STATE OF ALABAMA
HIGHWAY DEPARTMENT
MONTGOMERY 4 ALABAMA

April 30, 1963

ED N RODGERS
STATE HIGHWAY DIRECTOR

JACK W WARD
CHIEF ENGINEER

Mr. B. E. Higgins
Bridge Engineer
Office

Re: Bridge Foundation Investigation
Proj. F.I.-346(2), Tensaw River
Mobile-Baldwin Counties

Dear Sir:

Attached are the results of the bridge foundation investigation that was conducted at the above specified area.

From the standard penetration blow counts it appears that suitable material for pile support will be found between depth elevation 80.0 to 100.0. An assumed surface elevation of 200.0 was established to represent the top of the water in Tensaw River.

Very truly yours,

F. B. Ruffer,
Acting Engineer of Materials & Tests

By: Edward Eiland
Edward Eiland,
Assistant Materials & Tests Engineer

RDP:ao
cc:
Mr. Robison
Resident Engr.
BPR (send to Mr. Higgins)
Mr. Horn
Project File
File

Attachment

STATE HIGHWAY DEPARTMENT OF ALABAMA
BUREAU OF MATERIALS & TESTS
DIVISION OF MATERIALS
MONTGOMERY 4 ALABAMA

Form M & T F-1

Mr J F Tribble, Materials Engineer
Bureau of Materials & Research
State Highway Department
OFFICE

Bridge Foundation Investigation
Project FI-346(2)
Tensaw River
Re Mobile-Baldwin County

Dear Sir

Listed below are the results of soundings made at the above location

Ft C/L T STA 263+87

Elevation of Hub 201.0 Proposed Left Lane Bridge

201.0	to	172.0	Water
172.0	"	163.0	Very soft, wet, blackish-gray, slightly
	"		sandy, mucky clay
163.0	"	161.5	N/1.5 = 1
163.0	"	158.0	Very soft wet gray silty clay
158.0	"	156.5	N/1.5 = 1
158.0	"	156.0	Very soft, wet, gray, silty clay
156.0	"	153.0	Very soft, wet, gray, silty clay w/ a few thin sand lenses

Ft T STA

Elevation of Hub

153.0	to	151.5	N/1.5 = 1
153.0	"	148.0	Very soft, wet, gray, silty clay
	"		w/ a few sand lenses
148.0	"	146.5	N/1.5 = 1
148.0	"	143.0	Very soft, wet, gray, silty clay w/
	"		a few sand lenses
143.0	"	141.5	N/1.5 = 1
143.0	"	138.0	Very soft, wet, gray, silty clay
			w/ a few sand lenses

Ft T STA

Elevation of Hub

138.0	to 136.5	N/1.5 = 1
138.0	" 133.0	Very soft, wet, gray silty clay
	"	w/ a few sand lenses
133.0	" 131.5	N/1.5 = 2
133.0	" 128.0	Very soft, wet, gray, silty sand
	"	clay w/ a few sand lenses
128.0	" 126.5	N/.5 = 1, N/1.0 = 1, N/1.5 = 1 (N = 2)
128.0	" 123.0	Very soft, wet, gray, silty sand clay w/ a few sand lenses

Ft T STA

Elevation of Hub

123.0	to 121.5	N/.5 = 2, N/1.0 = 1, N/1.5 = 1 (N = 2)
123.0	" 121.0	Very soft, wet, gray, sand-clay
	"	w/ a few sand lenses
121.0	" 118.0	Med., wet, gray, very sandy clay
	"	w/ small amount pea gravel
118.0	" 116.5	N/.5 = 6, N/1.0 = 4, N/1.5 = 4 (N = 8)
118.0	" 115.0	Med wet, gray, very sandy clay
	"	w/ small amount pea gravel

Ft T STA

Elevation of Hub

115.0	to 113.0	Loose to med., wet, gray well
	"	graded sand w/ small amount
	"	pea gravel
113.0	" 111.5	N/.5 = 6, N/1.0 = 5, N/1.5 = 5, (N = 10)
113.0	" 112.0	Loose to med. wet, gray well graded
	"	sand w/ small amount pea gravel
	"	
	"	

Ft T STA

Elevation of Hub

112.0	to	110.0	Med. wet, gray, well graded
"			sand w/ lenses of light green,
"			stiff clay
110.0	"	108.0	Med. wet gray-green sand
"			w/ small amt. green marine clay
108.0	"	106.5	N/.5 = 11, N/1.0 = 8, N/1.5 = 9 (N = 17)
108.0	"	103.0	Med. wet gray-green, coarse sand w/ small
"			amount marine clay & pea gravel

Ft T STA

Elevation of Hub

103.0	to	101.5	N/.5 = 4, N/1.0 = 5, N/1.5 = 7, (N = 12)
103.0	"	98.0	Med. wet, gray, green, well graded
"			sand w/ small amount of marine clay
"			and pea gravel
98.0	"	96.5	N/.5 = 28, N/1.0 = 17, N/1.5 = 16 (N = 33)
98.0	"	97.0	Dense wet, gray-green, well graded sand
"			w/ small amount of pea gravel
"			

Ft T STA

Elevation of Hub

97.0	to	93.0	Med. well graded sand (fine to very coarse)
"			w/ small amount of pea gravel
93.0	"	91.5	N/.5 = 6, N/1.0 = 10, N/1.5 = 10 (N = 20)
93.0	"	88.0	Med. gray, well graded
"			sand w/ small amount of pea gravel
88.0	"	86.0	N/.5 = 7, N/1.0 = 10, N/1.5 = 13 (N = 23)
"			
"			

Ft T STA

Elevation of Hub

88.0	to	83.0	Med. gray, well graded
	"		sand w/ small amount of pea gravel
83.0	"	81.5	N/.5 = 8, N/1.0 = 12, N/1.5 = 12 (N = 24)
83.0	"	78.0	Med. gray, well graded sand w/
	"		small amount of pea gravel
78.0	"	76.5	N/.5 = 11, N/1.0 = 12, N/1.5 = 16 (N = 28)
	"		
	"		

Ft T STA

Elevation of Hub

	to		
	"		
	"		
	"		
	"		
	"		
	"		
	"		

Ft T STA

Elevation of Hub

	to		
	"		
	"		
	"		
	"		
	"		
	"		
	"		

STATE HIGHWAY DEPARTMENT OF ALABAMA
BUREAU OF MATERIALS & TESTS
DIVISION OF MATERIALS
MONTGOMERY 4, ALABAMA

Form M & T F-1

Mr J F Tribble, Materials Engineer
Bureau of Materials & Research
State Highway Department
OFFICE

FI-346(2)
Baldwin-Mobile Co.
Re Tensaw River

Dear Sir

Listed below are the results of soundings made at the above location

C/L Ft T STA 269+90

Elevation of Hub 201.0

201.0	to	174.0	Water
174.0	"	165.0	Very soft gray-black, muck
165.0	"	164.0	Very soft, wet, gray, silty clay
164.0	"	162.5	N/1.5 = 1
164.0	"	159.0	Very soft, wet, gray, silty clay
159.0	"	157.5	N/1.5 = 1
159.0	"	155.0	Very soft, wet, gray, silty clay
155.0	"	154.0	Soft, wet, gray, silty clay w/ a few thin lenses of fine sand

Ft T STA

Elevation of Hub

154.0	to	152.5	N/.5 = 1, N/1.0 = 1, N/1.5 = 2 (N = 3)
154.0	"	148.0	Soft, wet, gray silty clay w/
	"		a few 2" to 3" lenses of fine sand
148.0	"	146.5	N/.5 = 2, N/1.0 = 1, N/1.5 = 2 (N = 3)
148.0	"	143.0	Soft, wet, gray, very silty
	"		clay w/ thin lenses of sand
143.0	"	141.5	N/.5 = 2, N/1.0 = 8, N/1.5 = 8 (N = 16)
	"		

Ft T STA

Elevation of Hub

143.0	to	142.5	Soft wet gray very silty
	"		clay w/ lenses of sand
142.5	"	138.0	Med. wet gray very silty
	"		fine sand w/ clay
138.0	"	136.5	N/.5 = 8, N/1.0 = 10, N/1.5 = 14 (N = 24)
13810	"	133.0	Med. wet gray, very silty, fine
	"		sand w/ intermittent layers
	"		of med. gray sand clay

Ft T STA

Elevation of Hub

133.0	to	131.5	N/.5 = 6, N/1.0 = 7, N/1.5 = 8 (N = 15)
133.0	"	128.0	Med. wet, gray, silty sand w/
	"		thin layers of gray sand clay
128.0	"	126.5	N/.5 = 8, N/1.0 = 18, N/1.5 = 14 (N = 32)
128.0	"	123.0	Med. wet gray silty fine SAND w/ a few
	"		thin layers of thin gray clay
123.0	"	121.5	N/.5 = 14, N/1.0 = 14, N/1.5 = 15 (N = 29)
	"		

Ft T STA

Elevation of Hub

123.0	to	120.0	Med. wet gray slightly silty
	"		sand w/ a few layers of stiff
	"		gray clay
120.0	"	118.0	Dense wet gray slightly
	"		silty sand
118.0	"	116.5	N/.5 = 6, N/1.0 = 16, N/1.5 = 8 (N = 34)
118.0	"	113.0	Dense wet gray slightly silty
	"		sand

Ft T STA

Elevation of Hub

113.0	to	111.5	N/.5 = 9, N/1.0 = 18, N/1.5 = 20 (N = 38)
113.0	"	110.0	Dense wet gray slightly
	"		silty sand w/ small amount pea gravel
110.0	"	108.0	Med. wet gray well graded
	"		sand w/ pea gravel
108.0	"	106.5	N/.5 = 7, N/1.0 = 9, N/1.5 = 11 (N = 20)
108.0	"	102.0	Med. wet gray well graded
	"		sand w/ pea gravel

Ft T STA

Elevation of Hub

102.0	to	100.5	N/.5 = 6, N/1.0 = 12, N/1.5 = 11 (N = 33)
102.0	"	100.0	Med. wet gray well graded
	"		sand w/ pea gravel
100.0	"	98.5	N/.5 = 13, N/1.0 = 14, N/1.5 = 14 (N = 28)
100.0	"	92.0	Med. wet gray well graded
	"		sand w/ small amount pea gravel
92.0	"	90.5	N/.5 = 12, N/1.0 = 13, N/1.5 = 14 (N = 27)
	"		

Ft T STA

Elevation of Hub

92.0	to	87.0	Med. wet gray well graded
	"		sand w/ small amount pea gravel
87.0	"	85.5	N/.5 = 8, N/1.0 = 12, N/1.5 = 13 (N = 25)
	"		
	"		Ended hole Elev. 85.5
	"		
	"		
	"		

Ft C/L T STA 259+86

Elevation of Hub 201.5

201.5	to	181.5	Water
181.5	"	174.0	Very soft wet gray muck
174.0	"	169.0	Very soft wet gray silty
	"		Clay
169.0	"	167.5	N/1.5 = 1
169.0	"	164.0	Very soft wet gray silty
	"		clay
164.0	"	162.5	N/1.5 = 1

Ft T STA

Elevation of Hub

164.0	to	159.0	Very soft wet gray
	"		silty clay
159.0	"	157.0	N/1.5 = 1
159.0	"	156.0	Very soft wet gray
	"		silty clay
156.0	"	154.0	Very soft wet gray
	"		silty clay w/ a few
	"		thin sand lenses

Ft T STA

Elevation of Hub

154.0	to	152.5	N/1.5 = 2
154.0	"	149.0	Very soft wet gray
	"		silty clay w/ a few thin sand lenses
149.0	"	147.5	N/1.5 = 2
149.0	"	144.0	Very soft wet gray
	"		silty clay w/ a few
	"		thin sand lenses
	"		

Ft T STA

Elevation of Hub

144.0	to	142.5	N/.5 = 3, N/1.0 = 1, N/1.5 = 1 (N = 2)
144.0	"	139.0	Very soft wet gray
	"		silty clay w/ a few
	"		thin sand lenses
139.0	"	137.5	N/1.5 = 2
139.0	"	134.0	Very soft wet gray
	"		silty clay w/ a few
	"		thin sand lenses

Ft T STA

Elevation of Hub

134.0	to	132.5	N/1.5 = 1
134.0	"	131.0	Very soft wet gray
	"		silty clay w/ a few
	"		thin sand lenses
131.0	"	129.0	Very soft wet gray
	"		silty sand clay
129.0	"	127.5	N/.5 = 1, N/1.0 = 1, N/1.5 = 1 (N = 2)
	"		

Ft T STA

Elevation of Hub

129.0	to	125.0	Very soft wet gray
	"		silty sand clay
125.0	"	124.0	Med. wet light greenish
	"		gray marine sand w/
	"		small amount clay
124.0	"	122.5	N/.5 = 4, N/1.0 = 10, N/1.5 = 9 (N = 19)
124.0	"	121.0	Med. wet light greenish
	"		gray marine sand w/ small amt. clay.

Ft T STA

Elevation of Hub

121.0	to	119.0	Dense wet light gray
	"		sine grain sand w/ small
	"		amount silt
119.0	"	117.5	N/.5 = 10, N/1.0 = 15, N/1.5 = 16 (N = 31)
119.0	"	116.0	Dense wet gray fine
	"		grain sand w/ very
	"		small amount silt
	"		

Ft T STA

Elevation of Hub

116.0	to	113.0	Med. wet gray fine
	"		grain sand w/ small
	"		amount silt and pea gravel
113.0	"	111.5	N/.5 = 8, N/1.0 = 9, N/1.5 = 11 (N = 20)
113.0	"	109.0	Med. wet gray fine
	"		grain sand w/ very
	"		small amount pea gravel
	"		

Ft T STA

Elevation of Hub

109.0	to	108.0	Dense wet gray med.
	"		grain sand
108.0	"	106.5	N/.5 = 6, N/1.0 = 15, N/1.5 = 16 (N = 31)
108.0	"	103.0	Dense wet gray med.
	"		grain sand
103.0	"	101.5	N/.5 = 14, N/1.0 = 26, N/1.5 = 36 (N = 50+)
103.0	"	98.0	Dense wet gray med.
	"		grain sand

Ft T STA

Elevation of Hub

98.0 to 96.5 N/.5 = 11, N/1.0 = 23, N/1.5 = 38 (N = 50+)

98.0 " 94.0 Dense wet gray med.

" grain sand

"

" Ended hole Elev. 94.0

"

"

"

Ft T STA

Elevation of Hub

to

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Ft T STA

Elevation of Hub

to

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