

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
STATE BOND ISSUE HIGHWAY

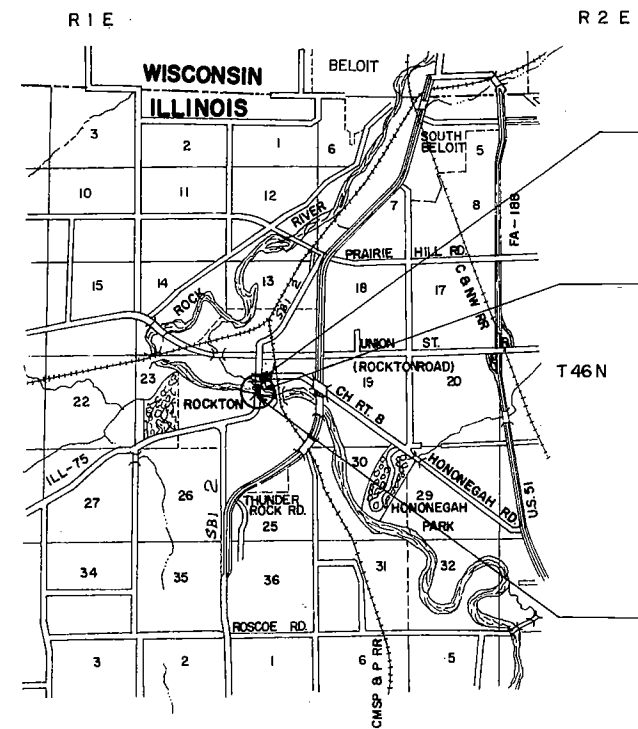
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2326 GUARD RAIL CONNECTED TO EXISTING BRIDGES

PLAN 1 INCH 100 FT.
PROFILE, HOR. 1 INCH 100 FT.
PROFILE, VERT. 1 INCH 10 FT.
CROSS-SECTIONS 1 INCH 5 FT.

S.B.I. ROUTE 2
SECTION 77 BR
WINNEBAGO COUNTY

C-92-014-73



SECTION 77 BR BEGINS
STATION 202+93.85

SECTION 77 BR
INCLUDES THE REMOVAL OF EXISTING SUPERSTRUCTURE
AND RELACEMENT WITH PRECAST AND PRESTRESSED
CONCRETE I BEAMS, RECONSTRUCTION OF ABUTMENTS,
AND PIERS AT STATION 208+00 IN ADDITION TO BRIDGE
APPROACH PAVEMENT AND ALL OTHER RELATED WORK
TO COMPLETE THIS SECTION.

SECTION 77 BR ENDS
STATION 214+40.00

LAY OUT 1" = 1 MILE
NET LENGTH OF SECTION = 1146.15 FT. = 0.217 MILES = 0.349 KILOMETERS

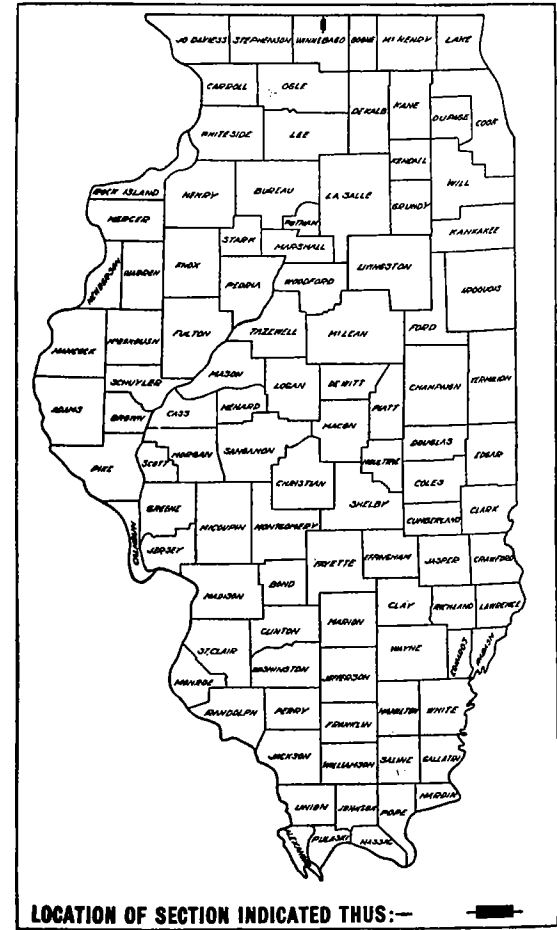
DESIGN DESIGNATION
700 (92) AREA SERVICE

CONTRACT NO. 29482

4-7

BOND ISSUE ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI-2	77 BR	WINNEBAGO	35	1
FED. ROAD DIV. NO. 4 ILLINOIS PROJECT				

P-92-015-65 (201)



LOCATION OF SECTION INDICATED THIS:—

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED: March 23
D. G. Smith DISTRICT ENGINEER

EXAMINED: 44 3
Chute ENGINEER OF ROAD PLANS AND CONTRACTS

PASSED: 5
W. E. H. ENGINEER OF DESIGN

APPROVED: 6
W. E. H. ACTING CHIEF TRANSPORTATION ENGINEER

SUMMARY OF QUANTITIES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI-2	77BR	WINNEBAGO	35	2
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

CODE NO	ITEM	UNIT	TOTAL
201005	TREE REMOVAL, ACRES	ACRE	0.13
202001	EARTH EXCAVATION	CU YD	850
209002	POROUS GRANULAR EMBANKMENT	CU YD	190
210001	TRENCH BACKFILL	CU YD	62
301018	STABILIZED BASE COURSE 9"	SQ YD	1656 1302.2
* 406007	BITUMINOUS CONCRETE BINDER COURSE	TON	174 194.0
* 406008	BITUMINOUS CONCRETE SURFACE COURSE CLASS I	TON	327 434.0
501001	REMOVAL OF EXISTING STRUCTURES	EACH	3 0.0
* 501015	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
501032	EXPANSION BOLTS 7/8 INCH	EACH	30 89.0
X50201	STRUCTURE EXCAVATION	CU YD	190 191.0
503004	PROTECTIVE COAT	SQ YD	1170
504003	CLASS X CONCRETE	CU YD	1553.1 1555.1
* 505010	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I BEAMS, 48 INCH	LIN FT	3373.5
507001	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	4340
508006	ALUMINUM RAILING, TYPE L	LIN FT	1134
512001	REINFORCEMENT BARS	POUND	202,040 202,284.0
513005	FURNISHING CREOSOTED PILES 20.1 TO 38 FEET	LIN FT	208 207.0
513022	DRIVING TIMBER PILES	LIN FT	208 147.0
514001	NAME PLATES	EACH	1
603005	STORM SEWERS, TYPE I 12"	LIN FT	188 156.2
603006	STORM SEWERS, TYPE I 15"	LIN FT	48 34.5
603013	STORM SEWERS, TYPE I 36"	LIN FT	200 290.7
* 609063	ADJUSTING WATER VALVES 6"	EACH	2
612111	MANHOLES, TYPE A, 4' DIAMETER TYPE I FRAME, CLOSED LID	EACH	1
612118	MANHOLES, TYPE A, 5' DIAMETER, TYPE I FRAME, CLOSED LID	EACH	4 2.0
* 609077	DUCTILE IRON WATER MAIN, MECHANICAL JOINT 8"	LIN FT	600 578.58
612362	MANHOLES SPECIAL, WITH TYPE I FRAME, CLOSED LID	EACH	1
* 622001	PORTLAND CEMENT CONCRETE RAILROAD CROSSING	SQ YD	34
604014	STORM SEWER REMOVAL 36"	LIN FT.	284

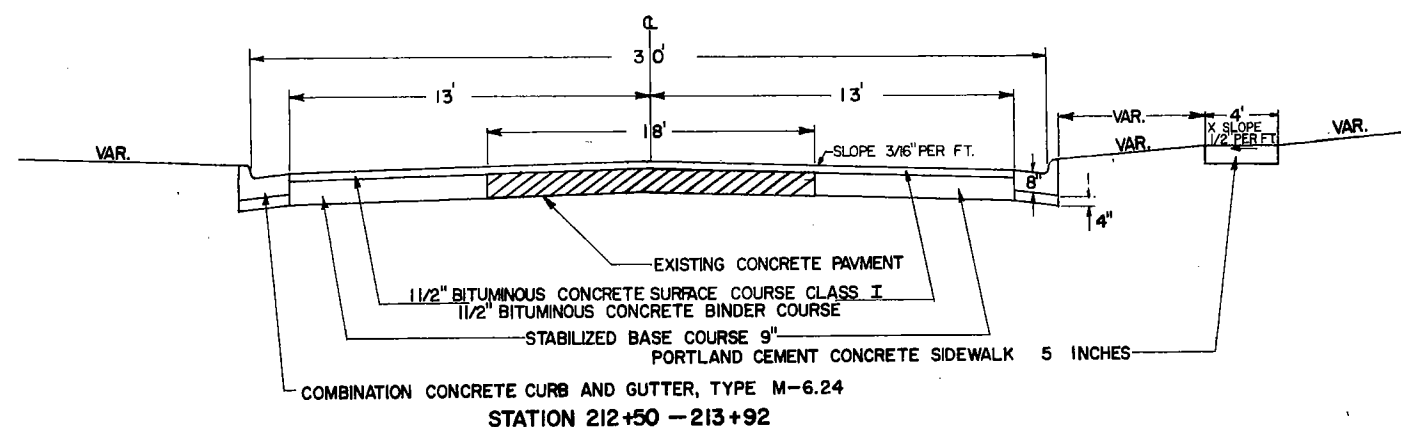
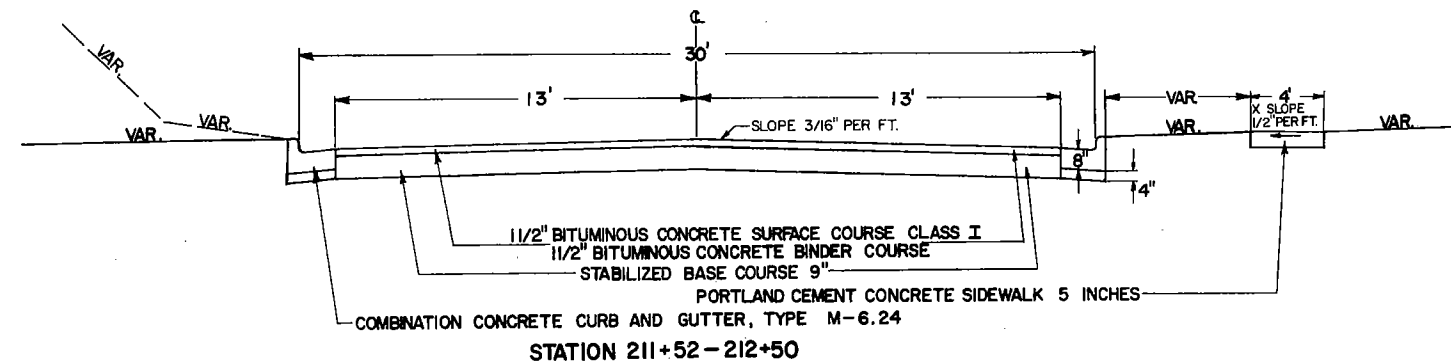
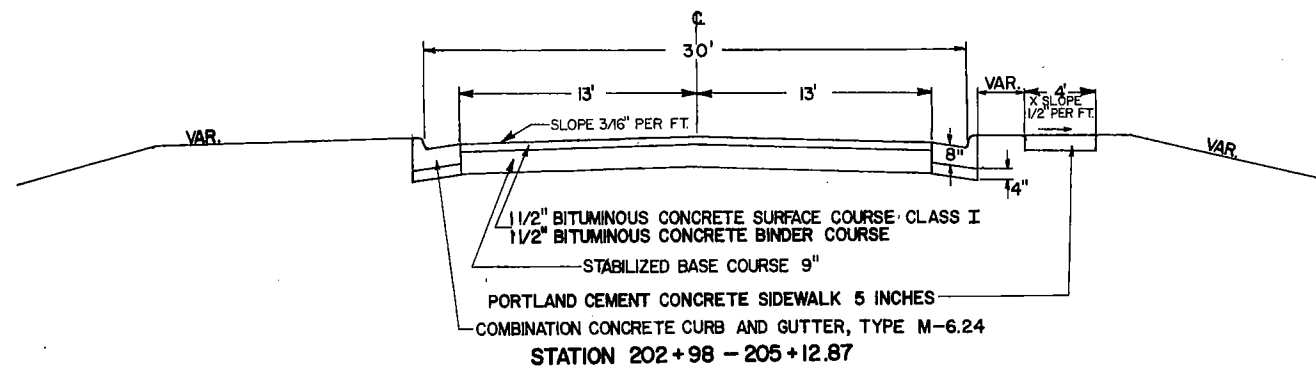
CODE NO	ITEM	UNIT	TOTAL
* 612392	INLETS, SPECIAL	EACH	10
616083	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6, 24	LIN FT	1252 1230.0
617001	PAVEMENT REMOVAL	SQ YD	765 769.0
617005	COMBINATION CURB AND GUTTER REMOVAL	LIN FT	24
617006	SIDEWALK REMOVAL	SQ FT	1174 1296.0
620005	PAVEMENT REMOVAL AND REPLACEMENT TYPE II, 9 INCH	SQ YD	38 70.3
623003	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 7 INCH	SQ YD	37 36.1
624003	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	1354 1745.6
* 628001	STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL	LIN FT	37.5 50.0
210178	COAL TAR INTERLAYER PROTECTIVE COAT	SQ YD	1976 1952.0
* 644001	SODDING	SQ YD	1686 1652.3
646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1
* 612290	INLETS TO BE REMOVED	EACH	3
* X62801	TERMINAL SECTION, SINGLE RAIL	EACH	4
* S33004	SERVICE INSTALLATION, TYPE C	EACH	1
* L00008	CONDUIT IN TRENCH 3" DIA. GALVANIZED STEEL	LIN FT	20 90.0
* L00056	CONDUIT ATTACHED TO STRUCTURE 2" GALVANIZED STEEL	LIN FT	556 568.0
* L00081	CONDUIT MOUNTED, 3" DIA GALVANIZED STEEL	LIN FT	12 24.0
* L05620	POLE ALUMINUM, ANCHOR BASE, 36 FT MH, 4 FT MAST ARM	EACH	4
* L02446	LUMINAIRE, MERCURY VAPOR, WITH BUILT-IN REGULATOR BALLAST AND PHOTO-CELL 400 WATTS	EACH	4
* L02812	LAMP, MERCURY VAPOR, 400 WATTS, TYPE H33-I-CD	EACH	4
* L03836	JUNCTION BOX	EACH	1
* L04300	TRENCH AND BACKFILL	LIN FT	20 90.0
* L06035	ELECTRIC CABLE IN CONDUIT, 600V (NEOPRENE-RUBBER INSULATED) I/C NO 12	LIN FT	336
* L06038	ELECTRIC CABLE IN CONDUIT, 600V (NEOPRENE-RUBBER INSULATED) I/C NO 6	LIN FT	1368
* L06174	ELECTRIC CONDUCTOR IN CONDUIT (BARE ANNEALED COPPER) #6	LIN FT	684
* XZ1090	NEOPRENE EXPANSION JOINT 2"	LIN FT	79
* XZ1093	NEOPRENE EXPANSION JOINT 4"	LIN FT	40 39.45
X01001	REPAIR EXISTING PIER	L.S.	1.0
X02001	CURB DRAINHOLES	L.S.	1.0
X04001	FUR. & PL TOPSOIL	SQ YD.	1652.3
* SEE SPECIAL PROVISION			
612233	MANHOLE ADJUST	EA	1.0
301004	AGG. BASE CSE TB	TON	25.6
X09007	BIT MATL PR CT	GAL	103.0
FRC008	BREAK EX WINGWALLS	EA	1.0
FRC009	REMOVE OLD CONC	EA	1.0
LX3836	LIGHT EXPLAN JT	L.S.	1.0
X09011	ADD LIGHT COST	L.S.	1.0

DISTRICT NO. 2 DIXON
DRAWN DATE
CHECKED SCALE

TYPICAL SECTIONS

NOTE: The thickness of Bituminous Mixture shown on the plans is the nominal thickness. Deviations from the nominal thickness will be permitted when such deviations occur due to irregularities in the existing base or surface on which the Bituminous Mixture is placed.

Protective Coat shall also be applied to all gutter flags, face of curbs, and driveways.



GENERAL NOTES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 2	77BR	WINNEBAGO	35	3
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY.

DATE 9-30-73

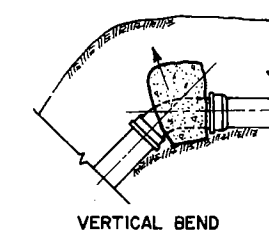
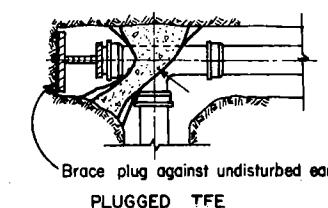
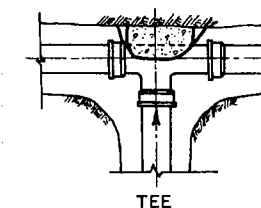
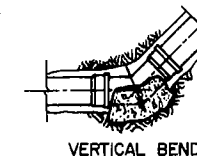
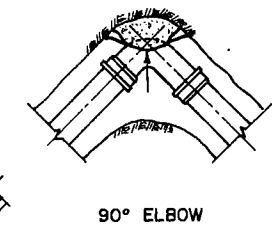
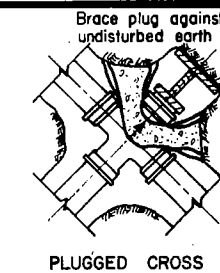
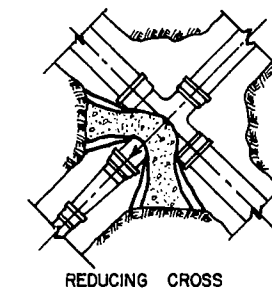
DISTRICT ENGINEER D. E. Lamm

THE CONTRACTOR SHALL ERECT TWO (2) BARRICADES CONFORMING TO STANDARD 2298 AND 2299 AT LOCATIONS AS SHOWN ON THE PLAN & PROFILE.

PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS

WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THRUST BLOCK DETAIL



NOTES:
All blocks to bear against undisturbed earth.
Arrows indicate direction of thrust.
All blocks to be class "X" concrete.
All fittings shown in plan except Vertical Bend.

DRAINAGE STRUCTURES CLASS X CONCRETE & REINFORCEMENT BARS

CLASS X CONCRETE & REINFORCEMENT BARS					STORM SEWERS			DUCTILE IRON WATER MAIN MEC. JOINT	
R O L	STATION	TYPE	CLASS X CONCRETE CU. YDS.	REINFORCE- MENT BARS LBS.	TYPE I				
					12"	15"	36"		8"
L/R	202+34	SS	1551.9	200,630	40				
R	202+34	SS			20				
L/R	203+10	SS			28				
R	203+10	SS			28				
	208+00	BR SUP							
L	210+89-210+92	SS					8		
L/R	210+92	SS					28		
L	210+89-211+88	SS							100
L/R	211+88	SS					28		
L	211+88	SS					8		
L	211+88-213+72	SS					180		
L	213+62-R213+78	SS				36			
L	213+62-213+72					12			
L/R	202+93.85	R.R.		1410					
R	204+97-210+97	X-ING WM						600	
	TOTALS		1551.9	202,040	188	48	280	600	

SS = STORM SEWER
BR SUP = BRIDGE SUPERSTRUCTURE

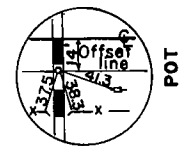
DISTRICT NO. 2
DRAWN
CHECKED

DIXON
DATE
SCALE

U.S.G.S. DATUM
5th GA. (1929)

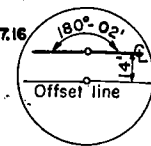
SEC. 77 BR BEGINS
STA. 202+93.85

At a point near the South East Corner
of the North West 1/4 of Sec. 24,
Township 46 North, Range 1 East of
the 4th Principal Meridian



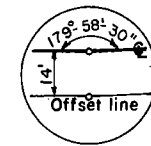
POT 202+93.85
I.P. & R.R. Tracks

BM "□" IN GATE POST
51' R STA. 202+86 ELEV. 727.16



PI 205+16.0
Pk. Nail Face N. Abut. Line

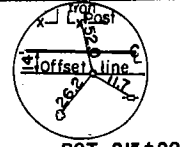
BM "□" IN S.E. COR. WING WALL
17' L STA. 211+08 ELEV. 732.32



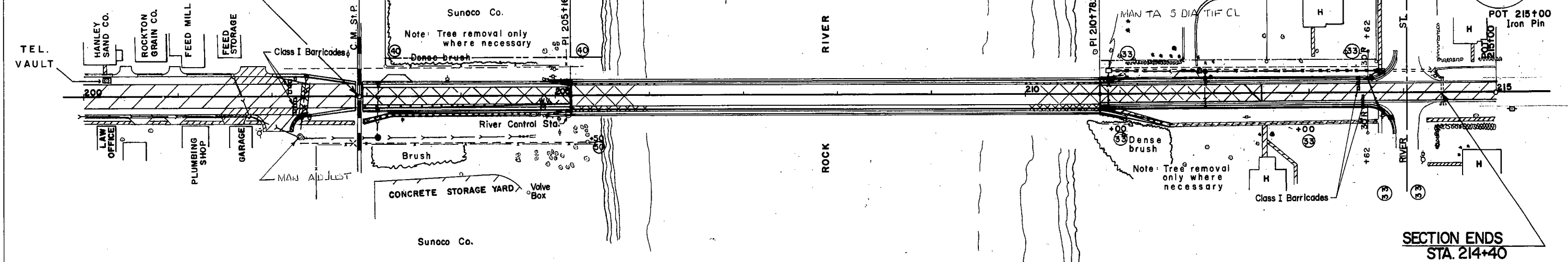
PI 210+78.25
Pk. Nail S. Abut. Line

BM "□" IN COR. HEADWALL
24' L STA. 214+34 ELEV. 738.52

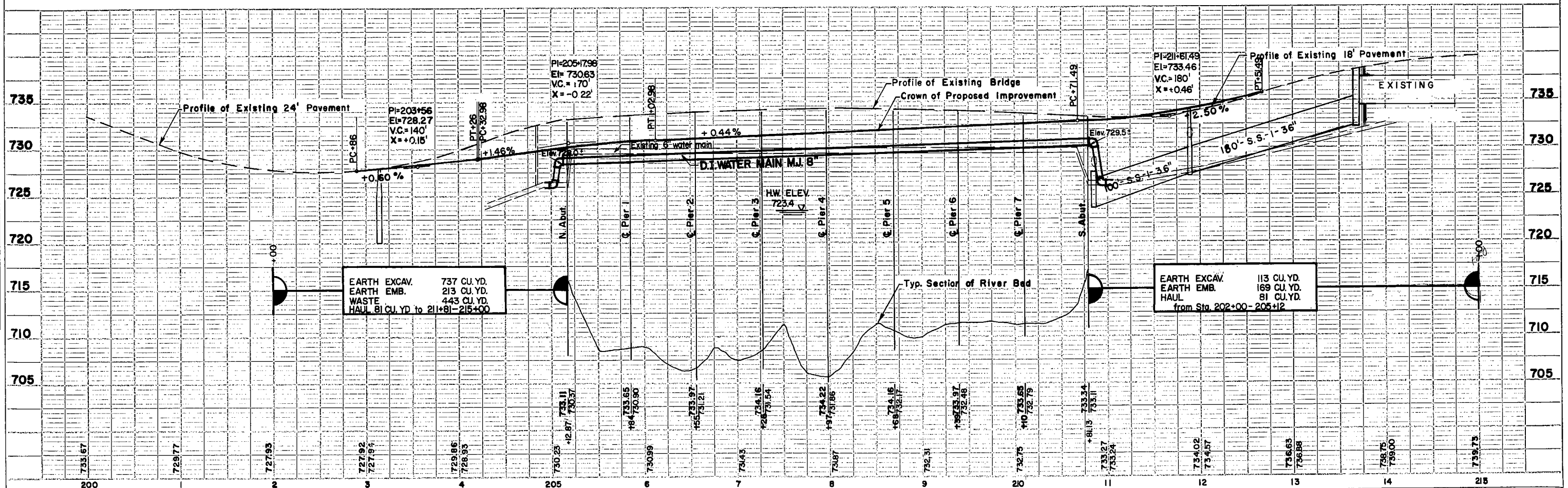
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 2 77BR	WINNEBAGO	35	4	
STA. 200+00	TO STA. 215+00			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



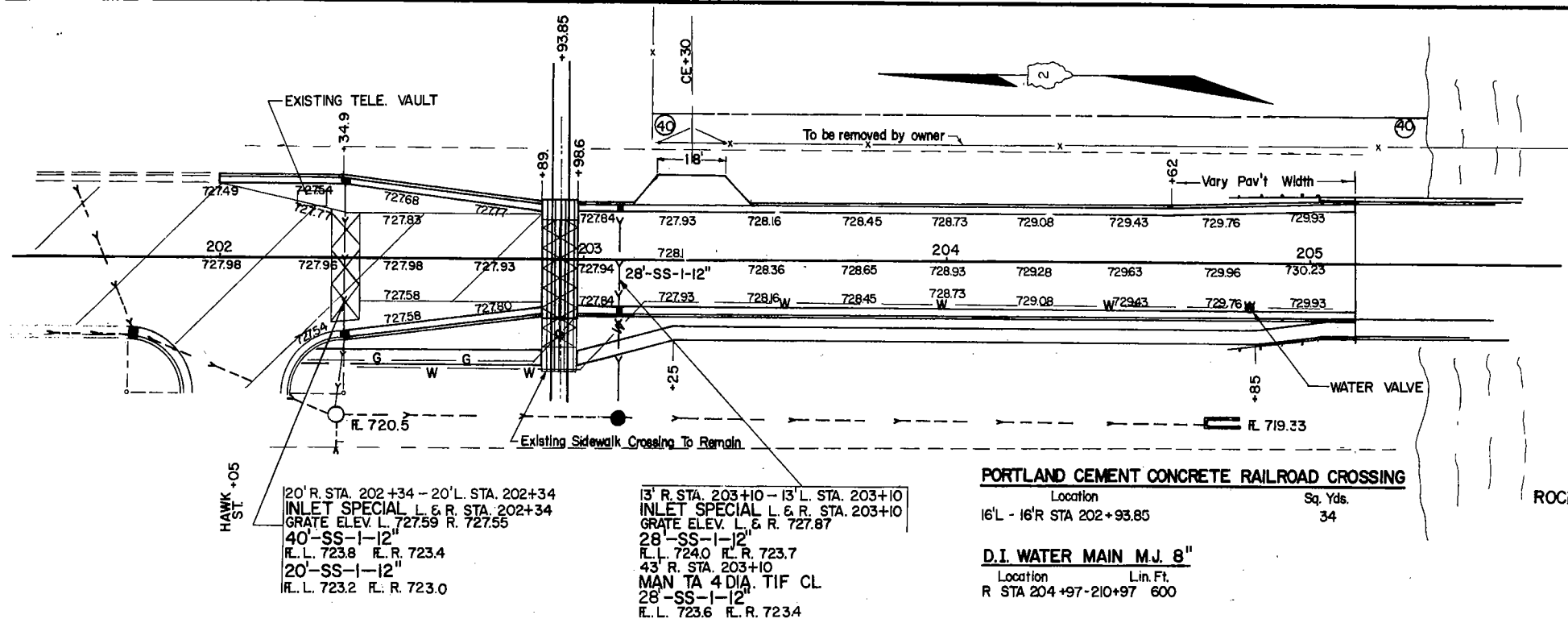
POT 215+00
Iron Pin



SECTION ENDS
STA. 214+40



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 2	77BR	WINNEBAGO	35	5
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				



TREE REMOV. ACRES

Location	Acres
L Sta 204+85 - 205+30	.04
L Sta 210+63 - 211+25	.04
R Sta 210+63 - 211+25	.05
TOTAL	0.13 Acre

TRENCH BACKFILL

Location	Cu Yds
L&R Sta 210+92	18
L Sta 210+88 - 210+92	3
L&R Sta 211+88	4
L Sta 213+62 - R Sta 213+78	7
L Sta 213+62 - 213+80	6
L&R Sta 202+34	14
L&R Sta 203+10	10
TOTAL	62 Cu Yds

STAB BASE CSE 9"

Location	Sq Yd
L Sta 202+00 - 202+89.1	42
R Sta 202+34 - 202+89.1	7
Sta 202+98.6 - 204+62	474
Sta 204+62 - 205+12.87	150
Sta 210+81.13 - 211+80	349
Sta 211+80 - 212+50	242
Sta 212+50 - 213+92	276
Sta 213+92 - 215+00	96
TOTAL	1656 Sq Yd

BIT CONC SURF CSE CL 1

Location	Ton
L Sta 202+00 - 202+89.1	4
R Sta 202+34 - 202+89.1	2
Sta 202+98.6 - 204+62	40
Sta 204+62 - 205+12.87	13
Sta 210+81.13 - 211+80	25
Sta 211+80 - 213+62	44
Sta 213+62 - 213+92	11
Sta 213+92 - 214+40	12
Sta 213+40 - 215+00	9
River Street Return	5
Total	165

BIT CONC BIND CSE

Location	Ton
L Sta 202+00 - 202+89.1	4
R Sta 202+34 - 202+89.1	2
Sta 202+98.6 - 204+62	40
Sta 204+62 - 205+12.87	13
Sta 210+81.13 - 211+80	25
Sta 211+80 - 213+62	44
Sta 213+62 - 213+92	11
Sta 213+92 - 214+40	12
Sta 214+40 - 215+00 (Taper)	6
River Street (Return)	17
Total	174

REM EXIST STRUCT

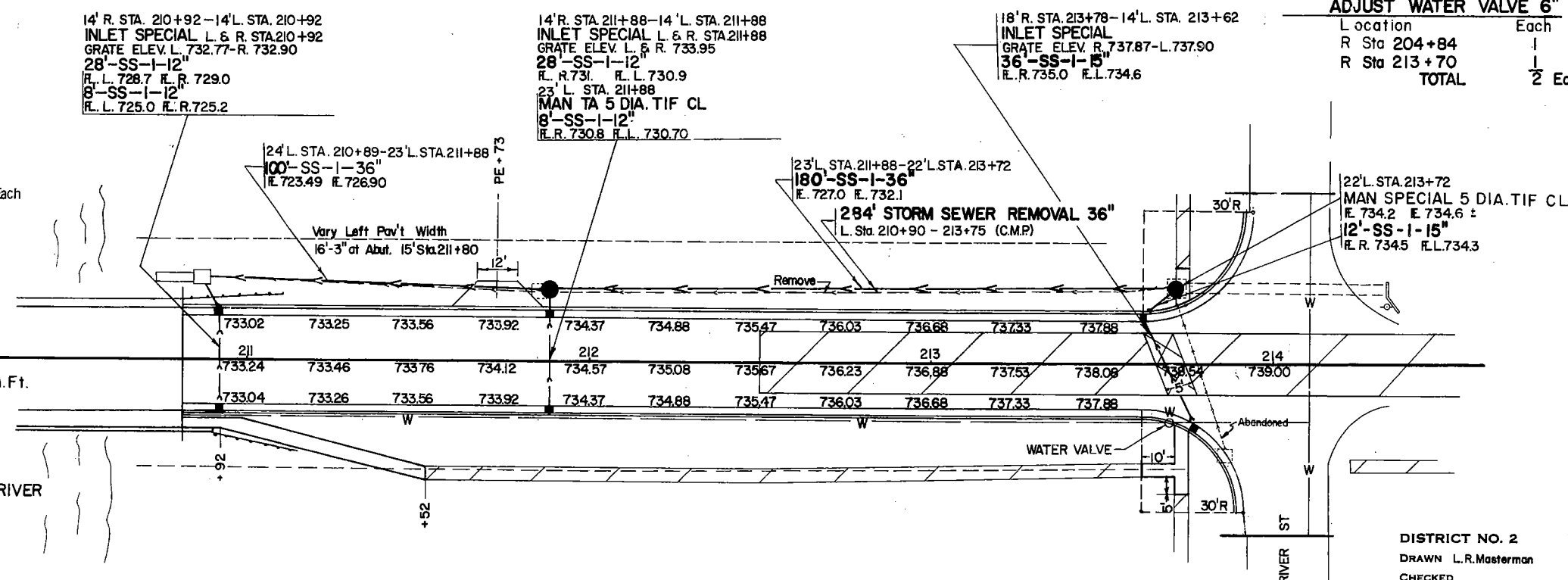
Location	Each
L Sta 211+84 (Inlet)	1
L Sta 213+72 (Inlet)	1
R Sta 213+85 (Inlet)	1
TOTAL	3 Each

COMB CC&G TM 6.24

Location	Lin Ft
L Sta 202+00 - 202+89.1	90
R Sta 202+09 - 202+29.5 (Return)	24
R Sta 202+29.5-202+89.1	60
L&R Sta 202+98.6 - 205+12.87	428
L&R Sta 210+81.13 - 213+92	650
TOTAL	1252 Lin. Ft.

PAVEMENT REM

Location	Sq Yds
Sta 202+98.6 - 205+12.87	429
Sta 210+81.12 - 212+50	338
TOTAL	765 Sq Yds



COMB CC&G REM

R Sta 202+29.5	24 Lin Ft
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SIDEWALK REM

Location	Sq Ft
R Sta 202+34	32
R Sta 202+98.6 - 204+84	748
R Sta 210+81.13 - 211+52	304
R Sta 213+70	90
TOTAL	1174 Sq Ft

PVT REM REPL T 2 9"

Location	Sq Yds
L&R Sta 202+34	27.5
L&R Sta 213+70	11.0
TOTAL	38.5 Sq Yds

PCC DRIVEWAY PAVT 7

Location	Sq Yds
L Sta 203+30	21
L Sta 211+73	16
TOTAL	37 Sq Yds

PCC SIDEWALK 5

Location	Sq Ft
R Sta 202+34	32
R Sta 202+98.6 - 205+12.87	864
R Sta 210+81.13 - 211+52	292
R Sta 213+70	122
L Sta 213+70	44
TOTAL	1354 Sq Ft

SODDING

DUE TO NATURE OF EXISTING
SOIL, 4" OF TOP SOIL WAS
PLACED AT SODDED LOCATIONS.

Location	Sq Yds
L Sta 202+00 - 202+91.5	94
L Sta 202+25 - 202+91.5	26
L Sta 202+96.3 - 205+12.87	205
R Sta 202+96.3 - 205+12.87	469
L Sta 210+81.13 - 213+92	365
R Sta 210+81.13 - 213+92	426
TOTAL	1585 Sq Yds

CLASS X CONCRETE

Location	Cu Yds
R Sta 205+06	0.3
R Sta 205+11	0.3
R Sta 210+83	0.3
R Sta 210+91	0.3
TOTAL	1.2 Cu Yds.

INLETS REMOVED

Location	Each
211+85 - 22' Lt	1
213+86 - 27' Rt	1
213+72 - 22' Lt	1
Total	3

STEEL PLATE BEAM GUARD RAIL SINGLE RAIL

Location	Lin. Ft.
L Sta 204+90.5-205+03	12.5
R Sta 204+78-205+03	250
TOTAL	375 Lin. Ft.

TERMINAL SEC SIN RAIL

Location	Each
L Sta 204+65.5-204+90.5	1 Each
R Sta 204+53 - 204+78	1 Each
L & R Sta 210+91.13-211+16.13	2 Each
TOTAL	4 Each

ADJUST WATER VALVE 6"

Location	Each
R Sta 204+84	1
R Sta 213+70	1
TOTAL	2 Each

DISTRICT NO. 2

DRAWN L.R. Masterman

CHECKED

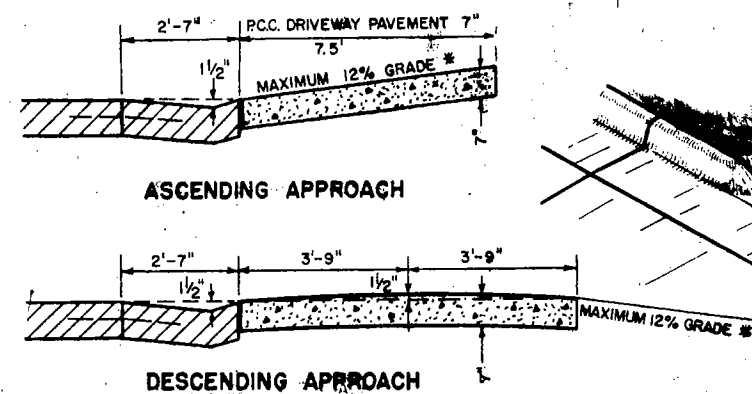
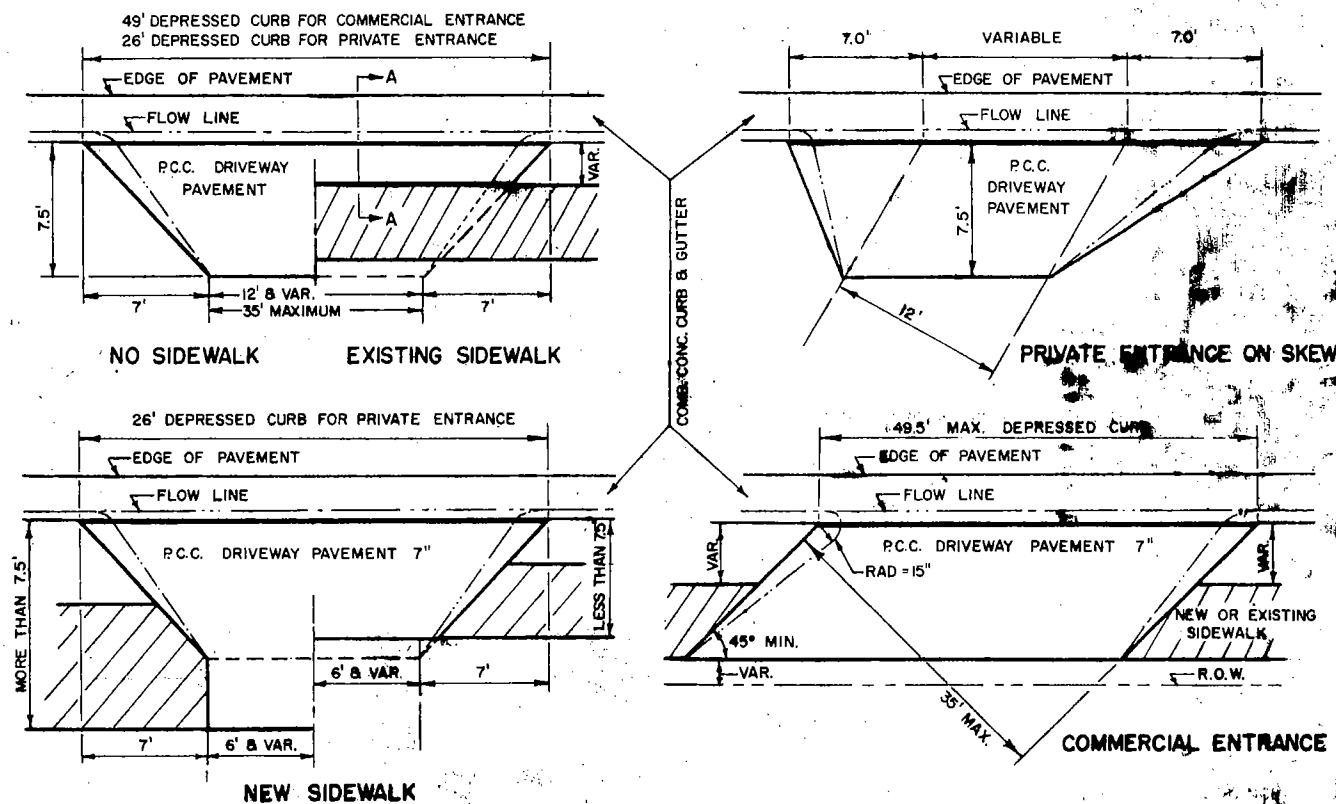
DIXON

DATE

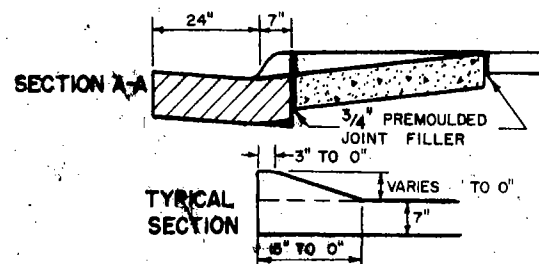
SCALE

ENTRANCE APPROACHES-URBAN AREA

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 2	77	WINNEBAGO	35	6
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



* IN CASES WHERE GRADE EXCEEDS 12%, THE RESIDENT ENGINEER SHALL CHECK WITH DISTRICT DESIGN OFFICE TO DETERMINE NEW APPROACH GRADE. PARTICULAR ATTENTION SHALL BE PAID TO THE NEGATIVE GRADE TO PREVENT DRAINAGE FROM OVERFLOWING INTO THE PRIVATE ENTRANCE.

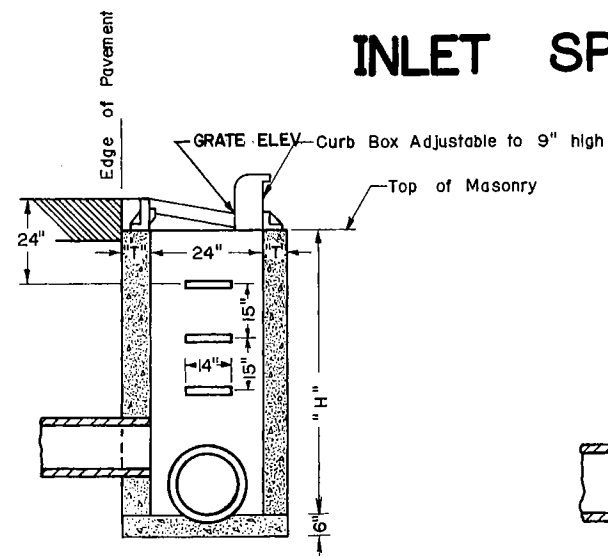


THE VARIABLE HEIGHT INTEGRAL CURB AND PREMOULDED JOINT FILLER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF P.C.C. DRIVEWAY PAVEMENT.

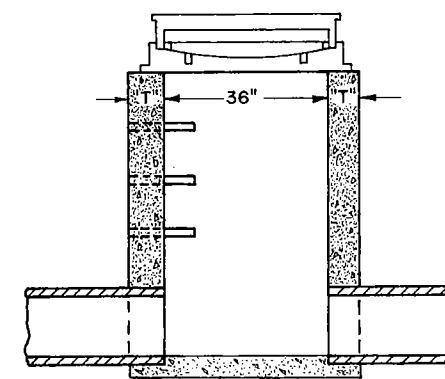
DISTRICT NO. 2 DIXON
DRAWN C.R.R. DATE DEC 64
CHECKED J.R.R. SCALE NONE

INLET SPECIAL

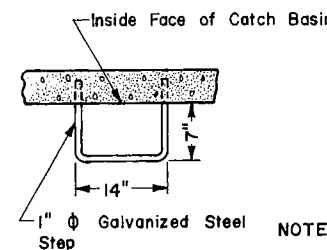
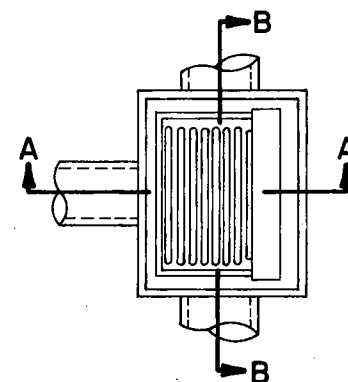
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 2	77	WINNEBAGO	35	6
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



SEC. A-A



SEC. B-B



MATERIALS	"T"
Concrete Masonry Units	5"
Building Brick, Grade S.W. from Clay or Shale	8"
Monolithic Concrete	6"
Concrete Building Brick, Grade A	8"

NOTE -

Except as noted hereon Inlet Special shall be constructed in accordance with Section 612 of the Standard Specifications.

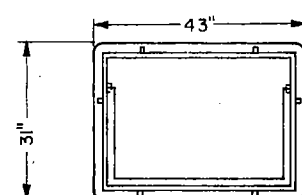
The Contract Unit Price each for INLETS SPECIAL" shall include the cost of furnishing and installing the frame & grate, the galvanized iron steps (if used), the precast floor slabs and sand cushion (when used).

Bricks and Conc. Masonry Unit are to be laid in full mortar beds with flush joints. Weight of Cast Iron Frame & Grate=530 lbs ±. Steps shall be omitted when depth of "H" is less than 5 feet.

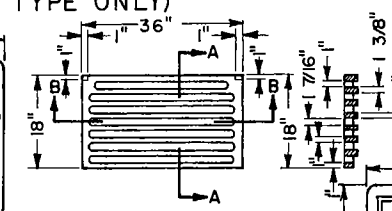
STEP DETAIL

DETAIL OF FRAME & GRATE

(SAG LOCATION TYPE ONLY)

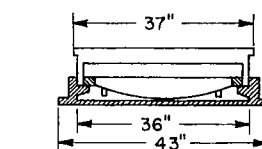
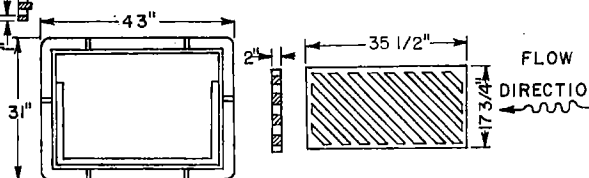


PLAN OF FRAME Without Grate or Curb Box



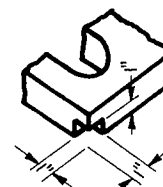
PLAN OF GRATE

(GENERAL LOCATION TYPE)

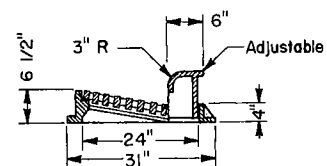


LONGITUDINAL SECTION

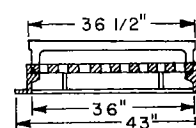
SECTION B-B



DETAIL OF SEATING NOTCH



TRANSVERSE SECTION

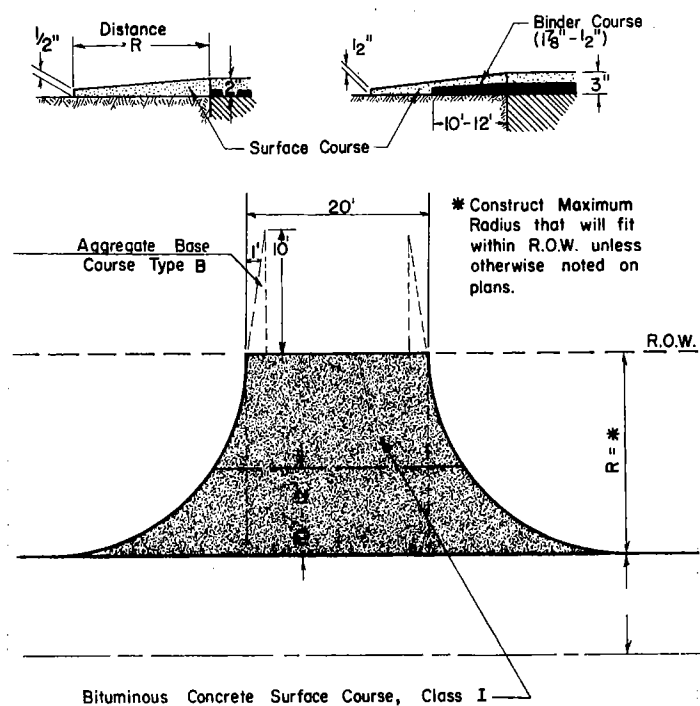


DISTRICT NO. 2 DIXON
DRAWN J. Horst
CHECKED -

DATE 8-1-68
SCALE -

MANHOLES, SPECIAL TYPICAL TAPER FROM 3" TO 0" & BITUMINOUS SIDE ROAD APPROACH

BITUMINOUS SIDE ROAD APPROACH Widening & Resurfacing



ALTERNATE MATERIALS FOR WALLS	D	T
Concrete Masonry Units	4'-0" 5"	5'-0" 5"
Building Brick Grade SW From Clay or Shale	4'-0" 8"	5'-0" 8"
Precast Reinforced Concrete Risers *	4'-0" 5"	5'-0" 5"
Monolithic Concrete	4'-0" 6"	5'-0" 6"
Concrete Building Brick Grade A	4'-0" 8"	5'-0" 8"

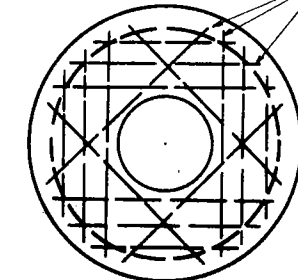
DIAMETER OF MAIN SEWER	D
4" and under	4'-0"
4" to 12" inclusive	5'-0"

NOTES
Brick & Concrete Masonry Units are to be laid in full mortar beds with flush joints.

The contract unit price for Manholes Special shall include the Frame with Lid and Reinforcement Bars.
* Precast R.C. Risers shall conform to the Standard Specifications for Reinforced Conc. Structures, Part 4, S.I.M. Description C-78, except that one line of reinforcement (consisting of at least 0.14 square inch per lineal foot) shall be used and the strength requirement will be waived.
Manholes Special shall be constructed in accordance with Section 601 of the Standard and Supplemental Specifications.
Cast iron frame, Special shall include Type I Closed Lid.

MANHOLES, SPECIAL

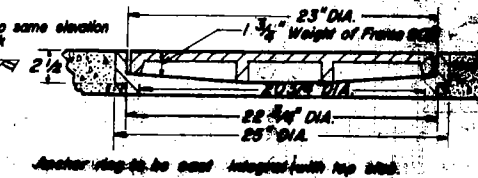
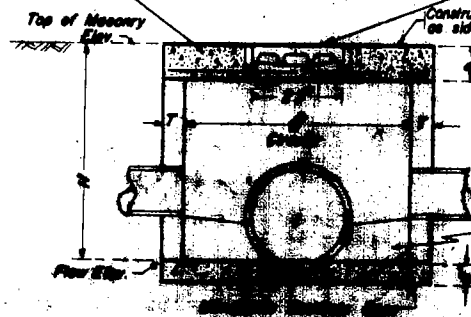
#4 Reinforcement Bars at 6" Centers



PLAN
Showing reinforcement in concrete slabs

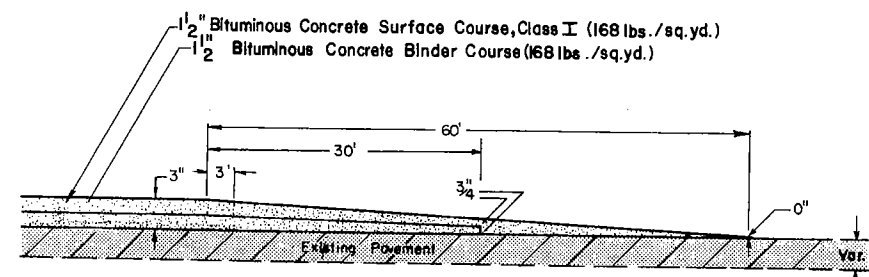
Reinforced concrete slab.

Special Frame with Type I Closed Lid



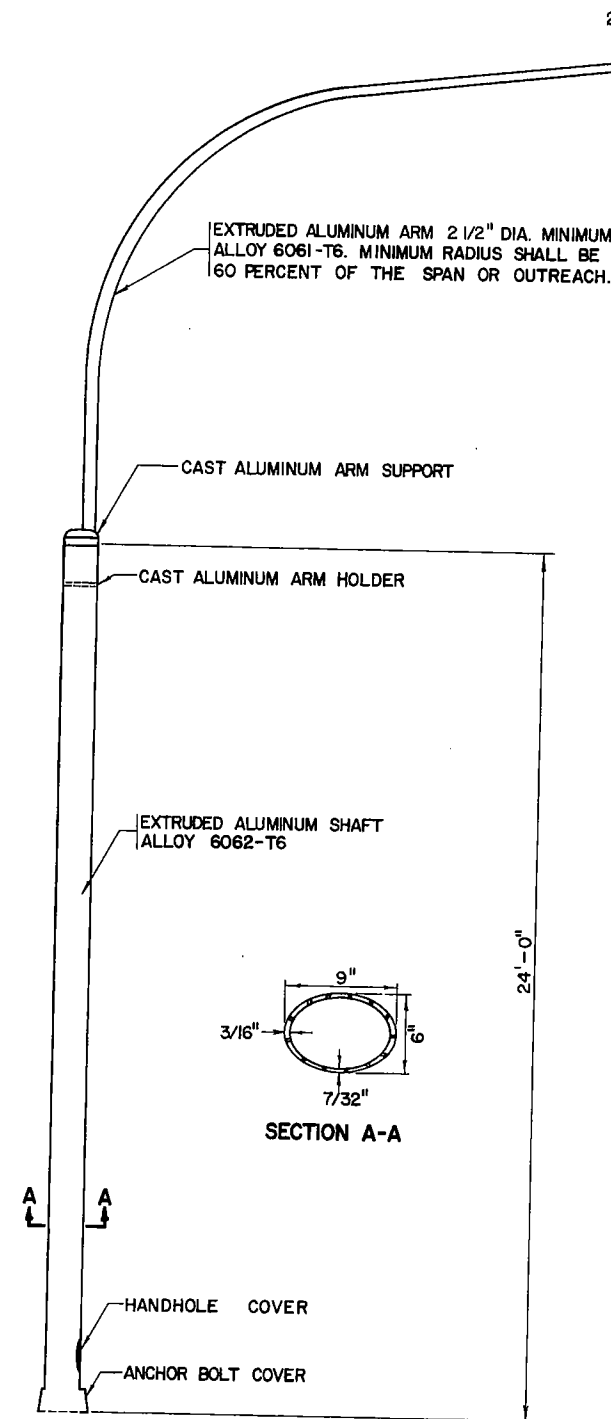
DISTRICT NO. 2 DIXON
DRAWN *[Signature]* DATE *[Date]*
CHECKED *[Signature]* SCALE
REVISED C.R.R. 8-2-66

TYPICAL TAPER FROM 3" TO 0" Widening & Resurfacing



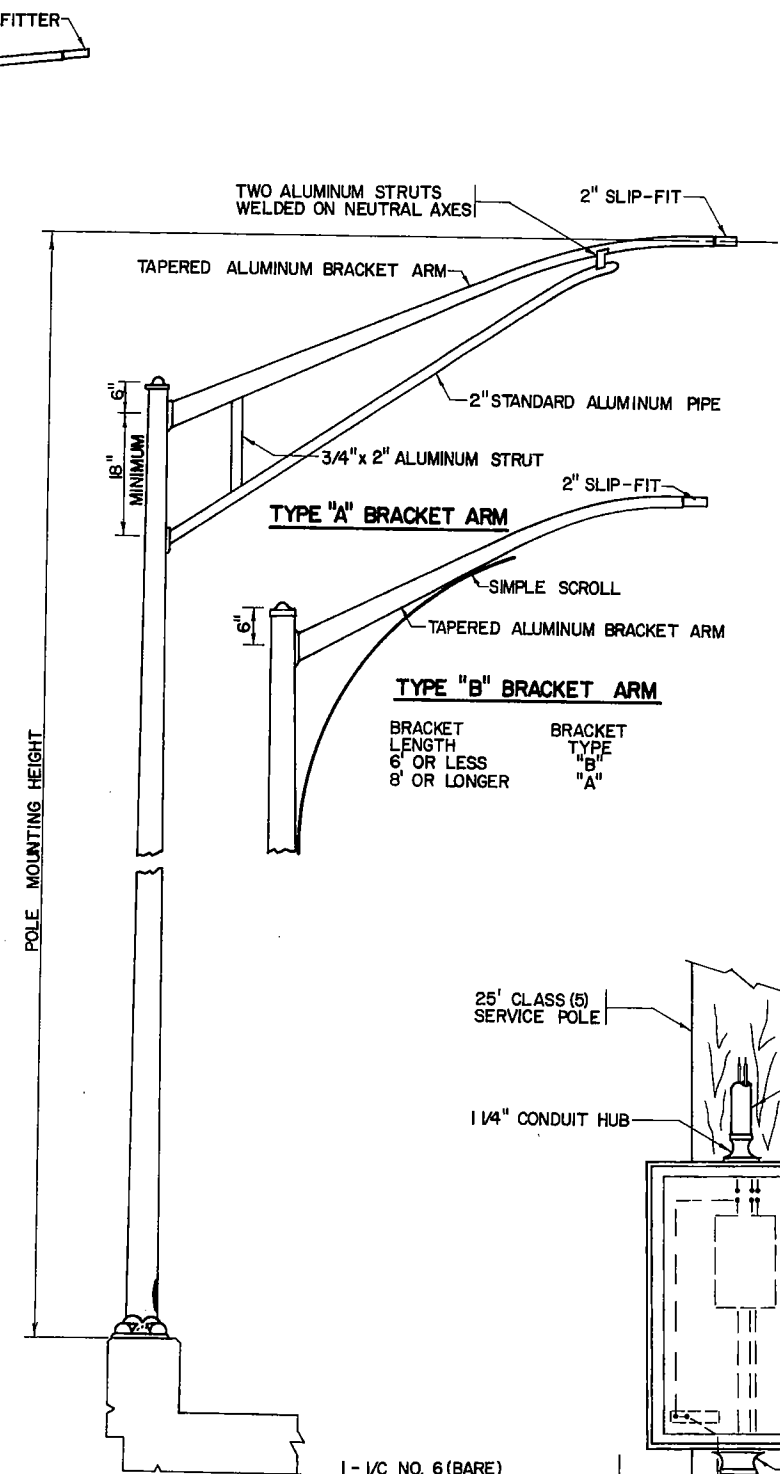
WIDTH	18'	20'	22'	24'	26'
Binder Course	3.7 Ton	4.2 Ton	4.6 Ton	5.0 Ton	5.5 Ton
Surface Course, Class I	6.4 Ton	7.0 Ton	7.7 Ton	8.4 Ton	9.1 Ton

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 2	77BR	WINNEBAGO	35	8
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				



NOTE: For light standard detail see sheet no. 9 of the bridge plans.

POLE, ALUMINUM



POLE, ALUMINUM

1 - 1/2" NO. 6 (BARE)
2 - 1/2" NO. 6 ELECTRICAL CABLE
IN CONDUIT TO JUNCTION BOX
AT BRIDGE

CONNECT GROUND WIRE TO ONE
5/8" x 8" COPPERWELD GROUND
ROD (6" BELOW GRADE)

25' CLASS (5)
SERVICE POLE

1 1/4" GALV. STEEL CONDUIT
WITH 2 1/2" #6 OR LARGER
TYPE USE CABLES

1 1/4" CONDUIT HUB

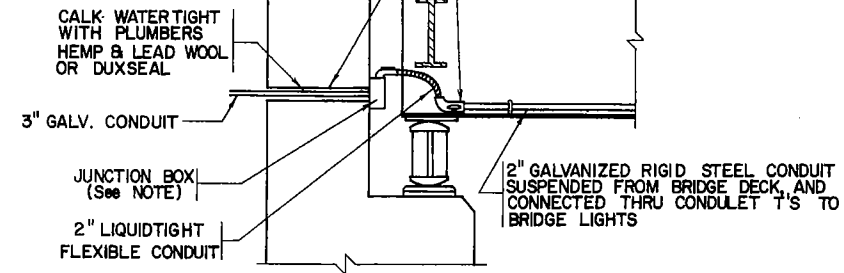
3" CONDUIT HUB

3" GALV. STEEL CONDUIT TO THE
JUNCTION BOX AT BRIDGE

SERVICE INSTALLATION

IF SLEEVE IS NOT IN PLACE LOCATE
SLEEVE 18" INSIDE FACIA BEAM WEB
AND PARALLEL TO BEAM LINE

1" CONDULET SHALL BE
LOCATED 2'-0" TO 3'-0"
FROM END OF BEAM



JUNCTION BOX ATTACHED TO
BRIDGE ABUTMENT

Note for Junction Box: Cast aluminum or cast malleable iron junction box with integral cast mounting feet and gasketed cast cover, weather, water and dust tight. Box shall have inside dimensions of 8" x 8" x 4" and shall be supported by anchoring to the bridge abutment by 4 hexhead stainless steel 5/16" Ø, 18 thread per inch expansion screw anchors. Duct portion of unit duct shall extend through the wall of the junction box by not less than 1". Wires shall be of such that splices can be withdrawn 12" from box. Conduit and wire shall not be used to support the box. This box shall not be used below grade. (Costs for making detailed attachments and connections are incidental to the price of the junction box.)

NOTE: All cable shall be laced and arranged in a neat and workman-like manner.

PAY ITEM	CODE NO.	CI
SERVICE INSTALLATION, TYPE C	S 33004	TYPE "E" 35 AMPERE

3 WIRE - 240 VOLT SERVICE

DISTRICT NO. 2 DIXON

DESIGNED

DRAWN

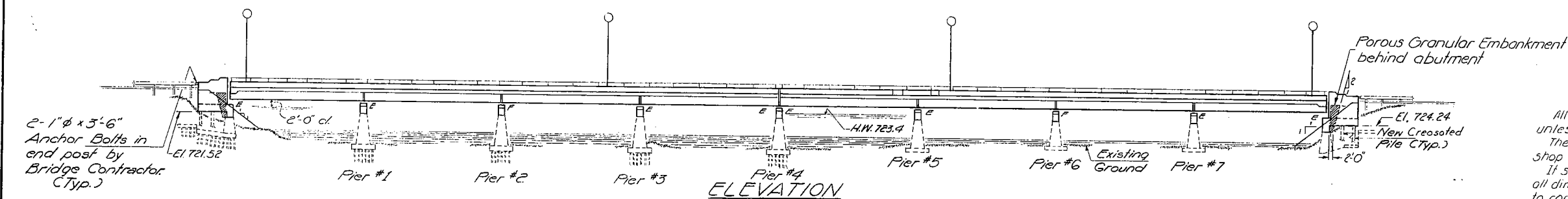
CHECKED

DATE

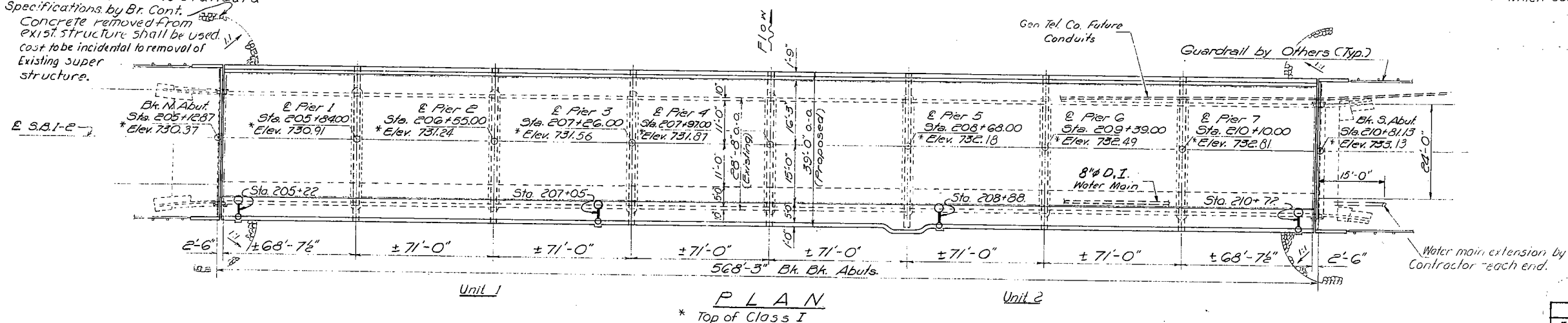
SCALE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / 20 SHEETS
F. S. I. 2	77BR	WINNEBAGO	35	9	
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT-		



Broken Concrete Rip-Rap to be placed in accordance with section 601.04 (c) of the Standard Specifications by Br. Cont. Concrete removed from exist structure shall be used. cost to be incidental to removal of Existing Super structure.



GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

The basic lead silico chromate paint shall be used for shop and field painting of structural steel.

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

An alternate strand pattern using Extra High Strength prestressing strand (270 k.s.i.) is permitted.

The concrete rail section above the construction joint @ the top of the curb and sidewalk shall be constructed of Class-X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

Expansion bolts shall consist of self drilling expansion anchors and $\frac{3}{4}$ " ϕ x 12" hooked bolts.

Protective Coat shall not be applied to surfaces to which Coal Tar Interlayer Protective Coat is applied.

<u>TOTAL BILL OF MATERIAL</u>				
<u>ITEM</u>	<u>UNIT</u>	<u>SUPER</u>	<u>SUB</u>	<u>TOTAL</u>
Furnishing & Erecting Precast Prestressed Conc. I-Beam	Lin. Ft.	3373.5		3373.5
Class X Concrete	Cu.Yd.	849.6	702.3	1551.9
Protective Coat	Sq.Yd.			1770
Structural Steel	Lbs.	4340		4340
Aluminum Railing (Type L)	Lin.Ft.	1134		1134
Structure Excavation	Cu.Yd.			190
Reinforcement Bars	Lbs.	170070	30360	200630
Creosoted Piles (201' to 38')	Lin.Ft.		208	208
Name Plates	Ea.	1		1
Removal of Exist. Superstructure	Ea.			1
Expansion Bolts 3/8"	Ea.			30
Porous Granular Embankment	Cu.Yd.			190
Neoprene Exp. Jt. (2")	Lin.Ft.	79		79
Neoprene Exp. Jt. (4")	Lin.Ft.	40		40
Coat To: Inter-layer Protective Coat	Sq.Yd.			1976
Bit. Conc. Surf Course, Class I	Tons			162

Diagram showing a traverse with five stations and their coordinates and elevations:

- Station 1: PC 504 + 32.95, Elev. 729.39
- Station 2: PI 505 + 17.93, Elev. 730.63
- Station 3: PT 506 + 02.98, Elev. 731.00
- Station 4: PC 510 + 71.49, Elev. 733.06
- Station 5: PI 511 + 61.49, Elev. 733.46
- Station 6: PT 512 + 51.49, Elev. 735.71

The traverse segments and their characteristics are:

- Station 1 to Station 2: 170' VC
- Station 2 to Station 3: 0.44%
- Station 3 to Station 4: 0.44%
- Station 4 to Station 5: 2.50%

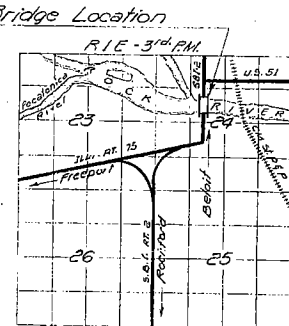
PROPOSED PROFILE S.B.1.-2
Top of Class I

DESIGN STRESSES

FIELD UNITS
 $f_c = 4400 \text{ psi (Super.)}$
 $f_c = 1000 \text{ psi (Sub.)}$
 $f_s = 20,000 \text{ psi (Reinf.)}$
 $v_c = 75 \text{ psi (Ftgs.)}$
 $n = 10$

PRECAST PRESTRESSED UNITS

$f_c = 5000 \text{ psi}$
 $f_{cr} = 4000 \text{ psi}$
 $f_s = 248,000 \text{ psi (5 strands)}$
 $f_{si} = 173,600 \text{ psi (5 strands \%)} \quad \text{Bridge Location}$
 Loading HS-20-44 R/E - 310



LOCATION PLAN

GENERAL PLAN & ELEVATION
S.B.I. RTE. 2 OVER ROCK RIVER

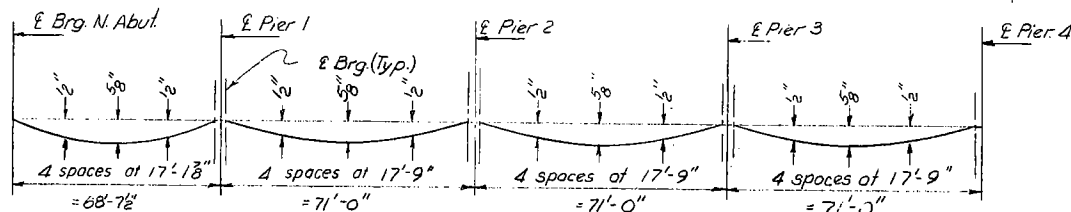
S.B.I. RTE. 2 SEC. 77 BR
WINNEBAGO COUNTY
STA. 208+00

DESIGNED <i>A. V. Khayrat</i>	EXAMINED <i>C. E. Hummer</i> ENGINEER IN CHARGE AND TRAFFIC STRUCTURES
CHECKED <i>W. H. King</i>	PASSED <i>THE ENGINEER</i> ENGINEER OF DESIGN
DRAWN <i>W. H. King</i>	APPROVED <i>W. H. King</i> CHIEF HIGHWAY ENGINEER
CHECKED <i>W. H. King</i>	

STATION 208+00
BUILT BY
STATE OF ILLINOIS
S.B.I. PT. 2 SEC 77BR
LOADING H520
NAME PLATES
602 2113

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

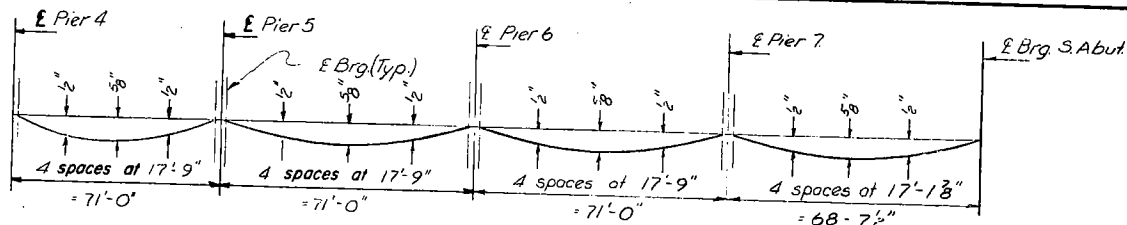
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
2	77 BR	WINNEBAGO	35	10	20 SHEETS



STANDARD FILET DETAIL

To determine t : After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown on the elevation sheet. These elevations subtracted algebraically from "Grade Elevations Adjusted for Dead Load Deflections," minus slab thickness, equals the fillet heights t . A negative value of t , not to exceed $\frac{1}{2}$, equals the embedment of the beam above the theoretical bottom of slab elevation. A positive value of t equals the fillet height above the top of the beam.

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	6	20512.870	18.010	729.926	729.926
		20512.870	11.406	730.060	730.060
		20512.870	4.802	730.164	730.164
		20512.870	1.802	730.239	730.239
E Brg. N. Abut.	6	20512.870	1.802	730.210	730.210
		20512.870	8.406	730.107	730.107
		20512.870	15.010	729.989	729.989
		20512.870	18.010	729.949	729.949
A	6	20515.370	11.406	730.084	730.084
		20515.370	4.802	730.187	730.187
		20515.370	1.802	730.262	730.262
		20515.370	8.406	730.234	730.234
B	6	20515.370	1.802	730.131	730.131
		20515.370	8.406	730.102	730.102
		20515.370	15.010	730.039	730.039
		20515.370	18.010	730.174	730.174
C	6	20525.370	11.406	730.277	730.277
		20525.370	4.802	730.352	730.352
		20525.370	1.802	730.324	730.324
		20525.370	8.406	730.221	730.221
D	6	20525.370	1.802	730.102	730.102
		20525.370	8.406	730.124	730.124
		20525.370	15.010	730.259	730.259
		20525.370	18.010	730.302	730.302
E	6	20535.370	11.406	730.405	730.405
		20535.370	4.802	730.437	730.437
		20535.370	1.802	730.409	730.409
		20535.370	8.406	730.306	730.306
F	6	20535.370	1.802	730.187	730.187
		20535.370	8.406	730.124	730.124
		20535.370	15.010	730.204	730.204
		20535.370	18.010	730.339	730.339
G	6	20545.370	11.406	730.442	730.442
		20545.370	4.802	730.517	730.517
		20545.370	1.802	730.489	730.489
		20545.370	8.406	730.386	730.386
H	6	20545.370	1.802	730.167	730.167
		20545.370	8.406	730.142	730.142
		20545.370	15.010	730.279	730.279
		20545.370	18.010	730.414	730.414
I	6	20555.370	11.406	730.517	730.517
		20555.370	4.802	730.592	730.592
		20555.370	1.802	730.564	730.564
		20555.370	8.406	730.461	730.461
J	6	20555.370	1.802	730.142	730.142
		20555.370	8.406	730.117	730.117
		20555.370	15.010	730.255	730.255
		20555.370	18.010	730.390	730.390
K	6	20565.370	11.406	730.617	730.617
		20565.370	4.802	730.692	730.692
		20565.370	1.802	730.664	730.664
		20565.370	8.406	730.561	730.561
L	6	20565.370	1.802	730.142	730.142
		20565.370	8.406	730.117	730.117
		20565.370	15.010	730.255	730.255
		20565.370	18.010	730.390	730.390
M	6	20575.370	11.406	730.748	730.748
		20575.370	4.802	730.823	730.823
		20575.370	1.802	730.795	730.795
		20575.370	8.406	730.692	730.692
N	6	20575.370	1.802	730.142	730.142
		20575.370	8.406	730.117	730.117
		20575.370	15.010	730.255	730.255
		20575.370	18.010	730.390	730.390
O	6	20583.995	18.010	730.467	730.467
		20583.995	11.406	730.542	730.542
		20583.995	4.802	730.617	730.617
		20583.995	1.802	730.589	730.589
P	6	20583.995	1.802	730.142	730.142
		20583.995	8.406	730.117	730.117
		20583.995	15.010	730.255	730.255
		20583.995	18.010	730.390	730.390
Q	6	20593.995	18.010	730.523	730.523
		20593.995	11.406	730.598	730.598
		20593.995	4.802	730.673	730.673
		20593.995	1.802	730.645	730.645
R	6	20593.995	1.802	730.142	730.142
		20593.995	8.406	730.117	730.117
		20593.995	15.010	730.255	730.255
		20593.995	18.010	730.390	730.390
S	6	20603.995	18.010	730.620	730.620
		20603.995	11.406	730.695	730.695
		20603.995	4.802	730.770	730.770
		20603.995	1.802	730.742	730.742
T	6	20603.995	1.802	730.142	730.142
		20603.995	8.406	730.117	730.117
		20603.995	15.010	730.255	730.255
		20603.995	18.010	730.390	730.390
U	6	20613.995	18.010	730.752	730.752
		20613.995	11.406	730.827	730.827
		20613.995	4.802	730.902	730.902
		20613.995	1.802	730.874	730.874
V	6	20613.995	1.802	730.142	730.142
		20613.995	8.406	730.117	730.117
		20613.995	15.010	730.255	730.255
		20613.995	18.010	730.390	730.390
W	6	20623.995	18.010	730.864	730.864
		20623.995	11.406	730.939	730.939
		20623.995	4.802	731.014	731.014
		20623.995	1.802	730.986	730.986
X	6	20623.995	1.802	730.142	730.142
		20623.995	8.406	730.117	730.117
		20623.995	15.010	730.255	730.255
		20623.995	18.010	730.390	730.390
Y	6	20633.995	18.010	730.920	730.920
		20633.995	11.406	730.995	730.995
		20633.995	4.802	731.070	731.070
		20633.995	1.802	731.042	731.042
Z	6	20633.995	1.802	730.142	730.142
		20633.995	8.406	730.117	730.117
		20633.995	15.010	730.255	730.255
		20633.995	18.010	730.390	730.390
AA	6	20643.995	18.010	730.952	730.952
		20643.995	11.406	731.027	731.027
		20643.995	4.802	731.102	731.102
		20643.995	1.802	731.074	731.074
AB	6	20643.995	1.802	730.142	730.142
		20643.995	8.406	730.117	730.117
		20643.995	15.010	730.255	730.255
		20643.995	18.010	730.390	730.390
AC	6	20654.995	18.010	730.800	730.800
		20654.995	11.406	730.875	730.875
		20654.995	4.802	730.950	730.950
		20654.995	1.802	730.922	730.922
AD	6	20654.995	1.802	730.142	730.142
		20654.995	8.406	730.117	730.117
		20654.995	15.010	730.255	730.255
		20654.995	18.010	730.390	730.390
AE	6	20664.995	18.010	730.944	730.944
		20664.995	11.406	731.019	731.019
		20664.995	4.802	731.094	731.094
		20664.995	1.802	731.066	731.066
AF	6	20664.995	1.802	730.142	730.142
		20664.995	8.406	730.117	730.117
		20664.995	15.010	730.255	730.255
		20664.995	18.010	730.390	730.390
AG	6	20674.995	18.010	730.888	730.888
		20674.995	11.406	730.963	730.963
		20674.995	4.802	731.038	731.038
		20674.995	1.802	731.010	731.010
AH	6	20674.995	1.802	730.142	730.142
		20674.995	8.406	730.117	730.117
		20674.995	15.010	730.255	730.255
		20674.995	18.010	730.390	730.390
AI	6	20684.995	18.010	730.932	730.932
		20684.995	11.406	731.007	731.007
		20684.995	4.802	731.082	731.082
		20684.995	1.802	731.054	731.054
AJ	6	20684.995	1.802	730.142	730.142
		20684.995	8.406	730.117	730.117
		20684.995	15.010	730.255	730.255
		20684.995	18.010	730.390	730.390
AK	6	20694.995	18.010	730.976	730.976
		20694.995	11.406	731.051	731.051
		20694.995	4.802	731.126	731.126
		20694.995	1.802	731.098	731.098
AL	6	20694.995	1.802	730.142	730.142
		20694.995	8.406	730.117	730.117



DEAD LOAD DEFLECTION DIAGRAM

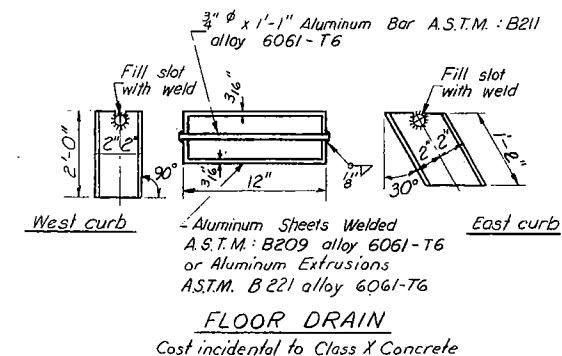
(Includes weight of concrete only)
 Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	77BR	WINNEBAGO	35	11

20 SHEETS

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
E Pier 4	6	20797.000	18.010	731.425	731.425
		20797.000	11.406	731.559	731.559
		20797.000	4.802	731.663	731.663
		20797.000	.000	731.738	731.738
		20797.000	1.802	731.709	731.709
		20797.000	8.406	731.606	731.606
		20797.000	15.010	731.487	731.487
		20807.000	18.010	731.469	731.493
		20807.000	11.406	731.603	731.627
		20807.000	4.802	731.707	731.730
A	6	20807.000	.000	731.782	731.805
		20807.000	1.802	731.753	731.777
		20807.000	8.406	731.650	731.674
		20807.000	15.010	731.531	731.555
		20817.000	18.010	731.513	731.556
B	6	20817.000	11.406	731.647	731.690
		20817.000	4.802	731.751	731.794
		20817.000	.000	731.826	731.869
		20817.000	1.802	731.797	731.840
		20817.000	8.406	731.694	731.737
C	6	20817.000	15.010	731.575	731.618
		20827.000	18.010	731.557	731.606
		20827.000	11.406	731.691	731.740
		20827.000	4.802	731.795	731.843
		20827.000	.000	731.870	731.918
D	6	20827.000	1.802	731.841	731.890
		20827.000	8.406	731.738	731.787
		20827.000	15.010	731.619	731.668
		20837.000	18.010	731.601	731.651
		20837.000	11.406	731.735	731.785
E	6	20837.000	4.802	731.839	731.888
		20837.000	.000	731.914	731.963
		20837.000	1.802	731.885	731.935
		20837.000	8.406	731.782	731.832
		20837.000	15.010	731.663	731.713
F	6	20847.000	18.010	731.645	731.689
		20847.000	11.406	731.779	731.823
		20847.000	4.802	731.883	731.926
		20847.000	.000	731.958	732.001
		20847.000	1.802	731.929	731.973
G	6	20847.000	8.406	731.826	731.870
		20847.000	15.010	731.707	731.751
		20857.000	18.010	731.689	731.715
		20857.000	11.406	731.823	731.849
		20857.000	4.802	731.927	731.952
H	6	20857.000	.000	732.002	732.027
		20857.000	1.802	731.973	731.999
		20857.000	8.406	731.870	731.896
		20857.000	15.010	731.751	731.777
		20868.000	18.010	731.737	731.738
I	6	20868.000	11.406	731.872	731.872
		20868.000	4.802	731.975	731.975
		20868.000	.000	732.050	732.050
		20868.000	1.802	732.022	732.022
		20868.000	8.406	731.919	731.919
J	6	20868.000	15.010	731.800	731.800
		20878.000	18.010	731.781	731.805
		20878.000	11.406	731.916	731.939
		20878.000	4.802	732.019	732.042
		20878.000	.000	732.094	732.117
K	6	20878.000	1.802	732.066	732.089
		20878.000	8.406	731.963	731.986
		20878.000	15.010	731.844	731.867
		20888.000	18.010	731.825	731.868
		20888.000	11.406	731.960	732.003
L	6	20888.000	4.802	732.063	732.106
		20888.000	.000	732.138	732.181
		20888.000	1.802	732.110	732.153
		20888.000	8.406	732.007	732.050
		20888.000	15.010	731.888	731.931
M	6	20898.000	18.010	731.859	731.918
		20898.000	11.406	732.004	732.053
		20898.000	4.802	732.107	732.156
		20898.000	.000	732.182	732.231
		20898.000	1.802	732.154	732.203
N	6	20898.000	8.406	732.051	732.100
		20898.000	15.010	731.932	731.981
		20908.000	18.010	731.913	731.963
		20908.000	11.406	732.048	732.097
		20908.000	4.802	732.151	732.200
O	6	20908.000	.000	732.226	732.275
		20908.000	1.802	732.198	732.247
		20908.000	8.406	732.095	732.144
		20908.000	15.010	731.976	732.025
		20918.000	18.010	731.957	732.001
P	6	20918.000	11.406	732.092	732.135
		20918.000	4.802	732.195	732.239
		20918.000	.000	732.270	732.314
		20918.000	1.802	732.242	732.285
		20918.000	8.406	732.139	732.182
Q	6	20918.000	15.010	732.020	732.063
		20928.000	18.010	732.001	732.027
		20928.000	11.406	732.136	732.162
		20928.000	4.802	732.239	732.265
		20928.000	.000	732.314	732.340
R	6	20928.000	1.802	732.312	732.312
		20928.000	8.406	732.213	732.209
		20928.000	15.010	732.094	732.117
		20938.000	18.010	732.075	732.100
		20938.000	11.406	732.184	732.214
S	6	20938.000	4.802	732.287	732.327
		20938.000	.000	732.362	732.362
		20938.000	1.802	732.334	732.334
		20938.000	8.406	732.231	732.231
		20938.000	15.010	732.112	732.112
T	6	20948.000	18.010	732.094	732.117
		20948.000	11.406	732.228	732.252
		20948.000	4.802	732.331	732.355
		20948.000	.000	732.406	732.430
		20948.000	1.802	732.378	732.402
U	6	20948.000	8.406	732.275	732.298
		20948.000	15.010	732.156	732.180
		21000.000	18.010	732.406	732.431
		21000.000	11.406	732.541	732.565
		21000.000	4.802	732.644	732.668
V	6	21000.000	.000	732.719	732.743
		21000.000	1.802	732.691	732.715
		21000.000	8.406	732.587	732.612
		21000.000	15.010	732.469	732.493
		21010.000	18.010	732.362	732.362
W	6	21010.000	11.406	732.497	732.497
		21010.000	4.802	732.600	732.600
		21010.000	.000	732.675	732.675
		21010.000	1.802	732.647	732.647
		21010.000	8.406	732.543	732.544
X	6	21010.000	15.010	732.425	732.425
		21020.000	18.010	732.406	732.431
		21020.000	11.406	732.541	732.565
		21020.000	4.802	732.644	732.668
		21020.000	.000	732.719	732.743
Y	6	21020.000	1.802	732.691	732.715
		21020.000	8.406	732.587	732.612
		21020.000	15.010	732.469	732.493
		21030.000	18.010	732.450	732.494
		21030.000	11.406	732.585	732.628
Z	6	21030.000	4.802	732.688	732.731
		21030.000	.000	732.763	732.806
		21030.000	1.802	732.735	732.778
		21030.000	8.406	732.631	732.675
		21030.000	15.010	732.513	732.556
AA	6	21040.000	18.010	732.494	732.544
		21040.000	11.406	732.629	732.678
		21040.000	4.802	732.732	732.781
		21040.000	.000	732.807	732.856
		21040.000	1.802	732.779	732.828
AB	6	21040.000	8.406	732.675	732.725
		21040.000	15.010	732.557	732.606
		21050.000	18.010	732.538	732.587
		21050.000	11.406	732.673	732.721
		21050.000	4.802	732.776	732.824
AC	6	21050.000	.000	732.851	732.899
		21050.000	1.802	732.823	732.871
		21050.000	8.406	732.719	732.768
		21050.000	15.010	732.601	732.649
		21060.000	18.010	732.582	732.625
AD	6	21060.000	11.406	732.717	732.759
		21060.000	4.802	732.820	732.862
		21060.000	.000	732.895	732.937
		21060.000	1.802	732.867	732.909
		21060.000	8.406	732.763	732.806
AE	6	21060.000	15.010	732.645	732.687
		21070.000	18.010	732.626	732.648



TWO UNITS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	372	#6	38'-2"	
a ₁	370	#6	37'-0"	
a ₂	370	#6	36'-0"	
a ₃	24	#7	34'-0"	
a ₄	100	#6	5'-9"	
b	720	#5	32'-6"	
b ₁	820	#5	29'-6"	
b ₂	210	#7	28'-0"	
b ₃	30	#6	28'-0"	
b ₄	108	#6	32'-6"	
b ₅	20	#5	30'-0"	
b ₆	40	#5	25'-6"	
b ₇	20	#5	30'-9"	
b ₈	60	#5	10'-3"	
b ₉	108	#5	28'-0"	
c	378	#4	5'-8"	
c ₁	566	#5	9'-10"	
d	566	#6	3'-6"	
d ₁	1132	#4	2'-8"	
d ₂	566	#6	5'-11"	
m	280	#4	5'-9"	
m ₁	60	#6	4'-6"	
m ₂	160	#4	4'-9"	
s	120	#4	11'-2"	
sr	320	#4	8'-8"	
x	240	#6	8'-7"	
Reinforcement		Bars	lbs.	63830
* Class	X Concrete		Cu. Yds.	79.4

For locations and details of bars $m, m_1, m_2, s \& s_1$; see sheets 5 & 8.
The quantities of longitudinal reinforcement and concrete in parapets are billed separately on sheet 9 and are not included above.
For spacing of bars d, d_1, d_2 see sh. #9.
* Includes 6.0 Cu. Yds. for observation platform at Pier #5, see sh. #10.

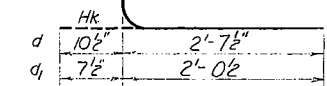
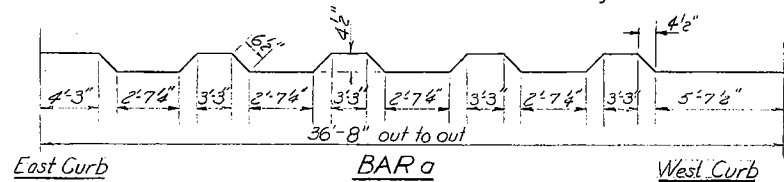
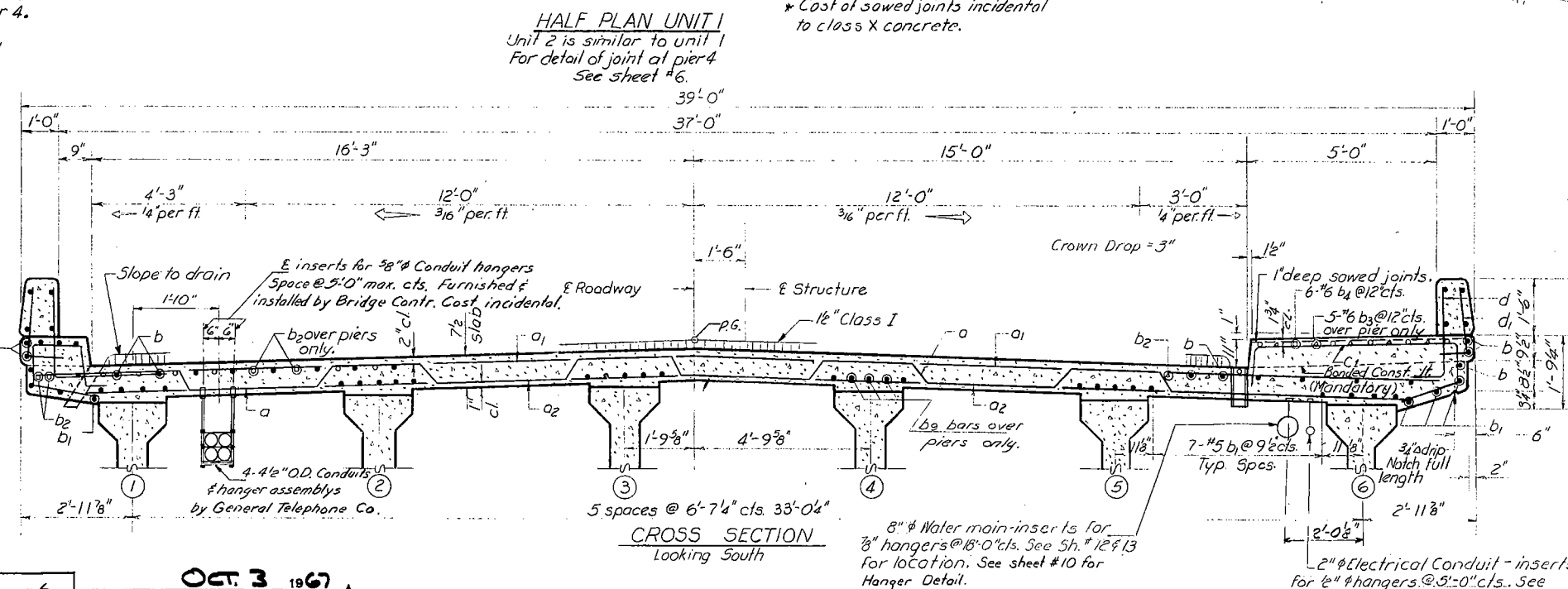
SUPERSTRUCTURE
1. RT. 2 SEC. 77 BR.
WINNEBAGO COUNTY
STA. 208+00

All Clearances shall be 1 1/2" unless shown otherwise.

BAR C

BAR x

Horizontal Leg
BARd₂



BARS d & d_1

DESIGNED	S.Y. Khayyat
CHECKED	Wei Hsiang
DRAWN	J.m.heninger
CHECKED	Wei Hsiang

OCT. 3 1967

EXAMINED

PASSED

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

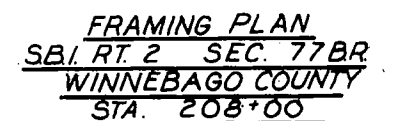
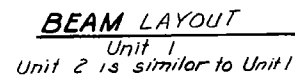
ENGINEER OF DESIGN

CARL THURMOND

CHIEF HIGHWAY ENGINEER

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Sheet: P. A. 2	77BR	WINNEBAGO	35	13
PER. ROAD DIST. NO. 7		ILLINOIS	PER. AID PROJECT	

SHEET NO. 5
20 SHEETS



OCT. 3 1967

EXAMINED *[Signature]*

PASSED *[Signature]*

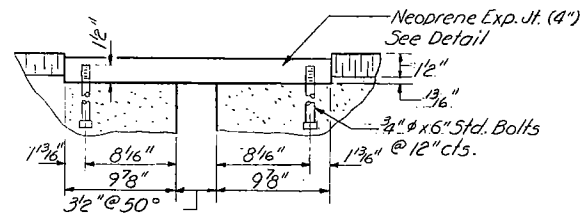
APPROVED *[Signature]*

CHIEF HIGHWAY DIVISION

- Bars $a_3, a_4; m, m_1, m_2;$
 s & s_1 are included in Bill
of Material on Sheet # 4

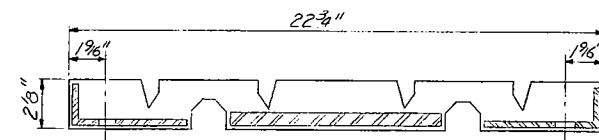
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
R. I. 2	77BR	WINNEBAGO	35	14	20 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



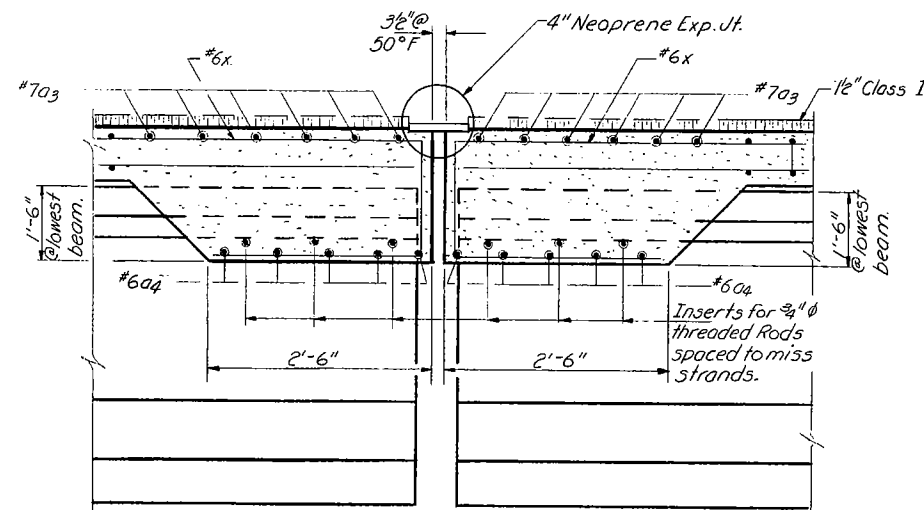
PIER 4 EXPANSION JOINT

In Roadway

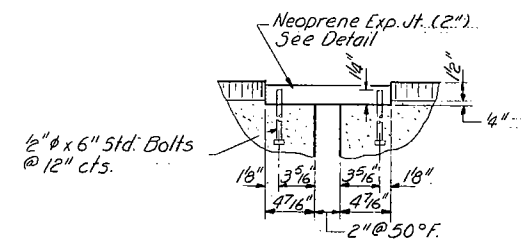


DETAIL OF NEOPRENE EXPANSION JOINT (4")

AT PIER 4
See Special Provision

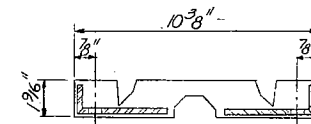


SECTION AT PIER 4



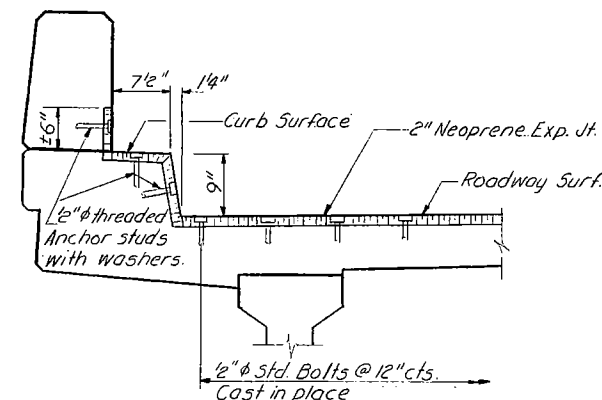
ABUTMENT EXPANSION JOINT

In Roadway

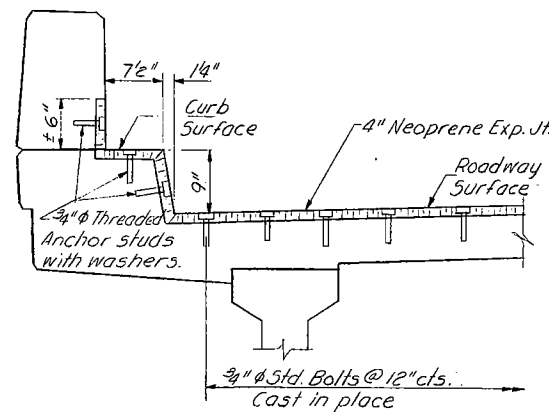


DETAIL OF NEOPRENE EXPANSION JOINT (2")

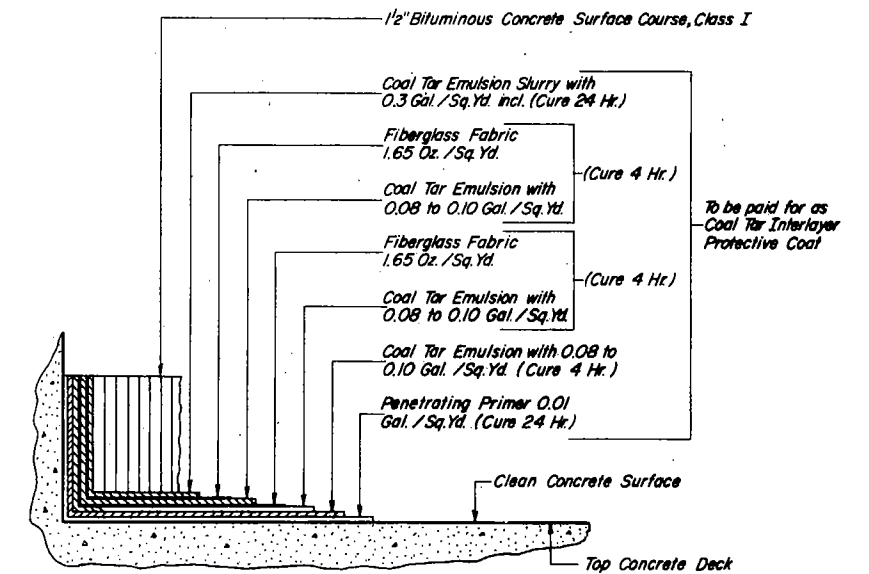
See Special Provisions



SECTION AT CURB JOINT
AT ABUTMENTS

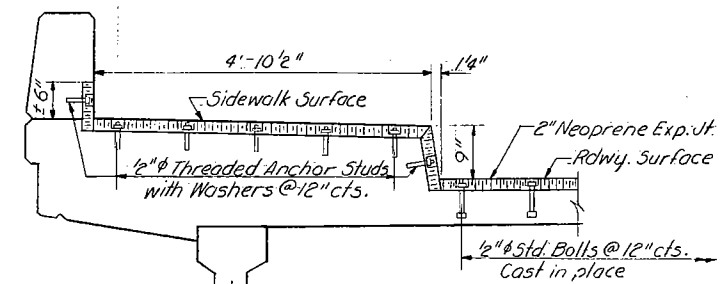


SECTION AT CURB JOINT
AT PIER 4

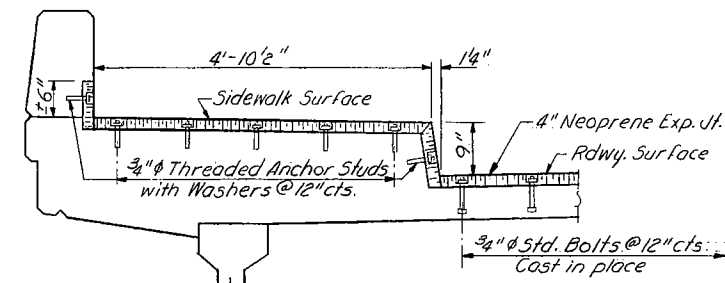


DETAIL OF DECK SURFACING

To be paid for as
Coal Tar Interlayer
Protective Coat



SECTION AT SIDEWALK JOINT
AT ABUTMENTS



SECTION AT SIDEWALK JOINT
AT PIER 4

DESIGNED A. V. Mayyat	19
CHECKED J. B. Nelson	EXAMINED
DRAWN Bev Robinson	PASSED
CHECKED J. B. Nelson	APPROVED

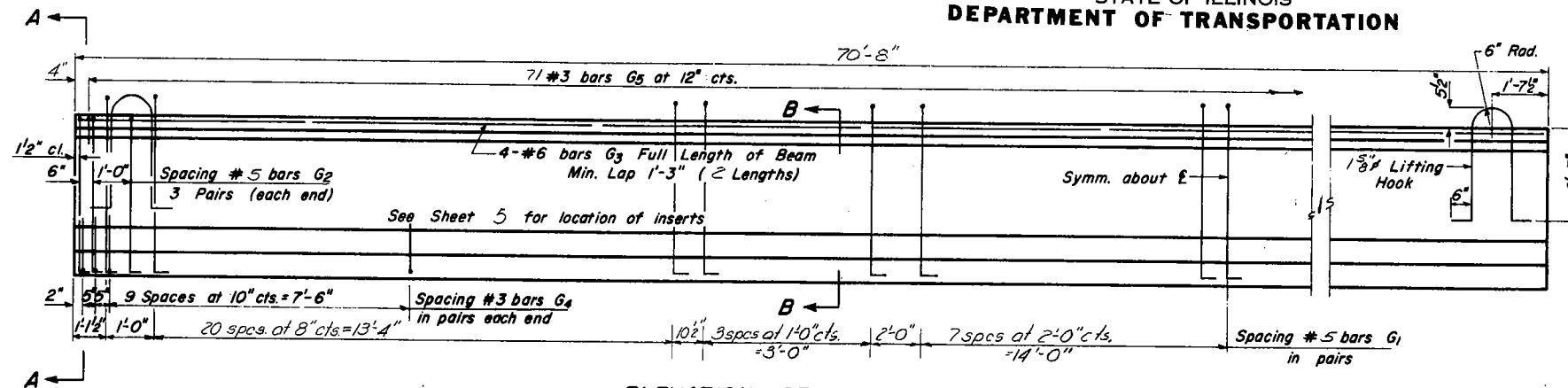
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
UNDER SECRETARY, CHIEF TRANSPORTATION ENGINEER

EXPANSION DEVICE DETAILS
S.B.I. RT. 2 SEC. 77 BR
WINNEBAGO COUNTY
STA. 208 +00

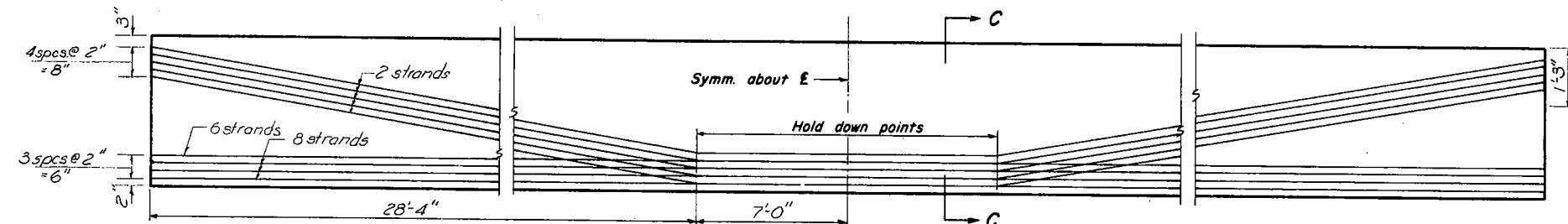
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	77BR	WINNEBAGO	35	15

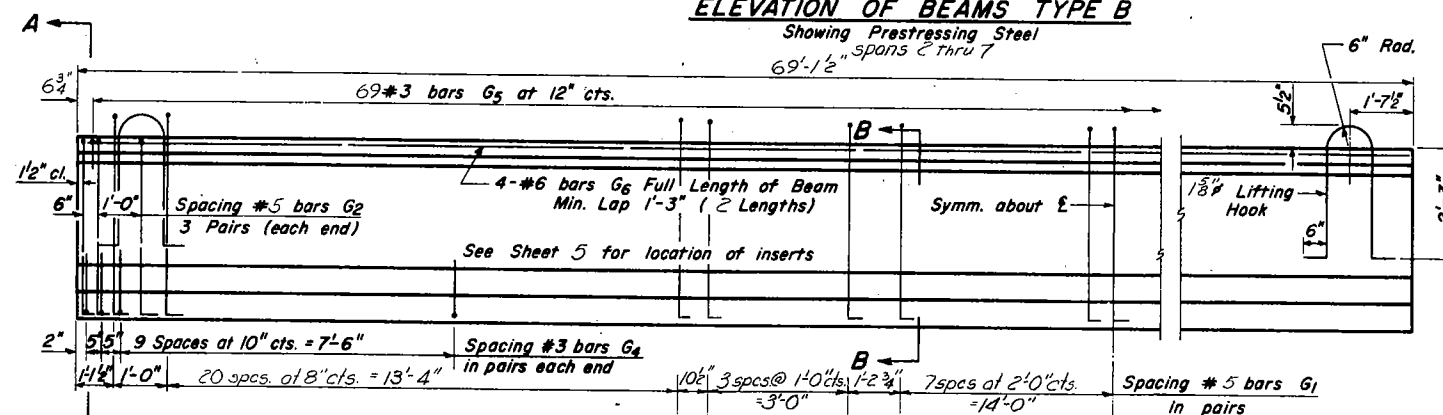
20 SHEETS



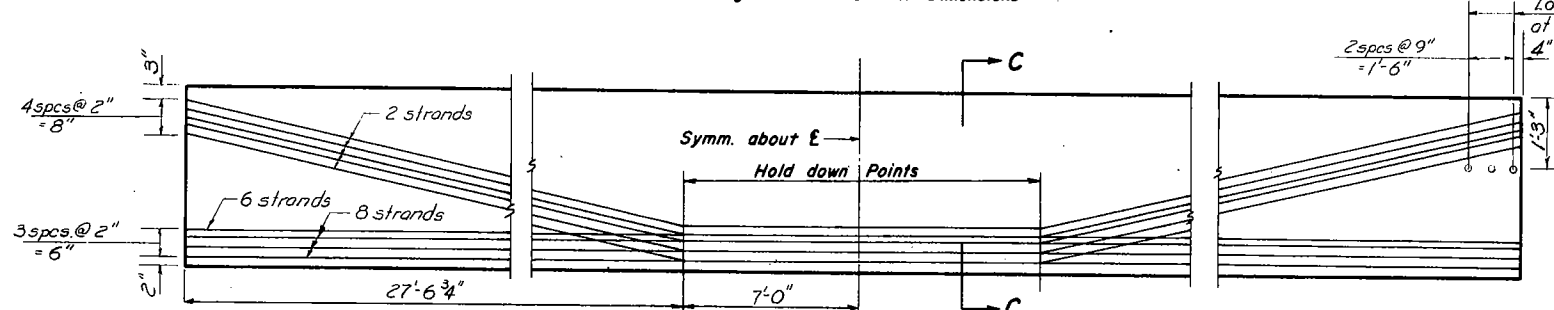
ELEVATION OF BEAMS TYPE B
Showing Reinforcement & Dimensions



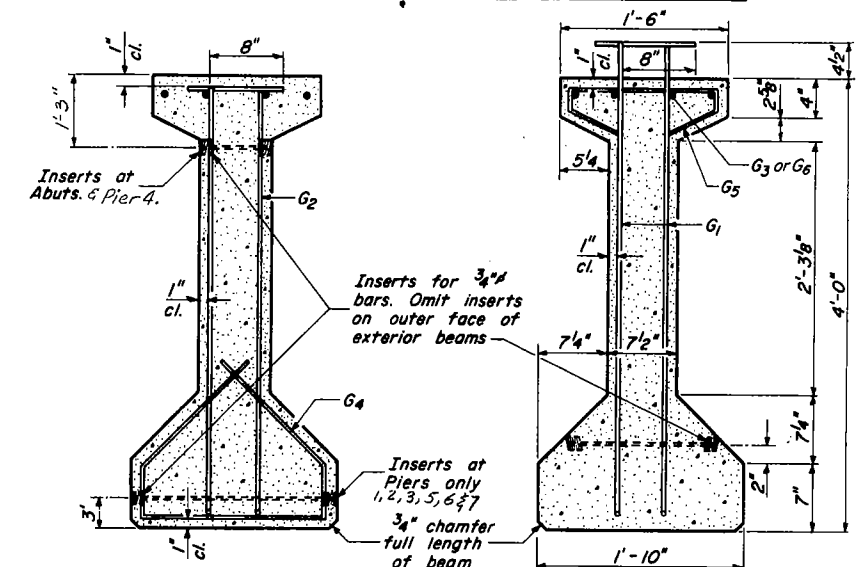
ELEVATION OF BEAMS TYPE B
Showing Prestressing Steel



ELEVATION OF BEAMS TYPE A
Showing Reinforcement & Dimensions

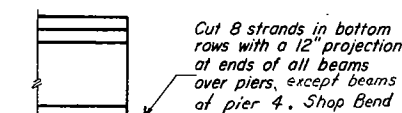


ELEVATION OF BEAMS TYPE A
Showing Prestressing Steel

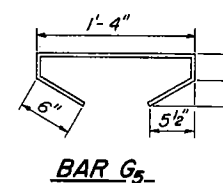


SECTION A-A

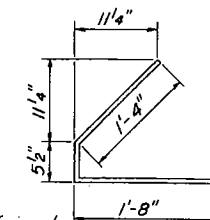
SECTION B-B



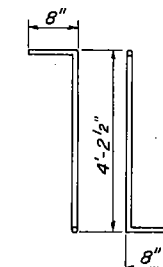
DETAIL AT END OF BEAMS OVER PIERS



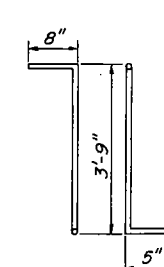
BAR G5



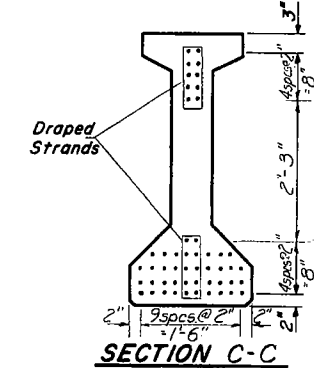
BAR G4



BAR G1



BAR G2



SECTION C-C

***BAR LIST**

Bar	No.	Size	Length	Shape
G1	134	#5	5'-6 1/2"	7L
G2	12	#5	4'-10"	7L
G3	8	#6	36'-0"	—
G4	48	#3	3'-5 1/2"	—
G5	69	#3	2'-9"	—
G6	8	#6	35'-0"	—

* For one beam only.

BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 48"	Lin. Ft.	3373.5

NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per linear foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 48 In."

Prestressing Steel shall have a nominal diameter of 7/16". Inserts for 3/4" threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams. Steel for lifting hook shall be ASTM A-306, Grade 70-80.

Ends of beams to be encased with cast in place concrete shall not be coated with asphalt paint.

An alternate prestressing strand pattern using Extra High Strength Strand (270 ksi) is permitted. See Special Provisions.

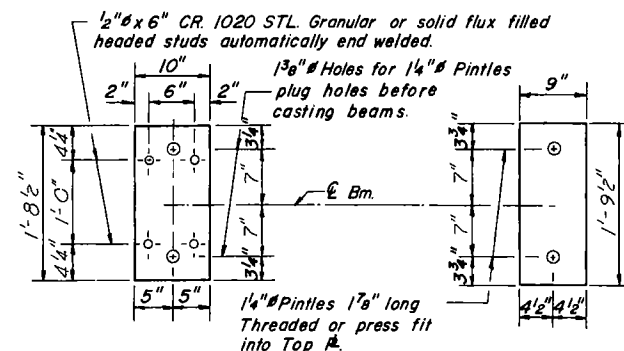
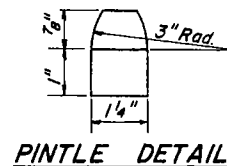
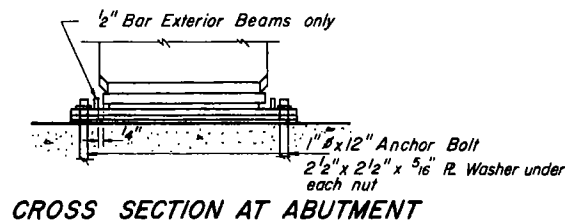
GIRDER DETAILS
S.B.I. RT. 2 SEC. 77BR
WINNEBAGO COUNTY
STA. 208+00

DESIGNED A.Y. Khayyat
CHECKED Wei Hsing
DRAWN Jm Heringer
CHECKED Wei Hsing

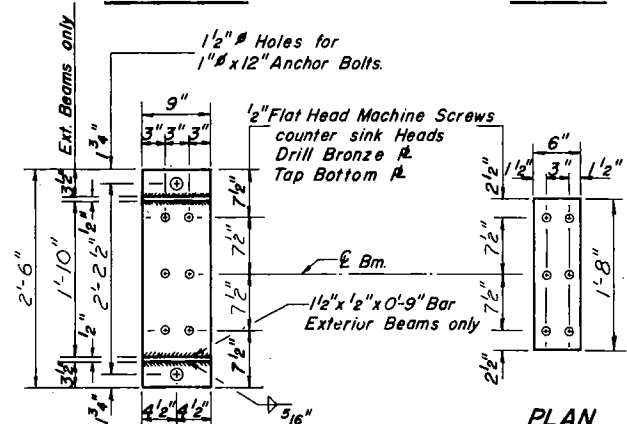
EXAMINED
PASSED
APPROVED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

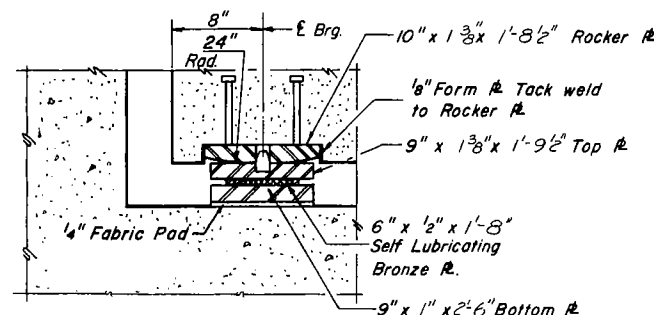
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
2	77BR	WINNEBAGO	35	16	20 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



PLAN TOP



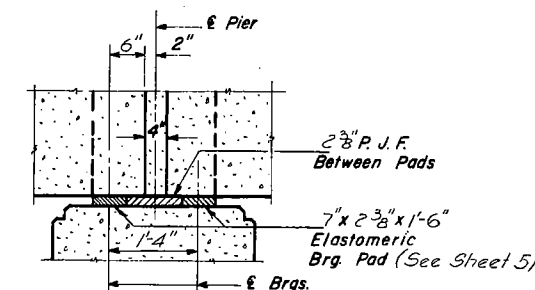
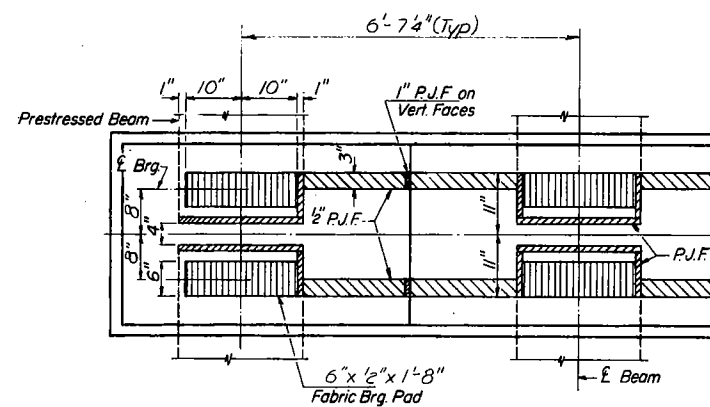
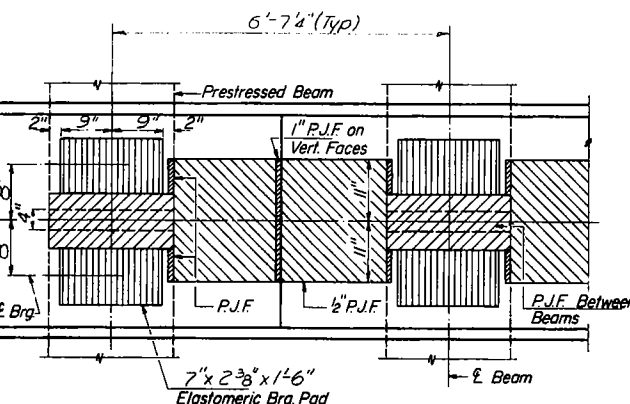
PLAN BOTTOM



DESIGNED	A.Y. Khayyat
CHECKED	Wei Hsiao
DRAWN	J.M. HEININGER
CHECKED	Wei Hsiao

PI-3 S 6-15-66

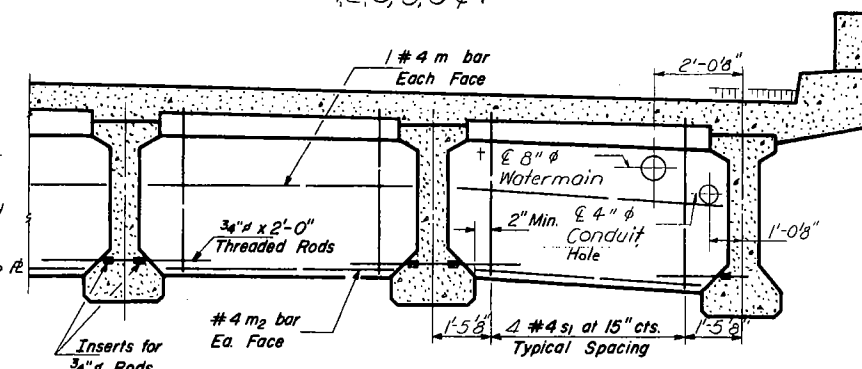
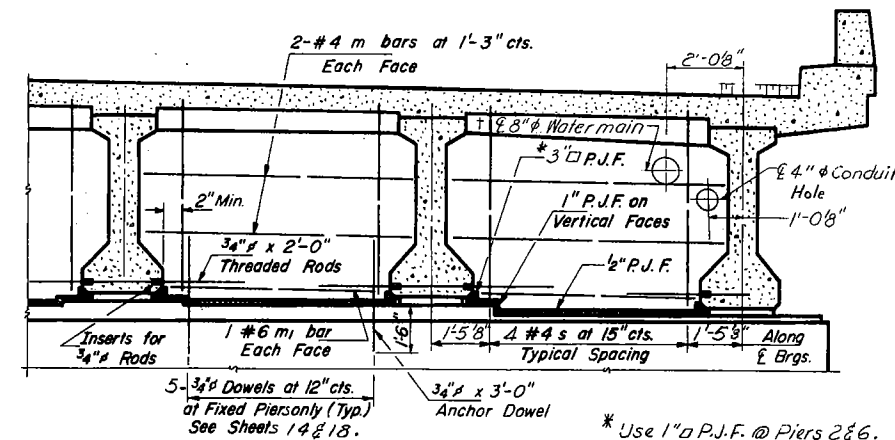
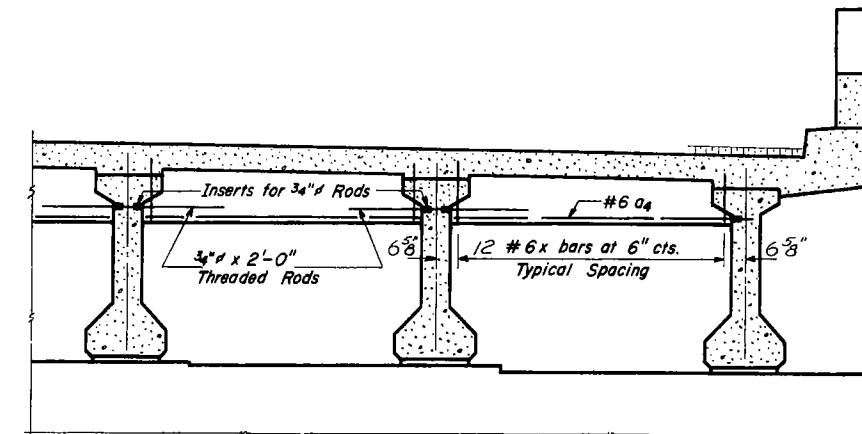
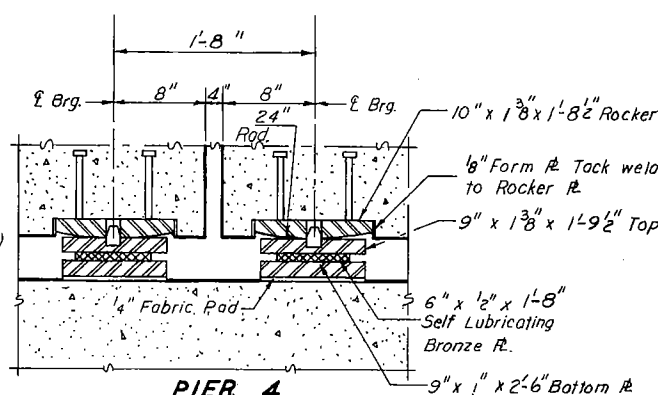
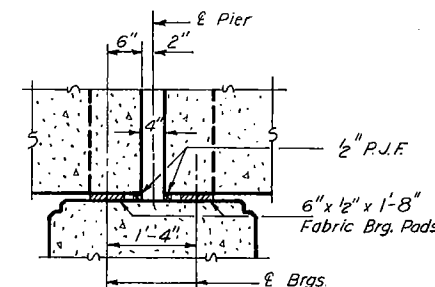
EXAMINED	Oct 3 1967
PASSED	WE Bausman
APPROVED	J.E. H. H. H.



PIERS 1, 3, 5 & 7
(Dimensions Along E of Beam)

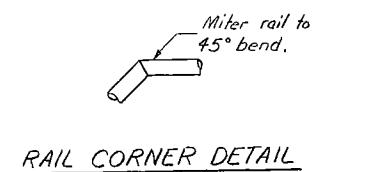
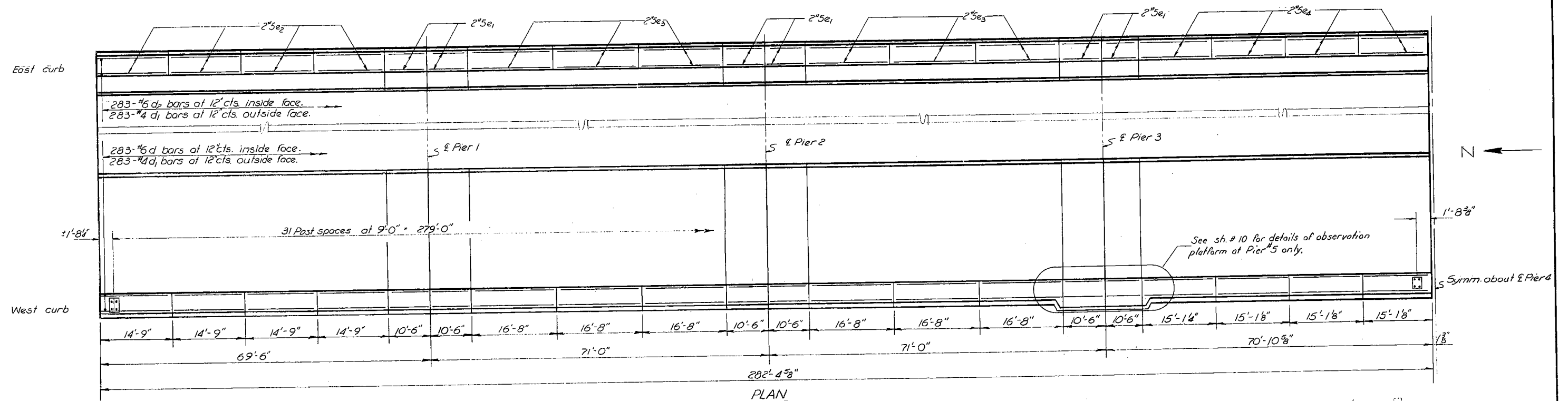
Note:
Weight of Anchor Bolts, Top Plates, Bottom Plates, Bronze Plates and Pintles of Bearing Assemblies is shown as the weight of Structural Steel on Sheet #1.

Cost of Rocker cast into beam is included in the cost of "Furnishing and Erecting Precast Prestressed Concrete I-Beams."

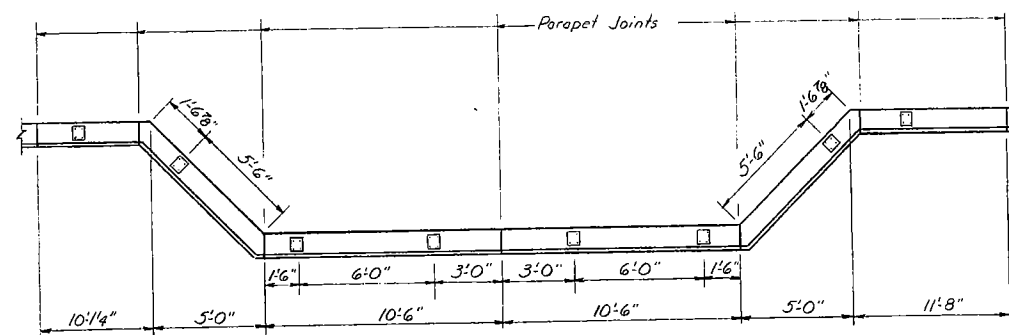


† Use 1/8 inch hole for 8 inch Watermain Bend reinforcement to clear.

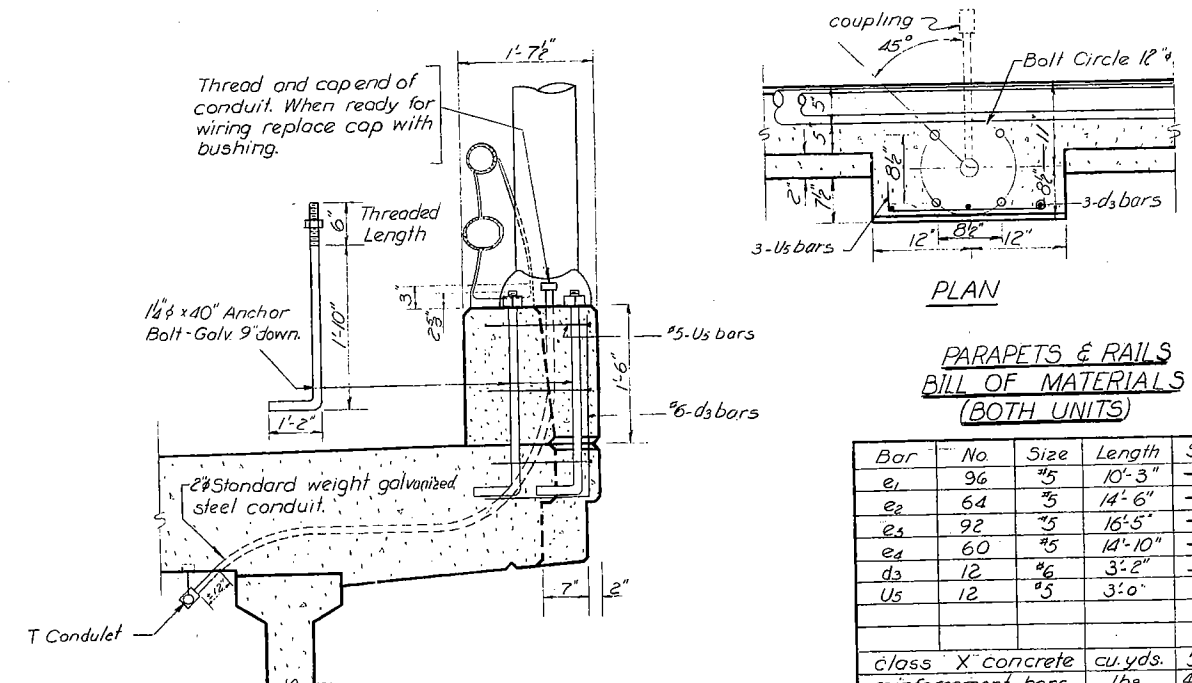
BEARING DETAILS
SBI. RT. 2 SEC. 77BR
WINNEBAGO COUNTY
STA. 208+00



Note Two extra rail posts are needed.



RAIL POST SPACES
At Observation Platform Only



LIGHT STANDARD DETAIL

Cost of anchor bolts & conduit is incidental to contract & for location of light std. see sh. # 1.

PARAPETS & RAILS
BILL OF MATERIALS
(BOTH UNITS)

Bar	No.	Size	Length	Shape
e ₁	96	#5	10'-3"	_____
e ₂	64	#5	14'-6"	_____
e ₃	92	#5	16'-5"	_____
e ₄	60	#5	14'-10"	_____
d ₃	12	#6	3'-2"	_____
U ₅	12	#5	3'-0"	_____
class X concrete			cu. yds.	58.2
reinforcement bars			lbs.	4590

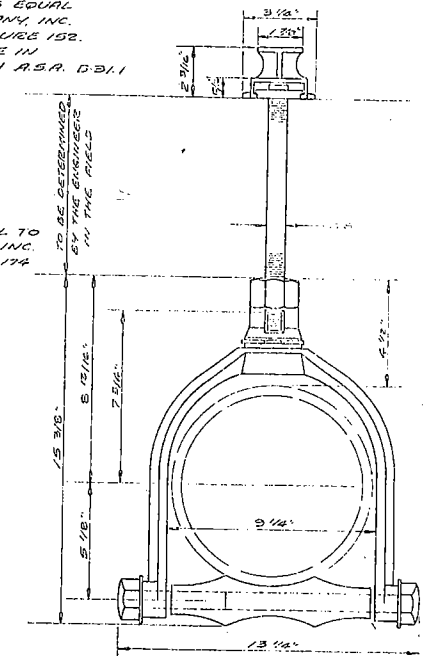
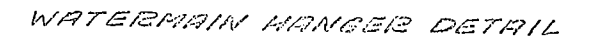
PARAPET WALLS
S.B.I. RT. 2 SEC. 77 BR.
WINNEBAGO COUNTY
STA. 208+00

DESIGNED *A. S. Khayyat*
CHECKED *W. J. Heringer*
DRAWN *J. M. Heringer*
CHECKED *W. J. Heringer*

O.C.T. 3 1967
 EXAMINED *[Signature]*
 ENGINEER IN CHARGE OF TRAFFIC STRUCTURES
 PASSED *[Signature]*
 ENGINEER OF DESIGN
 APPROVED *[Signature]*
 CHIEF HIGHWAY ENGINEER

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	778R	WINNEBAGO	35	18
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT:	

SHEET NO. 10
20 SHEETS

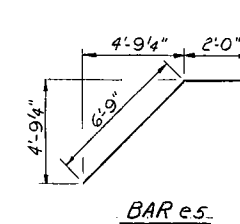


CONCRETE INSERTS EQUAL
TO GRINNELL COMPANY, INC.
CATALOG G-69 FIGURE 152.
SPACING SHALL BE IN
ACCORDANCE WITH A.S.A. D-31.1

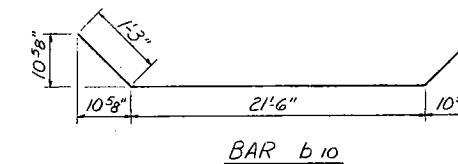
PIPE HANGERS EQUAL TO
STINNELL COMPANY, INC.
CATALOG G-69 FIGURE 174
FOR 8" PIPE.

MINIMUM 3" THICKNESS
FIBRE GLASS INSULATION.
ALUMINUM SHEATH FULL
CIRCUMFERENCE OF PIPE.
MINIMUM SHEATH THICKNESS
SHALL BE 14 GAUGE.
INSULATION SHALL BE
CARRIED OVER HANGER
SUPPORTS AND SHALL BE
COMPLETELY WATERPROOF.

Note: e₁ bars billed on sh. #9.



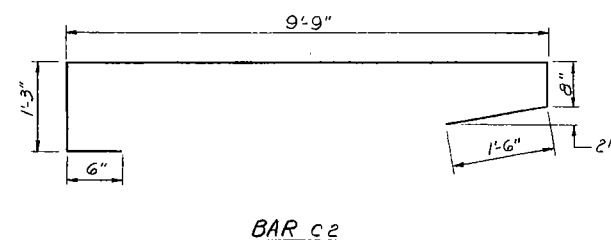
BAR e.5.



BAR b 10

<u>BILL OF MATERIAL</u>				
<u>Bar</u>	<u>No.</u>	<u>Size</u>	<u>Length</u>	<u>Shape</u>
a6	28	#5	6'0"	—
b5	20	#5	30'0"	—
b10	2	#5	24'0"	U
c2	30	#6	13'6"	□
e5	4	#5	8'9"	∠
e6	4	#5	11'0"	—
e7	4	#5	9'5"	—
e8	8	#5	7'0"	—
<u>Reinforcement Bars</u>			<u>Lbs.</u>	<u>1650</u>

Class X Concrete = 6.0 Cu. Yds. is included in sh. # 4.



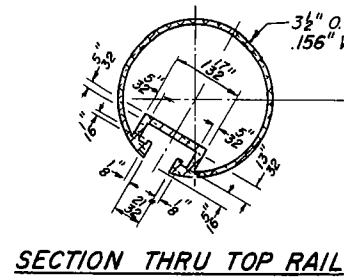
BAR c2

DESIGNED <i>A.Y. Maryat</i>	19
CHECKED <i>J.B. Kell...</i>	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
DRAWN <i>S.E. Lindsey</i>	ENGINEER OF DESIGN
CHECKED <i>J.B. Kell...</i>	CHIEF HIGHWAY ENGINEER
EXAMINED	
PASSED	
APPROVED	

OBSERVATION PLATFORM AT PIER 5
SBL RT. 2 SEC. 77 BR
WINNEBAGO COUNTY
STA. 208+00

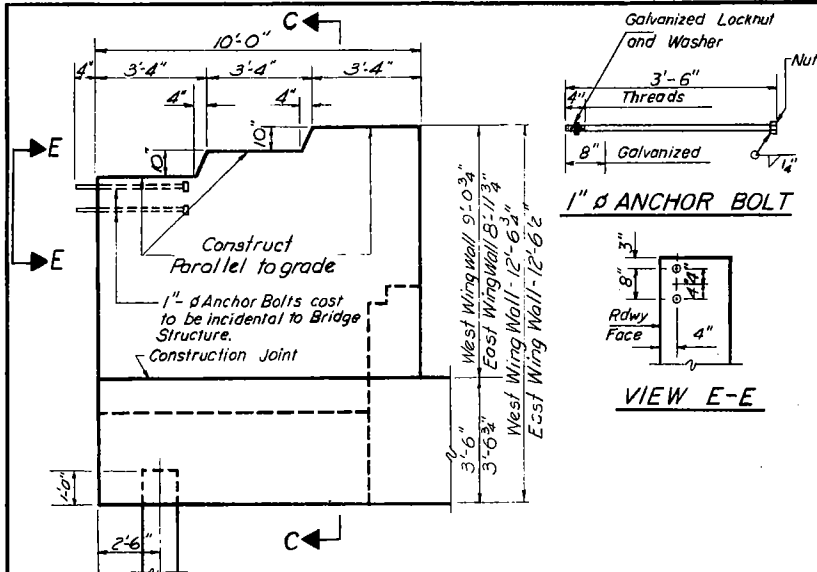
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. //
2	77BR	WINNEBAGO	35	19	20 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

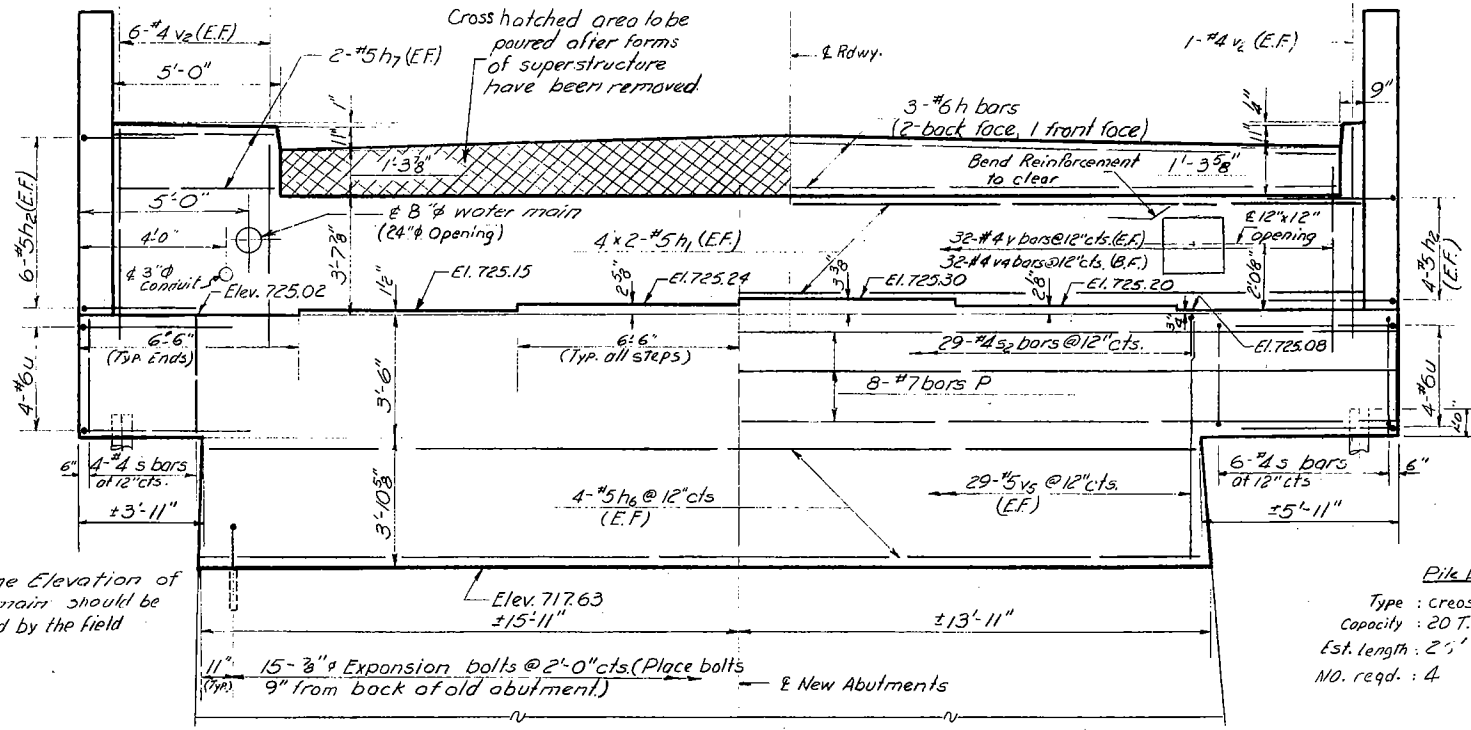


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

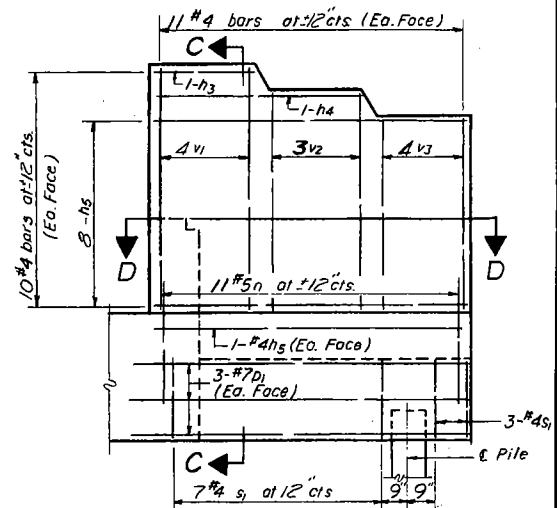
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SHEET NO. 12				
20 SHEETS				



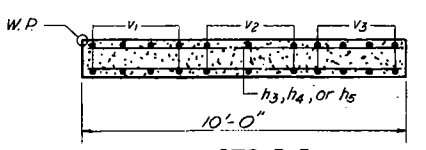
VIEW E-E



ELEVATION



WING WALL ELEVATION

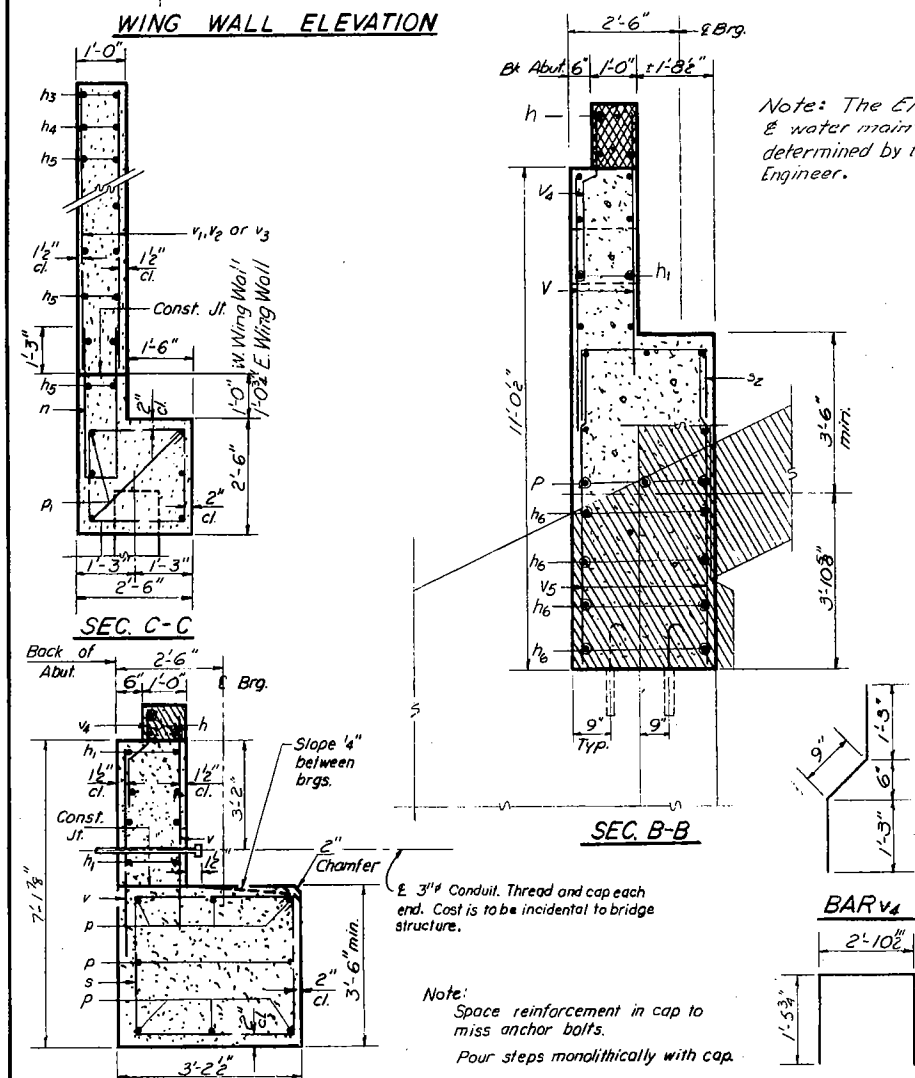


SEC. D-D

NORTH ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	3	#6	31'-0"	—
h1	16	#5	19'-0"	—
h2	20	#5	5'-0"	—
h3	4	#4	3'-1"	—
h4	4	#4	6'-5"	—
h5	36	#4	9'-9"	—
h6	8	#5	28'-11"	—
h7	4	#5	4'-9"	—
n	22	#5	7'-9"	—
p	8	#7	38'-9"	—
p1	12	#7	10'-0"	—
s	10	#4	12'-10"	—
s1	20	#4	9'-5"	—
s2	29	#4	5'-10"	—
u	8	#6	8'-10"	—
v	64	#4	6'-0"	—
v1	16	#4	8'-9"	—
v2	26	#4	7'-11"	—
v3	16	#4	7'-1"	—
v4	32	#4	3'-3"	—
v5	38	#5	7'-0"	—
Class X Concrete			Cu. Yds.	49.1
Reinforcement Bars			Lbs.	3630
Creosoted Piles			Lin. Ft.	104
Expansion bolts			Ea.	15
Name Plates			Ea.	1

NORTH ABUTMENT
S.B.I. RT. 2 SEC. 77 BR.
WINNEBAGO COUNTY
STA. 208+00



SEC. B-B

BAR V4

BAR S2

BAR n

BAR u

BAR h2

Note: Hotched area to be removed to elevation ± 717.63 at abutment wall, to 1'-6" below finished grade at wing wall. Reinforcement in wing walls shall be cut off at top of remainder of existing wing wall. Vertical reinforcement in abutment wall shall be cut off 2'-0" from remainder of existing concrete, clean and bent into new concrete. NO REBARS SO ADDED EXPANSION BOLTS.

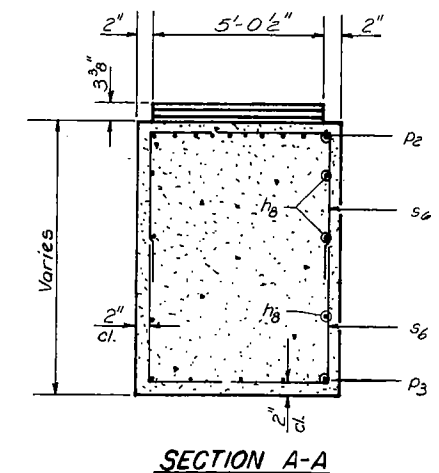
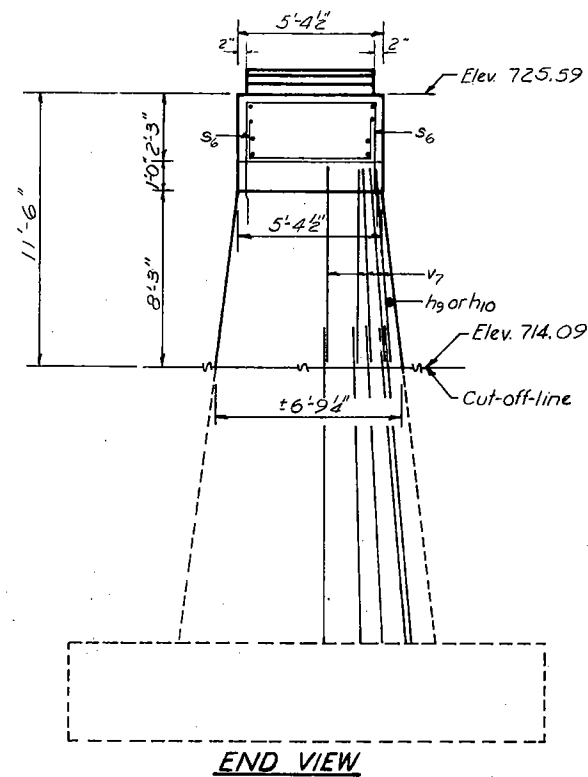
DESIGNED A.Y. K. Haysinger
CHECKED Wei Hsing
DRAWN Jmheninger
CHECKED Wei Hsing

EXAMINED
PASSED
APPROVER

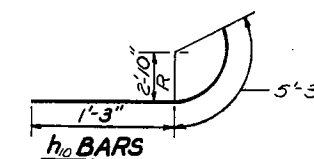
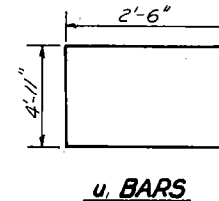
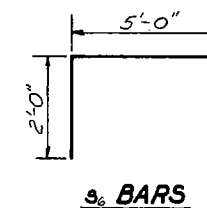
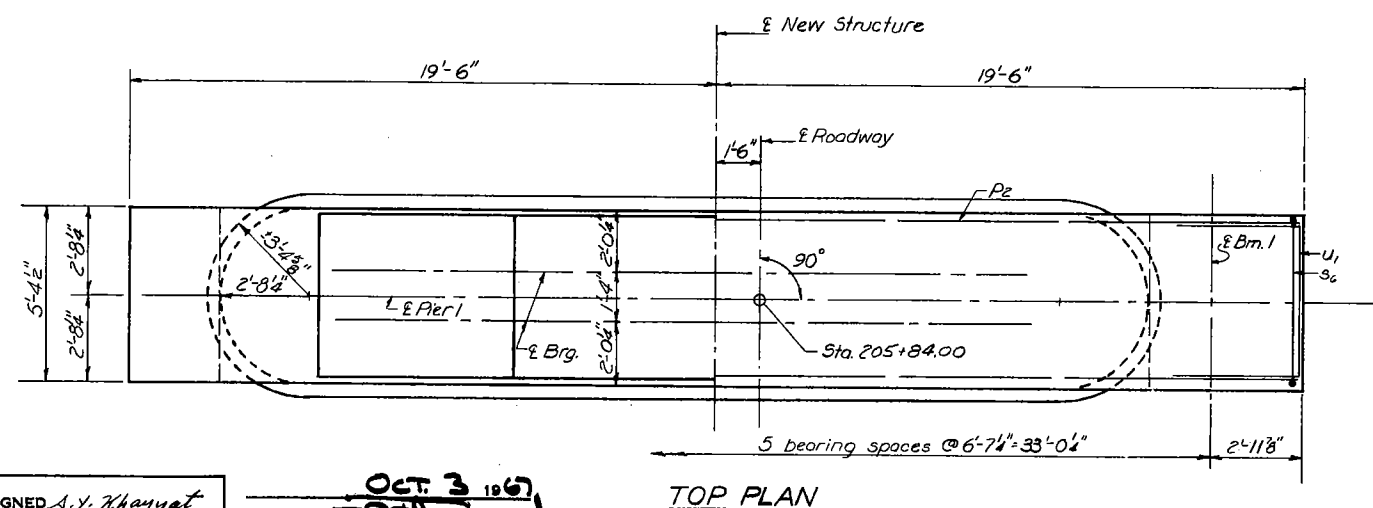
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7. A. 2	77BR	WINNEBAGO	35	22
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.	

SHEET NO. 14

20 SHEETS



<u>BILL OF MATERIAL</u>				
Bar	No.	Size	Length	Shape
h_3	12	#5	20'-0"	—
h_9	16	#5	25'-0"	—
h_{10}	32	#5	6'-6"	⌋
P_2	10	#8	38'-9"	—
P_3	10	#5	6'-0"	—
a_2	50	#4	9'-0"	□
u_1	6	#6	9'-11"	□
v_7	68	#5	10'-6"	—
Class X Concrete			Cu.Yds.	80.7
Reinforcement Bars			Lbs.	3120



Note:
Remove top of existing pier to
elev. 714.09, clean & leave the
existing reinforcement in place.
All edges shall have standard
3/4" chamfers.

DESIGNED *A.Y. Khayyat*
CHECKED *Nei Hsiao*
DRAWN *Jm.heninger*
CHECKED *Nei Hsiao*

OCT. 3 1967

EXAMINER *[Signature]*
ENGINEER IN CHARGE OF TRAFFIC STRUCTURES

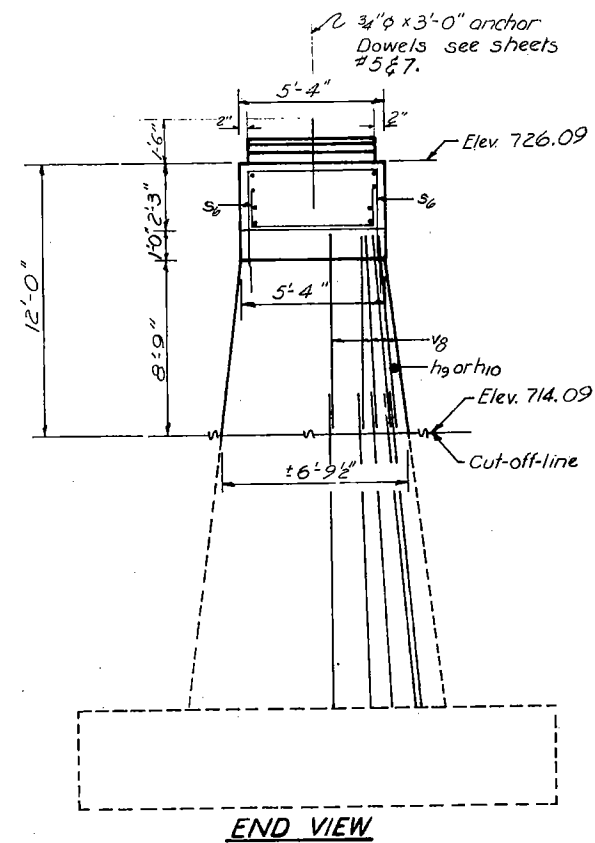
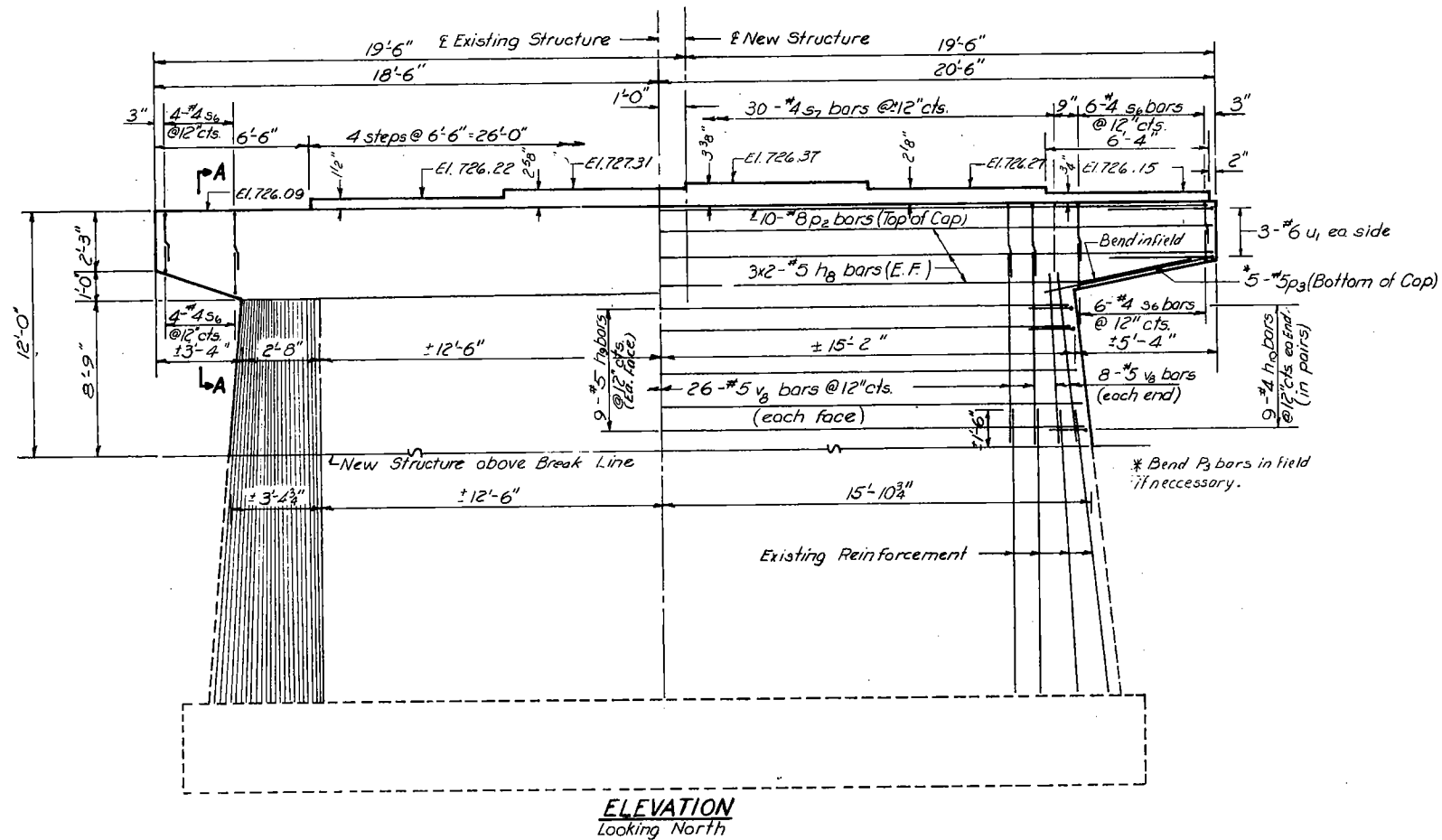
PASSED *[Signature]*
ENGINEER OF DESIGN

APPROVED *[Signature]*
CHIEF HIGHWAY ENGINEER

PIER 1
SBI RT 2 SEC. 77 BR.
WINNEBAGO COUNTY
STA. 208+00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

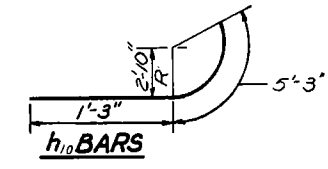
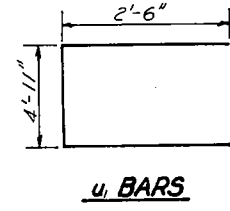
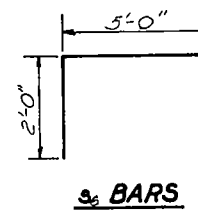
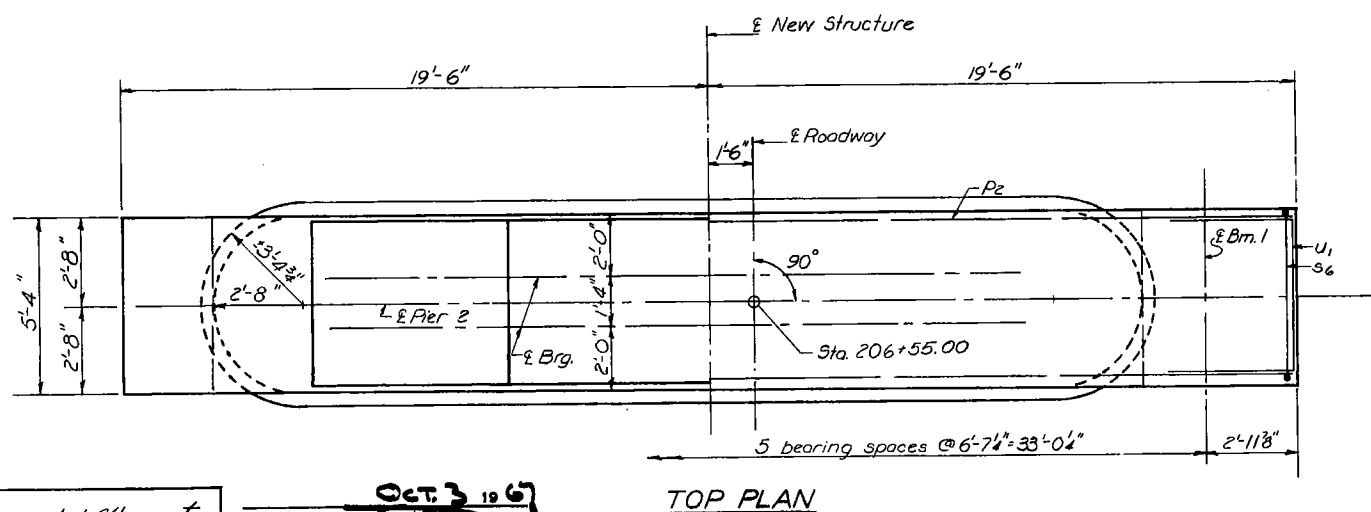
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	77BR	WINNEBAGO	35	23
SHEET NO. 15				
20 SHEETS				
FED. ROAD DIST. NO. 7				
ILLINOIS				
FED. AID PROJECT				



SECTION A-A

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_8	12	#5	20'-0"	—
h_9	18	#5	25'-0"	—
h_{10}	36	#5	6'-6"	—
p_2	10	#8	38'-9"	—
p_3	10	#5	6'-0"	—
s_6	50	#4	9'-0"	□
u_1	6	#6	9'-11"	□
v_2	68	#5	11'-0"	—
Class X Concrete				Cu.Yds 83.4
Reinforcement Bars				Lbs 3230



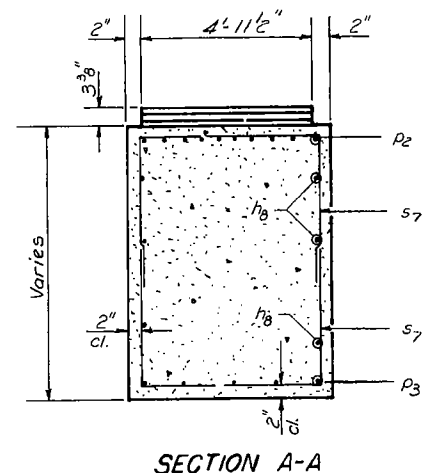
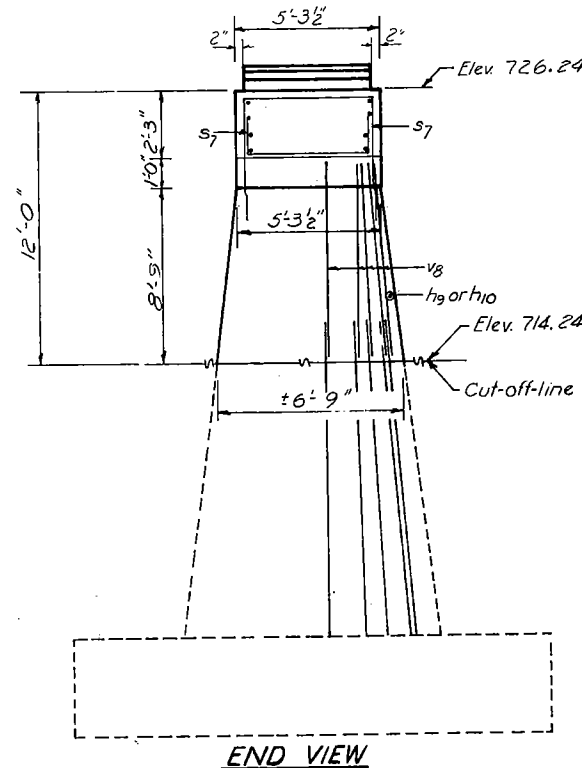
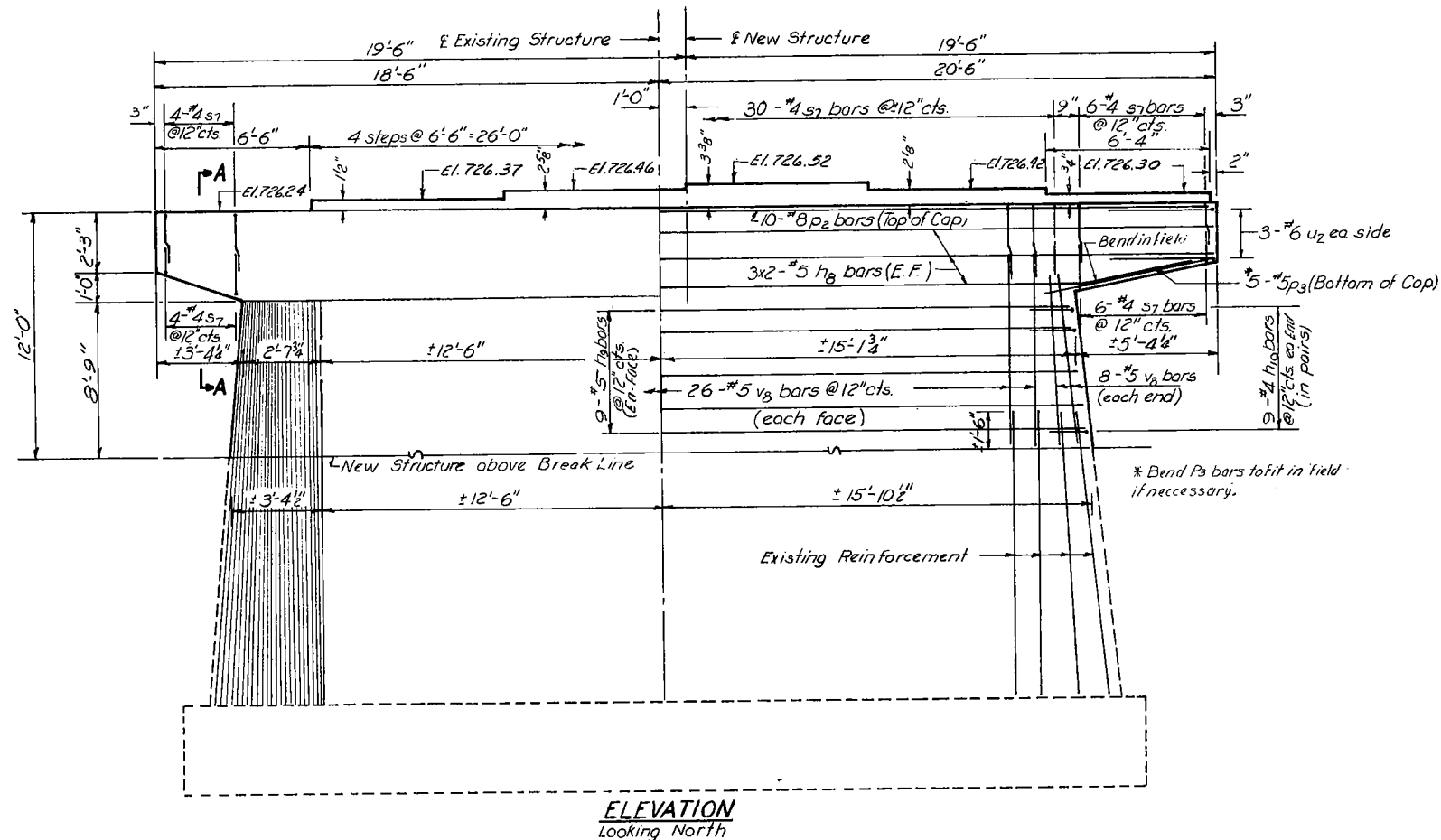
Note:
Remove top of existing pier to elev. 714.09, clean & leave the existing reinforcement in place.
All edges shall have standard 3/4" chamfers.

DESIGNED <i>A.V. Khayyat</i>	EXAMINED <i>[Signature]</i>
CHECKED <i>Wes. H. [Signature]</i>	PASSED <i>W.C. Baumann</i>
DRAWN <i>J.M. Heninger</i>	APPROVED <i>[Signature]</i>
CHECKED <i>Wes. H. [Signature]</i>	

PIER 2
SBI RT 2 SEC. 77 BR.
WINNEBAGO COUNTY
STA. 208+00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

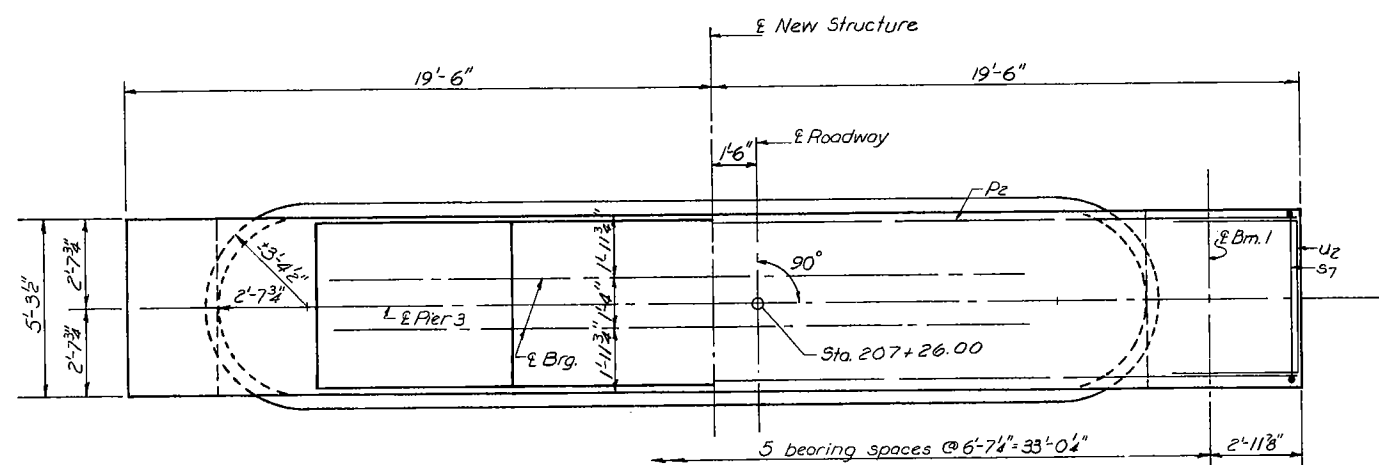
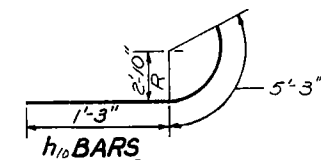
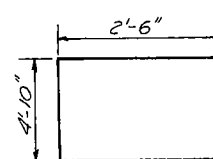
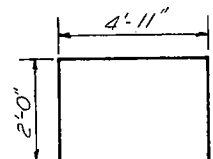
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16
2	77BR	WINNEBAGO	35	24	20 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS			
		FED. AID PROJECT			



PIER 3
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h8	12	#5	20'-0"	—
h9	18	#5	25'-0"	—
h10	36	#5	6'-6"	—
p2	10	#8	38'-9"	—
p3	10	#5	6'-6"	—
s7	50	#4	8'-11"	□
u2	6	#6	9'-10"	□
v8	68	#5	11'-0"	—
Class X Concrete		Cu.Yds.	83.1	
Reinforcement Bars		Lbs.	3230	

Note:
Remove top of existing pier to elev. 714.24, clean & leave the existing reinforcement in place.
All edges shall have standard 3/4" chamfers.

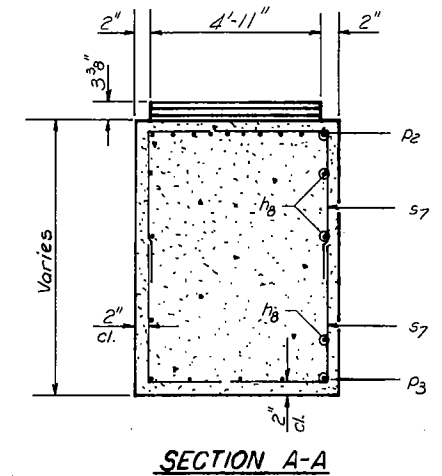
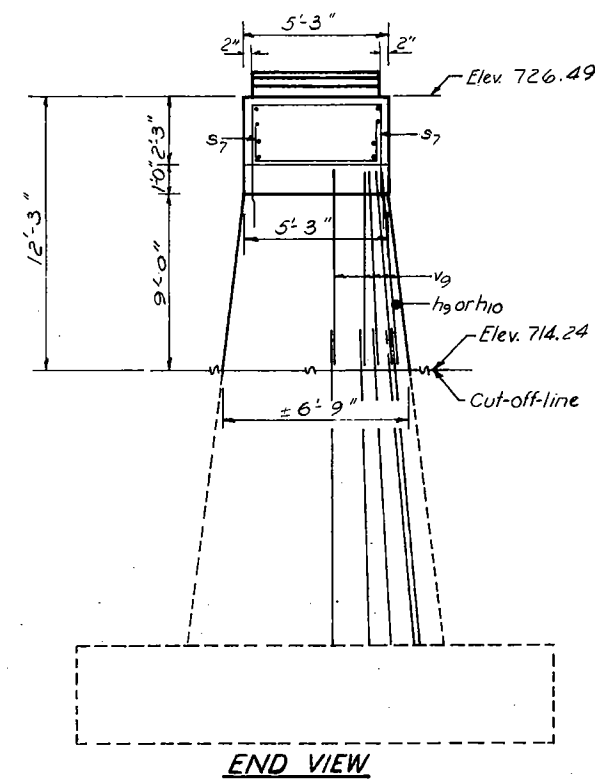
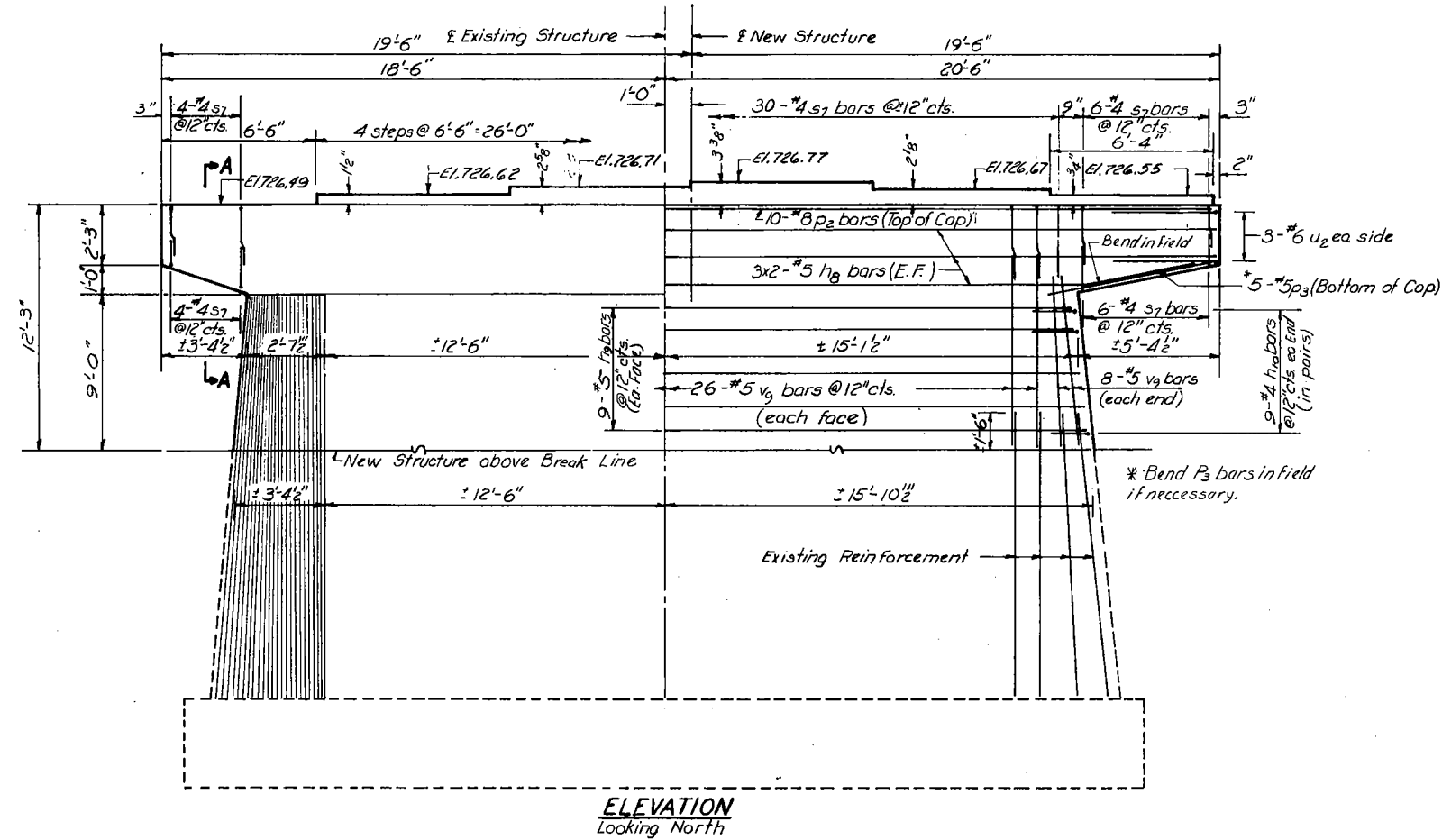


DESIGNED *A.Y. Khayyat*
CHECKED *Wei Hsiny*
DRAWN *Jm. Heninger*
CHECKED *Wei Hsiny*
EXAMINED *Oct 3 1967*
PASSED *W.B. Boush*
APPROVED *W.B. Boush*

PIER 3
SBI RT 2 SEC. 77 BR.
WINNEBAGO COUNTY
STA. 208+00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

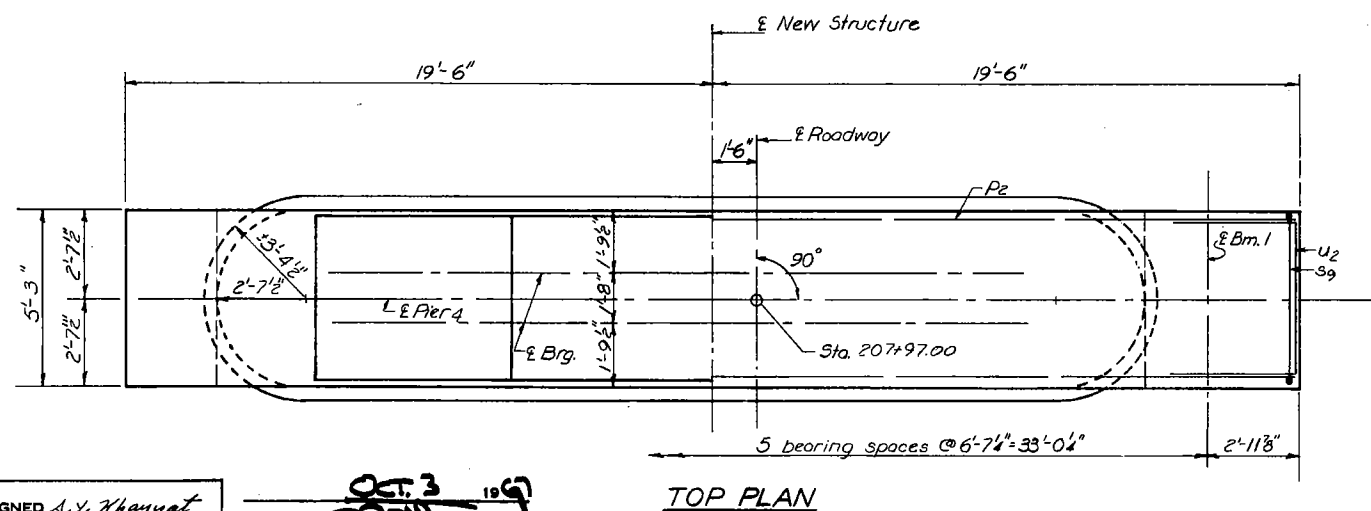
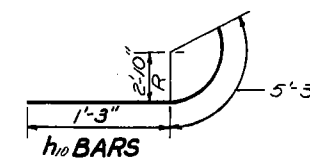
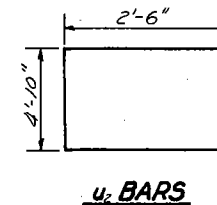
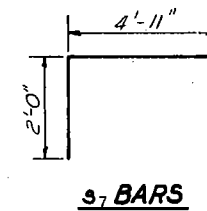
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / TOTAL SHEETS
2	77BR	WINNEBAGO	35	25	20 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



PIER 4
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_8	12	#5	20'-0"	—
h_9	18	#5	25'-0"	—
h_{10}	36	#5	6'-6"	⌋
p_2	10	#8	38'-9"	—
p_3	10	#5	6'-0"	—
s_7	50	#4	8'-11"	□
u_2	6	#6	9'-10"	⌊
v_9	68	#5	11'-6"	—
Class X Concrete				Cu. Yds. 84.3
Reinforcement Bars				Lbs. 3260

Note:
Remove top of existing pier to elev. 714.24, clean & leave the existing reinforcement in place.
All edges shall have standard 3/4" chamfers.



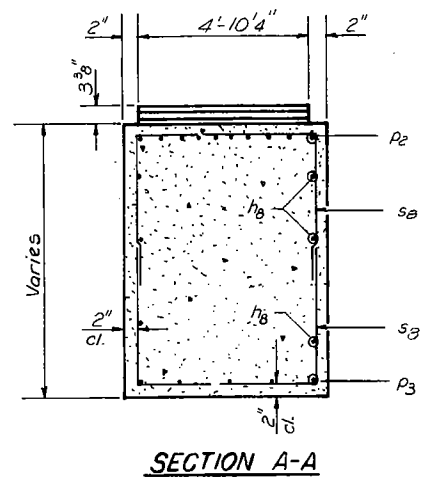
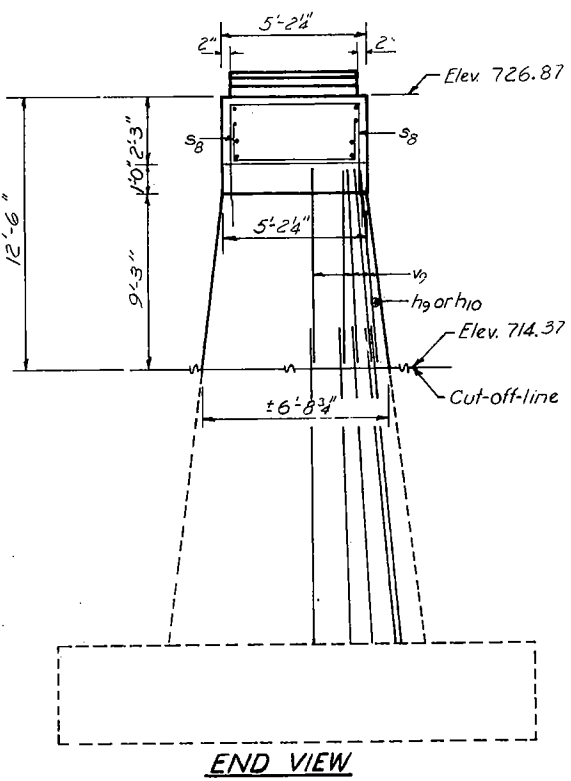
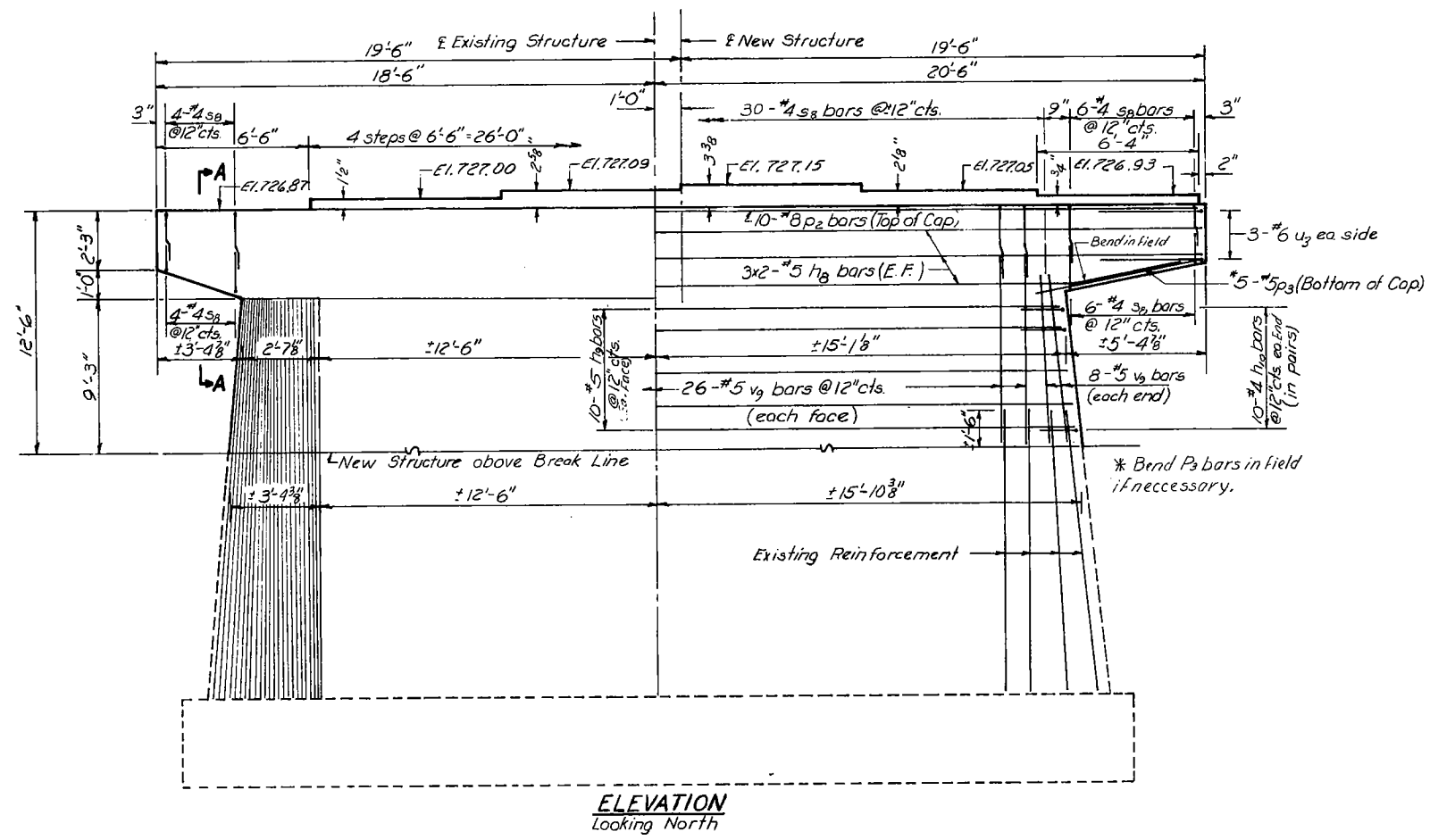
DESIGNED *A.Y. Khayyat*
CHECKED *Nel Heinger*
DRAWN *J.m. Heninger*
CHECKED *Nel Heinger*

EXAMINED *[Signature]*
PASSED *[Signature]*
APPROVED *[Signature]*

PIER 4
SBI RT 2 SEC. 77BR
WINNEBAGO COUNTY
STA. 208+00

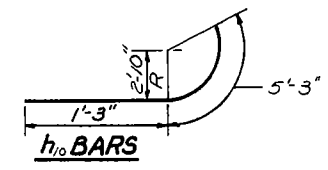
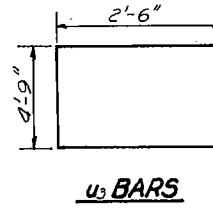
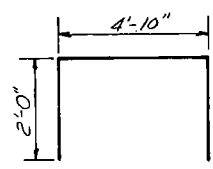
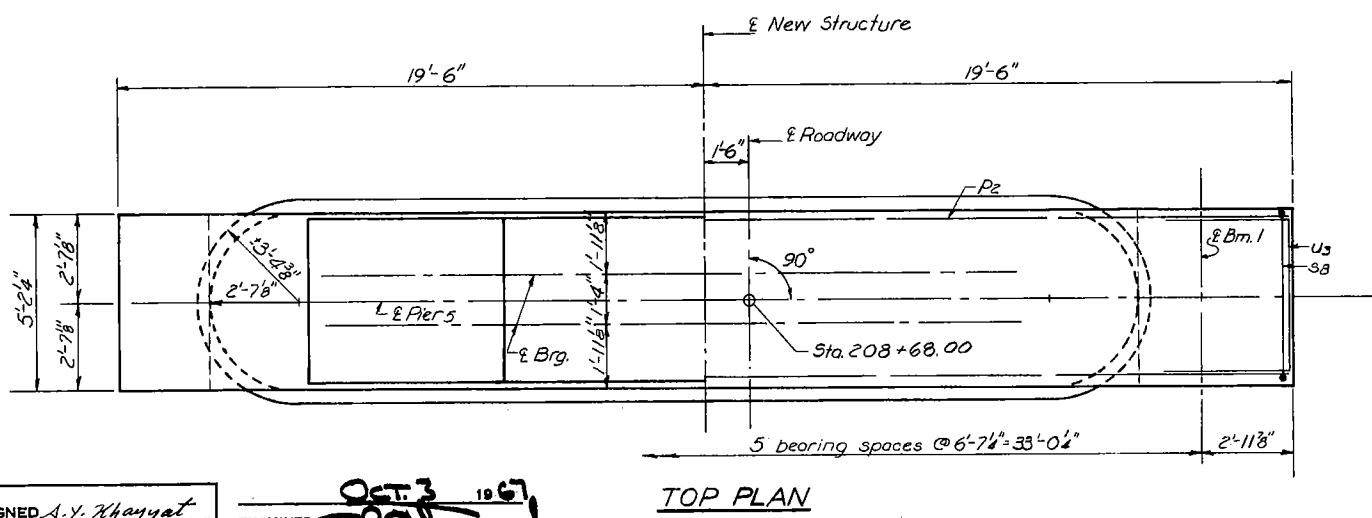
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 18
S. R. 2	77BR	WINNEBAGO	35	26	20 SHEETS
F. A. 2					
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



PIER 5
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₈	12	#5	20'-0"	—
h ₉	20	#5	25'-0"	—
h ₁₀	40	#5	6'-6"	—
P ₂	10	#8	38'-9"	—
P ₃	10	#5	6'-0"	—
s ₈	50	#4	8'-10"	□
u ₃	6	#6	9'-9"	□
v ₉	68	#5	11'-6"	—
Class X Concrete				Cu. Yds. 85.2
Reinforcement Bars				Lbs. 3340



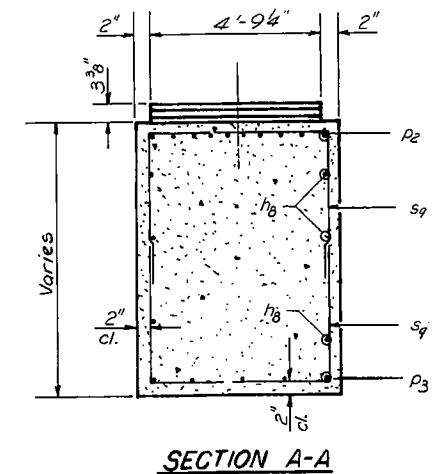
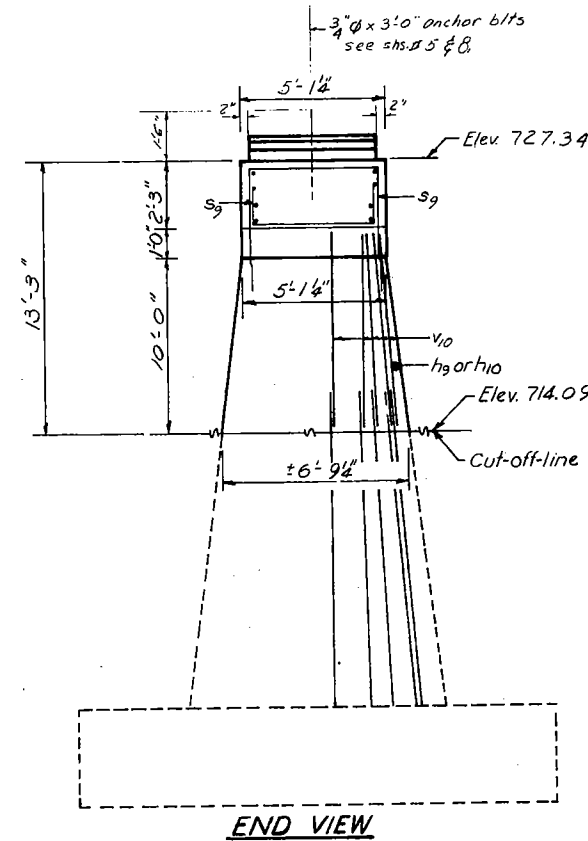
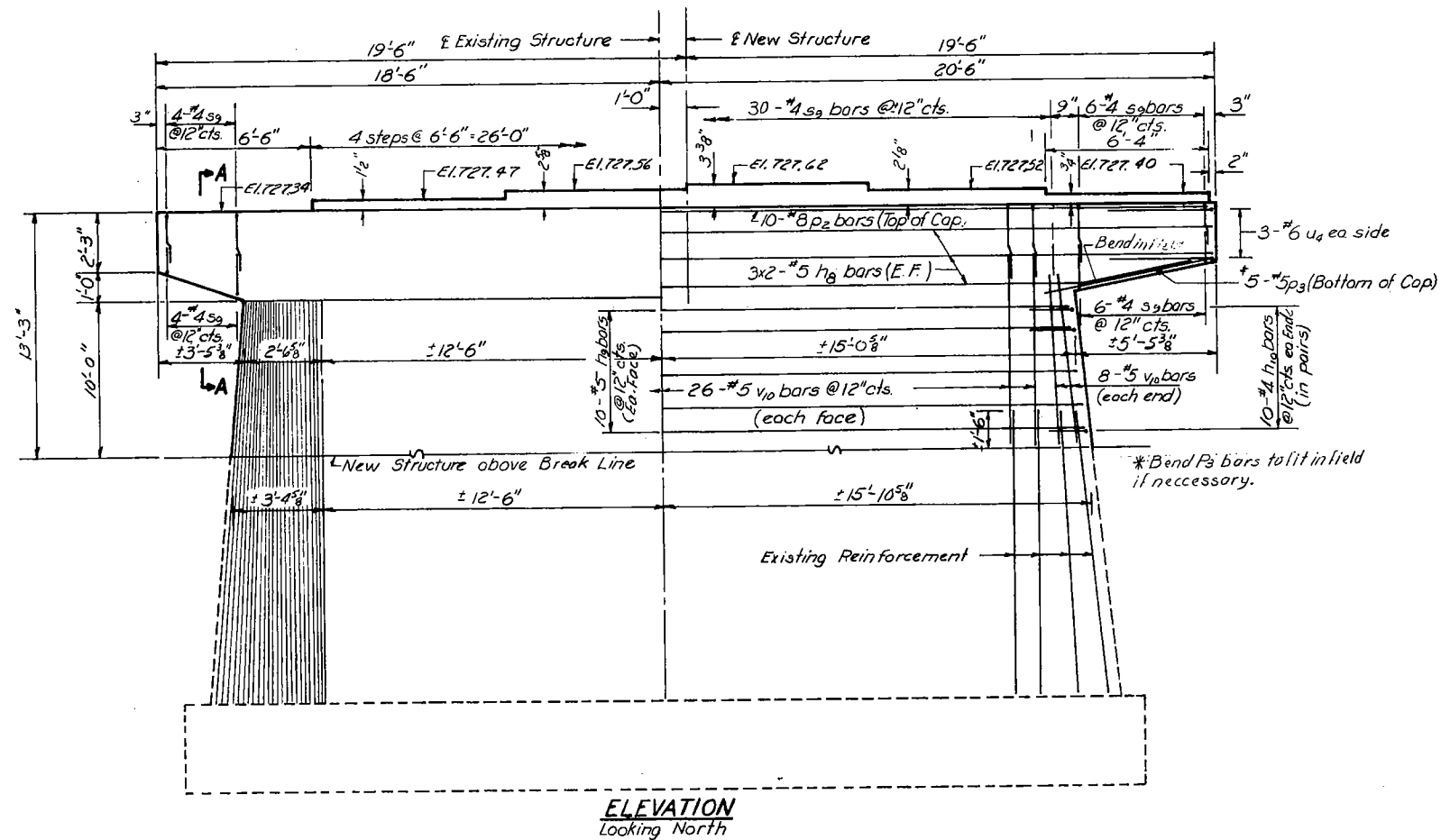
Note:
Remove top of existing pier to elev. 714.37, clean & leave the existing reinforcement in place. All edges shall have standard 3/4" chamfers.

DESIGNED A.Y. Khayyat
CHECKED W. H. H. H.
DRAWN J. M. H. H.
CHECKED W. H. H. H.
OCT 3 1967
EXAMINED
PASSED
APPROVED

PIER 5
SBI RT 2 SEC 77 BR
WINNEBAGO COUNTY
STA. 208+00

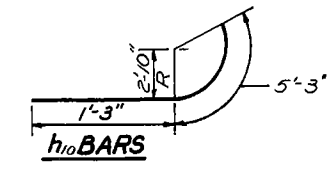
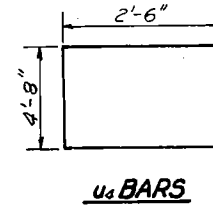
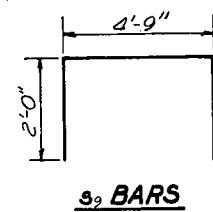
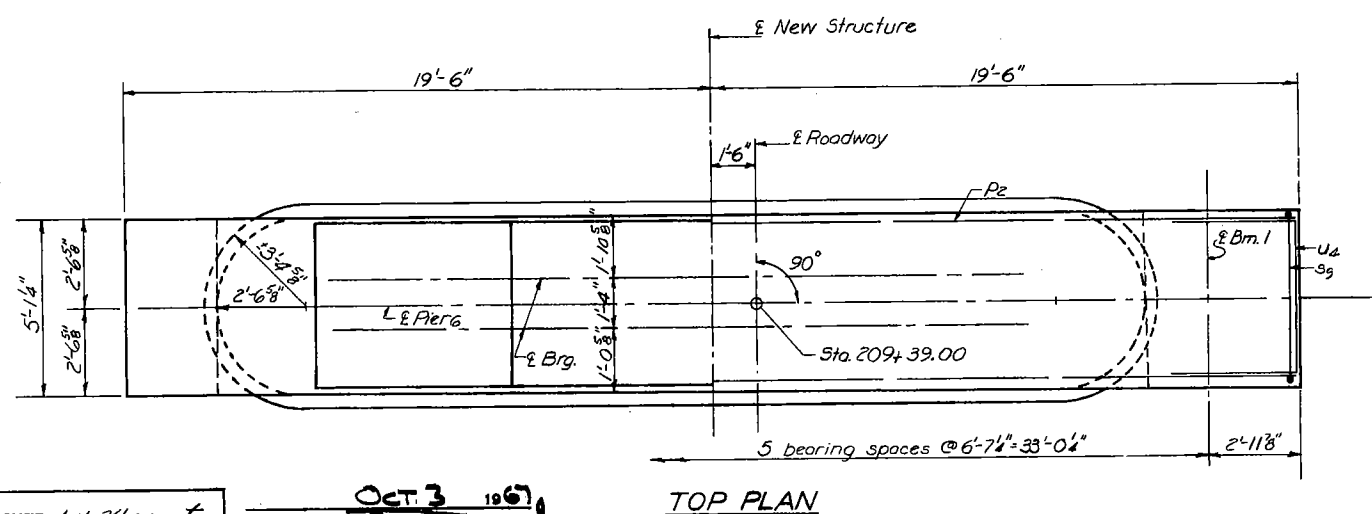
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 19
2	77BR	WINNEBAGO	35	27	20 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



PIER 6
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₈	12	#5	20'-0"	—
h ₉	20	#5	25'-0"	—
h ₁₀	40	#5	6'-6"	—
P ₂	10	#8	38'-9"	—
P ₃	10	#5	6'-0"	—
S ₉	50	#4	8'-9"	□
u ₄	6	#6	9'-8"	□
v ₁₀	68	#5	12'-3"	—
Class X Concrete				Cu.Yds. 89.4
Reinforcement Bars				Lbs. 3390



Note:
Remove top of existing pier to elev. 714.09, clean & leave the existing reinforcement in place.
All edges shall have standard 3/4" chamfers.

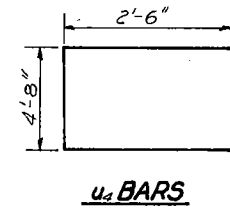
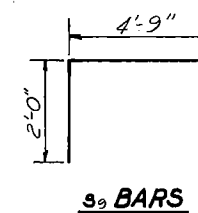
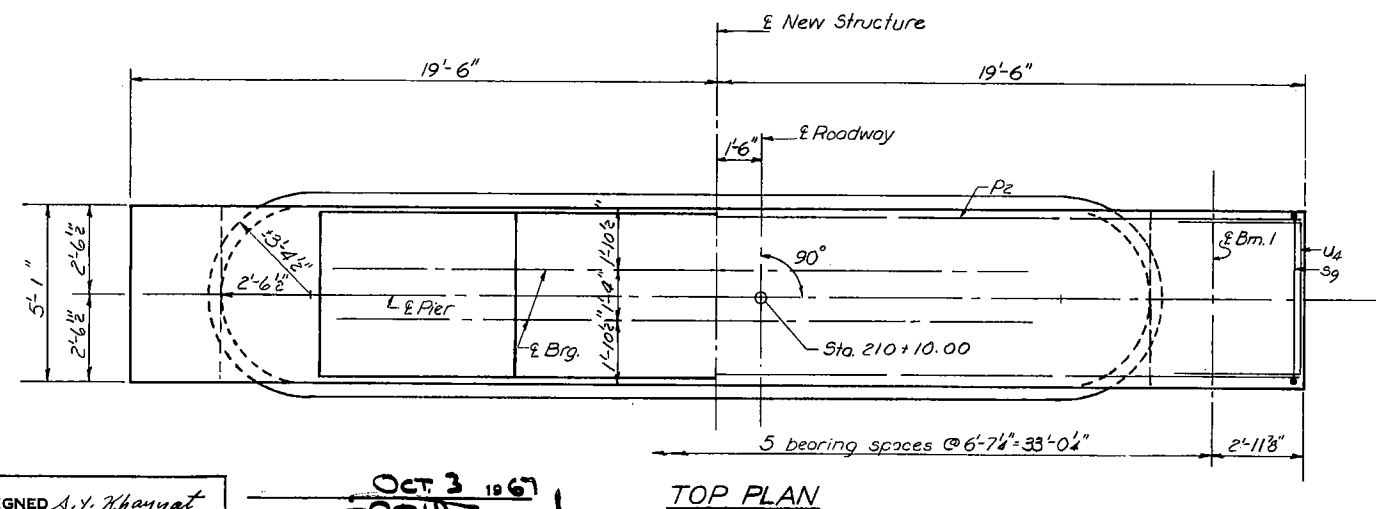
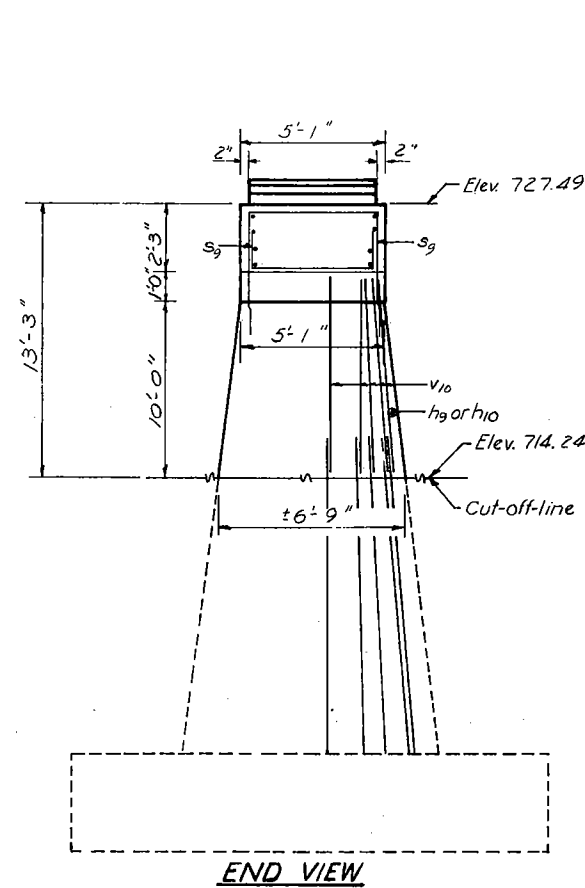
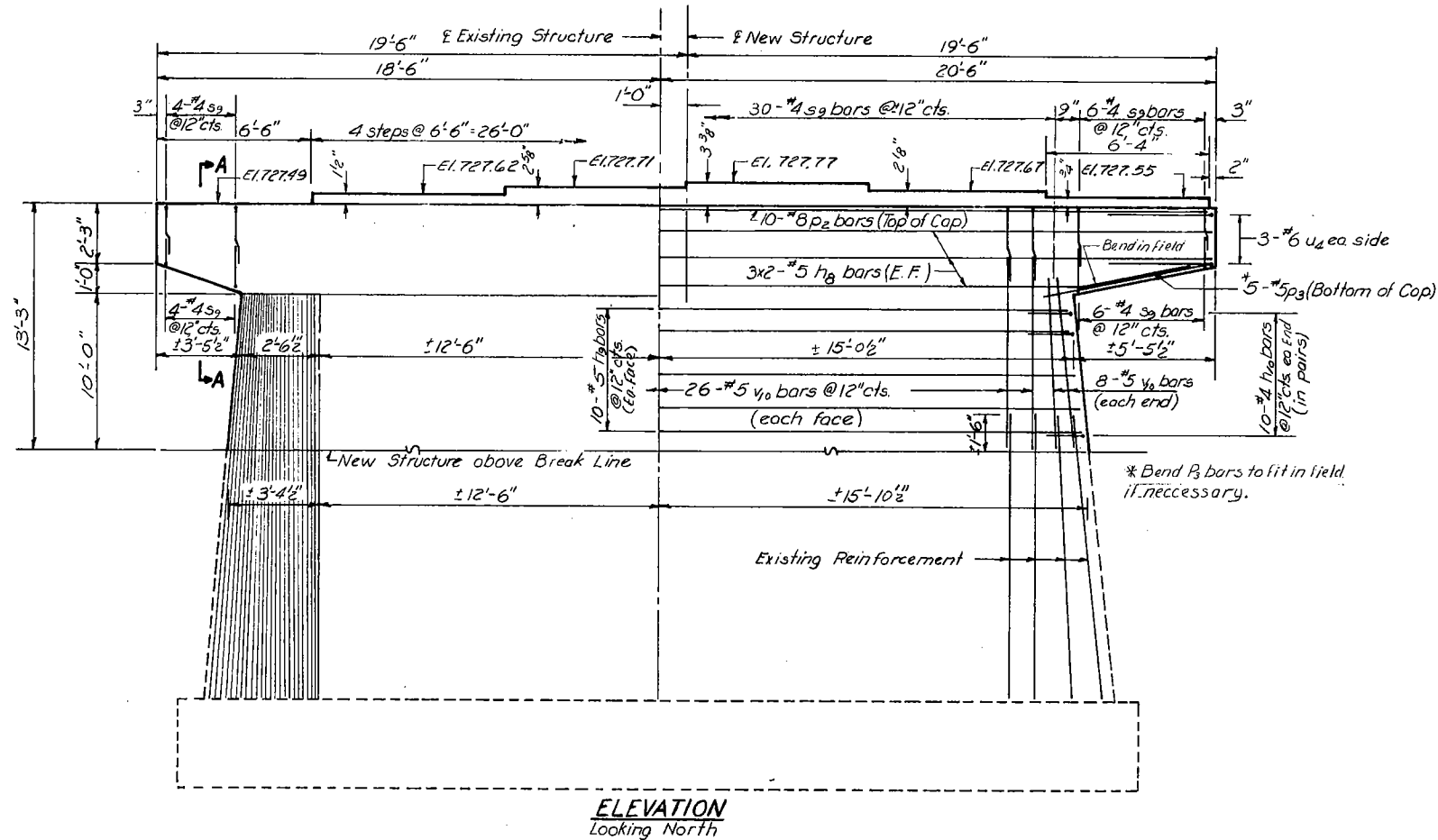
DESIGNED A.Y. Khayyat
CHECKED M.H. Hsiao
DRAWN Jm. Heninger
CHECKED M.H. Hsiao

OCT 3 1967
EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]

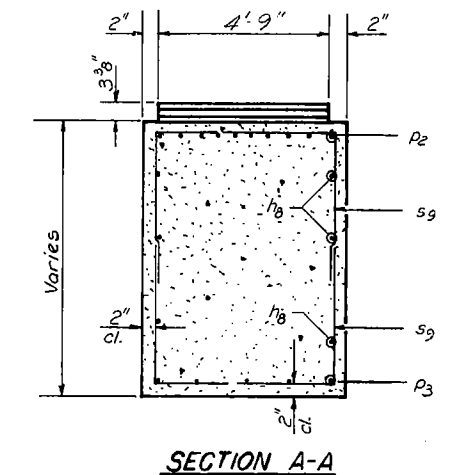
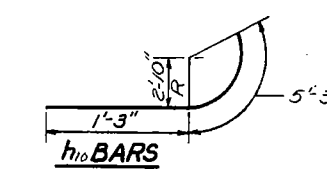
PIER 6
SBI RT 2 SEC 77BR.
WINNEBAGO COUNTY
STA. 208+00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
2	77BR	WINNEBAGO	35	28	20
SHEET NO. 20					
20 SHEETS					



Note:
Remove top of existing pier to elev. 714.24, clean & leave the existing reinforcement in place.
All edges shall have standard 3/4" chamfers.



PIER 7
BILL OF MATERIAL

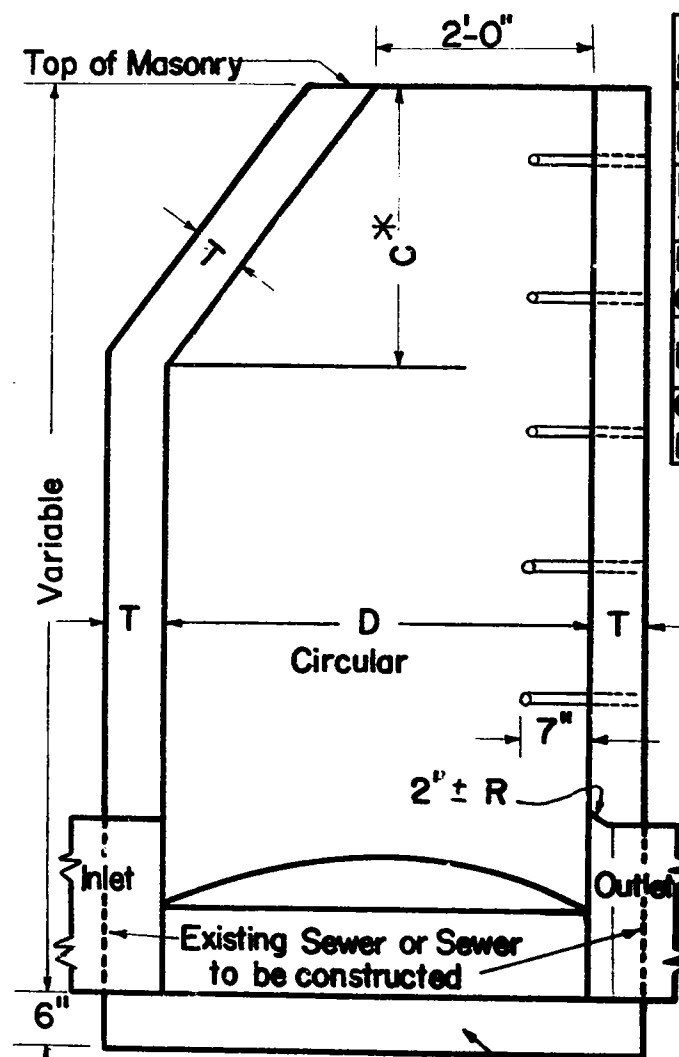
Bar	No.	Size	Length	Shape
h ₈	12	#5	20'-0"	—
h ₉	20	#5	25'-0"	—
h ₁₀	40	#5	6'-6"	—
P ₂	10	#8	38'-9"	—
P ₃	10	#5	6'-0"	—
s ₉	50	#4	8'-9"	□
u ₄	6	#6	9'-8"	□
v ₁₀	68	#5	12'-3"	—
Class X Concrete				Cu.Yds. 89.0
Reinforcement Bars				Lbs. 3390

DESIGNED A.Y. Khayyat
CHECKED N.A. Harris
DRAWN J.M. Heninger
CHECKED N.A. Harris

OCT 3 1967
EXAMINED C.E. Thummett
PASSED W.E. Bauman
APPROVED J.E. Harris

PIER 7
SBI RT 2 SEC 77 BR
WINNEBAGO COUNTY
STA. 208+00

STANDARD DESIGN OF MANHOLE TYPE A



ALTERNATE MATERIALS For Walls	D	C	T (Min.)
Concrete Masonry Units	4'-0"	2'-6"	5"
Bldg. Brick, Gr. SW, from Clay or Shale	4'-0"	2'-6"	8"
Precast Reinforced Concrete Risers	4'-0"	2'-6"	4"
Monolithic Concrete	4'-0"	2'-6"	6"
Concrete Building Brick, Grade A	4'-0"	2'-6"	8"

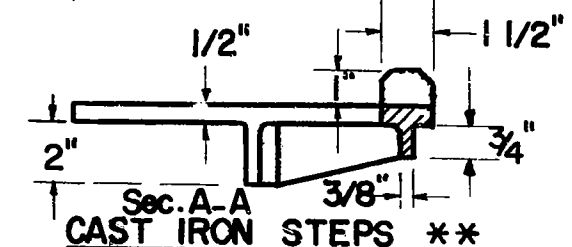
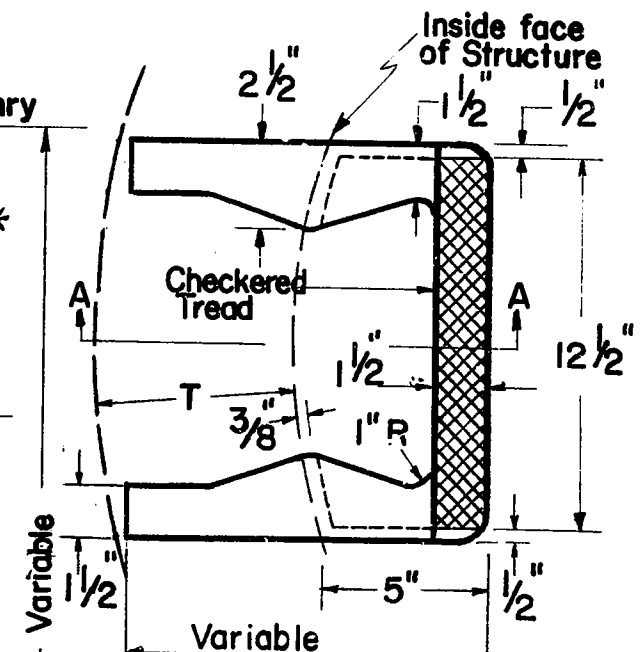
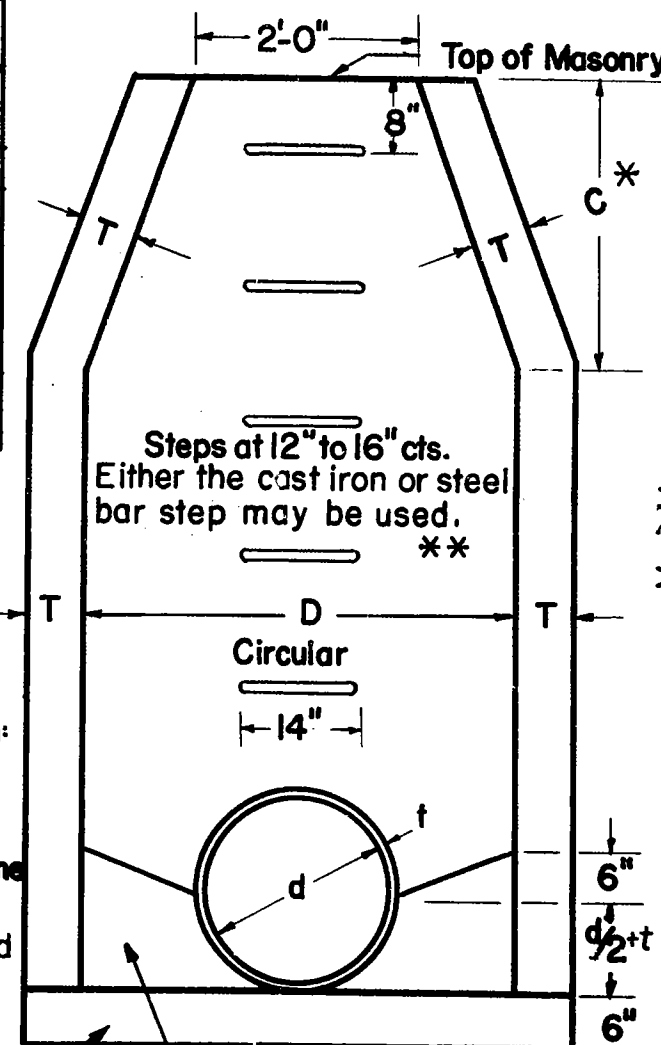
DIAMETER of MAIN SEWER	D
18" and under	4'-0"
21" to 42" inclusive	5'-0"

NOTES

Manhole Type A, shall be provided with: Type I frame and Closed Lid or Type 5 frame and Closed Lid

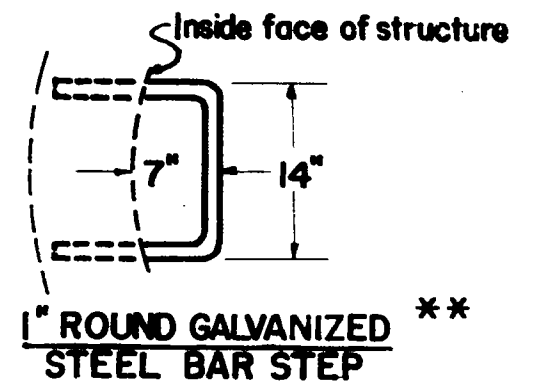
The contract unit price for Manholes Type A shall include the Frame or Frame and Closed Lid as specified.

* Dimension "C" for Precast Reinforced Concrete Risers may vary from the dimension given to plus 6 inches.



Cast iron steps shall be Gray Iron conforming to the requirements of Article 710.17 of the Standard Specifications.

Steps shall be embedded into wall a minimum of 4 inches. Steps shall not be extended on the outside.



See Plan Sheets for elevation of invert and diameter of sewer.

Bottom to be either Class X Concrete or Precast Reinforced Concrete slab not less than 12" wide with sand cushion. Furnishing and installing sand cushion to be included in the contract unit price for Manholes Type A.

Steps shall be omitted for work in Cook County, when the depth of the Manhole is 10 feet or less.

** The cast iron and the steel bar steps as detailed hereon are typical. Steps of other design and material that will conform to the minimum requirements of the steps shown, may be used when approved by the Engineer.

REVISIONS	
G.R.	8-1-68
W.F.	12-1-70

ISSUED 11-3-53

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

PASSED Dec. 1 1970
W. Van Ausdall
ENGINEER OF ROAD PLANS AND CONTRACTS

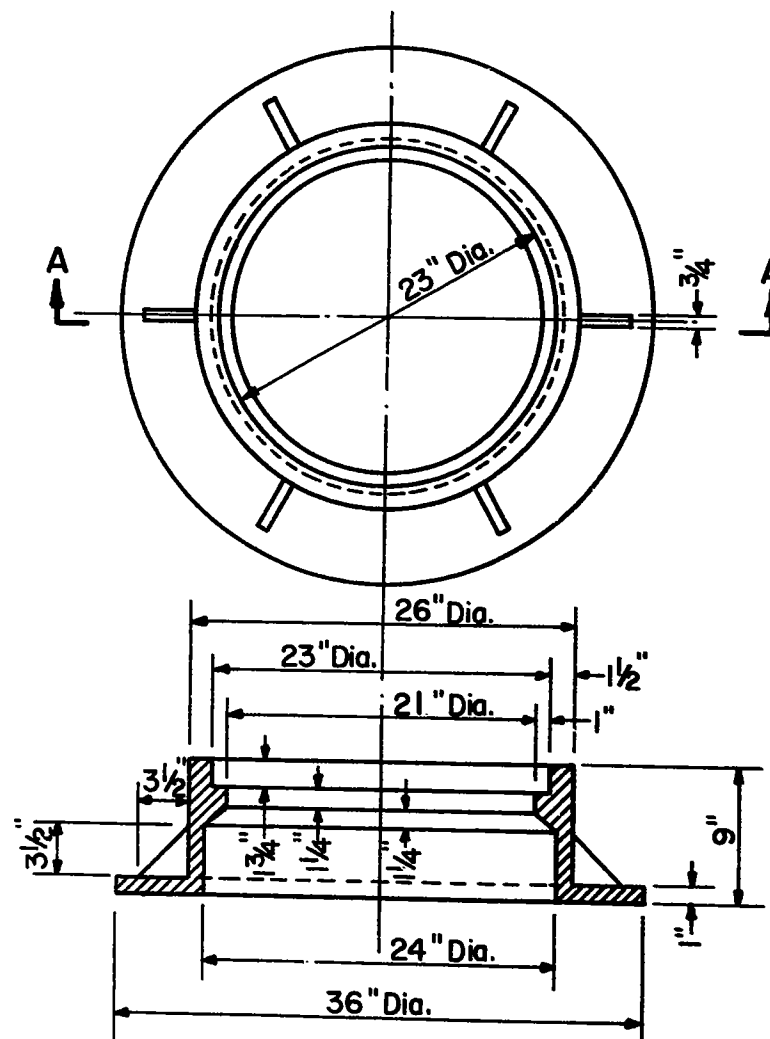
APPROVED Dec. 1 1970
W. E. Baumann
ENGINEER OF DESIGN

STANDARD 1527-5

Revised 9-9-66 I.E.B. & G.M.M. Rev. 12-20-57 W.F.A.
Revised 6-10-66 WF J.T.M. Rev. 6-20-58 Rev. J.F.L. 11-12-58
Revised N.M.S. 2-9-59

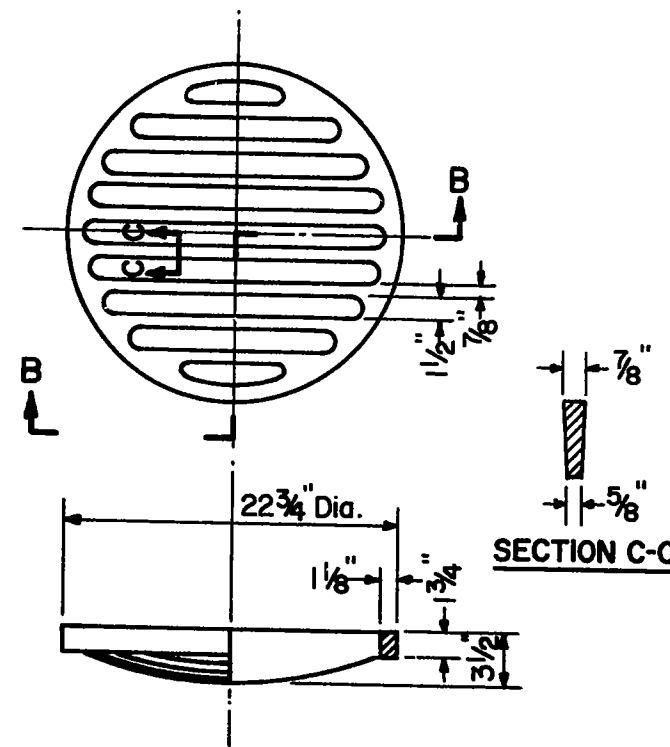
B-6.0

STANDARD DESIGN FRAME AND LIDS TYPE I



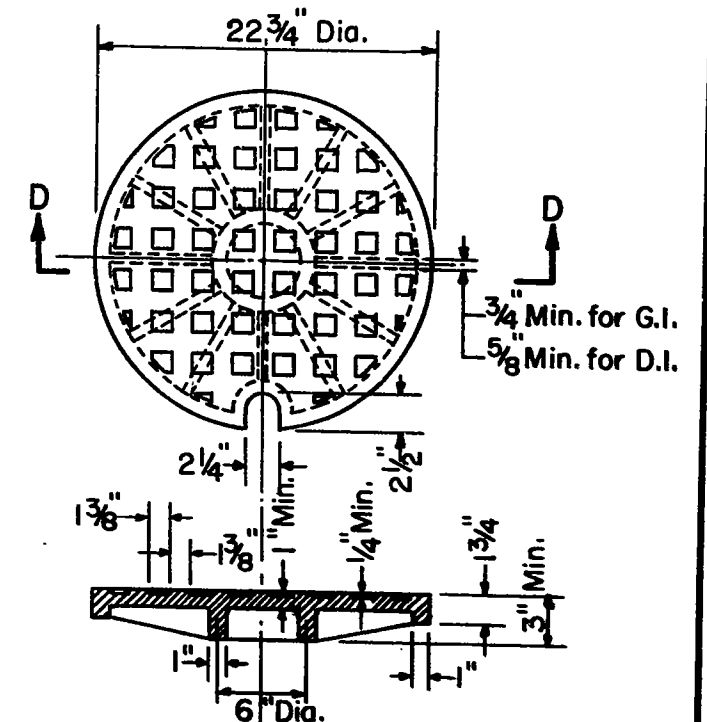
SECTION A-A

FRAME
WT. 390 Lbs.

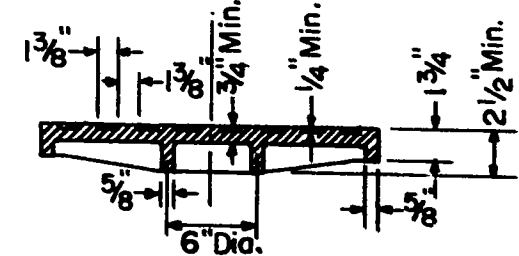


SECTION B-B

OPEN LID
WT. 116 Lbs.



SECTION D-D OF GRAY IRON LID
WT. 150 Lbs.



SECTION D-D OF DUCTILE IRON LID
WT. 115 Lbs.

CLOSED LID

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS		ISSUED 1-4-65	
PASSED Jan. 17 1972		REVISIONS	
<i>W VanAusdall</i> Engineer of Road Plans And Contracts		W.F.	9-15-65
APPROVED Jan. 17 1972		W.F.	3-11-68
<i>W E Baumann</i> Engineer of Design		W.F.	1-17-72

The open and closed lids may be made of either Gray Iron conforming to the Standard Specifications or Ductile Iron conforming to the Specifications for Ductile Iron Casting, A.S.T.M. Designation: A536, Grade 60-40-18, and shall be proof loaded in accordance with Federal Specifications RR-F-621 b, Section 3.8. The proof load shall be 25,000 lbs. on a 9"x 9" cast block.