National Park Service
U.S. Department of the Interior

PAVEMENT INVESTIGATION AND ANALYSIS REPORT

Congaree National Park (CONG)

NPS Contract No. 140P2022D0002
NPS Task Order No. 140P2025F0167
PMIS 334914

July 28, 2025

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1.0 Project Description

National Park System (NPS) retained AECOM Services, Inc. (AECOM) to provide engineering services related to pavement preservation at multiple parks in South Carolina. Preservation is the strategy designed to maintain and restore the overall condition of relatively new pavements that are in good to fair condition (distress severity and extent are low/moderate) by protecting them from water intrusion and limiting oxidation using treatments such as crack seal, slurry seal, chip seal, micro surfacing, and thin overlays. Pavement preservation treatments generally can extend the life of pavement in good or fair condition by 5-7 years and delay more expensive and intrusive rehabilitation activities.

As outlined in the project Scope of Services, the goal is to evaluate selected paved roads and parking areas at the Congaree National Park (CONG) and identify suitable pavement preservation or rehabilitation treatments. AECOM conducted pre-design activities, including an on-site scoping site visit and review of available project documents, to perform an initial pavement assessment. The preliminary findings were documented in a Pavement Analysis Report dated February 22, 2025. This report supplements the February 2025 pavement analysis by incorporating findings from additional pavement investigations and analyses conducted by AECOM during the Design Development (DD) phase. It presents the final recommendations for pavement treatment options for the designated roads and parking areas at CONG, in accordance with Chapter 11 of the Federal Highway Administration (FHWA) Project Design and Development Manual.

To ensure continuity and completeness in documenting the pavement evaluation efforts and findings, the activities conducted during the predesign (PD) phase are discussed in Section 2 of this report, while the DD phase activities are documented in Section 3. Section 4 contains the findings and recommendations. The specific roadway and parking lot sections are listed in Table 1, and the project location is provided in Appendix A.

2.0 Scope of Work – Predesign (PD) Phase

AECOM performed the following activities at CONG during the predesign phase:

2.1 Review of RIP Data

NPS provided AECOM with the Federal Highway Administration's (FHWA) Road Inventory Program (RIP) report for CONG (*Cycle 6 Final Report – Road Inventory and Condition Assessment of Paved Road, November 2021*). AECOM reviewed the RIP report to obtain the roadway inventory and existing condition information for the *target* road and parking lot sections of CONG; i.e., sections identified by the RIP report as candidates for pavement preservation as well as sections adjacent to candidate section(s) and/or sections deemed to be in similar condition to candidate section(s). Table 1 summarizes the relevant RIP data for the candidate/added section of CONG. The added sections (shown in blue text throughout the report) are included in the 70% design plans as "Options".

Table 1: CONG Target Road/Parking Lot Sections RIP Data

ROUTE ID	ROAD	AREA (SF)	LENGTH (MILES)	ROADWAY WIDTH (FT)	PAVEMENT TYPE	PCR	RECOMMENDED TREATMENT
CONG-0010	ENTRANCE ROAD		1.25	22	Asphalt	100	Localized Repair
CONG-0100	LONGLEAF CAMPGROUND ACCESS RD		0.02	13	Asphalt	98	Localized Repair
CONG-0900	VISITOR CENTER FIRST PARKING	13,648			Asphalt	97	Localized Repair
CONG-0901	VISITOR CENTER BUS PARKING	16,499			Asphalt	97	Localized Repair
CONG-0902	EMPLOYEE PARKING	5,804			Asphalt	97	Localized Repair
CONG-0909	VISITOR CENTER MIDDLE PARKING	14,462			Asphalt	97	Localized Repair

Notes:

1) *PCR = Pavement Condition Rating, L3R = Light Rehabilitation, H3R = Heavy Rehabilitation*
2) *Throughout this report, Added Sections are shown in BLUE.*

2.2 Review of FY19 Pavement Preservation Design Scoping Report for CONG

NPS provided AECOM with the Design Scoping Report for the previous round of pavement preservation project for CONG (*NP-SER PMS FY19*). A review of this report indicated that all CONG target sections were also considered for pavement preservation treatments as part of the FY19 project. Further discussions with the NPS team and the Park Units and a review of other relevant project documents confirmed that these sections received pavement preservation as part of the SER PMS FY19 Project. The available project plans included four proposed preservation treatment options, namely, 1.5 in. overlay, 0.75 in. overlay, chip seal, and micro-surfacing, however, the actual treatment selection for each road/parking lot section was left up to the contractors. AECOM's visual observations regarding the most likely past pavement preservation treatment are included in Table 3.

2.3 On-Site Scoping and 70% Design Site Visit

AECOM performed an on-site scoping field visit on November 26, 2024, along with members of the NPS project team and the CONG Park Unit team. Per the project scope, the on-site scoping field visit was conducted to evaluate the current site conditions of the park sections listed in Table 1. The project team's on-site scoping field visit activities included the following:

- Conduct tailgate safety briefings with the project team and sign Task Hazard Assessment (THA).
- Discuss the scope and objectives of the on-site field visits with the Park Unit Team.
- Gather site-specific information from the Park Unit Team including:
  - Priorities of roadways to treat,
  - Other ongoing/planned projects that may impact the planned pavement treatment work,
  - Concerns with existing roadway configurations (one-way roads),
  - Any present or anticipated changes in vehicular traffic volume and/or type within the park.
  - Past safety incidents/concerns related to roadway signage reported by park users,
  - Past pavement preservation/rehabilitation work at the park and experiences with those treatments,
  - Any other relevant information such as staging areas, permitting requirements, etc.
- Conducting the site walk of each roadway/parking lot section to:

- Evaluate the existing pavement condition, including estimating cracks and identifying the preliminary pavement preservation treatment.
- Evaluate the conditions of existing curbs, gutters, wheel stops, drainage inlets, ADA ramps, etc., and note improvement requirements.
- Provide opinion on the condition and adequacy of existing roadway and parking signage, including handicap parking signs.
- Review the existing striping (including the need for scarifying thermoplastic prior to treatments) and the need for striping parking stalls, as well as add/relocate handicap parking spots.

The draft on-site scoping field meeting minutes were submitted to NPS on December 15, 2024, and the final meeting minutes (revised per NPS comments) were submitted to NPS on January 17, 2025. The field notes from the on-site scoping field meeting including geo-referenced photographs taken by the project team are included in Appendix B.

3.0 Scope of Work – Design Development (DD) Phase

AECOM performed the following activities during the DD phase to finalize the pavement preservation treatment recommendations for the CONG sections:

3.1 70% Design Site Visit

AECOM conducted a 70% design site walk at the Park on May 31, 2025, to supplement the findings from the scoping site walk and perform a more detailed pavement condition survey. This was to finalize pavement recommendations and the 70% design deliverables. The following activities were conducted during the 70% design site walk:

- Establish the project baseline for the 70% design plans.
- Identify the locations and conditions of the existing roadway features, such as structures (bridges and culverts), signage, utility features, traffic loops, etc., and note improvement needs.
- Identify locations that require localized pavement treatments such as full or partial depth patching and aggregate/seed mixes for shoulder support.

The findings from the 70% design site walk along with corresponding recommendations, are incorporated into Section 4 of this report and the 70% design plans.

3.2 Subsurface Sampling and Investigation

Due to the observed load-related cracking and poor cross-slope at the Visitor Center Bus Parking (CONG-0901), subsurface investigation was conducted to obtain detailed pavement structure information—such as layer types, thicknesses, and engineering properties of both bound and unbound layers—to support the final treatment recommendations. On 05/31/2025, AECOM extracted four (4) pavement cores and two (2) test pits from CONG-0901 and an additional two (2) cores from the Entrance Road (CONG-0010). The Geotechnical test results are included in Appendices C1 through C3, and the key findings are discussed below:

- **Visitor Center Bus Parking (CONG-0901)**
  - Asphalt within CONG-0901 is 5 to 8.5 inches with an average of approximately 7 inches.
  - Debonding of the surface course was observed in two of the four cores and in one of the two test pits.
  - The soil samples extracted from the test pit locations indicated the presence of 5.5-10.5 inches of base quality material. A **6-inch-thick aggregate base** is assumed for pavement design purposes.
  - The subgrade was found to contain mostly clayey sand (AASHTO classification A-7-6 or A-6 / USCS class SC). A design **subgrade resilient modulus (M_R) value of 7,000 psi** is assumed for pavement design purposes.
- **Entrance Road (CONG-0010)**
  - Asphalt thickness along CONG-0010 varies from 5 to 5.5 inches.
  - One of the two cores exhibited debonding of the surface course.
  - A crushed aggregate base exists beneath the asphalt layer. Since no test pits were available to determine the base thickness, a 6-inch aggregate base layer is assumed below the asphalt, similar to the CONG-0901 pavement.

3.3 Review of Available Traffic Data

AECOM downloaded and reviewed the historical traffic counts for the Entrance Road (CONG-0010) from the "NPS Stats Report Viewer" website. An average daily traffic (ADT) of 206 was reported for 2024, while for the current year (2025), the reported ADT through June is 262. Considering the historical traffic volume counts (from 2021 to 2024), a design ADT of 250 is deemed appropriate for this road. Using this, along with an assumed 1% bus traffic, an 18-kip equivalent single axle load (ESAL) of 23,442 is calculated for CONG-0010 for a 20-year design life. For CONG-0901, it is conservatively assumed that approximately half of the park's total vehicular traffic will use this parking lot, thereby resulting in a 20-year design ESAL of 11,721. The reviewed traffic data and the ESAL calculations are included in Appendix D.

3.4 Construction Summary Estimate

A DD-Phase construction cost estimate, aligned with the Department of the Interior (DOI) Estimate Type B, is being prepared based on the proposed pavement treatments for the parking lots and roadway sections of CONG. This estimate will be submitted as a separate deliverable with the 70% design package. A summary of the estimated construction cost, based on a DOI Estimate Type C for CONG, is included in Appendix F.

3.5 Construction Schedule Summary

A construction schedule was developed based on the pavement preservation treatments proposed for the parking lots and roadway sections of CONG, and it is included in Appendix G.

4.0 Pavement Analysis, Findings, and Recommendations

AECOM performed pavement design analysis to determine the structural adequacy of CONG-0901 and CONG-0010 to support the expected design traffic load for a 20-year service life. The remaining

sections of CONG exhibit limited pavement surface distress and are hence considered ideal for pavement preservation treatments. Pavement design calculations were performed according to the *AASHTO Guide for Design of Pavement Structures, 1993*, and in line with Chapter 11 of the *FHWA Project Design and Development Manual*. The *AASHTO 1993* design calculations are included in Appendix E, and the findings and recommendations are discussed below:

Visitor Center Bus Parking (CONG-0901)

The pavement exhibits signs of load-related cracking and poor cross-slope through the middle of the parking lot, causing water ponding. Based on *AASHTO 1993* design calculations, the existing pavement structure—consisting of ~7 inches of asphalt over a 6-inch aggregate base with a subgrade M_R of 7,000 psi—is structurally adequate to support the design traffic loading. An asphalt mill and overlay treatment is recommended for this parking lot to correct the pavement slope, combined with localized patches to correct tree root damage. A 3-inch mill depth is deemed appropriate, as this will remove the debonding issues observed in the surface layer.

Entrance Road (CONG-0010)

Based on *AASHTO 1993* design calculations, the existing pavement structure—consisting of ~5inches of asphalt over a 6-inch aggregate base with a subgrade M_R of 7,000 psi—is structurally adequate to support the design traffic loading. Indeed, a majority of the pavement is in good condition, with areas of low severity Alligator Cracking or minor tree root damage. Thus, localized patching followed by surface treatment via crack sealing and seal coating is recommended for this road. Additionally, leveling via mill and overlay is recommended to correct a Depression next to an existing culvert near ~MP 0.25.

Longleaf Campground Access Road (CONG-0100)

The existing pavement has minor damage from tree roots. The intersection of CONG-0100 with the campground gravel parking lot (CONG-0906) exhibits gravel loss. It is recommended to saw-cut the end of the paved roadway and add new aggregate (place, compact, and grade) at this location. The remaining roadway pavement is recommended for preservation through crack sealing and seal coating.

Visitor Center First & Middle Parking (CONG -0900 & CONG -0909)

The pavement is in good condition, with some Edge Cracking and low-severity Longitudinal and Transverse Cracking due to tree root damage. Pavement preservation with crack sealing followed by seal coating is proposed for this parking lot.

Employee Parking (CONG-0902)

This parking lot is currently not in the project scope; however, it was part of the SER-PMS-FY19 Project, and the pavement condition is similar to that of the adjacent VC parking lots, hence is being included in the 60% design plans as an "Option". This roadway is proposed for the same treatment as CONG-0900 and CONG-0909 (crack seal and seal coat).

The following additional design considerations apply to CONG:

- Isolated areas needing more extensive repairs, such as partial- or full-depth patches due to significant damage like high-severity alligator cracks, edge cracks, or potholes, are identified during AECOM's 70% design site visit and shown in the 70% design plans.
- Aggregate/seed mixes are recommended to fix edge-shoulder drop-off in specific areas along CONG-0010 and CONG-0100. The locations and quantities of these mixes are detailed in the 70% design plans.
- Signage improvements are recommended, including new pedestrian crossing signs and pavement markings along CONG-0010
- Revising structural grading is not a part of this pavement preservation project but the observed adverse drainage conditions (water ponding issues, failed/deteriorated drainage structures, etc.) were noted during the site scoping field visit. Minor grade corrections will be achieved via asphalt mill and overlay treatments, where such treatments are recommended. The table below includes the drainage condition observations for each CONG section:

Table 2: Drainage Observations for CONG Sections

Route ID	Drainage Observation
CONG-0010	RCP pipe culverts in fair to good conditions
CONG-0100	None
CONG-0900	None
CONG-0901	Drainage swale in fair condition (needs cleaning)
CONG-0902	None
CONG-0909	None

Below is a summary of the findings and recommendations for each park section based on the pavement investigation and analysis findings:

Table 3: Findings and Recommendations for Each CONG Road/Parking Lot Section

Route ID	Previous Preservation Treatment (FY19)[1]	From the RIP Report		From AECOM's Field Scoping Site Visit			Comment / Reasons for Variance
		PCR	Recommended Treatment[2]	Overall Pavement Condition	Predominant Distress	Treatment Recommendation	
CONG-0010	1.5" Overlay	100	Localized Repair	Good	Alligator cracking, depression edge cracking, edge drop-off	Crack seal & seal coat w/ localized patching	
CONG-0100	1.5" Overlay	98	Localized Repair	Good	L&T cracking (tree root)	Crack seal & seal coat	
CONG-0900	1.5" Overlay	97	Localized Repair	Good	L&T cracking (tree root) edge cracking, edge drop-off	Crack seal & seal coat	
CONG-0901	1.5" Overlay	97	Localized Repair	Fair	Depression, block cracking, L&T cracking (tree root)	3" AC mill & overlay w/ localized patching	Pavement condition is considerably worse than the RIP reported
CONG-0902	1.5" Overlay	97	Localized Repair	Good	L&T cracking (tree root)	Crack seal & seal coat w/ localized patching	
CONG-0909	1.5" Overlay	97	Localized Repair	Good	Edge cracking	Crack seal & seal coat	

Notes:

1) The most likely previous pavement preservation treatment based on the visual observations during the on-site scoping site visit.
2) Per the RIP Report, below are the descriptions of the recommended treatment categories:
    a. Localized Repair: Pavement in "Excellent" condition (PCR = 95-100). Treatment includes spot repairs.
    b. Preventative Maintenance: Pavement in "Good" condition (PCR = 85-95). Treatments include crack sealing, chip seal, slurry seal, micro-surfacing, thin/ ultrathin overlay, concrete joint sealing, diamond grinding, dowel-bar retrofit, and isolated, partial or full-depth concrete slab repairs.
    c. Light Rehabilitation: Pavement in "Fair" condition (PCR = 60-85). Treatment includes single-lift overlay up to 2.5" and milling and overlaying.
    d. Heavy Rehabilitation: Pavement in "Poor" condition (PCR < 60). Treatment includes multi-lift overlay > 2.5".
    e. Reconstruction: Pavement in "Poor" condition (PCR < 60). Treatment includes replacing the entire existing pavement structure.

Note that the overall pavement conditions were rated as Good/Fair/Poor based on AECOM's on-site scoping field visit observations. Standard pavement engineering practices were applied to determine such rating, a summary of which is included below for reference:

"Good" pavement condition:

- Pavement has minimal surface defects.
- No significant cracks, potholes, or raveling (loss of aggregate).
- Minimum aging (surface color remains dark, indicating minimal loss of asphalt binder due to oxidation).
- Maintenance treatments, e.g., seal coating, crack sealing, etc. are appropriate for a "Good" condition pavement.

"Fair" pavement condition

- Some visible signs of wear, such as minor cracks (hairline to ¼ inch wide).
- Early signs of aging (fading asphalt color).
- Some surface raveling or minor depressions but no major structural issues.
- Patching or previous repairs are intact.
- Heavier preservation treatments, such as localized repair, micro surfacing, or resurfacing are considered to treat a pavement in "Fair" condition.

"Poor" Condition

- Extensive cracking, including alligator (interconnected) cracks or wide transverse/longitudinal cracks (>¼ inch).
- Potholes, ruts, or significant depressions present, causing uneven surfaces.
- Medium to severe raveling or aggregate loss, leading to rough texture.
- Potential water pooling or drainage issues.
- Previous patches or repairs are deteriorating or failing.
- The pavement may be a candidate for a mill and overlay treatment or full-depth reconstruction.

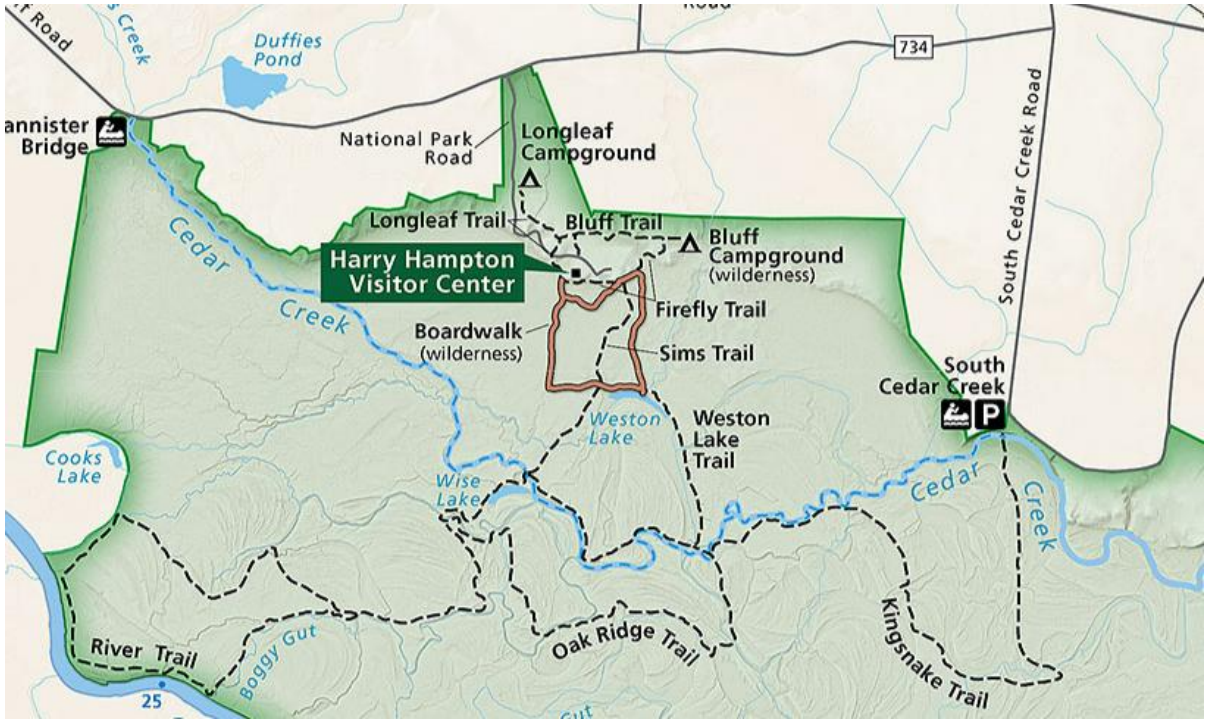
Depending on the treatment types, pavement preservation activities generally can extend the life of a pavement by 5-10 years. For reference, the table below provides a general guideline on the expected performances of the different preservation treatments *(when applied to a pavement in appropriate condition)*:

Table 4: "Expected" Performance Period of Typical Pavement Preservation Treatments

Treatment	Expected Performance (Years)
Crack Sealing + Seal Coating (Slurry Seal)	5-7
Crack Sealing + Rejuvenating	5-7
Microsurfacing	6-8
Thin Overlay	8-10
Non-structural Mill and Overlay	10+

Appendix A – Project Location

CONG


Duffies Pond
734
South Cedar Creek Road
annister Bridge
National Park Road
Longleaf Campground
Longleaf Trail
Bluff Trail
Bluff Campground (wilderness)
Harry Hampton Visitor Center
Firefly Trail
Boardwalk (wilderness)
Sims Trail
South Cedar Creek
Weston Lake
Weston Lake Trail
Cedar Creek
Cooks Lake
Wise Lake
Cedar Creek
Kingsnake Trail
Oak Ridge Trail
River Trail
Boggy Gut
25

N
Caroline Sims Rd
CONG-0100
Mile
post
CONG-0010
CONG-0010
END CONSTRUCTION
CONG-0900
CONG-0909
CONG-0901
CONG-0902

Appendix B – Scoping Site Visit Field Notes and Photos

CONG-0010: Entrance Road

Section Length/Area	1.25 Miles	**Other Observations**	Two plastic speed bumps (Fair to Poor)
Pavement Type	Asphalt	**Curb**	None
RIP Data (PCR)	100	**Sidewalk**	None
Overall Pavement Condition	Good	**Drainage Structure**	Several RCP pipe culverts[1]
Predominant Distress	Alligator cracking, depression Edge cracking and edge drop off	**Road Signs**	Recommend adding pedestrian crosswalk signs
Recommended Treatment	Asphalt patching with Crack seal & rejuvenator	**Handicap Parking**	None
Geotechnical Testing	None	**Existing Striping**	Thermoplastic STOP bar & DYCL (Fair)

Notes:

1. *Locations on the marked plan.*

Section	Distress		Treatment
1	L/M	Alligator Cracking 1,200 SF	Asphalt patching with Crack seal & rejuvenator
	L	Edge Cracking 100'	
	M	Depression 200 SF	

Legend:

L, M – Low or Medium severity cracks
DYCL – Double Yellow Center Line

CONG-0010: Entrance Road

❶ **Lat/Long:** 33.830703,-80.822503 (MP 1.16)
Medium Alligator Cracking

❷ **Lat/Long:** 33.831136,-80.825461 (MP 1.02)
Low Alligator Cracking

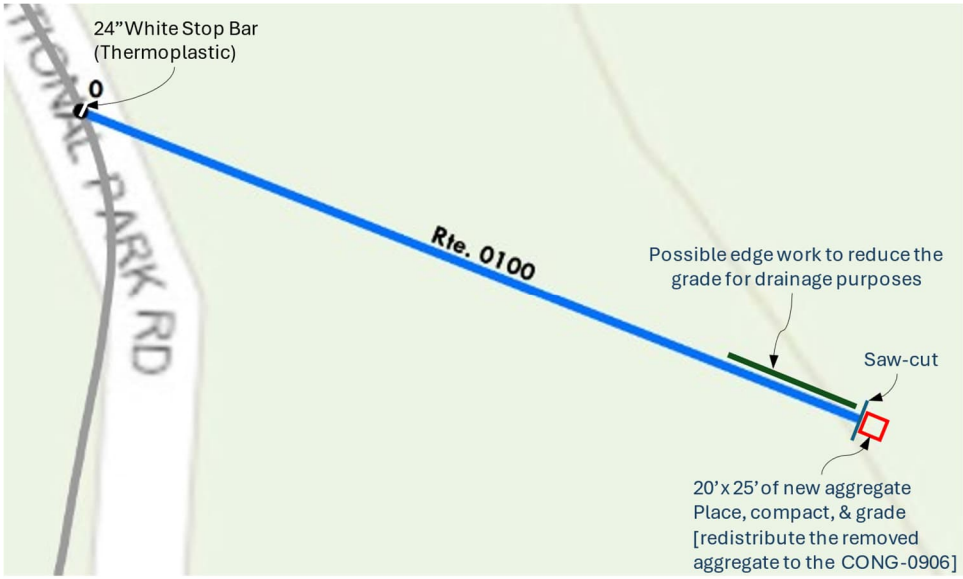
❸ **Lat/Long:** 33.832325,-80.826347 (MP 0.93)
Edge drop off, proposed location of seed-aggregate edge support

❹ **Lat/Long:** 33.839558,-80.828575 (MP 0.28)
Edge Cracking. Cut and lower embankment soil

CONG-0100: Longleaf Campground Access Road

Section Length/Area	0.02 Mile	**Other Observations**	
Pavement Type	Asphalt	**Curb**	None
RIP Data (PCR)	98	**Sidewalk**	None
Overall Pavement Condition	Good	**Drainage Structure**	None
Predominant Distress	L&T cracking (tree root damage)	**Road Signs**	Okay
Recommended Treatment	Crack seal & rejuvenator	**Handicap Parking**	None
Geotechnical Testing	None	**Existing Striping**	Thermoplastic STOP bar & DYCL (Fair)

Notes:



Section	Distress	Treatment
1	L L&T (tree root) 5' M L&T (tree root) 5'	Crack seal & rejuvenator

Legend:

L&T – Longitudinal & Transverse cracking
L, M – Low or Medium severity cracks
DYCL – Double Yellow Center Line

CONG-0100: Longleaf Campground Access Road

❶ **Lat/Long:** 33.836103,-80.828269
Pavement in good condition, thermoplastic double-yellow center line (good condition).

❷ **Lat/Long:** 33.836089,-80.828231
Low-severity tree root damage.

❸ **Lat/Long:** 33.836106,-80.828247
Medium-severity tree root damage. Possible edge work to improve drainage

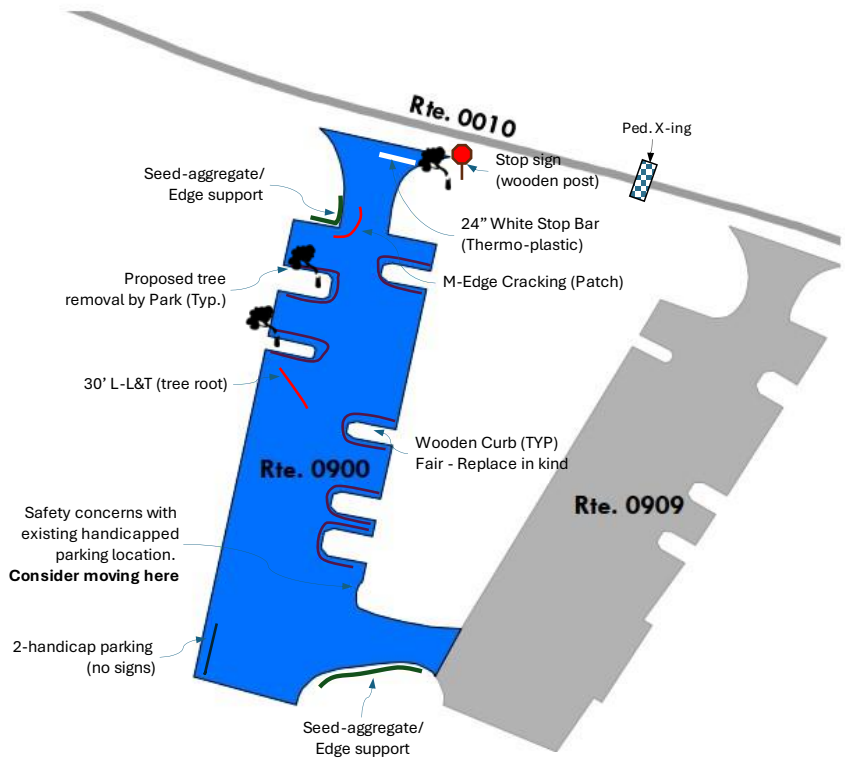
❹ **Lat/Long:** 33.836094,-80.828169
Edge of pavement in need of saw cut. Place new aggregate, compact, and grade.

CONG-0900: Visitor Center First Parking

Section Length/Area	13,648 SF	**Other Observations**	Possible tree removals (by the Park)
Pavement Type	Asphalt	**Curb**	Rubber Wheel Stops at parking stalls (Good) Wooden curbs (Poor - replace in kind)[1]
RIP Data (PCR)	97	**Sidewalk**	Brick (Good)
Overall Pavement Condition	Good	**Drainage Structure**	None
Predominant Distress	L&T cracking (tree root damage)[1] Edge cracking[1], edge drop off[1]	**Road Signs**	Okay
Recommended Treatment	Crack Seal & Seal Coat	**Handicap Parking**	Two (consider relocating)[1]
Geotechnical Testing	None	**Existing Striping**	STOP Bar[1]: Thermoplastic paint (Fair) Other striping: Regular paint (Fair/Poor)

Notes:

1. *Locations on the marked plan.*



Section	Distress	Treatment
1	L L&T 30' L Edge Cracking 40'	Crack Seal & Seal Coat

Legend:

L&T – Longitudinal & Transverse cracking
L, M – Low or Medium severity cracks

CONG-0900: Visitor Center First Parking

❶ **Lat/Long:** 33.830528,-80.823364
L&T Cracking (tree root)

❷ **Lat/Long:** 33.830783,-80.823311
Edge Cracking (patch); proposed aggregate topsoil edge support.

❸ **Lat/Long :** 33.830514,-80.823333
Rubber wheel stops, wooden curb

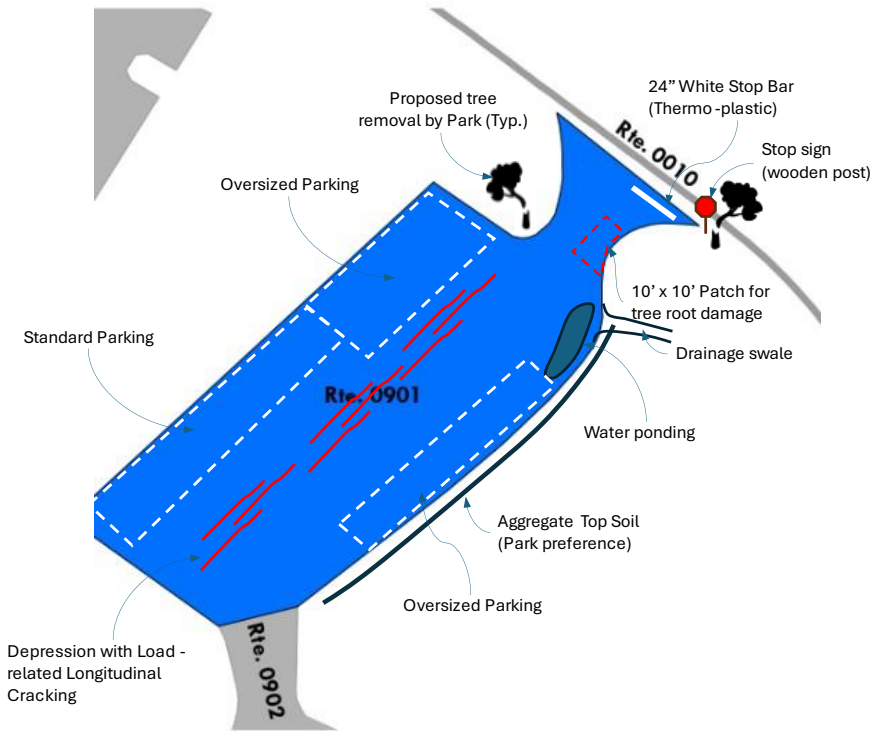
❹ **Lat/Long:** 33.830161,-80.823447
Handicap parking – no signage, consider relocating

CONG-0901: Visitor Center Bus Parking

Section Length/Area	16,499 SF	**Other Observations**	Possible tree removal (by the Park)
Pavement Type	Asphalt	**Curb**	Rubber Wheel Stops at parking stalls (Good)
RIP Data (PCR)	97	**Sidewalk**	Brick (Good)
Overall Pavement Condition	Fair	**Drainage Structure**	Drainage swale[1] (needs cleaning)
Predominant Distress	Depression, Block Cracking, tree root damage	**Road Signs**	Add signage for "Trailer Parking"
Recommended Treatment	Patching, asphalt M&O	**Handicap Parking**	None
Geotechnical Testing	6 cores and 2 test pits	**Existing Striping**	STOP Bar[1]: Thermoplastic paint (Fair) Other striping: Regular paint (Fair)

Notes:

1. *Locations on the marked plan.*



Section	Distress	Treatment
1	M Depression 150 SF L Block Cracking 300 SF	Patching, asphalt M&O

Legend:

L&T – Longitudinal & Transverse cracking
L, M – Low or Medium severity cracks
M&O – Mill & Overlay

CONG-0901: Visitor Center Bus Parking

❶ **Lat/Long:** 33.830158,-80.823136
Depression with load-related cracking

❷ **Lat/Long:** 33.830331,-80.822525
Block Cracking/Reflective Cracking from underlying utility patch

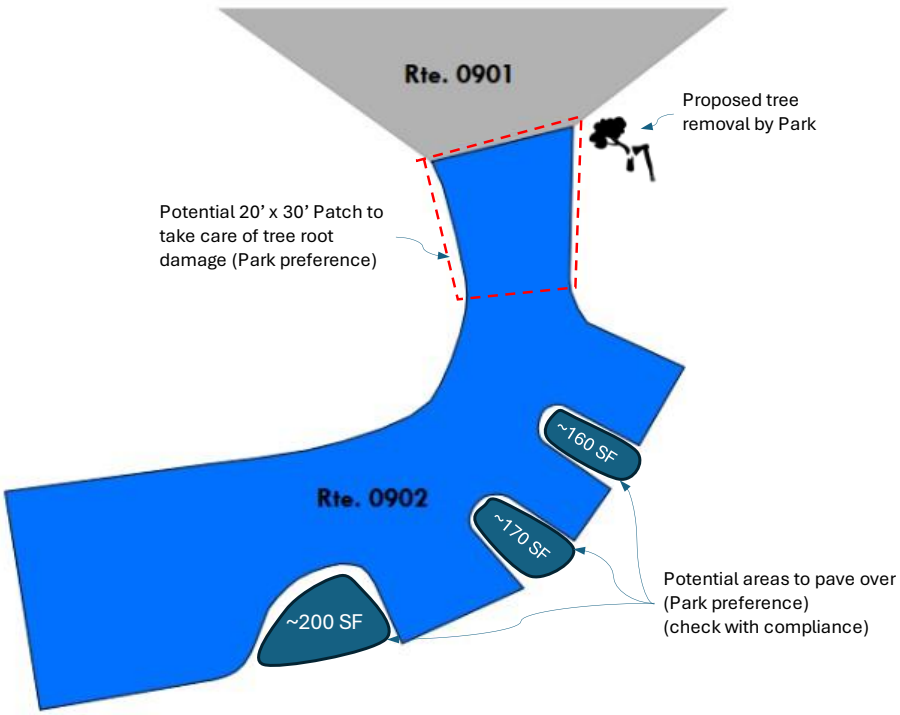
❸ **Lat/Long :** 33.830331,-80.822264
Tree-root damage (Patch)

❹ **Lat/Long:** 33.830236,-80.822381
Depression with signs of water ponding (drainage path updated)

CONG-0902: Employee Parking (added)

Section Length/Area	5,804 SF (6,334 SF)	**Other Observations**	Possible tree removal (by the Park)
Pavement Type	Asphalt	**Curb**	Rubber wheel stops (Good)
RIP Data (PCR)	97	**Sidewalk**	None
Overall Pavement Condition	Good	**Drainage Structure**	None
Predominant Distress	Tree root damage	**Road Signs**	Good
Recommended Treatment	Patching & Surface Treatment	**Handicap Parking**	None
Geotechnical Testing	None	**Existing Striping**	Regular paint (Good)

Notes:



Section	Distress	Treatment
1	L/M Tree root damage	Patching (20' x 30')

Legend:

L, M – Low or Medium severity cracks

CONG-0902: Employee Parking (added)

❶ **Lat/Long:**33.829761,-80.822669
Weathering, minimal pavement cracking

❷ **Lat/Long:** 33.829758,-80.8227
Weathering, minimal pavement cracking

❸ **Lat/Long :** 33.829931,-80.822617
Tree root damage

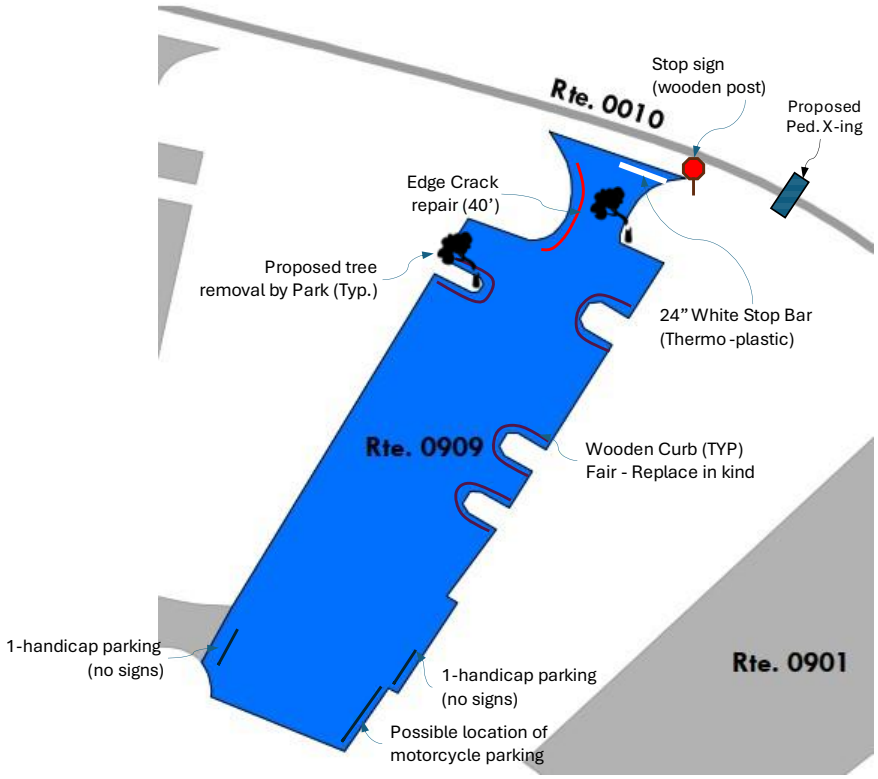
❹ **Lat/Long:** 33.829892,-80.822669
Low Edge Cracking/tree root damage

CONG-0909: Visitor Center Middle Parking

Section Length/Area	14,462 SF	**Other Observations**	Possible tree removal (by the Park)
Pavement Type	Asphalt	**Curb**	Rubber Wheel Stops at parking stalls (Good) Wooden curbs (Poor - replace in kind)[1]
RIP Data (PCR)	97	**Sidewalk**	Brick (Good)
Overall Pavement Condition	Good	**Drainage Structure**	None
Predominant Distress	Edge cracking[1]	**Road Signs**	Okay
Recommended Treatment	Surface Treatment	**Handicap Parking**	Two (consider relocating)[1]
Geotechnical Testing	None	**Existing Striping**	STOP Bar[1]: Thermoplastic paint (Fair) Other striping: Regular paint (Fair/Poor)

Notes:

1. *Locations on the marked plan.*



Section	Distress	Treatment
1	L Edge Cracking 40' L L&T Cracking 50'	Crack Seal & Seal Coat

Legend:

L&T – Longitudinal & Transverse cracking
L, M – Low or Medium severity cracks

CONG-0909: Visitor Center Middle Parking

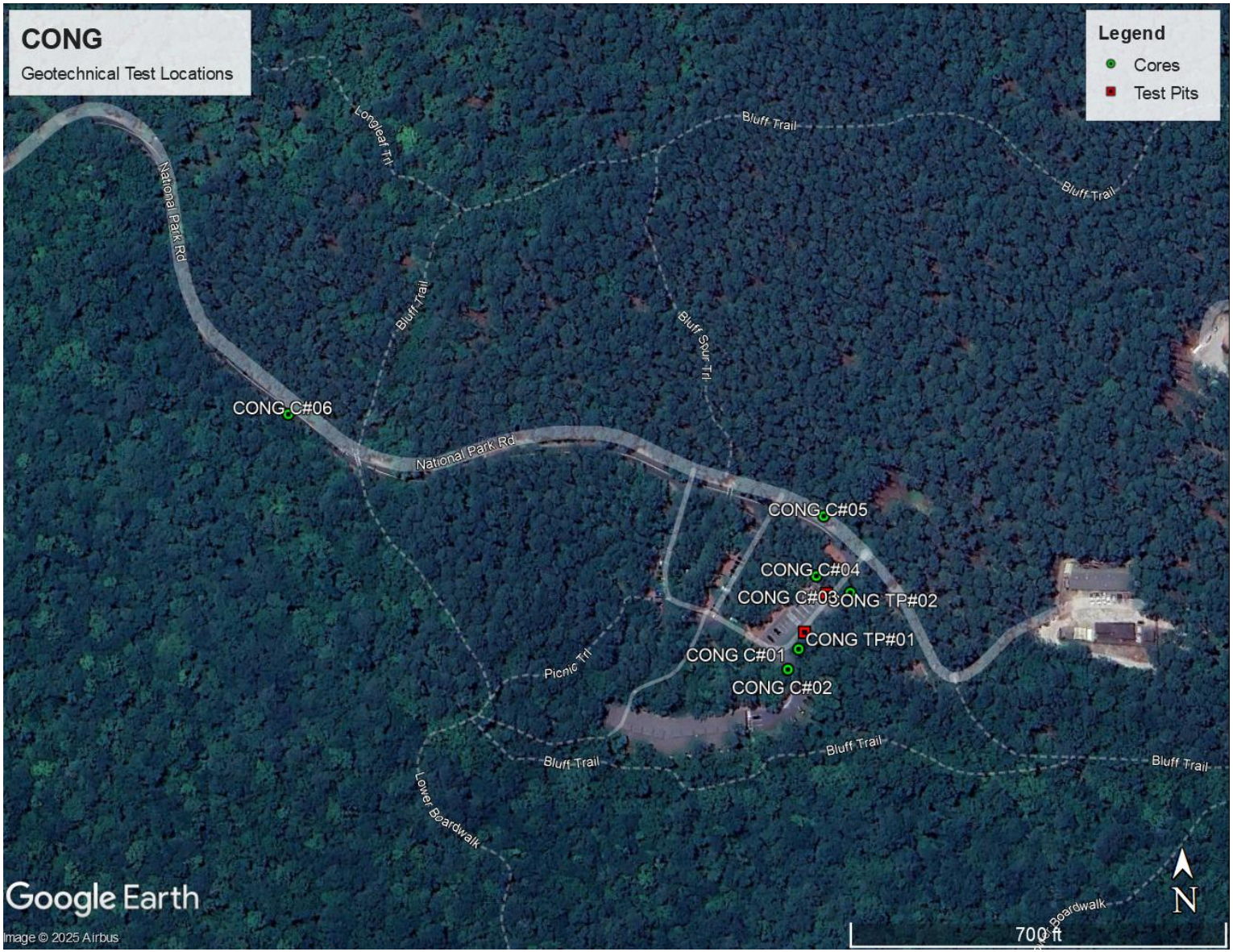
❶ **Lat/Long:** 33.830567,-80.822936
L&T Cracking (tree root damage)

❷ **Lat/Long:** 33.830742,-80.822778
Edge Cracking

❸ **Lat/Long:** 33.830606,-80.822806
Rubber wheel stops, wooden curb

❹ **Lat/Long:** 33.830158,-80.823128
Handicap parking (no signage)

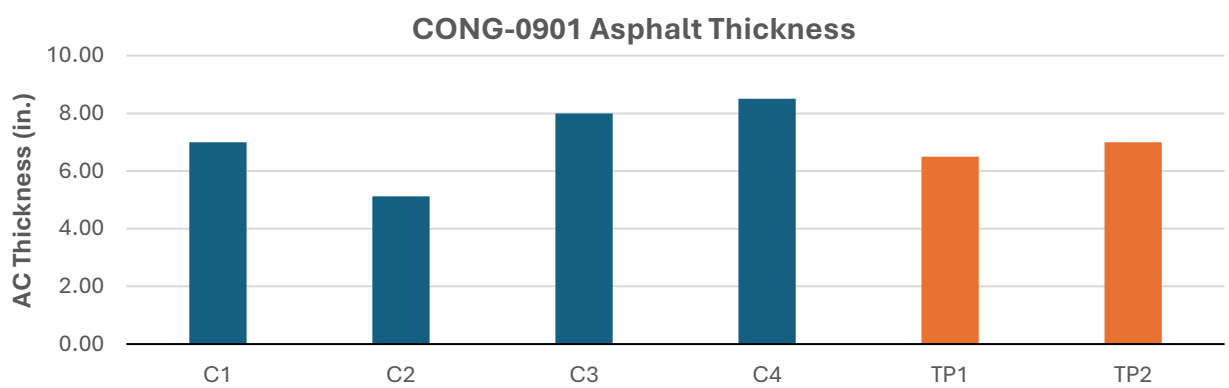
Appendix C1 – Subsurface Sampling and Geotechnical Test Data



CONG Geotechnical Test Location

Table: Core Data Summary – CONG

Core/ TP #	Route ID	Direction	AC			Unbound Layers		Comment
			Thickness (in)	Cracking (in.)	Debonding (in.)	Base	Subgrade	
C1	CONG-0901	--	7.00	--	1.875	Crushed Aggregate	--	--
C2	CONG-0901	--	5.13	--	--	Crushed Aggregate	--	--
C3	CONG-0901	--	8.00	--	2.625	Crushed Aggregate	--	--
C4	CONG-0901	--	8.50	--	--	Crushed Aggregate	--	--
C5	CONG-0010	NB	5.00	--	--	Crushed Aggregate	--	--
C6	CONG-0010	NB	5.50	--	1.875	Crushed Aggregate	--	--
TP1	CONG-0901	--	6.50	--	2.00	10.5" of A-1-a	7.0" of A-7-6	Geofabric observed at 12" depth
TP2	CONG-0901	--	7.00	--	--	5.5" of A-1-a	7.5" of A-6	Geofabric observed at 11" depth



Appendix C2 – Material Sampling Photo Documentation Log

AECOM

Appendix C2: MATERIAL SAMPLING PHOTO DOCUMENTATION LOG

Date 5/31/2025 Site Code: CONG Sampled By JSG/NJ

Legend: G = Good F = Fair P = Poor

Core Notes: Brown Crushed Aggregate Base

Sample Number: C1 Dia.: 6"

Location: CONG-0901

	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Wearing Surface	0.5	HMA	G		
	Surface	1.375	HMA	P		
	Binder	2.375	HMA	G		
	Base	2.75	HMA			
	--	--	--			
	Total Depth	7	inches			

Core Notes: Brown Crushed Aggregate Base

Sample Number: C2 Dia.: 6"

Location: CONG-0901

	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Wearing Course	0.5	HMA	G		
	Surface	1.5	HMA	G		
	Base	3.125	HMA			
	--	--	--			
	--	--	--			
	--	--	--			
	Total Depth	5.125	inches			

Core Notes: Brown Crushed Aggregate Base

Sample Number: C3 Dia.: 6"

Location: CONG-0901

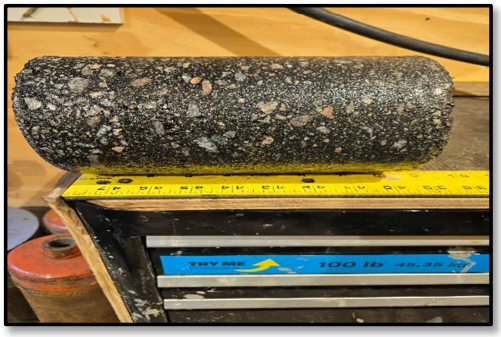
	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Wearing Surface	0.5	HMA	G		
	Surface	2.125	HMA	P		
	Binder	2.375	HMA	G		
	Base	3	HMA			
	--	--	--			
	--	--	--			
	Total Depth	8	inches			

AECOM

Appendix C2: MATERIAL SAMPLING PHOTO DOCUMENTATION LOG

Date 5/31/2025 Site Code: CONG Sampled By JSG/NJ

Legend: G = Good F = Fair P = Poor



Sample Number: C4 Dia.: 6"

Location: CONG-0901

	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Surface	2	HMA	G		
	Binder	2.25	HMA	G		
	Binder	1.75	HMA	G		
	Base	2.5	HMA			
	--	--	--			
Total Depth		8.5	inches			

Core Notes: Brown Crushed Aggregate Base; ½" Wearing Surface included in Surface layer

Sample Number: C5 Dia.: 6"

Location: CONG-0010

	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Surface	1.5	HMA	G		
	Base	3.5	HMA			
	--	--	--			
	--	--	--			
	--	--	--			
	--	--	--			
Total Depth		5	inches			

Core Notes: Crushed Aggregate Base

Sample Number: C6 Dia.: 6"

Location: CONG-0010

	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Micro Surface	0.25	HMA	G		
	Surface	1.625	HMA	P		
	Binder	1.125	HMA	G		
	Base	2.5	HMA			
	--	--	--			
	--	--	--			
Total Depth		5.5	inches			

Core Notes: Tan Crushed Aggregate Base

AECOM

Appendix C2: MATERIAL SAMPLING PHOTO DOCUMENTATION LOG

Date 5/31/2025 Site Code: CONG Sampled By JSG/NJ

Legend: G = Good F = Fair P = Poor

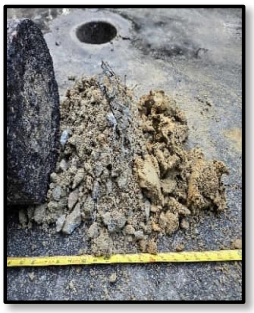
Sample Number: TP1 Dia.: 6"

Location: CONG-0901

	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Surface	2	HMA	P		
	Base	4.5	HMA			
	--	--	--			
	--	--	--			
	--	--	--			
UNBOUND	--	--	--			
	Base	10.5	Gravel w/ Silt & Sand (GW-GM / A-1-a)			
	Subgrade	7	Clayey Sand (SC / A-7-6)			
	--	--	--			
	Total Depth	24	inches			

Core Notes: ½" Micro Surface included; Fabric @ 12"

`



Sample Number: TP2 Dia.: 6"

Location: CONG-0901

	Layer Type	Thickness	Description	Bond Quality	Stripping	Deterioration
HMA	Micro Surface	0.5	HMA	G		
	Surface	2	HMA	G		
	Binder	1.75	HMA	G		
	Base	2.75	HMA			
	--	--	--			
UNBOUND	--	--	--			
	Base	5.5	Silty Sand w/ Gravel (SM / A-1-a)			
	Subgrade	7.5	Clayey Sand (SC / A-6)			
	--	--	--			
	Total Depth	20	inches			

Core Notes: Geofabric at 11" depth

Appendix C3 – Laboratory Test Results of Unbound Materials

Project: NPS SC - CONG
Project No.: 60748151

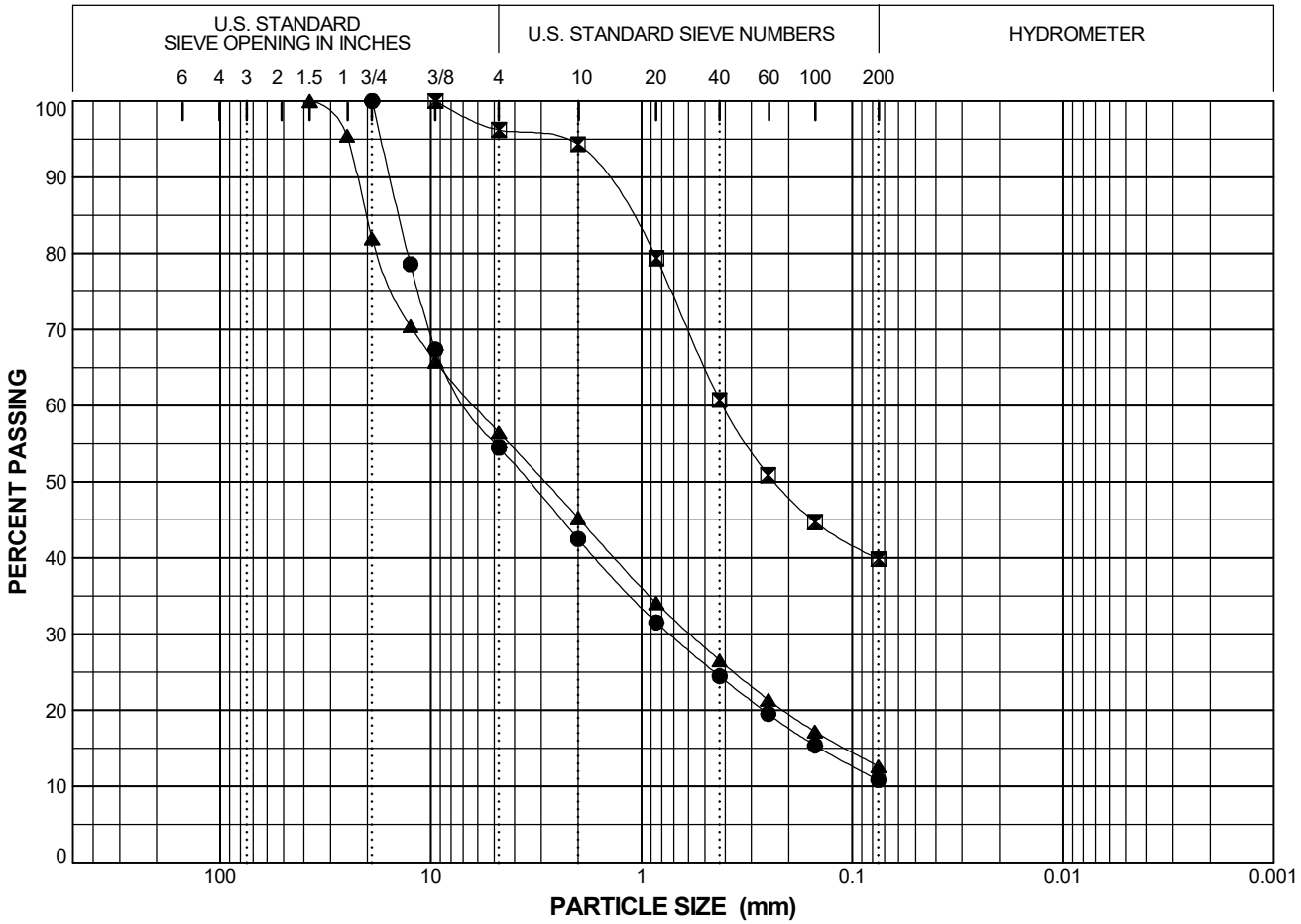
AECOM

SUMMARY OF LABORATORY TEST RESULTS

Boring and Sample Numbers	Depth (ft)	Classification	USCS and AASHTO Symbols	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits		Specific Gravity	Organic Content (%)	Grain Size		Compaction	Consolidation	Unconfined Compression		Triaxial Compression		Permeability (cm/sec)	Special Tests
						Liquid Limit	Plastic Limit			<#200 (%)	<2μ (%)			Strength (psi)	Strain (%)	UU	CIU		
TP1 Base	6.5-17.0	Gray WELL-GRADED GRAVEL with SILT and SAND	GW-GM A-1-a(0)							11									
TP1 Subgrade	17.0-24.0	Brown CLAYEY SAND	SC A-7-6(5)			46	22			40									
TP2 Base	7.0-12.5	Brown SILTY SAND with GRAVEL	SM A-1-a(0)							13									
TP2 Subgrade	12.5-20.0	Brown CLAYEY SAND	SC A-6(5)			37	17			47									

Note: The soil classification is based partially on visual classification unless both grain size and Atterberg limits are performed.

* Refer to Laboratory Test Curves



SYMBOL	●	⊠	▲
Boring	TP1	TP1	TP2
Sample	Base	Subgrade	Base
Spec			
Depth (ft)	6.5-17.0	17.0-24.0	7.0-12.5
% +3"	0.0	0.0	0.0
% Gravel	45.5	3.8	43.5
% Sand	43.7	56.4	43.8
% Fines	10.8	39.8	12.6
% -2μ			
Cc	1.27		
Cu	96.71		
LL		46	
PL		22	
PI		24	
AASHTO	A-1-a(0)	A-7-6(5)	A-1-a(0)
USCS	GW-GM	SC	SM
w (%)			

Particle Size (Sieve #)	PERCENT FINER ●	⊠	▲
2"			
1 1/2"			100.0
1"			95.5
3/4"	100.0		82.0
1/2"	78.6		70.4
3/8"	67.4	100.0	65.8
4	54.5	96.2	56.5
10	42.5	94.3	45.3
20	31.5	79.4	34.1
40	24.5	60.8	26.5
60	19.5	50.9	21.4
100	15.4	44.7	17.2
200	10.8	39.8	12.6

SYMBOL	DESCRIPTION AND REMARKS
●	Gray WELL-GRADED GRAVEL with SILT and SAND (GW-GM)
⊠	Brown CLAYEY SAND (SC)
▲	Brown SILTY SAND with GRAVEL (SM)

PARTICLE SIZE DISTRIBUTION

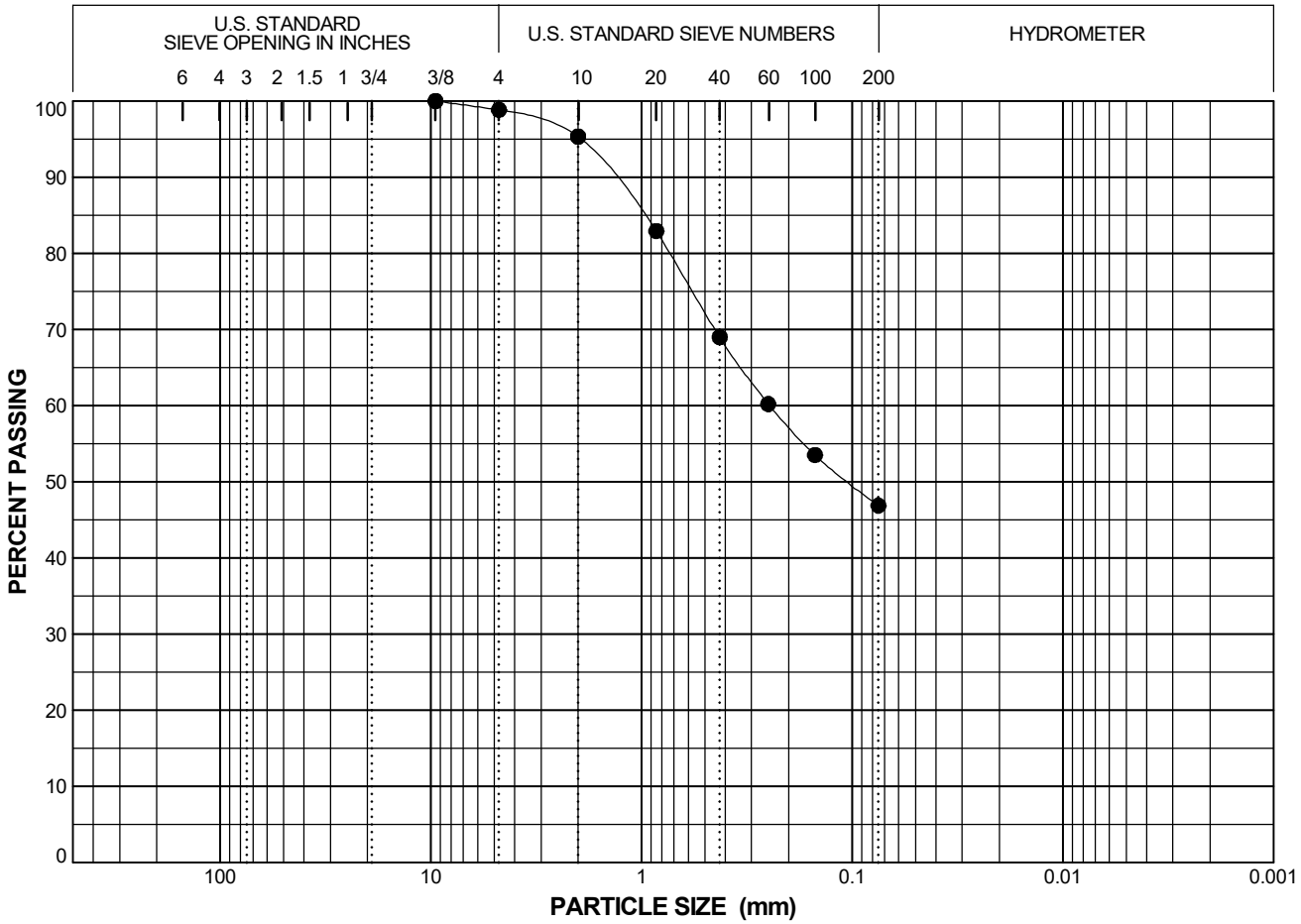
NPS SC - CONG

Project Number	July 2025	Figure 1
60748151		

AECOM

SIEVE_BLUEBELL_AASHTO 60748151_2025-06-14_NPS SC - CONG.GPJ URS_BLUE.GDT 7/11/25

COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	



SYMBOL	●		
Boring	TP2		
Sample	Subgrade		
Spec			
Depth (ft)	12.5-20.0		
% +3"	0.0		
% Gravel	1.2		
% Sand	52.0		
% Fines	46.9		
% -2μ			
Cc			
Cu			
LL	37		
PL	17		
PI	20		
AASHTO	A-6(5)		
USCS	SC		
w (%)			

Particle Size (Sieve #)	PERCENT FINER ●		
2"			
1 1/2"			
1"			
3/4"			
1/2"			
3/8"	100.0		
4	98.8		
10	95.3		
20	82.9		
40	69.0		
60	60.2		
100	53.5		
200	46.9		

SYMBOL	DESCRIPTION AND REMARKS
●	Brown CLAYEY SAND (SC)

PARTICLE SIZE DISTRIBUTION

NPS SC - CONG

Project Number 60748151	July 2025	Figure 2

AECOM

SIEVE_BLUEBELL_AASHTO 60748151_2025-06-14_NPS SC - CONG.GPJ URS_BLUE.GDT 7/11/25

Appendix D – Traffic Data for Pavement Design

Historical Traffic Data Downloaded from NPS Stats Report Viewer

(Website: https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Traffic%20Counts?Park=GRCA)

Park Congaree NP Add Color Ramp None

1 of 1 Find | Next

Congaree NP

Current calendar year data are preliminary and subject to change. Data will be finalized by the end of the first quarter of next calendar year.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Total	Change From Previous Year
NUMBER OF VEHICLES AT ENTRANCE														
2025	5,144	5,799	9,963	9,781	9,869	7,261							47,817	-36.5%
2024	4,653	5,531	10,114	6,904	8,405	6,335	5,195	4,051	4,275	7,000	7,854	5,029	75,346	-3.6%
2023	5,214	5,000	8,520	6,396	7,408	6,422	5,728	4,000	6,913	8,427	7,860	6,243	78,131	20.2%
2022	3,851	5,398	7,427	7,670	6,405	5,872	3,940	3,906	4,699	5,778	5,418	4,650	65,014	-7.5%
2021	4,809	4,756	7,088	6,334	7,265	5,959	5,532	4,230	5,866	6,550	6,039	5,852	70,280	71.8%
2020	3,323	3,399	3,654	0	0	1,564	4,197	3,393	3,996	6,512	5,927	4,935	40,900	-23.9%
2019	2,468	3,537	5,660	5,018	9,551	4,545	3,786	3,811	2,937	4,735	4,026	3,646	53,720	9.9%
2018	2,426	3,658	6,972	4,532	7,532	4,517	3,606	4,249	2,021	2,990	3,303	3,081	48,887	-8.2%
2017	2,595	4,472	7,015	6,018	6,272	4,733	3,526	4,642	2,729	3,891	4,532	2,844	53,269	14.2%
2016	2,382	2,185	5,993	4,337	5,009	4,386	2,800	3,708	3,950	4,205	3,432	4,255	46,642	65.6%
2015	938	2,128	3,536	3,317	3,434	2,657	2,787	1,522	1,185	1,474	3,050	2,145	28,173	-21.8%
2014	2,612	2,297	3,576	4,673	2,747	2,873	2,592	3,100	3,052	3,427	2,944	2,133	36,026	7.3%
2013	2,996	1,884	3,523	3,650	3,297	3,112	3,112	2,350	2,400	2,100	2,950	2,200	33,574	-1.1%
2012	2,702	2,204	3,508	3,554	4,257	1,987	2,658	2,267	2,441	3,317	2,948	2,102	33,945	-9.3%
2011	2,137	2,803	3,697	3,322	3,382	3,753	889	3,738	5,047	3,538	2,941	2,163	37,410	-0.1%
2010	1,686	5,542	6,950	632	2,588	3,027	3,247	2,167	2,315	4,149	3,505	1,634	37,442	-49.6%
2009	3,589	5,154	6,832	8,469	13,188	4,320	5,626	4,552	5,610	6,630	6,444	3,928	74,342	18.6%
2008	4,053	9,017	6,948	6,343	6,802	3,913	2,153	4,496	5,793	4,147	5,143	3,882	62,690	-9.8%
2007	4,132	4,020	7,072	7,035	6,288	4,991	9,284	7,995	5,169	4,372	5,314	3,835	69,507	30.6%
2006	2,645	1,532	6,651	7,126	5,174	4,843	4,660	2,824	3,829	5,448	4,828	3,655	53,215	103.4%
2005	1,558	2,580	4,899	3,659	2,752	1,030	842	1,853	2,152	2,783	1,277	781	26,166	-53.0%
2004	3,301	6,287	5,086	6,973	5,231	1,892	3,850	3,203	4,162	5,998	6,217	3,510	55,710	30.9%
2003	2,886	2,856	4,267	4,178	3,969	2,980	3,030	3,416	1,686	4,399	5,687	3,221	42,575	-6.2%
2002	3,338	3,423	4,620	5,323	4,757	4,178	3,240	3,064	2,872	3,320	4,219	3,022	45,376	-9.1%
2001	2,964	3,803	4,396	6,920	4,491	3,946	3,509	2,784	4,565	4,890	4,637	3,019	49,924	26.6%
2000	2,194	3,252	4,576	4,033	4,017	3,543	2,828	2,667	3,784	3,658	3,405	1,489	39,446	-1.2%
1999	3,192	3,783	4,051	5,566	4,167	2,847	2,273	2,204	3,177	2,413	3,517	2,732	39,922	-21.2%
1998	3,739	2,731	3,754	5,639	4,572	4,205	3,952	3,805	4,688	6,484	4,057	3,024	50,650	6.3%
1997	3,400	2,951	5,426	2,895	5,921	4,326	4,037	2,836	3,319	5,769	4,016	2,769	47,665	11.2%
1996	2,360	3,648	4,995	6,149	4,101	3,337	3,034	3,441	3,312	3,189	2,726	2,573	42,865	-6.9%
1995	1,933	2,867	6,511	5,690	4,695	4,463	3,420	3,592	4,038	3,971	1,722	3,123	46,025	0.3%
1994	1,613	2,892	5,523	5,663	4,939	2,968	4,248	4,206	4,256	3,217	3,411	2,973	45,909	20.3%
1993	2,318	2,431	2,654	5,189	4,699	3,331	3,262	2,818	3,325	3,326	2,969	1,834	38,156	29.5%
1992	2,098	2,313	3,053	3,541	3,965	2,243	2,178	1,812	1,948	2,246	2,490	1,588	29,475	

Traffic Counts Page 1 of 1 7/27/2025 10:34:06 PM

Table: Historical Traffic Volume Summary

Year	Annual Total	ADT
2024	75,346	206
2023	78,131	214
2022	65,014	178
2021	70,280	193
	Average ADT	198

Table: Design ESAL Calculation for CONG-0010

Class	Design AADT	Vehicle Distribution (%)	Truck Factor	ESAL	20-Year Design ESAL
Classes 1-3	220	99.00%	0.0061	9,699	**20,629**
Class 4		1.00%	0.6806	10,930	

Appendix E – *AASHTO 1993* Pavement Design Calculations

AASHTO 1993 Pavement Design Calculations

Project SC192 Pavement Preservation, Multiple Parks in South Carolina
Section ID CONG-0010
Design for Structural Adequacy of Existing Pavement

Design Inputs

Subgrade M_r (psi) =	7,000
Acceptable terminal servicibility P_t =	2.5
Initial servicibility P_0 =	4.2
Servicibility loss (ΔPSI) =	1.7
ADT =	220
% Trucks =	1.0%
Daily Truck Volume =	2.20
Design Life (Year) =	20.00
Design ESAL =	20,629
Reliability, R =	90
Z_R =	-1.282
Standard Deviation S_0 =	0.45
W_{18} =	20,629
Required SN =	**1.87**

Existing Structure

Layer	Thickness (in)	Layer Coeff.
HMA	1.50	0.34
HMA	3.50	0.34
HMA	0.00	0.34
Agg. Base	6.00	0.14
Subbase	0.00	0.11
Total Pavement Thickness		**11**
Provided SN		**2.54**

Pass
[Provided SN > Required SN]

AASHTO 1993 Design Input References

Functional Classification	Urban	Rural
Interstate and other freew ays	85-99.9	80-99.9
Principle arterials	80-99	75-95
Collectors	80-95	75-95
Local	50-80	50-80

Page II-9

S_0=0.40-0.50 for flexible pavement (or overlay) design (I-62&III-82)
S_0=0.30-0.40 for AC overlay (III-121)

R	Z_R
50	0
60	-0.253
70	-0.524
80	-0.841
85	-1.037
90	-1.282
91	-1.34
92	-1.405
93	-1.476
94	-1.555
95	-1.645
96	-1.751
97	-1.881
98	-2.054
99	-2.327
100	-3.75

AASHTO 1993 Pavement Design Calculations

Project SC192 Pavement Preservation, Multiple Parks in South Carolina
Section ID CONG-0901
Design for Structural Adequacy of Existing Pavement

Design Inputs

Subgrade M_r (psi) =	7,000
Acceptable terminal servicibility P_t =	2.5
Initial servicibility P_0 =	4.2
Servicibility loss (ΔPSI) =	1.7
ADT =	110
% Trucks =	1.0%
Daily Truck Volume =	1.10
Design Life (Year) =	20.00
Design ESAL =	10,315
Reliability, R =	90
Z_R =	-1.282
Standard Deviation S_0 =	0.45
W_{18} =	10,315
Required SN =	**1.65**

Existing Structure

Layer	Thickness (in)	Layer Coeff.
HMA	2.00	0.34
HMA	2.00	0.34
HMA	3.00	0.34
Agg. Base	6.00	0.14
Subbase	0.00	0.11
Total Pavement Thickness		**13**
Provided SN		**3.22**

Pass
[Provided SN > Required SN]

AASHTO 1993 Design Input References

Functional Classification	Urban	Rural
Interstate and other freew ays	85-99.9	80-99.9
Principle arterials	80-99	75-95
Collectors	80-95	75-95
Local	50-80	50-80

Page II-9

S_0=0.40-0.50 for flexible pavement (or overlay) design (I-62&III-82)
S_0=0.30-0.40 for AC overlay (III-121)

R	Z_R
50	0
60	-0.253
70	-0.524
80	-0.841
85	-1.037
90	-1.282
91	-1.34
92	-1.405
93	-1.476
94	-1.555
95	-1.645
96	-1.751
97	-1.881
98	-2.054
99	-2.327
100	-3.75

Appendix F – Construction Cost Estimate Summary
(Class B Estimate will be submitted separately)

Class C Summary Estimate for all South Carolina Parks

Park	PMIS #	PMIS Estimated Budget	Base Bid			Options			Total W. Options		
			Direct Construction	Markups	Total	Direct Constructio	Markups	Total	Direct Construction	Markups	Total
COWP	334929	$1,869,762	$346,791	$332,795	$679,586	$10,209	$9,797	$20,005	$357,000	$342,591	$699,591
CONG	**334914**	**$615,000**	**$403,196**	**$403,613**	**$806,809**	**$16,801**	**$16,819**	**$33,620**	**$419,997**	**$420,432**	**$840,429**
KIMO	334920	$1,155,041	$987,432	$1,081,349	$2,068,780	$9,669	$10,589	$20,257	$997,101	$1,091,937	$2,089,038
NISI	334915	$121,000	$14,000	$16,030	$30,030	$9,608	$11,001	$20,610	$23,608	$27,031	$50,639
	Total	**$3,760,803**	**$1,751,419**	**$1,833,786**	**$3,585,205**	**$46,287**	**$48,205**	**$94,492**	**$1,797,706**	**$1,881,991**	**$3,679,697**

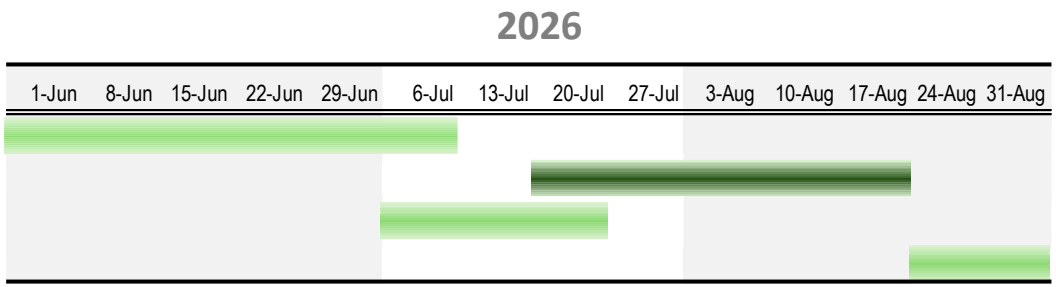
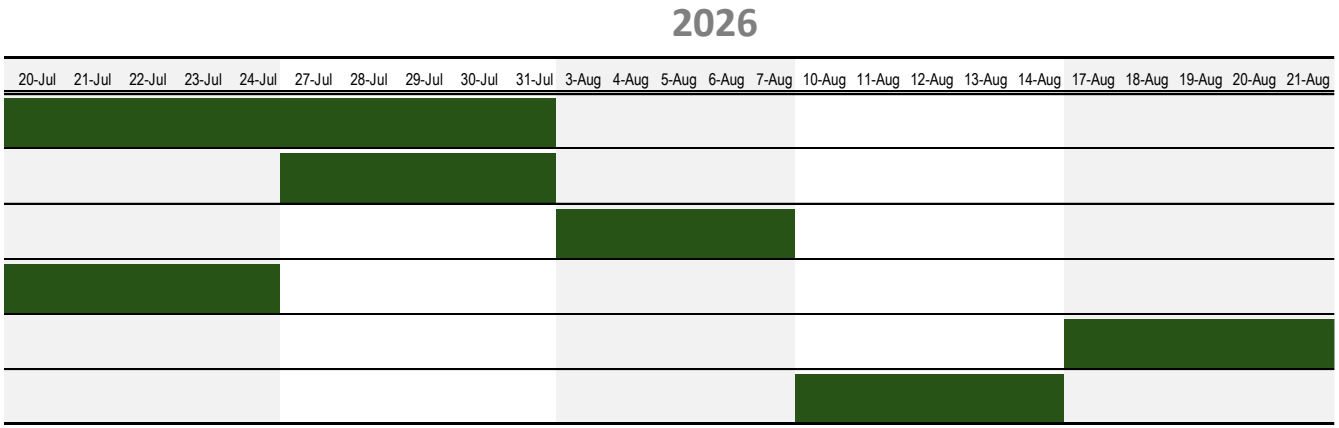
Class C Summary Estimate for the CONG Sections

ROUTE ID	ROAD	FMSS#	PAVEMENT TYPE	PROPOSED TREATMENT	COST W/O MARKUPS	TOTAL MARKUP	COST W/ MARKUPS	PMIS ESTIMATED BUDGET
CONG-0010	ENTRANCE ROAD	49065	Asphalt	CRACK SEAL & REJUVENATOR w/ LOCALIZED PATCHING	$ 210,396	$ 210,613	$ 421,009	$ 349,706
CONG-0100	LONGLEAF CAMPGROUND ACCESS ROAD	241978	Asphalt	CRACK SEAL & REJUVENATOR	$ 1,885	$ 1,887	$ 3,772	$ 24,118
CONG-0900	VISITOR CENTER FIRST PARKING	49064	Asphalt	CRACK SEAL & SEAL COAT	$ 68,839	$ 68,910	$ 137,749	$ 84,412
CONG-0901	VISITOR CENTER BUS PARKING	225801	Asphalt	ASPHALT MILL & OVERLAY	$ 73,752	$ 73,828	$ 147,580	$ 72,353
CONG-0902	EMPLOYEE PARKING	241977	Asphalt	SEAL COAT w/ LOCALIZED PATCHING	$ 16,801	$ 16,819	$ 33,620	$ -
CONG-0909	VISITOR CENTER MIDDLE PARKING	225800	Asphalt	CRACK SEAL & SEAL COAT	$ 48,324	$ 48,374	$ 96,699	$ 84,412
				Total Base Bid	**$ 403,196**	**$ 403,613**	**$ 806,809**	**$ 615,000**
				Total Options	**$ 16,801**	**$ 16,819**	**$ 33,620**	**$ -**
				Total	**$ 419,997**	**$ 420,432**	**$ 840,429**	**$ 615,000**

Note: The added section (CONG-0902) will be included as a "Bid Option" in the Class C Construct Cost Estimate and the 15% Design Plans

Appendix G – Construction Schedule Summary

PARK ID	PMIS #	Duration (days)
COWP	334929	41
CONG	**334914**	**34**
KIMO	334920	20
NISI	334,915	13



ROUTE ID	ROAD	PROPOSED TREATMENT
CONG-0010	ENTRANCE ROAD	CRACK SEAL & REJUVENATOR w/ LOCALIZED PATCHING
CONG-0100	LONGLEAF CAMPGROUND ACCESS ROAD	CRACK SEAL & REJUVENATOR
CONG-0900	VISITOR CENTER FIRST PARKING	CRACK SEAL & SEAL COAT
CONG-0901	VISITOR CENTER BUS PARKING	ASPHALT MILL & OVERLAY
CONG-0902	EMPLOYEE PARKING	SEAL COAT w/ LOCALIZED PATCHING
CONG-0909	VISITOR CENTER MIDDLE PARKING	CRACK SEAL & SEAL COAT