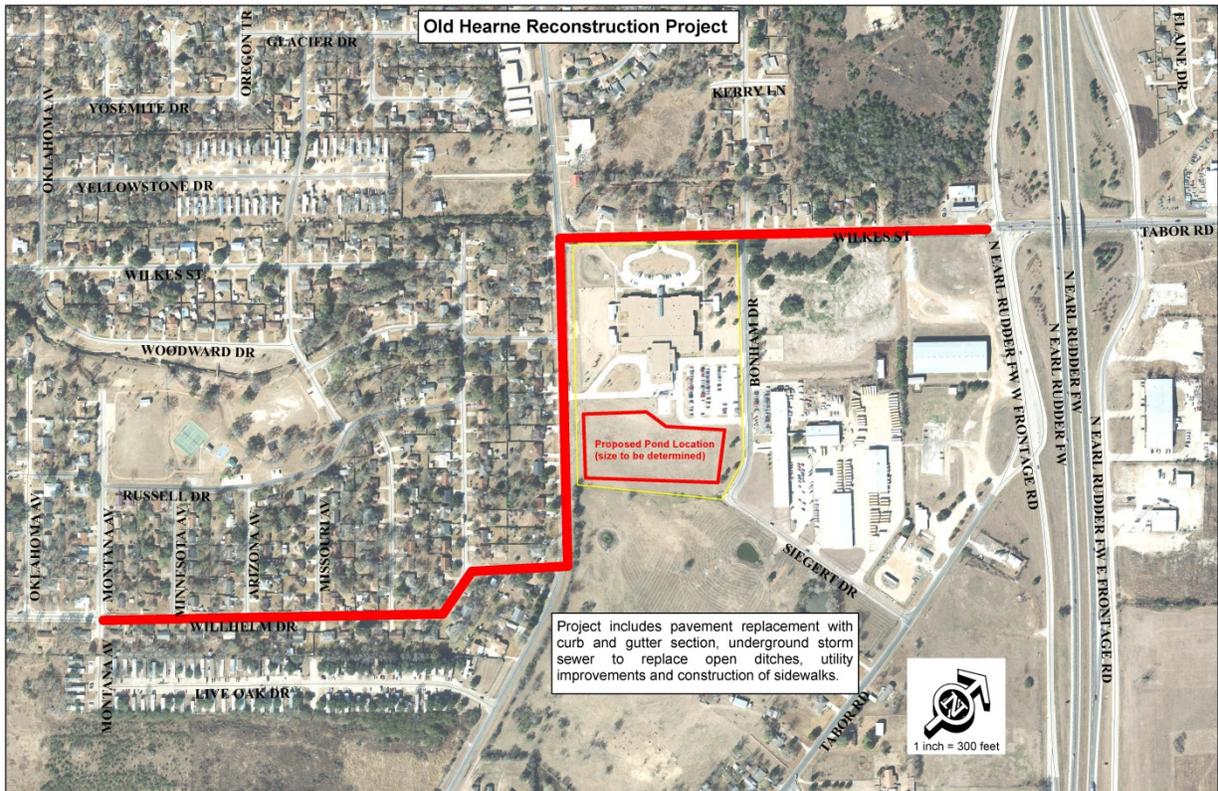


## ACTION FORM BRYAN CITY COUNCIL

<b>DATE OF COUNCIL MEETING:</b> May 28, 2013		<b>DATE SUBMITTED:</b> April 26, 2013	
<b>DEPARTMENT OF ORIGIN:</b> PW-Engineering		<b>SUBMITTED BY:</b> W. Paul Kaspar	
<b>MEETING TYPE:</b>	<b>CLASSIFICATION:</b>	<b>ORDINANCE:</b>	<b>STRATEGIC INITIATIVE:</b>
<input type="checkbox"/> BCD	<input type="checkbox"/> PUBLIC HEARING	<input type="checkbox"/> 1ST READING	<input checked="" type="checkbox"/> PUBLIC SAFETY
<input type="checkbox"/> SPECIAL	<input type="checkbox"/> CONSENT	<input type="checkbox"/> 2ND READING	<input type="checkbox"/> SERVICE
<input checked="" type="checkbox"/> REGULAR	<input checked="" type="checkbox"/> STATUTORY		<input type="checkbox"/> ECONOMIC DEVELOP.
<input type="checkbox"/> WORKSHOP	<input type="checkbox"/> REGULAR		<input checked="" type="checkbox"/> INFRASTRUCTURE
			<input checked="" type="checkbox"/> QUALITY OF LIFE
<b>AGENDA ITEM DESCRIPTION:</b> Engineering Design Contract for the Old Hearne Road Reconstruction Project, City Project Number 322-411-425-611-DE-1211 to Jones & Carter, Inc. for the lump sum amount of \$442,500.00.			
<p><b>SUMMARY STATEMENT:</b> This Engineering Design Contract for the reconstruction of Old Hearne Road Project includes the surveying and engineering design for the widening and reconstruction of Old Hearne Road from Wilkes Road to Wilhelm Drive, and Wilkes Road from SH 6 to Old Hearne Road, including underground storm sewer drainage where none exists today. To better coordinate the design of the drainage system, this contract will utilize the plans and specifications to be developed by Freese and Nichols for the Bonham Detention Pond (design contract also on this City Council Agenda) to tie in the storm sewer improvements. The roadway design will convert the existing open ditch sections within the project limits to curb and gutter pavement with sidewalks for increased pedestrian safety. Utility improvements consist of a 24" sanitary sewer line along Wilkes Road, and a 12" waterline along part of Wilkes Road and along Old Hearne Road. This design also includes reconstruction of Wilhelm Drive with new curb and gutter pavement plus underground storm sewer from Old Hearne Road to Montana Avenue, which would be an extension of the Old Hearne Improvements. This work is to be funded from the Street Maintenance Fund and will complete the reconstruction of Wilhelm Drive (began with previous project from Texas Avenue to Montana Avenue).</p> <p>Current estimated construction cost for the roadway project are as follows:</p> <p>Old Hearne / Wilkes / Wilhelm Total - \$4,000,000 (includes 15% contingency)</p> <p style="padding-left: 40px;">Sewer Portion - \$383,237</p> <p style="padding-left: 40px;">Water Portion - \$301,185</p> <p style="padding-left: 40px;">Roadway portion Old Hearne / Wilkes - \$2,665,578</p> <p style="padding-left: 40px;">Wilhelm portion - \$650,000</p> <p>Detention Pond - \$640,000 to \$800,000 with 25% contingency</p> <p>The above estimates show the street and detention pond cost to be approximately \$3,500,000 with contingency. \$3,125,000 of the planned Fiscal Year 2014 bonds will fund the Old Hearne Road and Wilkes street portion of the project and the detention pond with \$650,000 estimated to come from Transportation Fee to fund the improvements to Wilhelm. These numbers were developed using the cost estimates without the full contingency amount, if additional funds are needed for the project they are planned to come from Transportation Fee funds as both Old Hearne and Wilkes are existing streets that maintenance will be averted due to the reconstruction.</p> <p>This design contract includes Subsurface Utility Engineering (SUE) work that will identify underground utility conflicts in order to minimize the potential for in-field conditions requiring change orders, which are often prevalent in rehabilitation projects in older areas of the city. Infrastructure will also be designed to prepare for a future traffic signal at the intersection of Wilkes Road at Old Hearne Road (note: this intersection will continue to operate as a stop sign controlled intersection until the need for the signal is met.).</p>			

In addition to survey work, geotechnical investigations for this pavement work and for the Bonham Detention pond are included in this scope of work. Bidding and construction phase services as well as As-Built Record Drawings also will be provided as part of this scope. The schedule for this work shows submission of final plans and specifications for bidding by March of 2014.



This contract, combined with the stormwater detention pond design contract with Freese and Nichols, equals \$594,308 which is less than the budgeted total for the design of this project of \$676,000. The negotiated contract complies with the Engineering Division’s professional services negotiation policy.

Jones and Carter was selected through a Request for Qualifications process, initially through the generic Prequalification process in 2011 and more definitively through a short listed presentation and interview process specifically for the Old Hearne Road Project, where they competed against two (2) other short listed local engineering firms for this contract.

**STAFF ANALYSIS AND RECOMMENDATION:** Staff recommends awarding the Engineering Design Contract for the Old Hearne Road Reconstruction Project, City Project Number 322-411-425-611-DE-1211 to Jones & Carter, Inc. for the lump sum amount of \$442,500.00. Preparing the design for the infrastructure reconstruction along Old Hearne Road will be a step toward construction of an improved, safer, more aesthetically pleasing and properly functioning street with better drainage in an area that could benefit from the enhancements. In addition to improving the existing infrastructure and aesthetics of this area, this project will improve the safety for pedestrians along this section of Old Hearne Road. Staff has received numerous requests for sidewalks along this stretch of roadway through our Capital Improvement Program feedback process.

**OPTIONS (In Suggested Order of Staff Preference):**

1. Award the Engineering Design Contract
2. Do not award the Engineering Design Contract

**ATTACHMENTS:** Engineering Design Contract. (See related item on the same Council Agenda – Freese and Nichols contract for Bonham Detention Pond.)

<b>FUNDING SOURCE:</b> \$442,500 – 2010 Certificates of Obligation – Fund 368
<b>APPROVALS:</b> Jayson E. Barfknecht 05/16/13; Hugh R. Walker. 05/17/2013
<b>APPROVED FOR SUBMITTAL: CITY MANAGER</b> Kean Register, 05-17-2013
<b>APPROVED FOR SUBMITTAL: CITY ATTORNEY</b> Janis K. Hampton, 05-20-2013

Revised 04/2013

**CONTRACT FOR ENGINEERING SERVICES  
JONES & CARTER, INC.**

This Contract, dated \_\_\_\_\_, 2013, is between the **City of Bryan**, a Texas home-rule municipal corporation, (the City) and **Jones & Carter, Inc.**, a corporation (the Engineer), whereby the Engineer agrees to provide the City with certain professional services as described herein and the City agrees to pay the Engineer for those services.

**1. Scope of Services**

In consideration of the compensation stated in paragraph 2, the Engineer agrees to provide the City with the professional services as described in Attachment A, the Scope of Services, which is incorporated herein by reference for all purposes, and which services may be more generally described as follows:

Old Hearne Road Project Design.

**2. Payment**

In consideration of the Engineer's provision of the professional services in compliance with all terms and conditions of this Contract, the City shall pay the Engineer according to the terms set forth in Attachment B. Except in the event of a duly authorized change order, approved by the City in writing, the total cost of all professional services provided under this Contract shall be a lump sum fee of Four Hundred Forty Two Thousand Five Hundred Dollars (\$442,500).

**3. Time of Performance**

- A. All design work and other professional services provided under this Contract must be completed by the following date: August 31, 2015. The City Engineer may agree to an extension of the time for completion. Any extension of the time for completion approved by the City Engineer, however, shall only be effective upon the execution of an instrument in writing stating the terms of the extension and signed by both the City Engineer and the Engineer. The Schedule is more fully defined in Attachment C.
- B. **Time is of the essence of this Contract.** The Engineer shall be prepared to provide the professional services in the most expedient and efficient manner possible in order to complete the work by the times specified.

**4. Warranty, Indemnification, & Release**

- A. As an experienced and qualified design professional, the Engineer warrants that the information provided by the Engineer reflects high professional and industry standards, procedures, and performances. The Engineer warrants the design preparation of drawings, the designation or selection of materials and equipment, the selection and supervision of personnel, and the performance of other services under this Contract, is pursuant to a high standard of performance in the profession. The Engineer warrants that the Engineer will exercise diligence and due care and perform in a good and workmanlike manner all of the services pursuant to this Contract. Approval of the City shall not constitute, or be deemed, a release of the responsibility and liability of the Engineer, its employees, agents, or associates for the exercise of skill and diligence to promote the accuracy and competency of their designs, information, plans, specifications or any other document, nor shall the City's approval be deemed to be the assumption of responsibility by

the City for any defect or error in the aforesaid documents prepared by the Engineer, its employees, associates, agents, or subcontractors.

- B. The Engineer shall promptly correct any defective designs or specifications furnished by the Engineer at no cost to the City. The City's approval, acceptance, use of, or payment for, all or any part of the Engineer's services hereunder or of the Project itself shall in no way alter the Engineer's obligations or the City's rights hereunder.
- C. In all activities or services performed hereunder, the Engineer is an independent contractor and not an agent or employee of the City. The Engineer and its employees are not the agents, servants, or employees of the City. As an independent contractor, the Engineer shall be responsible for the professional services and the final work product contemplated under this Contract. Except for materials furnished by the City, the Engineer shall supply all materials, equipment, and labor required for the professional services to be provided under this Contract. The Engineer shall have ultimate control over the execution of the professional services. The Engineer shall have the sole obligation to employ, direct, control, supervise, manage, discharge, and compensate all of its employees or subcontractors, and the City shall have no control of or supervision over the employees of the Engineer or any of the Engineer's subcontractors.
- D. The Engineer must at all times exercise reasonable precautions on behalf of, and be solely responsible for, the safety of its officers, employees, agents, subcontractors, licensees, and other persons, as well as their personal property, while in the vicinity of the Project or any of the work being done on or for the Project. It is expressly understood and agreed that the City shall not be liable or responsible for the negligence of the Engineer, its officers, employees, agents, subcontractors, invitees, licensees, and other persons.
- E. **Responsibility for damage claims (indemnification): Engineer shall defend, indemnify and save harmless the City and all its officers, agents, and employees from all suits, actions, or claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person or persons or property resulting from the Engineer's negligent performance of the work, or by or on account of any claims or amounts recovered under the Workmen's Compensation Law or any other law, ordinance, order or decree, and his sureties shall be held until such suit or suits, action or actions, claim or claims for injury or damages as aforesaid shall have been settled and satisfactory evidence to the effect furnished the City. Engineer shall defend, indemnify and save harmless the City, its officers, agents and employees in accordance with this indemnification clause only for that portion of the damage caused by Engineer's negligence.**
- F. Release. The Engineer releases, relinquishes, and discharges the City, its officers, agents, and employees from all claims, demands, and causes of action of every kind and character, including the cost of defense thereof, for any injury to, sickness or death of the Engineer or its employees and any loss of or damage to any property of the Engineer or its employees that is caused by or alleged to be caused by, arises out of, or is in connection with the Engineer's negligent performance of the work. Both the City and the Engineer expressly intend that this release shall apply regardless of whether said claims, demands, and causes of action are covered, in whole or in part, by insurance.

## 5. **Engineer's Insurance**

The Engineer agrees to maintain, on a primary basis, for the duration of this contract the insurance coverages and limits as described below. See Attachment D for insurance example. The Engineer

must deliver to the City a certificate(s) of insurance evidencing that such policies are in full force and effect within 5 business days of notification of the City's intent to award a contract. Failure to meet the insurance requirements and provide the required certificate(s) and any necessary endorsements within five business days **may cause the contract to be rejected.** The City reserves the right to obtain complete, certified copies of all required insurance policies at any time.

The requirements as to types and limits, as well as the City's review or acceptance of insurance coverage to be maintained by Engineer, is not intended to nor shall in any manner limit or qualify the liabilities and obligations assumed by the Engineer under the Agreement.

- A. **Commercial General Liability Insurance** – Limit of liability not less than \$1,000,000 per occurrence Engineer agrees to maintain a standard ISO version Commercial General Liability occurrence form, or its equivalent providing coverage for, but not limited to, Bodily Injury and Property Damage, Premises/Operations, Products/Completed Operations, Independent Engineers.
  
- B. **Professional Liability Insurance** – Limit of liability not less than \$1,000,000 per occurrence Engineer agrees to maintain Professional (Errors & Omissions) Liability to pay on behalf of the insured all sums which the insured shall become legally obligated to pay as damages by reason of any act, malpractice, error or omission of the Engineer or any person employed or acting on the Engineer's behalf (including but not limited to sub-contractors). For policies written on a "claims-made" basis, Engineer agrees to maintain a retroactive date prior to or equal to the effective date of this contract and that continuous coverage will be maintained or a supplemental extended reporting period will be purchased with a minimum reporting period not less than two years after the completion of this contract. The Engineer is solely responsible for any additional premium for the supplemental extended reporting period.  
  
No "claims made" policies are acceptable without prior approval by the City Attorney. If approved, coverage must be maintained for two years after the completion of this contract.
  
- C. **Business Automobile Liability Insurance** – Limit of liability not less than \$1,000,000 per occurrence Engineer agrees to maintain a standard ISO version Business Automobile Liability, or its equivalent, providing coverage for all owned, non-owned and hired automobiles. Should the Engineer not own any automobiles, the business auto liability requirement shall be amended to allow the Engineer to agree to maintain only Hired & Non-Owned Auto Liability. This amended coverage requirement may be satisfied by way of endorsement to the Commercial General Liability, or separate Business Auto policy.
  
- D. **Workers' Compensation Insurance & Employers' Liability Insurance** – Statutory & \$500,000/\$500,000/\$500,000. The Engineer agrees to maintain Worker's Compensation Insurance & Employers Liability. In the event any work is sublet, the Engineer shall require the subcontractor similarly to provide the same coverage and shall himself acquire evidence of such coverage on behalf of the subcontractor.
  
- E. **Additional Insured Endorsements** The Engineer agrees to endorse the City as an Additional Insured on each insurance policy required to be maintained, with the exception of the worker's compensation, employer's liability and professional liability policy.
  
- F. **Waiver Of Subrogation** Waiver of subrogation in favor of the City of Bryan for each required policy. When required by the insurer or should a policy condition not permit Engineer to enter into a pre-loss agreement to waive subrogation without an endorsement, then Engineer agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of rights of

Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should Engineer enter into such an agreement on a pre-loss basis.

- G. **Deductibles, Coinsurance Penalties, & Self-Insured Retention** Engineer shall agree to be fully and solely responsible for any costs or expenses as a result of a coverage deductible, coinsurance penalty, or self-insured retention; including any loss not covered because of the operation of such deductible, coinsurance penalty, or self-insured retention.
- H. **Subcontractor's Insurance** The Engineer shall agree to cause each subcontractor employed by Engineer to purchase and maintain insurance of the type specified, provided the Engineer's insurance does not afford coverage on behalf of the subcontractor.
- I. **Certificate Of Insurance** Engineer shall furnish the City with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements. The certificate must be from a company with an A.M. Best rating of "A-VI" or better and/or otherwise acceptable to the City. Certificates must be submitted using the ACORD form and all endorsements must be included with the submittal. Engineer has the affirmative obligation to advise City at the address listed below within 5 business days of the cancellation or substantial change of any required insurance policy, and failure to do so shall be construed as a breach of this contract.

Failure of the City to demand such certificate(s) or other evidence of full compliance with these insurance requirements or failure of the City to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

In the event the City is notified that a required insurance coverage will cancel or non-renew during the contract period, the Engineer shall agree to furnish prior to the expiration of such insurance, a new or revised certificate(s) as proof that equal and like coverage is in effect. The City reserves the right, but not the obligation, to withhold payment to Engineer until coverage is reinstated. If the Engineer fails to maintain the required insurance, the City shall have the right, but not the obligation, to purchase the required insurance at Engineer's expense.

Certificates and notices should be given to the City at the following address:

**City of Bryan  
Attn: Risk Management Department  
300 S. Texas Ave.  
Bryan, TX 77803**

**RIGHT TO REVIEW AND ADJUST** The City reserves the right to review these requirements and to modify insurance coverage and their limits when deemed necessary and prudent. Furthermore, the City reserves the right, but not the obligation, to review and reject any insurer providing coverage because of poor financial condition.

## **6. Termination**

- A. The City may terminate this Contract at any time upon **thirty (30)** calendar days written notice. Upon the Engineer's receipt of such notice, the Engineer shall cease work immediately. The Engineer shall be compensated for the services satisfactorily performed prior to the termination date.

- B. If, through any cause, the Engineer fails to fulfill its obligations under this Contract, or if the Engineer violates any of the agreements of this Contract, the City has the right to terminate this Contract by giving the Engineer **five (5)** calendar days written notice to the Engineer. The Engineer will be compensated for the services satisfactorily performed before the termination date.
- C. No term or provision of this Contract shall be construed to relieve the Engineer of liability to the City for damages sustained by the City because of any breach of contract by the Engineer. The City may withhold payments to the Engineer for the purpose of setoff until the exact amount of damages due the City from the Engineer is determined and paid.

**7. Miscellaneous Terms**

- A. This Contract has been made under and shall be governed by the laws of the State of Texas. The parties agree that performance and all matters related thereto shall be in Brazos County, Texas.
- B. Notices shall be mailed to the addresses designated herein or as may be designated in writing by the parties from time to time and shall be deemed received when sent postage prepaid U.S. Mail to the following addresses:

The City of Bryan  
Attn: W. Paul Kaspar, P.E.  
P.O. Box 1000  
Bryan, Texas 77805

Jones & Carter, Inc.  
Attn: Steve E. Duncan, P.E.  
1716 Briarcrest Drive, Suite 160  
Bryan, Texas 77802

- C. No waiver by either party hereto of any term or condition of this Contract shall be deemed or construed to be a waiver of any other term or condition or subsequent waiver of the same term or condition.
- D. This Contract represents the entire and integrated agreement between the City and the Engineer and supersedes all prior negotiations, representations, or agreements, either written or oral. This Contract may only be amended by written instrument approved and executed by the parties.
- E. This Contract and all rights and obligations contained herein may not be assigned by the Engineer without the prior written approval of the City.
- F. The Engineer, its agents, employees, and subcontractors must comply with all applicable federal and state laws, the charter and ordinances of the City of Bryan, and with all applicable rules and regulations promulgated by local, state, and national boards, bureaus, and agencies. The Engineer must obtain all necessary permits and licenses required in completing the work and providing the services required by this Contract.
- G. The parties acknowledge that they have read, understood, and intend to be bound by the terms and conditions of this Contract.

Party of the First Part  
**CITY OF BRYAN, TEXAS**

**Approved as to Form: Approved:**

\_\_\_\_\_  
Janis K. Hampton, City Attorney

Prepared and Recommended:

\_\_\_\_\_  
W. Paul Kaspar, P.E., City Engineer

**Approved for Processing:**

\_\_\_\_\_  
Jayson Barfknecht, P.E., Ph.D.  
Director of Public Works

\_\_\_\_\_  
Kean Register, City Manager

By: \_\_\_\_\_  
Jason P. Bienski, Mayor

Attest:

By: \_\_\_\_\_  
Mary Lynne Stratta, City Secretary

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

Party of the Second Part  
**JONES & CARTER, INC.:**

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_  
Firm's License No. \_\_\_\_\_

\_\_\_\_\_  
Witness

SCOPE OF SERVICES  
OLD HEARNE ROAD / WILKES ROAD  
RECONSTRUCTION & DRAINAGE IMPROVEMENTS

General

This project includes the surveying and engineering design for the widening and reconstruction of Old Hearne Road from Wilkes Road to Willhelm Drive, and Wilkes Road from SH 6 to Old Hearne Road, including underground storm sewer drainage. Willhelm Drive will be reconstructed with new curb & gutter pavement plus underground storm sewer from Old Hearne Road to Montana Avenue, including sidewalks as an alternate bid item. Utility improvements consist of a 24" sanitary sewer line along Wilkes Road from Old Hearne Road to SH6, a 12" waterline along Wilkes Road from Bonham Street to Old Hearne Road, then along Old Hearne Road from Wilkes Road to Willhelm Drive. Along Willhelm Drive from Old Hearne Road to Montana Avenue, the existing waterline will be replaced with an 8" waterline and the existing sanitary sewer will be relocated as needed for the waterline work (approximately 900 feet). Both water and sanitary sewer service connections will be replaced for the portions along the reconstructed Willhelm Drive. The waterline work will also include the placement of fire hydrants for effective fire protection.

Scope of Services

1. PUBLIC MEETINGS

- a. Prepare exhibits and attend up to three (3) public meetings. All coordination, correspondence, and advertising for these meetings will be provided by the City.

2. NOTICE OF ENTRY

- a. Provide initial Notice of Entry to all property owners along the route by issuing a letter to the owner based on Brazos Central Appraisal District data. Any entry issues of additional correspondence shall be the responsibility of the City.

3. SURVEY CONTROL

- a. Establish horizontal and vertical survey control points referencing the City of Bryan monument system (NAD 83 and NAVD 88) and make them available to the contractor for use during construction.

4. TOPOGRAPHIC MAPPING

- a. Obtain field data in and around the project area which includes:
  - i. Cross-sections of each right-of-way on a 100-foot interval, obtaining additional detail at intersections.
  - ii. Existing drainage system details of roadside ditches, culverts, storm sewers, outfall flow lines, and downstream and upstream cross sections of Still Creek at the Old Hearne/Wilkes Road Intersection.
  - iii. Visible improvements such as fences, driveways, landscape areas, etc.
  - iv. Visible utilities including manholes (with invert information), water valves, water meters, fire hydrants, telephone pedestals, power poles, down conduits, gas line markers, etc.
  - v. Underground utilities which are marked in the field by utility locators.
  - vi. Trees 6-inches and larger including size and drip line.
  - vii. Additional elevations on private property along existing driveways and at the garage and front doors.

- b. Provide a topographic map of the project area suitable for design which includes
  - i. The field data.
  - ii. Scaling the flood plain from the current FEMA Map.
  - iii. Calculating 1-foot contour lines and creating a Triangulated Irregular Network file (TIN file).

5. ROW/EASEMENT DETERMINATION

- a. Obtain and plot the most recent recorded plats and deeds of tracts and easements along the project route and adjacent areas.
- b. Locate property corners and fences found in the field.
- c. Calculate and show the right-of-ways and easements on the topographic map for engineering design considerations.
- d. Existing easement legal interpretation to be provided by the City.
- e. It is not anticipated that the improvements described in the *General* portion of this scope will require the acquisition of right-of-ways or easements, therefore, surveys for right-of-way or easement acquisitions are not included for these improvements, but can be provided for an additional fee.

6. DETENTION POND SURVEYING

- a. Provide topographic mapping for detention pond site “B” (on Bonham Elementary School property) as identified by Freese & Nichols in the Still Creek Flood Protection Study, suitable for detention design.
- b. Prepare metes and bounds descriptions and exhibits for two (2) drainage easements required for detention pond site “B” as identified by Freese & Nichols in the Still Creek Flood Protection Study, suitable for execution and recordation.
- c. J&C will obtain title reports for the tracts of land proposed to dedicate drainage easements for detention pond site “B” only. Additional title reports can be provided at an additional cost, or by others.

7. SUBSURFACE UTILITY ENGINEERING (SUE)

- a. All Subsurface Utility Engineering (SUE) work shall be in accordance with the quality level definitions found in the ASCE Standard ASCE 38-02.
- b. Locate known underground utility lines utilizing available as-built drawings in the office, and surface geophysical equipment in the field for the entire project area.
- c. Canvas the project area with subsurface utility locating equipment for any unknown underground utilities, after which all subsurface utility information is shown on the topographic map stating the preliminary depth, and utility type prepared to a Quality Level B.
- d. During the final design phase, uncover critical utility crossings in the field and document detailed subsurface utility information sufficient to satisfy Quality Level A and add that information to the topographic map.
- e. Canvas the detention pond site “B” area with subsurface utility locating equipment for any unknown underground utilities, after which all subsurface utility information is shown on the topographic map stating the preliminary depth, and utility type prepared to a Quality Level B.
- f. “Pot-holes” are not expected for the detention pond site “B” area.

## 8. ROADWAY & DRAINAGE DESIGN

- a. Provide 50% Preliminary Design review submittal including drawings, estimate of probable cost, and index of civil technical specifications. 3 hard copies (24x36) and 1 digital pdf to be provided.
- b. Provide 90% Final Design review submittal including drawings, estimate of probable cost, contract documents and technical specifications. 3 hard copies (24x36) and 1 digital pdf to be provided.
- c. Provide Final sealed design submittal including drawings, estimate of probable cost, and civil technical specifications. 3 sealed (24x36) original plan sets, 3 sealed original specifications, cost estimate, and bid schedule, plus 1 digital pdf to be provided. This will include the preparation of the contract book (using the City of Bryan standard template) with the general provisions, and all necessary special provisions, technical specifications, and bid schedule.
- d. Drawings expected to be provided include: cover, sheet index, notes, topographic & existing utility mapping, erosion control plan, project specific traffic control plan (signed & sealed for construction), roadway & drainage plan & profile drawings, intersection & driveway tie-in details, striping & signage plan, project specific details, and standard details. J&C will also provide a per plan page quantity take-off sheet.
- e. Underground storm sewer design will be coordinated with Freese & Nichols to verify capacity and tie-in design of the proposed detention pond outfall, provided by Freese & Nichols.
- f. It is understood that Freese & Nichols will perform all detention pond modeling and all storm sewer modeling including sizing and spacing of the curb inlets for all proposed roadway and drainage improvements along Old Hearne Road, Wilkes Street, and Wilhelm Drive. Freese & Nichols will then provide J&C with the proposed storm sewer conduit and curb inlet sizes for vertical and horizontal design in J&C's construction documents. Freese & Nichols will prepare and submit the Final Drainage Report that documents the sizing and performance of the proposed detention ponds and outlets, proposed curb inlets, and the underground storm sewer conduits in accordance with the latest edition of the BCS Unified Stormwater Design Guidelines.

## 9. SANITARY SEWER DESIGN

- a. Provide 50%, 90%, and Final Design submittals as with the Roadway & Drainage Design. 3 hard copies (24x36) and 1 digital pdf to be provided.
- b. Drawings expected to be provided include: sanitary sewer plan & profile drawings, project specific details, and standard details.
- c. Utility flow analysis and sizing is not included in this project scope.

## 10. WATERLINE DESIGN

- a. Provide 50%, 90%, and Final Design submittals as with the Roadway & Drainage Design. 3 hard copies (24x36) and 1 digital pdf to be provided.
- b. Drawings expected to be provided include: waterline plan & profile drawings, project specific details, and standard details.
- c. Utility flow analysis and sizing is not included in this project scope.

## 11. STRUCTURAL ANALYSIS OF EXISTING CULVERTS

- a. Structural analysis of the two (2) existing 6'x6' Reinforced Box Culverts under Old Hearne Road at Still Creek to verify the structural integrity and minimum cover requirements. This analysis includes a visual inspection and sample core taken to determine actual compressive strength per ASTM C42.

- b. Provide a letter report sealed by a professional engineer documenting the results of the structural analysis and any structural recommendations based on these findings.

## 12. TRANSPORTATION ENGINEERING

- a. Conduit and pull box design for a future traffic signal at the intersection of Wilkes Road at Old Hearne Road.
- b. Traffic signal modification drawings at the intersection of Wilkes Road at SH 6 West Frontage Road/FM 974 in accordance with TxDOT standards and specifications. The degree to which the existing traffic signal will need to be modified is unknown at this time but is anticipated to include a new traffic signal mast arm pole in the northwest corner and associated foundation, pull box, conduits, cabling, vehicle detection and vehicle signal heads.

## 13. TXDOT PERMITTING COORDINATION

- a. Coordinate and provide documents to the City of Bryan to obtain the TxDOT driveway permit for work within the SH 6 ROW.
- b. All permit submissions to TxDOT shall be made by the City of Bryan.
- c. A Categorical Exclusion is not expected to be required by TxDOT for this project and is therefore not included in the project scope.

## 14. GEOTECHNICAL INVESTIGATION

- a. Perform geotechnical investigation for the project including 3-20' deep borings, 2-15' deep borings, and 1-10' deep borings throughout the project area.
- b. Provide a Geotechnical Report summarizing the test results of the soil borings, report any ground water findings, and provide project specific recommendations for the roadway stabilization, pavement section, and utility trench excavations.
- c. No environmental investigations are included in this project scope, as this project will be constructed within existing City right-of-ways.

## 15. DETENTION POND GEOTECHNICAL INVESTIGATION

- a. Perform geotechnical investigation for the Bonham Elementary Detention Pond in accordance with the scope outlined by Freese & Nichols, Inc. (FNI).
- b. The geotechnical investigation will involve a field exploration program including the drilling of four (4) 30' deep borings across the proposed detention pond site at locations designated by FNI. Soil (and any rock) samples will be obtained continuously to 10 feet depth below the existing ground surface and thereafter at 5 foot intervals, to the maximum boring exploration depths of 30 feet. Standard drilling and sampling procedures will be utilized. Ground water levels will be obtained during drilling and after an equalization period of approximately 24 hours. The boreholes will then be filled with a mixture of soils cuttings and bentonite as a safety precaution for any pedestrians crossing the project site.
- c. The geotechnical investigation will also include laboratory testing of the soils recovered during the field exploration. The laboratory tests will consist of classification tests (Atterberg limits - Liquid and Plastic Limits – and percent fines (materials finer than the No. 200 U.S. Standard sieve size)), as well as unconfined compression tests, and moisture content tests at the frequency specified by FNI.
- d. Provide a Geotechnical Report summarizing the test results of the field exploration and laboratory testing program. The summary report will describe the field exploration and laboratory testing procedures and will present the results of the field exploration and laboratory testing in the form of logs of borings and a summary table of laboratory test results. The logs of borings will indicate all field tests (such as Standard Penetration

Tests and pocket penetrometer tests) and any ground water observations. The report will NOT present any geotechnical engineering interpretation of the data or recommendations concerning the detention pond as this will be provided by FNI.

16. BID/CONSTRUCTION PHASE

- a. Assist the City in obtaining bids for the construction of the project including attendance at the pre-bid conference. The City will coordinate the bidding process, issue contract documents to bidders, etc.
- b. Assist the City during construction including attendance at the pre-construction conference, consulting and advising the City as required during the construction phase, and attending the final inspection.
- c. No construction material testing is included in this scope.
- d. Prepare record drawings based on the contractor's redlines. 1 digital copy in TIFF format and 1 digital copy in AutoCAD format to be provided.

PAYMENT  
 OLD HEARNE ROAD / WILKES ROAD  
 RECONSTRUCTION & DRAINAGE IMPROVEMENTS

Payment to the ENGINEER will be made as follows:

A. Invoice and Time of Payment

Monthly invoices will be issued by the ENGINEER for all work performed under this Agreement. Invoices are due and payable on receipt. Invoices will be prepared in a format approved by the CITY prior to submission of the first monthly invoice. Monthly payment of the fee will be in proportion to percent completion of the total work for each fee item outlined below.

B. Upon completion of services enumerated in Attachment A, Scope of Services, the final payment of any balance will be due upon receipt of the final invoice.

FEE STRUCTURE:

TOTALS:

Public Meetings

Public Meetings	\$ 5,000	\$ 5,000
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Surveying

Notice of Entry	\$ 2,000	
Survey Control	\$ 6,500	
Topographic Mapping	\$ 36,000	
ROW/Easement Determination	<u>\$ 13,000</u>	\$ 57,500

Detention Pond Surveying

Topographic Mapping (Pond B)	\$ 4,000	
Drainage Easement Preparation (Pond B)	<u>\$ 4,500</u>	\$ 8,500

Subsurface Utility Engineering (SUE)

Subsurface Utility Engineering "B"	\$ 16,000	
Subsurface Utility Engineering "A"	\$ 9,000	
Detention Pond "B" Subsurface Utility Engineering "B"	<u>\$ 4,000</u>	\$ 29,000

Engineering Design

*Roadway & Drainage Design*

Preliminary Roadway & Drainage Design	\$ 115,000	
Final Roadway & Drainage Design	<u>\$ 115,000</u>	\$ 230,000

*Sanitary Sewer Design*

Preliminary Sanitary Sewer Design	\$ 15,000	
Final Sanitary Sewer Design	<u>\$ 15,000</u>	\$ 30,000

*Waterline Design*

Preliminary Waterline Design	\$ 15,000	
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Final Waterline Design	\$ 10,000	\$ 25,000
<i><u>Special Services</u></i>		
Structural Analysis of Existing Box Culverts	\$ 3,000	
Transportation Engineering	\$ 12,000	
TxDOT Permitting Coordination	\$ 3,500	
Geotechnical Investigation	\$ 11,000	
Detention Pond Geotechnical Investigation	\$ 8,500	\$ 38,000
<i><u>Construction Support</u></i>		
Bid/Construction Phase	\$ 16,000	
Record Drawings	\$ 3,500	\$ 19,500
<b><u>TOTAL</u></b>		<b>\$ 442,500</b>

ESTIMATED MONTHLY BREAKDOWN

Jun-13	Survey, Geotechnical	\$ 41,500
Jul-13	Survey, Structural	\$ 25,000
Aug-13	Survey, SUE	\$ 51,000
Sep-13	Prelim Design, Transportation Engineering	\$ 51,000
Oct-13	Prelim Design, Transportation Engineering	\$ 51,000
Nov-13	Prelim Design, Public Meetings	\$ 52,500
Dec-13	Final Design	\$ 50,000
Jan-14	Final Design, TxDOT Coordination	\$ 53,500
Feb-14	Final Design, Public Meetings	\$ 47,500
Mar-14	Bidding	\$ 1,000
Apr-14	Construction Assistance	\$ 1,000
May-14	Construction Assistance	\$ 1,000
Jun-14	Construction Assistance	\$ 1,000
Jul-14	Construction Assistance	\$ 1,000
Aug-14	Construction Assistance	\$ 1,000
Sep-14	Construction Assistance	\$ 1,000
Oct-14	Construction Assistance	\$ 1,000
Nov-14	Construction Assistance	\$ 1,000
Dec-14	Construction Assistance	\$ 1,000
Jan-15	Construction Assistance	\$ 1,000
Feb-15	Construction Assistance	\$ 1,000
Mar-15	Construction Assistance	\$ 1,000
Apr-15	Construction Assistance	\$ 1,000
May-15	Construction Assistance	\$ 1,000
Jun-15	Construction Assistance	\$ 1,000
Jul-15	Record Drawings	<u>\$ 3,500</u>
		\$ 442,500

PROJECT SCHEDULE  
OLD HEARNE ROAD / WILKES ROAD  
RECONSTRUCTION & DRAINAGE IMPROVEMENTS

SCHEDULE:

We understand that this project is a high priority and we are prepared to commence work immediately. The following is the anticipated schedule:

Council Award:	May 2013
Submit 50% Plans for Review:	November 2013
Submit 90% Plans for Review:	February 2014
Submit Final Plans & Specs:	March 2014

**ATTACHMENT "D" -THE CITY OF BRYAN INSURANCE REQUIREMENTS**