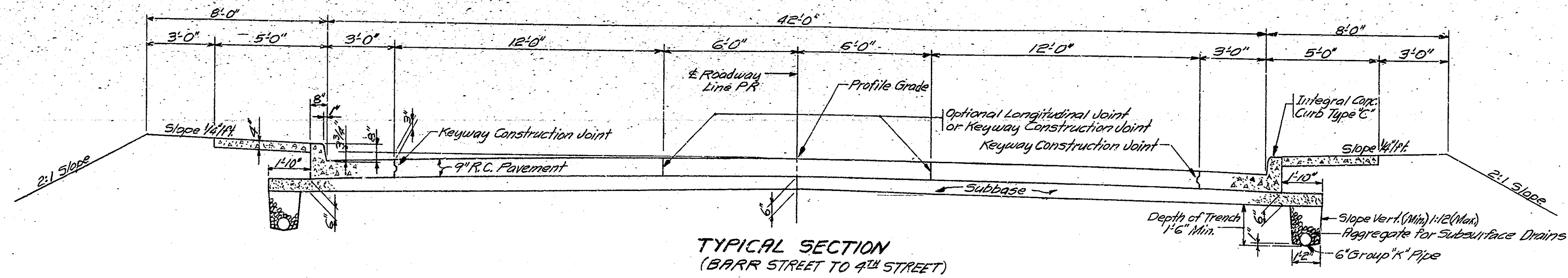
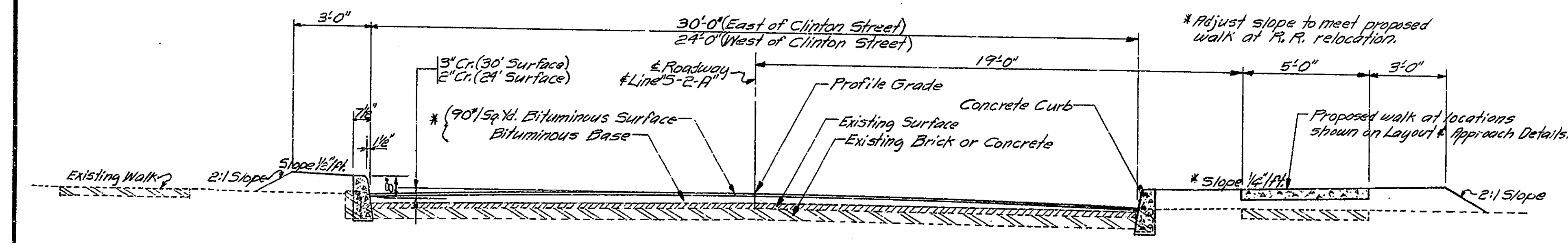
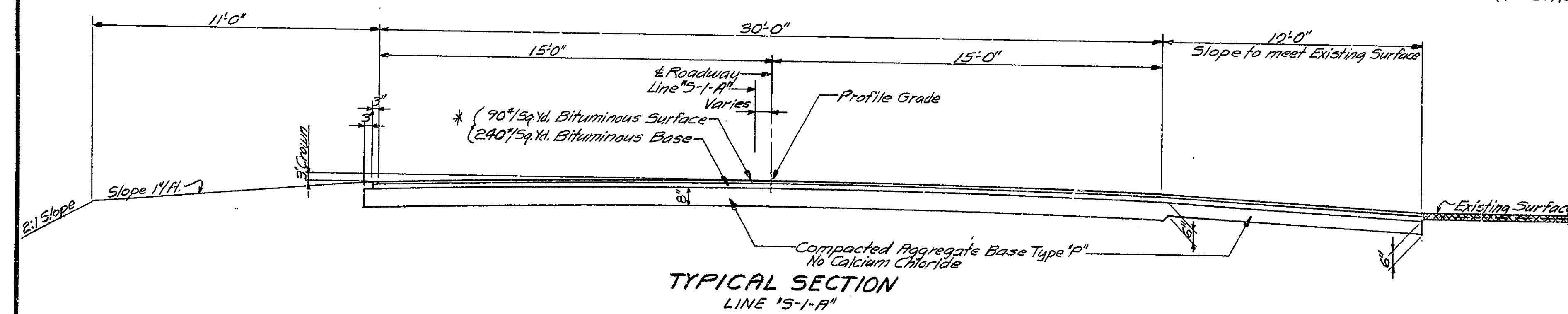
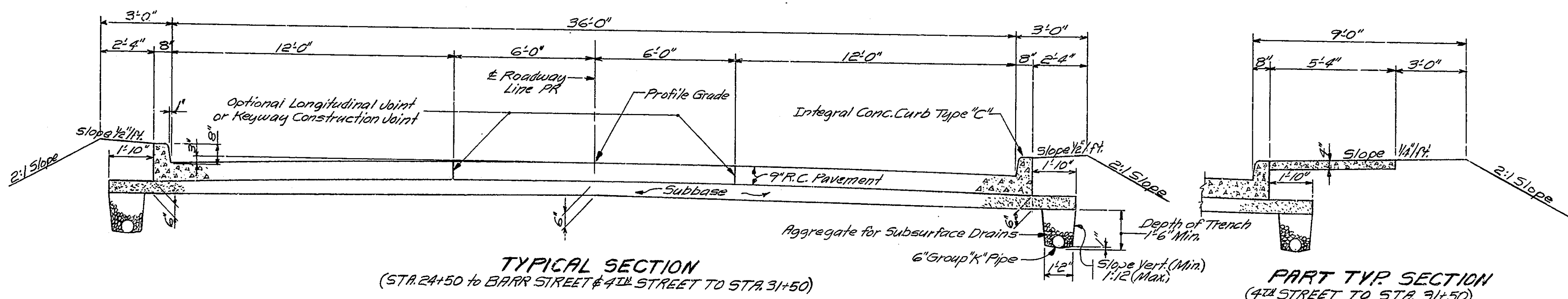


BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	2	65



NOTES:
 See General Plan for R.C. Pavement Offsets.
 All shoulders, slopes and areas disturbed by construction to be sodded.
 * Hot Asphaltic Concrete Surface Type "B" on Hot Asphaltic Concrete Base or Hot A.E. Surface Type III on Hot A.E. Base.
 See Rd. Std. A for R.C. Pavement reinforcing.



PROPOSED CONSTRUCTION WHERE EXISTING WALK IS TO REMAIN IN PLACE.

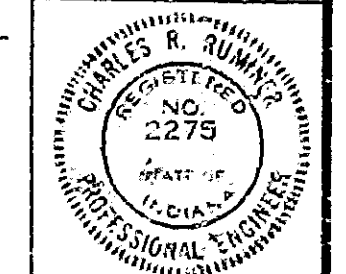
PROPOSED CONSTRUCTION WHERE NEW WALKS ARE TO BE BUILT.

TYPICAL CROSS SECTIONS
 INDIANA STATE HIGHWAY COMMISSION

SCALE: 3/8" = 1'-0"
 August 18, 1967

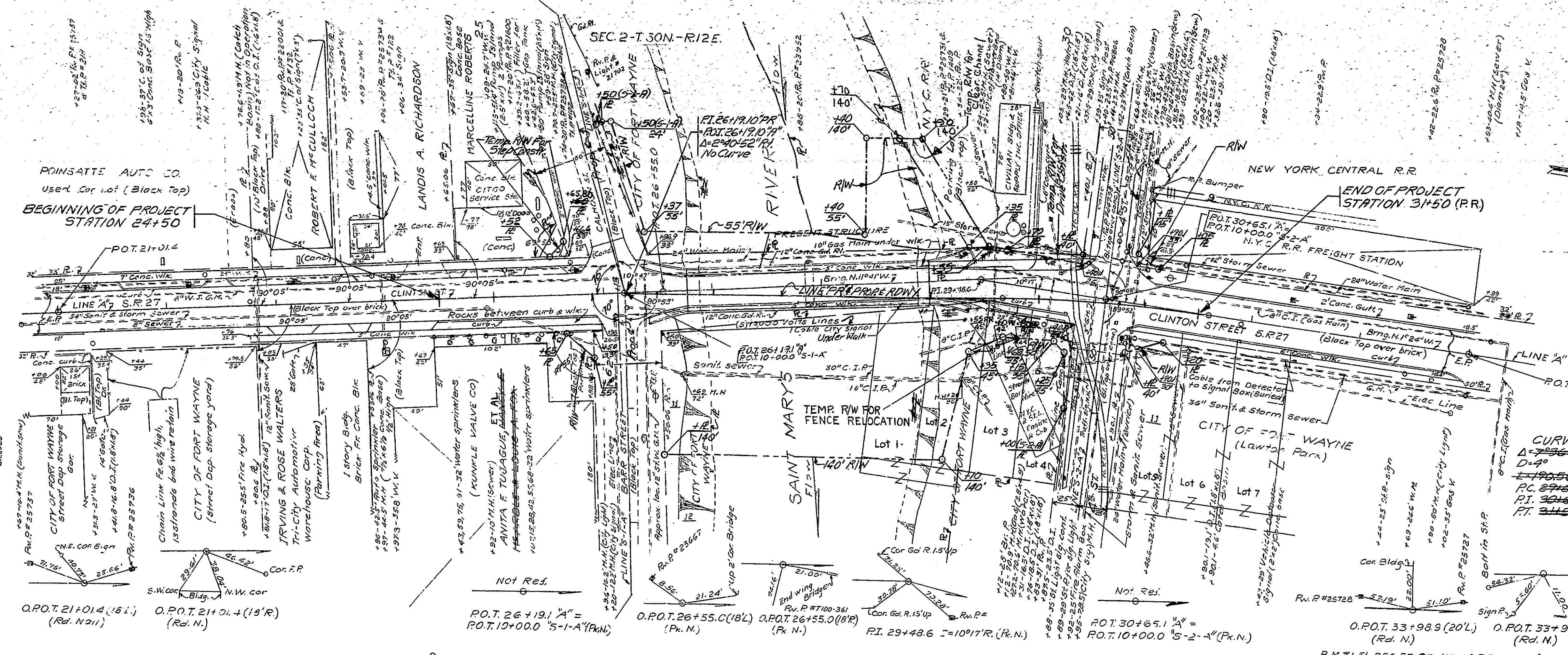
RECOMMENDED FOR APPROVAL: *C. R. Miner*

DRAWING: OF
 PROJECT: U-414(6)
 BRIDGE CONTRACT NO. B-7535
 BRIDGE FILE: 27-MM-5364



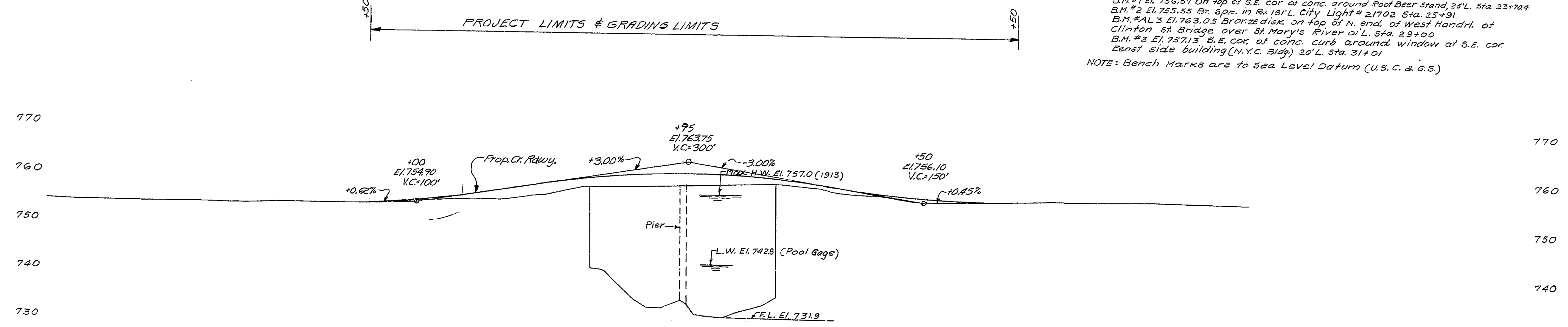
DESIGNED	C.K.D.
DRAWN	W.P. R.P. C.K.D.
TRACED	C.K.D.

U-414(6) 1968 3 65
 UTILITY OWNERS
 P.W.P. - Ind. & Mch. Elec. Co.
 Tel. P. - General Tel. Co. Fort Wayne
 City Light & Power - City Engineer
 Gas - Northern Ind. P.S. Co.
 Sewer - City Fort Wayne



CURVE DATA (P.R.)
 $\Delta = 7^{\circ}36'08.33''$
 $D = 9^{\circ}07'35.17''$
 $L = 190.06$
 $PC = 29+68.55$ (P.R.)
 $PT = 30+65.10$ (P.R.)
 $PI = 30+63.72$ (P.R.)
 $PT = 31+60.27$ (P.R.)
 $PT = 31+58.60$ (P.R.)

NOTE: RW IS SHOWN TO LINE 'P' UNLESS NOTED.
 O.P.O.T. 21+01.4 (15'L) (Rd. N.21)
 O.P.O.T. 21+01.4 (15'R) (Rd. N.)
 P.O.T. 26+19.1 "A" = P.O.T. 10+00.0 "S-1-A" (P.R.N.)
 O.P.O.T. 26+55.0 (BL) (P.K.N.)
 O.P.O.T. 26+55.0 (BR) (P.K.N.)
 R.I. 29+43.6 I=10°17'R (P.K.N.)
 P.O.T. 30+65.1 "A" = P.O.T. 10+00.0 "S-2-A" (P.K.N.)
 O.P.O.T. 33+98.9 (20'L) (Rd. N.)
 O.P.O.T. 33+98.9 (20'R) (Rd. N.)
 B.M. #1 EL. 756.57 On top of S.E. cor. of conc. ground Roof Beer stand, 25'L. Sta. 23+74.4
 B.M. #2 EL. 755.55 Br. Spk. in R.W. 15'L. City Light # 21702 Sta. 25+91
 B.M. #3 EL. 763.05 Br. 22" disk on top of N. end of West Handrl. of Clinton St. Bridge over St. Mary's River oil L. Sta. 29+00
 B.M. #3 EL. 757.13 S.E. cor. of conc. curb around window at S.E. cor. East side building (N.Y.C. Bldg) 20'L. Sta. 31+01
 NOTE: Bench Marks are to Sea Level Datum (U.S.C. & G.S.)



21	75430	75431	75432	75433	75434	75435	75436	75437	75438	75439	75440	75441	75442	75443	75444	75445	75446	75447	75448	75449	75450	75451	75452	75453	75454	75455	75456	75457	75458	75459	75460	75461	75462	75463	75464	75465	75466	75467	75468	75469	75470	75471	75472	75473	75474	75475	75476	75477	75478	75479	75480	75481	75482	75483	75484	75485	75486	75487	75488	75489	75490	75491	75492	75493	75494	75495	75496	75497	75498	75499	75500	75501	75502	75503	75504	75505	75506	75507	75508	75509	75510	75511	75512	75513	75514	75515	75516	75517	75518	75519	75520	75521	75522	75523	75524	75525	75526	75527	75528	75529	75530	75531	75532	75533	75534	75535	75536	75537	75538	75539	75540	75541	75542	75543	75544	75545	75546	75547	75548	75549	75550	75551	75552	75553	75554	75555	75556	75557	75558	75559	75560	75561	75562	75563	75564	75565	75566	75567	75568	75569	75570	75571	75572	75573	75574	75575	75576	75577	75578	75579	75580	75581	75582	75583	75584	75585	75586	75587	75588	75589	75590	75591	75592	75593	75594	75595	75596	75597	75598	75599	75600	75601	75602	75603	75604	75605	75606	75607	75608	75609	75610	75611	75612	75613	75614	75615	75616	75617	75618	75619	75620	75621	75622	75623	75624	75625	75626	75627	75628	75629	75630	75631	75632	75633	75634	75635	75636	75637	75638	75639	75640	75641	75642	75643	75644	75645	75646	75647	75648	75649	75650	75651	75652	75653	75654	75655	75656	75657	75658	75659	75660	75661	75662	75663	75664	75665	75666	75667	75668	75669	75670	75671	75672	75673	75674	75675	75676	75677	75678	75679	75680	75681	75682	75683	75684	75685	75686	75687	75688	75689	75690	75691	75692	75693	75694	75695	75696	75697	75698	75699	75700	75701	75702	75703	75704	75705	75706	75707	75708	75709	75710	75711	75712	75713	75714	75715	75716	75717	75718	75719	75720	75721	75722	75723	75724	75725	75726	75727	75728	75729	75730	75731	75732	75733	75734	75735	75736	75737	75738	75739	75740	75741	75742	75743	75744	75745	75746	75747	75748	75749	75750	75751	75752	75753	75754	75755	75756	75757	75758	75759	75760	75761	75762	75763	75764	75765	75766	75767	75768	75769	75770	75771	75772	75773	75774	75775	75776	75777	75778	75779	75780	75781	75782	75783	75784	75785	75786	75787	75788	75789	75790	75791	75792	75793	75794	75795	75796	75797	75798	75799	75800	75801	75802	75803	75804	75805	75806	75807	75808	75809	75810	75811	75812	75813	75814	75815	75816	75817	75818	75819	75820	75821	75822	75823	75824	75825	75826	75827	75828	75829	75830	75831	75832	75833	75834	75835	75836	75837	75838	75839	75840	75841	75842	75843	75844	75845	75846	75847	75848	75849	75850	75851	75852	75853	75854	75855	75856	75857	75858	75859	75860	75861	75862	75863	75864	75865	75866	75867	75868	75869	75870	75871	75872	75873	75874	75875	75876	75877	75878	75879	75880	75881	75882	75883	75884	75885	75886	75887	75888	75889	75890	75891	75892	75893	75894	75895	75896	75897	75898	75899	75900	75901	75902	75903	75904	75905	75906	75907	75908	75909	75910	75911	75912	75913	75914	75915	75916	75917	75918	75919	75920	75921	75922	75923	75924	75925	75926	75927	75928	75929	75930	75931	75932	75933	75934	75935	75936	75937	75938	75939	75940	75941	75942	75943	75944	75945	75946	75947	75948	75949	75950	75951	75952	75953	75954	75955	75956	75957	75958	75959	75960	75961	75962	75963	75964	75965	75966	75967	75968	75969	75970	75971	75972	75973	75974	75975	75976	75977	75978	75979	75980	75981	75982	75983	75984	75985	75986	75987	75988	75989	75990	75991	75992	75993	75994	75995	75996	75997	75998	75999	76000
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34
ROAD PLAN AND PROFILE
 SCALES: - HORIZ. 1"=50', VERT. 1"=10'
 RECOMMENDED FOR APPROVAL *C.R. Rimmer*
 ENGINEER OF BRIDGE DESIGN
 PROJECT: U-414(6)
 BRIDGE CONTRACT NO: D-7535
 BRIDGE FILE: 27-MM-5364
 August 18, 1967
 32
 33

G. F. Wagoner
 R. D. Kemmerly
 1-5-66

G. F. Wagoner
 R. D. Kemmerly
 1-5-66

BR 2020

BR 2020

21

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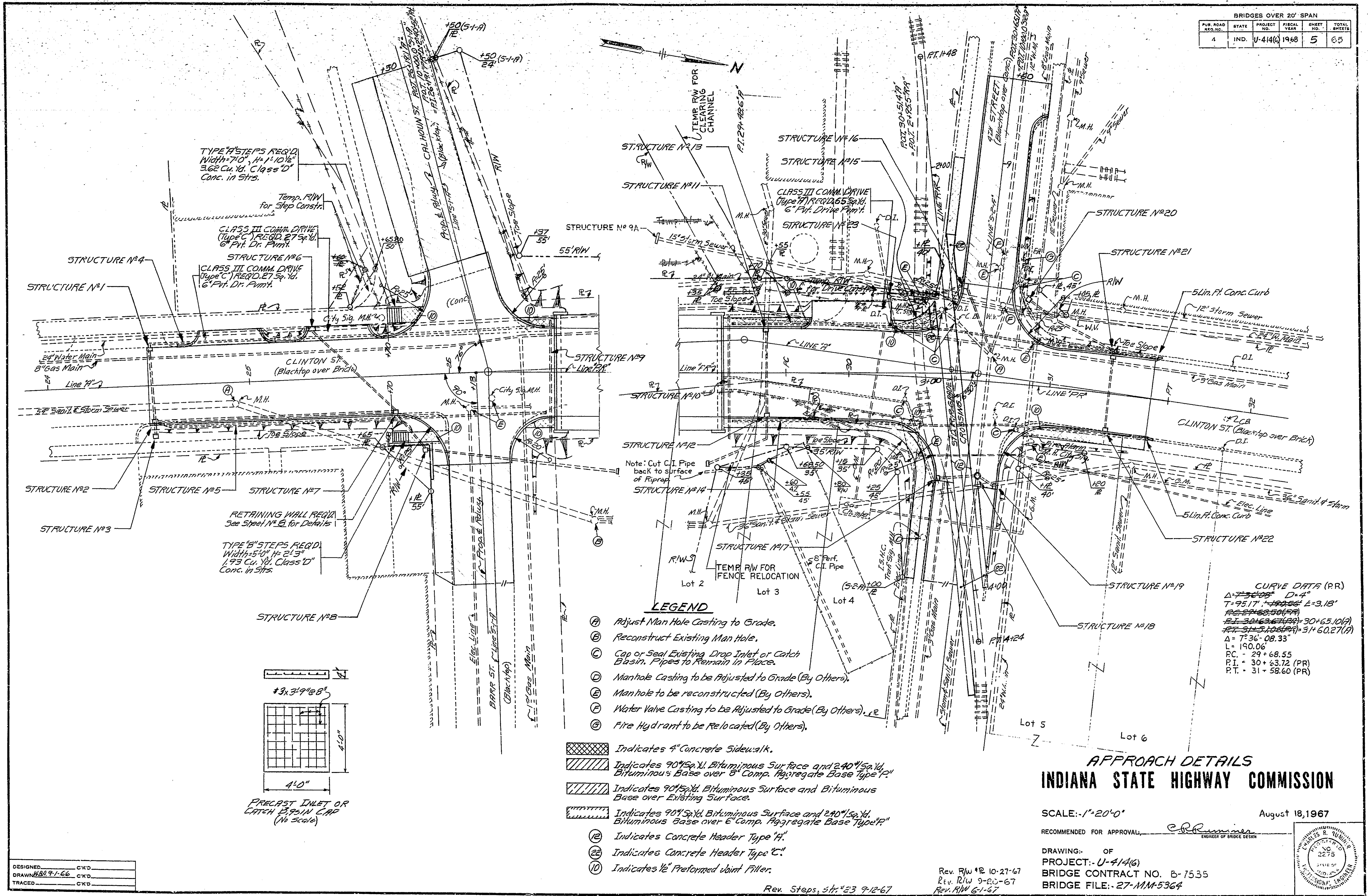
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31

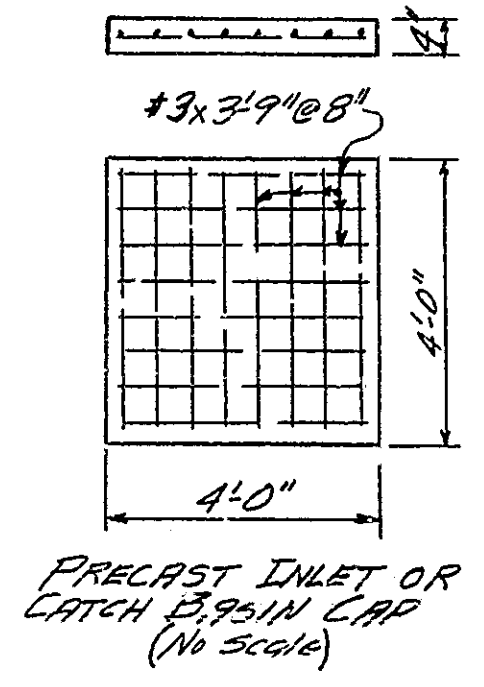
32

33

BRIDGES OVER 20' SPAN					
PUB. ROAD	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	5	65



DESIGNED: C.K.D.
 DRAWN: B.P. 7-1-66 C.K.D.
 TRACED: C.K.D.



- LEGEND**
- (A) Adjust Man Hole Casting to Grade.
 - (B) Reconstruct Existing Man Hole.
 - (C) Cap or Seal Existing Drop Inlet or Catch Basin. Pipes to Remain in Place.
 - (D) Manhole Casting to be Adjusted to Grade (By Others).
 - (E) Manhole to be reconstructed (By Others).
 - (F) Water Valve Casting to be Adjusted to Grade (By Others).
 - (G) Fire Hydrant to be Relocated (By Others).
- [Cross-hatched] Indicates 4" Concrete Sidewalk.
 - [Diagonal lines] Indicates 90% Sand Bituminous Surface and 240% Sand Bituminous Base over 6" Comp. Aggregate Base Type "P".
 - [Horizontal lines] Indicates 90% Sand Bituminous Surface and Bituminous Base over Existing Surface.
 - [Vertical lines] Indicates 90% Sand Bituminous Surface and 240% Sand Bituminous Base over 6" Comp. Aggregate Base Type "P".
 - (H) Indicates Concrete Header Type "H".
 - (E) Indicates Concrete Header Type "E".
 - (I) Indicates 1/2" Preformed Joint Filler.

CURVE DATA (P.R.)
 $\Delta = 30^\circ$ $D = 41'$
 $T = 95.17'$ $E = 3.18'$
 $L = 190.06'$
 $PC = 29 + 68.55$
 $PT = 31 + 58.60$ (P.R.)

APPROACH DETAILS
INDIANA STATE HIGHWAY COMMISSION

SCALE: 1/20' = 1'-0'
 August 18, 1967

RECOMMENDED FOR APPROVAL: *C.R. Summers*
 ENGINEER OF BRIDGE DESIGN

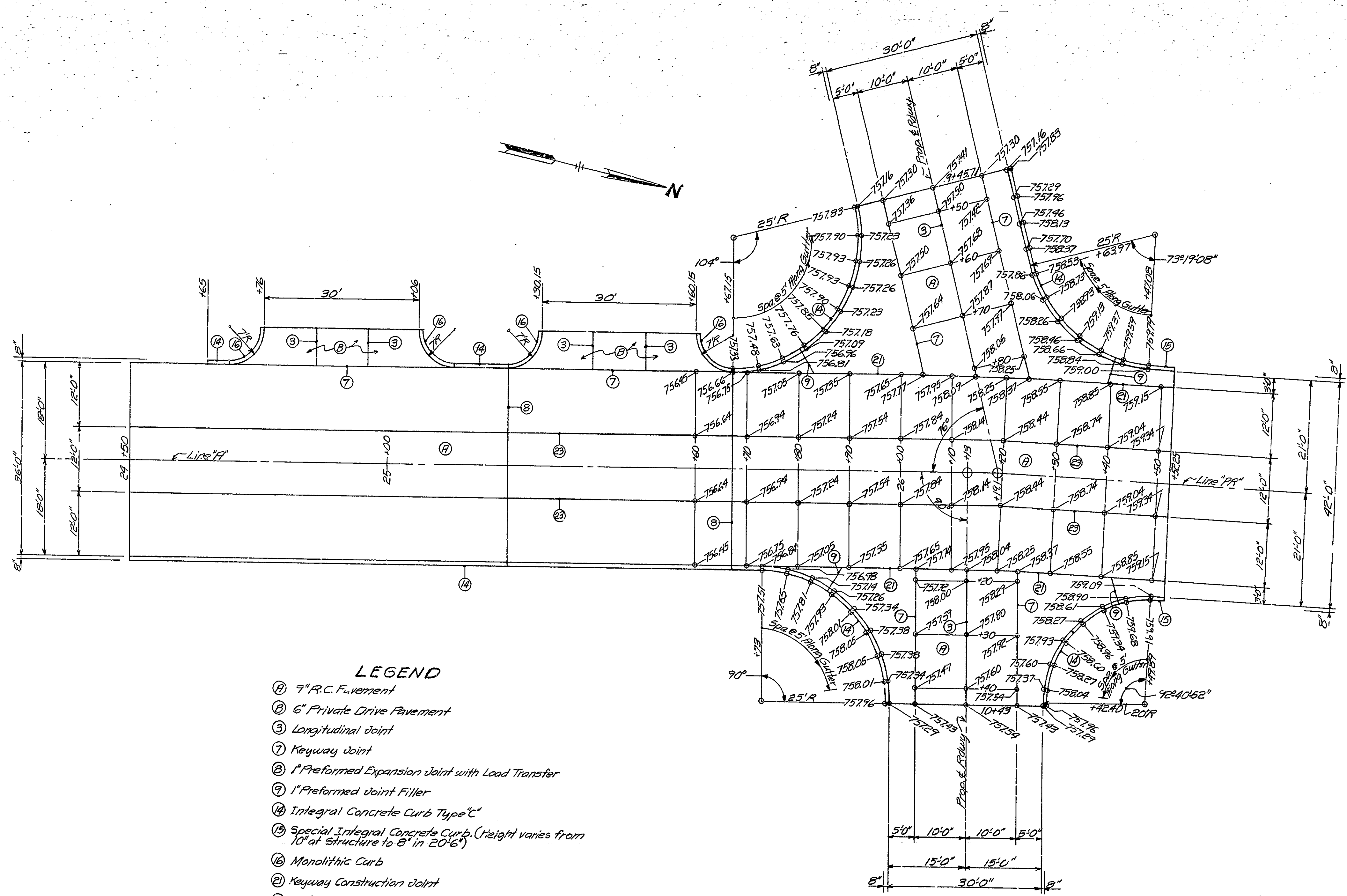
DRAWING OF PROJECT: U-414(6)
 BRIDGE CONTRACT NO. B-7535
 BRIDGE FILE: 27-MM-5364

Rev. R/W #2 10-27-67
 Rev. R/W 9-20-67
 Rev. R/W 6-1-67

Rev. Steps, Str. #23 9-12-67

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
		5	65	

BRIDGES OVER 20' SPAN				
PUB. ROAD RECORD	STATE	PROJECT NO.	FISCAL YEAR	TOTAL SHEETS
4	IND.	U-414(6)	1968	65



- LEGEND**
- (A) 7" R.C. Pavement
 - (B) 6" Private Drive Pavement
 - (C) Longitudinal Joint
 - (D) Keyway Joint
 - (E) 1" Preformed Expansion Joint with Load Transfer
 - (F) 1" Preformed Joint Filler
 - (G) Integral Concrete Curb Type "C"
 - (H) Special Integral Concrete Curb (Height varies from 10" at structure to 8" in 20'±)
 - (I) Monolithic Curb
 - (J) Keyway Construction Joint
 - (K) Optional Longitudinal Joint or Keyway Construction Joint

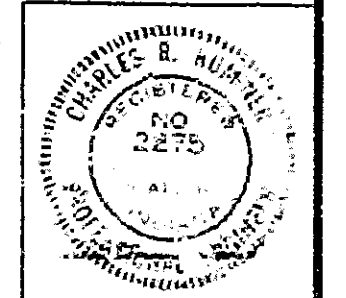
CLINTON & BARR STREET INTERSECTION

APPROACH DETAILS
INDIANA STATE HIGHWAY COMMISSION

SCALE: - 1" = 10'
August 18, 1967

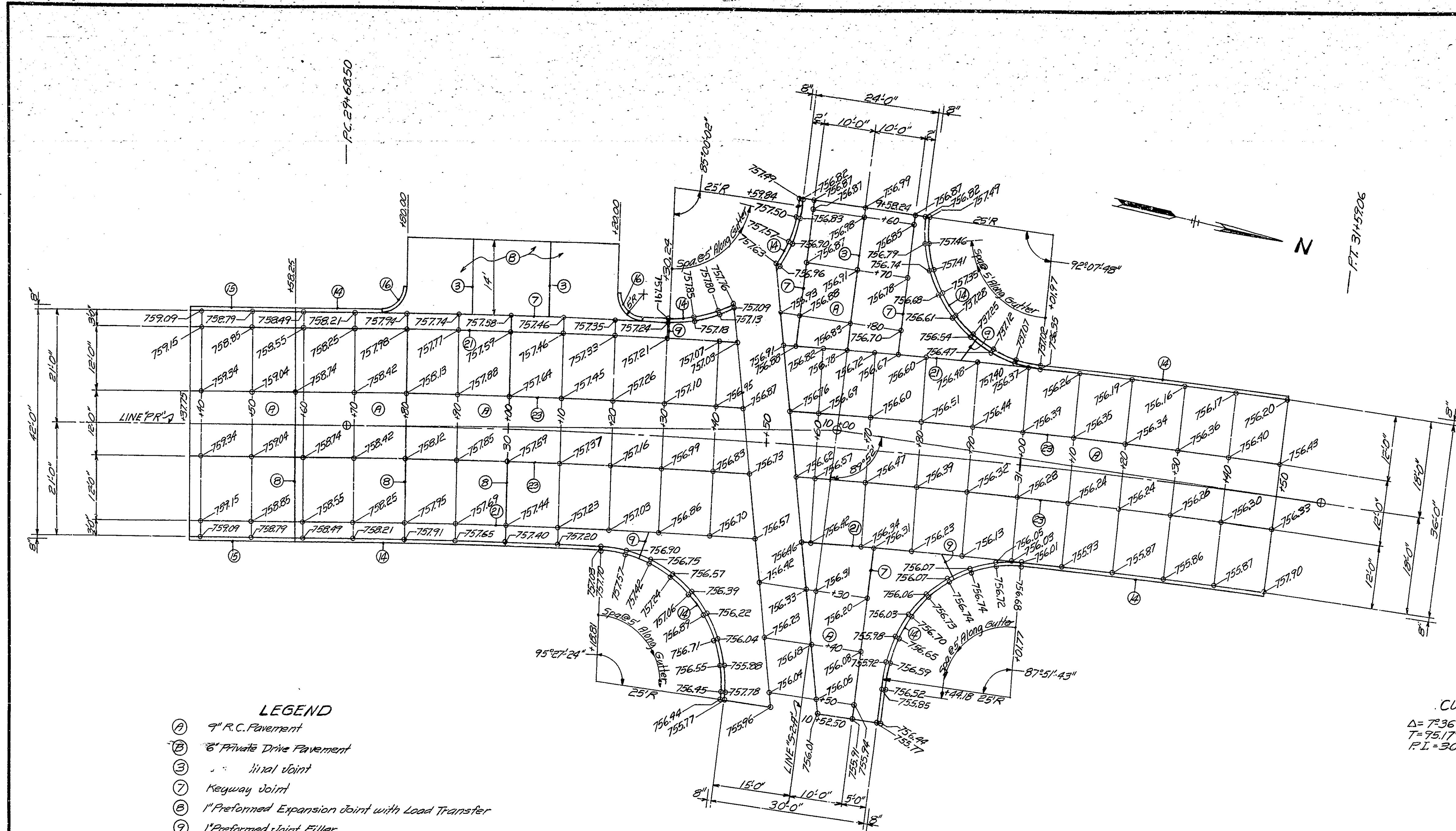
RECOMMENDED FOR APPROVAL: *C. P. Rimmer*
DIRECTOR OF BRIDGE DIVISION

DRAWING: OF
PROJECT: - U-414(6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE: - 27-111M-536A



DESIGNED: C.K.D.
DRAWN: W.B.F. & R.S.T. C.K.D. D.K.C. J.P.L. 1/67
TRACED: C.K.D.

BRIDGES OVER 20' SPAN					
PUB. ROAD	STATE	PROJECT	FISCAL	SHEET	TOTAL
NO.		NO.	YEAR	NO.	SHEETS
4	IND.	U-414(6)	1968	7	65



- LEGEND**
- (A) 9' R.C. Pavement
 - (B) 6' Private Drive Pavement
 - (C) 1' Preformed Expansion Joint with Load Transfer
 - (D) 1' Preformed Joint Filler
 - (E) Integral Concrete Curb Type 'C'
 - (F) Special Integral Concrete Curb (Height varies from 10" at Structure to 8" in 20'±)
 - (G) Monolithic Curb
 - (H) Keyway Construction Joint
 - (I) Optional Longitudinal Joint or Keyway Construction Joint

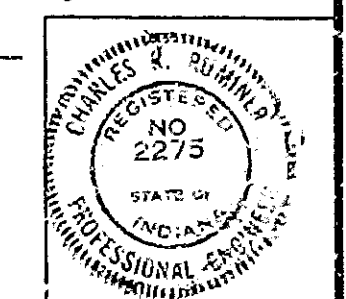
CURVE DATA
 $\Delta = 73^{\circ}36'08''$ $D = 4''$
 $T = 75.17'$ $L = 190.56'$ $E = 3.18'$
 $P.I. = 30+63.67$

CLINTON # 4TH STREET INTERSECTION

APPROACH DETAILS
INDIANA STATE HIGHWAY COMMISSION

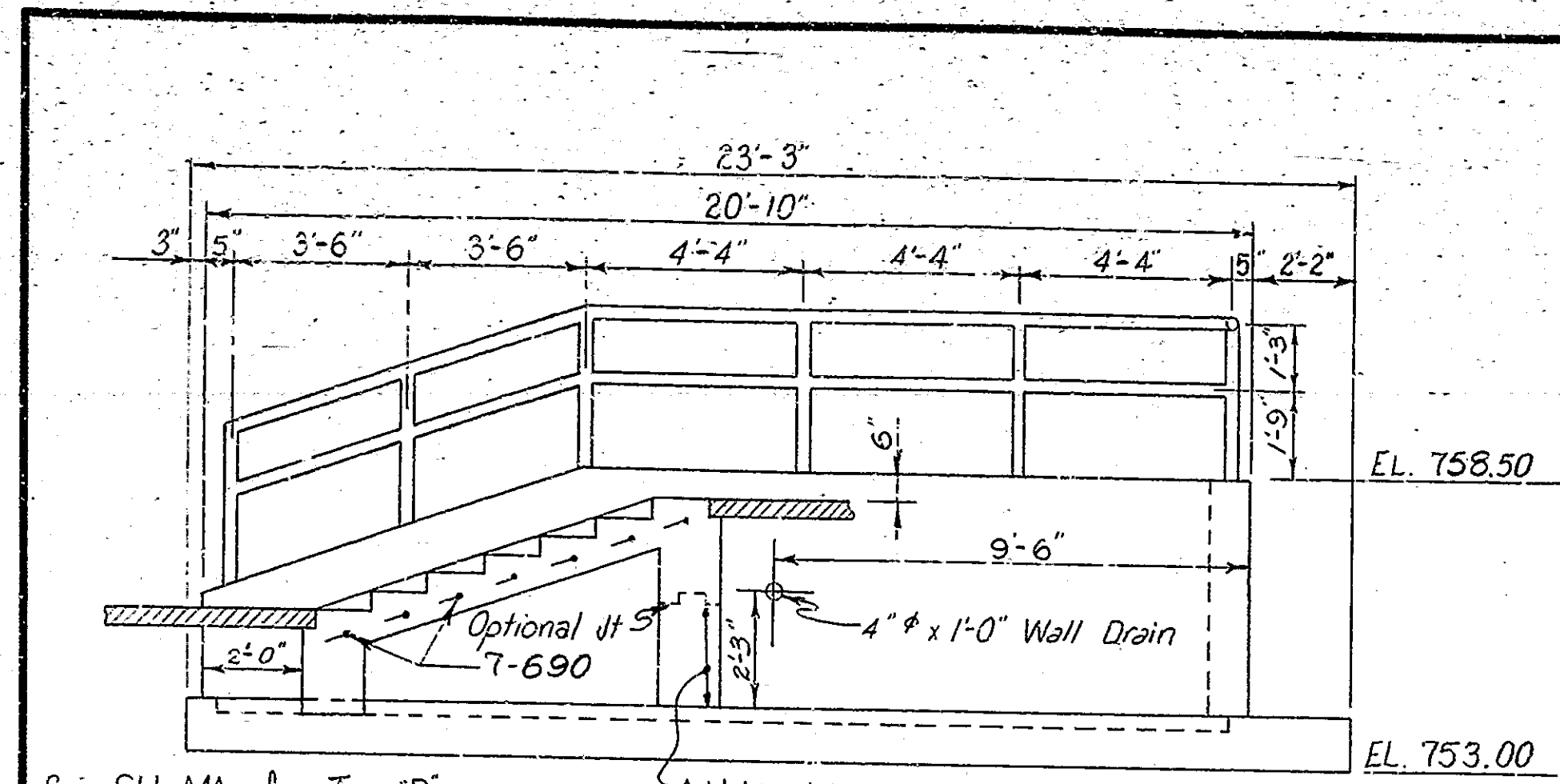
SCALE: 1" = 10'
 August 13, 1967
 RECOMMENDED FOR APPROVAL: *E.R. Rimmer*
ENGINEER OF BRIDGE DESIGN

DRAWING: OF
 PROJECT: U-414 (6)
 BRIDGE CONTRACT NO. B-7535
 BRIDGE FILE: 27-MM-5364



DESIGNED: C.K.D.
 DRAWN: W.B. 5-31-67 C.K.D. DKC 6/28/67
 TRACED: C.K.D.

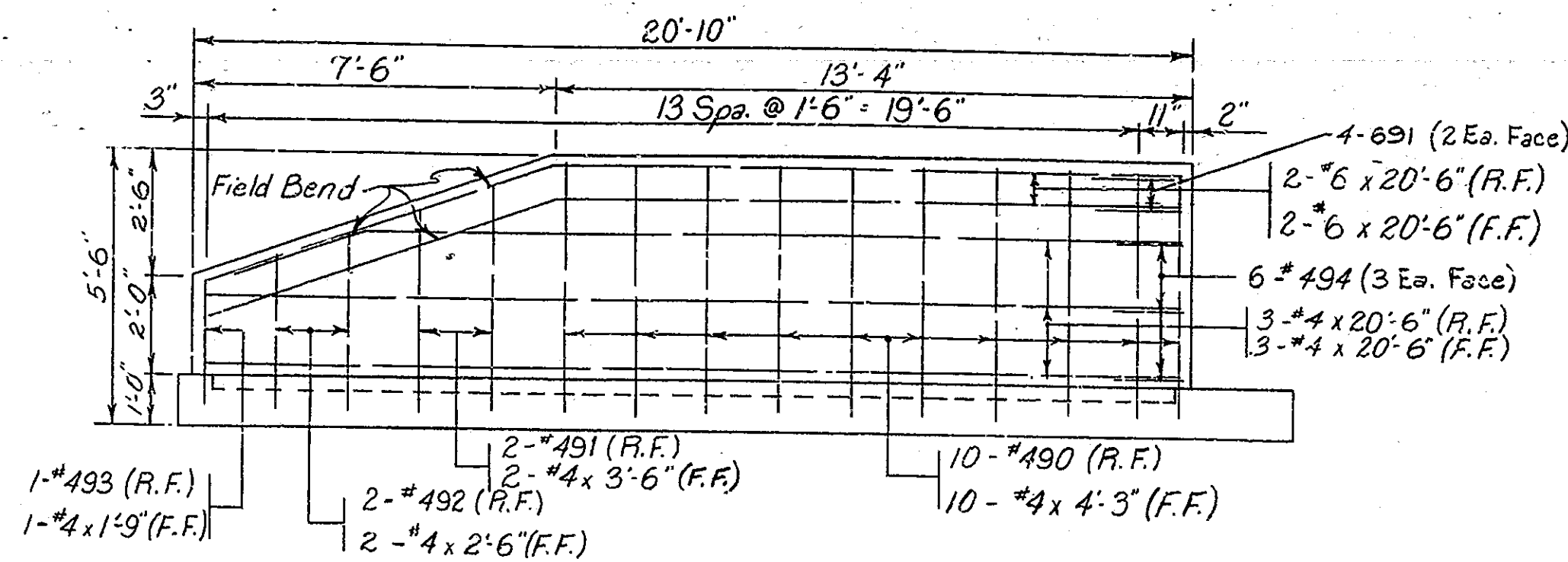
BRIDGES OVER 20' SPAN					
PUB. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	8	65



See Std. MA₂ for Type "B"
Steps - Slope 3 to 1
One set steps Regd.
Elevation "Y-Y" only.

ELEVATION X-X
ELEVATION Y-Y (OPPOSITE HAND)

○ Approx. location 12" pipe



ELEVATION A-A
ELEVATION B-B (OPPOSITE HAND)

NOTES

Aluminum Pipe handrail.
Horiz. Rails: 2" Schedule 40 (0.154" wall).
Vert. Post: 2" Schedule 80 (0.218" wall).
Rail Flange & Post connections to be welded.
Posts to be set vertical - Rails parallel to top of walls.
Aluminum Alloy pipe to conform to A.S.T.M. spec. B-241-54T.
Alloy spec. 65-11-A Cond. T-6.
All posts set in 2 1/2" x 10" sleeves with "Leadite" or Equal.
Cost of sleeve & setting to be included in bid price for Aluminum Railing (See Details).
Any existing underground installations not shown on approach details shall be provided for as directed by Project Engineer.
Footing excavation to be backfilled with grade "B" special borrow to original ground line.
Excavation for pipes under footing to be backfilled with Grade "B" Special Borrow to EL. 753.00.

BILL OF MATERIALS

REINFORCING STEEL			
Size #	# of Bars	Length (ft.)	Weight (lbs.)
690	7	4'-6"	
691	4	4'-0"	
#6	8	20'-6"	
Total #6			318

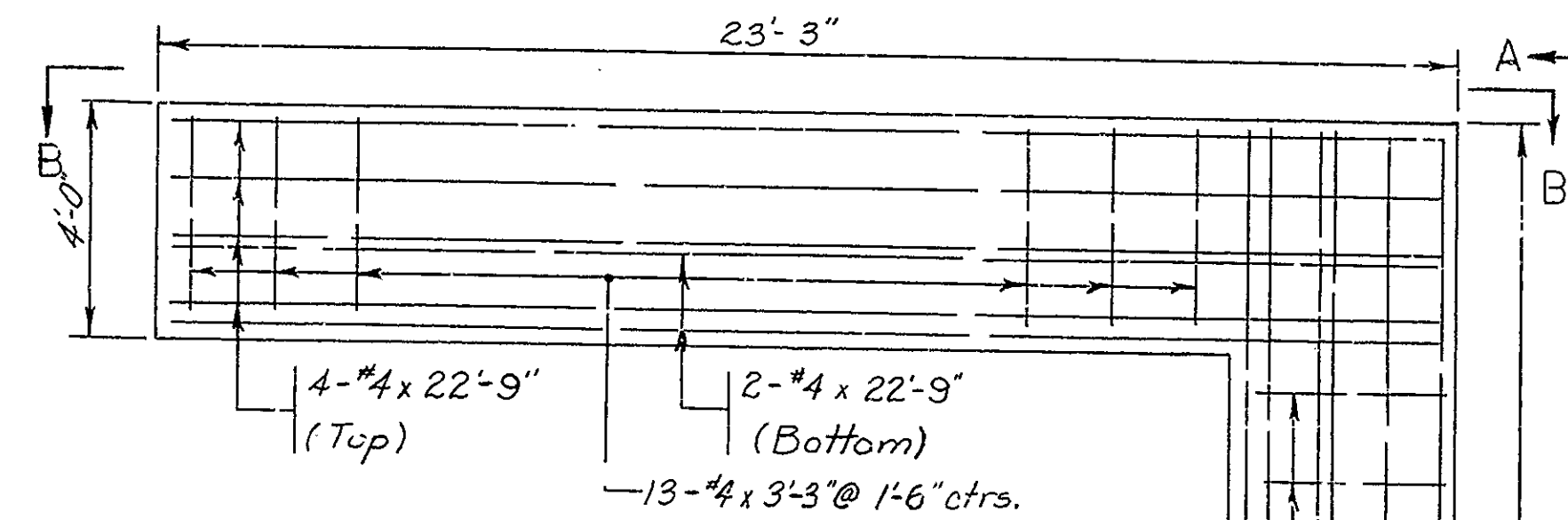
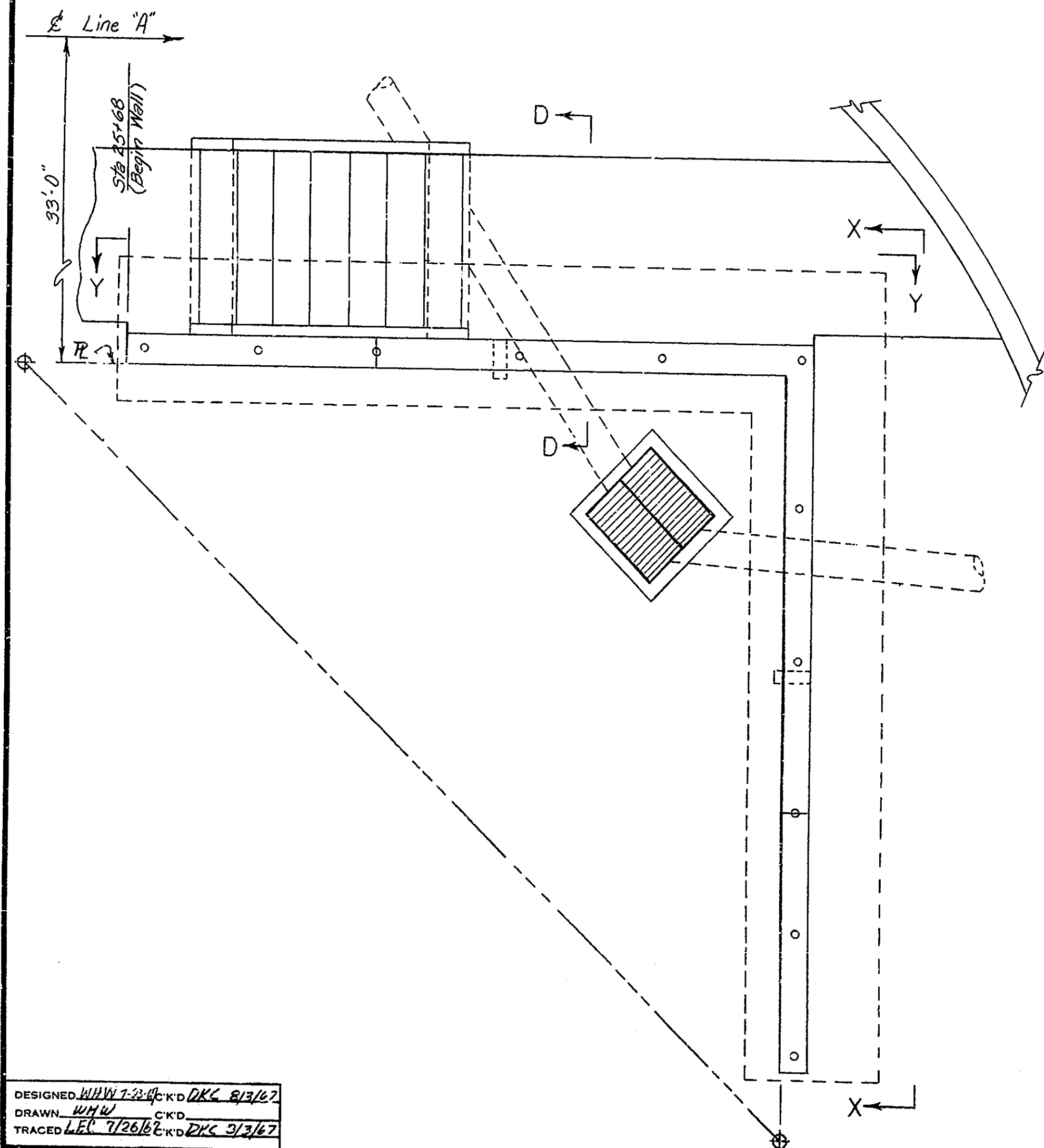
490	19	6'-6"	
491	4	5'-9"	
492	4	4'-9"	
493	2	4'-0"	
494	6	3'-0"	
#4	12	22'-9"	
#4	12	20'-6"	
#4	19	4'-3"	
#4	4	3'-6"	
#4	26	3'-3"	
#4	4	2'-6"	
#4	2	1'-9"	
Total #4			603

Total Steel 921

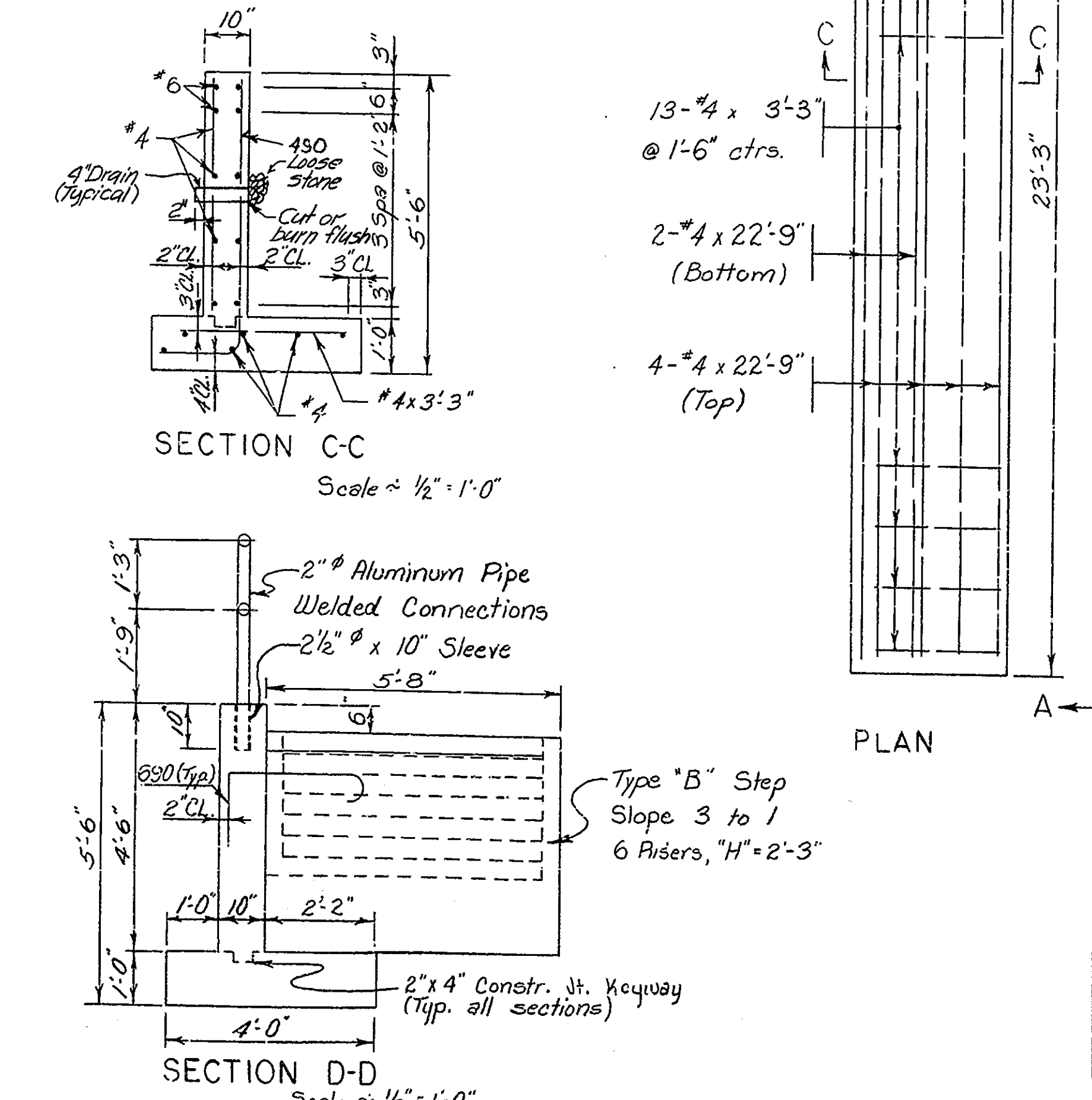
Concrete	
Class "D" in Structure	
Footing	6.3 cys.
Wall	5.2 cys.
Wall under step	0.5 cys.
Total Class "D"	12.0 cys.

Miscellaneous	
2" Alum. Pipe Railing	40 Lin. Ft.
#2-4" x 1'-0" Steel Boiler Tubes @ 6.3"/ft.	12.5'

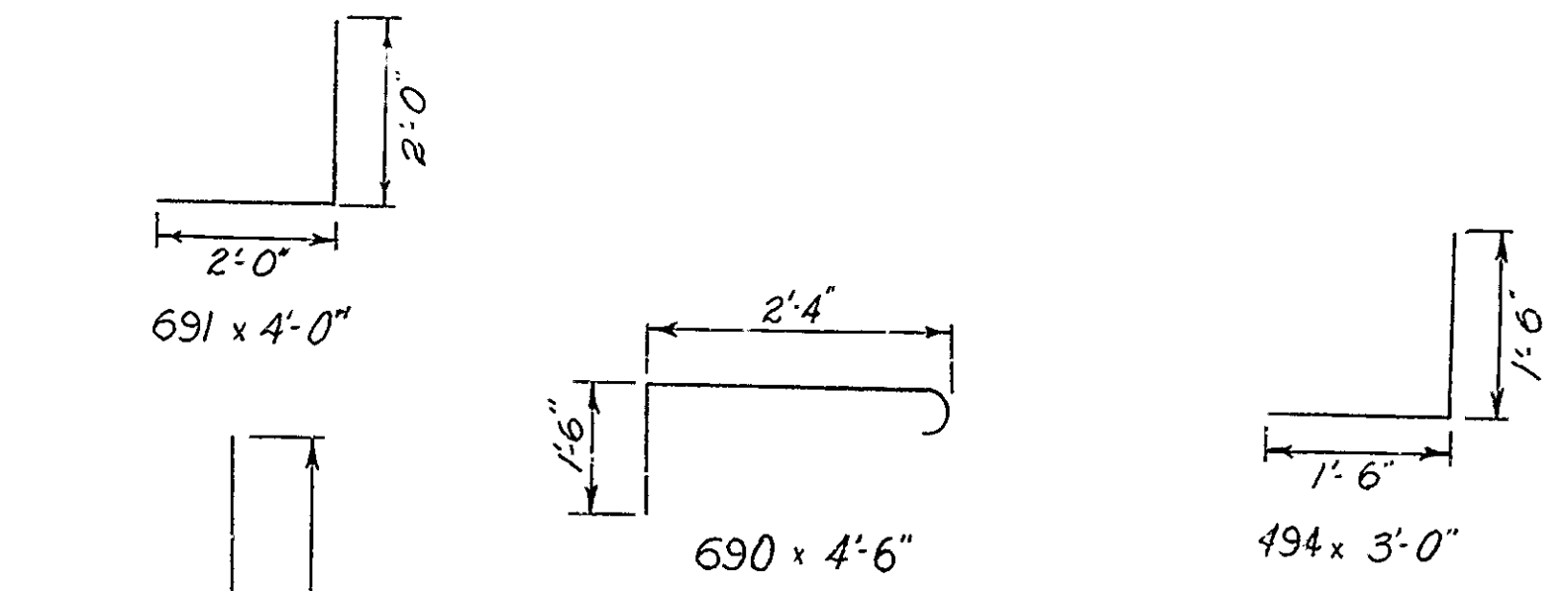
* Billed in Summary as Cast Iron.



SECTION C-C
Scale = 1/2" = 1'-0"



SECTION D-D
Scale = 1/2" = 1'-0"



RETAINING WALL DETAILS
(RT. STA. 25+68 LINE 'A')
INDIANA STATE HIGHWAY COMMISSION

Size #	A	B	Length
490	1'-6"	5'-0"	6'-6"
491	1'-6"	4'-3"	5'-9"
492	1'-6"	3'-3"	4'-9"
493	1'-6"	2'-6"	4'-0"

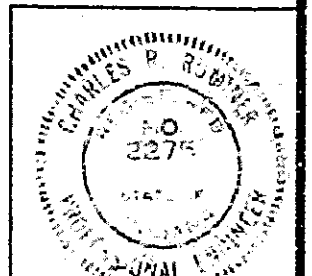
SCALE: 3/8" = 1'-0" (Unless Noted) August 18, 1967

RECOMMENDED FOR APPROVAL: *CP Rumer*

DRAWING: OF
PROJECT: U-414(6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE: 27-MM-5364

DESIGNED: WJW 7/26/67 CKD
DRAWN: WJW CKD
TRACED: LEL 7/26/67 CKD

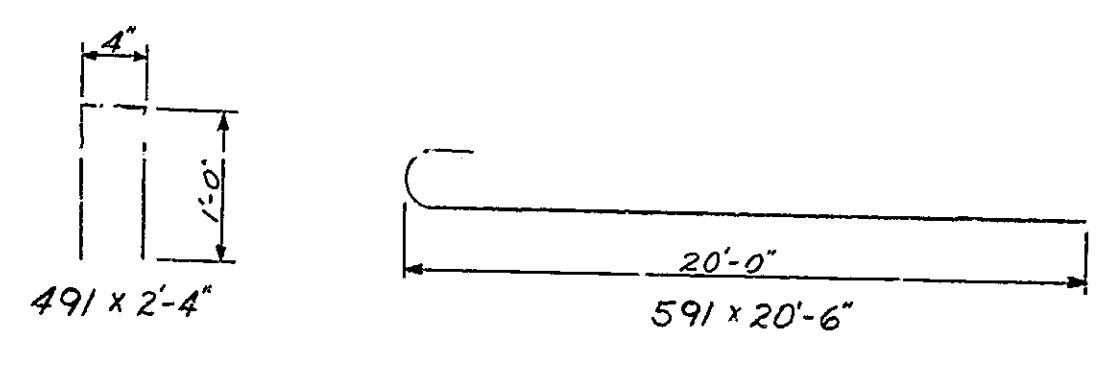
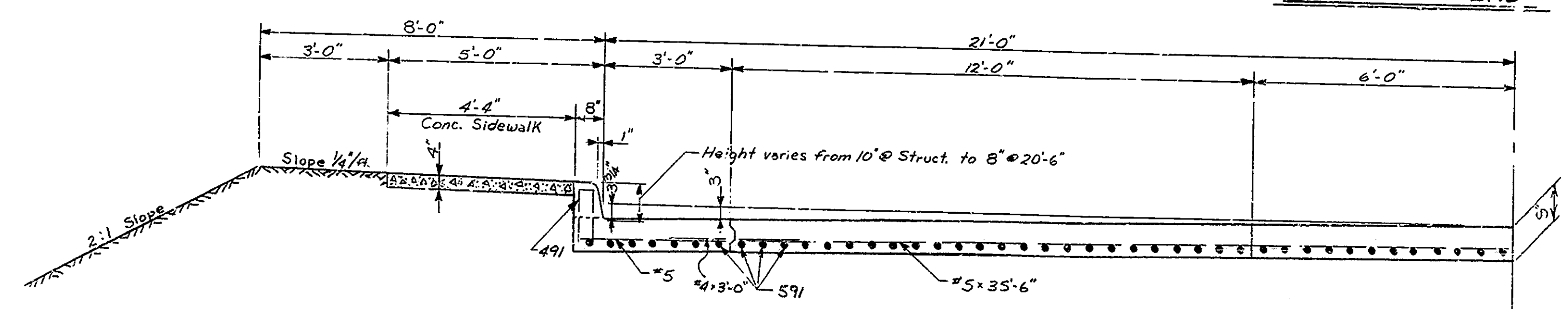
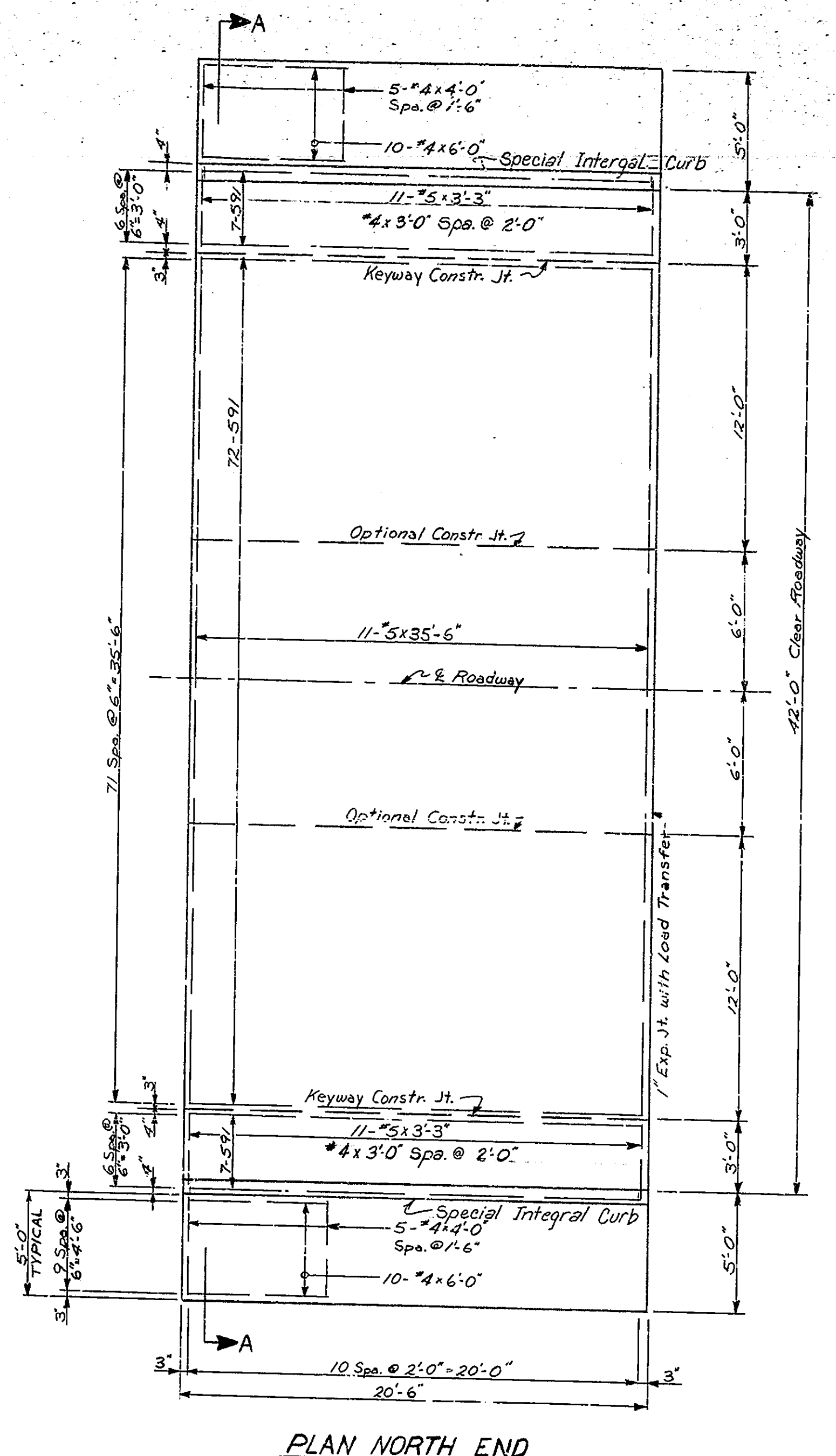
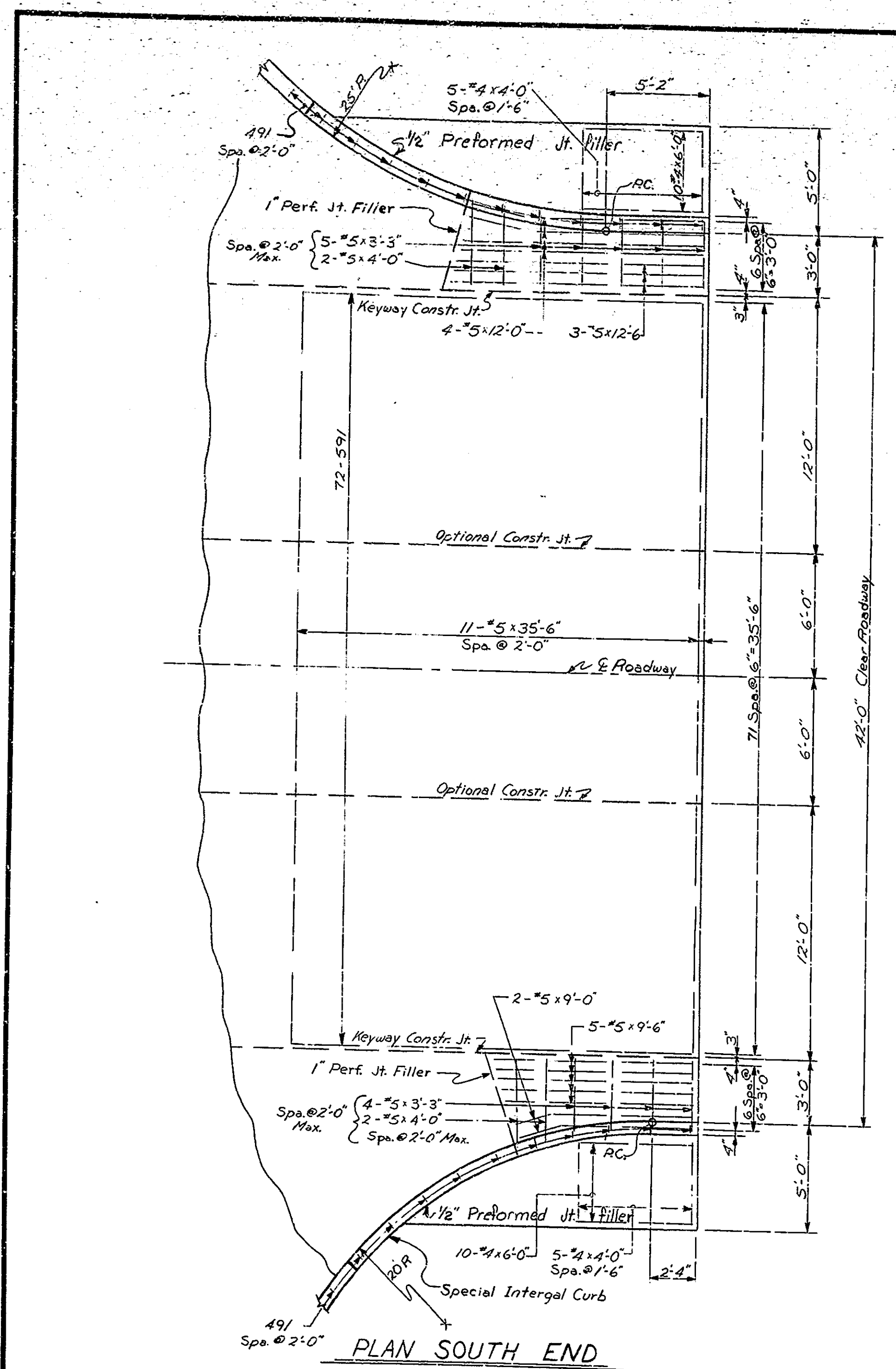
See Bridge Standard C₁ for Reinforcing Bar Notes and Wall Drains



BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	9	65

BILL OF MATERIALS
R.C. BRIDGE APPROACH
NORTH AND SOUTH END

REINFORCING STEEL			
SIZE & MARK	N ^o BARS	LENGTH	WEIGHT
#5	158	20'-6"	
#5	22	35'-6"	
#5	3	12'-6"	
#5	5	12'-0"	
#5	2	9'-0"	
#5	4	4'-0"	
#5	31	3'-3"	
Total #5			4472#
#4	40	6'-0"	
#4	20	4'-0"	
Total #4			213#
Total Steel			4685#
~ MISCELLANEOUS ~			
5" R.C. Pavement		191 Sq. Yds.	
North End (99 Sq. Yds.)			
South End (92 Sq. Yds.)			
4" Concrete Sidewalk		32 Sq. Yds.	
North End (20 Sq. Yds.)			
South End (16 Sq. Yds.)			
Special Integral Curb		82 Lin. Ft.	



NOTES:
See Br. Std. C1 for Reinforcing Bar Notes.
See Rd. Std. M4 for additional Approach Details.
See Rd. Std. A for Keyway Construction Joint.
See Rd. Std. M41 for additional Sidewalk Details.
See General Plan for pavement offsets.

DESIGNED BY: *WBA* C.K.D. *DKC 10-28-66*
DRAWN BY: *DKC 1-1-66* C.K.D. *WBA*
TRACED BY: C.K.D.

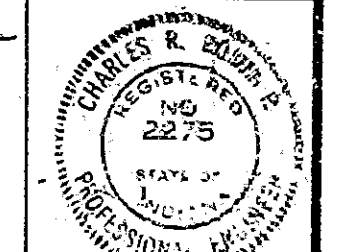
SECTION A-A
Scale: 1/2" = 1'-0"

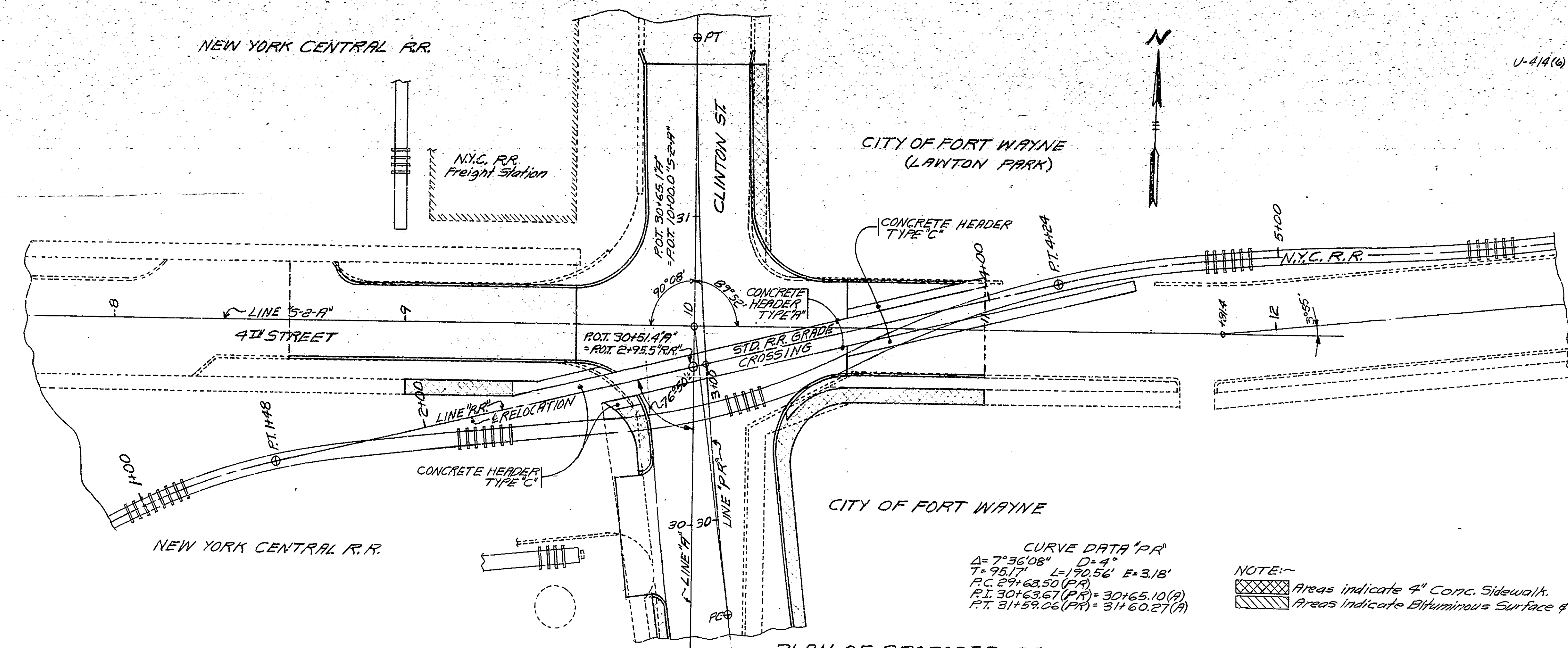
R.C. BRIDGE APPROACH DETAILS
INDIANA STATE HIGHWAY COMMISSION

SCALE: 1/4" = 1'-0" UNLESS NOTED August 18, 1967

RECOMMENDED FOR APPROVAL: *C. R. ...*

DRAWING OF PROJECT: U-414 (6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE: 27-MM-5364

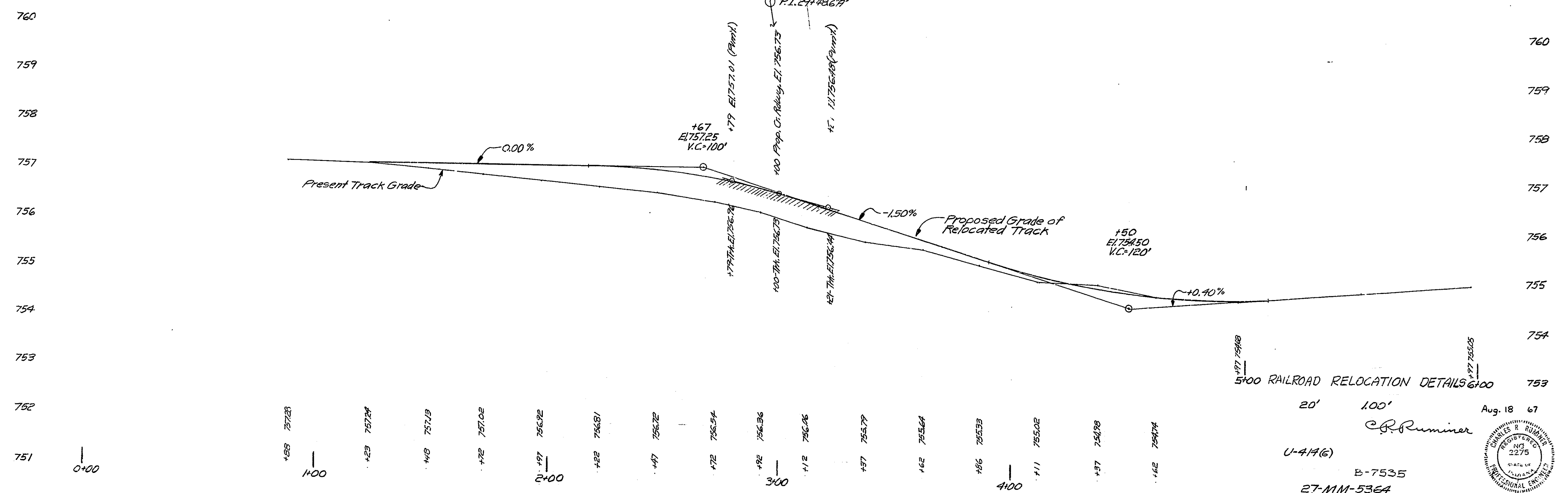




CURVE DATA 'PR'
 $\Delta = 7^{\circ}36'08''$ $D = 4'$
 $T = 95.17'$ $L = 190.56'$ $E = 3.18'$
 $P.C. = 29+68.50 (PR)$
 $P.I. = 30+63.67 (PR) = 30+65.10 (A)$
 $P.T. = 31+59.06 (PR) = 31+60.27 (A)$

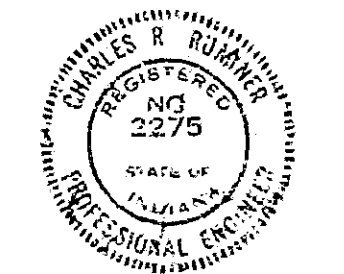
NOTE:-
 Areas indicate 4" Conc. Sidewalk.
 Areas indicate Bituminous Surface & Base.

PLAN OF PROPOSED RELOCATION OF N.Y.C.R.R. TRACK

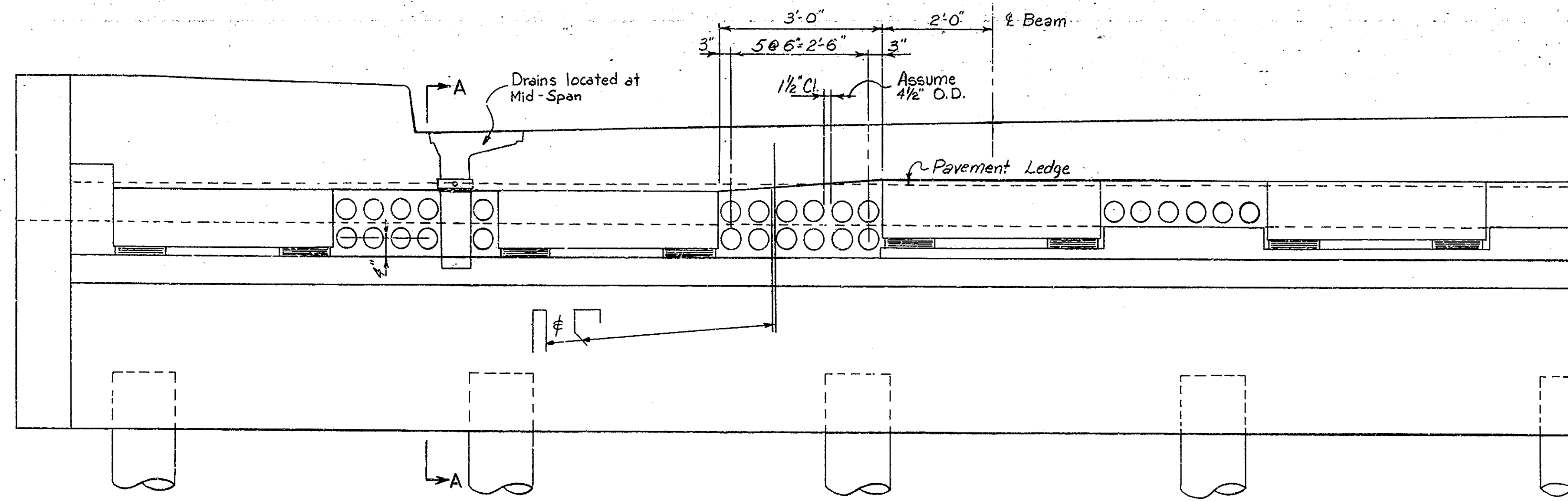


5100 RAILROAD RELOCATION DETAILS 6100

20' 100'
 Aug. 18 67
 C.R. Rimmer
 U-414(6)
 B-7535
 27-MM-5364



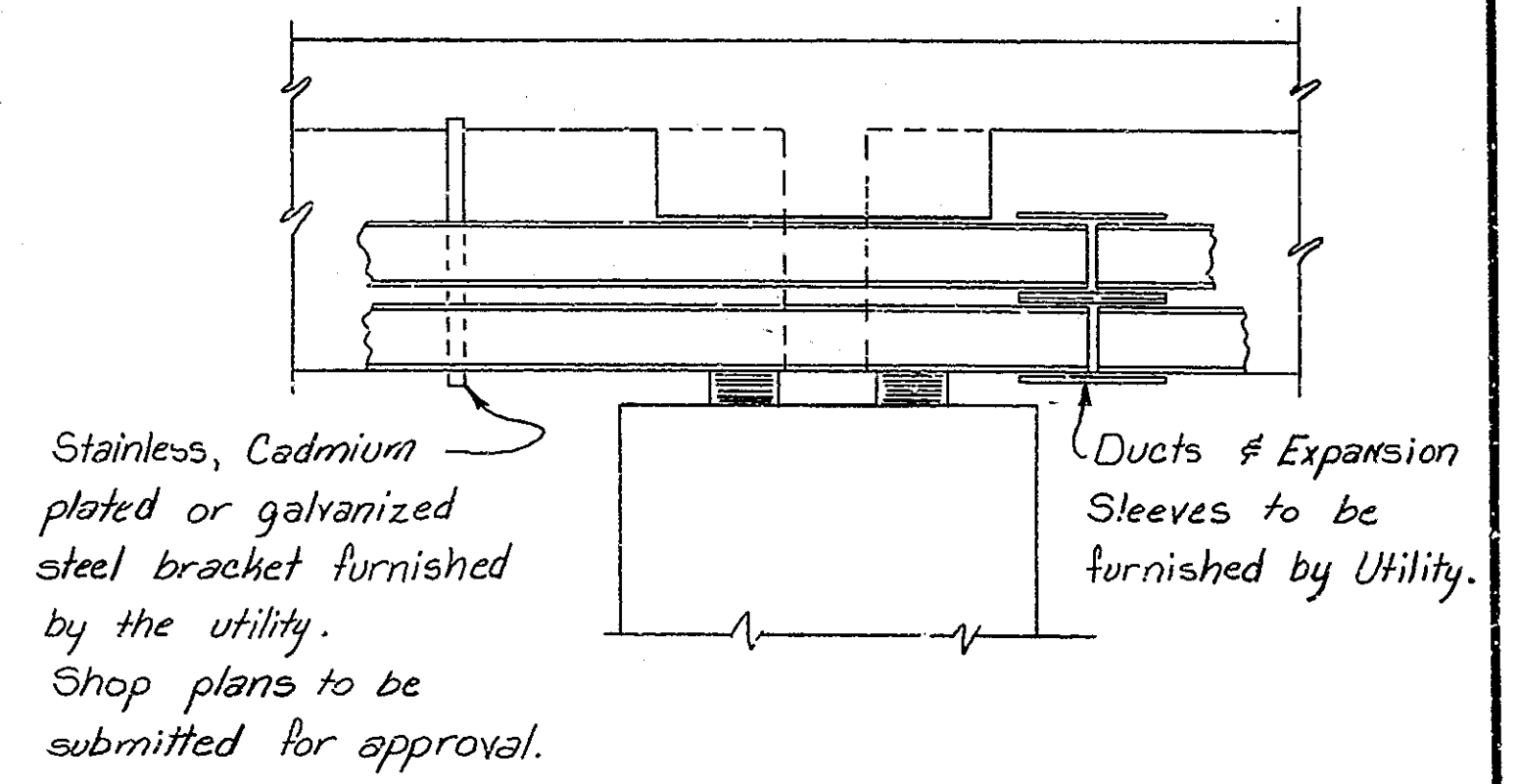
BRIDGES OVER 20' SPAN					
PUB. ROAD	STATE	PROJECT	FISCAL	SHEET	TOTAL
NO.		NO.	YEAR	NO.	SHEETS
4	IND.	U-414(6)	1966	11	65



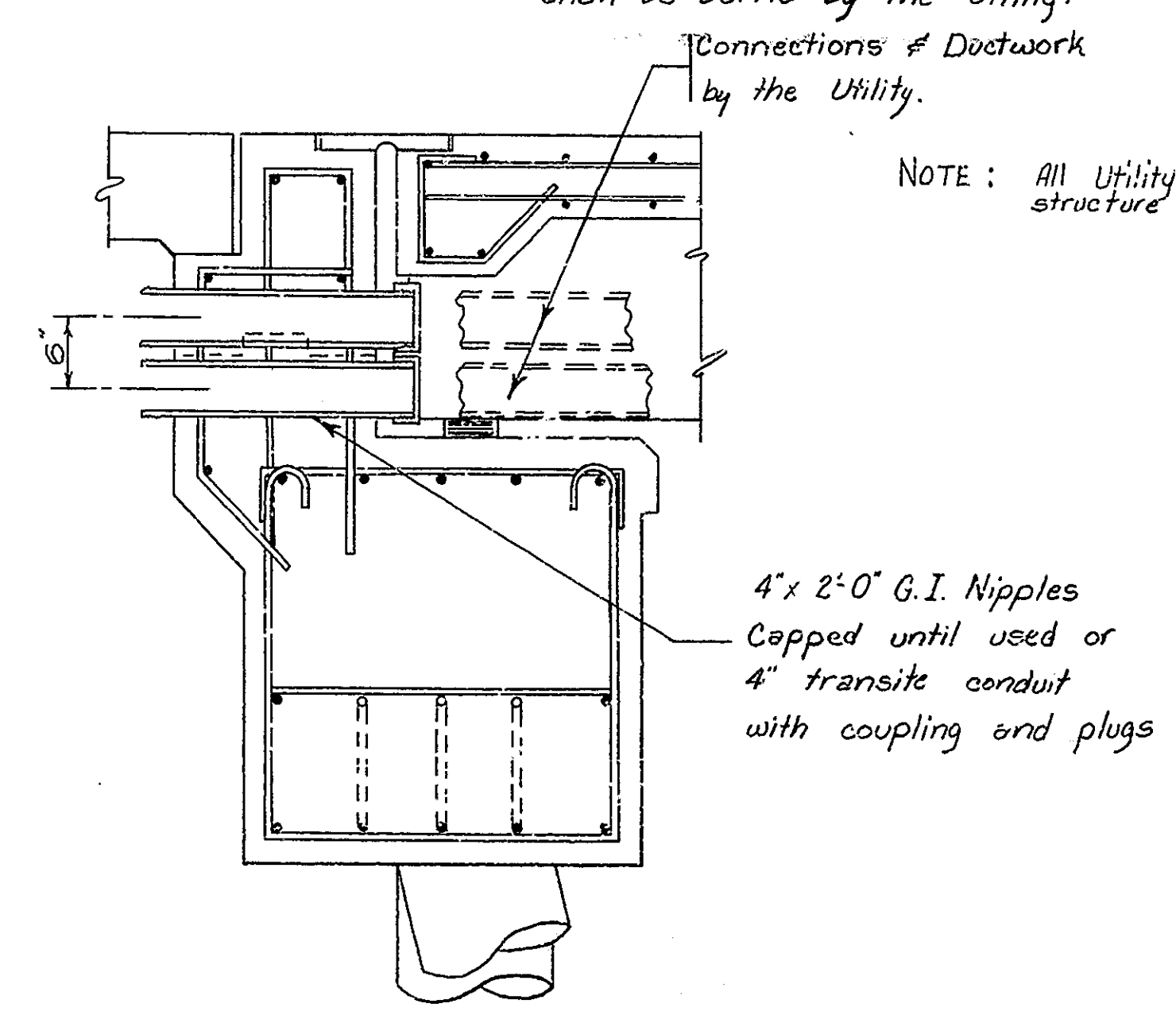
END BENT ELEVATION
Scale ~ 3/4" = 1'-0"

Note:- All ductwork for future installations under the concrete pavement to be connected to nipples at end bents and run outside the pavement limits before the pavement is poured. The cost of materials and installation for all brackets, ductwork and other items required shall be borne by the Utility.

Note:- Ducts may be in all spaces between beams as required by Utilities.

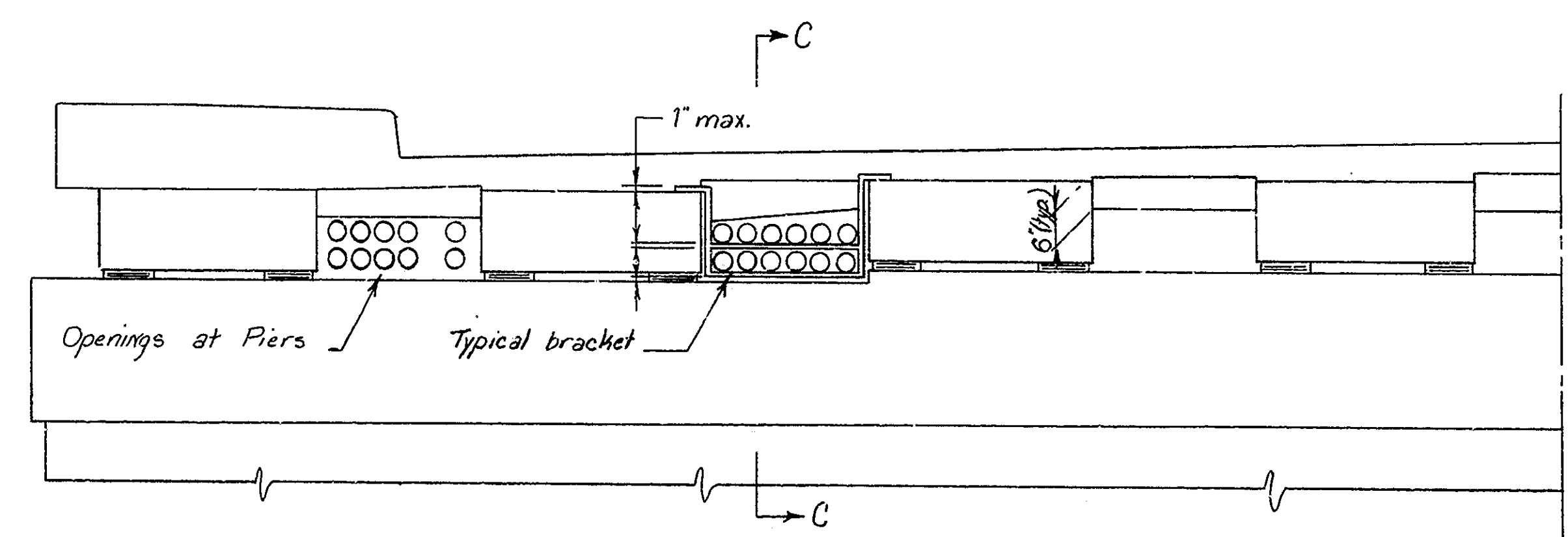


SECTION "C-C"
Scale ~ 1" = 1'-0"



SECTION A-A
Scale ~ 1" = 1'-0"

NOTE: All Utility installations on structure shall be grounded.

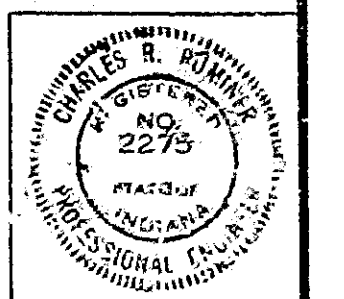


BENT 2 THRU 7
Scale ~ 1/2" = 1'-0"

UTILITY DETAIL
INDIANA STATE HIGHWAY COMMISSION

SCALE:- AS NOTED August 18, 1967
RECOMMENDED FOR APPROVAL: *C.R. Rummel*
ENGINEER OF BRIDGE DESIGN

DRAWING OF PROJECT:- U-414 (6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE:- 27-MM-5364



DESIGNED: C.K.D.
DRAWN: D.K.C. 5/16/67
CHECKED: W.B.A. 5/26/67
TRACED: C.K.D. 5/26/67

Rev.: Conduits; 9/12/67

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	12	65

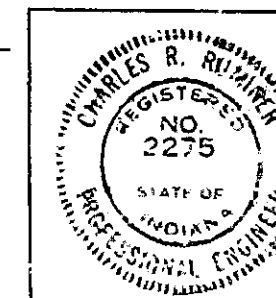
Boring No. 1			Boring No. 2			Boring No. 3			Boring No. 4			Boring No. 5		
Station	Offset	Surface	Station	Offset	Surface	Station	Offset	Surface	Station	Offset	Surface	Station	Offset	Surface
26+55	30' Rt.	756.4	27+00	23' Lt.	741.6	27+65	33' Rt.	734.7	28+25	21' Lt.	733.9	29+10	39' Rt.	756.5
Sample No.	N	Description	Sample No.	N	Description	Sample No.	N	Description	Sample No.	N	Description	Sample No.	N	Description
1	17/11	Surface Brown moist very stiff loam (frozen) (fill)	1	72	Surface Gray wet very soft silty loam with trace of organic matter	1	60	Surface Gray wet very soft silty loam with trace of organic matter	1	30	Surface Gray wet very soft silty loam with trace of organic matter	1	6/9	Surface Brown moist stiff silty loam with trace of glass and brick (frozen) (fill)
2	1/1	Black moist very loose cinders (fill)	2	735.6	7/5	Gray wet medium dense fine to coarse sand	2	733.2	1/1	Gray and brown very loose cinders with trace china and glass (fill)	2	1/1	Gray and brown very loose cinders with trace china and glass (fill)	
3	1/1	Brown moist very soft sandy loam and cinders (fill)	3	734.6	4/2	Gray wet medium dense sandy loam	3	730.6	2	1/1	Gray moist loose cinders and brick (fill)	3	1/1	Gray moist loose cinders and brick (fill)
4	0/0	Brown moist very soft sandy loam and cinders (fill)	4	730.6	1/2	Gray wet very soft silty loam and coarse sand	4	726.6	2	4/5	Gray wet medium stiff sandy loam with some gravel and trace of organic matter	4	3/3	Gray moist loose cinders and brick (fill)
5	0/1	Brown wet very soft silty loam	5	726.6	6/5	Gray wet medium dense medium to coarse sand with trace of silt	5	726.7	3	725.9	3	5/6	Gray wet medium dense fine to coarse sand with trace of silt	
6	1/3	Gray wet soft silty loam	6	716.6	5/6	Gray wet medium dense fine to coarse gravel	6	711.6	4	724.5	4	5/8	Gray wet medium dense fine to coarse sand	
7	7/10	Gray wet medium dense coarse sand	7	711.6	13/16	Gray wet medium dense medium to coarse sand with trace of silt	7	706.6	5	724.5	5	5/8	Gray wet medium dense fine to coarse sand	
8	6/7	Gray wet dense fine sand	8	706.6	10/11	Gray wet very dense fine to coarse sand with trace of silt	8	701.6	6	724.5	6	7/9	Gray wet medium dense fine to coarse sand	
9	14/17	medium dense below 38.5'	9	701.6	22/36	Gray wet very dense fine to coarse sand with trace of silt	9	701.6	7	724.5	7	7/11	Bottom of test boring	
10	19/16	medium dense below 38.5'	10	701.6	47/61	Bottom of test boring	10	698.2	7	704.0	8	49/52	Bottom of test boring	
11	10/17	dense at 53.5'						8	698.2	8	27/35	Bottom of test boring		
12	5/6	dense at 53.5'												
13	7/13	Bottom of test boring												

SOIL BORINGS
INDIANA STATE HIGHWAY COMMISSION

SCALE:- AS NOTED August 18, 1967

RECOMMENDED FOR APPROVAL: *C. R. Rummel*
ENGINEER OF BRIDGE DESIGN

DRAWING: OF
PROJECT: U-414(6)
BRIDGE CONTRACT NO. B-7595
BRIDGE FILE: 27-MM-5364

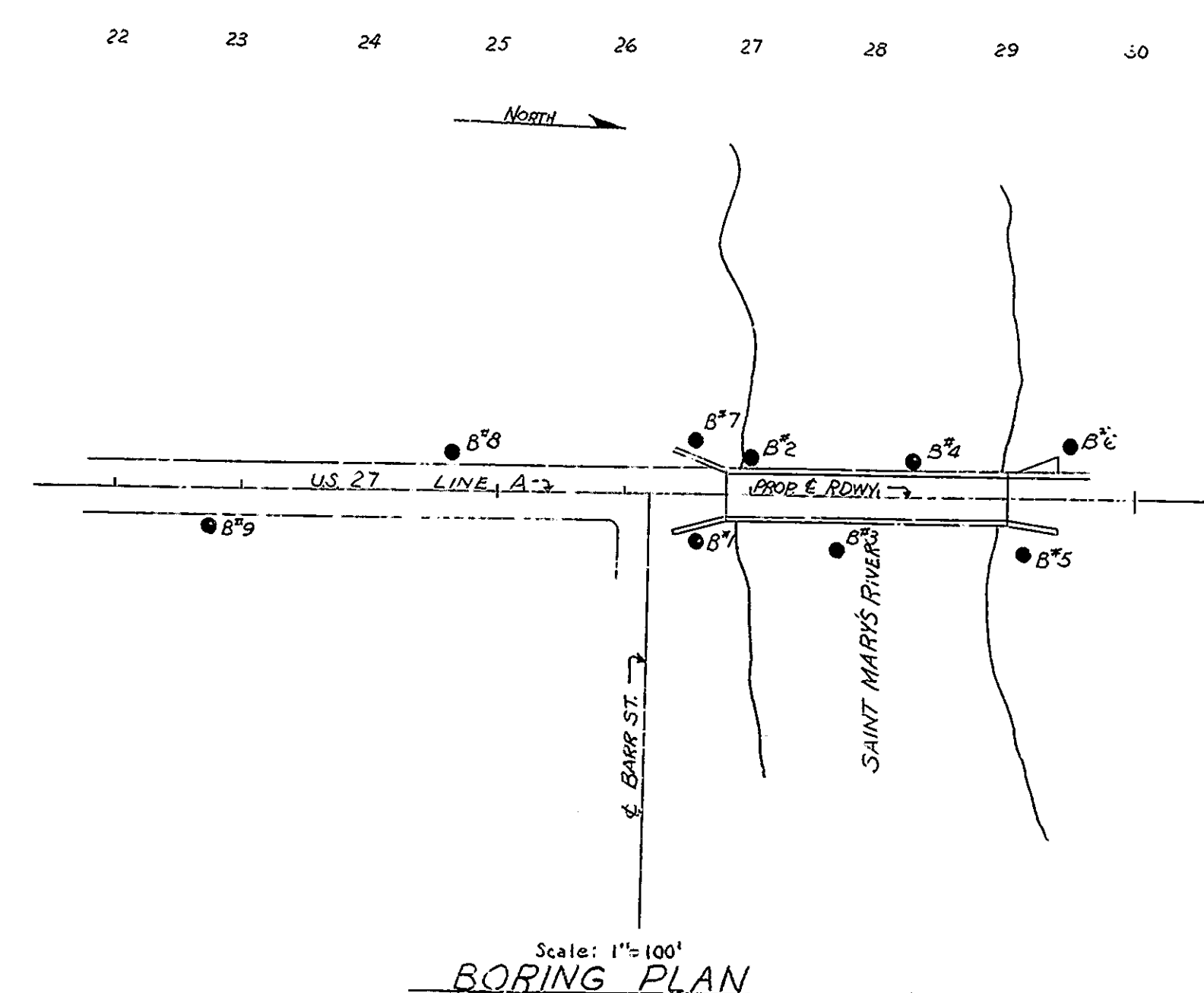


DESIGNED: CKD
DRAWN: RMH CKD MLS 4-9-66
TRACED: CKD

BRIDGES OVER 20' SPAN				
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	TOTAL SHEETS
4	IND.	U-414(6)	1968	13

Boring No. 6			Boring No. 7			Boring No. 8			Boring No. 9		
Station 29+45			Station 26+37			Station 24+60			Station 22+71		
Offset 34' Lt.			Offset 37' Lt.			Offset 32' Lt.			Offset 23' Rt.		
Surface 757.5			Surface 756.2			Surface 755.1			Surface 753.4		
Sample No.	EI.	Description	Sample No.	EI.	Description	Sample No.	EI.	Description	Sample No.	EI.	Description
	757.5	Surface		756.2	Surface		755.1	Surface		753.4	Surface
	757.3	Topsoil for 0.2'		755.7	Dark brown moist very loose sandy loam (fill)		755.1	Brown moist medium stiff sandy loam (fill)		752.4	Asphalt pavement and brick pavement
1	11/2	Black moist very loose cinders (fill)	1	3/4		1	3/4		1	2/3	Brown moist soft silty loam with a little brick and a little cinders (fill)
	752.5	Black moist medium dense sandy loam with trace of cinders	2	4/7	Brown moist loose sandy loam with trace of brick and a trace of coarse gravel (fill)	2	753.1	Brown wet very loose fine sand (fill)	2	748.4	Black moist very soft peat
2	10/5		3	2/2	Brown moist very loose to loose fine sand with a trace of brick and a trace of glass (fill)	3	750.5	Gray moist soft clay loam with trace of brick (fill)	2	745.9	Gray wet very soft sandy loam
3	749.5	Brown moist medium dense fine sand	4	3/3		4	747.6	Gray moist medium stiff clay loam	3	741.4	Gray wet very loose fine sand
4	745.5	Brown wet medium dense fine to coarse sand with trace of gravel	5	744.2	Mottled gray and brown medium stiff silty loam	5	742.1	Brown wet very loose fine sand	4	736.4	Brown wet loose fine to coarse sand with trace of gravel
5	740		6	731.7	Brown wet loose to very loose fine sand	6	738.1	Brown wet loose fine to coarse sand	5	733.4	Bottom of test boring
6	735		7	721.7	Brown wet medium dense fine to coarse sand		735.1	Bottom of test boring			
7	730.5	Gray wet medium dense fine sand		721.2	Bottom of test boring						
8	725										
9	720										
10	715										
	713.0	dense at 43.5'									
	712.5	Gray hard wet silty loam									
	710	Bottom of test boring									

Scale: 1" = 50'



Scale: 1" = 100'
BORING PLAN

NOTE: N-Relative Density = Number of blows required to drive a 2" O.D. sample spoon a distance of 6" into undisturbed soil with a 140# hammer free falling a distance of 30". See Art. A-203 of the Specifications regarding Test Pit Data.

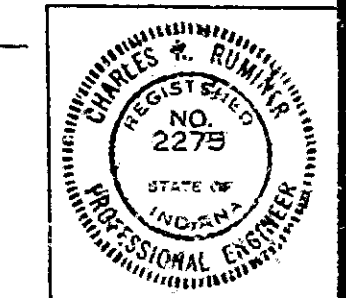
DESIGNED: C.K.D.
DRAWN: R.M.H. C.K.D. M.L.S. 4-9-66
TRACED: C.K.D.

SOIL BORINGS
INDIANA STATE HIGHWAY COMMISSION

SCALE: AS NOTED August 18, 1967

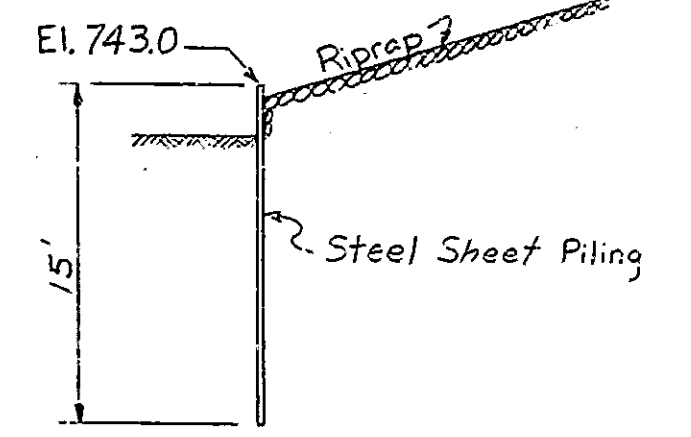
RECOMMENDED FOR APPROVAL: [Signature]

DRAWING: OF
PROJECT: U-414(6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE: 27-MM-5364



BRIDGES OVER 20' SPAN				
PUR. ROAD SECT.	STATE	PROJECT NO.	FISCAL YEAR	TOTAL SHEETS
4	IND.	U-414(6)	1968	14

UTILITY OWNERS
 P. B. Ind. & Mich. Elec. Co.
 Tel. & General Tel. Co. Fort Wayne
 City of Fort Wayne - City Engineer
 Gas Northern Ind. P. Co.
 River City Fort Wayne



SECTION P-P

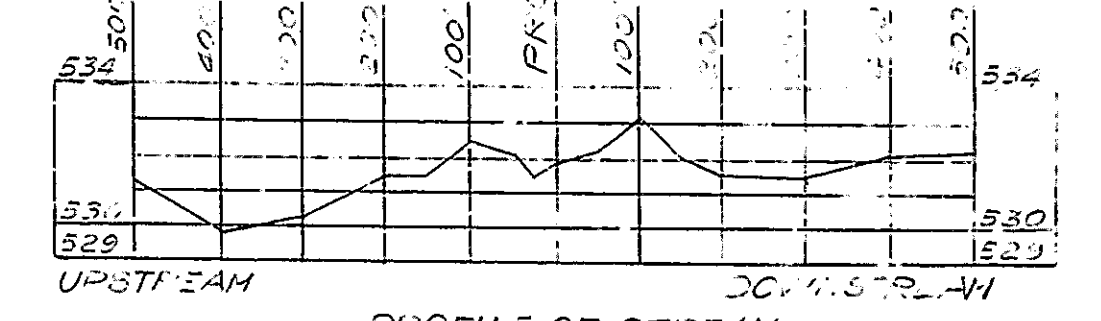
NOTE: Precast Structure R.C. bridge built 1908 ex. National Const. Co. Inap's 21' Span 2 @ 36' Cl. Rdwy 25', 5' conc. walk on each side.

NOTE: SEE "APPROACH DETAILS" SHEET FOR OTHER STRUCTURES & DETAILS.

NOTE: SEE SHEETS 3 & 4 FOR REFERENCES.

NOTE: Sanitary Sewer within limits of Waterway Clearing not to be disturbed. Contractor to contact City for location of 24" watermain before driving piles or removing present structure.

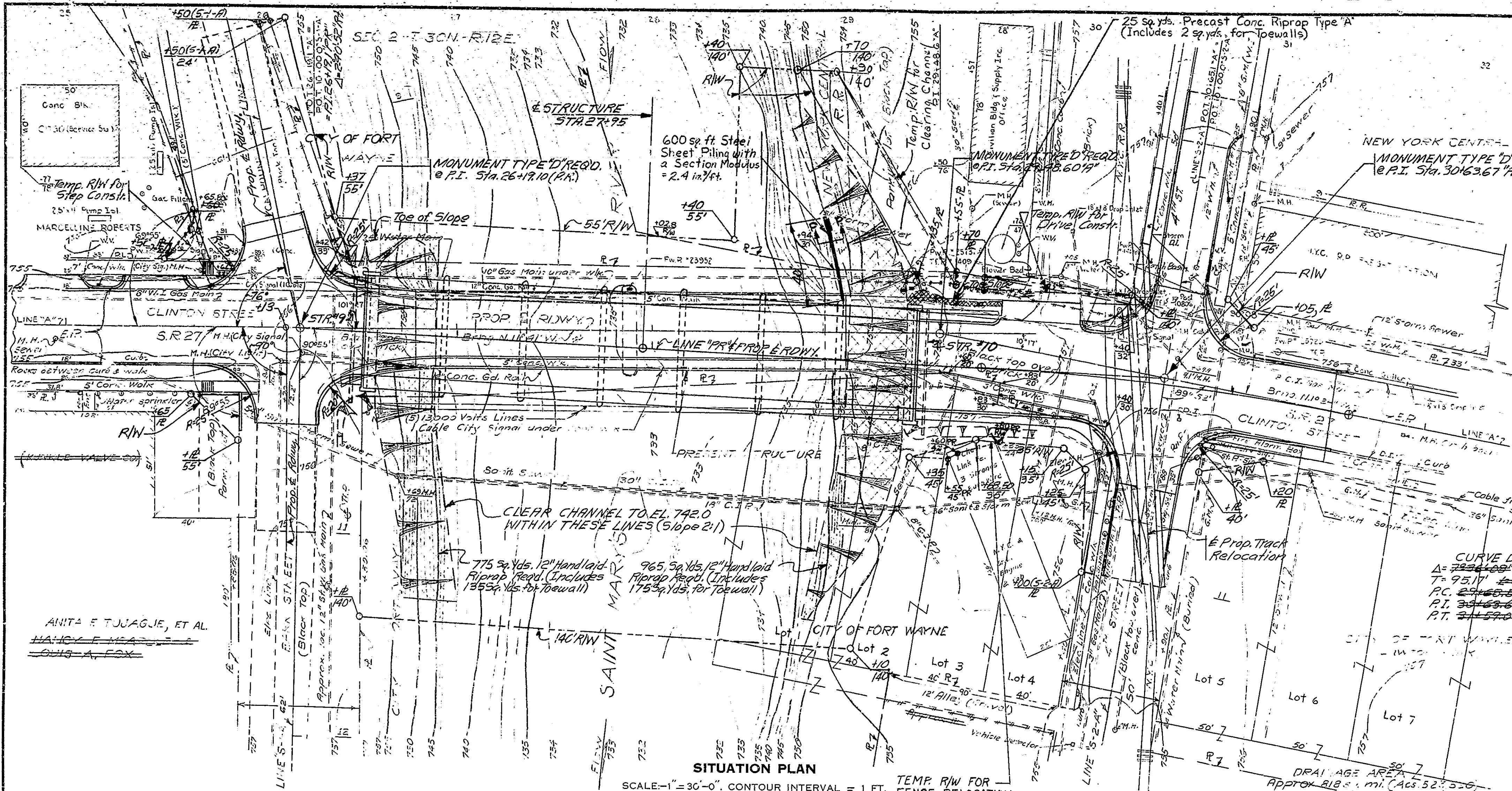
CURVE DATA (PR)
 $\Delta = 7^\circ 36' - 08.33"$
 $T = 95.11'$
 $PC = 29+68.55$
 $PT = 30+63.72$
 $PI = 31+60.27$
 $PC = 29+68.55$
 $PT = 31+58.60$



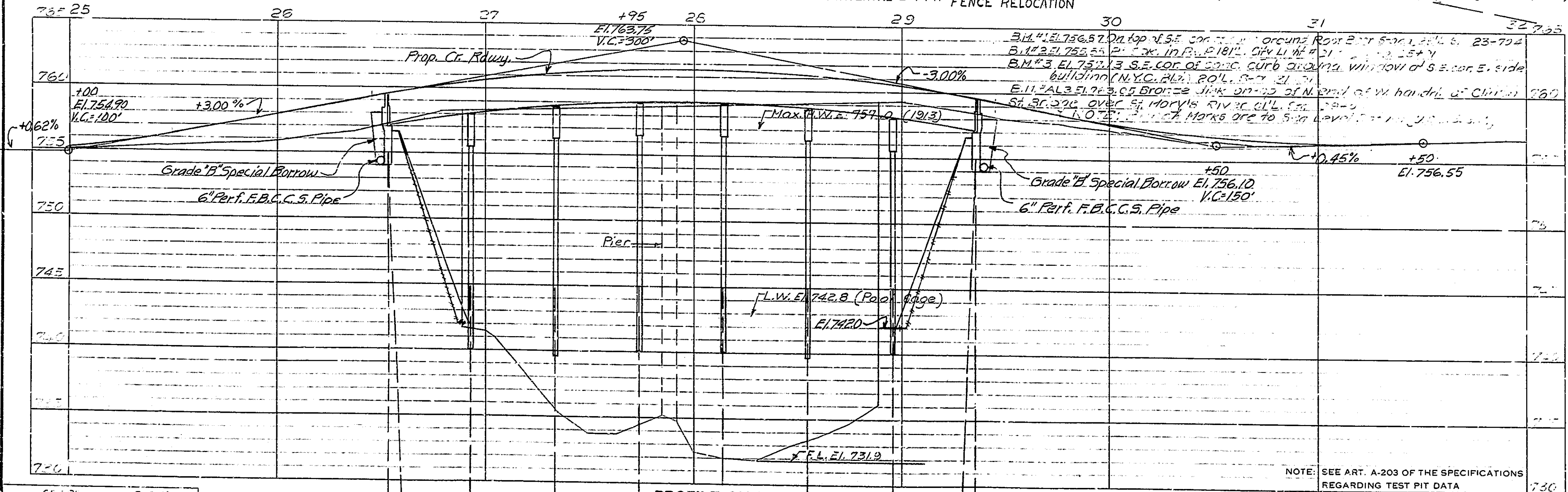
PROFILE OF STREAM
 Scale: Horiz. 1" = 30'-0" Vert. 1" = 5'-0"

EARTHWORK TABULATION

FILL + 20%	770 Cu. Yds.
SURPLUS EXCAVATION	3275 Cu. Yds.
COMMON EXCAVATION	685 Cu. Yds.
WASTE	3190 Cu. Yds.



SITUATION PLAN
 SCALE: 1" = 30'-0" CONTOUR INTERVAL = 1 FT. TEMP. R/W FOR FENCE RELOCATION



PROFILE ON PROPOSED & ROADWAY
 SCALES: HORIZ. 1" = 30'-0" VERT. 1" = 5'-0"

LAYOUT
 CONT. PRESTRESSED R.C. SPREAD BOX BEAM BRIDGE
 75 PANS (37' x 50' x 40' x 6' x 37' x 9") SQUARE 42'-0" RDWY - 5'-0" WALKS
 OVER SAINT MARY'S RIVER ON S.R. 27

INDIANA STATE HIGHWAY COMMISSION

ALLEN COUNTY

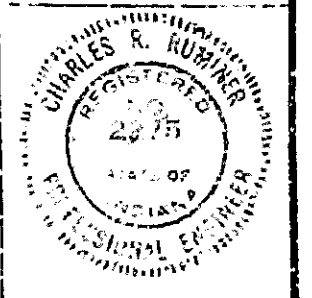
SCALE: AS NOTED

August 18, 1967

RECOMMENDED FOR APPROVAL:

C. R. Rumer
 CONSULTING ENGINEER

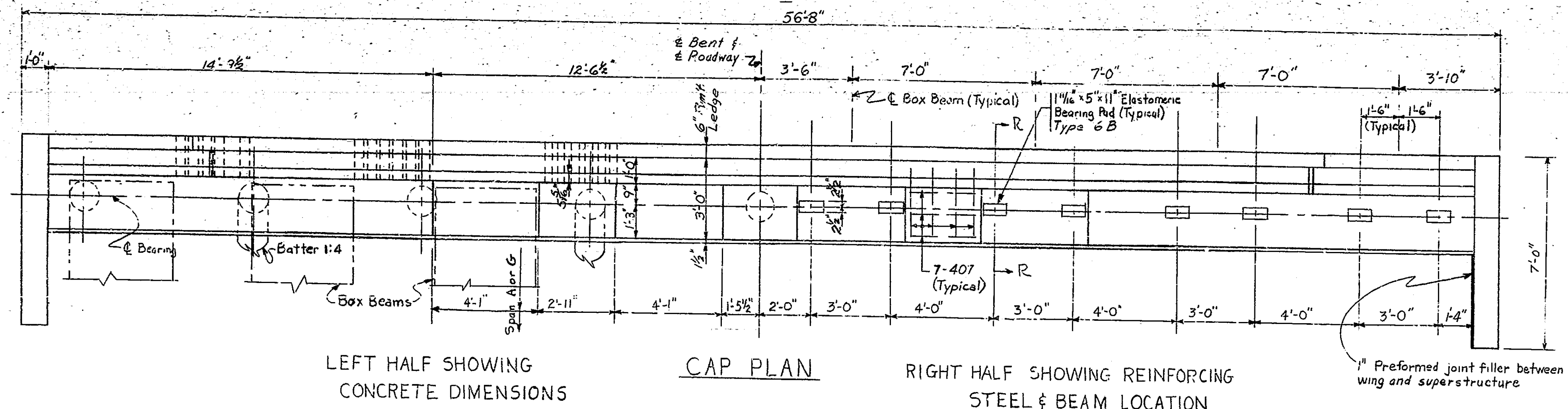
DRAWING: C1 OF 10
 PROJECT: U-414(6) STATION: 27+95
 BRIDGE CONTRACT NO. B-7335
 BRIDGE FILE: 27-414-5-24



DRAWN BY: R. R. ...
 DESIGNED: C. K. U.
 TRACED: C. K. U.

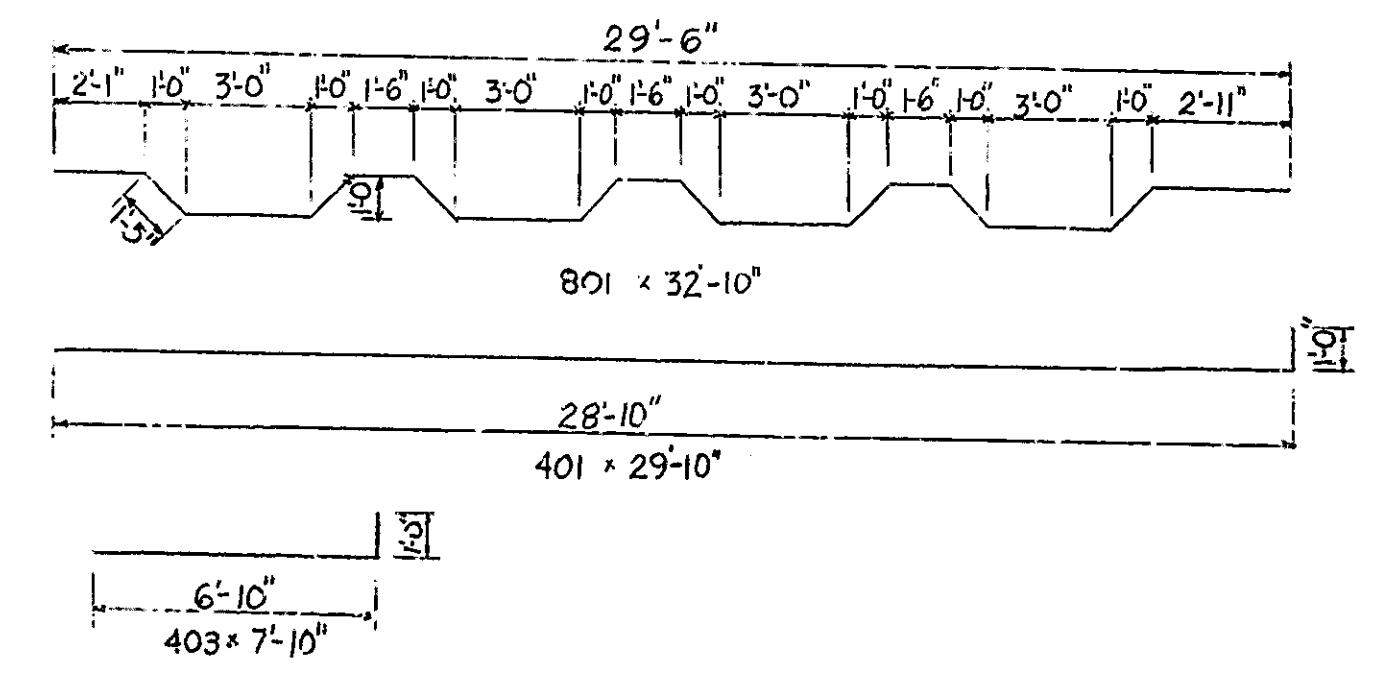
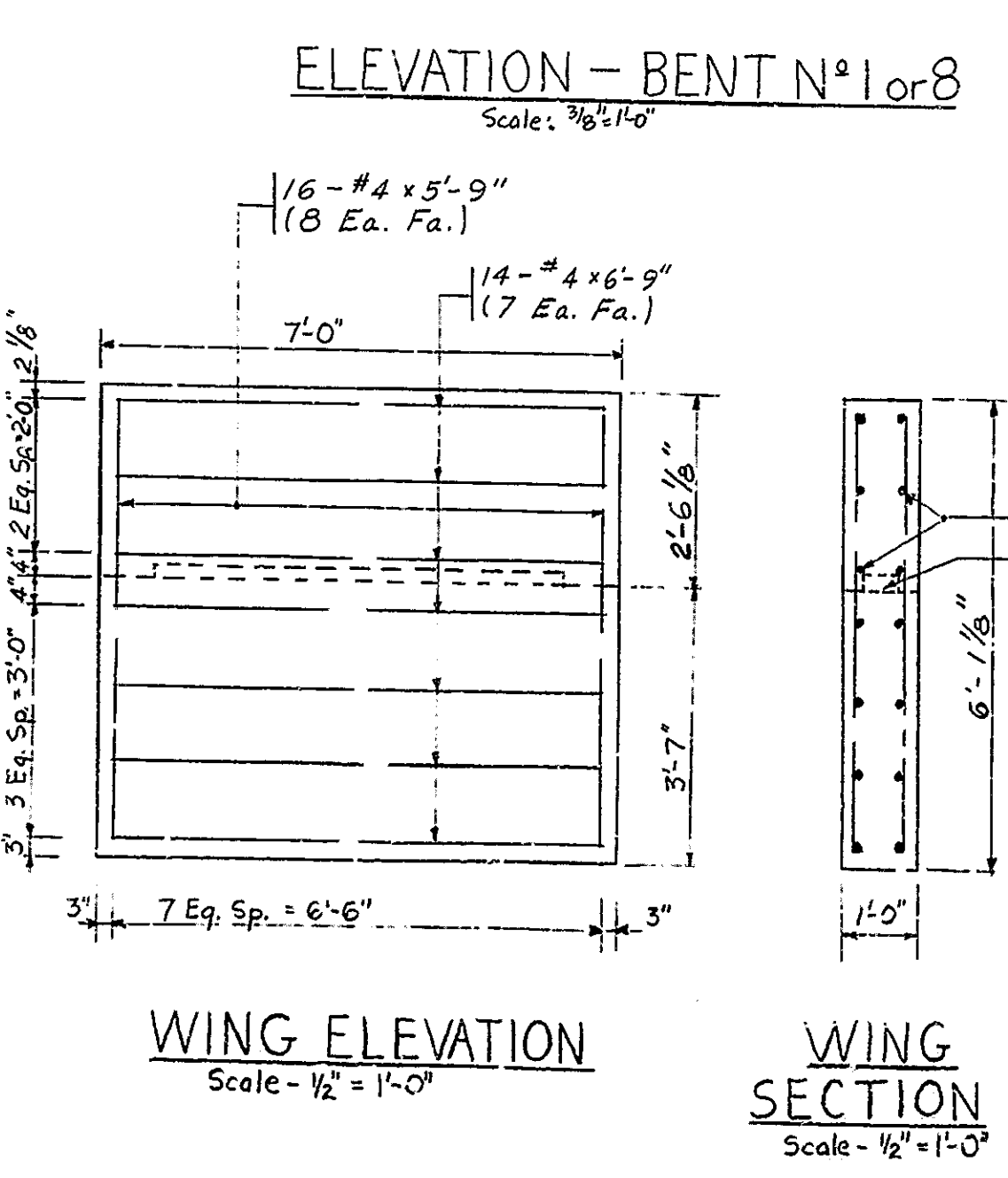
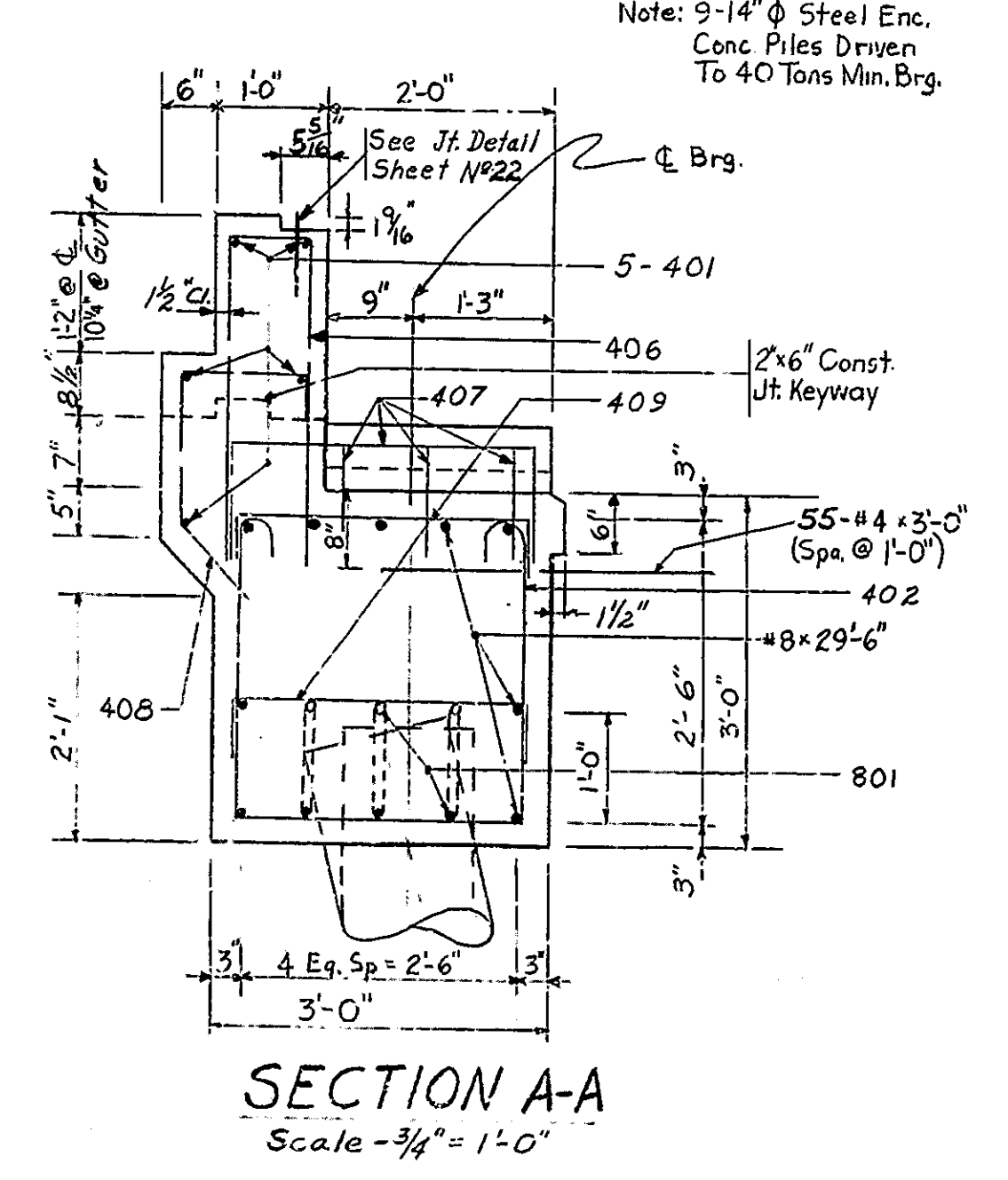
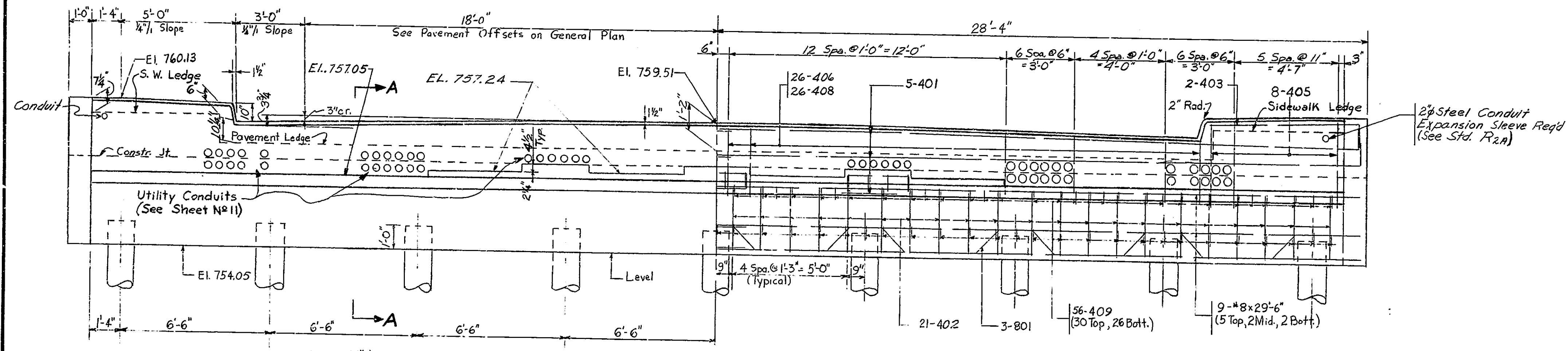
NOTE: FIELD NOTES, BOOK BR. 2020 Pgs. 1-52
 Rev. 7/16/65: Added Sheet Piling, Riprap
 Rev. 10/27/67: ...
 Rev. 3/5/68: ...
 Rev. R/W 6-1-67

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	16	65



**BILL OF MATERIALS
BENT 1 or 8**

REINFORCING STEEL			
SIZE & MARK	NO. BARS	LENGTH	WEIGHT
#8	6	32'-10"	
#8	18	29'-6"	
TOTAL #8			1944*
401	10	29'-10"	
402	42	9'-0"	
403	4	7'-10"	
405	16	7'-2"	
406	52	6'-3"	
407	21	4'-8"	
408	52	4'-0"	
409	112	3'-8"	
#4	28	6'-9"	
#4	32	5'-9"	
#4	55	3'-0"	
TOTAL #4			1,605*
TOTAL STEEL			3,549*
CONCRETE			
CLASS "F"			
Bottom Cap to Const. Jt			23.2 Cu Yd
Const. Jt. to Top Mudwall			5.6 Cu Yd
TOTAL CLASS "F"			28.8 Cu Yd
MISCELLANEOUS			
9-14" x 45'-0" Steel			
Encased Conc. Piles (76) 405 linft			



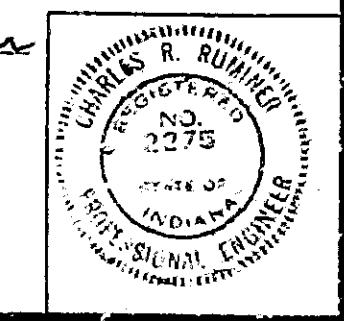
**END BENT DETAILS
INDIANA STATE HIGHWAY COMMISSION**

SCALE: - 3/8" = 1'-0" (Unless Noted) August 18, 1967
RECOMMENDED FOR APPROVAL: *[Signature]*
DRAWING: C3 OF 10
PROJECT: U-414(6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE: 27-MM-5364

DESIGNED: CAW 7-25-66 DKC 10/2/66
DRAWN: CAW 7-25-66 DKC 4/5/67
TRACED: CKD

NOTE: See Br. Std. C, for Reinforcing Bar Notes.
For Sect. R-R see Sheet 19

Rev. 9/20/67 Sect. R-R
Rev.: Conduits, Pmt Ledge 9/12/67



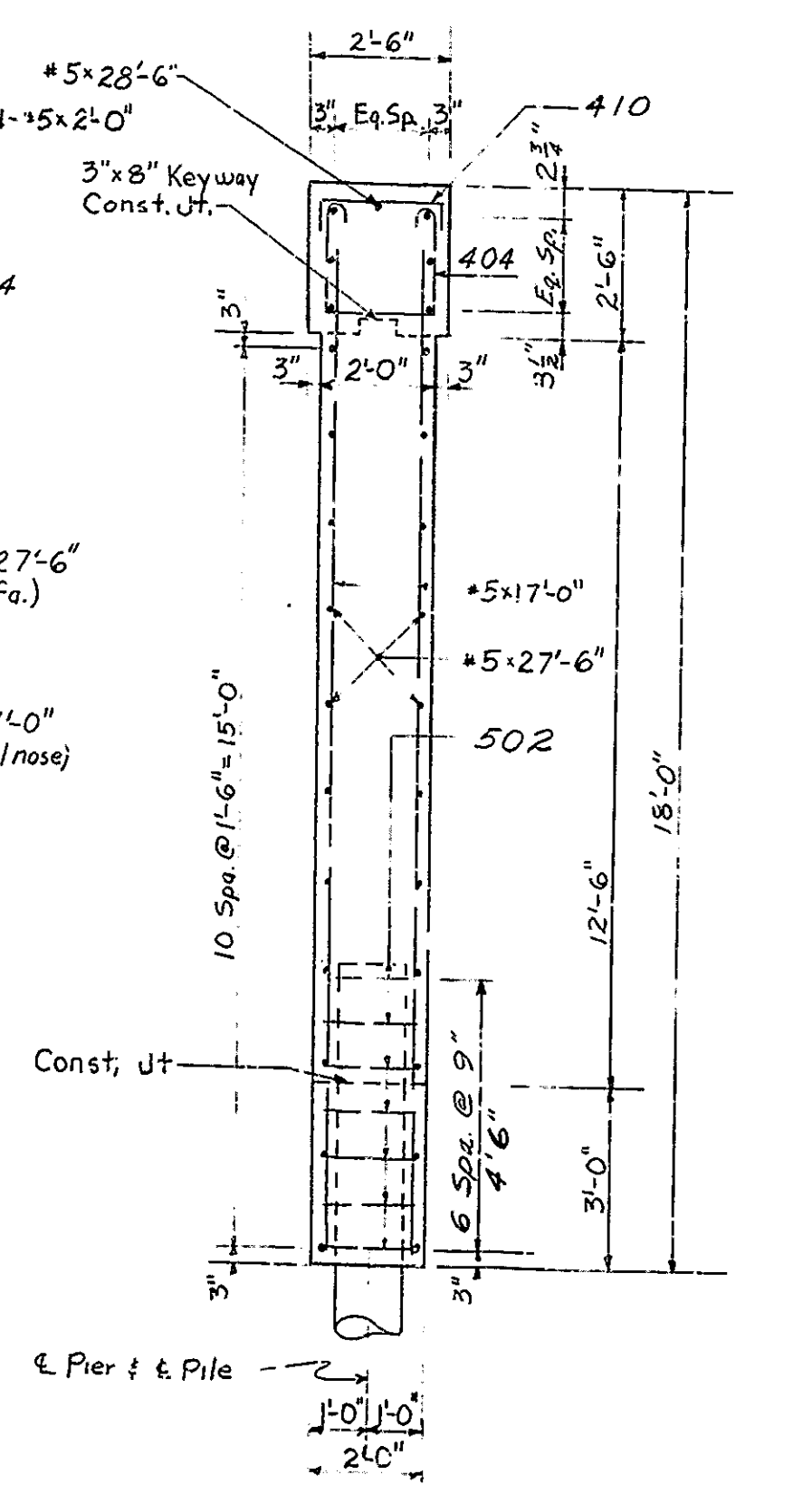
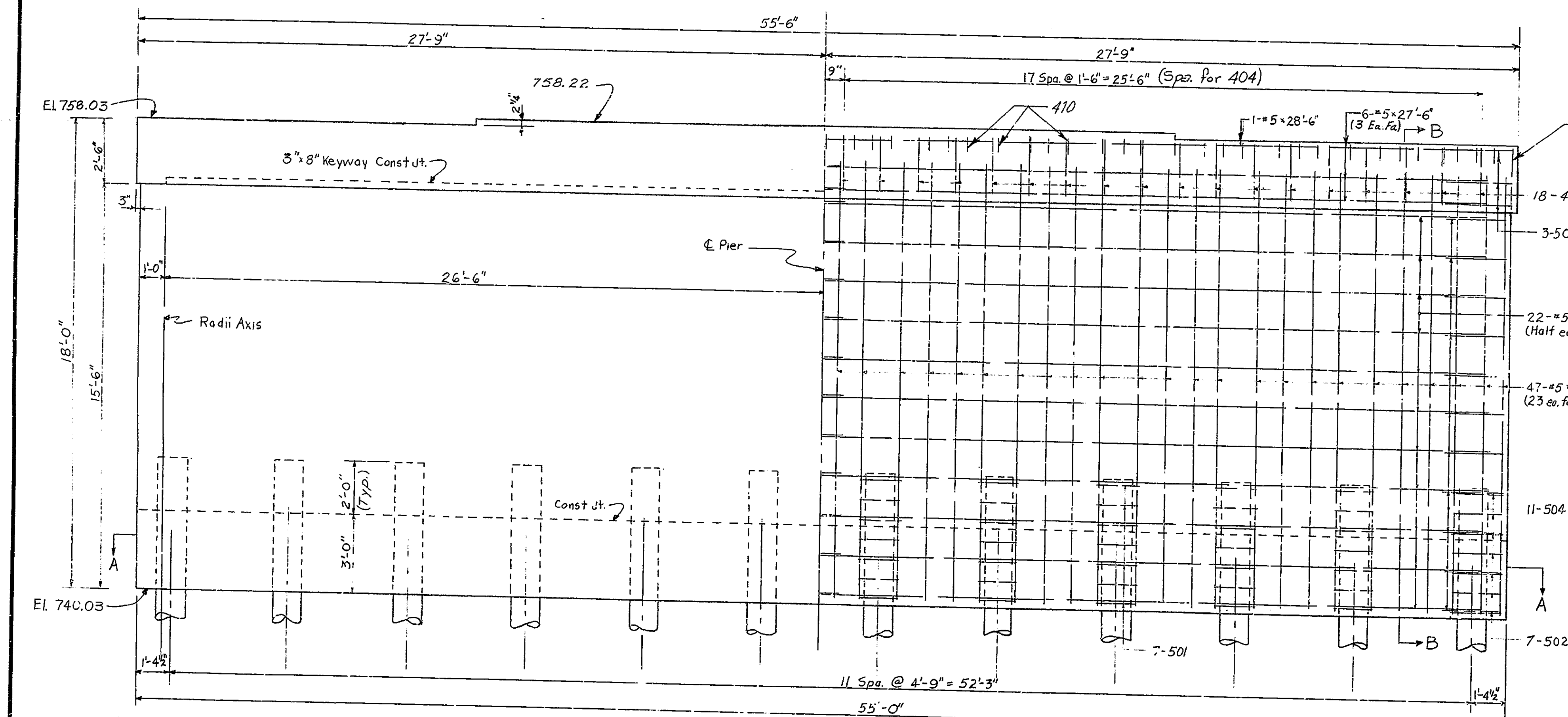
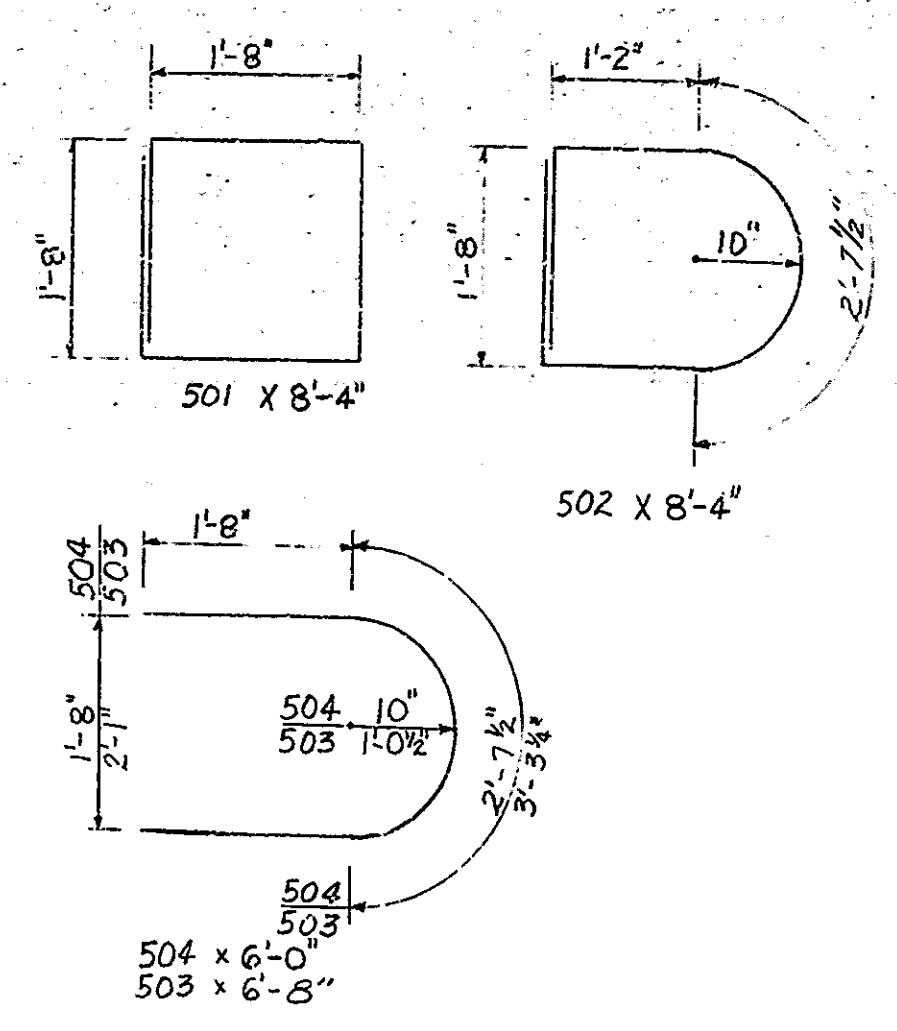
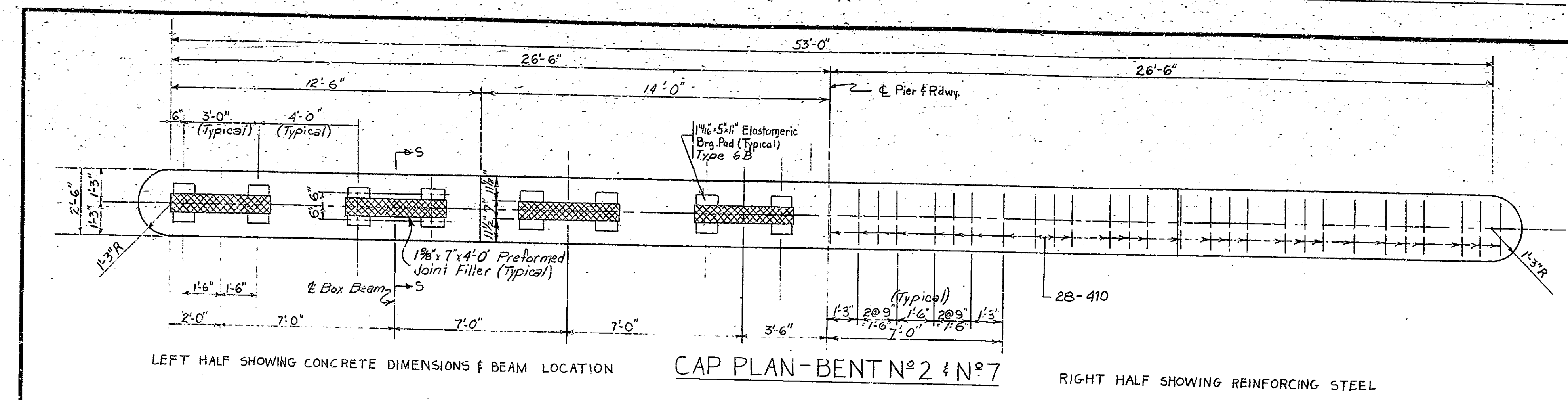
BRIDGES OVER 20' SPAN				
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	TOTAL SHEETS
4	IND.	U-414(6)	1968	65

**BILL OF MATERIALS
BENT N^o 2 or N^o 7**

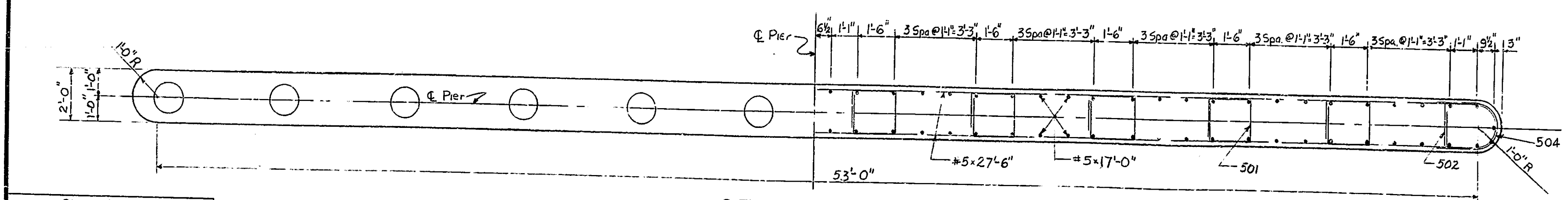
REINFORCING STEEL			
SIZE & MARK	NO. BARS	LENGTH	WEIGHT
501	70	8'-4"	
502	14	8'-4"	
503	6	6'-8"	
504	22	6'-0"	
#5	2	28'-6"	
#5	56	27'-6"	
#5	94	17'-0"	
#5	2	2'-0"	
Total #5			4246#
404	36	7'-4"	
410	55	3'-2"	
Total #4			299#
TOTAL STEEL			4539#

CONCRETE	
CLASS "F" - CAP	12.2 cys
CLASS "D" - STEM	
(ABOVE CONST. JT.)	49.6 cys
CLASS "D" - STEM	
(BELOW CONST. JT.)	10.7 cys
Total Class "D"	60.3 cys

MISCELLANEOUS	
12-14" ϕ Steel Enc. Conc. Piles	420 lin. ft.
Encased Conc. Piles	(7 Ga.)



Note: 12-14" ϕ Steel Enc. Conc. Piles Driven to 40 Ton Min. B₃ Required Each Pier



SECTION B-B

ELEVATION - BENT N^o 2 & N^o 7

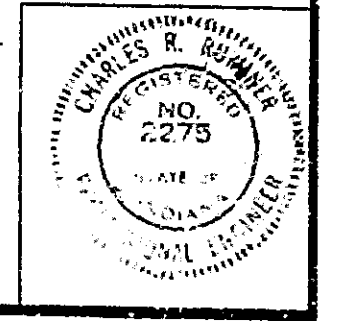
SECTION A-A

**BENT N^o 2 & N^o 7 DETAILS
INDIANA STATE HIGHWAY COMMISSION**

SCALE: - 3/8" = 1'-0"
 August 18, 1967
 RECOMMENDED FOR APPROVAL: *C.R. Rummel*
 DRAWING: C4 of 10
 PROJECT: U-414(6)
 BRIDGE CONTRACT NO. B-7535
 BRIDGE FILE: 27-MM-5364

DESIGNED: CAW 7/26/67 DEC 10/1967
 DRAWN: CAW 8/11/66 C.K.D. DEC 4/1967
 TRACED: C.K.D.

NOTE - See Br. Std. C for Reinforcing Bar Notes
 For part Sect. S-5 See Sheet # 19
 Rev. 9/20/67 Sect. S-5

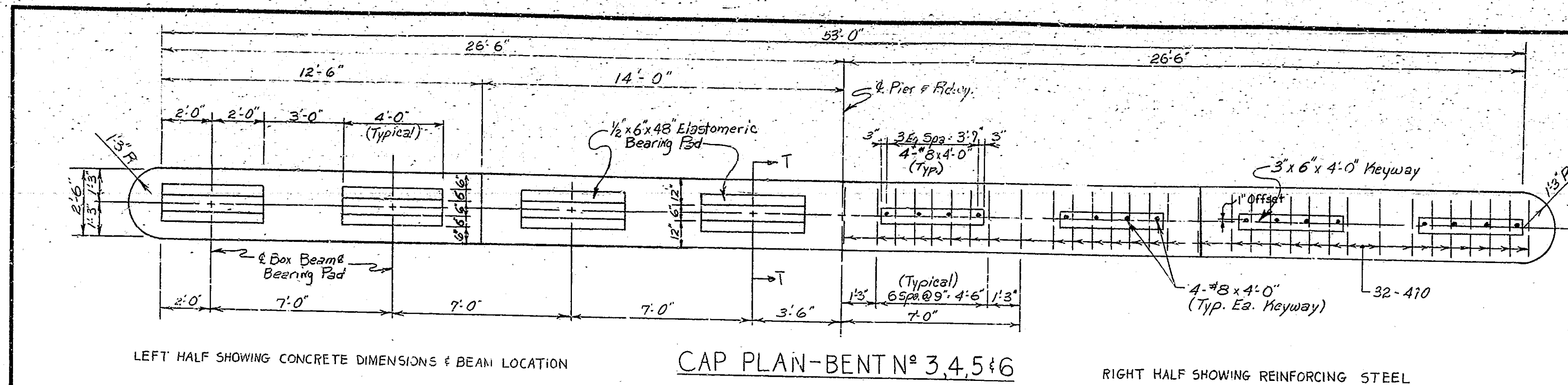


BRIDGES OVER 20' SPAN					
PUB. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	18	65

BILL OF MATERIALS
BENT N^o 3, 4, 5 or 6

REINFORCING STEEL			
SIZE & MARK	NO. BARS	LENGTH (ft)	WEIGHT (LBS)
#8	32	4'-0"	
TOTAL #8			342#
501	80	8'-4"	
502	16	8'-4"	
503	6	6'-8"	
504	24	6'-0"	
#5	2	28'-6"	
#5	60	27'-6"	
#5	94	18'-0"	
#5	2	2'-0"	
TOTAL #5			4576#
404	36	7'-4"	
410	63	3'-2"	
TOTAL #4			310#
TOTAL STEEL			5228#
CONCRETE			
CLASS "F" - CAP			13.0 cys
CLASS "D" - STEM (BETWEEN CONST. JTS)			52.6 cys
CLASS "D" - STEM (BELOW CONST. JT.)			11.6 cys
Total Class "D"			64.2 cys
MISCELLANEOUS			
12-14" ϕ x 35'0" Steel			
Enroased Conc. Piles (7 Ga.)			420 linft

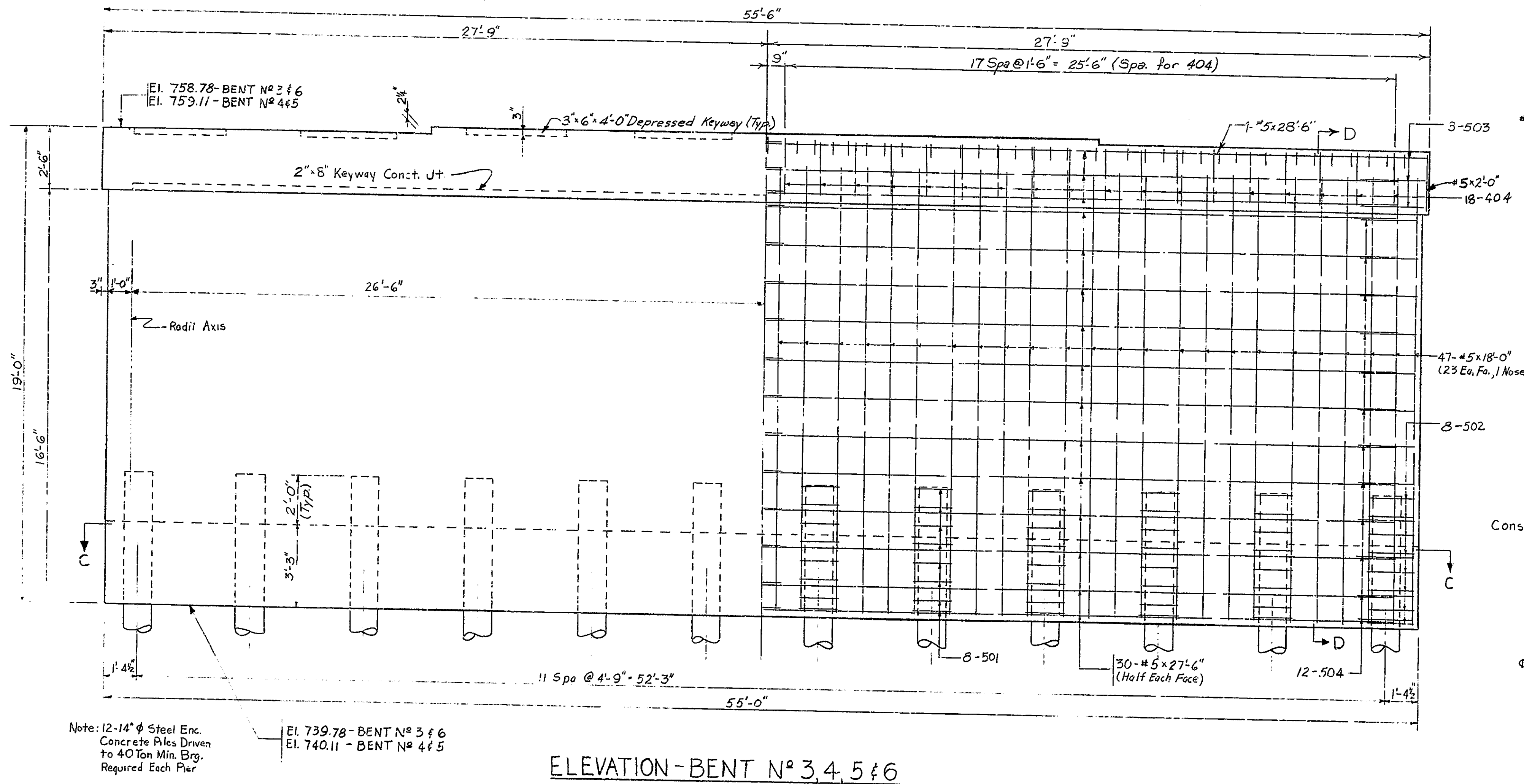
Note: See Drawing C4 for Bending Diagrams.



LEFT HALF SHOWING CONCRETE DIMENSIONS & BEAM LOCATION

CAP PLAN-BENT N° 3, 4, 5 & 6

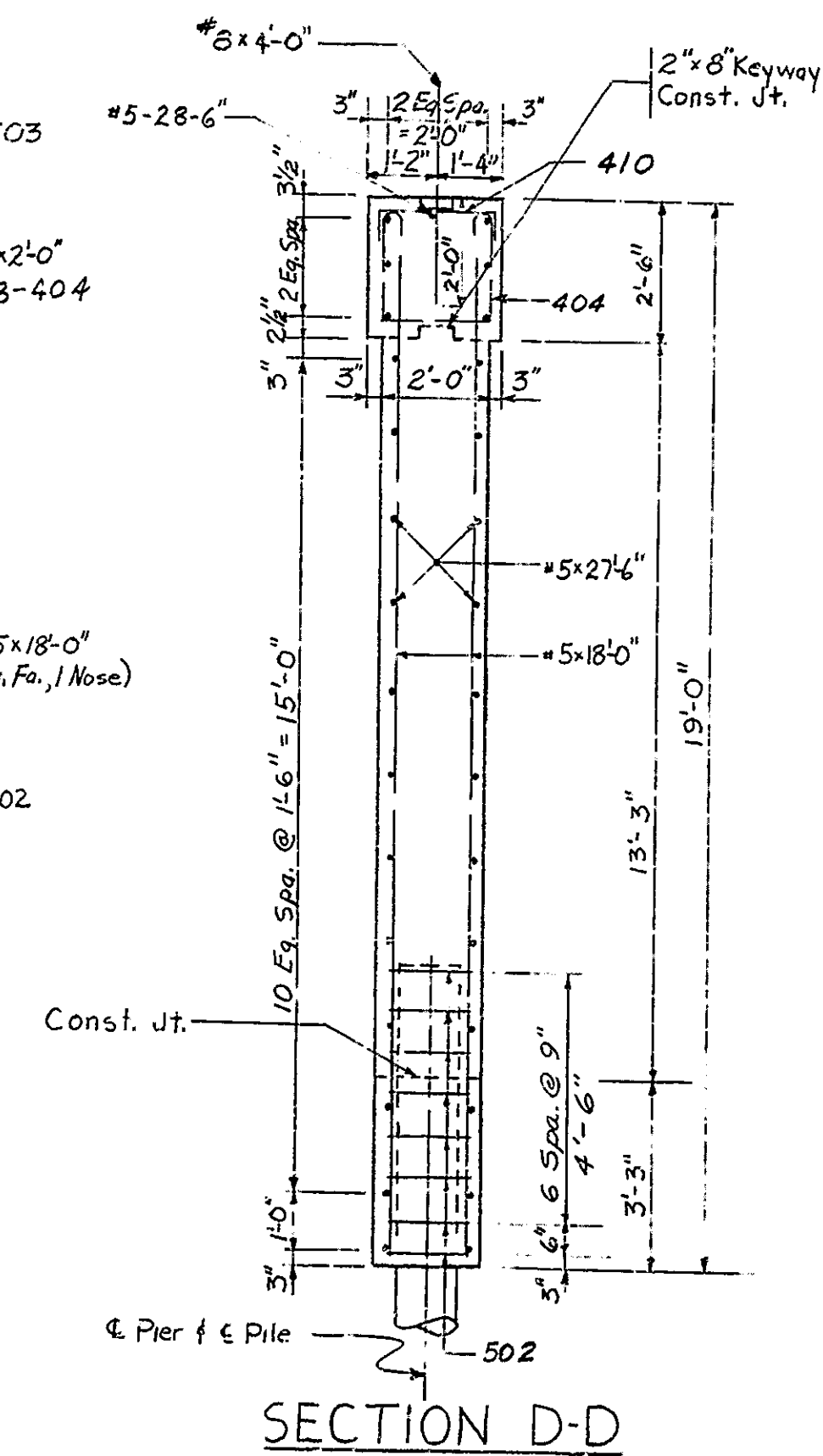
RIGHT HALF SHOWING REINFORCING STEEL



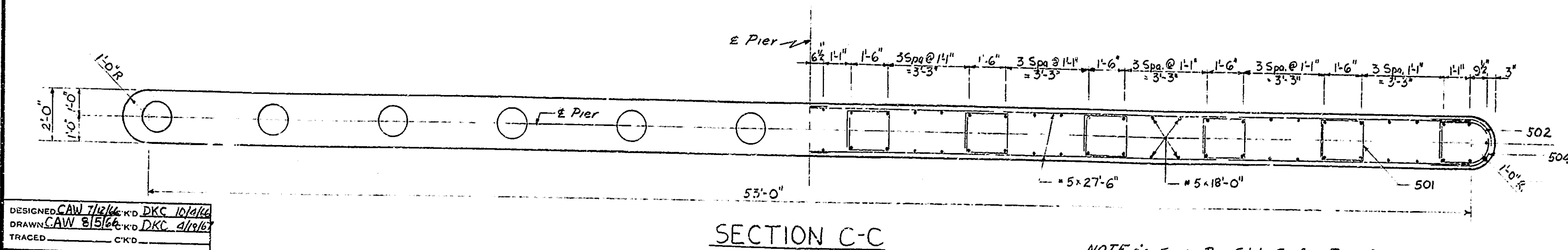
Note: 12-14" ϕ Steel Enc. Concrete Piles Driven to 40 Ton Min. Brg. Required Each Pier

El. 739.78 - BENT N° 3 & 6
El. 740.11 - BENT N° 4 & 5

ELEVATION-BENT N° 3, 4, 5 & 6



SECTION D-D



SECTION C-C

NOTE: See Br. Std. G. for Reinforcing Bar Notes. For Part Sec. F. T. T. see Sheet 20

Rev. 9/16/71 Sect. T-T

BENT N° 3, 4, 5 & 6 DETAILS
INDIANA STATE HIGHWAY COMMISSION

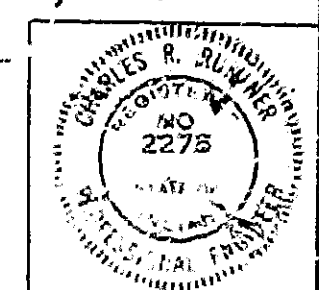
SCALE: - 3/8" = 1'-0"

August 18, 1967

RECOMMENDED FOR APPROVAL: _____

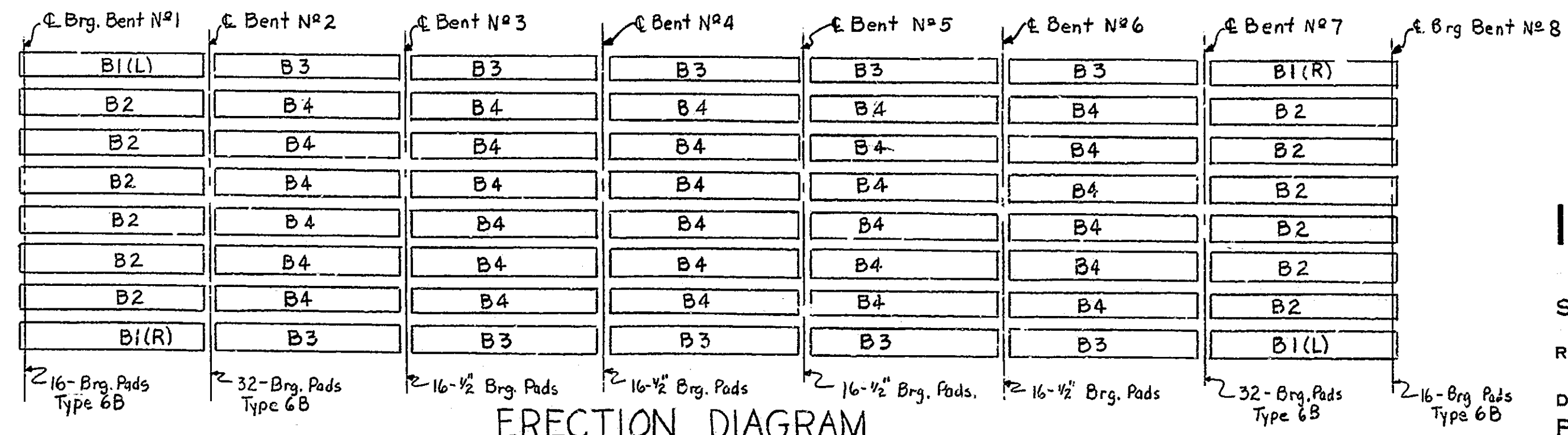
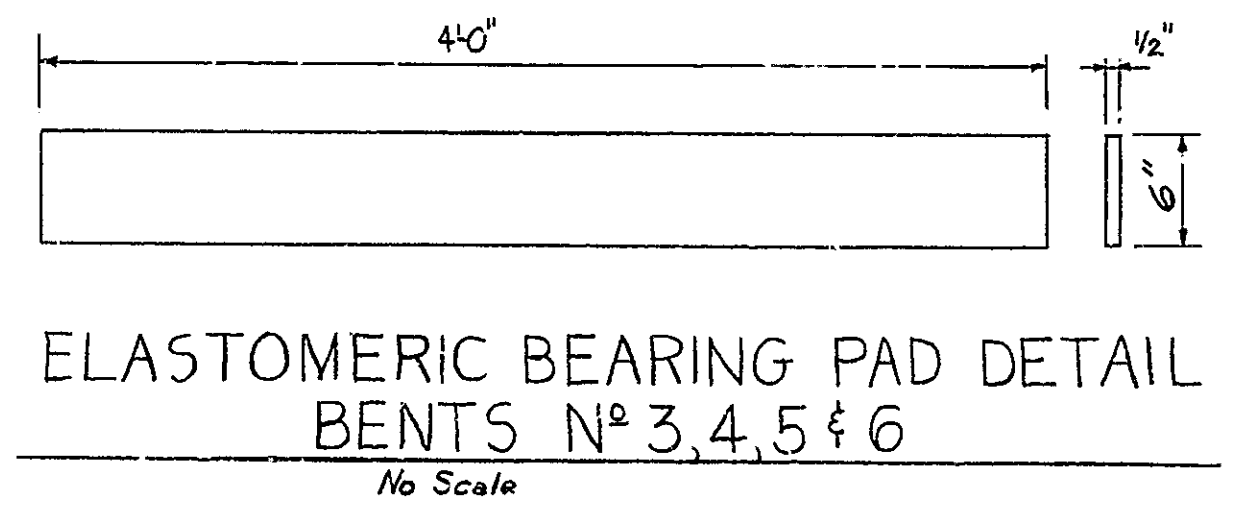
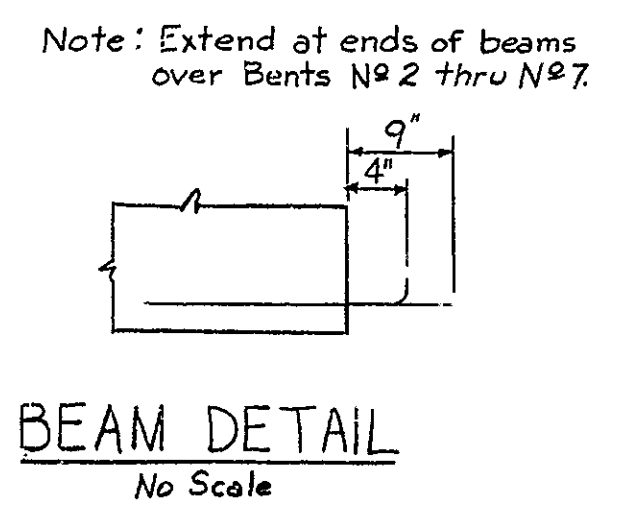
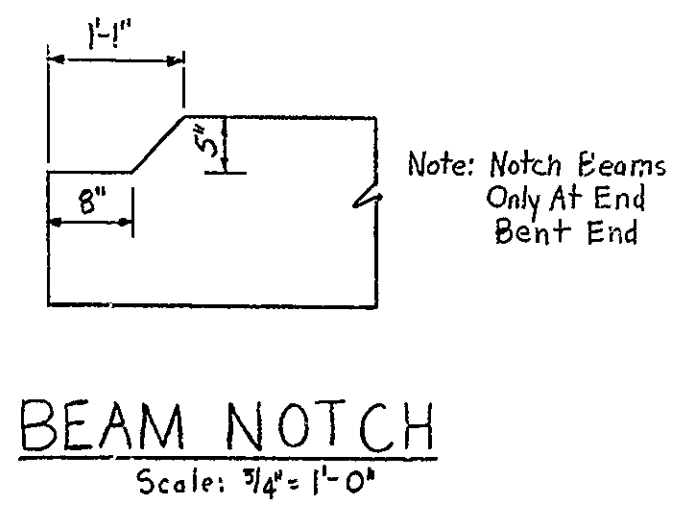
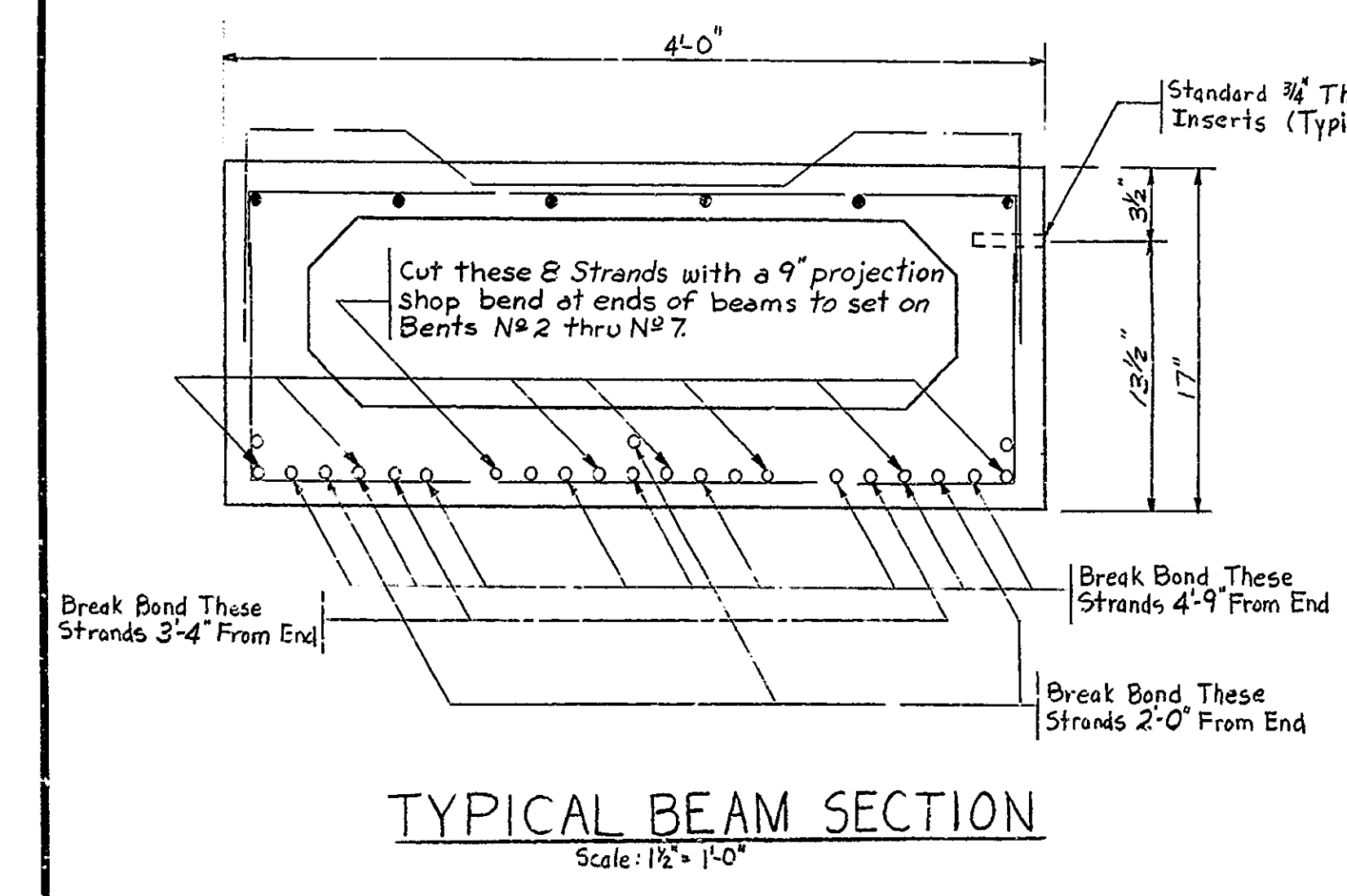
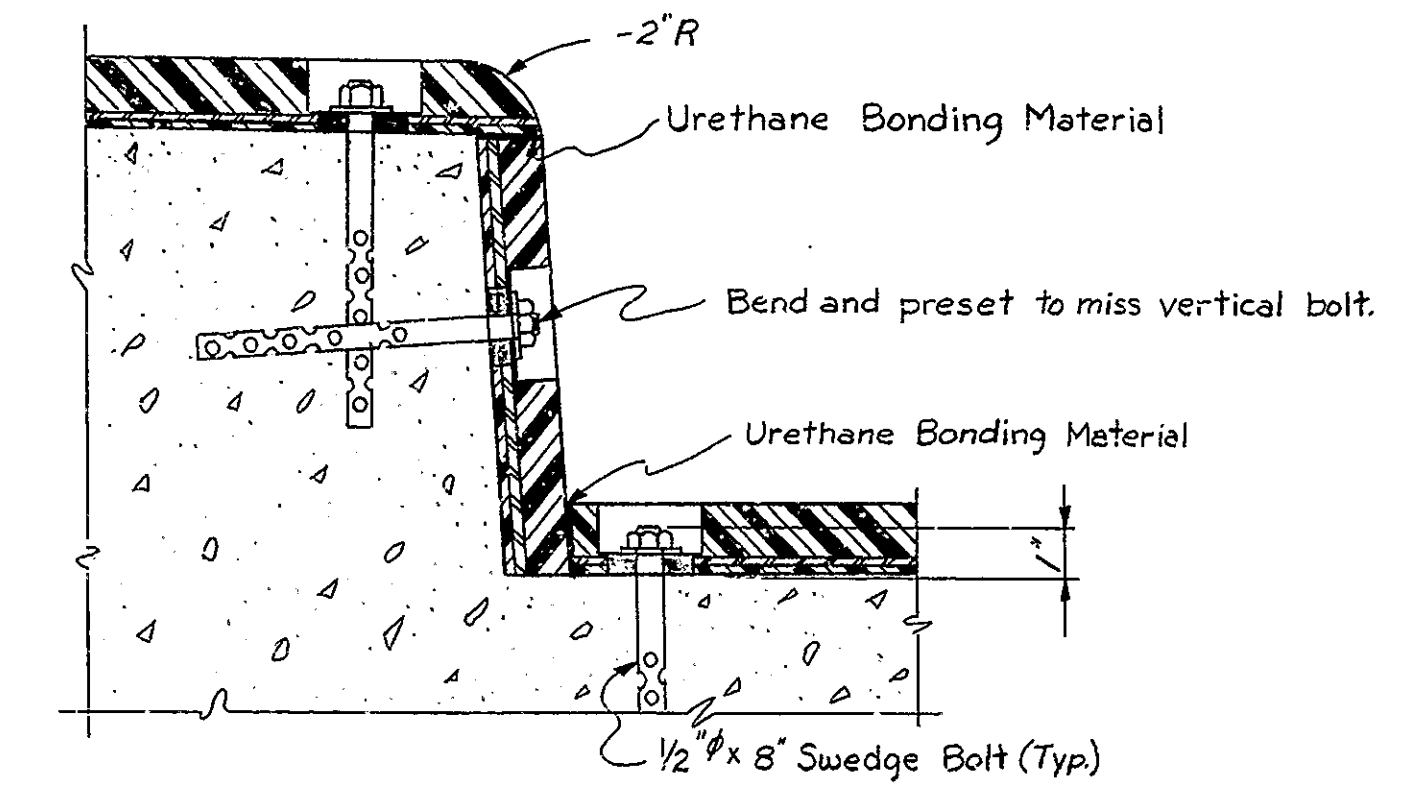
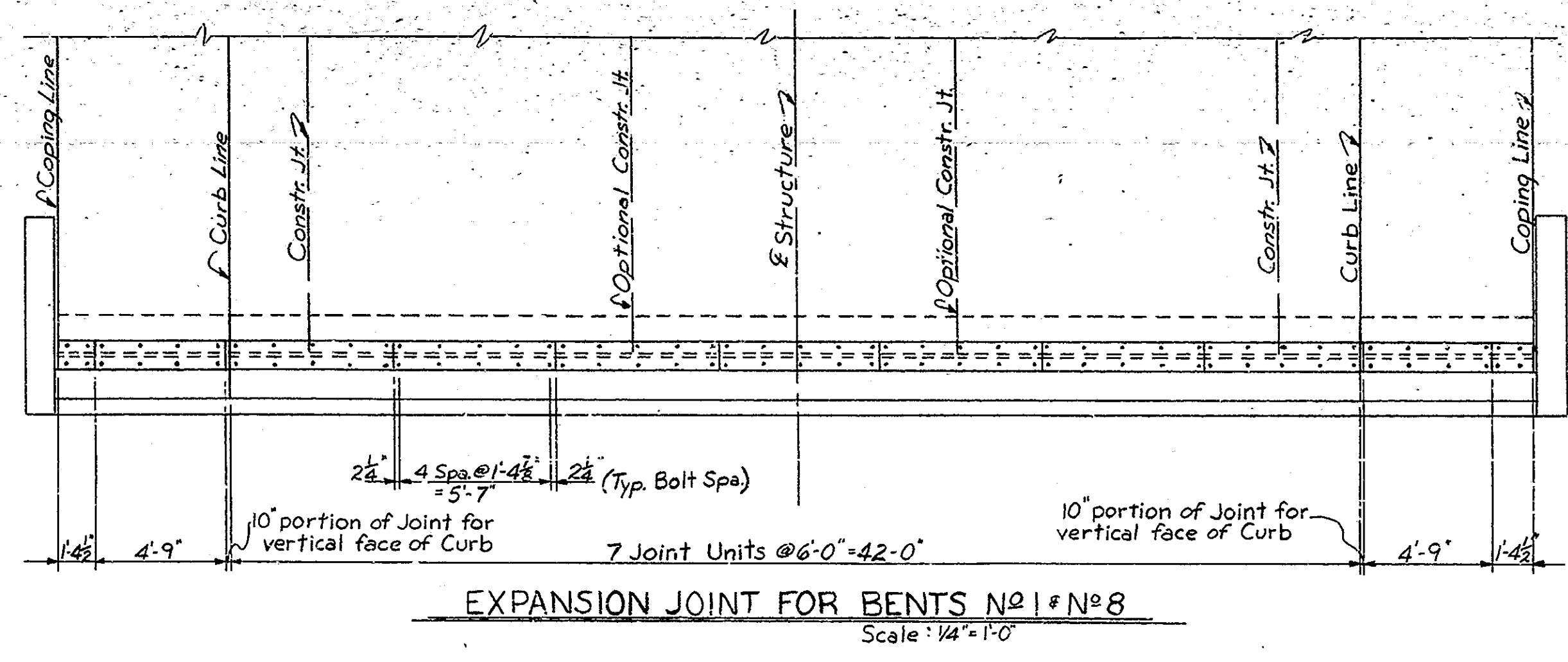
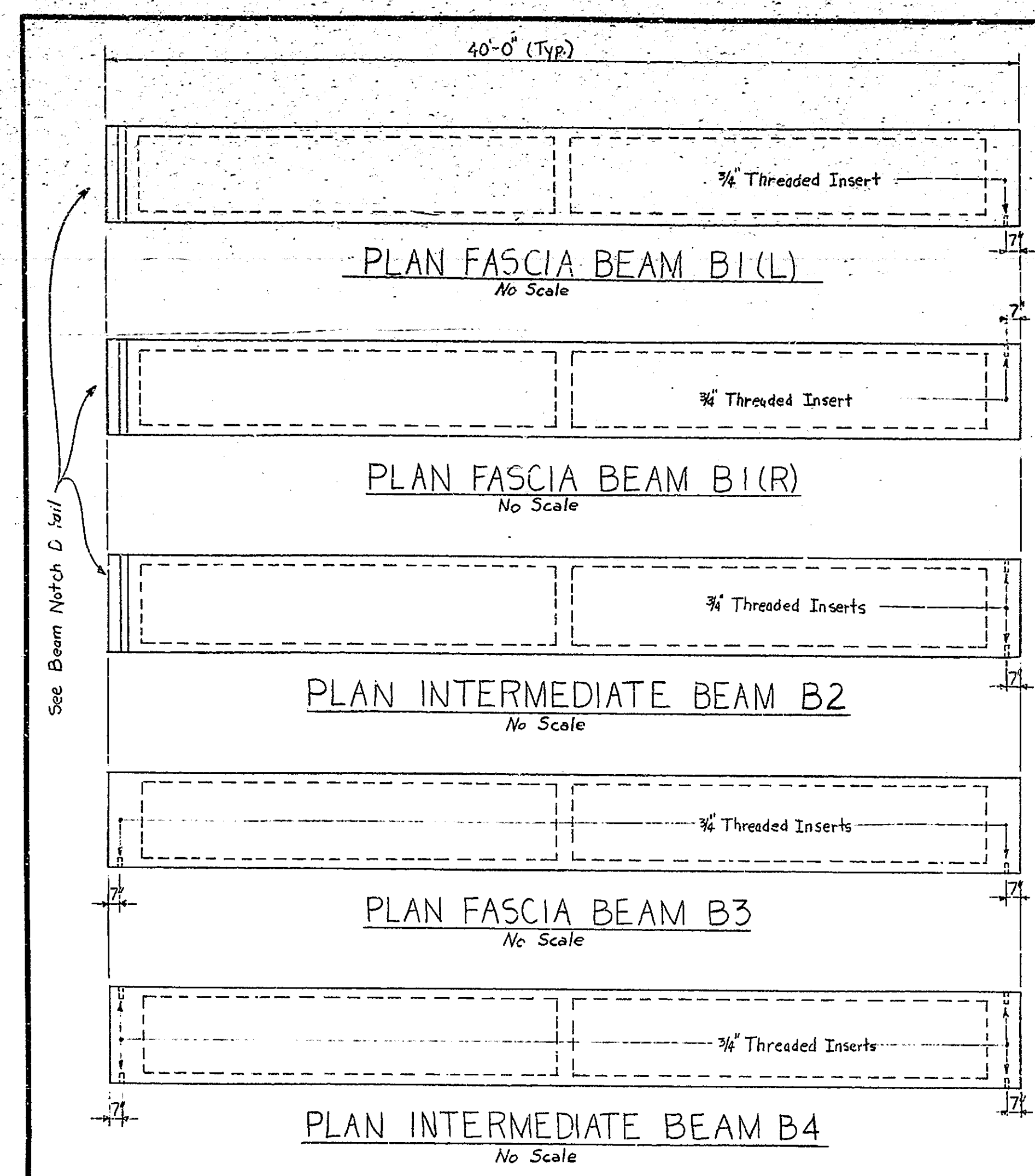
ENGINEER OF BRIDGE DESIGN

DRAWING: C5 OF 10
PROJECT: U-414(6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE: 27-MM-5364



DESIGNED: CAW 7/16/66 DKC 10/16/66
DRAWN: CAW 8/5/66 DKC 4/16/67
TRACED: CKD

BRIDGES OVER 20' SPAN						
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	
4	IND.	U-414(6)	1968	2	65	



Swedge Bolts may be preset or holes bored and bolts grouted. Cost of Swedge Bolts to be included in cost per linear foot of Expansion Joint.

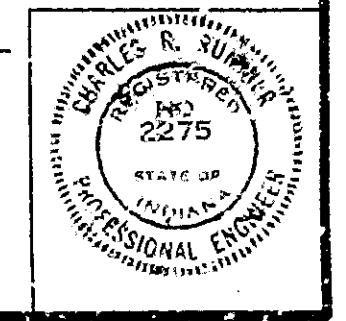
NOTES: See Br. Std. PB11 for Elastomeric Br. Pad Type 6B. See Br. Std. PB9B for beam information not shown. See Br. Std. PB6 for Design Data and Notes.

DETAILS
INDIANA STATE HIGHWAY COMMISSION

SCALE: AS NOTED August 18, 1967

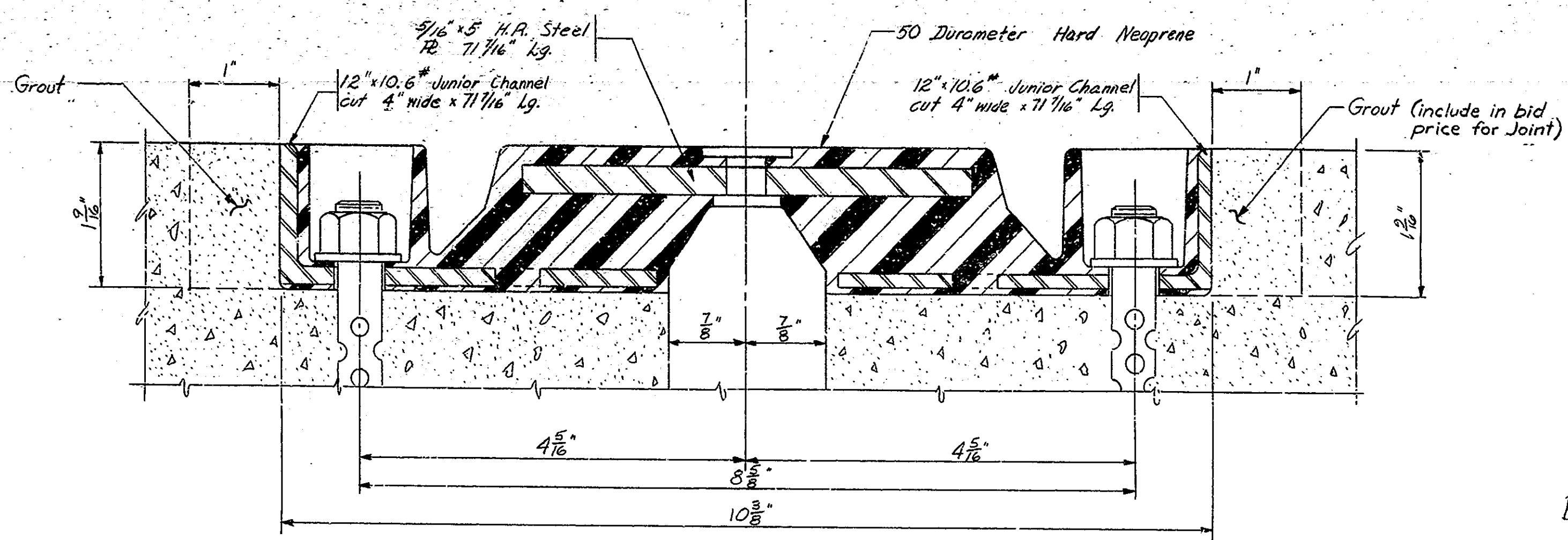
RECOMMENDED FOR APPROVAL: *C. R. Rimmer*

DRAWING: C8 OF 10
PROJECT: U-414(6)
BRIDGE CONTRACT NO. B-7535
BRIDGE FILE: 27-MM-5364

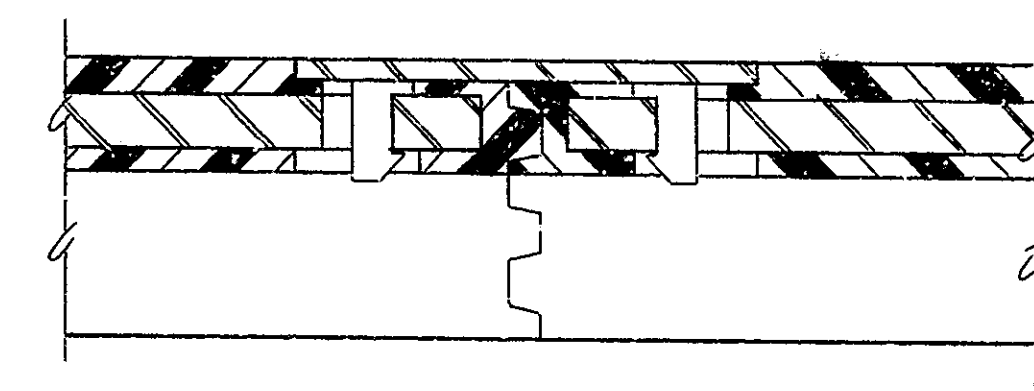


DESIGNED: CAV/5/16/68 CKD DKC 9/20/68
DRAWN: CAV/5/16/68 CKD DKC 5/25/67
TRACED: CKD

BRIDGES OVER 20' SPAN					
PUR. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	U-414(6)	1968	22	85

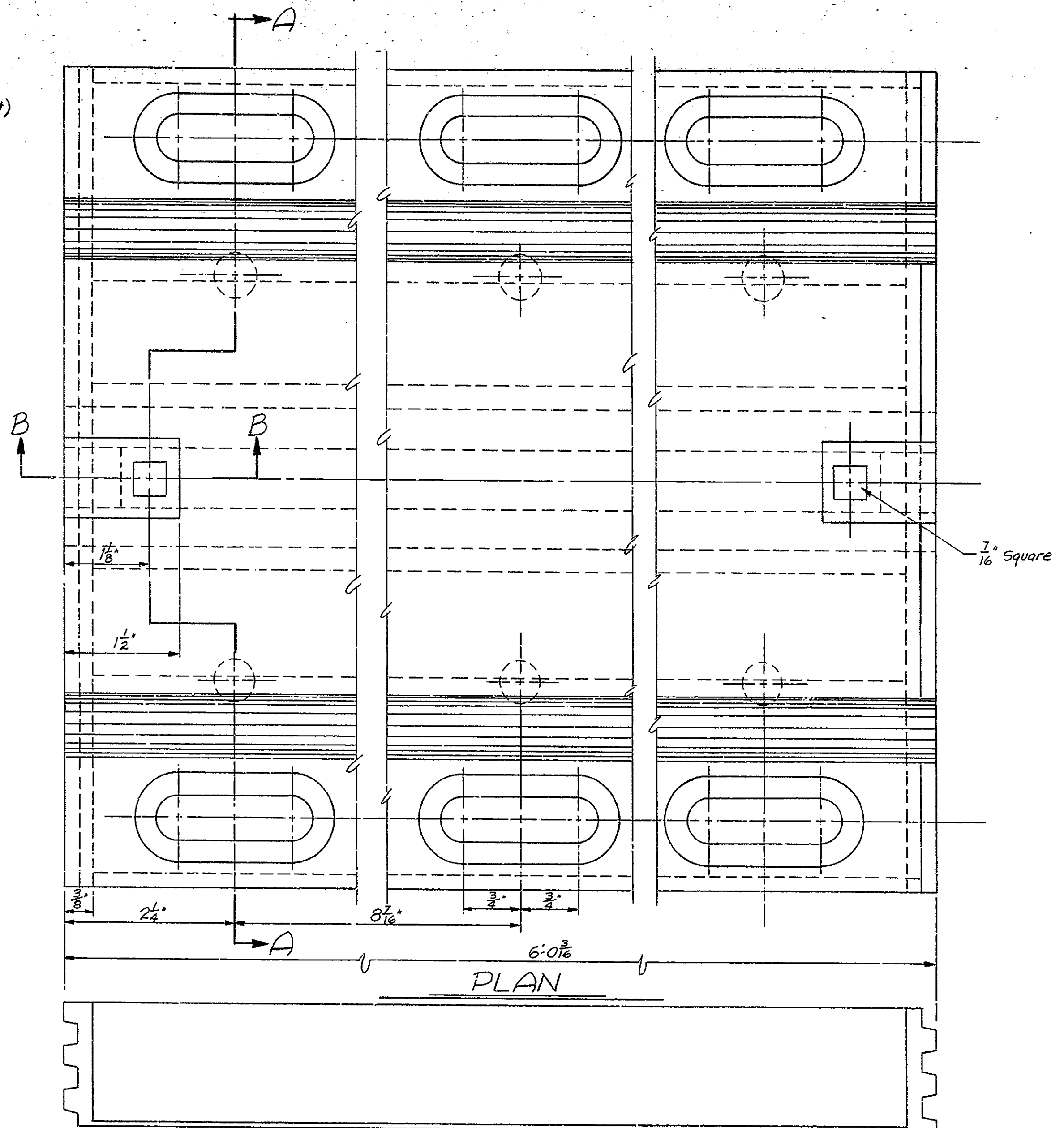


SECTION A-A



SECTION B-B
End Clamping Method

NOTE:-
Shop drawings to be furnished by contractor.



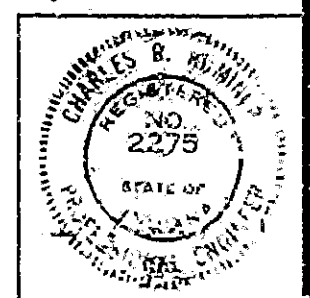
ELEVATION

EXPANSION JOINT TYPE "A"
INDIANA STATE HIGHWAY COMMISSION

SCALE: - 1" = 1" August 18, 1967

RECOMMENDED FOR APPROVAL: *C.R. Rimmer*
ENGINEER OF BRIDGE DESIGN

DRAWING: C9 OF 10
PROJECT: U-414(6)
BRIDGE CONTRACT NO. B-753 5
BRIDGE FILE: 27-MM-5364



DESIGNED: C.K.D.
DRAWN: J.A. 4/14/67 C.K.D.
TRACED: Z.K.C. 5/23/67 C.K.D. W.A.W. 5/25/67

Rev: 9-12-67 Matt's & S.P. Note

ITEM	STRUCTURE QUANTITIES																												
	CONCRETE			RAILING		REINF.		STRUCT.		BRONZE		ANCHOR		ANCHOR		PILES		RAILING		EXP. J.		2" Steel Pipe		2" Steel Pipe		Anchor Assemblies			
	CLASS F	CLASS D	CLASS E	CLASS F	CLASS F	STEEL	STEEL	STEEL	BEARING	PLATES	RODS	RODS	UNTR.	TRE.	ENCASED	STEEL	CAST	TYPE 6	ARMOR	ARMOR	TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B	
	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	STEEL	STEEL	STEEL	LBS.	EACH	EACH	EACH	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
Bent No 1	28.8					3,549									9,405														
Bent No 2	13.2	60.3				4,539									12,420														
Bent No 3	13.0	64.2				5,228									12,420														
Bent No 4	13.0	64.2				5,228									12,420														
Bent No 5	13.0	64.2				5,228									12,420														
Bent No 6	13.0	64.2				5,228									12,420														
Bent No 7	13.2	60.3				4,539									12,420														
Bent No 8	28.8					3,549									9,405														
Superstructure	462.1					117,208											24												
Retaining Wall						921																							
TOTALS	598.1	377.4				159,902									3330		24												

BRIDGES OVER 20' SPAN					
STATE	PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	
IND.	U-414(6)	1968	24	65	

SUMMARY			QUANTITIES		
DESCRIPTION	UNIT	BRIDGE FILE	TOTALS		
1 Class F Concrete	Cu. Yds.	598.1			
2 Class D Concrete	Cu. Yds.	377.4			
3 Class E Concrete above Footings	Cu. Yds.				
4 Class E Concrete in Footings	Cu. Yds.				
5 Railing Concrete	Cu. Yds.				
6 Reinforcing Steel	Lbs.	159,902			
7 Structural Steel	Lump Sum				
8 Anchor Plates (AK-AP)	Each				
9 Cast Iron	Lbs.	3,149			
10 Railing (Type 6 or D)	Lin. Ft.	544			
11 Untreated Timber Piles Furnished	Lin. Ft.				
12 Untreated Timber Piles Driven	Lin. Ft.				
13 Treated Timber Piles Furnished	Lin. Ft.				
14 Treated Timber Piles Driven	Lin. Ft.				
15 Steel Pile Shells Furnished (Driven)	Lin. Ft.	3,330			
16 Steel Pile Shells Driven	Lin. Ft.				
17 Steel H Piles Furnished	Lin. Ft.				
18 Steel H Piles Driven	Lin. Ft.				
19 Furnishing Equipment for Driving Piles	Lump Sum				
20 Wet Excavation	Cu. Yds.				
21 Foundation Excavation Unclassified	Cu. Yds.				
22 Waterway Excavation	Cu. Yds.	2660			
23 Common Excavation	Cu. Yds.	685			
24 Special Borrow	Cu. Yds.	100			
25 Grade B Special Borrow	Cu. Yds.	605			
26 Sodding	Sq. Yds.	1205			
27 Mulched Seeding	Sq. Yds.	300			
28 Reinforced Cement Concrete Pavement (9")	Sq. Yds.	2230			
29 Compacted Aggregate Base (Type P)	Tons	286			
30 Compacted Aggregate Shoulder	Tons				
31 Subbase	Cu. Yds.	425			
32 Removal Present Structure	Lump Sum				
33 Temporary Bridge and Approaches	Lump Sum				
34 Typical Sign Standards	Each	14			
35 Standard Barricades (Type A)	Each	1			
36 Standard Barricades (Type B)	Each	5			
37 Standard Signs	Each				
38 R/W Markers	Each	19			
39 Slopewall	Sq. Yds.				
40 Riprap	Sq. Yds.	1740			
41 1/4" Expansion Joint Armor (Type)	Lin. Ft.				
42 1/4" Expansion Joint Armor (Type)	Lin. Ft.				
43 1/4" Expansion Joint (Type)	Lin. Ft.				
44 1/4" Expansion Joint (Type)	Lin. Ft.				
45 1/4" Expansion Joint (Type)	Lin. Ft.				
46 Straight Beam Guard Rail	Lin. Ft.				
47 Class D Concrete in Structures	Cu. Yds.	18.6			
48 Structural Members	Lump Sum				
49 Anchor Rods (AK-AR-21)	Each	24			
50 Expansion Joint, Type "A"	Lin. Ft.	112			
51 2" Steel Conduit	Lin. Ft.	592			
52 2" Aluminum Pipe Railing	Lin. Ft.	40			
53 Bituminous Surface	Tons	47			
54 Bituminous Base	Tons	132			
55 Bituminous Material Applied, Prime	Tons	1.0			
56 Bituminous Material Applied, Tack	Tons	0.1			
57 Aggregate for Substrate Drains	Cu. Yds.	53			
58 6" Private Drive Pavement	Sq. Yds.	119			
59 Cement Concrete Sidewalk	Sq. Yds.	200			
60 Integral Concrete Curb, Type "C"	Lin. Ft.	613			
61 Special Integral Concrete Curb	Lin. Ft.	82			
62 Concrete Curb	Lin. Ft.	283			
63 Manhole, Type B-4	Each	2			
64 Inlet, Type E-7	Each	3			
65 Inlet, Type K-10	Each	4			
66 Inlet, Type A-13	Each	2			
67 Catch Basin, Type E-7	Each	1			
68 Catch Basin, Type K-10	Each	5			
69 12" Group 1" Pipe	Lin. Ft.	460			
70 12" Group 1" Pipe	Lin. Ft.	180			
71 6" Group "K" Pipe (86a F.B.C.P.C.S.)	Lin. Ft.	856			
72 6" Perforated (F.B.C.P.C.S. Pipe)	Lin. Ft.	140			
73 Castings Adjusted to grade	Each	2			
74 Reconstructed Manhole	Each	1			
75					
76 SUMMARY CONTINUED ON SHEET No 25					
77					

APPROACH STRUCTURES						
STRUCT. NO.	LOCATION	DESCRIPTION	CL. CONC.	REINF. STEEL	CAST IRON	REMARKS
		SIZE KIND	IN STRUC.	LBS.	LBS.	
1	16' Lt. Sta. 24+51	12" Inlet Type R-13				Connect to Str. No 2
2	18' Rt. Sta. 24+53	12" Group "L" Pipe	36			Connect to Str. No 7
3	24' Rt. Sta. 24+53	12" Group "L" Pipe	120			Connect to Str. No 2
4	17' Lt. Sta. 24+51 to Sta. 26+45	6" Group K Pipe (106a F.B.C.P.C.S.)	208			Connect to Str. No 1; Length includes 4' for 90° Elbow
5	17' Rt. Sta. 24+53 to Sta. 26+51	6" Group K Pipe (106a F.B.C.P.C.S.)	208			Connect to Str. No 2; Length includes 4' for 90° Elbow
6	24' Lt. Sta. 25+32	12" Inlet Type R-13				Connect to Str. No 7
7	18' Rt. Sta. 25+75	12" Group "L" Pipe	60			Connect to Str. No 7
8	36' Rt. Sta. 25+86	12" Group "P" Pipe	26			Connect to Str. No 8
9	Sta. 26+50	12" Group "L" Pipe	100	0.3		To Drain Grade "B" Special Borrow
9A	Sta. 29+40	15" C.S. Pipe (16 Ga.)	70	0.4		Connect to Pres. Pipe, 1' Pvt. Entr. Haul. Regd.
10	20' Lt. Sta. 29+60	6" Perforated F.B.C.P.C.S. Pipe	70			To Drain Grade "B" Special Borrow
11	20' Lt. Sta. 29+60	12" Group "L" Pipe	42			Connect to Str. No 12
12	20' Rt. Sta. 29+60	12" Group "P" Pipe	52			Length includes 4' for 45° Elbow
13	23' Lt. Sta. 29+40 to Sta. 31+50	6" Group K Pipe (106a F.B.C.P.C.S.)	220			Connect to Str. No 21; Length includes 4' for Tee
14	23' Rt. Sta. 29+40 to Sta. 31+50	6" Group K Pipe (106a F.B.C.P.C.S.)	220			Connect to Str. No 22; Length includes 4' for Tee
15	36' Lt. Sta. 30+34	12" Inlet Type E-7				Connect to Str. No 16
16	45' Lt. Sta. 30+58	12" Group "P" Pipe	24			Connect to Existing Manhole
17	48' Rt. Sta. 30+45	12" Group "L" Pipe	18			Connect to Str. No 18
18	45' Rt. Sta. 30+70	12" Manhole Type B-4				Connect to Str. No 18
19	50' Rt. Sta. 30+80	12" Inlet Type K-10				Connect to Str. No 18
20	40' Lt. Sta. 30+85	12" Group "L" Pipe	12			Connect to Str. No 18
21	18' Lt. Sta. 31+30	12" Inlet Type E-7				Connect to Existing Manhole
22	18' Rt. Sta. 31+30	12" Group "P" Pipe	40			Connect to Existing Manhole; Length includes 4' for 60° Elbow
23	36' Lt. Sta. 30+20	12" Group "P" Pipe	16			Connect to Str. No 21
TOTALS			18.6	921		Total of Reinforcing Steel carried to "Structure Quantities"

BARRICADES, BARRIERS, TRAFFIC SIGNS AND LIGHTS						
ITEM	UNIT	QUANTITY	ASSEMBLY	BRIDGE FILE	TOTALS	
TYPICAL SIGN	Each	14	Signs XW-1 Signs XW-2 Signs XW-3 Signs XM-2 Signs W-4B, W-35A(20MPH) Signs XW-14	6 2 2 6		
STANDARD BARRICADES (TYPE A)	Each	1	Torches Barricades (Type A) Signs XR-1 Signs M-20A Signs XA-A	14 1 1 1		
STANDARD BARRICADES (TYPE B)	Each	5	Lafertens Barricades (Type B) Signs XR-1	2 5 5		
STANDARD SIGNS	Each		Lanterns Signs W-11 Signs W-35A	10		
SUITABLE BRIDGE BARRIERS	Each	2	Torches Suitable Barriers Lanterns or Torches	2 2 4		
CONSTRUCTION IDENTIFICATION SIGNS	Each	2	Signs XM-6 Signs XM-7 Signs XM-8	2 2		

BILL OF SPlice BARS						
REINFORCING STEEL						
SIZE	LENGTH	WEIGHT EACH	NO. WEIGHT			TOTAL WEIGHT
			PIECES	LBS.	LBS.	
#11	11'-0"	58.4				
#10	10'-6"	45.2				
#9	9'-6"	32.3				
#8	8'-9"	23.4				
#7	8'-0"	16.4				
#6	7'-6"	11.3				
#5	6'-9"	7.0				
#4	6'-0"	4.0				
#3	5'-6"	2.1				
TOTAL SPlice BARS						

NOTE: For Test Bar Samples see Bridge Standard C1.

* Not A Pay Item. Place as directed by the Engineer. "W-35A" safe speed to be determined by the Engineer. When sign standards are used in unpaved areas the contractor may use two posts set (3) three feet in the ground. Directional, advisory or warning signs shall be right hand or left hand as the location of the sign requires.

Weight of spirals includes weight of 1 1/2 extra turns top and bottom. Spacers and 1 1/2 turns at laps included in cost of spiral.

***The weight of structural steel is approximate only, and it shall be the contractors responsibility to determine the weight on which he bases his bid.


DRAWN BY: J.L.C. JULY 27, 1965
 SUMMARIZED: D.K.C. c/w W.B.A.
 TRACED: L.E.C. 8/2/67 c/w D.K.C. 8/2/67

SUMMARY
INDIANA STATE HIGHWAY COMMISSION

SCALE: August 18, 1967

RECOMMENDED FOR APPROVAL: *C. R. Rimmer*

DRAWING: OF
 PROJECT: U-414(6)
 BRIDGE CONTRACT NO. B-7535
 BRIDGE FILE: 27-MM-5364



ITEM	STRUCTURE QUANTITIES																				
	CONCRETE			RAILING	REINF.	STRUCT.	BRONZE	ANCHOR	ANCHOR	PILES				RAILING	EXP. JOINT	EXP. JOINT					
	CLASS	CLASS	CLASS	CONCRETE	STEEL	STEEL	BEARING	PLATES	RODS	UNTREATED	TREATED	STEEL	STEEL	CAST	TYPE	ARMOR	ARMOR				
	F	D	E	CLASS F	***	***	PLATES	MC-AP	MC-AR	TIMBER	TIMBER	ENCASED	BEARING	IRON	OR	(TYPE)	(TYPE)				
CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	LIN. FT.	LBS.	LBS.	EACH	EACH	NO.	NO.	NO.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.				
SPLICE BARS																					
Reinf. Steel for Approach Structures																					
Reinf. Steel for R.C. Bridge Approaches																					
Reinf. Steel for Lip Gutter, Pmt, Topers, etc.																					
TOTALS																					

BRIDGES OVER 20' SPAN					
PUB. ROAD	STATE	PROJECT	FISCAL	SHEET	TOTAL
NO.		NO.	YEAR	NO.	SHEETS
4	IND.	U-414 (6)	1966	25	65

DESCRIPTION	UNIT	QUANTITIES	
		BRIDGE	FILE
		TOTALS	
1 Class F Concrete	Cu. Yds.		
2 Class D Concrete	Cu. Yds.		
3 Class E Concrete above Footings	Cu. Yds.		
4 Class E Concrete in Footings	Cu. Yds.		
5 Railing Concrete	Cu. Yds.		
6 Reinforcing Steel	Lbs.		
7 Structural Steel	Lump Sum		
8 Anchor Plates (MK-AP)	Each		
9 Cast Iron	Lbs.		
10 Railing (Type	Lin. Ft.		
11 Untreated Timber Piles Furnished	Lin. Ft.		
12 Untreated Timber Piles Driven	Lin. Ft.		
13 Treated Timber Piles Furnished	Lin. Ft.		
14 Treated Timber Piles Driven	Lin. Ft.		
15 Steel Pile Shells Furnished ("	Lin. Ft.		
16 Steel Pile Shells Driven ("	Lin. Ft.		
17 Steel H Piles Furnished	Lin. Ft.		
18 Steel H Piles Driven	Lin. Ft.		
19 Furnishing Equipment for Driving Piles	Lump Sum		
20 Wet Excavation	Cu. Yds.		
21 Foundation Excavation Unclassified	Cu. Yds.		
22 Waterway Excavation	Cu. Yds.		
23 Common Excavation	Cu. Yds.		
24 Special Borrow	Cu. Yds.		
25 Grade B Special Borrow	Cu. Yds.		
26 Sodding	Sq. Yds.		
27 Mulched Seeding	Sq. Yds.		
28 Reinforced Cement Concrete Pavement ("	Sq. Yds.		
29 Compacted Aggregate Base (Type	Tons		
30 Compacted Aggregate Shoulder	Tons		
31 Subbase	Cu. Yds.		
32 Removal Present Structure	Lump Sum		
33 Temporary Bridge and Approaches	Lump Sum		
34 Typical Sign Standards	Each		
35 Standard Barricades (Type A)	Each		
36 Standard Barricades (Type B)	Each		
37 Standard Signs	Each		
38 R/W Markers	Each		
39 Slope wall	Sq. Yds.		
40 Riprap	Sq. Yds.		
41 1 3/4" Expansion Joint Armor (Type	Lin. Ft.		
42 1 1/4" Expansion Joint Armor (Type	Lin. Ft.		
43 1 3/4" Expansion Joint (Type	Lin. Ft.		
44 1 1/4" Expansion Joint (Type	Lin. Ft.		
45 1 1/4" Expansion Joint (Type	Lin. Ft.		
46 Straight Beam Guard Rail	Lin. Ft.		
47 Class D Concrete in Structures	Cu. Yds.		
75 Capping Existing Structure	Each	8	
76 Concrete Header, Type "A"	Lin. Ft.	160	
77 Concrete Header, Type "C"	Lin. Ft.	195	
78 1" Preformed Exp. Jt. with load Transf.	Lin. Ft.	205	
79 1" Preformed Joint Filler	Lin. Ft.	40	
80 1/2" Preformed Joint Filler	Lin. Ft.	70	
81 Monument, Type "D"	Each	3	
82 Pavement Removal	Sq. Yds.	2280	
83 Walk Removal	Sq. Yds.	370	
84 Gutter Removal	Lin. Ft.	50	
85 Curb Removal	Lin. Ft.	720	
86 15" C.S. Pipe (16 Ga.)	Lin. Ft.	10	
87 Anchor Assembly type AS-1	Each	88	
88 Foundation Excavation unclassified	Cu. Yds.	120	
89			
90			

STRUCT. NO.	LOCATION	SIZE	DESCRIPTION		CL. D. CONC.	REINF.	CAST	REMARKS
			KIND	LENGTH				
			LIN. FT.	CU. YDS.	LBS.	LBS.		
TOTALS								

ITEM	UNIT	QUANTITY	ASSEMBLY		BRIDGE		TOTALS
			FILE	FILE			
TYPICAL							
SIGN	Each		Signs XW-1				
			Signs XW-2				
			Signs XW-3				
			Signs XM-2				
			Signs W-4B, W-35A (20MPH)				
STANDARDS							
STANDARD BARRICADES (TYPE A)	Each		Torches				
			Barricades (Type A)				
			Signs XR-1				
STANDARD BARRICADES (TYPE B)	Each		Signs M-20A				
			Lanterns				
STANDARD SIGNS	Each		Barricades (Type B)				
			Signs XR-1				
SUITABLE BRIDGES	Each		Lanterns				
			Signs W-11				
CONSTRUCTION IDENTIFICATION	Each		Signs W-35A				
			Torches				
SIGNS	Each		* Suitable Barriers				
			* Lanterns or torches				
CONSTRUCTION IDENTIFICATION	Each		* Signs XM-6				
			* Signs XM-7				
SIGNS	Each		* Signs XM-8				
			* Signs XM-8				

BILL OF SPLICE BARS							
REINFORCING STEEL							
SIZE	LENGTH	WEIGHT	BRIDGE FILE				TOTAL WEIGHT
			NO. PIECES	WEIGHT LBS.	NO. PIECES	WEIGHT LBS.	
#11	11'-0"	58.4					
#10	10'-6"	45.2					
#9	9'-6"	32.3					
#8	8'-9"	23.4					
#7	8'-0"	16.4					
#6	7'-6"	11.3					
#5	6'-9"	7.0					
#4	6'-0"	4.0					
#3	5'-6"	2.1					
TOTAL SPLICE BARS							

* Not A Pay Item. Place as directed by the Engineer. "W-35A" safe speed to be determined by the Engineer. When sign standards are used in unpaved areas the contractor may use two posts set (3) three feet in the ground. Directional, advisory or warning signs shall be right hand or left hand as the location of the sign requires.

Weight of spirals includes weight of 1 1/2 extra turns top and bottom. Spacers and 1 1/2 turns at laps included in cost of spiral.

***The weight of structural steel is approximate only, and it shall be the contractors responsibility to determine the weight on which he bases his bid.

DRAWN BY: J.L.C. JULY 27, 1965
 SUMMARIZED: D.K.C. ck'd W.B.F.
 TRACED: L.E.C. 8/21/67, ck'd D.K.C. 9/21/67

SUMMARY
INDIANA STATE HIGHWAY COMMISSION

SCALE: _____ August 18, 1967

RECOMMENDED FOR APPROVAL: *C.R. Rummel*

DRAWING: OF _____
 PROJECT: U-414 (6)
 BRIDGE CONTRACT NO. B-7535
 BRIDGE FILE: 27-MM-5364

