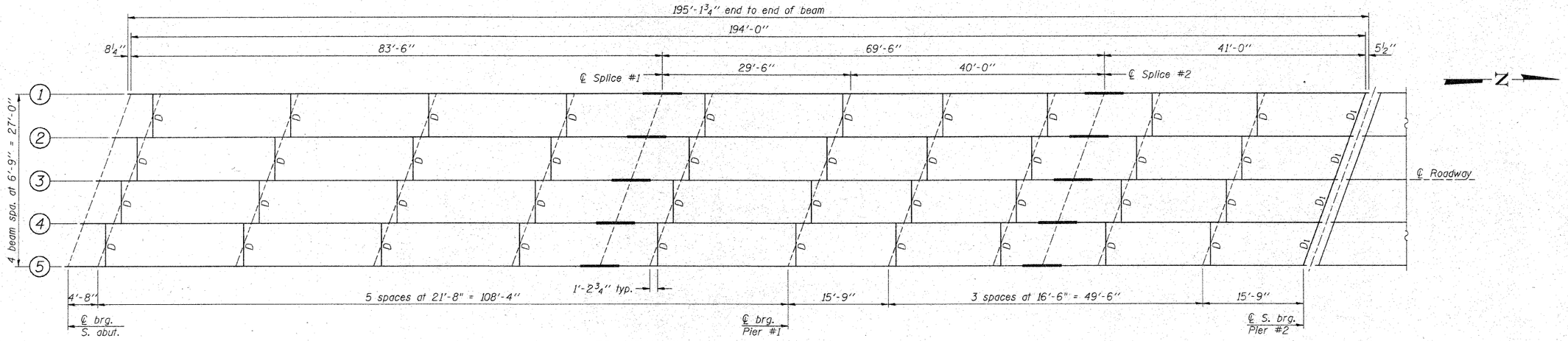
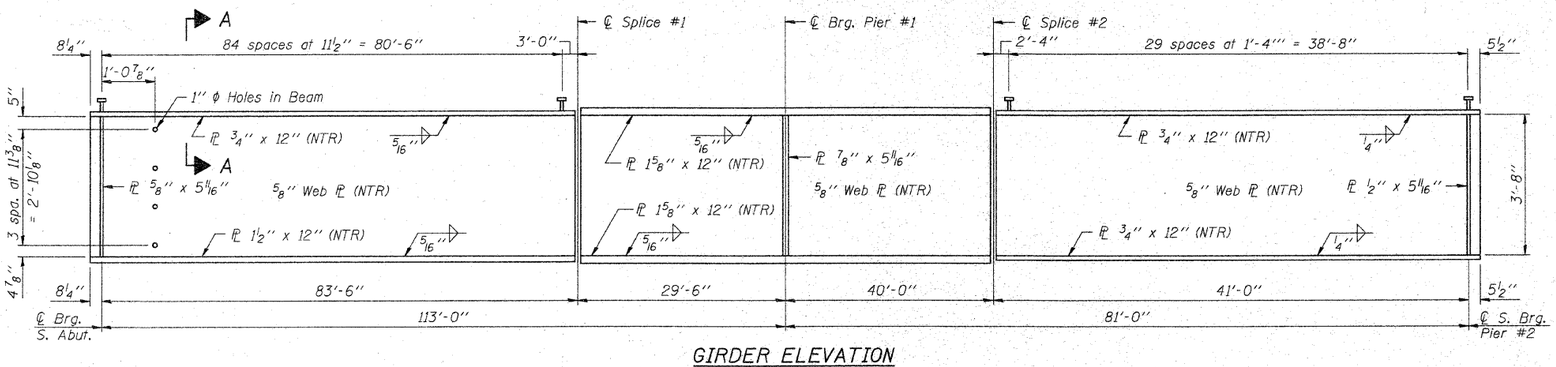
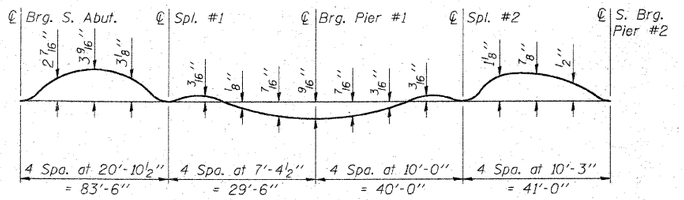


FRAMING PLAN - SPAN 1 & SPAN 2

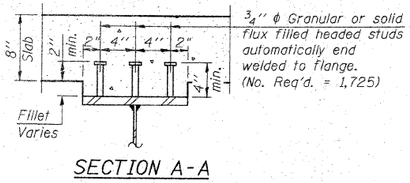


GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

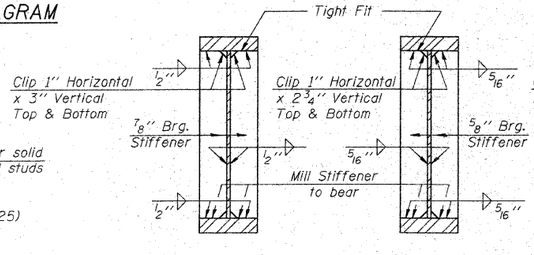


CAMBER DIAGRAM

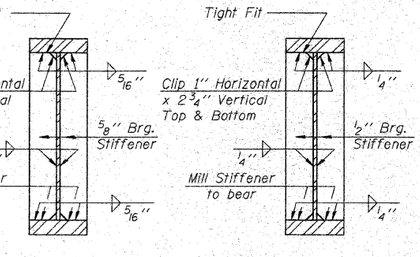


3/4" ϕ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd. = 1,725)

SECTION A-A



SECTION AT PIER #1



SECTION AT S. ABUT.

SECTION AT PIER #2

INTERIOR GIRDER MOMENT TABLE				
		0.4 Span 1	Pier #1	0.6 Pier #2
I_s	(in^4)	17,468	24,741	13,449
$I_c(n)$	(in^4)	46,838	-	33,784
$I_c(3n)$	(in^4)	33,166	-	24,820
S_s	(in^3)	888	1,047	591
$S_c(n)$	(in^3)	1,263	-	863
$S_c(3n)$	(in^3)	1,143	-	776
DC1	(k/')	0.931	0.980	0.894
M_{DC1}	('k)	895.5	-1,335.4	232.2
DC2	(k/')	0.180	0.180	0.180
M_{DC2}	('k)	199.8	-188.0	67.6
DW	(k/')	0.338	0.338	0.338
M_{DW}	('k)	375.2	-353.0	-127.0
M_{L+IM}	('k)	1,420.0	-989.8	816.3
M_u (Strength I)	('k)	4,417	4,166	1,994
* $\phi_f M_n$, $\phi_f M_{nc}$	('k)	6,163	4,799	5,305
f_s DC1	(ksi)	12.1	15.3	4.7
f_s DC2	(ksi)	2.1	2.2	1.0
f_s DW	(ksi)	3.9	4.0	2.0
f_s 1.3(L+IM)	(ksi)	17.6	14.7	14.8
f_s (Service II)	(ksi)	35.7	36.2	22.5
f_s (Total)(Strength I)	(ksi)	47.3	47.7	30.0
** Vr	(k)	68.3	-	26.4

* Compact sections
** Non-Compact and slender sections

TOP OF WEB ELEVATIONS (FOR FABRICATORS USE ONLY)					
Beam Number	South Abutment	Splice #1	Pier #1	Splice #2	S. ℄ Brg. Pier #2
1	630.770	631.175	631.134	631.191	631.369
2	630.885	631.306	631.265	631.321	631.500
3	630.999	631.436	631.395	631.451	631.630
4	630.843	631.297	631.255	631.311	631.491
5	630.686	631.158	631.116	631.170	631.351

INTERIOR GIRDER REACTION TABLE (SERVICE LOADS)				
		S. Abut.	Pier #1	S. ℄ Pier #2
R_{DC1}	(k)	76.2	121.3	20.4
R_{DC2}	(k)	8.5	21.5	4.9
R_{DW}	(k)	15.9	40.4	9.3
R_{L+IM}	(k)	91.0	187.7	40.1
R_{Total}	(k)	156.2	370.9	74.7

BILL OF MATERIAL

	Item	Unit	Total
	Stud Shear Connectors	Each	1,830
*	Furnishing and Erecting Structural Steel	L. Sum	1

*Includes Span 3 steel

NOTES:

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

FRAMING PLAN - SPANS 1 & 2
C.H. 8 OVER IOWA INTERSTATE RAILROAD & THE HENNEPIN CANAL
STATION 36+00
S.N. 006-3247

WHA #1066D05

STRUCTURAL SHEET NO. 17B OF 33B SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	188	05-00195-00-BR	BUREAU	127	83
			CONTRACT NO. 87380		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BRS-0188(118)		

FILE NAME = e:\Structs\1066D05Bureau\County\Drawings\1066Framing1.dgn