

**GENERAL NOTES**

DESIGN:.....AASHTO LRFD Bridge Design Specifications, 2017 Edition, with latest interim specifications.

ADDITIONAL DEAD LOAD:.....Up to 2" Non-Structural Concrete on exterior face included.

SEISMIC PARAMETERS:..... $A_s \leq 0.40g$

FOUNDATION SOIL:..... $\phi \geq 28'$ ; Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.

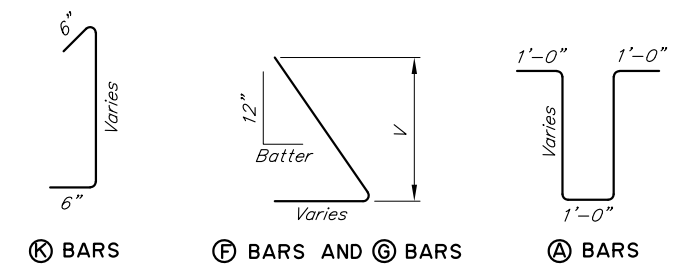
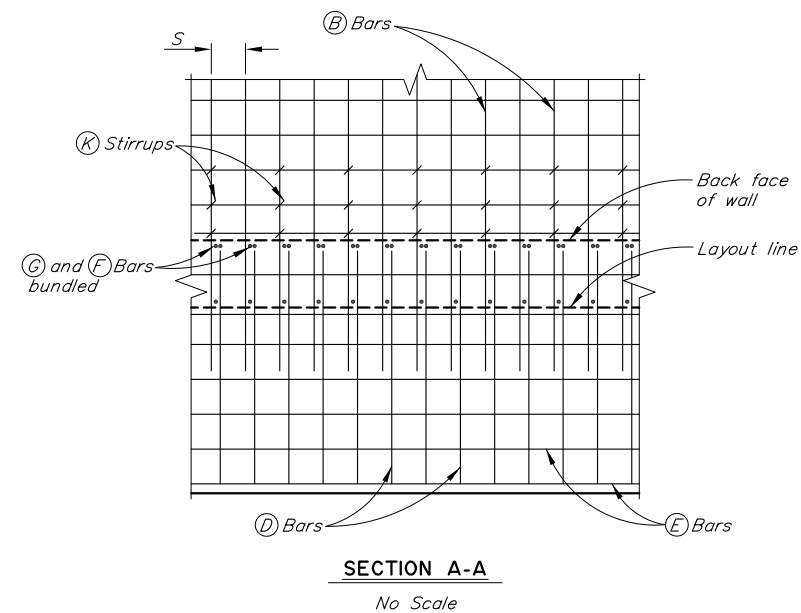
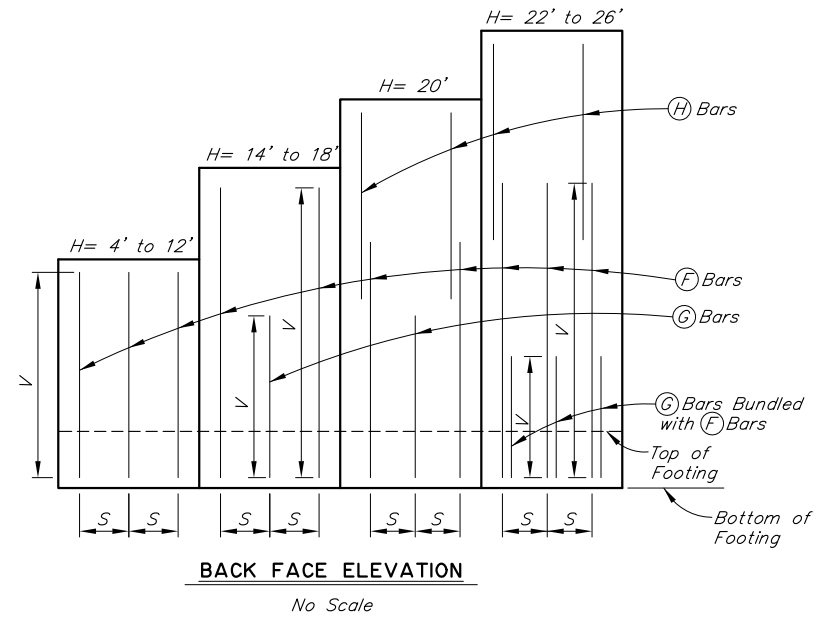
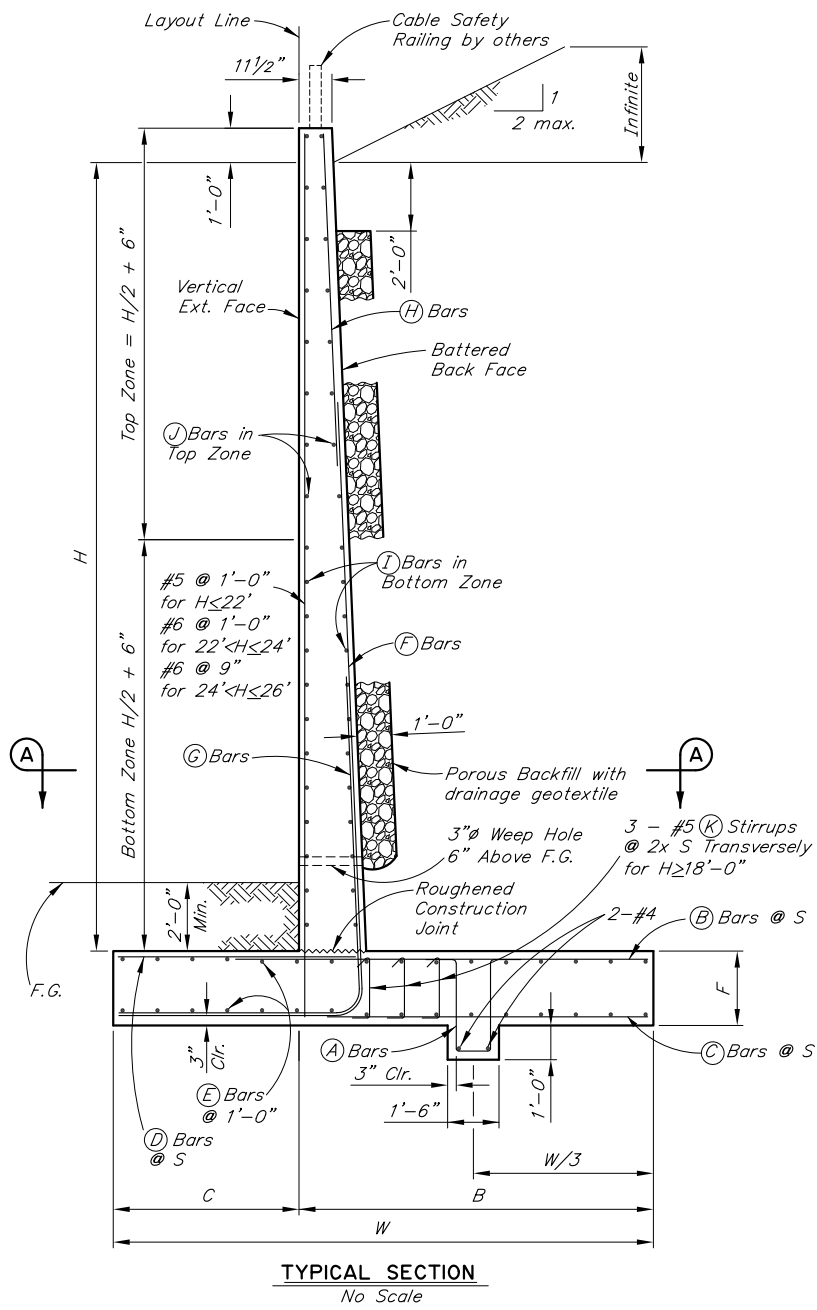
RETAINED SOIL:..... $32' \leq \phi \leq 36'$   
 $120 \text{ pcf} \leq \gamma \leq 140 \text{ pcf}$

REINFORCED CONCRETE:.....Class A Concrete,  $f'_c = 4,000 \text{ psi}$

REINFORCEMENT:.....ASTM A706 or A615, Grade 60,  $F_y = 60,000 \text{ psi}$

LOAD COMBINATIONS AND LIMIT STATES:.....Service I =  $1.0DC + 1.0EV + 1.0EH$   
 Strength I =  $\alpha DC + \beta EV + \eta EH$

Where:  
 $\alpha$ :.....1.25 or 0.90, Whichever Controls Design  
 $\beta$ :.....1.35 or 1.00, Whichever Controls Design  
 $\eta$ :.....1.50 or 0.90, Whichever Controls Design  
 DC:.....Dead Load of Structure Components  
 EH:.....Horizontal Earth Fill Pressure  
 EV:.....Vertical Earth Pressure from Earth Fill Weight



See "B-07.10" for details not shown

**ABBREVIATIONS:**

- Ser I - Service I limit state
- Str I - Strength I limit state
- B' - Effective footing width (ft)
- qo - Gross uniform bearing stress (ksf)
- F.G. - Finished grade

**TABLE OF DIMENSIONS, REINFORCING STEEL, AND DATA**

DIMENSIONS							A BARS		B BARS		C BARS		D BARS		E BARS		F BARS			G BARS			H BARS		I BARS		J BARS		EFFECTIVE FOOTING WIDTHS AND BEARING PRESSURES		Steel (Lbs/ft) Concrete (CF/ft)		
H	W	F	C	B	Batter	Spacing S	Size	Spacing	Length	Size	Length	Size	Length	Size	Length	Size	Size	V	Length	Size	V	Length	Size	Length	Size	Spacing	Size	Spacing	Ser I B'-qo	Str I B'-qo			
4'-0"	4'-0"	1'-0"	1'-0"	3'-0"	1/2":12"	12"	#4	1'-6"	6'-2"	#4	2'-11"	#4	2'-6"	#4	1'-8"	#4	#4	4'-10"	7'-5"	-	-	-	-	-	#4	1'-6"	#4	1'-6"	3.5-1.1	3.4-1.4	30-10.9		
6'-0"	4'-3"	1'-0"	1'-3"	3'-0"	1/2":12"	12"	#4	1'-6"	6'-2"	#4	2'-10"	#4	2'-5"	#4	1'-11"	#4	#4	6'-10"	9'-9"	-	-	-	-	-	#4	1'-0"	#4	1'-6"	3.2-1.6	3.0-2.2	38-13.5		
8'-0"	4'-6"	1'-3"	1'-6"	3'-0"	1/2":12"	12"	#4	1'-6"	6'-8"	#4	3'-1"	#4	2'-4"	#4	2'-2"	#4	#5	8'-10"	12'-4"	-	-	-	-	-	#4	1'-0"	#4	1'-6"	2.6-2.6	2.3-4.0	50-17.5		
10'-0"	5'-3"	1'-3"	1'-6"	3'-9"	1/2":12"	9"	#4	1'-6"	6'-8"	#4	3'-9"	#4	3'-0"	#4	2'-2"	#4	#6	10'-10"	14'-5"	-	-	-	-	-	#4	1'-0"	#4	1'-0"	2.6-3.8	2.2-5.9	76-21.2		
12'-0"	6'-6"	1'-6"	1'-9"	4'-9"	1/2":12"	9"	#4	1'-6"	7'-2"	#5	5'-1"	#4	3'-11"	#4	2'-5"	#4	#7	12'-10"	17'-0"	-	-	-	-	-	#4	1'-0"	#4	1'-0"	3.3-4.3	2.9-6.7	106-27.3		
14'-0"	7'-9"	1'-6"	2'-9"	5'-0"	5/8":12"	6"	#4	1'-6"	7'-2"	#4	4'-8"	#4	3'-11"	#4	3'-5"	#5	#7	14'-10"	20'-3"	#7	8'-5"	12'-7"	-	-	#5	1'-0"	#4	1'-0"	4.3-4.1	3.8-6.3	148-33.4		
16'-0"	9'-9"	1'-8"	2'-9"	7'-0"	3/4":12"	6"	#4	1'-6"	7'-6"	#6	7'-2"	#4	5'-8"	#4	3'-5"	#5	#8	16'-10"	22'-9"	#8	9'-6"	14'-0"	-	-	#5	1'-0"	#4	1'-0"	6.1-4.4	5.5-6.5	207-43.1		
18'-0"	11'-3"	1'-10"	3'-8"	7'-7"	3/4":12"	6"	#4	1'-6"	7'-10"	#7	8'-1"	#4	6'-1"	#4	4'-4"	#5	#9	18'-10"	25'-11"	#9	10'-11"	16'-5"	-	-	#5	1'-0"	#4	1'-0"	7.5-4.4	6.9-6.5	283-51.7		
20'-0"	13'-3"	1'-10"	4'-8"	8'-7"	7/8":12"	6"	#4	1'-6"	7'-10"	#8	9'-1"	#4	6'-9"	#4	5'-4"	#5	#9	17'-5"	25'-10"	#9	11'-7"	18'-5"	-	-	#5	1'-0"	#5	1'-0"	9.6-4.3	9.0-6.2	358-62.0		
22'-0"	15'-0"	1'-10"	5'-3"	9'-9"	7/8":12"	6"	#4	1'-6"	7'-10"	#9	10'-10"	#4	7'-9"	#4	5'-11"	#5	#8	19'-7"	28'-9"	#8	11'-8"	19'-3"	-	-	#5	1'-0"	#5	1'-0"	11.4-4.4	10.7-6.4	495-70.4		
24'-0"	19'-0"	2'-0"	6'-0"	13'-0"	7/8":12"	6"	#4	1'-6"	8'-2"	2x#9	14'-0"	#4	10'-11"	#4	6'-8"	#6	#9	21'-7"	31'-9"	#9	13'-1"	21'-7"	-	-	#7	27'-2"	#6	1'-0"	#5	1'-0"	16.3-4.4	15.6-6.2	807-86.3
26'-0"	22'-3"	2'-6"	7'-6"	14'-9"	1":12"	6"	#4	1'-0"	9'-2"	2x#10	16'-2"	#4	12'-2"	#4	8'-2"	#6	#10	23'-10"	36'-5"	#10	15'-0"	25'-4"	-	-	#8	29'-5"	#6	1'-0"	#5	1'-0"	20.2-4.4	19.4-6.2	1131-113.4

State of Alaska DOT&PF  
 ALASKA STANDARD PLAN  
**CANTILEVER RETAINING WALL TYPE II**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
 Carolyn Morehouse, P.E.  
 Chief Engineer

Adoption Date: 07/17/2020

Last Code and Stds. Review By: NWM Date: 7/17/20  
 Next Code and Standards Review date: 07/17/2030

DRAWN BY: MCM CHECKED BY: BAS DESIGNED BY: NWM B-05.10