

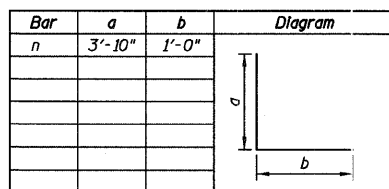
**BILL OF MATERIAL -
NORTHWEST WINGWALL**

Bar	No.	Size	Length	Shape
h5	13	#7	9'-3"	—
h6	13	#5	9'-3"	—
h7	4	#7	9'-0"	—
h8	9	#7	8'-0"	—
h9	9	#5	8'-0"	—
v5	20	#4	12'-9"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	840		
Concrete Box Culverts	Cu. Yd.	5.7		

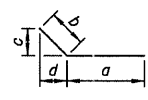
**BILL OF MATERIAL -
NORTHEAST WINGWALL**

Bar	No.	Size	Length	Shape
h10	13	#9	14'-8"	—
h11	13	#5	14'-8"	—
h12	4	#9	8'-0"	—
h13	9	#9	8'-0"	—
h14	9	#5	10'-0"	—
v6	16	#4	24'-10"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	1,560		
Concrete Box Culverts	Cu. Yd.	8.3		

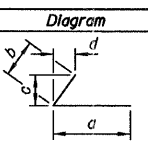
BAR BENDING DIAGRAMS



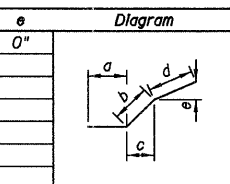
Bar	a	b	c	d
h12	5'-0"	3'-0"	1'-11 1/8"	2'-3 3/8"
h13	5'-0"	3'-0"	1'-6"	2'-7 1/8"
h14	5'-0"	5'-0"	2'-6"	4'-4 1/2"
h24	5'-0"	3'-0"	2'-10 7/8"	8 3/4"
h25	5'-0"	3'-0"	3 1/4"	2'-11 3/4"
h26	5'-0"	3'-0"	3 1/4"	2'-11 3/4"



Bar	a	b	c	d
h8	5'-0"	3'-0"	2'-9 7/8"	1'-0 3/8"
h9	5'-0"	3'-0"	2'-9 7/8"	1'-0 3/8"
h17	5'-3"	3'-0"	2'-9 7/8"	1'-0 3/8"



Bar	a	b	c	d	e
h7	5'-0"	1'-0"	11 1/4"	3'-0"	0"

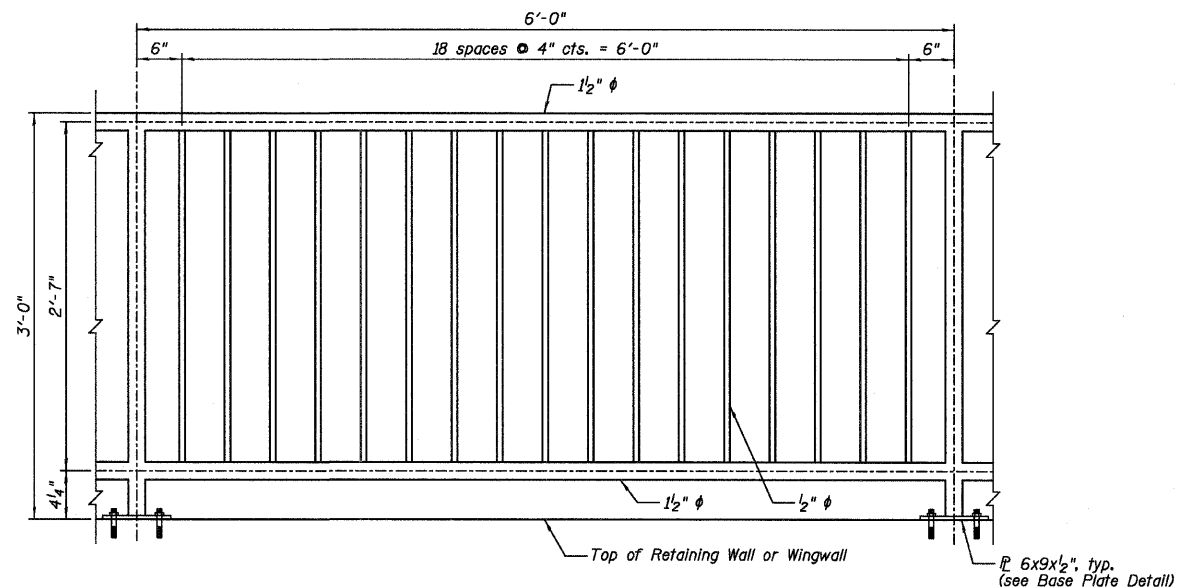


**BILL OF MATERIAL -
SOUTHWEST WINGWALL
AND RETAINING WALL**

Bar	No.	Size	Length	Shape
h15	17	#9	17'-5"	—
h16	13	#5	17'-5"	—
h24	6	#9	8'-0"	—
h25	11	#9	8'-0"	—
h26	9	#5	8'-0"	—
h27	18	#4	18'-2"	—
n	25	#6	4'-10"	—
t1	38	#5	6'-1"	—
v10	18	#4	24'-9"	—
v11	25	#5	10'-8"	—
v12	7	#4	10'-8"	—
w1	14	#5	18'-2"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	3,310		
Concrete Box Culverts	Cu. Yd.	23.8		

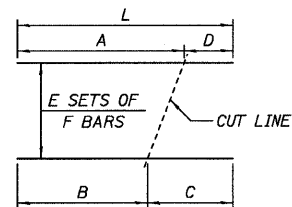
**BILL OF MATERIAL -
SOUTHEAST WINGWALL
AND RETAINING WALL**

Bar	No.	Size	Length	Shape
h15	18	#9	17'-5"	—
h16	14	#5	17'-5"	—
h17	6	#9	8'-3"	—
h18	12	#9	8'-0"	—
h19	9	#5	8'-0"	—
h23	16	#4	24'-8"	—
n	26	#6	4'-10"	—
t	52	#5	5'-3"	—
v7	18	#4	23'-6"	—
v8	26	#5	9'-5"	—
v9	7	#4	9'-5"	—
w	12	#5	24'-8"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	3,520		
Concrete Box Culverts	Cu. Yd.	26.0		

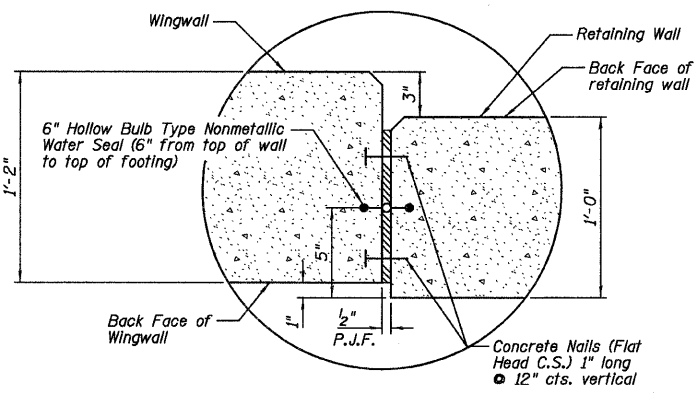


PIPE HANDRAIL, SPECIAL

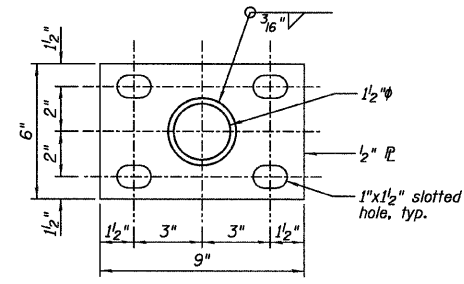
BAR CUTTING DIAGRAM



BAR	A	B	C	D	E	F	L
v6	12'-9"	12'-1"	12'-9"	12'-1"	1	16	24'-10"
v7	12'-9"	10'-9"	12'-9"	10'-9"	1	18	23'-6"
v10	12'-9"	12'-0"	12'-9"	12'-0"	1	18	24'-9"



DETAIL A



BASE PLATE DETAIL

DESIGNED JCZ
CHECKED MSW
DRAWN JWK
CHECKED MSW

DATE 02/25/11

FARNSWORTH GROUP, INC.

**WINGWALL DETAILS
STRUCTURE NO. 057-7841**

NOTE:

All posts, railing, splces, anchor devices and bent plates shall be painted using the Shop and Field Applied Paint System or the Shop Applied Paint System. Color will be chosen by the Owner.

SHEET NO. C16	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19 SHEETS	07-00233-00-BR	MCLEAN	40	31
		SN 057-7841	CONTRACT NO. 91422		
		FED. ROAD DIST. NO. 5	ILLINOIS FED. AID PROJECT		