

Department of Engineering/Road Management
Dan Gaillet, P.E., County Engineer/ Road Manager

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MEMORANDUM

August 30, 2017

To: Sheila Jones, Supervisor, District I
Trey Baxter, Supervisor, District II
Gerald Steen, Supervisor, District III
David Bishop, Supervisor, District IV
Paul Griffin, Supervisor, District V

From: Dan Gaillet, P.E.
County Engineer and Road Manager *DG*

Re: Deerfield Reconstruction

The Engineering Department recommends that the Board hire Neel Schaffer, Inc. for design engineering for the reconstruction of North Deerfield Drive for a fee not to exceed \$48,000.

AGREEMENT FOR PROFESSIONAL SERVICES

BETWEEN

Madison County

AND

NEEL-SCHAFFER, INC.

This is an Agreement made on _____, 2017, between the Madison County Board of Supervisors, Madison County, Mississippi, the OWNER, and NEEL-SCHAFFER, INC., the ENGINEER.

The OWNER intends to improve roads within Deerfield Subdivision, which is described in more detail in Exhibit A, *Project Description*, and hereinafter called the "Project."

Exhibit B contains the "Scope of Design Phase Services" while the "Project Schedule" is contained in Exhibit C. Compensation is detailed in Exhibit D, "Payment to Engineer".

The OWNER and the ENGINEER, in consideration of the mutual covenants herein, agree with respect to the performance of professional engineering services by the ENGINEER relative to the Project and the payment for these services by the OWNER as set forth herein.

SECTION 1 — BASIC SERVICES OF ENGINEER

1.1 **ENGINEER** shall provide for **OWNER** professional engineering services for all phases of the **Project** to which this Agreement applies as hereinafter provided. These services will include serving as **OWNER's** professional engineering representative for the **Project**, providing consultation and advice and furnishing customary engineering services.

1.2 By execution of this Agreement, **OWNER** authorizes **ENGINEER** to provide Basic Services for the Design Phase of the **Project** in accordance with Exhibit B, "Scope of Design Phase Services."

SECTION 2 — ADDITIONAL SERVICES OF ENGINEER

If authorized in writing by **OWNER**, **ENGINEER** shall provide, or obtain from other qualified persons or firms, Additional Services which are not included as part of the Basic Services specified in Section 1. Additional Services shall include, but are not limited to, the following:

2.1. Services resulting from significant changes in the general scope, extent or character of the **Project** designed or specified by **ENGINEER** or its design including, but not limited to, changes in size, complexity, **OWNER's** schedule, character of construction or method of financing; and revising

previously accepted studies, reports, design documents or Contract Documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents, or are due to any other causes beyond **ENGINEER's** control.

2.2. Preparing documents for alternate bids requested by **OWNER** for Contractor's work which is not executed or documents for out-of-sequence work.

2.3. Services resulting from the award of more than one separate prime contract for construction, materials or equipment for the **Project** unless multiple awards were contemplated and included as part of Basic Services in Section 1.

2.4. Assistance in connection with rebidding or renegotiating contracts for construction which involve modifying the Contract Documents to revise the **Project's** general scope, extent or character as necessary to reduce or increase the Construction Cost to bring it within the cost limit.

2.5. Preparing to serve or serving as a consultant or witness for **OWNER** in any litigation, arbitration or other legal or administrative proceeding involving the **Project**.

2.6. Services in making revisions to Contract Documents occasioned by the acceptance of

substitutions proposed by Contractor; and services after the award of the construction contract in evaluating and determining the acceptability of an unreasonable or excessive number of substitutions proposed by Contractor.

2.7. Services resulting from significant delays in Project schedule which occurred through no fault of **ENGINEER**.

2.8. Additional or extended services during construction made necessary by (a) work damaged by fire or other cause during construction; (b) a significant amount of defective, neglected or delayed work of Contractor or supplier; (c) protracted or extensive assistance in the startup or utilization of any equipment or system; (d) acceleration of the progress schedule involving services beyond normal working hours; and (e) default or bankruptcy by Contractor.

2.9. Services during out-of-town travel required of **ENGINEER** other than visits to the Project site or **OWNER's** office.

2.10. Additional Services in connection with the Project, including services which are to be furnished by **OWNER** in accordance with Section 3 and services not otherwise provided for in Basic Services as specified in Section 1 of this Agreement.

SECTION 3 — **OWNER's** RESPONSIBILITIES

OWNER shall do the following in a timely manner so as not to delay the services of **ENGINEER** and bear all costs incident thereto:

3.1. Designate in writing a person to act as **OWNER's** representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions and receive information, with respect to **ENGINEER's** services for the Project.

3.2. Provide all criteria and full information as to **OWNER's** requirements for the Project, including design objectives and constraints; space, capacity and performance requirements; and flexibility, expendability, and any budgetary limitations. Also furnish copies of additional design and construction standards which **OWNER** will require to be included in the Contract Documents.

3.3. Assist **ENGINEER** by placing at **ENGINEER's** disposal available information pertinent to the Project including previous reports; geotechnical information; utility locations; property descriptions, zoning, deed and other land use restrictions; and any other data relative to design or construction of the Project. **ENGINEER** shall not be liable for any claims for injury or loss arising from errors, omissions or inaccuracies in documents or other information provided by the **OWNER**.

3.4. Arrange for access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under this Agreement.

3.5. Examine studies, reports, sketches, drawings, specifications, proposals and other documents presented by ENGINEER and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER.

3.6. Acquire property for easements and rights-of-way required for construction of the Project.

3.7. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of any development that affects the scope or timing of ENGINEER's services, or any defect or nonconformance in the work of the ENGINEER or of any Contractor.

SECTION 4 — PERIOD OF SERVICE

4.1. The provisions of this Section 4 and the various rates of compensation for ENGINEER's services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion of all phases to which this Agreement applies. Specific periods of time and/or completion dates for

rendering services are set forth in Exhibit C, "Project Schedule."

4.2. If OWNER requests modifications or changes in the scope, extent or character of the Project, or if periods of time and/or completion dates are exceeded through no fault of ENGINEER, the period of service and amount of compensation for ENGINEER's services shall be adjusted equitably.

4.3. In the event that the work designed or specified by ENGINEER is to be performed under more than one prime construction contract, the period of service and/or amount of compensation for ENGINEER's services shall be adjusted equitably unless multiple awards were contemplated and included as part of Basic Services in Section 1.

SECTION 5 — PAYMENTS TO ENGINEER

5.1. **Methods of Payment.** OWNER shall pay ENGINEER for Basic Services rendered under Section 1 and Additional Services rendered under Section 2 in accordance with the provisions of Exhibit D, "Payments to Engineer."

5.2. **Times of Payment.** ENGINEER shall submit monthly statements for Basic and Additional Services rendered. For lump sum and percentage methods of payment, statements will be based upon ENGINEER's estimate of the proportion of the total

services actually completed at the time of billing. For cost-plus-fixed-fee method of payment, the amount of fixed fee billed will be based on the proportion of the costs incurred at the time of billing to the maximum allowable costs established for this Agreement. OWNER shall make prompt monthly payments in response to ENGINEER's monthly statements.

5.3. **Delinquent Payments.** The OWNER recognizes time is critical with respect to payment of the ENGINEER's statements, and that timely payment is a material part of the consideration of this Agreement. ENGINEER's statements shall be due and payable within 30 calendar days of statement date. If OWNER objects to all or any portion of an invoice, OWNER shall notify the ENGINEER within 14 calendar days of the invoice date, identify the cause of the disagreement and pay when due that portion of the statement not in dispute. If OWNER fails to make any payment due ENGINEER for services and expenses, excepting any portion of the statement in dispute, within 60 calendar days after receipt of ENGINEER's statement, the amounts due ENGINEER shall include a charge at the rate of one percent per month from the 60th day unless special arrangements have been previously made and agreed to by both parties in writing. Payment will be credited first to interest and then to principal. In the

event of a disputed or contested billing, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.

5.4. **Termination Payment.** In the event of termination by OWNER or ENGINEER under Paragraph 6.2, OWNER shall pay ENGINEER for services and expenses provided to date of termination in accordance with the methods of payment specified in Paragraph 5.1.

5.5. **Records of Costs.** Records of costs pertinent to ENGINEER's compensation will be kept in accordance with generally accepted accounting principals. ENGINEER is only obligated to maintain these records for a period of three years following date of final payment for services rendered under this Agreement.

SECTION 6 — GENERAL TERMS AND CONDITIONS

6.1. Construction Cost.

6.1.1. **Opinions of Cost.** Since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, ENGINEER's opinions of probable Construction Cost provided for herein are to be made on the basis of

experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional, generally familiar with the construction industry; but ENGINEER cannot and does not guarantee that proposals, bids or actual Construction Cost will not vary from opinions of probable cost prepared by ENGINEER.

6.1.2. **Construction Cost Budget.** If a Construction Cost budget is established by written agreement between OWNER and ENGINEER and specifically set forth in this Agreement as a condition thereto, the following will apply:

6.1.2.1. The acceptance by OWNER at any time during the provision of services under this Agreement of a revised opinion of probable Construction Cost in excess of the then established budget will constitute a corresponding revision in the Construction Cost budget to the extent indicated in such revised opinion.

6.1.2.2. Any Construction Cost budget so established will include a contingency of 10 percent unless another amount is agreed upon in writing.

6.1.2.3. ENGINEER will be permitted to determine what materials, equipment, component systems and types of construction are to be included in the Contract Documents and to make reasonable adjustments in the extent of the Project to bring it within the budget.

6.1.2.4. If proposals or bids have not been obtained within six months after completion of the Design Phase, the established Construction Cost budget will not be binding on ENGINEER, and OWNER shall consent to an adjustment in such cost limit commensurate with any applicable change in the general level of prices in the construction industry between the date of completion of the Design Phase and the date on which proposals or bids are sought.

6.1.2.5. Use of an estimated or actual Construction Cost of the project as a basis of payment to the ENGINEER shall not be construed to mean that a Construction Cost budget has been established for the Project.

6.2. **Termination.** The obligation to provide further services under this Agreement may be terminated by either party upon 30 calendar days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

6.3. **Suspension.** Upon 14 calendar days' written notice to the ENGINEER, the OWNER may suspend the ENGINEER's work. Suspension for any reason exceeding 60 calendar days shall, at the ENGINEER's option, make this Agreement subject to re-negotiation or termination as provided for elsewhere in this Agreement. Any suspension shall extend the

period of service in a manner that is satisfactory to both the OWNER and the ENGINEER.

6.4. Ownership and Reuse of Documents.

6.4.1. Contract Documents and reports prepared by ENGINEER pursuant to this Agreement shall be the property of the OWNER. ENGINEER shall have the right to retain copies of all documents for his files.

6.4.2. Contract Documents prepared or furnished by ENGINEER and ENGINEER's independent professional associates and consultants, pursuant to this Agreement are instruments of service with respect to the Project. These documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, or to ENGINEER's independent professional associates or consultants. OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's independent professional associates and consultants from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to further

compensation at rates to be agreed upon by OWNER and ENGINEER.

6.5. Insurance.

6.5.1. The ENGINEER maintains workers' compensation insurance coverage and unemployment compensation coverage in an amount as required by state law; comprehensive general liability insurance with maximum limits of \$500,000/\$1,000,000; automotive liability insurance with maximum limits of \$500,000/ \$500,000; and professional liability insurance with an annual limit of \$500,000.

6.6. Personnel and Facilities. The ENGINEER has, or will secure at his own expense, personnel, equipment and other materials and supplies required to perform the services under this Agreement within the period of service set forth in Section 4. ENGINEER may subcontract a portion of these services, but these Subcontractors shall be subject to written approval by the OWNER. Such personnel shall not be employees of nor have contractual relationship with the OWNER.

6.7. Accounting System. The ENGINEER shall maintain an accounting system which accounts for costs in accordance with generally accepted accounting principles. The OWNER reserves the right to audit the ENGINEER's accounts which relate to services provided under this Agreement.

6.8. **Successors and Assigns.** Neither **OWNER** nor **ENGINEER** shall assign any interest in this Agreement without the prior written consent of the other and in no case shall assignment relieve assignor from liability under this Agreement. This Agreement shall bind the successors and legal representatives of both parties. Nothing in this Agreement shall give any rights or benefits to anyone other than **OWNER** and **ENGINEER**.

6.9. **Relationship.** The **OWNER** has retained **ENGINEER** to provide professional services. These parties have not entered into any joint venture or partnership with the other. The **ENGINEER** is not to be considered the agent of the **OWNER**.

6.10. **Standard of Care.** The **ENGINEER** will strive to perform services under this Agreement in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representation, express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document or otherwise.

6.11. **Indemnification.**

6.11.1. To the fullest extent permitted by law, the **ENGINEER** agrees to hold harmless and indemnify **OWNER** from and against liability arising out of

ENGINEER's negligent performance of professional services under this Agreement. To the fullest extent provided by law, the **OWNER** agrees to hold harmless and indemnify **ENGINEER** from and against liability arising out of **OWNER's** negligence.

6.11.2. The **OWNER** shall not be liable to the **ENGINEER** and the **ENGINEER** shall not be liable to the **OWNER** for any special, incidental or consequential damages, including, but not limited to, loss of use and loss of profit, incurred by either party due to the fault of the other, regardless of the nature of this fault, or whether it was committed by the **OWNER**, or the **ENGINEER** or their employees, agents or subcontractors.

6.12. **Recovery of Dispute Resolution Costs.** In the event that legal action is brought by either party against the other, the prevailing party shall be reimbursed by the other for the prevailing party's legal costs, in addition to whatever other judgments or settlement amounts, if any, may be due.

6.13. **Compliance with Codes and Standards.** The **ENGINEER's** professional services shall incorporate those publicly announced federal, state and local laws, regulations, codes and standards that are applicable at the time the services are rendered. In the event of a change in a law, regulation, et al., the **ENGINEER** shall assess its impact. If, in the, the

impact is such to significantly affect the ENGINEER's compensation or the period of service, then the compensation and/or period of service can be renegotiated.

6.14. **Force Majeure.** Neither OWNER nor ENGINEER shall be liable for faults or delays caused by any contingency beyond his control, including, but not limited to, acts of God, wars, strikes, walkouts, fires, natural calamities, or demands or requirements of governmental agencies.

6.15. **Separate Provisions.** If any provisions of this Agreement are held to be invalid or unenforceable, the remaining provisions shall be valid and binding.

6.16. **Hazardous Materials.**

6.16.1.1. When hazardous materials are known, assumed or suspected to exist at a project site, ENGINEER is required to take appropriate precautions to protect the health and safety of his personnel, to comply with the applicable laws and regulations and to follow procedures deemed prudent to minimize physical risks to employees and the public. OWNER hereby warrants that, if he knows or has any reason to assume or suspect that hazardous materials may exist at the project site, he will inform ENGINEER in writing prior to initiation of services under this Agreement.

6.16.1.2. Hazardous materials may exist at a site where there is no reason to believe they could or should be present. OWNER agrees that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. ENGINEER agrees to notify OWNER as soon as practically possible should unanticipated hazardous materials or suspected hazardous materials be encountered.

6.17. **Subsurface Conditions and Utilities.**

6.17.1. The OWNER recognizes that a comprehensive sampling and testing program implemented by trained and experienced personnel of ENGINEER, or ENGINEER's subconsultants, with appropriate equipment may fail to detect certain hidden conditions. The OWNER also recognizes that actual environmental, geological and geotechnical conditions that ENGINEER properly inferred to exist between sampling points may differ significantly from those that actually exist.

6.17.2. ENGINEER will locate utilities which will affect the Project from information provided by the OWNER and utility companies and from ENGINEER's surveys. In that these utility locations are based, at least in part, on information from others, ENGINEER cannot and does not warrant their completeness and accuracy.

6.18. **Anticipated Change Orders.** OWNER recognizes and expects that a certain amount of imprecision and incompleteness is to be expected in Contract Documents; that all details of a completed project are not intended to be covered in the Contract Documents; that a certain amount of errors, omissions, ambiguities and inconsistencies are to be expected in Contract Documents; that contractors are expected to furnish and perform work, materials and equipment that may reasonably be inferred from the Contract Documents or from the prevailing custom or trade usage as being required to produce the intended result whether or not specifically called for; and that a certain amount of Change Orders are to be expected. -In no case will OWNER make claim against ENGINEER for costs incurred if the Change Order work is a necessary part of the Project for which OWNER would have incurred costs if work had been included originally in the Contract Documents unless OWNER can demonstrate that such costs were higher through issuance of the Change Order than they would have been if originally included in the Contract Documents in which case any claim of OWNER against ENGINEER will be limited to the cost increase and not the entire cost of the Change Order.

6.19. **Value Engineering.** If the OWNER retains the services of a VALUE ENGINEER (VE)

to review the Contract Documents prepared by the ENGINEER, it shall be at the OWNER's sole expense and shall be performed in a timely manner so as not to delay the orderly progress of the ENGINEER's services. The OWNER shall promptly notify the ENGINEER of the identity of the VE and shall define the VE's scope of services and responsibilities for the ENGINEER. All recommendations of the VE shall be given to the ENGINEER for review, and adequate time will be provided to the ENGINEER to respond to these recommendations. If the ENGINEER objects to any recommendations made by the VE, it shall so state in writing to the OWNER, along with the reasons for objecting. If the OWNER requires the incorporation of changes in the Contract Documents to which the ENGINEER has objected, the OWNER agrees, to the fullest extent permitted by law, to waive all claims against the ENGINEER and to indemnify and hold harmless the ENGINEER from any damages, liabilities or costs, including reasonable attorneys' fees and costs of defense, which arise in connection with or as result of the incorporation of such changes required by the OWNER. In addition, the ENGINEER shall be compensated for services necessary to incorporate recommended VE changes into reports, drawings, specifications, bidding or

other documents. The ENGINEER shall be compensated as Additional Services for all time spent to prepare for, review and respond to the recommendations of the VE. The ENGINEER's time for performance of its services shall be equitably adjusted.

6.20. **Affirmative Action.** During the performance of this Agreement, the ENGINEER agrees to take affirmative action to ensure that applicants are employed, and employees are treated during employment, without regard to their race, color, religion, sex or national origin.

6.21. **Conflicts.** In the event of a conflict between the main text of this Agreement and any appendix thereof, provisions of the main text shall govern.

6.22. **Governing Law.** The laws of the State of Mississippi will govern the validity of this Agreement, its interpretations and performance, and remedies for any claims related to this Agreement.

6.23. **Separate Provisions.** If any provisions of this Agreement are held to be invalid or unenforceable, the remaining provisions shall be valid and binding.

6.24. The ENGINEER authorizes Mark J. Beyea, P.E., Registered Professional Engineer No. 12599 and Frank O'Keefe,

P.E., Registered Professional Engineer No. 11097 in the State of Mississippi, to act on his behalf for this Project.

SECTION 7 — DEFINITIONS

As used herein, the following words and phrases have the meanings indicated, unless otherwise specified in various sections of this Agreement:

7.1. **Addenda.** Written or graphic instruments issued prior to the opening of bids which clarify, correct or change the bidding documents or the Contract Documents.

7.2. **Agreement.** This contract including all exhibits and documents included by reference.

7.3. **Application for Payment.** The form accepted by ENGINEER which is to be used by Contractor in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

7.4. **Bid.** The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the construction work to be performed.

7.5. **Change Order.** A document recommended by ENGINEER which is signed by Contractor and OWNER and authorizes an addition, deletion or revision in the construction work, or an adjustment in the contract

price or the contract time, issued on or after the effective date of the construction contract.

7.6. **Contract Documents.** The drawings and specifications, addenda, and other documents required to obtain bids from contractors for construction of the Project.

7.7. **Contractor.** The person, firm or corporation with whom OWNER has entered into a contract for construction of the Project.

7.8. **Construction Cost.** Total cost of entire Project to OWNER not including ENGINEER's compensation and expenses, cost of land and rights-of-way, or compensation for or damages to properties, unless this Agreement so specifies; nor will it include OWNER's legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project or the cost of services to be provided by others to OWNER pursuant to Section 3 of this Agreement.

7.9. **Direct Labor Costs.** Salaries and wages paid to ENGINEER's personnel engaged directly on the Project, including engineers, draftsmen, technicians, designers, surveyors, resident project representatives and other technical and administrative personnel; but does not include indirect payroll related costs or fringe benefits.

7.10. **Drawings.** The drawings which show the character and scope of the Project and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.

7.11. **Reimbursable Expenses.** Actual expenses incurred by ENGINEER directly in connection with providing services for the Project. These include, but are not limited to, transportation and subsistence; reproduction and printing; communications; postage and express mail; equipment rental; and expense of computers and other specialized equipment.

7.12. **Resident Project Representative.** The authorized representative of ENGINEER who is assigned to the construction site or any part thereof for the purpose of observing the performance of the work of the Contractor.

7.13. **Shop Drawings.** All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for Contractor to illustrate some portion of the work and all illustrations, brochures, standard schedules and other information prepared by a Supplier and submitted by Contractor to illustrate material or equipment for some portion of the Project.

7.14. **Specifications.** Those portions of the Contract Documents consisting of written technical

descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Project and certain administrative details applicable thereto.

7.15. **Subcontractor.** An individual, firm or corporation having a direct contract with Contractor or with any other subcontractor for the performance of a part of the Project at the site.

7.16. **Supplier** A manufacturer, fabricator, supplier, distributor, material man or vendor of products or equipment used in construction of the project.

SECTION 8 — SPECIAL PROVISIONS AND EXHIBITS

8.1. This Agreement is subject to the following Special Provisions.

8.2. The following Exhibits are attached to and made a part of this Agreement.

8.2.1. Exhibit A, "Project Description."

8.2.2. Exhibit B, "Scope of Design Phase Services."

8.2.3. Exhibit C, "Project Schedule."

8.2.4. Exhibit D, "Payments to Engineer."

8.3. This Agreement, consisting of Pages 1 to 16, inclusive, together with the Exhibits identified above, constitute the entire agreement between OWNER and ENGINEER and supersede all prior written and oral understandings. This Agreement and said Exhibits may only be amended, supplemented, modified or canceled through a duly executed written instrument.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first written above.

OWNER: MADISON COUNTY

BY: _____

TITLE: _____

WITNESS: _____

ENGINEER: NEEL-SCHAFFER, INC.

BY: MA [Signature]

TITLE: Sr. VP

WITNESS: [Signature]

Sr. PM

EXHIBIT A
PROJECT DESCRIPTION

The project consists of the following elements:

1. Reconstruction of approximately of two-lane asphalt paved roadway. Reconstruction includes:
 - a. Removal of existing pavement
 - b. Removal of high volume change clay soils to a depth of three feet below the pavement structure
 - c. Backfill with non-expansive borrow material
 - d. Construction of new asphalt pavement structure
2. Repair of base failures and placement of asphalt overlay within available funding on two-lane roadway.
3. Installation of new thermoplastic pavement markings.
4. Traffic control measures.
5. Temporary erosion control measures.
6. Reestablishment of permanent vegetation.

EXHIBIT B

SCOPE OF DESIGN PHASE SERVICES

Deerfield Subdivision Madison County

The following engineering services shall be performed by the CONSULTANT on behalf of the County in accordance with this CONTRACT at the direction of the County Consultant or his designee:

1 PRELIMINARY DESIGN PHASE

After execution of the Agreement, the Preliminary Design Phase will be initiated and the CONSULTANT shall:

- 1.1 Consult with the OWNER to clarify and define the OWNER's requirements for the Project.
- 1.2 Assemble and review available data which may be pertinent to the Project.
- 1.3 Survey the project utilizing standard surveying practices as required to prepare preliminary and final contract plans in accordance with the current MDOT Design Manual. The work shall be drafted in accordance with the current MDOT Survey Manual.
- 1.4 Perform subsurface explorations and geotechnical analyses to determine general subsurface conditions and parameters for final design of the Project. The OWNER recognizes that even a comprehensive sampling and testing program implemented by trained and experienced personnel with appropriate equipment may fail to detect certain hidden conditions. OWNER also recognizes that actual environmental, geological and geotechnical conditions that the CONSULTANT properly inferred to exist between sampling points may differ significantly from those that actually exist.
- 1.5 Identify and analyze requirements of governmental authorities having jurisdiction to approve the Project with whom consultation is to be undertaken in connection with the Project.
- 1.6 Prepare preliminary design documents consisting of final design criteria, preliminary drawings and outline specifications..
- 1.7 Based on the information contained in the preliminary design documents, prepare an opinion of probable construction costs.
- 1.8 Furnish one copy of above preliminary design documents to OWNER for review
- 1.9 Schedule progress meetings as required to effectively coordinate with the OWNER; prepare minutes of these progress meetings; and prepare a design progress report monthly for the preceding month's work which shall accompany the CONSULTANT's monthly statement.
- 1.10 The CONSULTANT's services under the Preliminary Design Phase will be considered complete no later than 30 days after the date when preliminary design documents are delivered to the OWNER plus such additional time as may be considered reasonable for obtaining approval of governmental authorities having jurisdiction to approve the preliminary design documents, if such approval is to be obtained during the

Preliminary Design Phase.

2 FINAL DESIGN PHASE

After receiving written authorization to proceed with the Final Design Phase, the **CONSULTANT** shall:

- 2.1 Modify preliminary design documents as necessary to reflect **OWNER's** comments.
- 2.2 Perform detailed design.
- 2.2 On the basis of approved preliminary design documents (including **OWNER's** comments) and detailed design, prepare final design documents to include final construction drawings, specifications and contract documents.
- 2.3 Conduct plan-in-hand inspection of the project site with **OWNER** and representatives of governmental agencies which may have jurisdiction over the Project.
- 2.4 Prepare a project notebook containing copies of all design calculations, equipment and component data sheets, manufacturer's catalog cuts, survey books/notes, correspondence and other information.
- 2.5 Based on information contained in the final design documents, prepare a revised opinion of probable construction costs.
- 2.6 Provide technical criteria, written descriptions and design data for **OWNER's** use in filing applications for permits with or obtaining approvals of such governmental authorities as have jurisdiction to review or approve the final design of the Project and assist **OWNER** in consultations with appropriate authorities.
- 2.7 Furnish one set of the above final design documents to the **OWNER** for review and approval
- 2.8 Schedule progress meetings as required to effectively coordinate with the **OWNER**; prepare minutes of these progress meetings; and prepare a design progress report monthly for the preceding month's work which shall accompany the **CONSULTANT's** monthly statement.
- 2.9 The **CONSULTANT's** services under the Final Design Phase will be considered complete at the earlier of (1), the date when the final design documents have been accepted by the **OWNER**, or (2), 30 days after the date when the final design documents are delivered to the **OWNER** for final acceptance, plus in each case such additional time as may be considered reasonable for obtaining approval of governmental authorities having jurisdiction to approve the final design documents if such approval is to be obtained during the Final Design Phase.

3 ADVERTISE/BIDDING

- 4.1 The **CONSULTANT** will facilitate the advertisement of the project for construction and will assist in analyzing bids and recommending appropriate action pertaining to the awarding of the construction phase.

Exhibit C
Project Schedule
Deerfield Subdivision
Madison County

Task	Sept	Oct	Nov	Dec	Jan
1.0 Preliminary Design Phase					
1.1 Field Survey					
1.2 Geotechnical Investigation					
2.0 Final Design Phase					
2.1 Final Design					
2.2 Final Design Documents					
2.15 Utility Coordination					
4.0 Advertise/bidding					

EXHIBIT D

PAYMENTS TO ENGINEER

1.1 Payments to Engineer

Owner will pay **ENGINEER** for Services rendered under Section 1, as supplemented by Exhibit B, "Scope of Services", the following amounts:

1.1.1 For Basic Services a *Lump Sum fee of \$48,000*

1.1.2 For Additional Services. *OWNER shall pay ENGINEER for Additional Services rendered under Section 2 on the basis of ENGINEER's Direct Labor Costs times a factor of 2.61 plus a fee equal to 12% of the total labor amount and Reimbursable Expenses. Payments to ENGINEER for Additional Services shall be made in accordance with paragraph 5.2 of this Agreement.*

1.1.3 Payments to **ENGINEER** by **OWNER** are not contingent on any factor except **ENGINEER's** ability to provide services in a manner consistent with that standard of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

Payments to **ENGINEER** by **OWNER** specifically are not contingent on **OWNER's** receipt of grants for the **Project** or **OWNER's** decision to suspend or cancel the **Project**.