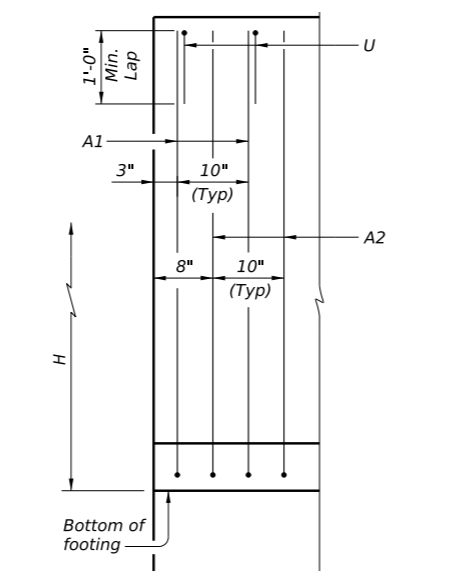
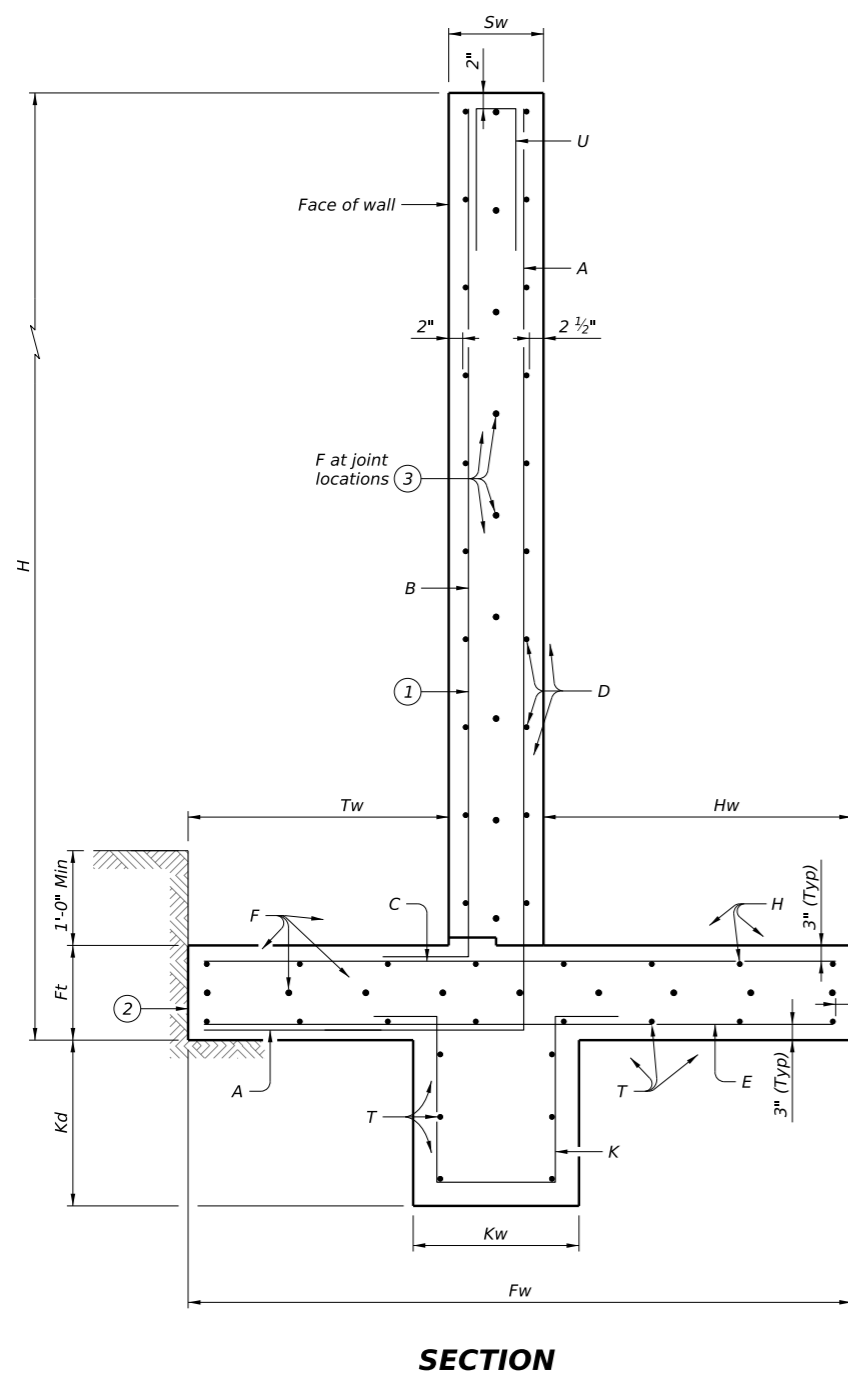


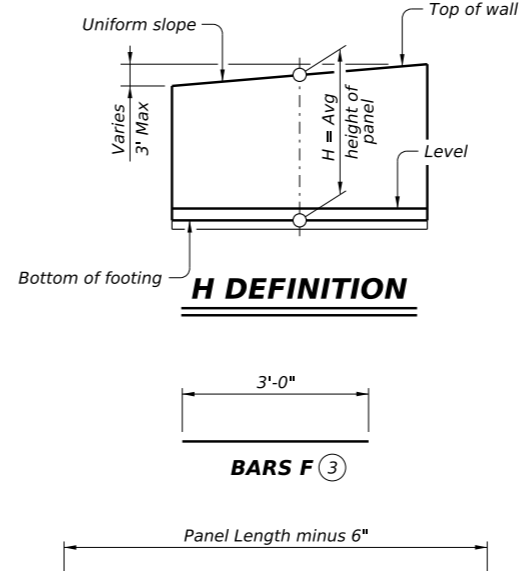
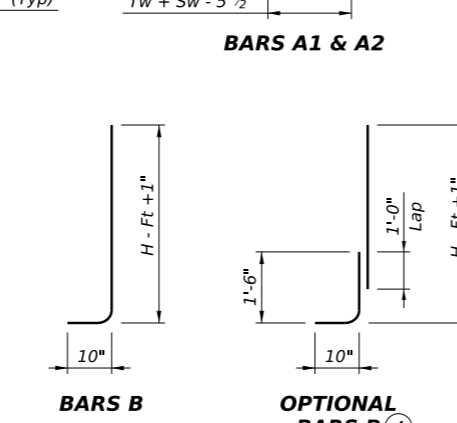
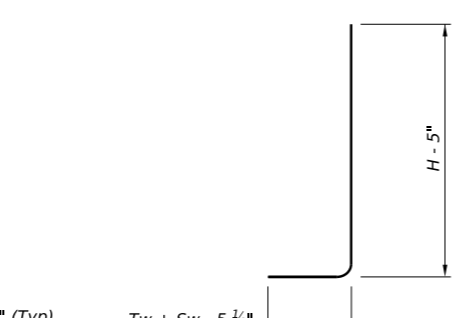
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DATE: FILE:

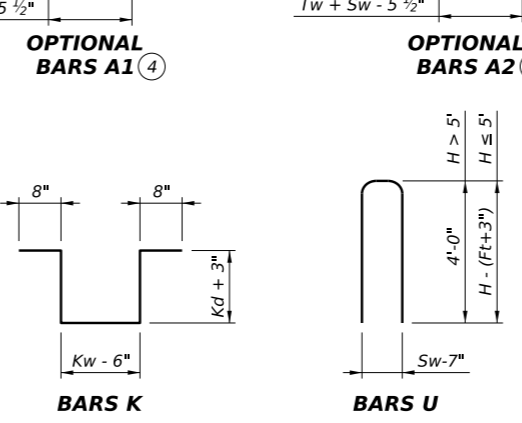
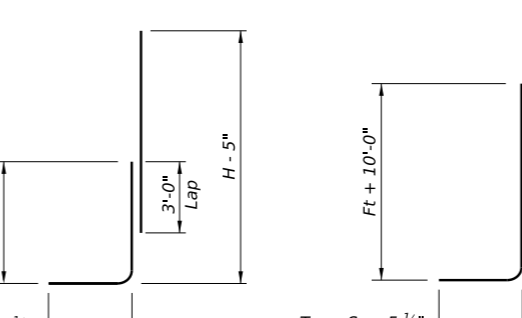
Wall Height "H"	PROPERTIES								REINFORCING STEEL FOR ONE 32' PANEL (DESIGN C)																				QUANTITY FOR ONE 32' PANEL		Wall Height "H"																				
	WALL DIMENSIONS							MAX SOIL PRESS	Bars A1				Bars A2				Bars B				Bars C				Bars E				Bars K				D (#5) at 12" Max.		Dowel F at 12" Max.		H (#5) at 12" Max.		T (#5) at 12" Max.		U ~ 39 #5 at 10" Max.		Conc (CY)	REINF (LB)							
	(Ft)	Fw	Tw	Sw	Hw	Ft	Kw		Kd	T/SF	No.	Size	Spa.	Length	Weight	No.	Size	Spa.	Length	Weight	No.	Size	Spa.	Length	Weight	No.	Size	Spa.	Length	Weight		No.	Size	Spa.	Length	Weight	No.	Weight	No.	Weight	No.	Weight			No.	Weight	No.	Weight	No.	Weight	
2	5'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	0.218	39	#4	10"	3'-2"	83	39	#4	10"	3'-2"	83	39	#4	10"	1'-11"	50	39	#4	10"	4'-6"	118	39	#4	10"	4'-6"	118	39	#4	10"	4'-4"	113	4	132	8	65	6	198	6	198	2'-0"	82	8.3	1240	2
4	5'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	0.321	39	#4	10"	5'-2"	135	39	#4	10"	5'-2"	135	39	#4	10"	3'-11"	103	39	#4	10"	4'-6"	118	39	#4	10"	4'-6"	118	39	#4	10"	4'-4"	113	8	263	10	81	6	198	6	198	6'-0"	245	10.7	1707	4
6	5'-6"	1'-6"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	0.395	39	#4	10"	7'-8"	200	39	#4	10"	7'-8"	200	39	#4	10"	5'-11"	155	39	#4	10"	5'-0"	131	39	#4	10"	5'-0"	131	39	#4	10"	4'-4"	113	12	395	12	97	6	198	6	198	8'-5"	343	13.7	2161	6
8	7'-4"	1'-9"	1'-1"	4'-6"	1'-0"	1'-0"	1'-0"	0.500	39	#4	10"	10'-0"	261	39	#4	10"	10'-0"	261	39	#4	10"	7'-11"	207	39	#4	10"	6'-10"	179	39	#4	10"	6'-10"	179	39	#4	10"	4'-4"	113	16	526	16	129	8	263	8	263	8'-6"	346	18.9	2727	8
10	8'-8"	2'-4"	1'-1"	5'-3"	1'-2"	1'-6"	1'-6"	0.590	39	#5	10"	12'-7"	512	39	#4	10"	12'-7"	328	39	#4	10"	9'-9"	255	39	#5	10"	8'-2"	333	39	#4	10"	8'-2"	213	39	#4	10"	5'-10"	152	20	658	20	161	10	329	10	329	8'-6"	346	26.0	3616	10
12	10'-4"	2'-11"	1'-2"	6'-3"	1'-4"	1'-9"	1'-9"	0.684	39	#5	10"	15'-3"	621	39	#4	10"	15'-3"	398	39	#4	10"	11'-7"	302	39	#5	10"	9'-10"	400	39	#4	10"	9'-10"	257	39	#4	10"	6'-7"	172	24	789	23	185	11	362	11	362	8'-7"	350	34.8	4198	12
14	11'-8"	3'-6"	1'-4"	6'-10"	1'-7"	2'-0"	2'-0"	0.769	39	#5	10"	18'-0"	733	39	#4	10"	18'-0"	469	39	#4	10"	13'-4"	348	39	#5	10"	11'-2"	455	39	#4	10"	11'-2"	291	39	#4	10"	7'-4"	192	28	920	27	217	13	428	13	428	8'-9"	356	46.3	4837	14
16	13'-1"	4'-0"	1'-6"	7'-7"	1'-9"	2'-0"	2'-0"	0.853	39	#5	10"	20'-8"	841	39	#5	10"	20'-8"	841	39	#4	10"	15'-2"	396	39	#6	10"	12'-7"	738	39	#4	10"	12'-7"	329	39	#4	10"	7'-4"	192	32	1052	30	241	14	460	14	460	8'-11"	363	57.3	5912	16
18	14'-7"	4'-6"	1'-8"	8'-5"	1'-9"	2'-0"	2'-0"	0.937	39	#6	10"	23'-4"	1367	39	#5	10"	23'-4"	950	39	#4	10"	17'-2"	448	39	#7	10"	14'-1"	1124	39	#4	10"	14'-1"	368	39	#4	10"	7'-4"	192	36	1183	34	273	16	526	16	526	9'-1"	370	67.1	7325	18
20	16'-5"	5'-0"	1'-10"	9'-7"	2'-0"	2'-0"	2'-0"	1.039	39	#6	10"	26'-0"	1524	39	#6	10"	26'-0"	1524	39	#4	10"	18'-11"	493	39	#7	10"	17'-11"	1429	39	#4	10"	17'-11"	467	39	#4	10"	7'-4"	192	38	1249	36	289	17	559	17	559	9'-3"	377	82.8	8662	20



PARTIAL WALL ELEVATION
(Showing vertical reinforcing pattern in back face.)



BARS D, H, and T



- Place vertical bars inside of horizontal bars (Typical both faces).
- Place footing toe against undisturbed soil.
- See Retaining Wall Miscellaneous Details (RW(SF)) standard for size.
- Optional bars splices not included in above table.

MATERIAL NOTES:
Provide Class C concrete ($f'c=3,600$ psi.)
Provide Grade 60 reinforcing steel.

GENERAL NOTES:
Designed according to AASHTO LRFD Bridge Design Specifications.
Walls are designed assuming unit weight of soil = 120 pcf and a friction angle = 30 degrees for foundation and retained soil.
See Retaining Wall Miscellaneous Details (RW(SF)) standard for details and notes not shown.
These details provide designs for wall heights of 2 to 20 feet. For heights not shown, round up "H" to determine wall dimensions and reinforcing. (For example, a 9-foot high wall would use the 10-foot high dimensions and reinforcing.)
Quantities are based on "H" being average height of panel.
Retaining walls are designed to be coded as follows on Retaining Wall Layout Sheets:

- C - 15 - 32 Panel length ~ 32 ft. is standard; 28 ft. requires special quantities.
- Average height (H) of panel.
- Design A = No surcharge or slope above wall.
- Design B = No surcharge; slopes to 3:1.
- Design C = Traffic surcharge; no slope above wall.

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bar dimensions shown are out-to-out of bar.

Texas Department of Transportation
Bridge Division Standard

SPREAD FOOTING RETAINING WALL

RW(SFC)

FILE: RW-SFC-25.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS		DIST		SHEET NO.