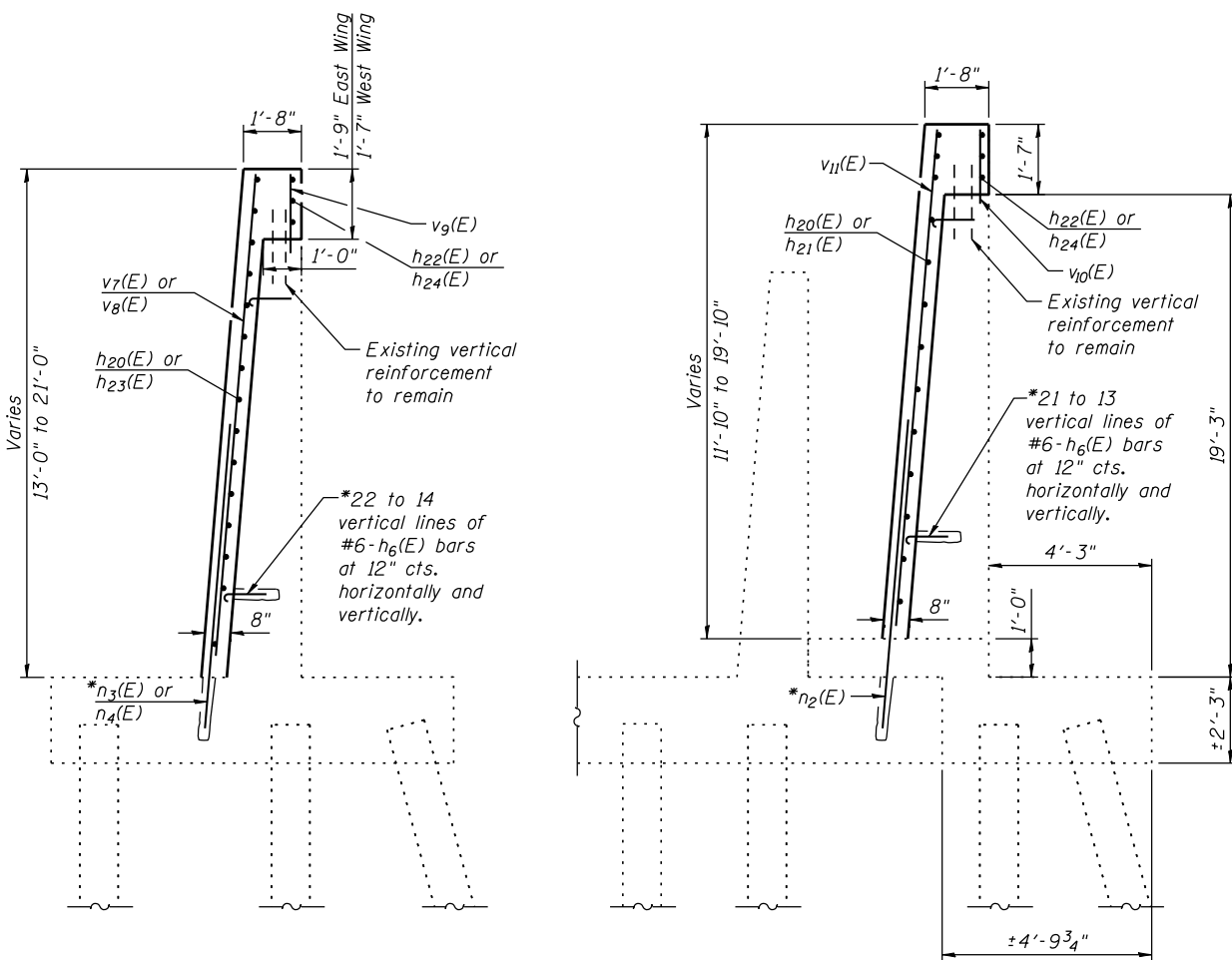


PIPE UNDERDRAIN DETAIL

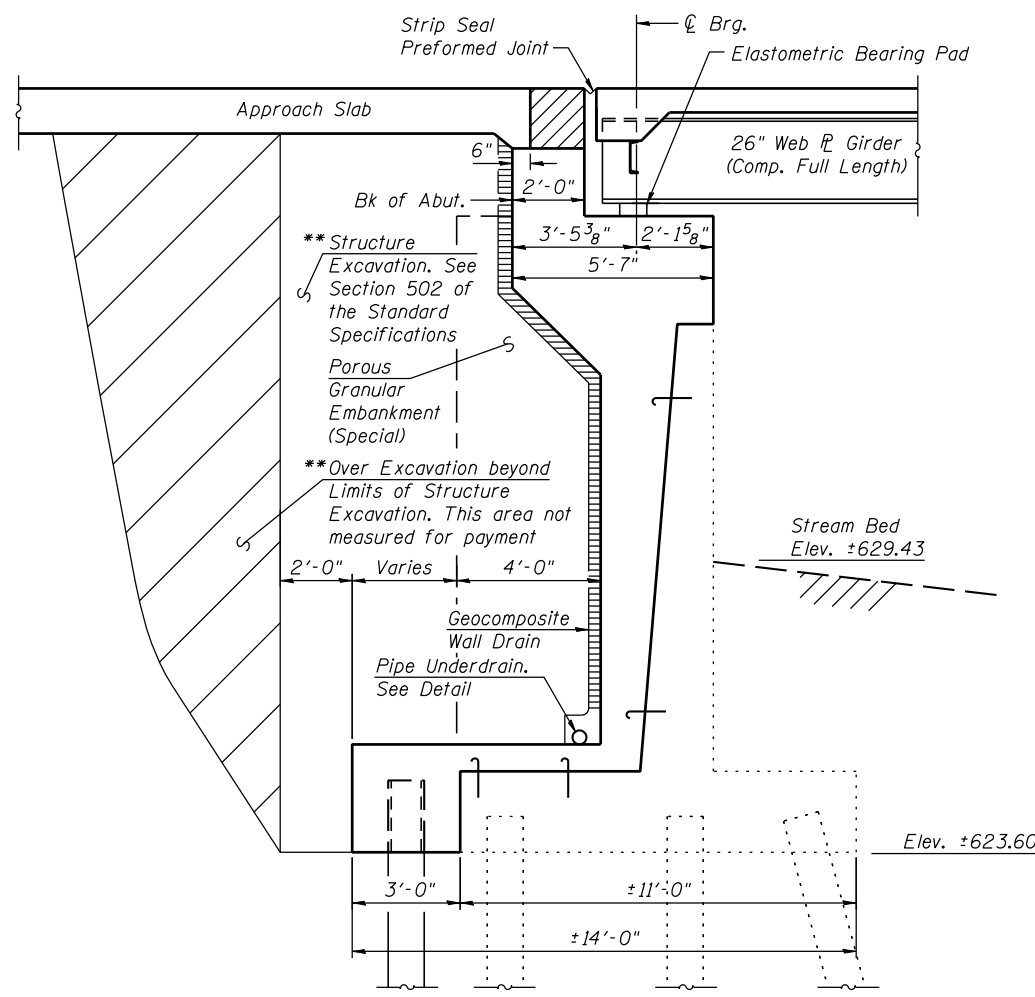
Note: All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 6011101).



SECTION E-E

SECTION D-D

*Epoxy grout $h_6(E)$, $n_2(E)$, $n_3(E)$ and $n_4(E)$ bars in drilled holes of the depth specified by the manufacturer to achieve full tension capacity and according to Article 584 of the Standard Specifications. Bar lengths shown are based on 9 inch min. drilled holes. Actual bar lengths are required to be adjusted by the contractor before ordering of material.



SECTION THRU SOUTH ABUTMENT

**Backfill remainder of structure excavation and over excavation with same material specified for roadway embankment

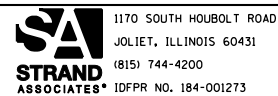
Note: Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal. On all sections, horizontal dimensions at right angles.

SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h(E)$	234	#5	33'-3"	—
$h_1(E)$	30	#6	34'-1"	—
$h_2(E)$	36	#5	33'-3"	—
$h_3(E)$	4	#5	34'-4"	—
$h_4(E)$	2	#5	17'-3"	—
$h_5(E)$	4	#5	39'-3"	—
$h_6(E)$	1360	#6	1'-8"	U
$h_7(E)$	12	#5	37'-11"	—
$h_8(E)$	12	#5	23'-5"	—
$h_{20}(E)$	42	#5	36'-1"	—
$h_{21}(E)$	2	#5	23'-6"	—
$h_{22}(E)$	6	#5	36'-5"	—
$h_{23}(E)$	22	#5	14'-8"	—
$h_{24}(E)$	3	#5	16'-8"	—
$h_{25}(E)$	4261	#6	2'-0"	U
$n_1(E)$	382	#7	7'-0"	—
$n_2(E)$	100	#7	9'-2"	—
$n_3(E)$	34	#7	13'-5"	—
$n_4(E)$	49	#7	11'-7"	—
$t(E)$	364	#6	9'-0"	—
$t_1(E)$	40	#6	3'-2"	—
$t_2(E)$	113	#6	4'-3"	U
$v(E)$	192	#5	3'-7"	—
$v_1(E)$	36	#9	23'-7"	U
$v_2(E)$	188	#5	8'-11"	n
$v_3(E)$	188	#5	13'-9"	n
$v_4(E)$	360	#9	17'-11"	U
$v_5(E)$	192	#5	15'-7"	—
$v_6(E)$	192	#7	14'-6"	—
$v_7(E)$	18	#7	12'-8"	—
$v_8(E)$	25	#7	12'-6"	—
$v_9(E)$	17	#5	1'-5"	—
$v_{10}(E)$	79	#5	1'-3"	—
$v_{11}(E)$	50	#7	17'-8"	—
$v_{12}(E)$	124	#4	11'-1"	n
$w(E)$	4	#5	10'-6"	—
$w_1(E)$	20	#5	33'-11"	—
$w_2(E)$	10	#5	36'-10"	—
$w_3(E)$	4	#5	18'-2"	—
$w_4(E)$	20	#5	36'-4"	—
$w_5(E)$	4	#5	36'-1"	—
$w_6(E)$	2	#5	36'-10"	—
$w_7(E)$	6	#5	25'-3"	—
$w_{11}(E)$	6	#5	11'-7"	—
Reinforcement Bars, Epoxy Coated	Pound		90,900	
Concrete Structures	Cu. Yd.		489	
Furnishing Steel Piles HP12x53	Foot		1.161	
Driving Piles	Foot		1.161	
Test Pile HP12x53	Each		1	
Structure Excavation	Cu. Yd.		340	
Concrete Sealer	Sq. Ft.		1.811	
Geocomposite Wall Drain	Sq. Yd.		409	

For Bar Splicer Details See Sheet 32 of 35.
For Details of Piles and Concrete Encasement See Sheet 30 of 35.

FILE NAME = s:\p1\6380--6395\6346\025\Micro\Sh\Structure\Plans\0980015-64C17-827-SABUT3.dgn



1170 SOUTH HOUBOLT ROAD
JOLIET, ILLINOIS 60431
(815) 744-4200
IDFPR No. 184-001273

USER NAME = brianf	DESIGNED - KJL	REVISED
PLOT SCALE =	CHECKED - AJS	REVISED
PLOT DATE = 10/12/2012	DRAWN - BJF	REVISED
	CHECKED - KJL	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS (3 OF 3)
STRUCTURE NO. 098-0015

SHEET NO. 28 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	101 BR-3	WHITESIDE	113	84
CONTRACT NO. 64C17				
ILLINOIS FED. AID PROJECT				