



Richland County Transportation Ad Hoc Committee

June 25, 2019 - 1:00 PM  
Council Chambers  
2020 Hampton Street, Columbia, SC 29201

1. **CALL TO ORDER** The Honorable Calvin "Chip" Jackson
2. **APPROVAL OF MINUTES** The Honorable Calvin "Chip" Jackson  
Regular Session: May 28, 2019 [PAGES 1-8]
3. **ADOPTION OF AGENDA** The Honorable Calvin "Chip" Jackson
4. **ITEMS FOR INFORMATION** The Honorable Calvin "Chip" Jackson
  - A. Holt #12 Service Order Modifications for Spears Creek Chrch Road Design Contract [PAGES 9-35]
  - B. 12 Dirt Road Contract Extension [PAGES 36-49]
  - C. Pending Approvals [PAGE 50]
  - D. Update on Blythewood/Richland County/SCDOT IGA for Blythewood SUP Maintenance
5. **ITEMS FOR ACTION** The Honorable Calvin "Chip" Jackson
  - A. Approval of Scope of Work for Design Contracts [PAGE 51]
    - i. Projects Under the Referendum
      1. Shop Road Extension
      2. Blythewood Area Improvement
      3. Broad River Corridor NIP
      4. Trenholm Acres/Newcastlye NIP
      5. Smith/ Rocky Branch Greenway
    - ii. Projects Over the Referendum
      1. Polo Road Widening
      2. Lower Richland Boulevard Widening
  - B. Approval of Projects to be Advertised [PAGES 52-57]
    - i. Projects Under the Referendum
      1. Greene Street Phase 2- available to advertise
      2. Resurfacing Package R-available to advertise
      3. Dirt Road Package K- July

ii. Projects Over the Referendum

1. Atlas Road Widening-July
2. Polo SUP, Harrison Sidewalk- July

C. Penny Projects Inside SCDOT Rights-Of-Way Maintenance Cost  
Impacts [**PAGES 58-67**]

**6. ADJOURNMENT**



Richland County Council  
Transportation Ad Hoc Committee  
May 28, 2019 – 1:00 PM  
Council Chambers  
2020 Hampton Street, Columbia 29204

COMMITTEE MEMBERS PRESENT: Calvin “Chip” Jackson, Chair; Paul Livingston, Jim Manning, Dalhi Myers and Chakisse Newton

OTHER COUNCIL MEMBERS PRESENT: Allison Terracio

OTHERS PRESENT: Michelle Onley, John Thompson, Eden Logan, Kimberly Toney, Michael Niermeier, Allison Steele, Mohammed Al-Tofan, Quinton Epps, Stephen Staley, Ismail Ozbek and Jennifer Wladischkin

1. **Call to Order** – Mr. Jackson called the meeting to order at approximately 1:00 PM.
2. **Approval of Minutes: April 23, 2019** – Ms. Newton moved, seconded Ms. Myers, to approve the minutes as distributed.

In Favor: Jackson, Newton and Myers

The vote in favor was unanimous.

3. **Adoption of the Agenda** – Mr. Jackson stated Item #4(e): “Approval of Future Scopes of Work” needs to be deferred. In addition, Item #5(c): “Tall Oaks Drive: RCU Utility” needs to be moved to an action item.

Mr. Manning moved, seconded by Ms. Myers, to adopt the agenda as amended.

In Favor: Jackson, Newton and Myers

The vote in favor was unanimous.

4. **ITEMS FOR ACTION:**

- a. **Approval of Blythewood Right of Way Condemnation** – Mr. Niermeier stated the spreadsheet shows the 7 parcels that are needed to move this project forward, as well as, the number of contacts attempted, the offers made, the counteroffers, and any other engagement the County has had with the landowner. Staff’s recommendation is to move to condemnation on these parcels.

Ms. Myers inquired if they are all the same owner.

Mr. Niermeier stated the 3 – 4 belong to Mr. Spears.

Ms. Myers stated she takes it that we have gone through the process that Legal normally goes through, based on their recommendation.

Mr. Niermeier stated the appraisal has been conducted. The Right-of-Way Manager has reached out several times to the property owners to try to reach an agreement, and has been unsuccessful in doing so.

Ms. Myers stated she just wants to make sure the Legal Department has said that is the appropriate next step, and it will not be costlier to condemn than to reach an agreement.

Mr. Beaty stated he is not certain that staff has presented this to County Legal, at this time. The normal process is, they present to Council that they have reached out multiple times, and cannot negotiate a settlement. They recommend the next step being to back check this with County Legal, before Legal proceeds with condemnation.

Ms. Newton stated, for clarification, that Mr. Beaty mentioned, as far as he was aware, we are following the process, and that with our approval to condemn, we would be putting this in hands of our Legal Department, and they would continue following the County process.

Mr. Beaty responded in the affirmative.

Ms. Myers stated, if a condemnation recommendation comes from this committee, that means they will move to condemnation, not to a point where they may be going back to say, "This is our last offer", which is her concern. She stated there is another step, where Mr. Smith gets involved, to make an analysis of the cost differential between a full condemnation, and buying it out, even at a higher amount, and getting our outside attorneys involved, before we take it to condemnation.

Mr. Beaty stated the PDT is allowed a very limited amount of negotiation room, and the amounts exceed the PDT's authorized amount.

Mr. Jackson inquired if the condemnation would be by individual parcels.

Mr. Niermeier responded in the affirmative.

Mr. Jackson stated the ones that are tremendously large, and not even close, he does not know that we would have that issue, Ms. Myers. There are a couple that are...

Ms. Myers stated there are 3 that are huge, and 4 that are not.

Mr. Beaty stated, it is common, that once a project goes into condemnation, the staff and the outside attorney, that handles condemnations, can settle for an amount greater than the PDTs authority, but less than the full cost of condemnation.

Mr. Manning moved, seconded by Mr. Jackson, to forward this item to Council with a recommendation to approve the condemnations, with the understanding that it will go to the Legal Department for proper vetting.

Mr. Jackson offered a friendly amendment that the vetting process with the County Attorney be done prior to it being submitted to full Council.

In Favor: Jackson, Newton and Myers

The vote in favor was unanimous.

- b. **Approval of Spears Creek Service Order** – Mr. Niermeier stated the Spears Creek Service Order came before Council in October 2018. It was passed through First Reading. His understanding is there was a change in termini from Percival Road to Jacob’s Mill Pond Road. The thought, at the time, was the change in termini would require 3 Readings and Public Hearing to approve this. He was tasked to consult with the County Attorney. The County Attorney does not have an answer to his inquiry, as of yet. He would recommend deferring this item until the next Committee meeting.

Ms. Myers moved, seconded by Ms. Newton, to defer this item until the next Committee meeting.

In Favor: Jackson, Newton and Myers

The vote in favor was unanimous.

Mr. Jackson stated the expectation is that we will have an answer at the next meeting.

- c. **Approval of Public Information Summary Letters** – Mr. Niermeier stated, at the request of the committee, it was determined that we wanted to follow-up with all the public information meetings that were held on several of the projects. What is before the committee is 7 letters drafted, to that effect, to be sent out to individuals that provided emails or mailing addresses.

Mr. Jackson requested the general content of the letters.

Mr. Niermeier stated the letters generally notes the time and date of the public information meeting, that the conceptual design was discussed at said meeting, and where we are in regards to the project. It is basically a general reminder of what was discussed and the input that brought to the PDT/County staff.

Ms. Newton stated she wanted to confirm that when it references an attachment of design, that the attachments will be made a part of the communication.

Mr. Niermeier stated they will be made available on the website, with a link to the designs.

Mr. Jackson inquired about the next step, after the letters go out.

Mr. Niermeier stated they will continue until they get to the next public meeting, which will be near the construction date.

Ms. Newton requested an additional line in the letters that says, “All the reference materials and designs are available on our website at...”

Ms. Newton moved, seconded by Ms. Myers, to approve the letters.

In Favor: Jackson, Newton, Myers and Livingston

The vote in favor was unanimous.

d. **Approval of Blythewood Widening SUP Maintenance Agreement with SCDOT** – Mr. Niermeier stated this originated from the Blythewood Widening Project where Blythewood and the County agreed that Blythewood would maintain the SUP, and any foliage. The next step, since it is in our SCDOT Right-of-Way, the County has to enter into a similar agreement with SCDOT. What is before the committee is the standard agreement.

Ms. Myers stated this is a SCDOT road, will be maintained by the Town of Blythewood, and the County will have no liability for maintenance. So, why is the County a necessary party.

Mr. Niermeier stated that is a good question, and he has asked that himself.

Mr. Beaty stated the County and the SCDOT have the IGA. The SCDOT does not have any contractual relationship with the Town of Blythewood, so the SCDOT has assigned the development process to Richland County. The SCDOT has said it will not maintain Shared-Use Paths. The County has already entered into a maintenance agreement with the Town of Blythewood. Now, we have to get the responsibility from the SCDOT to the Town of Blythewood. The SCDOT will assign the County the responsibility, for the Shared-Use Paths, and the County will pass that along to the Town of Blythewood.

Ms. Myers stated, her issue is, she does not think the County should have any responsibility. What if Blythewood decided tomorrow that they do not want to maintain it? We have then entered into a contract where we are responsible in SCDOT's eyes. Whatever happens after that, too bad, so sad. It seems the Town of Blythewood wants to maintain flora and fauna, and she thinks it is great that they do, but she also knows the Richland County taxpayer does not have any obligation to maintain a SCDOT road. It seems to her, in this contract, we are now creating a new obligation for the County, despite the fact that there may an agreement by the Town of Blythewood. It would seem to her the contract should be between the Town of Blythewood and the SCDOT. We could facilitate that, but accepting liability, and then delegating that responsibility, seems to be putting the responsibility on the Public Works Department.

Mr. Beaty stated the only thing he will note is, this liability, and this responsibility, is not new. It is new to this project, but the County has entered into this responsibility on 3 other projects.

Ms. Myers stated she wants the flora and fauna. She just wants to be sure we are not undertaking liability for the County, where there is no money to pay for it. She would be happy to move this along, with the understanding that our Legal Department negotiate with SCDOT to get a direct contract between SCDOT and Blythewood, but that the County not be a middleman.

Mr. Jackson inquired, if there is a way for the County to indemnify itself, even in this contract.

Mr. Beaty stated, "Not to his knowledge."

Mr. Jackson stated, he agrees with Ms. Myers, he thinks it's another layer that we do not necessarily want to add, even though the benefit outweighs the risk. The benefit of the Town assuming the responsibility outweighs the risk of them abdicating their responsibility some years down the road. If there is a document that indicates they were willing to accept the risk, and accepted it willingly and knowingly, that would carry equally, if not greater weight, than a new Mayor or Town Council saying they no longer want to own that.

Ms. Myers suggested modifying the contract by taking the County out, as a party, and the contract be

between the SCDOT and the Town of Blythewood. The County would facilitate getting the contract completed, but not be a party.

Ms. Myers moved, seconded by Mr. Jackson, to direct staff to edit the contract by deleting Richland County, as an obligator, and inserting the Town of Blythewood. Then, to go forward, with our Legal Department, to get the contract executed.

Ms. Newton stated, while Legal is in this process, if they could provide their recommendations on potentially avoiding this situation in the future.

Ms. Myers accepted that as a friendly amendment to the motion.

In Favor: Jackson, Newton, Myers and Livingston

The vote in favor was unanimous.

Dr. Thompson requested the committee to direct staff to address the similar agreements noted in Mr. Beaty's comments.

Ms. Myers moved, seconded Ms. Newton, to direct staff to look at the previous contracts, noted by Mr. Beaty, to ensure that Richland County is not a 3<sup>rd</sup> party to these contract, but that they are directly between the 2 parties involved in the maintenance.

In Favor: Jackson, Newton, Myers and Livingston

The vote in favor was unanimous.

**e. Approval of Future Scopes of Work** – This item was deferred until the next Committee meeting.

1. Lower Richland Blvd.
2. McNulty Street Improvements
3. Polo Road Widening
4. Smith Rocky Branch Section C
5. Creech Road Extension
6. Broad River Corridor
7. Shop Road Extension
8. Trenholm Acres/Newcastle
9. Crane Creek Greenway

**f. Tall Oaks Drive: RCU Utility Relocation Design Services – Holt #12 Service Order Modification**

– Mr. Niermeier stated this is a service order modification for Holt Consulting, which is the OET on this project. Previously, the amount requested was in the contingency, and Dr. Thompson was authorized to sign these, when we did not have an Administrator.

Mr. Manning moved, seconded by Mr. Jackson, to approve the request.

Ms. Myers stated, for clarification, is it the \$23,000 increase.

Mr. Niermeier stated it is a \$23,909 increase, from the contingency, for the Holt Consulting contract.

Ms. Myers inquired if the utility relocation cost more than we anticipated.

Mr. Beaty stated, during the design and construction process, they identified a utility that needs to be relocated, and a wetland that needs to be delineated.

Ms. Myers stated, for clarification, it was not in the original scope, and is not an increase, but an addition, for necessary work, or the project cannot be completed.

Mr. Beaty responded in the affirmative.

In Favor: Jackson, Newton, Myers and Livingston

The vote in favor was unanimous.

## 5. ITEMS FOR INFORMATION/DISCUSSION:

a. **Discussion: Maintenance Items** – Ms. Steele stated these are proposed objects to go in SCDOT Right-of-Way, for which the County would then be responsible for maintenance. Those objects would be landscaped medians, lighting (maintenance and energy), Shared-Use Paths and Mast Arms. They are requesting guidance from Council on whether or not to proceed with including these projects.

1. Shared-Use Paths – There are presently 3 IGAs in effect with SCDOT. The SCDOT will maintain the concrete, but the County is responsible for the vegetation maintenance and removal of any ice during a winter storm.

Ms. Myers inquired about the estimated cost.

Ms. Steele stated it is approximately \$11,100/mile annually.

Ms. Myers inquired about the number of miles.

Ms. Steele stated she does not have a number of miles for all the future projects.

Mr. Beaty stated it would be approximately 10 miles.

Mr. Manning inquired if the Shared-Use Paths were a part of the original referendum.

Ms. Steele stated the original referendum included sidewalks. She does not know if it included Shared-Use Paths.

Mr. Beaty stated the referendum stated that bicycle and pedestrian accommodations would be provided. It did not specifically say how they would be provided. Then, two separate categories for bikeways and sidewalks was in the referendum. The 3<sup>rd</sup> category is your widening projects, and it simply said, bicycle and pedestrian accommodations will be provided, with no specificity.

Mr. Manning inquired if the Shared-Use Paths is the standard industry.

Mr. Beaty stated it is one of the ways. You can either do a 10-ft. Shared-Use Path, out of concrete, or you could do a 5-ft. sidewalk on one side, 4-ft. of roadway, times 2, and then you would stripe it. It is much cheaper upfront to build the Shared-Use Path because you are not building 8-ft. of



full roadway, but you do experience the long-term maintenance requirements.

Mr. Manning inquired if there have been community involvement/engagement meetings showing them plans for this, and getting their input.

Mr. Beaty stated there have been many project meetings, on many projects. Oftentimes, they present to the public the options of a bike lane/sidewalk vs. Shared-Use Path. Different communities have preferred different options. At this stage of the program, they have moved forward, with Council's direction, to develop Shared-Use Paths, on some projects. Some projects the community preferred bike lanes.

2. Mast Arm Signals – The traditional signals, at an intersection, are the poles with lights hanging from the cables. The mast arm is the metal pole with the metal arm hanging and the light hanging from the arm. It is a better looking intersection; however, SCDOT will not maintain those. SCDOT will maintain the traditional pole and cables.

Mr. Jackson inquired about what type of maintenance is required.

Ms. Steele stated, she thinks, the biggest issue is if a car runs off the road and hits the pole. You would be looking at a full replacement for the system.

Mr. Manning inquired, if his car runs off the road, and he hits you or a car, the County does not pay to fix that. So, why if he runs off the road and hit a mast arm would his insurance company, or him, be responsible for the damage he did when he ran off the road. Why does the County have that responsibility? He stated, some people, think they look a little nicer, and we have talked about blight and trying to make the County look nice. He inquired if this are the same kind of mast arms that has the street name and are lit up real nice.

Ms. Steele stated some of them do, but she does not think we have those proposed.

Ms. Terracio inquired if we have considered mitigating any light pollution that would affect wildlife.

Ms. Steele stated she does not believe that has been researched.

Mr. Beaty stated all of the new signal heads that are installed meet current design standards, and they are all IED. They are no longer a giant bulb, but the small dots. Whether we put up a steel pole or a mast arm pole, the signal head would be the same.

Ms. Terracio inquired if that is something that we could consider in the future, as we look toward lighting options.

Mr. Livingston inquired, for clarification, if the \$26,000 to replace is for one mast arm.

Ms. Steele stated that is for one mast arm replacement.

Mr. Beaty stated there would be 4 – 5 poles at each intersection.

3. Landscaped Medians – The cost estimate (\$5,460/quarter mile – annually) they obtained from the City of Columbia only covers labor. It does not cover flora and fauna, lighting, irrigation, etc.,

so once you include any kind of materials, that cost will go up.

Ms. Myers inquired if we have explored partnering with any of the beautification organizations to fund some of this.

Ms. Steele stated she does not believe that has been looked at, but is something staff can explore.

4. Street Lighting – The cost estimate includes the maintenance and monthly electric bill. There are quite a few projects are proposing lighting.

Ms. Myers requested Ms. Steele explain the chart included in the agenda packet.

Ms. Steele stated you can either do an upfront pre-payment lease or a monthly payment.

Ms. Myers stated, for clarification, a 15-year lease for Pedestrian Connect 1, would be \$407,000.

Ms. Steele stated you have \$200 for a monthly bill, or, if you are doing the 15-lease it would be \$408,000, for energy and maintenance.

Ms. Myers requested, before this goes to full Council, if staff will put some information telling the periodicity.

Ms. Steele stated Section 21-12, of the ordinance, says we are not going to install street lighting unless we have funding available to install it Countywide.

Ms. Myers stated, if that is the case, we need to know what that number is before we can make a proper recommendation.

- b. **Discussion: Scope Alignment – History of Actions** – Mr. Niermeier requested PDT provide the scope alignment summary, which is basically the history of actions taken dating back to 2018 to bring the program back in line.

Mr. Jackson moved, seconded by Ms. Myers, to defer this item to the June 18<sup>th</sup> Work Session.

In Favor: Jackson, Newton, Myers and Livingston

The vote in favor was unanimous.

6. **ADJOURN** – The meeting adjourned at approximately 1:50 PM.

**Service Order**  
**For**  
**On Call Engineering Services Agreement**

SERVICE ORDER NO. Holt #15

Date: August 17, 2018

This Service Order No. Holt #15 is issued by Richland County, South Carolina (the “County”), to Holt Consulting Company, LLC. (the “Consultant”) pursuant to that Agreement dated February 11, 2015 between the County and the Consultant called “On Call Engineering Services Agreement Related to the Richland County, South Carolina Sales Tax Public Transportation Improvement Plan” (the “Agreement”).

This Service Order, together with the Agreement, form a Service Agreement. A Service Agreement represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations, or agreements, either written or oral. A Service Agreement may be amended or modified only by a Change Order or Change Directive as provided for in the Agreement.

**I. Scope of Services.**

A. Unless otherwise provided in an exhibit to this Service Order, this Service Order and the Service Agreement are based on the information set forth below:

*See Exhibit A – Scope of Services*

B. Unless otherwise provided in an exhibit to this Service Order, the Consultant’s Services to be provided pursuant to this Service Order are:

*See Exhibit A – Scope of Services*

C. Unless otherwise provided in an exhibit to this Service Order, the County’s anticipated dates for commencement of the Services and Completion of the Services are set forth below:

1. Commencement Date: September 3, 2018
2. Completion Date: *See Exhibit A – Scope of Services - Schedule*

D. Key personnel assigned by Consultant to this Service Scope of Work:

1. Paul A. Holt, P.E. (Principal)
2. Jeff Mulliken, P.E. (Sr. Project Manager)

**II. Insurance**

The Consultant shall maintain insurance as set forth in the Agreement. If the Consultant is required to maintain insurance exceeding the requirements set forth in the Agreement, those additional requirements are as follows:

*N/A*

**III. Owner’s Responsibilities.**

In addition to those responsibilities the County may have as stated in the Agreement, the County in connection with this Service Order only shall:

*N/A*

**IV. Consultant’s Compensation.**

A. The Consultant shall be compensated for Services provided under this Service Order as follows:

<i>Lump Sum</i>	\$	449,289.62
<i>Approved Direct Expenses</i>	\$	7,017.50
<i>Cost Plus Fixed Fee</i>	\$	0.00
<i>Total</i>	\$	<u>456,307.12</u>
<i>Contingency – Not to Exceed*</i>	\$	44,928.96

*\*Requires approval from Richland County to authorize contingency*

B. Additional Services. Unless otherwise provided in an exhibit to this Service Order, any Additional Services by the Consultant shall be paid as Additional Services as provided in the Agreement.

**V. Additional Exhibits.**

The following exhibits and/or attachments are incorporated herein by reference thereto:

*Exhibit A – Scope of Services*

**VI. Execution of Service Agreement**

The Execution of this Service Order by the County below constitutes a Service Order to the Consultant. The execution of this Service Order by the Consultant creates the Service Agreement.

**NOW, THEREFORE**, in consideration of the foregoing, the sufficiency of which is hereby acknowledged by the parties, this Service Agreement is entered into Under Seal as of the Effective Date of \_\_\_\_\_, 2018.

**WITNESS:**

\_\_\_\_\_

**RICHLAND COUNTY, SOUTH CAROLINA**

By: \_\_\_\_\_ (L.S.)

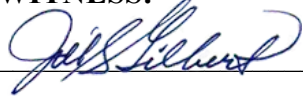
Its: \_\_\_\_\_

Date: \_\_\_\_\_

**CONSULTANT:**

**HOLT CONSULTING COMPANY, LLC**

**WITNESS:**

  
\_\_\_\_\_

By:  \_\_\_\_\_ (L.S.)

Its: Principal \_\_\_\_\_

Date: August 17, 2018 \_\_\_\_\_

## **EXHIBIT A: SCOPE OF SERVICES**

# ATTACHMENT "A"

## SCOPE OF SERVICES AND SCHEDULE

# SPEARS CREEK CHURCH ROAD (S-53)

# WIDENING

### Introduction

Holt Consulting Co. (CONSULTANT) has been authorized by Richland County (COUNTY) to provide engineering services for the widening of Spears Creek Church Road (S-53) in Richland County, South Carolina. Spears Creek Church Road is considered a Rural Minor Arterial by the South Carolina Department of Transportation (DEPARTMENT). The DEPARTMENT holds all public rights-of-way adjacent to the project corridor and assumes all maintenance responsibilities for those said rights-of-way.

The project will consist of widening the existing roadway to five lanes (two lanes in each direction with center median) between Two Notch Road (US 1) and just before the westbound I-20 entrance / exit ramps, for a total length of approximately 2.20 miles. The project is proposed to include bicycle and pedestrian accommodations.

**Project Location** - The project is located in Richland County, northeast of the City of Columbia; however, a large portion of the project is within the City of Columbia municipal limits – between Jacobs Millpond Road (S-1097) and the end of project.

**Existing Conditions** – Spears Creek Church Road is an existing 2-lane, earthen shoulder and ditch section roadway for the majority of the alignment, from just past Two Notch Road to just before Earth Road, for approximately 1.23 miles. The road transitions to a 3-lane, earthen shoulder and ditch section facility from Earth Road to just past the intersection with Pontiac Business Center Drive / Southridge Way, for an approximate distance of 0.63 miles where the roadway transitions back to a 2-lane roadway until the proposed end of project at the I-20 ramps.

Spears Creek Church Road crosses Spears Creek and associated floodway via dual 60-inch, reinforced concrete pipes between Jacobs Millpond Road and Earth Rd. Walden Pond and associated dam structure is situated adjacent to the southbound direction of Spears Creek Church Road at this crossing. The Walden Pond dam failed during the 2015 flood event, breaching the spillway, overtopping Spears Creek Church Road and demolishing the roadway south of the existing dual 6'x6' reinforced concrete box culvert. The new RCPs were installed in this damaged area of roadway to the south of the culvert. This dam has not been repaired to pre-flood conditions to-date. Most recent coordination from 2016 stated that the owners of the pond and dam were planning for permanent breach of the dam.

**Proposed Project Scope (Roadway Widening)** – A Concept Report, Traffic Analysis & Report, Preliminary Roadway and Conceptual Structure Plans, and other associated services, will be developed to reflect the implementation of the widening of Spears Creek Church Road to five lanes with the following;

- 45 mph design speed;
- 12-foot wide travel lanes;
- The addition of a two-way left turn lane along the length of the roadway (assumed 15 foot wide center media);
- Curb and gutter, closed-drainage system;
- The addition of bicycle and pedestrian accommodations along the length of the roadway;
- Hydraulic evaluations of existing FEMA crossing of Spears Creek;
- Potential replacement of existing RC box culvert and dual, RC pipes with a new structure;
- Review vertical/horizontal and intersection alignments and design, and revise, if necessary, to meet design criteria; and,
- Pedestrian accommodations along Earth Road which connect to the Clemson Road Widening project.

**Summary of Anticipated Services** - An outline of the services anticipated for this project is shown below.

- Task 1 - Project Management
- Task 2 - Environmental Services / Permitting
- Task 3 - Traffic Analysis
- Task 4 - Aerial Mapping / Field Surveys
- Task 5 - Concept Report
- Task 6 - Preliminary Roadway Design
- Task 7 - Conceptual Structure Design
- Task 8 - Preliminary Stormwater Management / Hydraulic Design

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## Quality Control

The CONSULTANT shall implement all necessary quality control measures to produce plans and reports that conform to COUNTY guidelines and standards. Prior to submittal to the COUNTY, all plans and reports shall be thoroughly reviewed for completeness, accuracy, correctness, and consistency. Subconsultants for this project will be required to implement and maintain a stringent quality control program as well. The COUNTY reserves the right to request QA/QC documents (red-lines, checklists, etc) from the CONSULTANT with project deliverables.



## Task 1

### PROJECT MANAGEMENT

The CONSULTANT shall institute a program for conformance with COUNTY requirements for monitoring and controlling project engineering budget, schedule and invoicing procedures. The CONSULTANT's subconsultants shall be included in this program. Proposed dates of submittals, completion of tasks, and final completion of pre-construction services as noted in this agreement will be negotiated with the COUNTY. Included in management of the project will be:

- ◆ Project meetings between the COUNTY, DEPARTMENT and CONSULTANT for clarification of scope, discussion of concepts, review of submittals, etc. at the discretion of the COUNTY.
- ◆ The CONSULTANT will prepare meeting agenda and meeting materials as well as record the minutes of each meeting in which it participates and distribute to the appropriate COUNTY personnel.
- ◆ Prepare monthly invoices, status reports, and schedule updates. Assume a 9-month design schedule which will impact the duration of preparing invoices, status reports, and schedule updates.

At this time, no assumptions should be made for the preparation of invoices, reports and updates during the construction duration of the project. All Construction Phase Services to be negotiated under a future contract modification.

- ◆ The CONSULTANT will provide coordination with its SUB-CONSULTANTS during the execution of their work. Assume a 9-month design schedule.
- ◆ The CONSULTANT will include the COUNTY in any discussions concerning the project prior to submittal of deliverables if that process has the advantage of expediting the completion of any task of the project.

The CONSULTANT will attend meetings with the COUNTY and stakeholders from various organizations affected by this project in order to incorporate the needs and desires of these organizations into the decision-making process. It is assumed that the CONSULTANT will attend 9 project meetings (1 each month during the design services) and two (2) additional review coordination meetings with the DEPARTMENT, COUNTY and others, as applicable. The CONSULTANT will be in attendance at these meetings and will prepare all necessary display materials, meeting agendas and minutes.

#### **Deliverables:**

1. Nine (9) status reports (approximately monthly) and updated schedule. Two (2) additional meetings may be held specific to miscellaneous coordination efforts.
2. Meeting agendas and meeting minutes covering all project meetings. Meeting agendas are to be provided to the COUNTY within two (2) business days prior to all meetings. Meeting

minutes are to be provided to the COUNTY within three (3) business days after all meetings.

## **Task 2**

### **ENVIRONMENTAL SERVICES/PERMITTING**

Within two weeks of the date that the COUNTY provides a Notice to Proceed (NTP) for the subject project, and prior to commencement of design, the CONSULTANT shall make a determination of the environmental and/or navigational permits expected to be required for the subject project on a permit determination form. This information will inform the COUNTY of the anticipated permits and will be incorporated in the project schedule to ensure compliance.

No Jurisdictional Determination services shall be conducted during this scope of services. Desktop level wetland mapping (National Wetland Inventory, NWI) shall be used as a general guide during the development of the roadway alignment for preparation of the concept report and preliminary plans.

No permitting services shall be conducted during this scope of services; however, the Concept Report (see Task 5) shall include potential permitting requirements and other environmental issues.

No NEPA documentation services are assumed for this scope of work.

#### **Technical Reports**

Hazardous Waste and Underground Storage Tanks – In assessing the environmental liabilities associated with the proposed new rights of way, the COUNTY may conduct appropriate / applicable elements of a Phase I Environmental Site Assessment in accordance with procedures established by ASTM Designation E 1527-13, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”. This approach complies with the Standards and Practices for All Appropriate Inquiries (AAI), Final Rule published in 40 CFR Part 312. A Phase 2 Site investigation may be conducted by the COUNTY for those sites recommended for additional study as stated in the Phase 1 ESA. The results / deliverable provided from a Phase 1 ESA and any potential Phase 2 Site Investigations will be provided to the CONSULTANT.

**Public Coordination/Public Meeting** – One (1) public meeting is proposed for this phase of the project. The meeting is proposed to be conducted following development of the concept report.

The CONSULTANT will develop and provide to the COUNTY a list of property owners and stakeholders such as businesses, schools, shopping centers and home owners associations.

The public meeting will tentatively be scheduled for 5:00 pm to 7:00 pm on a Monday or Thursday at a venue along, or near, the project corridor. The CONSULTANT, with input from the

COUNTY, will be responsible for procuring the venue and determination of date and time. The CONSULTANT will be responsible for the preparation of public notice letters and draft media release necessary for promoting the meeting. The COUNTY will provide sample documentation from a previous public meeting. Following COUNTY approval of the public notice letter, the CONSULTANT will mail letters to the list of property owners and stakeholders.

The CONSULTANT, with input from the COUNTY, shall prepare necessary public meeting materials, (deliverables would include project design displays, project overview displays, project typical sections and right of way data tables, as applicable). The CONSULTANT will provide necessary boards and display easels. The CONSULTANT shall also be responsible for the development and printing of handouts, comment cards and sign-in sheets for the public meeting. The COUNTY will provide a base template (with language utilized for previous public meetings) for the handout, comment card and sign-in sheets. The CONSULTANT shall provide draft copies of all materials to be used in the public meeting to the COUNTY for review a minimum of 15 business days prior to printing. The CONSULTANT will also provide the COUNTY with PDF versions of all final deliverables, as stated above, for the public information meeting one week prior to the meeting for posting on the COUNTY website.

The public meeting is assumed to be held as an open-house style meeting. The COUNTY may conduct a brief formal presentation at some time during the public information meeting. The CONSULTANT shall attend the scheduled public meeting and have a minimum of four (4) personnel knowledgeable of the project and its impacts in attendance. The CONSULTANT's role at the meeting is to discuss the project alternatives, proposed design and impacts with the public in attendance.

The COUNTY may secure security guards from local law enforcement agencies or private security firms for all public meetings. The COUNTY will also be responsible for fabricating and erecting signs to be placed on the projects as well as any directional signage needed at the public meeting venue.

The CONSULTANT shall prepare a summary of the public meeting comments within seven (7) business days from the close of the public comment period and receipt of the comments from the COUNTY. The COUNTY will provide a sample from a previous public meeting on a similar project. The COUNTY will be responsible for development of public comment responses and individual response letters, at their discretion. The CONSULTANT may be asked to assist with the development of appropriate responses, as necessary.

**Assumptions:**

- The CONSULTANT will conduct property owner research and develop property owner and stakeholder contact/ mailing list in Excel format. Assume 125 contacts.

- The CONSULTANT will submit a draft media release to the COUNTY one month prior to the public meeting.
- The CONSULTANT will prepare public notice letters and mail/deliver to stakeholders one month prior to the public meeting. Assume 125 letters.
- The center alignment reflecting both typical sections to be presented at public meeting (see Task 5 below).
- The CONSULTANT will provide printed and PDF copies of all displays (up to 12 – 36-in x 48-in). Draft copies of the displays shall be submitted to the COUNTY in full size hardcopies 15 days prior to the Public Meeting. The CONSULTANT assumes two (2) rounds of revisions on public meeting materials and displays.
- The CONSULTANT assumes up to 100 comments will be received and included in the public meeting summary.
- Meeting Preparation and Debrief meetings will be held at Richland County Penny Offices in Columbia, SC.
- Participation of four (4) CONSULTANT team members at one (1) Public Meeting

### **Deliverables**

1. Permit Determination Form
2. Property Owner and Stakeholder list
3. Public Notice Letters
4. Draft Media Release
5. Attendance at one (1) Public Meeting and preparation of Public Meeting materials (as stated in scope)
6. Public Meeting Summary

## **Task 3**

### **TRAFFIC ANALYSIS**

**Data Collection** – The CONSULTANT will collect data necessary to perform a detailed traffic analysis of existing and future design conditions. The data collection will include the following activities:

**Field Investigation** – The CONSULTANT will conduct a field visit to examine the existing roadway conditions and adjacent land use characteristics present within the study area, including:

1. Existing roadway speed limits
2. Number of lanes
3. Type and length of turn lanes
4. Traffic control

The field investigation will also identify those locations where horizontal and/or vertical sight distance may be limited at roadway and driveway intersections and identify locations where access management principles may be applied to consolidate driveway curb cuts.

**Accident Data Collection** – The COUNTY will obtain the most recent three years crash data along the study corridor.

**Traffic Signal Timing Data Plan Collection** – The CONSULTANT will obtain existing traffic signal timing information from the DEPARTMENT for the following signalized intersection along Spears Creek Church Road within the corridor:

1. Spears Creek Church Road at Two Notch Road
2. Spears Creek Church Road at Earth Road / Woodcreek Farms Road

**Traffic Volume Data Collection** – The CONSULTANT will conduct manual turning movement counts in 15-minute intervals during the weekday A.M. peak (7:00 to 9:00 A.M.) and P.M. peak (4:00 to 6:00 P.M.) on either Tuesday, Wednesday or Thursday at the signalized intersections indicated above and the following unsignalized intersections:

1. Spears Creek Church Road and Jacobs Millpond Road on North End of Project
2. Spears Creek Church Road and Jacobs Millpond Road on South End of Project
3. Spears Creek Church Road and I-20 Ramps
4. Spears Creek Church Road at Greenhill Parish Parkway/Jacobs Drive
5. Spears Creek Church Road at Pontiac Business Center Drive/Southridge Way

The CONSULTANT will conduct 24-hour bi-directional counts during the mid-week at the following locations:

1. Spears Creek Church Road between I-20 and Earth Road/Woodcreek Farm Road
2. Spears Creek Church Road between Earth Road and Two Notch Road/Woodcreek Farm Road

All counts will be conducted while the local public schools are in session.

The CONSULTANT will utilize travel demand models and/or average annual growth rates to establish design year and background traffic growth.

**Development Data Collection** – The CONSULTANT will obtain information concerning planned and approved development projects affecting traffic within the corridor area. Information concerning projected land uses, zoning and development planning documents will also be obtained.

**Traffic Analysis** – The CONSULTANT will perform the necessary analyses of the proposed improvement alternatives using the information obtained during the Data Collection task.

**Conceptual Analysis** – The CONSULTANT will identify the opening year and design year (20 years past opening date) peak hour Levels of Service for roadway segments and intersections within the study area using the procedures and methodologies outlined in the current editions of Special Report 209: Highway Capacity Manual 2000 edition and traffic analysis software, such as Highway Capacity Software (HCS) or Synchro 7.0 or 8.0 SimTraffic. The results of the conceptual design analysis will include:

1. The number and type of lanes on each approach of the study area intersections
2. Length of turn lanes to provide sufficient vehicle storage
3. LOS Tables
4. Opening year ADT and design year ADT

**Accident Analysis** – The CONSULTANT will identify the existing high crash locations within the corridor and will determine:

1. the total number of crashes, number of fatal crashes and fatalities, number of injury crashes and injuries;
2. the probable cause, time and location of all the fatal crashes;
3. the total number of the property damage crashes;
4. the lighting and pavement condition of all the crash occurrences

The CONSULTANT will summarize the different crash types and determine the primary causes of the existing crashes. The CONSULTANT will identify those locations with frequent and/or severe crash histories that may be able to be addressed through design and traffic control measures implemented as part of this project. The CONSULTANT will evaluate the most recent three years of available crash data.

***Report Preparation*** – The CONSULTANT will prepare a traffic study that will outline the evaluations performed and the recommended improvements along the corridor and comparative analysis of the existing roadway to the post improvement roadway. The results will provide Levels-of-Service for each scenario studied. The CONSULTANT will submit a PDF of the traffic study to the COUNTY. Upon receipt of any comments, the CONSULTANT will revise the study accordingly and submit a PDF and two (2) final copies to the COUNTY for submittal to the DEPARTMENT for review. The CONSULTANT will revise the study as necessary per DEPARTMENT comments for final approval. After approval of the recommended improvements, the CONSULTANT will proceed with the development of preliminary roadway plans.

Traffic Signal Warrant Analysis will not be performed under this scope of work; however, recommended intersections, if applicable, for traffic signal warrant studies will be indicated in the report.

The CONSULTANT will notify the COUNTY's designated Project Manager prior to performing any work on site.

## **Task 4**

### **AERIAL MAPPING / FIELD SURVEY**

***Aerial Photography and Aerial LiDAR Mapping***– The CONSULTANT will conduct Aerial Photography and Aerial LiDAR Mapping services to SCDOT standards for use during the preparation of the concept report, design and roadway plan development. Mapping will be conducted to the contour accuracy of 0.5 foot (one-foot contour interval) and prepared for use in

plans developed to a horizontal scale of 1" = 20'. The vertical and horizontal accuracy will be equal to or better than 0.05-ft RMS on hard surfaces and equal to or better than 0.5-ft on non-paved surfaces. Aerial mapping deliverables shall include a 2D planimetric file, 3D digital terrain model (DTM) file, in SCDOT Standard Symbology, and orthophotography (TIF, or other geospatial digital file format).

Field annotation of aerial topography will be performed by the CONSULTANT.

Mapping limits are shown in the attached Exhibit 1.

***Field Survey*** – The CONSULTANT shall conduct necessary field surveys for the proper development / control of aerial LiDAR mapping services. Field survey services for the preparation of aerial LiDAR mapping shall include the placement of aerial panels at pre-determined and coordinated locations within the project area. Panels shall be either V-shaped (2-foot legs with 1 foot width) or X-shaped (1 foot legs on each side with 1 foot width). Field survey of the panels will be performed utilizing the South Carolina VRS Network to establish horizontal coordinates referenced to the South Carolina State Plane Coordinate System (NAD 83/2011) for each panel point. Elevations referenced to the NAVD 88 Vertical Datum will be established for each panel by performing differential level loops to the accuracy necessary for LiDAR mapping accuracy.. An ASCII or .txt file shall be provided containing the horizontal coordinates and vertical elevations of each panel point.

Additionally, the CONSULTANT will obtain two (2) field surveyed cross sections upstream (one (1) at the face of existing drainage structures and one (1) at the existing rights-of-way) and one (1) downstream at the face of the existing drainage structures for use in the development of the preliminary hydraulic models necessary to perform a preliminary hydraulic study of the FEMA Special Flood Hazard Area along Spears Creek Church Road. Detailed hydraulic models and studies of the FEMA Special Flood Hazard area will be completed in subsequent phases of work for this project - see Task 8.

The intent is to utilize the Aerial LiDAR mapping conducted in this stage of work for future design services, specifically, pavement surveys. Control, LiDAR mapping checks, supplemental surveys, obscured areas, drainage / outfall surveys, property monumentation, etc to be conducted upon further development of this project.

**Assumptions:**

1. The COUNTY will advertise the Eminent Domain notification prior to the CONSULTANT conducting the field work.

**Task 5**

## CONCEPT REPORT

**Documentation of Existing Conditions and Identification of Deficiencies** – Aerial LiDAR mapping and photography (as conducted under this scope of work) of the proposed project area will be utilized for all design and plan development under this scope of work. The CONSULTANT will review the project corridor through the use of existing roadway plans, aerial photography & LiDAR mapping, site visits, and other available desktop-level data / information (ie; County GIS data, wetland inventory, cultural resources, etc) to determine existing and proposed land-use of properties within corridor, roadway data inventory (for existing intersecting roadways within corridor) to include lane widths, intersection configurations, types of accesses provided, natural drainage patterns, opinion of pavement conditions upon visual observation, observation of utilities, and potential impacts to the surrounding community. At the same time, any deficiencies that exist throughout the project such as sight distance problems at intersections or inadequate horizontal or vertical clearances, areas of insufficient shoulders, and areas where the existing pavement structure has deteriorated will be identified. Photography and videotaping may be used to document these conditions; copies of which to be submitted to COUNTY

**Develop Design Criteria** – The CONSULTANT will prepare the project Design Criteria in accordance with the following;

- *SCDOT Roadway Design Manual (2017 Edition);*
- *Applicable Instructional Bulletins, Preconstruction Advisory Memos and Preconstruction Design Memos;*
- *Road Design Plan Preparation Guide-2000;*
- *Standard Drawings for Road Construction (latest revisions per Notice to Proceed of this work);*
- *All applicable American Association of State Highway Transportation Officials (AASHTO) publications.*

Any exceptions and/or deviations from established design guides and standards will be identified. The CONSULTANT will notify the COUNTY of any exceptions and/or deviations from the Design Criteria as soon as identified. The COUNTY will coordinate the Design Criteria with the DEPARTMENT for final approval. Development of a formal Design Exception is not included as part of this contract.

**Typical Section, Alternate Alignment and Intersection Studies** – Existing features of the project will be considered during development of the roadway typical sections and alignment studies. Environmental constraints, railroads, utilities, businesses, and residences will be considered in the development of the typical sections and proposed alignments.

**Project Concept Report** – The CONSULTANT will prepare a Project Concept Report for COUNTY approval. The report shall include, but not limited to the following:

- Project overview;
- Existing conditions;



- Environmental constraints / design and coordination issues (includes utilities and railroads); COUNTY to provide documentation of utilities within corridor (SC 811) prior to alignment studies and typical section production.
- Project layout based on aerial LiDAR mapping and aerial photography;
- Approved design criteria;
- Typical section; (assume two)
  - Typical No. 1: On-street bike lanes with sidewalk behind curb
  - Typical No. 2: Shared-Use Pathways
- Alignment studies; (assume left, right and center alignments)
- Impact comparisons (rights-of-way, utilities, environmental, traffic, costs, etc)
- Conceptual bridge data;
- Project schedule and cost estimates (to include any existing COUNTY estimates), and;
- Recommendations for design and potential design refinements / enhancements.

The COUNTY will provide to the CONSULTANT a template, in Word format, of previously prepared concept report(s).

## **Task 6**

### **PRELIMINARY ROADWAY DESIGN**

***Preliminary Roadway Plans*** – Following Project Concept Report approval, Traffic Study recommendations, and discussions with COUNTY regarding the recommended design approach, the CONSULTANT will prepare Preliminary Roadway Plans. The plans will be developed to the level of detail of approximately 30% Complete Construction Plans. The Preliminary Roadway Plans for the project will be prepared at a scale of 1"=20' scale to illustrate pertinent information associated with roadway design. The plans will be sufficiently developed to illustrate the construction limits and right-of-way requirements of the entire project. The plans will incorporate information obtained during data collection / site visits and any utility information discovered during coordination with utility owners (COUNTY to conduct), and the design will be adjusted where possible to minimize impacts. Additionally, the design will be adjusted to minimize impacts to developed properties and wetlands. Preliminary Plans will include plan, profile and cross-sections of the recommended design, to include (at a minimum) the following;

- Typical Sections
- Horizontal / vertical alignments (mainline and relocated side roads only)
- Plan Layout (lane widths, radii, directional arrows, storage, tapers, etc)
- Review of sight distance considerations
- Review of non-standard driveway grades and tie-ins
- Limits of existing rights-of-way, easements and adjacent properties
- Property lines and parcel numbers (from County GIS data)
- Anticipated location, type and size of necessary drainage culverts, major cross-lines, outfall improvements, retaining walls, and other miscellaneous roadway structures and proposed bridge

- Cross-sections at 100 foot intervals on tangents and 50-foot intervals in curves (mainline and relocated side roads only)
- Construction limits
- Proposed rights-of-way and easements
- Labeling (type, size and location) of existing, major utility features

It is assumed that the mainline Spears Creek Church Road alignment may be a combination of left and right alignment shifts in order to accommodate the necessary typical section with reduced impacts. It is assumed that such alignment will be reflected in the preliminary plans.

Upon completion of the Preliminary Roadway Plans, the CONSULTANT will submit the plans to the COUNTY for review and comment. The CONSULTANT will be responsible for addressing comments and resubmitting revised Preliminary Roadway Plans. The COUNTY will provide the Preliminary Roadway Plans to the DEPARTMENT for review and comment following receipt of revisions.. It is assumed the DEPARTMENT will provide a matrix of comments with their review. The CONSULTANT will be responsible for providing appropriate comment responses; however, no plan changes or plan resubmittals to the DEPARTMENT are assumed at this stage.

A cost estimate will be prepared by the CONSULTANT and submitted along with the Preliminary Roadway Plans for use by the COUNTY. The COUNTY will use this cost estimate in order to determine whether or not the scope of the project needs to be reduced or expanded due to budgetary constraints.

Upon completion of the Preliminary Roadway Plans, the CONSULTANT will provide the COUNTY with two (2) half-sized, hard copy sets of plans along with a PDF (half-size and full size). The CONSULTANT at this time will also provide the COUNTY with preliminary new rights-of-way areas for use in developing an estimated right-of-way cost.

## **Task 7**

### **CONCEPTUAL STRUCTURE DESIGN**

This task includes the analysis for a potential new structure installation along Spears Creek Church Road at the Spears Creek crossing and associated roadway widening. Existing conditions at this crossing are dual 60-inch, reinforced concrete pipes placed after the 2015 flood event which demolished the roadway south of the existing dual 6'x6' reinforced concrete box culvert. No more than three (3) different structural concepts will be evaluated for inclusion in the Concept Report. The plans for this Task will include a conceptual plan and profile sheet and typical section sheet including construction staging anticipated.

**Design Criteria** – Structure design criteria will be developed in accordance with the following DEPARTMENT and AASHTO (as noted) publications;

- *Bridge Design Manual, 2006;*
- *Road Design Plan Preparation Guide, 2000;*

- *SCDOT Roadway Design Manual, 2017 Edition;*
- *Standard Drawings for Road Construction;*
- *Standard Specifications for Highway Construction, 2007;*
- *Bridge Design Memoranda; and,*
- *All applicable American Association of State Highway and Transportation Officials (AASHTO) publications.*

The following design and construction specifications will be used in the design and preparation of preliminary bridge plans:

- *Bridge Design Manual, 2006;*
- *Standard Specifications for Highway Construction, 2007;*
- *AASHTO's LRFD Bridge Design Specifications, 6th edition (2012) and the latest Interim Specifications in place at the time of contract execution;*
- *AASHTO's LRFD Bridge Construction Specifications, 3<sup>rd</sup> edition (2010) and the latest Interim Specifications in place at the time of contract execution;*
- *Geotechnical Design Manual, v. 1.1, 2010;*
- *Seismic Design Specifications for Highway Bridges, v. 2, 2008;*
- *Supplemental and Technical Supplemental Specifications as already prepared by the DEPARTMENT for bridge design and/or construction.*
- *Bridge design memoranda issued by the DEPARTMENT dated April 2006 or later.*
- *The latest edition of the ANSI/AASHTO/AWS D1.5-2002 Bridge Welding Code, with additions and revisions as stated in the special provisions.*
- *AASHTO "Guide Specifications" as may be applicable to the project.*

For any proposed bridges, they are to be assumed to have an Operational Classification = II and is in Seismic Design Category "A."

**Conceptual Plans** – The CONSULTANT will evaluate alternate layouts based on the parameters of the horizontal and vertical design(s) and submit a drawing showing the preferred layout and any alternates considered. Concurrence from the DEPARTMENT on the preferred alternate is necessary prior to development of preliminary plans in subsequent phases of this project. Conceptual design for bridge components will be performed to the extent necessary for verification of structure type, determination of approximate component sizes and feasibility of recommended foundations.

The CONSULTANT shall prepare a conceptual cost estimate based on the conceptual structure design to be included with the preliminary roadway estimate.

## Task 8

### **PRELIMINARY STORMWATER MANAGEMENT/HYDRAULIC DESIGN**

The CONSULTANT will perform preliminary roadway drainage design, stormwater management, and hydraulic design consistent with the level of completion for the roadway design of the project.

The roadway drainage and hydraulic design will be based on the information obtained in the associated services in this scope of work. The following subtasks will be performed as part of this task:

**Drainage Field Review / Data Acquisition** – The CONSULTANT will perform a detailed review of the project site. The purpose of the field review is to evaluate the existing drainage conditions and document potential design issues for the project. The following items shall be documented during the field review:

- Jurisdictional Stream / FEMA Special Flood Hazard Areas and Crossings
- Existing conditions at major cross-lines (major cross-lines are designated as cross-line structures including and larger than 48" pipe); CONSULTANT to verify existence;
- Outfall conditions and potential drainage concerns for areas adjacent to the roadway;
- Adjacent Stormwater Basins which may be impacted by the project;
- Determine sizes of existing and proposed box culverts and cross-line pipes at and above 48" in diameter;
- Existing / potential erosion control issues along the project.

The CONSULTANT shall obtain all available effective FEMA data for FEMA floodplain crossings, water quality data, and any stormwater as-built data available for adjacent developments. The water quality data shall include any stream impairments at downstream outfalls.

**Drainage Design Criteria** – The CONSULTANT shall prepare a summary of the roadway drainage, stormwater management, and hydraulic analysis design criteria. The design criteria will be based on the SCDOT's *Requirements for Hydraulic Design Studies* (2009) as a minimum. The CONSULTANT will review Richland County Design Standard and prepare recommendations for any conflicts in the design criteria. The drainage design criteria shall address the requirements for stream impairments downstream of the project.

**Major Cross-Line Studies** – In the course of the field review, the CONSULTANT shall identify all existing cross-lines and to determine the existence of any major cross-lines (structures including and larger than 48" pipe). It is assumed for this scope of services that one major cross-line exist within the project limits, along Spears Creek. Should additional major cross-line be identified, a contract modification will be negotiated for additional hydraulic studies as stated below.

The CONSULTANT shall perform a hydrologic and hydraulic study for each major cross-line drainage structure along the project. The study will include a watershed study to determine the design flows at the structure and hydraulic analysis of the cross-line in accordance with SCDOT design standards. The CONSULTANT will estimate cross-line inverts and channel topography based on field reviews. The evaluation of the cross-line should be based on the preliminary roadway design. Based on the evaluation, the CONSULTANT will provide recommendations for retaining, replacing, or other roadway drainage alternatives for each cross-line structure.

The design storm for each cross-line shall be based on the design criteria identified as part of this task. The design storm shall be based on the SCDOT's *Requirements for Hydraulic Design Studies*.

All major cross-lines will be identified and shown on the preliminary roadway plans.

**Outfall Studies** – The CONSULTANT shall perform a preliminary pre-construction versus post-construction analysis at each outfall. The pre-construction versus post-construction analysis shall be based on the preliminary roadway design. The outfall analysis shall address the potential increase in flows from the project and include any recommendations (if needed) for stormwater best management practices to address water quantity or quality. Best management practices which should be considered include stormwater basins, outfall improvements, water quality devices, etc. A preliminary design for the best management practice shall be performed to approximate the area of impact to adjacent property. Examples include a preliminary size for stormwater basins, length of outfall improvements, and size / type for water quality devices.

The preliminary plans shall be used by the CONSULTANT to show cross-line extensions, replacements, etc. Any potential outfall improvements or best management practices should also be shown on the preliminary plans.

The CONSULTANT will be responsible for preparing a Drainage Summary Report to include the calculations performed as part of this scope of services, recommended improvements for cross-lines and outfalls, and recommendations for FEMA floodplain and Jurisdictional Stream crossings. The Drainage Summary Report shall include a narrative description of the drainage conditions along the project and a summary of any potential roadway drainage issues along the project.

Detailed ditch design and closed storm system design is not included in this scope of work. The CONSULTANT will be required to approximate roadway drainage areas for each outfall based on the preliminary roadway plans; however no interior drainage system design is required for this phase of the project. Field surveys of drainage structures / cross-lines will not be performed as part of this phase of the project.

Sediment and erosion control design is not required for this phase of the project. As part of the field reviews, the CONSULTANT shall identify any areas which are highly susceptible to erosion or sedimentation issues. These areas should be identified in the field review and summarized in the drainage report. These areas may require additional erosion and sediment control above the normally accepted methods for roadway improvement projects. Example areas include existing ponds located downstream of the project, areas of large cut and fill, etc.

**Preliminary Hydraulic Analysis** – The proposed improvements along Spears Creek Church Road will likely impact the FEMA-defined Special Flood Hazard Area associated with the Spears Creek crossing and associated floodway. The project will include a preliminary hydraulic study to evaluate the existing and/or proposed hydraulic structures.

The existing hydraulic structure under Spears Creek Church Road along Spears Creek consists of dual 60-inch, reinforced concrete pipes which were added to the south of the existing dual 6'x6' reinforced concrete box culvert in the area demolished during the 2015 flood event which also

breached the Walden Pond dam. The stream crossing within the project corridor is designated Zone AE Special Flood Hazard Area. The CONSULTANT will obtain and verify all existing hydraulic data and utilize available, existing models, as the basis of the studies, where applicable. The existing models will be updated to reflect the limited additional field survey data of the project area obtained for this phase of work. The existing hydraulic model (or developed model from survey) will be utilized to evaluate the potential impacts of extending the pipes and/or culvert conveying Spears Creek. If necessary, the hydraulic models will be utilized to evaluate potential replacement structures as well. The proposed conditions models will be developed based on the proposed design to analyze the potential impacts of the project. The analysis of the existing hydraulic data will include a review of the watershed and FEMA calculated design flows to ensure their accuracy with existing conditions.

The preliminary hydraulic studies will be based on DEPARTMENT requirements and will include an evaluation of the impacts from the proposed construction.

**Assumptions:**

1. If needed, the CONSULTANT will utilize geotechnical data from reports developed for the nearby Clemson Road widening project to develop input to the preliminary hydraulics study.
2. CONSULTANT to obtain FEMA model data and COUNTY will provide available LiDAR data.
3. A Conditional Letter of Map Revision (CLOMR) or a No-Impact Certification will be completed as part of a future work order as required.
4. The CONSULTANT will complete more detailed hydraulic studies and the hydraulic study documentation as required by the United States Army Corps of Engineers as part of the environmental permit as part of a future work order as required.

## Services Not Provided

Services not provided by the CONSULTANT include, but are not limited to, the following:

- Lighting and Electrical plans
- Landscaping and irrigation plans
- Pavement coring or pavement design
- Environmental Assessment Documentation
- Falling Weight Deflectometer (FWD) testing
- Video Pipe Inspection
- The CONSULTANT shall not be the “responsible engineer” referenced IN 2009-04 who evaluates the structural condition and performs the preliminary inspection of existing pipes and culverts to determine if they can be retained. The DEPARTMENT shall determine if existing pipes and culverts are to be retained due to structural conditions. The CONSULTANT will indicate the retention/extension of all existing pipes/culverts which meet the hydraulic requirements unless otherwise directed by the DEPARTMENT
- Sight-specific Response Analysis study
- Utility relocation design and plans
- Utility coordination
- Right-of-way acquisition, exhibits, negotiations, or appraisals
- Right-of-way or construction phase design services and plans
- Administering or advertising the bid process
- Fabricating or erecting signs for public meetings
- Alternate designs for bidding
- Construction Engineering and Inspection (CEI)
- Location of water and sewer utility services for each utility customer in the project area.
- All other services not specifically included in this scope of work
- Construction Phase Services (proposed contract modification for these services)

## **Services of the COUNTY**

The COUNTY agrees to provide to the CONSULTANT, and at no cost to the CONSULTANT, the following upon request:

- Access to and use of all reports, data and information in possession of the COUNTY which may prove pertinent to the work set forth herein.
- Existing Policies and Procedures of the COUNTY with reference to geometrics, standards, specifications and methods pertaining to all phases of the CONSULTANT's work.
- Eminent Domain advertisement notice.
- Coordinate, advertise, fabricate and erect signs, and approve location for Public Meeting.
- Provide Security guard for the public information meeting.
- Existing roadway plans.
- Provide existing signalized intersection coordination timing(s), existing interconnect plan, and location of master, if applicable.
- Provide Existing utility data provided by Utility Owners within the project area
- Final moving, demolition and reset items list. An initial list will be provided by the CONSULTANT.
- Contract documents (project-specific special provisions to be supplied by CONSULTANT)
- Right-of-Way acquisition.
- As-built roadway plans.
- Construction Engineering and Inspection (CEI)
- Phase 1 Environmental Site Assessment
- Approved pavement design



## **Project Deliverables**

The CONSULTANT will provide to the COUNTY the deliverable items shown below within the time allotted for each phase of work. Delivery may not be in the order shown.

- Meeting Agendas and Meeting Minutes
- Photography / Video (project documentation)
- Roadway and Bridge Design Criteria
- Project Concept Report
- Project Traffic Analysis / Study
- Public Information Meeting materials (as detailed in scope of work)
- Preliminary Roadway Plans
- Bridge Concept Layout(s)
- Conceptual Structure Plans
- Drainage Summary Report
- Preliminary Plans construction cost estimate
- Documentation of areas of new rights-of-way (per parcel)
- CADD files

## Schedule

Below is a summary of significant milestones and anticipated submittal timeframes:

<b>Project Concept Report</b> .....	4	months from NTP
<b>Public Information Meeting</b> .....	5	months from NTP
<b>Preliminary Roadway &amp; Bridge Plans</b> .....	7	months from NTP
<i>assume COUNTY review (1 month)</i> .....	8	months from NTP
<b>Preliminary Roadway &amp; Bridge Plans (revised) **</b> .....	9	months from NTP
<i>assume SCDOT review (25 business days)</i> .....	10	months from NTP

The submittal dates include time for COUNTY/DEPARTMENT review as noted. Per the Intergovernmental Agreement between the COUNTY and the DEPARTMENT, the DEPARTMENT has 25 business days for their review.

**\*\* - Theoretical completion date of services under this scope of work.**

Exhibit 1: Aerial Photography & Aerial Mapping Limits

# Exhibit 1 - Aerial Photography and Aerial Mapping Limits

**Legend**  
Survey Limits



Google Earth

© 2018 Google

3000 ft



**Spears Creek Church Road Widening (8-17-18)**

Task	Total	Holt	Neel-Schaffer	CSS	GPI	AECOM		
Task 1: Project Management	\$38,525.00	\$38,525.00						
Task 2: Environmental / Public Meeting	\$38,263.50	\$12,918.00				\$25,345.50		
Task 3: Traffic Analysis	\$37,851.50	\$0.00				\$37,851.50		
Task 4: Aerial Mapping / Field Surveys	\$66,513.62	\$0.00		\$32,843.00	\$33,670.62			
Task 5: Concept Report	\$47,058.00	\$47,058.00						
Task 6: Preliminary Roadway Design	\$160,435.00	\$160,435.00						
Task 7: Conceptual Structure Design	\$19,530.00	\$0.00	\$19,530.00					
Task 8: Prelim Stormwater / Hydraulic Design	\$48,130.50	\$0.00	\$48,130.50					
<b>Total</b>	<b>\$456,307.12</b>	<b>\$258,936.00</b>	<b>\$67,660.50</b>	<b>\$32,843.00</b>	<b>\$33,670.62</b>	<b>\$63,197.00</b>		
<b>Total %</b>	<b>100.0%</b>	<b>56.7%</b>	<b>14.8%</b>	<b>7.2%</b>	<b>7.4%</b>	<b>13.8%</b>		

DBE Certified				x				
SLBE Certified		x		x				

DBE Utilization	7.2%
SLBE Utilization	63.9%

Lump Sum	\$449,289.62
Approved Direct Expenses	\$7,017.50
Cost Plus Fixed Fee	\$0.00
<b>Total</b>	<b>\$456,307.12</b>

	Directs	
Neel-Schaffer	Task 8	\$454.50 <i>mileage, FEMA data fee</i>
AECOM	Task 2	\$1,337.50 <i>mileage, printing</i>
AECOM	Task 3	\$2,665.50 <i>mileage, traffic counts, printing</i>
GPI	Task 4	\$635.00 <i>mileage, per diem, lodging</i>
CSS	Task 4	\$1,925.00 <i>traffic control</i>

**Total Directs      \$7,017.50**

**RICHLAND COUNTY  
ADMINISTRATION**

2020 Hampton Street, Suite 4069  
Columbia, SC 29204  
803-576-2050



**Agenda Briefing**

**To:** Chair of the Committee and the Honorable Members of the Committee  
**Prepared by:** Miller, Nathaniel  
**Department:** Transportation  
**Date Prepared:** June 12, 2019 **Meeting Date:** June 25, 2019

<b>Legal Review</b>		<b>Date:</b>	
<b>Budget Review</b>		<b>Date:</b>	
<b>Finance Review</b>		<b>Date:</b>	
<b>Other Review:</b>		<b>Date:</b>	
<b>Approved for Council consideration:</b>		Informational purposes only	
<b>Committee</b>	Transportation Ad Hoc		
<b>Subject:</b>	Service Order Modifications		

**Recommended Action:** No action is required. This briefing serves as information only.

**Motion Requested:** N/A

**Request for Council Reconsideration:**  Yes

N/A

**Fiscal Impact:** None

**Motion of Origin:** N/A

Council Member	
Meeting	
Date	

**Discussion:** The following attached, service modification (s) are to allow a contract time extension to a proposed end date of February 11<sup>th</sup>, 2020. This will allow necessary design and rights-of-way services to continue and be completed on the contracted roads. **NO FEE ADJUSTMENTS ARE PROPOSED BY THESE MODIFICATIONS.**

**Attachments:**

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 3-4 Dirt Road Paving  
**Service Order No.:** P&P#6  
**Modification No.:** 2  
**Consultant:** Parrish & Partners  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of July 2018) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$542,205.44
Contingency	\$54,220.54
<b>Total Service Order Budget</b>	<b>\$596,425.98</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$54,220.54
Authorized Contingency	\$32,274.00
<b>Available Contingency</b>	<b>\$21,946.54</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Additional Property Owners for RW Acquisition (Direct Expenses)	\$32,274.00	
2	Contract Time Extension (NO FEE ADJUSTMENT)		X
3			
4			
5			
6			
7			
8			
9			
10			

**\$32,274.00**



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 3-4 Dirt Road Paving  
**Service Order No.:** M&H#11  
**Modification No.:** 2  
**Consultant:** Mead & Hunt, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of April 2018) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed for the contracted road. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$29,183.00
Contingency	\$2,918.30
<b>Total Service Order Budget</b>	<b>\$32,101.30</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$2,918.30
Authorized Contingency	\$2,000.00
<b>Available Contingency</b>	<b>\$918.30</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	R/W Acquisition Services (Drainage Outfall Easements from (2) Property Owners)	\$2,000.00	
2	Contract Time Extension (NO FEE ADJUSTMENT)		X
3			
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9			
10			

**\$2,000.00**

*Be W Lee*

Accepted by: Richland PDT Project Manager (Signature)

*6/12/19*

Date

Accepted by: Authorized Richland County Management (Signature)

Date



# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 3-4 Dirt Road Paving  
**Service Order No.:** M&H#10  
**Modification No.:** 1  
**Consultant:** Mead & Hunt, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
 Department of Transportation  
 P.O. Box 192  
 2020 Hampton St.  
 Columbia, S.C. 29201

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of May 2018) to a proposed end date of February 11, 2020. This will allow necessary rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$86,400.00
Contingency	\$8,640.00
<b>Total Service Order Budget</b>	<b>\$95,040.00</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$8,640.00
Authorized Contingency	\$0.00
<b>Available Contingency</b>	<b>\$8,640.00</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Contract Time Extension (NO FEE ADJUSTMENT)		X
2			
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4			
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8			
9			
10			

\$0.00



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 3-4 Dirt Road Paving  
**Service Order No.:** M&H#9  
**Modification No.:** 1  
**Consultant:** Mead & Hunt, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of July 2018) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$435,676.47
Contingency	\$43,567.65
<b>Total Service Order Budget</b>	<b>\$479,244.12</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$43,567.65
Authorized Contingency	\$0.00
<b>Available Contingency</b>	<b>\$43,567.65</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Contract Time Extension (NO FEE ADJUSTMENT)		X
2			
3			
4			
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9			
10			

\$0.00



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 3-4 Dirt Road Paving  
**Service Order No.:** Holt#12  
**Modification No.:** 3  
**Consultant:** Holt Consulting  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of 7/18/18) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$578,073.00
Contingency	\$57,807.30
<b>Total Service Order Budget</b>	<b>\$635,880.30</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$57,807.30
Authorized Contingency	\$23,909.00
<b>Available Contingency</b>	<b>\$33,898.30</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Wetland Delineations, JD & Wetland Permitting (Tall Oaks Dr)	\$6,400.00	
2	Richland County Utilities Gravity Sewer Relocation (Tall Oaks Dr)	\$17,509.00	
3	Contract Time Extension (NO FEE ADJUSTMENT)		X
4			
5			
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7			
8			
9			
10			

**\$23,909.00**

Bee W Lee

Accepted by: Richland PDT Project Manager (Signature)

6/12/19

Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 3-4 Dirt Road Paving  
**Service Order No.:** CECS#5  
**Modification No.:** 1  
**Consultant:** CECS, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of July 2018) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$517,996.49
Contingency	\$51,799.65
<b>Total Service Order Budget</b>	<b>\$569,796.14</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$51,799.65
Authorized Contingency	\$0.00
<b>Available Contingency</b>	<b>\$51,799.65</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Contract Time Extension (NO FEE ADJUSTMENT)		X
2			
3			
4			
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9			
10			

\$0.00



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 3-4 Dirt Road Paving  
**Service Order No.:** C&D#5  
**Modification No.:** 1  
**Consultant:** Cox & Dinkins, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of July 2018) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$745,160.00
Contingency	\$74,516.00
<b>Total Service Order Budget</b>	<b>\$819,676.00</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$74,516.00
Authorized Contingency	\$0.00
<b>Available Contingency</b>	<b>\$74,516.00</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Contract Time Extension (NO FEE ADJUSTMENT)		X
2			
3			
4			
5			
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7			
8			
9			
10			

\$0.00



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 1-2 Dirt Road Paving  
**Service Order No.:** M&H#7  
**Modification No.:** 1  
**Consultant:** Mead & Hunt, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
 Department of Transportation  
 P.O. Box 192  
 2020 Hampton St.  
 Columbia, S.C. 29201

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of September 2017) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$439,600.00
Contingency	\$43,960.00
<b>Total Service Order Budget</b>	<b>\$483,560.00</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$43,960.00
Authorized Contingency	\$0.00
<b>Available Contingency</b>	<b>\$43,960.00</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Contract Time Extension (NO FEE ADJUSTMENT)		X
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8			
9			
10			

\$0.00



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 1-2 Dirt Road Paving  
**Service Order No.:** M&H#6  
**Modification No.:** 2  
**Consultant:** Mead & Hunt, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of September 2017) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$479,292.00
Contingency	\$0.00
<b>Total Service Order Budget</b>	<b>\$479,292.00</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$0.00
Authorized Contingency	\$0.00
<b>Available Contingency</b>	<b>\$0.00</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Add'l Design Services (Fee utilized contingency with remainder increasing PO)		
2	Contract Time Extension (NO FEE ADJUSTMENT)		X
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9			
10			

\$0.00



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 1-2 Dirt Road Paving  
**Service Order No.:** M&H#5  
**Modification No.:** 2  
**Consultant:** Mead & Hunt, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
 Department of Transportation  
 P.O. Box 192  
 2020 Hampton St.  
 Columbia, S.C. 29201

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of September 2017) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$259,454.30
Contingency	\$0.00
<b>Total Service Order Budget</b>	<b>\$259,454.30</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$0.00
Authorized Contingency	\$0.00
<b>Available Contingency</b>	<b>\$0.00</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Add'l Design Services (Fee utilized contingency with remainder increasing PO)		
2	Contract Time Extension (NO FEE ADJUSTMENT)		X
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10			

\$0.00



Accepted by: Richland PDT Project Manager (Signature)

6/12/19

Date

Accepted by: Authorized Richland County Management (Signature)

Date



# SERVICE ORDER MODIFICATION

**Project No./Name:** Years 1-2 Dirt Road Paving  
**Service Order No.:** M&H#4  
**Modification No.:** 3  
**Consultant:** Mead & Hunt, Inc  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
**P.O. Box 192**  
**2020 Hampton St.**  
**Columbia, S.C. 29201**

**DESCRIPTION:**

*This service order modification is to allow a contract time extension (from the original end date of July 2017) to a proposed end date of February 11, 2020. This will allow necessary design and rights of way services to continue and be completed on the contracted roads. NO FEE ADJUSTMENTS ARE PROPOSED BY THIS MODIFICATION.*

**SERVICE ORDER BUDGET SUMMARY**

**Amount**

Consultant Compensation	\$439,725.00
Contingency	\$43,972.50
<b>Total Service Order Budget</b>	<b>\$483,697.50</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$43,972.50
Authorized Contingency	\$8,850.00
<b>Available Contingency</b>	<b>\$35,122.50</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Additional Design & Surveys (Fee applied to original PO amount)		
2	Summer Haven / Haven Circle (Additional Survey & Engineering Services)	\$8,850.00	
3	Contract Time Extension (NO FEE ADJUSTMENT)		X
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**\$8,850.00**



Accepted by: Richland PDT Project Manager (Signature)



Date

Accepted by: Authorized Richland County Management (Signature)

Date

# SERVICE ORDER MODIFICATION

**Project No./Name:** 2016 Intersections  
**Service Order No.:** C&D#2  
**Modification No.:** 4  
**Consultant:** Cox & Dinkins  
**Modification Type:**  Contingency Authorization  
 Other

**RICHLAND COUNTY**  
**Department of Transportation**  
 P.O. Box 192  
 2020 Hampton St.  
 Columbia, S.C. 29201

**DESCRIPTION:**

*This service order modification is for design and permitting services necessary for the relocation of City of Columbia waterlines for the Gamers Ferry Rd / Harmon Rd Intersection Improvement project. This activity was not assumed in the original scope of work and has become evident per utility coordination services performed for this project. Refer to the attached scope and fee estimate for more information. This work is assumed to be an authorization from the existing contingency budget; therefore, no contract value increase is proposed.*

**SERVICE ORDER BUDGET SUMMARY**

	Amount
Consultant Compensation	\$550,665.00
Contingency	\$53,641.50
<b>Total Service Order Budget</b>	<b>\$604,306.50</b>

**CONTINGENCY AUTHORIZATIONS**

Contingency Budget	\$53,641.50
Authorized Contingency	\$53,545.00
<b>Available Contingency</b>	<b>\$96.50</b>

**MODIFICATION DETAILS**

Mod. No.	Description	Contingency Authorization	Other
1	Additional traffic counts & Traffic Signal Warrant Analysis & Technical Memo	\$2,490.00	
2	Traffic Signal Design & Plan Development	\$11,200.00	
3	Subsurface Utility Investigations & Engineering (localized)	\$27,055.00	
4	Waterline Relocation Design & Permitting Services (Gamers Ferry / Harmon)	\$12,800.00	
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10			

**\$53,545.00**

  
 Accepted by: Richland PDT Project Manager (Signature)

  
 Date

  
 Accepted by: Authorized Richland County Management (Signature)

  
 Date

**Water Relocations for the  
Garners Ferry Rd / Harmon Rd Intersection Improvement Project  
Engineering Services**

Davis & Floyd, Inc. is pleased to present this proposal for Professional Engineering Services for the relocation of City of Columbia (CITY) water infrastructure in relationship with the Garners Ferry Road/Harmon Road Intersection Improvement (RPP Project No. 297) (PROJECT) as conducted by Richland County (COUNTY) as part of the Richland County Penny Sales Tax Program (PROGRAM). The work does not include any private water infrastructure or other wet or dry utilities. Generally, the CITY has the following water infrastructure within the limits of this project:

- Approximately 1,230 LF of 12-inch waterline

**Support Services by Others**

The following support services are not included in Davis & Floyd's proposed scope of services. It is assumed that these services will either not be needed or will be provided by the COUNTY through the PROGRAM.

- Surveying, Subsurface Utility Engineering (SUE), locating private wells and septic systems, etc.
- Acquisition of rights-of-way and easement documents, as necessary.
- Geotechnical, including corrosion and stray current analysis, contaminated soils, etc.
- Environmental studies and design, including archaeological, endangered species, wetland and streams, site assessments, hazardous material removal and mitigation, etc.
- Detailed hydraulic analysis to determine waterline sizing and pressures, etc.
- Fees required for all permit applications and approvals.

Any other services or project needs, other than those as detailed in this scope of work, which may be discovered and deemed necessary during the relocation services, will be conducted by the COUNTY and coordinated with the CITY, as necessary.

It is assumed that the CITY's waterlines will be relocated within the areas of new rights-of-way proposed, or existing rights-of-way, as acquired and included in the development of the PROJECT. Should any additional easement acquisitions (outside of the proposed roadway rights of way) be determined to be necessary for the waterline relocations, this work will be conducted by the COUNTY, in coordination with the CITY. In regards to prior rights, for those locations where the CITY may hold existing prior rights, these rights are proposed to be retained / maintained with the relocation efforts as part of the PROJECT, conducted by the COUNTY and in coordination with the CITY.

**Design Services**

Davis & Floyd will develop final design drawings and specifications for the proposed waterline relocations owned by the CITY. Conceptual horizontal alignments will be submitted for approval prior to beginning final design. Final drawing submittals will include 90% and 100% plans. These documents will be prepared to show the scope, extent, and character of the work to be furnished and performed by the Contractor for construction of the work elements described.

Pending Approvals (with County)

1. Shop Road Widening Internal Funds Transfer
2. 1 Railroad Agreements (3 Rivers Greenway and Shop Road Phase 2) need payments
3. Chatsworth SUP Maintenance Determination with County

## **Item 5,a: Approval of Scopes of Work for Design Contracts**

Approval of Scopes of Work for Design Contracts (each project has had at least 1 public meeting conducted, and Council has previously approved public meeting summary and recommended improvements for future design)

### 5,a,i: Projects Under Referendum

- Shop Road Extension Phase 2 – 30% complete plans have been prepared. Proposed scope includes services for the preparation of 100% Final Construction Plans for a new location, 2-lane roadway from Longwood to Garners Ferry.
- Blythewood Area Improvements – 30% complete plans have been prepared for McNulty. Proposed scope includes services for the preparation of 100% Final Construction Plans for a 3-lane section from Blythewood to Main (north of Blythewood Road). Also the proposed scope includes services for the preparation of 100% Final Construction Plans for the Creech Connector which would be a new location 3-lane section also from Blythewood to Main (south of Blythewood Road).
- Broad River Corridor NIP – Concept plans have been prepared. Proposed scope includes services for 70% Complete Plans for 3 intersections along Broad River Road (Greystone, Bush River, and St. Andrews). After receipt of 70% plans and cost estimates to determine impacts, a final scope would then be developed for the remaining design.
- Trenholm Acres/Newcastle NIP - Concept plans have been prepared. Proposed scope includes services for 70% Complete Plans for various locations of sidewalks and studying locations of landscaped median. After receipt of 70% plans and cost estimates to determine impacts, a final scope would then be developed for the remaining design.
- Smith/Rocky Branch Greenway – A concept study has been prepared. Proposed scope includes services for 70% Complete Plans for a greenway from Olympia Avenue to the Congaree River tying in to the existing Granby greenway. After receipt of 70% plans and cost estimates to determine impacts, a final scope would then be developed for the remaining design.
- Crane Creek Greenway - A concept study has been prepared. Proposed scope includes services for 100% Complete Plans for a greenway from Canal Front Park adjacent to the Broad River to a point along Mountain Drive following an existing City easement.

### 5,a,ii,: Proejcts Above Referendum

- Polo Road Widening – 30% complete plans have been prepared. Proposed scope includes services for the preparation of 100% Complete Plans for a 3-lane roadway with a Shared Use Path on one side, from Mallet Hill to Two Notch Road.
- Lower Richland Boulevard Widening - 30% complete plans have been prepared. Proposed scope includes services for the preparation of 100% Complete Plans for a 5-lane roadway with a Shared Use Path on one side and sidewalk on the other, from Garners Ferry to Rabbit Run.

**PROJECT: 321 INNOVISTA TRANSPORTATION RELATED PROJECTS 2 - GREENE STREET PHASE 2**  
**District(s): 05**



**SCOPE:** This project consists of converting Greene Street from a 4-lane and 2-lane roadway to a 3-lane curb and gutter roadway with sidewalks and dedicated bike lanes from Huger Street to Gadsden Street. Additionally, this project includes a new bridge over the Norfolk Southern and CSX railroads to reconnect Greene Street. The project also includes permanently closing Devine Street between Pulaski Street and Gadsden Street and Gadsden Street behind the USC Greek Village at the Norfolk Southern crossings once the Greene Street roadway and bridge are open to traffic.

**SCHEDULE:**

	2015	2016	2017	2018	2019	2020	2021
Design	[Bar]						
Right of Way		[Bar]					
Utilities			[Bar]				
Construction					[Bar]		

**FUNDING:**

Phase	Referendum	*2019 Q1 Estimate
Planning & Delivery		\$1,370,427.16
Design		\$1,322,404.00
Right of Way		\$2,261,790.83
Utilities		\$3,075,955.52
Construction	\$31,800,000.00	\$20,407,312.53
<b>Total:</b>	<b>\$31,800,000.00</b>	<b>\$28,437,890.04</b>

Note: \$50M in Referendum for Phases 1, 2 and 3. Currently allocated: \$18M to Phase 1 and \$32M to Phase 2. Funds remaining at completion of Phases 1 and 2 will be allocated to Phase 3.

**PHASE:** Right of Way Phase

**STATUS:** The project has been approved for construction by the South Carolina Department of Transportation and City of Columbia. Both railroad (Norfolk Southern and CSX Transportation) construction agreements are fully executed. Right-of-Way acquisition is nearing completion. Project is scheduled to be advertised in June with construction anticipated to begin in Fall 2019.

**PROJECT: 783 RESURFACING PACKAGE "R"**



**SCOPE:** Milling, full depth patching, and/or resurfacing of approximately 12.02 miles of roadway located within Richland County.

Sub Projects	District(s)	Status	Sub Projects	District(s)	Status
1 Ashleys Place	11	Construction Phase	25 Padgett Woods	11	Construction Phase
2 Averill Lane	01	Construction Phase	Boulevard		
3 Bedford Way	11	Construction Phase	26 Pear Tree Circle	11	Construction Phase
4 Belk Court	02	Construction Phase	27 Prince Charles Court	11	Construction Phase
5 Bent Oak Court	07	Construction Phase	28 Radcot Court	08	Construction Phase
6 Berkeley Forest Court	11	Construction Phase	29 Ragsdale Drive	11	Construction Phase
7 Berkeley Forest Drive	11	Construction Phase	30 Raintree Court	11	Construction Phase
8 Bronlow Drive	01	Construction Phase	31 Raintree Lane	11	Construction Phase
9 Bucktail Way	01	Construction Phase	32 Ramblewood Drive	11	Construction Phase
10 Candlewood Drive	11	Construction Phase	33 Redington Way	01	Construction Phase
11 Cardington Drive	11	Construction Phase	34 Regents Court	11	Construction Phase
12 Carolina Pines Drive	02	Construction Phase	35 Salusbury Lane	08	Construction Phase
13 Exton Shore Drive	11	Construction Phase	36 Spring Hope Road	10	Construction Phase
14 Falbrook Court	01	Construction Phase	37 Staffwood Court	01	Construction Phase
15 Flowerwood Drive	11	Construction Phase	38 Staffwood Drive	01	Construction Phase
16 Greys Court	11	Construction Phase	39 Stonemedede Drive	01	Construction Phase
17 Jadetree Court	11	Construction Phase	40 Ventura Court	08	Construction Phase
18 Kildare Drive	11	Construction Phase	41 W Royal Tower Drive	01	Construction Phase
19 Mountainbrook Drive	11	Construction Phase	42 Winding Creek Lane	08	Construction Phase
20 Murifield Court W	09	Construction Phase	43 Woodhouse Court	01	Construction Phase
21 N Royal Tower Drive	01	Construction Phase	44 Woodlands West	09	Construction Phase
22 Northpoint Boulevard	02	Construction Phase	45 Wyncliff Court	01	Construction Phase
23 Oak Knoll Drive	02	Construction Phase			
24 Osbourne Lane	01	Construction Phase			

**STATUS:** This project will be advertised for bids in June 2019.

Dirt Road Package K (Potential List)

1. Robert James Rd- District 10
2. Barkley Rd- District 11
3. Rocky Rd- District 11
4. South Dr- District 10
5. Dogwood Shores – District 11
6. Lake Dogwood Shores – District 11
7. Wider Rd- District 11



**PROJECT: 271 ATLAS RD WIDENING**  
**District(s): 10, 11**



**SCHEDULE:**

	2015	2016	2017	2018	2019	2020	2021	2022
Design	[Bar]							
Right of Way		[Bar]						
Utilities		[Bar]						
Construction					[Bar]			

**FUNDING:**

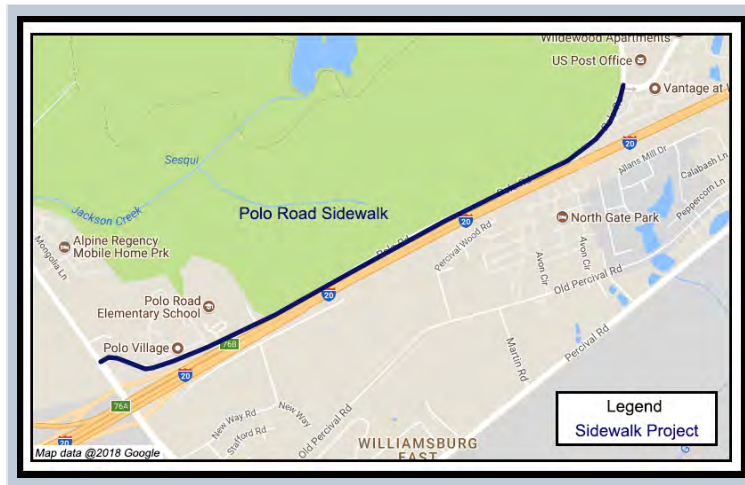
Phase	Referendum	*2019 Q1 Estimate
Planning & Delivery		\$2,159,929.99
Design	\$1,000,000.00	\$2,272,964.03
Right of Way	\$1,900,000.00	\$2,776,558.28
Utilities	\$1,500,000.00	\$6,860,501.75
Construction	\$13,200,000.00	\$29,893,567.21
<b>Total:</b>	<b>\$17,600,000.00</b>	<b>\$43,963,521.26</b>

**SCOPE:** The proposed scope recommends a 3-lane (2 travel lanes with a center turn lane) widened roadway from Bluff Road to Shop Road and then a 5-lane (4 travel lanes with a center turn lane) roadway from Shop Road to Garners Ferry Road. These improvements will accommodate bicyclists through the use of 4-foot on-street bike lanes and provide for pedestrians through the use of 5-foot sidewalks constructed behind the curb.

**PHASE:** Right of Way Phase

**STATUS:** The Right-of-Way acquisition is complete. The Norfolk Southern and CSX Transportation railroad construction agreements have been fully executed. Revised final construction plans are under review by the South Carolina Department of Transportation (SCDOT). Final utility relocation plans are under review by the City of Columbia. Construction is anticipated to begin in 2019.

**PROJECT: 180 POLO RD SIDEWALK (MALLET HILL RD TO ALPINE RD)**  
**District(s): 08, 09, 10**



**SCHEDULE:**

	2015	2016	2017	2018	2019	2020
Design	[Bar spanning 2015-2019]					
Right of Way			[Bar spanning 2017-2019]			
Utilities			[Bar spanning 2017-2019]			
Construction					[Bar spanning 2019-2020]	

**FUNDING:**

Phase	Referendum	*2019 Q1 Estimate
Planning & Delivery		\$131,294.83
Design		\$224,000.00
Right of Way		\$251,690.00
Utilities		\$133,532.65
Construction	\$403,444.00	\$2,195,253.27
<b>Total:</b>	<b>\$403,444.00</b>	<b>\$2,935,770.75</b>

**SCOPE:** Project consists of a shared-use path along the north side of Polo Rd. from Alpine Rd. to Mallet Hill Rd.

**PHASE:** Construction Phase

**STATUS:** Project advertised as Package S11 with Harrison Road Sidewalk on April 17, 2019. Bids were opened on May 22, 2019. Bids were over engineer's estimate and the projects will be rebid individually.

**PROJECT: 164 HARRISON ROAD SIDEWALK (TWO NOTCH RD. TO FOREST DR.)  
District(s): 03**



**SCHEDULE:**

	2015	2016	2017	2018	2019	2020
Design	[Bar spanning 2015-2019]					
Right of Way			[Bar spanning 2017-2019]			
Utilities			[Bar spanning 2017-2020]			
Construction					[Bar spanning 2019-2020]	

**FUNDING:**

Phase	Referendum	*2019 Q1 Estimate
Planning & Delivery		\$114,065.82
Design		\$253,000.00
Right of Way		\$96,240.00
Utilities		\$175,506.06
Construction	\$600,000.00	\$1,312,552.81
<b>Total:</b>	<b>\$600,000.00</b>	<b>\$1,951,364.69</b>

**SCOPE:** Project consists of a 5 ft. wide sidewalk on one side of Harrison Road from Two Notch Road to Forest Drive.

**PHASE:** Construction Phase

**STATUS:** Project advertised as Package S11 with Polo Road Sidewalk on April 16, 2019. Bids were opened on May 22, 2019. Bids were over engineer's estimate and the projects will be rebid individually.



**Agenda Briefing**

**To:** Chair of the Committee and the Honorable Members of the Committee  
**Prepared by:** Allison Steele, P.E., Deputy Director, Transportation Department  
**Department:** Richland County Transportation  
**Date Prepared:** May 23, 2019 **Meeting Date:** May 28, 2019

<b>Legal Review</b>	N/A	<b>Date:</b>	
<b>Budget Review</b>	N/A	<b>Date:</b>	
<b>Finance Review</b>	N/A	<b>Date:</b>	
<b>Other Review:</b>	N/A	<b>Date:</b>	
<b>Approved for Council consideration:</b>	Acting County Administrator	Dr. John Thompson, Ph.D., MBA, CPM	

**Committee**

**Subject:** Penny Projects Within SCDOT Rights-Of-Way-Maintenance Cost Impacts

**Background Information:**

Many projects included in the Penny Program fall within South Carolina Department of Transportation’s (SCDOT) Rights-Of-Way. Projects in two of the major categories, Neighborhood Improvement Projects and Sidewalks, propose the installation of certain features that SCDOT has stated they will not maintain, meaning the County would be responsible for maintenance within SCDOT’s ROW in perpetuity.

Some of these features are landscaped medians, street lighting, mast arm traffic lights, and shared use paths (SUPs). Council has already approved the installation of SUPs in several locations, which would be a shared maintenance responsibility between the County and SCDOT (see attachment (1) Clemson Rd. Maintenance Agreement as an example.)

Further, County Ordinance Section 21-12 states that the County shall not install street lighting until funds are appropriated to provide that service countywide (see attachment 2). The funding required would be for the installation, maintenance and monthly electric bill.

**Recommended Action:**

Staff requests Council to provide guidance on whether or not to proceed with including these project features in future projects.

**Motion Requested:**

Motion is subject to guidance from the Committee

**Request for Council Reconsideration:** No

**Fiscal Impact:**

1. SUP\Vegetated Buffer Maintenance (Labor and Materials) – approximately \$11,100\mile - annually
2. Mast Arm Signals (Labor and Materials) – approximately \$26,000 to replace
3. Landscaped Medians (Labor Only) – approximately \$5,460\quarter mile – annually
4. Street Lighting (Including Energy & Maintenance) – approximately \$49,200\mile – annually

Estimates are derived from Public Works Roads & Drainage labor and materials costs, City of Columbia labor costs and from PDT research.

**Motion of Origin:**

This request did not result from a Council motion. This was a request for information originating out of the Dirt Road Ad Hoc Committee and Transportation Ad Hoc Committee

Council Member	N/A
Meeting	N/A
Date	N/A

**Discussion:**

Maintaining these items in SCDOT’s ROW would mean the County would incur the maintenance costs, but it also means the County shares in the liability for any incidents that may arise involving these project features.

To incur these maintenance responsibilities, an increase in the Public Works Roads & Drainage budget would be necessary.

**Attachments:**

1. Clemson Rd. Maintenance Agreement
2. Street Lighting Ordinance Section 21-12
3. Maintenance Items By Project
4. Updated Street Lighting Cost Estimates
5. Staff responses to Committee’s questions posed on 5/28/19

## APPENDIX 1 – MAINTENANCE PARTNERSHIP AGREEMENT

2/17/00

THIS AGREEMENT is entered this 15<sup>th</sup> day of June, 2013 by and between Richland County, hereinafter referred to as County, and the South Carolina Department of Transportation, hereinafter referred to as SCDOT.

WHEREAS, in accordance with Sections 57-3-110 (1) and (10), 57-3-650, 57-23-10, 57-23-800(E), 57-25-140, and the SCDOT's Policy of Vegetation Preservation on SC Highways, SCDOT is authorized to allow landscaping and beautification efforts on SCDOT right of ways;

WHEREAS, the County has previously obtained a Cooperative Intergovernmental Agreement (IGA) for the coordination of the Richland County Sales Tax Transportation Program to access SCDOT's right of way for construction and/or improvement of transportation facilities. Said IGA is described as follows:

IGA Number: 25-14      Date Issued: February 7, 2014

Location: Clemson Road from Old Clemson Road to Sparkleberry Crossing Road;

WHEREAS, SCDOT and the County are desirous of entering into this Agreement to grant a continuous license to the County to enter the SCDOT's right of way to conduct routine maintenance of landscaping, beautification and/or enhancements permitted by the aforesaid IGA;

NOW THEREFORE, in consideration of mutual promises, SCDOT and the County agree to the following:

1) SCDOT grants the County a license to enter onto the SCDOT right of way at the area defined by the intergovernmental agreement. The purpose of the license to enter is limited to routine maintenance of the intergovernmental agreement area. Such entry will be limited to the scope of the work identified in the intergovernmental agreement. No additional encroachment beyond that contemplated by the original intergovernmental agreement is allowed. If additional maintenance, enhancement and/or beautification efforts, different from the original scope of work identified in the intergovernmental agreement, is requested, the County will be required to submit a new intergovernmental agreement identifying the new scope of work. Entry onto SCDOT right of way pursuant to this agreement may be without notice to the SCDOT.

2) The County agrees to post all necessary traffic control devices and take all necessary precautions in conformance with SCDOT traffic control standards and as required by the SCDOT, along the SCDOT right of way prior to and during the performance of any routine maintenance, enhancement and/or beautification efforts.

3) SCDOT agrees to accept maintenance responsibilities for the shared use path concrete structure not to include cleaning or hazardous weather maintenance of the surface.

4) The County agrees to accept maintenance responsibilities for maintenance of the shared use path's surface to include cleaning and hazardous weather maintenance of the surface.

5) The County agrees to maintain the vegetation zone located between the edge of roadway and the shared use path as well as the vegetation zone on the outside shoulder of the path. This maintenance includes, but is not limited to, mowing and clearing/limbing vegetation management.

6) The County agrees to be responsible for all claims or damages arising from the work performed by the County, its employees or agents, but only within the limits of the SC Tort Claims Act. In addition, should the County use a contractor for performance of the work, the County shall insert a hold harmless and indemnification clause in its contract with all contractors and subcontractors which requires the contractor and subcontractor to indemnify and hold

**MAINTENANCE PARTNERSHIP AGREEMENT, PAGE 2**

harmless the County and the State of South Carolina, specifically the SCDOT, from any liability, claims or damages which may arise from the performance of the work on SCDOT right of way. . Nothing in this Agreement shall be construed to expand County liability for its actions in SCDOT's right of way beyond the limits of the S. C. Tort Claims Act. Further, the County agrees that they are subject to S. C. Code Section 57-5-140, which provides that SCDOT shall not be liable for damages to property or injuries to persons, as otherwise provided for in the Torts Claims Act, as a consequence of the negligence by a municipality in performing such work within the State highway right of way.

7) This Agreement shall not be modified, amended or altered except upon written consent of the parties. Neither party shall assign, sublet, or transfer its interest in this Agreement without the written consent of the other.

8) This Agreement may be terminated upon thirty days' written notice to the other party; however, in cases where the County is not performing in accordance with this Agreement, SCDOT shall give written notice to the County of the failure in performance and, if the County does not correct or cure the performance within three days of receipt of the notice, SCDOT shall have the option to terminate this license immediately, and shall, thereafter, give written notice of such termination to the County.

IN WITNESS HEREOF, the above parties have hereunto set their hands and seals.

SOUTH CAROLINA DEPARTMENT OF  
TRANSPORTATION

By: Robert C. Robinson  
Its: DEA  
Recommended by: \_\_\_\_\_

RICHLAND COUNTY

By: Sandra Yuice  
Its: \_\_\_\_\_  
Sandra Yuice, Ph.D.  
Assistant County  
Administrator

Richland County Attorney's Office

Elizabeth L. Miller  
Approved As To LEGAL Form Only.  
No Opinion Rendered As To Content.

(c) The developer of any new subdivision constructed within the jurisdiction and authority of the county is responsible for the initial installation of all necessary traffic control devices in accordance with an approved signage plan. The department of public works shall maintain the devices after acceptance of the streets.

(Code 1976, § 8-1005; Ord. No. 005-03HR, § I, 1-21-03; Ord. No. 052-05HR, § I, 7-12-05; Ord. No. 046-07HR, § I, 5-15-05)

**Sec. 21-12. Street lighting.**

The county shall not provide street lighting on any highway, street or road until such time as sufficient funds are appropriated to provide that service county-wide. Homeowners or homeowner's associations may obtain street lighting through contractual arrangements with the electric utility serving their area.

(Ord. No. 005-03HR, § I, 1-21-03)

**Sec. 21-13. Emergency maintenance of roads.**

(a) No work may be performed on any roadway not already maintained by the county unless the county administrator determines that access to such roadway is necessary for the performance of one or more public functions, and the following conditions exist:

- (1) Such a roadway is the only access for one (1) or more property owners or residences, and
- (2) Emergency medical services, sheriff department vehicles and other county vehicles cannot, in the lawful performance of their duties, gain full and immediate access to at least one (1) residence unless road scraping is performed, and
- (3) At least one (1) of the properties to be accessed is used as a primary residence.

(b) Any work pursuant to this section will be done on a one-time basis only. In such cases, the county department of public works is limited to the minimum improvements that will allow full and immediate access to the affected residences. Crusher-run, gravel, pipe or other materials will not be routinely provided.

(Code 1976, § 8-1007; Ord. No. 1846-89, § I, 3-21-89; Ord. No. 2372-93, § I, 11-16-93; Ord. No. 005-03HR, § I, 1-21-03; Ord. No. 032-13HR, § I, 7-2-13)

**Sec. 21-14. Abandonment of public roads and right-of-ways.**

(a) Any person or organization wishing to close an existing public street, road, or highway in the county to public traffic shall petition a court of competent jurisdiction in accordance with section 57-9-10, et seq. of the state code of laws. The petition shall name the county as a respondent (unless the county is the petitioner). The county attorney shall advise the court with regard to the county's concurrence or opposition after consultation with the county's planning, public works, and emergency services departments, and after consideration by county council. It shall be the responsibility of the petitioner to physically close the roadway if a petition is successful. The county attorney may submit such petition on behalf of the county if so directed by county council.

(b) Any person or organization wishing the county to abandon maintenance on an existing county-maintained street, road or highway shall submit to the public works department a petition to do so signed by the owners of all property adjoining the road and by the owners of all property who use the road as their only means of ingress/egress to their property. The petition shall state that the property owners release and indemnify the county from any duty to maintain the road. At the recommendation of the county engineer, the county administrator shall have the authority to act on a petition that involves a dead-end road; county council shall have the authority to approve petitions



## Maintenance Items by Project

June 7, 2019

### Existing Maintenance Agreements

1. Clemson Road Widening – Shared Use Path (Existing Agreement) *Sparkleberry Crossing to Old Clemson Road – both sides of road and along Earth Road to Peach Grove Ct – one side of road = 3.722 miles*
2. Southeast Richland Neighborhood Improvements – Shared Use Path (Existing Agreement) *Garners Ferry Road to Rabbit Run, Rabbit Run to Lower Richland Blvd and Lower Richland Blvd to Lower Richland High School – one side of road = 1.634 miles*
3. Polo Road Sidewalk – Shared Use Path (Existing Agreement) *Alpine Road to Mallet Hill Road – one side of road = 1.701 miles*

### Maintenance to be Performed by Others

1. North Main Street Widening – Landscape Median, Mast Arms, Lighting (City to Maintain)
2. Blythewood Road Widening – Shared Use Path (Town of Blythewood to Maintain) *I-77 to Syrup Mill Road – both sides of road = 1.665 miles*
3. Blythewood Road Phase 2 (Creech Connector) – Shared Use Path (Town of Blythewood to Maintain, to be confirmed during design) *Current Concept from Blythewood Road to Main Street – one side of road = 0.440 miles*

### Maintenance Under Consideration for Richland County

1. Bluff Road Phase II Improvements – Shared Use Path *Berea Road to Blair Road – both sides of road = 2.519 miles*
2. Lower Richland Boulevard Widening – Shared Use Path *Garners Ferry Road to Lower Richland High School – both sides of road = 0.384 miles*
3. Pineview Road Improvements – Shared Use Path *Bluff Road to Garners Ferry Road – one side of road = 2.811 miles*
4. Polo Road Widening – Shared Use Path *Two Notch Road to Mallet Hill Road – one side of road = 1.884 miles*
5. Shop Road Widening – Shared Use Path *George Rogers Blvd to Mauney Drive – both sides of road = 4.061 miles*
6. Clemson Road/Sparkleberry Lane Intersection – Shared Use Path *Clemson Road from I-20 to Sparkleberry Crossing – both sides of road, Sparkleberry Lane from Mallet Hill Road to Sparkleberry Crossing – one side of road, and Sparkleberry Crossing to Clemson Road – both sides of road = 1.144 miles*

7. Decker/Woodfield Neighborhood Improvements – Shared Use Path *Chatsworth Pedestrian Connector = 0.133 miles*, Landscaped Medians *Decker Blvd = 0.424 miles*, Lighting *Chatsworth Pedestrian Connector, Brookfield Road Sidewalk from Decker Blvd to Richland NE High School and Decker Blvd Streetscape from Trenholm Road to Percival Road = 2.680 miles*, Mast Arms 8
8. Bull Street/Elmwood Avenue Intersection – Mast Arms 4
9. Broad River Corridor Neighborhood Improvements – Mast Arms 10, Landscaped Medians *Broad River Road and intersections with Greystone Blvd, Bush River Road and St. Andrews Road = 0.500 miles*
10. Crane Creek Neighborhood Improvements – Landscaped Medians along Monticello Road *0.500 miles*
11. Trenholm Acres/Newcastle Neighborhood Improvements – Landscaped Medians *Fontaine Road, Two Notch Road and Parklane Road = Conceptual 1000' to 2.650 miles*
12. Spears Creek Church Road Widening – Unknown

## Lighting Cost Estimate\*

6/10/2019

\*The estimates assume a 15-year lease from Dominion Energy. Dominion Energy will install and maintain the lighting.

\*These estimates were based on information from Dominion Energy for the Decker Blvd. / Woodfield Park Neighborhood Improvement Project.

### Scenario 1: Money Down with Monthly Fee

	Cost / Mile		Total for 15-year Period (Cost / Mile) <sup>3</sup>	
	Pedestrian Path <sup>1</sup>	4 or 5-lane Roadway <sup>2</sup>	Pedestrian Path <sup>1</sup>	4 or 5-lane Roadway <sup>2</sup>
Money Down	\$ 408,000.00	\$ 485,000.00	\$ 444,000.00	\$ 578,600.00
Monthly Fee	\$ 200.00	\$ 520.00		

### Scenario 2: Zero Money Down / Monthly Fee Only

	Cost / Mile		Total for 15-year Period (Cost / Mile) <sup>3</sup>	
	Pedestrian Path <sup>1</sup>	4 or 5-lane Roadway <sup>2</sup>	Pedestrian Path <sup>1</sup>	4 or 5-lane Roadway <sup>2</sup>
Money Down	\$ -	\$ -	\$ 570,600.00	\$ 738,000.00
Monthly Fee	\$ 3,170.00	\$ 4,100.00		

1. Assumes Acorn-style LED lighting with new poles
2. Assumes Acorn-style LED lighting with new poles and Cobrahead LED lighting mounted on existing wood poles.
3. Total Cost/Mile for 15-Year Lease Period = Money Down + Monthly Fee \* 12 months / year \* 15 years



Acorn-Style Lighting



Cobrahead Lighting

## Maintenance Items Q & A (Updated 6/21)

### Questions from Transportation Committee Meeting Held On 5/28/19

1. How many miles of Shared Use Paths (SUPs) and Landscaped Medians (LMs) are proposed to be maintained by the County? **Approximately 20 miles of SUPs and 4 miles of LMs**
2. How many mast arms are proposed to be maintained by the County? **22**
3. (new) If a driver were to run into and damage a County-maintained mast arm, would the County require that driver or his insurance company to pay for repair\replacement? **Risk Management would attempt to go after them for indemnification but there would be no guarantee that the driver even has insurance or that RM would be successful in recovering any costs. Also if damage were done to the mast arm for some other reason (i.e. tornado, tree down, etc.) the County would be responsible for its repair. If the mast arm goes down and causes damage to property such as a car, the County could also be liable for that property damage. If a traditional signal is installed, all of this responsibility would fall to SCDOT.**
4. Are any beautification organizations willing to assist with maintain landscaped medians? **Keep The Midlands Beautiful was contacted, and they responded that they only focus on litter and recycling efforts. Quinton Epps with the Conservation Division was contacted, and he was unaware of any organizations that would be interested in maintaining LMs.**
5. Lighting Cost Chart – An updated lighting chart has been provided with two options: pre-pay the full amount of installation and maintenance and then just have a monthly electric bill or pay zero up front and have a monthly bill that includes electric and installation\maintenance.
6. What would be the cost to provide street lighting Countywide? **The following is the mileage of roadways that the County currently maintains:**
  - a. Paved – 591.92
  - b. Unpaved – 212.91
  - c. Total – 804.83

The cost estimates provided by the PDT are for 4\5 lane roadways and were based specifically on the Decker\Woodfield project. Almost all of the County's current roads are two-lane, so just to get a very rough estimate to provide street lighting County wide we would assume half the costs listed in the attachment which provides the numbers below:

  - a. Scenario 1 15-year cost – \$232,837,319
  - b. Scenario 2 15-year cost - \$296,982,270
7. IGA between SCDOT and County for maintenance of SUPs in the Town of Blythewood. Staff was directed to change this IGA to be an agreement between SCDOT and Blythewood. **County staff is currently working to update the IGA to reflect Blythewood instead of the County.**
8. The Committee requested the three IGAs that have already been executed between the County and SCDOT be re-evaluated to see if they should be changed as well.
  - a. Clemson Rd IGA – A portion of the proposed SUP falls within unincorporated County and a portion within the City of Columbia. Create an IGA between the City and SCDOT for the portion within the City's limits?
  - b. Southeast Richland Neighborhood Improvements (SERN) IGA – This entire project falls within unincorporated County.
  - c. Polo Rd. IGA - This entire project falls within unincorporated County.
9. Light pollution\impacts to wildlife (Picture 1)

- a. Animals - Artificial light can disrupt the nighttime environment of nocturnal animals, impact wetland habitats, and affect bird migration that relies on moonlight\starlight navigation
- b. Humans – Blue light has been shown in some studies to negatively impact humans such as vision and sleep disruption; however, this is related more to interior lighting and electronics. Glare appears to be the biggest issue with outdoor lighting.
- c. Sky Glow - Brightness of the night sky in a built-up area as a result of light pollution. This can best be understood by observing the two photos on the following page.



Picture (1): Before and during the 2003 Northeast blackout, a massive power outage that affected 55 million people. Photo by of Todd Carlson