

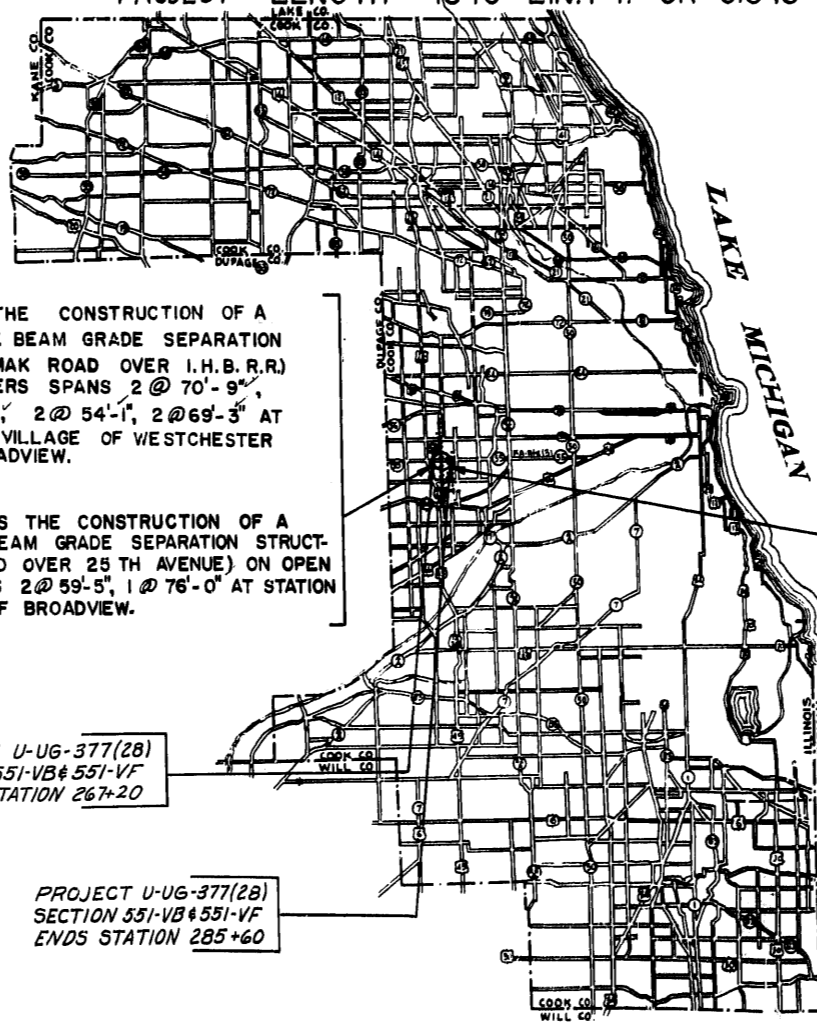
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 55	551-VB	Cook	9	1
S. P. R. REG. NO. 4 ILLINOIS PROJECT U-UG-377(28)			57	

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

DISTRICT 10
S.B.I. ROUTE 55 (F.A. ROUTE 131) SECTION 551-VB & 551-VF
CERMAK ROAD GRADE SEPARATION
OVER I.H.B. R.R.
PROJECT U-UG-377 (28)
COOK COUNTY

GROSS LENGTH 1840 LIN. FT.
 PROJECT LENGTH 1840 LIN. FT. OR 0.348 MILES



SECTION 551-VB INCLUDES THE CONSTRUCTION OF A CONTINUOUS WIDE FLANGE I BEAM GRADE SEPARATION STRUCTURE (CARRYING CERMAK ROAD OVER I.H.B. R.R.) ON OPEN ABUTMENTS AND PIERS SPANS 2 @ 70'-9", 1 @ 59'-1", 1 @ 90'-3", 2 @ 47'-3", 2 @ 54'-1", 2 @ 69'-3" AT STATION 272+40.47 IN THE VILLAGE OF WESTCHESTER AND THE VILLAGE OF BROADVIEW.

SECTION 551-VB ALSO INCLUDES THE CONSTRUCTION OF A CONTINUOUS WIDE FLANGE I BEAM GRADE SEPARATION STRUCTURE (CARRYING CERMAK ROAD OVER 25 TH AVENUE) ON OPEN ABUTMENT AND PIERS, SPANS 2 @ 59'-5", 1 @ 76'-0" AT STATION 283+25.66 IN THE VILLAGE OF BROADVIEW.

SECTION 551-VF INCLUDES THE FURNISHING, FABRICATING SHOP PAINTING AND DELIVERY OF THE STRUCTURAL STEEL f.o.b. THE UNLOADING POINT AT BROADVIEW, FOR A 10 SPAN CONTINUOUS WIDE FLANGE I BEAM STRUCTURE (CARRYING CERMAK ROAD OVER I.H.B. R.R.) ON OPEN ABUTMENT AND PIERS, SPAN 2 @ 70'-9", 1 @ 59'-1", 1 @ 90'-3", 2 @ 47'-3", 2 @ 54'-1", 2 @ 69'-3" AT STATION 272+40.47 IN THE VILLAGE OF WESTCHESTER AND THE VILLAGE OF BROADVIEW.

SECTION 551-VF ALSO INCLUDES THE FURNISHING, FABRICATING, SHOP PAINTING AND DELIVERY OF THE STRUCTURAL STEEL f.o.b. THE UNLOADING POINT AT BROADVIEW, FOR A 3 SPAN CONTINUOUS WIDE FLANGE I BEAM STRUCTURE (CARRYING CERMAK ROAD OVER 25 TH AVENUE) ON OPEN ABUTMENTS AND PIERS, SPANS, 1 @ 76'-0", 2 @ 59'-5" AT STATION 283+25.66 IN THE VILLAGE OF BROADVIEW.

PROJECT U-UG-377(28)
 SECTION 551-VB & 551-VF
 BEGINS STATION 267+20

PROJECT U-UG-377(28)
 SECTION 551-VB & 551-VF
 ENDS STATION 285+60

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

SUBMITTED: 9-25-54 *J. J. Sutthill* DISTRICT ENGINEER

EXAMINED: January 25, 1961 *William C. Quaddell* CHIEF ENGINEER OF PLANS AND CONTRACTS

PASSED: January 25, 1961 *Thomas* ENGINEER OF DESIGN

APPROVED: January 25, 1961 *W. H. ...* CHIEF HIGHWAY ENGINEER

APPROVED: January 25, 1961 *...* DIRECTOR

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS

APPROVED DATE

DIVISION ENGINEER

PLANS PREPARED BY BUREAU OF DESIGN *Wm. D. Brown*
 EXAMINED BY BUREAU OF CONSTRUCTION *Wm. D. Brown*
 EXAMINED BY BUREAU OF MAINTENANCE *G. W. Albrecht*
 EXAMINED BY BUREAU OF TRAFFIC *R. J. Newell*
 ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY
 DISTRICT ENGINEER *J. P. Sullivan*

DATE 9-3-59
 DATE 7-8-57
 DATE 7-8-59
 DATE 9-3-59
 DATE 9-3-59

SUMMARY OF QUANTITIES

SECTION	551-VF	551-VB
DATE	7-8-57	9-3-59
PROJECT	COOK	
STA	267+20	285+60

INDEX OF SHEETS

SHEET NO.

SEC. 551 - VF	SEC. 551 - VB	
1.	1.	COVER SHEET
2.	2.	INDEX OF SHEETS, SUMMARY OF QUANTITIES, SIGNATURE SHEET
	3.	TYPICAL CROSS-SECTIONS
	4.-5.	GENERAL PLAN OF IMPROVEMENT
	6.	EXISTING TOPOGRAPHY ALONG CERMAK ROAD
	7.	KNOWN EXISTING UTILITIES ON CERMAK ROAD
	8.-9.	PLAN AND PROFILE SHEETS OF VIADUCT APPROACHES
	10.	BITUMINOUS SURFACING PLAN SHEET
	11.	TEMPORARY DETOUR SERVICE ROAD ACROSS I.H.B.R.R.
	12.	DRAINAGE PLAN AND PROFILE SHEET OF VIADUCT APPROACHES
	13.	DRAINAGE PLAN SHEET OF RETAINING WALL
	14.	SUPPLEMENTARY DETAILS OF BRIDGE APPROACH SLABS
	15.-22.	CROSS-SECTIONS ON CERMAK ROAD
	23.-25.	CROSS-SECTIONS ON SERVICE ROADS
	26. & 26A	STANDARD 2138-1, STANDARD 1790F, STANDARD 2114
	27. & 27A	STANDARD 2122, STANDARD 1683-1, STANDARD 1527-2, STANDARD 2113, STANDARD 2158
	28. & 28A	STANDARD 1514R, STANDARD 1516S, STANDARD 1766-2, STANDARD 2068R
	29.	STANDARD 1686-1, STANDARD 1687-2
3.	30.	GENERAL PLAN AND ELEVATION OF CERMAK ROAD BRIDGE OVER GARDNER ROAD, I.H.B.R.R., AND 25TH. AVENUE
	31.	SUPERSTRUCTURE OVER GARDNER ROAD
	32.	SUPERSTRUCTURE BETWEEN I.H.B.R.R. AND GARDNER ROAD
	33.	SUPERSTRUCTURE OVER I.H.B.R.R.
	34.	SUPERSTRUCTURE OVER 25TH. AVENUE
4.	35.	STRUCTURAL STEEL LAYOUT AND DETAILS- CERMAK ROAD OVER GARDNER ROAD
5.	36.	STRUCTURAL STEEL DETAILS BETWEEN I.H.B.R.R. AND GARDNER ROAD
6.	37.	STRUCTURAL STEEL DETAILS - CERMAK ROAD OVER I.H.B.R.R.
7.	38.	STRUCTURAL STEEL LAYOUT AND DETAILS- CERMAK ROAD OVER 25TH. AVENUE
8.	39.	EXPANSION GUARDS
9.	40.	FABRICATION DIAGRAM
	41.	HANDRAIL DETAILS- CERMAK ROAD OVER 25TH. AVENUE
	42.	HANDRAIL DETAILS- CERMAK ROAD OVER GARDNER ROAD AND I.H.B.R.R.
	43.	ABUTMENTS- BRIDGE OVER GARDNER ROAD AND I.H.B.R.R.
	44.	ABUTMENTS- BRIDGE OVER 25TH. AVENUE
	45.	PIERS, NO. 1 AND NO. 2
	46.	PIER, NO. 3
	47.	PIERS, NO. 4 AND NO. 5
	48.	PIER NO. 6
	49.	PIERS, NO. 7 AND NO. 8
	50.	PIER NO. 9
	51.	PIERS, NO. 10 AND NO. 11
	52.	DETAILS OF RETAINING WALL
	53.-56.	SOIL BORING DATA
	57.	PILE DETAILS

Note:
 Breakdown between U & UG Funds

	U	UG
6707	36%	64%
X231	100%	None
X531	42%	58%

ITEM	UNIT	BRIDGE ITEMS	ROAD ITEMS	TOTAL
080008	COMBINATION CONCRETE CURB & GUTTER, TYPE 6	LIN. FT.	2,007	2,007
020001	TRENCH BACKFILL	CU. YDS.	169	169
032006	P. C. CONCRETE BASE COURSE (9")	SQ. YDS.	4,498	4,498
048012	P. C. CONCRETE PAVEMENT (16 1/2"-12"-16 1/2")	SQ. YDS.	872	872
046001	BITUMINOUS MATERIALS (PRIME COAT)	GALS.	500	500
046002	AGGREGATE (PRIME COAT)	TONS.	10	10
046006	BITUMINOUS CONCRETE BINDER COURSE	TONS.	390	390
046007	BITUMINOUS CONCRETE SURFACE COURSE, SUB-CLASS I-II	TONS.	250	250
081004	P. C. CONCRETE MEDIAN, TYPE 4	LIN. FT.	1,003	1,003
089003	P. C. CONCRETE SIDEWALK (5")	SQ. FT.	10,030	10,030
080013	LONGITUDINAL CURB EXPANSION JOINTS	SQ. FT.	842	842
094001	STEEL PLATE BEAM GUARD RAIL	LIN. FT.	2,012.5	2,012.5
112001	SODDING	SQ. YDS.	13,737	13,737
112002	SUPPLEMENTAL WATERING	UNITS.	38	38
112004	AGRICULTURAL GROUND LIMESTONE	TONS.	8	8
024002	SUB-BASE GRANULAR MATERIAL, TYPE-A	CU. YDS.	1,211	1,211
066277	STORM SEWERS, TYPE 3, (R.C.P. CLASS III) 8"	LIN. FT.	88	88
066094	STORM SEWERS, TYPE 1, (R.C.P. CLASS III) 10"	LIN. FT.	232	232
066210	STORM SEWERS, TYPE 2, (R.C.P. CLASS II) 12"	LIN. FT.	498	498
066279	STORM SEWERS, TYPE 3, (R.C.P. CLASS III) 12"	LIN. FT.	106	106
075019	CATCH BASINS, TYPE A, 4' DIA., WITH TYPE 5 FRAME, OPEN LID	EACH	4	4
075101	INLETS, TYPE A, WITH TYPE 5 FRAME, OPEN LID	EACH	4	4
075233	MANHOLES, TYPE A, 4' DIA., WITH TYPE 1 FRAME, CLOSED LID	EACH	5	5
082003	CLASS X CONCRETE	CU. YDS.	3307.0	2110.6
059001	REINFORCEMENT BARS	LBS.	514,250	209,962
016001	EMBANKMENT	CU. YDS.	123,779	123,779
075319	CATCH BASINS, TYPE A (SPECIAL), 4' DIA., WITH TYPE 5 FRAME, OPEN LID	EACH	2	2
063020	PERFORATED CORRUGATED METAL PIPE, 6"	LIN. FT.	1,440	1,440
019001	POROUS GRANULAR EMBANKMENT	CU. YDS.	600	600
060005	FURNISHING CREOSOTED PILES, 20.1'-38'	LIN. FT.	1,000	1,000
075034	CATCH BASINS, TYPE C WITH TYPE 8 GRATE	EACH	8	8
066001	STORM SEWERS TYPE 1, 8"	LIN. FT.	1,215	1,215
066024	" " " 2, 8"	LIN. FT.	22	22
054003	ERECTING STRUCTURAL STEEL	LBS.	1,804,150	1,804,150
061001	NAME PLATES	EACH	2	2
083002	SLOPE WALL 4"	SQ. YDS.	1,524	1,524
060004	FURNISHING CREOSOTED PILES, UP TO 20'	LIN. FT.	6,870	6,870
060008	DRIVING TIMBER PILES	LIN. FT.	6,870	7,870
060044	DRIVING CONCRETE PILES	LIN. FT.	1,722	1,722
060043	DRIVING CONCRETE PILES	LIN. FT.	1,722	1,722
201000	ALUMINUM HANDRAIL, 2 RAIL	LIN. FT.	1,665	1,665
050001	CLASS A EXCAVATION FOR STRUCTURES	CU. YDS.	1,500	5,100
060042	METAL SHOES	EACH	482	482
060047	TEST PILES (CONCRETE)	EACH	4	4
060007	TEST PILES (TIMBER)	EACH	4	4

SECTION 551-VF

054002 FURNISHING STRUCTURAL STEEL LBS. 1,804,150

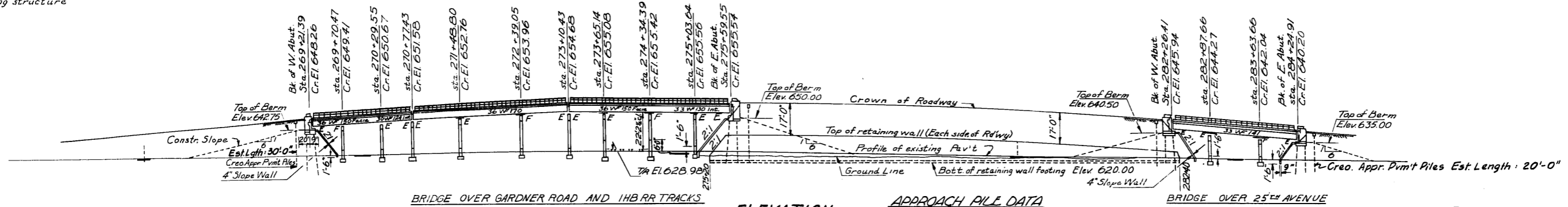
USGS BM - LaGrange 13 miles N of Ashland Ave. Crossing of C&N RR 0.15 miles W of N 1/4 corner Sec 33, T 39 N R 12 E in SE angle of intersection of Mannheim Road and Thirty First Street in concrete post, standard tablet stamped "Prim. Trav. Sta. No. 12 K 1924 K 50" Elev 635.05

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
551-VF	551-VB	COOK	9	3
			57	30

SHEET NO. 1
28 SHEETS

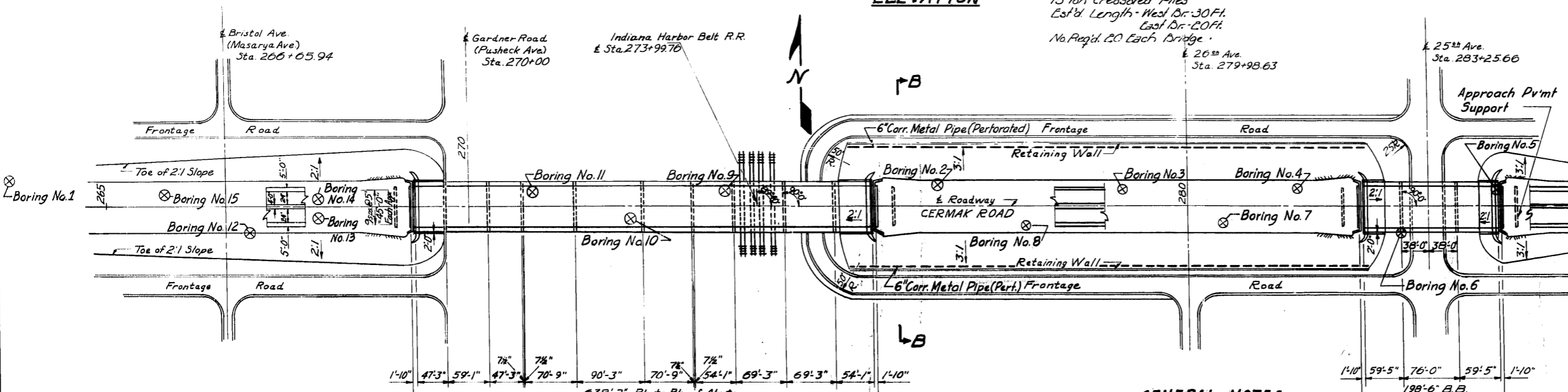
No existing structure



APPROACH PILE DATA
15 Ton Creosoted Piles
Est'd Length - West Br. 30 Ft.
Est'd Br. 20 Ft.
No Reg'd. 20 Each Bridge.

SECTION 551-VB
BILL OF MATERIAL ROAD ITEMS

ITEM	UNIT	TOTAL
Combination Conc. Curb & Gutter, Type 6	Lin. Ft.	2,007
Trench Backfill	Cu. Yd.	169
Bituminous Materials (Prime Coat), 1-1 Gal.	Gal.	500
P.C. Concrete Base Course 9"	Sq. Yd.	4,498
Aggregate (Prime Coat)	Ton	10
Bituminous Concrete Binder Course	Ton	390
Bituminous Concrete Surface Course	Ton	250
P.C. Concrete Median, Type 4	Lin. Ft.	1,003
P.C. Concrete Sidewalk, 5"	Sq. Ft.	10,030
Long. Curb Expansion Joints	Sq. Ft.	842
Steel Plate Beam Guard Rail	Lin. Ft.	2,012.5
Sodding	Sq. Yd.	13,737
Supplemental Watering	Unit	38
Agric. Ground Limestone	Ton	2
Sub-Base Granular Material, Type A Cu. Yd.	Cu. Yd.	1,211
Embankment	Lin. Ft.	123,779
Storm Sewers, Type 3, 8" Dia.	Lin. Ft.	80
Storm Sewers, Type 1, 10" Dia.	Lin. Ft.	232
Storm Sewers, Type 2, 12" Dia.	Lin. Ft.	498
Storm Sewers, Type 3, 12" Dia.	Lin. Ft.	106
Catch Basins, Type A, Type 5 Fr. (Special)	Each	2
Catch Basins, Type A, Type 5 Frame	Each	4
Inlets, Type A, Type 5 Frame	Each	4
Manholes, Type A, Type 1 Fr. 4' Dia.	Each	5
Reinforcement Bars	Lbs.	209,962
Class X Concrete	Cu. Yds.	2,110.6
P.C. Concrete Pavement (1 1/2" - 12" - 1 1/2")	Sq. Yds.	372
6" Corr. Metal Pipe - Perforated	Lin. Ft.	1,440
Porous Granular Embankment	Cu. Yds.	600
Creosoted Piles 20' x 28"	Lin. Ft.	1,000
Catch Basins Type C with Type B Grate	Each	8
Storm Sewers Type 1, 8"	Lin. Ft.	12,72
Storm Sewers Type 2, 8"	Lin. Ft.	12,72

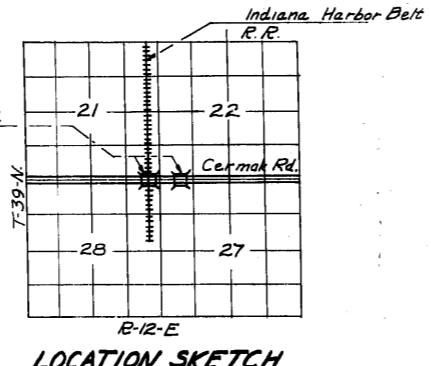
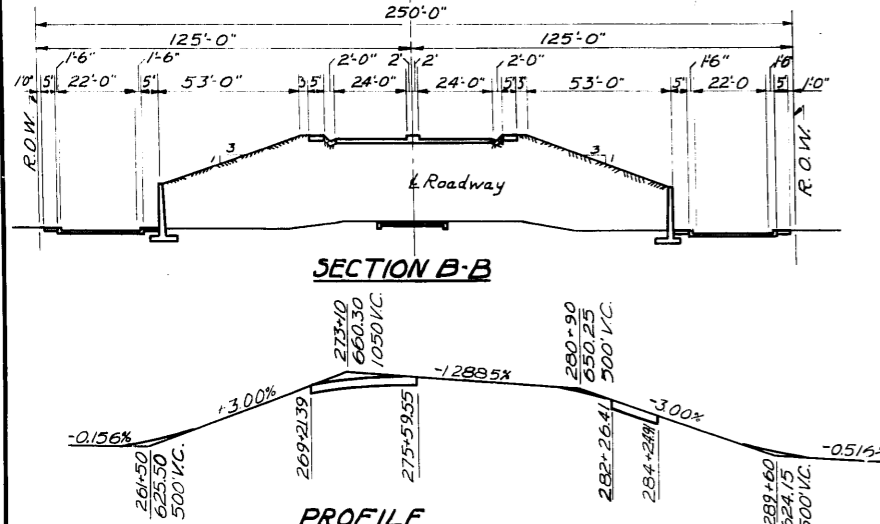


GENERAL NOTES

Class X Concrete shall be used throughout.
Coarse aggregate which is to be used in end posts and parapet wall must be absolutely free of chert, mica, lignite and soft sandstone.
The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, #4 wires, weighing 58# per 100 sq. ft.

BILL OF MATERIAL BRIDGE ITEMS-551-VF

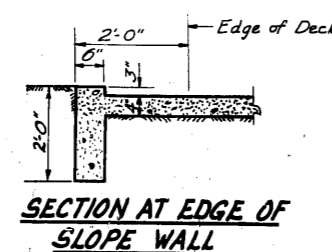
Item	Super	Sub	Total
* Class A Excav. for Struct.	Cu. Yds.	1,500	5,100
Erect. Structural Steel	Lbs.	1,804,150	1,804,150
Class X Concrete	Cu. Yds.	1,747.2	3,307.0
Aluminum Handrail	Lin. Ft.	1,665	1,665
Reinforcement Bars	Lbs.	301,780	514,250
Creosoted Piles (up to 20')	Lin. Ft.	6,870	6,870
Test Piles (Creosoted Timber)	Each	4	4
Concrete Piles	Lin. Ft.	1,722	1,722
Test Piles (Concrete)	Each	4	4
Metal Shoes	Each	482	482
Name Plates	Each	2	2
Slope Wall	Sq. Yds.	1,524	1,524



STRESSES

f_c Super f 305 = 14,000 psi.
f_c Retaining Wall = 10,000 psi.
f_s Reinforcement Bars = 20,000 psi.
f_s Structural Steel = 18,000 psi.
n = 10
y_e All Footings = 75 p.s.i.

LOADING H20-S16-44



DESIGNED	Ronald C. Pity	EXAMINED	July 29 1957
CHECKED	John H. Jordan	PASSED	
DRAWN	R.C.P. F. Bahr	APPROVED	R.R. Bartholomew
CHECKED	J.K.J.		

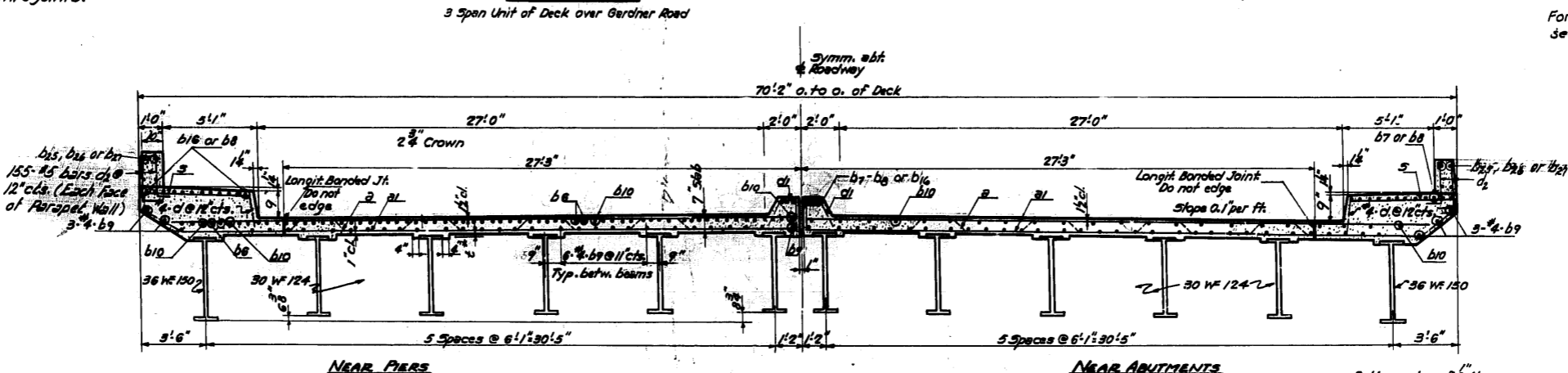
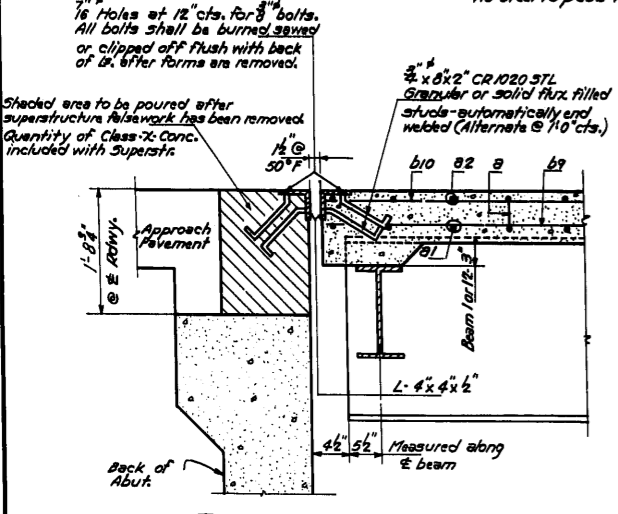
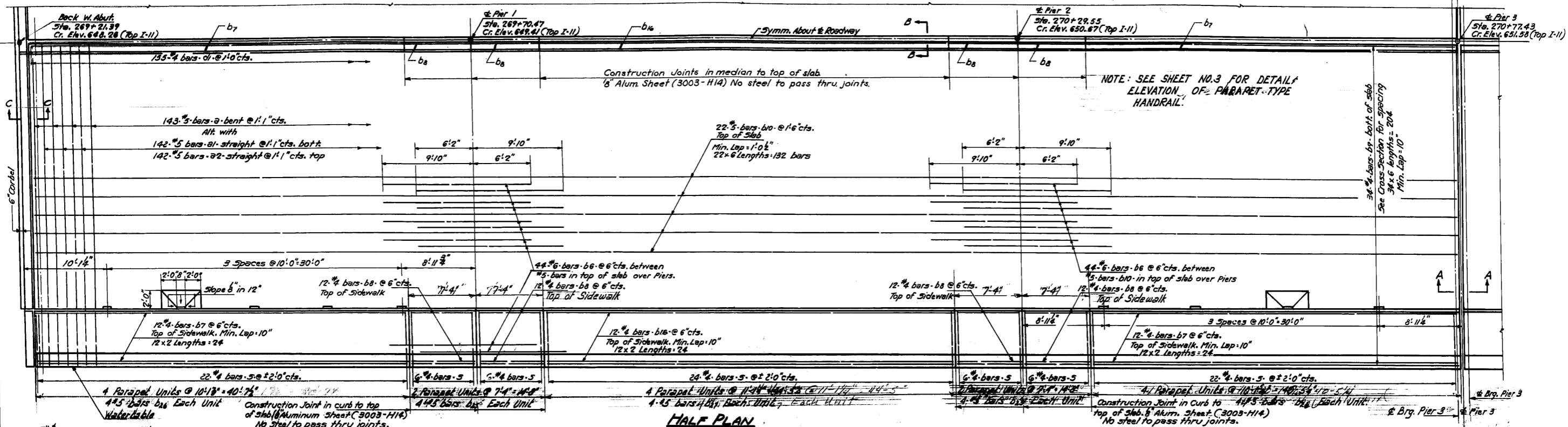
SECTION 551-VF
Furnish Struct. Steel Lbs. 1,804,150

PROJECT U-116 377(28)
GENERAL PLAN & ELEVATION
CERMAK ROAD OVER
GARDNER ROAD - IHB RR & 25TH AVE.
SBI Rt. 55 - SECTION 551-VBF
COOK COUNTY
STATION 274 + 34.38

Rev. 12-30-60 Removal of F.I., increased slab to 7", raised super 1" to meet grade, slab reinforcement [L#(59)] & Parapet Rail R.R.M. & T.K. Revised 11/1/61 J.S.E. Quantities Reinforcement Bars changed from 312,970 Lbs (Sub. Sh.) to 212,960 & from 316,350 Lbs. (Total) to 514,250 Lbs.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
S.A. 55	551-VB	COOK	57	31	28 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



BILL OF MATERIAL

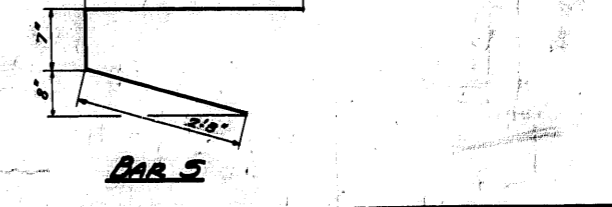
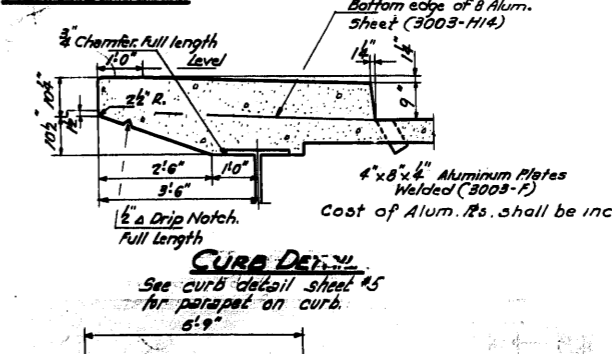
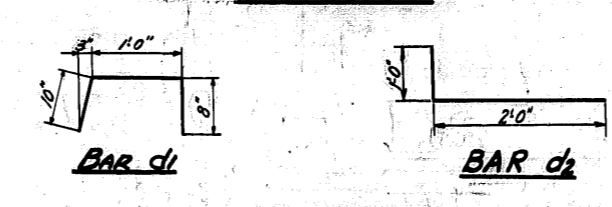
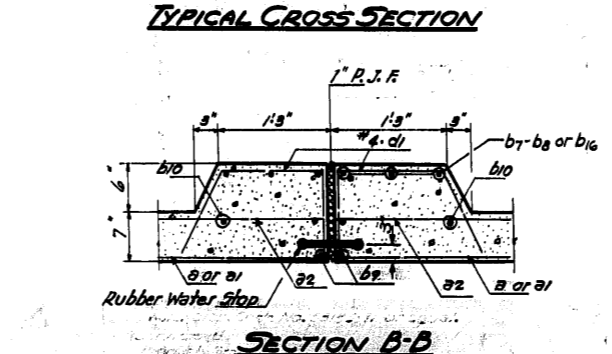
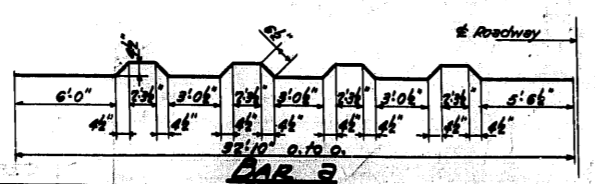
Bar	No.	Size	Length	Shape
b	286	#5	34'2"	~
b1	284	5	32'10"	~
b2	284	5	33'10"	~
b6	176	6	16'0"	~
b7	120	4	20'8"	~
b8	120	4	7'1"	~
b9	204	4	26'6"	~
b10	132	5	26'8"	~
b16	60	4	22'9"	~
b25	32	5	7'0"	~
b26	64	5	9'6"	~
b27	32	5	10'9"	~
d	310	4	1'2"	~
d1	310	4	2'6"	~
d2	620	5	3'11"	~
s	184	4	8'7"	~
Class-7 Concrete				Cu. Yds. 325.0
Reinforcement Bars				Lbs. 50,390
* Structural Steel				Lbs. 293740

DESIGNED *Ronald C. Pitz*
CHECKED *Shay K. Jacobson*
DRAWN *R.C.P. M. Miller*
CHECKED *S.K.S.*

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

July 29 1957

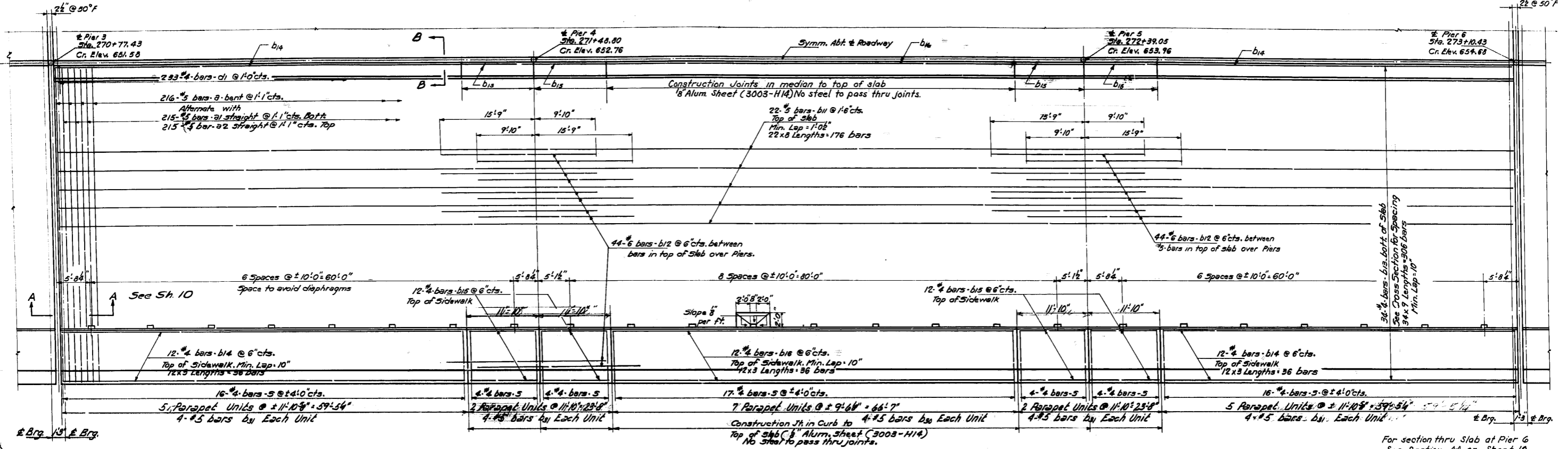
METHOD OF DETERMINING FILLET HEIGHT "c"
After all structural steel has been erected elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 ft. from these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations, minus floor thickness, equals the fillet heights above top of beam.



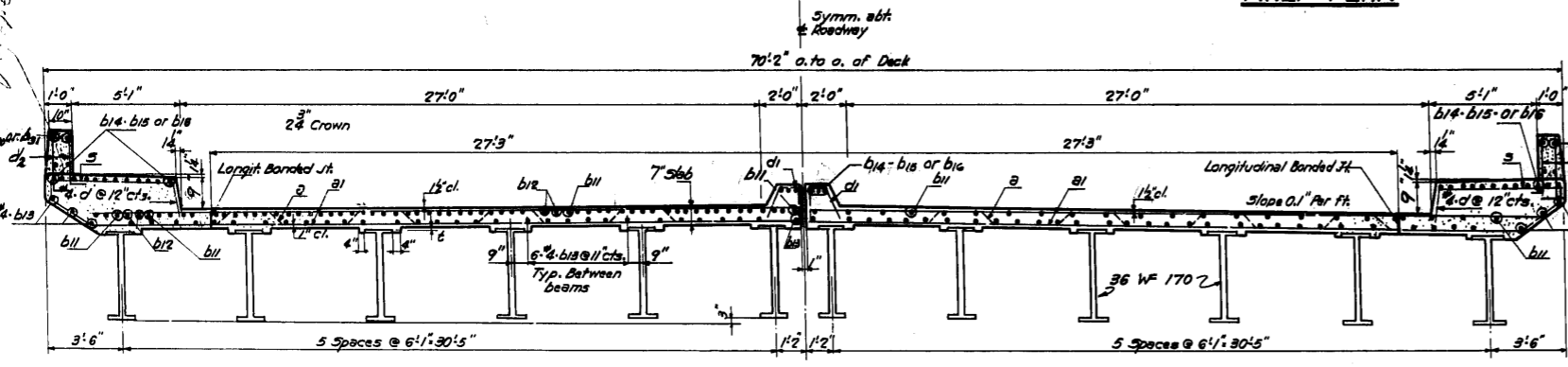
SUPERSTRUCTURE
THREE SPAN UNIT OF DECK
OVER GARDNER ROAD
S.B.L. RT. 55-SEC. 551-VB/F
COOK COUNTY
STA. 274+34.38

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

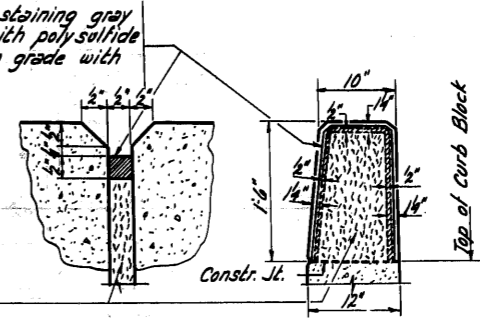
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. J
55	551-VB	Cook	57	32	28 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.		



HALF PLAN



CROSS SECTION

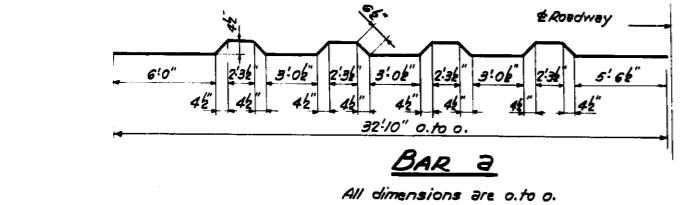


DETAIL OF JOINT IN PARAPET-TYPE HANDRAIL

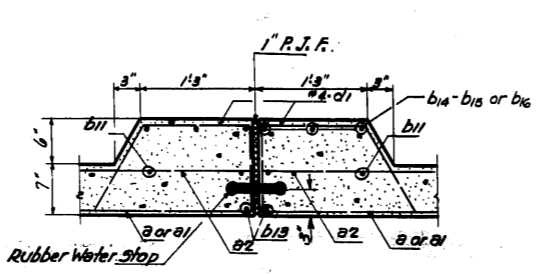
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a	432	#5	34'2"	~
a1	430	5	32'10"	—
a2	430	5	38'10"	—
b11	362	5	30'0"	—
b12	176	6	25'7"	—
b13	672	4	26'7"	—
b14	180	4	20'4"	—
b15	120	4	11'7"	—
b16	90	4	22'9"	—
b30	56	5	9'0"	—
b31	112	5	11'6"	—
d	466	4	1'2"	—
d1	466	4	2'6"	—
d2	932	5	3'0"	—
s	260	4	8'7"	—
Class-X Concrete		Cu. Yds. 481.7		
Reinforcement Bars		Lbs. 86,100		
Structural Steel		Lbs. 385590		

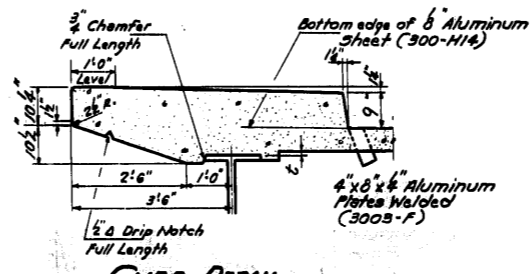
* Weight of Rockers, Bearing Plates, Lead Plates and Anchor Bolts included as Structural Steel. Weight of Expansion Guards not included.



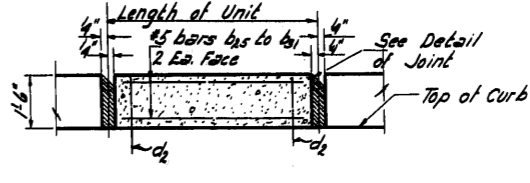
BAR a
All dimensions are o.t.o.



SECTION B-B



CURB DETAIL
See Curb detail sheet #5 for parapet on curb.

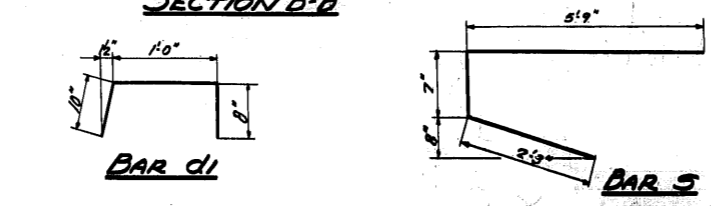


ELEVATION PARAPET WALL

DESIGNED *Ronald C. Pitz*
CHECKED *S. Royal K. Jankovich*
DRAWN *R.C.P.*
CHECKED *S. Royal K. Jankovich*

EXAMINED *M. J. ...*
PASSED *E. S. ...*
APPROVED *R. R. ...*

July 29 1959



BAR d1

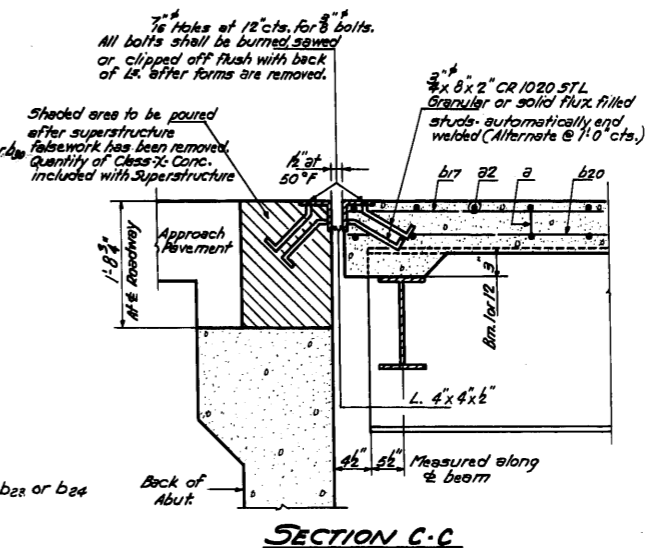
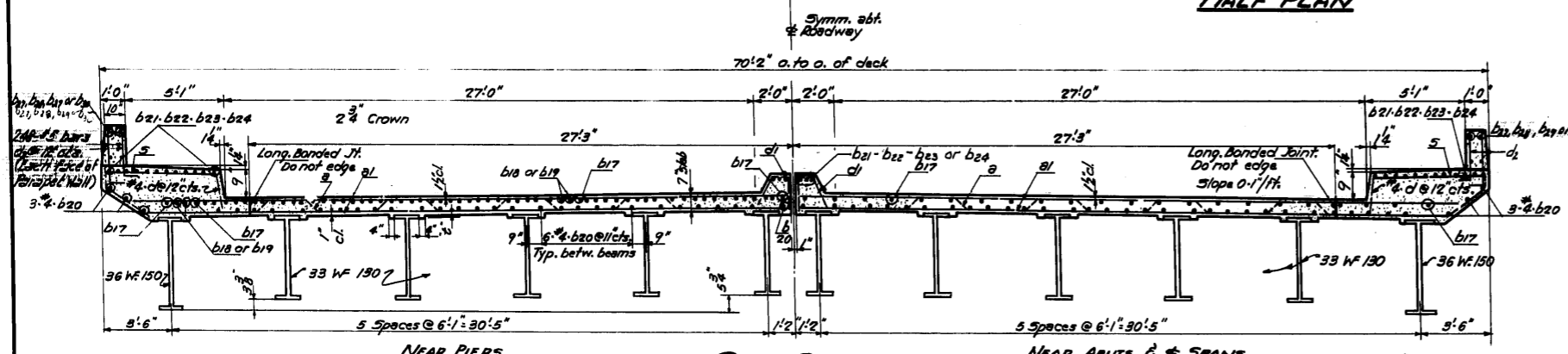
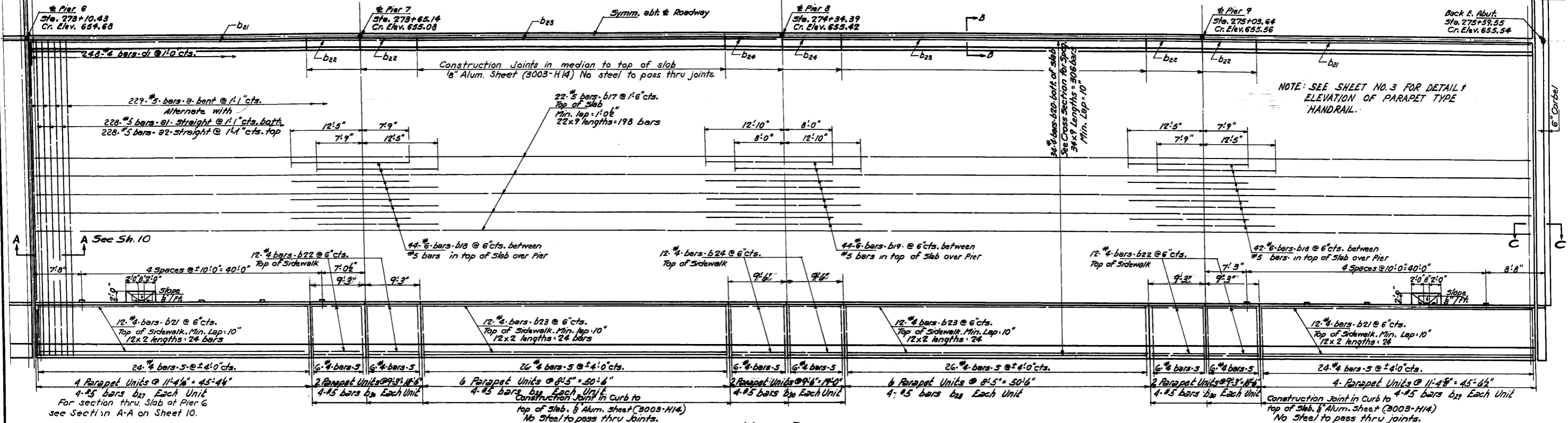
BAR s

Note: See sheet No. 2 for detail of bar d2.

**SUPERSTRUCTURE
BETWEEN
I.M.B.R.R. & GARDNER ROAD
S.B.I. RT. 55- SECTION 551-VB/F
COOK COUNTY
STATION 274+34.38**

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

ROUTE NO. S.B.I. 55 P.A.	SECTION 551 V.B.	COUNTY Cook	TOTAL SHEETS 57	SHEET NO. 33	SHEET NO. 4 28 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.		

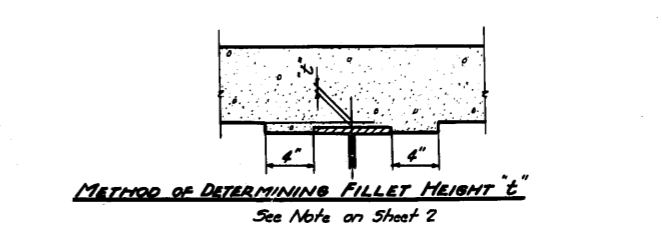
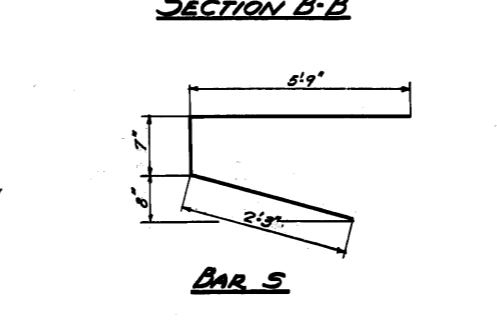
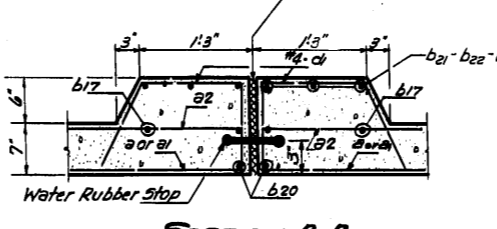
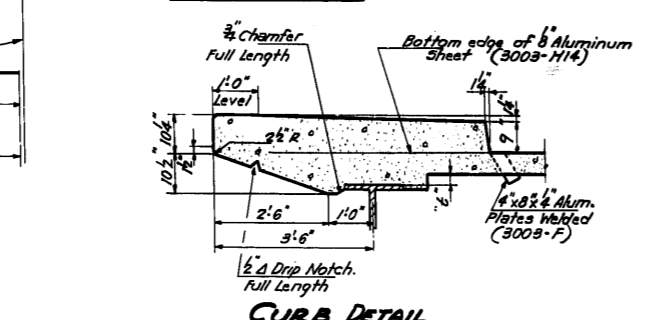
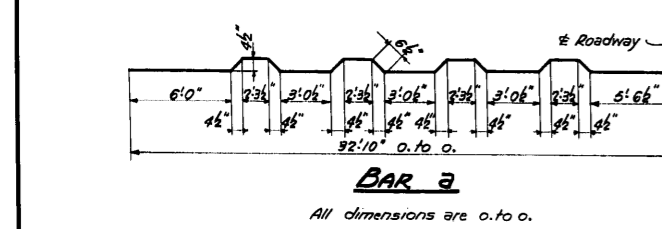


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	458	#5	34'2"	
a1	456	#5	32'10"	
a2	456	#5	33'10"	
b17	396	#5	28'6"	
b18	176	#5	20'2"	
b19	88	#5	20'10"	
b20	612	#5	28'4"	
b21	120	#5	23'0"	
b22	120	#5	9'0"	
b23	120	#5	26'7"	
b24	60	#5	9'3"	
b27	32	#5	10'9"	
b28	96	#5	8'0"	
b29	32	#5	11'0"	
b30	48	#5	9'0"	
d	496	#5	11'2"	
e	496	#5	2'6"	
f	992	#5	3'0"	
g	272	#5	8'7"	
Class-X Concrete				C. Yds. 517.7
Reinforcement Bars				Lbs. 92,310
* Structural Steel				Lbs. 492840

* Height of Rockers, Bearing Plates, Lead Plates and Anchor Bolts included as Structural Steel.

SUPERSTRUCTURE
FOUR SPAN UNIT OF DECK
OVER I.H.B.R.R.
S.B.I. RT. 55 - SEC. 551 - V.B.F.
COOK COUNTY
STATION 274+34.38



DESIGNED *Conall C. P. Jr.*
CHECKED *J. R. K. Jacobson*
DRAWN *Z.C.P. M. Miller*
CHECKED *F. H. S.*

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

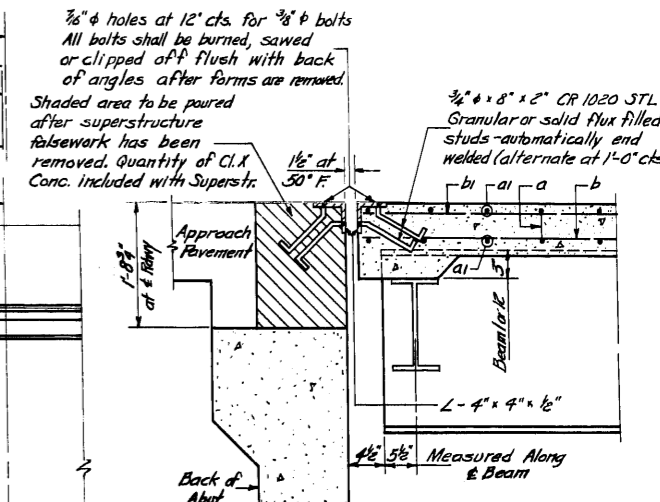
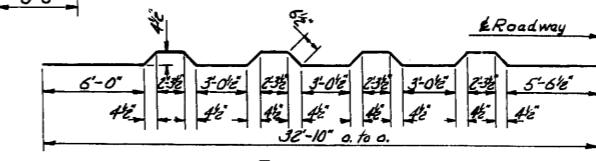
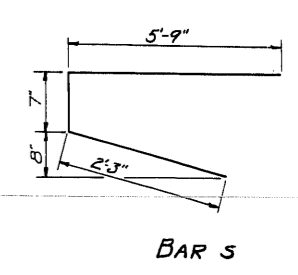
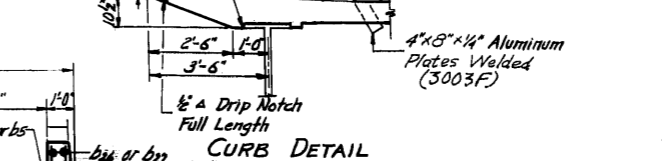
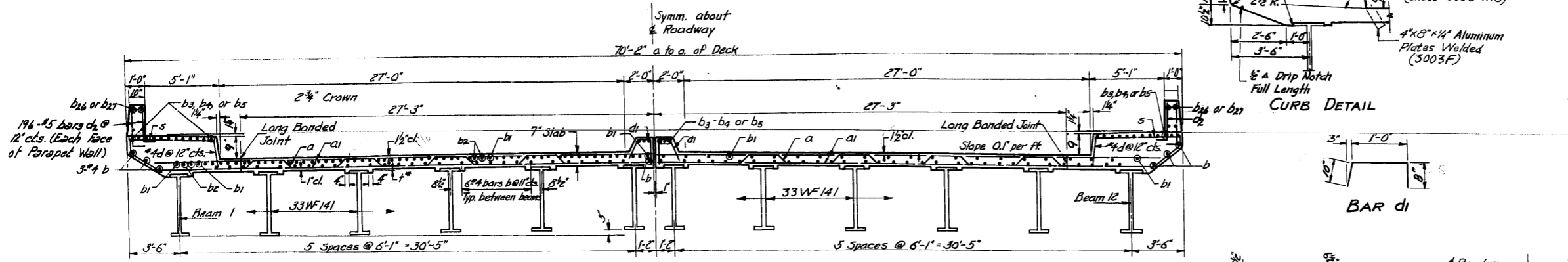
July 29 1959

CHIEF HIGHWAY ENGINEER

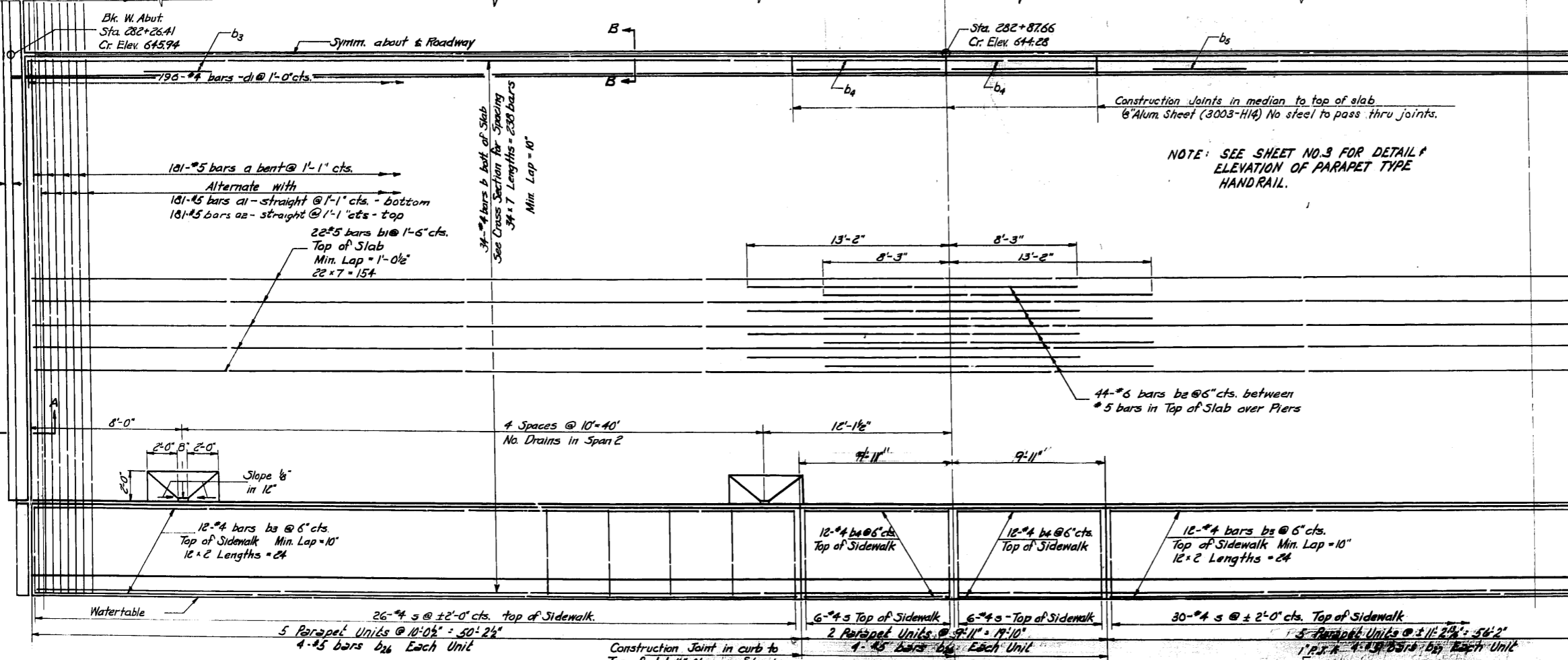
Note: See sheet #2 for detail of bar d.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 28 SHEETS
S. I. 59	551VB	COOK	57	34	
F. A.					



NEAR PIERS
METHOD OF DETERMINING FILLET HEIGHTS "f"
After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 ft. From these elevations subtract the increment of deflection for these points, determined from the D.L. deflection diagram. The elevations so obtained subtracted from the theoretical grade elevations, minus floor thickness, equals the fillet heights above top of beam.



NOTE: SEE SHEET NO. 3 FOR DETAIL OF ELEVATION OF PARAPET TYPE HANDRAIL.

SECTION A-A

BILL OF MATERIAL

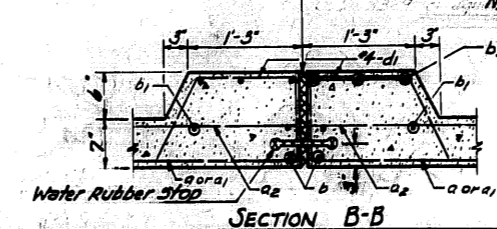
Bar	No.	Size	Length	Shape
a	362	#5	34'-2"	~
a1	362	#5	32'-10"	~
a2	362	#5	33'-10"	~
b	476	#4	28'-7"	~
b1	308	#5	28'-11"	~
b2	188	#5	21'-5"	~
b3	120	#4	25'-5"	~
b4	120	#4	9'-8"	~
b5	60	#4	28'-6"	~
b26	112	#5	9'-6"	~
b27	40	#5	10'-9"	~
d	392	#4	1'-2"	~
d1	392	#4	2'-6"	~
d2	784	#5	3'-0"	~
s	212	#4	8'-7"	~
Class X Concrete		Cu Yds.	415.4	
Reinforcement Bars		Lbs.	72,320	
Structural Steel		Lbs.	402,920	

DESIGNED *Edward C. Pity*
CHECKED *J. J. H. ...*
DRAWN *E. C. R.*
CHECKED *E. K. G.*

EXAMINED *McRanna*
PASSED *E. S. ...*
APPROVED *R. R. ...*

July 29 19 59

DESIGN STRESSES
Fs = 18,000 Structural Steel
Fs = 20,000 Reinforcement
Fc = 1,400 Superstructure
Fc = 1,000 Substructure
n = 10



SUPERSTRUCTURE
CERMAK ROAD OVER 25TH AVE.
S.B.I. RT. 55-SECTION 551-VBF
COOK COUNTY
STATION 274+34.38

Note: All top of beam elevations to be increased by .08'

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.L. 57	551-VF	COOK	9	4
F.A.	551-VB		57	35
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

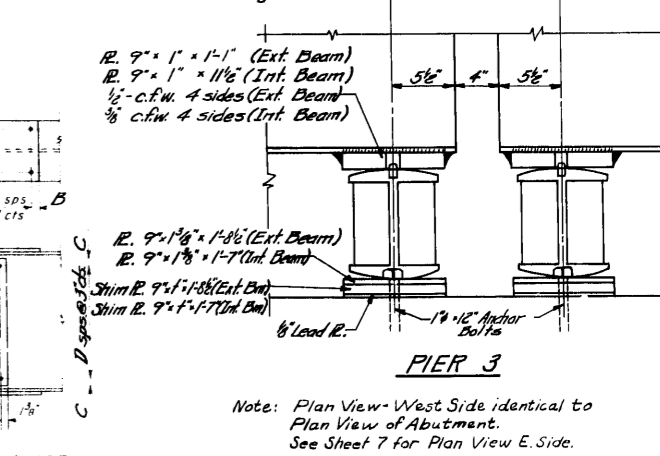
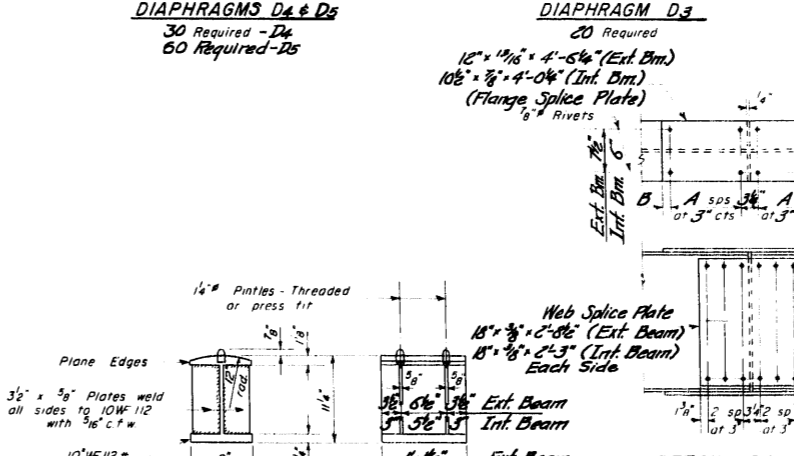
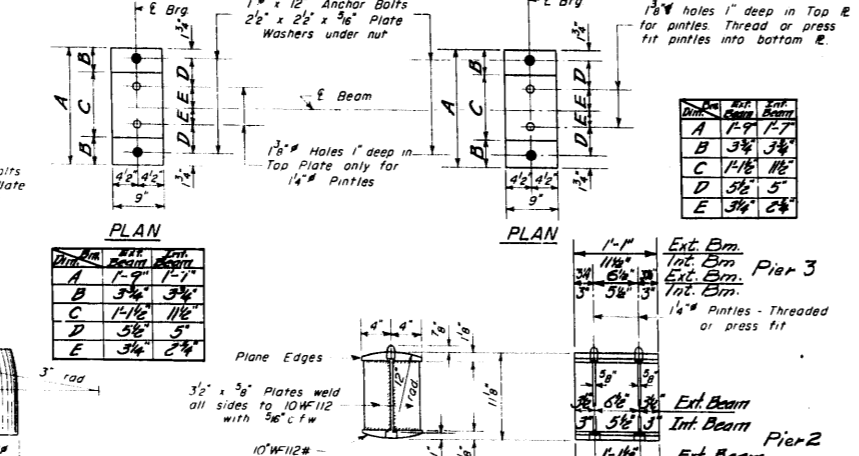
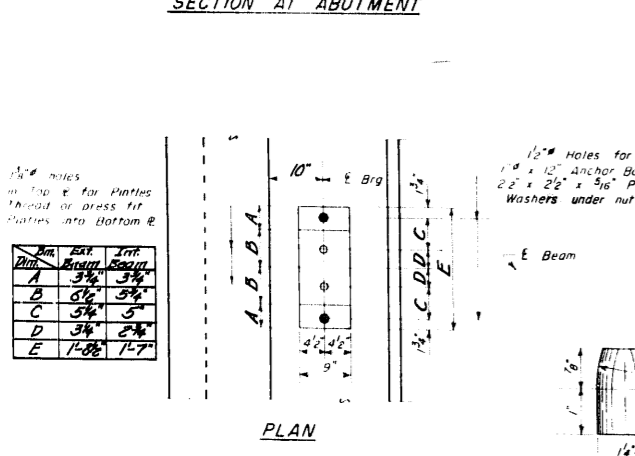
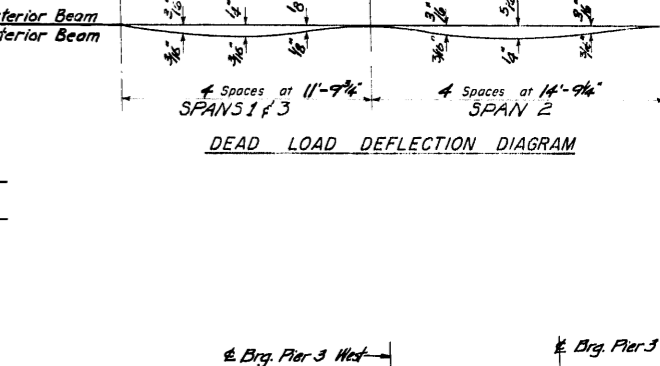
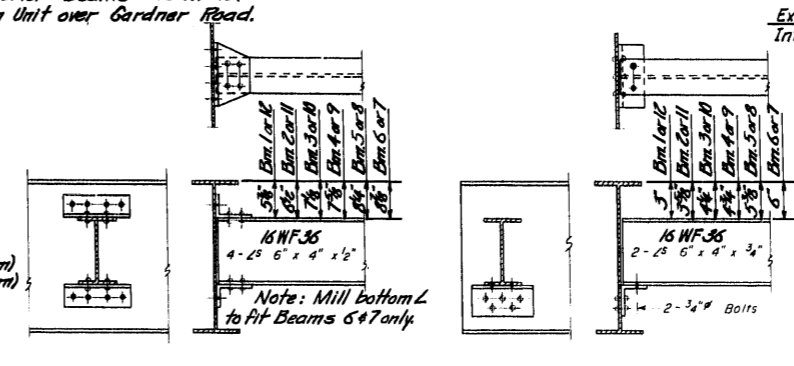
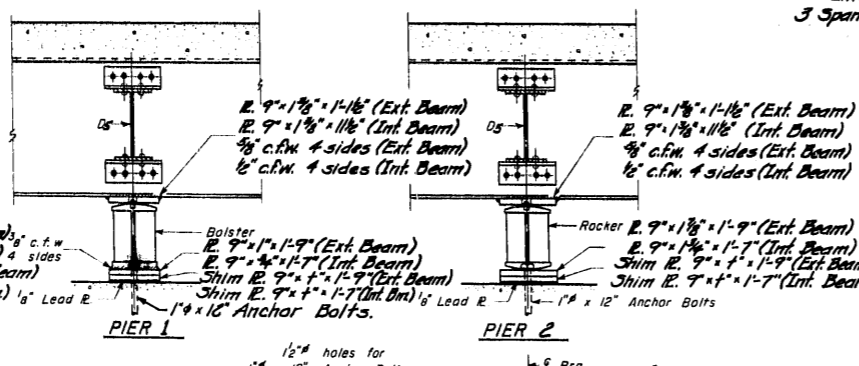
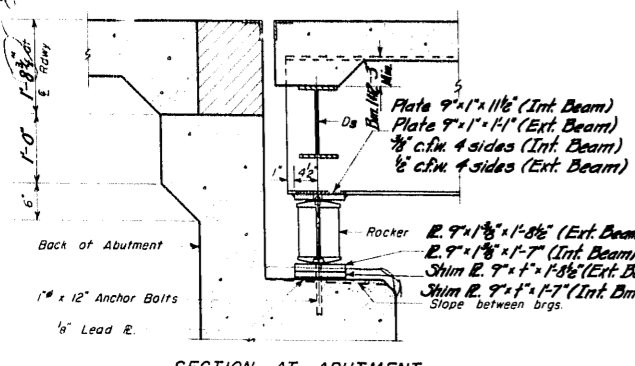
28 SHEETS

47'-3"		12'-3"		19'-0 1/2"		19'-0 1/2"		47'-3"	
18'-11"	16'-1"	12'-3"	10'-6"	19'-0 1/2"	19'-0 1/2"	10'-6"	12'-3"	18'-11"	7'-6"
647.39	647.44	647.49	647.54	647.59	647.64	647.69	647.74	647.79	647.84
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
1	2	3	4	5	6	7	8	9	10
648.43	648.48	648.53	648.58	648.63	648.68	648.73	648.78	648.83	648.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
11	12	13	14	15	16	17	18	19	20
649.43	649.48	649.53	649.58	649.63	649.68	649.73	649.78	649.83	649.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
21	22	23	24	25	26	27	28	29	30
649.93	649.98	650.03	650.08	650.13	650.18	650.23	650.28	650.33	650.38
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
31	32	33	34	35	36	37	38	39	40
650.43	650.48	650.53	650.58	650.63	650.68	650.73	650.78	650.83	650.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
41	42	43	44	45	46	47	48	49	50
650.93	650.98	651.03	651.08	651.13	651.18	651.23	651.28	651.33	651.38
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
51	52	53	54	55	56	57	58	59	60
651.43	651.48	651.53	651.58	651.63	651.68	651.73	651.78	651.83	651.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
61	62	63	64	65	66	67	68	69	70
651.93	651.98	652.03	652.08	652.13	652.18	652.23	652.28	652.33	652.38
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
71	72	73	74	75	76	77	78	79	80
652.43	652.48	652.53	652.58	652.63	652.68	652.73	652.78	652.83	652.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
81	82	83	84	85	86	87	88	89	90
652.93	652.98	653.03	653.08	653.13	653.18	653.23	653.28	653.33	653.38
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
91	92	93	94	95	96	97	98	99	100
653.43	653.48	653.53	653.58	653.63	653.68	653.73	653.78	653.83	653.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
101	102	103	104	105	106	107	108	109	110
653.93	653.98	654.03	654.08	654.13	654.18	654.23	654.28	654.33	654.38
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
111	112	113	114	115	116	117	118	119	120
654.43	654.48	654.53	654.58	654.63	654.68	654.73	654.78	654.83	654.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
121	122	123	124	125	126	127	128	129	130
654.93	654.98	655.03	655.08	655.13	655.18	655.23	655.28	655.33	655.38
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
131	132	133	134	135	136	137	138	139	140
655.43	655.48	655.53	655.58	655.63	655.68	655.73	655.78	655.83	655.88
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds
141	142	143	144	145	146	147	148	149	150
655.93	655.98	656.03	656.08	656.13	656.18	656.23	656.28	656.33	656.38
Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds	Ds

Note: All Elevations are at top of Beams at E Bearings or E Splices.

FRAMING PLAN
Exterior Beams - 36 WF 150
Interior Beams - 30 WF 104
3 Span Unit over Gardner Road.

DEAD LOAD DEFLECTION DIAGRAM



DESIGNED *Ronald C. Pitt*
CHECKED *James H. Sargent*
DRAWN *R.C.P. W.A. Sausaman*
CHECKED *J.K.J.*

EXAMINED *McDonnell*
PASSED *R.L. Smith*
APPROVED *R.R. Bartholomew*

JULY 29 19 59

DETAIL OF BEARING AT PIER 2 & PIER 3 WEST

TABLE OF "x" DIMENSIONS

Part	Ext. Beam	Int. Beam	Ext. Beam	Int. Beam
W. Abut.	0	0	0	0
Pier 1	0	0	0	0
Pier 2	0	0	0	0
Pier 3	0	0	0	0

*West Side Only

STRUCTURAL STEEL LAYOUT & DETAILS
CERMAK ROAD OVER GARDNER ROAD
S.B.I. Rt. 55 - SEC. 551-VBF
COOK COUNTY
STATION 274+34.38

Note: All top of beam elevations to be increased by .03'

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

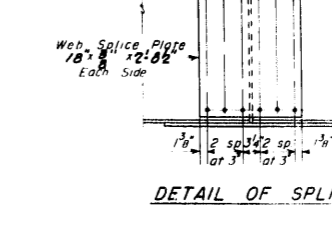
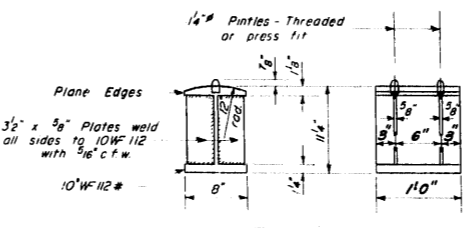
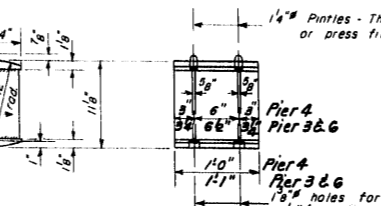
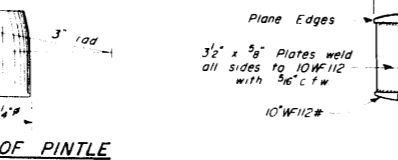
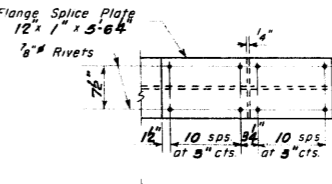
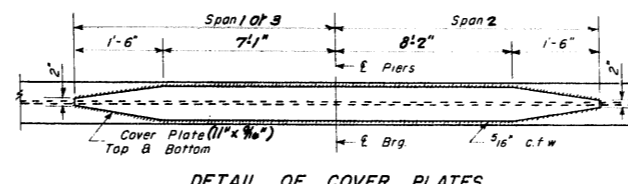
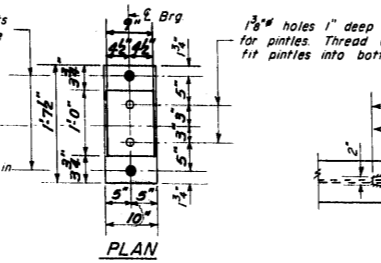
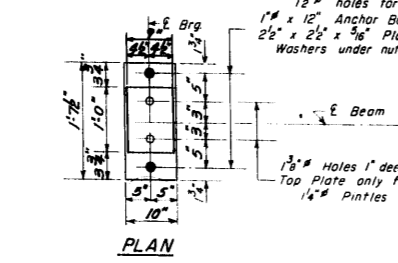
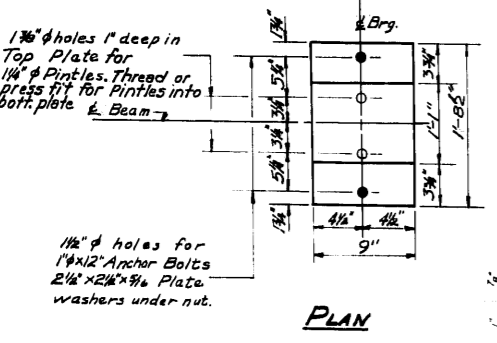
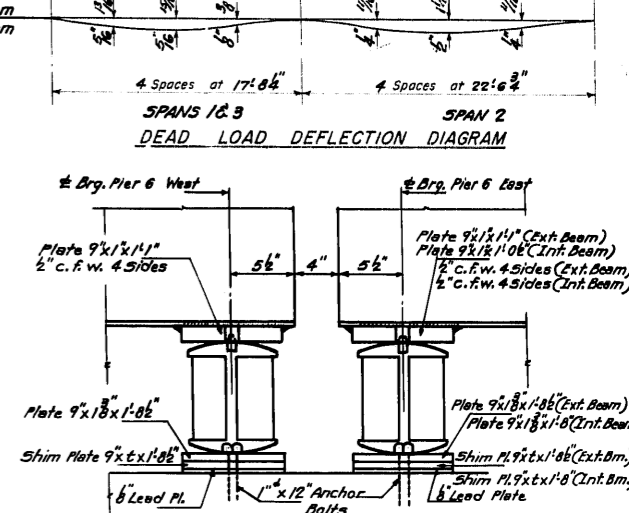
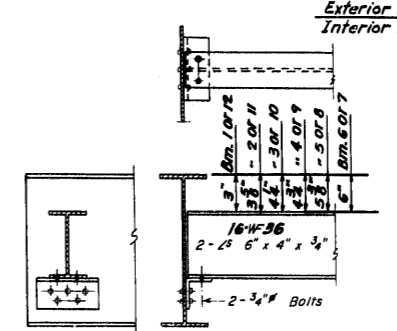
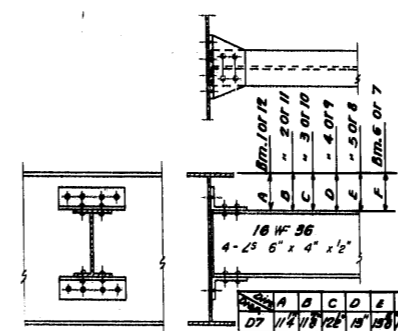
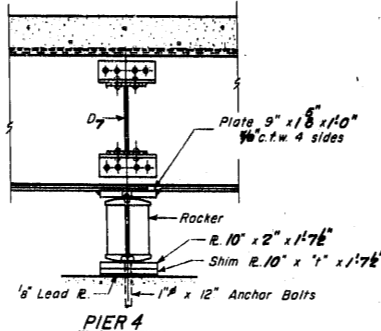
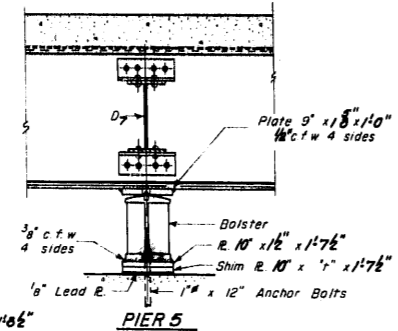
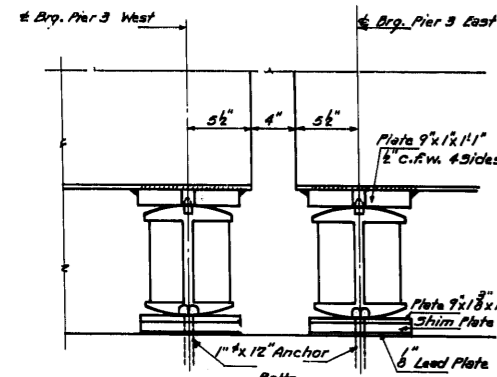
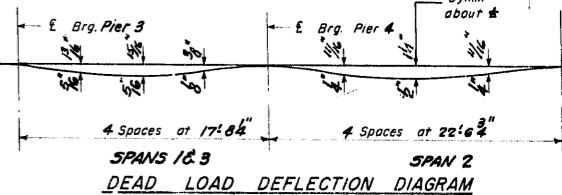
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
551-VF	551-VB	Cook	57	36

28 SHEETS

Pier 3		70'9"												Pier 4		70'3"												Pier 5		70'9"												Pier 6	
17'8"		17'8"				17'8"				17'9"				17'9"				17'9"				17'8"				17'8"				5'6"													
E Brg. Pier 3 West		Beam 1				Splice				E Brg. Pier 4				Splice				E Brg. Pier 5				Splice				E Brg. Pier 6 West																	
650.67		651.46				651.75				652.05				652.73				652.95				653.18				653.74																	
650.78		651.51				651.80				652.10				652.78				653.00				653.23				653.79																	
650.77		651.56				651.85				652.15				652.83				653.05				653.28				653.84																	
650.82		651.61				651.90				652.20				652.88				653.10				653.33				653.89																	
650.87		651.66				651.95				652.25				652.93				653.15				653.38				653.94																	
650.92		651.71				652.00				652.30				652.98				653.20				653.43				653.99																	
650.92		651.71				652.00				652.30				652.98				653.20				653.43				653.99																	
650.87		651.66				651.95				652.25				652.93				653.15				653.38				653.94																	
650.82		651.61				651.90				652.20				652.88				653.10				653.33				653.89																	
650.77		651.56				651.85				652.15				652.83				653.05				653.28				653.84																	
650.72		651.51				651.80				652.10				652.78				653.00				653.23				653.79																	
650.67		651.46				651.75				652.05				652.73				652.95				653.18				653.74																	
51'6 1/2"		39'4"				39'4"				50'11"				39'4"				39'4"				51'6 1/2"				51'6 1/2"																	

Note: All Elevations are at top of Beams @ E Bearings or E Splices.

FRAMING PLAN
All beams 36" W 170



DESIGNED *Ronald C. Pitt*

CHECKED *J. J. J.*

DRAWN *R.C. W. A. Soussan*

CHECKED *J.K.J.*

EXAMINED *July 29 1959*

PASSED *E. J. J.*

APPROVED *R.R. J.*

TABLE OF "I" DIMENSIONS

Position	1 or 12	2 or 11	3 or 10	4 or 9	5 or 8	6 or 7
Pier 3	0'	5'	0'	1/8'	0'	1/2'
Pier 4	0'	1/8'	0'	3'	0'	1/8'
Pier 5	0'	1/8'	0'	1/2'	0'	1/8'
Pier 6	0'	1/8'	0'	1/8'	0'	1/2'

STRUCTURAL STEEL DETAILS
BETWEEN I.H.B.R.R. & GARDNER ROAD
S.B.I. RT. 55-SEC. 551-VB/F
COOK COUNTY
STATION 274+34.38

Note: All top of beam elevations to be increased by .08'

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

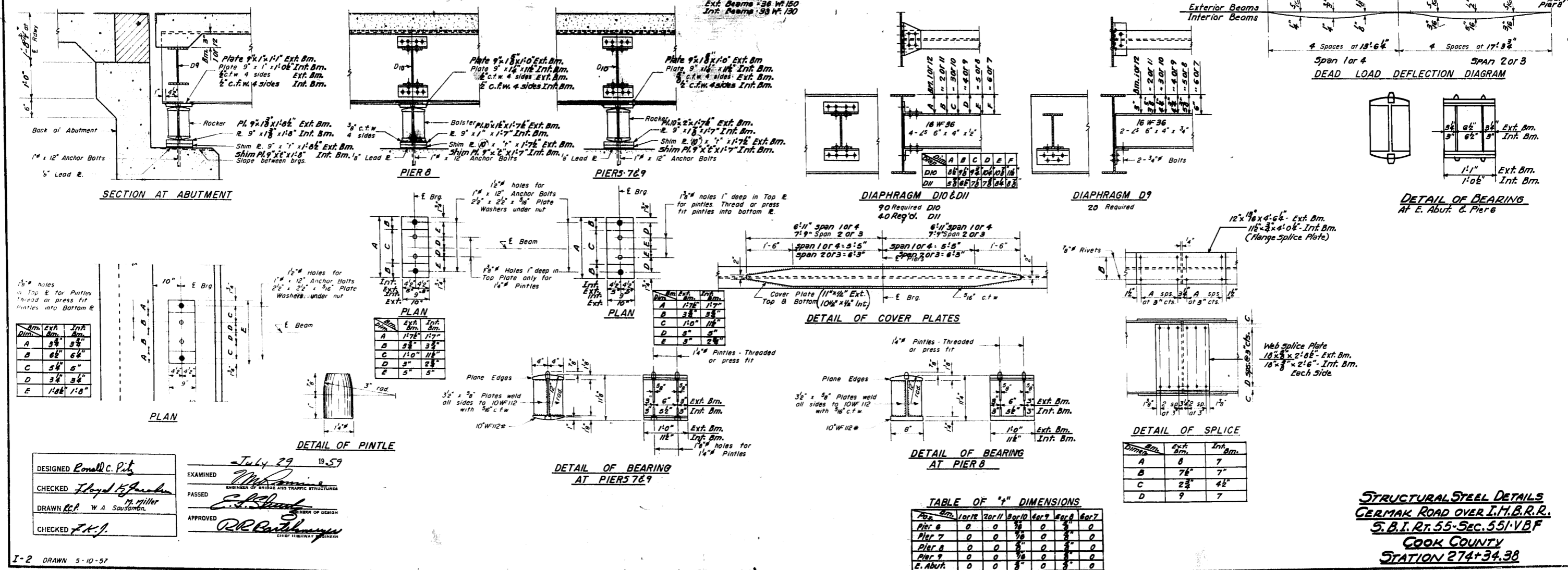
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 28 SHEETS
55	551-VB	COOK	9	6	
F.A.	551-VB	ILLINOIS	57	37	

Span	21'-0"	17'-5"	15'-0"	13'-9"	20'-10 1/2"	18'-7 1/2"	16'-0"	14'-3"	20'-4 1/2"	20'-10 1/2"	13'-9"	15'-0"	17'-5"	21'-0"																																				
653.76	653.01	653.86	653.91	653.96	654.01	654.01	653.96	653.91	653.86	653.81	653.76	654.09	654.15	654.20	654.25	654.30	654.35	654.40	654.45	654.50	654.55	654.60	654.65	654.70	654.75	654.80	654.85	654.90	654.95	655.00	655.05	655.10	655.15	655.20	655.25	655.30	655.35	655.40	655.45	655.50	655.55	655.60	655.65	655.70	655.75	655.80	655.85	655.90	655.95	656.00
76"	21'-0"	17'-5"	15'-0"	13'-9"	20'-10 1/2"	18'-7 1/2"	16'-0"	14'-3"	20'-4 1/2"	20'-10 1/2"	13'-9"	15'-0"	17'-5"	21'-0"	54"																																			

Note: All elevations are at top of Beams
@ Bearings or @ Splices.

STEEL FRAMING PLAN

Note: See Sheet 7
for Section at Pier 6



DESIGNED **Ronald C. Pitt**
CHECKED **Floyd K. Gardner**
DRAWN **R.C.P.** W.A. Soudamann
CHECKED **F.K.J.**

EXAMINED **July 29 1959**
PASSED **E. J. [Signature]**
APPROVED **R.R. [Signature]**

STRUCTURAL STEEL DETAILS
GERMAK ROAD OVER I.H.B.R.R.
S.B.I. Rt. 55-SEC. 551-VB-F
COOK COUNTY
STATION 274+34.38

Note: All top of beam elevations to be increased by .08'

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55-VF	55-VB	COOK	9	7
ILLINOIS			57	38

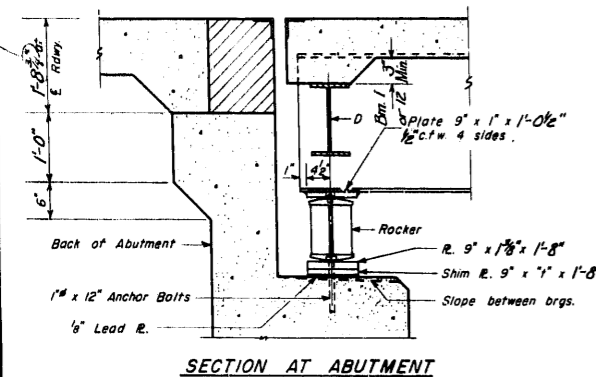
SHEET NO. 9
28 SHEETS

	23'-9"	59'-5"	19'-11 1/2"	16'-6 1/2"	14'-9"	76'-0"	23'-3"	76'-0"	23'-3"	14'-9"	16'-6 1/2"	19'-1 1/2"	59'-5"	23'-9"	5 1/2"
	± Brg. W. Abut.			± Brg. Pier 10			Splice			± Brg. Pier 11			± Brg. E. Abut.		
D	644.97	Dz	①	D1	643.28	D1	642.81	Dz	641.55	D1	641.07	D1	Dz	639.34	D
D	645.02	Dz	②	D1	643.33	D1	642.86	Dz	641.60	D1	641.12	D1	Dz	639.39	D
D	645.07	Dz	③	D1	643.38	D1	642.91	Dz	641.65	D1	641.17	D1	Dz	639.44	D
D	645.12	Dz	④	D1	643.43	D1	642.96	Dz	641.70	D1	641.22	D1	Dz	639.49	D
D	645.17	Dz	⑤	D1	643.48	D1	643.01	Dz	641.75	D1	641.27	D1	Dz	639.54	D
D	645.22	Dz	⑥	D1	643.53	D1	643.06	Dz	641.80	D1	641.32	D1	Dz	639.59	D
D	645.27	Dz	⑦	D1	643.58	D1	643.11	Dz	641.85	D1	641.37	D1	Dz	639.64	D
D	645.32	Dz	⑧	D1	643.63	D1	643.16	Dz	641.90	D1	641.42	D1	Dz	639.69	D
D	645.37	Dz	⑨	D1	643.68	D1	643.21	Dz	641.95	D1	641.47	D1	Dz	639.74	D
D	645.42	Dz	⑩	D1	643.73	D1	643.26	Dz	642.00	D1	641.52	D1	Dz	639.79	D
D	645.47	Dz	⑪	D1	643.78	D1	643.31	Dz	642.05	D1	641.57	D1	Dz	639.84	D
D	645.52	Dz	⑫	D1	643.83	D1	643.36	Dz	642.10	D1	641.62	D1	Dz	639.89	D
D	644.97	Dz	⑬	D1	643.28	D1	642.81	Dz	641.55	D1	641.07	D1	Dz	639.34	D

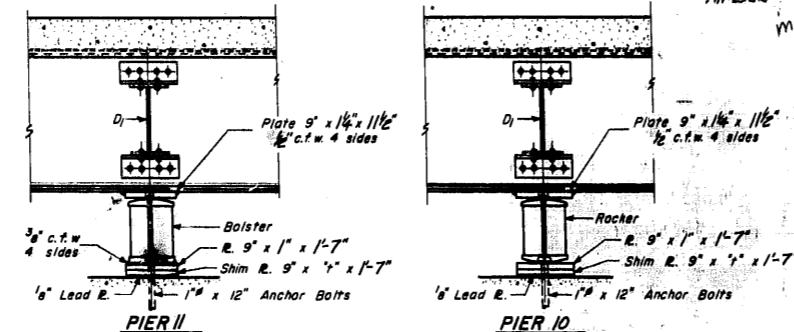
Note: All elevations are at top of Beams
• E Bearings or E Splices.

FRAMING PLAN

Elevations shown are at top of beam.
All Bed 33 WF 141

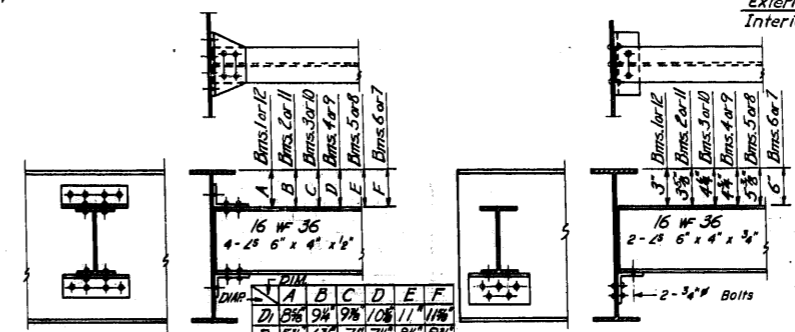


SECTION AT ABUTMENT



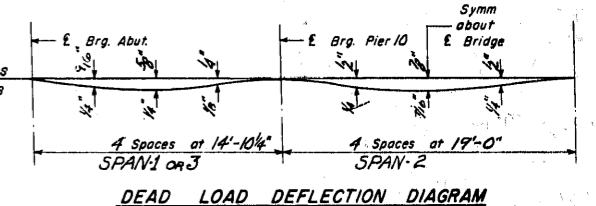
PIER II

PIER 10

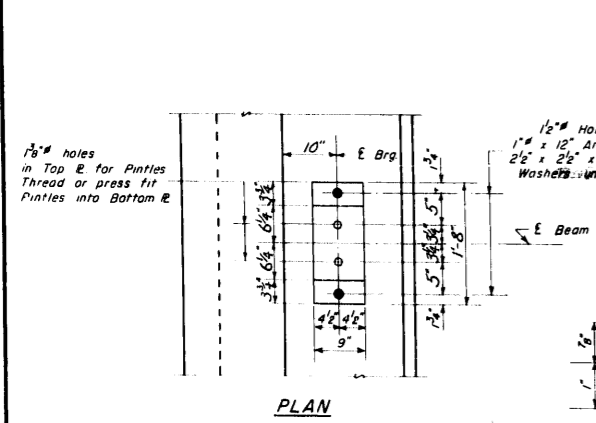


DIAPHRAGM D1 & D2

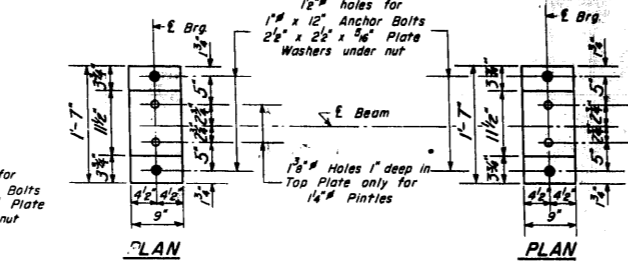
DIAPHRAGM D



DEAD LOAD DEFLECTION DIAGRAM

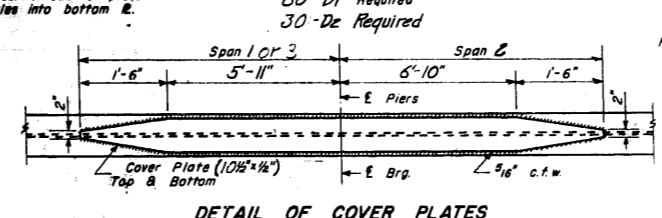


PLAN

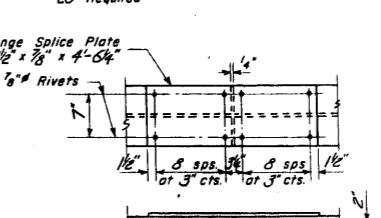


PLAN

PLAN

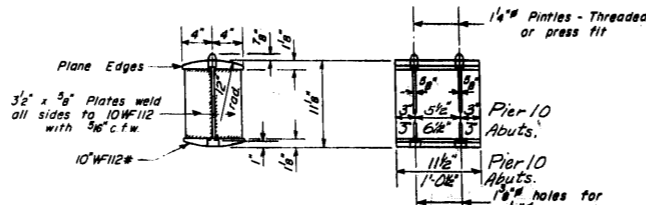


DETAIL OF COVER PLATES

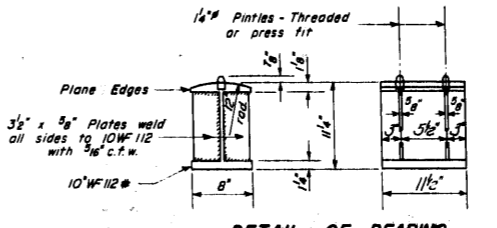


DETAIL OF SPLICE

DETAIL OF PINTLE



DETAIL OF BEARING AT PIER 10 & ABUTS



DETAIL OF BEARING AT PIER II

DESIGNED	Ronald C. Pitt
CHECKED	Floyd K. Fosdick
DRAWN	R. R. W. A. Sousoman
CHECKED	J. K. S.

EXAMINED	July 29, 1959
PASSED	[Signature]
APPROVED	[Signature]

TABLE OF 4\"/>

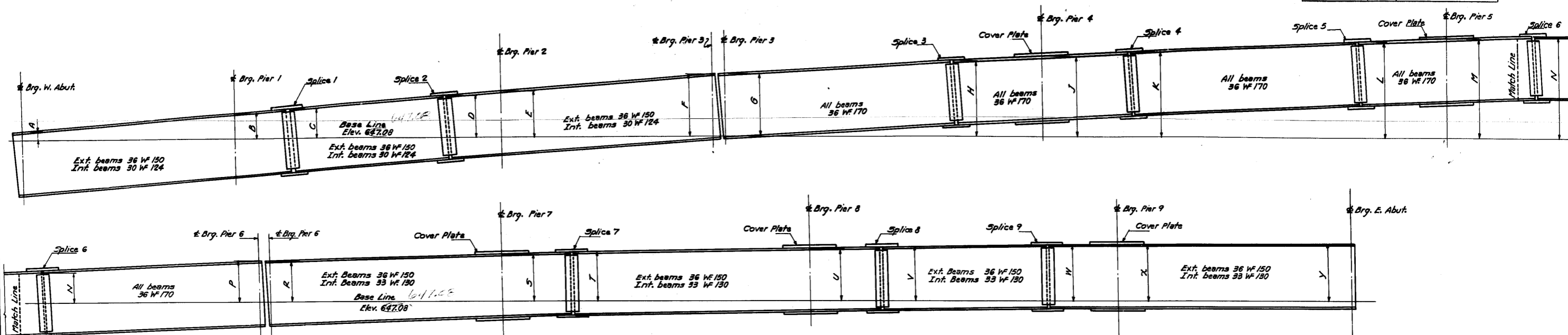
Beam	1st 12	2nd 11	3rd 10	4th 9	5th 8	6th 7
M. Abut.	0	1/2	0	1/2	0	1/2
Pier 10	0	1/2	0	1/2	0	1/2
Pier 11	0	1/2	0	1/2	0	1/2
E. Abut.	0	1/2	0	1/2	0	1/2

STRUCTURAL STEEL LAYOUT & DETAILS
CERMAK ROAD OVER 25TH AVE.
S.B.T. RT. 55 - SECTION 55-VB
COOK COUNTY
STATION 274 + 34.38

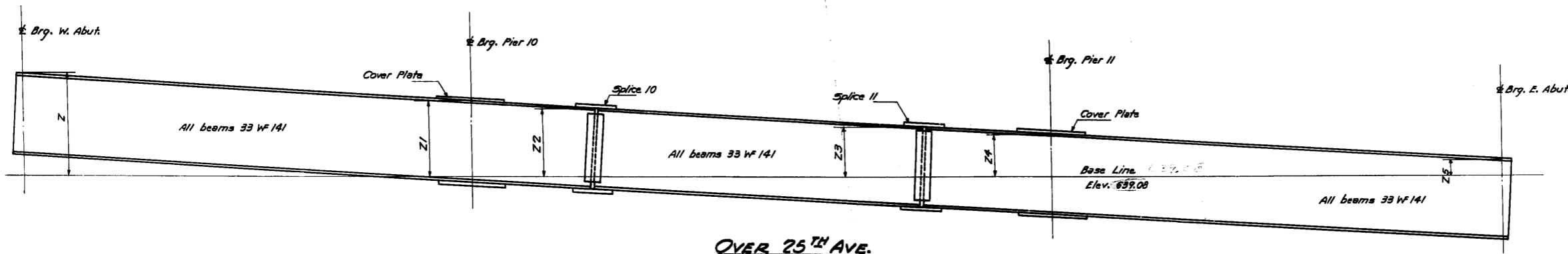
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. 55	551-VF	Cook	9	9
P. A.	551-VB		57	40
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 11
28 SHEETS



OVER GARDNER ROAD AND I.H.B.R.R.



OVER 25TH AVE.

TABLE OF DIMENSIONS

Dim.	1 or 12	2 or 11	3 or 10	4 or 9	5 or 8	6 or 7
A	4 3/8"	5 1/2"	5 3/8"	5 3/8"	6 1/2"	7 3/8"
B	1' 5 1/8"	1' 5 3/8"	1' 6 3/8"	1' 7"	1' 7 3/8"	1' 8 3/8"
C	1' 8 3/8"	1' 9"	1' 9 3/8"	1' 10 1/8"	1' 10 3/8"	1' 11 3/8"
D	2' 5 3/8"	2' 5 3/8"	2' 6 3/8"	2' 7"	2' 7 3/8"	2' 8 3/8"
E	2' 8 3/8"	2' 8 3/8"	2' 9 3/8"	2' 10"	2' 10 3/8"	2' 11 3/8"
F	3' 7 3/8"	3' 8 3/8"	3' 9"	3' 9 3/8"	3' 10 1/8"	3' 10 3/8"
G	3' 8"	3' 8 3/8"	3' 9 1/4"	3' 9 3/8"	3' 10 1/4"	3' 11"
H	4' 5 1/2"	4' 6 3/8"	4' 6 3/8"	4' 7 1/4"	4' 7 3/8"	4' 8 3/8"
J	4' 9"	4' 9 3/8"	4' 10 1/4"	4' 10 3/8"	4' 11 3/8"	5' 0"
K	5' 10 3/8"	5' 11 1/4"	5' 11 3/8"	5' 12 3/8"	5' 13"	5' 13 3/8"
L	5' 8 3/8"	5' 9 3/8"	5' 10"	5' 10 3/8"	5' 11 3/8"	5' 11 3/8"
M	5' 11 1/2"	6' 0"	6' 0 3/8"	6' 1 1/4"	6' 1 3/8"	6' 2 3/8"
N	6' 2 3/8"	6' 2 3/8"	6' 3 3/8"	6' 4"	6' 4 3/8"	6' 5 3/8"
P	6' 3 3/8"	6' 3 3/8"	6' 4 3/8"	6' 5 3/8"	6' 6 3/8"	6' 7 3/8"
R	6' 9 3/8"	6' 9 3/8"	6' 10 3/8"	6' 11"	6' 11 3/8"	6' 12 3/8"
S	7' 1 1/2"	7' 1 3/8"	7' 2 3/8"	7' 3"	7' 3 3/8"	7' 4 3/8"
T	7' 2 1/4"	7' 2 3/8"	7' 3 1/4"	7' 4 1/8"	7' 4 3/8"	7' 5 3/8"
U	7' 5"	7' 5 3/8"	7' 6 1/4"	7' 6 3/8"	7' 7 1/4"	7' 8 3/8"
V	7' 5 3/8"	7' 6 1/2"	7' 6 3/8"	7' 7 3/8"	7' 8 1/4"	7' 8 3/8"
W	7' 6 3/8"	7' 7 1/8"	7' 8"	7' 8 3/8"	7' 9 1/4"	7' 9 3/8"
X	7' 7"	7' 7 3/8"	7' 8 3/8"	7' 9 1/4"	7' 9 3/8"	7' 10 3/8"
Y	7' 7 1/2"	7' 8"	7' 8 3/8"	7' 9 1/4"	7' 9 3/8"	7' 10 3/8"
Z	5' 11 3/8"	6' 0 1/4"	6' 0 3/8"	6' 1 1/4"	6' 2"	6' 2 3/8"
Z1	4' 3 3/8"	4' 4"	4' 4 3/8"	4' 5 1/4"	4' 5 3/8"	4' 6 3/8"
Z2	3' 9 3/8"	3' 10 3/8"	3' 11"	3' 11 3/8"	4' 0 3/8"	4' 0 3/8"
Z3	2' 6 3/8"	2' 7 1/4"	2' 7 3/8"	2' 8 3/8"	2' 9"	2' 9 3/8"
Z4	2' 0 3/8"	2' 1 1/2"	2' 2"	2' 2 3/8"	2' 3 1/4"	2' 3 3/8"
Z5	4 3/8"	4 3/8"	5 1/4"	5 3/8"	6 1/2"	7 3/8"

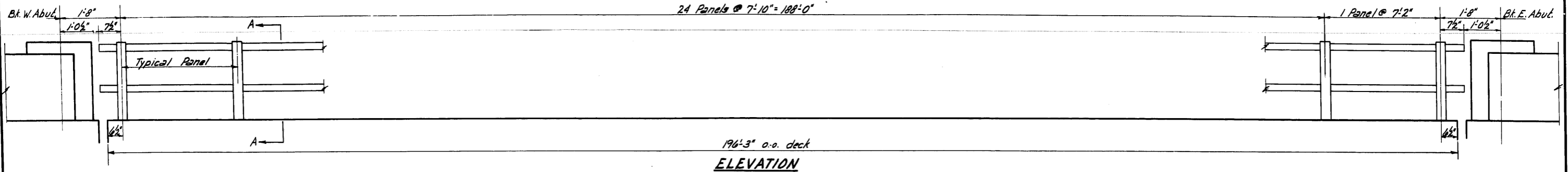
DESIGNED *Ronald C. Pitt*
CHECKED *Donald K. Jacobson*
DRAWN *K.C.P. H. Miller*
CHECKED *F.K.J.*

EXAMINED *July 29 19 57*
PASSED *[Signature]*
APPROVED *[Signature]*

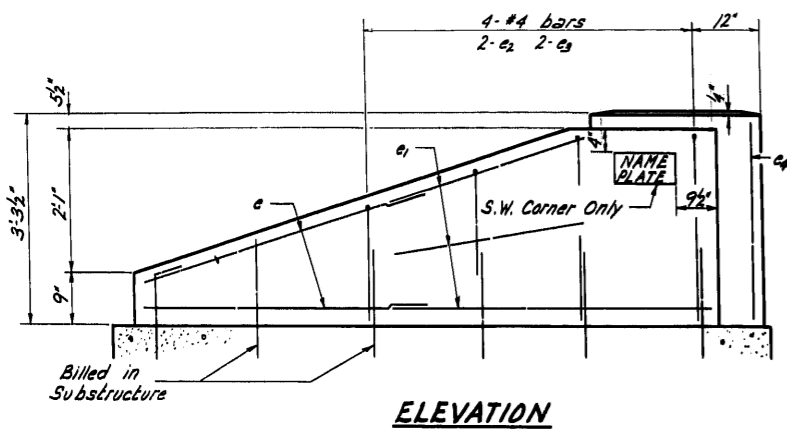
FABRICATION DIAGRAM
S.B.I. RT. 55 - SEC. 551-VB F
COOK COUNTY
STA. 274+34.38

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

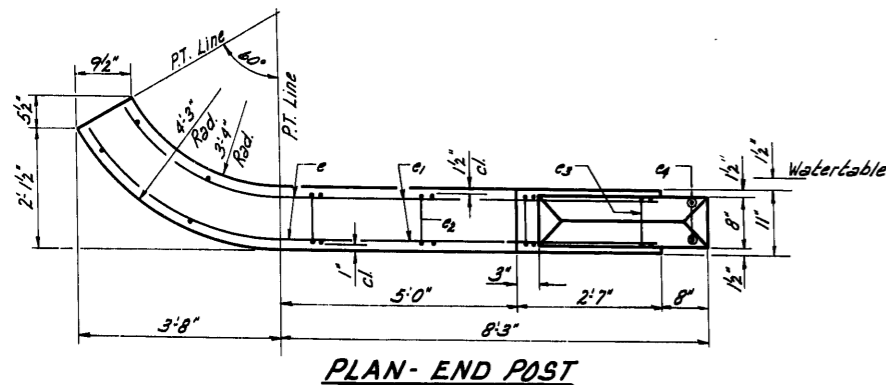
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12 28 SHEETS
S.B.I. 55	551-VB	COOK	57	41	
F.A. PROJ. U-116377(28)	ILLINOIS FED. AID PROJECT.				



196'-3" o.o. deck
ELEVATION



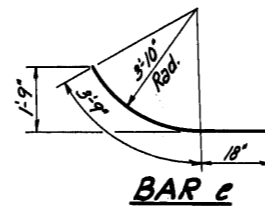
ELEVATION



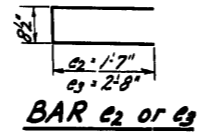
PLAN-END POST



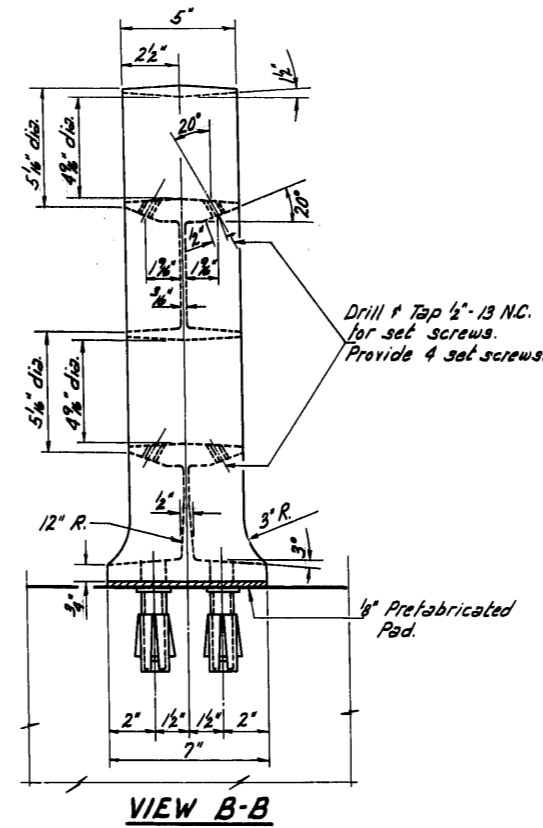
CAST END CAP
DRIVE FIT TYPE
8- Required
Incidental to item "Aluminum Handrail".



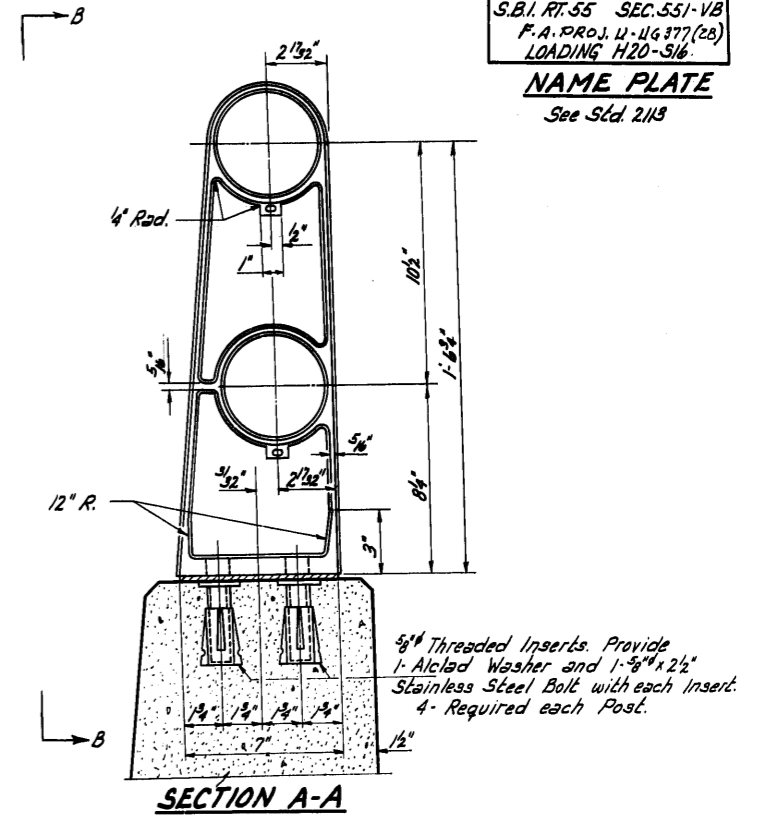
BAR c



BAR e2 or e3



VIEW B-B



SECTION A-A

STA. 274 + 34.38
BUILT 19 BY
STATE OF ILLINOIS
S.B.I. RT. 55 SEC. 551-VB
F.A. PROJ. U-116377(28)
LOADING H20-S16
NAME PLATE
See Sld. 213

BILL OF MATERIAL

Class X Concrete	Cu. Yds.	3.7
Reinforcement Bars	Lbs.	230
Aluminum Handrail	Lin. Ft.	393

NOTES

All Posts shall be placed normal to parapet.
All Posts shall be of Aluminum conforming to ASTM Specification B-108 alloy SG-70B-T6.
All Rail Tubing shall be of Aluminum conforming to ASTM Specification B-235 alloy GS-11A-T6.
Alclad Washers shall be made from sheet conforming to ASTM Specification B-209 alloy clad CG-42A-T4.
Rail Tubing may be cut to random lengths.
For material composition of Prefabricated Pad, See Article 54.9 (f), (Bearings and Anchorage), of the Standard Specifications.
Set screws shall be of Aluminum conforming to ASTM Specification B-211 alloy CG-42A-T4

BILL OF REINFORCEMENT

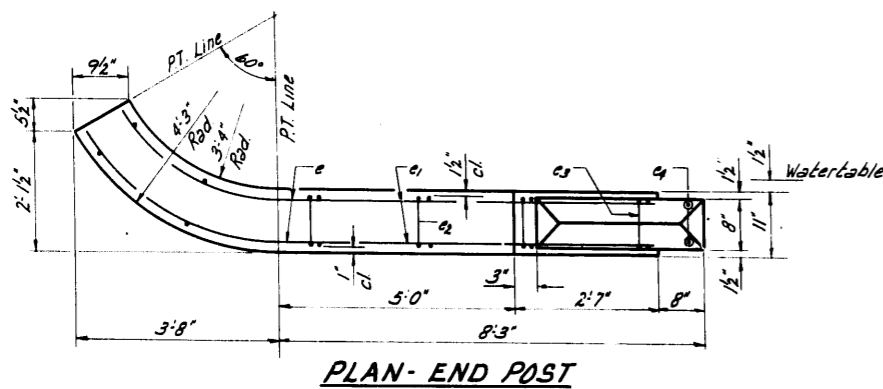
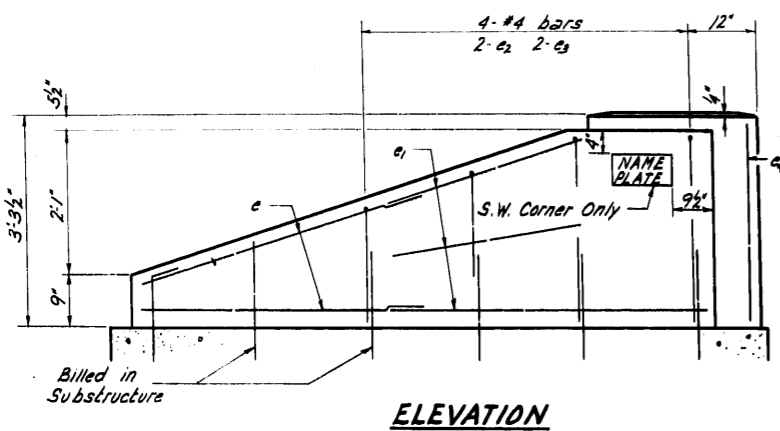
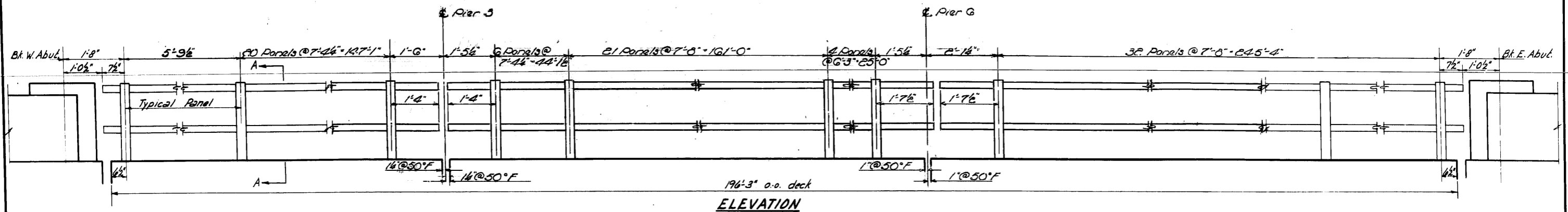
Bar	No.	Size	Length	Shape
c	16	#4	5'-3"	—
e1	24	#4	6'-6"	—
e2	8	#4	3'-10"	—
e3	8	#4	6'-0"	—
e4	8	#4	2'-3"	—

DESIGNED	R.P. Mowen	19
CHECKED	C. J. H. [Signature]	EXAMINED
DRAWN	P. Lawler	PASSED
CHECKED	C. J. H. [Signature]	APPROVED

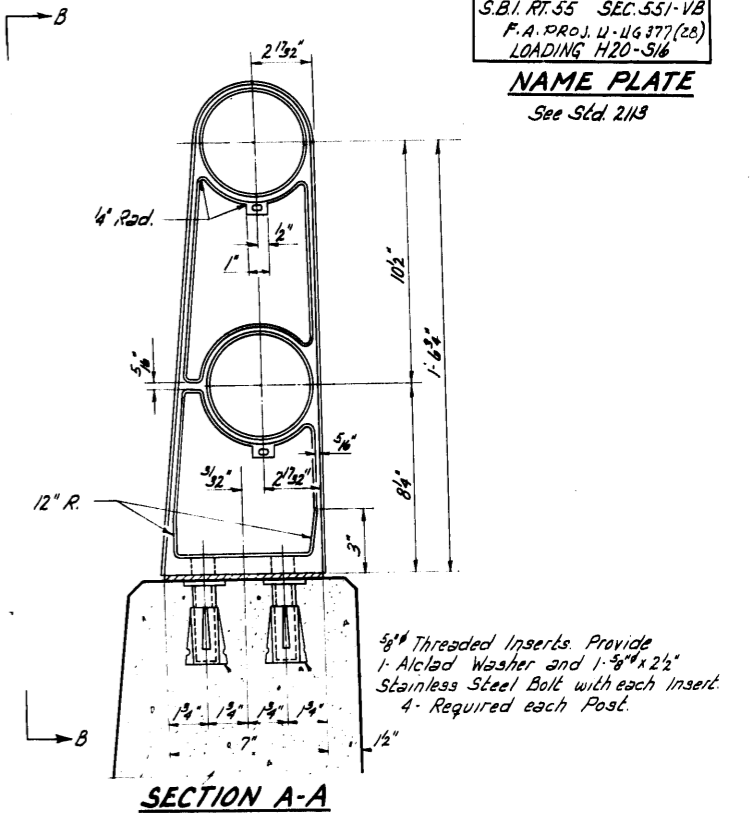
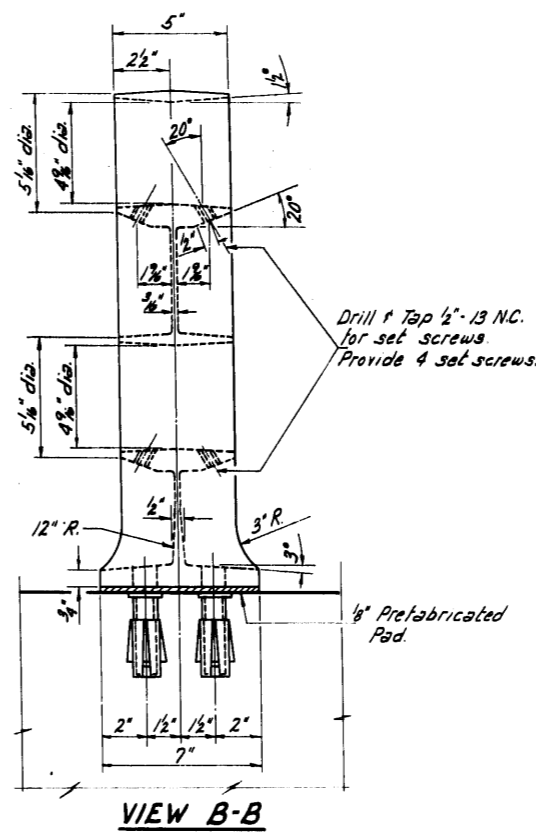
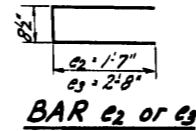
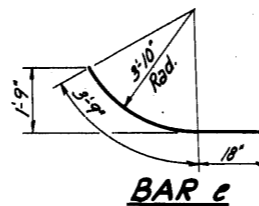
HANDRAIL DETAILS
OVER 25TH AVE.
S.B.I. RT. 55 SEC. 551-VB
COOK COUNTY
STA. 274 + 34.38

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13A 28 SHEETS
S.B.I. 55	551-VB	COOK	57	42A	
F.A.					
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



CAST END CAP
DRIVE FIT TYPE
2-4" Required
Incidental to item "Aluminum Handrail".



STA. 274+34.38
BUILT 19 BY
STATE OF ILLINOIS
S.B.I. RT. 55 SEC. 551-VB
F.A. PROJ. U-116377(28)
LOADING H20-S16
NAME PLATE
See Std. 2113

BILL OF MATERIAL

Class X Concrete	Cu.Yds	3.7
Reinforcement Bars	Lbs.	230
Aluminum Handrail	Lin. Ft.	1,272

NOTES

All Posts shall be placed normal to parapet.
All Posts shall be of Aluminum conforming to ASTM Specification B-108 alloy SG-70B-T6.
All Rail Tubing shall be of Aluminum conforming to ASTM Specification B-235 alloy GS-11A-T6.
Alclad Washers shall be made from sheet conforming to ASTM Specification B-209 alloy clad CG-42A-T4.
Rail Tubing may be cut to random lengths.
For material composition of Prefabricated Pad, See Article 54.9 (f), (Bearings and Anchorage), of the Standard Specifications.
Set screws shall be of Aluminum conforming to ASTM Specification B-211 alloy CG-42A-T4

BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
e	16	#4	5'-9"	U
e ₁	24	#4	6'-6"	—
e ₂	8	#4	3'-10"	—
e ₃	8	#4	6'-0"	—
e ₄	8	#4	2'-3"	—

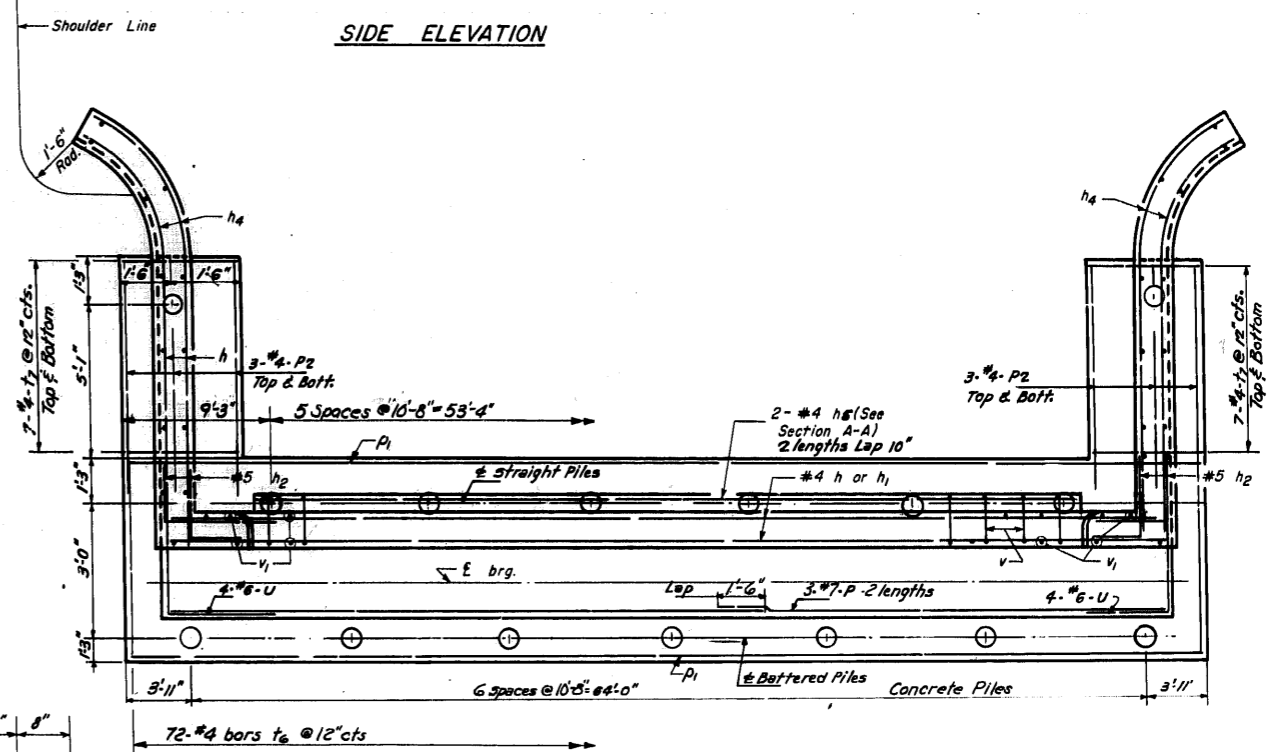
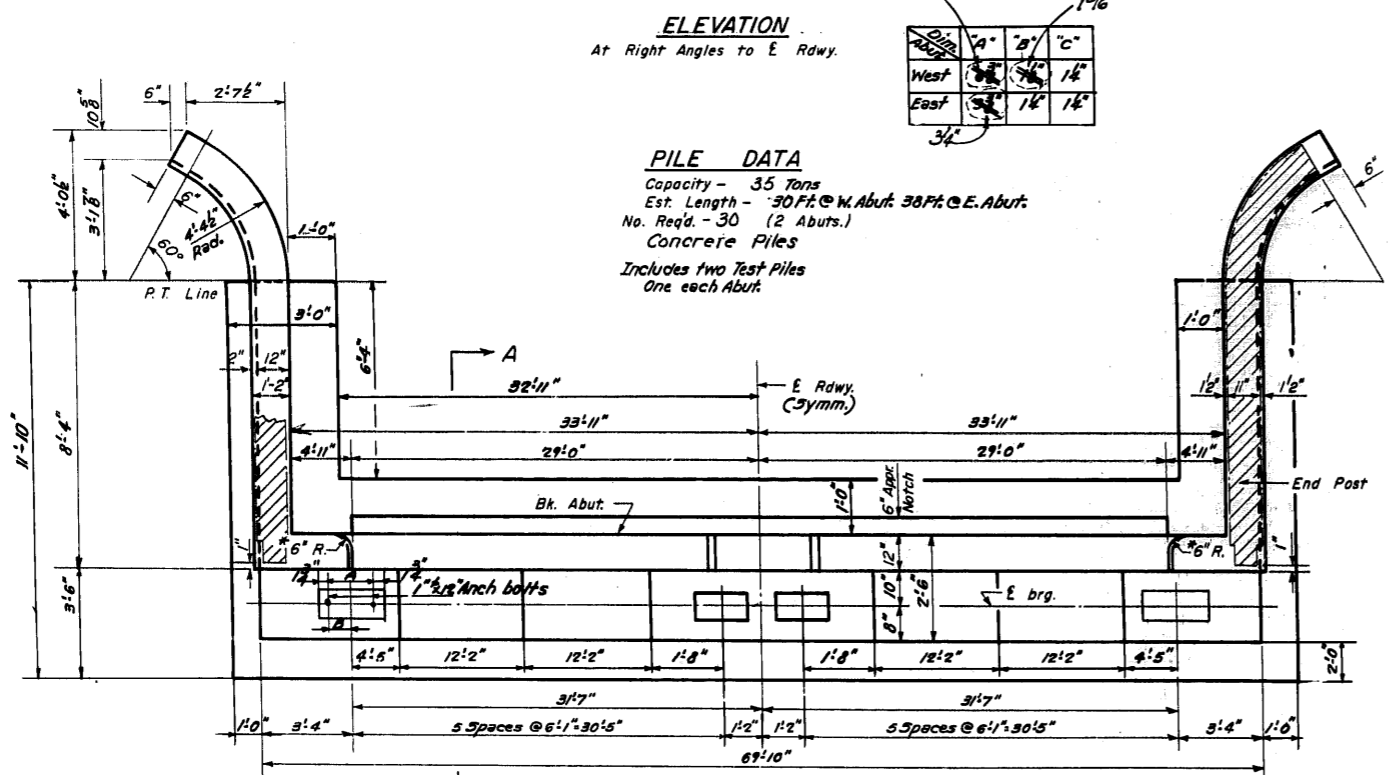
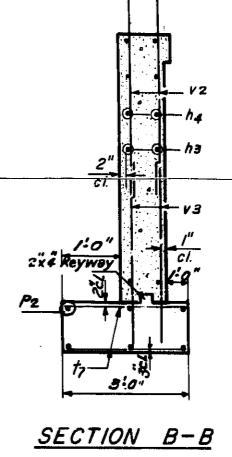
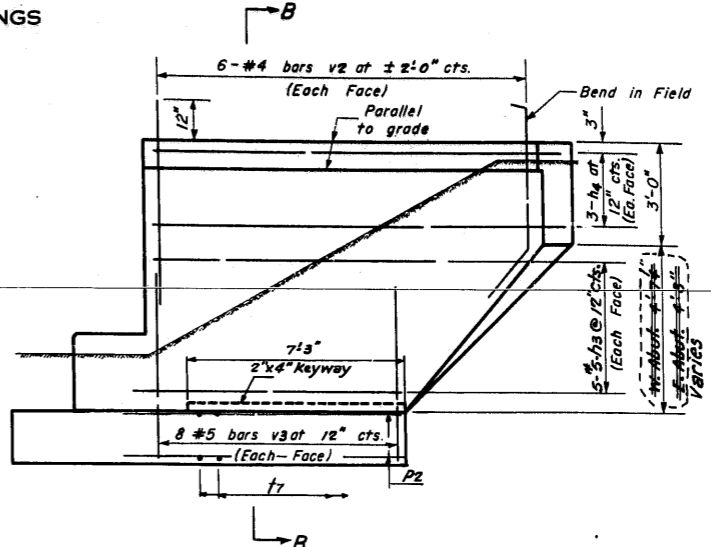
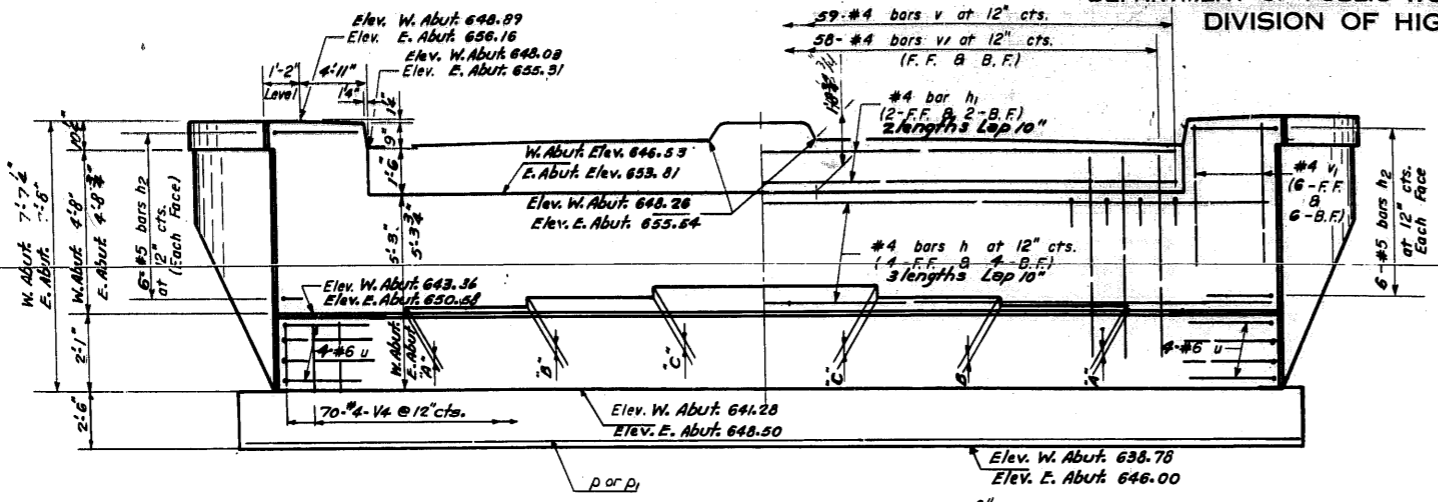
DESIGNED	P. Wanner
CHECKED	Campbell
DRAWN	P. Lawler
CHECKED	Campbell

EXAMINED	M. C. Bowman	JAN 19 1962
PASSED	C. S. Stewart	
APPROVED	A. R. Prentiss	

HANDRAIL DETAILS
OVER GARDNER ROAD & I.H.B. R.R.
S.B.I. RT. 55 SEC. 551-VB
COOK COUNTY
STA. 274 + 34.38

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

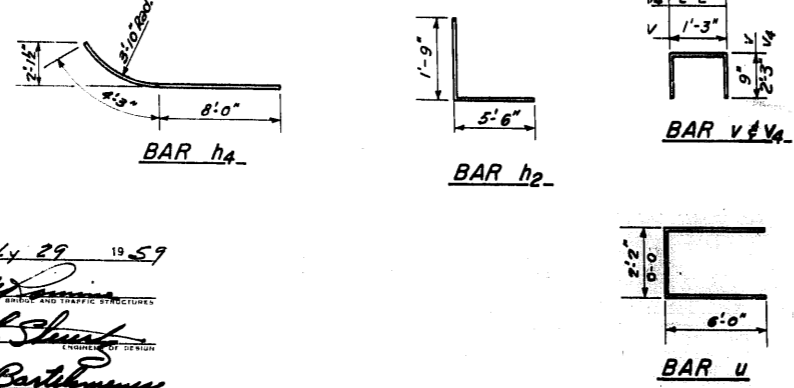
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	551-VB	COOK	97	43
SHEET NO 14 28 SHEETS				



PILE DATA
Capacity - 35 Tons
Est. Length - 30 Ft. @ W. Abut. 38 Ft. @ E. Abut.
No. Reqd. - 30 (2 Abuts.)
Concrete Piles
Includes two Test Piles
One each Abut.

ANCHOR BOLT SPACING

Abut.	Beam	A	B
West	ZKR	11"8"	85"
East	ZKR	11"5"	85"
West	INT	11"4"	84"
East	INT	11"4"	84"



BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	48	#4	23'9"	—	v ₆	144	#4	5'9"	—
h ₁	16	#4	29'5"	—	t ₇	56	#4	2'9"	—
h ₂	48	#5	7'3"	L	u	16	#6	14'2"	□
h ₃	40	#5	8'0"	—	v	118	#4	2'9"	□
h ₄	24	#5	12'3"	—	v ₁	280	#4	6'6"	—
h ₅	8	#2	29'4"	—	v ₂	48	#4	5'8"	—
p	32	#7	35'8"	—	v ₃	64	#5	6'0"	—
p ₁	12	#2	24'6"	—	v ₄	280	#4	6'8"	□
p ₂	24	#4	7'3"	—					

BILL OF MATERIAL

Item	Unit	Quantity
Class X Concrete	Cu. Yd.	143.7
Reinforcement Bars	Lb.	9090
Concrete Piles	Lin. Ft.	952
Test Piles (Conc.)	Each	2

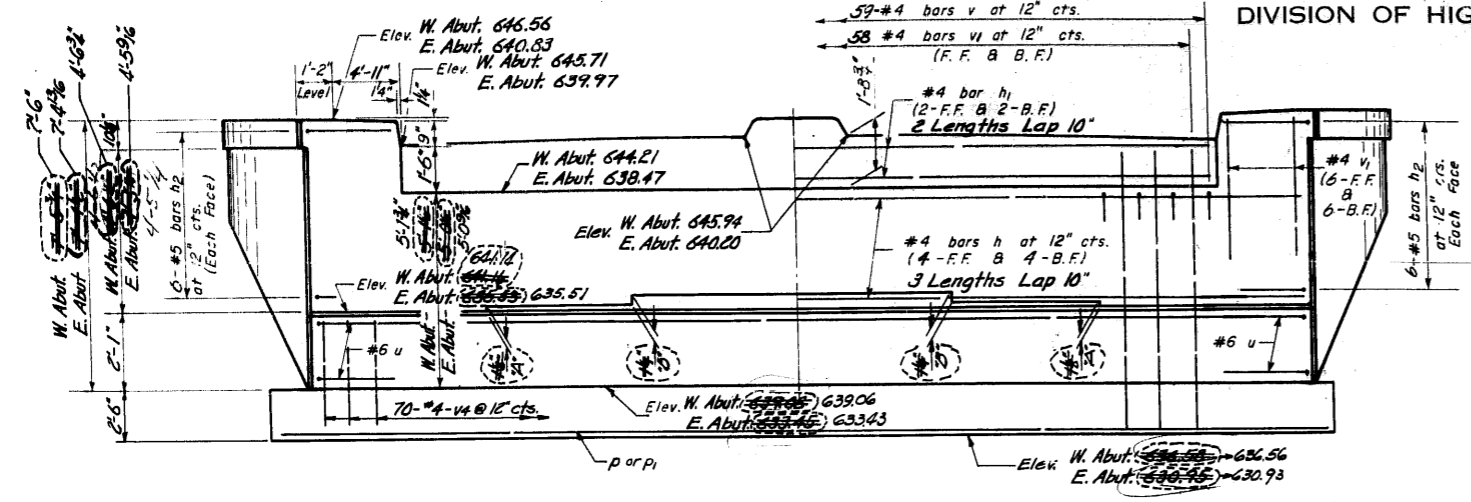
DESIGNED **Ronald C. Pitt**
 EXAMINED **July 29 1959**
 CHECKED **Raymond E. Jordan**
 PASSED **E. J. Stewart**
 DRAWN **R. R. W. A. Sousanfan**
 APPROVED **R. R. W. A. Sousanfan**
 CHECKED **J. H. J.**

**ABUTMENTS
BRIDGE OVER GARDNER ROAD & I.H.B. R.R.
S.B.I. R. 55- SEC. 551-VB
COOK COUNTY
STA. 274+34.38**

A-3 Drawn 5-21-58
 Revised 8/11/61 Changed slope thickness as shown in Table A-11 1/2" dimension.
 In SIDE ELEVATION changed dimensions of back end of wing wall to 1/2" & 3/4".

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

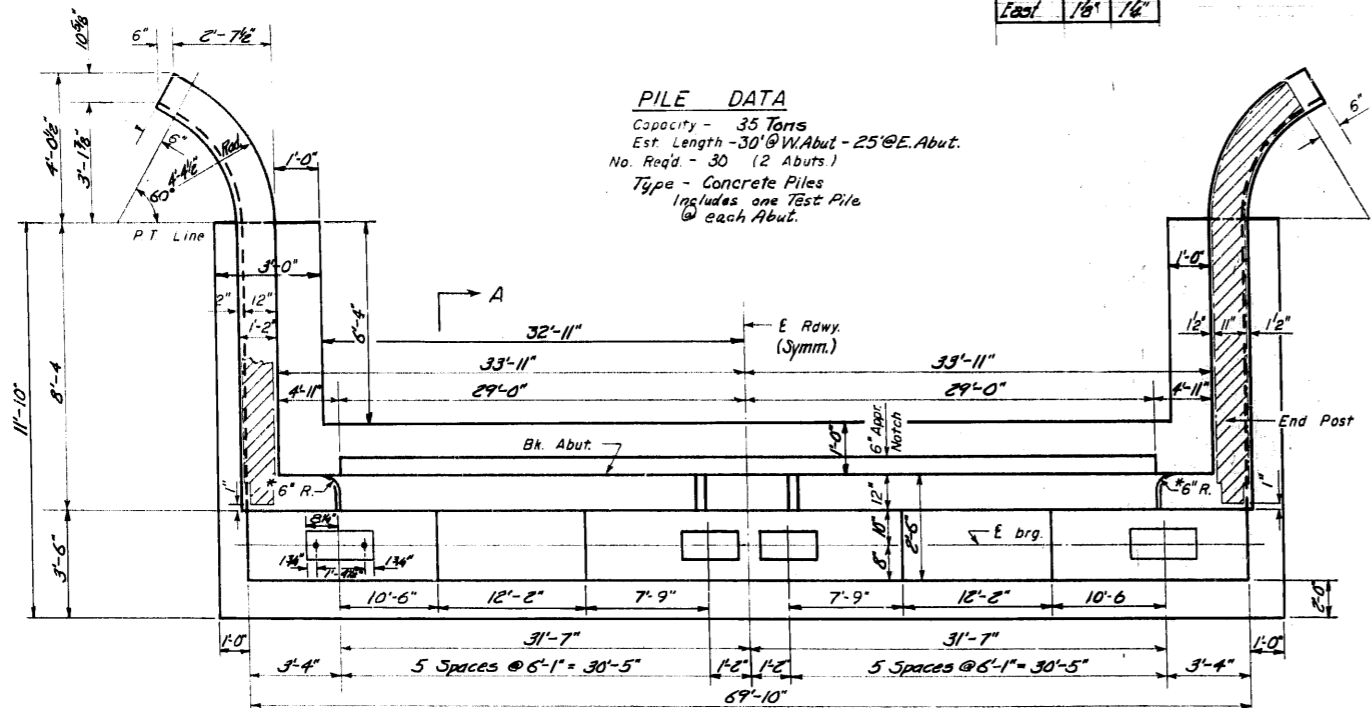
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 15
S.B.I. 55	551-VB	COOK	57	44	28 SHEETS
FED. ROAD DIST. NO. 7	ALINDR	FED. AID PROJECT			



ELEVATION
At Right Angles to E. Rdwy.

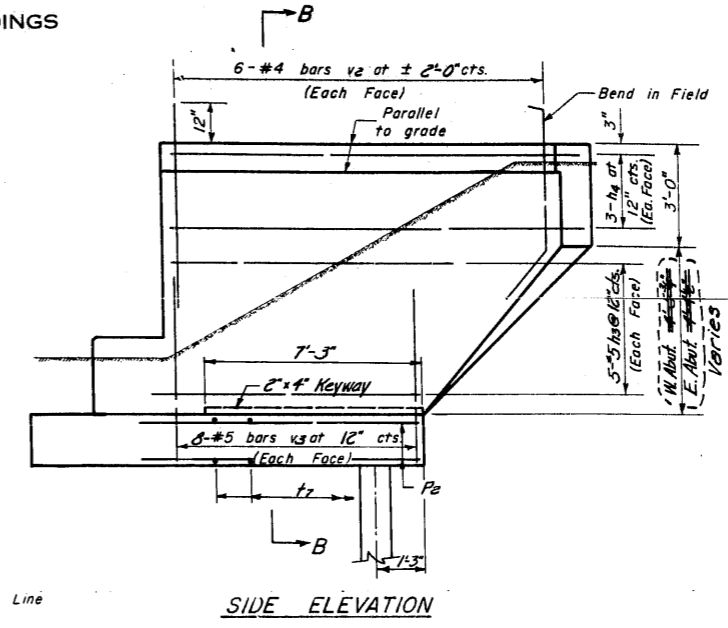
Abut.	A	B
West	14'	16'
East	16'	16'

PILE DATA
Capacity - 35 Tons
Est. Length - 30' @ W. Abut. - 25' @ E. Abut.
No. Req'd. - 30 (12 Abuts.)
Type - Concrete Piles
Includes one Test Pile @ each Abut.

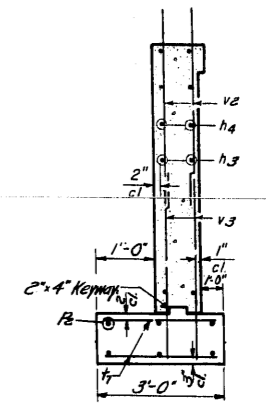


PLAN OF ABUTMENT
Dimensions

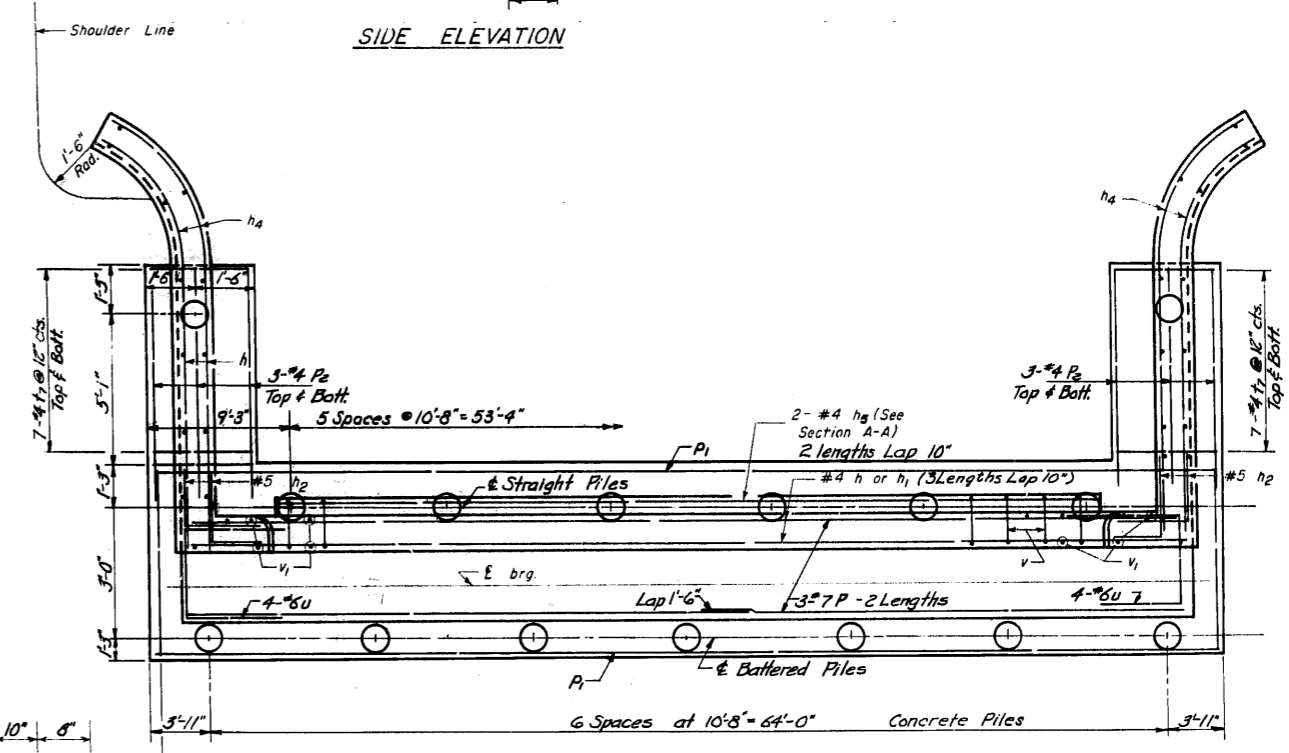
* Note Contractor shall construct curb without radius when a curb gutter are to be used on bridge approaches (See Road Plans).



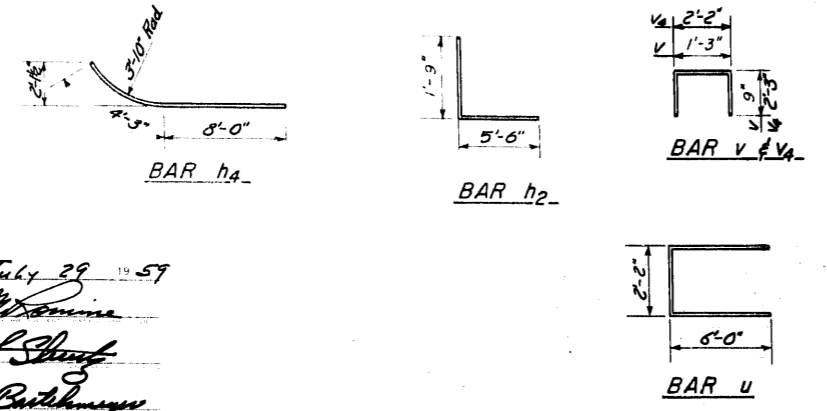
SIDE ELEVATION



SECTION B-B



PLAN OF ABUTMENT
Reinforcement & Pile Spacing



BILL OF REINFORCEMENT									
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	48	#4	25'-9"	—	v6	144	#4	5'-3"	—
h1	16	#4	29'-5"	—	v7	56	#4	2'-9"	—
h2	48	#5	7'-3"	L					
h3	40	#5	8'-0"	—	u	16	#6	14'-2"	□
h4	24	#5	12'-3"	—					
h5	8	#4	20'-4"	—	v	118	#4	2'-1"	□
P	32	#7	35'-8"	—	v1	280	#4	6'-6"	—
A	12	#4	24'-6"	—	v2	48	#4	5'-6"	—
P2	24	#4	7'-3"	—	v3	64	#5	6'-0"	—
					v4	280	#4	6'-8"	□

BILL OF MATERIAL		
Item	Unit	Quantity
Class X Concrete	Cu Yd	140.2
Reinforcement Bars	Lb	9070
Concrete Piles	Lin. Ft.	770
Test Pile (Concrete)	Each	2

ABUTMENTS
CERMAK ROAD OVER 25TH AVE.
S.B.I. RT. 55 - SECTION 551-VB
COOK COUNTY
STATION 274+34.38

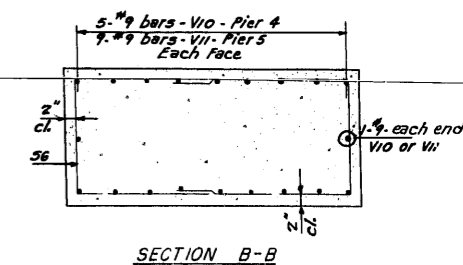
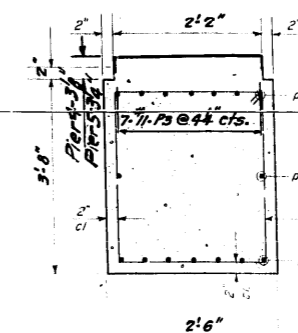
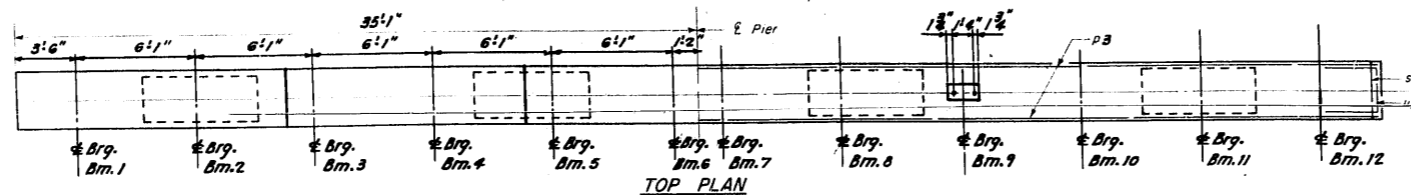
DESIGNED: Ronald C. Pitz
CHECKED: Donald K. Janssen
W.A. Sausaman
F. Tiley
W.A. Sausaman
DRAWN: R.L.G.
EXAMINED: July 29 1957
DESIGNED: M. Janssen
CHECKED: E. J. Shuff
APPROVED: R.R. Butcher

A-3 Drawn 5-21-58

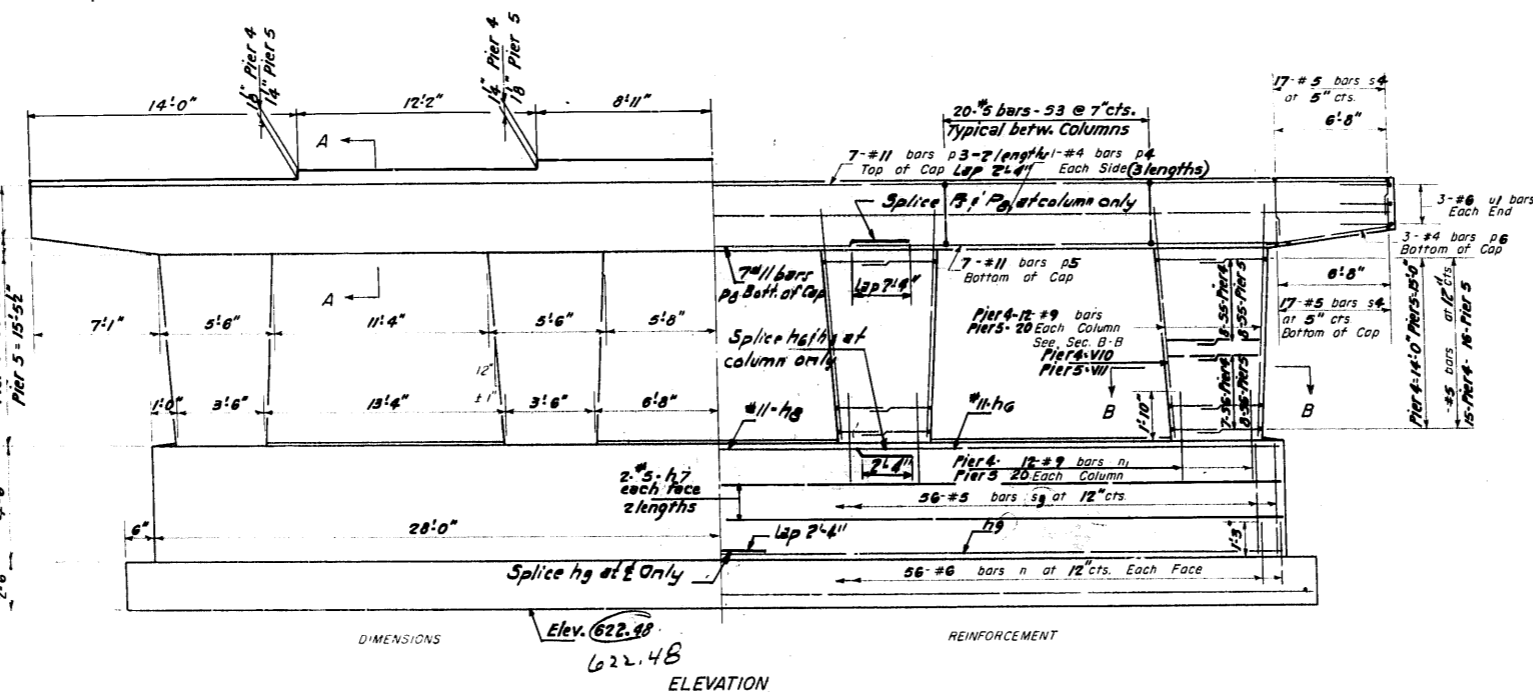
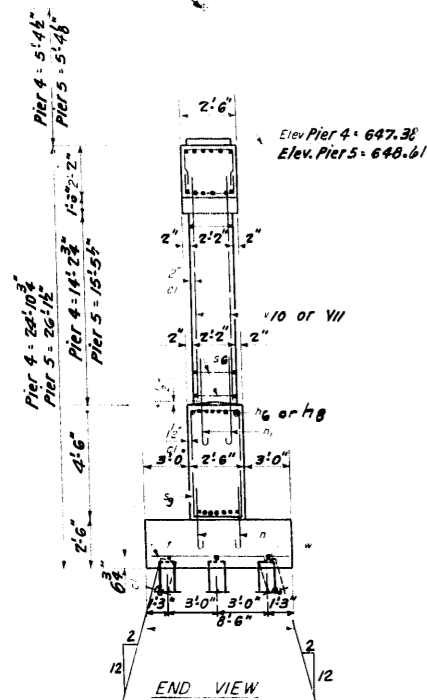
Revised: 8/31/51 Changed dimensions at front face of Abut. Elevations of west end abut. dimensions as shown in ELEVATION view. In SIDE ELEVATION changed dimensions of base and of support to vertical. J.A.B.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / B
55	551-VB	COOK	57	47	28 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



± Pier 4 Sta. 271+48.80
Cr. Elev. 652.76
± Pier 5 Sta. 272+39.05
Cr. Elev. 653.96



SECTION A-A

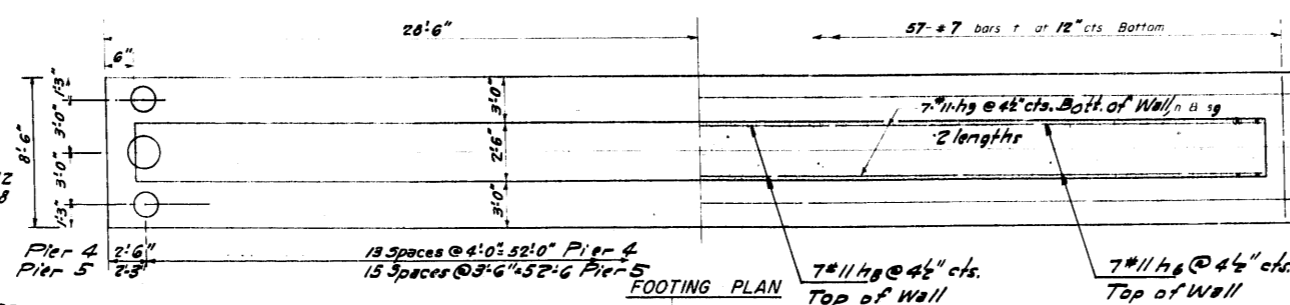
PIERS 4 & 5
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n6	14	#11	20'7"	—
n7	16	#5	28'6"	—
n8	14	#11	37'4"	—
n	224	#6	3'2"	—
n	128	#9	5'3"	—
n9	28	#11	29'0"	—
p3	28	#11	36'2"	—
p4	12	#4	23'11"	—
p5	14	#11	20'11"	—
p6	12	#4	7'10"	—
p8	14	#11	37'5"	—
s3	120	#5	11'8"	—
s4	136	#5	6'8"	—
s5	128	#5	8'2"	—
s6	120	#5	7'0"	—
s9	112	#5	18'6"	—
t	114	#7	8'3"	—
v1	12	#6	6'2"	—
v10	48	#9	16'0"	—
v11	80	#9	17'4"	—
v	12	#5	29'0"	—

A & B DIMENSIONS

Bar	A	B
s4	2'2"	2'3"
s5	1'10"	3'2"
s6	1'10"	2'7"

Class 4 Concrete	228 /
Reinforcement Bars	38120
Creosoted Piles	Lin. Ft. 1,335
Test Piles (Creo. Timber)	Each 1
Metal Shoes	Each 89



FOOTING PLAN

Creosoted Piles
Capacity = 20 Tons
Est. Length = 15 Ft.
No. Reqd. = 90 (2 Piers - includes one test pile at Pier 4)
Equip with American all steel pile shoe
Number 2 or Equal

DESIGNED	Ronald C. Pitz
CHECKED	Ronald K. Jacobson
DRAWN	R.E.P. W.A. Sausman
CHECKED	R.K.P.

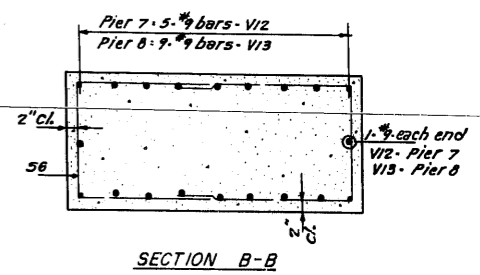
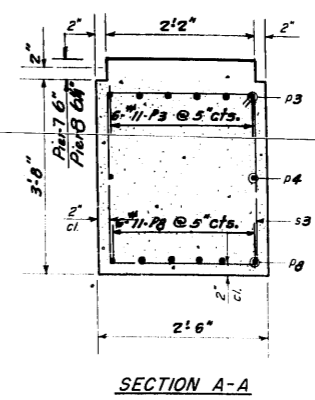
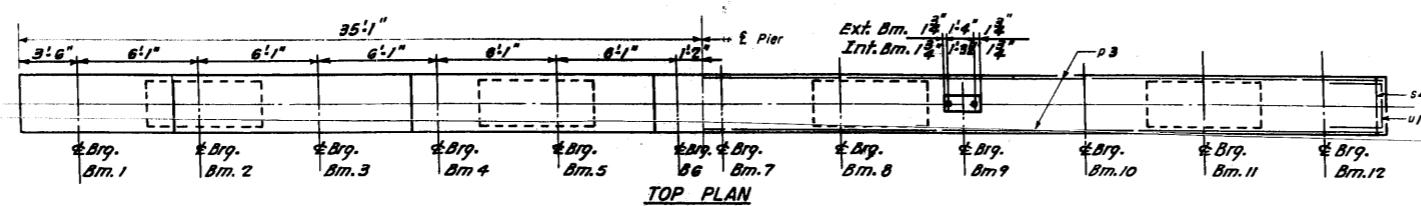
EXAMINED	July 29 1959
PASSED	E.P. Shurt
APPROVED	R.R. Bartholomew

NOTE:
Batter Alternate Piles in
outside Rows (Pier 5 only).

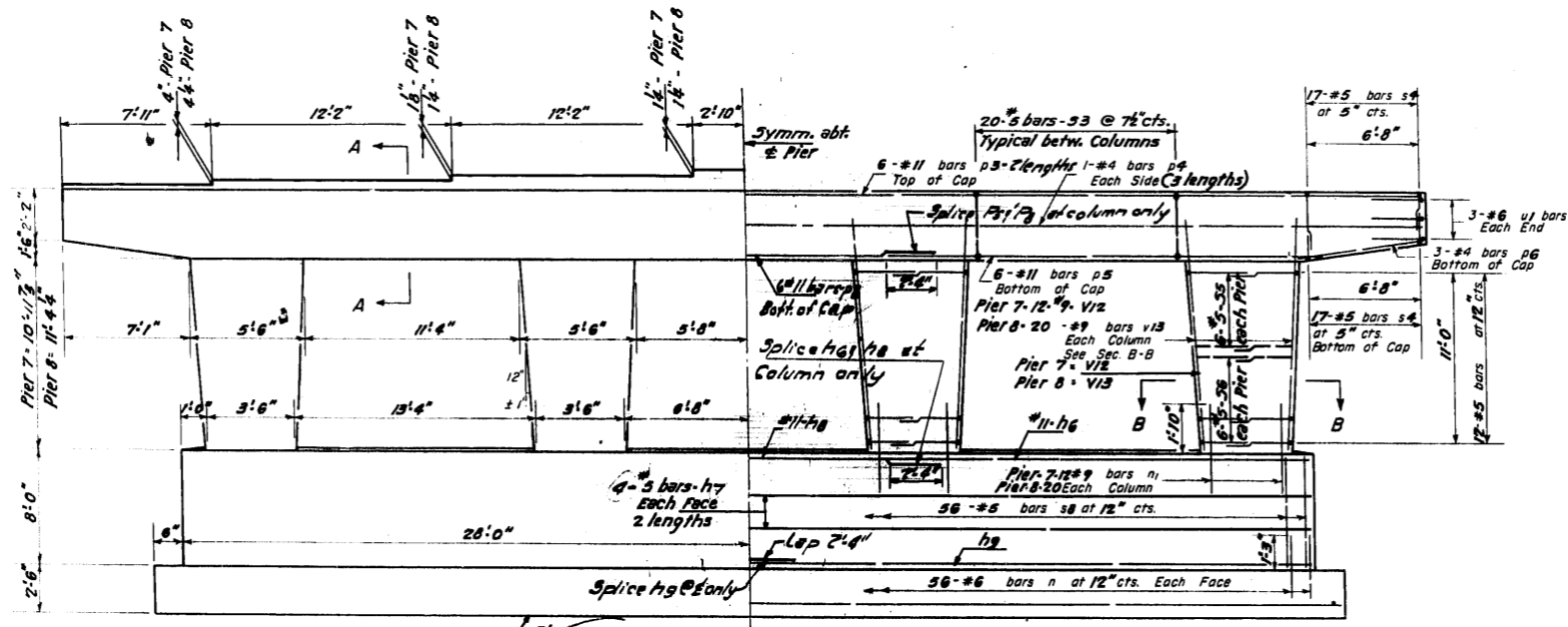
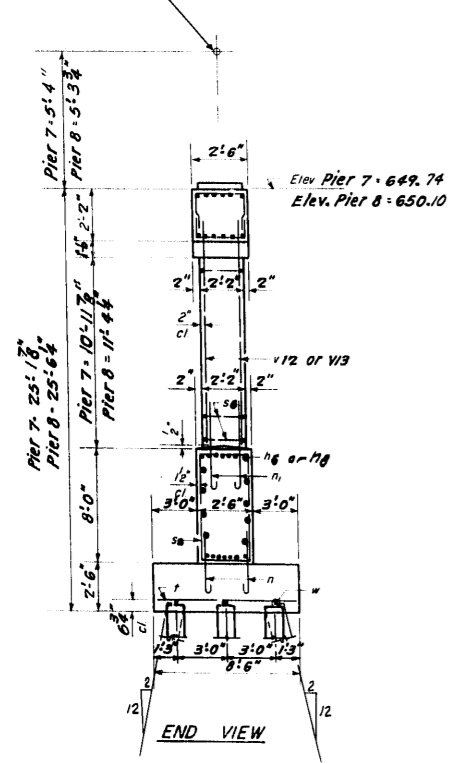
PIERS 4 & 5
S.B.I. Rr. 55-SEC. 551-VB
COOK COUNTY
STA. 274+34.38

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

ROUTE NO. S. B. L. 55	SECTION 551-VB	COUNTY Cook	TOTAL SHEETS 57	SHEET NO. 49	SHEET NO. 20- 28 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

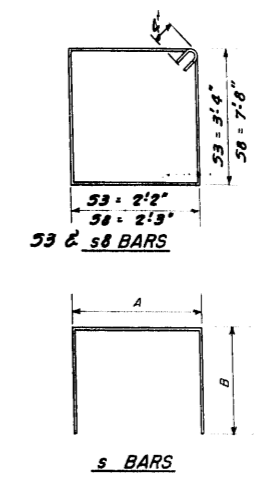


± Pier 7 Sta. 273+65.14
Cr. Elev. 655.08
± Pier 8 Sta. 274+34.39
Cr. Elev. 655.42



DIMENSIONS
ELEV. 624.58
624.58
REINFORCEMENT

ELEVATION



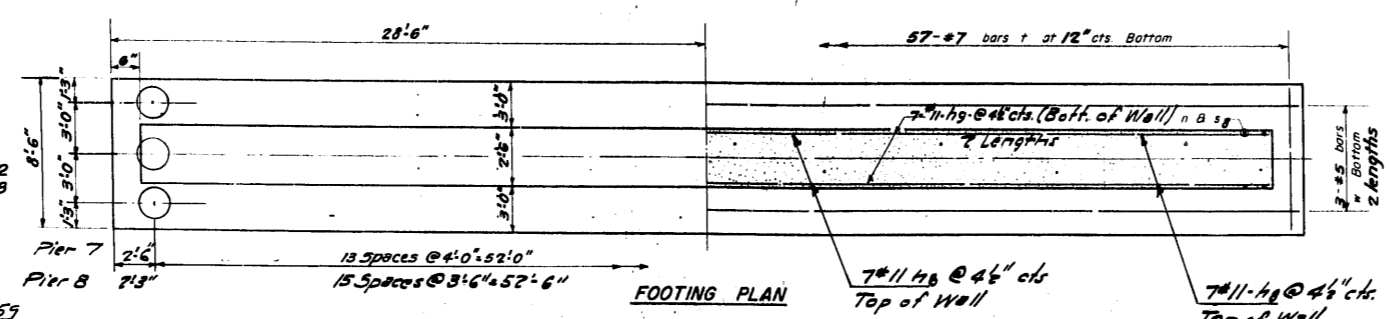
A & B DIMENSIONS

Bar	A	B
s4	2'2"	2'3"
s5	1'10"	3'2"
s6	1'10"	2'7"

PIERS 7 & 8
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h6	14	#11	20'7"	—
h7	32	#5	28'6"	—
h8	14	#11	37'4"	—
n	224	#6	5'2"	—
n1	128	#9	5'3"	—
h9	28	#11	28'0"	—
p3	24	#11	36'2"	—
p4	12	#4	23'11"	—
p5	12	#11	20'11"	—
p6	12	#4	7'10"	—
p8	12	#11	37'0"	—
s3	120	#5	11'3"	—
s4	136	#5	6'8"	—
s5	96	#5	8'2"	—
s6	96	#5	7'10"	—
s8	112	#5	20'6"	—
t	114	#7	8'3"	—
u1	12	#6	6'2"	—
v12	48	#9	12'10"	—
v13	80	#9	13'2"	—
w	12	#5	29'0"	—

Class X Concrete Cu Yds 256.3
Reinforcement Bars Lbs 35920
Crested Pier Lin. Ft. 1335
Test Piles (Cres. Timber) Each One
Metal Shoes Each 89



FOOTING PLAN

Note:
Batter Alternate Piles in
outside Rows (Pier 8 only)

Crested Pier
Capacity - 20 Tons
Est. Length - 15 Ft.
No. Req'd - 90 (2 Piers includes one
test pile @ Pier 8) Pier 7 - 42
Pier 8 - 48
Equip with American all steel
pile shoe Number 2 or Equal

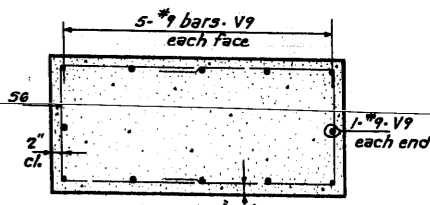
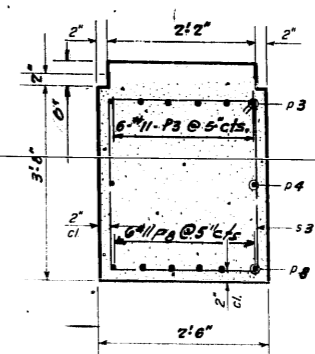
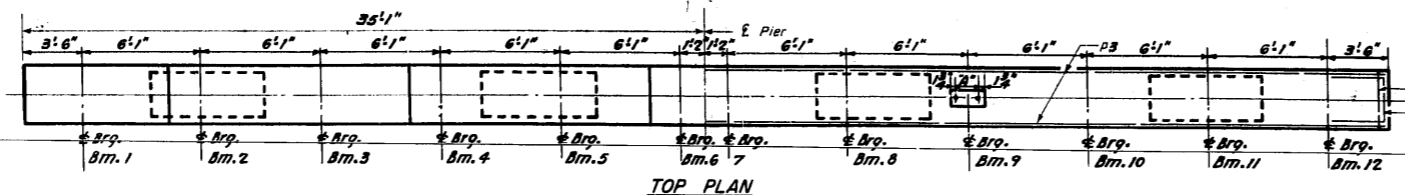
DESIGNED	Ronald C. Pitt	EXAMINED	July 29 1959
CHECKED	Frank X. Gaudin	PASSED	Chief Engineer
DRAWN	R.S.P. W.A. Sausard	APPROVED	Chief Highway
CHECKED	F.K.A.		

PIERS 7 & 8
S. B. L. R. 55-SEC. 551-VB
COOK COUNTY
STA. 274+34.38

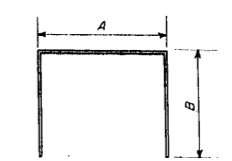
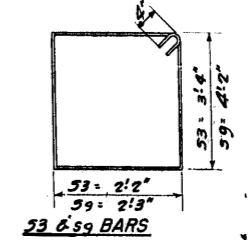
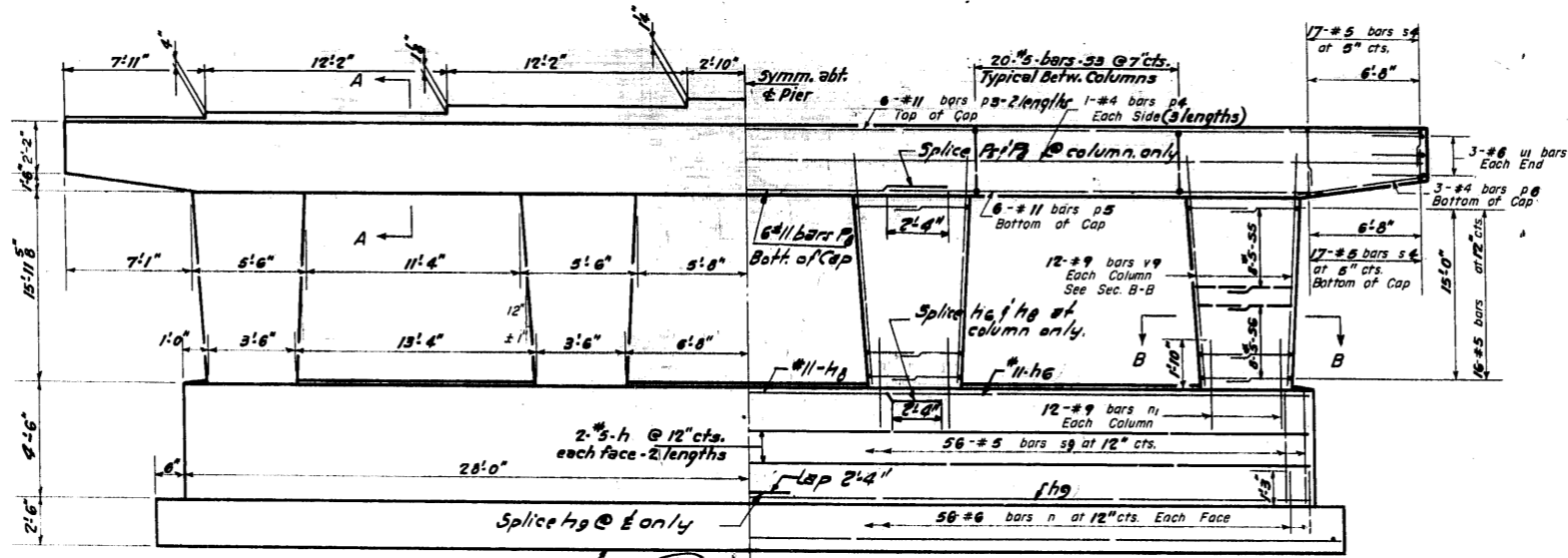
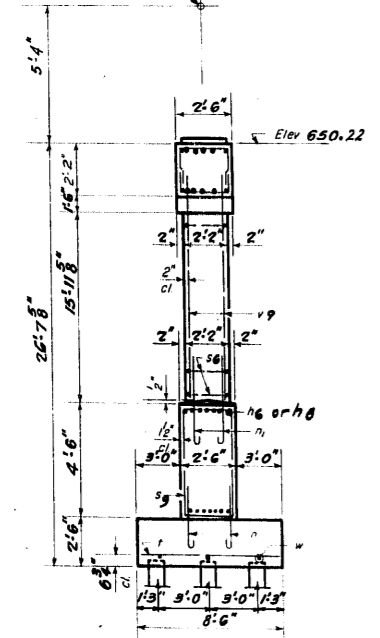
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2/
57	551-VB	COOK	57	50	18 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

1/4" = 1'-0"
1/8" = 1'-0"
1/16" = 1'-0"



± Pier 9. Sta. 275+03.64
Ct. Elev. 655.56



A & B DIMENSIONS

Bar	A	B
s4	2'2"	2'3"
s5	1'10"	3'2"
s6	1'10"	2'7"

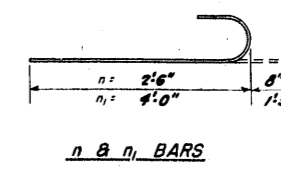
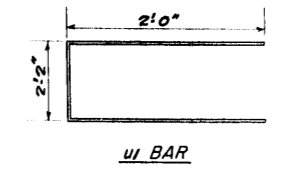
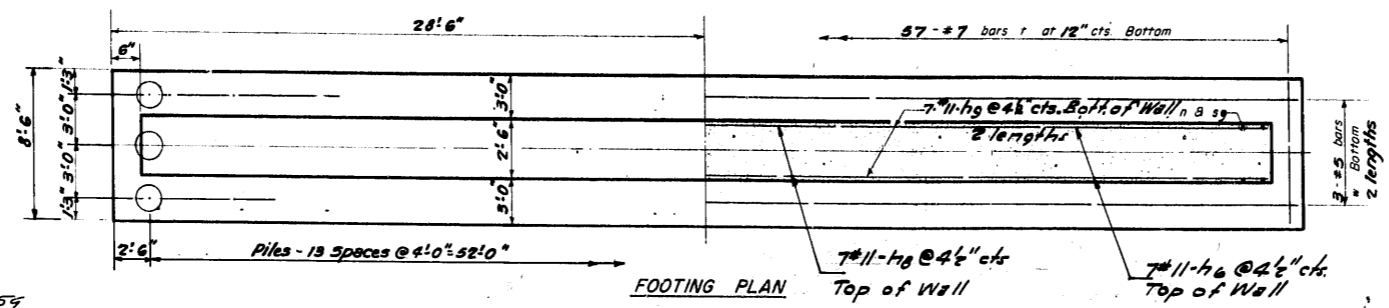
PIER 9
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h6	7	#11	20'7"	—
h7	8	#5	28'6"	—
h8	7	#11	37'4"	—
n	112	#6	3'2"	U
n1	48	#9	5'3"	U
h9	14	#11	29'0"	—
p3	12	#11	36'2"	—
p4	6	#4	29'11"	—
p5	6	#11	20'11"	—
p6	6	#4	7'10"	—
p8	6	#11	27'9"	—
s3	60	#5	11'8"	□
s4	68	#5	6'8"	□
s5	64	#5	8'2"	□
s6	64	#5	7'0"	□
s9	56	#5	18'6"	□
r	57	#7	8'3"	—
v1	6	#6	6'2"	□
v9	48	#9	17'9"	—
w	6	#5	29'0"	—

Class X Concrete Cu Yds 116.9
Reinforcement Bars Lbs 17,340
Created Piles Lin.Ft. 630
Metal Shoes Each 42

Note: All edges shall have standard 1/4" chamfer except footing.

Created Piles
Capacity - 20 Tons
Est. Length - 15 Ft.
No. Req'd. - 42
Equip with American all steel pile shoe, Number 2 or Equal



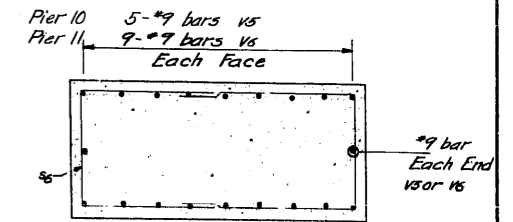
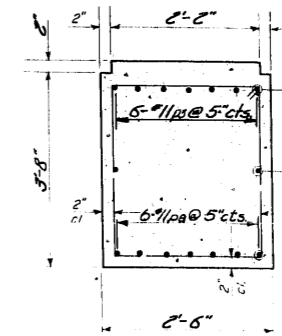
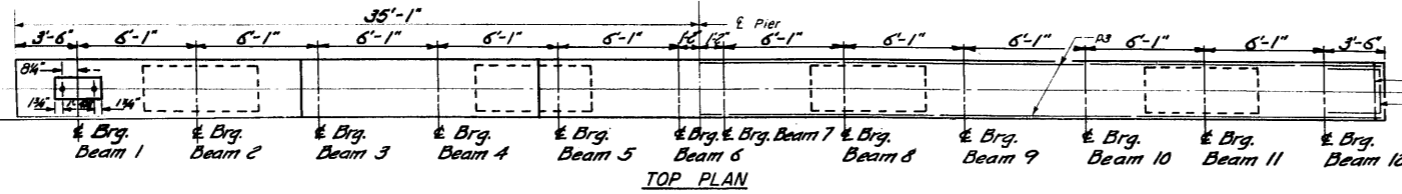
DESIGNED: *Ronald C. Pitt*
CHECKED: *Raymond K. Jacobson*
DRAWN: *R.C.P. W.A. Sausaman*
CHECKED: *J.K.L.*

EXAMINED: *July 29, 1954*
PASSED: *R.P. Shurt*
APPROVED: *R.P. Shurt*

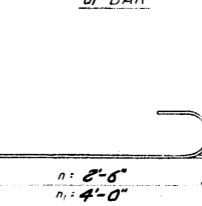
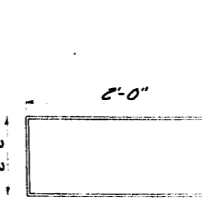
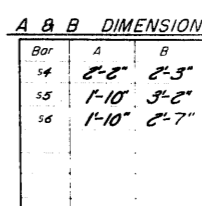
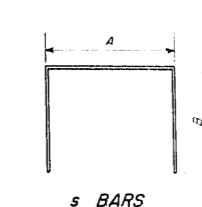
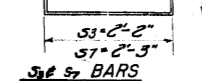
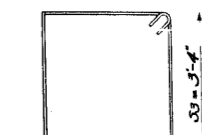
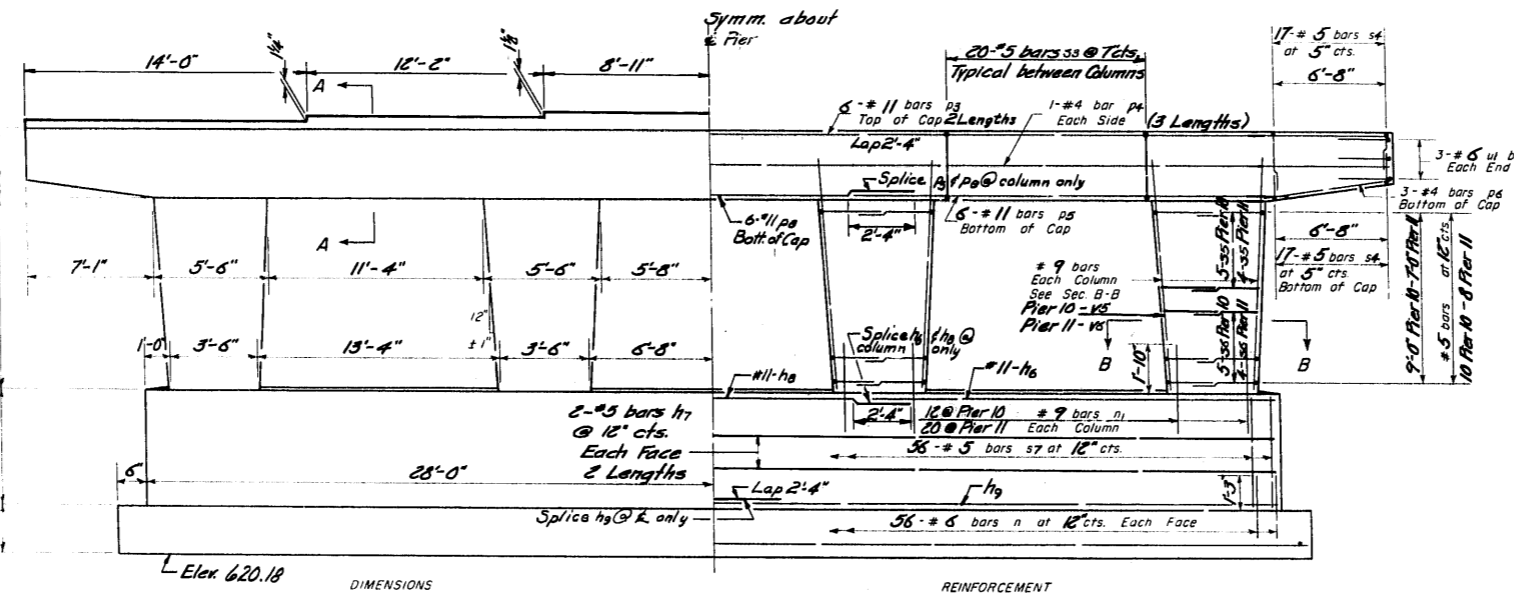
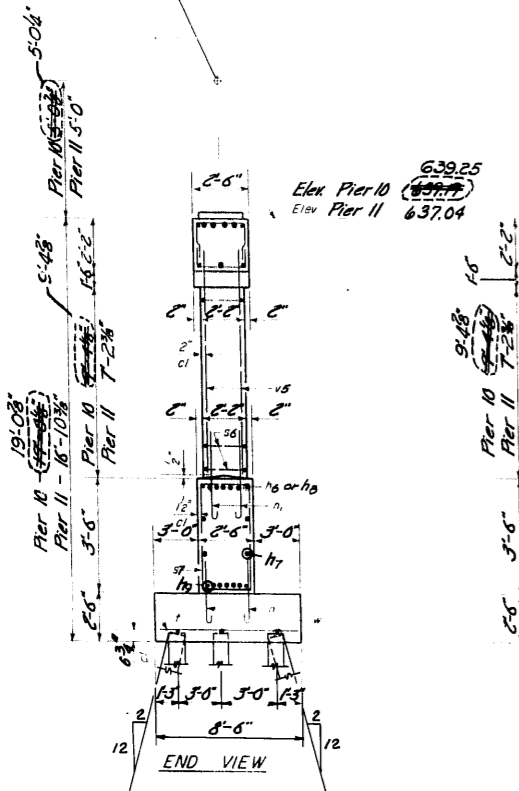
PIER 9
S.B.I. RT. 55-SEC. 551-VB
COOK COUNTY
STA. 274+34.38

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO 22 28 SHEETS
S. R. L. 55	551-VB	COOK	57	51	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



± Pier 10 Sta. 285+87.65
Cr. Elev. 644.27
± Pier 11 Sta. 283+63.65
Cr. Elev. 642.04



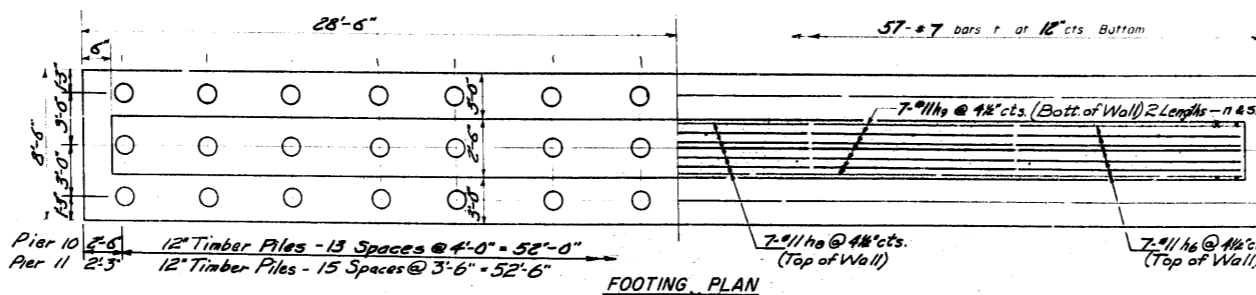
PIERS 10 & 11
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h6	14	#11	20'-7"	—
h7	16	#5	28'-6"	—
h8	14	#11	37'-4"	—
h9	28	#11	29'-0"	—
n	224	#6	3'-2"	—
n1	128	#9	5'-3"	—
p3	24	#11	36'-2"	—
p4	12	#4	23'-11"	—
p5	12	#11	20'-11"	—
p6	12	#4	7'-10"	—
p8	12	#11	37'-9"	—
s3	120	#5	11'-8"	—
s4	136	#5	6'-8"	—
s5	72	#5	8'-2"	—
s6	72	#5	7'-0"	—
s7	112	#5	11'-5"	—
t	114	#7	8'-3"	—
u1	12	#5	6'-0"	—
v5	48	#9	11'-2"	—
v6	80	#9	9'-0"	—
"	12	#5	29'-0"	—

Class X Concrete 198.7
Reinforcement Bars 32,610
Creosoted Timber Piles Lin Ft. 990
Metal Shoes each 90

PILE DATA

Creosoted Piles
Capacity = 20 tons
Est. Length = 11'
No. Req'd = 42 - Pier 10
48 - Pier 11
Equip with American all steel pile shoe
Number 20 or equal.



Note:
Batter Alternate Piles in
outside Rows (Pier 11 only)

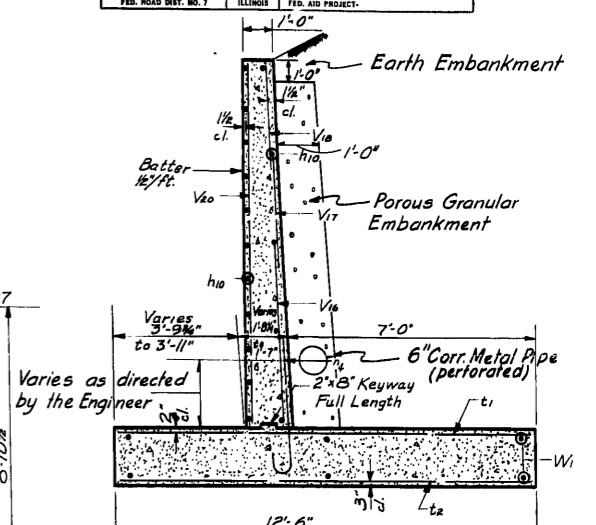
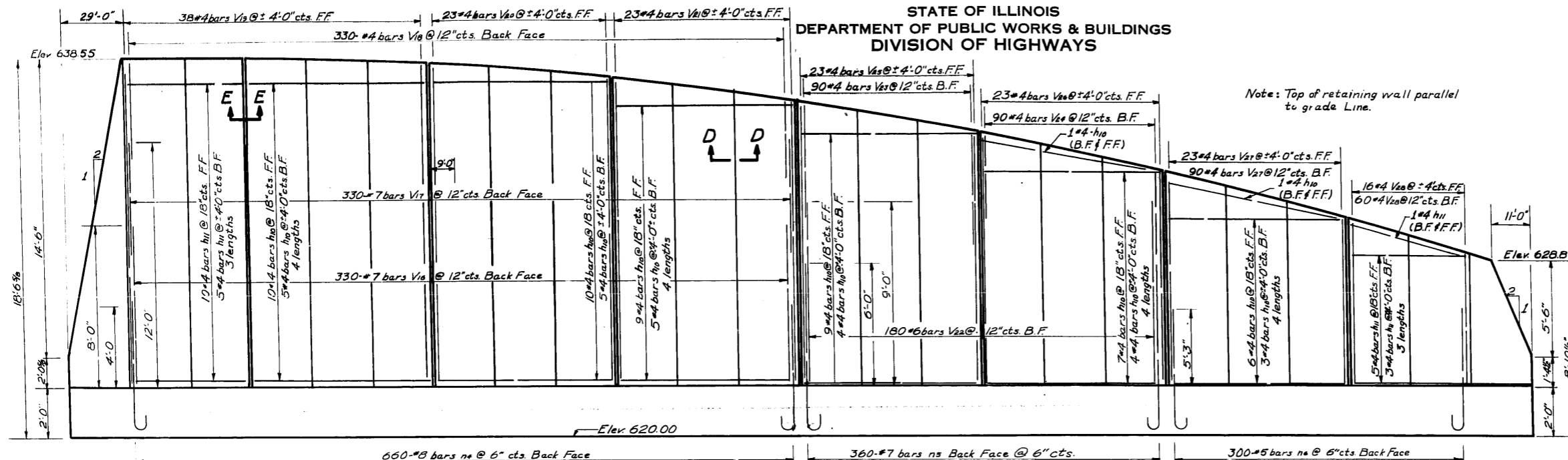
DESIGNED	Ronald C. Pitt	EXAMINED	July 29 1957
CHECKED	Edward H. Casper	PASSED	
DRAWN	R.P. W.A. Sausman	APPROVED	
CHECKED	J.H.R.		

Revised 8/2/61 Changed height of Pier 10 from 19'-0" to 19'-0"
alignment from top of Pier 10 to Cr. of lobby chgd. from
5'-0" to 5'-0". Elev. at top of Pier chgd. from 644.27 to 644.27. See END VIEW. - J.A.B.

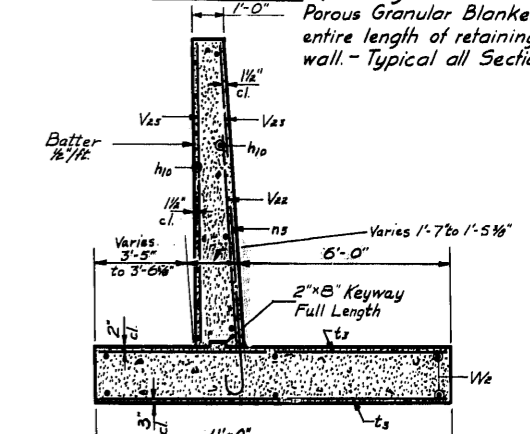
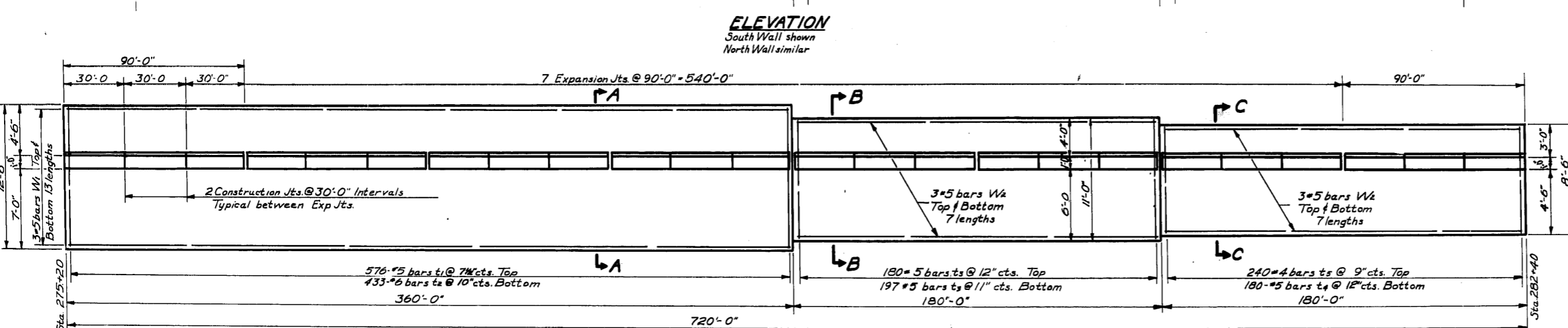
PIERS 10 & 11
CERMAK ROAD OVER 25TH AVE.
S.B.I. Pt. 55 - SECTION 551-VB
COOK COUNTY
STATION 274+34.38

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
S. R. L. 55	551-VB	COOK	57	52	28 SHEETS
F. A.					
FILE ROAD DIST. NO. 7	ILLINOIS	TYPE AND PROJECT			



SECTION-A-A (Showing Detail of Porous Granular Blanket entire length of retaining wall - Typical all Sections)

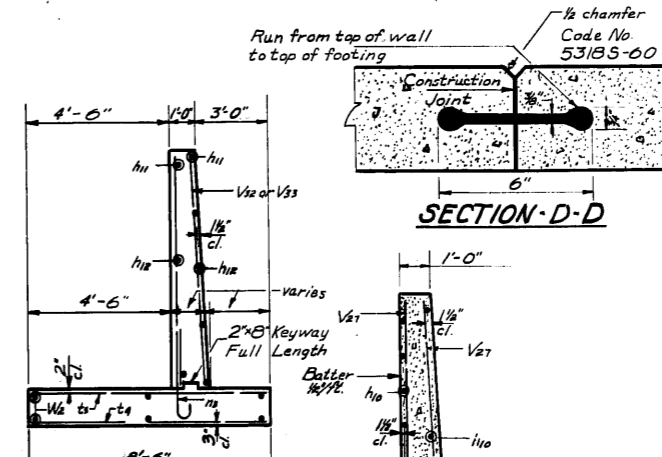
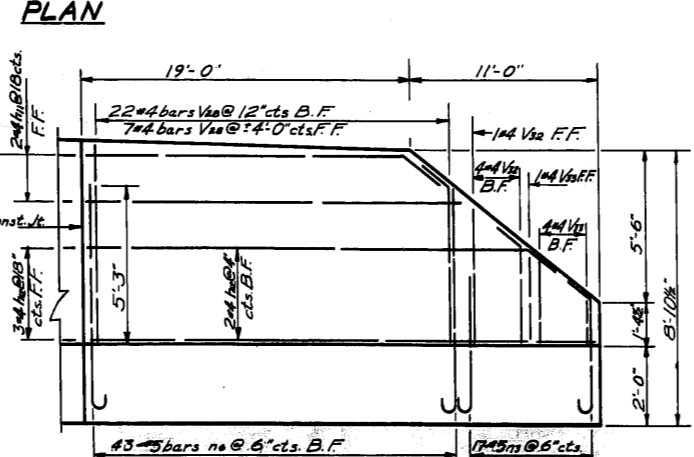
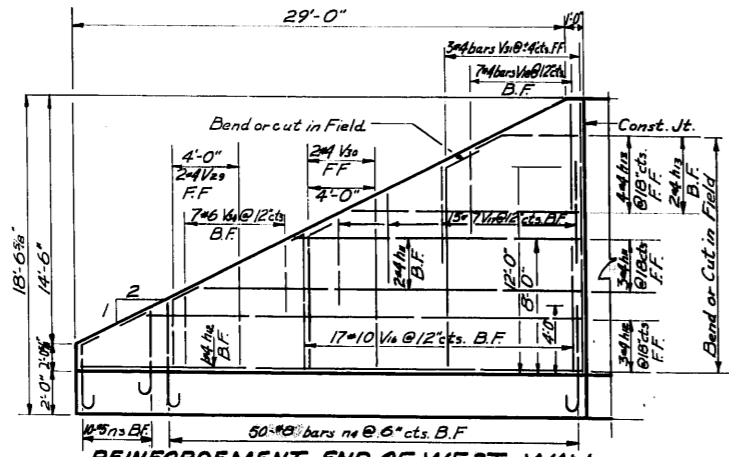
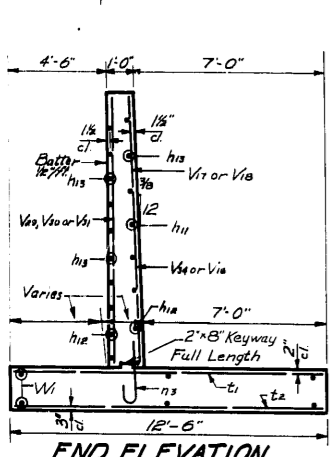


SECTION-B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1	240	#4	23'-2"	
h2	180	#4	20'-0"	
h3	180	#4	29'-0"	
h4	180	#4	11'-0"	
v1	54	#5	3'-7"	
v2	1440	#8	6'-7"	
v3	720	#7	8'-4"	
v4	630	#5	7'-4"	
t1	1152	#5	12'-3"	
t2	630	#5	12'-3"	
t3	720	#5	10'-9"	
t4	300	#5	8'-3"	
t5	480	#4	8'-3"	
v1	630	#7	21'-0"	
v2	630	#7	9'-0"	
v3	674	#4	5'-2"	
v4	70	#4	15'-10"	
v5	40	#4	15'-0"	
v6	30	#5	13'-10"	
v7	180	#4	9'-0"	
v8	180	#4	4'-8"	
v9	40	#4	12'-4"	
v10	40	#4	10'-8"	
v11	220	#4	8'-9"	
v12	210	#4	5'-9"	
v13	4	#4	5'-9"	
v14	4	#4	5'-9"	
v15	4	#4	13'-0"	
v16	10	#4	4'-10"	
v17	10	#4	2'-10"	
v18	72	#6	7'-0"	
w1	180	#5	28'-8"	
w2	180	#5	28'-8"	

RETAINING WALL
SBI Rt. 55- SECTION 551-VB
COOK COUNTY
STATION 274 + 34.38

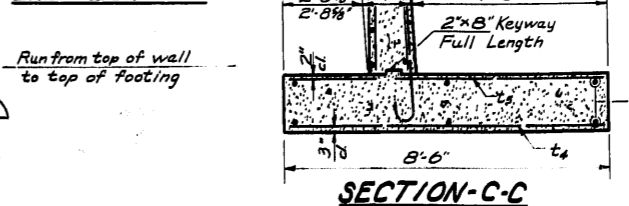
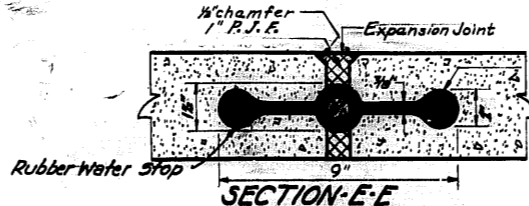


DESIGNED *Ronell C. Pitz*
CHECKED *Floyd K. Jacobson*
DRAWN *R.C.P. F. Bahr*
CHECKED *F. H. A.*

EXAMINED *July 29 1959*
PASSED *E. J. Shurt*
APPROVED *R. R. Burchmyer*
CHIEF HIGHWAY ENGINEER

BARS ns-nm-np-nq

7"	ns	3'-0"
7 1/2"	nm	5'-6"
10"	np	7'-6"
7"	nq	6'-9"



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

PROJECT NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
551-VB	551-VB	COOK	57	53

SHEET NO. 2A
238 SHEETS

Form No. S. D. 137

FOUNDATION BORINGS

Sheet 1 of 15 Sheets

Project: Bridge Permak Road over Indiana

Road: Harbor Belt R.R. Sta. 274+08

Section: 551-VB

Boring made by: William Carner

County: Cook

Date: Oct. 56

Form No. S. D. 137

FOUNDATION BORINGS

Sheet 2 of 15 Sheets

Project: Bridge Permak Road over Indiana

Road: Harbor Belt R.R. Station 274+08

Section: 551-VB

Boring made by: William Carner

County: Cook

Date: Oct. 56

Form No. S. D. 137

FOUNDATION BORINGS

Sheet 3 of 15 Sheets

Project: Bridge Permak Road over Indiana

Road: Harbor Belt R.R. Station 274+08

Section: 551-VB

Boring made by: William Carner

County: Cook

Date: Oct. 56

Form No. S. D. 137

FOUNDATION BORINGS

Sheet 4 of 15 Sheets

Project: Bridge Permak Road over Indiana

Road: Harbor Belt R.R. Station 274+08

Section: 551-VB

Boring made by: William Carner

County: Cook

Date: Oct. 56

Boring No. 1

Boring located at Station 274+08, 25 Ft. Lt. Centerline.

	605.0	107	Very stiff gray stoney clay till. Qu-5.55
Surface of ground	604.0		
Medium black silty clay	603.0		
	602.5	125	Very dense gray angular poorly graded clayey gravel.
Stiff brown mottled clay	601.5		
	600.0	190	
Lost Sample	599.0		
	620.0		
	619.0		
Hard brown clay till. Qu-5.62	617.5	50	
	616.0		
Hard gray silty clay till. Qu-5.77	614.0	30	
	613.0		
Dense gray silty clay	611.5	31	
	611.0		
Stiff gray silty clay till. Qu-5.83	609.0	41	
	608.5		
Very dense gray angular sandy silt.	607.0	51	
	606.5		
	605.0		

Boring No. 2

Boring located at Station 274+37, 32 Ft. Lt. Centerline.

	604.5	200	Qu-4.49
	603.5		Hard gray stoney clay till.
Surface of ground	624.4		
Stiff dark brown silty clay	604.0		
	603.0		Refusal
	601.0		
	621.5		
	619.5	24	Qu-4.25
Hard brown clay till.	618.5		
	617.0	45	Qu-5.24
	616.0		
	615.5		
Hard gray silty clay till. Qu-4.25	614.5	27	
	613.5		
Medium gray stoney sandy silt.	612.5		
	612.0	2c	
	611.0		
	610.5		
	609.5	57	Qu-4.65
Hard gray stoney clay till.	608.5		
	607.0	190	To stoney to test
	606.0		

Boring No. 3

Boring located at Station 274+7, 21 Ft. Lt. Centerline.

	604.0		
	603.0		Refusal on boulder
Surface of ground	634.1		
Stiff dark brown silty clay	634.1		
	621.5		
	599.0	71	To stoney to test.
	598.0		
	619.0	36	Qu-3.09
Hard brown clay till.	618.0		
	616.0		
	616.5		
	615.5	52	Qu-6.31
	615.0		
Very stiff gray varved silty clay. Qu-5.50	614.0	16	
	613.0		
	612.0		
	611.5	41	Dense gray poorly graded gravel.
	610.5		
	609.5		
	609.0		
	608.5	100	Qu-6.66
	608.0		
Hard gray brittle stoney clay till.	607.0		
	606.5		
	606.5	550	Qu-7.00
	605.5		

Boring No. 4

Boring located at Station 274+57, 26 Ft. Lt. Centerline.

	625.0		
Surface of ground	601.5		
	601.0	216	Very stiff gray silty stoney clay till. Qu-5.19
	600.0		
	599.5		
Stiff brown mottled clay fill.	598.5		
	597.5	226	
	596.5		Very dense gray sandy silt.
	596.0	122	
	595.0		
	618.5	2	Ruptured
	617.5		
	617.0		
Hard gray silty clay till. Qu-6.66	615.0	33	
	614.5		
Medium gray poorly graded subangular sand.	613.5	17	
	612.5		
	611.5		
Dense gray sandy silt.	611.0	5	
	610.0		
	609.5		
	608.5	110	Qu-5.31
	607.5		
	607.0		
Hard gray brittle stoney clay till. Qu-3.00	606.0	100	
	605.0		
	604.5		
	604.5		Refusal
	603.5		

Blows per foot - Penetration of Sampling Spoon
Hammer weight - 350 Lbs.
Drop - 12"
Qu - Unconfined Compressive Strength in Tons per square foot.

DESIGNED <u>Ronald C. Pitt</u>	EXAMINED <u>W. J. ...</u>
CHECKED <u>Floyd K. Jackson</u>	PASSED <u>E. V. ...</u>
DRAWN <u>R.C.P.</u>	APPROVED <u>R.C. ...</u>
CHECKED <u>F.H.J.</u>	

July 29 1957

BORING DATA
SBI Rt. 55 - SECTION 551-VB
COOK COUNTY
STATION 274+34.38

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 25 28 SHEETS
S.B.I. 55	551-VB	COOK	57	54	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. RD. PROJECT.		

Form No. S. & B. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana Sheet 5 of 15 Sheets
Route SBI 55 Harbor Belt R.R. Station 275408
Section 551-VB Boring made by William Carter Date Oct. 56
County Cook

Boring No.	Depth	Penetration	Remarks	Qu
Boring No. 5 Boring located at Station 264425, 23 Ft Lt Center-line.	605.0			
	604.0		Refusal on boulder	
	603.0			
	601.5		180 To stoney to test	
	600.5		Hard gray stoney clay and very numerous boulders.	
	599.0		Refusal on boulder	
	598.0			
	596.5		222 To stoney to test.	
	595.5			
	619.0	43	Hard brown clay till.	Qu-7.56
	618.0			
	617.0		Stiff gray varved silty clay. Ruptured	
	616.0	12		
	615.0			
	614.0	29	Very stiff gray sandy clay till.	Qu-2.24
613.0				
612.0				
611.0	5	Very stiff gray clay till.	Qu-3.27	
610.0				
609.0	170	Hard gray stoney clay till.	Qu-7.01	
608.0				
606.5	155	Refusal on boulder		
605.5				
605.0				

Form No. S. & B. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana Sheet 6 of 15 Sheets
Route SBI 55 Harbor Belt R.R. Station 275408
Section 551-VB Boring made by William Carter Date Oct. 56
County Cook

Boring No.	Depth	Penetration	Remarks	Qu
Boring No. 6 Boring located at Station 262427, 35 Ft Rt Center-line.	604.0		Hard gray brittle clay till.	
	603.0		Refusal on boulder	
	602.0			
	601.5		226 Very dense gray silt.	
	600.5			
	599.0		312	
	598.0			
	619.0	25	Hard brown clay till.	Qu-6.54
	618.0			
	617.0		Stiff dark brown silty clay.	
	616.5	22	Hard gray silty clay till.	Qu-8.41
	615.5			
	614.5		Medium gray silty sand.	
	613.0	26		
	612.0			
611.5	48	Hard gray brittle clay till.	Qu-7.03	
610.5				
609.0	125	Refusal on a boulder		
608.0				
606.5				
605.5				

Form No. S. & B. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana Sheet 7 of 15 Sheets
Route SBI 55 Harbor Belt R.R. Station 275408
Section 551-VB Boring made by William Carter Date Oct. 56
County Cook

Boring No.	Depth	Penetration	Remarks	Qu
Boring No. 7 Boring located at Station 260427, 24 Ft Rt Center-line.	604.5		Hard gray brittle clay till.	
	603.5		770	
	602.0		Very dense gray very stoney slightly clayey silt.	
	601.0		Refusal on boulder	
	599.5			
	598.5		258	
	619.5	33	Hard brown clay till.	Qu-5.00
	618.5			
	617.0	60	Hard brown clay till.	Qu-6.78
	616.0			
	615.5		Medium gray silty sand with thin layers of gray clay.	
	614.5	20		
	613.5			
	612.0	40	Hard gray clay till.	Qu-7.64
	611.0			
610.5				
609.5				
608.5	370	Hard gray brittle stoney clay till.	Qu-4.82	
607.0				
605.0		Cored boulder		
601.5				

Form No. S. & B. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana Sheet 8 of 15 Sheets
Route SBI 55 Harbor Belt R.R. Station 275408
Section 551-VB Boring made by William Carter Date Oct. 56
County Cook

Boring No.	Depth	Penetration	Remarks	Qu
Boring No. 8 Boring located at Station 277427, 26 Ft Rt Center-line.	604.5		Very dense gray stoney silt.	
	603.5		290	
	624.6		Surface of Ground.	
	622.0		Very stiff brown mottled silty clay.	
	619.5	12	Hard brown mottled silty silty clay till.	Qu-4.29
	618.5			
	617.5		Very dense gray silty sand, and layers of clay.	
	617.0	58		
	616.0			
	615.5		Hard gray clayey silt.	
	614.5	31		Qu-4.94
	613.5			
	612.5		Very stiff gray mottled silty clay with layers of sand.	
	612.0	59		Qu-5.42
	611.0			
610.0				
609.5				
608.5	34	Hard gray brittle silty clay till.	Qu-5.39	
607.0				
606.0	186	To stoney to test		
605.5				

Blows per foot - Penetration of Sampling Spoon
Hammer Weight - 350 Lbs.
Drop - 12"
Qu - Unconfined Compressive Strength in Tons per Square Foot.

DESIGNED Ronald C. Pitz
CHECKED Alfred H. Jacobson
DRAWN R.C.P.
CHECKED F.H.F.

July 29 1959
CLASSIFIED W.D. ...
PAID E.P. ...
APPROVED R.R. ...

BORING DATA
SBI Rt. 55 SECTION 551VB
COOK COUNTY
STATION 274+34.38

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

DATE	55-113	NO.	57	55	SHEET NO. 26
BY	COOK				28 SHEETS

Form No. S.O. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana
Road SBI 55
Section 551-VR
County Cook

Form No. S.O. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana
Road SBI 55
Section 551-VR
County Cook

Form No. S.O. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana
Road SBI 55
Section 551-VR
County Cook

Form No. S.O. 137
FOUNDATION BORINGS
Project Bridge Gernak Road over Indiana
Road SBI 55
Section 551-VR
County Cook

Boring No. 10
Boring located at Station 273456, 26 Ft. Lt. Centerline.

Depth (ft)	Penetration (lb)	Remarks	Notes
Surface of Ground	608.1		
	606.5		
	604.0		
	603.0		
	602.0		
	600.5		
	598.5		
	620.5		
	619.5		
	618.0		
	617.0		
	616.5		
	614.5		
	614.0		
	613.0		
	611.0		
	610.5		
	609.5		
	608.0		
	607.0		

Boring No. 10
Boring located at Station 273426, 17 Ft. Lt. Centerline.

Depth (ft)	Penetration (lb)	Remarks	Notes
Surface of Ground	627.7		
	605.0		
	604.0		
	625.0		
	602.5		
	601.5		
	624.5		
	621.5		
	620.0		
	619.0		
	618.5		
	617.5		
	616.5		
	615.0		
	614.0		
	613.5		
	612.5		
	611.5		
	610.5		
	609.5		
	608.5		

Boring No. 11
Boring located at Station 270497, 26 Ft. Lt. Centerline.

Depth (ft)	Penetration (lb)	Remarks	Notes
Surface of Ground	626.8		
	607.0		
	606.0		
	604.5		
	603.5		
	622.0		
	621.0		
	620.5		
	619.5		
	618.5		
	617.0		
	616.0		
	615.0		
	614.5		
	613.5		
	612.0		
	611.0		
	610.0		
	609.5		
	608.5		
	608.0		

Boring No. 12
Boring located at Station 267407, 36 Ft. Lt. Centerline.

Depth (ft)	Penetration (lb)	Remarks	Notes
Surface of Ground	624.0		
	604.0		
	603.0		
	600.5		
	622.0		
	621.0		
	620.5		
	619.5		
	618.5		
	617.0		
	616.0		
	615.0		
	614.5		
	613.5		
	612.0		
	611.0		
	610.0		
	609.0		
	608.5		
	608.0		

DESIGNED Ronald C. Pitt
CHECKED Hynd K. Jackson
DRAWN R.C.P.
CHECKED F.H.S.

EXAMINED [Signature]
FIELD [Signature]
APPROVED [Signature]

Blows per Foot - Penetration of Sampling Spoon
Penetration Weight - 350 Lbs.
Drop - 18"
Qu - Unconfined Compressive Strength
in Tons per square foot

BORING DATA
SBI RT. 55 SECTION 551-VR
COOK COUNTY
STATION 274+34.38

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

PROJECT NO.	SECTION	SUBJECT	DATE	BY	NO. OF SHEETS
55	55WB	COOK	57	56	28

Form No. S. D. 137

FOUNDATION BORINGS

Project Bridge Cermak Road over Indiana Sheet 13 of 15
 Route SR 55 Harbor Hill R.R. Station 275406 Date Nov. 56
 Station 551-V3 Boring made by William Carter
 County Cook

Boring No.	Depth (ft)	Remarks	Notes
Boring No. 13			
Boring located at Station 268405, 18 Ft. Lt. Center-line.			
Surface of Ground	604.9		
Stiff gray mottled clay.	601.5	203	Qu-5.19
	600.0		Hard gray silty sandy stone clay till.
	591.0	250	To stoney to test.
Qu-1.34	620.0	4	
	619.0		
Hard gray silty clay till.	617.5	49	
Qu-0.74	615.5		
	615.5		
Very stiff gray silty sandy clay till. Lost sample	614.0	38	
	613.0		
Very stiff gray clay till.	612.5	29	
Qu-3.02	611.5		
	610.5		
	610.0		
Very dense gray silty gravel and boulders. Refusa	609.0		
	608.5		
Very stiff gray clay till.	607.5	200	To stoney to test
	606.5		
	606.0		

Form No. S. D. 137

FOUNDATION BORINGS

Project Bridge Cermak Road over Indiana Sheet 14 of 15
 Route SR 55 Harbor Hill R.R. Station 275406 Date Nov. 56
 Station 551-V3 Boring made by William Carter
 County Cook

Boring No.	Depth (ft)	Remarks	Notes
Boring No. 14			
Boring located at Station 268405, 18 Ft. Lt. Center-line.			
Surface of Ground	604.0	150	Ruptured
	603.5		Hard gray silty clay till.
Stiff gray mottled clay.	602.0	120	Qu-10.224
	601.0		
	594.5	130	Qu-10.224
	593.5		
	620.5		
	619.5	32	
Hard mottled clay till.	618.5		
	617.0	12	
	616.0		
	615.5		
	614.5	51	
	613.5		
Hard gray very silty clay till.	612.0	43	Ruptured sample
	611.0		
	610.0		
Very dense silty gravel and boulders.	609.5	125	
	608.5		
	607.5		
Hard gray silty clay till.	607.0	120	Ruptured sample
	606.0		

Form No. S. D. 137

FOUNDATION BORINGS

Project Bridge Cermak Road over Indiana Sheet 15 of 15
 Route SR 55 Harbor Hill R.R. Station 275406 Date Nov. 56
 Station 551-V3 Boring made by William Carter
 County Cook

Boring No.	Depth (ft)	Remarks	Notes
Boring No. 15			
Boring located at Station 268405, 18 Ft. Lt. Center-line.			
Surface of Ground	604.18	145	Ruptured sample
Medium mottled clay.	602.5		
	620.0		
Qu-0.57	619.0	7	
Med. gray clay and streaks of fine sand.	618.0		
	617.0		
	616.5	62	Qu-10.224
	615.5		
Hard gray brittle clay till.	614.0	100	Qu-6.30
	613.0		
	611.5	66	Qu-6.62
	610.5		
	610.0		
	609.0	107	
	608.0		
Very dense gray silty sand and angular gravel.	606.5	200	
	605.5		
	605.0		

Checked Ronald C. Pitt
 Drawn Floyd K. Sander
 Date 7/14

Date July 29 1957
 Checked W. J. ...
 Drawn E. J. ...
 Date 7/14

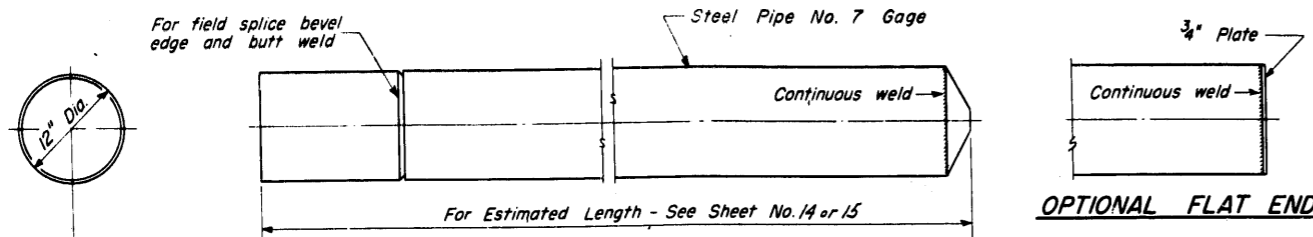
Blows per foot
 Hammer Weight
 Drop
 Qu

Penetration of Sampling Spoon
 350 Lbs.
 12"
 Unconfined Compressive Strength
 in Tons per square foot.

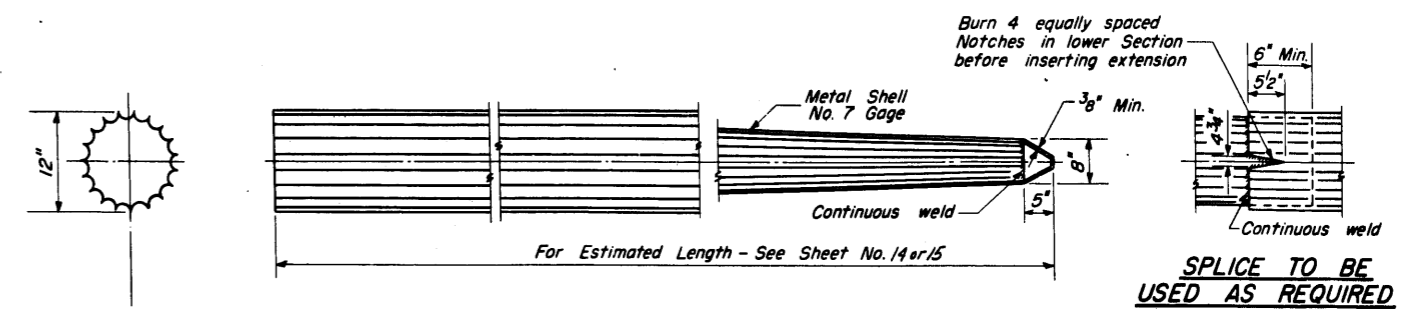
Boring Data
 SBI R-55 Section
 Cook County
 Station 274-2333

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

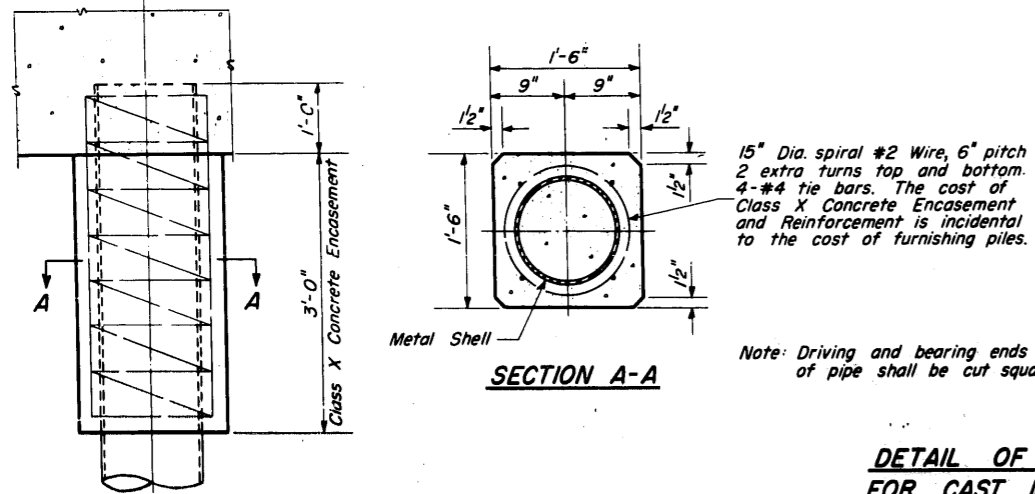
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 28 28 SHEETS
S.A. 55	55-VB	COOK	57	57	
F.A.		ILLINOIS FED. AID PROJECT			



OPTIONAL FLAT END



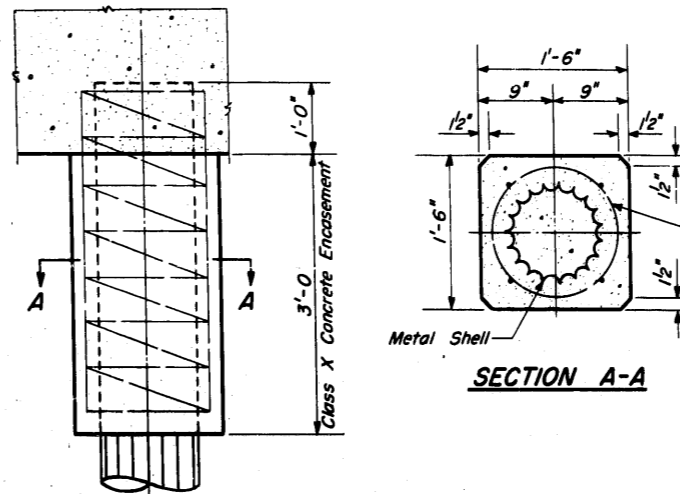
SPLICE TO BE USED AS REQUIRED



SECTION A-A

Note: Driving and bearing ends of pipe shall be cut square.

DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



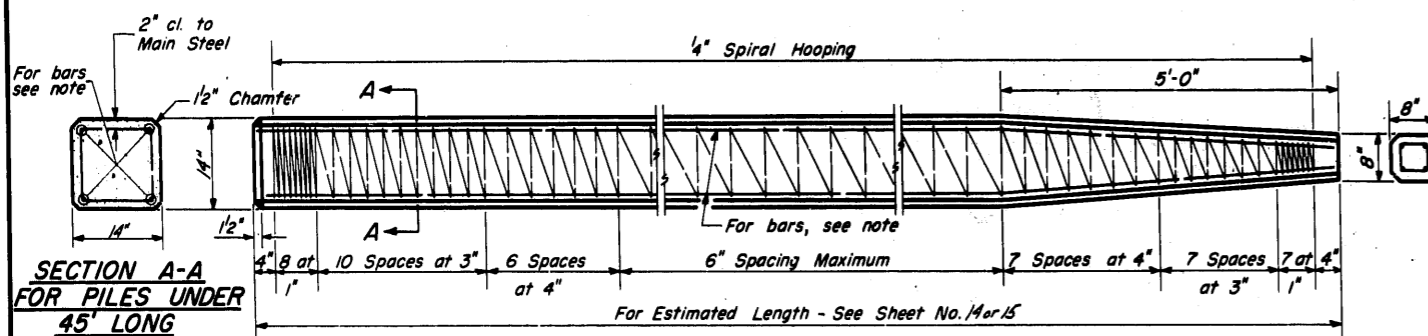
SECTION A-A

ALLOWABLE TAPERS

- 1-Taper 1/2'-6" for 10' + 12" Cylindrical Section Extension
- 2-Taper 1/4'-0" for 17' + 12" Cylindrical Section Extension
- 3-Taper 1/7'-0" for 30' + 12" Cylindrical Section Extension

15" Dia. spiral #2 Wire, 6" pitch
2 extra turns top and bottom.
4-#4 tie bars. The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles.

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES

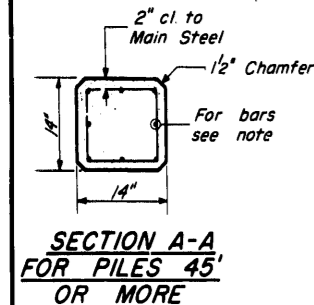


SECTION A-A FOR PILES UNDER 45' LONG

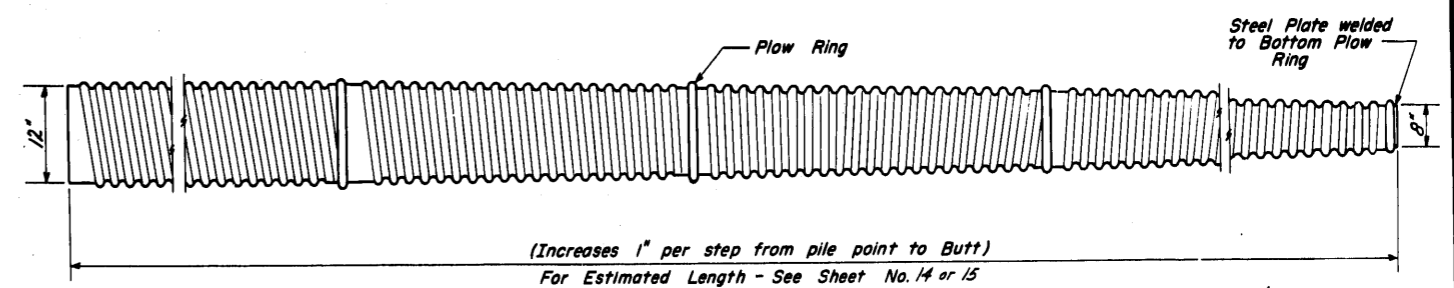
Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 14" Piles under 45' long use 4-#9 bars the full length.

Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L* from each end. For Piles longer than 45', use three slings placed at a distance of 0.12 L* from each end and at mid-point of pile.

*L = Over all length of pile to be handled.

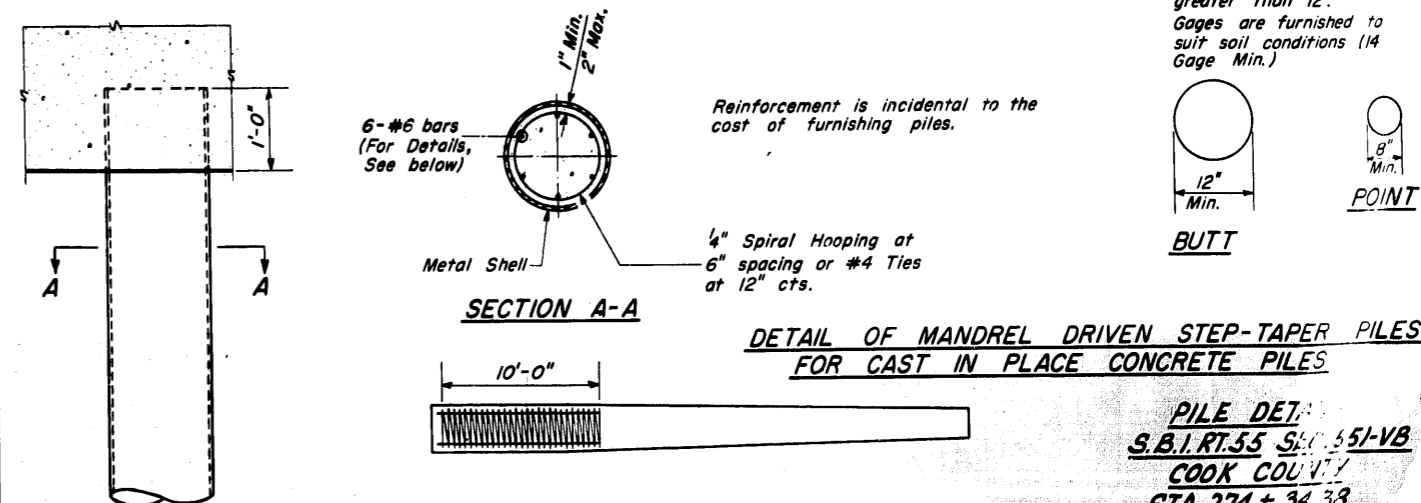


SECTION A-A FOR PILES 45' OR MORE



(Increases 1" per step from pile point to Butt)
For Estimated Length - See Sheet No. 14 or 15

At least 1/4 of the length of pile shall have a Butt diameter equal to or greater than 12". Gages are furnished to suit soil conditions (14 Gage Min.)



SECTION A-A

DETAIL OF MANDREL DRIVEN STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES

PILE DET.
S.B.I. RT. 55 SEC. 55-VB
COOK COUNTY
STA. 274 + 34.33

DESIGNED	K. P. Wozniak	19
CHECKED	Charles H. Hotal	EXAMINED
DRAWN	W. A. Soussman	PASSED
CHECKED	Charles H. Hotal	APPROVED
		CHIEF HIGHWAY ENGINEER