

BM#5 EL 5.048  
RR SPIKE IN 24" PINE  
51.365m LT -L STA 187+23.477

GREENHORNE & O'MARA, INC.  
5665 CENTERVIEW DRIVE, SUITE 101  
RALEIGH, NORTH CAROLINA 27606  
(919) 891-1919



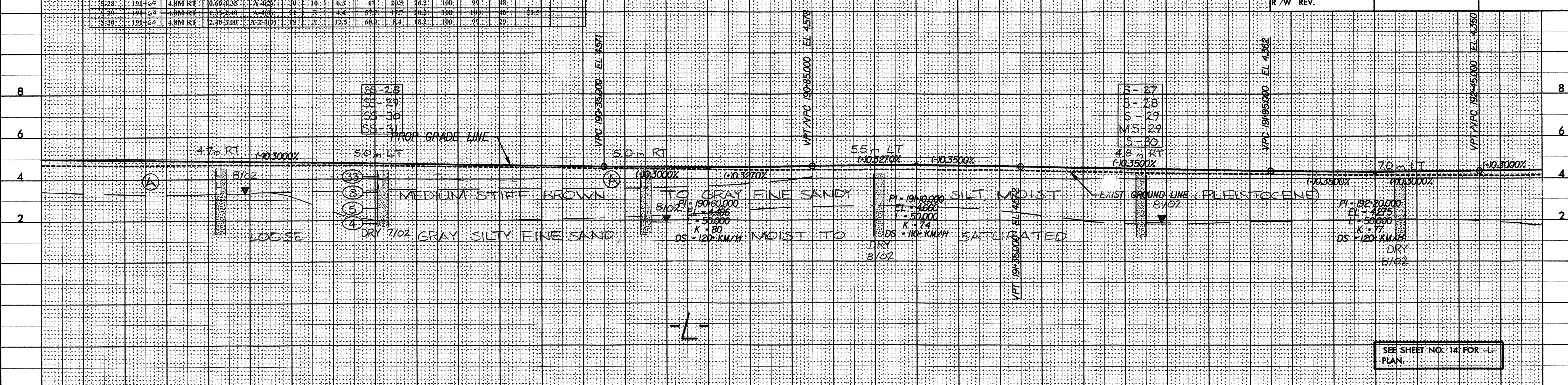
PROJECT REFERENCE NO. R-2539C  
SHEET NO. 34  
ROADWAY DESIGN ENGINEER  
HYDRAULICS ENGINEER

PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION  
INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION

CONST. REV.  
R/W REV.

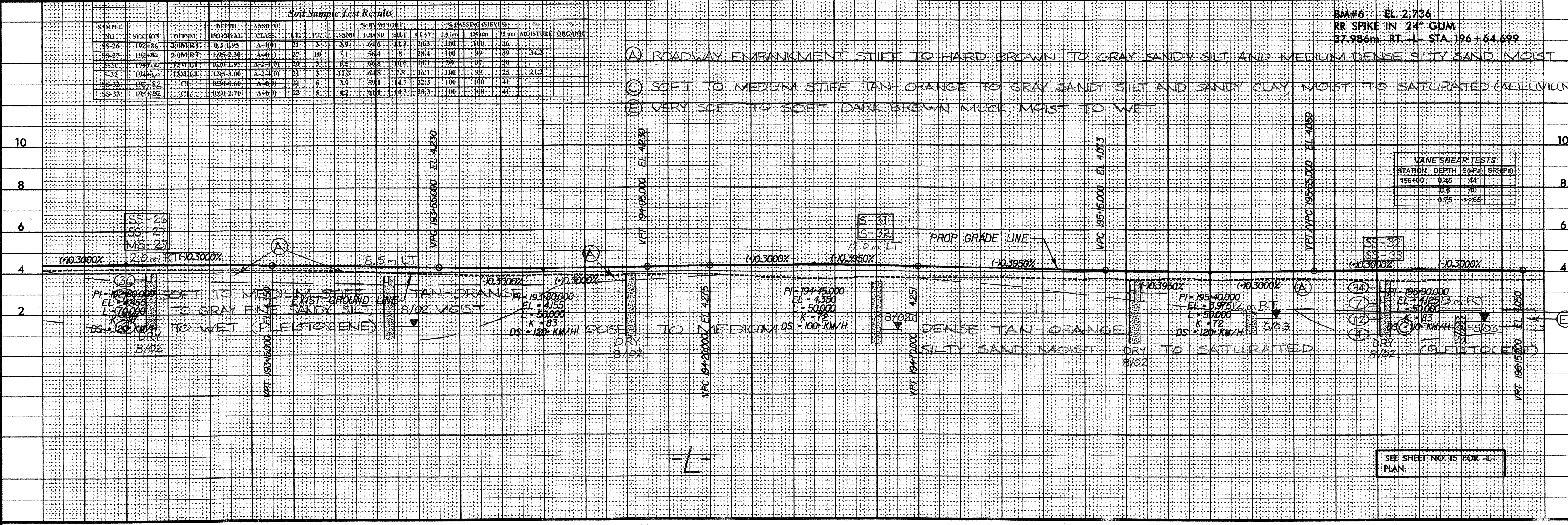
Soil Sample Test Results												
SAMPLE NO.	STATION	DEPTH INTERVAL	CLASS	LIQ. LIM.		PLAST. LIM.		% BY WEIGHT			% MOISTURE	% ORGANIC
				LL	PL	US	US	CLAY	2.0mm	75µm		
SS-28	187+82	5.0M LT	A-4(0)	21	4	5.1	61.2	12.7	20.3	100	100	36
SS-29	189+82	5.0M LT	A-4(2)	23	10	5.7	38.3	11	18.4	100	100	49
SS-30	189+82	5.0M LT	A-4(0)	24	9	3	54.5	18	14.4	100	100	48
SS-31	189+82	5.0M LT	A-2-3(0)	22	6	11	58.5	10.5	20.3	100	99	33
S-27	191+24	4.8M RT	A-4(0)	20	3	3.2	62.5	18.8	0.2	100	100	39
S-28	191+24	4.8M RT	A-4(2)	20	10	6.3	47	20.5	6.3	100	99	48
S-29	191+24	4.8M RT	A-4(0)	21	5	4.4	37.2	17.6	40.2	100	100	46
S-30	191+24	4.8M RT	A-2-3(0)	20	3	12.5	68.2	8.4	8.2	100	99	29

ROADWAY EMBANKMENT STIFF TO HARD TAN TO BROWN SANDY SILT, MOIST



Soil Sample Test Results												
SAMPLE NO.	STATION	DEPTH INTERVAL	CLASS	LIQ. LIM.		PLAST. LIM.		% BY WEIGHT			% MOISTURE	% ORGANIC
				LL	PL	US	US	CLAY	2.0mm	75µm		
SS-26	192+80	2.0M RT	A-4(0)	23	3	3.9	56.6	11.4	20.2	100	100	36
SS-27	192+80	2.0M RT	A-4(1)	27	10	5.1	56.4	8	26.4	100	99	34
SS-28	192+80	2.0M LT	A-4-3(0)	20	3	10.5	60.8	10.8	19.1	99	97	30
SS-29	194+60	2.0M LT	A-4(0)	23	3	11.5	64.8	7.8	16.1	100	99	25
SS-32	195+82	CL	A-4(0)	21	4	3.9	50.1	14.3	22.5	100	100	41
SS-33	195+82	CL	A-4(0)	23	3	4.3	50.1	14.3	20.5	100	100	44

ROADWAY EMBANKMENT STIFF TO HARD BROWN TO GRAY SANDY SILT AND MEDIUM DENSE SILTY SAND, MOIST  
SOFT TO MEDIUM STIFF TAN ORANGE TO GRAY SANDY SILT AND SANDY CLAY, MOIST TO SATURATED (ALLUVIUM)  
VERY SOFT TO SOFT DARK BROWN MUCK, MOIST TO WET



VANE SHEAR TESTS			
STATION	DEPTH (m)	S (kPa)	GR (kPa)
192+00	0.25	44	
	0.6	40	
	0.75	>>65	

SEE SHEET NO. 15 FOR -L- PLAN.