

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.
F.A. 61	531-3HB	COOK	29	1
ILLINOIS PROJECT U-184(40)				
JOB NO. P-90-001-64				

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

(S.B.I. ROUTE 53) F.A. ROUTE 61 SECTION 531-3HB - COOK COUNTY
 PROJECT U-184 (40)

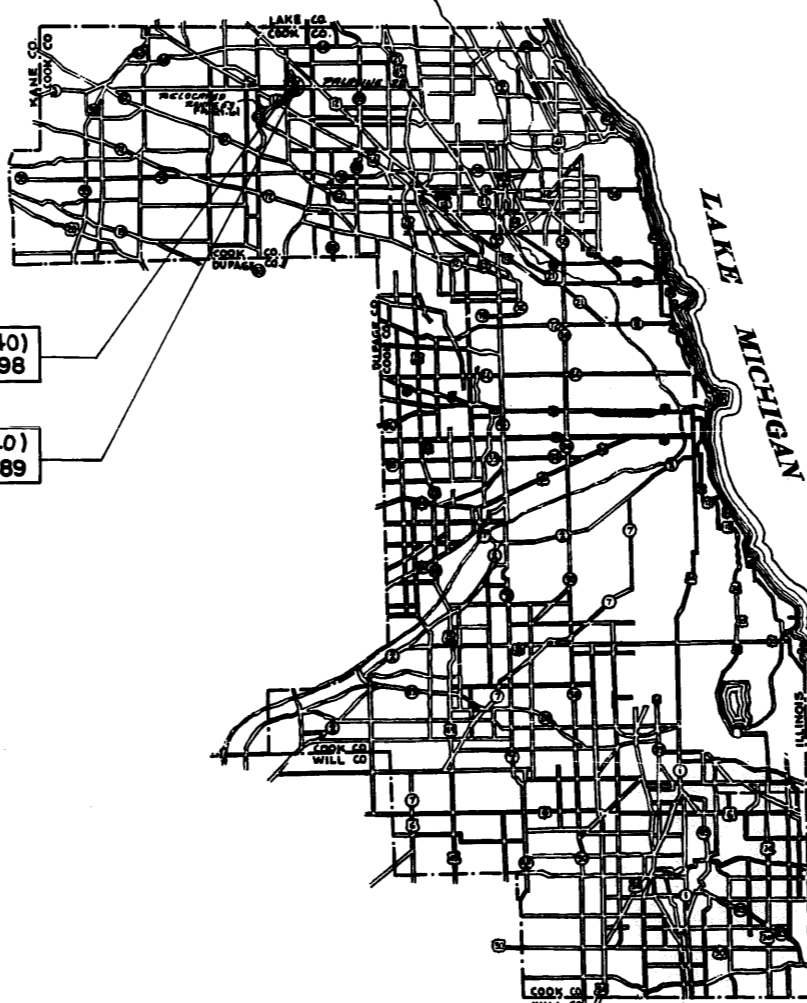
C - 90 - 442 - 64

DUAL STRUCTURES OVER PALATINE ROAD
RELOCATED ROUTE 53

PROJECT LENGTH 205.09 LIN. FT. OR 0.039 MILES

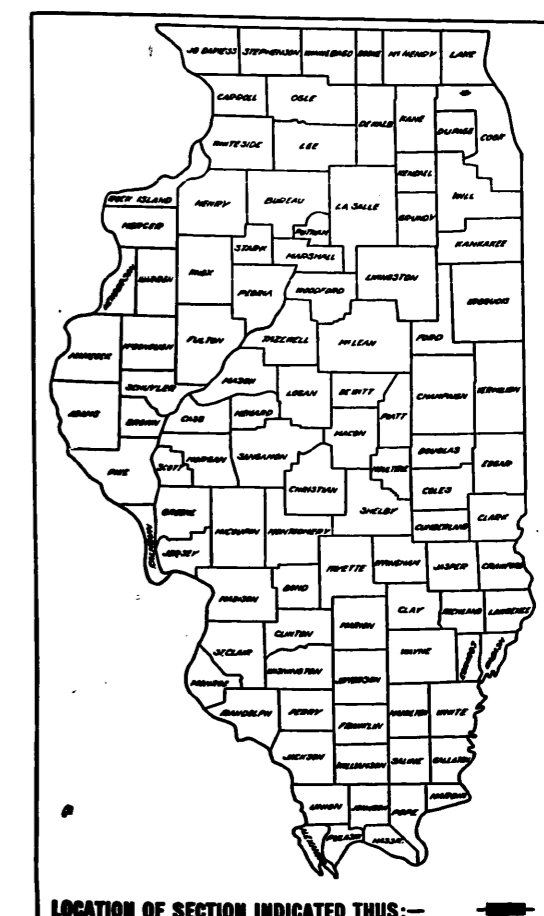
INDEX OF SHEETS ON SHEET 2

SECTION 531-3HB INCLUDES THE CONSTRUCTION OF DUAL 4-SPAN CONTINUOUS WIDE FLANGE BEAM GRADE SEPARATION STRUCTURES (TO CARRY RELOCATED ROUTE 53 OVER PALATINE ROAD), WITH SPANS 2@ 60'-9" AND 2@ 39'-3", ON OPEN R.C. ABUTMENTS AND R.C. PIERS, IN THE VILLAGE OF ARLINGTON HEIGHTS.



PROJECT U-184(40)
 ENDS STA. 330+20.98

PROJECT U-184(40)
 BEGINS STA. 328+15.89



STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS
 SUBMITTED August 31, 1964
 C.A. Tenover
 EXAMINED Sept. 11, 1964
 W. Van Dusen
 FARMER Sept. 11, 1964
 APPROVED Sept. 11, 1964
 APPROVED Sept. 11, 1964

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS
 APPROVED
 DIVISION ENGINEER DATE

R. KENNEDY

JOB NUMBER CONTRACT NO. 23867

COUNTY COOK SECTION 531-3HB F. A. ROUTE 61

PLANS PREPARED BY BUREAU OF DESIGN
 APPROVED BY ASST DISTRICT ENGINEER - ENGINEERING
 EXAMINED BY BUREAU OF CONSTRUCTION
 EXAMINED BY BUREAU OF MAINTENANCE
 EXAMINED BY BUREAU OF TRAFFIC
 EXAMINED BY BUREAU OF MATERIALS
 ENTIRE SECTION INSPECTED AND APPROVED
 AS TO POLICY DISTRICT ENGINEER

Albert J. Jones DATE 8-28-64
John C. Manning DATE 8-31-64
Joseph A. Young DATE 8-28-64
W. H. ... DATE 8-28-64
W. H. Spraul DATE 8-28-64
C. A. Benowitz DATE 8-31-64

ROAD DISTRICT	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-61 (SB-55)	591-3HB	COOK	29	2
STA.		TO STA.		
U.S. DEPT. OF TRANSPORTATION DIV. OF HIGHWAYS PROJECT				

SUMMARY OF QUANTITIES

PAY ITEM	UNIT	TOTAL QUANTITY	CODE NO.
POROUS GRANULAR EMBANKMENT	CU YD	300	019001
CLASS A EXCAVATION FOR STRUCTURES	CU YD	600	050001
CLASS X CONCRETE	CU YD	1,552.0	052003
PROTECTIVE COAT	SQ YD	3,560	052021
FURNISHING AND ERECTING STRUCTURAL STEEL REINFORCEMENT BARS	POUND	636,420	054001
FURNISHING CREDOSOTED PILES, UP TO 20 FEET	POUND	324,185	059001
DRIVING TIMBER PILES	LIN FT	750	060004
DRIVING CONCRETE PILES	LIN FT	750	060008
FURNISHING CONCRETE PILES	LIN FT	2,000	060043
TEST PILES, CONCRETE	LIN FT	2,000	060044
NAME PLATES	EACH	2	060047
PAVEMENT REMOVAL	EACH	2	061001
SLOPE WALL, 4 INCH	SQ YD	100	082001
ALUMINUM HANDRAIL	SQ YD	1,381	083002
	LIN FT	806	200004

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	INDEX OF SHEETS, SUMMARY OF QUANTITIES, SIGNATURES
3.	EXISTING TOPOGRAPHY & PLAN OF PROPOSED IMPROVEMENT
4.	PROFILES & ROADWAY SECTIONS
5.	DETAIL OF SPECIAL INLET
6.	GENERAL PLAN & ELEVATION OF STRUCTURES
7 - 8.	SUPERSTRUCTURE DETAILS
9.	HANDRAIL LAYOUT
10.	HANDRAIL & LIGHTING DETAILS
11 - 12.	TOP OF SLAB ELEVATIONS
13.	STRUCTURAL STEEL - FRAMING PLANS
14.	STRUCTURAL STEEL DETAILS
15.	EXPANSION DEVICE DETAILS
16 - 21.	PIER DETAILS
22 - 23.	ABUTMENT DETAILS
24.	WING WALL DETAILS
25.	PILE DETAILS
26 - 27.	BORING DATA
28.	STANDARD 1686-2 (SYMBOLS); STANDARD 2113-1 (NAME PLATE)
29.	STANDARD 1971-3 ("ROAD UNDER CONSTRUCTION" SIGN); STANDARD 2114 (FLAGMAN SIGN); STANDARD 2158-2 (F.A. PROJECT SIGN)

ONE (1) SIGN CONFORMING TO STANDARD 2158-2 SHALL BE ERECTED AT LOCATIONS SHOWN ON SHEET 3 OR AS DIRECTED BY THE ENGINEER.

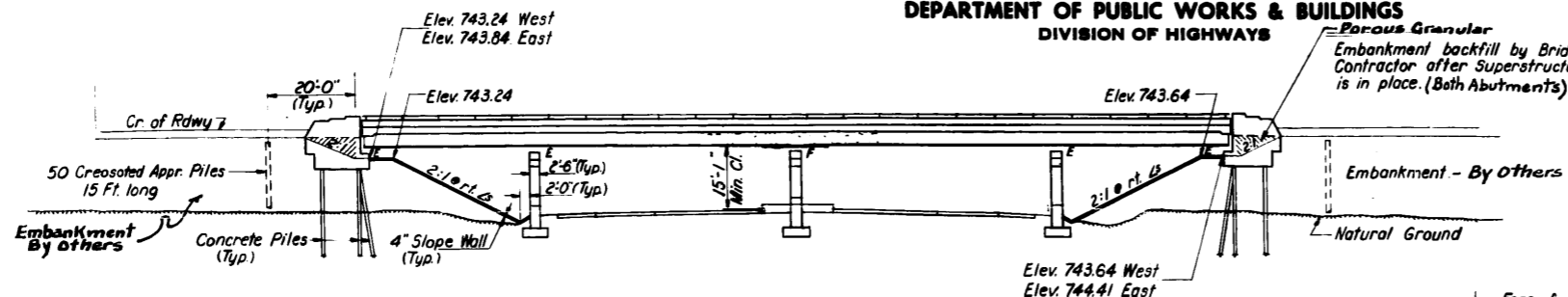
NOTE: THE "STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION" ADOPTED JANUARY 2, 1958 AND THE "SUPPLEMENTAL SPECIFICATIONS" EFFECTIVE MARCH 2, 1964, SHALL GOVERN THE CONSTRUCTION OF THIS WORK

AXLE LOAD LIMITS: DHV-20 - CLASSIFICATION - DESIGN SPEED
 SINGLE - 18,000 LBS 6387 H 70
 TANDEM - 24,000 LBS

B.M.: RR Spike in E. Face P.P. of N.W.
Corner Palatine Rd. & Wilke Rd.
Elev. 730.55

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
61	531-3HB	COOK	29	6	22 SHEETS
ILLINOIS FED. AID PROJECT: U-184(40)					



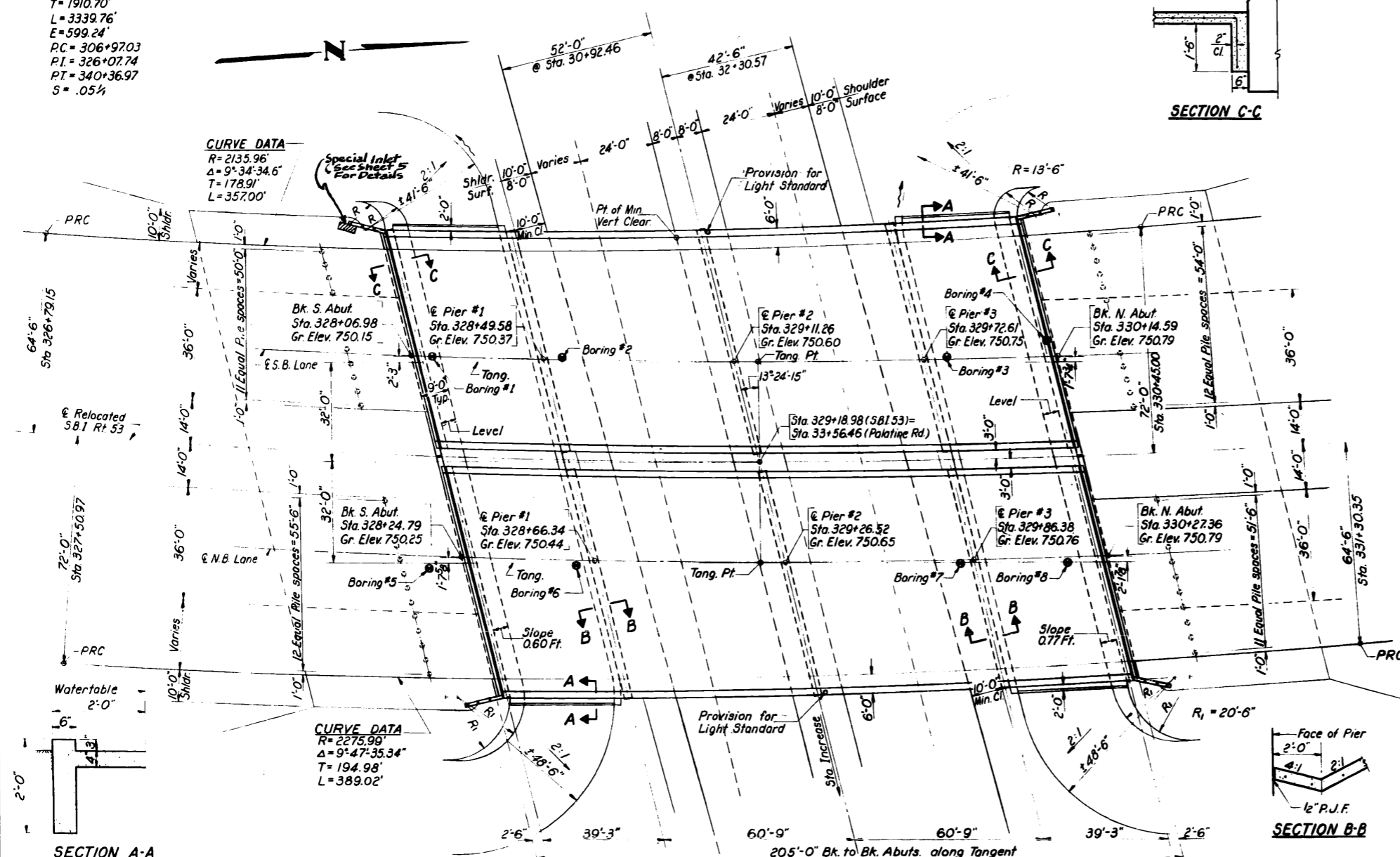
HORIZ. CURVE DATA

SBI RT. 53
 $\Delta = 69^\circ 35'$
 $D = 2^\circ 05'$
 $R = 2750'$
 $T = 1910.70'$
 $L = 3339.76'$
 $E = 599.24'$
 $PC = 306+97.03$
 $PI = 326+07.74$
 $PT = 340+36.97$
 $S = .054$

CURVE DATA
 $R = 2135.96'$
 $\Delta = 9^\circ 34' 34.6''$
 $T = 178.91'$
 $L = 357.00'$

ELEVATION

SECTION C-C



GENERAL NOTES

Coarse aggregate to be used in parapet handrails and end post must be free of chert, flint, limonite, 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, weighing 58# per 100 Sq. Ft. All reinforcement bars shall be lapped 20 diameters unless otherwise shown. Permanent forms will not be permitted in forming the concrete floor. All structural steel shall conform to A.S.T.M. Specifications Designation A-36. Rivets 3/4", Open Holes 1 1/16" unless otherwise noted. Anchor bolts shall be set before riveting diaphragms over supports. Roadway expansion guards shall be assembled in the shop in proper position with the ends in place and shall be left assembled for shop inspection. The exposed surfaces of the expansion guards shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted. Expansion guards are included in quantity of Structural Steel. Estimated Weight = 37,780 Lbs. Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Article 56.1 to 56.5 inclusive of the Standard Specifications. The Contractor shall drive one concrete test pile in a permanent location at each abutment as directed by the Engineer before ordering the remainder of piles. Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 60.9(c) of the Standard Specifications.

PROFILE OF RELOCATED RT. 53



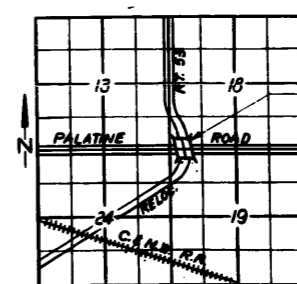
PROFILE OF PALATINE ROAD

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Porous Granular Embankment	Cu. Yds.		300	300
* Class A Excavation for Structures	Cu. Yds.		600	600
Class X Concrete	Cu. Yds.	746.0	804.9	1550.9
Structural Steel	Lbs.	636,420		636,420
Aluminum Handrail	Lin. Ft.	806		806
Reinforcement Bars	Lbs.	239,700	84,450	324,150
Creosoted Piles	Lin. Ft.	750		750
Concrete Piles	Lin. Ft.		2000	2000
Test Piles (Concrete)	Each		2	2
Name Plates	Each		2	2
Slope Wall (4')	Sq. Yds.		1381	1381
Protective Coat	Sq. Yds.		3560	3560

*Includes excavation for slope wall

SECTION B-B



LOCATION PLAN

PROJ. U-184(40)
 GENERAL PLAN & ELEVATION
 RELOCATED SBI RT. 53 (FA. RT. 61)
 OVER PALATINE ROAD
 F.A. RT. 61 SEC. 531-3-HB
 COOK COUNTY
 STA. 329+18.98 (SBI. 53)

DESIGNED W.L. Perry
 CHECKED R.K. Kowal
 DRAWN J.L. Armstrong
 CHECKED R.K.

EXAMINED H.E. B...
 PASSED E...
 APPROVED U.E. Claff

STATION 329+18.98
 BUILT 196 BY
 STATE OF ILLINOIS
 F.A. RT. 61 SEC. 531-3-HB
 F.A. PROJ. U-184(40)
 LOADING HS 20

NAME PLATE LETTERING
 See Std. 2113-1

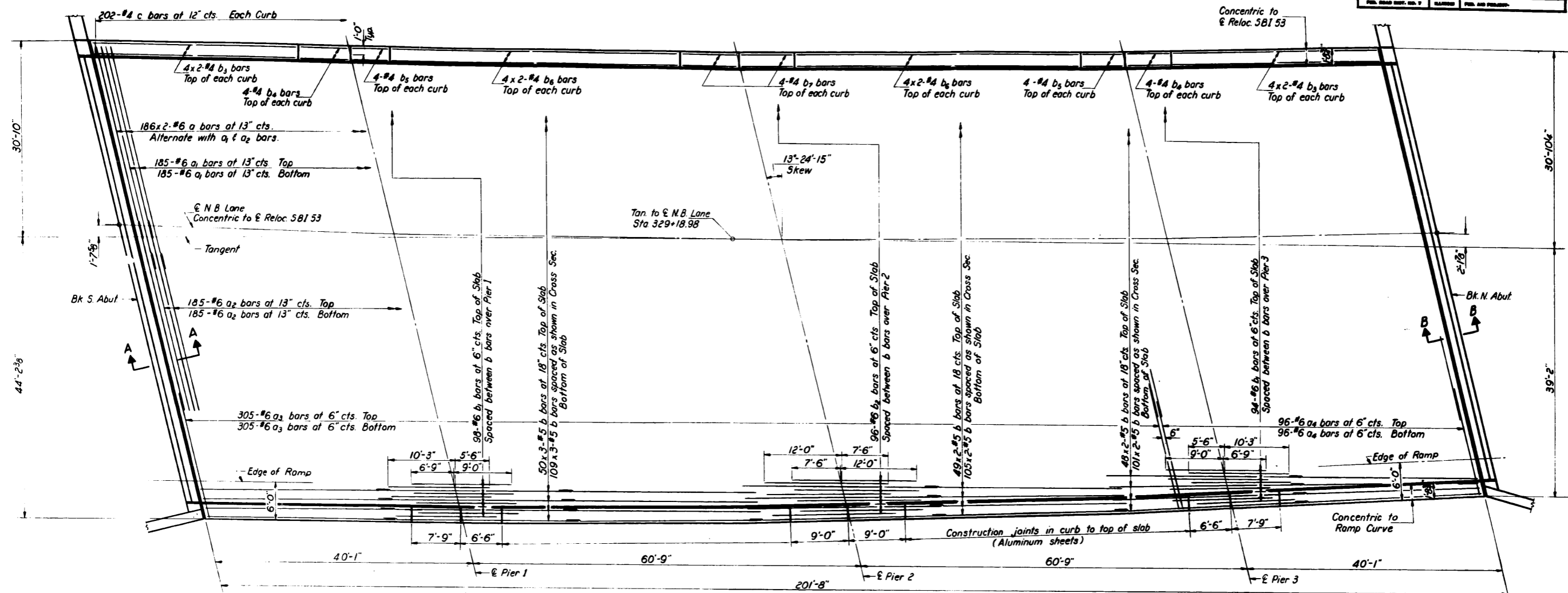
Road Classification (Relocated SBI 53):
 Class A-1
 D.H.V. 6387

DESIGN STRESSES
 $f_c = 1400$ psi. Super & Sub
 $f_v = 75$ psi. Footing
 $f_s = 20,000$ psi. Reinf.
 $f_s = 20,000$ psi. Struct. (A-36)
 $n = 10$
 LOADING HS 20-44

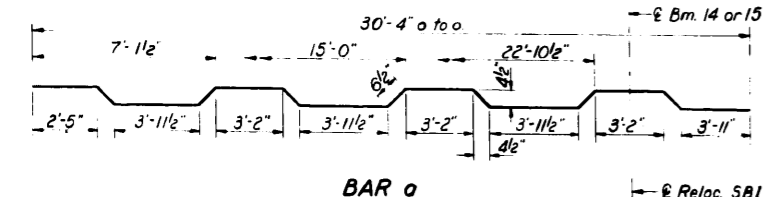
Revised 4-28-64

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

DESIGN NO.	PROJECT	CONTRACT	DATE	SHEET NO.
531-3HB	COOK	29	7	22 SHEETS
P.L. 61		P.L. 61		
P.L. 61		P.L. 61		



PLAN

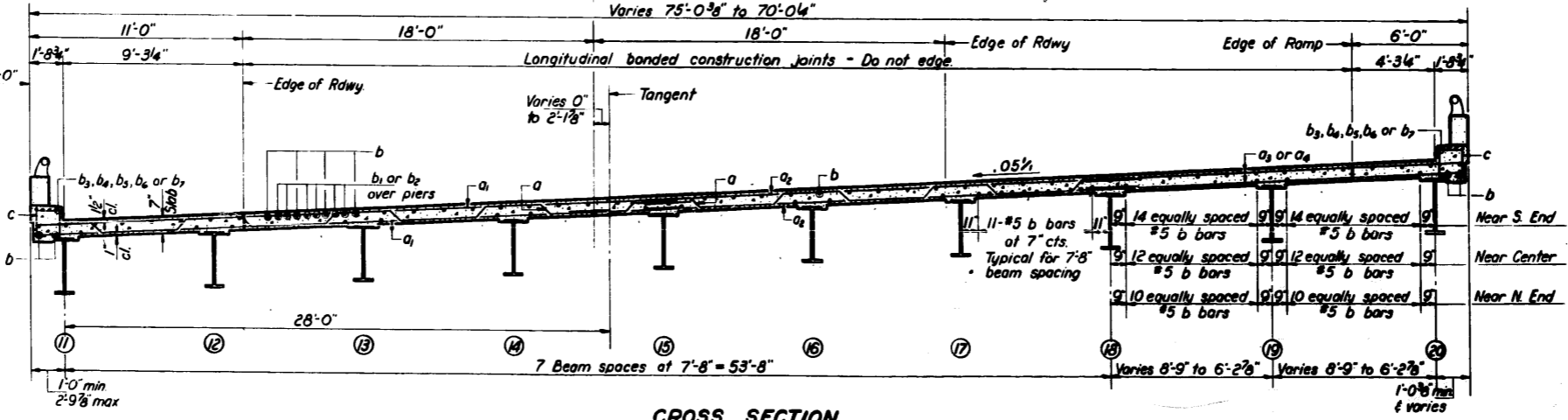
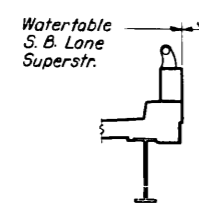


BAR a

BAR c

- * Includes weight of N.B. Lane Bar List shown on sheet #4
- ** Weight of bearing assemblies with lead plates, and anchor bolts are included as structural steel. Est. Weight = 13,740 #
- ** Weight of expansion device is included as structural steel. Est. Weight = 18,940 #

Note:
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Min. bar laps = 20 dia.
See sheet #3 for Curb Detail.
See sheet #10 for Section A-A and Section B-B.



CROSS SECTION

BILL OF MATERIAL

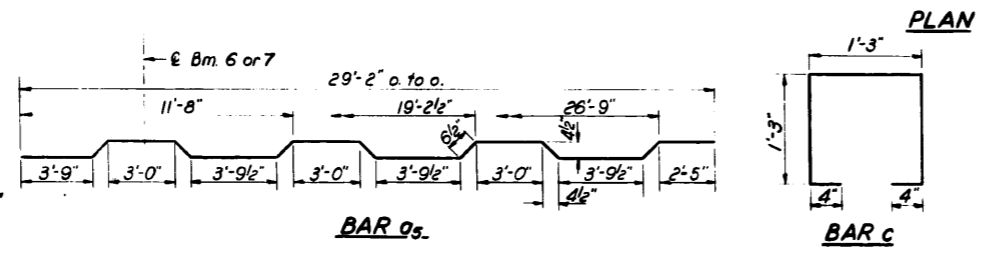
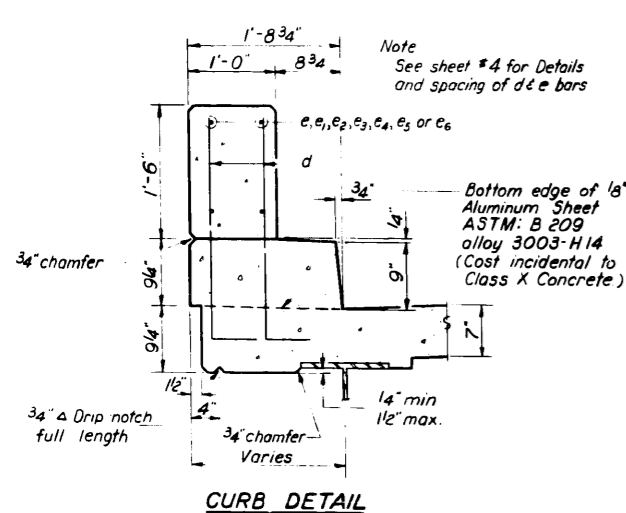
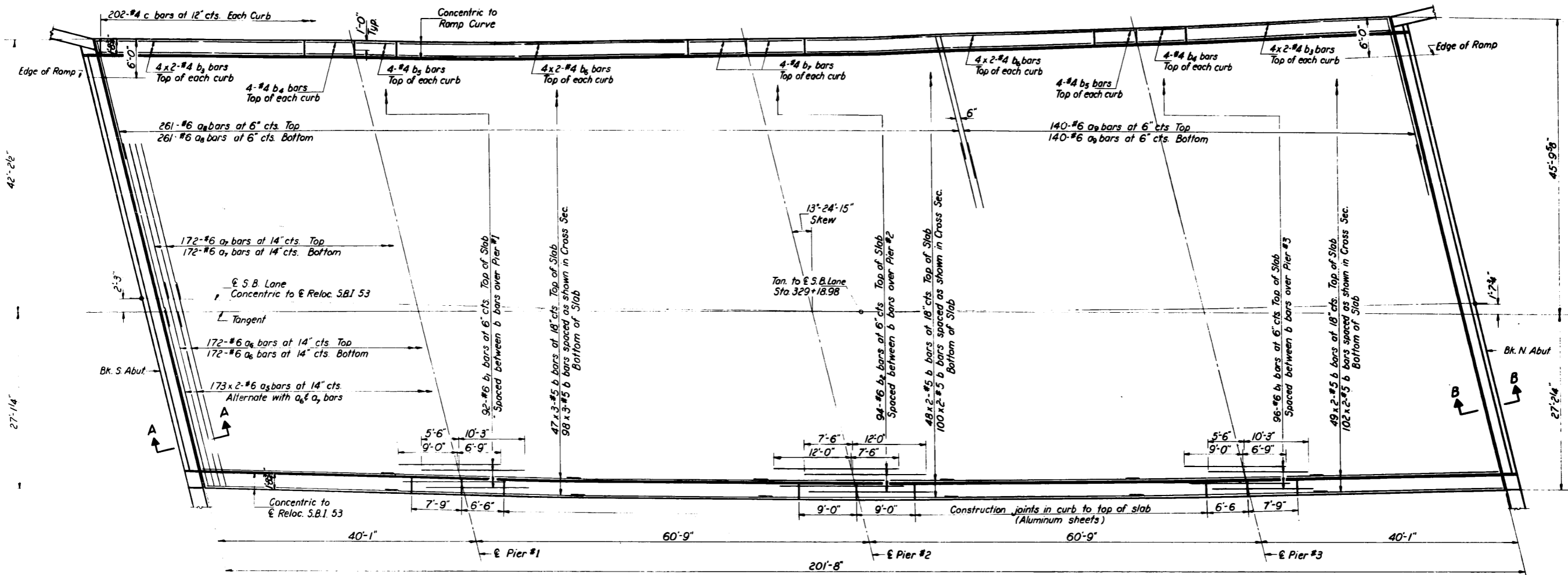
Bar	No.	Size	Length	Shape
a	372	#6	31'-6"	—
a1	370	#6	35'-6"	—
a2	370	#6	26'-3"	—
a3	610	#6	20'-0"	—
a4	192	#6	17'-6"	—
b	1083	#5	30'-0"	—
b1	192	#6	15'-9"	—
b2	96	#6	19'-6"	—
b3	32	#4	17'-0"	—
b4	16	#4	7'-6"	—
b5	16	#4	6'-3"	—
b6	32	#4	23'-3"	—
b7	16	#4	8'-9"	—
c	404	#4	4'-5"	□
* Reinforcement Bars			Lbs.	123,300
** Structural Steel			Lbs.	318,700
Class X Concrete			Cu. Yds.	376.1

DESIGNED	Walter Perry
CHECKED	R. Lownd
DRAWN	J. L. Armstrong
CHECKED	RK
EXAMINED	W. E. Baumann
PASSED	U. E. Duff
APPROVED	U. E. Duff

N. B. LANE
SUPERSTRUCTURE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

PROJECT NO.	591-348	CITY	COOK	DATE	29 8	SHEET NO.	3
DATE	6/1	DESIGNED BY	W. J. BERRY	CHECKED BY	J. L. ARMSTRONG	TOTAL SHEETS	22



Notes:
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Min. bar laps = 20 dia.
For Section A-A and Section B-B see sheet #10.
* Includes weight of S.B. Lane Bar List shown on sheet #4
** Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel. Est. Weight = 13,740#
*** Weight of expansion device is included as structural steel Est. Weight = 18,840#

BILL OF MATERIAL

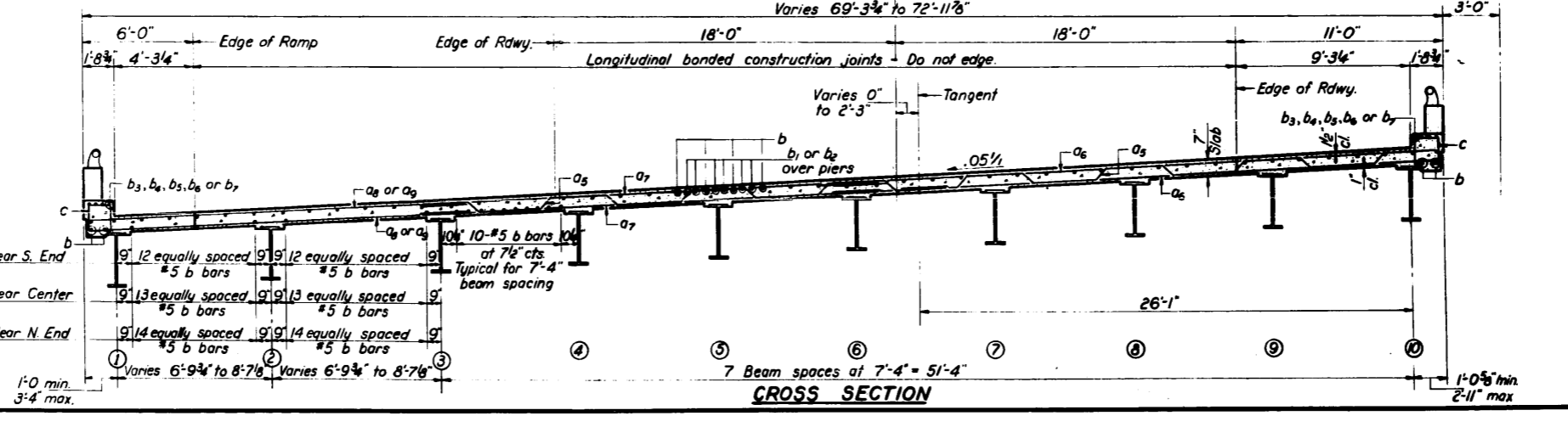
Bar	No.	Size	Length	Shape
a ₅	346	#6	30'-4"	~
a ₆	344	#6	31'-3"	~
a ₇	344	#6	25'-3"	~
a ₈	522	#6	19'-9"	~
a ₉	200	#6	23'-0"	~
b	1033	#5	30'-0"	~
b ₁	188	#6	15'-9"	~
b ₂	94	#6	19'-6"	~
b ₃	32	#4	17'-0"	~
b ₄	16	#4	7'-6"	~
b ₅	16	#4	6'-3"	~
b ₆	32	#4	23'-3"	~
b ₇	16	#4	8'-9"	~
c	404	#4	4'-5"	□

* Reinforcement Bars Lbs. 116,400
 ** Structural Steel Lbs. 317,720
 *** Glass X Concrete Cu. Yds. 369.9

DESIGNED *Walter Berry*
CHECKED *J. L. Armstrong*
DRAWN *J. L. Armstrong*
CHECKED *OK*

EXAMINED *W. E. Benning*
PASSED *W. E. Benning*
APPROVED *W. E. Benning*

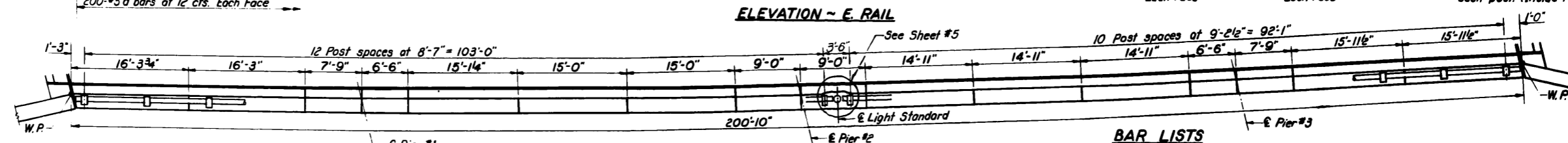
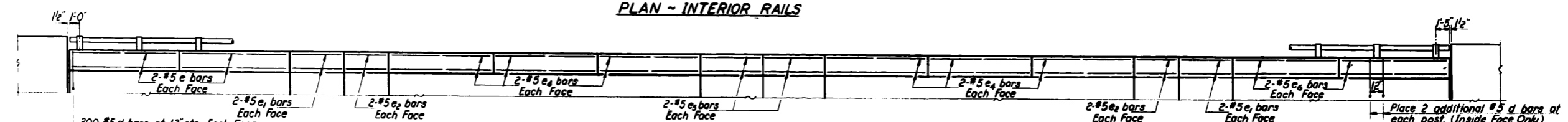
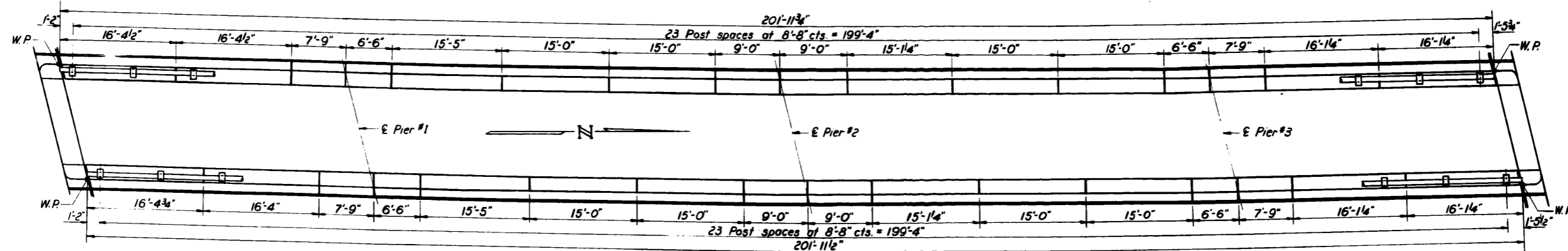
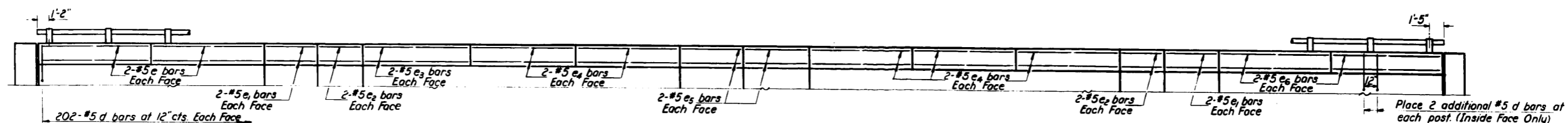
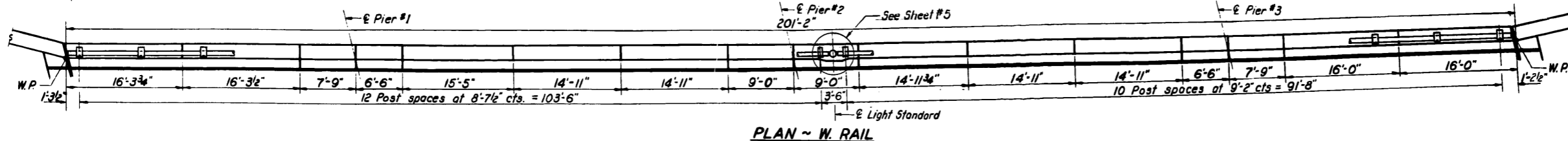
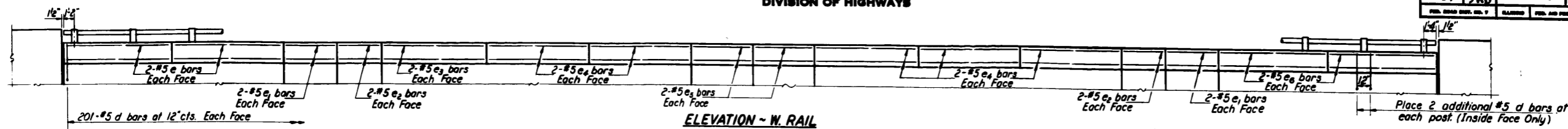
JULY 31 1944



**S. B. LANE
SUPERSTRUCTURE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98**

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

PROJECT NO.	531-3HB	COUNTY	COOK	SECTION	29	SHEET NO.	4
DATE	7/31/64	DESIGNED BY	W.E. GIBSON	DRAWN BY	J.L. ARMSTRONG	CHECKED BY	R.K.



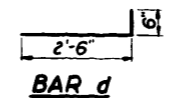
BAR LISTS

S.B. LANE					N.B. LANE				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
d	904	#5	3'-0"	□	d	904	#5	3'-0"	□
e	16	#5	16'-1"	□	e	16	#5	16'-1"	□
e ₁	16	#5	7'-6"	□	e ₁	16	#5	7'-6"	□
e ₂	16	#5	6'-3"	□	e ₂	16	#5	6'-3"	□
e ₃	8	#5	15'-2"	□	e ₃	4	#5	15'-2"	□
e ₄	40	#5	14'-8"	□	e ₄	44	#5	14'-8"	□
e ₅	16	#5	8'-9"	□	e ₅	16	#5	8'-9"	□
e ₆	16	#5	15'-9"	□	e ₆	16	#5	15'-9"	□

DESIGNED *Walter Perry*
EXAMINED *W.E. Gibson*
CHECKED *R.K.*
DRAWN *J.L. Armstrong*
CHECKED *R.K.*

JULY 31 1964
APPROVED *J.E. Giff*

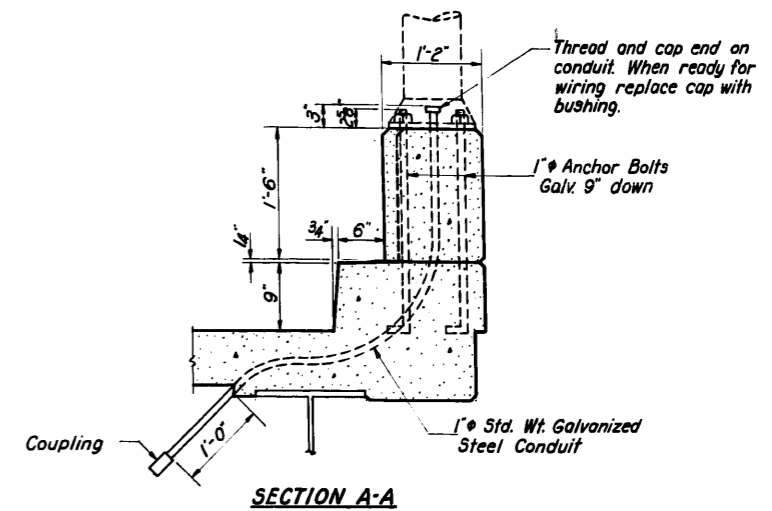
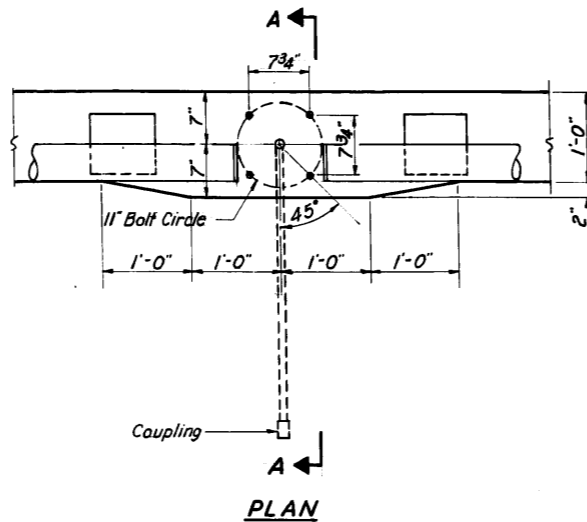
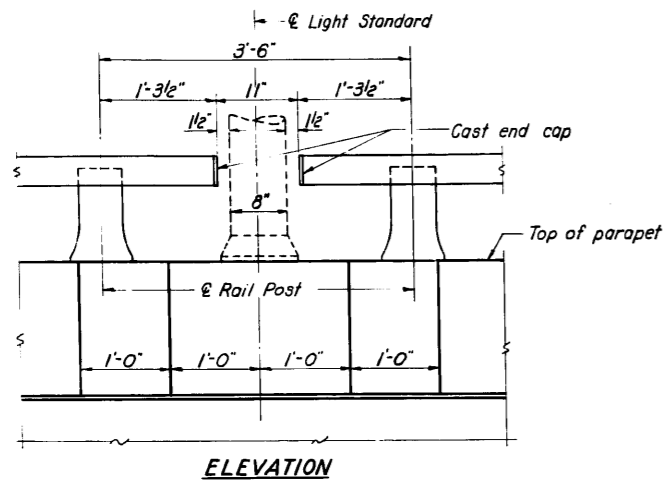
Note: See sheet #5 for Handrail and Parapet Joint Details.



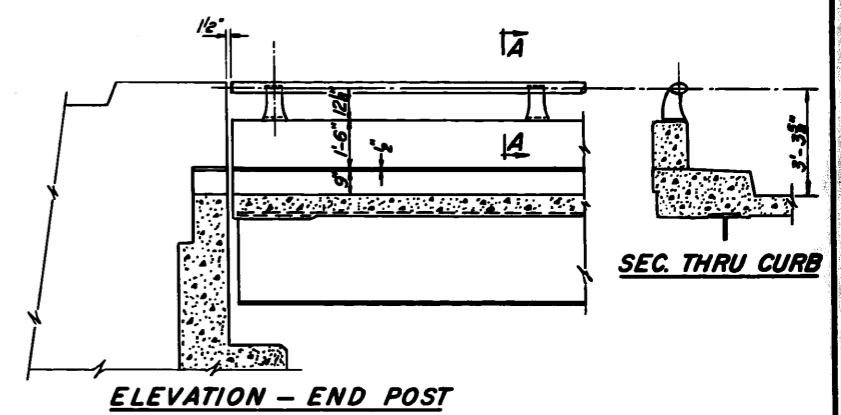
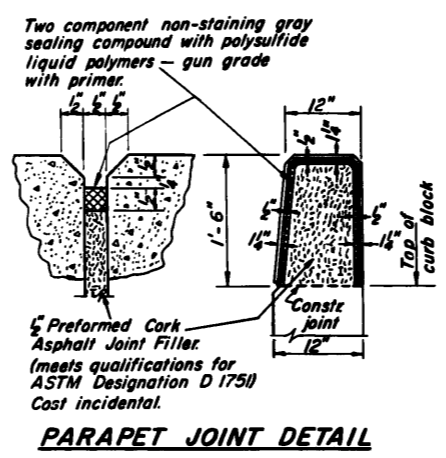
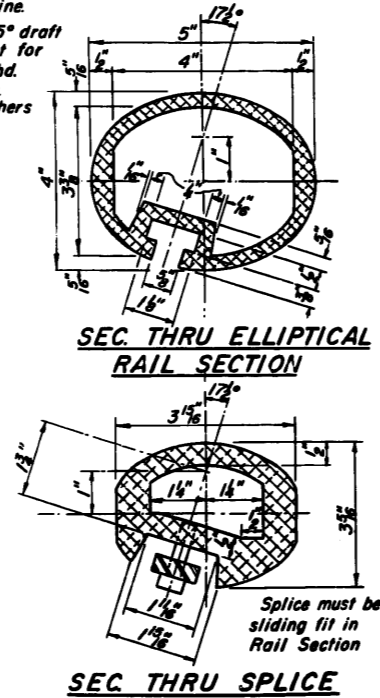
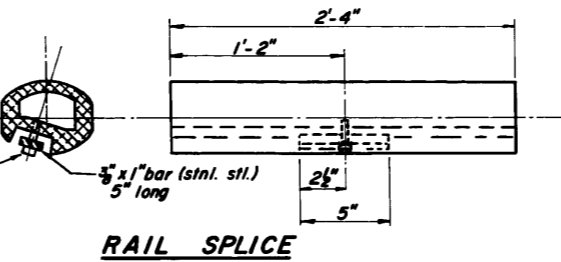
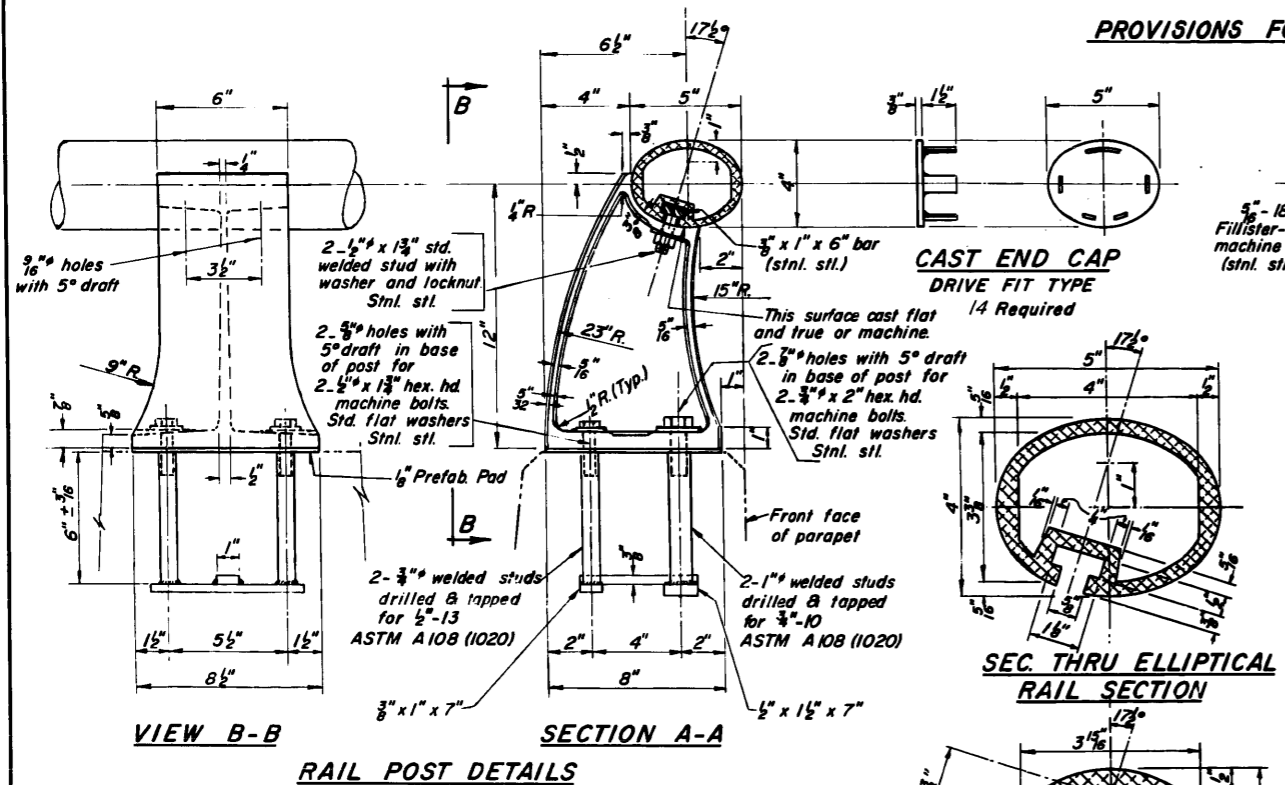
HANDRAIL LAYOUT
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 22 SHEETS
531-3-HB		COOK	29	10	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



PROVISIONS FOR LIGHT STANDARDS



NOTES:

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-235 alloy 6061-T6, or 6062-T6, and shall extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

See Special Provisions for following Material Specifications:
Cast Aluminum Alloy Bridge Post—Alloy 344-T4.
Stainless Steel Welded Stud Bolts, Washers, and Locknuts

For material composition of Prefabricated Pad, see Article 54.9(f), (Bearing and Anchorage), of the Standard Specifications.

METHOD OF MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS OF PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, and caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

BILL OF MATERIAL

Item	Unit	Quantity
ALUMINUM HANDRAIL	Lin. Ft.	806

ALUMINUM HANDRAIL

HANDRAIL & LIGHTING DETAILS
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

DESIGNED	Walter Perry	DATE	JULY 31 1964
CHECKED	R. Kowert	EXAMINED	W. E. Baumann
DRAWN	Wm. M. Best	PASSED	[Signature]
CHECKED	RK	APPROVED	J. E. Hoff

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

BEAMS 11-18

Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
11	32817.627	26.128	748.904	748.904
12	32819.725	18.533	749.295	749.295
13	32821.041	10.937	749.686	749.686
14	32823.886	3.338	750.076	750.076
15	32825.950	4.260	750.467	750.467
16	32828.993	11.862	750.857	750.857
17	32830.044	19.464	751.248	751.248
18	32832.074	27.069	751.638	751.638
11	32820.120	26.219	748.912	748.912
12	32822.211	18.622	749.303	749.303
13	32824.291	11.024	749.694	749.694
14	32826.359	3.424	750.085	750.085
15	32828.415	4.177	750.475	750.475
16	32830.462	11.780	750.866	750.866
17	32832.497	19.385	751.256	751.256
18	32834.521	26.991	751.646	751.646
11	32830.093	26.560	748.947	748.951
12	32832.158	18.956	749.337	749.342
13	32834.210	11.350	749.728	749.732
14	32836.252	3.742	750.118	750.123
15	32838.282	3.866	750.508	750.513
16	32840.301	11.476	750.899	750.903
17	32842.310	19.088	751.289	751.293
18	32844.307	26.702	751.679	751.683
11	32840.070	26.865	748.980	748.984
12	32842.106	19.254	749.371	749.375
13	32844.132	11.640	749.761	749.765
14	32846.147	4.025	750.151	750.155
15	32848.150	3.590	750.541	750.545
16	32850.143	11.208	750.931	750.935
17	32852.124	18.827	751.321	751.325
18	32854.095	26.448	751.711	751.715
11	32850.048	27.134	749.014	749.014
12	32852.057	19.515	749.404	749.404
13	32854.056	11.894	749.794	749.794
14	32856.043	4.272	750.183	750.183
15	32858.020	3.351	750.573	750.574
16	32859.986	10.976	750.963	750.964
17	32861.941	18.602	751.353	751.353
18	32863.885	26.230	751.742	751.743
11	32859.279	27.350	749.044	749.044
12	32861.264	19.724	749.434	749.434
13	32863.237	12.097	749.823	749.823
14	32865.199	4.468	750.213	750.213
15	32867.151	3.161	750.603	750.603
16	32869.092	10.793	750.992	750.992
17	32871.022	18.425	751.382	751.382
18	32872.942	26.060	751.771	751.771
11	32869.261	27.549	749.076	749.085
12	32871.216	19.916	749.465	749.475
13	32873.164	12.282	749.855	749.865
14	32875.099	4.646	750.244	750.254
15	32877.024	2.990	750.634	750.643
16	32878.938	10.629	751.023	751.033
17	32880.841	18.269	751.412	751.422
18	32882.735	25.910	751.801	751.811
11	32879.244	27.712	749.107	749.124
12	32881.173	20.072	749.496	749.513
13	32883.092	12.430	749.886	749.903
14	32885.000	4.787	750.275	750.292
15	32886.897	2.856	750.664	750.681
16	32888.785	10.501	751.053	751.070
17	32890.661	18.148	751.442	751.459
18	32892.528	25.796	751.831	751.848
11	32889.228	27.838	749.138	749.159
12	32891.129	20.191	749.527	749.548
13	32893.021	12.543	749.916	749.937
14	32894.901	4.893	750.305	750.326
15	32896.772	2.757	750.694	750.715
16	32898.632	10.409	751.083	751.104
17	32900.482	18.063	751.472	751.493
18	32902.322	25.718	751.861	751.882
11	32899.212	27.928	749.168	749.183
12	32901.086	20.274	749.557	749.572
13	32902.950	12.619	749.946	749.960
14	32904.804	4.963	750.335	750.349
15	32906.647	2.824	750.723	750.738
16	32908.480	10.353	751.112	751.127
17	32910.303	18.014	751.501	751.515
18	32912.117	25.675	751.889	751.904

BEAMS 11-18

Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
11	32909.197	27.982	749.198	749.205
12	32911.044	20.321	749.586	749.594
13	32912.880	12.659	749.975	749.983
14	32914.706	4.996	750.364	750.371
15	32916.522	2.667	750.752	750.760
16	32918.329	10.333	751.141	751.148
17	32920.125	18.000	751.529	751.537
18	32921.911	25.668	751.918	751.925
11	32919.932	27.999	749.229	749.229
12	32921.749	20.331	749.617	749.617
13	32923.555	12.662	750.006	750.006
14	32925.352	4.992	750.394	750.394
15	32927.139	2.679	750.782	750.782
16	32928.916	10.351	751.171	751.171
17	32930.683	18.025	751.559	751.559
18	32932.440	25.700	751.947	751.947
11	32930.666	27.975	749.259	749.267
12	32932.453	20.300	749.647	749.655
13	32934.230	12.624	750.035	750.043
14	32935.997	4.946	750.424	750.432
15	32937.754	2.731	750.812	750.820
16	32939.502	10.411	751.200	751.208
17	32941.240	18.091	751.588	751.596
18	32942.969	25.773	751.976	751.984
11	32940.651	27.914	749.287	749.301
12	32942.410	20.233	749.675	749.689
13	32944.160	12.550	750.063	750.077
14	32945.899	4.866	750.451	750.466
15	32947.629	2.817	750.839	750.854
16	32949.350	10.503	751.227	751.242
17	32951.061	18.190	751.615	751.630
18	32952.762	25.877	752.003	752.017
11	32950.636	27.817	749.314	749.335
12	32952.367	20.129	749.702	749.723
13	32954.089	12.440	750.090	750.110
14	32955.801	4.750	750.477	750.498
15	32957.503	2.940	750.865	750.886
16	32959.197	10.632	751.253	751.274
17	32960.880	18.325	751.641	751.662
18	32962.555	26.019	752.029	752.050
11	32960.619	27.684	749.340	749.357
12	32962.323	19.990	749.728	749.745
13	32964.017	12.295	750.116	750.132
14	32965.701	4.599	750.503	750.520
15	32967.376	3.098	750.891	750.908
16	32969.042	10.796	751.279	751.296
17	32970.699	18.495	751.666	751.683
18	32972.347	26.195	752.054	752.071
11	32970.602	27.514	749.366	749.376
12	32972.277	19.814	749.753	749.763
13	32973.944	12.113	750.141	750.151
14	32975.600	4.411	750.529	750.539
15	32977.248	3.291	750.916	750.926
16	32978.887	10.996	751.304	751.314
17	32980.516	18.701	751.691	751.701
18	32982.137	26.407	752.079	752.089
11	32980.563	27.308	749.391	749.391
12	32982.231	19.602	749.778	749.778
13	32983.889	11.895	750.166	750.166
14	32985.496	4.187	750.553	750.553
15	32987.118	3.521	750.941	750.941
16	32988.730	11.231	751.328	751.328
17	32990.332	18.940	751.716	751.716
18	32991.926	26.654	752.103	752.103
11	32989.814	27.086	749.414	749.414
12	32991.436	19.374	749.801	749.802
13	32993.049	11.661	750.188	750.189
14	32994.652	3.948	750.575	750.575
15	32996.247	3.766	750.963	750.964
16	32997.833	11.481	751.350	751.351
17	32999.410	19.198	751.738	751.738
18	33000.978	26.915	752.125	752.125

BEAMS 11-18

Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
11	32999.792	26.810	749.438	749.442
12	33001.386	19.093	749.825	749.829
13	33002.971	11.374	750.212	750.216
14	33004.546	3.655	750.599	750.603
15	33006.114	4.065	750.987	750.991
16	33007.672	11.785	751.374	751.378
17	33009.222	19.508	751.761	751.765
18	33010.763	27.231	752.148	752.152
11	33009.768	26.498	749.461	749.465
12	33011.334	18.775	749.848	749.853
13	33012.890	11.051	750.235	750.240
14	33014.438	3.326	750.622	750.627
15	33015.978	4.399	751.010	751.014
16	33017.509	12.126	751.397	751.401
17	33019.032	19.854	751.784	751.788
18	33020.546	27.582	752.171	752.175
11	33019.741	26.150	749.484	749.484
12	33021.279	18.421	749.871	749.871
13	33022.808	10.691	750.258	750.258
14	33024.328	2.961	750.645	750.645
15	33025.840	4.770	751.032	751.032
16	33027.343	12.502	751.419	751.419
17	33028.839	20.235	751.806	751.806
18	33030.326	27.969	752.193	752.193
11	33022.234	26.057	749.489	749.489
12	33023.765	18.327	749.876	749.876
13	33025.287	10.596	750.263	750.263
14	33026.800	2.864	750.650	750.650
15	33028.305	4.868	751.037	751.037
16	33029.802	12.602	751.424	751.424
17	33031.290	20.336	751.811	751.811
18	33032.770	28.072	752.198	752.198

Theoretical Grade Elevations Adjusted For Dead Load Deflection

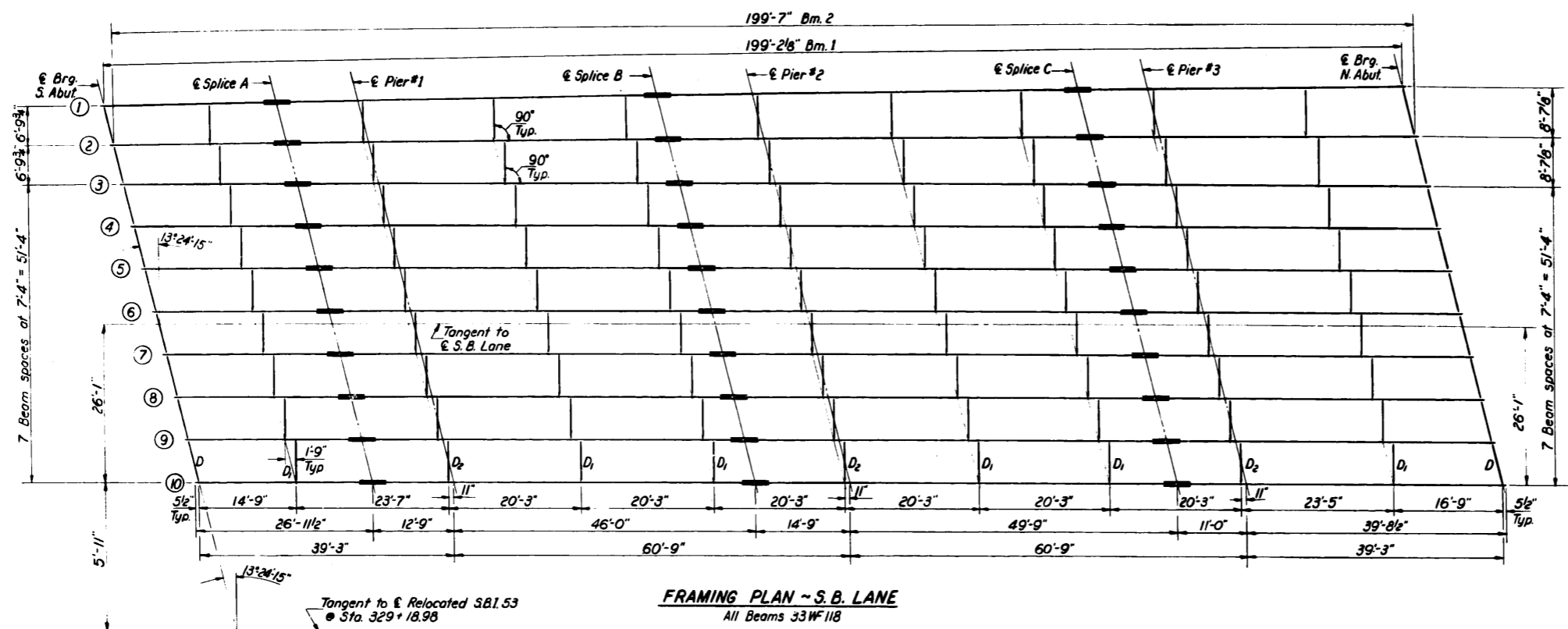
Beam	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BEAM 19	
A	752.080
B	752.092
C	752.122
D	752.147
E	752.169
F	752.191
G	752.224
H	752.253
I	752.282
J	752.298
K	752.312
L	752.327
M	752.357
N	752.384
O	752.410
P	752.434
Q	752.456
R	752.473
S	752.480
T	752.480
U	752.496
V	752.508
W	752.511

Theoretical Grade Elevations Adjusted For Dead Load Deflection

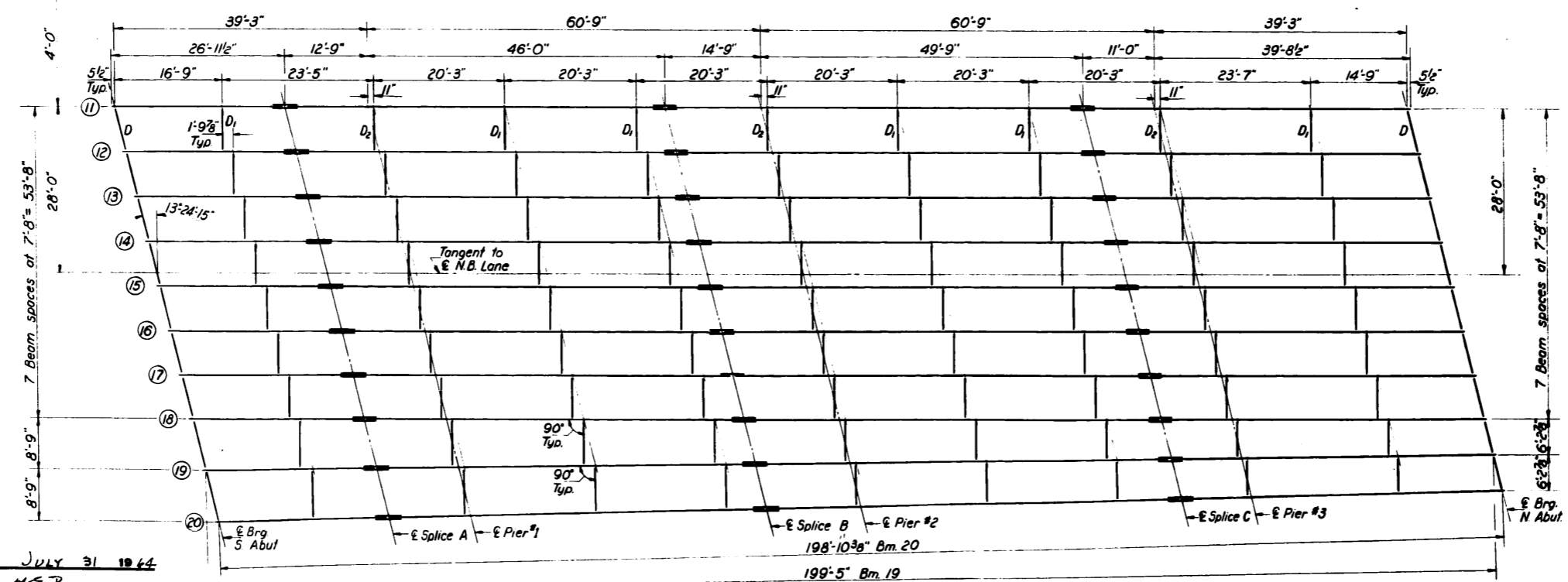
Beam	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BEAM 20	
A	752.533
B	752.5

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

PROJECT NO.	531-3HB	COUNTY	COOK	TOTAL SHEETS	29	SHEET NO.	13
DATE	6/1					22 SHEETS	
DESIGNED BY			DRAWN BY				
CHECKED BY			APPROVED BY				



FRAMING PLAN ~ S.B. LANE
All Beams 33WF118



FRAMING PLAN ~ N.B. LANE
All Beams 33WF118

DESIGNED *Walter Perry*
CHECKED *L. Howard*
DRAWN *J. L. Armstrong*
CHECKED *RL*

JULY 31 1944
EXAMINED *H. E. Baumann*
PASSED *[Signature]*
APPROVED *V. E. Cliff*

STRUCTURAL STEEL
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

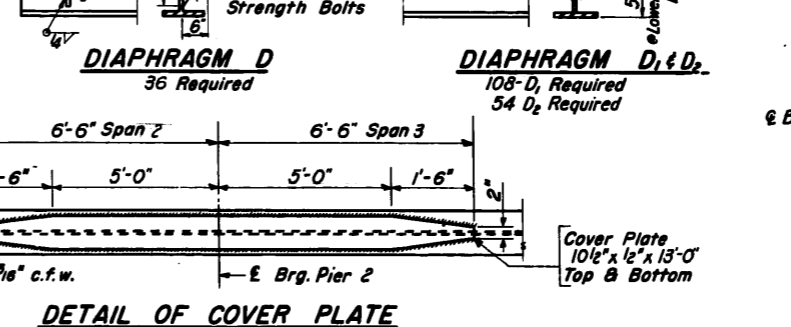
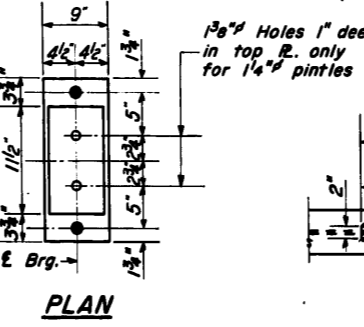
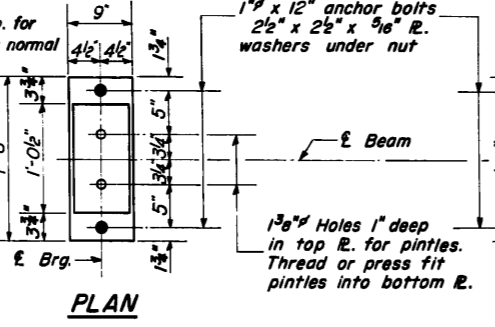
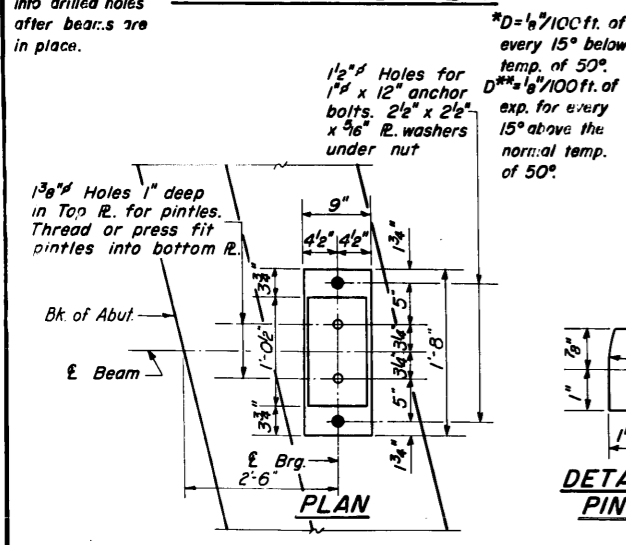
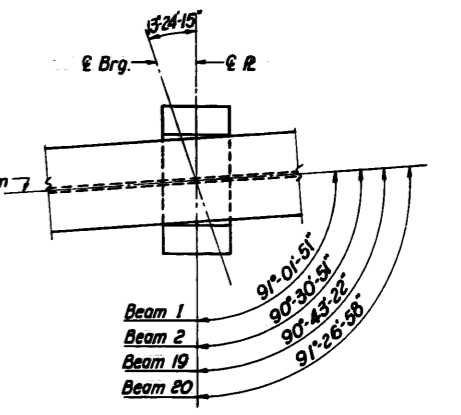
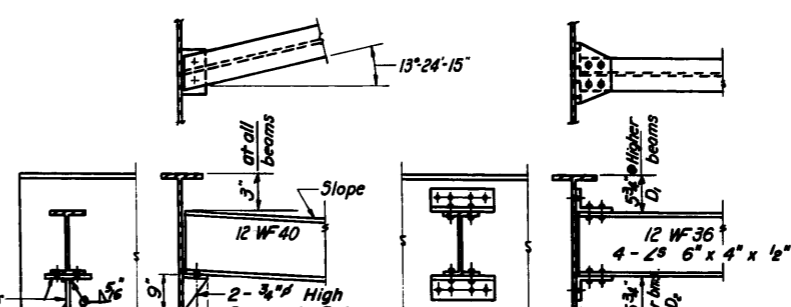
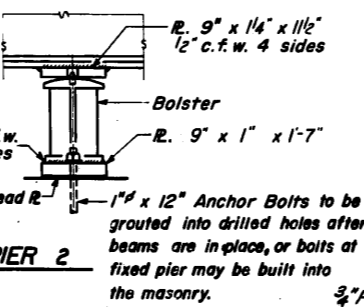
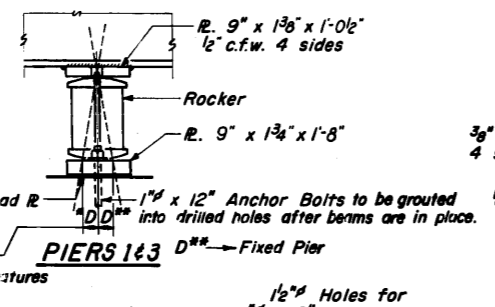
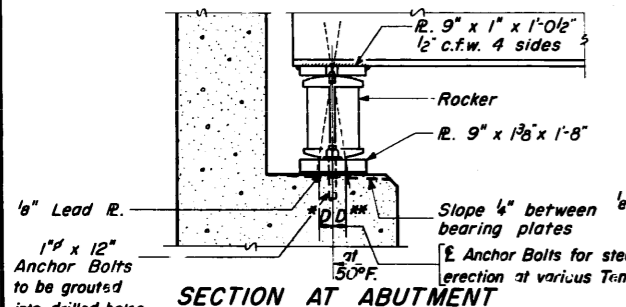
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 61	531-3HB	COOK	29	14
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

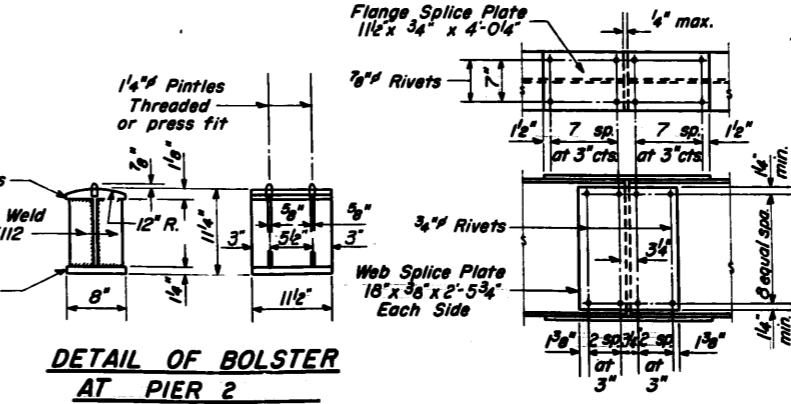
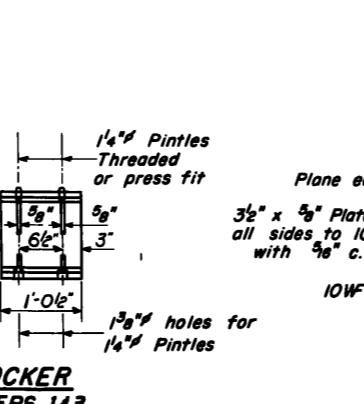
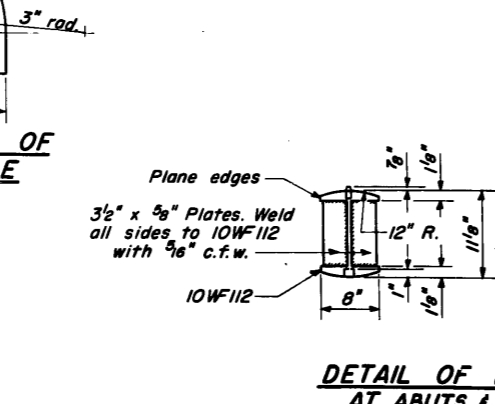
SHEET NO. 9
22 SHEETS

TOP OF WF ELEVATIONS

Location Beam	S. B. LANE										N. B. LANE									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
€ Brq. S. Abut.	747.72	748.06	748.40	748.77	749.14	749.51	749.88	750.25	750.62	750.99	748.33	748.72	749.11	749.50	749.89	750.28	750.67	751.06	751.51	751.96
€ Splice A	747.76	748.11	748.46	748.83	749.20	749.57	749.94	750.31	750.68	751.05	748.38	748.77	749.16	749.55	749.94	750.33	750.72	751.11	751.54	751.97
€ Pier #1	747.80	748.15	748.50	748.87	749.24	749.61	749.98	750.35	750.72	751.09	748.42	748.81	749.20	749.59	749.98	750.37	750.76	751.15	751.57	751.99
€ Splice B	747.90	748.28	748.66	749.03	749.40	749.77	750.14	750.51	750.88	751.25	748.56	748.95	749.34	749.73	750.12	750.51	750.90	751.29	751.68	752.07
€ Pier #2	747.92	748.31	748.70	749.07	749.44	749.81	750.18	750.55	750.92	751.29	748.60	748.99	749.38	749.77	750.16	750.55	750.94	751.33	751.71	752.09
€ Splice C	748.01	748.43	748.85	749.22	749.59	749.96	750.33	750.70	751.07	751.44	748.73	749.12	749.51	749.90	750.29	750.68	751.07	751.48	751.80	752.14
€ Pier #3	748.03	748.46	748.89	749.26	749.63	750.00	750.37	750.74	751.11	751.48	748.77	749.16	749.55	749.94	750.33	750.72	751.11	751.50	751.89	752.16
€ Brq. N. Abut.	748.13	748.57	749.01	749.38	749.75	750.12	750.49	750.86	751.23	751.60	748.88	749.27	749.66	750.05	750.44	750.83	751.22	751.61	751.92	752.23



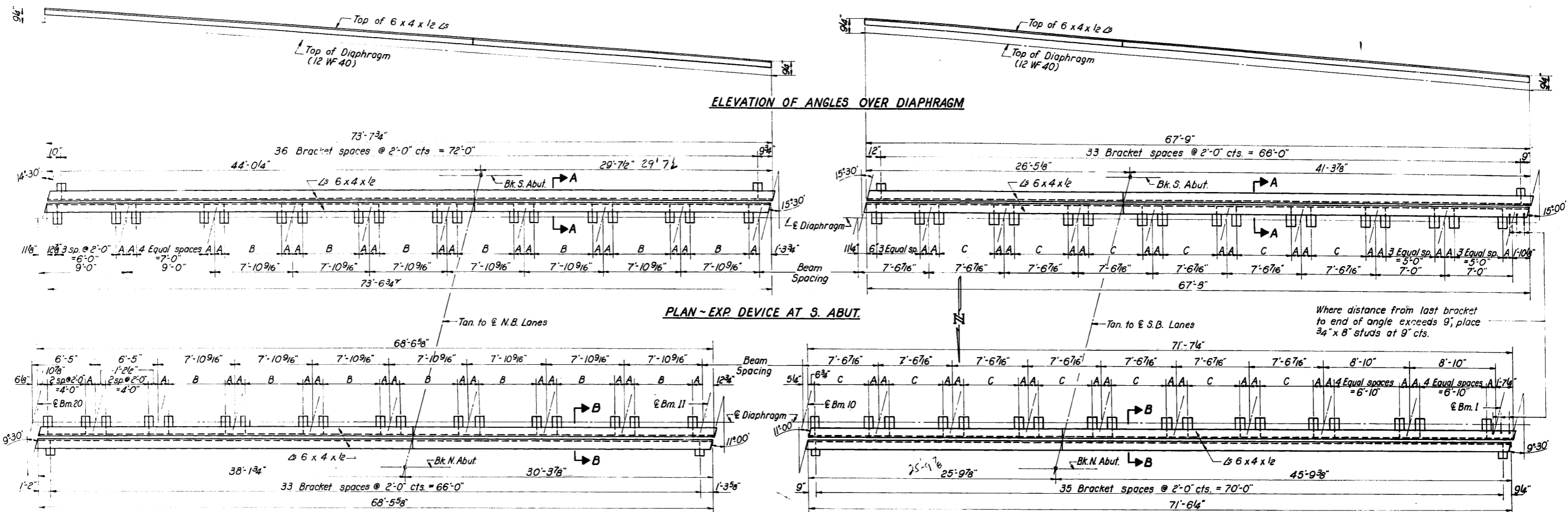
DESIGNED *Walter Perry*
 CHECKED *R. Kowert*
 DRAWN *J.L. Armstrong*
 JULY 31 1964
 EXAMINED *W.C. Burmann*
 PASSED *[Signature]*
 APPROVED *[Signature]*



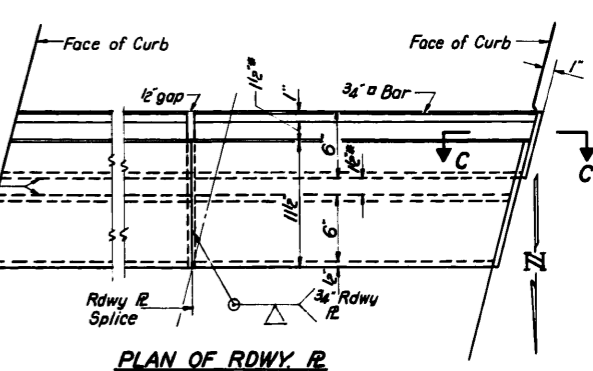
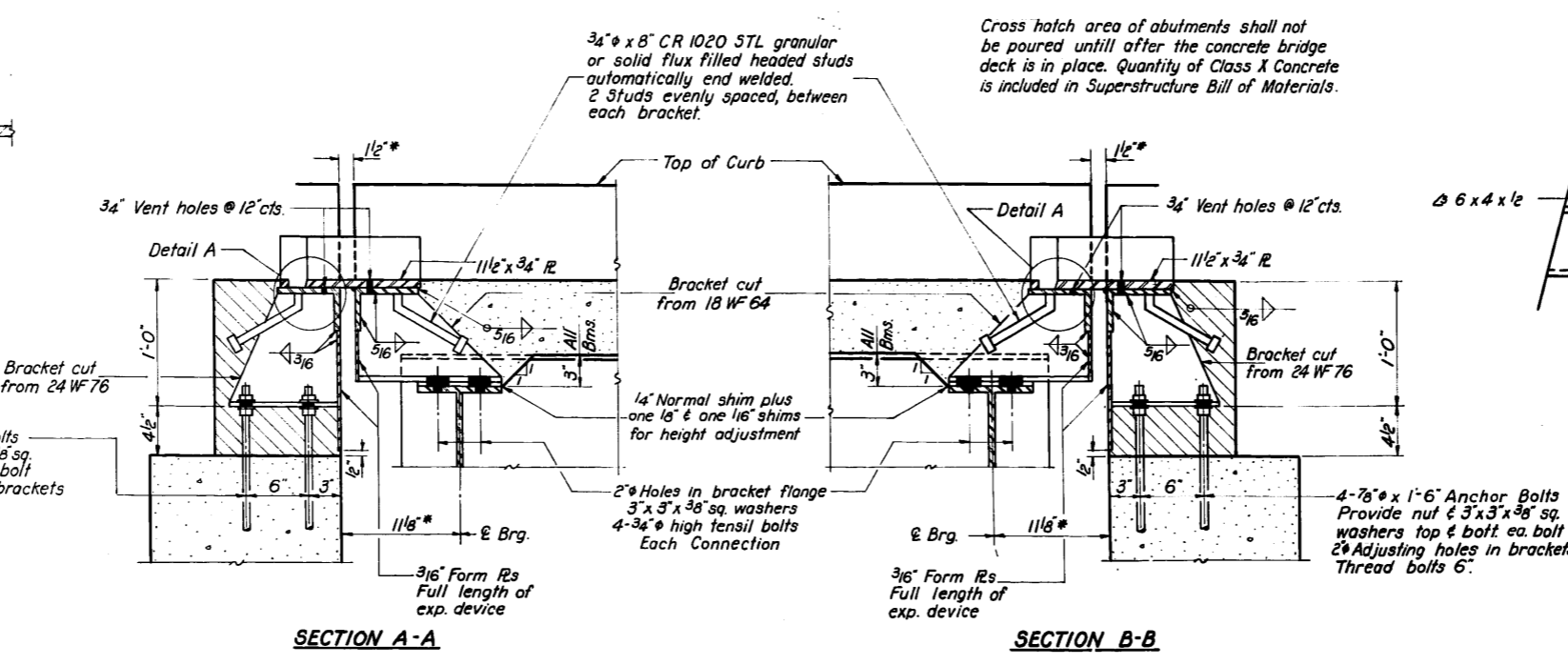
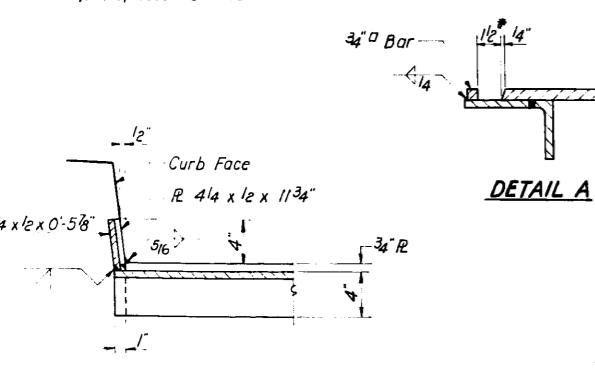
STRUCTURAL STEEL DETAILS
 F.A. RT. 61 SEC. 531-3-HB
 COOK COUNTY
 STA. 329+18.98

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10
F.A. 61	531-3 HB	COOK	29	15	22 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.		



A = 1'-0"
B = 3 Equal spaces = 5'-10 9/16"
C = 3 Equal spaces = 5'-6 7/16"



DESIGNED *Walter Perry*
CHECKED *R. Kowal*
DRAWN *J.L. Armstrong*
CHECKED *R.K.*

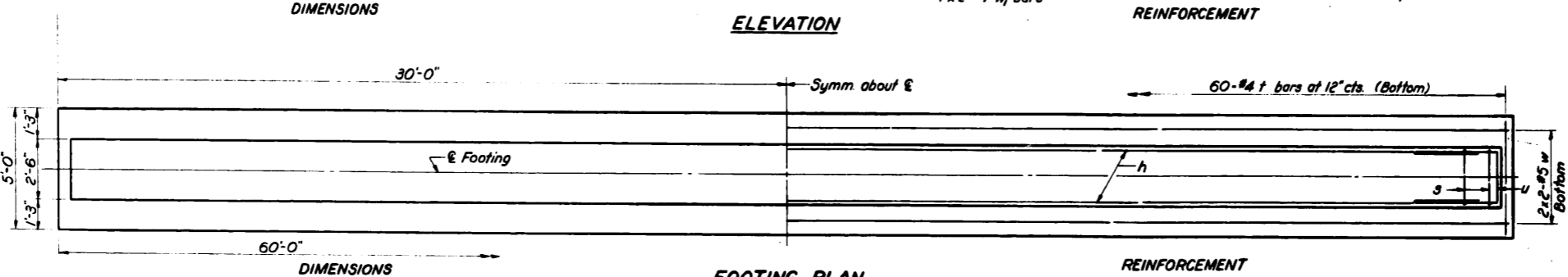
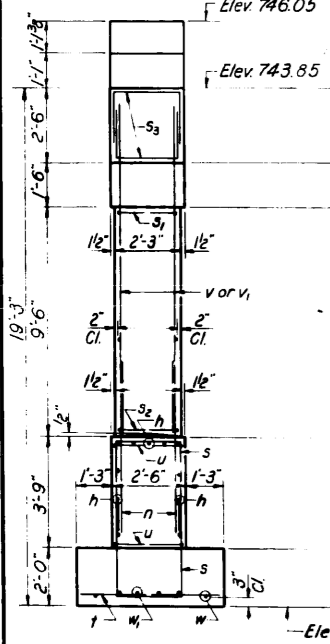
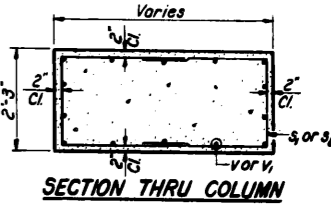
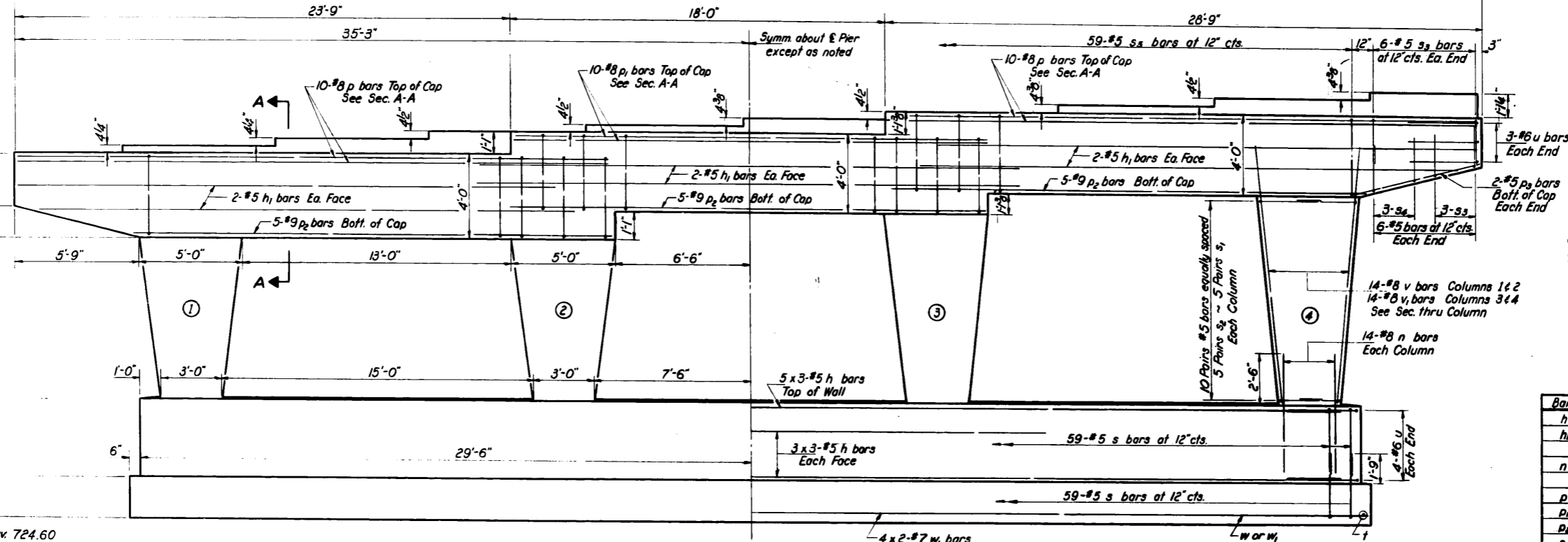
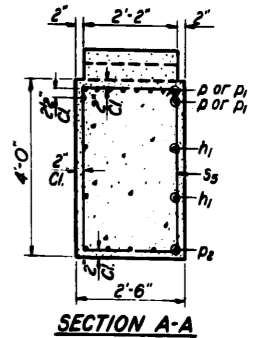
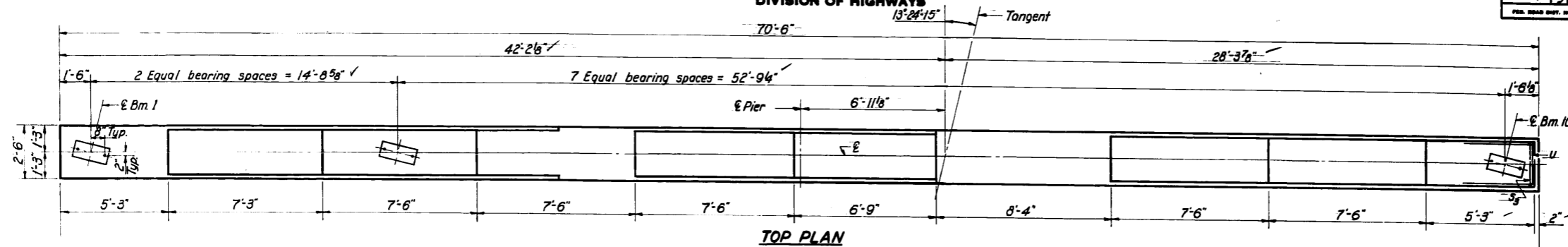
JULY 31 1961
EXAMINED *W.C. Beermann*
PASSED *E. L. ...*
APPROVED *O.E. ...*

EXPANSION DEVICE
F.A. RT. 61 SEC. 531-3 HB
COOK COUNTY
STA. 329+18.98

* * Normal temp. of 50°F

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

ROUTE NO.	SECTION	BRIDGE	TOTAL SPANS	SHEET NO.	SHEET NO. 11
F.A. RT. 61	531-3-HB	COOK	29	16	22 SHEETS
DESIGNED BY		DRAWN BY		CHECKED BY	
W.P. Perry		J.L. Armstrong		R.K.	
EXAMINED BY		PASSED BY		APPROVED BY	
W.E. Blum		E. Blum		U.E. Bluff	
DATE		JULY 31 1964			



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	33	#5	19'-9"	—
h ₁	12	#5	26'-0"	—
n	56	#8	6'-0"	—
p	20	#8	28'-6"	—
p ₁	10	#8	22'-6"	—
p ₂	15	#9	23'-0"	—
p ₃	4	#5	6'-0"	—
s	118	#5	9'-2"	□
s ₁	40	#5	7'-7"	□
s ₂	40	#5	6'-9"	□
s ₃	18	#5	6'-6"	□
s ₄	6	#5	7'-2"	□
s ₅	59	#5	12'-5"	□
t	60	#4	4'-9"	—
u	14	#6	8'-9"	□
v	28	#8	13'-0"	—
v ₁	28	#8	14'-3"	—
w	4	#5	30'-6"	—
w ₁	8	#7	30'-9"	—
Class X Concrete				Cu. Yds. 85.2
Reinforcement Bars				Lbs. 10,920

A & B DIMENSIONS

Bar	A	B
s	2'-2"	3'-6"
s ₁	1'-11"	2'-10"
s ₂	1'-11"	2'-5"
s ₃	2'-2"	2'-2"
s ₄	2'-2"	2'-6"

Note:
Space reinforcement in cap to miss anchor bolts.
Min. bar laps = 20 dia. unless otherwise noted.
All edges shall have standard 3/4" chamfers except as noted.
Pour steps monolithically with cap.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Max. Soil Pressure = 2.0 T/ft²

DESIGNED Walter Perry
CHECKED R. Kowert
DRAWN J.L. Armstrong
CHECKED RK

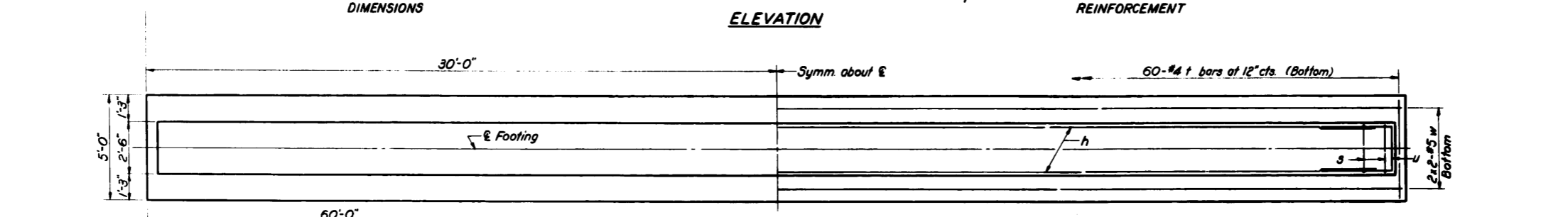
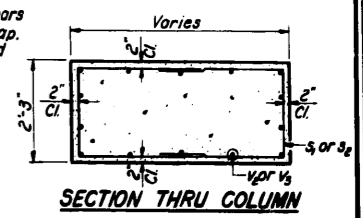
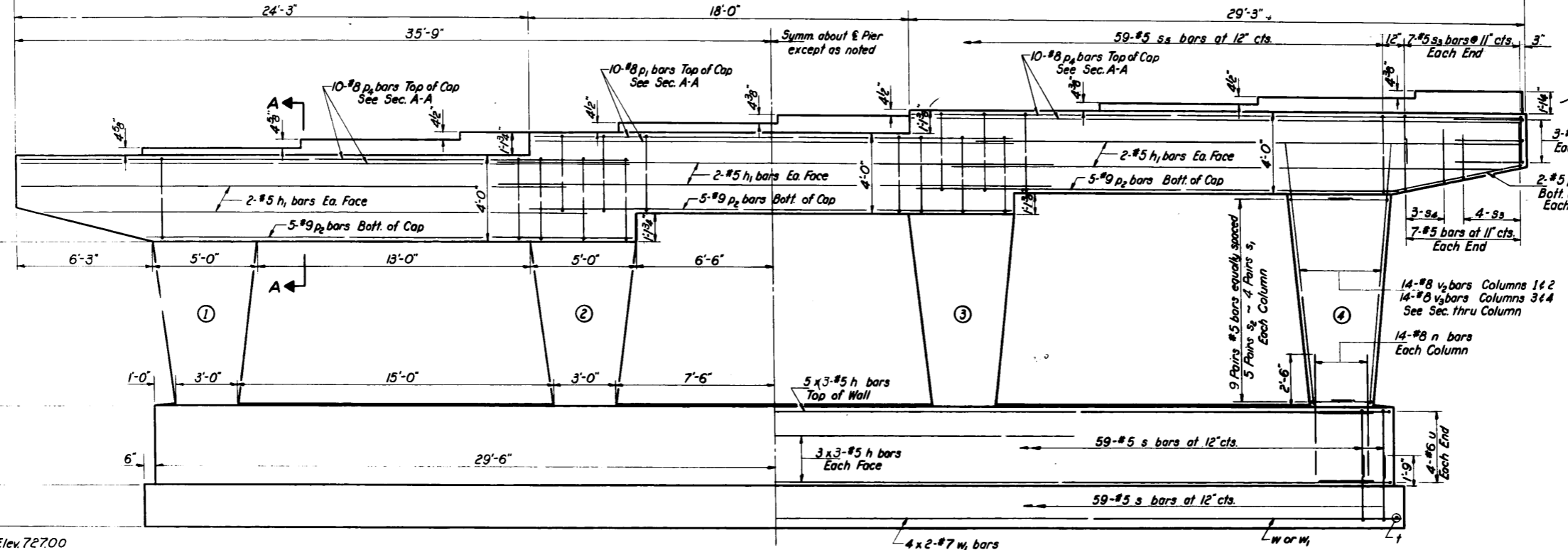
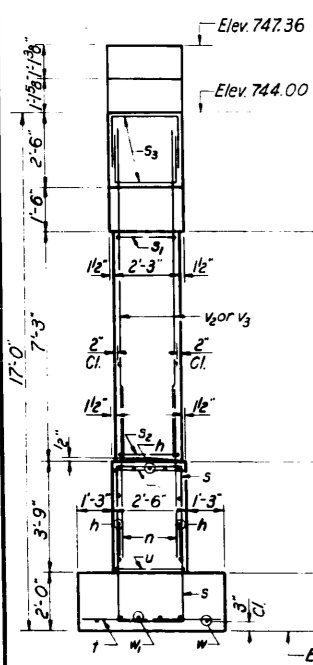
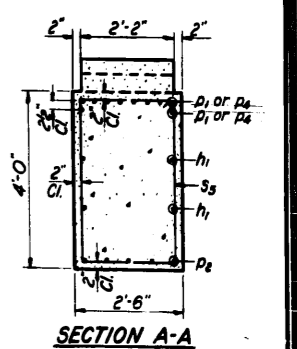
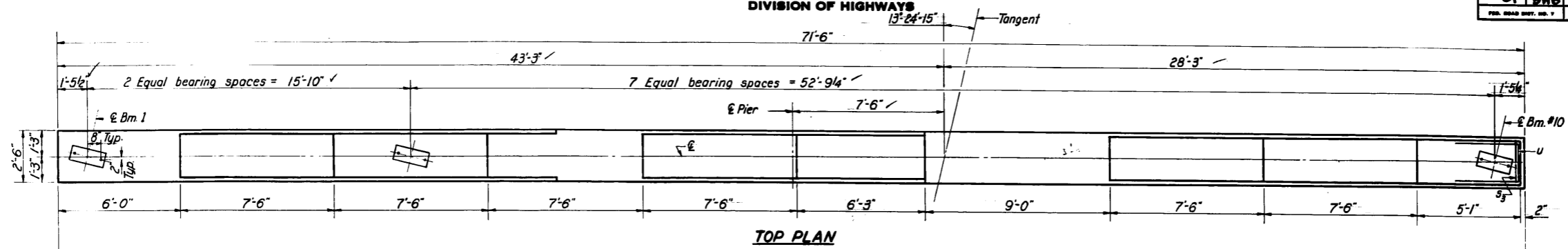
EXAMINED W.E. Blum
PASSED E. Blum
APPROVED U.E. Bluff

JULY 31 1964

PIER #1 - S. B. LANE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

ROUTE NO.	SECTION	QUANTITY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12
P.A. 61	531-3HB	COOK	29	17	22 SHEETS
FED. ROAD DIST. NO. 7	PLANING	FED. AID PROJECT			



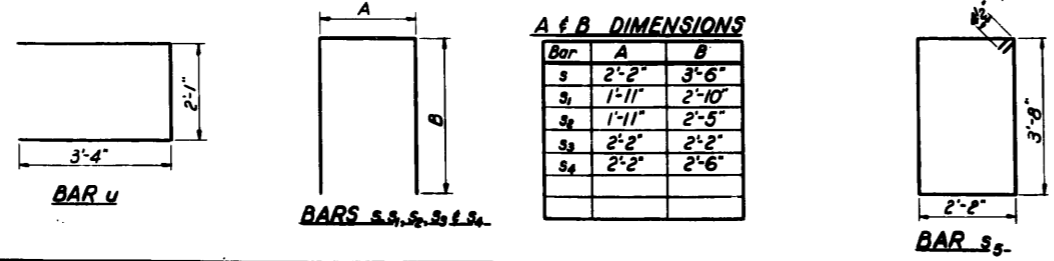
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	33	#5	18'-9"	—
h1	12	#5	26'-0"	—
n	56	#8	6'-0"	—
p1	10	#8	22'-6"	—
p2	15	#9	23'-0"	—
p4	20	#8	29'-0"	—
p5	4	#5	6'-6"	—
s	118	#5	9'-2"	□
s1	32	#5	7'-7"	□
s2	40	#5	6'-9"	□
s3	22	#5	6'-6"	□
s4	6	#5	7'-2"	□
s5	59	#5	12'-5"	□
t	60	#4	4'-9"	—
u	14	#6	8'-9"	□
v2	28	#8	10'-9"	—
v3	28	#8	12'-0"	—
w	4	#5	30'-6"	—
w1	8	#7	30'-9"	—
Class X Concrete				Cu. Yds. 82.5
Reinforcement Bars				Lbs. 10,580

DESIGNED *Walter Perry*
CHECKED *R. Kowal*
DRAWN *J. L. Armstrong*
CHECKED *RK*

EXAMINED *H. C. Rasmussen*
PASSED *[Signature]*
APPROVED *[Signature]*

JULY 31 1964

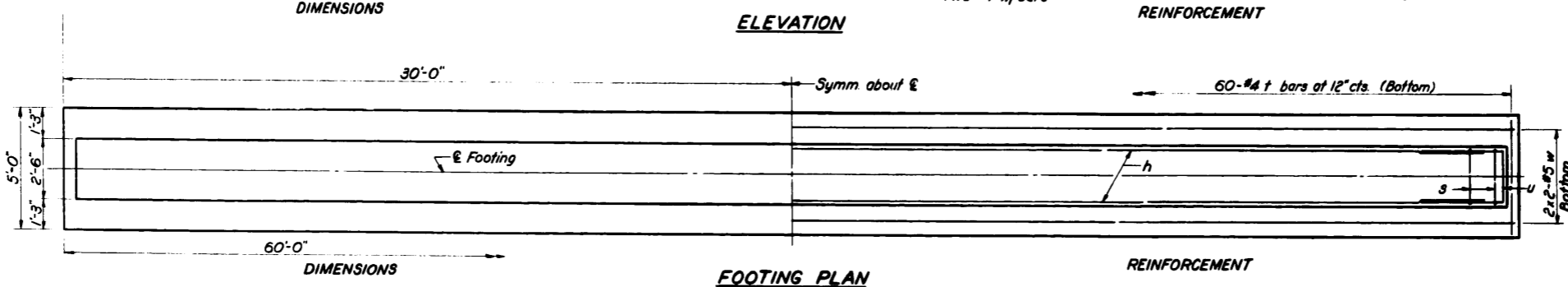
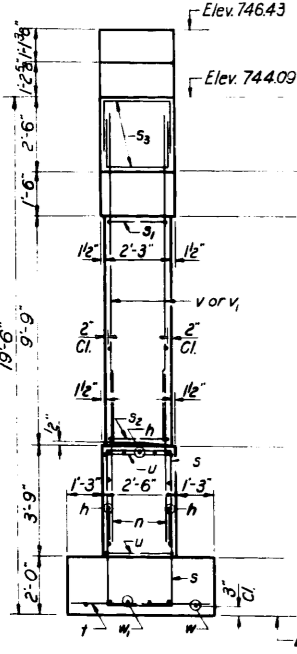
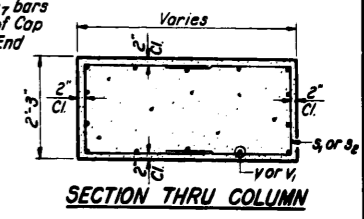
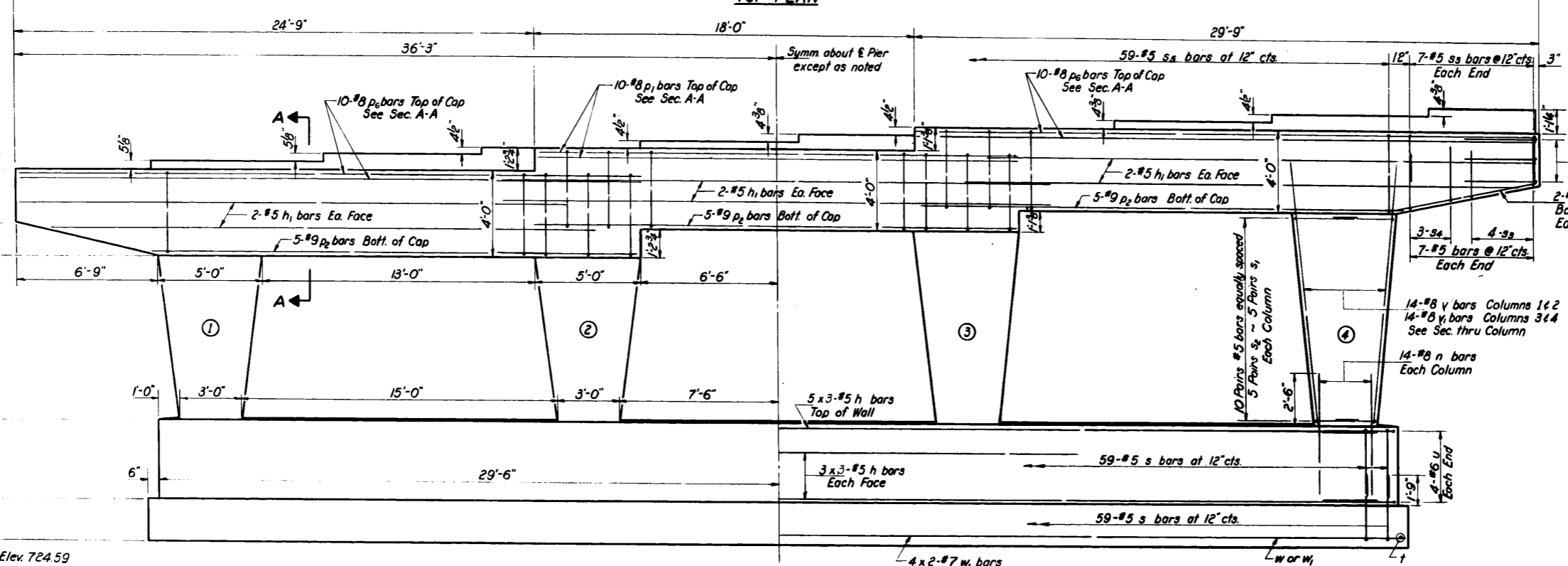
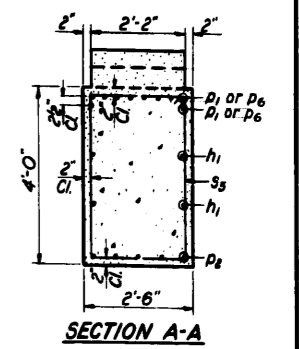
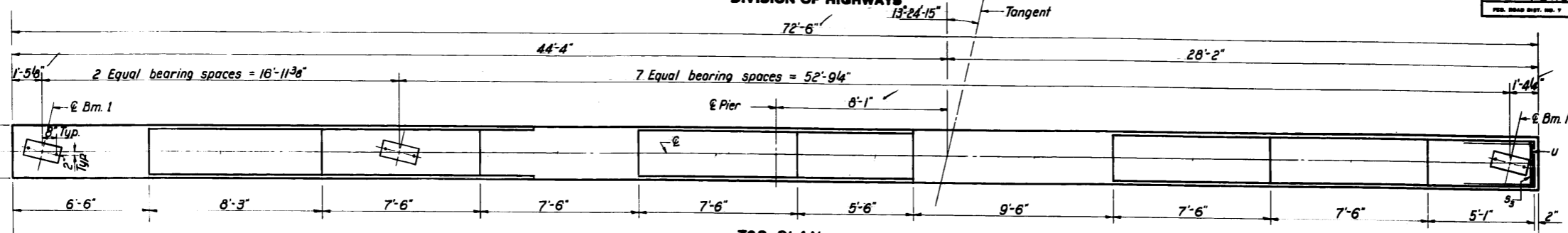


Note:
Space reinforcement in cap to miss anchor bolts.
Min. bar laps = 20 dia. unless otherwise noted.
All edges shall have standard 3/4" chamfers except as noted.
Pour steps monolithically with cap.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Max. Soil Pressure = 3.2 T/ft²

PIER #2 ~ S.B. LANE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
531-3-HB	218	COOK	29	18
SHEET NO. 13		22 SHEETS		



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	33	#5	19'-9"	—
h ₁	12	#5	26'-0"	—
n	56	#8	6'-0"	—
p ₁	10	#8	22'-6"	—
p ₂	15	#9	23'-0"	—
p ₆	20	#8	29'-6"	—
p ₇	4	#5	7'-0"	—
s	118	#5	9'-2"	□
s ₁	40	#5	7'-7"	□
s ₂	40	#5	6'-9"	□
s ₃	22	#5	6'-6"	□
s ₄	6	#5	7'-2"	□
s ₅	59	#5	12'-5"	□
t	60	#4	4'-9"	—
u	14	#6	8'-9"	□
v	28	#8	13'-0"	—
v ₁	28	#8	14'-3"	—
w	4	#5	30'-6"	—
w ₁	8	#7	30'-9"	—
Class X Concrete			Cu Yds.	86.7
Reinforcement Bars			Lbs.	11,010

DESIGNED *Walter Perry*

CHECKED *L. Hawk*

DRAWN *J. L. Armstrong*

CHECKED *RK*

EXAMINED *W.C. Baumgartner* JULY 31 1964

PASSED *[Signature]*

APPROVED *J.E. Olcott*

A & B DIMENSIONS

Bar	A	B
s	2'-2"	3'-6"
s ₁	1'-11"	2'-10"
s ₂	1'-11"	2'-5"
s ₃	2'-2"	2'-2"
s ₄	2'-2"	2'-6"

BAR u

BAR s, s₁, s₂, s₃ & s₄

BAR s₅

Note:

Space reinforcement in cap to miss anchor bolts.

Min. bar laps = 20 dia. unless otherwise noted.

All edges shall have standard 3/4" chamfers except as noted.

Pour steps monolithically with cap.

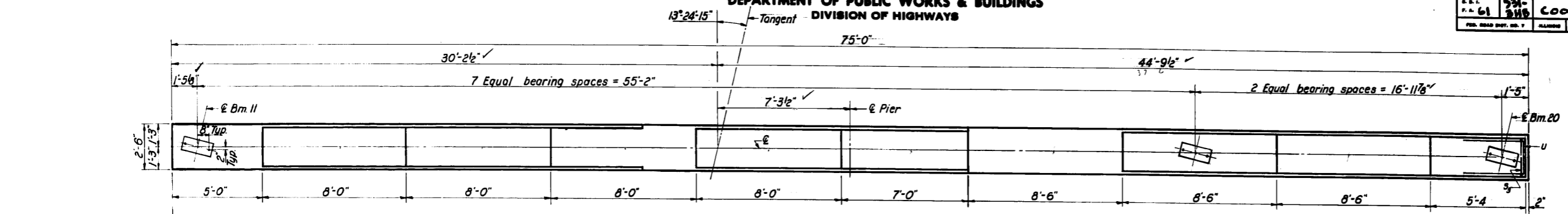
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

Max. Soil Pressure = 2.0 T/ft²

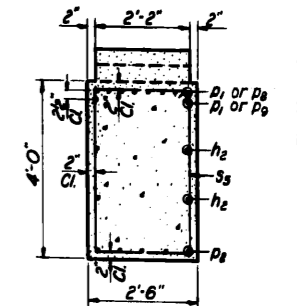
PIER #3 - S.B. LANE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

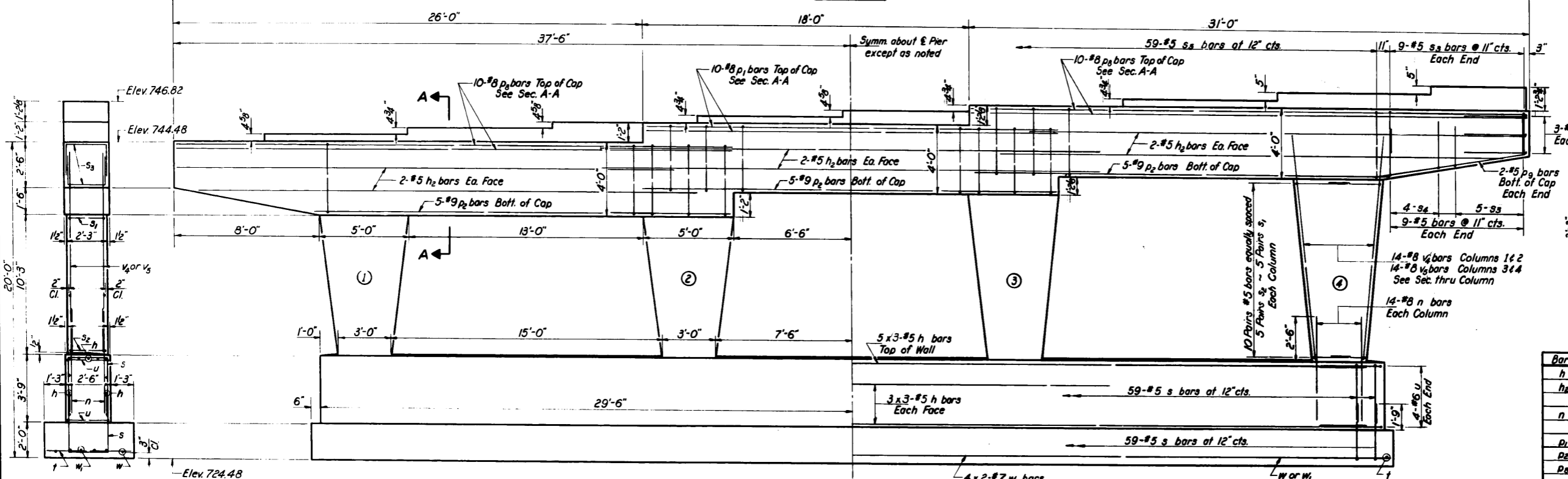
STATE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 14
61	531-3HB	COOK	29	19	22 SHEETS



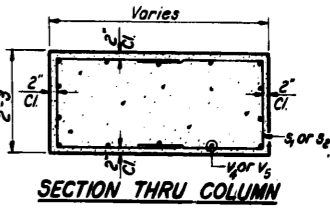
TOP PLAN



SECTION A-A



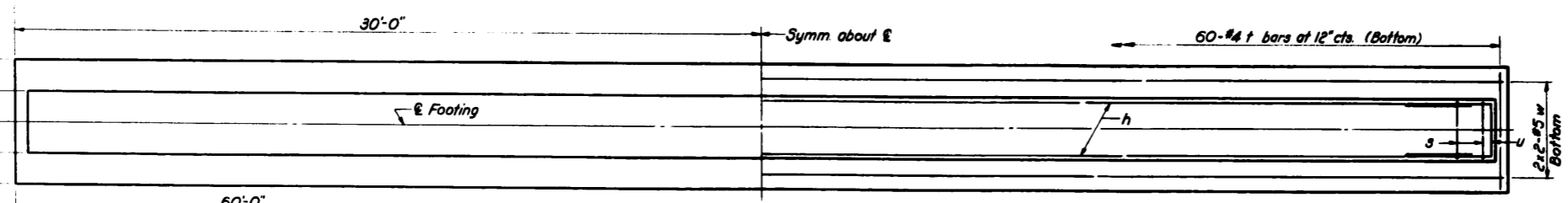
ELEVATION



SECTION THRU COLUMN

END VIEW

DIMENSIONS REINFORCEMENT



FOOTING PLAN

REINFORCEMENT

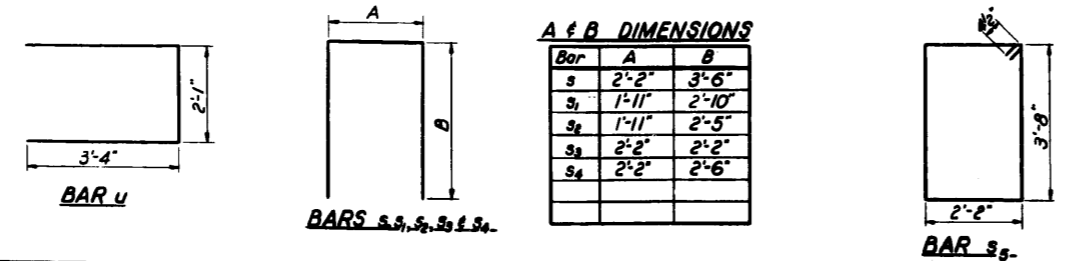
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	33	#5	19'-9"	—
h ₂	12	#5	27'-6"	—
n	56	#8	6'-0"	—
p ₁	10	#8	22'-6"	—
p ₂	15	#9	23'-0"	—
p ₃	20	#8	30'-9"	—
p ₄	4	#5	8'-3"	—
s	118	#5	9'-2"	□
s ₁	40	#5	7'-7"	□
s ₂	40	#5	6'-9"	□
s ₃	28	#5	6'-6"	□
s ₄	8	#5	7'-2"	□
s ₅	59	#5	12'-5"	□
t	60	#4	4'-9"	—
u	14	#6	8'-9"	□
v ₄	28	#8	14'-0"	—
v ₅	28	#8	15'-3"	—
w	4	#5	30'-6"	—
w ₁	8	#7	30'-9"	—
Class X Concrete		Cu Yds.	88.7	
Reinforcement Bars		Lbs.	11,500	

DESIGNED *Walter Perry*
CHECKED *R. Kuntz*
DRAWN *J. L. Armstrong*
CHECKED *RK*

EXAMINED *H. C. Baumann*
PASSED *[Signature]*
APPROVED *[Signature]*

JULY 31 1964

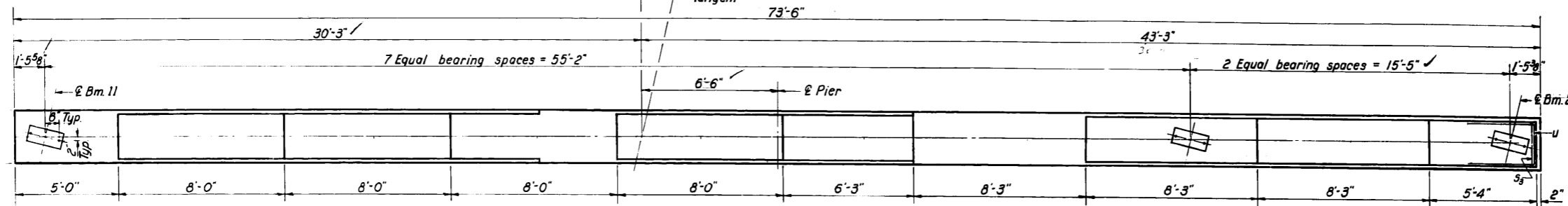


Note:
Space reinforcement in cap to miss anchor bolts.
Min. bar laps = 20 dia. unless otherwise noted.
All edges shall have standard 3/4" chamfers except as noted.
Four steps monolithically with cap.
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Max. Soil Pressure = 2.0 T/ft²

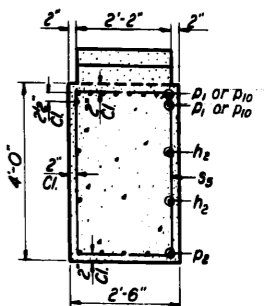
PIER #1 ~ N.B. LANE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

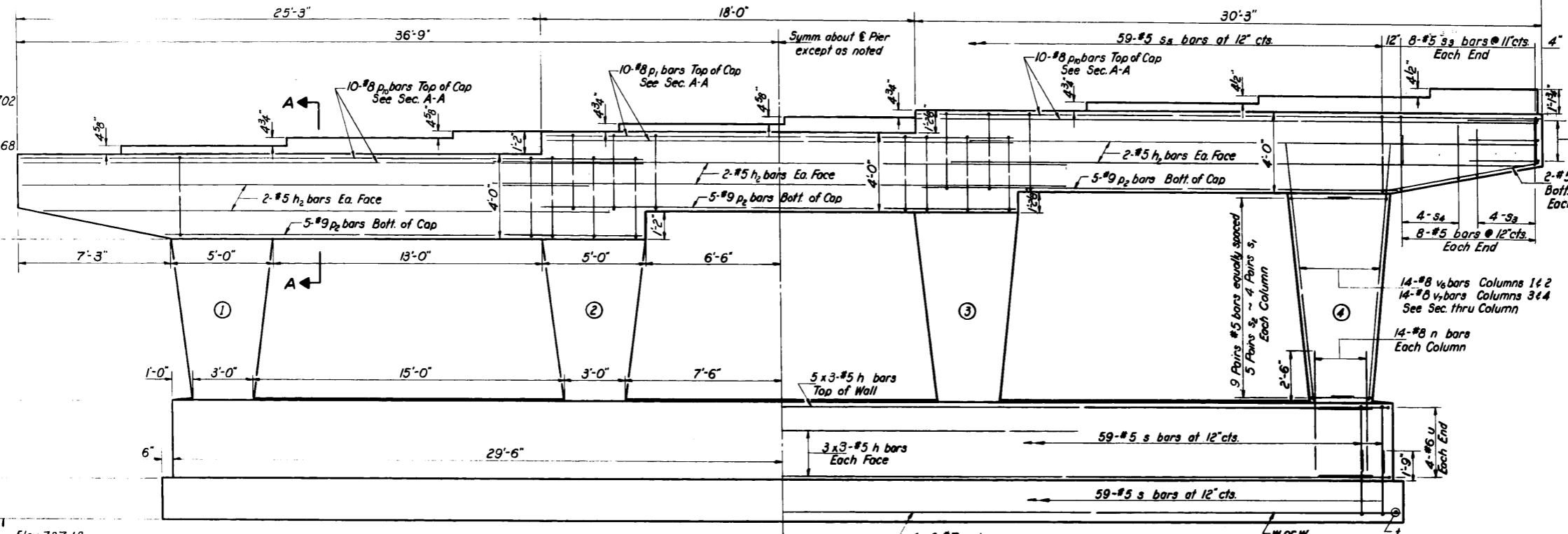
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 15
61	531-3-HB	COOK	29	20	22 SHEETS
ILLINOIS		FED. AID PROJECT			



TOP PLAN

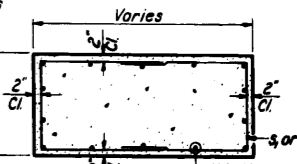


SECTION A-A

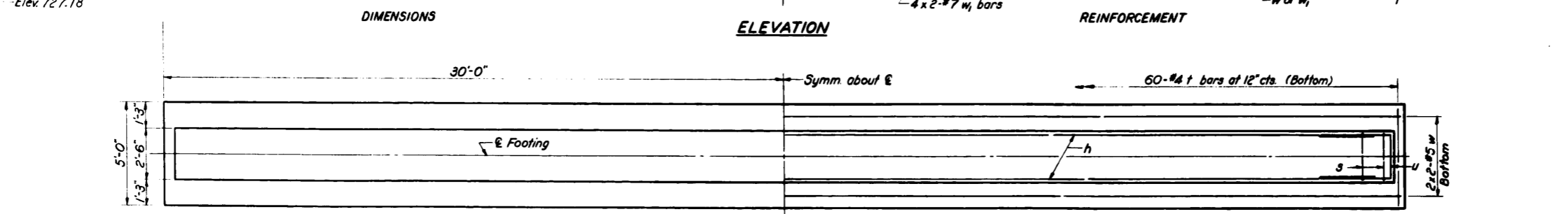


ELEVATION

REINFORCEMENT



SECTION THRU COLUMN



FOOTING PLAN

REINFORCEMENT

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	33	#5	19'-9"	—
h2	12	#5	27'-6"	—
n	56	#8	6'-0"	—
p1	10	#8	22'-6"	—
p2	15	#9	23'-0"	—
p3	20	#8	30'-0"	—
p4	4	#5	7'-6"	—
s	118	#5	9'-2"	□
s1	32	#5	7'-7"	□
s2	40	#5	6'-9"	□
s3	24	#5	6'-6"	□
s4	8	#5	7'-2"	□
s5	59	#5	12'-5"	□
t	60	#4	4'-9"	—
u	14	#6	8'-9"	□
v6	28	#8	11'-3"	—
v7	28	#8	12'-6"	—
w	4	#5	30'-6"	—
w1	8	#7	30'-9"	—
Class X Concrete			Cu. Yds.	84.7
Reinforcement Bars			Lbs.	10,760

Note:
Space reinforcement in cap to miss anchor bolts.
Min. bar laps = 20 dia. unless otherwise noted.
All edges shall have standard 3/4" chamfers except as noted.
Pour steps monolithically with cap.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Max. Soil Pressure = 3.2 T/ft

END VIEW

DIMENSIONS

ELEVATION

REINFORCEMENT

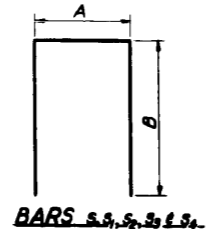
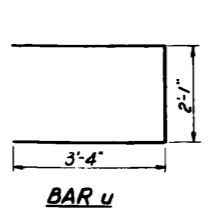
DIMENSIONS

FOOTING PLAN

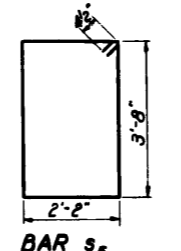
REINFORCEMENT

DESIGNED	Walt Perry
CHECKED	R. Kount
DRAWN	J. L. Armstrong
CHECKED	RK

EXAMINED	JULY 31 1964	W. G. Baumann
PASSED		E. J. ...
APPROVED		W. E. ...



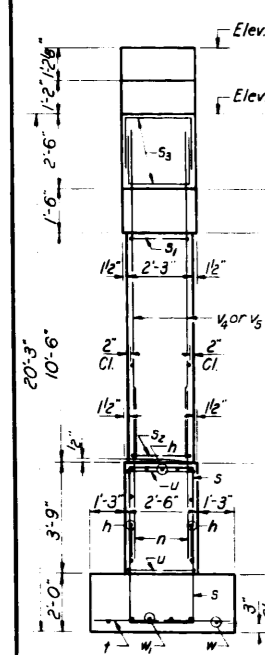
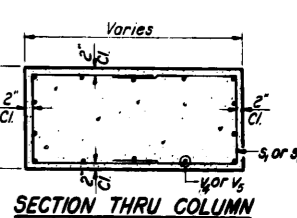
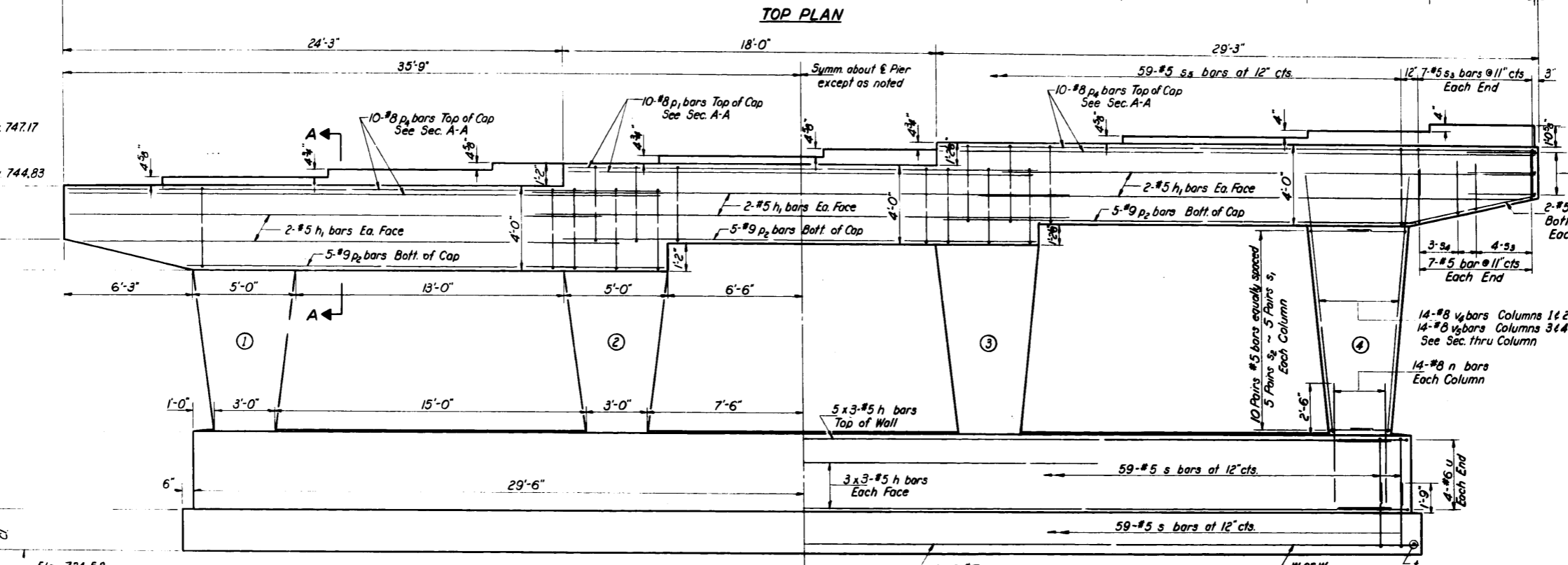
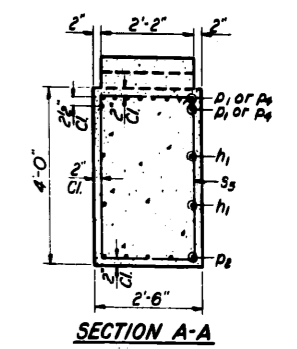
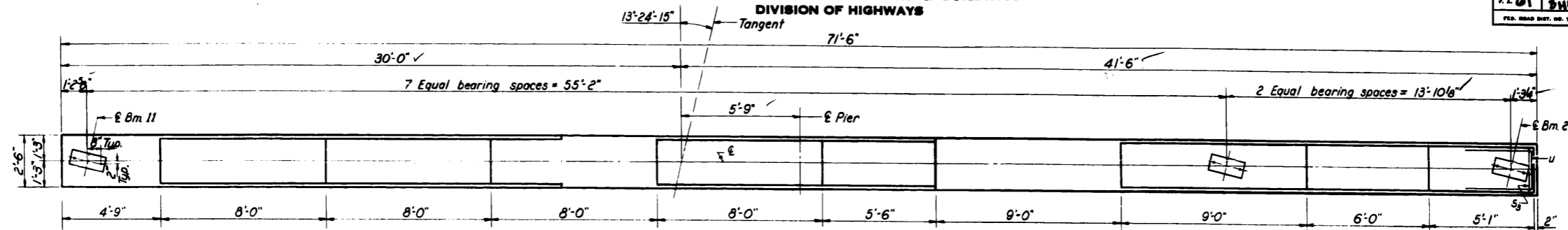
Bar	A	B
s	2'-2"	3'-6"
s1	1'-11"	2'-10"
s2	1'-11"	2'-5"
s3	2'-2"	2'-2"
s4	2'-2"	2'-6"



PIER #2-N. B. LANE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16
61	531-3-HB	Cook	29	21	22 SHEETS
PER. ROAD DIST. NO. 7		ILLINOIS	PER. AID PROJECT		

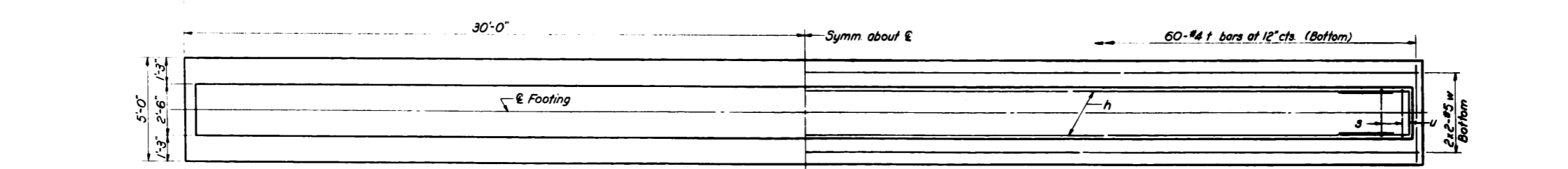


END VIEW

DIMENSIONS

ELEVATION

REINFORCEMENT



DIMENSIONS

FOOTING PLAN

REINFORCEMENT

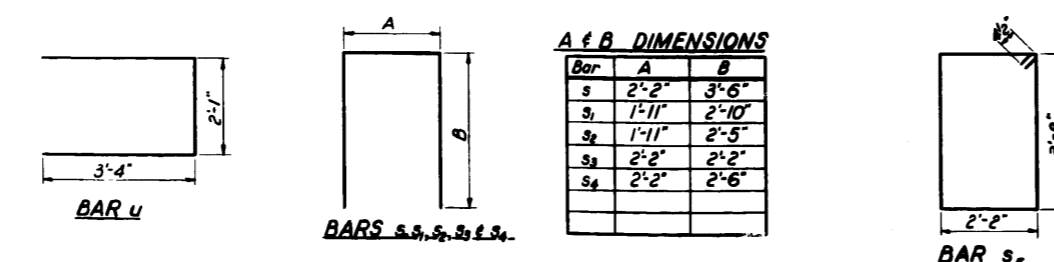
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	33	#5	10'-9"	
h1	12	#5	26'-0"	
n	56	#8	6'-0"	
D1	10	#8	22'-6"	
D2	15	#9	23'-0"	
D4	20	#8	29'-0"	
D2	4	#5	6'-6"	
s	118	#5	9'-2"	
s1	40	#5	7'-7"	
s2	40	#5	6'-9"	
s3	18	#5	6'-6"	
s4	6	#5	7'-2"	
s4	59	#5	12'-5"	
t	60	#4	4'-9"	
u	14	#6	8'-9"	
v1	28	#8	14'-0"	
v2	28	#8	15'-3"	
w	4	#5	30'-6"	
w1	8	#7	30'-9"	
Class X Concrete		Cu. Yds.	87.4	
Reinforcement Bars		Lbs.	11,100	

DESIGNED *Walter Perry*
CHECKED *RK*
DRAWN *J. L. Armstrong*
CHECKED *RK*

EXAMINED *W. G. Bannerman*
PASSED *[Signature]*
APPROVED *[Signature]*

JULY 31 1964

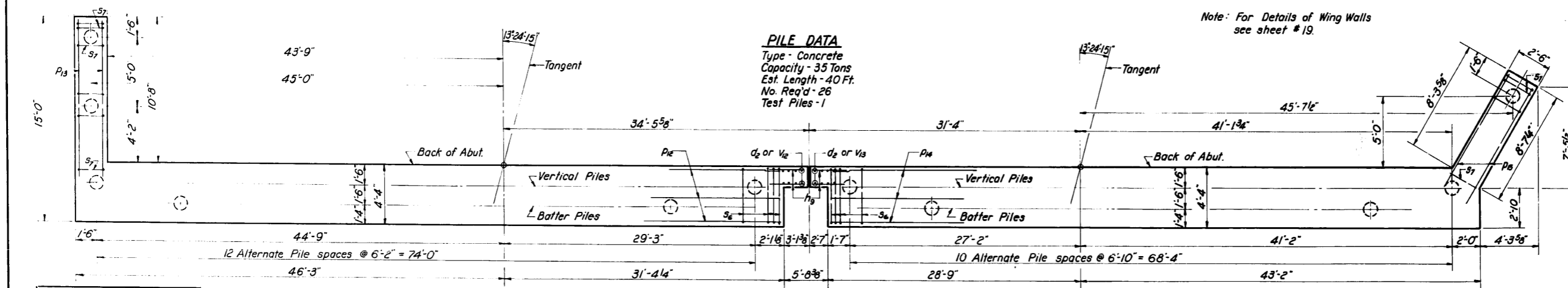
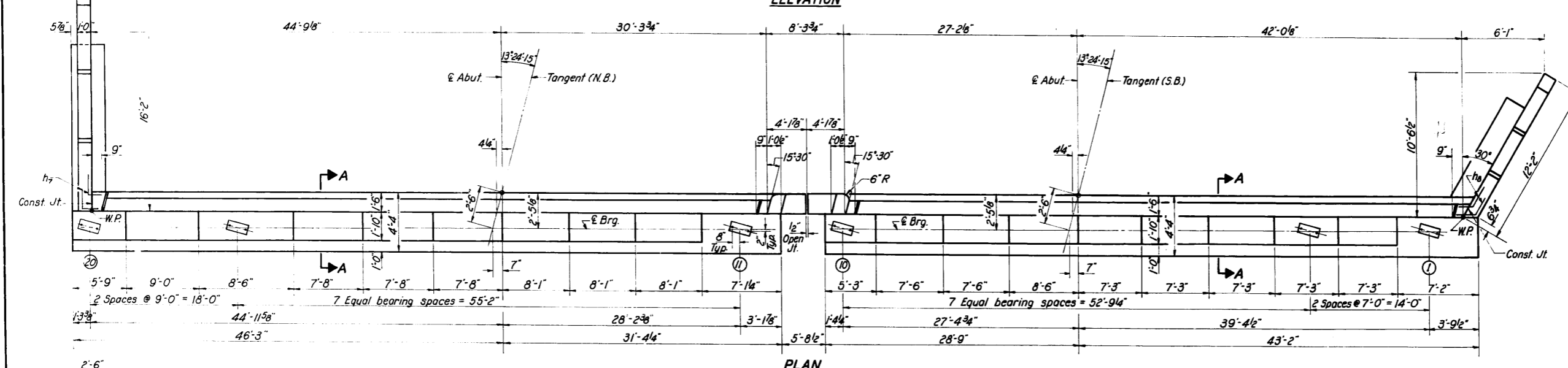
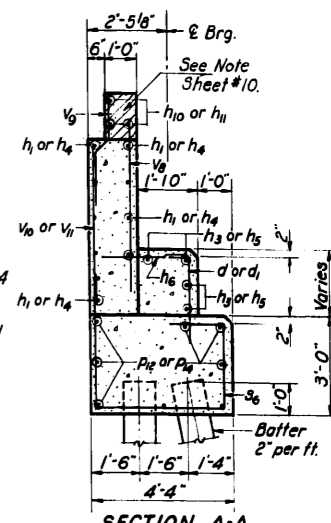
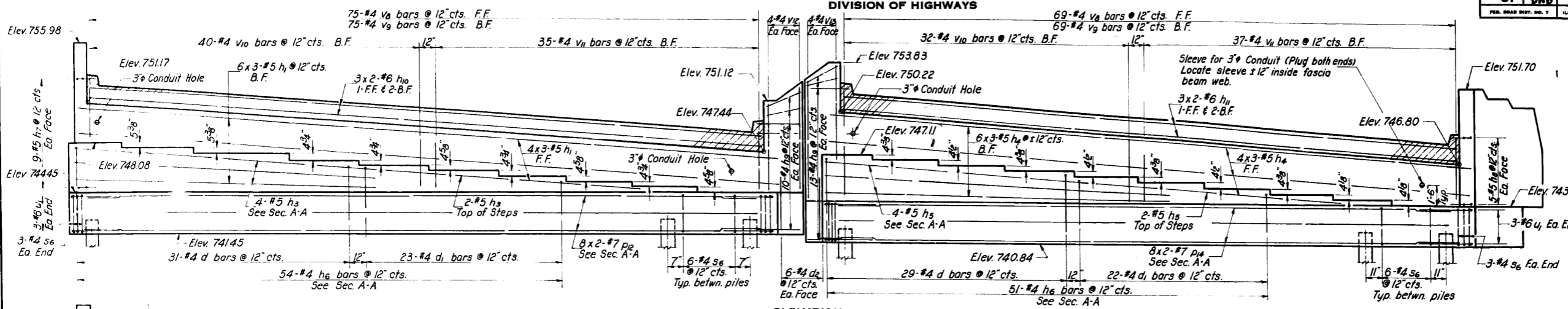


Note:
Space reinforcement in cap to miss anchor bolts.
Min. bar laps = 20 dia. unless otherwise noted.
All edges shall have standard 3/4" chamfers except as noted.
Pour steps monolithically with cap.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Max. Soil Pressure = 2.07/ft²

PIER #3 ~ N.B. LANE
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

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

ROUTE NO.	DISTRICT	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
531-3-HB	61	Cook	29	27	22 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



PILE DATA
Type - Concrete
Capacity - 35 Tons
Est. Length - 40 Ft.
No. Req'd - 26
Test Piles - 1

Note: For Details of Wing Walls see sheet #19.

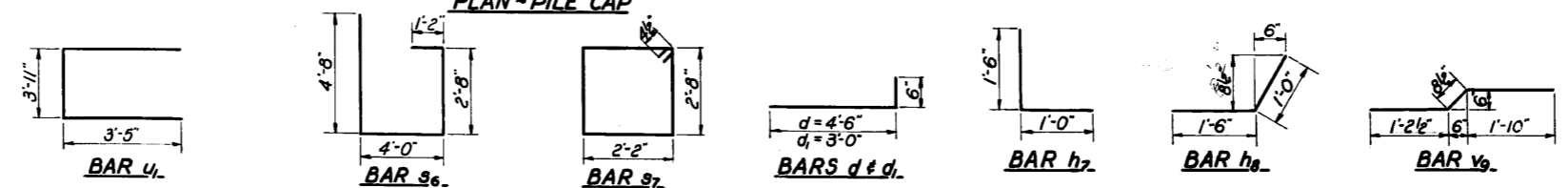
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d	60	#4	5'-0"	□
d1	45	#4	3'-6"	□
d2	12	#4	5'-3"	□
h1	30	#5	26'-0"	□
h2	6	#5	31'-6"	□
h3	30	#5	24'-9"	□
h4	6	#5	29'-3"	□
h5	107	#4	3'-0"	□
h6	18	#5	2'-6"	□
h7	10	#5	2'-6"	□
h8	46	#4	4'-0"	□
h9	6	#6	38'-0"	□
h10	6	#6	35'-0"	□
h11	2	#4	4'-3"	□
h12	2	#4	9'-3"	□
h13	6	#4	14'-3"	□
h14	14	#4	15'-5"	□
h15	2	#4	6'-6"	□
h16	6	#4	10'-3"	□
h17	6	#4	11'-5"	□
h18	6	#4	11'-5"	□
d12	16	#7	39'-6"	□
d13	6	#7	12'-6"	□
d14	16	#7	36'-9"	□
d15	6	#7	9'-6"	□
s6	144	#4	12'-6"	□
s7	20	#4	10'-5"	□
u1	12	#6	10'-9"	□
v6	144	#4	3'-9"	□
v7	144	#4	3'-9"	□
v8	72	#4	4'-6"	□
v9	72	#4	2'-9"	□
v10	8	#4	6'-6"	□
v11	8	#4	7'-9"	□
v12	32	#4	9'-6"	□
v13	26	#4	6'-0"	□
Class X Concrete			Cu. Yds.	1439
Reinforcement Bars			Lbs.	9430
Concrete Piles			Lin Ft.	1040
Test Piles (Concrete)			Each	1

SOUTH ABUTMENT
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98

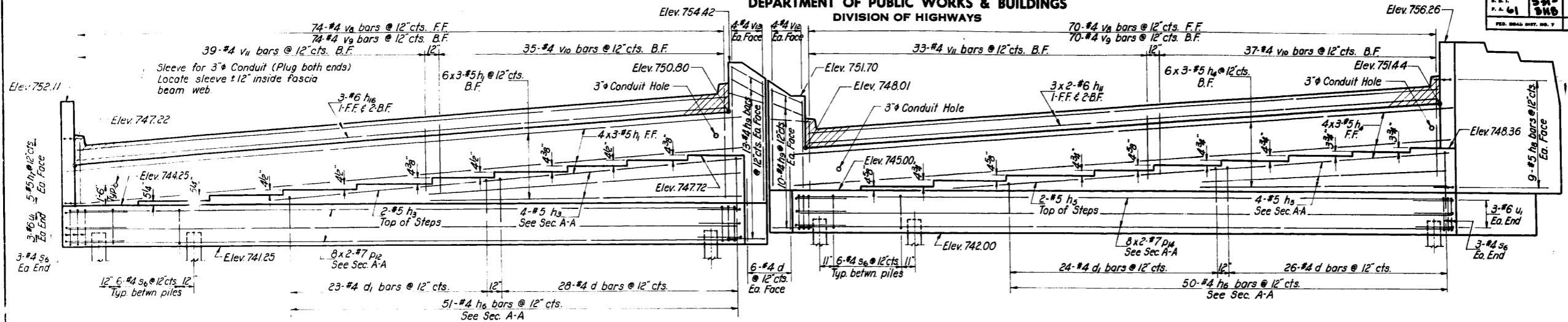
DESIGNED	Walton Perry	EXAMINED	W.E. Bowman
CHECKED	L. Kowat	PASSED	E. Bowman
DRAWN	J.L. Armstrong	APPROVED	U.E. O'Leary
CHECKED	RK		

JULY 31 1964

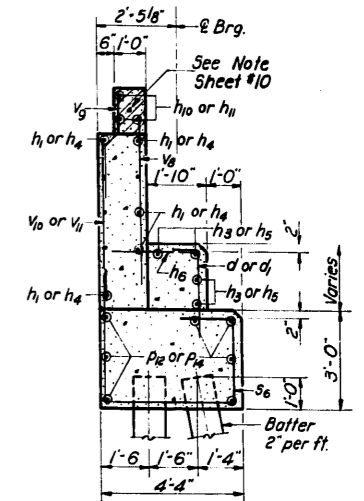


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

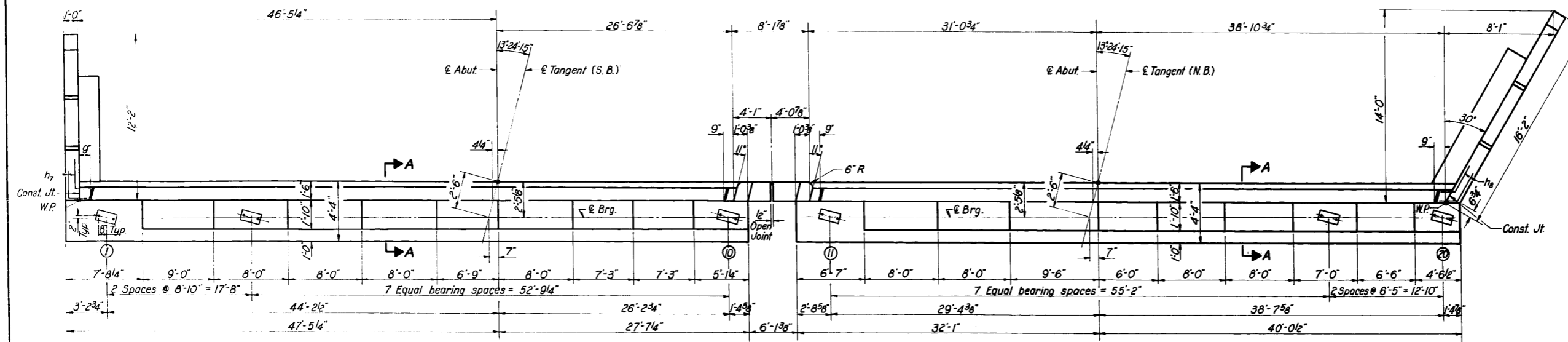
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61	531-3HB	COOK	29	23
SHEET NO. 18				
22 SHEETS				



ELEVATION

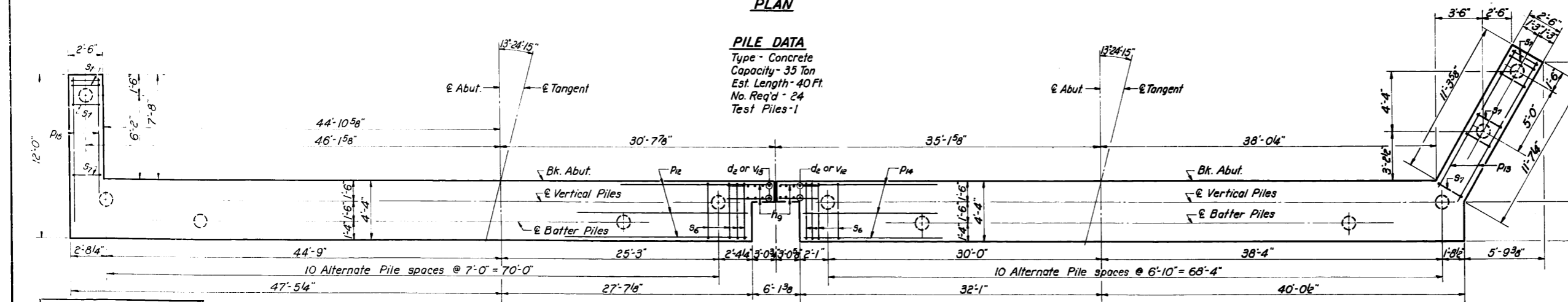


SECTION A-A



PLAN

PILE DATA
Type - Concrete
Capacity - 35 Ton
Est. Length - 40 Ft.
No. Req'd - 24
Test Piles - 1



PLAN - PILE CAP

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d	34	#4	5'-0"	┌
d1	47	#4	3'-6"	┌
d2	12	#4	5'-3"	┌
h1	30	#5	26'-0"	┌
h2	6	#5	31'-6"	┌
h3	30	#5	24'-9"	┌
h4	6	#5	29'-3"	┌
h5	103	#4	3'-0"	┌
h7	10	#5	2'-6"	┌
h8	18	#5	2'-6"	┌
h9	46	#4	4'-0"	┌
h10	6	#6	38'-0"	┌
h11	2	#6	35'-0"	┌
h12	2	#4	4'-3"	┌
h13	2	#4	9'-3"	┌
h14	6	#4	14'-3"	┌
h15	14	#4	15'-5"	┌
h16	2	#4	6'-6"	┌
h17	6	#4	10'-3"	┌
h18	6	#4	11'-5"	┌
P12	16	#7	39'-6"	┌
P13	6	#7	12'-6"	┌
P14	16	#7	36'-9"	┌
P15	6	#7	9'-6"	┌
s6	132	#4	12'-6"	┌
s7	21	#4	10'-5"	┌
u1	12	#6	10'-9"	┌
v9	144	#4	3'-9"	┌
v9	144	#4	3'-9"	┌
v10	72	#4	4'-6"	┌
v11	72	#4	2'-9"	┌
v12	8	#4	6'-6"	┌
v13	8	#4	7'-9"	┌
v14	32	#4	9'-6"	┌
v15	26	#4	6'-0"	┌
Class X Concrete	Cu. Yds.	143.8		
Reinforcement Bars	Lbs.	9330		
Concrete Piles	Lin. Ft.	960		
Test Piles (Concrete)	Each	1		

DESIGNED *Walter Perry*
CHECKED *R. Rownt*
DRAWN *J.L. Armstrong*
CHECKED *RK*

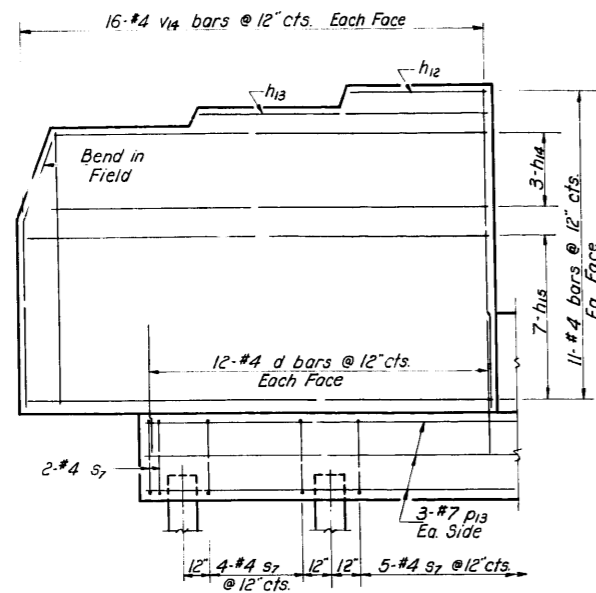
JULY 31 1964
EXAMINED *W.E. Benemann*
PASSED *Edmund*
APPROVED *W.E. Benemann*

Note:
For details of Wing Walls
see sheet #19.
For details of d, d1, h7, h8,
s6, s7, u1 & v9 bars see sheet #17.

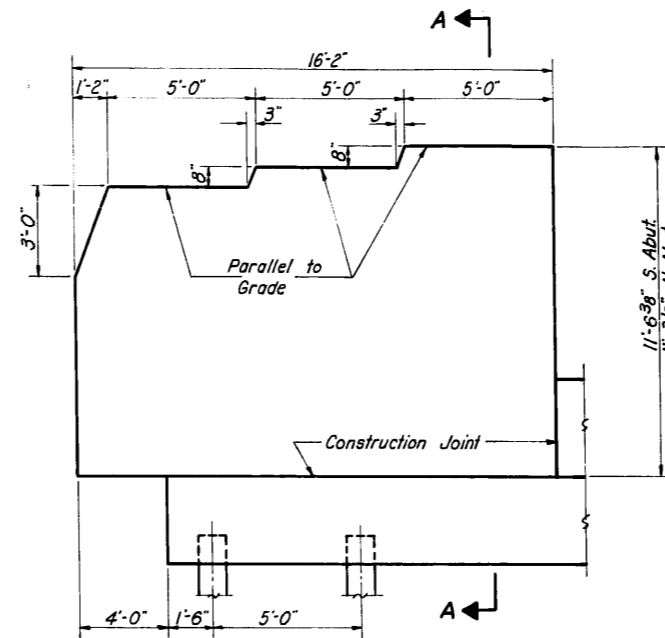
NORTH ABUTMENT
F.A. RT. 61 SEC. 531-3HB
COOK COUNTY
STA. 329 +18.98

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

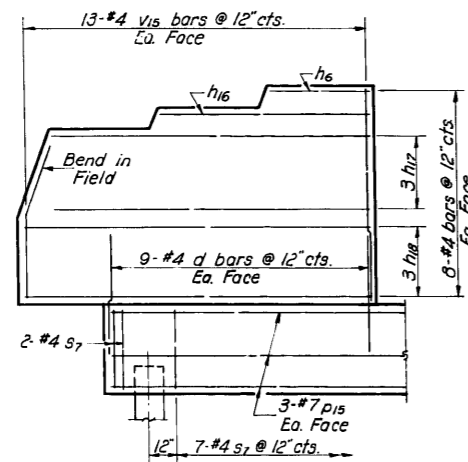
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 19/
61	531-3-HB	COOK	29	2A	22 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT.	



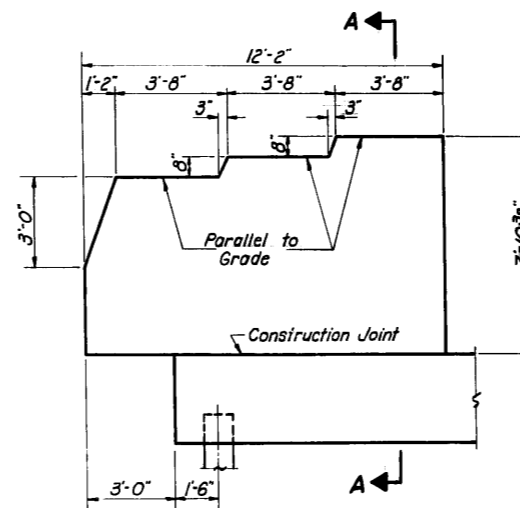
REINFORCEMENT



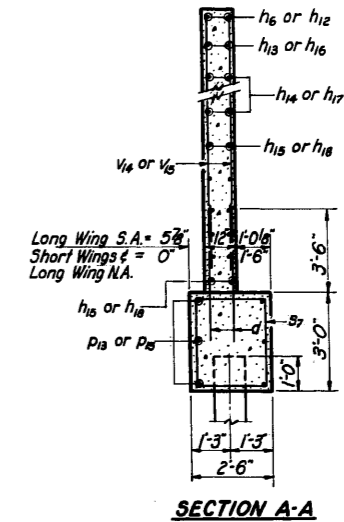
DIMENSIONS



REINFORCEMENT



DIMENSIONS



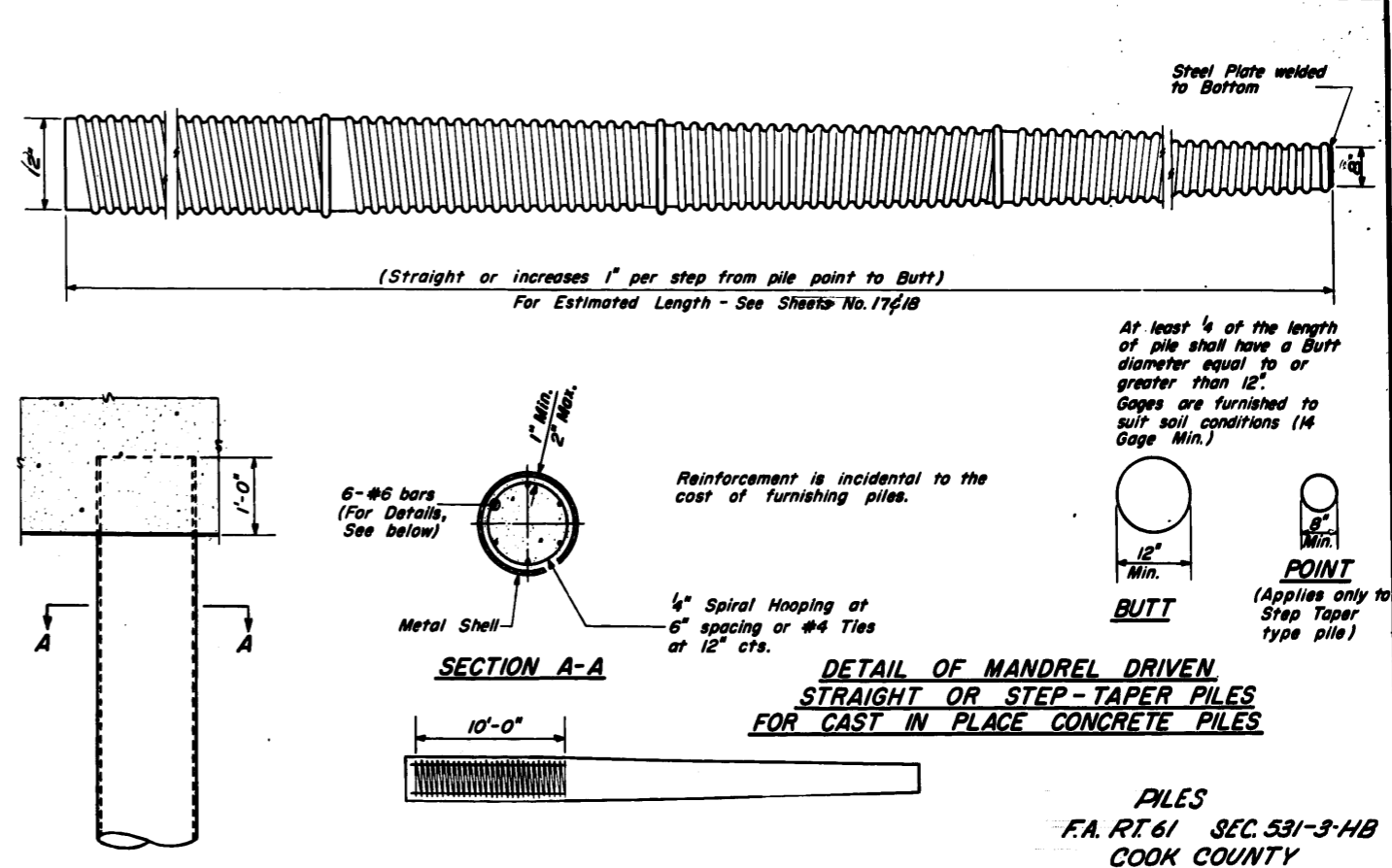
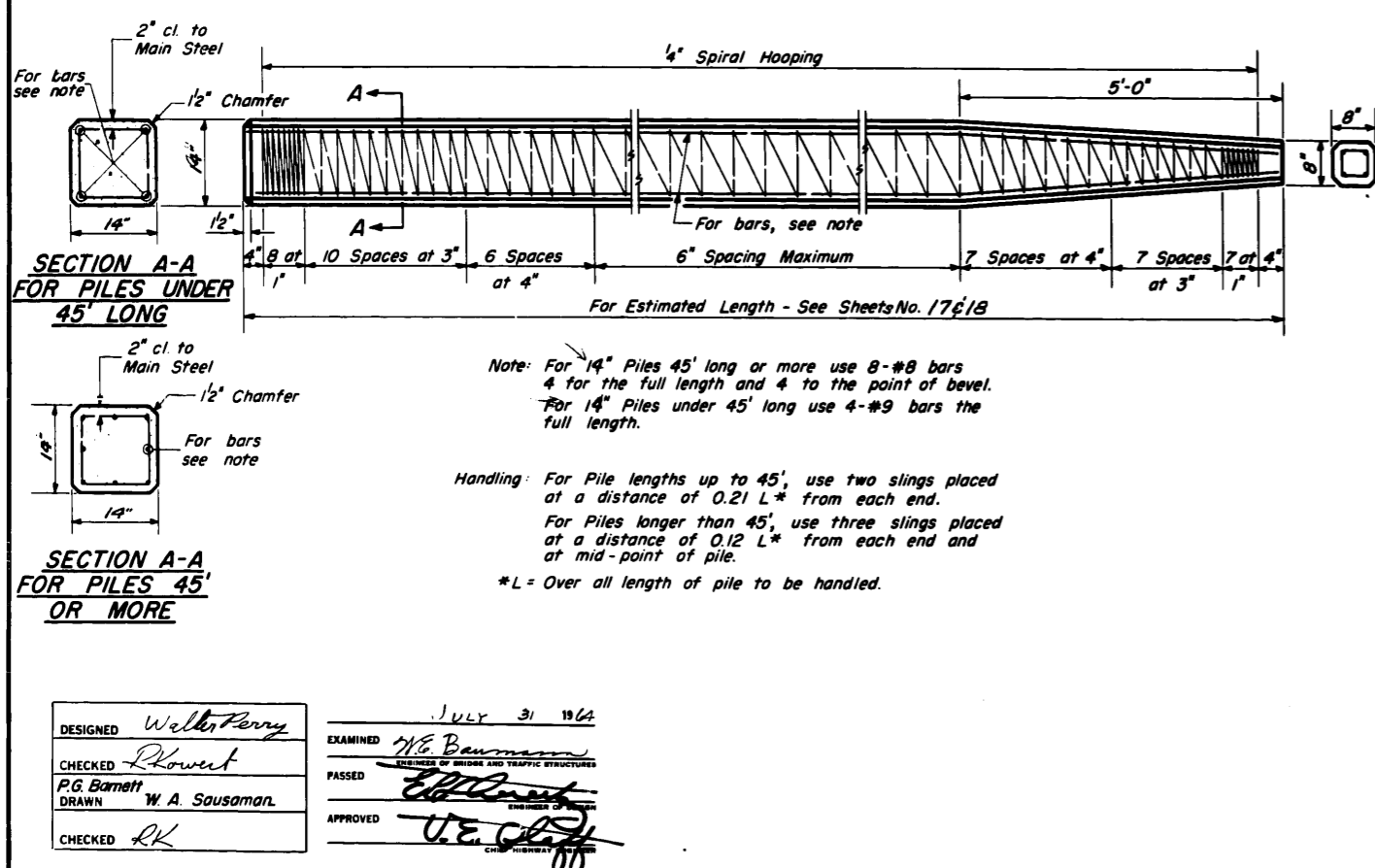
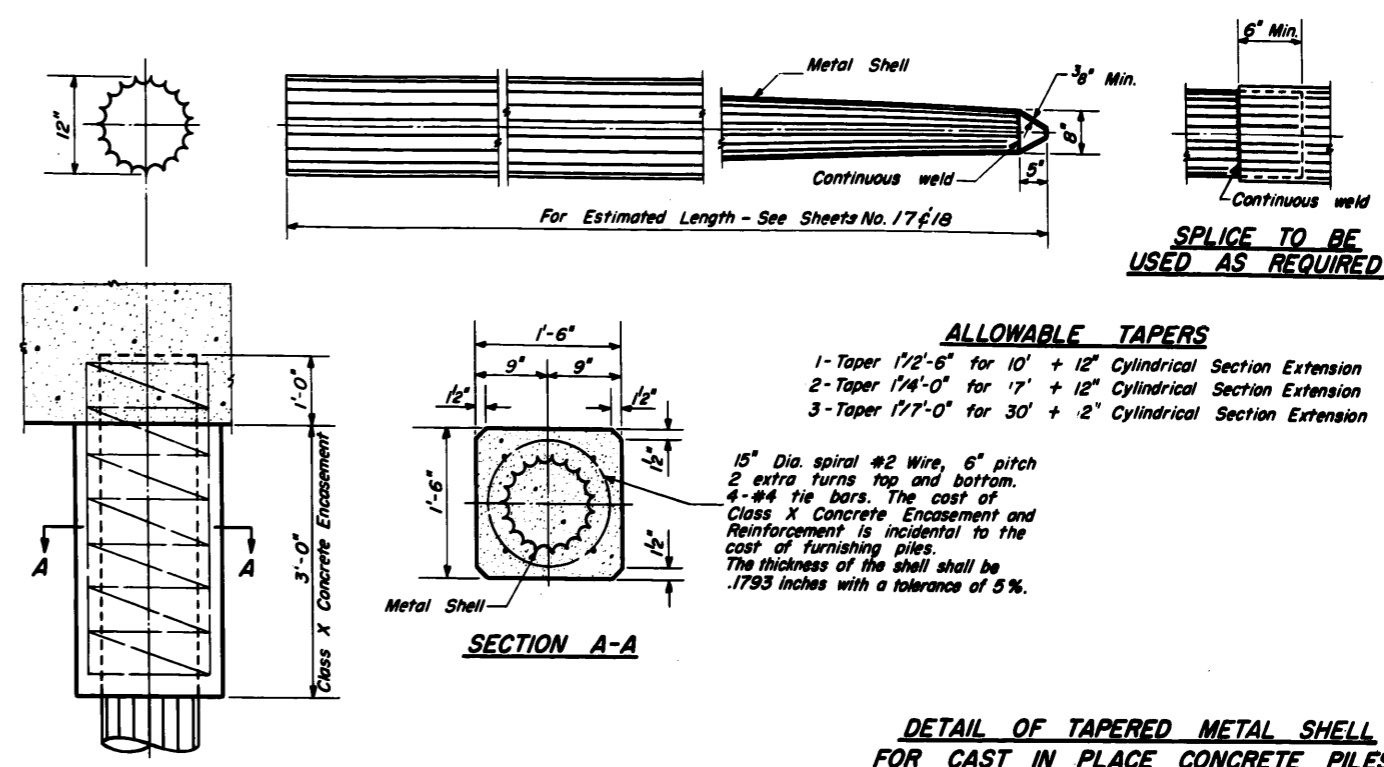
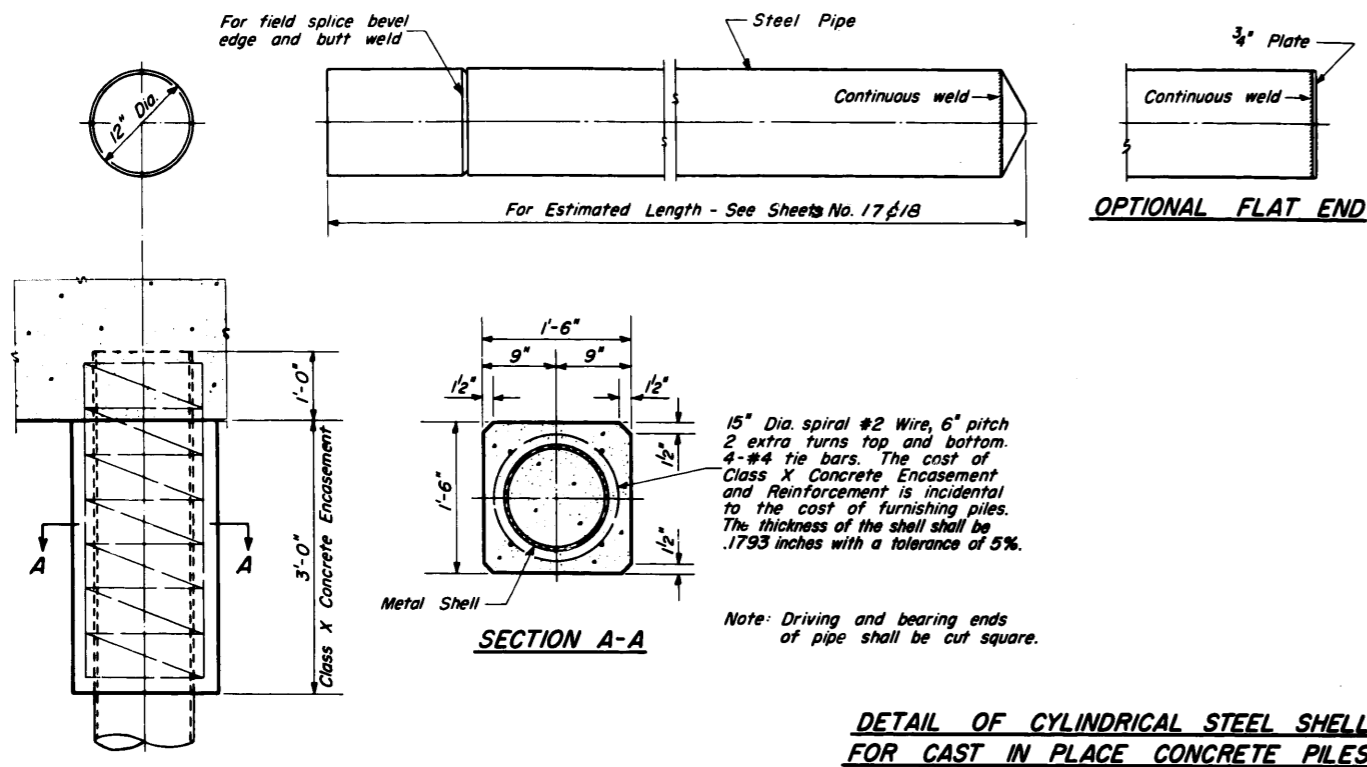
SECTION A-A

DESIGNED	Walter Perry	EXAMINED	July 31, 1964
CHECKED	R. K.	PASSED	
DRAWN	J.L. Armstrong	APPROVED	V.E. O'Connell
CHECKED	R.K.		

WING WALL DETAILS
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.96

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A. 61	531-3HB	COOK	29	29	22 SHEETS
FED. ROAD DIST. NO. 1		ILLINOIS	T.S. NO. PROJECT		



DESIGNED	Walter Perry	EXAMINED	W.E. Baumann
CHECKED	R. Kowert	PASSED	E. J. ...
DRAWN	W. A. Sausaman	APPROVED	U.E. ...
CHECKED	RK		

JULY 31 1962

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

SECTION 531-3-HB
COUNTY COOK
TOTAL SHEETS 29
SHEET NO. 22
SHEETS 22

Boring No. B-5
Station 320 + 13
Offset 33' E of C.L. of 53

Ground Surface	Elevation	z	Q _u / s.l.	w (%)	Surface Water B. Groundwater B. of Completion After Hours	Elevation	z	Q _u / s.l.	w (%)
730.2	0								
BLACK ORGANIC CLAY									
BROWN & GRAY MOTTLED CLAY	11	6.98							
BROWN CLAY	13	5.67							
BROWN TO GRAY CLAY	17	6.18							
GRAY CLAY	13	4.27							
GRAY CLAY	7	2.91							
GRAY CLAY	5	2.52							
GRAY CLAY	11	2.33							
GRAY CLAY	5	2.52							
GRAY GRITTY CLAY GRAY CLAYEY GRAVEL	26	2.52							

END OF BORING

Boring No. B-6
Station 328 + 58
Offset 33' E of C.L. of 53

Ground Surface	Elevation	z	Q _u / s.l.	w (%)	Surface Water B. Groundwater B. of Completion After Hours	Elevation	z	Q _u / s.l.	w (%)
730.2	0								
BLACK ORGANIC CLAY									
BROWN CLAY	6	6.55							
BROWN CLAY	6	6.33							
BROWN CLAY BROWN SANDY SILTY CLAY	12	6.33							
BROWN CLAY	13	8.15							
GRAY CLAY	8	2.52							
GRAY CLAY	7	2.11							
GRAY CLAY	4	2.11							
GRAY CLAY	4	2.11							
GRAY CLAY	5	2.52							
GRAY GRITTY CLAY	9	2.52							

END OF BORING

Boring No. B-8
Station 330 + 13
Offset 33' E of C.L. of 53

Ground Surface	Elevation	z	Q _u / s.l.	w (%)	Surface Water B. Groundwater B. of Completion After Hours	Elevation	z	Q _u / s.l.	w (%)
729.2	0								
BLACK ORGANIC CLAY									
BROWN (CRUMBLY) CLAY	11	6.98							
BROWN (CRUMBLY) CLAY	13	5.67							
BROWN CLAY	17	6.18							
GRAY CLAY	13	4.27							
GRAY CLAY	7	2.91							
GRAY CLAY	5	2.52							
GRAY CLAY	11	2.33							
GRAY CLAY	5	2.52							
GRAY GRITTY CLAY GRAY CLAYEY GRAVEL	26	2.52							

END OF BORING

Boring No. B-7
Station 329 + 77
Offset 33' E of C.L. of 53

Ground Surface	Elevation	z	Q _u / s.l.	w (%)	Surface Water B. Groundwater B. of Completion After Hours	Elevation	z	Q _u / s.l.	w (%)
730.2	0								
BLACK ORGANIC CLAY									
CRUMBLY	21	6.98							
BROWN SILTY CLAY	17	8.51							
BROWN CLAY	10	7.76							
BROWN CLAY	10	5.77							
BROWN CLAY	13	5.82							
GRAY CLAY	10	3.49							
GRAY STONEY SANDY CLAY	17	4.50							
LAYER OF GRAY SAND GRAY CLAY	7	2.52							
GRAY CLAY GRAY GRAVELLY CLAY	10	3.00							

END OF BORING

N - Standard Penetration Test - Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".
Q_u - Unconfined Compressive Strength - 1/d
w - Water Content - percentage of oven dry weight - %
Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value

DESIGNED *Walters Perry*
CHECKED *R. K.*
DRAWN *J.L.A.*
CHECKED *R.K.*

EXAMINED *W.B. Beermann*
PASSED *E. J. ...*
APPROVED *U.E. ...*

BORING DATA
F.A. RT. 61 SEC. 531-3-HB
COOK COUNTY
STA. 329+18.98