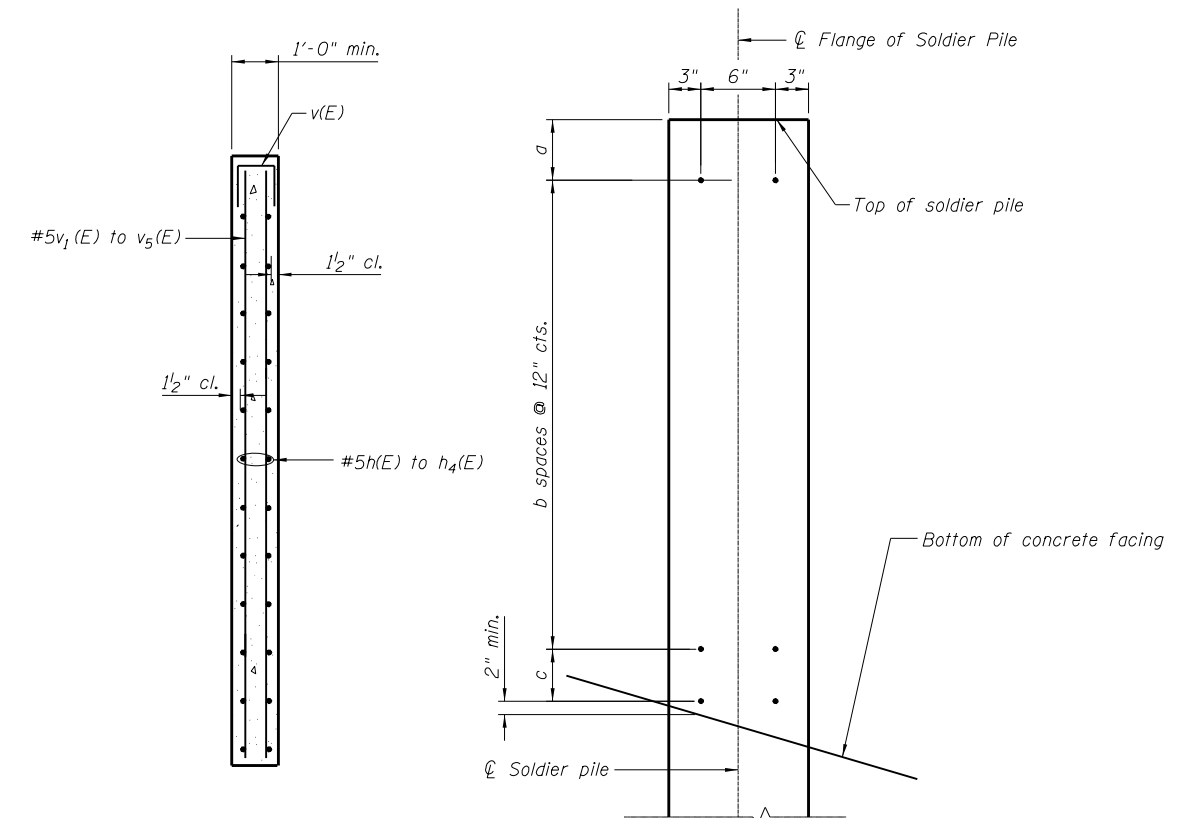


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE DATA

Panel	Soldier Pile Designations	Top of soldier Pile Elevation	Bottom of soldier Pile Elevation	Top of concrete encasement	Top of CLSM	Stud Shearconnectors			
						a	b	c	No. per pile
A	A ₁ HP Section	543.26	520.00	540.02	542.76	3"	2	9 1/4"	8
	A ₂ HP Section	543.92	520.00	540.20	543.42	3"	3	3 3/4"	10
	A ₃ HP Section	544.17	520.00	540.36	543.67	3"	3	4 3/4"	10
B	B ₁ HP Section	544.35	520.00	540.54	543.85	3"	3	4 1/4"	10
	B ₂ HP Section	544.66	520.00	540.71	544.16	3"	3	6"	10
	B ₃ HP Section	544.77	520.00	540.88	544.27	3"	3	5"	10
C	C ₁ HP Section	544.61	520.00	540.88	544.11	3"	3	3 1/4"	10
	C ₂ HP Section	544.09	520.00	540.71	543.59	3"	2	11"	8
	C ₃ HP Section	543.68	520.00	540.54	543.18	3"	2	8"	8
D	D ₁ HP Section	543.30	520.00	540.36	542.80	3"	2	4 1/2"	8
	D ₂ HP Section	542.90	520.00	540.20	542.40	3"	2	3"	8
	D ₃ HP Section	542.51	520.00	540.02	542.00	3"	2	0"	6

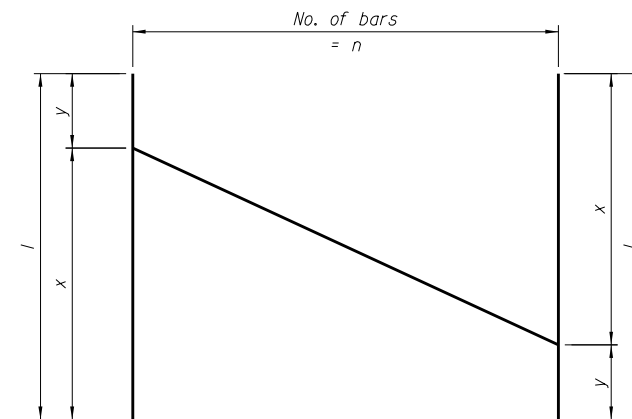


SECTION THRU PANEL

SHEAR STUD SPACING DETAIL

BAR DIMENSIONS

Bar	n	y	x	l
v ₁ (E)	8	3'-10"	6'-9"	10'-7"
v ₃ (E)	23	6'-2"	6'-8"	12'-10"
v ₄ (E)	15	5'-8"	6'-2"	11'-10"
v ₅ (E)	8	3'-2"	5'-8"	8'-10"
h ₁ (E)	3	15'-0"	22'-0"	37'-0"
h ₄ (E)	3	17'-0"	24'-0"	41'-0"



BAR CUTTING DIAGRAM

(v₁(E) @ v₃(E) to v₅(E) bars) (h₁(E) @ h₄(E) bars)

BARS v(E)

SOLDIER PILE WALL DATA

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	42	#5	25'-0"	—
h ₁ (E)	3	#5	37'-0"	—
h ₂ (E)	4	#5	7'-0"	—
h ₃ (E)	8	#5	22'-2"	—
h ₄ (E)	3	#5	41'-0"	—
v(E)	92	#5	2'-2"	U
v ₁ (E)	8	#5	10'-7"	—
v ₂ (E)	76	#5	6'-9"	—
v ₃ (E)	23	#5	12'-10"	—
v ₄ (E)	15	#5	11'-10"	—
v ₅ (E)	8	#5	8'-10"	—
Concrete Structures			Cu. Yd.	24.0
Reinforcement Bars (Epoxy coated)			Pound	2960

DESIGNED - KRG
CHECKED - MJK
DRAWN - GSJ
CHECKED - MJK

MID-AMERICA ENGINEERING SERVICES

SHEET NO. 6 8 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	600	60-(30,31,128)-3	Madison	529	516
RETAINING WALL 4			CONTRACT NO. 76B85		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		