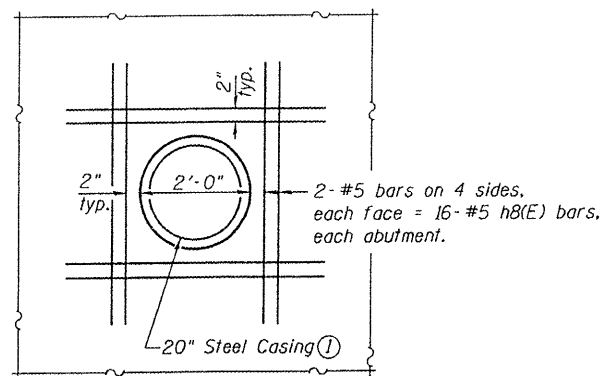
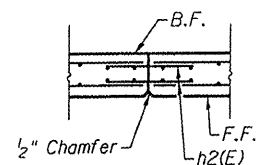


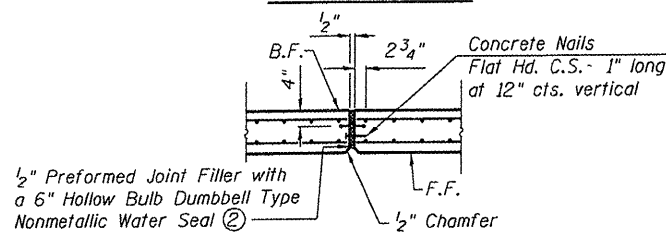
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



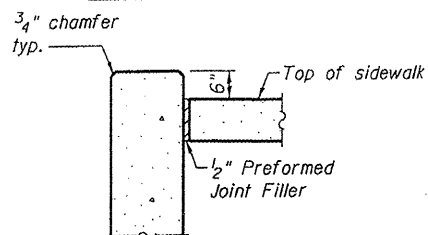
SEWER OPENING



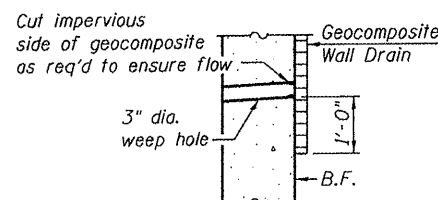
CONTROL JOINT



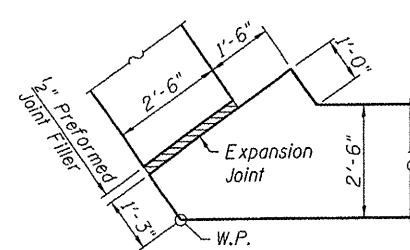
EXPANSION JOINT



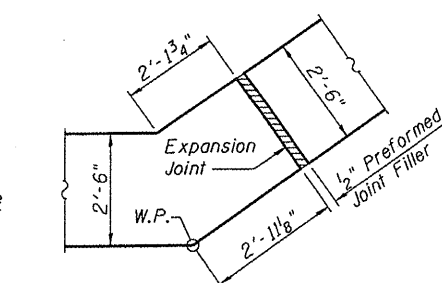
DETAIL A



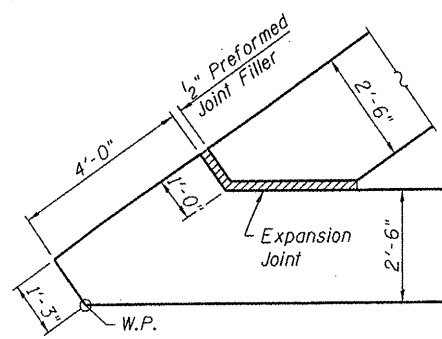
DETAIL B



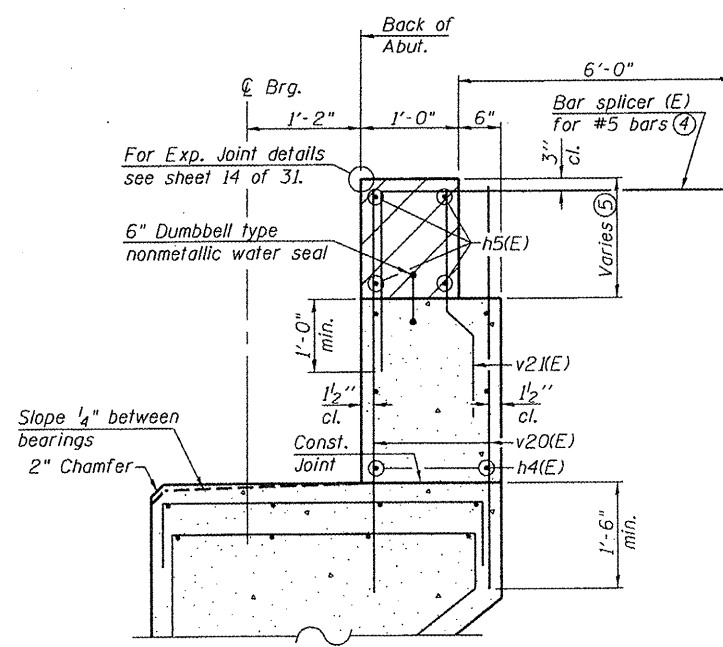
DETAIL C



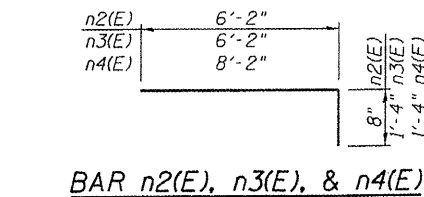
DETAIL D



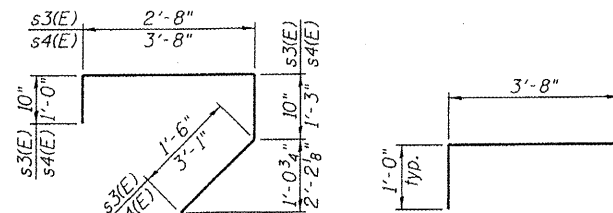
DETAIL E



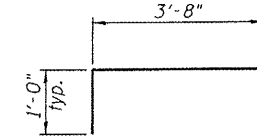
DETAIL F



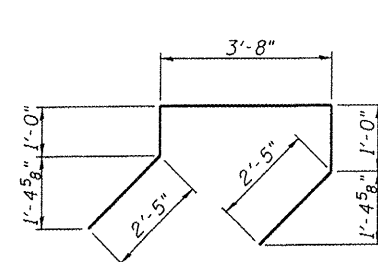
BAR n2(E), n3(E), & n4(E)



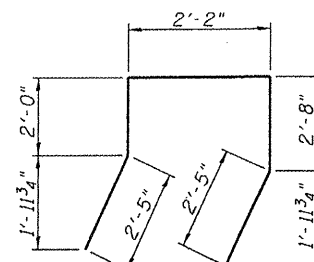
BAR s3(E) & s4(E)



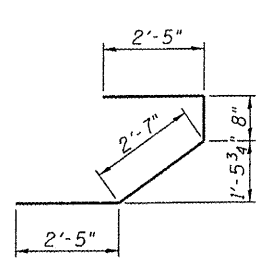
BAR s5(E)



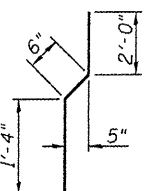
BAR u(E)



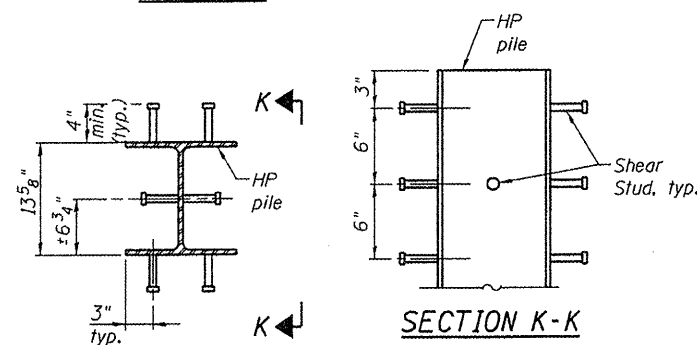
BAR u1(E)



BAR u3(E)



BAR v2(E)



PILE STUDS DETAIL

Provide 14 - 3/4"  $\phi$  granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications automatically end welded to piling, each pile, each abutment. Cost included with Furnishing Steel Piles HP14x73.

WEST ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n(E)	124	#5	14'-8"	—
h4(E)	153	#5	24'-9"	—
h8(E)	16	#5	4'-6"	—
n2(E)	142	#4	6'-10"	—
n3(E)	101	#8	7'-6"	—
n4(E)	96	#8	9'-6"	—
s1(E)	42	#5	24'-8"	—
s2(E)	12	#4	2'-2"	—
s3(E)	66	#5	5'-10"	—
t3(E)	296	#6	11'-2"	—
u(E)	24	#5	10'-6"	—
u1(E)	24	#5	11'-8"	—
v9(E)	68	#5	3'-4"	—
v10(E)	137	#5	4'-4"	—
v11(E)	100	#4	16'-5"	—
v12(E)	71	#6	14'-3"	—
v13(E)	66	#6	12'-3"	—
v14(E)	21	#4	12'-9"	—
v15(E)	15	#6	10'-6"	—
v16(E)	15	#6	8'-6"	—
v17(E)	21	#4	11'-5"	—
v18(E)	15	#6	10'-3"	—
v19(E)	15	#6	8'-3"	—
w6(E)	24	#6	19'-0"	—
w7(E)	48	#6	37'-11"	—
w8(E)	24	#6	18'-3"	—
Structure Excavation	Cu. Yd.	415		
Concrete Structures	Cu. Yd.	301.2		
Reinforcement Bars, Epoxy Coated	Pound	27,990		
Furnishing Steel Piles HP14x73	Foot	462		
Driving Piles	Foot	462		
Test Pile Steel HP14x73	Each	1		
Pile Shoes	Each	34		
Underwater Structure Excavation Protection-Location 1	Each	1		

EAST ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
c(E)	4	#5	2'-5"	—
c3(E)	4	#5	3'-0"	—
h(E)	104	#5	14'-8"	—
h4(E)	165	#5	24'-9"	—
h5(E)	8	#6	35'-3"	—
h6(E)	8	#4	24'-0"	—
h7(E)	18	#5	12'-6"	—
h8(E)	16	#5	4'-6"	—
n2(E)	142	#4	6'-10"	—
n3(E)	100	#8	7'-6"	—
n4(E)	96	#8	9'-6"	—
s1(E)	42	#5	24'-8"	—
s2(E)	12	#4	2'-2"	—
s4(E)	69	#5	9'-0"	—
s5(E)	44	#4	5'-8"	—
t3(E)	285	#6	11'-2"	—
t4(E)	24	#6	7'-9"	—
u(E)	23	#5	10'-6"	—
u1(E)	23	#5	11'-8"	—
u3(E)	18	#5	8'-1"	—
v20(E)	138	#5	5'-4"	—
v21(E)	69	#4	3'-10"	—
v22(E)	100	#4	15'-4"	—
v23(E)	72	#6	13'-2"	—
v24(E)	68	#6	11'-2"	—
v25(E)	21	#4	11'-9"	—
v26(E)	13	#6	9'-10"	—
v27(E)	13	#6	7'-10"	—
v28(E)	21	#4	11'-0"	—
v29(E)	15	#6	9'-2"	—
v30(E)	15	#6	7'-2"	—
w6(E)	24	#6	19'-0"	—
w7(E)	48	#6	37'-11"	—
w9(E)	16	#6	23'-2"	—
Structure Excavation	Cu. Yd.	284		
Concrete Structures	Cu. Yd.	296.3		
Reinforcement Bars, Epoxy Coated	Pound	29,020		
Furnishing Steel Piles HP14x73	Foot	558		
Driving Piles	Foot	558		
Test Pile Steel HP14x73	Each	1		
Pile Shoes	Each	32		
Concrete Sealer	Sq. Ft.	1,671		
Underwater Structure Excavation Protection-Location 2	Each	1		

ABUTMENT DETAILS  
STRUCTURE NO. 082-6113

- Notes:
- For details of 20" Steel Casing and 12" Ductile Iron Sanitary Sewer Pipe, see roadway plans. The gap between the Steel Casing and the Sewer Opening in the abutment stem shall be grouted with nonshrink grout for the entire length of the opening before backfilling proceeds above the bottom of the opening. The nonshrink grout shall conform to the IDOT Standard Specification Section 1024. Cost of grout included in Concrete Structures.
  - Preformed Joint Filler and Nonmetallic Water Seal shall extend from 6" below the top of the wall to the bottom of the footing. Cost included in Concrete Structures.
  - For bar c(E) details, see sheet 9 of 31. For bar c3(E) details, see sheet 12 of 31. For bar s1(E) and s2(E) details, see sheet 26 of 31.
  - Bar Splicer (E) for #5 bars shall be placed parallel to the approach pavement reinforcement.
  - Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
  - Pour steps monolithically with abutment stem. Typical East and West Abutments.

SHEET NO. 23	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	9274	04-00202-00-BR	ST. CLAIR	55	40
31 SHEETS	CONTRACT NO. 97369				
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	
GATES ASSOCIATES Consulting Engineers Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200 Design Firm License No. 184.001115			DESIGNED DGL CHECKED JAD DRAWN JAD CHECKED DGL		