Prepared in the Office of: SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
504 Meadowlands Drive
Hillsborough, NC 27278
(919) 732-3883 - (919) 732-6676 (FAX)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, SHOULDER BORROW, FINE GRADING, CLEARING AND GRUBBING, BREAKING OF EXISTING PAVEMENT AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "GRADING".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

STATION SIZE THICKNESS OR GAUGE	OFFSET	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	% MINIMUM REQUIRED SLOPE	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 8"	12"	15"	18"	24"	30"	36"	42"	R.C. PIPE CLASS III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"
		0401	0402		377.4	377.3											48														
Y1 12+99	16 RT	0401		380.4																											
L 13+00	22 LT	0402		379.5																											
		0402	0404		377.3	376.1											140														
Y1 12+75	16 RT	0403		380.7																											
		0403	0401		377.7	377.4																			24						
L 11+58	18 LT	0404		378.0																											
		0404	0405		376.1	374.9	0.3										120														
L 10+37	17 LT	0405		376.8																											
		0405	OUT		374.9	374.2	0.5										52														
		0406	0407		377.3	377.2																			40						
Y1 12+99	16 LT	0406		380.3																											
Y1 13+35	23 LT	0407		380.9																											
		0407	OUT		377.2	377.0																			28						
Y1 14+07	16 RT																														
TOTALS																	360								92						

STATION	STRUCTURE NO. FROM	STRUCTURE NO. TO	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	* TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. *FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME & GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. FRAME WITH GRATE STD. 840.22	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. FRAME WITH GRATE STD. 840.29	J.B. STD. 840.31 OR 840.32	G.D.I STD. 840.35 AND 340.20	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" C.Y. STD 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN.FT.	REMARKS
	0401	0402																												
Y1 12+99	0401							1			1	1																		
L 13+00	0402							1											1			1								
	0402	0404																												
Y1 12+75	0403							1			1		1																	
	0403	0401																												
L 11+58	0404							1											1			1								
	0404	0405																											33	
L 10+37	0405							1											1			1								
	0405	OUT																											52	
	0406	0407																												
Y1 12+99	0406							1			1	1																		
Y1 13+35	0407							1			1			1																
	0407	OUT																												
Y1 14+07																													17	
TOTALS								7			4	2	1	1					3			3							102	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I. (N.S.)	GRATED DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

PARCEL INDEX

PARCEL NO.	OWNER	TYPE	AREA (SF)	AREA (AC)
1	NELDA C SUGGS DEED BOOK 237 PAGE 162	TCE	220.94	0.005
1	NELDA C SUGGS DEED BOOK 237 PAGE 162	PUE	553.12	0.013
1	NELDA C SUGGS DEED BOOK 237 PAGE 162	AUE	504.66	0.012
2	GABRIEL S & JUDITH P RUSSELL DEED BOOK 1058 PAGE 747	TCE	130.08	0.003
2	GABRIEL S & JUDITH P RUSSELL DEED BOOK 1058 PAGE 747	AUE	2609.06	0.060
3	ESTATE OF EDWIN DOUGLAS FOWLER FILE #13E347	TCE	0.00	0.000
4	GABRIEL S & JUDITH P RUSSELL DEED BOOK 1144 PAGE 80	AUE	1551.82	0.036
6	ELMER J & MARJORIE B RAY DEED BOOK 1144 PAGE 80	AUE	1568.95	0.036
7	MARY R NIFONG DEED BOOK 1987–E PAGE 1175	AUE	160.61	0.004
8	FRANCES BOWLES DEED BOOK 224 PAGE 126	AUE	36.97	0.001

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT + 20%	BORROW	WASTE
–L– STA. 12+00.00 TO 14+75.00	107		61		46
–Y1– STA. 12+40.00 TO 15+00.00	41		10		31
TOTAL	148		71		77
ESTIMATED SHOULDER CONSTRUCTION			96	96	
LOSS DUE TO CLEARING AND GRUBBING			25		
WASTE IN LIEU OF BORROW				–77	–77
PROJECT TOTALS	148		192	19	
EST 5% TO REPLACE BORROW				1	
GRAND TOTALS	148		192	20	
SAY	150			20	

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