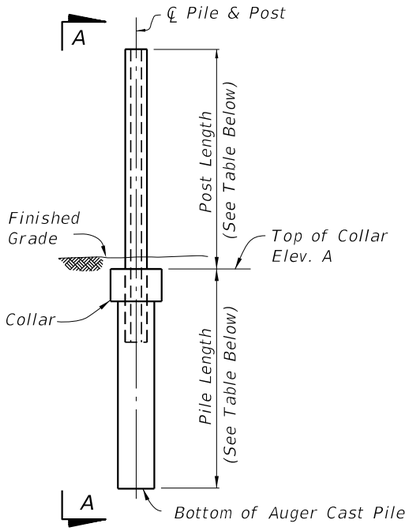
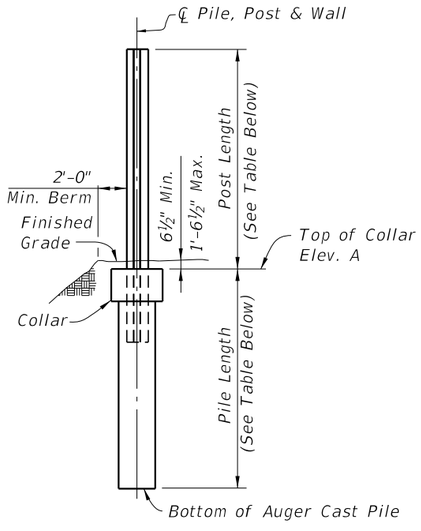


PILE/POST ELEVATION
(Pile/Post Connection Option A Shown)

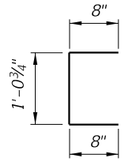


VIEW A-A
(Pile/Post Connection Option A Shown)

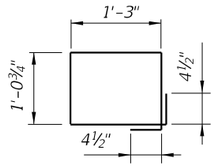
BAR BENDING DETAILS

All bar dimensions in bending diagrams are out-to-out. All bars not shown in the bending diagrams are straight.

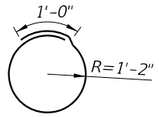
POST & PILE



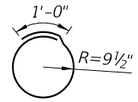
BAR P1
Bar Length = 2'-5"



BAR P2
Bar Length = 5'-5"

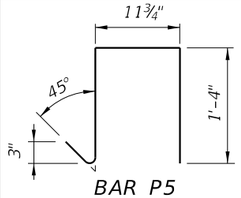


BAR P3
Bar Length = 8'-4"

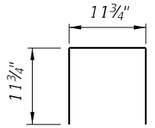


BAR P4
Bar Length = 6'-0"

90° CORNER POST & PILE

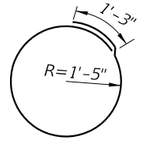


BAR P5
Bar Length = 4'-0"

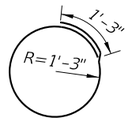


BAR P6
Bar Length = 2'-11¼"

CAST-IN-PLACE COLLAR

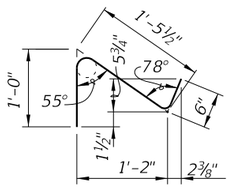


BAR P9
Bar Length = 10'-2"

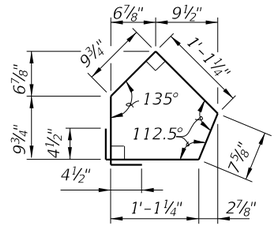


BAR P10
Bar Length = 9'-2"

45° CORNER POST & PILE



BAR P7 (POST)
Bar Length = 2'-8"



BAR P8 (PILE)
Bar Length = 5'-0¼"

NOTES:
Bars A, B & P1 are used in Options A, B & E.
Bars C are only used in Option A.
Bars C2 are only used in Option B.
Bars P2 are used in Options A & E.
Bars P3 are only used in Option A.
Bars P4 are only used in Option B.
Bars P5 & P6 are only used in 90É Corner Posts.
Bars P7 & P8 are only used in 45É Corner Posts.
Bars P9 & P10 are used in the Cast-In-Place Collar Options.

For Bar Designations, See Index No. 5205.

TABLE 1 - FOUNDATIONS FOR MEDIUM DENSE GRANULAR SOILS (Soil SPT N_{60} Values between 10 and 40)

POST AND PILE DIMENSIONS / TABLE OF REINFORCING STEEL

WALL TYPE	POST LENGTH WITHOUT CAP	POST LENGTH WITH CAP	PILE LENGTH OPTION A		PILE LENGTH OPTIONS B, C, D & E		PILE/POST REINFORCING										CAST-IN-PLACE COLLAR	
							10'-0" POST SPACING				20'-0" POST SPACING				BARS C	BARS C2	BARS P1, P2, P3, P4, P5, P6, P7 & P8	BARS P9	BARS P10
			10'-0" POST SPACING	20'-0" POST SPACING	10'-0" POST SPACING	20'-0" POST SPACING	BARS A SIZE	BARS B SIZE	BARS B DIM 'A'	BARS D SIZE	BARS A SIZE	BARS B SIZE	BARS B DIM 'A'	BARS D SIZE	SIZE	SIZE	SIZE	SIZE	SIZE
A	12'-0½"	12'-2½"	11'-0"	14'-0"	12'-0"	15'-0"	#4	#4	10'-0"	#4	#5	#5	9'-0"	#6	#9	#7	#4	#5	#5
B	13'-0½"	13'-2½"	11'-0"	15'-0"	12'-0"	16'-0"	#4	#4	10'-7"	#5	#5	#5	8'-10"	#7	#9	#7	#4	#5	#5
C	14'-0½"	14'-2½"	12'-0"	16'-0"	13'-0"	17'-0"	#4	#4	10-5"	#5	#6	#6	10'-4"	#7	#9	#7	#4	#5	#5
D	15'-0½"	15'-2½"	12'-0"	17'-0"	13'-0"	18'-0"	#5	#5	12'-11"	#6	#6	#6	10'-3"	#8	#9	#7	#4	#5	#5
E	16'-0½"	16'-2½"	13'-0"	17'-0"	14'-0"	18'-0"	#5	#5	12'-9"	#6	#7	#7	11'-10"	#8	#9	#7	#4	#5	#5
F	17'-0½"	17'-2½"	14'-0"	18'-0"	14'-0"	19'-0"	#5	#5	12'-7"	#6	#7	#7	11'-8"	#9	#9	#7	#4	#5	#5
G	18'-0½"	18'-2½"	14'-0"	19'-0"	15'-0"	20'-0"	#6	#6	14'-11"	#7	#8	#8	13'-1"	#10	#9	#7	#4	#5	#5
H	19'-0½"	19'-2½"	15'-0"	20'-0"	15'-0"	21'-0"	#6	#6	14'-10"	#7	#8	#8	13'-0"	#10	#9	#7	#4	#5	#5
I	20'-0½"	20'-2½"	15'-0"	21'-0"	16'-0"	22'-0"	#6	#6	14'-9"	#8	#9	#9	14'-3"	#11	#9	#7	#4	#5	#5
J	21'-0½"	21'-2½"	16'-0"	22'-0"	16'-0"	24'-0"	#6	#6	14'-8"	#8	#9	#9	14'-2"	#11	#9	#7	#4	#5	#5
K	22'-0½"	22'-2½"	16'-0"	23'-0"	17'-0"	26'-0" *	#7	#7	17'-1"	#8	#9	#9	14'-1"	2~ #14 & 1 ~ #9	#9	#7	#4	#5	#5

* For Steel Post Option "D", use 30'-0".

NOTE: USE THIS INDEX ONLY WHEN SOIL SPT N VALUES ARE BETWEEN 10 AND 40

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/10	CMH	Changed Bar P3 radius. Changed Bars P5 & P6.			
07/01/10	CMH	Added table title and renumbered sheet.			

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PRECAST SOUND BARRIERS - PILE DEPTH AND REINFORCING SUMMARY

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Sheet No. 1 of 2

Index No. 5206

TABLE 2 - FOUNDATIONS FOR LOOSE GRANULAR SOILS (SPT N_{60} Values between 4 and 9)

POST AND PILE DIMENSIONS							TABLE OF REINFORCING STEEL												
WALL TYPE	POST LENGTH WITHOUT CAP	POST LENGTH WITH CAP	PILE LENGTH OPTION A		PILE LENGTH OPTIONS B, C, D & E		PILE/POST REINFORCING											CAST-IN-PLACE COLLAR	
							10'-0" POST SPACING				20'-0" POST SPACING				BARS C	BARS C2	BARS P1, P2, P3, P4, P5, P6, P7 & P8	BARS P9	BARS P10
			10'-0" POST SPACING	20'-0" POST SPACING	10'-0" POST SPACING	20'-0" POST SPACING	BARS A	BARS B		BARS D	BARS A	BARS B		BARS D					
							SIZE	SIZE	DIM 'A'	SIZE	SIZE	SIZE	DIM 'A'	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE
A	12'-0½"	12'-2½"	12'-0"	17'-0"	13'-0"	17'-0"	#4	#4	10'-0"	#4	#5	#5	9'-0"	#6	#9	#7	#4	#5	#5
B	13'-0½"	13'-2½"	13'-0"	17'-0"	14'-0"	18'-0"	#4	#4	10'-7"	#5	#5	#5	8'-10"	#7	#9	#7	#4	#5	#5
C	14'-0½"	14'-2½"	14'-0"	18'-0"	14'-0"	19'-0"	#4	#4	10-5"	#5	#6	#6	10'-4"	#7	#9	#7	#4	#5	#5
D	15'-0½"	15'-2½"	14'-0"	19'-0"	15'-0"	20'-0"	#5	#5	12'-11"	#6	#6	#6	10'-3"	#8	#9	#7	#4	#5	#5
E	16'-0½"	16'-2½"	15'-0"	20'-0"	16'-0"	21'-0"	#5	#5	12'-9"	#6	#7	#7	11'-10"	#8	#9	#7	#4	#5	#5
F	17'-0½"	17'-2½"	16'-0"	21'-0"	16'-0"	22'-0"	#5	#5	12'-7"	#6	#7	#7	11'-8"	#9	#9	#7	#4	#5	#5
G	18'-0½"	18'-2½"	16'-0"	22'-0"	17'-0"	23'-0"	#6	#6	14'-11"	#7	#8	#8	13'-1"	#10	#9	#7	#4	#5	#5
H	19'-0½"	19'-2½"	17'-0"	23'-0"	18'-0"	25'-0"	#6	#6	14'-10"	#7	#8	#8	13'-0"	#10	#9	#7	#4	#5	#5
I	20'-0½"	20'-2½"	17'-0"	24'-0"	18'-0"	26'-0"	#6	#6	14'-9"	#8	#9	#9	14'-3"	#11	#9	#7	#4	#5	#5
J	21'-0½"	21'-2½"	18'-0"	25'-0"	19'-0"	29'-0"	#6	#6	14'-8"	#8	#9	#9	14'-2"	#11	#9	#7	#4	#5	#5
K	22'-0½"	22'-2½"	18'-0"	26'-0"	19'-0"	*	#7	#7	17'-1"	#8	#9	#9	14'-1"	2~ #14 & 1 ~ #9	#9	#7	#4	#5	#5

* Do not use for walls with 30" dia. foundations, 20' spacing, & greater than 21' high.

NOTE: USE THIS INDEX ONLY WHEN SOIL SPT N VALUES ARE BETWEEN 4 AND 9

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
07/01/10	CMH	New sheet.			

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Interim Date 07/01/10

Index No. 5206