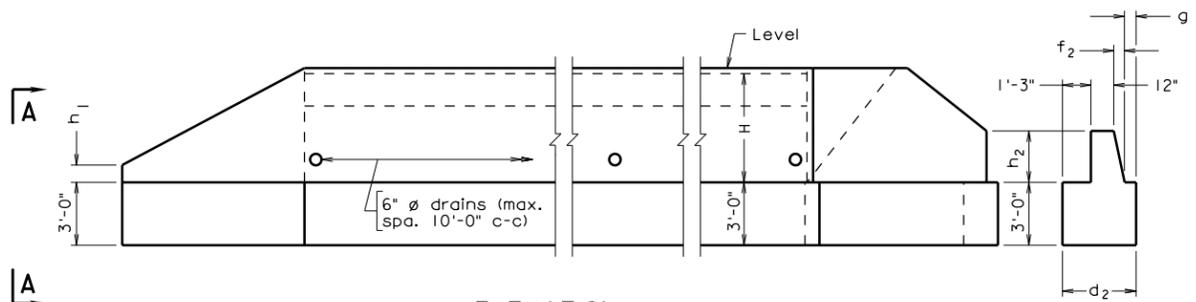
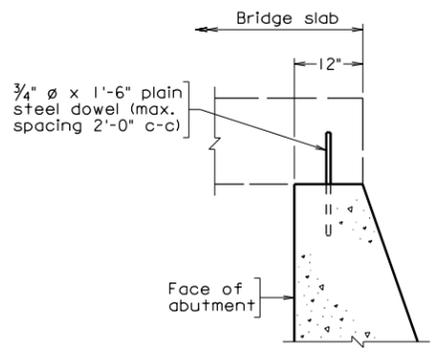


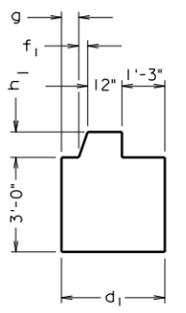
PLAN



ELEVATION
Piles omitted for clarity

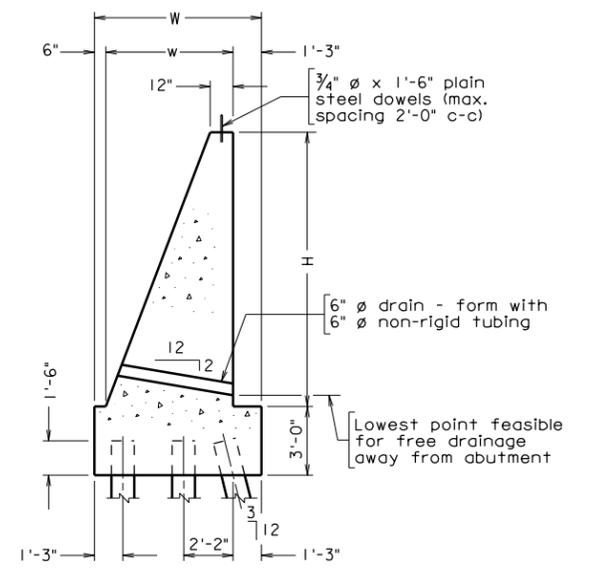


TYPICAL BRIDGE SEATS

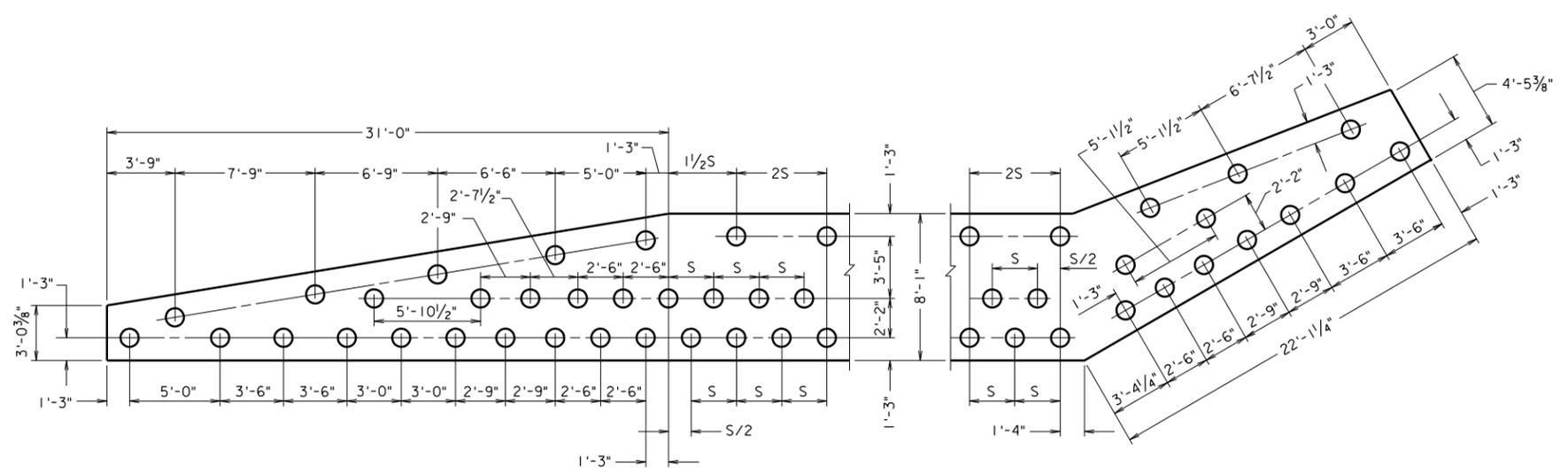


VIEW A-A

DIMENSION DATA	
H =	
L ₁ =	
L ₂ =	
R =	
W =	
f ₁ =	
f ₂ =	
h ₁ =	
h ₂ =	
w =	
c =	
d ₁ =	
d ₂ =	
g =	



TYPICAL SECTION ON C-C



PILE PLAN

csapl230.dgn

CS-APL2-30 06-14-2010

Sealed and Signed by:
Julius F.J. Volgyi Jr.,
Lic. No. 010487
On the date of
June 14, 2010

A copy of the original
sealed and signed
standard drawing
is on file in the
Central Office.

VDOT S&B DIVISION
RICHMOND, VA
STRUCTURAL ENGINEER

			COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION		
			STRUCTURE AND BRIDGE DIVISION		
			ABUTMENT		
No.	Description	Date	Designed:	Date	Plan No.
	Revisions		Drawn:		Sheet No.
			Checked:		CS-APL2-30

CAST-IN-PLACE CONCRETE SLAB SPANS

**ABUTMENTS ON PILES
30 ° SKEW - FILL SLOPE 2: 1**

NOTES TO DESIGNER:

Standard to be used when abutments are on piles.

Standard is for: 30° skew
2: 1 fill slope

TABLE OF DIMENSIONS AND QUANTITIES									
ABUTMENT*					STRAIGHT WING				
H	w	W	Neat – CY per ft. of R	Ftg – CY per ft. of R	L ₁	h ₁	f ₁	Neat CY	Footing CY
4'-0"	2'-4"	4'-6"	0.301R	0.577R	8'-0"	9"	3"	2.4	5.2
5'-0"	2'-9"	4'-6"	0.416R	0.577R	10'-0"	9"	3 1/8"	3.6	6.0
6'-0"	3'-2"	4'-11"	0.540R	0.631R	13'-0"	9"	3 1/4"	5.4	7.6
7'-0"	3'-7"	5'-4"	0.700R	0.684R	15'-0"	9"	3 3/8"	7.4	9.0
8'-0"	3'-11"	5'-8"	0.855R	0.727R	17'-0"	9"	3 3/8"	9.5	10.3
9'-0"	4'-4"	6'-1"	1.040R	0.780R	20'-0"	9"	3 3/8"	12.5	12.2
10'-0"	4'-9"	6'-6"	1.243R	0.834R	22'-0"	9"	3 3/8"	15.6	13.8
11'-0"	5'-2"	6'-11"	1.464R	0.888R	24'-0"	9"	3 3/8"	19.1	15.5
12'-0"	5'-7"	7'-4"	1.702R	0.941R	27'-0"	9"	3 3/8"	23.6	17.8
13'-0"	5'-11"	7'-8"	1.936R	0.984R	29'-0"	9"	3 3/8"	27.8	19.4
14'-0"	6'-4"	8'-1"	2.208R	1.037R	31'-0"	9"	3 3/8"	32.7	21.4
SKEWED WING						* To compute concrete quantity of the abutment, multiply volume as tabulated by R. Footing quantities do not include deductions for piles.			
H	L ₂	h ₂	f ₂	Neat CY	Footing CY				
4'-0"	4'-0"	2'-0"	4 5/8"	1.6	3.6				
5'-0"	5'-0"	2'-6"	5 3/4"	2.3	4.3				
6'-0"	6'-0"	3'-0"	8 3/4"	3.3	5.2				
7'-0"	8'-0"	3'-0"	9 3/8"	4.6	6.4				
8'-0"	9'-0"	3'-6"	11 1/8"	6.0	7.3				
9'-0"	10'-0"	4'-0"	1'-1 3/8"	7.7	8.4				
10'-0"	12'-0"	4'-0"	1'-1 3/4"	10.0	9.9				
11'-0"	13'-0"	4'-6"	1'-4"	12.4	11.1				
12'-0"	14'-0"	5'-0"	1'-6 1/8"	15.1	12.4				
13'-0"	16'-0"	5'-0"	1'-6 1/4"	18.4	14.1				
14'-0"	17'-0"	5'-6"	1'-8 3/8"	21.8	15.5				

CAST-IN-PLACE CONCRETE SLAB SPANS

ABUTMENTS ON PILES 30 ° SKEW - FILL SLOPE 2: 1

NOTES TO DESIGNER(cont'd):

$$c = 2 \frac{3}{8}'' \text{ (H = 4'-0'')} \\ c = 1 \frac{1}{4}'' \text{ (H = 5'-0'' to 14'-0'')}$$

$$d_1 = 3'-2'' + f_1 \text{ (H = 4'-0'')} \\ d_1 = 2'-9'' + f_1 \text{ (H = 5'-0'' to 14'-0'')}$$

$$d_2 = 3'-2'' + f_2 \text{ (H = 4'-0'')} \\ d_2 = 2'-9'' + f_2 \text{ (H = 5'-0'' to 14'-0'')}$$

$$g = 11'' \text{ (H = 4'-0'')} \\ g = 6'' \text{ (H = 5'-0'' to 14'-0'')}$$

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

PROJECT/TITLE BLOCKS:

Project block and title block shall be completed in accordance with Manual of the Structure and Bridge Division, Volume V – Part 2, Chapter 4.

DIMENSION DATA:

Enter H, L₁, L₂, R, W, c, d₁, d₂, g, h₁, h₂, f₁, f₂, and w dimensions in the DIMENSION DATA table.

TYPICAL BRIDGE SEATS:

If approach slab is required, replace details with cell BSA.

SECTION ON CENTERLINE:

Typical Section based on H = 11'-0" to 14'-0" with no approach slab, replace with appropriate cell if needed.

PILE PLAN:

Based on skew angle = 30° and H = 14'-0", replace the pile plan cell with the appropriate pile plan cell if needed.