

**Madison County Engineering Department/Road Department
Task Order**

Task Order No. #1

Additional Pages Attached 1

**Task Order to the General Services Agreement Between
The Board of Supervisors of Madison County, Mississippi
and Stantec Consulting Services, Inc.
(Company)**

This Task Order to the General Services Agreement between the Board of Supervisors of Madison County, Mississippi ("County") and Stantec Consulting Services, Inc. ("Engineer") is a part of and is subject to all the terms and conditions of the Agreement unless specifically provided otherwise herein.

1. Project Name: Yandell Road Fire Station Signal
2. Project Number: Yandell Road Fire Station Signal - SGSTO1
3. Project Manager: for County: Dan Gaillet, P.E. for Engineer: Brad Engels, P.E.
4. Method of Compensation: X Per Exhibit(s) to the Agreement
 Other (Attach)
5. Task Order Allowable Cost (attach additional pages if necessary): Not to exceed \$21,901.20
6. Scope of Work (Describe, attach additional pages if necessary): See attached.
7. Schedule of Performance (attach additional pages if necessary): To be determined.
8. Approve Subconsultants (list, if any): none
9. Special Provisions: none

Accepted and approved by County and Engineer as of the last date of execution below.

Board of Supervisors of Madison County, MS

Date: _____

By: _____
Dan Gaillet, P.E., County Engineer/Road Manager

Date: _____

By: _____
(Engineer)



Stantec Consulting Services Inc.
1 Olympic Way, Madison, MS 39110

February 23, 2016

Attention: Mr. Dan Gallet
Madison County, Mississippi

Dear Mr. Gallet,

Reference: GS Task Order #1 – Yandell Rd. Fire Station Emergency Signal

We are pleased to provide you with this letter of proposal for *Traffic and Transportation Engineering Services* regarding the installation of an emergency traffic signal on Yandell Road at the Gluckstadt Fire Department in Madison County, Mississippi. **The cost for these services will not exceed \$22,000** and will be billed using labor-hour methodology.

This proposal includes the following services:

Design services for the preparation of emergency traffic signal installation plans. The emergency traffic signal installation plans will include the emergency traffic signal design and layout, fire station preemption installation design, cabinet modification details required at the existing Highway 51 and Yandell Road traffic signal cabinet, pavement markings and signing plan sheets.

Coordination services, which include the preparation and submittal of the Mississippi Department of Transportation permit for interconnecting the emergency signal to the existing traffic signal cabinet at the intersection of Highway 51 and Yandell Road, the preparation and submittal of the Emergency service application, and the procurement of the required number of quotes, evaluation, and recommendation of award for contractor selection.

Construction, engineering and inspection services, which includes equipment submittals approval and periodic on-site construction field inspection.

We appreciate the opportunity to provide this proposal to you. Please contact me if you have any questions.

Regards,

STANTEC CONSULTING SERVICES INC.

A handwritten signature in black ink, appearing to read "Brad Engels", with a stylized flourish at the end.

Brad Engels
Associate
Phone: (601) 354-0696
brad.engels@stantec.com

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Design with community in mind

**Madison County Engineering Department/Road Department
Task Order**

Task Order No. #2

Additional Pages Attached 3

**Task Order to the General Services Agreement Between
The Board of Supervisors of Madison County, Mississippi
and Stantec Consulting Services, Inc.
(Company)**

This Task Order to the General Services Agreement between the Board of Supervisors of Madison County, Mississippi ("County") and Stantec Consulting Services, Inc. ("Engineer") is a part of and is subject to all the terms and conditions of the Agreement unless specifically provided otherwise herein.

1. Project Name: Childress Road Drainage Project – Phase 1
2. Project Number: Childress Road Drainage Project - SGSTO2
3. Project Manager: for County: Dan Gaillet, P.E. for Engineer: Brad Engels, P.E.
4. Method of Compensation: X Per Exhibit(s) to the Agreement
 Other (Attach)
5. Task Order Allowable Cost (attach additional pages if necessary): Not to exceed \$15,200.00
6. Scope of Work (Describe, attach additional pages if necessary): See attached.
7. Schedule of Performance (attach additional pages if necessary): To be determined.
8. Approve Subconsultants (list, if any): River Science, LLC, Kosciusko, MS
Burns, Cooley, Dennis, Inc., Ridgeland, MS
9. Special Provisions: Work proposed is to determine what type of structure will be used to replace the existing structure. This does not include the design.

Accepted and approved by County and Engineer as of the last date of execution below.

Board of Supervisors of Madison County, MS

Date: _____

By: _____
Dan Gaillet, P.E., County Engineer/Road Manager

Date: _____

By: _____
(Engineer)



Stantec Consulting Services Inc.
1 Olympic Way, Madison, MS 39110

February 23, 2016

Attention: Mr. Dan Gallet
Madison County, Mississippi

Dear Mr. Gallet,

Reference: **GS Task Order #2 – Phase 1 Services for Childress Road Drainage Project**

We are pleased to provide you with this letter of proposal for *Phase 1 Services* regarding the Childress Road Drainage Project in Madison County, Mississippi. **The cost for these services will not exceed \$15,200.**

This proposal includes the following services:

Topographical Survey, which includes topo from the top of bank to top of bank from approximately 100' upstream to approximately 100' downstream, drainage structures and inverts, marked utilities, a valley cross section approximately 1,075' wide and a road profile approximately 900' east of the stream centerline to approximately 350' west of the stream centerline.

Hydraulic Analysis, which includes the determination of the drainage area and related parameters, calculating estimated peak flows at the crossing, preparing HEC-RAS computer modeling of the stream reflecting current existing conditions and proposed conditions and submittal of all findings in a written report.

Geotechnical Investigation, which includes collecting one 70' boring sample, performing laboratory tests and preparing a final report of the findings.

I have attached the proposals submitted by the sub-consultants. We appreciate the opportunity to provide this proposal to you. Please contact me if you have any questions.

Regards,

STANTEC CONSULTING SERVICES INC.

Brad Engels
Associate
Phone: (601) 354-0696
brad.engels@stantec.com

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Attachments: Sub-consultant proposal & Fee Proposal

Design with community in mind

PROFESSIONAL SERVICES CONTRACT

CONTRACT AGREEMENT TO ENGAGE THE SERVICES OF BURNS COOLEY DENNIS, INC.

This Agreement has been entered into on the 23th day of February, 2016, between Stantec, hereinafter referred to as "Client," and BURNS COOLEY DENNIS, INC., hereinafter referred to as "Engineer," for mutual consideration as hereinafter set forth.

- A. Engineer agrees to conduct an exploratory soil boring to provide recommendations related to site-preparation and foundation for either a replacement box culvert or a bridge crossing along Childress Rd in Flora, MS:
 - 1. Drilling of one boring to a depth of 70 ft at the planned area of construction.
 - 2. Performing laboratory water content tests on all samples, Atterberg limit tests, and unconfined compression tests on selected samples of fine-grained materials.
 - 3. Preparing a report to present the results of the soil boring and laboratory test data. The report would include a plan showing the approximate boring location, a graphical log of the boring, the results of all laboratory tests, and a complete description of the services provided.
- B. For the services described, Client agrees to compensate Engineer a lump sum fee of \$3,850.00.
- C. The General Conditions for Services presented on the following sheet are hereby incorporated into and made a part of this Agreement.
- D. This Agreement is e-mailed for review and execution. Please print, sign and return either by e-mail or by telefax to Burns Cooley Dennis, Inc. at (601) 856-9774.

Additional services, including review of foundation plans and construction observations and testing, are available and can be performed later at your request, but are specifically excluded from this Agreement.

STANTEC
CLIENT

BURNS COOLEY DENNIS, INC.
GEOTECHNICAL ENGINEER

Signature

Signature

Typed or Printed Name/Title

A. E. (Eddie) Templeton, P.E.
Typed or Printed Name/Title

Date

February 23, 2016
Date



River Science, LLC

Hydrologic & Hydraulic Engineering

P.O. Box 32
Kosciusko, MS 39090

601-613-5262
www.riverscience-llc.com

February 19, 2016

Brad Engels, P.E.
Stantec
1 Olympic Way
Madison, MS 39110

Dear Brad:

REFERENCE: CHILDRESS LANE CULVERT REPLACEMENT
MADISON COUNTY, MISSISSIPPI


I am pleased to respond to your request for a proposal to analyze the existing crossing of Childress Lane over a tributary of the Bogue Chitto in Madison County, Mississippi. Stantec will provide topographic information for the analysis. River Science, LLC will perform the following tasks:

- Hydrologic analysis - determine drainage area and related parameters, calculate estimated peak flows at the crossing. (est. 3 hours)
- Hydraulic analysis - using the topographic information provided by Stantec, prepare HEC-RAS computer modeling of the stream reflecting current existing conditions and proposed conditions (est. 16 hours)
- Preparation of a letter report (est. 6 hours)

Total estimated cost: not to exceed \$3,000. If this proposal meets with your approval, please return a signed copy for my files.

Sincerely,

RIVER SCIENCE, LLC


Jill S. Butler P.E., CFM
Principal

ACCEPTED BY:

Name: _____

Title: _____

**Madison County Engineering Department/Road Department
Task Order**

Task Order No. #3

Additional Pages Attached _____

**Task Order to the General Services Agreement Between
The Board of Supervisors of Madison County, Mississippi
and Stantec Consulting Services, Inc.
(Company)**

This Task Order to the General Services Agreement between the Board of Supervisors of Madison County, Mississippi ("County") and Stantec Consulting Services, Inc. ("Engineer") is a part of and is subject to all the terms and conditions of the Agreement unless specifically provided otherwise herein.

1. Project Name: Countywide Inspection Services
2. Project Number: Countywide Inspection Services- SGSTO3
3. Project Manager: for County: Dan Gaillet, P.E. for Engineer: Brad Engels, P.E.
4. Method of Compensation: X Per Exhibit(s) to the Agreement
_____ Other (Attach)
5. Task Order Allowable Cost (attach additional pages if necessary): Not to exceed \$7,255.00
6. Scope of Work (Describe, attach additional pages if necessary): Providing an on-site inspector to monitor construction activities.
7. Schedule of Performance (attach additional pages if necessary): On an as-needed basis.
8. Approve Subconsultants (list, if any): none
9. Special Provisions: none

Accepted and approved by County and Engineer as of the last date of execution below.

Board of Supervisors of Madison County, MS

Date: _____

By: _____
Dan Gaillet, P.E., County Engineer/Road Manager

Date: _____

By: _____
(Engineer)

**Madison County Engineering Department/Road Department
Task Order**

Task Order No. #1

Additional Pages Attached 4

**Task Order to the General Services Agreement Between
The Board of Supervisors of Madison County, Mississippi
and Mendrop Engineering Resources, LLC
(Company)**

This Task Order to the General Services Agreement between the Board of Supervisors of Madison County, Mississippi ("County") and Mendrop Engineering Resources, LLC ("Engineer") is a part of and is subject to all the terms and conditions of the Agreement unless specifically provided otherwise herein.

- 1. Project Name: Purvis Road - Bridge Project
- 2. Project Number: Purvis Road - Bridge Project - MGSTO1
- 3. Project Manager: for County: Dan Gaillet, P.E. for Engineer: Blake Mendrop, P.E.
- 4. Method of Compensation: X Per Exhibit(s) to the Agreement
 Other (Attach)
- 5. Task Order Allowable Cost (attach additional pages if necessary): Not to exceed \$22, 915.00
- 6. Scope of Work (Describe, attach additional pages if necessary): See attached.
- 7. Schedule of Performance (attach additional pages if necessary): To be determined.
- 8. Approve Subconsultants (list, if any): none
- 9. Special Provisions: This phase 1 work will determine the ultimate solution.
 This phase does not include design.

Accepted and approved by County and Engineer as of the last date of execution below.

Board of Supervisors of Madison County, MS

Date: _____

By: _____
Dan Gaillet, P.E., County Engineer/Road Manager

Date: _____

By: _____
(Engineer)

**WORK ASSIGNMENT NO. 1
DRAINAGE, STREAM STABILIZATION, AND BRIDGE RECOMINDATIONS
OF SPRING CREEK AT PURVIS ROAD
MADISON COUNTY**

THIS WORK ASSIGNMENT TO THAT CERTAIN GENERAL ENGINEERING SERVICES CONTRACT IS EXECUTED BY AND BETWEEN MADISON COUNTY BOARD OF SUPERVISORS AND **MENDROP ENGINEERING RESOURCES, LLC**, EFFECTIVE THE 18th DAY OF FEBRUARY, 2016, IS INCORPORATED THEREIN AS IF COPIED FULLY IN BOTH WORDS AND FIGURES AS A PART OF EXHIBIT NO. 1.

LET IT BE KNOWN THAT:

WHEREAS, the parties to the above stated CONTRACT are now desirous of implementing an additional Work Assignment or phase thereunder: and,

WHEREAS, each of said parties represents that it continues to have authority to execute this Work Assignment and that all certifications previously made in said CONTRACT remain in effect;

NOW THEREFORE, the parties hereto do further contract and agree to add the following items of work to the above CONTRACT under the additional terms and conditions as are hereinafter stated:

SPECIFIC SCOPE OF WORK FOR THIS WORK ASSIGNMENT

The CONSULTANT, in accordance with the General Services Agreement, shall (1) **complete drainage, streambank protection, and bridge recommendations** for the bridge crossing of Spring Creek within the vicinity of Purvis Road near Flora, MS., (2) evaluate the history of the watershed and drainage, evaluate the bank and roadway embankment erosion issues at said location near and within the ROW of Purvis Road, (3) recommend options to mitigate channel bank instability as needed, and (4) provide documentation of findings.

The following engineering services shall be performed by the CONSULTANT on behalf of Madison County in accordance with the CONTRACT at the direction of the County Engineer or his designee, unless otherwise modified by the Madison County Board of Supervisors (MCBOS).

The Scope of Work shall include the following:

Part 1 – PRE-DESIGN CONFERENCE, FIELD RECONNAISSANCE & DATA GATHERING

The purpose of the conference is to discuss MCBOS procedures, contract administration, data required by this General Services CONTRACT and the Work Assignment, the design criteria, and other matters as the parties deem necessary. After the Pre-Design Conference, the Project Manager or his designee shall authorize the CONSULTANT to proceed with the scope of work.

The CONSULTANT shall make an initial site visit to document existing site conditions and other information which may be pertinent to the study.

Part 2 – FIELD SURVEY

The CONSULTANT shall survey utilizing standard surveying practices as required in accordance with the current Survey Standards. The work shall be performed in accordance with standard survey

practices with any additional instructions or requests as specified by the MCBOS, including the following:

1. Document "good faith" efforts to notify the property owners prior to entering upon the property for survey purposes;
2. Establish horizontal and vertical and intermediate control, as necessary, in accordance with Survey Standards;
3. Perform hydraulic survey according to Survey Standards;
4. Perform topographic survey for the following as per Attachment "A" in accordance with the Survey Standards:
 - a. Cross section area around the bridge at approximately 100 ft. intervals. Cross section widths will extend approximately 100' to 150' each way beyond the channel top banks. Survey will be to extent to provide recommendations and not the extent of needed for final design;
 - b. Collect site specific topographic data to document the size of existing channels, drainage structures, invert elevations, finish floor elevations of structures within the investigation area, and other pertinent survey information that will be part of the study;

Additional surveys may need to be gathered to develop final plans once mitigation options have been developed.

Part 3 – HYDROLOGIC/HYDRAULIC ANALYSES & MITIGATION ALTERNATIVES

The hydraulic study and recommendations shall be based upon hydraulic design in conformance with the MDOT's Design Manual, AASHTO Highway Drainage Guidelines, FHWA Hydraulic Engineering Circulars and Publications and any other Local, State, or Federal regulations as appropriate.

The hydraulic study and recommendations shall include the following as a minimum:

- A. **STREAM STABILITY AND GEOMORPHIC ASSESSMENT:** The assessment shall be based on the FHWA Publication *Stream Stability at Highway Structures*, Hydraulic Engineering Circular No. 20 (HEC 20), and include a Level 1: Qualitative Geomorphic Analyses and a Level 2: Basic Engineering Analyses.
- B. **HYDRAULIC ANALYSES:** The CONSULTANT shall use the U.S. Army Corps of Engineers (USACE) Hydrologic Engineer Center, River Analysis System (HEC-RAS) software to perform a one-dimensional steady flow analysis of Spring Creek within the study area. The hydraulic analyses should be utilized to determine the hydraulic parameters necessary for the hydraulic design of stream stability countermeasures. If the project is located in or across a FEMA regulatory floodway or base flood elevations have been determined as noted on the NFIP maps, the CONSULTANT shall obtain the step-backwater hydraulic model for the specified stream and community from FEMA.
- C. **STREAM STABILITY COUNTERMEASURE DESIGN:** The determination of countermeasure requirements shall be based on the FHWA Publication *Bridge Scour and Stream Instability Countermeasures*, Hydraulic Engineering Circular No. 23 (HEC 23). Further

requirements shall be the FHWA Publication *Design of Riprap Revetment*, Hydraulic Engineering Circular No. 11 (HEC 11) and *Stream Stability at Highway Structures*, Hydraulic Engineering Circular No. 20 (HEC 20). Details and drawings shall be provided for the design.

- D. HYDRAULIC REPORT: Hydraulic reports shall include as a minimum a narrative that describes the project scope; statements defining any additional sources of information including cross sections, topographic data, and other supporting information; design alternatives; analysis considerations; supporting documentation stating analysis procedures including existing and proposed conditions; documentation of all modifications made to models to correctly represent the conditions; recommendations and details; tables comparing water surface elevations between the models demonstrating that the proposed project meets current local, state, and federal regulations; documentation of stream stability and lateral migration tendencies of affected channel reaches; and photographs.

The CONSULTANT shall submit a draft preliminary engineering recommendations to MCBOS for review. Subsequent to MCBOS review, a meeting will be scheduled to review and discuss the findings of the study. Subsequent to the review meeting, the CONSULTANT shall make all necessary changes which arise during the review prior to submitting final recommendations. All pertinent hydraulic data, documentation, and reports shall be included in the submittal.

The final submittal shall include one hard copy in a bound format including a CD/DVD of a color PDF of the report.

Part 4 – CONCEPTUAL PLANS

The CONSULTANT shall prepare and submit conceptual plans for the project to include, where applicable, typical sections, plan and elevation schematics, and any other information for development of the conceptual plans.

Three (3) set of conceptual plans shall be submitted to MCBOS for review. Studies of other concepts and conceptual changes required during this review are considered to be covered by this Scope of Work. The CONSULTANT will allow approximately two (2) weeks for review by MCBOS in their progress schedule unless indicated otherwise.

Once Final Review is complete and a conceptual plan and alternative is agreed upon, the CONSULTANT will then submit additional scope and fee estimate for Phase II which would include for final construction plans and specifications.

TYPICAL ITEMS/MATERIALS PROVIDED BY MADISON COUNTY BOARD OF SUPERVISORS:

- A. Maps, aerial photographs, and other cartographic items as may be available;
- B. Available construction plans, drawings, and maps pertinent to the project;
- C. Bridge inspection reports as may be available;
- D. Pile records;

- E. Copies of previous studies/analyses, environmental assessments, conceptual plan, and other information pertaining to the project;
- F. Names, addresses, and telephone numbers of points of contact which may prove useful to the CONSULTANT in the conduct of the analysis;

ITEMS/SERVICES NOT INCLUDED PHASE I BUT WILL BE INCLUDED IN THE PHASE II SCOPE OF WORK:

- A. Property map surveys;
- B. Final Right-of-Way Plans;
- C. Detailed Construction Plans;
- D. Construction Specifications;
- E. Environmental permitting;
- F. Cost Estimate;

MAXIMUM ALLOWABLE COST

The CONSULTANT'S fee for completion of this Work Assignment shall be \$_____, which sum shall be paid incrementally each month. Services will be billed monthly on an hourly basis for cost incurred during the period, but shall not exceed the total estimated fee without prior written authorization from the Client.

SO EXECUTED AND AGREED THIS THE _____ DAY OF _____, 2016.

THE MADISON COUNTY BOARD OF SUPERVIORS

SO EXECUTED AND AGREED THIS THE _____ DAY OF _____, 2016.

MENDROP ENGINEERING RESOURCES, LLC

ATTEST: (affix seal)
