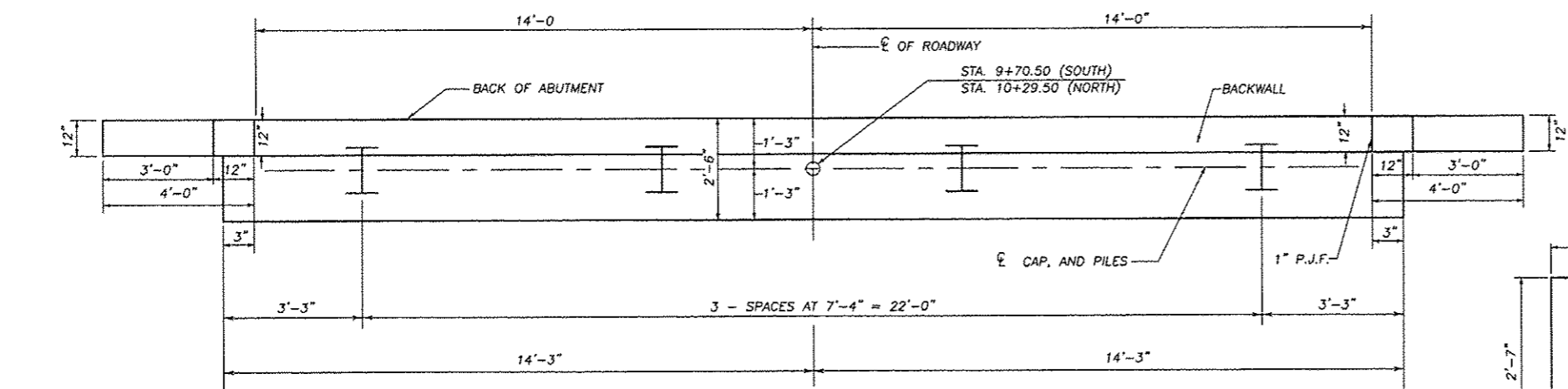
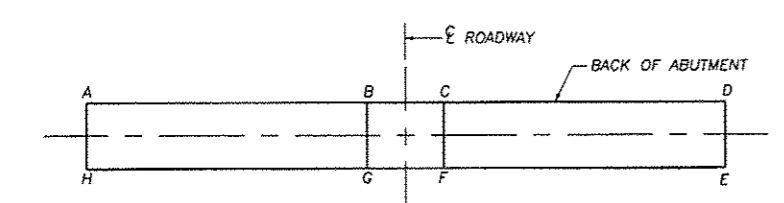


**ELEVATION**  
 \* FOR CAP ELEVATIONS SEE TABLE BELOW

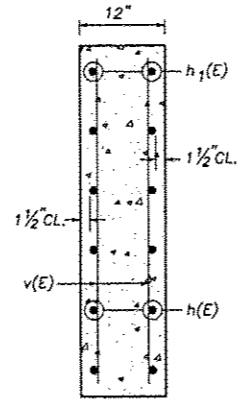


**PLAN**



ABUTMENT	A	B	C	D	E	F	G	H
S	879.32	879.51	879.51	879.32	879.29	879.48	879.48	879.29
N	878.64	880.19	880.19	878.64	878.67	880.22	880.22	878.67

**ELEVATION TOP OF ABUTMENTS**



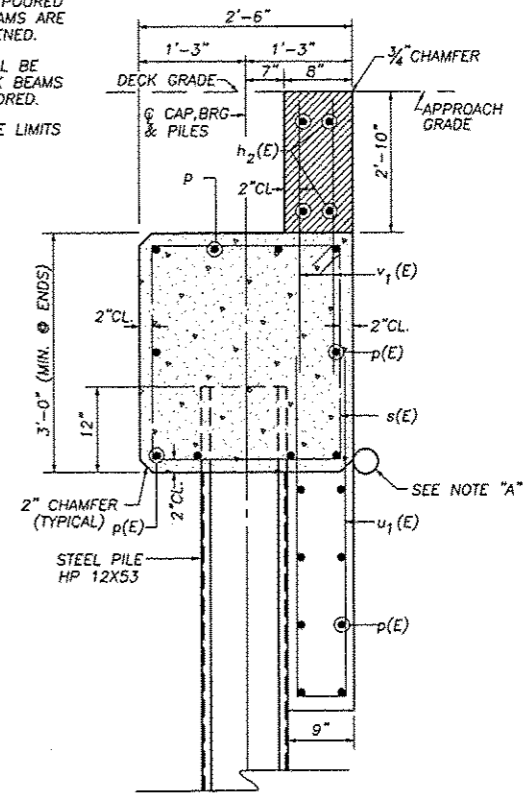
**SECTION THRU WINGWALL**

**PILE DATA INFORMATION**

TYPE AND SIZE: STEEL PILES HP 12X53  
 DRIVE TO REFUSAL. MIN. PENETRATION 20' BELOW STREAM BED  
 NO. REQUIRED : 7+1 TEST PILE NORTH ABUTMENT  
 EST. LENGTH: 50' - S. ABUT. ; 50' - N. ABUT.

NOTE: WINGWALLS ABOVE TOP OF CAP SHALL NOT BE POURED UNTIL THE DECK BEAMS ARE IN PLACE AND FASTENED.  
 HATCHED AREA SHALL BE POURED AFTER DECK BEAMS ARE SET AND ANCHORED.  
 WIDTH SHALL BE THE LIMITS OF THE CAP.

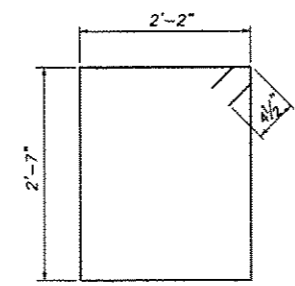
NOTE "A": 4" PIPE UNDERDRAIN IN FILTER FABRIC. FULL WIDTH OF ABUTMENT AND EXTEND TO INTERSECT THE SLOPES IF FRONT OF THE CAP. COST INCLUDED WITH CONCRETE STRUCTURES.



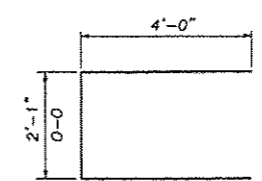
**SEC. THRU ABUT. (AT RIGHT ANGLES)**

**BILL OF MATERIAL 2 ABUTMENTS**

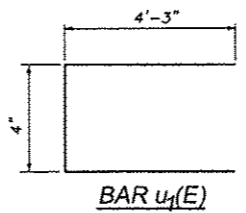
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	40	#4	5'-6"	—
h1(E)	24	#4	3'-8"	—
h2(E)	8	#4	27'-6"	—
p(E)	36	#7	28'-2"	—
s(E)	54	#4	10'-3"	□
u(E)	16	#6	10'-1"	□
u1(E)	58	#5	8'-10"	□
v(E)	32	#4	5'-6"	—
v1(E)	112	#4	4'-8"	—
CONCRETE STRUCTURES			CU. YD.	28.1
REINFORCEMENT BARS (EPOXY CTD.)			POUND	4140
STEEL PILE HP 12X53			FOOT	350
DRIVING PILES			FOOT	350
TEST PILE METAL SHELLS			EACH	1



**BAR s(E)**



**BAR u(E)**



**BAR u1(E)**

SCALE 1"=

NO.	DATE	REVISION

DESIGNED BY: [blank]  
 CHECKED BY: [blank]  
 DRAWN BY: [blank]  
 DATE: [blank]

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**SUBSTRUCTURE ABUTMENTS OF NORTH REES ROAD BRIDGE FOR STEPHENSON COUNTY**

SHEET TITLE  
**ABUTMENTS**

JOB NUMBER  
 2120077  
 DATE  
 3/25/2013  
 SHEET NO.

S.N. 089-3286  
 SUBSTRUCTURE ABUTMENTS  
 SECTION 12-03120-00-BR  
 STEPHENSON COUNTY