

LOCATION OF IMPROVEMENT SN 016-0314

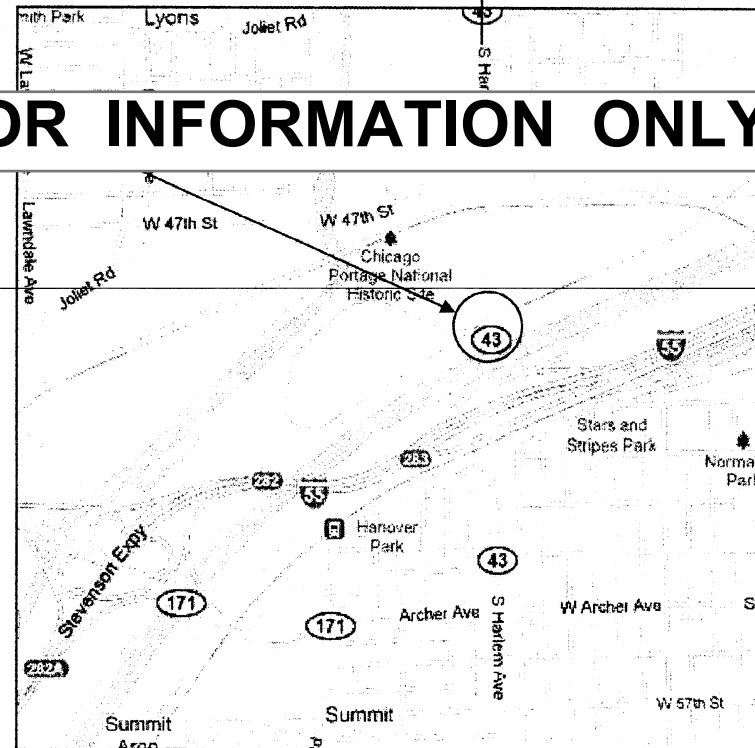
FOR INFORMATION ONLY

TRAFFIC DATA

2009 ADT = 19,000

POSTED SPEED LIMIT = 40 MPH

T 38 N



STICKNEY TOWNSHIP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: APRIL 8 2011
Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

MAY 13 2011
Scott E. Stapp
acting ENGINEER OF DESIGN AND ENVIRONMENT

MAY 13 2011
Christene M. Reed
DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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

PROJECT ENGINEER ROBERT BORO (847) 705-4178
PROJECT MANAGER ISSAM RAYYAN

CONTRACT NO. 60P28

016-0314

FOR INFORMATION ONLY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	0708.08-BR	COOK	6	2

CONTRACT NO 60P28

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 - 5 BRIDGE REPAIRS
- 6 ARTERIAL ROAD INFORMATION SIGN (TC-22)

STATE STANDARDS

- 701601 - 07 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701901 - 01 TRAFFIC CONTROL DEVICES

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ILLINOIS DEPARTMENT OF TRANSPORTATION
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FOR INFORMATION ONLY

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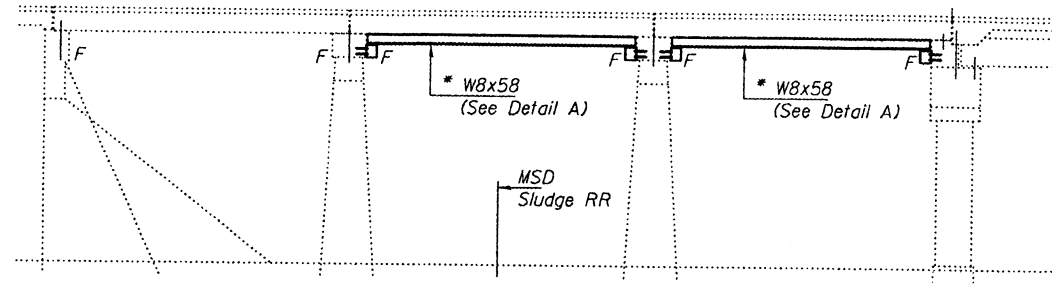
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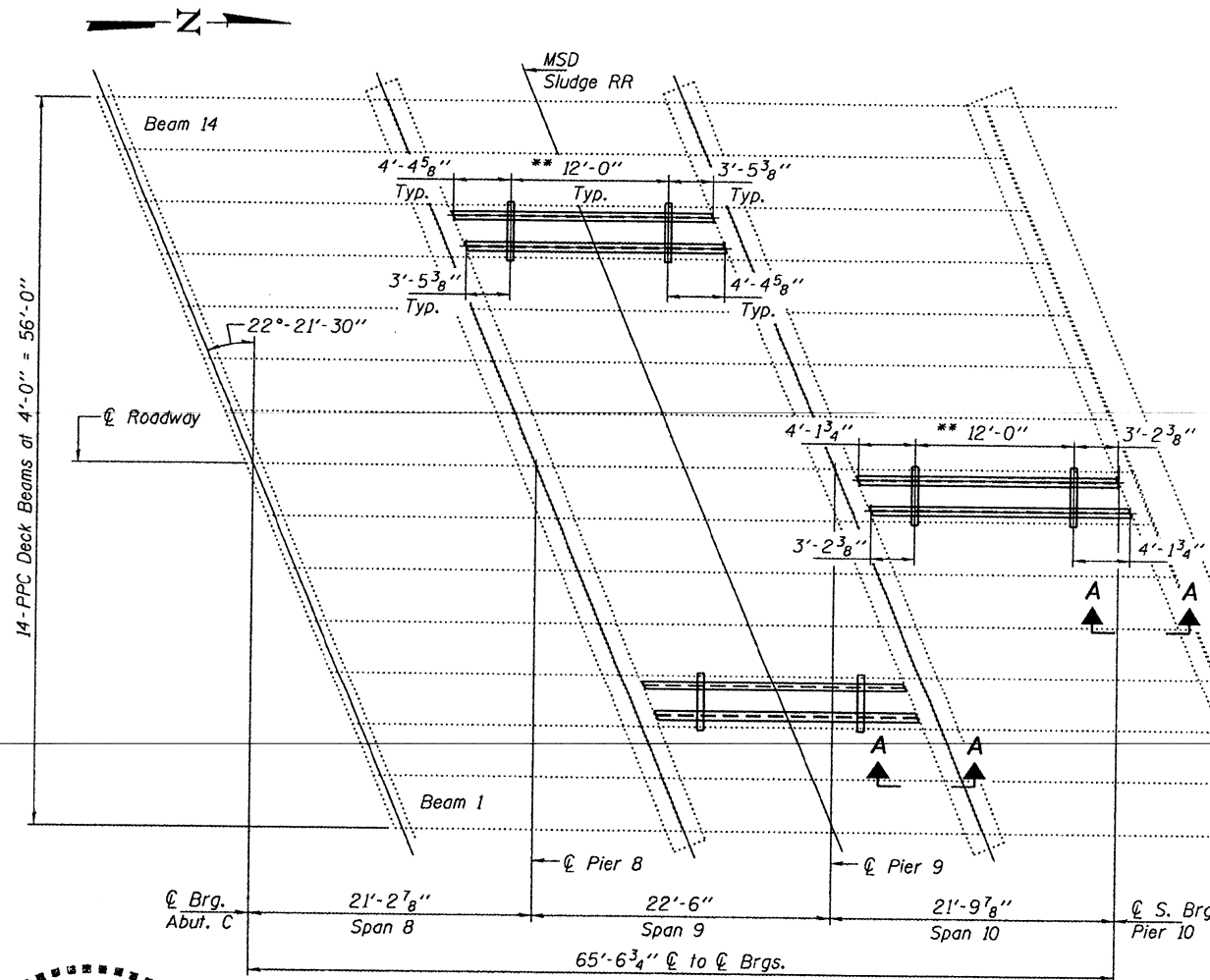
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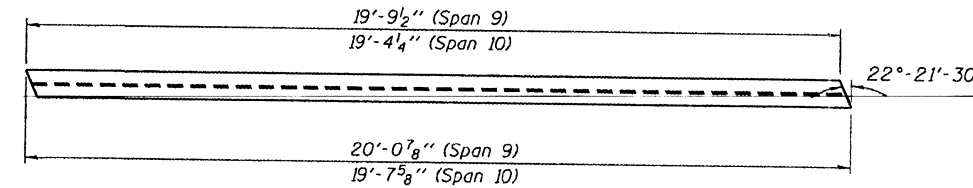
ELEVATION



PLAN

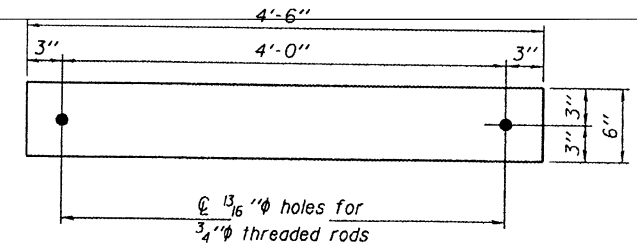
For Section A-A, see sheet 2 of 2.

* Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth = 8". No additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans. (Min. Sx = 52 in³)



DETAIL A

W8x58 x 20'-0 7/8" (4 Req'd)
W8x58 x 19'-7 5/8" (2 Req'd)



TRANSVERSE TIE RL'S
RL A 1/2" x 4'-6" x 6" (6 Req'd)

** CL Transverse tie RL's (2 per span). Place additional shims at midpoints between tie RL's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.



EXPIRES 11-30-2012

DESIGNED *David Puzey*
CHECKED *John A. B...*
DRAWN *boliva*
CHECKED *ADY*

EXAMINED *John F. ...* DATE **MAY 4, 2011**
PASSED *David Carl Puzey*
ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

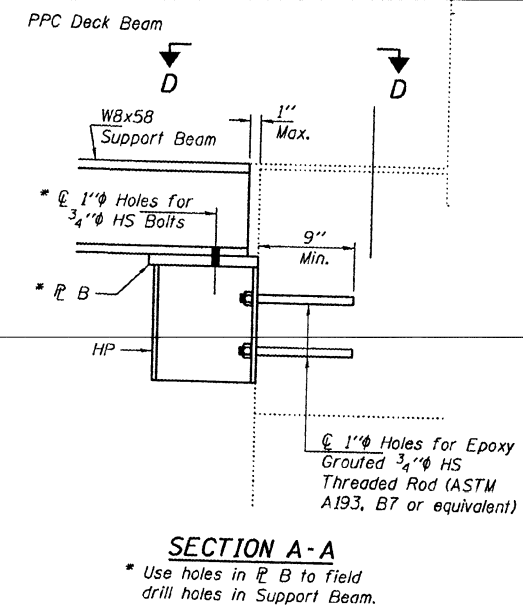
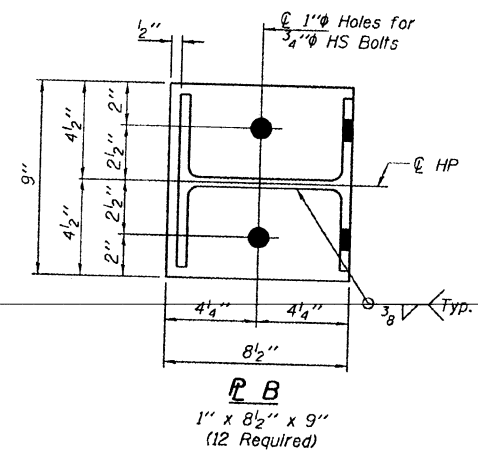
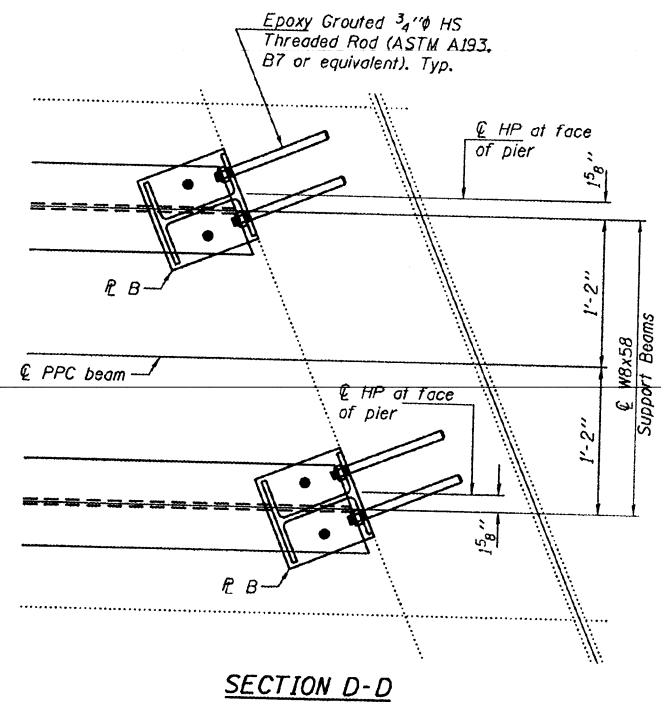
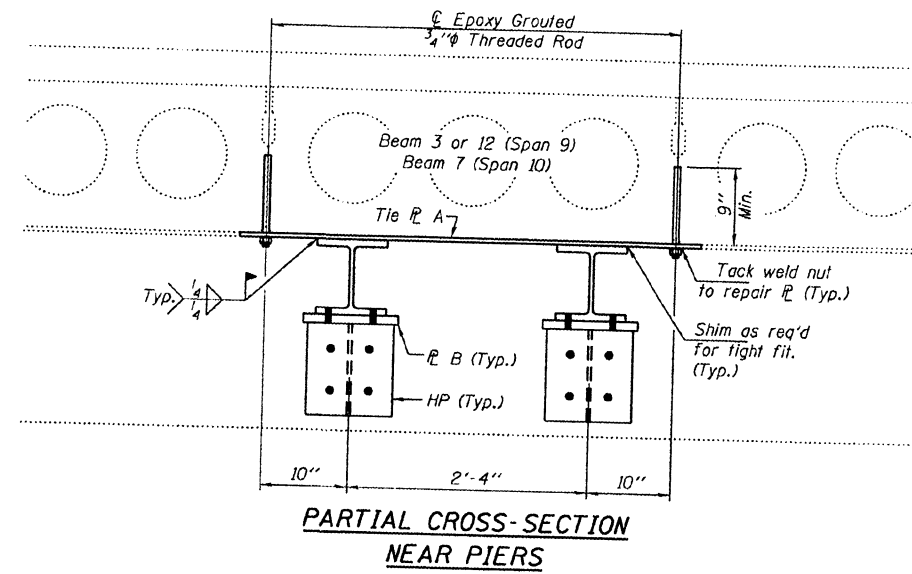
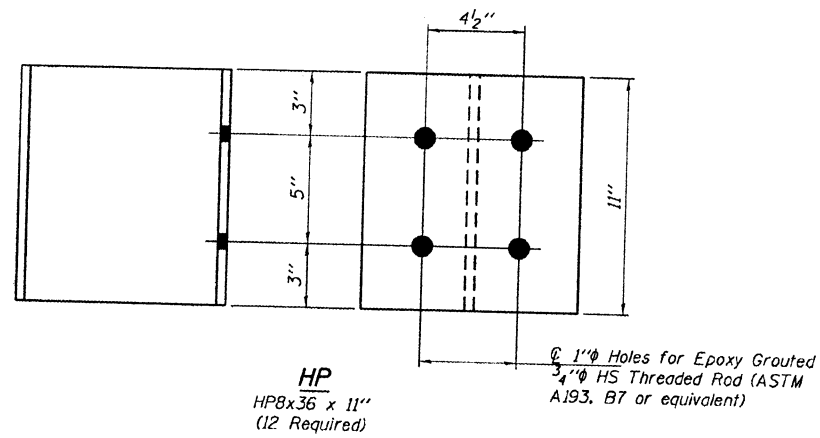
PLAN AND ELEVATION
016-0314

SHEET NO. 1 OF 2 SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	8020

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	0708.08-BR	COOK	6	4
CONTRACT NO. 60P28				
ILLINOIS FED. AID PROJECT				



DESIGNED ADY	EXAMINED	DATE
CHECKED DAB	<i>Jayne F. [Signature]</i>	MAY 4, 2011
DRAWN <i>daiva</i>	PASSED	
CHECKED ADY DAB	ACTING ENGINEER OF STRUCTURAL SERVICES	
	ACTING ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS
SN 016-0314

SHEET NO. 2 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	0708.08-BR	COOK	6	5
CONTRACT NO. 60P28			ILLINOIS FED. AID PROJECT	

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

P-91-296-86
P-91-297-86

NOTE: WHEREVER IN THESE PLANS REFERENCE IS MADE TO ANY SECTION NUMBER OTHER THAN THAT SHOWN ON THIS COVER SHEET IT SHALL BE INTERPRETED TO MEAN THE SECTION NUMBER SHOWN ON THIS SHEET. *0708 (.08, .1, .2A, .3A) & 2323.5 (B-R-86)

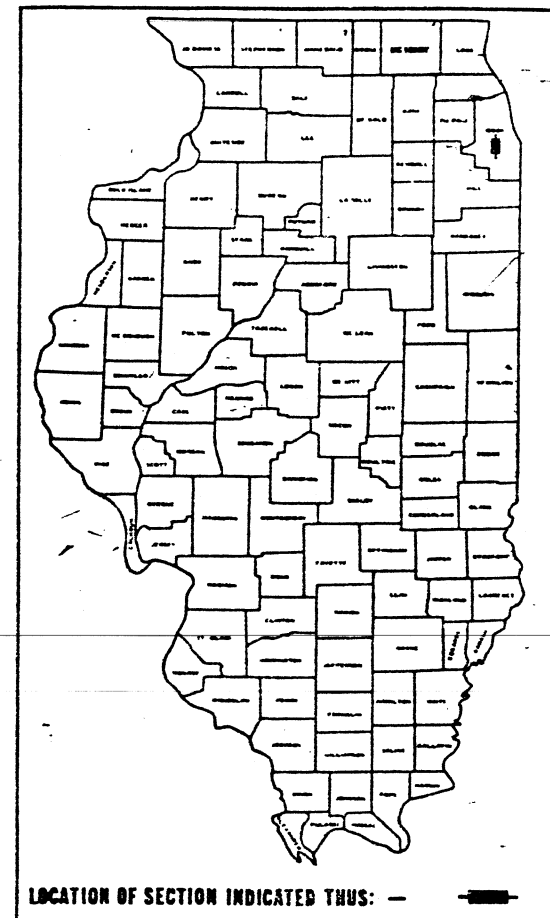
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
848	#	COOK	261

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

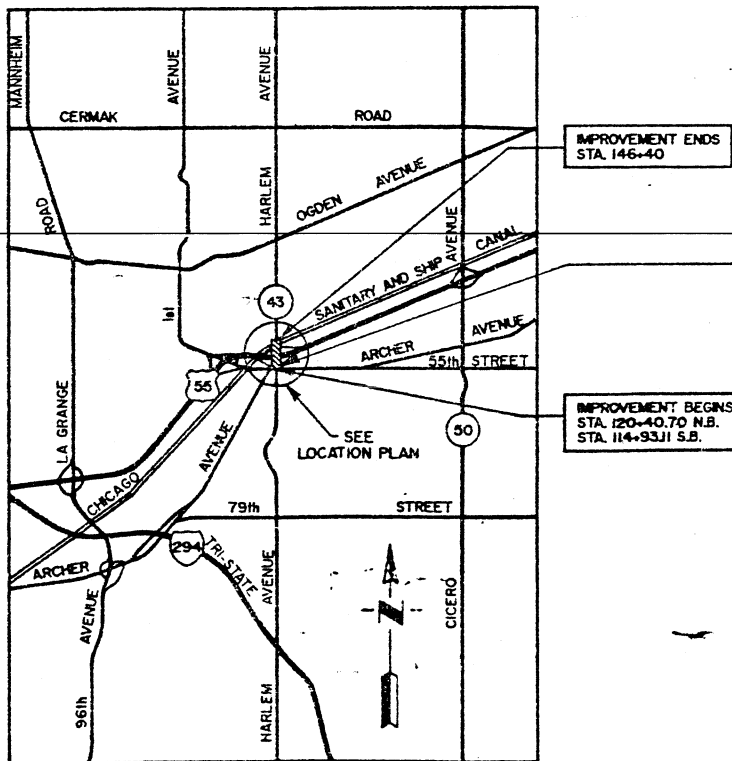
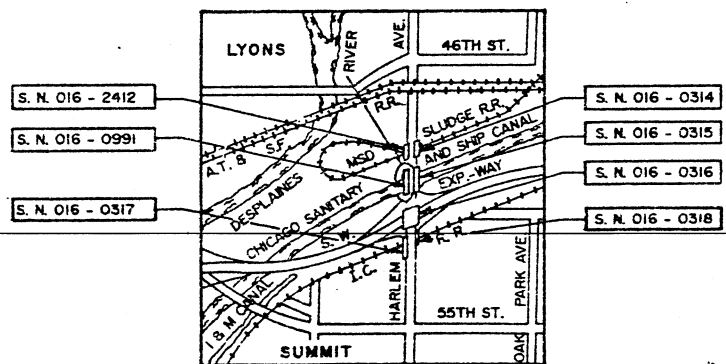
FOR INDEX OF SHEETS, SEE SHEET NO. 2

99,96
9-29-89

FAP 848 (ILL. 43/HARLEM AVENUE)
SECTION 0708 (.08, .1, .2A, .3A) & 2323.5 (B-R-86)
COOK COUNTY
STEVENSON EXPRESSWAY TO MSD SLUDGE RAILROAD & I.C.G.R.R.



(C-91-257-87)



- THE PROPOSED IMPROVEMENT
- CONSISTS OF REMOVAL OF EXISTING BRIDGE CONCRETE SUPERSTRUCTURES OVER I.C. RAILROAD AND REPLACEMENT WITH NEW DECK AND PARAPET FOR SOUTHBOUND BRIDGE, NEW STEEL BEAMS, CONCRETE DECK AND PARAPET, REPAIR OR REMOVAL AND RECONSTRUCTION OF BRIDGE ABUTMENT BACKWALL.
 - REHABILITATION OF BRIDGES OVER I-55, CHICAGO SANITARY AND SHIP CANAL, AND MSD SLUDGE RAILROAD.
 - BITUMINOUS SURFACE REMOVAL AND REPLACEMENT ON BRIDGES, ROADWAY AND APPROACH SLABS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

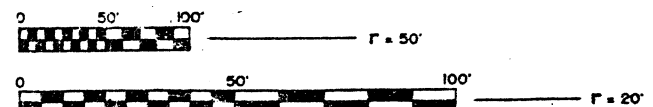
SUBMITTED: October 5, 1989

DESIGNED: 10/2/89

DRAWN: 10/2/89

PROJ. NO. 10-29-89

APPROVED: 11/2/89



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.

PLANS PREPARED BY

RACKOFF EADS
118 N. CLINTON
CHICAGO, ILLINOIS
STA. 120+40.70 TO STA. 123+35.84 N. B.
STA. 114+33.11 TO STA. 122+93.50 S. B.

HARRY O. HEFFTER, ASSOC., INC.
180 N. WABASH
CHICAGO, ILLINOIS
STA. 123+35.84 TO STA. 146+40.00 N. B.
STA. 122+93.50 TO STA. 146+40.00 S. B.

GROSS LENGTH OF IMPROVEMENT - 3,147 LIN. FT. = 0.596 MILES S. B., 2,600 LIN. FT. = 0.492 MILES N. B.
NET LENGTH OF IMPROVEMENT - 3,147 LIN. FT. = 0.596 MILES S. B., 2,600 LIN. FT. = 0.492 MILES N. B.
ROADWAY IMPROVEMENT LENGTH - 1,207.03 LIN. FT. = 0.229 MILES N. B., 1,468.11 LIN. FT. = 0.278 MILES S. B.
BRIDGE IMPROVEMENT LENGTH - 1,147.97 LIN. FT. = 0.217 MILES S. B., 886.89 LIN. FT. = 0.168 MILES N. B.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

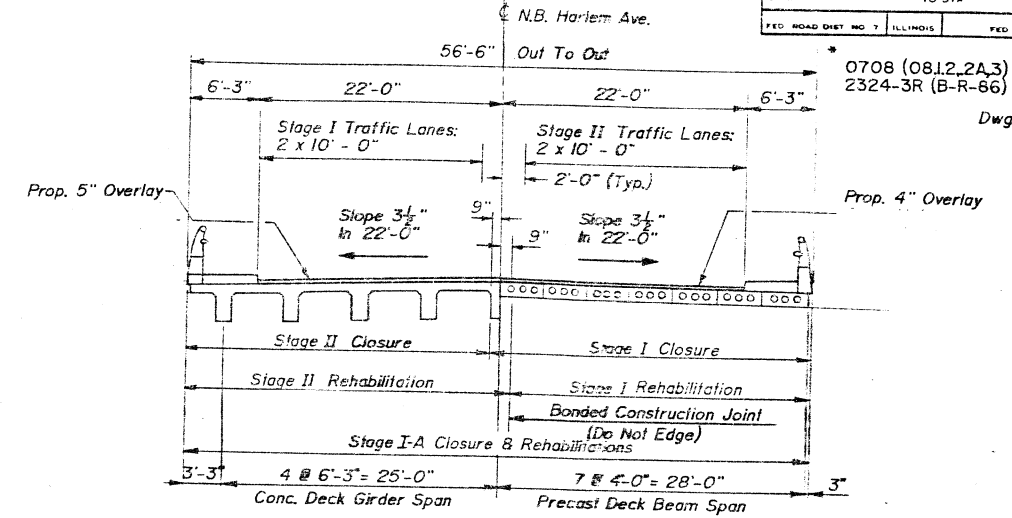
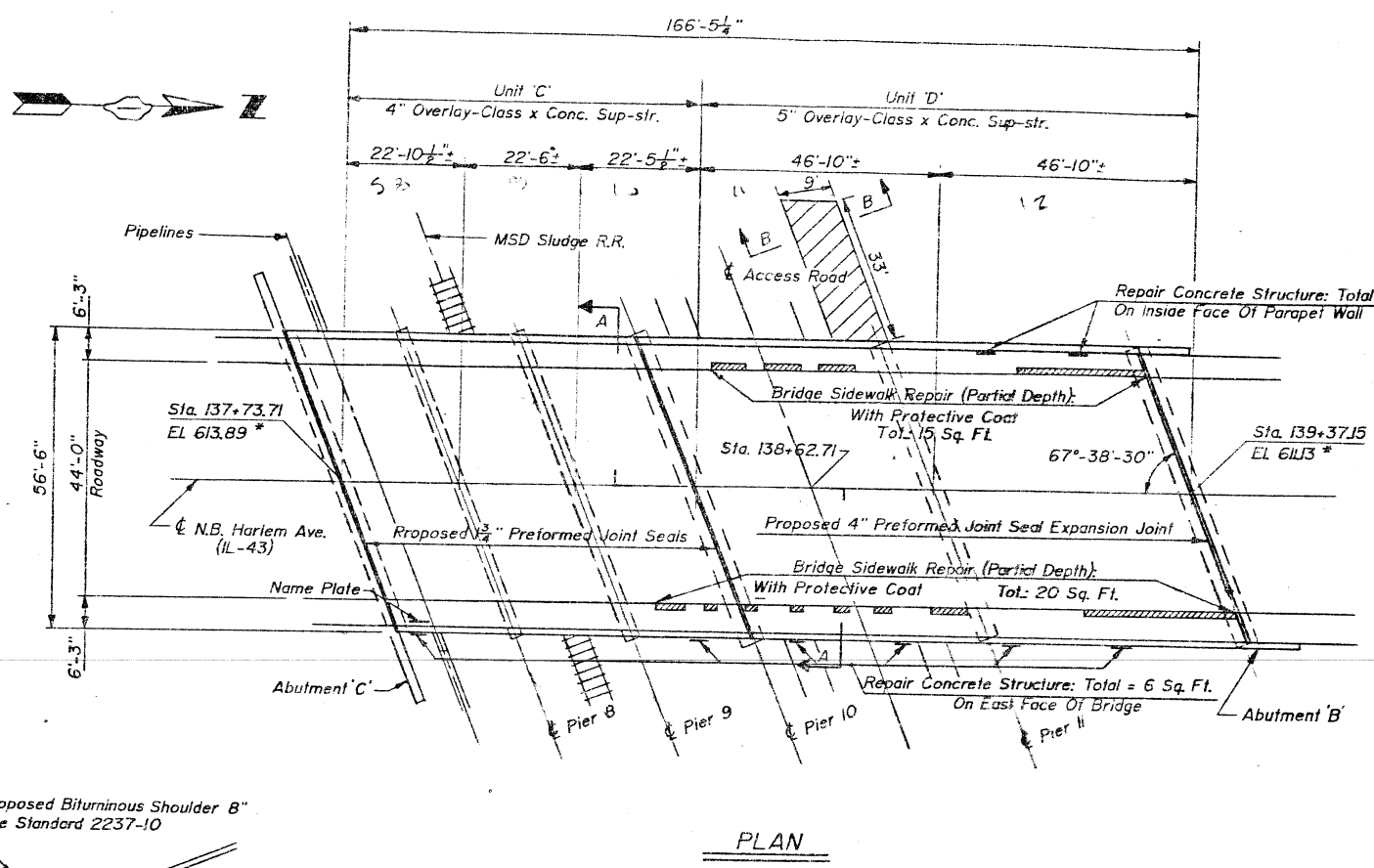
CONTRACT NO. 80528

FOR J. U. L. I. E. INFORMATION CALL TOLL FREE 1-800-892-0123

FOR INFORMATION ONLY

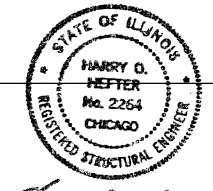
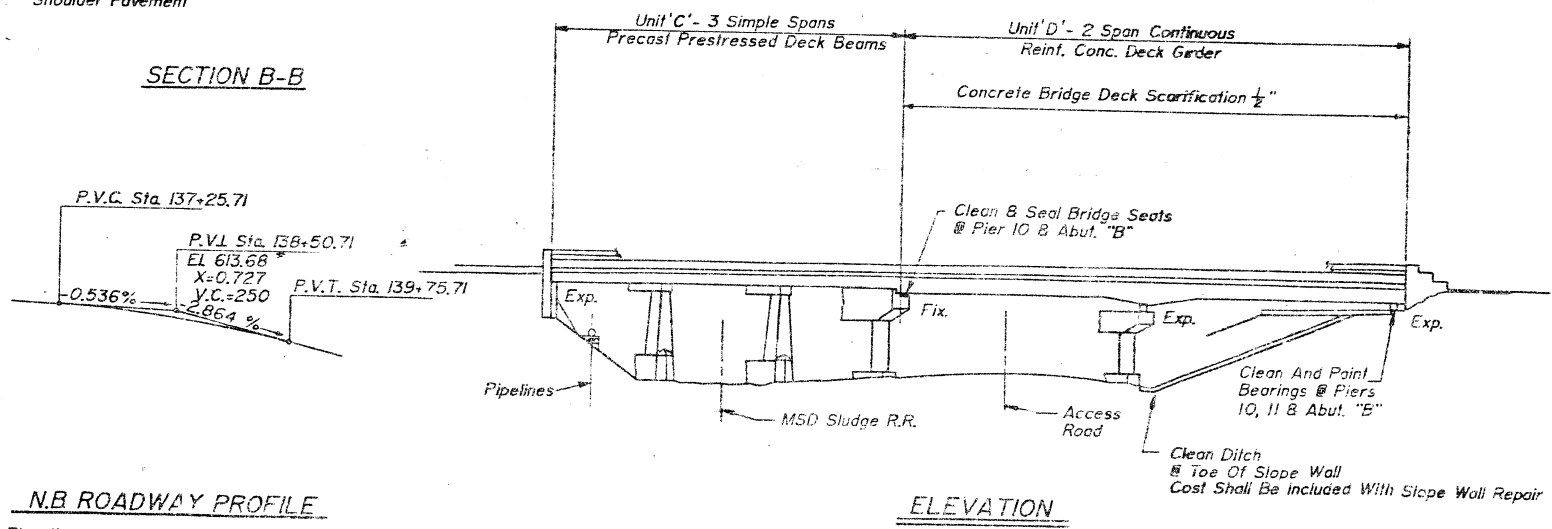
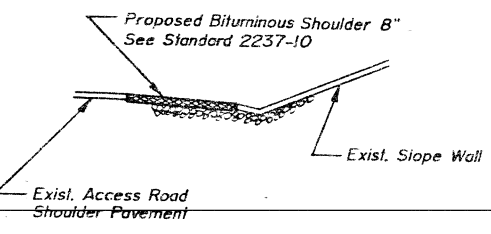
0-229

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	COOK	261	74
STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS	
FED. AID PROJECT		0708 (08.1.2A.3) & 2323.1 2324-3R (B-R-66)	



TOTAL BILL OF MATERIALS FOR BRIDGE SN 016-0314

PAY ITEM	UNIT	SUBSTR	SUPERSTR	TOTAL
BITUMINOUS SHOULDERS 8"	SQ. YD.			33
PROTECTIVE COAT	SQ. YD.			4
CONCRETE REMOVAL	CU. YD.		4	4
PREFORMED JOINT SEAL 1 3/4"	LN. FT.		8	8
PREFORMED JOINT SEAL 4"	LN. FT.		122	122
CLEANING & PAINTING STEEL BRIDGE No. 1	LN. FT.		61	61
REINFORCING BARS, EPOXY COATED	L. SLM		1	1
BITUMINOUS CONCRETE REMOVAL (DECK)	SQ. YD.		10810	10810
BRIDGE SIDEWALK REPAIR (PART. DEPTH)	SQ. FT.		785	785
CONCRETE BRIDGE DECK SCARIFICATION 1/2"	SQ. YD.		35	35
CONCRETE DECK BEAM REPAIR	SQ. FT.		460	460
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ. FT.		68	68
DECK SLAB REPAIR (PARTIAL)	SQ. YD.		10	10
EPOXY CRACK SEALING	SQ. YD.		200	200
REPAIR CONCRETE STRUCTURES	LN. FT.	16		16
KEYWAY REPAIR	SQ. FT.	53	8	61
SLOPE WALL REPAIR	LN. FT.		680	680
BRIDGE SEAT SEALER	SQ. YD.	10		10
FURNISH & ERECT STRUCTURAL STEEL	POUNDS		0.1	0.1
BRIDGE DECK CONCRETE OVERLAY	CU. YD.		6030	6030
NAME PLATES	EA.		105	105
Protective Shield	Sq. Yds.		10	10



APPROVED
FOR STRUCTURAL ADEQUACY ONLY

James H. Hefter
Engineer of Bridge and Structures

DESCRIPTION OF WORK---SN 016-0314---N.B. OVER MSD R.R.

- 1.0 Remove Bituminous Concrete Deck Surface
- 2.0 Repair Reinforced Concrete Deck, Sidewalk & Parapets
- 3.0 Repair Precast Deck Beams: Keyways Surface
- 4.0 Rebuild Deck Joints:
Precast Deck Beams To South Abutment
Precast Deck Beams To Precast Deck Beams (2 Joints)
Precast Deck Beams To Reinforced Cast In Place Deck
Reinforced Cast In Place Deck To North Abutment
Scarify Bridge Deck - Unit "D"
- 5.0 Place 4" & 5" BRIDGE DECK CONCRETE OVERLAY
- 6.0 Repair Piers & Abutments With Epoxy Crack Injection & Concrete Repair
- 7.0 Clean & Repair Concrete Ditch @ Toe Of North Abutment Slope Wall
Cleaning is incidental To Slope Wall Repair
- 8.0 Clean & Seal Bridge Seats
- 9.0 Clean & Seal Bridge Seats
- 10.0 Clean & Repair Concrete Ditch @ Toe Of North Abutment Slope Wall
Cleaning is incidental To Slope Wall Repair

INDEX OF DRAWINGS FOR SN 016-0314

Dwg. No.	Title
S-1	General Plan
S-2	Deck Slab Repair Plan & General Notes
S-3	Deck Slab Modifications
S-4	Expansion Joints And Bar Schedule
S-5	Abutment And Pier No. 9 Repairs
S-6	Pier No. 8 And Pier No. 10 Repairs

Reference:
Original Construction Plans
F. A. Route - 43 - Project U - UG - 4 (72)
Sheets 1, 2, 4, 5 Thru 18 Of 86
Sta. 47+78.00 = Sta. 137+73.71 (Current Project)
Section 207-0708-08-C, F.

Note: General Notes-See Dwg. S-2

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

BRIDGE REHABILITATION

N.B. HARLEM AVE. OVER MSD SLUDGE R.R.

STRUCTURE NO. 016-0314 COOK COUNTY

SCALE: VERT. NONE HORIZ. NONE

DATE: _____

DRAWN BY D. MC.

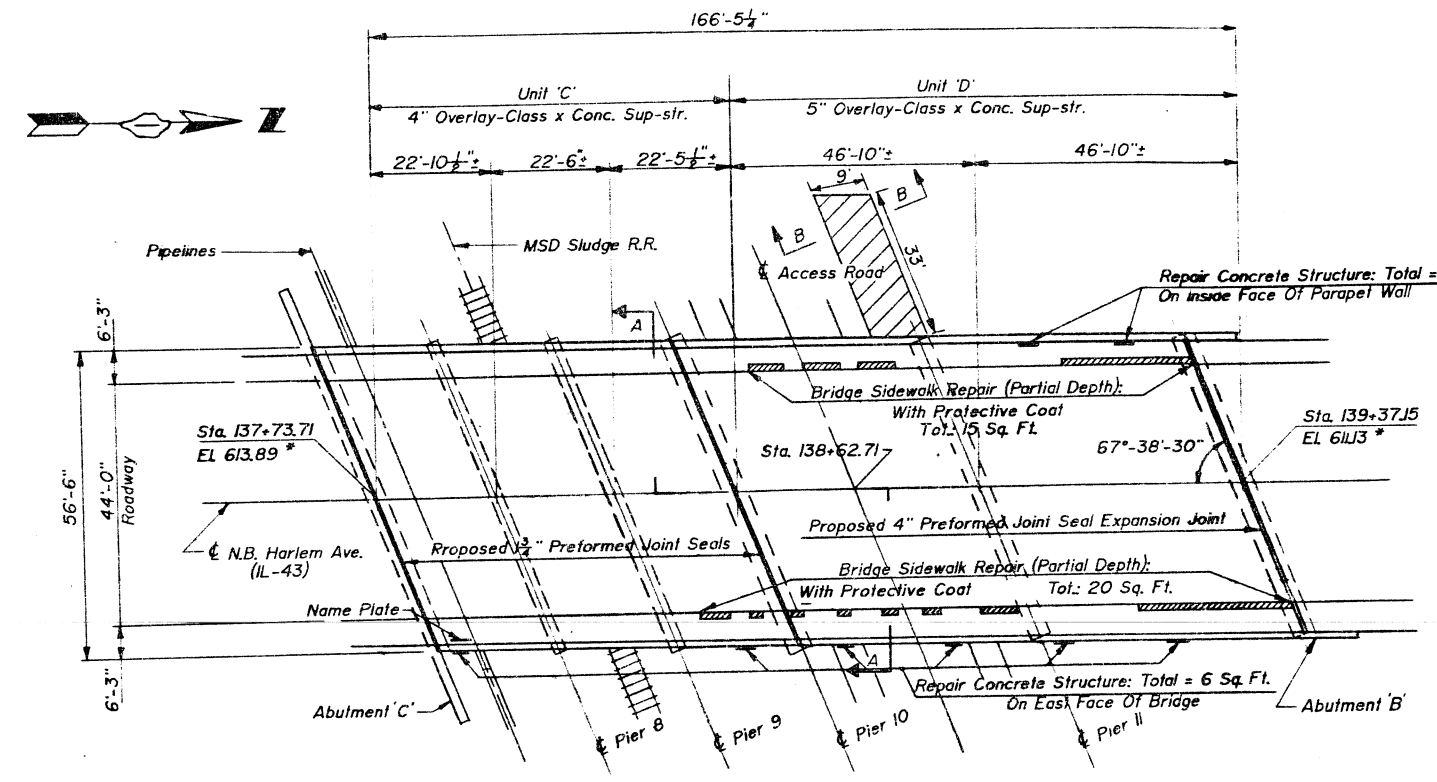
CHECKED BY R. J. K.

N.B. ROADWAY PROFILE

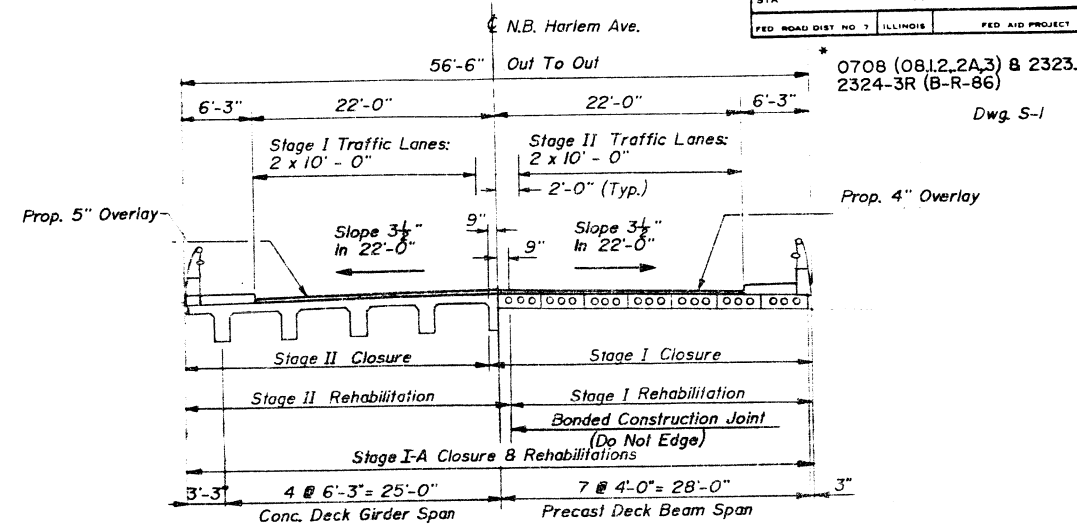
* Elevations Given Are For Reference Only,
Taken From Original Construction Plans
& Adjusted For The Proposed Deck
Overlay Thickness.

FOR INFORMATION ONLY

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 0708 (08.12.2A.3) & 2323.1	COOK	261	74
TO STA		FED AID PROJECT	

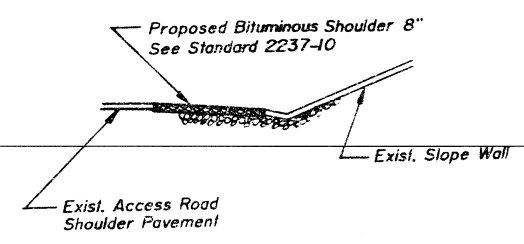


PLAN

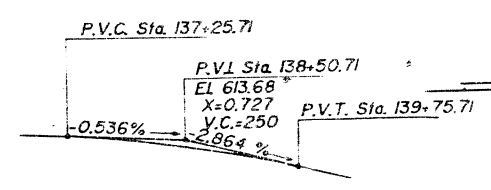


CROSS SECTION A - A

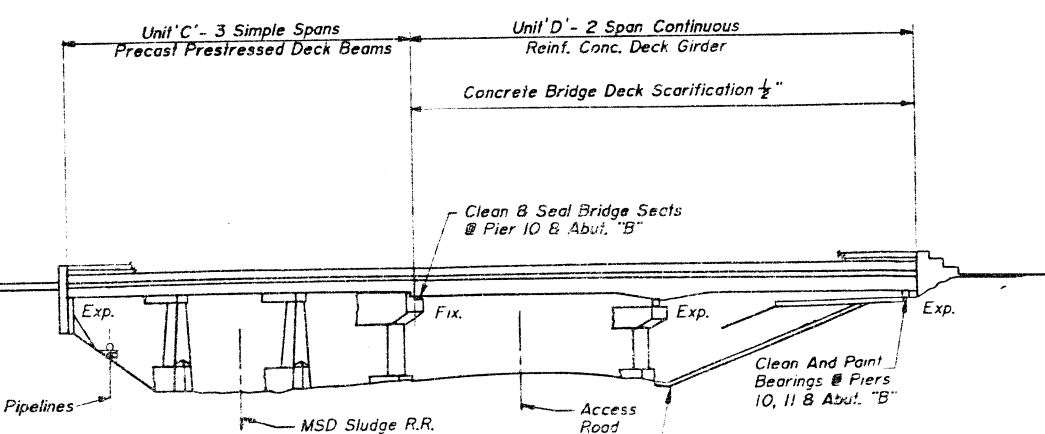
TOTAL BILL OF MATERIALS FOR BRIDGE SN 016-0314				
PAY ITEM	UNIT	SUBSTR	SUPERSTR	TOTAL
BITUMINOUS SHOULDERS 8"	SQ. YD.		4	33
PROTECTIVE COAT	SQ. YD.		4	4
CONCRETE REMOVAL	CU. YD.		8	8
PREFORMED JOINT SEAL 1 3/4"	LN. FT.		122	122
PREFORMED JOINT SEAL 4"	LN. FT.		61	61
CLEANING & PAINTING STEEL BRIDGE No. 1	L. SUM		1	1
REINFORCING BARS, EPOXY COATED	POUND		10810	10810
BITUMINOUS CONCRETE REMOVAL (DECK)	SQ. YD.		785	785
BRIDGE SIDEWALK REPAIR (PART. DEPTH)	SQ. FT.		35	35
CONCRETE BRIDGE DECK SCARIFICATION 1/2"	SQ. YD.		460	460
CONCRETE DECK BEAM REPAIR	SQ. FT.		68	68
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ. YD.		20	20
DECK SLAB REPAIR (PARTIAL)	SQ. YD.		16	16
EPOXY CRACK SEALING	LN. FT.	16		16
REPAIR CONCRETE STRUCTURES	SQ. FT.	53	8	61
KEYWAY REPAIR	LN. FT.		680	680
SLOPE WALL REPAIR	SQ. YD.	10		10
BRIDGE SEAT SEALER	L. SUM		0.2	0.2
FURNISH & ERECT STRUCTURAL STEEL	POUNDS		6030	6030
BRIDGE DECK CONCRETE OVERLAY	CU. YD.		106	106
NAME PLATES	EACH		1	1



SECTION B-B



N.B. ROADWAY PROFILE
 * Elevations Given Are For Reference Only. Taken From Original Construction Plans & Adjusted For The Proposed Deck Overlay Thickness.



ELEVATION



Harry B. Hefter

DESCRIPTION OF WORK---SN 016-0314---N.B. OVER MSD R.R.

- 1.0 Remove Bituminous Concrete Deck Surface
- 2.0 Repair Reinforced Concrete Deck, Sidewalk & Parapets
- 3.0 Repair Precast Deck Beams: Keyways Surface
- 4.0 Rebuild Deck Joints: Precast Deck Beams To South Abutment; Precast Deck Beams To Precast Deck Beams (2 Joints); Precast Deck Beams To Reinforced Cast In Place Deck; Reinforced Cast In Place Deck To North Abutment; Scarify Bridge Deck - Unit 'D'
- 5.0 Place 4" & 5" BRIDGE DECK CONCRETE OVERLAY
- 6.0 Repair Piers & Abutments With Epoxy Crack Injection & Concrete Repair
- 7.0 Clean & Repair Concrete Ditch @ Toe Of North Abutment Slope Wall. Cleaning is Incidenta! To Slope Wall Repair
- 8.0 Clean & Seal Bridge Seats
- 9.0 Bearings At Piers 10 And 11 And Abutment 'B' To Be Cleaned Per Method 1 And Painted

Dwg. No.	Title
S-1	General Plan
S-2	Deck Slab Repair Plan & General Notes
S-3	Deck Slab Modifications
S-4	Expansion Joints And Bar Schedule
S-5	Abutment And Pier No. 9 Repairs
S-6	Pier No. 8 And Pier No. 10 Repairs

Reference:
 Original Construction Plans
 F. A. Route - 43 - Project U - UG - 4 (72)
 Sheets 1, 2, 4, 5 Thru 18 Of 26
 Sta. 47+78.00 - Sta. 137+73.71 (Current Project)
 Section 207-0708-08-C.F.
 Note: General Notes-See Dwg. S-2

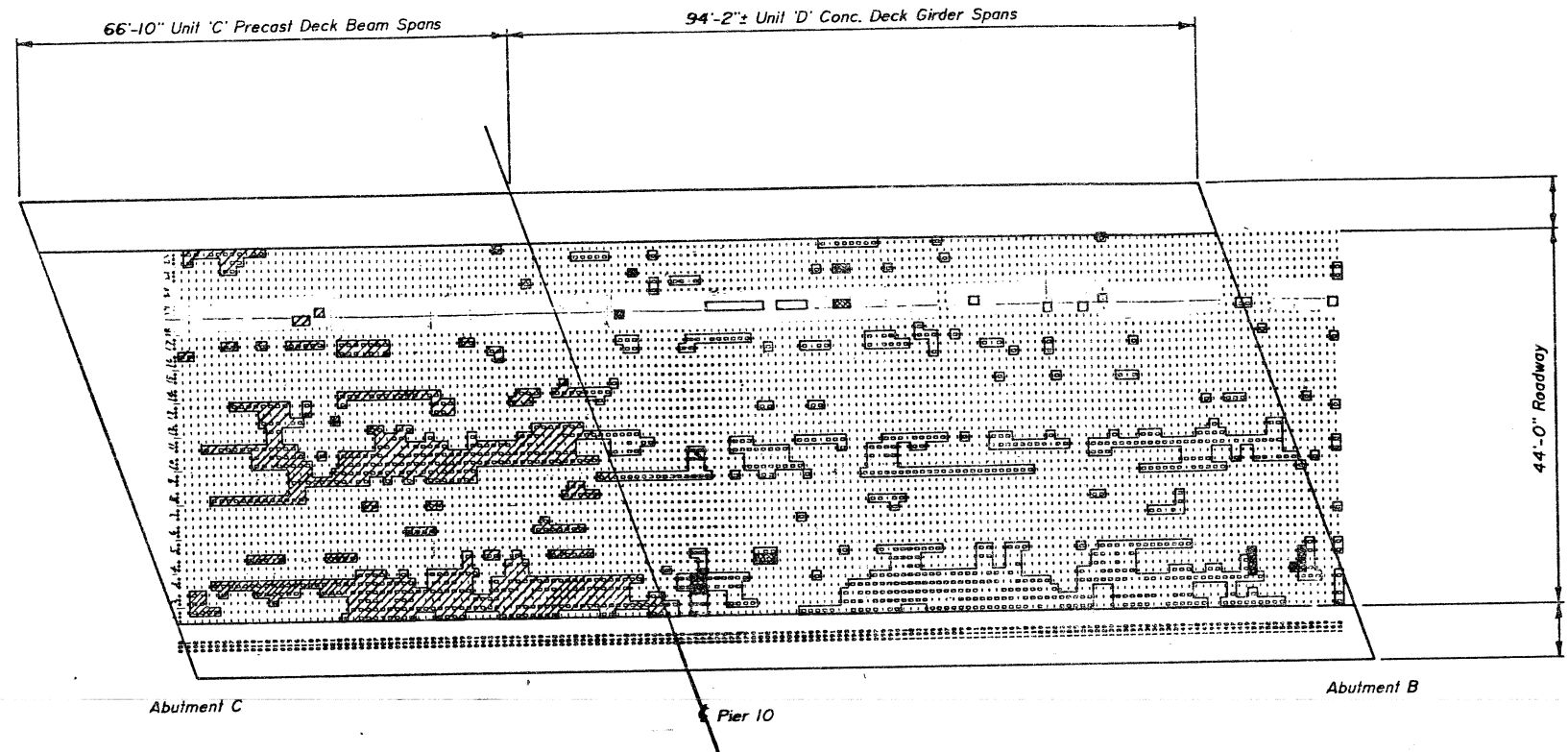
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
 BRIDGE REHABILITATION
 N.B. HARLEM AVE. OVER MSD SLUDGE R.R.
 STRUCTURE NO. 016-0314 COOK COUNTY
 SCALE: VERT. NONE
 HORIZ. NONE
 DRAWN BY D. Mc.
 CHECKED BY R. J. K.
 DATE: Rev.

FOR INFORMATION ONLY

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RT. 848	7	COOK	201	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ALIGNED	FED. AID PROJECT	

* 0708 (08.12.2A.3) & 23231, 2324-3R (B-R-86)
Dwg. S-2



- Areas Of Full Depth Deck Slab Repair - Type 1
- Areas Of Partial Depth Deck Slab Repair
- Areas Of Concrete Deck Beam Repair

BILL OF MATERIALS		
Item	Unit	Quant.
Deck Slab Repair (Full Depth, Type 1)	Sq. Yd.	10
Deck Slab Repair (Partial)	Sq. Yd.	200
Concrete Deck Beam Repair	Sq. Ft.	68
Bituminous Conc. Removal (Deck)	Sq. Yd.	785
Conc. Bridge Deck Scarification (1/2")	Sq. Yd.	460
Name Plates	Each	1

- ①
- ①
- ②
- ① ②
- ①

- ① For Unit D, Deck Girder Spans Only.
- ② For Unit C, Deck Beam Spans Only.

DECK SLAB REPAIR PLAN

STATION 138+62.71
REHABILITATED 199 BY
STATE OF ILLINOIS
F.A.P. RT.848 SEC.207-0708.08-CF

LOADING HS20
STR. No. 016-0314

LETTERING FOR NAME PLATE

See Std. 2113

NOTE:
Existing Name Plates shall be cleaned and relocated beneath new Name Plates. Cost shall be incidental to Name Plates. See sheet S-1 for location.

NOTE:
Areas Of Repair Shown Are Based On A Delameter Survey Taken In April, 1985 & Does Not Limit The Amount Of Repair Required As Directed By The Engineer. See Bridge Special Provisions For "Deck Slab Repairs."

GENERAL NOTES:

1. Calculated weight of Structural Steel = 6,030 pounds.
2. Paint shall be Lead and Chromate Free Alkyd paint system. Paint color shall be Light Grey - Munsell # 10Y 7/1. See Special Provisions.
3. Reinforcement bars shall conform to the requirements of AASHTO M-31, #4-42 or M-53 Grade 60.
4. Slope wall shall be reinforced with welded wire fabric, 5" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
5. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
6. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
7. Protective Shield shall be furnished, installed and later removed, to protect Access Road vehicular and Railroad traffic from falling materials. (See Special Provisions)
8. Bridge Seat Section = 420.0 Sq. Ft.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK SLAB REPAIR PLAN
BRIDGE REHABILITATION
N.B. HARLEM AVE. OVER MSD SLUDGE R.R.
STRUCTURE NO. 016-0314 COOK COUNTY

SCALE: VERT. NONE
HORIZ. NONE

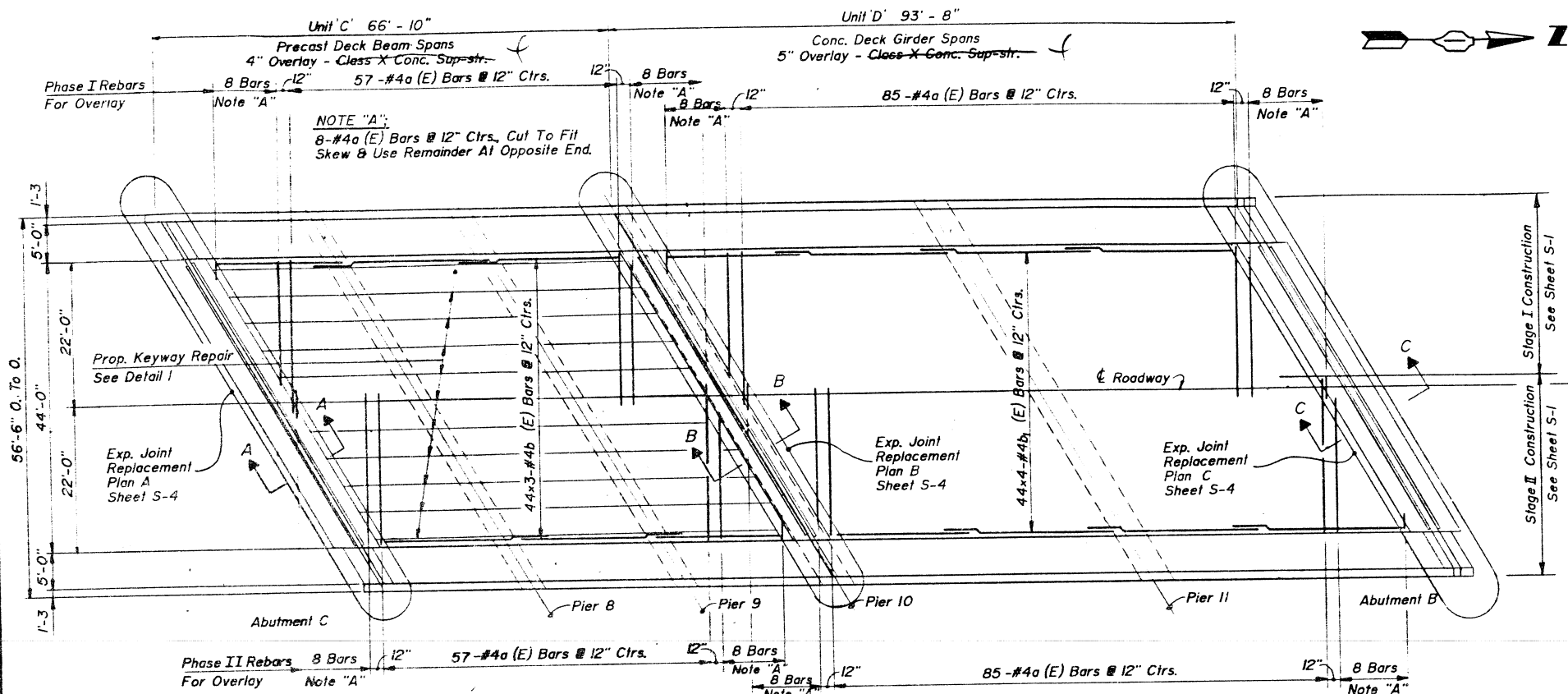
DATE: _____
DRAWN BY R. VEJAR
CHECKED BY R. J. K.

Rev. 12-7-89
Rev. 11-29-87

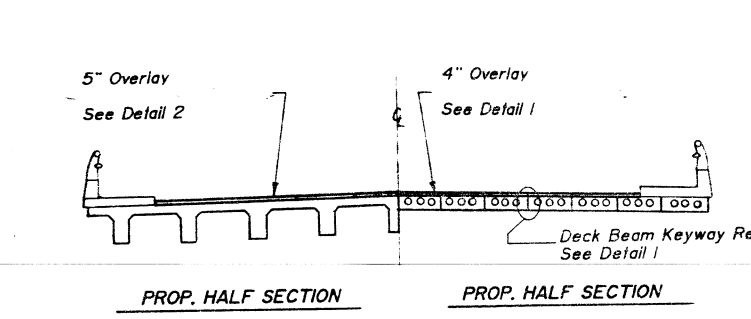
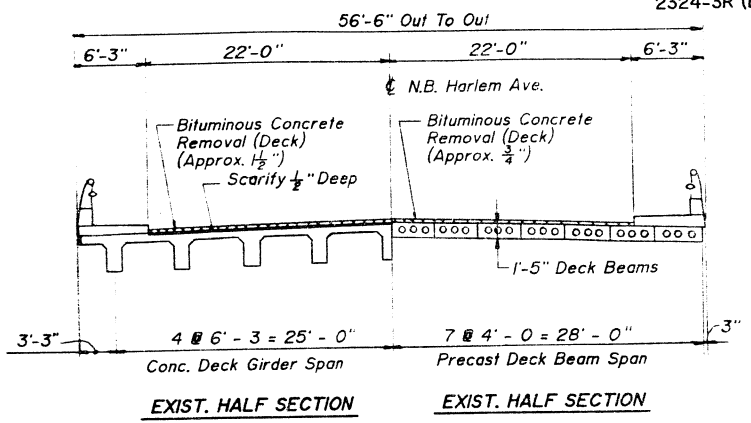
FOR INFORMATION ONLY

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 0708 (08,12,2A,3)	COOK	261	76
STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS	
		FED. AID PROJECT	

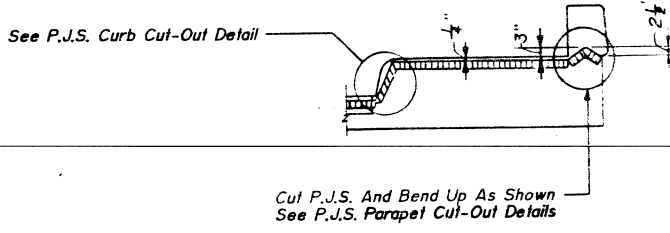
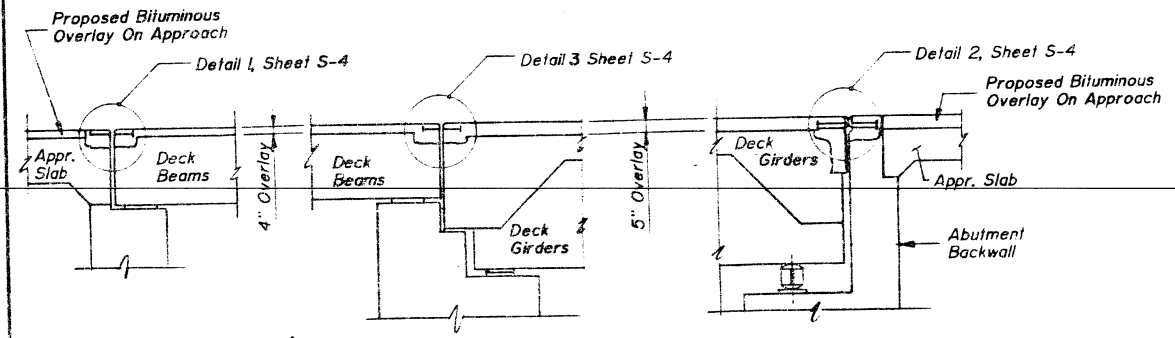
* 0708 (08,12,2A,3) & 23231, 2324-3R (B-R-86)
Dwg. S-3



DECK PLAN
SHOWING REINF. GRID IN OVERLAY



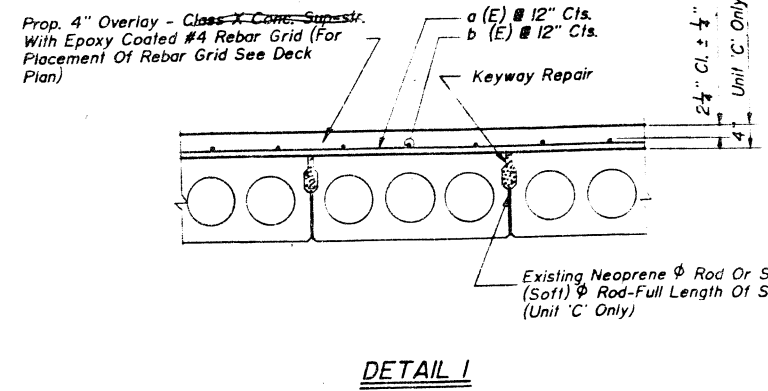
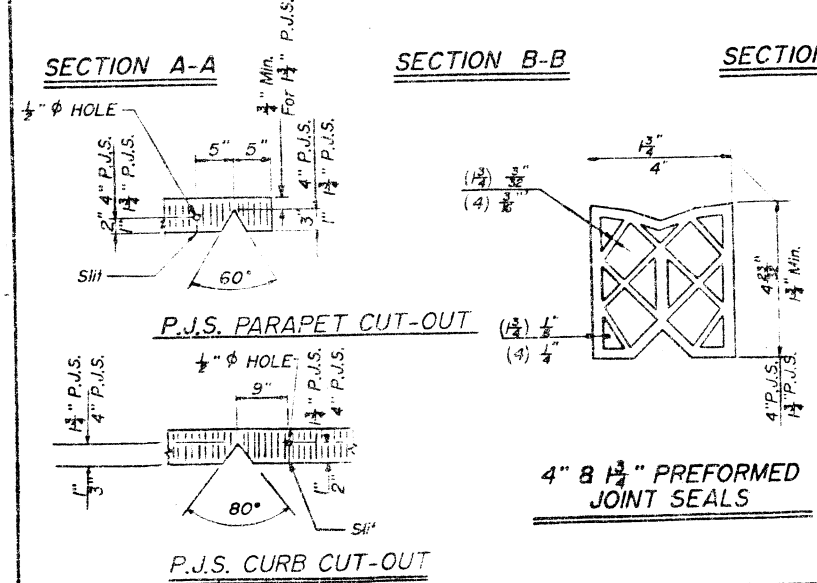
CONC. DECK GIRDER SPAN **PRECAST DECK BEAM SPAN**



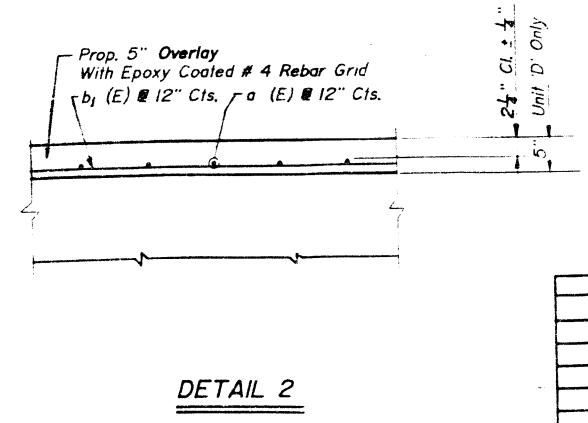
SIDEWALK P.J.S. TREATMENT

BILL OF MATERIALS		
Item	Unit	Quant.
Concrete Removal	Cu. Yd.	8
Preformed Joint Seal 1 1/2"	Lin. Ft.	122
Preformed Joint Seal 4"	Lin. Ft.	61
Reinforcing Bars, Epoxy Coated	Pound	10810
Keyway Repair	Lin. Ft.	680
Bridge Deck Concrete Overlay	Cu. Yd.	106
Structural Steel	Pound	6030

For Reinf. Bar Schedule See Sheet S-4
Work This Sheet With Sheet S-4



DETAIL 1

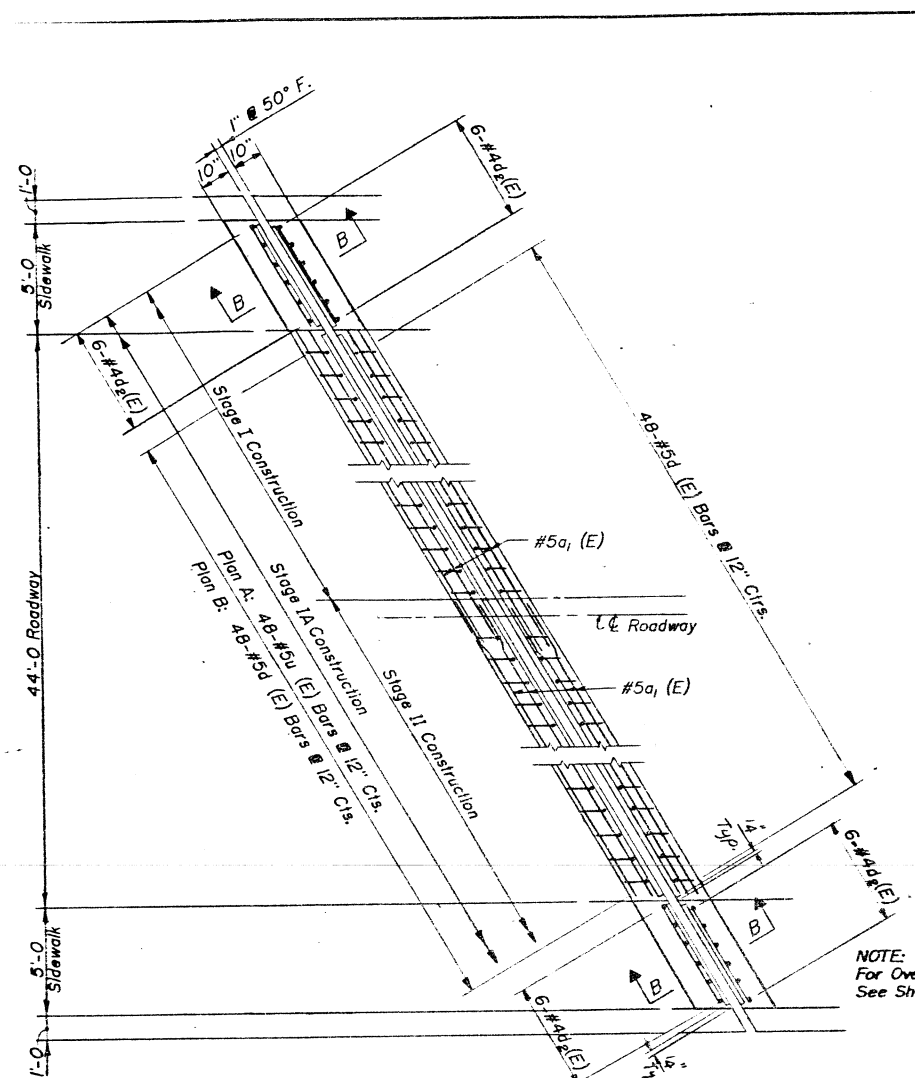


DETAIL 2

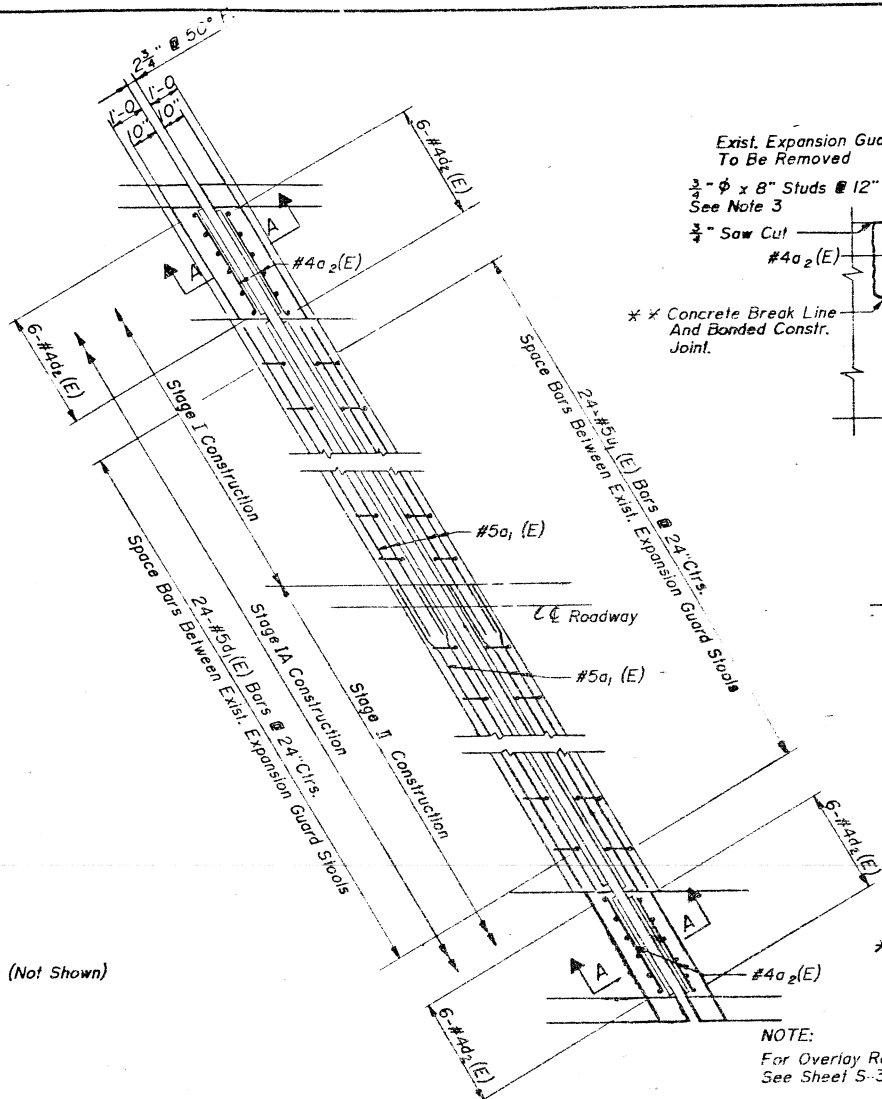
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK SLAB MODIFICATIONS
BRIDGE REHABILITATION
N.B. HARLEM AVE. OVER MSD SLUDGE R.R.
STRUCTURE NO. 016-0314 COOK COUNTY
SCALE: VERT. NONE DRAWN BY D. D.
DATE CHECKED BY R. J. K.

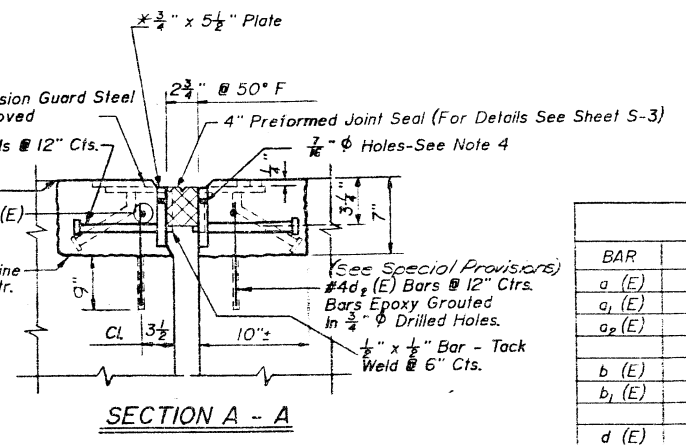
FOR INFORMATION ONLY



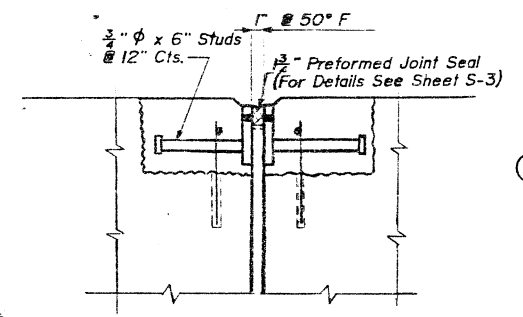
EXP. JOINT REPLACEMENT PLAN A
EXP. JOINT REPLACEMENT PLAN B
For Cross Sections See Details 1 Or 3



EXP. JOINT REPLACEMENT PLAN C
For Cross Section See Detail 2



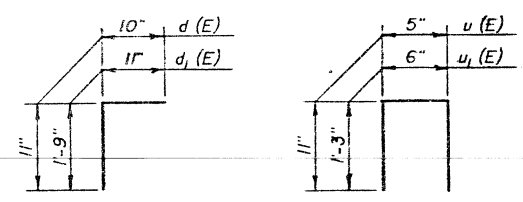
SECTION A - A



SECTION B - B

BAR SCHEDULE				
BAR	NO.	SIZE	LENGTH	SHAPE
a (E)	316	#4	22'-6"	—
a ₁ (E)	24	#5	24'-6"	—
a ₂ (E)	12	#4	5'-0"	—
b (E)	132	#4	23'-0"	—
b ₁ (E)	176	#4	24'-0"	—
d (E)	144	#5	1'-9"	L
d ₁ (E)	24	#5	2'-9"	L
d ₂ (E)	72	#4	1'-2"	—
u (E)	48	#5	2'-3"	□
u ₁ (E)	24	#5	3'-0"	□

For Bill Of Materials See Sheet S-3
① Overlay Reinforcing Bars: See Sheet S-3

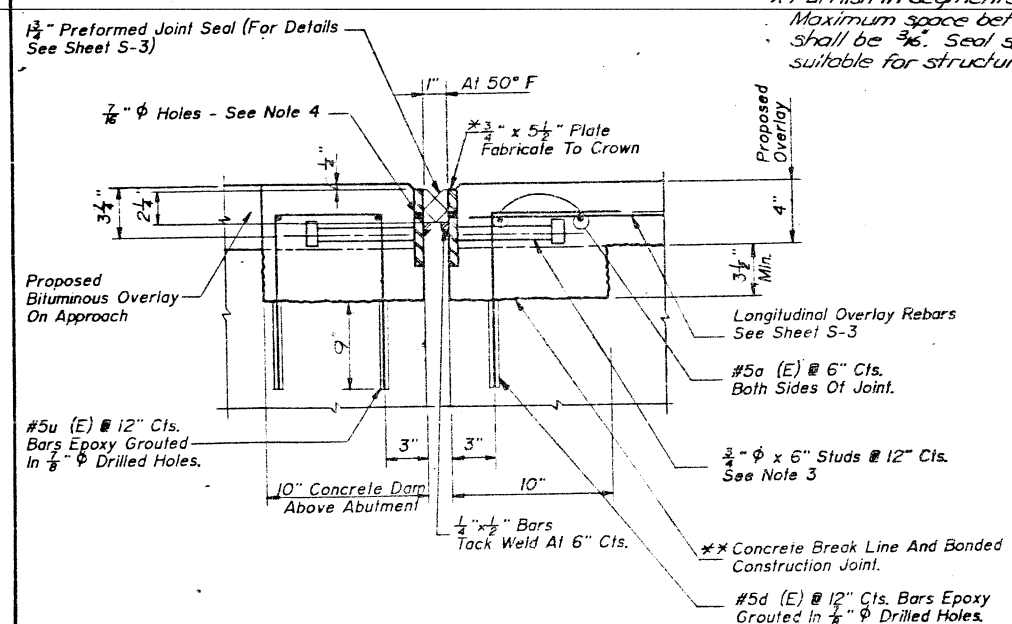


d (E) & d₁ (E) **u (E) & u₁ (E)**

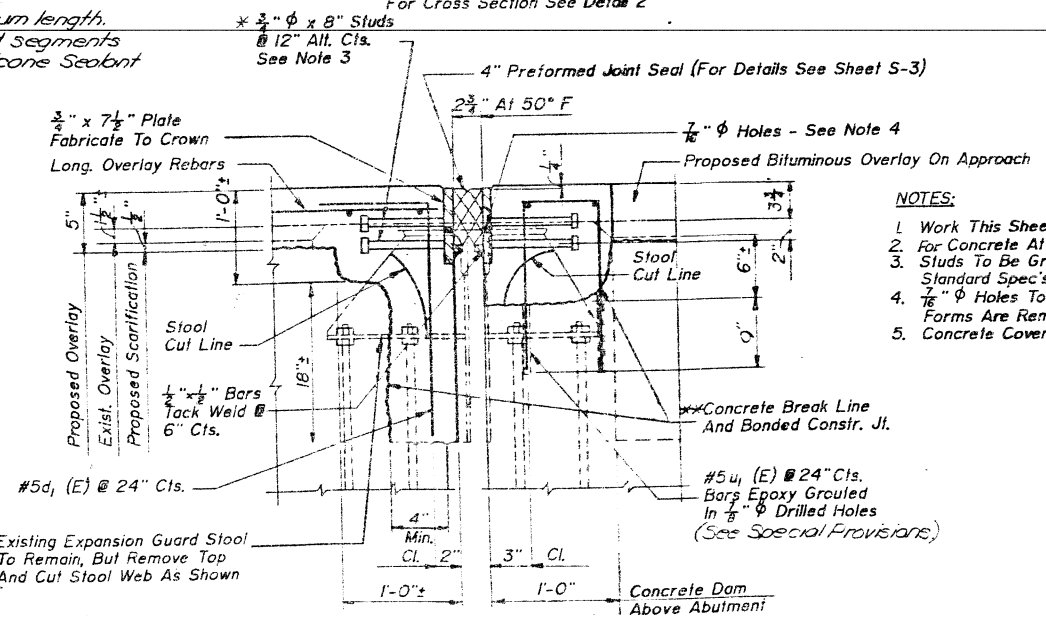
** Bonded Construction Joint in accordance with Article 504.13(a)(2) of the Std. Specs.

NOTE:
For Overlay Rebars (Not Shown) See Sheet S-3

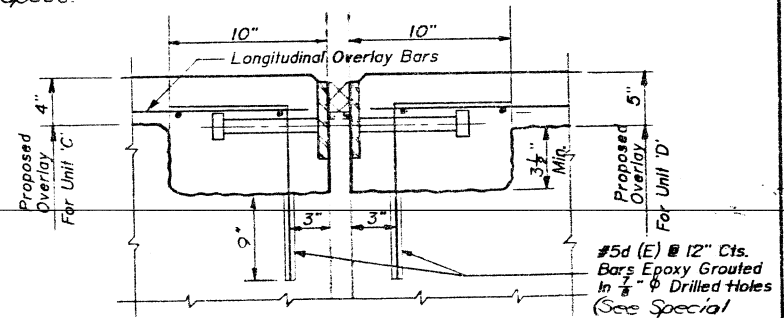
* Furnish in segments of 20' maximum length.
Maximum space between installed segments shall be 3/8\"/>



DETAIL 1 AT ABUTMENT 'C'



DETAIL 2 AT ABUTMENT 'B'



DETAIL 3 AT PIER 10

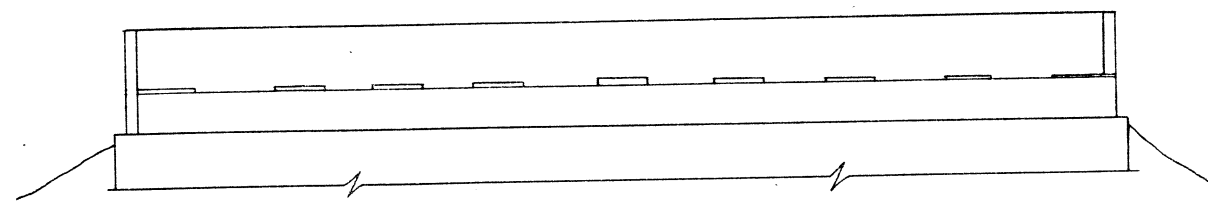
- NOTES:**
1. Work This Sheet With Sheet S-3.
 2. For Concrete At Expansion Joints see "Bridge Deck Concrete Overlay" Special Provision.
 3. Studs To Be Granular Or Flux Filled Headed Studs Conforming To Art. 710.38 Of The Standard Specs. And Automatically End Welded.
 4. 7/8\"/>
 5. Concrete Cover Over Deck & Sidewalk Reinforcement Is 2 1/4\"/>

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXPANSION JOINTS AND BAR SCHEDULE
BRIDGE REHABILITATION
N.B. HARLEM AVE. OVER MSD SLUDGE R.R.
STRUCTURE NO. 016-0314 COOK COUNTY
SCALE: VERT. NONE
HORIZ. NONE
DATE: _____
DRAWN BY: T.M.B.
CHECKED BY: R. J. K.
REV. 11-29-89

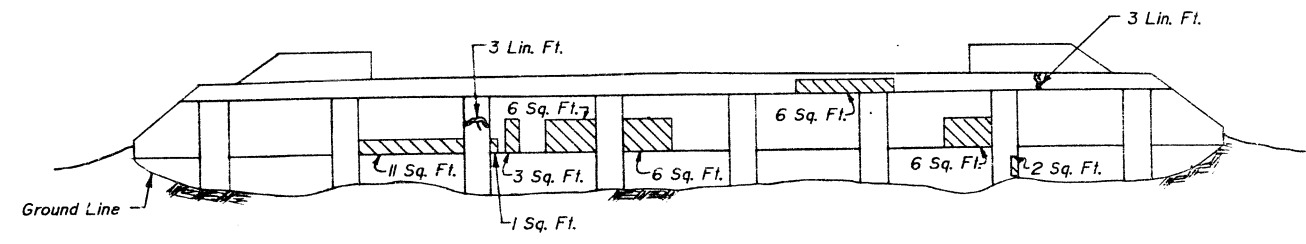
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#	COOK	261	78
STA		TO STA	
FED. ROAD DIST. NO. 7		ILLINOIS	
FED. AID PROJECT			

* 0708 (0812,2A,3) & 23231;
2324-3R (B-R-86)
Dwg. S-5

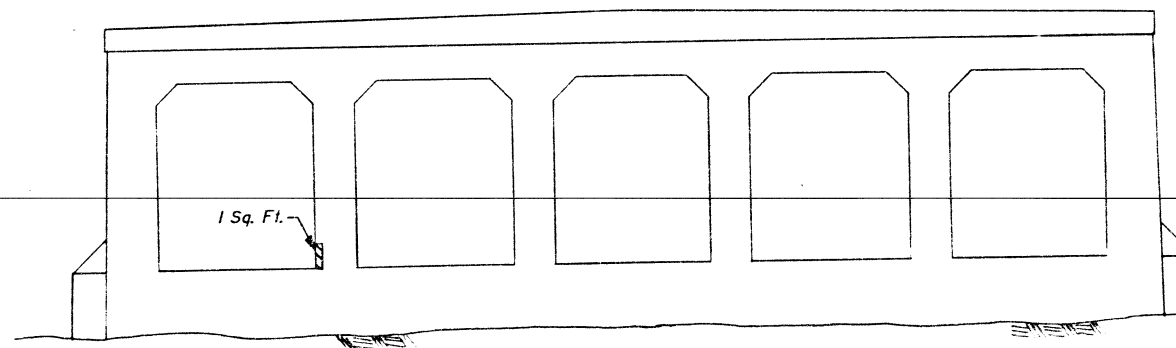


Abutment 'B' Has No Visible Spalls Or Large Cracks

NORTH ABUTMENT 'B'

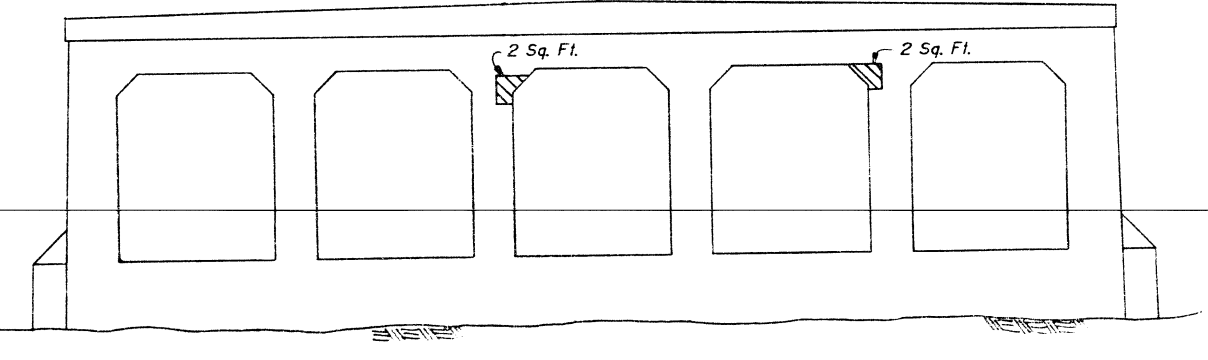


SOUTH ABUTMENT 'C'



North Face
PIER NO. 9

Ground Line



South Face
PIER NO. 9

LEGEND
 Repair Concrete Structures
 Crack To Be Epoxy Injected

NOTES:
 Areas Shown Indicate The Approx. Locations Of Repairs. These Areas Were Determined During The 1987 Field Inspection And Does Not Limit The Amount Of Repair Required As Directed By The Engineer. See Special Provisions For "Repair Conc. Structures".

REVISIONS	
NAME	DATE

Work This Sheet With Sheet S-6

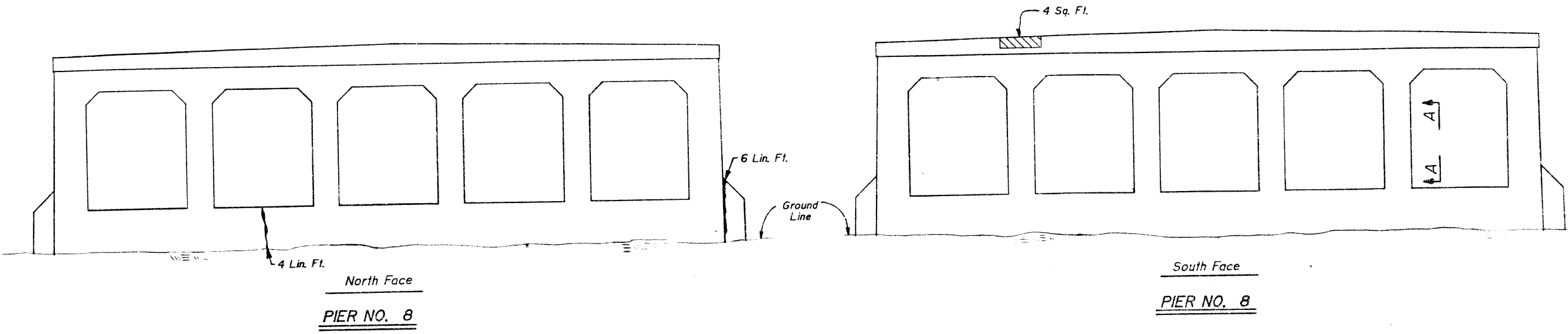
ILLINOIS DEPARTMENT OF TRANSPORTATION
 ABUTMENT AND PIER NO. 9 REPAIRS
 BRIDGE REHABILITATION
 N.B. HARLEM AVE. OVER MSD SLUDGE R.R.
 STRUCTURE NO. 016-0314 COOK COUNTY
 SCALE: VERT. NONE DRAWN BY D. IAC.
 HORIZ CHECKED BY R. J. K.
 DATE

FOR INFORMATION ONLY

F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
848	*	COOK	261	79
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

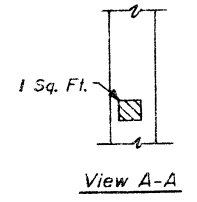
* 0708 (08J.2,2A,3) & 2323J,
2324-3R (B-R-86)

Dwg. S-6

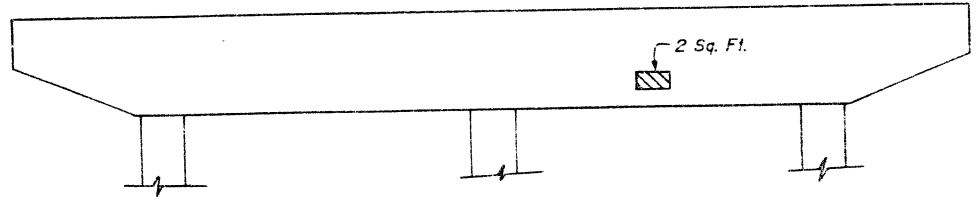


North Face
PIER NO. 8

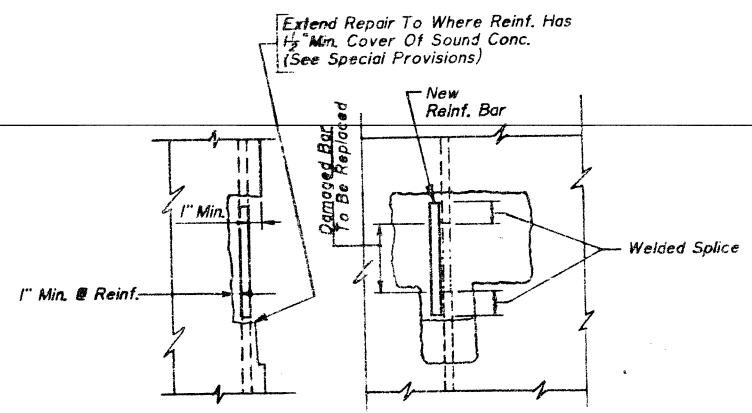
South Face
PIER NO. 8



BILL OF MATERIALS FOR PIERS AND ABUTMENTS							
ITEM	UNITS	ABUT C	PIER 8	PIER 9	PIER 10	ABUT B	TOTALS
EPOXY CRACK SEALING	LIN. FT.	6	10				16
REPAIR CONCRETE STRUCTURES	SQ. FT.	41	5	5	2		53



South Face Of Cap
PIER NO. 10



NOTE:
Exist. Reinf. Having 25% Or More Of Cross Sectional Area Lost Due To Corrosion Or Damage During Conc. Removal Shall Be Replaced By New Reinf. Lapped As Shown Or Noted.

CONCRETE REPAIR DETAIL

LEGEND
 Repair Concrete Structures
 Crack To Be Epoxy injected

NOTES:
 Areas Shown Indicate The Approx. Locations Of Repairs. These Areas Were Determined During The 1987 Field Inspection And Does Not Limit The Amount Of Repair Required As Directed By The Engineer. See Special Provisions For "Repair Conc. Structures".

Work This Sheet With Sheet S-5

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PIER NO. 8 AND NO. 10 REPAIRS
 BRIDGE REHABILITATION
 N.B. HARLEM AVE. OVER MSD SLUDGE R.R.
 STRUCTURE NO. 016-0314 COOK COUNTY

SCALE: VERT. $\frac{3}{16}$ " = 1'-0"
 HORIZ. $\frac{1}{16}$ " = 1'-0"

DRAWN BY D. D.
 CHECKED BY R. J. K.

FOR INFORMATION ONLY

STATE OF ILLINOIS
 COUNTY OF COOK
 DEPARTMENT OF HIGHWAYS

PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY
 F.A. ROUTE -42-PROJECT U-UG-4(72)
 NORTHBOUND HARLEM AVENUE AT APPROACH
 TO
 STEVENSON EXPRESSWAY

SECTION 207-0708.08-C.F.

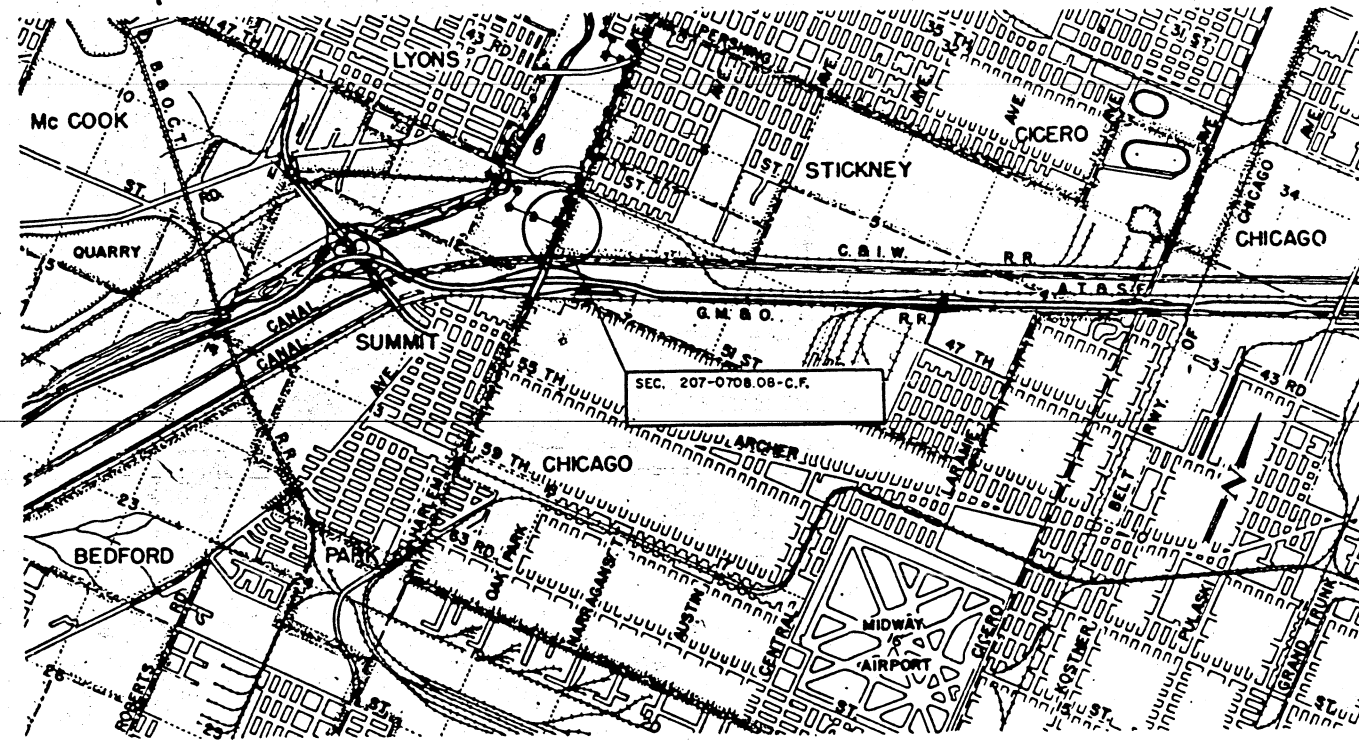
PROJECT DESCRIPTION

SECTION 207-0708.08-C.F. INCLUDES:
 RECONSTRUCTION OF EXISTING SUBSTRUCTURE OF HARLEM AVENUE
 BRIDGE OVER THE SANITARY DISTRICT SLUDGE TRACKS, AND CONSTRUCTION
 OF A PRECAST, PRESTRESSED CONCRETE BOX-BEAM DECK, THREE SIMPLE
 SPANS, AND LENGTHENING THIS BRIDGE BY ADDITIONAL TWO SPANS
 WITH REINFORCED CONCRETE T-BEAMS, SLAB AND SUBSTRUCTURE
 BETWEEN STATIONS 47+78.00 AND 49+41.44 ON NORTHBOUND
 ROADWAY.

ALSO INCLUDED IN THIS SECTION-REPAIRS TO (OLD BASCULE
 BRIDGE) HARLEM AVE. STRUCTURE OVER CHICAGO SANITARY AND
 AND SHIP CANAL AND RECONSTRUCTION OF APPROACH SPANS TO
 BASCULE BRIDGE.
 ALSO INCLUDED IN THIS SECTION IS THE GRADING, DRAINAGE
 AND PAVING OF NORTHBOUND HARLEM AVENUE AND ALL OTHER
 COLLATERAL WORK.

DESIGN SPEED
 45 M.P.H.

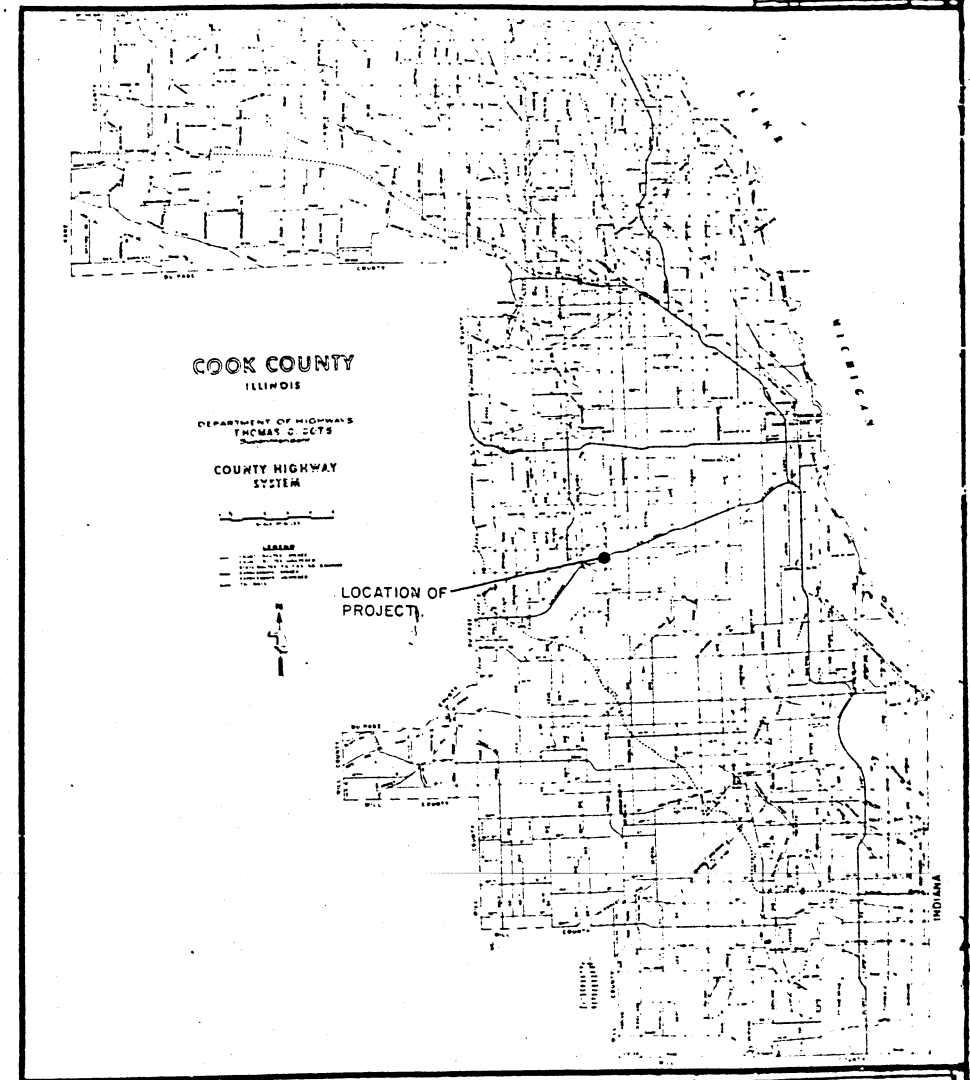
DESIGN DESIGNATION
 3801 (1987)-TSI-II.15 (PG-2C)



NET LENGTH TO BE IMPROVED 1,736.21 FT. = 0.329 MILES

STANDARD SYMBOLS

<p>MARKERS</p> <ul style="list-style-type: none"> ○ SECTION CORNER □ SHARD PAUL — CENTER LINE OF CONSTRUCTION - - - CONSTRUCTION JOINT — TRAVELED WAY - - - CONTRACTOR JOINT — LONGITUDINAL METAL JOINT ○ VALVE VAULT (V), METER VAULT (M), HAND HOLE (H) ○ HOUSE METER VAULT ○ FIRE HYDRANT ○ LIGHT STANDARD ○ TRAFFIC SIGNAL ○ TRAFFIC SIGN ○ BUFFALO BOX (SAS OR WATER SHUT-OFF) ○ TROLLEY POLE ○ TELEPHONE OR TELEGRAPH POLE ○ POWER LINE POLE ○ R.O.W. BARBER 	<p>BOUNDARIES</p> <ul style="list-style-type: none"> — STATE LINE — COUNTY LINE — SECTION, TOWNSHIP, OR GRANT LINE — TRAVELER LINE — CITY, OR VILLAGE LIMITS — RAILROAD, OR UTILITY TRACKS — PROPOSED PROFILE — FENCE (BARBED WIRE) — FENCE (NO DISTINCTION) — R.O.W. PROPOSED — EXISTING PROPERTY OR R.O.W. LINE — GUARD POSTS — STREAM — MARSH — TREES (SIZE INDICATED) 	<p>STRUCTURES</p> <p>INLET TO BE CONSTRUCTED</p> <p>STATION: 47+78.00</p> <p>TYPE OF STRUCTURE: 10'-0" x 10'-0" BOX GIRDER</p> <p>CATCH BASIN TO BE CONSTRUCTED</p> <p>STATION: 48+00.00</p> <p>TYPE OF STRUCTURE: 10'-0" x 10'-0" BOX GIRDER</p> <p>MANHOLE TO BE CONSTRUCTED</p> <p>STATION: 48+00.00</p> <p>TYPE OF STRUCTURE: 10'-0" x 10'-0" BOX GIRDER</p>	<p>DIRECTION OF FLOW IN DITCH</p> <p>— SUMMIT OF DITCH</p> <p>— EXISTING INLET, ADJUST (A), RECONSTRUCT (R)</p> <p>— INLET TO BE CONSTRUCTED</p> <p>— INLET TO BE FILLED</p> <p>— EXISTING CATCH BASIN, ADJUST (A), RECONSTRUCT (R)</p> <p>— CATCH BASIN TO BE CONSTRUCTED</p> <p>— CATCH BASIN TO BE FILLED</p> <p>— EXISTING MANHOLE, ADJUST (A), RECONSTRUCT (R)</p> <p>— MANHOLE TO BE CONSTRUCTED</p> <p>— MANHOLE TO BE FILLED</p> <p>— MONOLITHIC CONCRETE CULVERT</p> <p>— CONTROL OF ACCESS LINE</p>
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SCALES

PLAN	1 INCH	50 FT
PROFILE HOR.	1 INCH	50 FT
PROFILE VERT.	1 INCH	5 FT
CROSS SECTIONS	1 INCH	5 FT VERT
CROSS SECTIONS	1 INCH	10 FT HOR.

COUNTY OF COOK
 DEPARTMENT OF HIGHWAYS

APPROVED: *Harry A. Chlief* 10/72
 CHIEF ENGINEER

APPROVED: _____
 SUPERVISOR

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

APPROVED: *Harry A. Chlief*
 CHIEF HIGHWAY ENGINEER

APPROVED: _____
 DIRECTOR

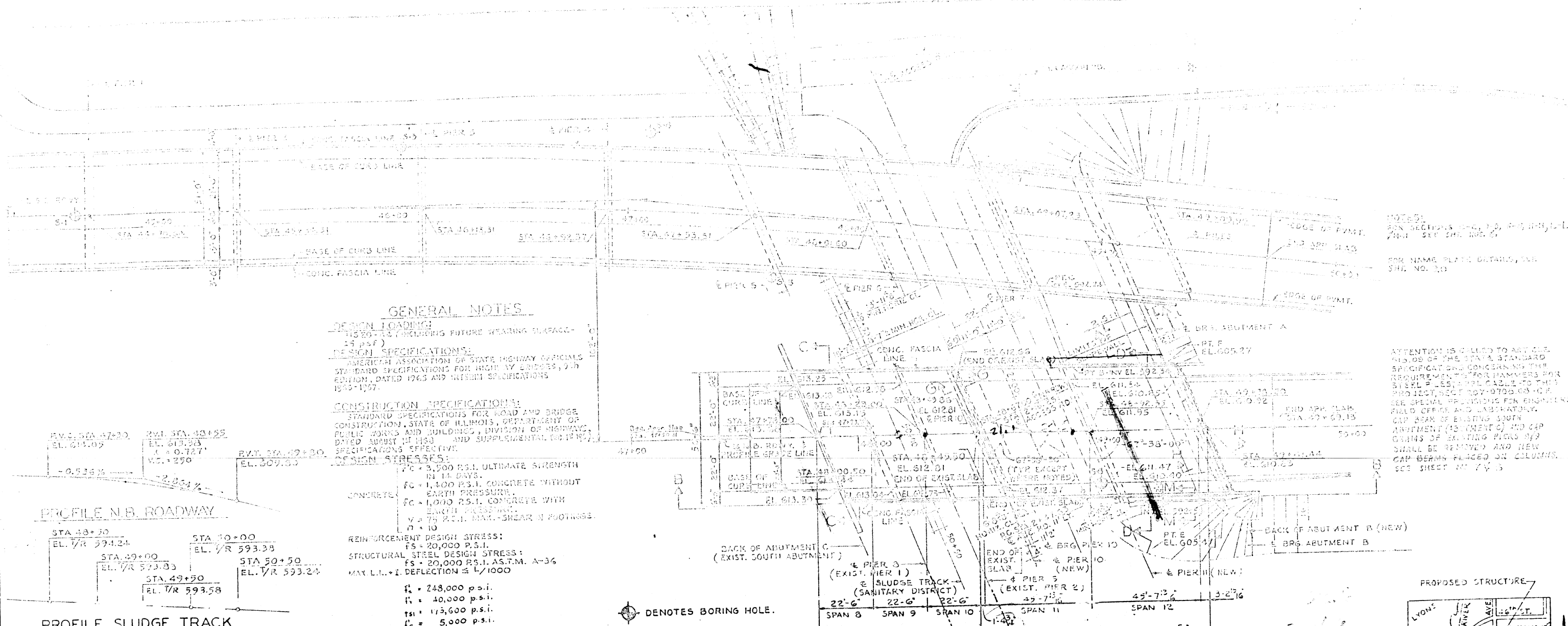
DEPARTMENT OF TRANSPORTATION
 BUREAU OF PUBLIC ROADS

APPROVED: _____
 DIVISION ENGINEER

#1566
Harry A. Chlief

BD 180
 17-1031

FOR INFORMATION ONLY



GENERAL NOTES

DESIGN LOADINGS:
HS 20-44 INCLUDING FUTURE WEARING SURFACE - 25 psf

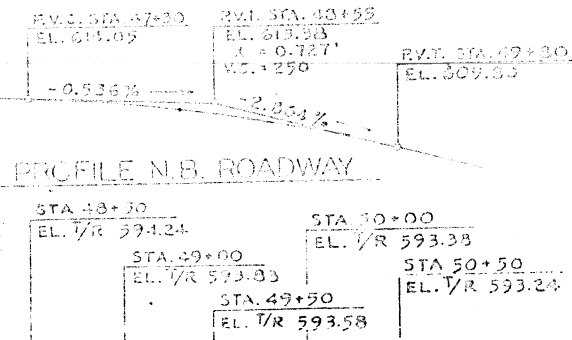
DESIGN SPECIFICATIONS:
AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 9th EDITION, DATED 1963 AND INTERIM SPECIFICATIONS 1963-1967.

CONSTRUCTION SPECIFICATIONS:
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF ILLINOIS, DEPARTMENT OF PUBLIC WORKS AND BUILDINGS, DIVISION OF HIGHWAYS, DATED AUGUST 1960 AND SUPPLEMENTAL SPECIFICATIONS SPECIFICATIONS EFFECTIVE.

DESIGN STRESSES:
 $f'_c = 3,500$ P.S.I. ULTIMATE STRENGTH IN 14 DAYS.
 $f'_c = 1,400$ P.S.I. CONCRETE WITHOUT EARTH PRESSURE.
 $f'_c = 1,000$ P.S.I. CONCRETE WITH EARTH PRESSURE.
 $v = 75$ P.C.I. MAX. SHEAR IN FOOTINGS.
 $n = 10$

REINFORCEMENT DESIGN STRESS:
 $f_s = 20,000$ P.S.I.
STRUCTURAL STEEL DESIGN STRESS:
 $f_s = 20,000$ P.S.I. A.S.T.M. A-36
 MAX. L.L. + I. DEFLECTION $\leq L/1000$

$f_t = 248,000$ p.s.i.
 $f_c = 40,000$ p.s.i.
 $f_{si} = 113,600$ p.s.i.
 $f_c = 5,000$ p.s.i.
 $f_{ci} = 4,000$ p.s.i. MIN.

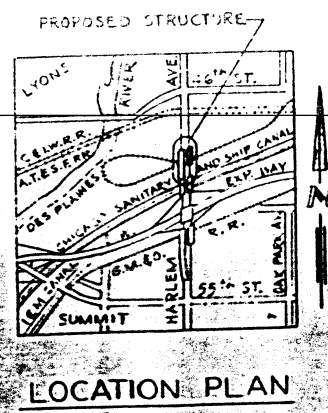


⊕ DENOTES BORING HOLE.

PLAN
SCALE: 1" = 20'

NOTES:
SEE SECTION 104, 105, AND 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

FOR CONCRETE NOTES, SEE SHT. NO. 16.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
SLOPEWALL, 8 INCH	SQ. YD.	300
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	34

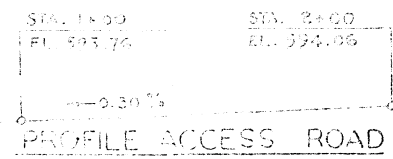
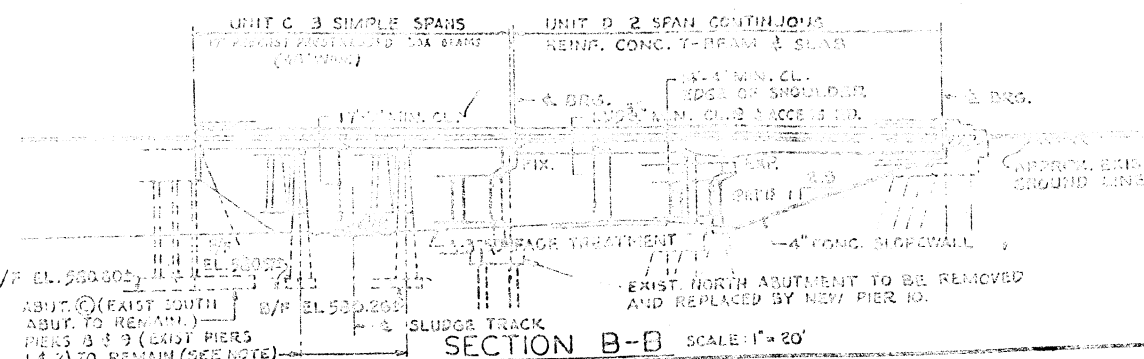
REVISIONS

NO.	BY	DATE	DESCRIPTION
1
2

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

GENERAL PLAN
STEVENSON EXPRESSWAY
HARBOR AVENUE OVER SANITARY DISTRICT TRUNK AND ACCESS ROAD

DATE: 11/15/73
SCALE: AS SHOWN
SHEET NO. 16 OF 207



FOR INFORMATION ONLY

TEST BORING NO.	TEST BORING NO.	TEST BORING NO.	TEST BORING NO.	TEST BORING NO.	TEST BORING NO.	TEST BORING NO.	TEST BORING NO.
545							
546							
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LEGEND AND GENERAL NOTES FOR SUBSURFACE EXPLORATION.

1 - Indicates the test boring location and number.

(1-3-53) - Indicates the 48-hour water table reading on the boring sheet.

1 - Indicates the number of blows for each 12 inches of penetration or as shown using a 140 lb. weight falling from 30 inches on a 2-inch O.D. split spoon sampler.

CU - Indicates unconfined compressive strength tests in tons per sq. ft. Determined by tester in the field on a Hand Spring Tester.

U - Indicates estimated pile tip elevation.

Note: Additional soil information is available in the engineer's office.

Test borings are shown only as a guide to bidders for estimating soil conditions which may be encountered in the work.

ESTIMATED PILE TIP ELEVATIONS									
TYPE OF PILE	TEST BORING NUMBERS								
	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	SC-1
12" CIP	558	582	580	580	580	580	580	580	--

NORMAL ALLOWABLE BEARING VALUE T/102									
ELEV.	TEST BORING NUMBERS								
	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	SC-1

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

GEORGE W. BUNNIE
 PRESIDENT BOARD OF COMMISSIONERS

THOMAS G. COUS
 SUPERVISOR OF HIGHWAYS

TEST BORINGS
 HARLEM AVENUE

APPROVED: _____ DATE: _____

PROJECT NO. _____

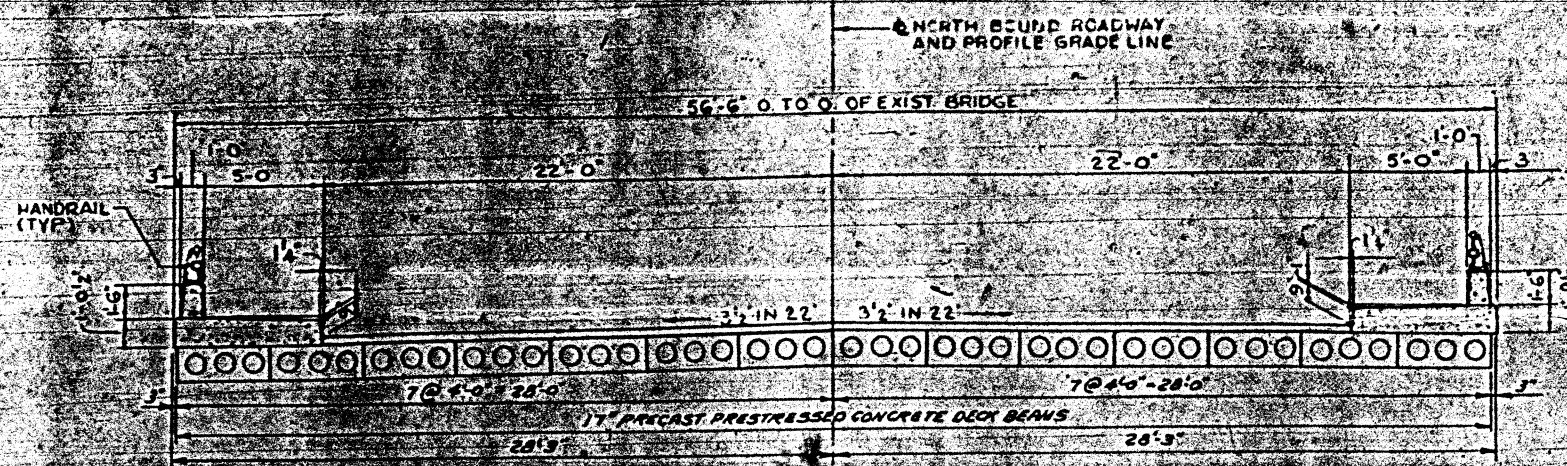
DATE OF REPORT: _____

BY: _____

SCALE: _____

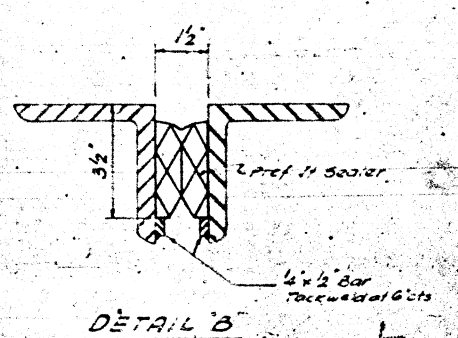
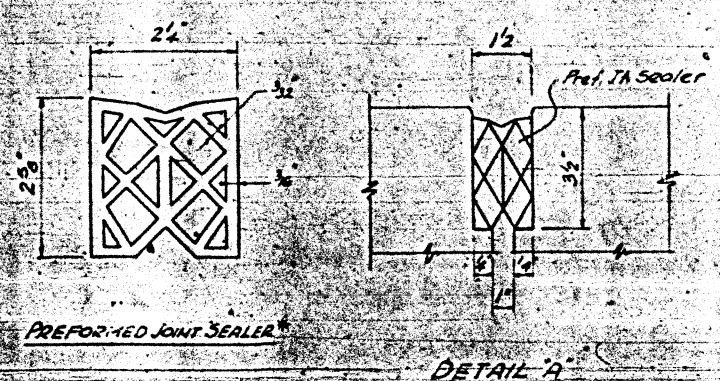
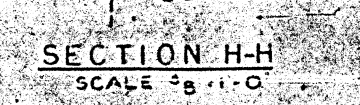
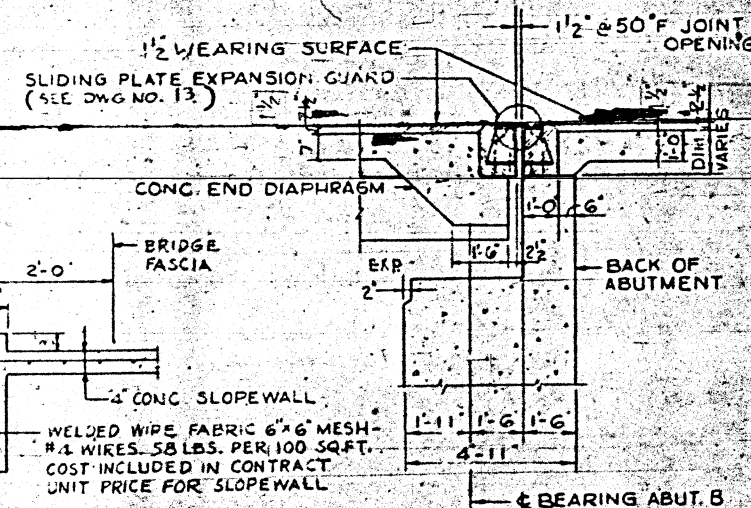
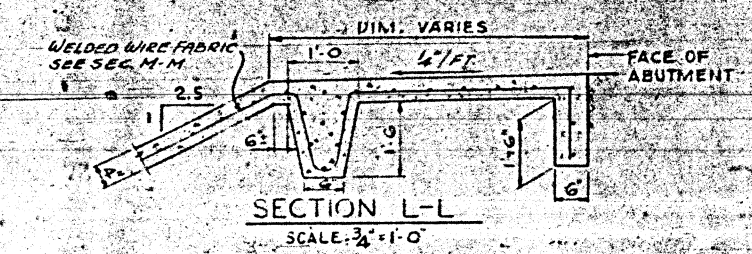
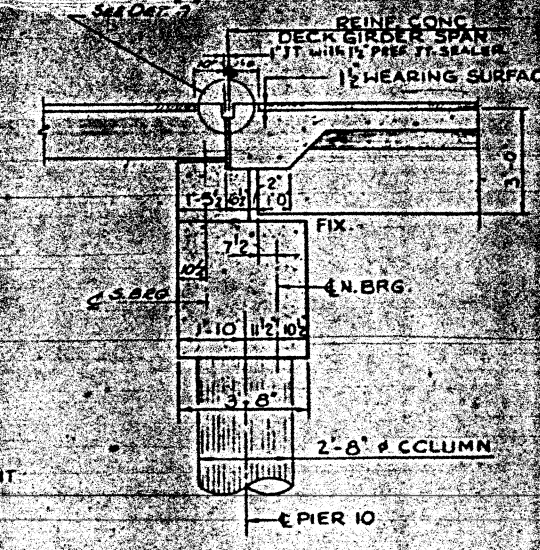
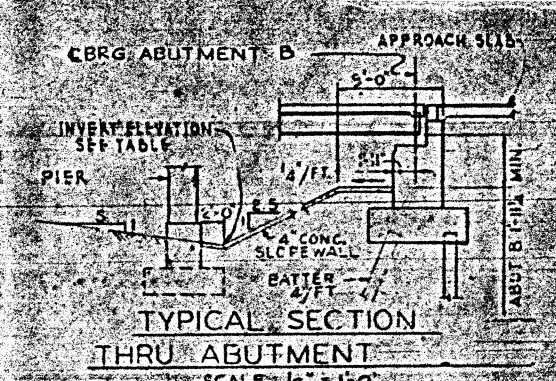
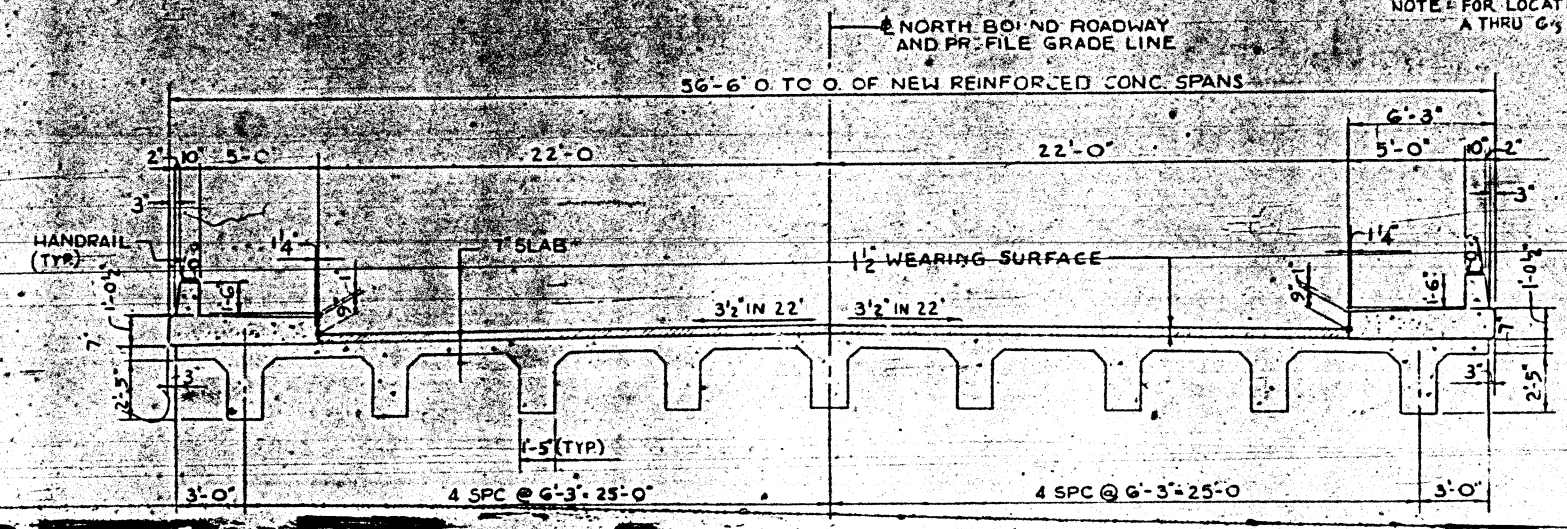
42 207-0700-09 5 86 2084

FOR INFORMATION ONLY



LOCATION	A	B	C
INVERT ELEV.	592.54	592.34	592.24
S	6.5	9.1	9.7

NOTE: FOR LOCATION OF POINTS A THRU G, SEE DWG. NO. 4



*) NOTE:
Preformed Elastomeric Polychloroprene Joint Seal
See Special Provision

NOTE: WORK THIS SHEET WITH DWG. NO. 4

B.C. Rev. Jan. 27, 1971

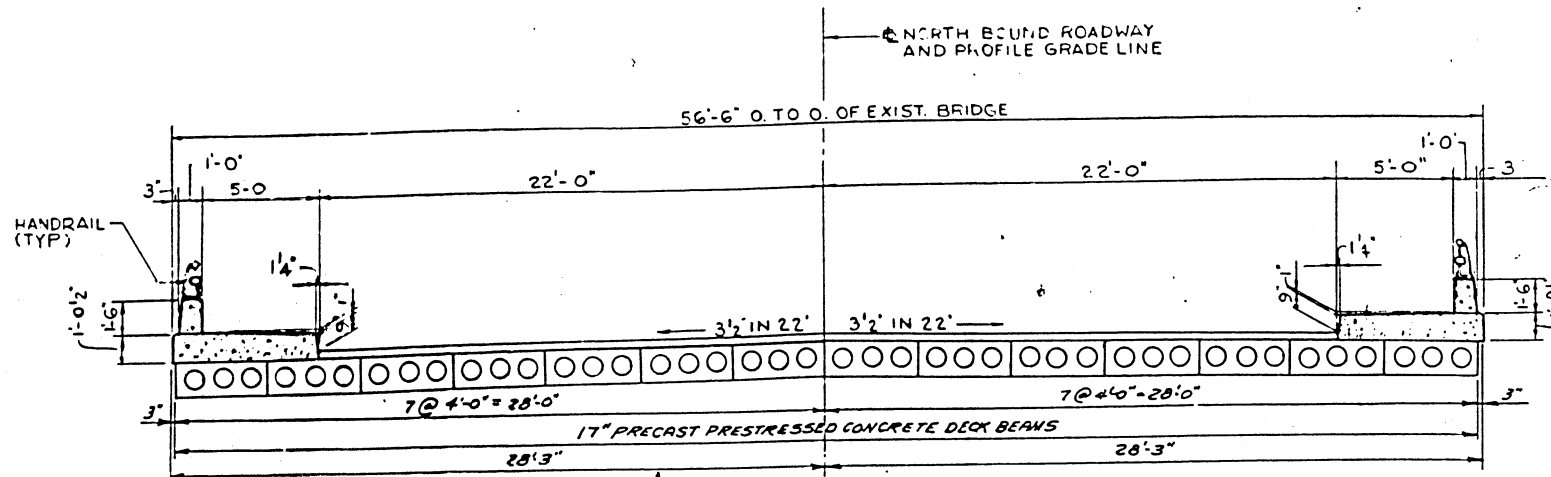
REVISIONS		
DATE	BY	DESCRIPTION
6-30-70	Ornd	Preformed Joint Sealer Details

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

STEVENSON EXPRESSWAY
HARLEM AVENUE OVER SANITARY DISTRICT TRACKS
AND ACCESS ROAD

COMPUTED: W. J. C. PROJECT U-UG-6172
DRAWN: R. K. M. SCALE: AS NOTED
CHECKED: J. S. APPROVED: [Signature]

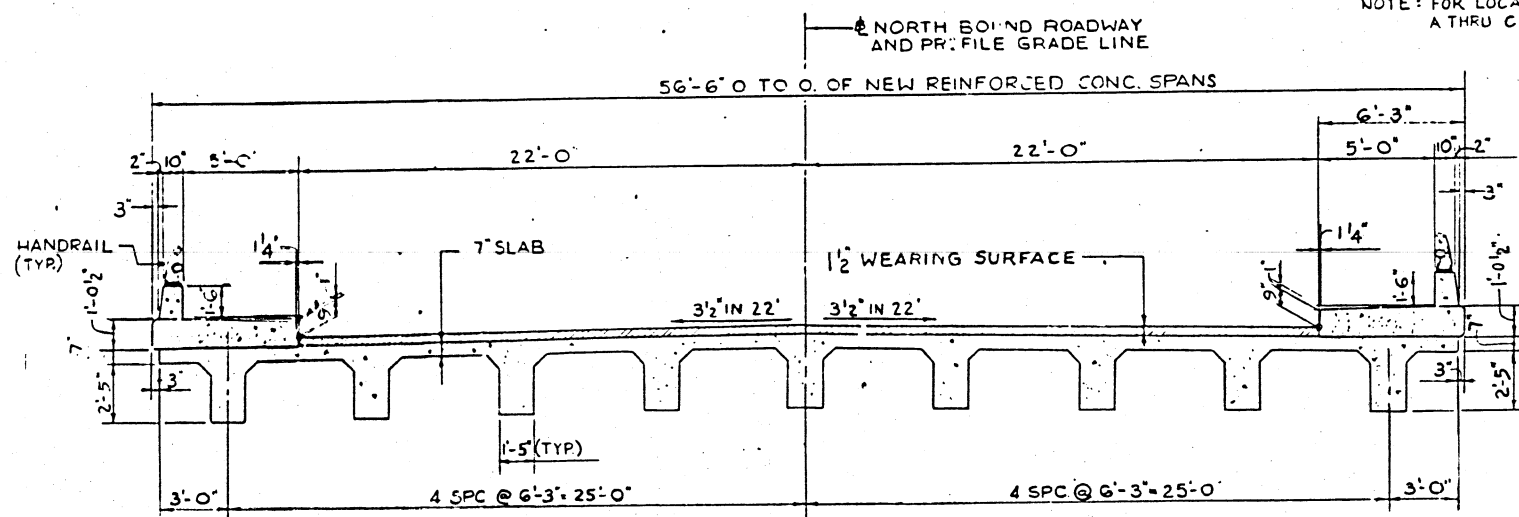
APPROVED: [Signature] F.A. No. 42
Scale and Route No. 207
Sheet No. GR-86
Total Sheets 103



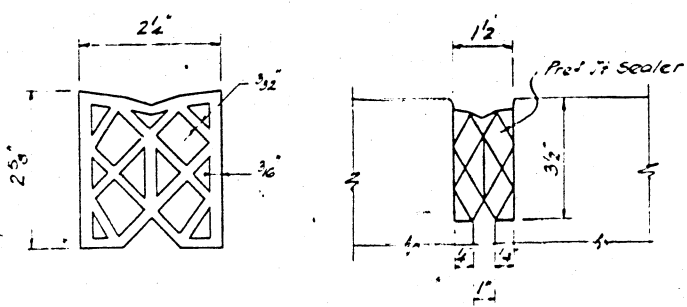
SECTION C-C
SCALE: 1/4" = 1'-0"

LOCATION	A	B	C
INVERT ELEV.	592.24	592.24	592.24
S	6.5	9.1	9.7

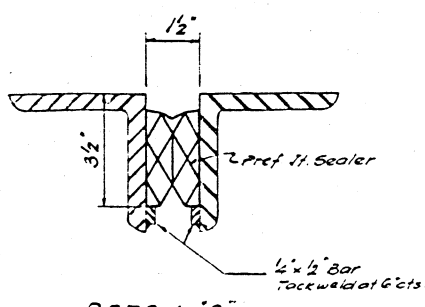
NOTE: FOR LOCATION OF POINTS A THRU C, SEE DWG. NO. 4



SECTION D-D
SCALE: 1/4" = 1'-0"

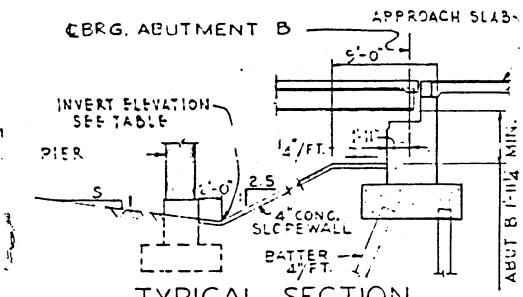


PREFORMED JOINT SEALER*

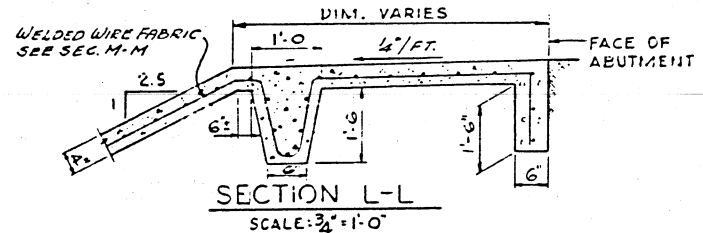


DETAIL "B"

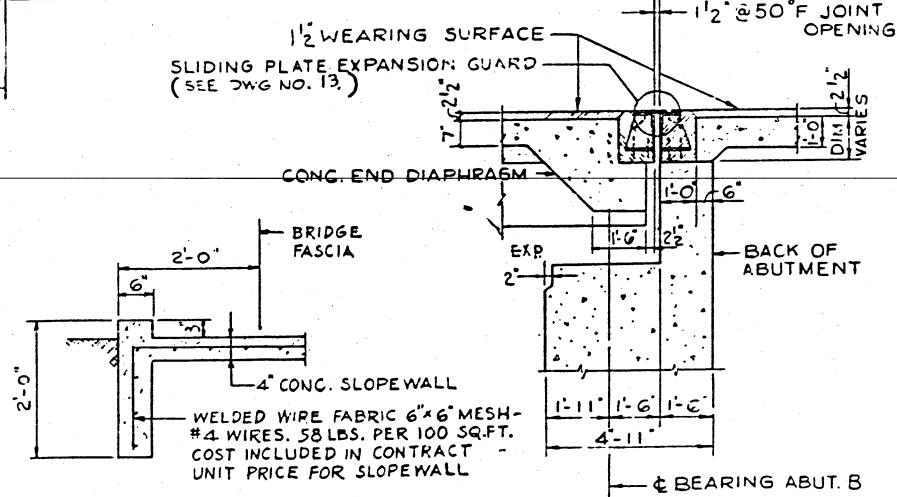
* NOTE:
Preformed Elastomeric
Preformed Joint Seal
See Special Provision.



TYPICAL SECTION
THRU ABUTMENT
SCALE: 1/8" = 1'-0"

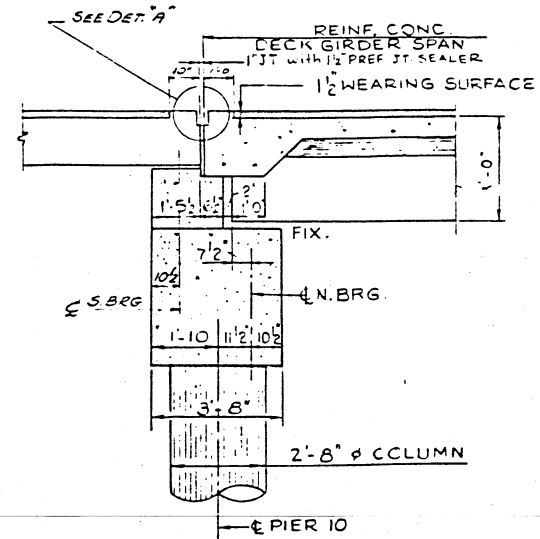


SECTION L-L
SCALE: 3/4" = 1'-0"



SECTION H-H
SCALE: 3/8" = 1'-0"

NOTE:
WORK THIS SHEET WITH DWG. NO. 4



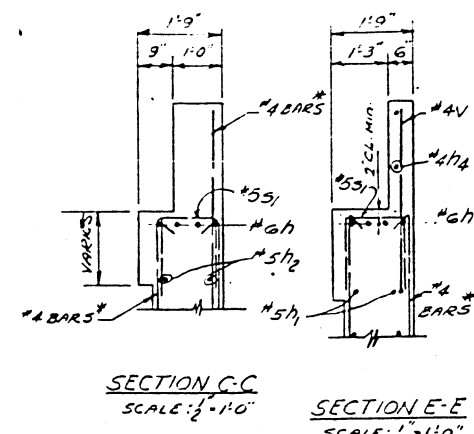
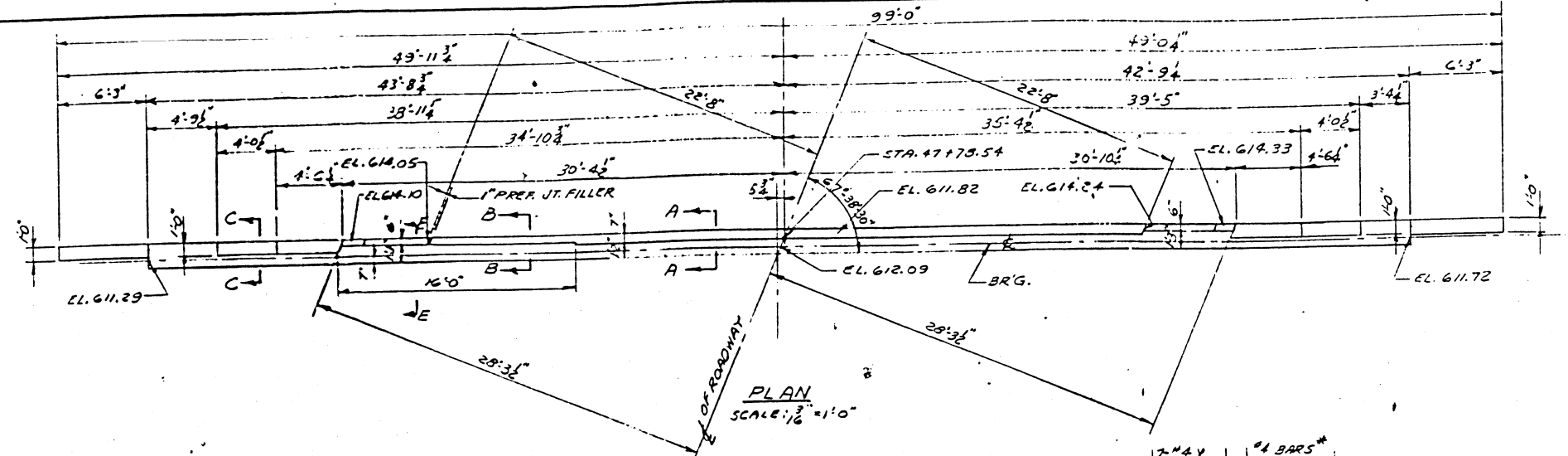
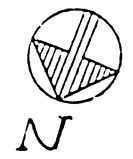
SECTION G-G
SCALE: 3/8" = 1'-0"

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

REVISIONS		
DATE	BY	DESCRIPTION
6-30-70	Dww	Preformed Joint Sealer Details

DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS			
GEORGE W. DUNNE PRESIDENT BOARD OF COMMISSIONERS		THOMAS G. COTS SUPERINTENDENT OF HIGHWAYS	
SLOPEWALL AND TYPICAL SECTIONS			
STEVENSON EXPRESSWAY HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD			
COMPUTED	W. J. C.	PROJECT	U-105-41721
DRAWN	R. K. M.	SCALE	AS NOTED
CHECKED	R. S.	APPROVED	[Signature]
APPROVED	[Signature]	F.A. Route No.	42
		State Aid Route No.	207
		Sheet No.	6
		Total Sheets	86
		Drawing No.	1035

FOR INFORMATION ONLY

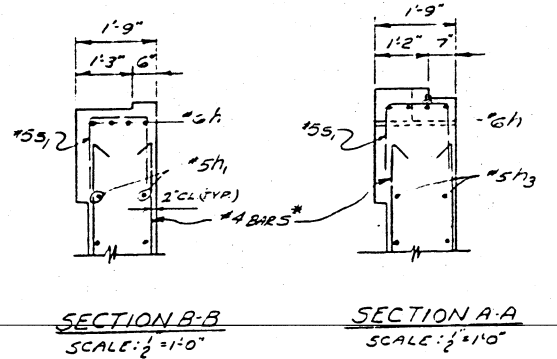
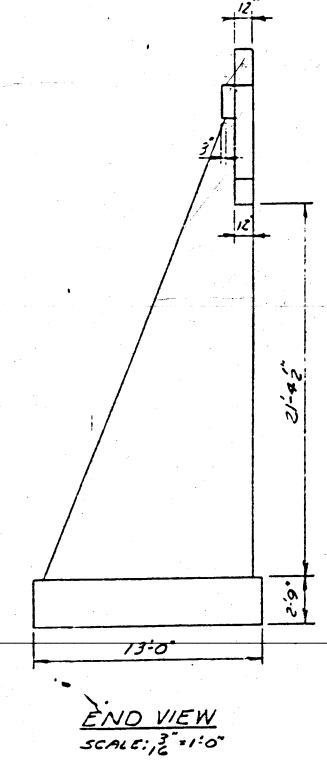
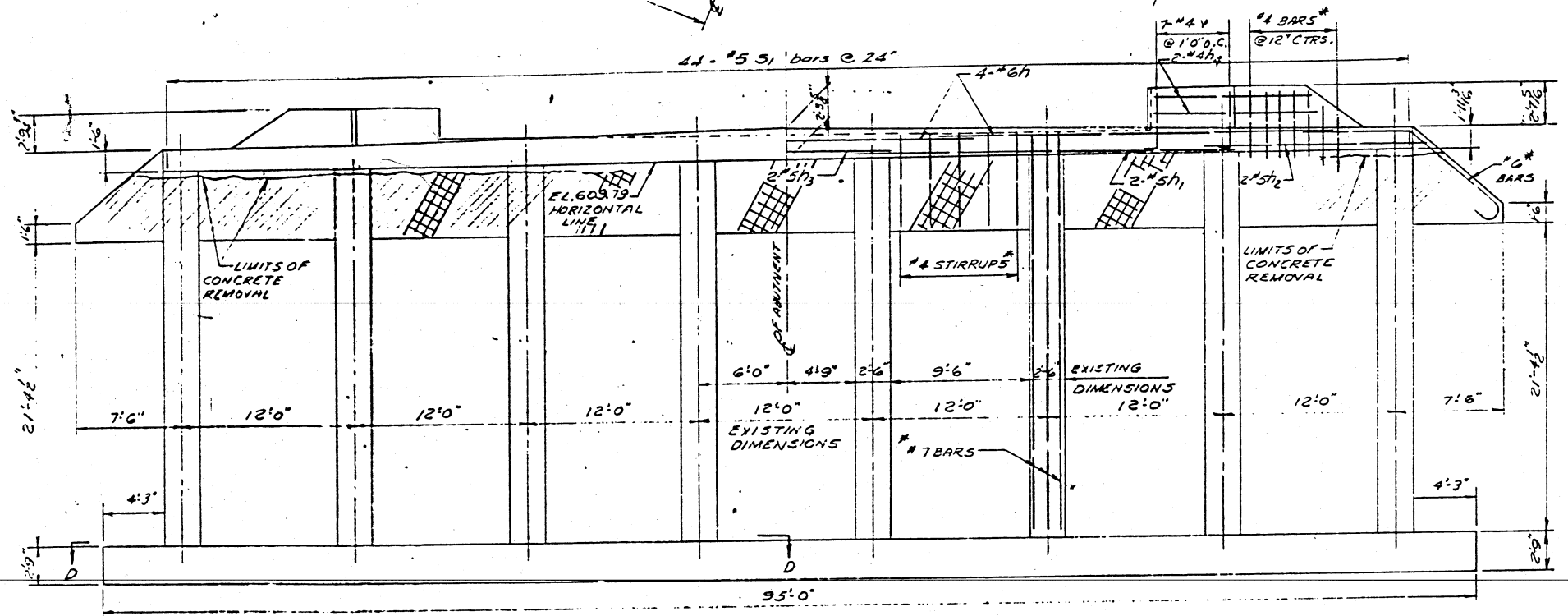


BAR SCHEDULE

MARK	NO.	SIZE	LENGTH	SKETCH	A	B	C
H	12	#6	27'-3"				
H1	4	#5	22'-3"				
H2	4	#5	15'-6"				
H3	2	#5	14'-3"				
H4	4	#4	10'-4"				
S1	44	#3	4'-4"		1'-0"	1'-4"	1'-6"
V	14	#4	4'-6"		4'-0"	6'-0"	

BILL OF MATERIAL

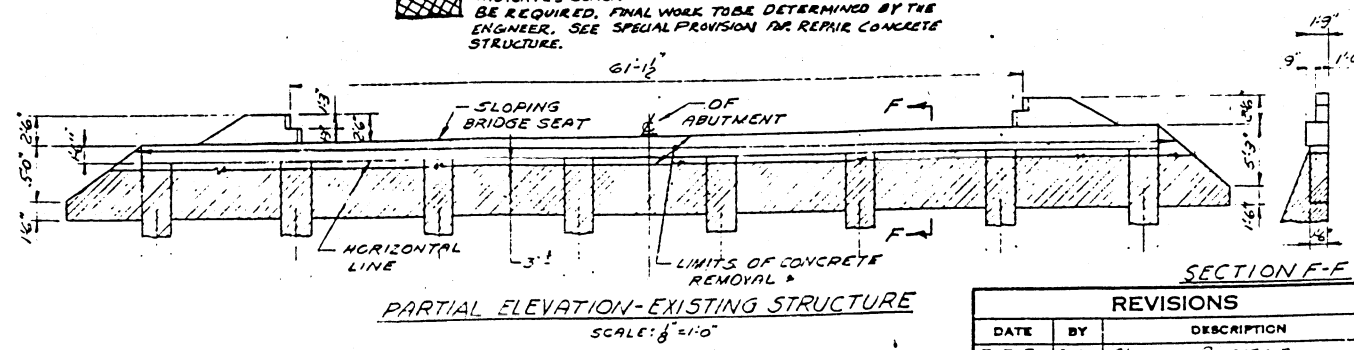
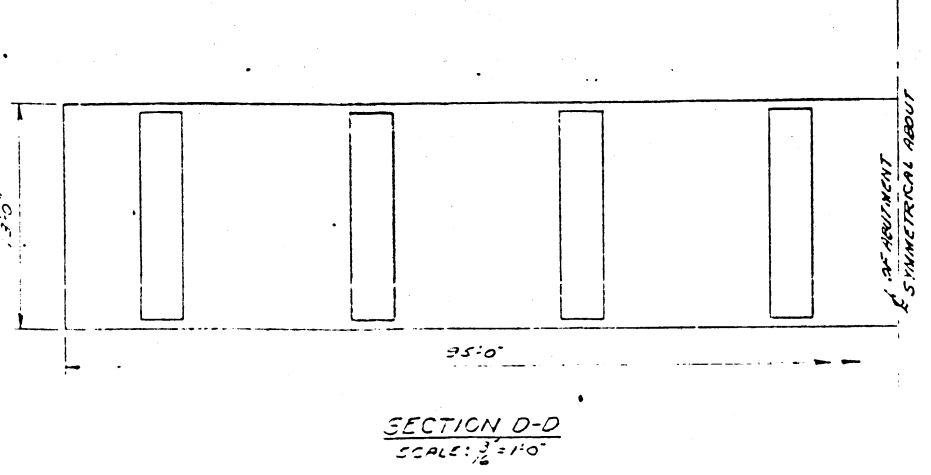
CONCRETE REMOVAL	12 CU. YD.
CLASS 'X' CONCRETE	13.9 CU. YD.
REINFORCEMENT BARS	362 LBS.
REPAIR CONCRETE STRUCTURES	175 SQ. FT.



NOTE:
 EXISTING REINFORCEMENT EXTENDING FROM BELCH EL. 609.79 (HORIZONTAL LINE) SHALL BE CLEANED AND RE-USED IN THE NEW CONSTRUCTION.

RETAINED PORTION OF EXISTING ABUTMENT.

INDICATES CONCRETE REPAIRS IN THESE AREAS WILL BE REQUIRED. FINAL WORK TO BE DETERMINED BY THE ENGINEER. SEE SPECIAL PROVISION FOR REPAIR CONCRETE STRUCTURE.



REVISIONS

DATE	BY	DESCRIPTION
7-7-70	D.W.	Clearance Dimensions
7-24-70	D.W.	Repair Concrete Structures

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS

ABUTMENT C-DETAILS
 STEVENSON EXPRESSWAY
 HARLEN AVENUE OVER SANITARY DISTRICT TRACKS
 AND ACCESS ROAD

COMPUTED: *L.F.*
 CHECKED: *L.F.*
 DRAWN: *L.F.*
 CHECKED: *L.F.*

PROJECT: U-UG-4 (2)
 SUBMITTED: 1 Nov 1970
 STRUCTURAL DESIGN ENGINEER

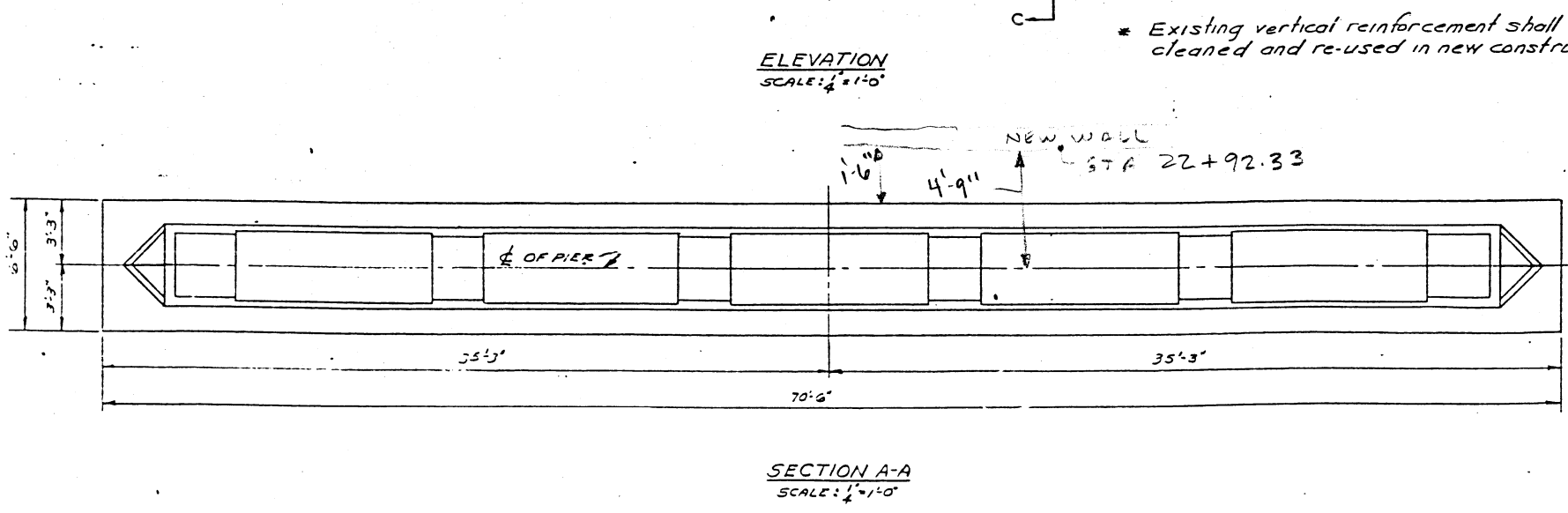
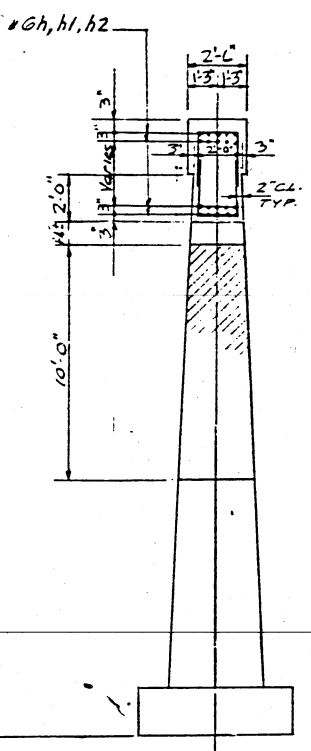
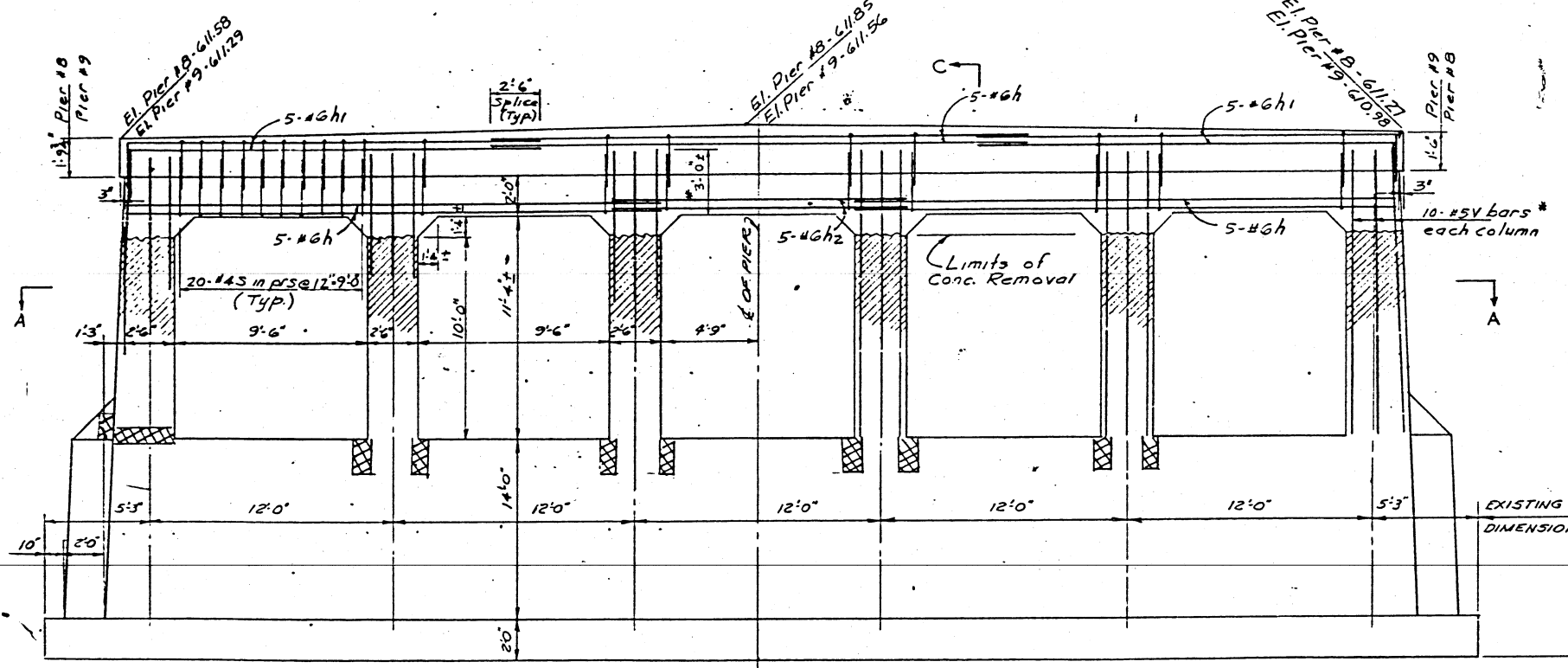
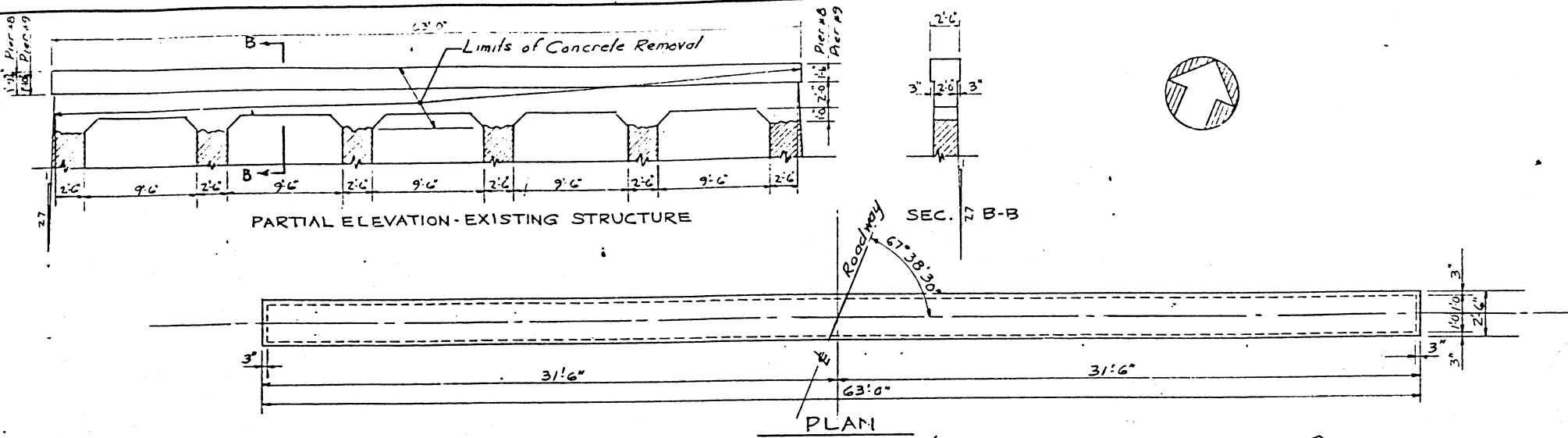
EXAMINED: *L.F.*
 CHIEF ENGINEER OF DESIG.

F.A. No. 42 SECTION NUMBER 207-0708.08 Sheet No. 7 Total Sheets 86 Drawing No. 1036

FOR INFORMATION ONLY

BAR SCHEDULE **							
MARK	NO.	SIZE	LENGTH	SKETCH	A	B	C
h	60	#6	26.2	—			
h1	40	#6	23.6	—	20.6		3.0
h2	20	#6	14.6	—			
S	200	#4	6.6	—	2.5	2.5	1.8

** Quantities shown are for both piers



LEGEND
 Retained portion of existing piers
 Indicates concrete repairs in these areas will be required. Final work to be determined by the Engineer. See SPECIAL PROVISION FOR REPAIR CONCRETE STRUCTURES.

BILL OF MATERIAL FOR TWO PIERS		
ITEM	UNIT	QUANT.
Concrete Removal	cu yds	42
Class "X" Concrete	cu yds	44.7
Reinforcement Bars	Lbs.	5,104
Repair Concrete Structures	Sq. FT.	25

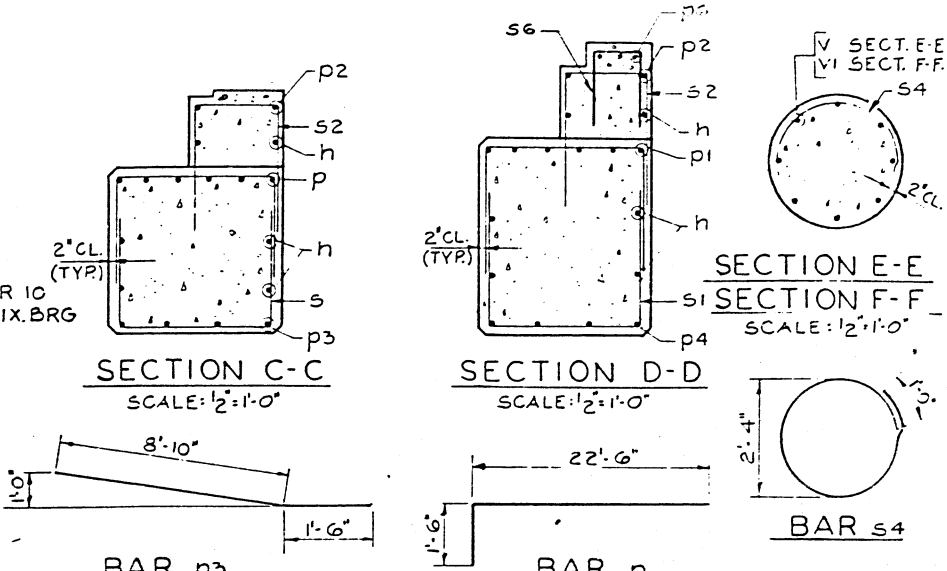
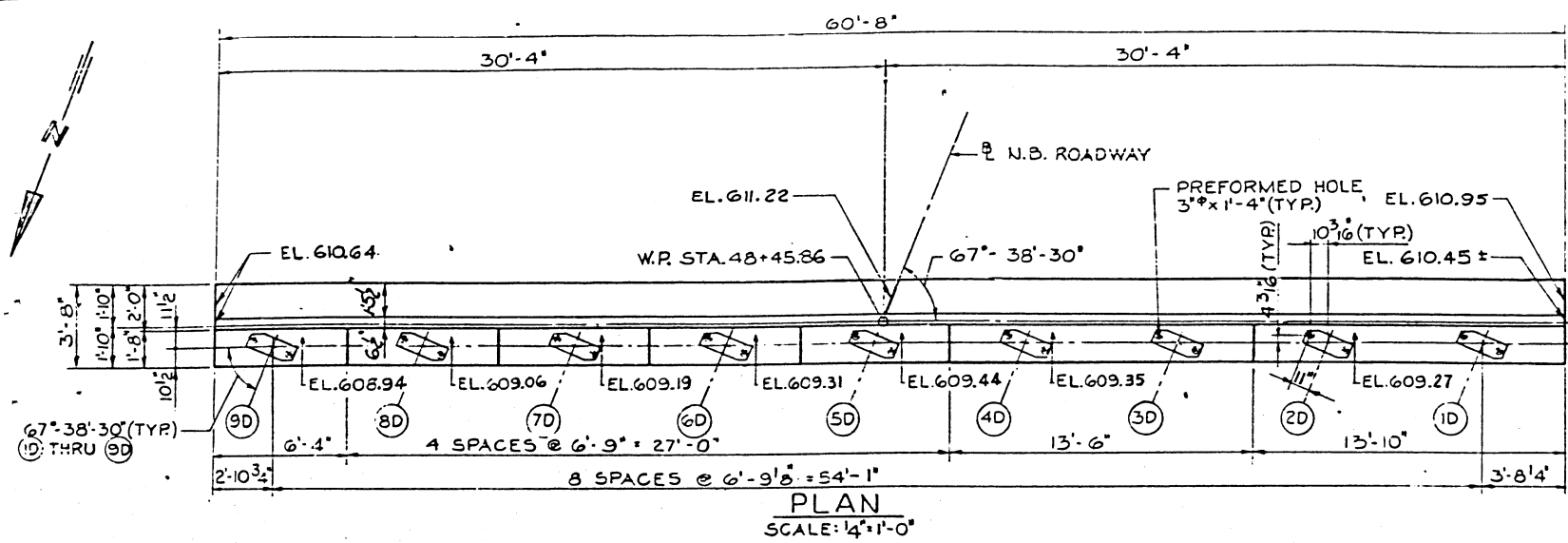
DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS
 GEORGE W. DUNNE, PRESIDENT BOARD OF COMMISSIONERS
 THOMAS G. COTS, SUPERINTENDENT OF HIGHWAYS

PIERS 8 AND 9
 STEVENSON EXPRESSWAY
 HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

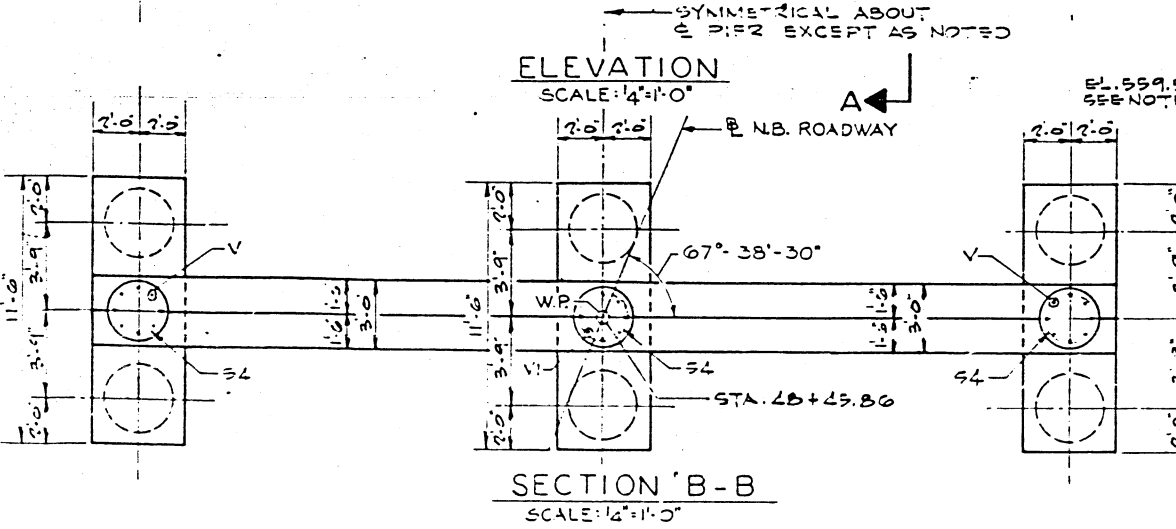
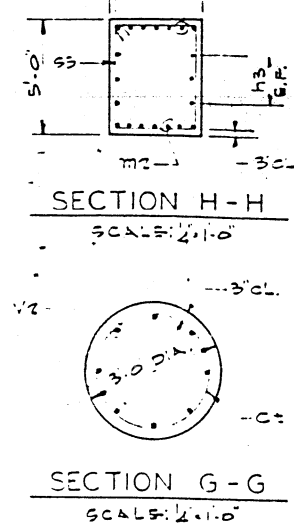
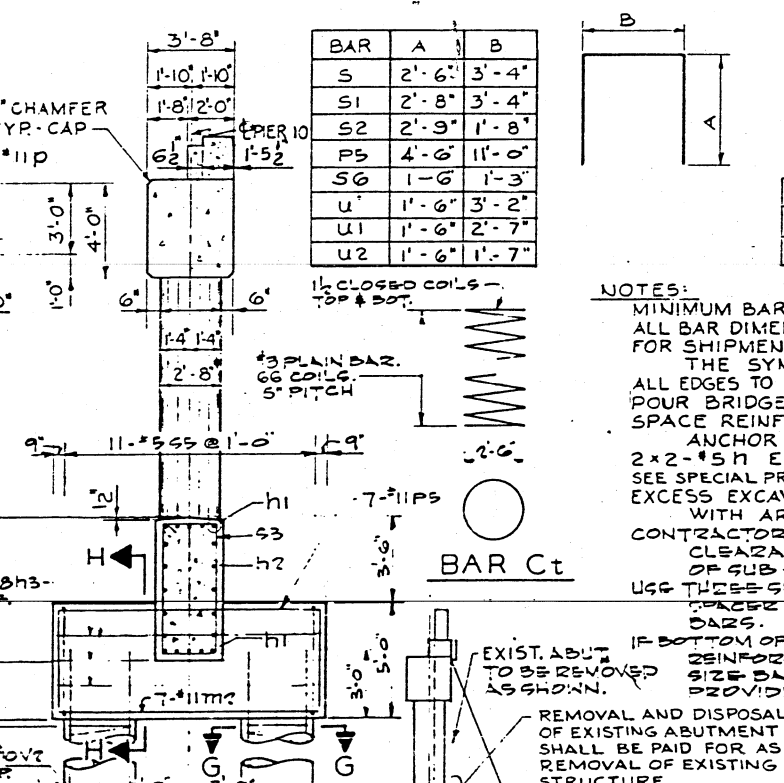
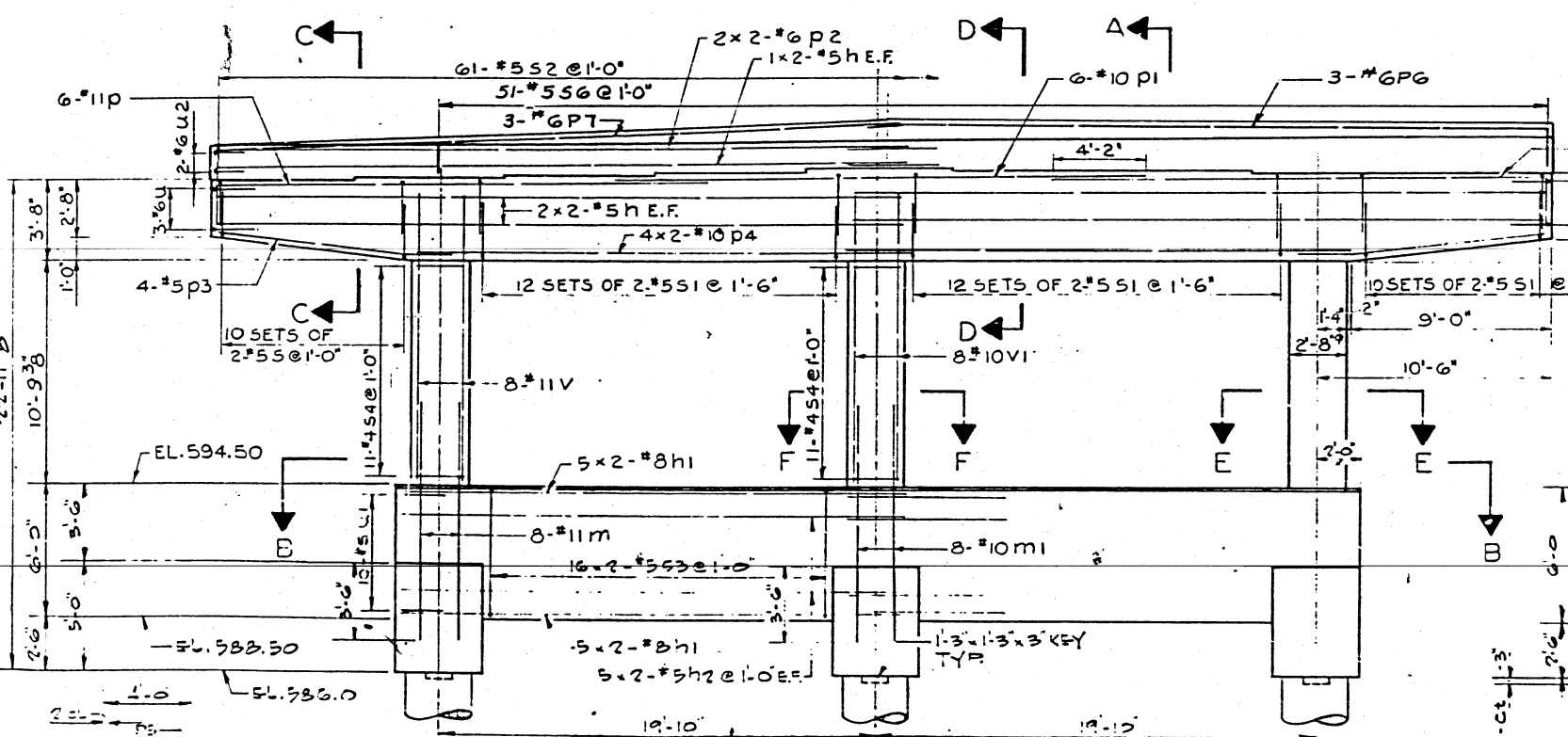
REVISIONS		
DATE	BY	DESCRIPTION
7-7-70	D.W.	h bar eng's, Clearance

COMPUTED	PROJECT	U-UG-4 (72)
CHECKED	SUBMITTED	1 May 1970
DRAWN	DESIGNED	U. G. COTS
CHECKED	STRUCTURAL DESIGN ENGINEER	
EXAMINED	SCALE	SECTION NUMBER
	42	2070708.05
		Sheet No. 3
		Total Sheets 36
		Drawing No. 1037

FOR INFORMATION ONLY



BAR LIST				
BAR	NO	SIZE	LENGTH	SHAPE
h	12	5	30'-9"	
h1	20	8	23'-3"	
h2	20	5	22'-6"	
h3	15	3	11'-0"	
m	16	11	10'-6"	
m1	8	10	10'-6"	
m2	21	11	11'-0"	
p	12	11	24'-0"	
p1	6	10	24'-0"	
p2	4	6	31'-3"	
p3	8	5	10'-4"	
p4	8	10	22'-0"	
p5	21	11	20'-0"	
s	20	5	8'-4"	
s1	68	5	8'-8"	
s2	61	5	7'-2"	
s3	32	5	17'-6"	
s4	33	4	8'-4"	
s5	33	5	17'-6"	
s6	51	5	4'-3"	
p6	3	6	31'-6"	
p7	3	6	30'-0"	
u	3	6	6'-2"	
u1	20	5	5'-7"	
u2	4	6	4'-7"	
v	16	11	13'-9"	
v1	8	10	13'-6"	
v2	45	10	24'-3"	
ct	6	3	518'-0"	



BAR	A	B
S	2'-6"	3'-4"
S1	2'-8"	3'-4"
S2	2'-9"	1'-8"
P5	4'-6"	11'-0"
S6	1'-6"	1'-3"
U	1'-6"	3'-2"
U1	1'-6"	2'-7"
U2	1'-6"	1'-7"

NOTES:

MINIMUM BAR LAP = 22 DIA.

ALL BAR DIMENSIONS ARE OUT TO CUT.

FOR SHIPMENT PREFIX ALL BAR MARKS ON THIS DRAWING WITH THE SYMBOL 10

ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.

POUR BRIDGE SEAT STEPS MONOLITHICALLY WITH PIER CAP.

SPACE REINFORCEMENT IN BRIDGE SEATS TO MISS ANCHOR BOLTS.

2x2-#5 h ETC. MEANS 2 LINES OF BARS WITH 2 LENGTHS PER LINE. SEE SPECIAL PROVISIONS FOR SUB-PIERS AND BRIDGE SEAT SEALANT.

EXCESS EXCAVATED MATERIAL WILL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.

CONTRACTOR SHALL MAKE PROPER PROVISIONS TO MAINTAIN CLEARANCE OF REINFORCEMENT FOR ENTIRE LENGTH OF SUB-PIER.

USE THESE SPACER BARS FOR EACH CONTINUOUS TIE. HEIGHT OF SPACER BARS IS INCLUDED IN QUANTITY FOR REINFORCEMENT BARS.

IF BOTTOM OF SUB-PIER IS LOWERED, CONTRACTOR SHALL EXTEND REINFORCEMENT BY SPLICING TO EACH VERTICAL BAR AN EQUAL SIZE BAR EXTENDING TO BOTTOM OF SUB-PIER AND PROVIDING A 24 DIAMETER LAP.

EXIST. ABUT. TO BE REMOVED AS SHOWN.

REMOVAL AND DISPOSAL OF EXISTING ABUTMENT SHALL BE PAID FOR AS REMOVAL OF EXISTING STRUCTURE.

EXIST. ABUTMENT TO REMAIN IN PLACE.

EXISTING FTG. TO REMAIN IN PLACE.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU YD	97.3
REINFORCEMENT BARS	BS	22,184
CLASS A EXCAVATION FOR STRUCTURES	CU YD	143
BRIDGE SEAT SEALANT	SQ. YD.	10
SUB-PIERS (SOIL BEARING)	CU. FT.	1418
REMOVAL OF EXISTING STRUCTURE	LUMP SUM	

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

PIER 10
STEVENSSON EXPRESSWAY
HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

PROJECT U-UG-4(12)
SCALE AS NOTED

COMPUTED BY FT
DRAWN BY FT
CHECKED BY FT

APPROVED BY [Signature] CHIEF ENGINEER

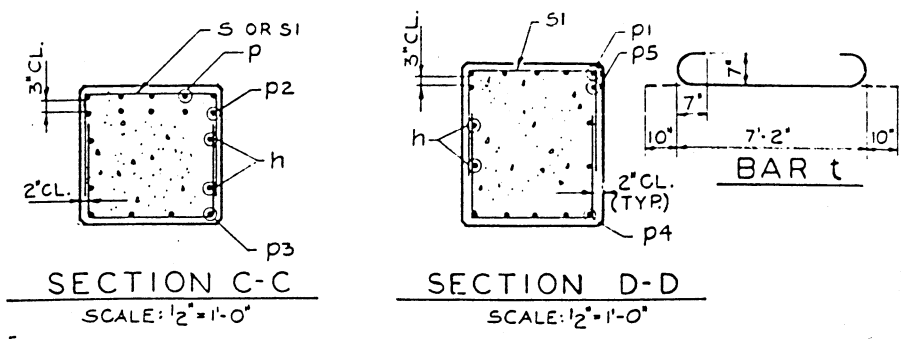
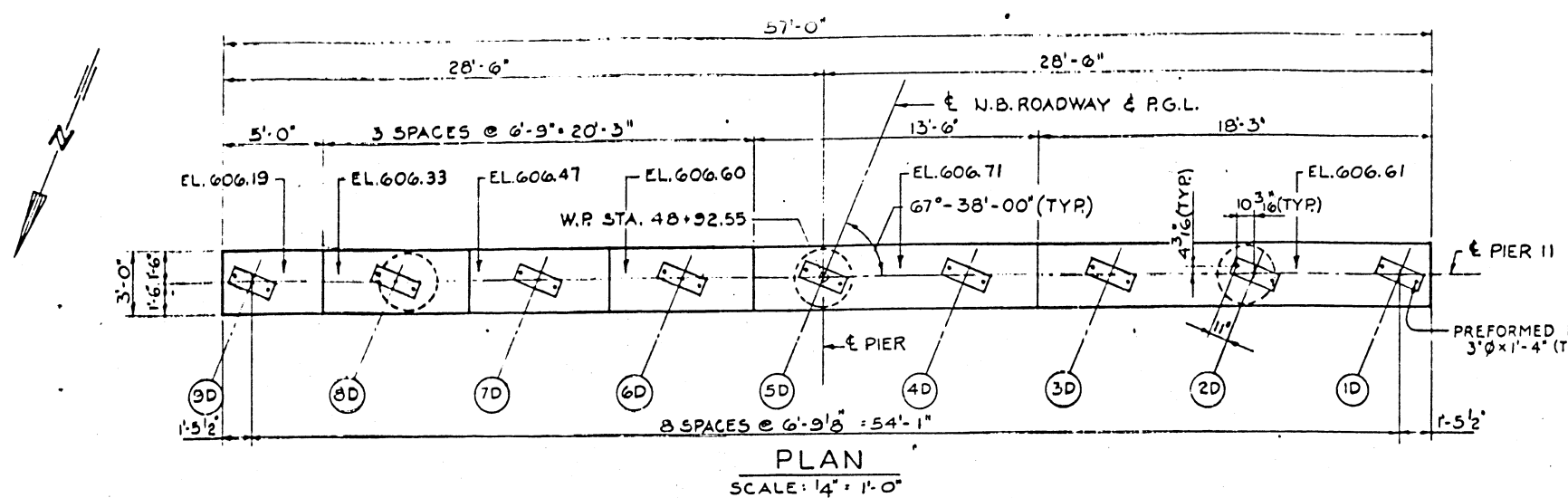
DATE 7-28-70 BY PS C. Bars

DATE	BY	DESCRIPTION
7-28-70	PS	C. Bars

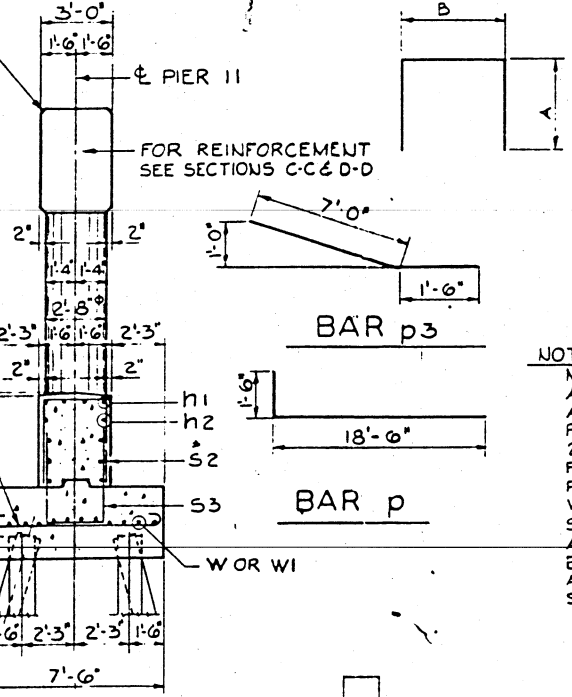
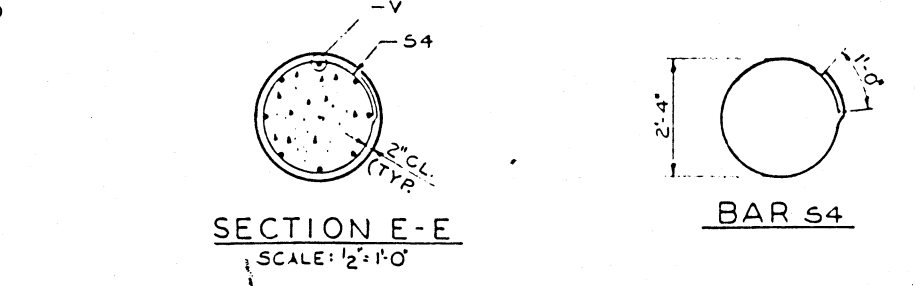
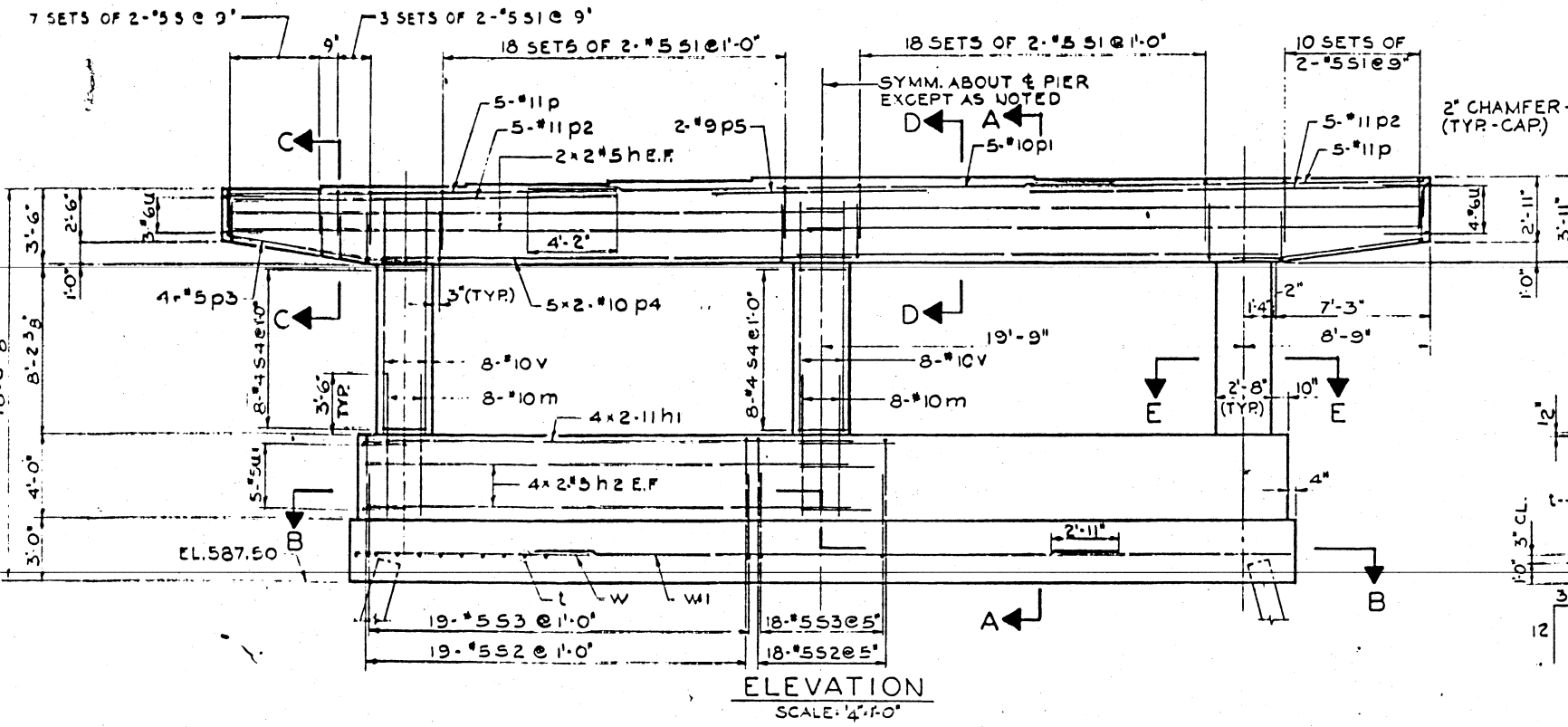
F.R. ROUTE NO. 42
State Aid Route No. 207
Sheet No. 9
Total Sheets 86
Drawing No. 21-1038

NOTE 'A':
EXACT ELEVATION TO BE DETERMINED IN FIELD BY THE ENGINEER, BASED ON UNCONFINED COMPRESSION TEST. DESIGN LOAD IS 2.0 K/FT² SEE

FOR INFORMATION ONLY

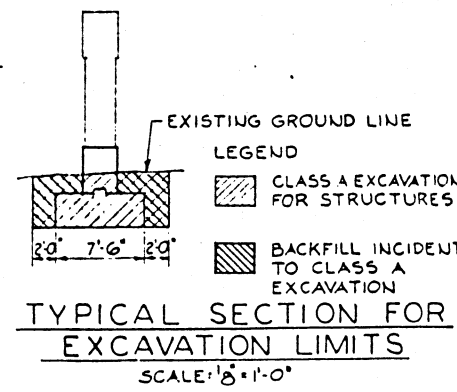


BAR LIST				
BAR	NO	SIZE	LENGTH	SHAPE
h	8	5	29'-0"	
h1	8	11	24'-0"	
h2	16	5	22'-9"	
m	24	10	7'-6"	
p	10	11	20'-0"	
p1	5	10	28'-0"	
p2	10	11	18'-6"	
p3	8	5	8'-6"	
p4	10	10	22'-3"	
p5	2	9	10'-0"	
s	14	5	7'-0"	
s1	98	5	7'-10"	
s2	56	5	10'-2"	
s3	56	5	9'-2"	
s4	24	4	8'-4"	
t	45	7	8'-10"	
u	7	6	5'-6"	
u1	10	5	5'-6"	
v	24	10	11'-3"	
w	12	9	11'-6"	
w1	12	9	29'-0"	



NOTES:
 MINIMUM BAR LAP = 24 DIA.
 ALL BAR DIMENSIONS ARE OUT TO OUT.
 ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.
 POUR BRIDGE SEAT STEPS MONOLITHICALLY WITH PIER CAP.
 2x2-#5 H ETC. MEANS 2 LINES OF BARS WITH 2 LENGTHS PER LINE.
 FOR PILE DETAILS SEE DWG. N° 19.
 FOR SHIPMENT PREFIX ALL BAR MARKS ON THIS DRAWING WITH THE PREFIX [II].
 SPACE REINFORCEMENT BARS IN BRIDGE SEATS TO MISS ANCHOR BOLTS.
 EXCESS EXCAVATED MATERIAL WILL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 2.17.03 OF THE STANDARD SPECIFICATIONS.
 SEE SPECIAL PROVISIONS FOR BRIDGE SEAT SEALANT.

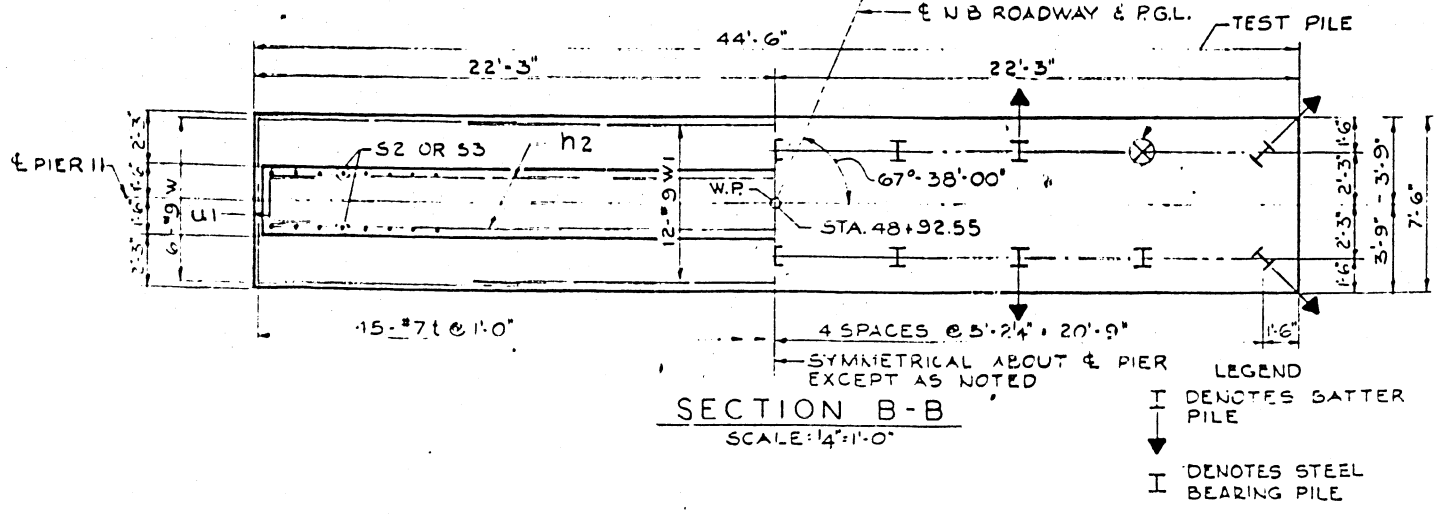
BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU YD	85.1
REINFORCEMENT BARS	LBS	13,010
FURNISHING STEEL PILES, 10BP42	LIN. FT	527
DRIVING STEEL PILES	LIN. FT	527
TEST PILE, STEEL	EACH	1
CLASS A EXCAVATION FOR STRUCTURES	CU YD	114
BRIDGE SEAT SEALANT	SQ. YD	18



PILE DATA	
PILE TYPE	STEEL "H" PILES 10BP42
CUT OFF ELEVATION	588.50
NUMBER REQUIRED *	18
ESTIMATED LENGTH- FEET	31
DESIGN LOAD (TONS)	45

* INCLUDES ONE TEST PILE

REVISIONS		
DATE	BY	DESCRIPTION
7-28-70	FS	H. Piles



DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS
 GEORGE W. DUNNE
 THOMAS R. COITS

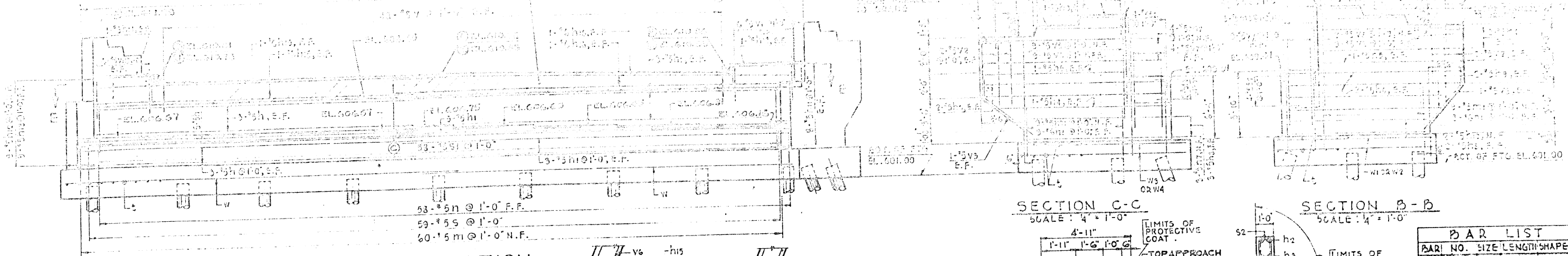
PIER II
 STEVENSON EXPRESSWAY
 HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

COMPUTED R P H
 UNRAWN O V
 CHECKED V X B

PROJECT U-3-8-72
 SCALE AS SHOWN
 APPROVED [Signature] 11/16/70

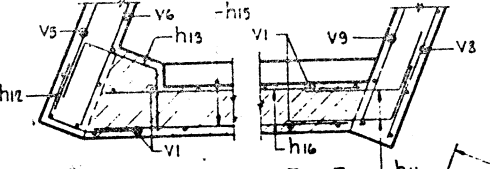
APPROVED [Signature]	F.A. ROUTE NO. 42	STATE AID ROUTE NO. 207	SHEET NO. 10	TOTAL SHEETS 86	DRAWING NO. 2039
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FOR INFORMATION ONLY

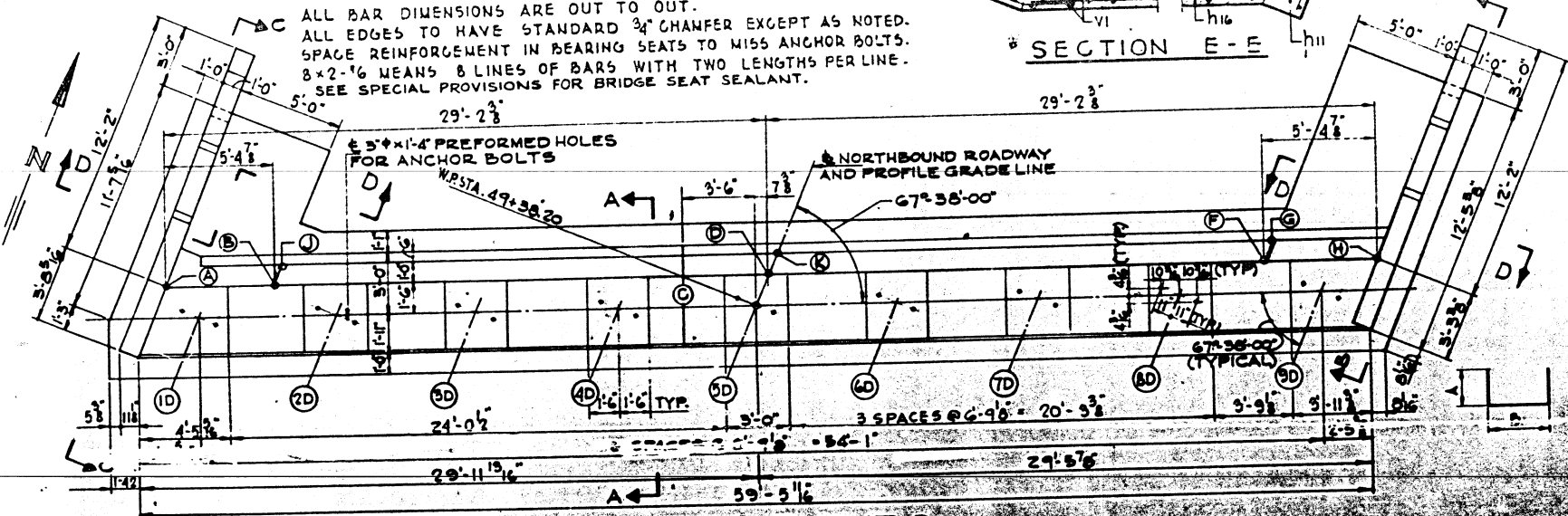


NOTES:
 FOR PILE DETAILS SEE DWG. N#19.
 FOR LIMITS OF EXCAVATION AND BACKFILL SEE DWG. N#20.
 MINIMUM BAR LAP = 24 DIAMETERS.
 ALL BAR DIMENSIONS ARE OUT TO OUT.
 ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.
 SPACE REINFORCEMENT IN BEARING SEATS TO MISS ANCHOR BOLTS.
 8x2-1/6 MEANS 8 LINES OF BARS WITH TWO LENGTHS PER LINE.
 SEE SPECIAL PROVISIONS FOR BRIDGE SEAT SEALANT.

ELEVATION
 SCALE: 1/4" = 1'-0"

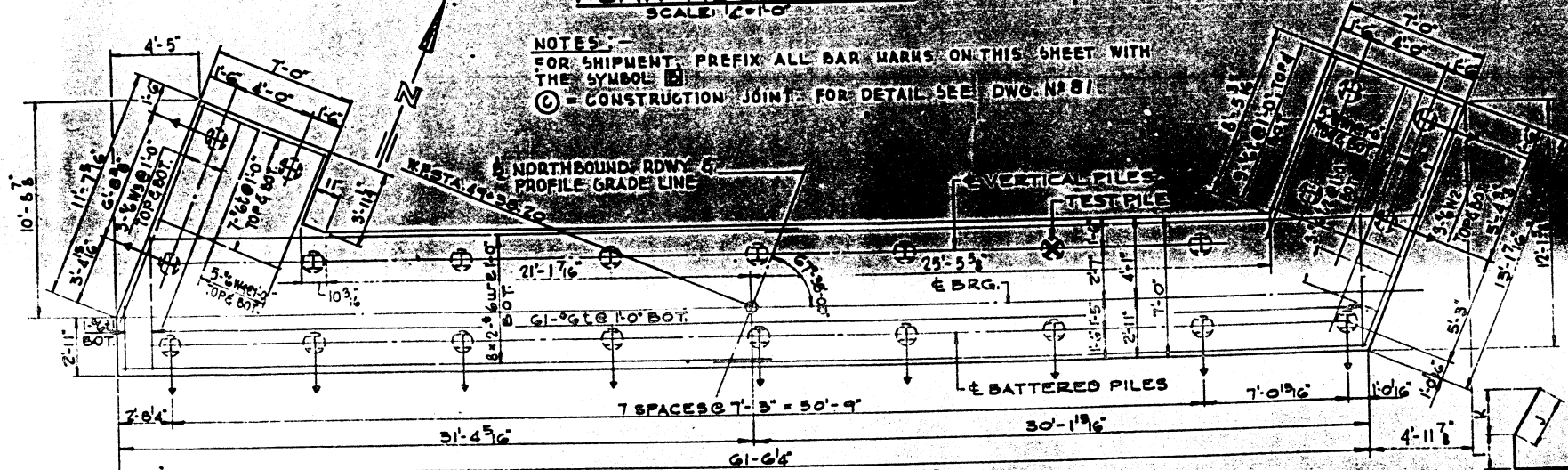


SECTION E-E



PLAN-ABUTMENT B
 SCALE: 1/2" = 1'-0"

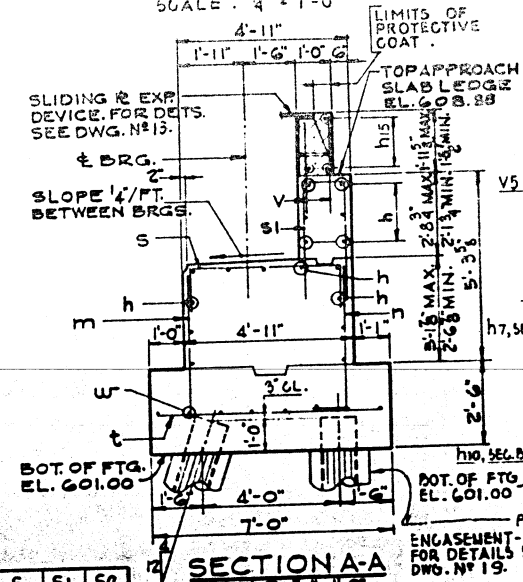
NOTES:
 FOR SHIPMENT, PREFIX ALL BAR MARKS ON THIS SHEET WITH THE SYMBOL [Symbol].
 [Symbol] = CONSTRUCTION JOINT. FOR DETAIL SEE DWG. N#81.



PLAN-FOOTING
 SCALE: 1/4" = 1'-0"

LEGEND
 [Symbol] DENOTES BATTER PILE
 [Symbol] DENOTES STEEL BEARING PILE

SECTION C-C
 SCALE: 1/4" = 1'-0"



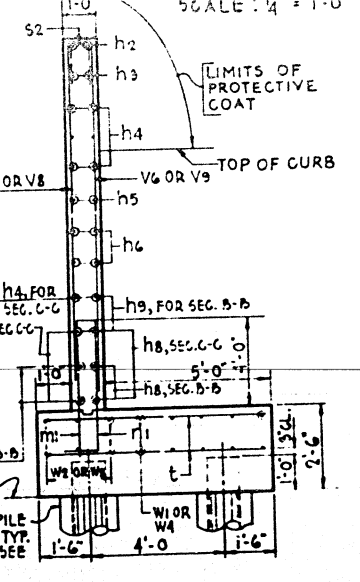
SECTION A-A
 SCALE: 5/8" = 1'-0"

BAR	S1	S2
A	1'-10"	4'-0" 1'-3"
B	4'-7"	1'-2" 0'-8"

BAR	H4	H1	H11
C	2'-0" 1'-0" 1'-0"		
D	5'-0" 3'-7" 3'-3"		

BAR	H12	H13
H	1'-3" 1'-3"	
I	0'-10" 1'-10"	
J	1'-9" 1'-9"	
K	1'-1" 1'-1"	

SECTION B-B
 SCALE: 1/4" = 1'-0"



SECTION D-D
 SCALE: 5/8" = 1'-0"

BAR LIST				
BAR NO.	SIZE	LENGTH	SHAPE	
h1	17	5	27'-9"	
h2	4	5	3'-4"	
h3	4	5	7'-0"	
h4	14	5	11'-10"	
h5	4	5	11'-10"	
h6	8	5	15'-3"	
h7	9	5	12'-0"	
h8	5	5	9'-0"	
h9	4	5	19'-0"	
h10	2	5	11'-6"	
h11	16	5	3'-6"	
h12	9	5	3'-4"	
h13	9	5	4'-4"	
h14	4	5	7'-0"	
h15	3	6	26'-9"	
h16	3	6	39'-0"	
m	60	5	3'-7"	
m1	18	5	5'-5"	
m2	4	5	7'-6"	
m3	3	5	6'-11"	
n	58	5	4'-7"	
n1	18	6	6'-5"	
s	59	5	8'-3"	
s1	58	5	9'-2"	
s2	59	5	9'-2"	
t	95	6	6'-8"	
t1	1	6	2'-9"	
t2	3	6	3'-6"	
v	96	5	3'-0"	
v1	74	5	3'-9"	
v2	8	5	6'-0"	
v3	4	5	6'-9"	
v4	4	5	6'-1"	
v5	2	5	8'-6"	
v6	2	5	9'-0"	
v7	7	5	4'-9"	
v8	9	5	8'-0"	
v9	9	5	8'-5"	
w	16	6	31'-5"	
w1	10	6	10'-0"	
w2	6	6	12'-5"	
w3	6	6	11'-5"	
w4	10	6	7'-6"	

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU YD	98.0
REINFORCEMENT BARS	LBS.	7,100
FURNISHING STEEL PILES, JOBPAZ	LIN FT	1012
DRIVING STEEL PILES	LIN FT	1012
PROTECTIVE COAT	SQ YD	19
CLASS A EXCAVATION FOR STRUCT.	CU YD	140
SAND OR GRAVEL EMBANKMENT	CU YD	29
BRIDGE SEAT SEALANT	SQ. YD.	2.1
TEST PILE	EACH	1

PILE DATA	
PILE TYPE	STEEL 'H' PILES JOBPAZ
DESIGN LOAD (TONS)	30
NUMBER REQUIRED	23 **
EST. LENGTH FEET	46

** INCLUDES TEST PILE

REVISIONS		
DATE	BY	DESCRIPTION
7-28-70	F.S.	Wing Ends; Bars h4 & h6; h1, p1 & s

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS

GEORGE W. DUNNE
 PRESIDENT BOARD OF COMMISSIONERS

THOMAS & COY'S
 SUPERINTENDENT OF HIGHWAYS

ABUTMENT B
 STEVENSON EXPRESSWAY
 HARLEM AVENUE OVER SANITARY DISTRICT TRACKS
 AND ACCESS ROAD

PROJECT: U-UG-4(172)
 SCALE: AS NOTED
 APPROVED: *Woolinger* 11/17/70

COMPUTED: W. J. C.
 DRAWN: S. J. D.
 CHECKED: J. M. N.

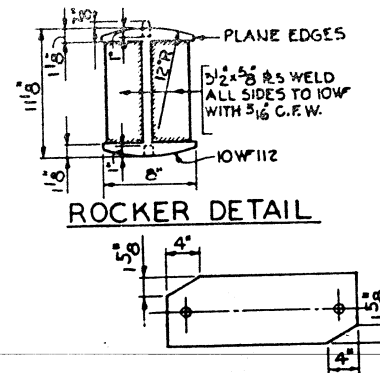
APPROVED: *[Signature]*
 STATE ROUTE NO. 42
 SHEET NO. 207
 TOTAL SHEETS 85
 DRAWING NO. 1042

FOR INFORMATION ONLY

ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES AND DECIMALS THEREOF.

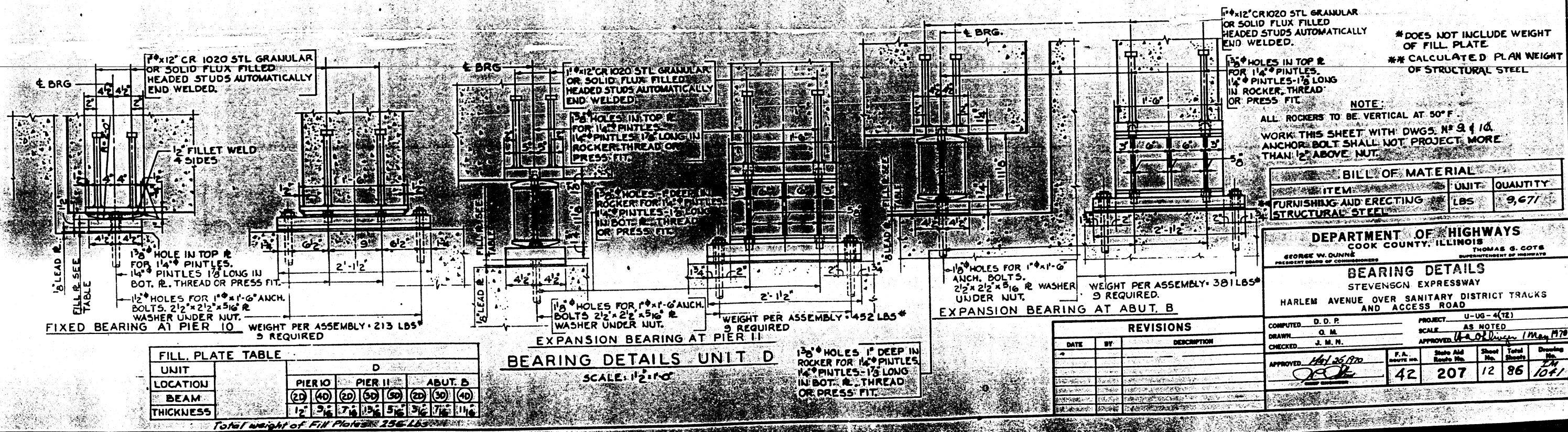
ALL BOLTS, NUTS, WASHERS, PINTLES, PINS, PLATES, PINTLES AND ANCHORS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 50708 OF THE STANDARD SPECIFICATIONS AND SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 50704. THESE ITEMS ARE INCLUDED FOR PAYMENT IN THE WEIGHT OF STRUCTURAL STEEL.

UNIT D OF 10



ROCKER DETAIL

AT PIER 10
BEARING PLATE PLAN
NOT TO SCALE



DOES NOT INCLUDE WEIGHT OF FILL PLATE
** CALCULATED PLAN WEIGHT OF STRUCTURAL STEEL

NOTE:
ALL ROCKERS TO BE VERTICAL AT 50° F.
WORK THIS SHEET WITH DWGS. NO. 9 & 10.
ANCHOR BOLT SHALL NOT PROJECT MORE THAN 1/2" ABOVE NUT.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
FURNISHING AND ERECTING STRUCTURAL STEEL	LBS	9,671

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
THOMAS G. COTE
SUPERINTENDENT OF HIGHWAYS
BEARING DETAILS
STEVENS ON EXPRESSWAY
HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

REVISIONS		
DATE	BY	DESCRIPTION

COMPUTED D. D. P.	PROJECT U-UG-4(72)
DRAWN G. M.	SCALE AS NOTED
CHECKED J. M. N.	APPROVED <i>[Signature]</i> 1 May 1970
APPROVED <i>[Signature]</i>	F.A. ROUTE NO. 42
	State Aid Route No. 207
	Sheet No. 12
	Total Sheets 86
	Drawing No. 1041

FILL PLATE TABLE		D		
UNIT		PIER 10	PIER II	ABUT. B
LOCATION		(2) (4)	(2) (5) (5)	(2) (3) (4)
BEAM		12" 3/8"	12" 5/8"	12" 7/8"
THICKNESS		1/2"	5/8"	3/4"

Total weight of Fill Plates 256 Lbs

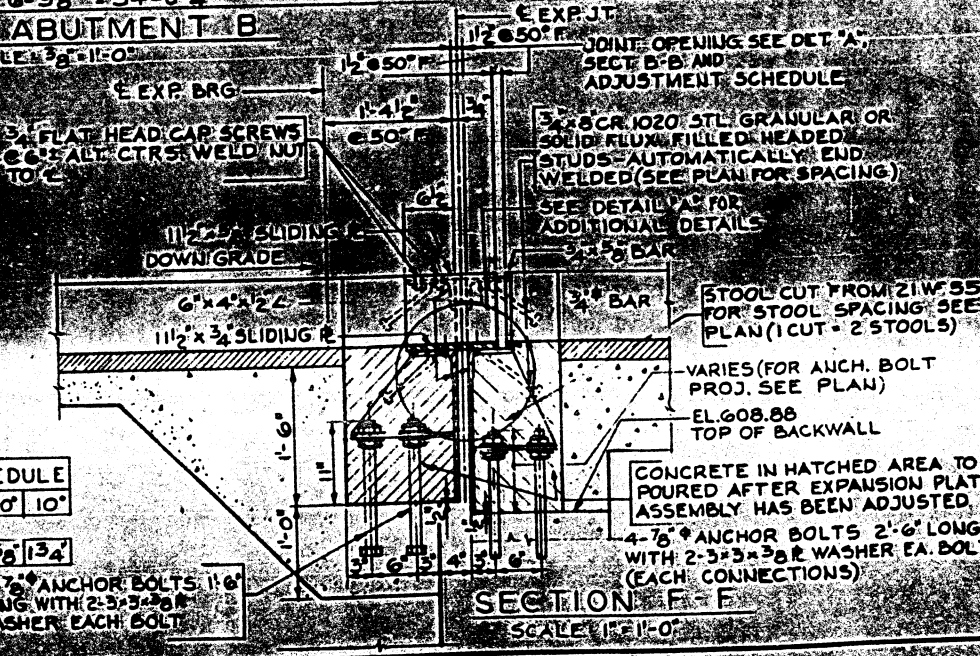
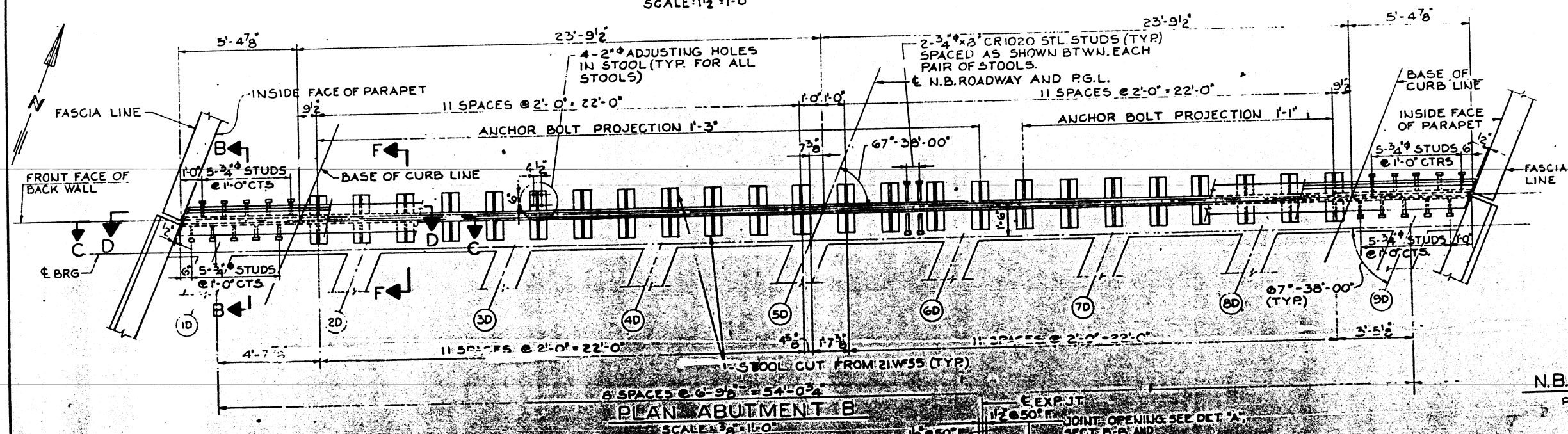
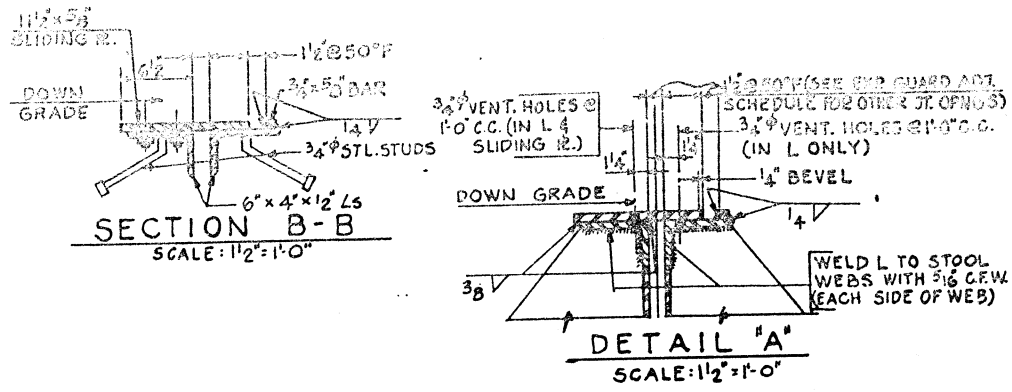
BEARING DETAILS UNIT D
SCALE: 1/2" = 1'-0"

FOR INFORMATION ONLY

EXPANSION GUARD ASSEMBLY SHALL BE FABRICATED OF STRUCTURAL STEEL CONFORMING TO A572M DESIGNATION 50.

EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.

ALL PARTS OF GUARD ASSEMBLY INCLUDING STUDS SHALL BE INCLUDED IN STRUCTURAL STEEL EQUIPMENT.



EXPANSION GUARD ADJUSTMENT SCHEDULE

ABUT.	TEMP.	110°	90°	70°	50°	30°	10°
JOINT OPENING AT ABUT. B							
1' 6" 1' 4" 1' 2" 1' 2" 1' 5" 1' 3" 1' 4"							

BILL OF MATERIAL

ITEMS	UNIT	QUANTITY
FURNISHING AND ERECTING STRUCTURAL STEEL	Lbs	7500

* CALCULATED PLAN WEIGHT OF STRUCTURAL STEEL

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
THOMAS G. COYS
SUPERINTENDENT OF HIGHWAYS

EXPANSION GUARD - ABUTMENT B
STEVENSON EXPRESSWAY
HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

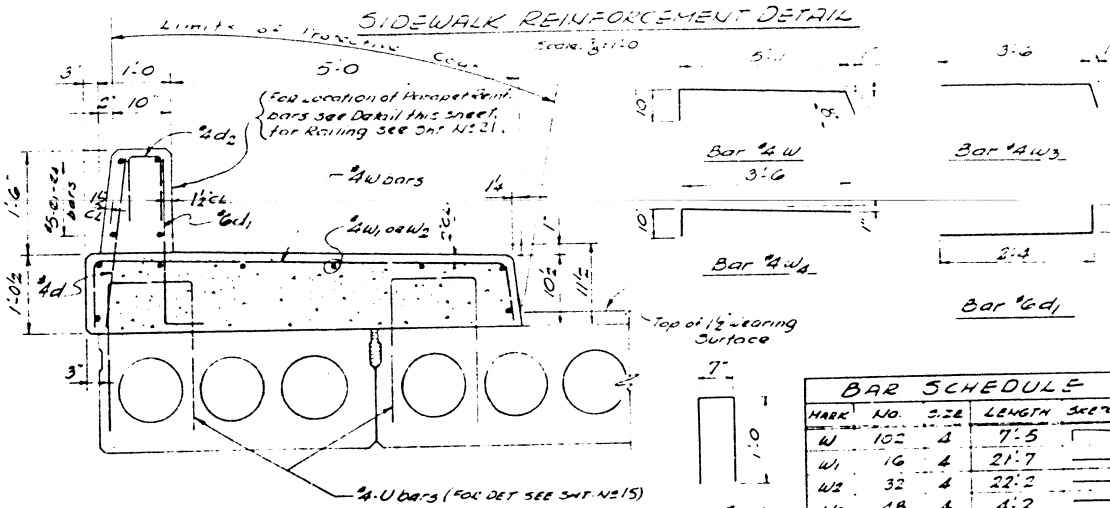
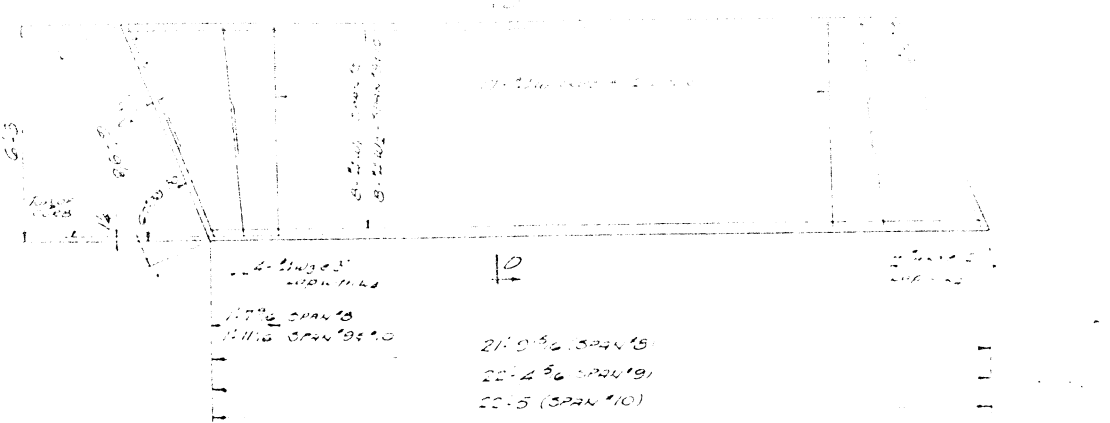
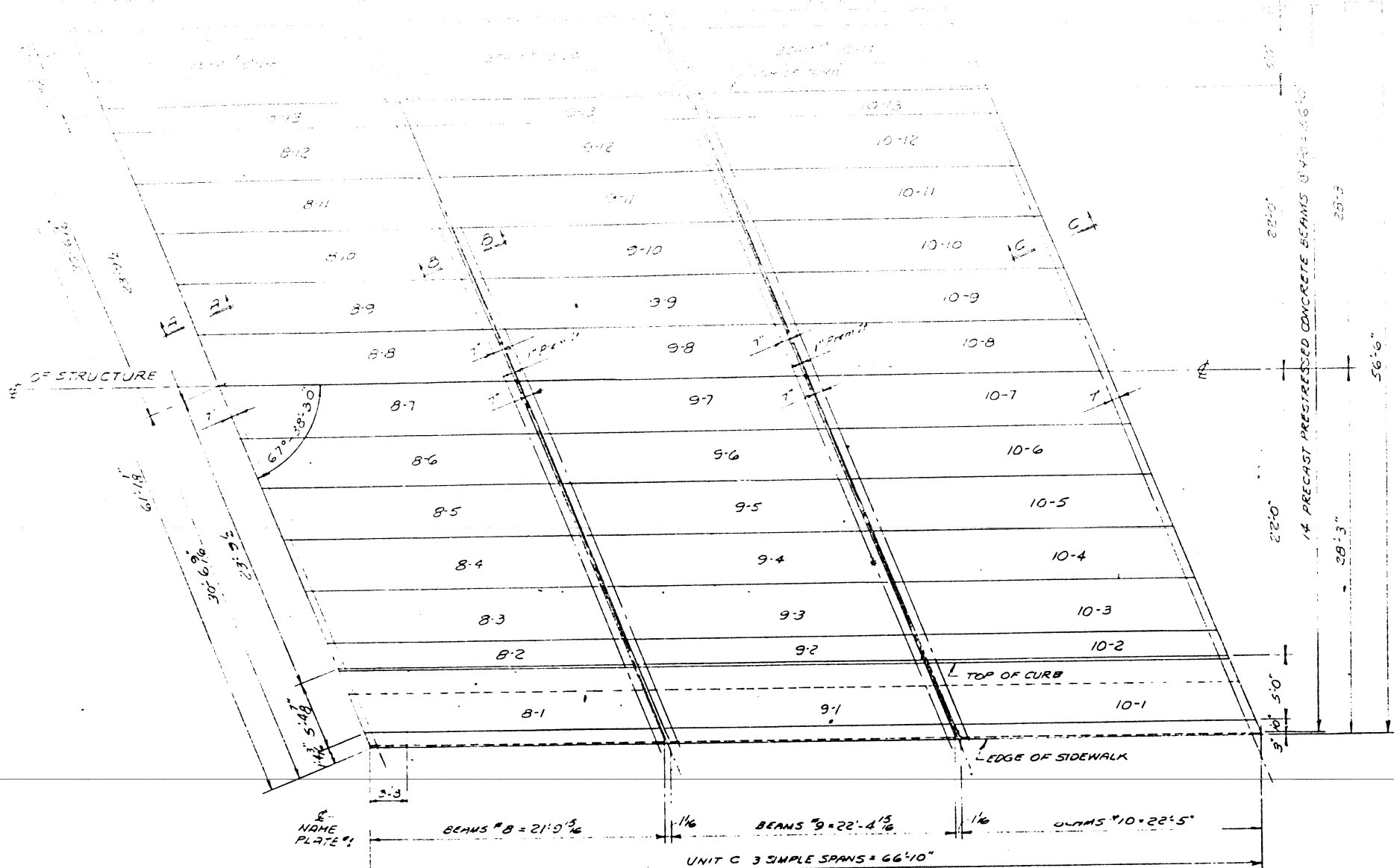
PROJECT: U-UG-41711
SCALE: AS NOTED
APPROVED: 1 May 1970

COMPUTED: D. D. P.	SCALE: AS NOTED
DRAWN: O. M.	APPROVED: 1 May 1970
CHECKED: J. M. N.	
APPROVED: 1 May 1970	
F.A. ROUTE NO. 42	State Aid Route No. 207
Sheet No. 13	Total Sheets 86
Drawing No. 1042	

REVISIONS

DATE	BY	DESCRIPTION

FOR INFORMATION ONLY



MARK	NO.	SIZE	LENGTH	SECTION
W1	102	3	7.5	
W2	16	4	21.7	
W3	32	4	22.2	
W4	48	4	8.2	
W5	48	4	4.4	

d1	136	4	2.5	
d1	136	6	2.10	
d2	48	4	2.7	
e1	8	5	10.5	
e2	8	5	10.10	
e3	16	5	10.8	
e4	16	5	11.3	

NOTES:
 FOR SECTIONS A-A, B-B & C-C SEE SHY NO. 15.
 FOR BEAM DETAILS AND NOTES SEE SHY NO. 15.
 FOR LOCATION OF RAILING POSTS & LGT. STDS SEE SHY NO. 17.
 FOR DETAIL OF JOINT IN PARAPET SEE SHY NO. 21.
 EXISTING SUPERSTRUCTURE INCLUDING CONCRETE HANDRAIL, SIDEWALK & CONCRETE DECK SLAB TO BE REMOVED.

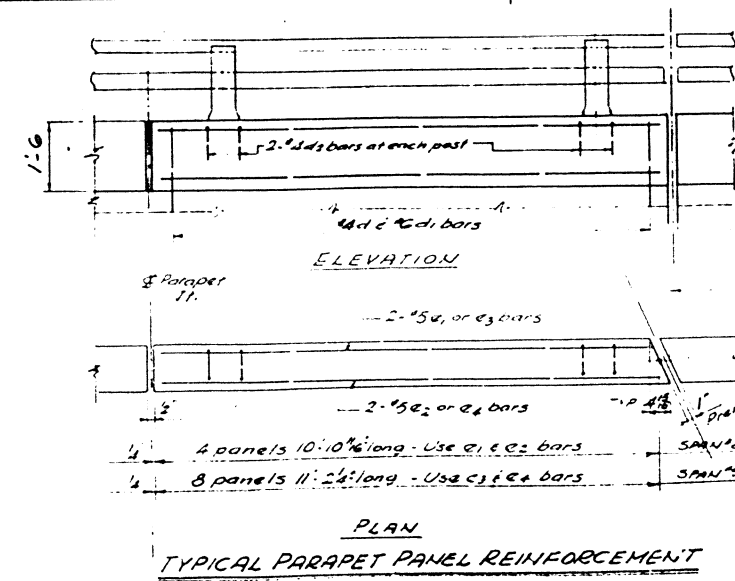
BILL OF MATERIAL	
CLASS X Concrete	37.0 Cu. Yds
Reinforcement Bars	2,907 Lbs
REMOVAL OF EXISTING SUPERSTRUCTURE	LUMP SUM
Name Plate	1 Each
Protective Coat	120 Sq Yds

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS
 GEORGE W. CLINE, PRESIDENT BOARD OF COMMISSIONERS
 THOMAS G. COY, SUPERINTENDENT OF HIGHWAYS

SUPERSTRUCTURE DETAILS - UNIT C
 STEVENSON EXPRESSWAY
 HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

REVISIONS		
DATE	BY	DESCRIPTION
7-7-70	D.M.V.	CLARENCE NOTES

COMPUTED	L.F.	PROJECT	U-UG-4(72)
CHECKED	R.T.P.	SUBMITTED	1 May 1970
DRAWN	R.T.P.	DESIGNED BY	J. J. Schuler
CHECKED	L.F.	STRUCTURAL DESIGN ENGINEER	
EXAMINED	M.R.	SCALE	AS SHOWN
CHIEF ENGINEER OF DESIGN		F.A. SECTION NUMBER	42 207-0000
		Sheet No.	14
		Total Sheets	86
		Drawing No.	2M 1043

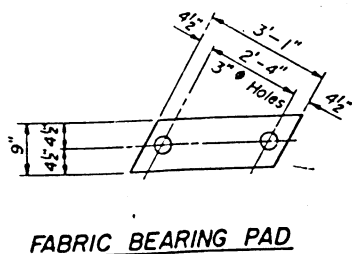


PLAN SCALE: 1/16" = 1'-0"

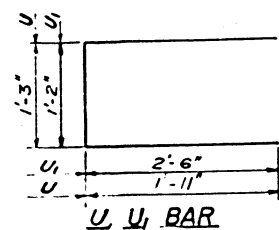
DECK ELEVATIONS

LOCATION	NO. & BRG. ABUT. C	2 PT.	SO. & BRG. PIER 8	2 PIER 8	NO. & BRG. PIER 9	2 PT.	SO. & BRG. PIER 9	2 PIER 9	NO. & BRG. PIER 9	2 PT.	SO. & BRG. PIER 10
EDGE OF SIDEWALK	613.092	613.170	613.838	613.819	613.830	613.687	613.533	613.523	613.513	613.347	613.171
TOP OF CURB	613.037	613.112	613.790	613.780	613.779	613.636	613.486	613.476	613.466	613.303	613.139
FLOW LINE	613.287	613.172	613.023	613.038	613.029	612.868	612.736	612.720	612.716	612.553	612.374
2-STRUCTURE	613.673	613.566	613.449	613.441	613.433	613.301	613.158	613.149	613.139	612.985	612.820
FLOW LINE	613.407	613.369	613.261	613.254	613.246	613.123	612.939	612.900	612.971	612.826	612.670
TOP OF CURB	613.217	613.119	613.011	613.004	613.996	613.873	613.739	613.730	613.721	613.576	613.420
EDGE OF SIDEWALK	614.323	614.227	614.121	614.114	614.106	613.986	613.855	613.846	613.837	613.694	613.540

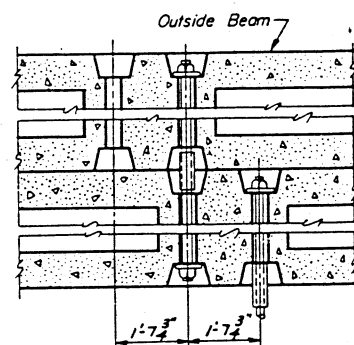
FOR INFORMATION ONLY



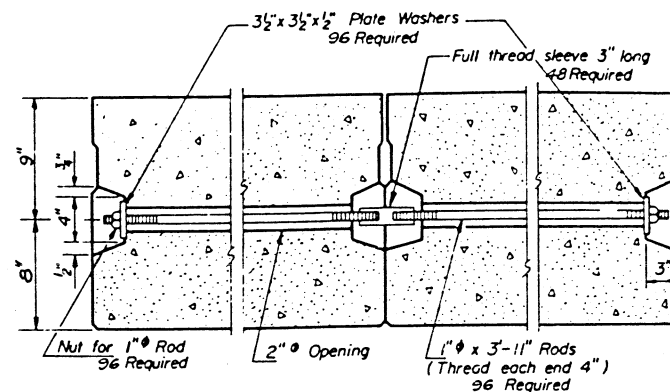
FABRIC BEARING PAD



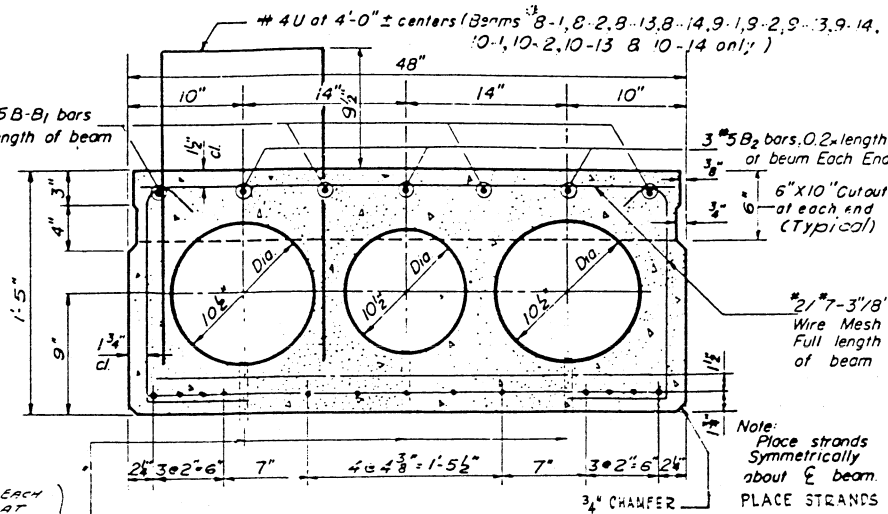
U U BAR



TYPICAL TRANSVERSE TIE ASSEMBLY



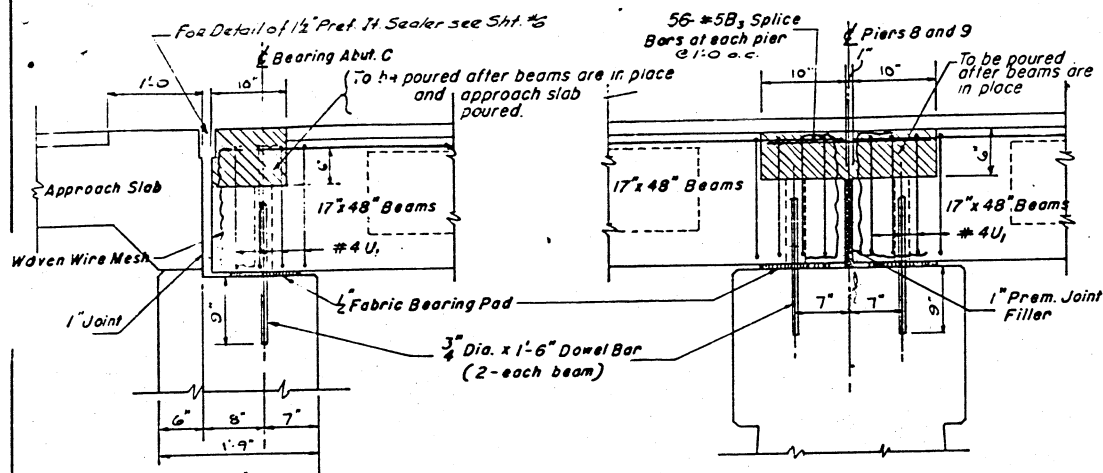
4 - #5 B-B bars full length of beam



TYPICAL SECTION

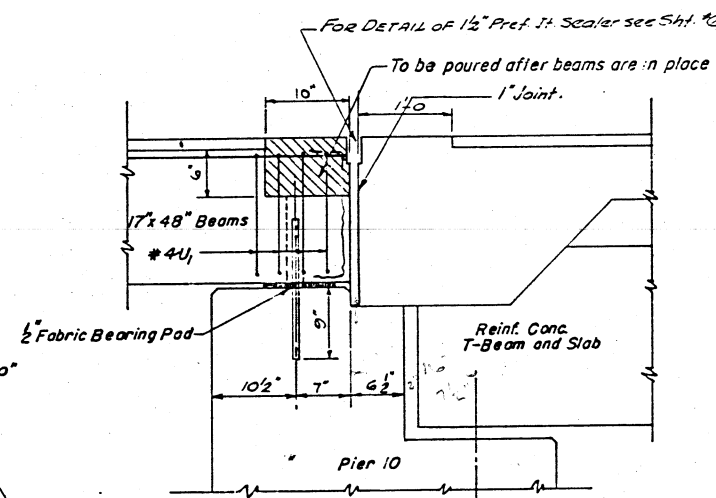
76 # Strands, Each Strand Stressed to 18,900 lbs.
13 Strands 1 1/2" up No Strands 3/4" up

Note: Place strands Symmetrically about center beam. PLACE STRANDS TO MISS DOWEL HOLES.

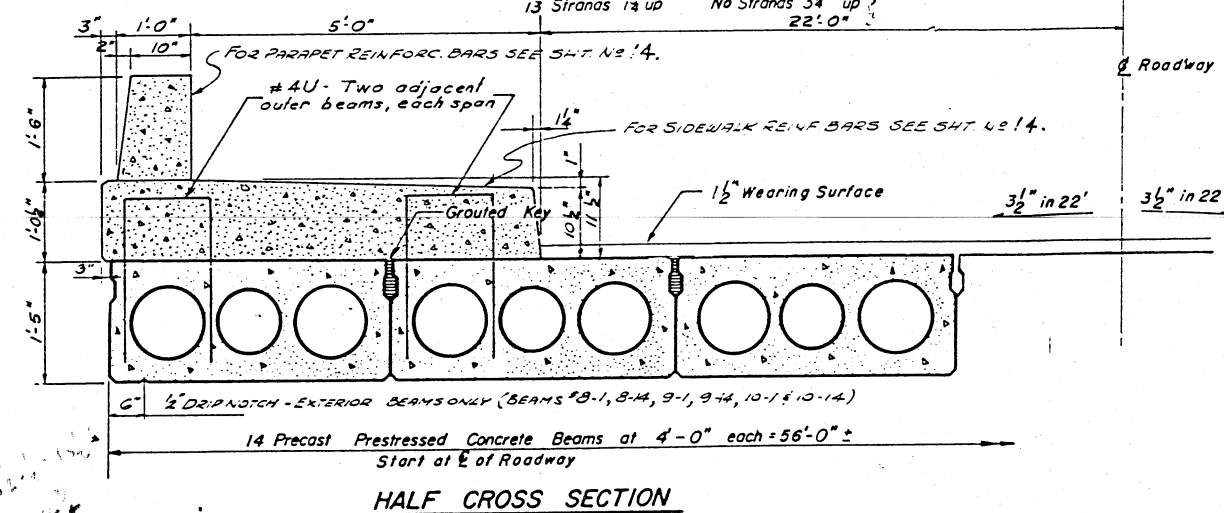


SECTION A-A

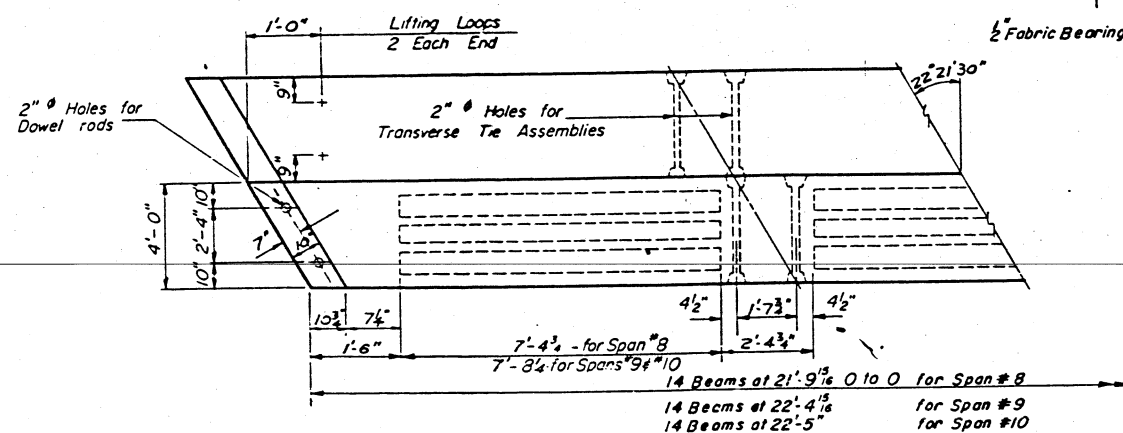
SECTION B-B



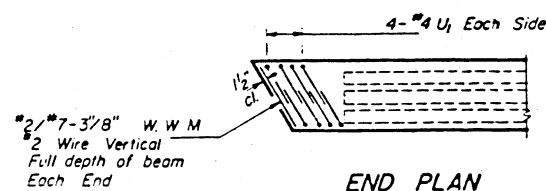
SECTION G-G



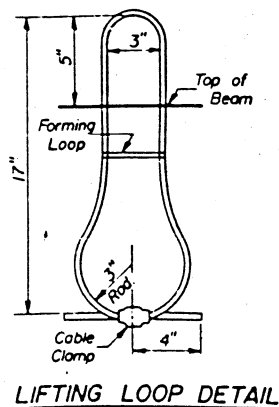
HALF CROSS SECTION



PLAN



END PLAN



LIFTING LOOP DETAIL

NOTES
 Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand. The nominal diameter shall be 7/16" and the nominal cross-sectional area shall be 0.109 sq. in. Lifting loops shall be 1/2" diameter, 6x19 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 18,700 lbs.
 The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place.
 Longitudinal shear keys shall be packed with a very dry mix of 2-1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the sub-structure and the anchor dowels shall be grouted in place.
 Steel for dowel rods, transverse tie rods, and armor angles shall be S.A.E. 1020, structural steel A.S.T.M. Designation: A36, or intermediate grade A.S.T.M. Designation A15. After fabrication the transverse tie assemblies (tie rods, nuts, washers and sleeves) shall be hot-dipped galvanized in accordance with A.S.T.M. Designation: A153.
 Cost of reinforcement and accessories cast into the beam, of bearing pads, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete"
 For Location of Sections A-A, B-B & C-C see Sheet No 14.

BILL OF MATERIAL

Span No	Bar	No.	Size	Length	Shape
8	B	56	5	21'-8"	—
9 & 10	B ₁	112	5	22'-3"	—
8, 9 & 10	B ₂	232	5	4'-6"	—
8 & 9	B ₃	112	5	1'-9"	—
8, 9 & 10	U	72	4	5'-1"	—
8, 9 & 10	U ₁	672	4	6'-2"	—
	#2/#7-3/8" Wire Mesh		Sq. Ft.	9500	
	Preformed Joint Sealer		Lin. Ft.	115	
	Precast Prestressed Concrete Deck Beams		Sq. Ft.	5734	
	Coal Tar Inter-over Protective Coat		Sq. Yds	327	
	Bituminous Concrete Surface Course, class 1 (1 1/2")		Ton	28	

REVISIONS

DATE	BY	DESCRIPTION
7-7-70	D.W.	1/2" Pref. Joint Sealer, 115' length

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS

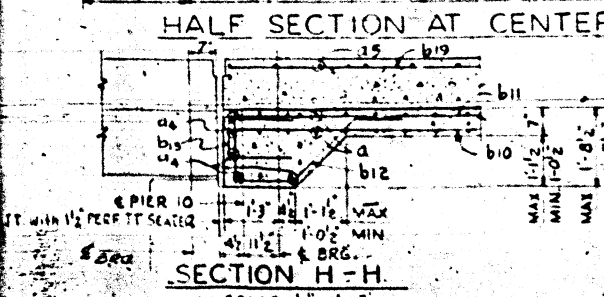
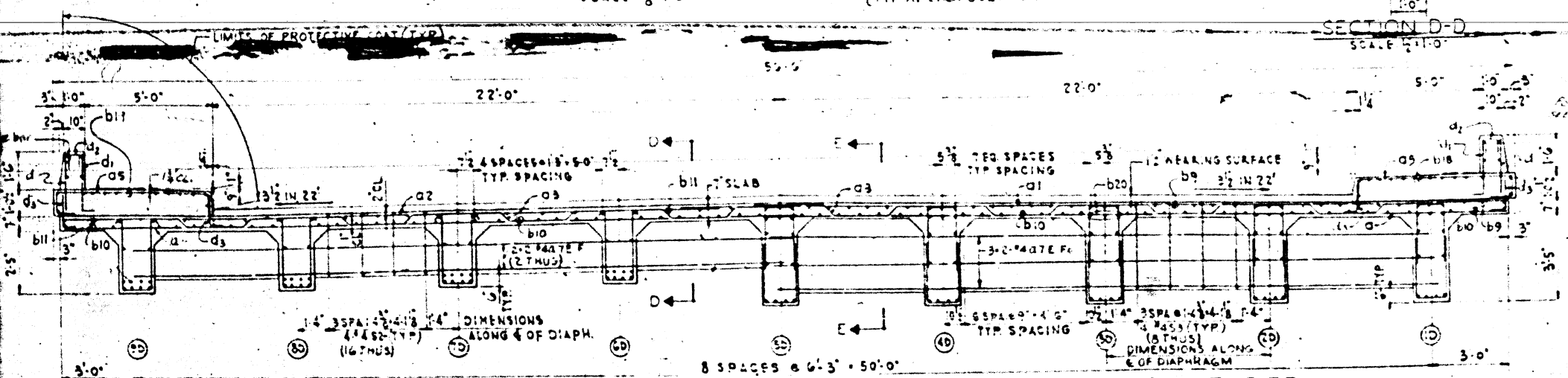
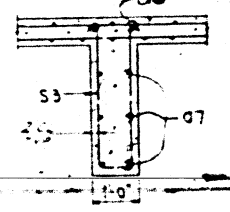
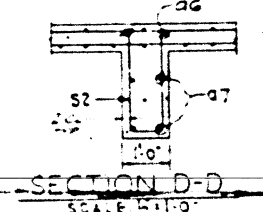
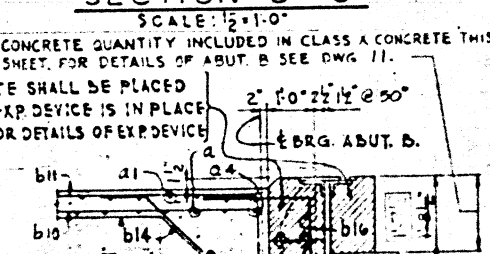
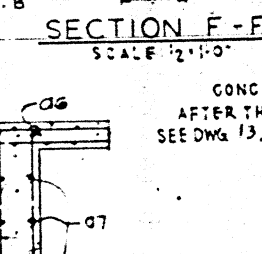
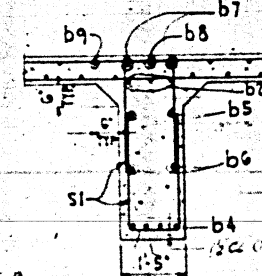
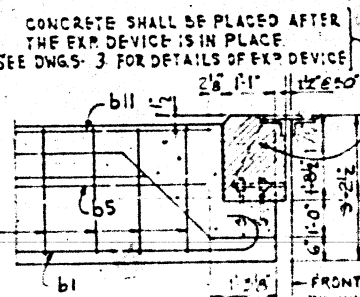
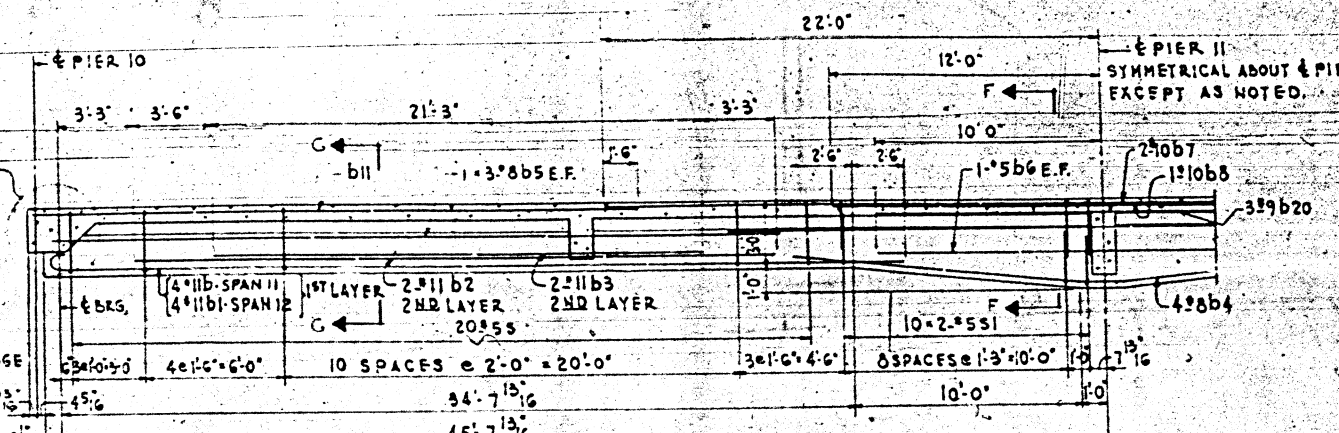
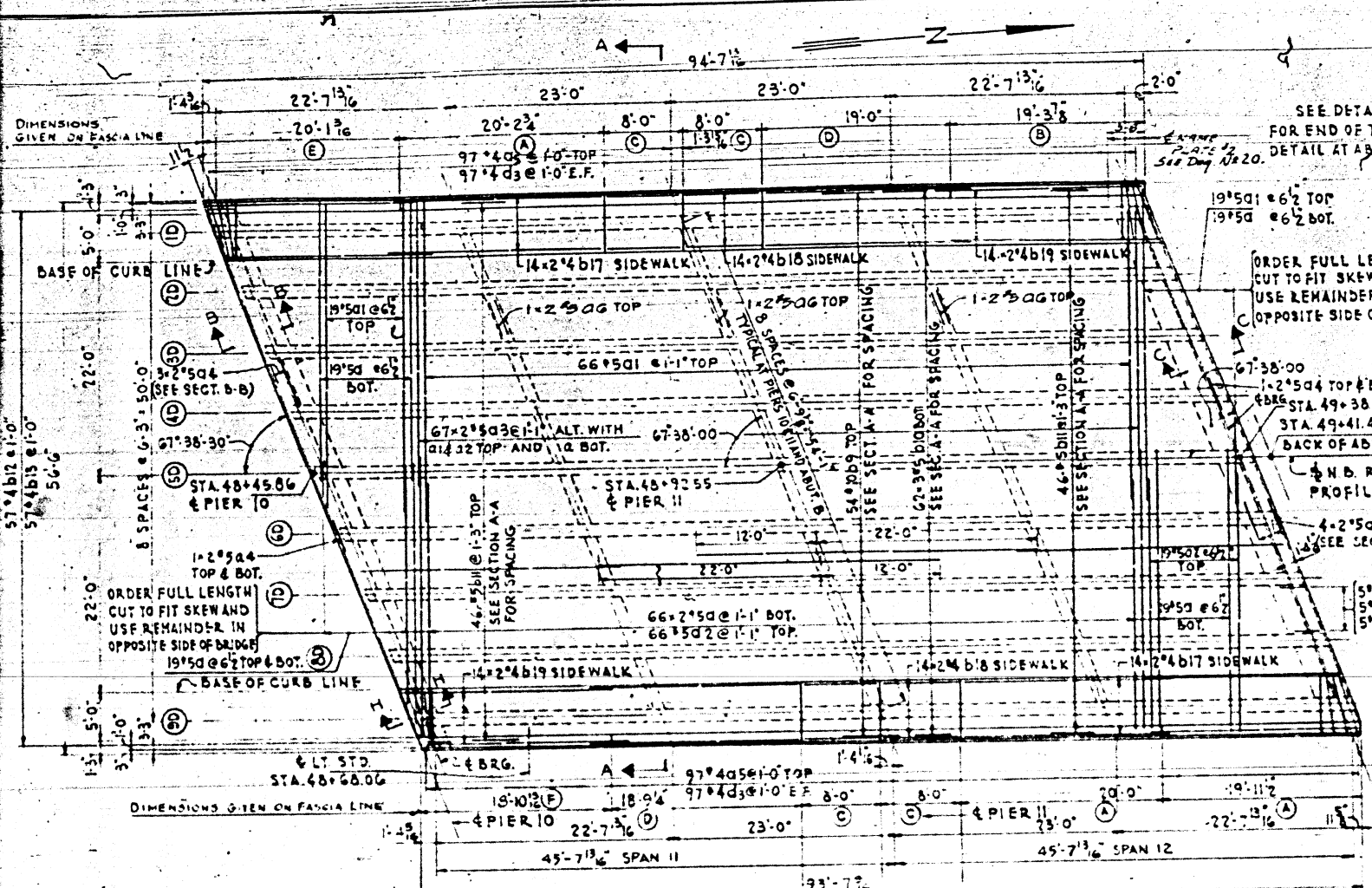
SUPERSTRUCTURE DETAILS - UNIT 'C'
 STEVENSON EXPRESSWAY
 HARLEM AVENUE OVER SANITARY DISTRICT TRUCKS AND ACCESS ROAD

PROJECT: U-16-4(22)
 SUBMITTED: 1 May 1970
 DRAWN: J. J. ...
 CHECKED: L.F.

COMPUTED: 41.7
 CHECKED: D.S.
 EXAMINED: 4/25/70
 CHIEF ENGINEER OF DESIGN

SECTION NUMBER: 42
 SHEET NO: 15
 TOTAL SHEETS: 86

FOR INFORMATION ONLY



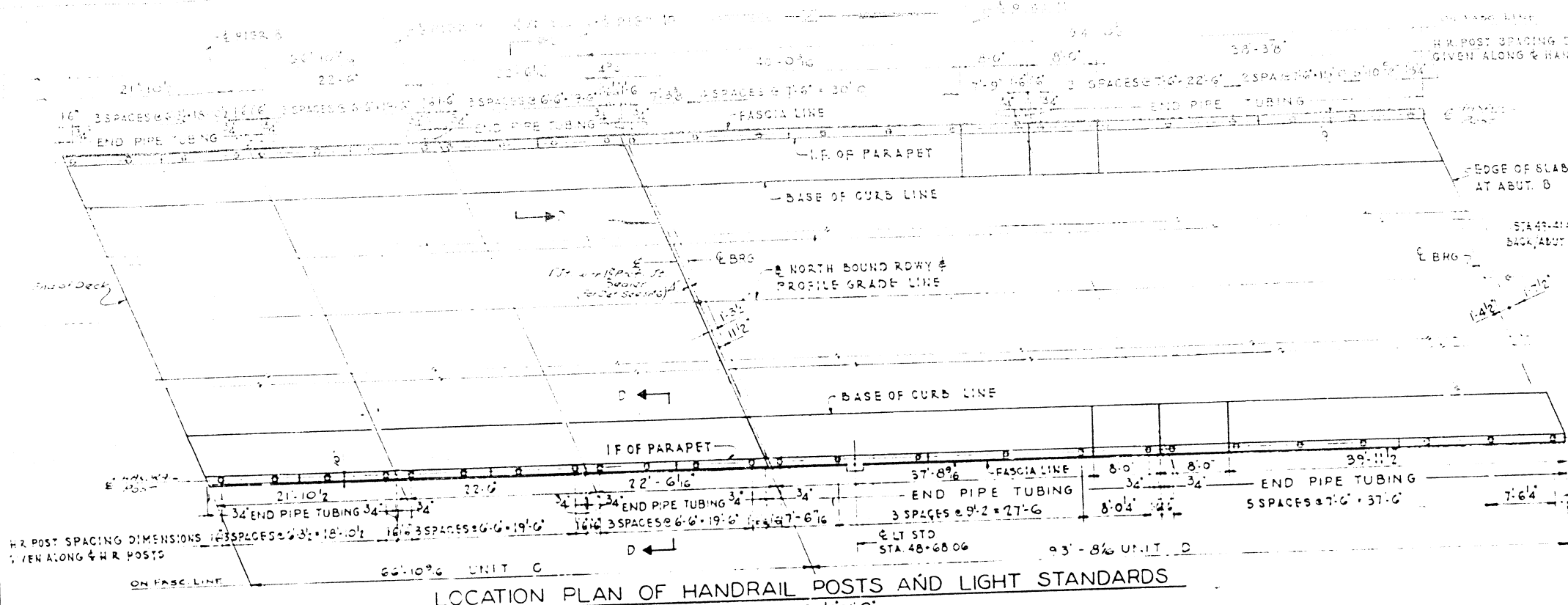
GENERAL CONCRETE NOTES: ALL CONCRETE SHALL BE CLASS "C" LIGHT AGGREGATE WHICH IS TO BE USED IN PARAPETS & TOP & FT. OF SIDEWALKS...
 1. FOR PLAN OF HANDRAIL POSTS AND LT. STDS. SEE DWG. 17.
 2. FOR BAR LIST, BILL OF MATERIAL, ADJUSTED GRADE ELEVATIONS & DETAILS SEE DWG. 17.
 3. FOR ADDITIONAL DETAILS AT LT. STD. SEE SHEET...
 4. FOR PARAPET PANELS (A) THRU (C) SEE DWG. 17.
 5. 14-2#4B ETC. INDICATES 14 LINES OF BARS WITH 2 LENGTHS PER LINE.
 6. FOR 1/2" PERFORMED JOINT SEALER DETAIL SEE SH. 16.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
NAME PLATE	EACH	1
CLASS X CONCRETE	CU. YD.	317.6
REINFORCEMENT BARS	LBS.	25,417
PROTECTIVE COAT	SQ. YD.	169
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	460
BITUMINOUS CONC. SURFACE COURSE, CLASS I (1 1/2")	TON	39

DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS	
T-BEAM & DECK SLAB PLAN - UNIT D	
STEVENSON EXPRESSWAY HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD	
COMPUTED J.M.N.	PROJECT U-UG-41771
DRAWN A.L.B.	SCALE AS NOTED
CHECKED D.O.P.	APPROVED <i>[Signature]</i> 1/24/27
APPROVED <i>[Signature]</i> 1/25/27	F.A. No. 42
	Sheet No. 207
	Total Sheets 161
	Drawing No. 86
	1/10/25

REVISIONS		
DATE	BY	DESCRIPTION
1/25/27	J.M.N.	CONCRETE NOTES

FOR INFORMATION ONLY



UNIT D
TABLE OF REACTIONS (KIPS)

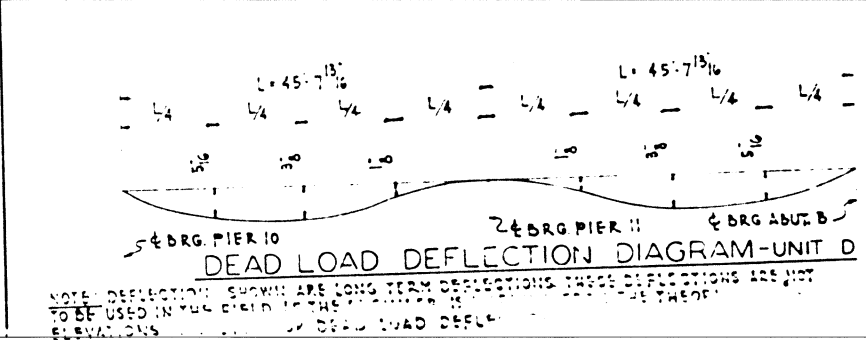
	PIER 10	PIER 11
D.L.	25.7	25.1
L.L.	5.4	33.6
IMPACT	1.6	9.9
TOTAL	32.7	68.6

UNIT D
TABLE OF MAX. MOMENTS (FT. KIPS)

	SPAN 11	PIER 11	SPAN 12
D.L.	205.8	200.7	475.4
L.L.	82.8	262.7	95.6
IMPACT	24.3	77.5	28.1
TOTAL	312.9	541.9	599.1

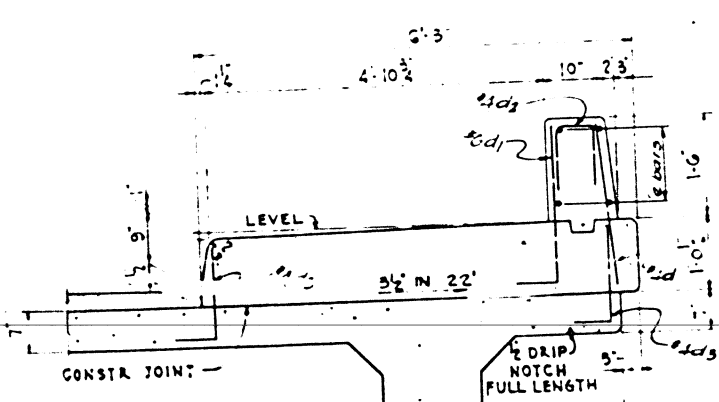
BAR LIST - UNIT D

BAR	NUMBER	SIZE	LENGTH	SHAPE
c	20	#5	26'-0"	
d1	64	#5	32'-0"	
d2	56	#5	28'-0"	
d3	34	#5	30'-0"	
d4	22	#5	30'-0"	
d5	194	#4	8'-0"	
d6	12	#5	28'-0"	
d7	28	#4	28'-0"	
b	36	#11	39'-0"	
b1	36	#11	39'-0"	
b2	36	#11	24'-0"	
b3	36	#11	21'-0"	
b4	37	#8	27'-0"	
b5	54	#8	32'-0"	
b6	18	#5	20'-0"	
b7	18	#10	44'-0"	
b8	9	#10	24'-0"	
b9	54	#10	34'-0"	
b10	186	#5	32'-0"	
b11	92	#5	26'-0"	
b12	57	#4	6'-0"	
b13	57	#4	5'-0"	
b14	40	#4	8'-0"	
b15	40	#4	3'-0"	
b16	40	#4	4'-0"	
b17	56	#4	20'-0"	
b18	56	#4	7'-0"	
b19	56	#4	20'-0"	
b20	27	#4	20'-0"	
d	200	#4	2'-0"	
d1	200	#4	2'-10"	
d2	56	#4	2'-7"	
d3	388	#4	2'-2"	
e	14	#5	19'-0"	
e1	5	#5	19'-0"	
e2	16	#5	7'-9"	
e3	10	#5	18'-6"	
e4	3	#5	3'-10"	
d4	3	#5	2'-9"	
s	360	#5	7'-4"	
s1	360	#5	6'-3"	
s2	24	#4	5'-9"	
s3	32	#4	7'-9"	



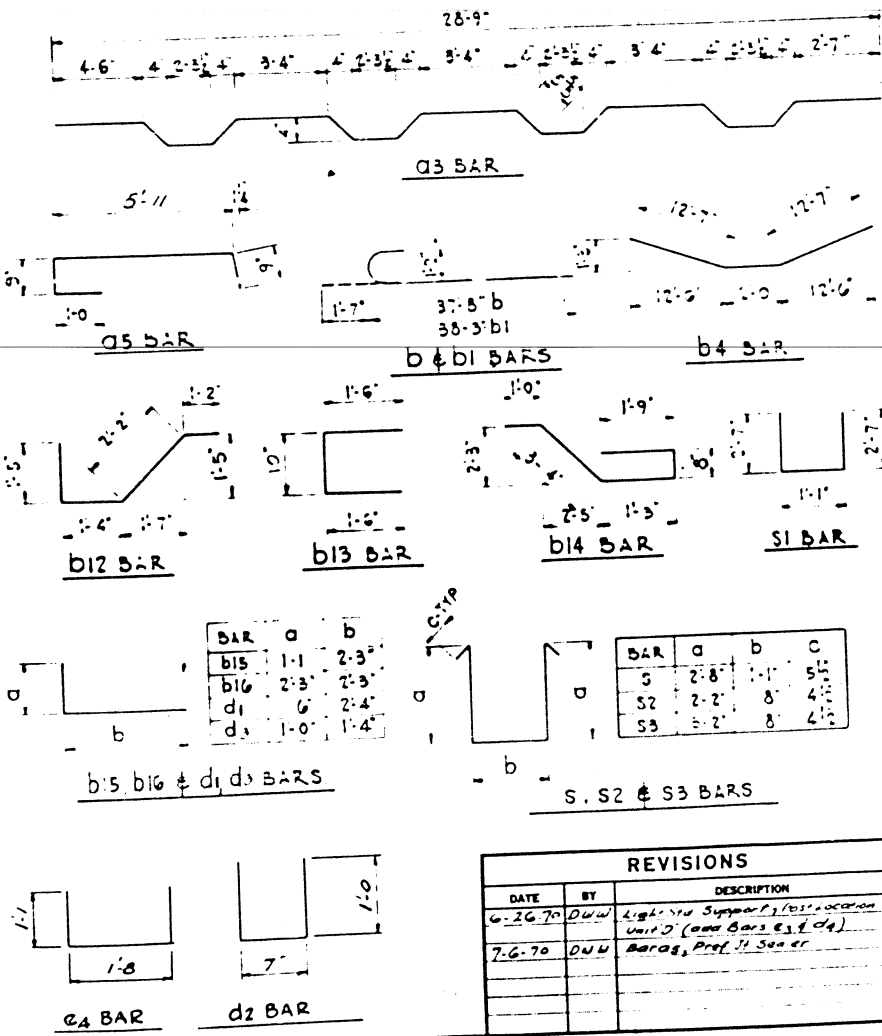
THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS - UNIT D

LOCAT.	BEAM	10'	20'	30'	40'	PIER 11	10'	20'	30'	40'	BRG. ABUT. B
1	1	2.616	2.465	2.326	2.197	1.954	1.824	1.654	1.445	1.230	0.955
2	2	2.659	2.525	2.363	2.217	1.968	1.856	1.663	1.470	1.244	0.958
3	3	2.702	2.505	2.401	2.201	2.001	1.822	1.602	1.497	1.279	0.931
4	4	2.744	2.605	2.439	2.249	2.034	1.919	1.721	1.523	1.303	0.952
5	5	2.785	2.644	2.475	2.277	2.066	1.950	1.749	1.549	1.326	0.973
6	6	2.826	2.689	2.517	2.315	2.103	1.987	1.784	1.611	1.408	1.183
7	7	2.867	2.733	2.559	2.353	2.141	2.025	1.822	1.649	1.446	1.228
8	8	2.908	2.777	2.599	2.391	2.179	2.063	1.860	1.687	1.484	1.273
9	9	2.949	2.821	2.641	2.431	2.217	2.101	1.900	1.727	1.524	1.318



PARAPET PANEL REINFORCING - UNIT D

Panel	NO. OF BARS PER PANEL	21'	25'	30'
A	3	21	20	20
B	1	20	20	20
C	1	20	20	20
D	1	21	21	20
E	1	20	20	20



BILL OF MATERIAL

ITEM	UNIT	QUANTITY	TOTAL
ALUMINUM RAILING	LN. FT.	134	189

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
PROJECT BASED ON COMMISSIONERS' RESOLUTION NO. 11-11-71
STEVENSCH EXPRESSWAY
HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

REVISIONS

DATE	BY	DESCRIPTION
6-26-70	DWW	Lighting Support Location Unit D (see Bars e3 & d4)
7-6-70	DWW	Bars, Prof. J. S. See et

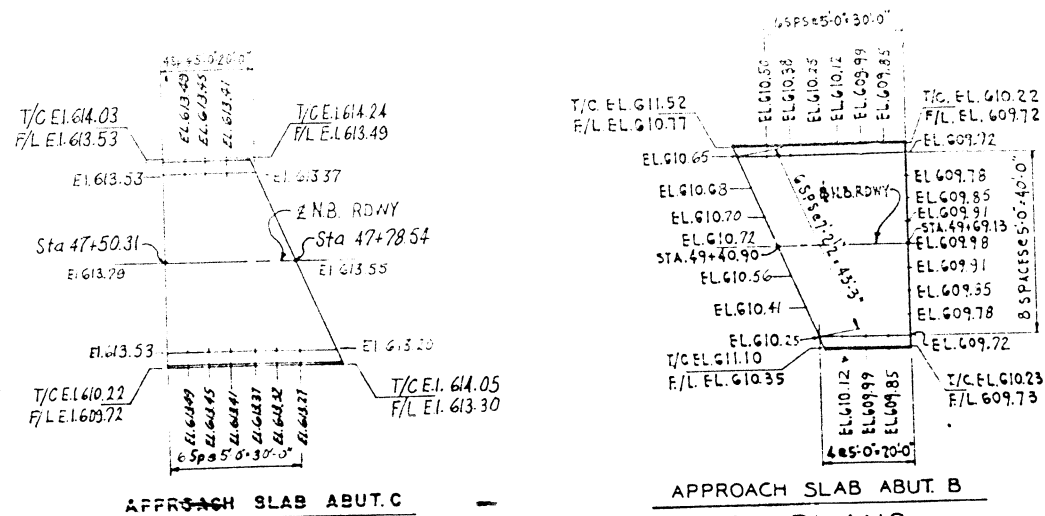
COMPUTED J.M.N.
DRAWN A.L.B.
CHECKED D.D.P.

PROJECT U-UG-41721
SCALE AS NOTED
APPROVED [Signature]

APPROVED [Signature]
F.A. No. 42
State Aid Route No. 207
Sheet No. 17
Total Sheets 86
Drawing No. 1046

- NOTES
- MIN BAR LAP = 24 DIA.
 - FOR BILL OF MATERIAL UNIT C SEE SHT. NO. 14, UNIT D SEE SHT. NO. 16
 - PREFIX ALL BAR MARKS FOR SHIPMENT WITH A LETTER INDICATING THE DECK SLAB UNIT WHERE THE BARS WILL BE USED.
EXAMPLE DDGS MEANS BAR Q3 FOR DECK SLAB UNIT D
 - ALL EDGES TO HAVE 3/4" STANDARD CHAMFER EXCEPT AS NOTED.
 - FOR HANDRAIL NOTES & DETAIL OF HANDRAIL POSTS AND CAPS SEE DWG. NR 21.
 - FOR ADDITION DETAILS AT LIGHT STANDARDS SEE SHT. 21 & 79
 - FOR SECTION D-D SEE SHT. NR 14.
 - FOR DECK DETAILS, PARAPET REINFORCEMENT FOR UNIT C SEE SHT. NR 14.

FOR INFORMATION ONLY



APPROACH SLAB ABUT. C
 APPROACH SLAB ABUT. B
APPROACH SLAB ELEVATIONS & KEY PLANS
 SCALE: 1" = 20'

NOTE: ALL APPROACH SLAB ELEVATIONS ARE TO THE TOP OF CONCRETE
 T/C = TOP OF CURB, F/L = FLOW LINE.

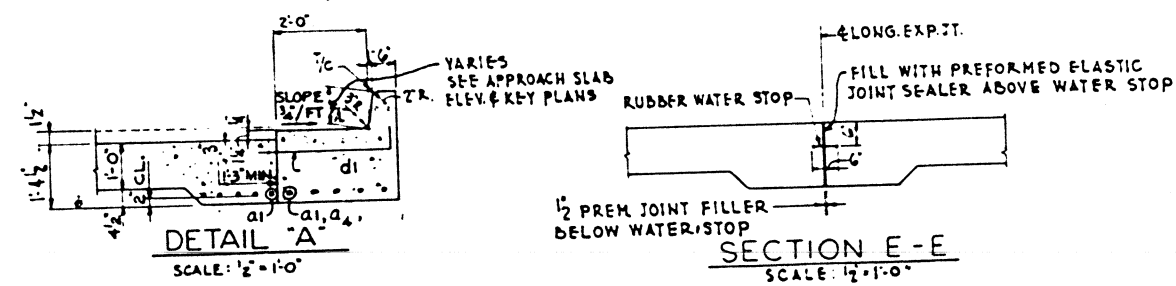
BAR LIST

MARK	SIZE	LENGTH	NO. OF BARS	TOTAL	SHAPE
d	15-8				
a1	19-8				
a4	18-10				
a5	36-2				

BAR LIST

MARK	SIZE	LENGTH	NO. OF BARS	TOTAL	SHAPE
d	9	17'-6"	26	26	52
a1	9	21'-6"	48	48	48
a4	9	20'-8"	5	5	10
a5	9	38'-0"	5	5	10
b1	5	21'-3"	62	62	24
d1	4	4'-0"	24	24	48

NOTE "A"
 #2 WELDED WIRE FABRIC
 6" x 6" PLACED 2 1/4" BELOW TOP
 OF CONCRETE, INCLUDED IN
 THE CONTRACT UNIT PRICE FOR
 PORTLAND CEMENT CONCRETE
 BASE COURSE 16 1/2" - 12" - 16 1/2".



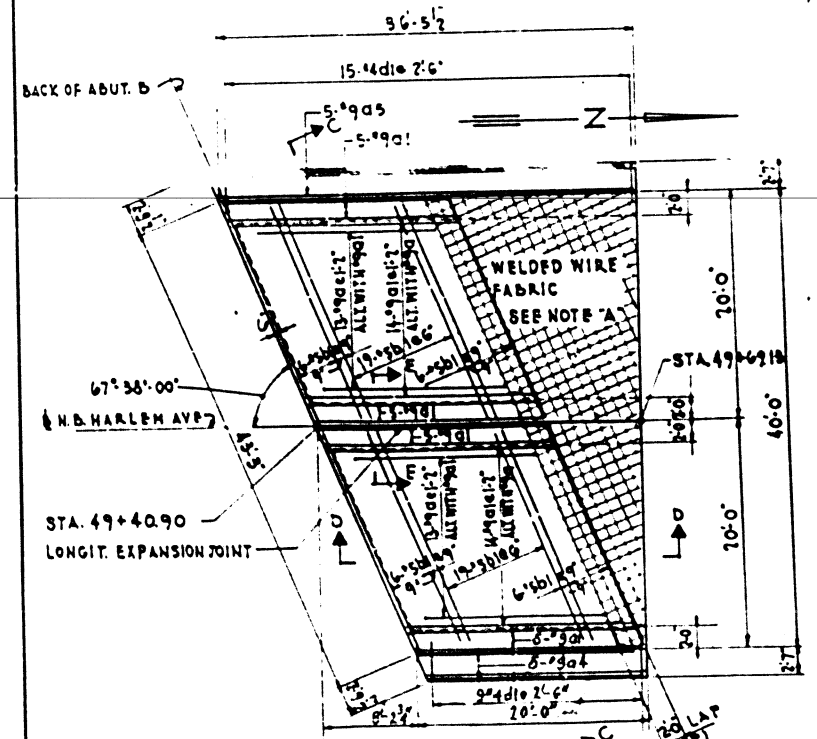
DETAIL "A"
 SCALE: 1/2" = 1'-0"

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

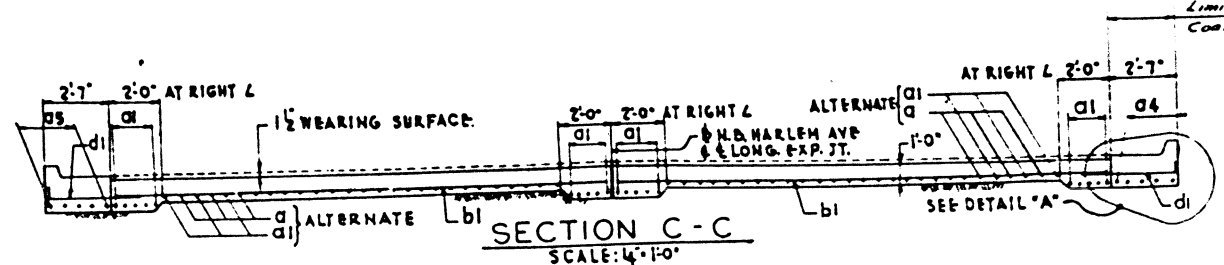
BILL OF MATERIAL

ITEM	UNIT	ABUT. C	ABUT. B	TOTAL
PORTLAND CEMENT CONCRETE BASE COURSE 16 1/2" - 12" - 16 1/2"	SQ. YD.	126	126	252
REINFORCEMENT BARS	LBS	2490	2490	4980
APPROACH SLAB CURB AND GUTTER	LIN. FT.	57	57	114
PROTECTIVE COAT	SQ. YD.	20	20	40
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	126	126	252
CONTINUOUS CONC SURFACE COURSE, CLASS I (1 1/2")	TON	11	11	22

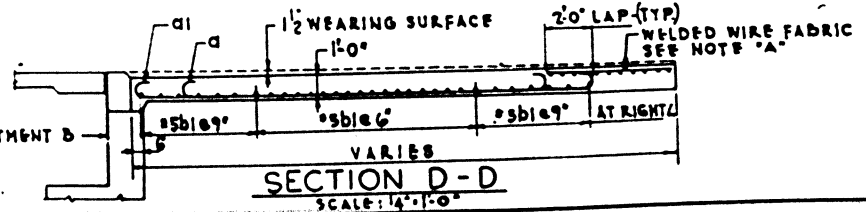
NOTES:
 SLABS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PORTLAND
 CEMENT CONCRETE BASE COURSE 16 1/2" - 12" - 16 1/2".
 ALL REINFORCEMENT BARS WILL BE PAID FOR AT THE CONTRACT
 UNIT PRICE FOR REINFORCEMENT BARS.
 WELDED WIRE FABRIC AND PREFORMED EXPANSION JOINT FILLER
 SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PORTLAND CEMENT
 CONCRETE BASE COURSE 16 1/2" - 12" - 16 1/2". PREFORMED EXPANSION JOINT
 FILLER SHALL CONFORM TO SECTION 129 OF THE STANDARD SPECIFICATIONS
 MINIMUM BAR LAP = 24 DIAMETERS.
 ALL BAR DIMENSIONS ARE OUT TO OUT.
 PREFIX ALL BAR MARKS FOR SHIPMENT WITH LETTER INDICATING
 THE APPROACH SLAB WHERE THE BARS WILL BE USED. EXAMPLE: ABOA
 MEANS BAR A4 FOR APPROACH SLAB AT ABUTMENT B



APPROACH SLAB AT ABUTMENT B
 SCALE: 1/8" = 1'-0"
 APPROACH SLAB AT ABUTMENT C
 SAME EXCEPT OPPOSITE HAND



SECTION C-C
 SCALE: 1/4" = 1'-0"



SECTION D-D
 SCALE: 1/4" = 1'-0"

REVISIONS

DATE	BY	DESCRIPTION
7-10-70	D.W.N.	DRAWING

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS
 GEORGE W. DUNNE
 PRESIDENT BOARD OF COMMISSIONERS

THOMAS G. COPE
 SUPERINTENDENT OF HIGHWAYS

APPROACH SLABS
 STEVENSON EXPRESSWAY
 HARLEM AVENUE OVER SANITARY DISTRICT TRACKS
 AND ACCESS ROAD

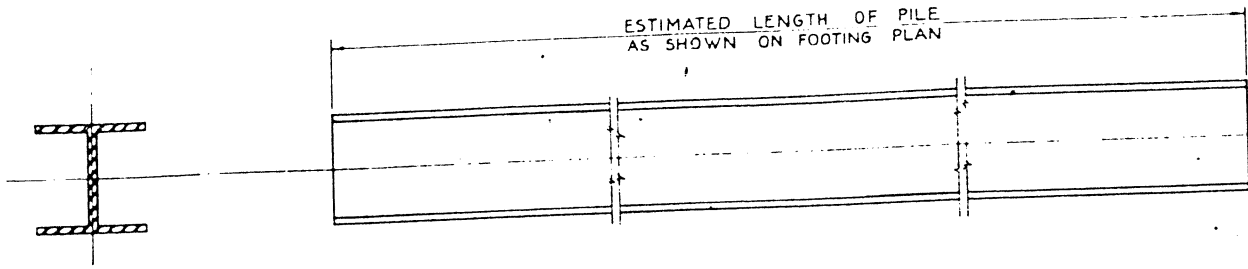
PROJECT: U-UG-41721
 SCALE: AS NOTED

COMPUTED: L.F.
 DRAWN: F.E.
 CHECKED: L.F.

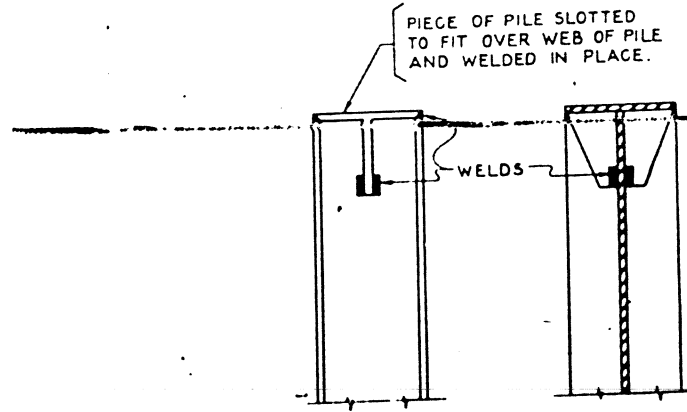
APPROVED: *[Signature]*
 CHIEF ENGINEER

F.A. SHEETS NO.	STATE AID ROUTE NO.	SHEET NO.	TOTAL SHEETS	DRAWING NO.
42	207	18	86	2

FOR INFORMATION ONLY



NOTE:
SEE STATE BRIDGE DESIGN MANUAL
FOR STANDARD STEEL PILE FIELD SPLICE.



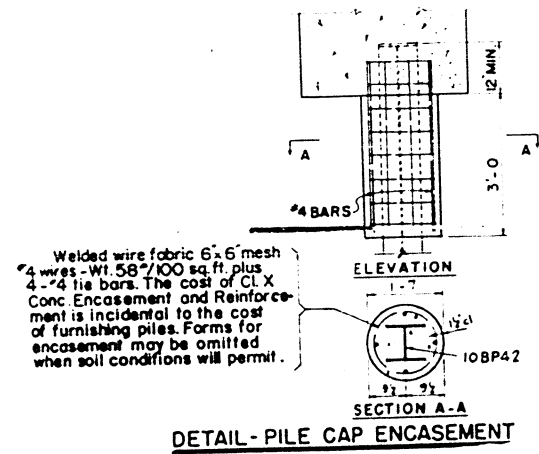
DETAIL OF CAP
FOR PILES

NOTE:
PAINT IN ACCORDANCE
WITH SPECIFICATIONS.

NOTE:
ENCASEMENT AND PILE CAPS WILL BE PROVIDED
FOR PILES IN ABUTMENTS AND ABUTMENT
WING WALLS AS SHOWN ON DETAIL.
PILE CAPS IN PIER FOOTINGS WILL NOT BE ENCASED.

DETAILS OF 10BP42 PILE

NOTE:
SEE STATE BRIDGE DESIGN MANUAL
FOR STANDARD STEEL PILE FIELD SPLICE.



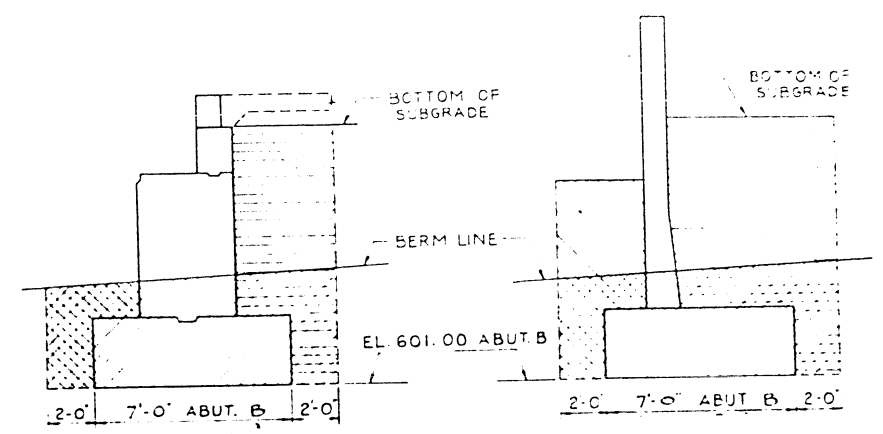
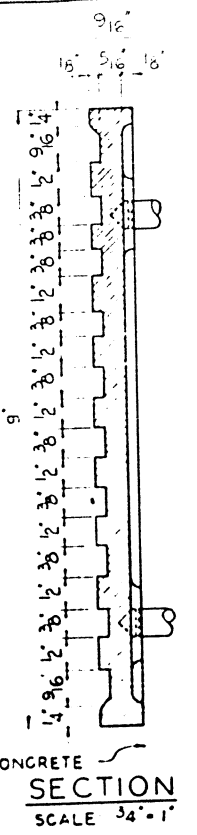
REVISIONS		
DATE	BY	DESCRIPTION
7-27-70	F.S.	Detail - Pile Cap Encasement

DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS <small>GEORGE W. DRAPER PRESIDENT BOARD OF SUPERVISORS</small>					
PILE DETAILS STEVENSON EXPRESSWAY HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD					
COMPUTED	PROJECT		NO SCALE		
DRAWN	SCALE		NO SCALE		
CHECKED	APPROVED		10/1/70		
APPROVED	F.A. NO.	State Aid Regs. No.	Sheet No.	Total Sheets	Drawing No.
<i>[Signature]</i>	42	207	19	86	1098

FOR INFORMATION ONLY

HARLEM AVENUE
 OVER
 SANITARY DISTRICT TRACKS
 AND ACCESS ROAD
 F.A. ROUTE 42, PROJECT U-UG-4(72)
 SECTION 207-0708.08 - C.F.
 STATION 48+67
 LOADING HS20-44
 1970 - MATTED BACKGROUND

NAME PLATE NO. 1
 (1 REQUIRED.)
 SCALE: 3/4" = 1"



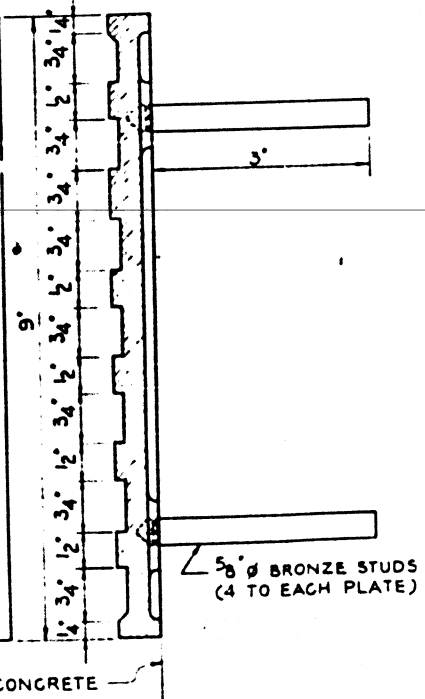
TYPICAL SECTIONS
 FOR EXCAVATION LIMITS - ABUTMENT B
 SCALE: 1/4" = 1'-0"

- LEGEND
- CLASS A EXCAVATION FOR STRUCTURES
 - BACK FILL (INCIDENTAL TO CLASS A EXCAVATION)
 - SAND OR GRAVEL EMBANKMENT

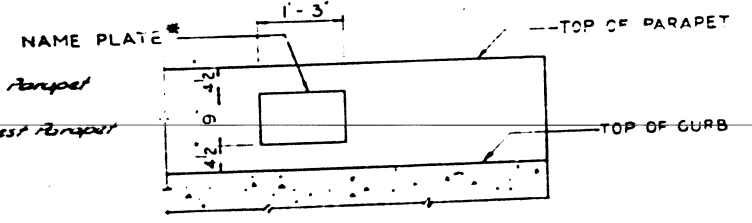
NOTE
 EXCESS EXCAVATED MATERIAL WILL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS
 FOR ABUTMENT B SEE SH. NO. 11.

BUILT BY
 COUNTY OF COOK
 WITH THE COOPERATION OF
 STATE OF ILLINOIS
 FEDERAL GOVERNMENT
 1970 - MATTED BACKGROUND

NAME PLATE NO. 2
 (1 REQUIRED.)
 SCALE: 3/4" = 1"



*) Locate Name Plate No. 1 on inside face of East Parapet at Unit C. See SH. No. 14.
 Locate Name Plate No. 2 on inside face of West Parapet at Unit D. See SH. No. 16.



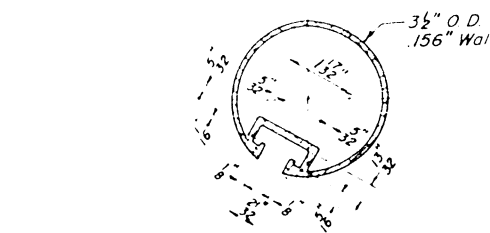
NAME PLATE LOCATION
 SCALE: 3/4" = 1'-0"

NOTES:
 For Name Plate method of installation see Sec 514 of the Standard Specifications, dated Aug. 1, 68.
 Location and inscription of Name Plates is not final and is subject to changes until shop drawings are approved.
 The Name Plate shall be embedded in the concrete so that the face of the Name Plate is flush with the surface of the concrete.
 Material - Best quality brass or bronze. Border & Letters - Raised 1/8" square cut and not tapered. Top surface polished.

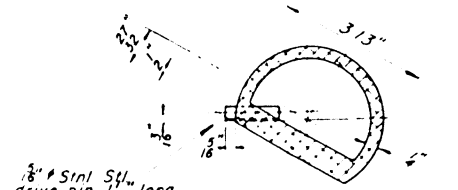
REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS <small>THOMAS G. COYB SUPERINTENDENT OF HIGHWAYS</small>					
NAME PLATES - EXCAVATION DETAILS STEVENSON EXPRESSWAY HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD					
COMPUTED: _____ DRAWN: M. V. CHECKED: W. J. C.	PROJECT U-UG-4(72) SCALE: AS NOTED APPROVED: <i>[Signature]</i> 1 May 1970 <small>CHIEF ENGINEER</small>	F.A. ROUTE NO. 42	State Aid Route No. 207	Sheet No. 20	Total Sheets 86 Drawing No. 1049

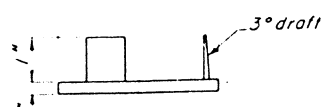
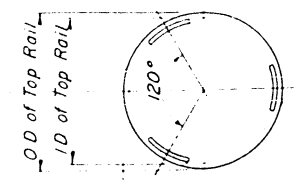
FOR INFORMATION ONLY



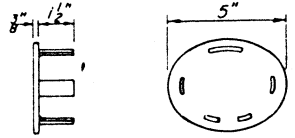
SECTION THRU TOP RAIL



SECTION THRU SPLICE TOP RAIL

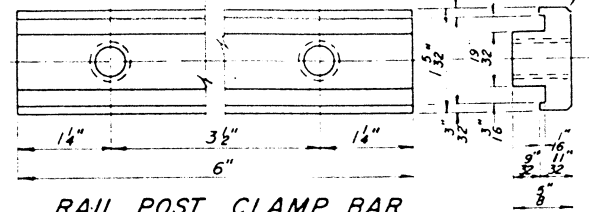


CAST END CAP For Top Rail Required



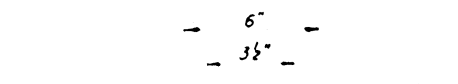
CAST END CAP For Bottom Rail DRIVE FIT TYPE Required

Drill & tap for 1/2" (stnl. stl.) hex head cap screws

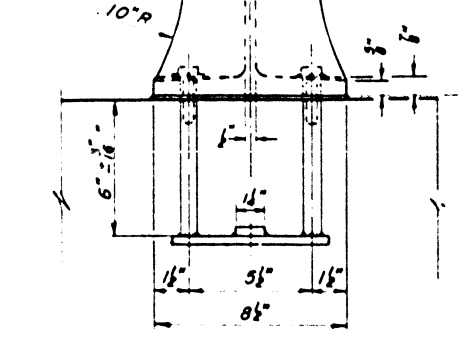
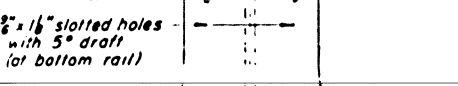
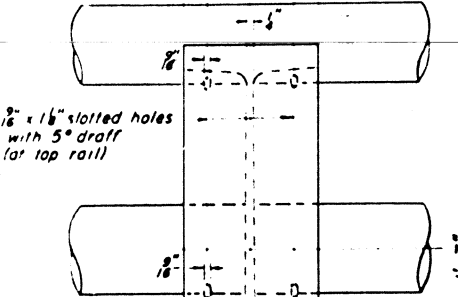


RAIL POST CLAMP BAR For Top Rail

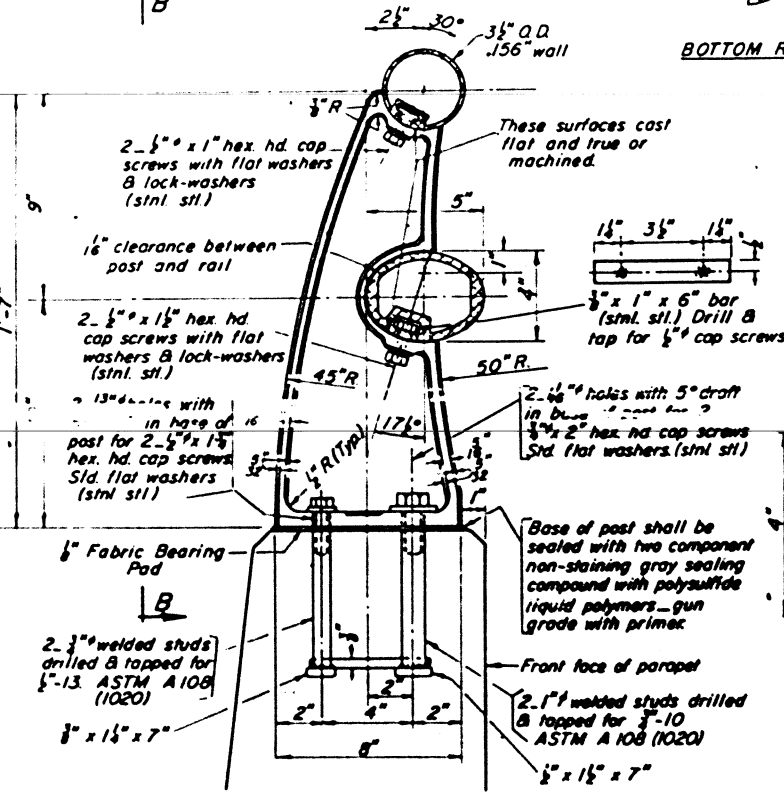
Bevel corners 1/8"-45°(Typ)



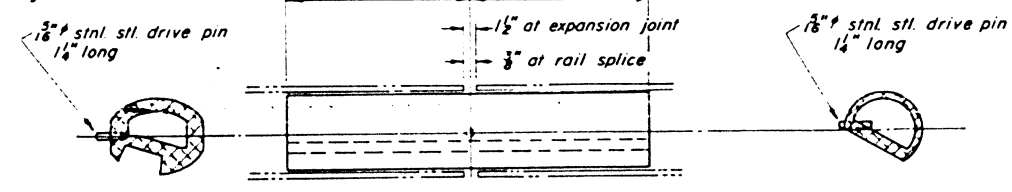
VIEW B-B



RAIL POST DETAILS



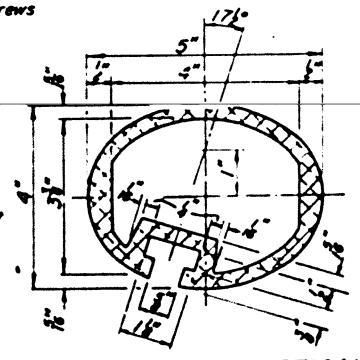
SECTION A-A



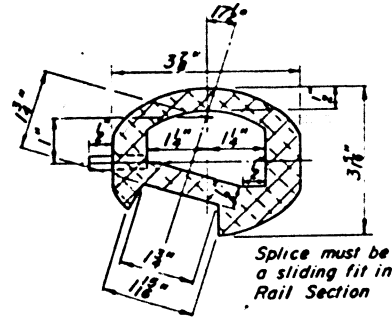
RAIL SPLICE

BOTTOM RAIL

TOP RAIL

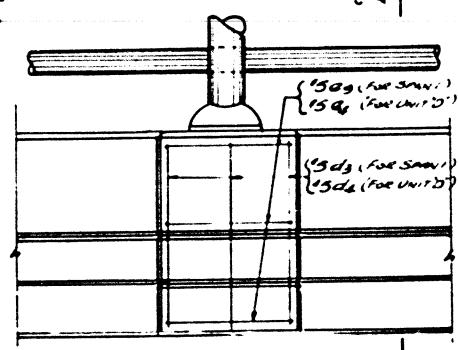


SEC THRU ELLIPTICAL RAIL SECTION



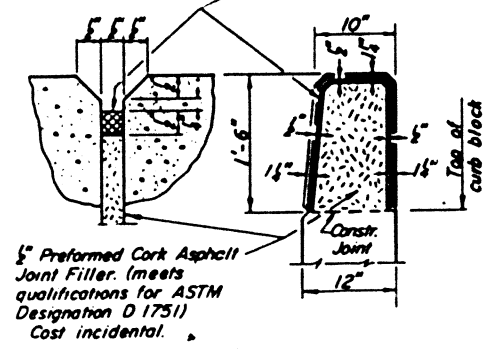
SEC THRU SPLICE

Splice must be a sliding fit in Rail Section



ELEVATION AT LIGHT SUPPORT

Two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer

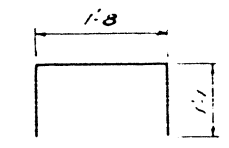


PARAPET JOINT DETAIL

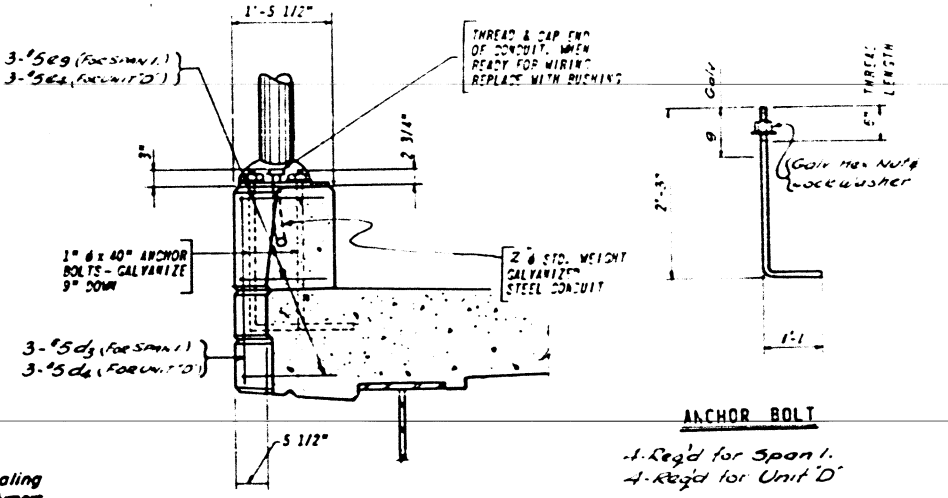
NOTES:

All Posts shall be normal to parapet
 All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
 All joints in rail shall be spliced per detail.
 Provide 1- 1/8" and 2- 1/8" Aluminum Shims for 25% of the Posts.
 Rail elements shall be parallel to Grade - high spots shall be ground and low spots shimmed.
 Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per linear foot for ALUMINUM RAILING.

Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.



BAR C4 or C9



SECTION C-C

(Light Support Detail at Unit D similar)

NOTES: For Bilal Material see SH 176-50
 The cost of furnishing and installing 1 inch Anchor Bolts are incidental to the Class X Concrete.

ALUMINUM RAILING

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS

HANDRAIL DETAILS
 STEVENSON EXPRESSWAY
 HARLEM AVENUE OVER SANITARY DISTRICT TRACKS AND ACCESS ROAD

REVISIONS		
DATE	BY	DESCRIPTION
6-25-70	o/w U	Light Support Detail

COMPUTED	PROJECT U-UG-4(72)
CHECKED	SUBMITTED
DRAWN STANDARD	STRUCTURAL DESIGN ENGINEER
CHECKED	
EXAMINED	DATE 5/25/70
CHIEF ENGINEER	4-2 207-00808 21 86 1050