

**State of Florida Department of Transportation  
PAVEMENT EVALUATION AND CONDITION DATA SHEET**

<b>Project No.:</b> 434417-1	<b>Cored By:</b> Elipsis Engineering and Consulting	<b>Date:</b> 10/22, 10/23, 10/24/14	<b>Page No.:</b> 1 of 3
<b>County:</b> Brevard	<b>Highway Sect. No.:</b> 70080	<b>From:</b> S. of George King Blvd	<b>To:</b> Section # 70070
<b>Road No.:</b> SR A1A	<b>Begin MP:</b> 3.149	<b>End MP:</b> 4.114	<b>Length:</b> 0.965 mile(s)

Core No.	MP	Distance from left edge of lane (ft)	Lane	Wheel Path	Pavement Layer (in.)						Base		Crack				Pavt Cond.	Rut Depth (in)	Cross Slope (%)	Comments	
					FC-2	FC-12.5	Type S	Type I	Type II w/ Shell	Core Length (in)	Type	Thick-ness (in)	Depth (in)	Type	Class	Extent					
1	3.256	3.5	R2	X	0.7		3.8				4.5	COQ	10.5	1.7	SL	III	S	P			
2	3.352	8.0	R2		0.7		3.3				4.0	COQ	10.5	1.2	SL	III	S	P			
3	3.352	4.0	OR				2.1				2.1	COQ	3.4	—	—	—	—	F			
4	3.401	2.0	R2	X		1.7	3.8				5.5	COQ	10.5	—	—	—	—	G			Patched Area Before Bridge
5	3.462	9.0	R2	X		3.6	5.2				8.8	COQ	10.7	—	—	—	—	G			Patched Area After Bridge - Curves Left
6	3.587	9.0	R2	X	0.8		3.8				4.6	COQ	10.4	1.1	SL	I	L	F			Curves Left
7	3.587	5.0	OR				1.8				1.8	COQ	7.2	—	—	—	—	F			Curves Left
8	3.804	9.0	R3	X	0.5		3.2				3.7	COQ	16.3	—	—	—	—	F			
9	3.804	4.5	OR				1.5				1.5	COQ	17.0	—	—	—	—	F			
10	4.066	11.0	R3			0.8	2.7				3.5	COQ	8.3	B	ST	I	L	F			Patched Area - Lane Drops-Off/Converted as Ramp to SR 401
11	4.082	4.0	OL				3.5				3.5	COQ	5.5	—	—	—	—	F			
12	3.994	2.0	L2	X	0.9		3.4				4.3	COQ	17.2	2.2	SL	II	M	F			
13	3.952	8.0	L3		1.3		2.6				3.9	COQ	7.1	1.7	SL	II	L	F			
14	3.836	6.0	L3		1.1		4.0				5.1	COQ	6.9	1.5	Br	II	S	P			
15	3.834	6.0	OL				2.5				2.5	COQ	6.5	—	—	—	—	F			
16	3.703	3.0	L3	X	0.8		3.2				4.0	COQ	13.0	1.9	Br	III	S	P			Curves Right

**Remarks:** Crack Depth of "B" indicates full depth crack to the base. EOP = Edge of Pavement  
Crack Extent: L= Light; M= Moderate; S= Severe    Pavement Condition: G= Good; F= Fair; P= Poor    Crack Types: A= Alligator; Bl= Block; Br= Branch  
 SL= Single Longitudinal; ST= Single Transverse; R= Reflective; J= Joint; OGFC= Open-Graded FC Stress Crack  
Base Types: LR= Limerock; COQ= Coquina; SC= Soil Cement; ABC= Asphalt Base; SAHM= Sand Asphalt Hot Mix; NB= No Base

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<b>County:</b> Brevard	<b>Highway Sect. No.:</b> 70080	<b>From:</b> S. of George King Blvd	<b>To:</b> Section # 70070
<b>Road No.:</b> SR A1A	<b>Begin MP:</b> 3.149	<b>End MP:</b> 4.114	<b>Length:</b> 0.965 mile(s)

Core No.	MP	Distance from left edge of lane (ft)	Lane	Wheel Path	Pavement Layer (in.)						Base		Crack				Pavt Cond.	Rut Depth (in)	Cross Slope (%)	Comments	
					FC-2	FC-12.5	Type S	Type I	Type II w/ Shell	Core Length (in)	Type	Thick-ness (in)	Depth (in)	Type	Class	Extent					
17	3.552	10.0	L2	X	1.2		3.5				4.7	COQ	10.3	1.6	SL	III	M	F			
18	3.552	6.0	OL				1.6				1.6	COQ	11.4	—	—	—	—	F			
19	3.463	2.5	L2	X		1.2	4.9				6.1	COQ	11.9	—	—	—	—	G			Patched Area Before Bridge
20	3.402	10.0	L2	X		1.6	2.4				4.0	COQ	10.5	—	—	—	—	G			Patched Area After Bridge
21	3.334	9.0	L2	X	0.5		3.6				4.1	COQ	11.7	—	—	—	—	F			
22	3.334	4.0	OL				2.0				2.0	COQ	5.0	—	—	—	—	F			
23	3.229	8.5	L3	X	1.1		3.5				4.6	COQ	8.4	1.8	Br	III	S	P			Pavement in this Area is The Ramp Merge Area From Ramp# 007 to SB A1A (20' from Outside Edge of L2 Lane)
24	3.191	3.0	R1	X	0.9		3.7				4.6	LR	8.7	2.2	SL	III	S	P			
25	3.350	8.0	R1		0.7		3.4				4.1	COQ	7.9	1.5	Br	II	M	P			
26	3.524	7.5	R1		0.8		3.9				4.7	COQ	10.3	1.5	SL	III	S	P			Curves Left
27	3.757	10.0	R1	X	0.4		6.3				6.7	LR	22.3	B	Br	III	S	P			
28	3.961	2.0	R1	X	0.6		1.3	4.2	1.2		7.3	LR	8.2	—	—	—	—	F			
29	4.107	2.5	L1	X	0.9		5.1				6.0	COQ	8.0	1.9	Br	II	M	P			
30	3.783	8.0	L1		0.6		3.0				3.6	COQ	10.7	1.5	Br	I	M	F			
31	3.501	3.0	L1	X	0.5		4.3				4.8	COQ	9.3	1.9	SL	II	M	F			Curves Right
32	3.311	8.5	L1	X	0.6		4.0				4.6	COQ	9.7	0.8	SL	II	L	F			

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<b>County:</b> Brevard	<b>Highway Sect. No.:</b> 70080	<b>From:</b> S. of George King Blvd	<b>To:</b> Section # 70070

<b>Road No.:</b> SR A1A	<b>Begin MP:</b> 3.149	<b>End MP:</b> 4.114	<b>Length:</b> 0.965 mile(s)
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Core No.	MP	Distance from left edge of lane (ft)	Lane	Wheel Path	Pavement Layer (in.)							Base		Crack				Pavt Cond.	Rut Depth (in)	Cross Slope (%)	Comments	
					FC-2	FC-12.5	Type S	Type I	Type II w/Shell	Core Length (in)	Type	Thick-ness (in)	Depth (in)	Type	Class	Extent						
33	3.177	2.000	L1	X		1.2	3.5				4.7	LR	7.8	—	—	—	—	G			Just South of Pavement Change	
34	302' from Gore	11.000	RAMP		0.9		15.5				16.4	LR	4.6	2.1	SL	III	S	P			Core Fractured During Extraction Ramp 8; NB SRA1A to G.K.B.	
35	312' from Gore	2.000	SHLDER	X			12.7				12.7	LR	6.3	—	—	—	—	F			Core Fractured During Extraction Ramp 8; NB SR A1A to G.K.B.	
36	563' from Gore	2.000	RAMP	X	1.0		16.0				17.0	LR	8.0	1.6	Br	I	L	P			Core Fractured During Extraction Ramp 8; NB SR A1A to G.K.B.	
37	347' from EOP	21.000	RAMP		0.6		7.1				7.7	LR	7.3	1.9	SL	II	S	P			Ramp 9; G.K.B. to NB SR A1A	
38	357' from EOP	2.500	SHLDER	X			7.3				7.3	LR	—	—	—	—	—	F			Ramp 9; G.K.B. to NB SR A1A	
39	1051' from EOP	2.000	RAMP	X	0.7		4.0				4.7	COQ	10.8	—	—	—	—	F			Ramp 9; G.K.B. to NB SR A1A	
40	246' from Gore	4.0	RAMP		0.6		5.2				5.8	COQ	10.5	2.1	SL	III	S	P			Ramp 6; SB SR A1A to G.K.B.	
41	446' from Gore	9.000	RAMP	X	0.7		3.2				3.9	COQ	11.1	2.1	SL	III	S	P			Ramp 6; SB SR A1A to G.K.B.	
42	436' from Gore	3.000	SHLDER	X			2.3				2.3	COQ	4.5	—	—	—	—	F			Ramp 6; SB SR A1A to G.K.B.	
43	268' from EOP	23.000	RAMP		0.8		3.0				3.8	COQ	16.0	—	—	—	—	P			Ramp 7; G.K.B. to SB A1A	
44	278' from EOP	3.000	SHLDER	X			1.9				1.9	COQ	—	—	—	—	—	F			Ramp 7; G.K.B. to SB A1A	
45	743' from EOP	5.0	RAMP		0.7		3.9				4.6	COQ	10.4	1.7	SL	III	S	P			Ramp 7; G.K.B. to SB A1A	

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<b>County:</b> Brevard	<b>Highway Sect. No.:</b> 70070	<b>From:</b> SR 528 / SR 401	<b>To:</b> Section #70080
<b>Road No.:</b> SR A1A	<b>Begin MP:</b> 12.810	<b>End MP:</b> 12.968	<b>Length:</b> 0.158 mile (s)

Core No.	MP	Distance from left edge of lane (ft)	Lane	Wheel Path	Pavement Layer (in.)						Base		Crack				Pavt Cond.	Rut Depth (in)	Cross Slope (%)	Comments				
					FC-3	Type S	ARMI	Type S			Core Length (in)	Type	Thick-ness (in)	Depth (in)	Type	Class					Extent			
1	12.918	11.0	R2		0.7	1.2	0.4	1.5			3.8	COQ	8.2	-	-	-	-	F						
2	12.918	5.0	OR			1.2					1.2	COQ	4.8	-	-	-	-	F						
3	12.936	8.5	L2	X	1.0	2.8					3.8	COQ	7.7	B	Br	I	M	F						
4	12.859	9.0	R1	X	1.0	3.6					4.6	COQ	11.6	-	-	-	-	F						
D1	12.809	5.5	R2									PCC	-	-	-	-	-	F				Asphalt Thickness = 2.3" - - East End of Bridge Approach Slab		
D2	12.809	5.5	R1									PCC	-	-	-	-	-	F				Asphalt Thickness = 2.6" - - East End of Bridge Approach Slab		

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SL= Single Longitudinal; ST= Single Transverse; R= Reflective; J= Joint; OGFC= Open-Graded FC Stress Crack  
Base Types: LR= Limerock; COQ= Coquina; SC= Soil Cement; ABC= Asphalt Base; SAHM= Sand Asphalt Hot Mix; NB= No Base

# Supplemental Data to PECD

(Asphalt Thickness for Each Drill Depth Location)

SR A1A

FIN: 434417-1 Section 70080

County: Brevard

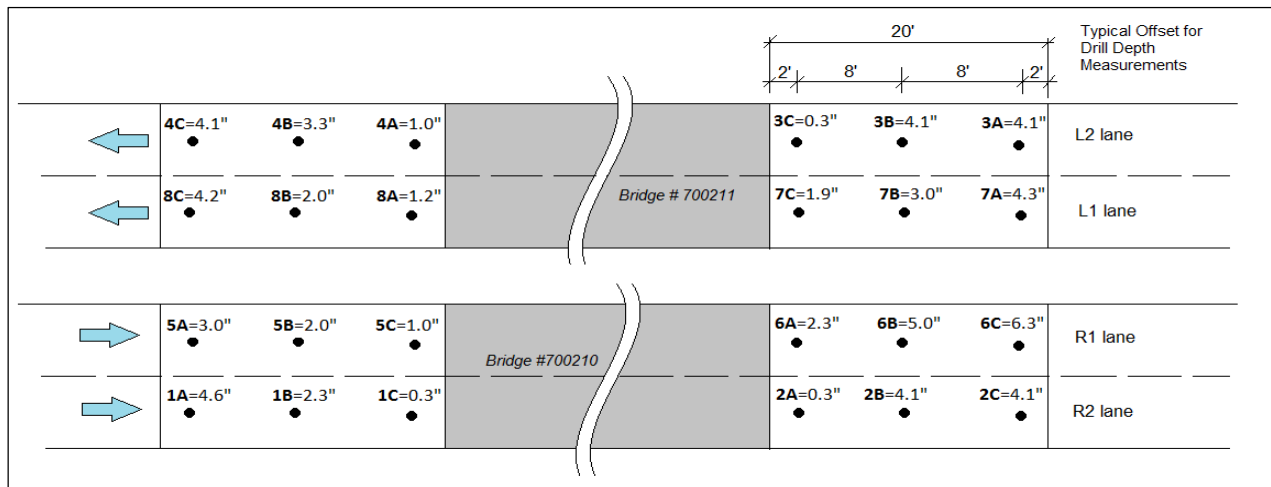
## Left Side

## Right Side

<u>L2 Lane</u>		<u>L1 Lane</u>	
Drill #	Asphalt Thickness	Drill #	Asphalt Thickness
3A	4.1"	7A	4.3"
3B	4.1"	7B	3.0"
3C	0.3"	7C	1.9"
Bridge # 700211			
4A	1.0"	8A	1.2"
4B	3.3"	8B	2.0"
4C	4.1"	8C	4.2"

<u>R1 Lane</u>		<u>R2 Lane</u>	
Drill #	Asphalt Thickness	Drill #	Asphalt Thickness
6C	6.3"	2C	4.1"
6B	5.0"	2B	4.1"
6A	2.3"	2A	0.3"
Bridge # 700210			
5C	1.0"	1C	0.3"
5B	2.0"	1B	2.3"
5A	3.0"	1A	4.6"

### Conceptual Layout of Drill Locations for Asphalt Thickness.



This pavement segments represents the maintenance repair work (with FC-12.5 asphalt) on both ends of the George King Boulevard Bridge. It is currently in good to fair condition. The approach slabs are overlaid in 2013 with new asphalt in the roadway lanes only. The shoulder areas of the approaches are bare concrete. This was due to settlement issues on both ends of the bridge. From the bridge inspection reports, it is noted that the approach slabs appear to have settled approximately 3 to 4 inches adjacent to the roadway transition. The settlement has caused the approach slabs to rotate leaving them up to 3/4" higher than the deck top at the end bent expansion joints. This has caused live load impacting of the bridge deck and approach slabs and it is most prevalent in the inside lanes (L1/R1) at both ends of the bridge. The maintenance repair work extended beyond the approach slabs by approximately 95 feet to ensure smooth ride while approaching/leaving the bridge deck.

In addition to the coring work, the crew obtained multiple drill depth measurements on the approach slabs. This work was done with a power drill and masonry drill bit. At the designated distance offset, the drilling was advanced down until it encountered the underlying Portland Cement Concrete. The drill bit was then marked at pavement surface level and pulled out. The depth of drill penetration was measured and noted in the core data sheets. As seen in the schematic diagram above, the asphalt thickness varies significantly. The thicker values at the far ends of the approach slabs is indicative of prior approach slab settlement and overlay repairs.