N:\PROJECTS\97\97042\DWGS\SUBMIT\DETAIL24.DWG [9704224.PLT]

BCW-21

WING	SIZE	WF5 α LENGTH From	To	Vary By	From	To	Vary By	SIZE	WF6 LENGTH From	To	Vary By	SIZE	WF7 α LENGTH From	To	Vary By	From	To	Vary By	SIZE	WH1 LENGTH	SIZE	WH3 LENGTH
A	--	-----	-----	-----	-----	-----	-----	4	3'- 6"	2'- 6¾"	0'- 2½"	--	-----	-----	-----	-----	-----	-----	4	6'- 6"	4	6'-11"
B	--	-----	-----	-----	-----	-----	-----	4	3'- 6"	2'- 6"	0'- 2"	--	-----	-----	-----	-----	-----	-----	4	7'- 6"	4	8'- 1"
C	--	-----	-----	-----	-----	-----	-----	4	3'- 6"	2'- 7½"	0'- 1¾"	--	-----	-----	-----	-----	-----	-----	4	8'- 6"	4	9'- 1"
D	--	-----	-----	-----	-----	-----	-----	4	3'- 6"	2'- 7½"	0'- 1½"	--	-----	-----	-----	-----	-----	-----	4	9'- 6"	4	10'- 2"
E	--	-----	-----	-----	-----	-----	-----	4	3'- 6"	2'- 7"	0'- 1⅜"	--	-----	-----	-----	-----	-----	-----	4	10'- 6"	4	11'- 2"
F	--	-----	-----	-----	-----	-----	-----	4	3'- 6"	2'- 6¾"	0'- 1¼"	--	-----	-----	-----	-----	-----	-----	4	11'- 6"	4	12'- 4"
G	--	-----	-----	-----	-----	-----	-----	4	4'- 0"	2'- 6½"	0'- 1⅜"	--	-----	-----	-----	-----	-----	-----	4	12'- 6"	4	13'- 4"
H	--	-----	-----	-----	-----	-----	-----	4	4'- 6"	2'- 7½"	0'- 2¼"	--	-----	-----	-----	-----	-----	-----	4	13'- 6"	4	14'- 5"
I	--	-----	-----	-----	-----	-----	-----	4	4'- 6"	2'- 8"	0'- 2"	--	-----	-----	-----	-----	-----	-----	4	14'- 6"	4	15'- 6"
J	--	-----	-----	-----	-----	-----	-----	4	4'-11"	2'- 8"	0'- 2¼"	--	-----	-----	-----	-----	-----	-----	4	15'- 6"	4	16'- 7"
K	--	-----	-----	-----	-----	-----	-----	4	5'- 5"	2'- 6⅞"	0'- 2⅜"	--	-----	-----	-----	-----	-----	-----	4	16'- 6"	4	17'- 7"
L	--	-----	-----	-----	-----	-----	-----	4	5'- 5"	2'- 6"	0'- 2¼"	--	-----	-----	-----	-----	-----	-----	4	17'- 6"	4	18'- 9"
M	4	8'-11"	5'- 1½"	0'- 1⅜"	6'-11"	6'- 1¼"	0'- 1⅜"	4	5'-11"	2'- 8½"	0'- 2⅜"	--	-----	-----	-----	-----	-----	-----	4	18'- 6"	4	19'- 9"
N	4	8'-11"	5'- 1¼"	0'- 1⅜"	6'-11"	6'- 1¼"	0'- 1⅜"	4	5'-11"	2'- 8½"	0'- 2⅜"	--	-----	-----	-----	-----	-----	-----	4	18'- 6"	4	19'- 9"
O	4	8'- 5"	5'- 6½"	0'- 1¾"	7'- 5"	6'- 6½"	0'- 1¾"	4	6'- 5"	2'- 8"	0'- 3"	--	-----	-----	-----	-----	-----	-----	4	19'- 6"	4	20'-10"
P	4	8'- 6"	4'- 8"	0'- 2"	6'- 6"	5'- 8"	0'- 2"	4	6'-11"	2'- 7"	0'- 3¼"	4	6'-11"	5'- 8"	0'- 1½"	7'-11"	6'- 8"	0'- 1¼"	4	20'- 6"	4	21'-11"
Q	4	8'- 7"	4'- 9⅝"	0'- 1¾"	6'- 7"	5'- 9⅝"	0'- 1¾"	4	6'-11"	2'- 8"	0'- 3"	4	6'-11"	5'- 8"	0'- 1½"	7'-11"	6'- 8"	0'- 1¼"	4	21'- 6"	4	23'- 0"
R	4	8'- 0"	5'- 2"	0'- 2"	7'- 0"	6'- 2"	0'- 2"	4	7'- 5"	2'- 6½"	0'- 3¼"	4	7'- 5"	6'- 2"	0'- 1¼"	8'- 5"	7'- 2"	0'- 1¼"	4	22'- 6"	4	24'- 0"
S	4	8'- 5"	5'- 6⅜"	0'- 2¼"	7'- 5"	6'- 6⅜"	0'- 2¼"	4	7'-11"	2'-10½"	0'- 3⅜"	4	7'-11"	6'- 6½"	0'- 1⅜"	8'-11"	7'- 6½"	0'- 1⅜"	4	23'- 6"	4	25'- 2"
T	4	5'-11"	4'- 9"	0'- 2"	6'-11"	5'- 9"	0'- 2"	4	7'-11"	2'- 9¼"	0'- 3¼"	4	7'-11"	6'- 1¾"	0'- 1¼"	8'-11"	7'- 1¾"	0'- 1¼"	4	24'- 6"	4	26'- 2"
U	5	7'- 2¼"	5'- 4¼"	0'- 2"	8'- 4"	6'- 6"	0'- 2"	4	8'- 5"	2'- 7"	0'- 3½"	5	8'- 5½"	7'- 4⅞"	0'- 1⅜"	9'- 7"	8'- 6⅝"	0'- 1⅜"	4	25'- 6"	4	27'- 3"
V	5	7'- 5¼"	5'- 5⅞"	0'- 2¼"	8'- 7"	6'- 7⅝"	0'- 2¼"	4	8'-11"	2'- 6⅞"	0'- 3⅜"	5	8'-11½"	7'- 6⅞"	0'- 1½"	10'- 1"	8'- 8½"	0'- 1½"	4	26'- 6"	4	28'- 3"
W	5	7'- 7½"	5'- 6½"	0'- 2¼"	8'- 9"	6'- 8½"	0'- 2¼"	4	9'- 5"	2'- 6½"	0'- 3⅜"	5	9'- 5½"	7'- 9⅜"	0'- 1½"	10'- 7"	8'-11½"	0'- 1½"	4	27'- 6"	4	29'- 5"
X	5	8'- 5½"	5'- 3⅜"	0'- 2½"	9'- 7"	6'- 5½"	0'- 2½"	4	10'- 5"	2'-10½"	0'- 4⅛"	5	10'- 5½"	8'- 8½"	0'- 1⅜"	11'- 7"	9'- 9½"	0'- 1⅜"	4	28'- 6"	4	30'- 6"
Y	5	8'-11½"	5'- 6"	0'- 2¾"	10'- 1"	6'- 1¾"	0'- 2¾"	4	11'- 5"	2'- 9½"	0'- 4½"	5	11'- 5½"	9'- 1⅞"	0'- 1⅞"	12'- 7"	10'- 2⅞"	0'- 1⅞"	4	29'- 6"	4	31'- 6"
Z	5	9'- 1½"	5'- 8"	0'- 2¾"	10'- 3"	6'- 5¾"	0'- 2¾"	4	11'-11"	2'- 8"	0'- 4⅝"	5	11'-11½"	9'- 3⅜"	0'- 1⅞"	13'- 1"	10'- 8½"	0'- 1⅞"	4	30'- 6"	4	32'- 7"
AA	6	9'- 6½"	5'-11⅜"	0'- 2¾"	10'-11"	7'- 3⅜"	0'- 2¾"	4	12'- 5"	2'- 6½"	0'- 4¾"	6	12'- 4½"	9'- 8⅝"	0'- 1⅞"	13'- 9"	11'- 1½"	0'- 1⅞"	4	31'- 6"	4	33'- 8"
BB	6	10'- 3½"	6'- 6½"	0'- 3"	11'- 8"	7'-11"	0'- 3"	4	13'- 5"	2'- 7"	0'- 5"	6	13'- 4½"	10'- 6½"	0'- 2"	14'- 9"	11'-11"	0'- 2"	4	32'- 6"	4	34'- 8"
CC	6	10'- 9½"	7'- 1½"	0'- 3"	12'- 2"	8'- 5"	0'- 3"	4	13'-11"	2'- 9½"	0'- 5⅛"	6	13'-10½"	11'- ½"	0'- 2"	15'- 3"	12'- 5"	0'- 2"	4	33'- 6"	4	35'-10"
DD	6	11'- 2½"	6'- 3½"	0'- 3¼"	12'- 7"	7'- 7⅝"	0'- 3¼"	4	14'- 5"	2'-10⅝"	0'- 5¼"	6	14'- 4½"	11'- 6½"	0'- 2"	15'- 9"	12'-11"	0'- 2"	4	34'- 6"	4	36'-10"
EE	6	11'- 8½"	6'- 9½"	0'- 3½"	13'- 1"	8'- 1⅝"	0'- 3½"	4	14'-11"	2'- 8"	0'- 5¼"	6	14'-10½"	11'-10⅜"	0'- 2½"	16'- 3"	13'- 2⅜"	0'- 2½"	4	35'- 6"	4	37'-11"

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WING DETAILS
2:1 FILL SLOPE - TYPE I
VIRGINIA DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

BCW-21

WING	SIZE	WH2 α LENGTH From	To	Vary By	Ea	SIZE	WV1 α LENGTH From	To	Vary By	From	To	Vary By	SIZE	WV2 LENGTH From	To	Vary By
A	4	6'- 0"	2'- 7⅝"	3'- 4½"	2	4	5'- ½"	2'- 9¼"	0'- 4½"	7'- 0"	4'- 9"	0'- 4½"	4	5'- 0"	2'- 7⅝"	0'- 3¾"
B	4	5'- 9"	2'- 6½"	3'- 2½"	2	4	5'- 6¼"	2'- 9"	0'- 4¾"	7'- 6"	4'- 8¾"	0'- 4¾"	4	5'- 6"	2'- 6¾"	0'- 3¾"
C	4	6'- 0"	2'- 7¾"	3'- 4¼"	2	4	6'- ½"	3'- ¼"	0'- 4½"	8'- 0"	5'- 0"	0'- 4½"	4	6'- 0"	3'- 2¼"	0'- 3¾"
D	4	9'- 1"	2'- 6½"	3'- 3¼"	2	4	6'- 6¼"	3'- ⅝"	0'- 4⅝"	8'- 6"	5'- ¾"	0'- 4⅝"	4	6'- 6"	3'- 1¾"	0'- 3¾"
E	4	9'- 4"	2'- 7¾"	3'- 4¼"	2	4	7'- ¼"	3'- 3¼"	0'- 4½"	9'- 0"	5'- 3"	0'- 4½"	4	7'- 0"	3'- 3"	0'- 3¾"
F	4	9'- 1"	2'- 6¾"	3'- 3¼"	2	4	7'- 6¼"	3'- 3⅝"	0'- 4⅝"	9'- 6"	5'- 3⅛"	0'- 4⅝"	4	7'- 6"	3'- 2¼"	0'- 3¾"
G	4	9'- 4"	2'- 7½"	3'- 4¼"	2	4	8'- ¼"	3'- 6¼"	0'- 4½"	10'- 0"	5'- 6"	0'- 4½"	4	8'- 0"	3'- 3⅜"	0'- 3¾"
H	4	12'- 5"	2'- 6⅞"	3'- 3⅝"	2	4	8'- 6¼"	3'- 6¼"	0'- 4⅝"	10'- 6"	5'- 5⅞"	0'- 4⅝"	4	8'- 6"	3'- 8½"	0'- 3¾"
I	4	12'- 9"	2'- 7⅝"	3'- 4¼"	2	4	9'- ¼"	3'- 9¼"	0'- 4½"	11'- 0"	5'- 9"	0'- 4½"	4	9'- 0"	3'-10½"	0'- 3¾"
J	4	12'- 6"	2'- 6⅝"	3'- 3⅝"	2	4	9'- 6¼"	3'- 8⅞"	0'- 4⅝"	11'- 6"	5'- 8⅝"	0'- 4⅝"	4	9'- 6"	3'- 7"	0'- 3¾"
K	4	16'- 0"	2'- 7½"	3'- 4¼"	2	4	10'- ¼"	4'- ¼"	0'- 4½"	12'- 0"	6'- 0"	0'- 4½"	4	10'- 0"	3'-10½"	0'- 3¾"
L	4	15'- 9"	2'- 7"	3'- 3½"	2	4	8'- 4¼"	3'-10¼"	0'- 4½"	10'- 4"	5'-10"	0'- 4½"	4	10'- 6"	3'- 9½"	0'- 3¾"
M	4	16'- 0"	2'- 7½"	3'- 4¼"	2	4	8'-11¼"	4'- ⅞"	0'- 4½"	10'-11"	6'- ½"	0'- 4½"	4	11'- 0"	4'- 9¾"	0'- 3¾"
N	4	16'- 0"	2'- 7½"	3'- 4¼"	2	4	8'- 5¼"	4'- 8¼"	0'- 4½"	10'- 5"	6'- 8"	0'- 4½"	4	11'- 6"	4'-11⅝"	0'- 3¾"
O	4	19'- 1"	2'- 6⅞"	3'- 3⅝"	2	4	8'-10¼"	4'- 9¾"	0'- 4½"	10'-10"	6'- 8½"	0'- 4½"	4	12'- 0"	4'- 9¾"	0'- 3¾"
P	4	19'- 4"	2'- 7⅝"	3'- 4¼"	2	4	7'-10¼"	4'-10¼"	0'- 4½"	9'-10"	6'-10"	0'- 4½"	4	12'- 6"	5'- 0"	0'- 3¾"
Q	4	19'- 1"	2'- 6⅞"	3'- 3⅝"	2	4	8'- 3¼"	4'- 9⅝"	0'- 4⅝"	10'- 3"	6'- 9⅝"	0'- 4⅝"	4	13'- 0"	4'-10½"	0'- 3¾"
R	4	19'- 4"	2'- 7⅝"	3'- 4¼"	2	4	8'-10¼"	5'- 1¼"	0'- 4½"	10'-10"	7'- 1"	0'- 4½"	4	13'- 6"	5'- 3¼"	0'- 3¾"
S	4	22'- 9"	2'- 7¼"	3'- 3⅝"	2	4	9'- 3¼"	5'- ¾"	0'- 4⅝"	11'- 3"	7'- ¼"	0'- 4⅝"	4	14'- 0"	5'- 4½"	0'- 3¾"
T	4	22'- 8"	2'- 7¼"	3'- 4¼"	2	4	9'- 9¼"	5'- 3¼"	0'- 4½"	11'- 9"	7'- 3"	0'- 4½"	4	14'- 6"	5'- 7⅝"	0'- 3¾"
U	4	22'- 9"	2'- 7¼"	3'- 3⅝"	2	4	9'-10¼"	5'- 4½"	0'- 4½"	11'-10"	7'- 4"	0'- 4½"	4	15'- 0"	5'- 9"	0'- 3¾"
V	4	26'- 0"	2'- 7¼"	3'- 4¼"	2	4	9'- 4¼"	5'- 7¼"	0'- 4½"	11'- 4"	7'- 7"	0'- 4½"	4	15'- 6"	5'- 7⅞"	0'- 3¾"
W	4	25'- 9"	2'- 6⅞"	3'- 3⅝"	2	4	9'- 9¼"	5'- 6⅝"	0'- 4⅝"	11'- 9"	7'- 6⅛"	0'- 4⅝"	4	16'- 0"	5'- 5½"	0'- 3¾"
X	4	26'- 0"	2'- 7¼"	3'- 4¼"	2	4	10'- 2¼"	6'- ¾"	0'- 4½"	12'- 2"	8'- ½"	0'- 4½"	4	16'- 9"	6'- 5¼"	0'- 3¾"
Y	4	29'- 1"	2'- 7"	3'- 3⅝"	2	4	10'- 1¼"	6'- 4¼"	0'- 4½"	12'- 1"	8'- 4"	0'- 4½"	4	17'- 6"	6'- 8⅝"	0'- 3¾"
Z	4	29'- 4"	2'- 7"	3'- 4¼"	2	4	10'- 4¼"	6'- 7¼"	0'- 4½"	12'- 4"	8'- 7"	0'- 4½"	4	18'- 0"	6'- 9"	0'- 3¾"
AA	4	29'- 1"	2'- 7"	3'- 3⅝"	2	5	10'- 9¾"	6'- 7¼"	0'- 4½"	12'- 9"	8'- 7½"	0'- 4½"	4	18'- 6"	6'- 9¾"	0'- 3¾"
BB	4	29'- 4"	2'- 7"	3'- 4¼"	2	5	11'- 3¾"	6'- 9¾"	0'- 4½"	13'- 4"	8'-10"	0'- 4½"	4	19'- 0"	6'- 9¾"	0'- 3¾"
CC	4	32'- 5"	2'- 7¼"	3'- 3⅝"	2	5	11'- 8¾"	6'-10½"	0'- 4½"	13'- 9"	8'-10½"	0'- 4½"	4	19'- 6"	7'- 3¾"	0'- 3¾"
DD	4	32'- 8"	2'- 8"	3'- 4"	2	5	12'- ¾"	7'- 0¾"	0'- 4½"	14'- 1"	9'- 7"	0'- 4½"	4	20'- 6"	7'-10½"	0'- 3¾"
EE	4	32'- 5"	2'- 7¼"	3'- 3⅝"	2	5	12'- 1⅞"	7'- 6¼"	0'- 4⅝"	14'- 2"	9'- 6½"	0'- 4⅝"	4	21'- 0"	7'-10½"	0'- 3¾"

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STRUCTURE AND BRIDGE DIVISION

WING DETAILS
2:1 FILL SLOPE - TYPE I
VIRGINIA DEPARTMENT OF TRANSPORTATION

1006.20

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WING	SIZE	WV3 α LENGTH From	To	Vary By	From	To	Vary By	SIZE	WV4 α LENGTH From	To	Vary By	From	To	Vary By
A	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
B	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
C	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
D	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
E	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
F	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
G	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
H	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
I	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
J	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
K	--	-----	-----	-----	-----	-----	-----	--	-----	-----	-----	-----	-----	-----
L	4	10'- 6½"	8'- 9½"	0'- 3½"	12'- 6"	10'- 9"	0'- 3½"	--	-----	-----	-----	-----	-----	-----
M	4	11'- ¼"	9'- 3¼"	0'- 3½"	13'- 0"	11'- 3"	0'- 3½"	--	-----	-----	-----	-----	-----	-----
N	4	10'- 5¼"	8'- 9"	0'- 3⅜"	12'- 5"	10'- 8⅞"	0'- 3⅜"	4	11'- 6¼"	10'- 8⅞"	0'- 2⅜"	13'- 6"	12'- 8½"	0'- 2⅜"
O	4	10'-11¼"	9'- 3"	0'- 3⅜"	12'-11"	11'- 2⅞"	0'- 3⅜"	4	12'- ½"	11'- 2⅞"	0'- 2⅜"	14'- 0"	13'- 2½"	0'- 2⅜"
P	4	10'- 8¼"	8'- 1⅜"	0'- 3⅜"	12'- 8"	10'- 1⅜"	0'- 3⅜"	4	12'- 6¼"	11'- ¼"	0'- 2¼"	14'- 6"	13'- 0"	0'- 2¼"
Q	4	11'- 2¼"	8'- 7⅜"	0'- 3⅜"	13'- 2"	10'- 7⅜"	0'- 3⅜"	4	13'- ¼"	11'- 5¼"	0'- 2⅜"	15'- 0"	13'- 5"	0'- 2⅜"
R	5	11'- 8¼"	8'- 2⅜"	0'- 3⅜"	13'- 9"	11'- 2⅜"	0'- 3⅜"	5	13'- 5¼"	11'-11⅜"	0'- 2¼"	15'- 5"	14'- 0"	0'- 2¼"
S	5	12'- 1⅜"	9'- 1⅜"	0'- 3½"	14'- 2"	11'- 7⅜"	0'- 3½"	5	13'-11⅜"	12'- 5⅜"	0'- 2½"	16'- 0"	14'- 6"	0'- 2½"
T	5	12'- 6⅜"	10'- 2⅜"	0'- 3⅜"	14'- 9"	12'- 2⅜"	0'- 3⅜"	5	14'- 5⅜"	12'-11⅜"	0'- 2½"	16'- 6"	15'- 0"	0'- 2½"
U	5	12'- 9⅜"	10'- 5⅜"	0'- 3⅜"	14'-10"	12'- 3⅜"	0'- 3⅜"	5	14'-11⅜"	13'- 1¼"	0'- 2½"	17'- 0"	15'- 1½"	0'- 2½"
V	6	13'- 3⅜"	9'- 7⅜"	0'- 3⅜"	15'- 5"	11'- 9¼"	0'- 3⅜"	6	15'- 5⅜"	13'- 7¼"	0'- 2¼"	17'- 7"	15'- 6½"	0'- 2¼"
W	6	13'- 9⅜"	10'- 1⅜"	0'- 3⅜"	15'-11"	12'- 3½"	0'- 3⅜"	6	15'-11⅜"	14'- 1½"	0'- 2¼"	18'- 1"	16'- 2½"	0'- 2¼"
X	6	14'- 2⅜"	10'- 6⅜"	0'- 3⅜"	16'- 4"	12'- 8½"	0'- 3⅜"	6	16'- 8⅜"	14'- 5⅜"	0'- 2¼"	18'-10"	16'- 7"	0'- 2¼"
Y	6	15'- 3⅜"	10'- 6¼"	0'- 3⅜"	17'- 5"	12'- 7⅜"	0'- 3⅜"	6	17'- 5⅜"	15'- 7¼"	0'- 2¼"	19'- 7"	17'- 6½"	0'- 2¼"
Z	6	15'- 5⅜"	10'- 8¼"	0'- 3⅜"	17'- 7"	12'- 9⅜"	0'- 3⅜"	6	17'-11⅜"	15'- 8⅜"	0'- 2¼"	20'- 1"	17'-10"	0'- 2¼"
AA	7	15'-11⅜"	11'- 2¼"	0'- 3½"	18'- 2"	13'- 4⅜"	0'- 3⅜"	7	18'- 5⅜"	16'- 2⅜"	0'- 2¼"	20'- 8"	18'- 5"	0'- 2¼"
BB	7	16'- 5⅜"	11'- 8¼"	0'- 3½"	18'- 8"	13'-10⅜"	0'- 3⅜"	7	18'-11⅜"	16'- 8⅜"	0'- 2¼"	21'- 2"	18'-11"	0'- 2¼"
CC	7	16'-11⅜"	12'- 2¼"	0'- 3⅜"	19'- 2"	14'- 4⅜"	0'- 3⅜"	7	19'- 5⅜"	17'- 2⅜"	0'- 2¼"	21'- 8"	19'- 5"	0'- 2¼"
DD	7	17'- 2⅜"	12'- 5¼"	0'- 3⅜"	19'- 5"	14'- 7⅜"	0'- 3⅜"	7	20'- 2⅜"	17'- 5⅜"	0'- 2¼"	22'- 8"	19'- 8"	0'- 2¼"
EE	7	17'- 3⅜"	12'- 6¼"	0'- 3⅜"	19'- 8"	14'- 8⅜"	0'- 3⅜"	8	20'-11½"	17'- 7"	0'- 2¼"	23'- 3"	19'-10½"	0'- 2¼"

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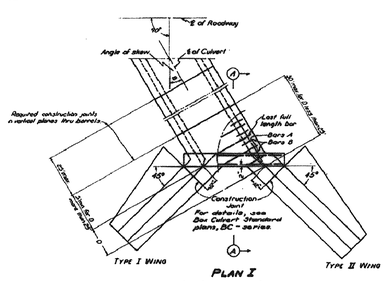
WING DETAILS
2:1 FILL SLOPE - TYPE I
VIRGINIA DEPARTMENT OF TRANSPORTATION

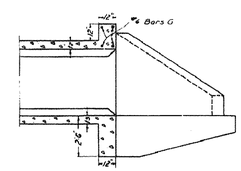
STRUCTURE AND BRIDGE DIVISION

BC-S



PLAN I

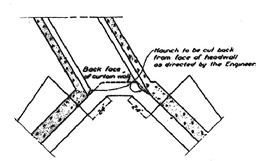
Plan I shall be used for construction of headwalls until h (thickness of sidewalls) divided by Cos Θ (angle of skew) exceeds 17'.



SECTION A-A

Reinforcing Bars shall be continued into the end of the barrel at the same spacing as given on standard plans. Lengths of bars shall be determined by the fabricator. Plan I and Plan II show details for a single box only.

Details for the double, triple and quadruple boxes are similar. The K bars, which are not continuous for the full width of the culvert must be given special attention. The spacing of the K bar must be continued to the point where a full length bar will no longer fit before beginning the variations in length.



HORIZONTAL SECTION
(TOP OF BOTTOM HAUNCH)

NOTE:-

Four Type I Wings to be used for skews up to 22°.
Two Type I & two Type II Wings to be used as shown for skews from 22° to 45°.
For skews above 45° special design wings are required.
All wings are to be built at an angle of 45° with the center-line of the roadway.
All headwalls are to be built parallel to the center-line of the roadway.
For details of wing walls see Plan BC-W for fills with 1½:1 slope and Plan BC-W1 for fills with 2:1 slope.
Quantities for wings of skewed box culverts are the same as for wingwalls of BC-series except for additional length of headwall and curtain wall resulting from skew.

Sheet 1 of 2

DETAILS OF SKEWS FOR STANDARD BOX CULVERTS
VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION

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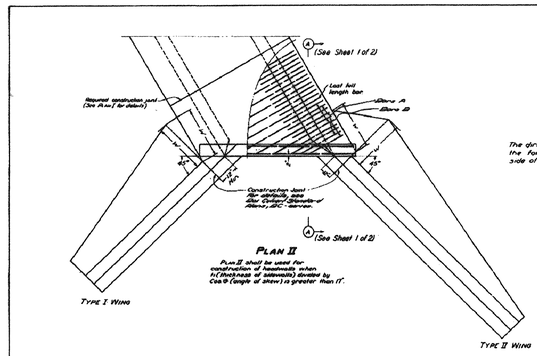
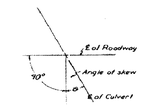
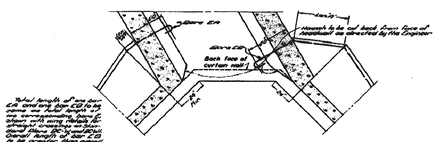
BC-S





The direction of skew is right hand when the far end of culvert is on the right hand side of the road.

DEFINITION
(ANGLE OF SKEW)



HORIZONTAL SECTION
(TOP OF BOTTOM HAUNCH)

Sheet 2 of 2

DETAILS OF SKEWS FOR STANDARD BOX CULVERTS
VIRGINIA DEPARTMENT of HIGHWAYS AND TRANSPORTATION

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AS-BUILT

Drawn	HTB
Designed	VDOT
Checked	WPJ
Approved	JST

GREENFIELD PARKWAY
PHASE 1

VDOT STANDARD DETAILS
BOX CULVERT WING DETAILS

NOT TO SCALE
NOVEMBER 12, 1997
PROJECT: 97042