PROJECT REFERENCE NO.	SHEET NO.
B-3349	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

52899

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 27000 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 12.52 FT
BASE DISCHARGE	= 133000 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 12.94 FT
OVERTOPPING DISCHARGE	= 150000 CFS
OVERTOPPING FREQUENCY	= 500 YRS
OVERTOPPING ELEVATION	= 9.8 FT

* THE DESIGN AND 100 yr. STORMS WERE ANALYZED IN HEC RAS AND DID NOT TAKE INTO ACCOUNT STORM SURGE SITUATIONS. THE PROPOSED BRIDGE IS AN IN-KIND REPLACEMENT AND WILL PROVIDE MORE WATERWAY OPENING.

BEGIN GRADE -L- STA 12+00
ELEV. = 5.50'
INCLUDES 1 1/4" RESURFACING

BEGIN RESURFACING
-L- STA 11+50

PI = 15+83.00
DL = 7.42°
VC = 300'
K = 27.4

℄ -L- STA 15+81
SPANS: 3@ 46' CORED SLAB
ELEV. 7.01'
SKEW = 90°

END GRADE -L- STA 19+50
ELEV. = 5.24'
INCLUDES 1 1/4" RESURFACING

END RESURFACING
-L- STA 20+00

"WATER SURFACE IS AFFECTED BY WIND-BLOWN TIDES FROM THE LOWER PAMLICO RIVER AND PAMLICO SOUND"

21'℄ (+)0.50136% 20'℄ 20'℄ (-)0.59406% 20'℄

AREA TO BE EXCAVATED

CLASS "B" RIP-RAP

BENCH

BM#16 CHISELED SQUARE IN SOUTHEAST CORNER OF SIDEWALK
-L- STA 17+32.40 122.76' RT ELEV. = 9.64'

SEE SHEET 4 FOR PLANS

Ⓐ Loose Tan Gray Fine to Coarse Sand and Sandy Silt Mix to Soft Clay
Ⓑ Very Soft to Medium Stiff Gray Sandy Clay and Clayey Sandy Silt with Shell Layers, Wet
Ⓒ Loose Gray Fine to Coarse Sand, Sat

10 0 -10

10 11 12 13 14 15 16 17 18 19 20 21

Soil Sample Test Results

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS	L.L.	P.I.	% BY WEIGHT C-SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) #10	% PASSING (SIEVES) #40	% PASSING (SIEVES) #200	% MOISTURE	% ORGANIC
S-6	12+00	20' RT	1.00-2.00	A-3(0)	18	NP	17.7	52.7	19.5	10.1	100	96	37		
S-7	12+00	20' RT	2.60-5.20	A-6(7)	29	11	2.5	31.6	33.6	32.2	98	98	78	16.4	
S-8	12+00	20' RT	5.20-6.00	A-2-4(0)	19	NP	4.2	77.7	3.0	18.1	100	100	24		
S-3	19+00	20' LT	1.00-3.80	A-4(0)	26	6	8.0	46.9	20.9	24.1	100	99	59	19.0	
S-4	19+00	20' LT	4.00-4.50	A-4(2)	27	8	5.0	41.2	35.6	18.1	100	98	81	63.8	
S-5	19+00	20' LT	4.50-5.60	A-4(1)	24	8	2.8	50.3	16.7	30.2	100	100	81		

VANE SHEAR TESTS

STATION	OFFSET	DEPTH (ft)	S(psf)	SR(psf)
15+00	70' LT	1.0	213	
15+00	70' LT	3.0	710	
17+00	70' LT	1.0	167	
17+00	70' LT	2.0	167	
17+00	70' LT	3.0	251	
17+00	70' LT	4.0	292	
17+00	70' LT	5.0	209	
17+00	70' LT	6.0	376	
17+00	70' LT	7.0	752	
17+00	70' LT	8.0	919	