FROEHLING & ROBERTSON, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS
ENGINEERS • LABORATORIES
"OVER ONE HUNDRED YEARS OF SERVICE"
SINCE 1881

N.C.D.O.T. GEOTECHNICAL UNIT
BORING LOG

SHEET 1 OF 1

PROJECT NO. 33656.1.1	**ID.** B-4319	**COUNTY** Wayne	**GEOLOGIST** C. Baldwin
SITE DESCRIPTION Bridge No. 21 over Great Swamp on NC 222			**GROUND WATER (ft)**
BORING NO. EB2-A	**BORING LOCATION** 16+74	**OFFSET** 18ft LT	**ALIGNMENT** -L-	**0 HR.** 22.5
COLLAR ELEV. 111.1 ft	**NORTHING** 660,565	**EASTING** 2,290,943	**24 HR.** 22.0
TOTAL DEPTH 38.5 ft	**DRILL MACHINE** CME 550	**DRILL METHOD** 2.25" ID HSA	**HAMMER TYPE** Automatic
DATE STARTED 5/12/05	**COMPLETED** 5/12/05	**SURFACE WATER DEPTH** N/A	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
111.1					Ground Surface				111.1 / 0.0
111.1	0.0	2	2	2	4		M		**-ROADWAY EMBANKMENT-** Brown, silty fine to coarse SAND (A-2-4), with some clay. 109.1 / 2.0
107.6	3.5	1	2	1	3	SS-19	17.2%		Brown, fine to coarse SAND (A-2-6(0)), with some clay. 104.1 / 7.0
102.6	8.5	WOH	WOH	1	1		W		**-ALLUVIAL-** Dark brown, silty CLAY (A-6), with some fine to coarse sand. 99.1 / 12.0
97.6	13.5	1	1	1	2		W		Gray, clayey fine to coarse SAND (A-2-6). 95.1 / 16.0
92.6	18.5	7	15	25	40		M		**-RESIDUAL-** Brown & gray, micaceous fine to coarse sandy SILT (A-4), saprolitic.
87.6	23.5	15	45	51	96		M		
82.6	28.5	25	27	60	87		M		
77.6	33.5	28	60/0.2'		88/0.7				77.1 / 34.0
									-WEATHERED ROCK- Brown & gray, PHYLLITE. 72.6 / 38.5
72.6	38.5	60/0.0'			60/0.0				

Boring Terminated with Standard Penetration Test Refusal at Elevation 72.6 ft on NON-CRYSTALLINE ROCK (PHYLLITE)

NOTES:

1) Driller indicates harder drilling at 16.0' (elev. 95.1').
2) Geologist indicates strata break in split spoon at 34.0' (elev. 77.1').
3) Auger refusal at 38.5' (elev. 72.6').

NCDOT BORE SINGLE G66-036.GPJ NC_DOT.GDT 7/1/05

FROEHLING & ROBERTSON, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS
ENGINEERS • LABORATORIES
"OVER ONE HUNDRED YEARS OF SERVICE"
SINCE 1881

N.C.D.O.T. GEOTECHNICAL UNIT
BORING LOG SHEET 11 OF 15

SHEET 1 OF 1

PROJECT NO. 33656.1.1	**ID.** B-4319	**COUNTY** Wayne	**GEOLOGIST** C. Baldwin
SITE DESCRIPTION Bridge No. 21 over Great Swamp on NC 222			**GROUND WATER (ft)**
BORING NO. EB2-B	**BORING LOCATION** 16+74	**OFFSET** 18ft RT	**ALIGNMENT** -L-	**0 HR.** 27.5
COLLAR ELEV. 111.0 ft	**NORTHING** 660,530	**EASTING** 2,290,935	**24 HR.** 27.0
TOTAL DEPTH 33.5 ft	**DRILL MACHINE** CME 550	**DRILL METHOD** 2.25" ID HSA	**HAMMER TYPE** Automatic
DATE STARTED 5/11/05	**COMPLETED** 5/11/05	**SURFACE WATER DEPTH** N/A	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
111.0					Ground Surface				111.0 / 0.0
111.0	0.0	1	2	1	3		M		**-ROADWAY EMBANKMENT-** Brown, fine to coarse sandy CLAY (A-6), with some silt.
107.5	3.5	WOH	1	3	4		M		104.0 / 7.0
102.5	8.5	WOH	WOH	WOH	0	SS-13	33.4%		**-ALLUVIAL-** Dark brown, fine sandy SILT (A-4(0)), with some clay & little coarse sand. 99.0 / 12.0
97.5	13.5	1	1	1	2		W		Gray, fine sandy SILT (A-4), with some clay & little coarse sand. 95.0 / 16.0
92.5	18.5	15	17	22	39		M		**-RESIDUAL-** Brown & gray, micaceous fine to coarse sandy SILT (A-4), saprolitic.
87.5	23.5	25	15	14	29		M		
82.5	28.5	27	28	15	43		M		79.5 / 31.5
77.5	33.5	60/0.0'			60/0.0				**-NON-CRYSTALLINE ROCK-** Brown & gray, PHYLLITE. 77.5 / 33.5

Boring Terminated with Standard Penetration Test Refusal at Elevation 77.5 ft in NON-CRYSTALLINE ROCK (PHYLLITE)

NOTES:

1) Driller indicates harder drilling at 16.0' (elev. 95.0') & 31.5' (elev. 79.5').
2) Auger refusal at 33.5' (elev. 77.5').

NCDOT BORE SINGLE G66-036.GPJ NC_DOT.GDT 7/1/05