Flexible Pavement Design Analysis					
PI Number	0004634	County(s)	Forsyth (south) & Fulton (north)		
Project Number	N/A Design Name McGinnis				
Project Description	McGinnis Ferry Widening from Union Hill to Sargent				

Traffic Data (AADTs are one-way)						Miscellaneous Data	
Initial Design Year	2020	Initial AADT, VPD	13,100	24 Hour Truck %	4.00	Lanes in one direction	2
Final Design Year	2040	Final AADT, VPD	18,850	SU Truck %	2.00	Curb & Gutter/Barrier	Yes
		Mean AADT, VPD	15,975	MU Truck %	2.00		

Design Data						
Lane Distribution Factor (%)90.00		Soil Support Value 3.00		Single Unit ESAL	0.40	
Terminal Serviceability Index 2.50		Regional Factor	1.80	Multiple Unit ESAL	1.50	
		User Defined 18-KIP ESAL	0.00	Calculated 18-KIP ESAL	0.95	
Non-Standard Value Comment						

Design Loading (Calculated 18-KIP ESAL)					
Mean AADT, VPD	LDF (%)	Vehicle Type	Volume (%)	ESAL Factor	Daily ESAL
15,975	90.00	Single Unit Truck	2.00	0.40	116
		Multi Unit Truck	2.00	1.50	432
Total Daily ESALs548					
Total Design Period ESALs4,000,400					

Proposed Flexible Full Depth Pavement Structure					
Course	Material	Thickness (inches)	Structural Coefficient	Structural Value	
Course 1	12.5 mm Superpave, Polymer Modified	1.50	0.4400	0.66	
Course 2	19 mm Superpave	2.00	0.4400	0.88	
Course 2	25 mm Superpare	1.00	0.4400	0.44	
Course 5	25 min Superpave	2.00	0.3000	0.60	
Course 4	25 mm Superpave	3.00	0.3000	0.90	
Course 5	Graded Aggregate Base	10.00	0.1600	1.60	
Required S	N 5.30 Proposed pavement is 4.19% Und	roposed pavement is 4.19% Underdesigned		5.08	

Design	
Kemarks	

Prepared By		
		Date
Recommended By		
	Consultant Design Phase Leader	Date
Approved By		
	State Pavement Engineer	Date