



North Carolina Department of Transportation
Division of Highways
Materials and Test Unit
Soils Laboratory

M&T Form 503

T.I.P. ID NO.: R-2610B(2)

REPORT ON SAMPLES OF: SOIL FOR QUALITY

PROJECT: 6.529005T
DATE SAMPLED: 4/03
SAMPLED FROM: -L-
SUBMITTED BY: CR Baldwin

COUNTY: Chatham
RECEIVED: 5/5/03
REPORTED: 5/12/03
BY: RH Calder

TEST RESULTS

PROJ. SAMPLE NO.	EB1-A	EB1-A	EB1-B	EB1-B	EB1-B	B1-B	EB2-A
LAB SAMPLE NO.	SS-1	SS-3	SS-7	ST-2	ST-2	SS-16	SS-13
				Triaxial	Consol.		
Retained #4 Sieve %	0.7	0.0	1.4	0.0	0.0	1.0	0.0
Passing #10 Sieve %	98.5	99.6	96.6	100.0	100.0	98.1	96.4
Passing #40 Sieve %	96.8	97.6	93.2	99.3	99.6	94.5	92.5
Passing #200 Sieve %	92.3	89.6	63.6	85.3	83.3	81.3	82.0

MINUS #10 FRACTION

SOIL MORTAR - 100%							
Coarse Sand Ret - #60 %	3.6	3.3	8.0	2.4	2.6	6.1	7.0
Fine Sand Ret - #270 %	3.0	7.8	29.5	13.9	16.1	11.5	8.1
Silt 0.053 - 0.010 mm %	26.6	59.1	41.2	43.8	39.6	55.6	46.3
Clay < 0.010 mm %	66.8	29.8	21.3	39.9	41.7	26.8	38.6
L.L.	68	46	29	44	47	40	48
P.L.	32	24	20	23	23	22	24
P.I.	36	22	9	21	24	18	24
AASHTO Classification	A-7-5(40)	A-7-6(22)	A-4(4)	A-7-6(19)	A-7-6(21)	A-6(15)	A-7-6(21)
Station	96+84.5	96+84.5	96+79.2	96+79.2	96+79.2	96+92.2	97+21.7
Offset	17.2m Lt.	17.2m Lt.	5.8m Lt.	5.8 m Lt.	5.8m Lt.	4.6m Lt.	17.2 m Lt.
Depth (m)	0.00	2.59	2.59	1.07	1.07	0.00	1.07
	to	0.45	3.04	3.04	1.65	1.65	0.45
Moisture Content (%)	32.4	28.1	18.3	27.2	23.9	24.1	25.8
Organic Content (%)							

NT = Not Tested
NP = Not Plastic
NA = Not Applicable

E.C. Howey, L.G., P.E.
Soils Engineer

LABORATORY SUMMARY SHEET FOR ROCK CORE SAMPLES

PROJECT NO.: 6.529005T (R-2610B(2))

F.A. NO.: N/A

COUNTY: Chatham

BRIDGE ON SBL US 421 (-L-) over Tick Creek

Sample #	Boring #	Depth (m)	Rock Type	Geologic Map Unit	Run RQD	Length (cm)	Diameter (cm)	Unit Weight (KN/m ³)	Unconfined Compressive Strength (KPa)	Young's Modulus (KPa)	Splitting Tensile Strength (KPa)	Remarks
RS-1	B1-A	4.11-4.21	Metamudstone/Meta-Argillite	CZmd	44	9.76	4.48	27.18	49,655			
RS-2	B1-A	7.51-7.61	Metamudstone/Meta-Argillite	CZmd	98	10.19	4.49	26.93	40,119			
RS-3	B1-B	4.66-4.76	Metamudstone/Meta-Argillite	CZmd	28	10.14	4.46	26.80	11,789			
RS-4	B1-B	8.78-8.88	Metamudstone/Meta-Argillite	CZmd	85	10.07	4.43	27.60	30,225			
RS-5	B2-A	3.81-3.91	Metamudstone/Meta-Argillite	CZmd	42	10.18	4.49	27.35	108,933			
RS-6	B2-B	6.41-6.51	Metamudstone/Meta-Argillite	CZmd	86	9.91	4.49	27.10	57,544			