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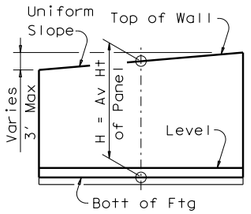
DATE:
FILE:



H DEFINITION

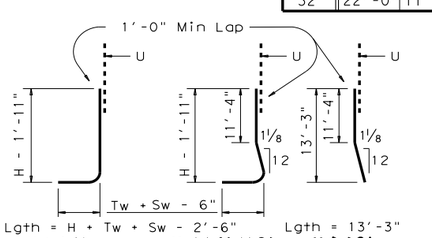
PROPERTIES

WALL DIMENSIONS

REINFORCING STEEL FOR ONE 32' PANEL (DESIGN A)

QUANTITY FOR ONE 32' PANEL

Wall Height "H"	Fw	Tw	Sw	Hw	Ft	Kw	Max Soil Press T/SF	A1 ~ 26 #5 at 15" c-c Lgth	A1 Wt	A2 ~ 25 #6 at 15" c-c Lgth	A2 Wt	A3 ~ 25 #7 at 15" c-c Lgth	A3 Wt	A4 ~ 26 #8 at 15" c-c Lgth	A4 Wt	A5 ~ 25 #9 at 15" c-c Lgth	A5 Wt	A6 ~ 25 #11 at 15" c-c Lgth	A6 Wt	A7 ~ 26 #11 at 15" c-c Lgth	A7 Wt	B ~ 26 #5 at 15" c-c Lgth	B Wt	C Size	C No	C Spa	C Lgth	C Wt	D (#5) at 12" c-c No	D Wt	Dowel F at 12" c-c No	Dowel F Wt	H (#5) at 12" c-c No	H Wt	T (#5) at 12" c-c No	T Wt	U ~ 26 #5 at 15" c-c Lgth	U Wt	CONC (CY)	REINF (LB)	Wall Height "H"
(Ft)	Fw	Tw	Sw	Hw	Ft	Kw	T/SF	Lgth	Wt	Lgth	Wt	Lgth	Wt	Lgth	Wt	Lgth	Wt	Lgth	Wt	Lgth	Wt	Lgth	Wt																			(Ft)
2	1'-8"	8"	1'-0"	0	9"	9"	0.11																					4	131	3	24			2	66	3'-4"	90	3.6	312	2
3	2'-0"	1'-0"	1'-0"	0	9"	9"	0.15																					6	197	4	32	2	66	2	66	5'-4"	145	5.1	506	3
4	2'-8"	1'-4"	1'-0"	4"	1'-0"	9"	0.21	3'-10"	104													3'-6"	95	#4	26	15"	1'-10"	32	8	263	6	48	2	66	2	66	7'-4"	199	7.4	873	4
5	3'-6"	1'-9"	1'-0"	9"	1'-0"	9"	0.23	5'-3"	142													4'-6"	122	#4	26	15"	2'-3"	39	10	329	7	56	2	66	3	99	8'-4"	226	9.6	1079	5
6	4'-3"	2'-2"	1'-0"	1'-1"	1'-0"	9"	0.24	6'-8"	181													5'-6"	149	#4	26	15"	2'-8"	46	12	394	8	64	3	99	3	99	8'-4"	226	11.6	1259	6
7	5'-0"	2'-6"	1'-0"	1'-6"	1'-0"	9"	0.27	8'-0"	217													6'-6"	176	#4	26	15"	3'-0"	52	14	460	9	72	3	99	3	99	8'-4"	226	13.7	1401	7
8	5'-8"	2'-10"	1'-0"	1'-10"	1'-0"	9"	0.30	9'-4"	253													7'-6"	203	#4	26	15"	3'-4"	58	16	526	10	80	3	99	4	131	8'-4"	226	15.7	1575	8
9	6'-4"	3'-2"	1'-0"	2'-2"	1'-0"	9"	0.33	10'-8"	284													8'-6"	231	#4	26	15"	3'-8"	64	18	591	11	88	3	99	4	131	8'-4"	226	17.7	1714	9
10	7'-0"	3'-6"	1'-0"	2'-6"	1'-0"	9"	0.36	12'-0"	325	4'-2"	156											9'-6"	258	#4	38	10"	4'-0"	102	20	657	12	96	4	131	4	131	8'-4"	226	19.6	2082	10
11	7'-9"	3'-10"	1'-0"	2'-11"	1'-0"	9"	0.39	13'-4"	362	5'-4"	200											10'-6"	285	#6	38	10"	4'-4"	247	22	723	13	104	4	131	5	164	8'-4"	226	21.7	2436	11
12	8'-6"	4'-3"	1'-0"	3'-3"	1'-0"	9"	0.40	14'-9"	400	6'-7"	247											11'-6"	312	#6	38	10"	4'-9"	271	24	789	14	112	4	131	5	164	8'-4"	226	23.8	2651	12
13	9'-2"	4'-7"	1'-0"	3'-7"	1'-0"	9"	0.43	16'-1"	436	7'-8"	288	6'-9"	345									12'-6"	339	#7	38	10"	5'-1"	395	26	854	15	120	5	164	6	197	8'-4"	226	25.8	3364	13
14	9'-10"	4'-11"	1'-0"	3'-11"	1'-0"	1'-0"	0.47	17'-5"	472	8'-11"	335	8'-1"	413									13'-6"	366	#8	38	10"	5'-5"	550	28	920	16	128	5	164	6	197	8'-4"	226	28.2	3771	14
15	10'-6"	5'-3"	1'-1 1/8"	4'-1 7/8"	1'-0"	1'-0"	0.50	18'-10"	511	10'-1"	379	9'-6"	485									14'-6"	393	#9	38	10"	5'-9"	743	30	986	17	136	6	197	7	197	8'-4"	226	30.3	4253	15
16	11'-2"	5'-7"	1'-2"	4'-5"	1'-3"	1'-3"	0.55	13'-3"	359	11'-2"	419	10'-11"	558	8'-5"	584							15'-6"	420	#9	38	10"	6'-1"	786	32	1051	18	144	6	197	7	230	8'-4"	226	36.0	4974	16
17	11'-10"	5'-11"	1'-3 1/8"	4'-7 7/8"	1'-3"	1'-3"	0.58	13'-3"	359	12'-5"	466	12'-4"	630	9'-10"	683							16'-6"	447	#9	38	10"	6'-5"	829	34	1117	19	152	7	230	7	230	8'-4"	226	38.5	5369	17
18	12'-6"	6'-3"	1'-4"	4'-11"	1'-6"	1'-3"	0.63	13'-3"	359	13'-7"	510	13'-9"	703	11'-2"	775							17'-6"	475	#9	38	10"	6'-9"	872	34	1117	19	152	7	230	8	263	8'-4"	226	44.3	5682	18
19	13'-3"	6'-7"	1'-5"	5'-3"	1'-6"	1'-6"	0.66	13'-3"	359	14'-9"	554	15'-2"	775	12'-8"	879							18'-6"	502	#9	38	10"	7'-2"	926	36	1183	20	160	7	230	8	263	8'-4"	226	48.1	6057	19
20	13'-10"	6'-11"	1'-6 1/4"	5'-4 3/4"	1'-6"	1'-6"	0.70	13'-3"	359	15'-11"	598	16'-7"	847	14'-1	978							19'-6"	529	#10	38	10"	7'-5"	1213	38	1248	21	168	8	263	8	263	8'-4"	226	50.9	6692	20
21	14'-6"	7'-3"	1'-7"	5'-8"	1'-9"	1'-6"	0.75	13'-3"	359	11'-2"	419	18'-0"	920	15'-5"	1070	9'-7"	815					20'-6"	556	#10	38	10"	7'-9"	1267	40	1314	22	176	8	263	9	296	8'-4"	226	57.7	7681	21
22	15'-2"	7'-7"	1'-8 1/8"	5'-10 7/8"	1'-9"	1'-6"	0.78	13'-3"	359	11'-2"	419	19'-5"	992	16'-11"	1174	10'-11"	928					21'-6"	583	#10	38	10"	8'-1"	1322	42	1380	23	184	8	263	9	296	8'-4"	226	61.0	8126	22
23	16'-0"	8'-0"	1'-9 1/4"	6'-2 3/4"	1'-9"	1'-6"	0.79	13'-3"	359	11'-2"	419	20'-11"	1069	18'-5"	1278	12'-4"	1048					22'-6"	610	#8	76	5"	8'-6"	1725	44	1446	24	192	9	296	10	329	8'-4"	226	64.8	8997	23
24	16'-6"	8'-3"	1'-10 1/8"	6'-4 7/8"	2'-0"	1'-6"	0.86	13'-3"	359	11'-2"	419	22'-3"	1137	19'-9"	1371	13'-7"	1155					23'-6"	637	#8	76	5"	8'-9"	1776	46	1511	25	200	9	296	10	329	8'-4"	226	72.4	9416	24
25	17'-3"	8'-7"	1'-11 1/4"	6'-8 3/4"	2'-0"	1'-6"	0.89	13'-3"	359	11'-2"	419	12'-2"	622	21'-2"	1469	15'-0"	1275	6'-1"	808			24'-6"	664	#8	76	5"	9'-2"	1860	48	1577	26	208	9	296	10	329	8'-4"	226	76.4	10112	25
26	18'-0"	9'-0"	2'-0 1/8"	6'-11 1/8"	2'-3"	1'-6"	0.93	13'-3"	359	11'-2"	419	12'-2"	622	22'-8"	1574	16'-4"	1388	7'-1"	941			25'-6"	692	#8	76	5"	9'-6"	1928	50	1643	27	217	10	329	11	361	8'-4"	226	85.2	10698	26
27	18'-6"	9'-4"	2'-1 1/4"	7'-0 3/4"	2'-3"	1'-6"	0.97	13'-3"	359	11'-2"	419	12'-2"	622	24'-1"	1672	17'-8"	1502	8'-1"	1074			26'-6"	719	#9	76	5"	9'-10"	2541	52	1708	28	225	10	329	11	361	8'-4"	226	89.0	11757	27
28	19'-3"	9'-7"	2'-2 3/8"	7'-5 5/8"	2'-3"	1'-9"	1.00	13'-3"	359	11'-2"	419	12'-2"	622	25'-5"	1764	19'-0"	1615	9'-1"	1206			27'-6"	746	#9	76	5"	10'-1"	2606	54	1774	29	233	10	329	12	394	8'-4"	226	94.5	12293	28
29	20'-0"	10'-0"	2'-3 1/2"	7'-8 1/2"	2'-3"	1'-9"	1.02	13'-3"	359	11'-2"	419	12'-2"	622	27'-0"	1874	20'-5"	1735	10'-1"	1339			28'-6"	773	#9	76	5"	10'-5"	2692	56	1840	30	241	11	361	12	394	8'-4"	226	99.2	12874	29
30	20'-6"	10'-4"	2'-4 5/8"	7'-9 3/8"	2'-3"	1'-9"	1.06	13'-3"	359	11'-2"	419	12'-2"	622	14'-4"	995	21'-9"	1849	11'-1"	1472	17'-0"	2348	29'-6"	800	#10	76	5"	10'-9"	3516	58	1906	31	249	11	361	12	394	8'-4"	226	103.3	15515	30
31	21'-3"	10'-7"	2'-5 3/4"	8'-2 1/4"	2'-3"	1'-9"	1.09	13'-3"	359	11'-2"	419	12'-2"	622	14'-4"	995	23'-0"	1955	12'-1"	1605	18'-4"	2533	30'-6"	827	#10	76	5"	11'-2"	3652	60	1971	32	257	11	361	13	427	8'-4"	226	108.2	16209	31
32	22'-0"	11'-0"	2'-6 1/2"	8'-5 1/2"	2'-6"	1'-9"	1.13	13'-3"	359	11'-2"	419	12'-2"	622	14'-4"	995	24'-5"	2075	13'-1"	1738	19'-10"	2740	31'-6"	854	#10	76	5"	11'-6"	3761	60	1971	32	257	12	394	13	427	8'-4"	226	118.9	16837	32



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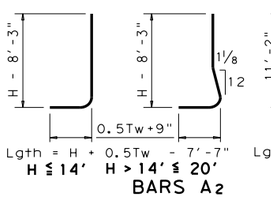

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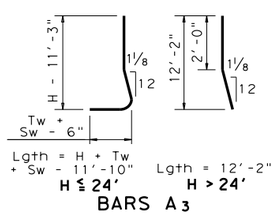

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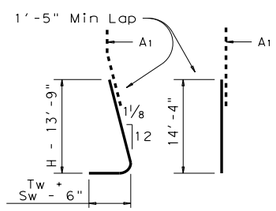

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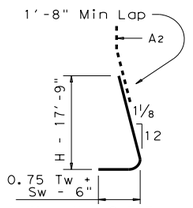

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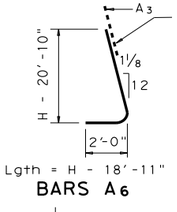

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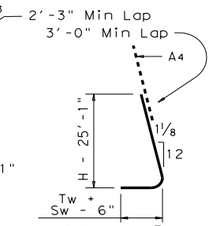

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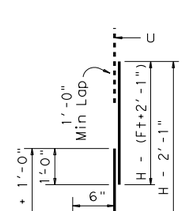
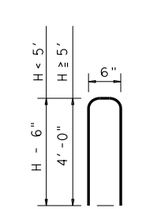
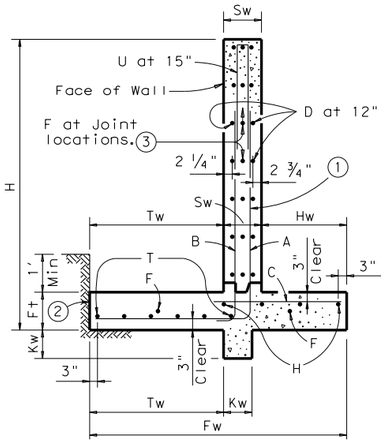


BARS B

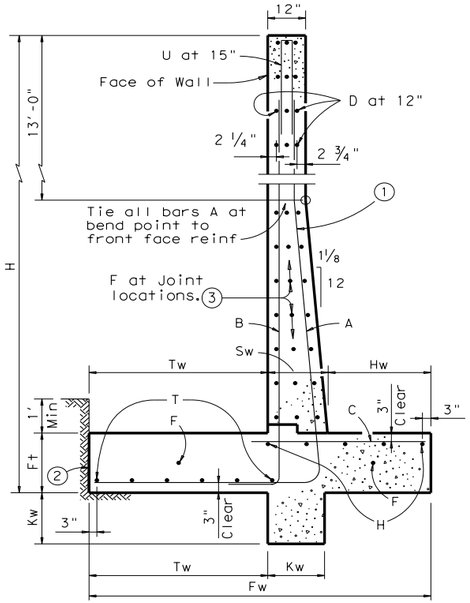


BARS U

1. Place vertical bars inside of horizontal bars (Typ both faces).
2. Place footing toe against undisturbed soil.
3. See standard RW 2 for size.



H ≦ 14'



H > 14'

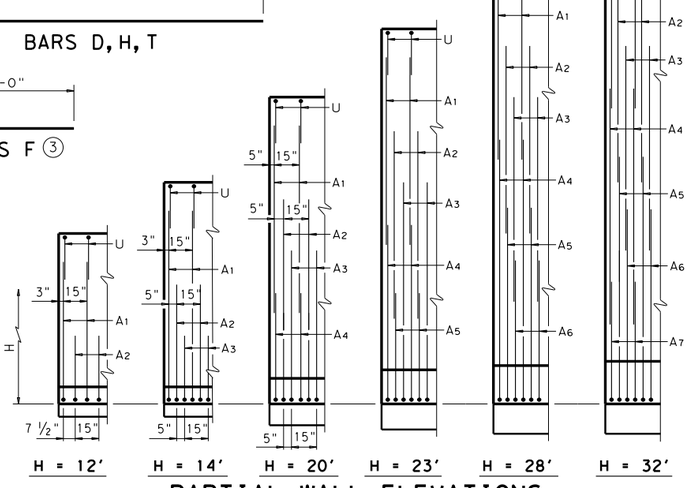
SECTIONS

Panel Length minus 6"

BARS D, H, T

3'-0"

BARS F ③



PARTIAL WALL ELEVATIONS

(Showing vertical reinforcing pattern in back face)

GENERAL NOTES:

All concrete to be Class "C".
All reinforcing steel to be Grade 60.
For notes and details not shown on this sheet see sheet RW2.
Quantities are based on "H" being average height of panel.
Retaining Walls are designed to be coded as follows on Retaining Wall Layout Sheets.

HC - 21 - 28
LA - 28 - 32

- Panel Length ~ 32' is standard; 28' requires special quantities
- Average Height "H" of panel
- Design - A = no surcharge or slope above wall; B = slopes up to 4:1; C = traffic surcharge and/or slopes up to 2.5:1
- Footing pressure design ~ L = low, H = high

Texas Department of Transportation

Bridge Division Standard

RETAINING WALLS

RW 1(L)A

FILE:	rwstde05.dgn	DN: TxDOT	CK: TxDOT	DW: GHO	CK: MPM
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REVISIONS					
		DIST	COUNTY		SHEET NO.