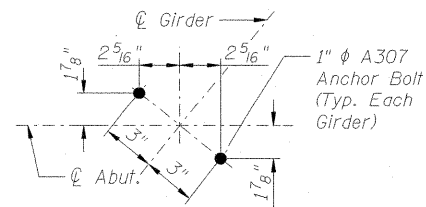


**BILL OF MATERIAL**

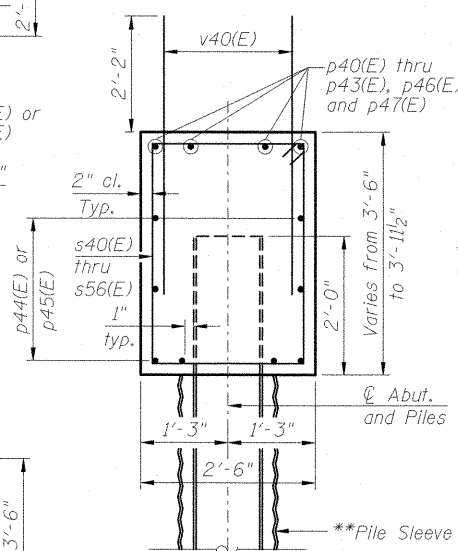
East Abutment				
Bar	No.	Size	Length	Shape
h40(E)	50	#6	14'-5"	
p40(E)	12	#7	14'-6"	
p41(E)	4	#7	13'-0"	
p42(E)	4	#7	18'-4"	
p43(E)	4	#7	22'-4"	
p44(E)	16	#7	24'-7"	
p45(E)	8	#7	32'-6"	
s40(E)	6	#5	11'-7"	
s41(E)	8	#5	11'-11"	
s42(E)	8	#5	12'-3"	
s43(E)	8	#5	12'-7"	
s46(E)	1	#5	12'-10"	
s52(E)	14	#5	12'-5"	
s53(E)	16	#5	12'-10"	
s54(E)	1	#5	13'-8"	
u40(E)	8	#6	7'-10"	
v40(E)	106	#5	4'-4"	
v43(E)	10	#5	13'-5"	
Concrete Structures		Cu. Yd.	28.5	
Reinforcement Bars, Epoxy Coated		Pound	4,730	
Furnishing Steel Piles HP12X53		Foot	580	
Driving Piles		Foot	580	
Test Pile Steel HP12X53		Each	1	
Pile Shoes		Each	11	

**BILL OF MATERIAL**

West Abutment				
Bar	No.	Size	Length	Shape
h40(E)	48	#6	14'-5"	
p40(E)	4	#7	14'-6"	
p41(E)	4	#7	13'-0"	
p44(E)	16	#7	24'-7"	
p45(E)	8	#7	32'-6"	
p46(E)	4	#7	26'-2"	
p47(E)	4	#7	33'-2"	
s40(E)	6	#5	11'-7"	
s43(E)	29	#5	12'-7"	
s46(E)	1	#5	12'-10"	
s52(E)	17	#5	12'-5"	
s55(E)	8	#5	12'-11"	
s56(E)	1	#5	13'-9"	
u40(E)	8	#6	7'-10"	
v40(E)	106	#5	4'-4"	
v44(E)	10	#5	12'-7"	
Concrete Structures		Cu. Yd.	28.6	
Reinforcement Bars, Epoxy Coated		Pound	4,590	
Furnishing Steel Piles HP12X53		Foot	570	
Driving Piles		Foot	570	
Test Pile Steel HP12X53		Each	1	
Pile Shoes		Each	11	



**ANCHOR BOLT INSTALLATION DETAIL**



**SECTION THRU ABUT.**

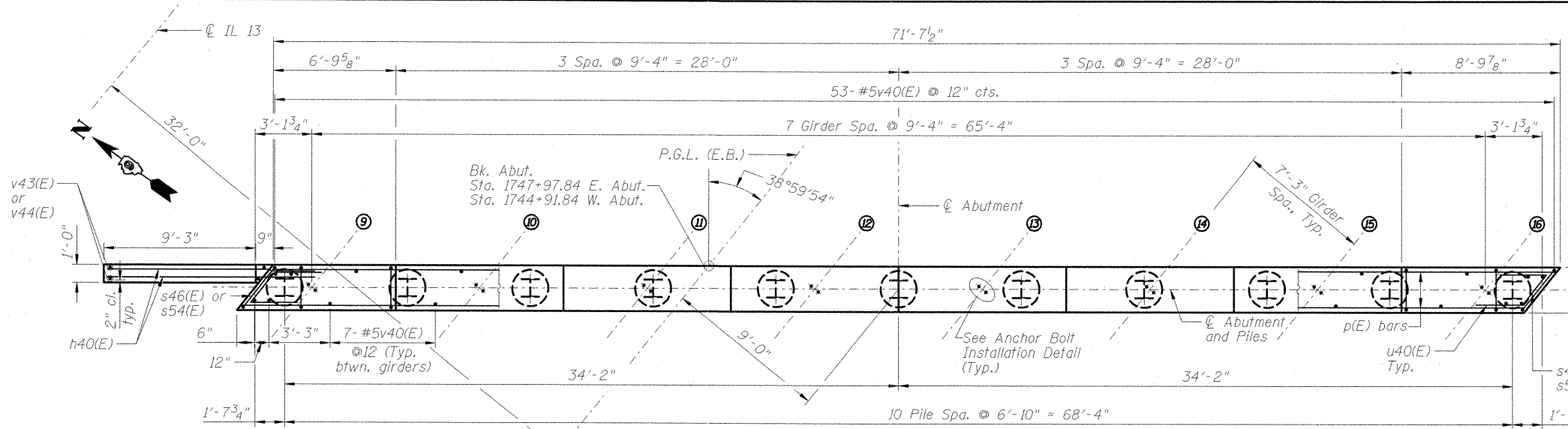
\*\*Cost included in the unit cost of Furnishing Steel Piles HP12X53

\*Order v43(E) and v44(E) bars full length. Cut as shown in bar detail and use remainder of bars in opposite face.

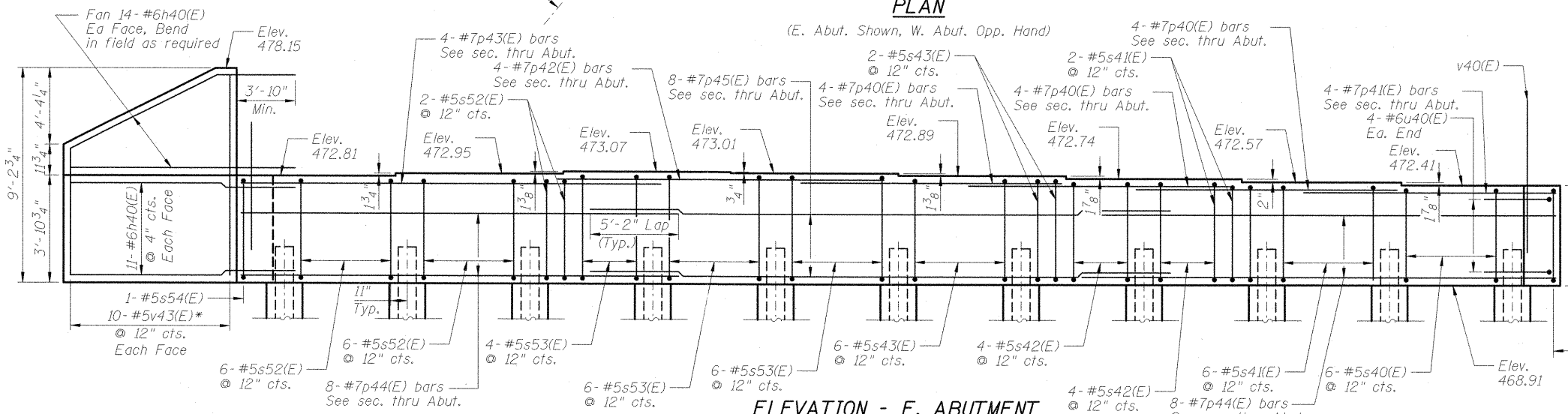
**Note:**  
For details of piles and pile sleeve, see Sheet S-29 of S-41.

**PILE DATA**

Type: HP 12x53  
Nominal Required Bearing: 418 k  
Factored Resistance Available: 230 k  
Est. Length: 58 ft (E. Abut.), 57 ft (W. Abut.)  
No. Production Piles: 11 Incl. 1 Test Pile (E. Abut.)  
11 Incl. 1 Test Pile (W. Abut.)

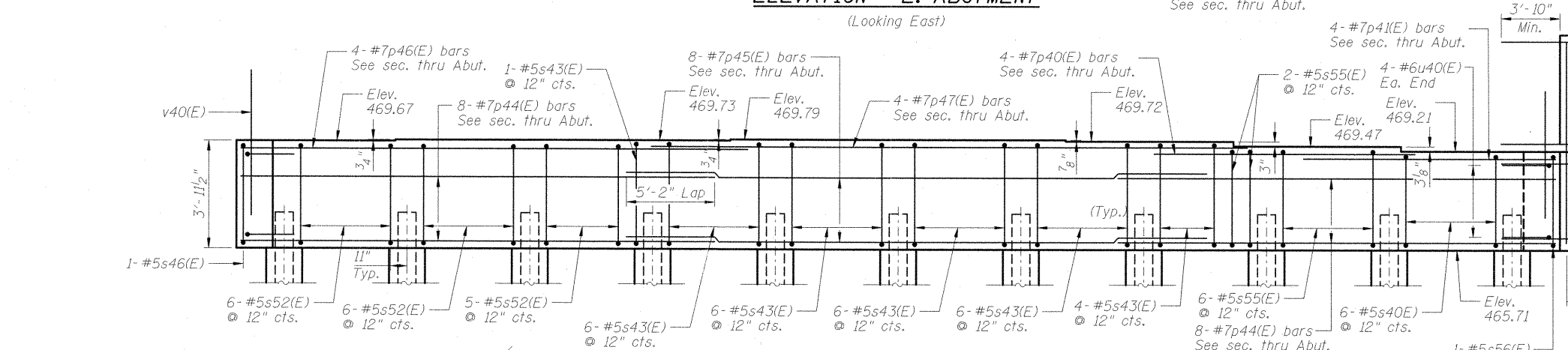


**PLAN**



**ELEVATION - E. ABUTMENT**

(Looking East)

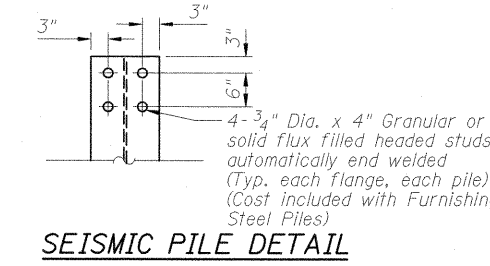
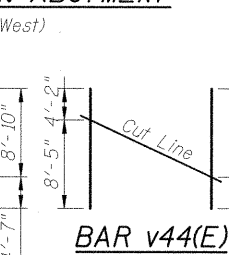
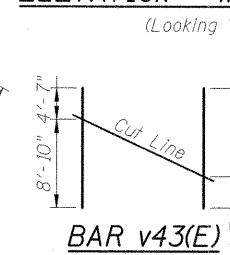
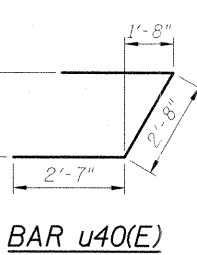
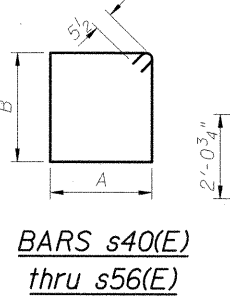


**ELEVATION - W. ABUTMENT**

(Looking West)

**A & B DIMENSIONS**

Bar	A	B
s40(E)	2'-2"	3'-2"
s41(E)	2'-2"	3'-4"
s42(E)	2'-2"	3'-6"
s43(E)	2'-2"	3'-8"
s46(E)	2'-9 1/2"	3'-2"
s52(E)	2'-2"	3'-7"
s53(E)	2'-2"	3'-9 1/2"
s54(E)	2'-9 1/2"	3'-7"
s55(E)	2'-2"	3'-5"
s56(E)	2'-9 1/2"	3'-7 1/2"



**SEISMIC PILE DETAIL**

**CMT**  
CRAWFORD MURPHY & TILLY, INC.  
CONSULTING ENGINEERS  
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO  
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

USER NAME = Gary Davis  
DESIGNED - MCC  
CHECKED - ATI  
DRAWN - GLD  
PLOT SCALE =  
PLOT DATE = 1/10/2012

REVISOR -  
REVISOR -  
REVISOR -  
REVISOR -

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REVISOR -  
REVISOR -  
REVISOR -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DETAILS**  
**STRUCTURE NO. 100-0094 (E.B.)**

SHEET NO. S-280F S-41 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(IX-1)VB-1	WILLIAMSON	367	194
			CONTRACT NO. 98859	
ILLINOIS FED. AID PROJECT				