

INVITATION TO BID

**BID NO. 17-0086-4**

**CHATHAM COUNTY RECORDS CENTER PARKING LOT REHABILITATION**

**PRE-BID CONFERENCE: 2:00 PM, SEPTEMBER 14, 2017**

**BID OPENING: 2:00 PM, SEPTEMBER 28, 2017**

THE COMMISSIONERS OF CHATHAM COUNTY, GEORGIA

ALBERT J. SCOTT, CHAIRMAN

COMMISSIONER HELEN J. STONE

COMMISSIONER TABITHA ODELL

COMMISSIONER JAMES J. HOLMES

COMMISSIONER JAMES "JAY" JONES

COMMISSIONER BOBBY LOCKETT

COMMISSIONER DEAN KICKLIGHTER

COMMISSIONER PATRICK J. FARRELL

COMMISSIONER CHESTER A. ELLIS

R. JONATHAN HART, COUNTY ATTORNEY

CHATHAM COUNTY, GEORGIA

DOCUMENT CHECK LIST

The following documents, when marked, are contained in and made a part of this Bid Package or are required to be submitted with the bid. It is the responsibility of the bidder to read, complete and sign, where indicated, and return these documents with his/her bid. **FAILURE TO DO SO MAY BE CAUSE FOR DISQUALIFYING THE BID.**

GENERAL INFORMATION AND INSTRUCTIONS TO BID WITH ATTACHMENTS

SURETY REQUIREMENTS - **A Bid Bond of 5% with this ITB.**

PROPOSAL

PLANS/SPECIFICATIONS – **Plans must be purchased at Clayton Digital Reprographics by logging into [www.cdrepro.com](http://www.cdrepro.com). Login to DFS. New users must register. For technical support contact CDR at (912) 447-5445, fax (912) 233-7020 or email: [cdwest@cdrepro.com](mailto:cdwest@cdrepro.com).**

BID SCHEDULE

PERFORMANCE BOND – **Required at the time of contract.**

PAYMENT BOND – **Required at the time of contract.**

CONTRACT

LEGAL NOTICE

ATTACHMENTS: A. DRUG FREE WORKPLACE; B. NONDISCRIMINATION STATEMENT; C. DISCLOSURE OF RESPONSIBILITY STATEMENT; D. CONTRACTOR & SUBCONTRACTOR AFFIDAVIT AND AGREEMENT, E. BIDDER'S CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION, F. M/WBE PARTICIPATION REPORT, G. SYSTEMATIC ALIEN VERIFICATION FOR ENTITLEMENTS,

DOCUMENTATION OF ABILITY TO PERFORM BID REQUIREMENTS. THIS MAY BE REQUIRED OF BIDDERS AFTER SUBMISSION OF BIDS.

**COUNTY TAX CERTIFICATE REQUIREMENT** - Contractor must supply a copy of their Tax Certificate from their location in the State of Georgia, as proof of payment of the occupational tax where their office is located.

CURRENT TAX CERTIFICATE NUMBER \_\_\_\_\_  
CITY \_\_\_\_\_  
COUNTY \_\_\_\_\_  
OTHER \_\_\_\_\_

**The Chatham County of Commissioners have established goals to increase participation of minority and woman owned businesses. In order to accurately document participation, businesses submitting bids or proposals are encouraged to report ownership status. A minority or woman owned business is defined as a business with at least 51% ownership by one or more minority/female individuals and whose daily business operations are managed and directed by one (1) or more of the minority/female owners. Please check ownership status as applicable:**

**African-American** \_\_\_\_\_ **Asian American** \_\_\_\_\_ **Hispanic** \_\_\_\_\_

**Native American or Alaskan Indian** \_\_\_\_\_ **Woman** \_\_\_\_\_

**In the award of "Competitive Sealed Proposals", minority/female participation may be one of several evaluation criteria used in the award process when specified as such in the Request for Proposal.**

RECEIPT IS HEREBY ACKNOWLEDGED OF ADDENDA NUMBER(S) \_\_\_\_\_

The undersigned bidder certifies that he/she has received the above listed and marked documents and acknowledges that his/her failure to return each, completed and signed as required, may be cause for disqualifying his/her bid.

BY: \_\_\_\_\_

DATE

\_\_\_\_\_  
SIGNATURE

TITLE: \_\_\_\_\_

COMPANY: \_\_\_\_\_

CHATHAM COUNTY, GEORGIA  
OFFICE OF THE PURCHASING DIRECTOR  
1117 EISENHOWER DRIVE - SUITE C  
SAVANNAH, GEORGIA 31406  
(912) 790-1622

**Date: August 17, 2017**

**BID NO. 17-0086-4**

**GENERAL INFORMATION FOR INVITATION FOR BID**

This is an invitation to submit a bid to supply Chatham County with construction, equipment, supplies and/or services as indicated herein. Sealed bids will be received at the Office of the Purchasing Agent, at **The Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406 up to 2:00PM local time, SEPTEMBER 28, 2017,** at which time they will be opened and publicly read. **The County reserves the right to reject all bids that are non-responsive or not responsible.**

Instructions for preparation and submission of a bid are contained in this Invitation To Bid package. Please note that specific forms for submission of a bid are required. Bids must be typed or printed in ink.

A **Pre-bid Conference** has been scheduled to be conducted at **The Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia SEPTEMBER 14, 2017, at 2:00 PM,** to discuss the specifications and resolve any questions and/or misunderstanding that may arise. **You are encouraged to attend.**

Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Director will issue a written addendum to document each approved change. Generally when addenda are required, the bid opening date will be changed.

Chatham County has an equal opportunity purchasing policy. Chatham County seeks to ensure that all segments of the business community have access to supplying the goods and services needed by County programs. The County affirmatively works to encourage utilization of disadvantaged and minority business enterprises in our procurement activities. The County provides equal opportunity for all businesses and does not discriminate against any persons or businesses regardless of race, color, religion, age, sex, national origin or handicap. The terms "disadvantaged business," "minority business enterprise," and "minority person" are more specifically defined and explained in the Chatham County Purchasing Ordinance and Procedures Manual, Article VII - Disadvantaged Business Enterprises Program.

**This project IS a Special Purpose Local Option Sales Tax (SPLOST) Project. See paragraph 2.25 for MBE/WBE participation goals.**

## INSTRUCTIONS TO BIDDERS

1.1 **Purpose:** The purpose of this document is to provide general and specific information for use in submitting a bid to supply Chatham County with equipment, supplies, and/or services as described herein. All bids are governed by the Code of Chatham County, Chapter 4, Article IV, and the laws of the State of Georgia.

1.2 **How to Prepare Bids:** All bids shall be:

- a. Prepared on the forms enclosed herewith, unless otherwise prescribed, and **all documents must be submitted.**
- b. Typewritten or completed with pen and ink, signed by the business owner or authorized representative, with all erasures or corrections initialed and dated by the official signing the bid. ALL SIGNATURE SPACES MUST BE SIGNED.

Bidders are encouraged to review carefully all provisions and attachments of this document prior to submission. Each bid constitutes an offer and may not be withdrawn except as provided herein.

1.3 **How to Submit Bids:** All bids shall be:

- a. **An original and duplicate copy must be submitted in a sealed opaque envelope, plainly marked with the bid number and title, date and time of bid opening, and company name.**
- b. Mailed or delivered as follows in sufficient time to ensure receipt by the Purchasing Director on or before the time and date specified above.

1. **Mailing Address: Chatham County Purchasing and Contracting, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406.**

2. **Hand Delivery: Purchasing Director, Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406.**

**BIDS NOT RECEIVED BY THE TIME AND DATE SPECIFIED WILL NOT BE OPENED OR CONSIDERED.**

1.4 **How to Submit an Objection:** Objections from bidders to this invitation to bid and/or these specifications should be brought to the attention of the County Purchasing Director in the following manner:

- a. When a pre-bid conference is scheduled, bidders shall either present their oral objections at that time or submit their written objections at least two (2) days prior to the scheduled pre-bid conference.
  - b. When a pre-bid conference is not scheduled, the bidder shall submit any objections he may have in writing not less than five (5) days prior to the opening of the bid.
  - c. The objections contemplated may pertain to form and/or substance of the invitation to bid documents. Failure to object in accordance with the above procedure will constitute a waiver on the part of the business to protest this invitation to bid.
- 1.5 **Failure to Bid:** If a bid is not submitted, the business should return this invitation to bid document, stating reason therefore, and indicate whether the business should be retained or removed from the County's bidders list.
- 1.6 **Errors in Bids:** Bidders or their authorized representatives are expected to fully inform themselves as to the conditions, requirements, and specifications before submitting bids. Failure to do so will be at the bidder's own risk. In case of error in extension of prices in the bid, the unit price will govern.
- 1.7 **Standards for Acceptance of Bid for Contract Award:** The County reserves the right to reject any or all bids and to waive any irregularities or technicalities in bids received whenever such rejection or waiver is in the best interest of the County. The County reserves the right to reject the bid of a bidder who has previously failed to perform properly or complete on time contracts of a similar nature, or a bid from a bidder whom investigation shows is not in a position to perform the contract.
- 1.8 **Bid Tabulation:** Tabulations for all bids will be posted for thirty (30) days after the bid opening in the Office of Purchasing and Contracting, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406 or can be reviewed on the Purchasing web site 24/48 hours after opening at <http://purchasing.chathamcounty.org>.
- 1.9 **Bidder:** Whenever the term "bidder" is used it shall encompass the "person," "business," "contractor," "supplier," "vendor," or other party submitting a bid or proposal to Chatham County in such capacity before a contract has been entered into between such party and the County.
- 1.10 **Responsible / Responsive Bidder:** *Responsible Bidder* means a person or entity that has the capability in all respects to perform fully and reliably the contract requirements. *Responsive Bidder* means a person or entity that has submitted a bid or proposal that conforms in all material respects to the requirements set forth in the invitation for bids or request for proposals.

- 1.11 **Compliance with Laws:** The bidder and/or contractor shall obtain and maintain all licenses, permits, liability insurance, workman's compensation insurance and comply with any and all other standards or regulations required by federal, state or County statute, ordinances and rules during the performance of any contract between the contractor and the County. Any such requirement specifically set forth in any contract document between the contractor and the County shall be supplementary to this section and not in substitution thereof.
- 1.12 **Contractor:** Contractor or subcontractor means any person or business having a contract with Chatham County. The Contractor/Vendor of goods, material, equipment or services certifies that they will follow equal employment opportunity practices in connection with the awarded contract as more fully specified in the contract documents.
- 1.13 **Local Preference:** On 27 March 1998, the Board of Commissioners adopted a "**Local Vendor**" Preference Ordinance that gives the lowest Chatham County vendor submitting a responsible bid/quote the opportunity to match the lowest price offered by an out-of-County vendor. If the County vendor confirms in writing to match within 24 hours, the award will be made to the Chatham County vendor. The lowest Chatham County responsive bidder will be afforded the "right to first refusal". "Local Vendor" is defined as a business or supplier which operates and maintains a regular place of business within the geographical boundaries of Chatham County or one of the local Municipalities of the County AND all real and personal property taxes are paid prior to award of a contract or purchase. "**NOT APPLICABLE TO PUBLIC WORKS CONSTRUCTION PROJECTS AND REVENUE PRODUCING BIDS.**" However, contractors are encourage to apply the same method when awarding bids to local M/WBE businesses whenever possible in order to promote growth in Chatham County's economy.
- 1.14 **Debarred Firms and Pending Litigation:** Any potential proposer/firm listed on the Federal or State of Georgia Excluded Parties Listing (Barred from doing business) **will not** be considered for contract award. Proposers **shall disclose** any record of pending criminal violations (Indictment) and/or convictions, pending lawsuits, etc., and any actions that may be a conflict of interest occurring within the past five (5) years. Any proposer/firm previously defaulting or terminating a contract with the County will not be considered.

\*\* All bidders or proposers are to read and complete the Disclosure of Responsibility Statement enclosed as an Attachment to be returned with response. Failure to do so may result in your solicitation response being rejected as non-responsive.

Bidder acknowledges that in performing contract work for the Board, bidder shall not utilize any firms that have been a party to any of the above actions. If bidder has engaged any firm to work on this contract or project that is later debarred, Bidder shall sever its relationship with that firm with respect to Board contract.

- 1.15 **Performance Evaluation:** On 11 April 2008, the Chatham County Board of Commissioners approved a change to the County Purchasing Ordinance requiring Contractor/Consultant Performance Evaluations, as a minimum, annually, prior to contract anniversary date. Should Contractor/Consultant performance be unsatisfactory, the appointed County Project Manager for the contract may prepare a Contractor/Consultant Complaint Form or a Performance Evaluation to the County Purchasing Agent.
- 1.16 **Payment of Taxes:** No contract shall be awarded unless all real and personal property taxes have been paid by the successful contractor and/or subcontractors as adopted by the Board of Commissioners on 8 April 1994.
- 1.17 **State Licensing Board for General Contractors:** Pursuant to Georgia law, the following types of contractors must obtain a license from the State Licensing Board of Residential and General Contractors by 1 July 2008 :

**\*Residential - Basic Contractor** (Contractor work relative to detached one-family and two-family residences and one-family townhouses not over three stories in height).

**\*Residential - Light Commercial Contractor** (Contractor work or activity related to multifamily and multiuse light commercial buildings and structures).

**\*General Contractor** (Contractor work or activity that is unlimited in scope regarding any residential or commercial projects).

**See "Checklist for Submitting Bid" for the type of license required for this project.**

- 1.18 **Immigration:** On 1 July , the Georgia Security and Immigration Compliance Act (SB 529, Section 2) became effective. All contractors and subcontractors with 100 or more employees entering into a contract or work must sign an affidavit that he/she has used the E-Verify System. E-Verify is a no-cost federal employment verification system to insure employment eligibility. Affidavits are enclosed in this solicitation. You may download M-274 Handbook for Employers at <http://www.dol.state.ga.us/spotlight/employment/rules>. You may go to <http://www.uscis.gov>. to find the E-Verify information.

**Systematic Alien Verification for Entitlements (SAVE) Program:** O.C.G.A. 50-36-1, required Georgia's counties to comply with the federal **Systematic Alien Verification for Entitlements (SAVE) Program**. SAVE is a federal program used to verify that applicants for certain "public benefits" are legally present in the United States. Contracts with the County are considered "public benefits." Therefore, the successful bidder will be required to provide the Affidavit Verifying Status for Chatham County Benefit Application prior to receiving any County contract. The affidavit is included as part of this bid package but is only required of the successful bidder.

**Protection of Resident Workers.** Chatham County Board of Commissioners actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Contractor shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment.

## **GENERAL CONDITIONS**

- 2.1 **Specifications:** Any obvious error or omission in specifications shall not inure to the benefit of the bidder but shall put the bidder on notice to inquire of or identify the same from the County. Whenever herein mentioned is made of any article, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed to be the minimum requirements of these specifications.
- 2.2 **Multiple Bids:** No vendor will be allowed to submit more than one (1) bid. Any alternate proposals must be brought to the Purchasing Agent's attention during the Pre-bid Conference or submitted in writing at least five (5) days preceding the bid opening date.
- 2.3 Not Used.
- 2.4 **Prices to be Firm:** Bidder warrants that bid prices, terms and conditions quoted in his bid will be firm for acceptance for a period of sixty (60) days from bid opening date, unless otherwise stated in the bid.
- 2.5 **Completeness:** All information required by Invitation for Bids/Proposals must be completed and submitted to constitute a proper bid or proposal.
- 2.6 **Quality:** All materials, or supplies used for the construction necessary to comply with this proposal shall be of the best quality, and of the highest standard of workmanship. Workmanship employed in any construction, repair, or installation required by this proposal shall be of the highest quality and meet recognized standards within the respective trades, crafts and of the skills employed.
- 2.7 **Guarantee/Warranty:** Unless otherwise specified by the County, the bidder shall unconditionally guarantee the materials and workmanship for one (1) year on all material and/or services. If, within the guarantee period, any defects occur which are due to faulty material and or services, the contractor at his expense, shall repair or adjust the condition,

or replace the material and/or services to the complete satisfaction of the County. These repairs, replacements or adjustments shall be made only at such time as will be designated by the County as being least detrimental to the operation of County business.

- 2.8 **Liability Provisions:** Where bidders are required to enter or go onto Chatham County property to take measurements or gather other information in order to prepare the bid or proposal as requested by the County, the bidder shall be liable for any injury, damage or loss occasioned by negligence of the bidder, his agent, or any person the bidder has designated to prepare the bid and shall indemnify and hold harmless Chatham County from any liability arising therefrom. The contract document specifies the liability provisions required of the successful bidder in order to be awarded a contract with Chatham County.
- 2.9 **Cancellation of Contract:** The contract may be canceled or suspended by Chatham County in whole or in part by written notice of default to the Contractor upon non-performance or violation of contract terms. An award may be made to the next low bidder, for articles and/or services specified or they may be purchased on the open market and the defaulting Contractor (or his surety) shall be liable to Chatham County for costs to the County in excess of the defaulted contract prices. See the contract documents for complete requirements.
- 2.10 **Patent Indemnity:** Except as otherwise provided, the successful bidder agrees to indemnify Chatham County and its officers, agents and employees against liability, including costs and expenses for infringement upon any letters patent of the United States arising out of the performance of this Contract or out of the use or disposal for the account of the County of supplies furnished or construction work performed hereunder.
- 2.11 **Certification of Independent Price Determination:** By submission of this bid, the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this procurement:
- (1) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
  - (2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other bidder or to any competitor; and
  - (3) No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not be submit a bid for the purpose or restricting competition.
- 2.12 **Award of Contract:** The contract, if awarded, will be awarded to that responsible bidder whose bid/proposal will be most advantageous to Chatham County, price and other factors

considered. The Board of Commissioners will make the determination as to which bid or proposal that serves as the best value to Chatham County.

2.13 **Procurement Protests:** Objections and protests to any portion of the procurement process or actions of the County staff may be filed with the Purchasing Agent for review and resolution. The Chatham County Purchasing Procedures Manual, Article IX - Appeals and Remedies shall govern the review and resolution of all protests.

2.14 **Qualification of Business (Responsible Bidder or Proposer):** A responsible bidder or proposer is defined as one who meets, or by the date of the bid acceptance can meet, certifications, all requirements for licensing, insurance, and registrations, or other documentation required by the Design Professional engaged to develop Scope of Work, specifications and plans. These documents will be listed in the Special Conditions further on in this solicitation. Chatham County has the right to require any or all bidders to submit documentation of the ability to perform, provide, or carry out the service or provide the product requested.

Chatham County has the right to disqualify the bid or proposal of any bidder or proposer as being unresponsive or irresponsible whenever such bidder/proposer cannot document the ability to deliver the requested product.

2.15 **Chatham County Tax Certificate Requirement:** A current Chatham County Tax Certificate is required unless otherwise specified. Please contact the Building Safety and Regulatory Services at (912) 201-4300 for additional information.

**NOTE:** No contract shall be awarded unless all real and personal property taxes have been paid by the successful contractor and/or subcontractors as adopted by the Board of Commissioners on 8 April 1994.

2.16 **Insurance Provisions, General:** The selected contractor shall be required to procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Bid.

It is every contractor's responsibility to provide the County Purchasing and Contracting Division current and up-to-date Certificates of Insurance for multiple year contracts before the end of each term. **Failure to do so may be cause for termination of contract.**

2.16.1 General Information that shall appear on a Certificate of Insurance:

- I. Name of the Producer (Contractor's insurance Broker/Agent).
- II. Companies affording coverage (there may be several).
- III. Name and Address of the Insured (this should be the Company or Parent of the firm Chatham County is contracting with).

- IV. A Summary of all current insurance for the insured (includes effective dates of coverage).
- V. A brief description of the operations to be performed, the specific job to be performed, or contract number.
- VI. Certificate Holder (This is to always include Chatham County).

**Chatham County as an Additional Insured:** Chatham County invokes the defense of sovereign immunity. In order not to jeopardize the use of this defense, the County **is not** to be included as an Additional Insured on insurance contracts.

2.16.2 **Minimum Limits of Insurance** to be maintained for the duration of the contract:

- a. **Commercial General Liability:** Provides protection against bodily injury and property damage claims arising from operations of a Contractor or Tenant. This policy coverage includes: premises and operations, use of independent contractors, products/completed operations, personal injury, contractual, broad form property damage, and underground, explosion and collapse hazards. Minimum limits: \$1,000,000 bodily injury and property damage per occurrence and annual aggregate.
- b. **Worker's Compensation and Employer's Liability:** Provides statutory protection against bodily injury, sickness or disease sustained by employees of the Contractor while performing within the scope of their duties. Employer's Liability coverage is usually included in Worker's Compensation policies, and insures common law claims of injured employees made in lieu of or in addition to a Worker's Compensation claim. Minimum limits: \$500,000 for each accident, disease policy limit, disease each employee and Statutory Worker's Compensation limit.
- c. **Business Automobile Liability:** Coverage insures against liability claims arising out of the Contractor's use of automobiles. Minimum limit: \$1,000,000 combined single limit per accident for bodily injury and property damage. Coverage should be written on an Any Auto basis.

2.16.3 Special Requirements:

- a. **Claims-Made Coverage:** The limits of liability shall remain the same as the occurrence basis, however, the Retroactive date shall be prior to the coincident with the date of any contract, and the Certificate of Insurance shall state the coverage is claims-made. The Retroactive date shall also be specifically stated on the Certificate of Insurance.
- b. **Extended Reporting Periods:** The Contractor shall provide the County with a notice of the election to initiate any Supplemental Extended Reporting Period and the reason(s) for invoking this option.

- c. **Reporting Provisions:** Any failure to comply with reporting provisions of the policies shall not affect coverage provided in relation to this request.
- d. **Cancellation:** Each insurance policy that applies to this request shall be endorsed to state that it shall not be suspended, voided, or canceled, except after thirty (30) days prior to written notice by certified mail, return receipt requested, has been given to the County.
- e. **Proof of Insurance:** Chatham County shall be furnished with certificates of insurance and with original endorsements affecting coverage required by this request. The certificates and endorsements are to be signed by a person authorized by the insurer to bind coverage on its behalf. All certificates of insurance are to be submitted prior to, and approved by, the County before services are rendered. The Contractor must ensure Certificate of Insurance are updated for the entire term of the County.
- f. **Insurer Acceptability:** Insurance is to be placed with an insurer having an A.M. Best's rating of A and a five (5) year average financial rating of not less than V. If an insurer does not qualify for averaging on a five year basis, the current total Best's rating will be used to evaluate insurer acceptability.
- g. **Lapse in Coverage:** A lapse in coverage shall constitute grounds for contract termination by the Chatham County Board of Commissioners.
- h. **Deductibles and Self-Insured Retention:** Any deductibles or self-insured retention must be declared to, and approved by, the County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as related to the County, its officials, officers, employees, and volunteers; or the Contractor shall procure a bond guaranteeing payment of related suits, losses, claims, and related investigation, claim administration and defense expenses.

2.16.4

**Additional Coverage for Specific Procurement Projects:**

- a. **Professional Liability:** Insure errors or omission on behalf of architects, engineers, attorneys, medical professionals, and consultants.

Minimum Limits:

\$1 million per claim/occurrence

Coverage Requirement:

If claims-made, retroactive date must precede or coincide with the contract effective date or the date of the Notice to Proceed. The professional must state if tail coverage has been purchased and the duration of the coverage.

- b. **Builder's Risk: (For Construction or Installation Contracts)** Covers against insured perils while in the course of construction.  
Minimum Limits: All-Risk coverage equal 100% of contract value  
Coverage Requirements: Occupancy Clause - permits County to use the facility prior to issuance of Notice of Substantial Completion.
  
- 2.17 **Compliance with Specification - Terms and Conditions:** The Invitation to Bid, Legal Advertisement, General Conditions and Instructions to Bidders, Specifications, Special Conditions, Vendor's Bid, Addendum, and/or any other pertinent documents form a part of the bidders proposal or bid and by reference are made a part hereof.
  
- 2.18 **Signed Bid Considered Offer:** The signed bid shall be considered an offer on the part of the bidder, which offer shall be deemed accepted upon approval by the Chatham County Board of Commissioners, Purchasing Agent or his designee. In case of a default on the part of the bidder after such acceptance, Chatham County may take such action as it deems appropriate, including legal action for damages or lack of required performance.
  
- 2.19 **Notice to Proceed:** The successful bidder or proposer shall not commence work under this Invitation to Bid until a written contract is awarded and a Notice to Proceed is issued by the Purchasing Agent or his designee. If the successful bidder does commence any work or deliver items prior to receiving official notification, he does so at his own risk.
  
- 2.20 **Payment to Contractors:** Instructions for invoicing the County for products delivered to the County are specified in the contract document.
  - a. Questions regarding payment may be directed to the Finance Department at (912) 652-7900 or the County's Project Manager as specified in the contract documents.
  
  - b. Contractors will be paid the agreed upon compensation upon satisfactory delivery of the products or completion of the work as more fully described in the contract document.
  
  - c. Upon completion of the work or delivery of the products, the Contractor will provide the County with an affidavit certifying all suppliers, persons or businesses employed by the Contractor for the work performed for the County have been paid in full.
  
  - d. Chatham County is a tax exempt entity. Every contractor, vendor, business or person under contract with Chatham County is required by Georgia law to pay State sales or use taxes for products purchased in Georgia or transported into Georgia and sold to Chatham County by contract. Please consult the State of Georgia, Department of Revenue, Sales and Use Tax

Unit in Atlanta (404) 656-4065 for additional information.

2.21 **Owner's Rights Concerning Award:** The Owner reserves the right, and sole and complete discretion to waive technicalities and informalities. The Owner further reserves the right, and sole and complete discretion to reject all bids and any bid that is not responsive or that is over the budget, as amended. In judging whether the bidder is responsible, the Owner will consider, but is not limited to consideration of, the following:

- a. Whether the bidder or principals are currently ineligible, debarred, suspended, or otherwise excluded from bidding or contracting by any state or federal agency, department, or authority;
- b. Whether the bidder or principals have been terminated for cause or are currently in default on a public works contract;
- c. Whether the bidder can demonstrate a commitment to safety with regard to Workers' Compensation by having an experience Modification Rate (EMR) over the past three years not having exceeded an average of 1.2; and
- d. Whether the bidder's past work provides evidence of an ability to successfully complete public works projects within the established time, quality, or cost, or to comply with the bidder's contract obligations; and
- e. Whether the bidder has made a Good Faith Effort to meet local participation goals for local economic impact for Disadvantaged Business Enterprises and Small Business Enterprises.

2.22 **Owner's Right to Negotiate with the Lowest Bidder:**

In the event all responsive and responsible bids are in excess of the budget, the Owner, in its sole and absolute discretion and in addition to the rights set forth above, reserves the right either to (i) supplement the budget with additional funds to permit award to the lowest responsive and responsible bid, or (ii) to negotiate with the lowest responsive and responsible bidder (after taking all deductive alternates) only for the purpose of making changes to the Project that will result in a cost to the Owner that is within the budget, as it may be amended.

2.23 **Debarred or Suspended Subcontractors.**

CONTRACTOR shall not subcontract, and shall ensure that no subcontracts are awarded at any tier, to any individual, firm, partnership, joint venture, or any other entity regardless of the form of business organization, that is on the Federal Excluded Parties List System (EPLS) at <https://www.epls.gov> or the State of Georgia, DOAS, State Purchasing Exclusion listing, or other local government entity. This includes pending litigation or claims with

the County or other government entities. Contractor shall immediately notify County in the event any subcontractor is added to a Federal, State or other Government Entity listing after award of the subcontract.

**2.24 Cone of Silence:**

Lobbying of Procurement Evaluation Committee members, County Government employees, and elected officials regarding this product or service solicitation, Invitation to Bid (ITB) or Request for Proposal (RFP) or contract by any member of a proposer's staff, or those people employed by any legal entity affiliated with an organization that is responding to the solicitation is strictly prohibited. Negative campaigning through the mass media about the current service delivery is strictly prohibited. Such actions may cause your proposal to be rejected.

**2.25** The Chatham County Board of Commissioners has adopted an aggressive program that establishes goals for minority/female, small and disadvantaged business participation in construction, professional services, and general procurement.

- a. The Chatham County Board of Commissioners under Georgia law may reject any bid as non-responsive if they feel a bidder did not exercise "Good Faith Effort" in obtaining the goal established for M/WBE participation.
- b. The Chatham County Board of Commissioners adopted a policy establishing goals oriented to increase participation of minority and female owned businesses, through MBE/WBE certification and development. In order to accurately document participation, businesses submitting bids, quotes or proposals are encouraged to report ownership status. A bidder or vendor that is certified by any agency of the Federal Government or State of Georgia may submit a copy of their certification with their bid as proof of qualifications. Bidders that intend to engage in joint ventures or utilize subcontractors must submit to the County Contracts Administrator, a report on Minority/Female Business Enterprise participation.

**Goals established for this project is 30% Combined.**

- c. A Minority/Female Business Enterprise (M/WBE) is a business concern that is at least 51% owned by one or more minority/female individuals and whose daily business operations are managed and directed by one (1) or more of the minority/female owners.

**2.26 LIQUIDATED DAMAGES:** Failure to complete all work within **180** calendar days plus any extension authorized in writing by the County shall entitle the County to deduct as "Liquidated Damages" from the monies due the Contractor the amount of **\$150** for each calendar day in excess of the authorized construction time.

- 2.26 Bidders or proposers are required to make a **Good Faith Effort**, where subcontracting is to be utilized in performing the contract, to subcontract with or purchase supplies from qualified M/WBEs. Bidders or proposers are required to state if they intend to subcontract any part of the work. Goals will be established for each contract at the onset. **Forms** requiring the signatures of bidders or proposers are enclosed as **Attachments** and must be completed and returned with your bid response. If forms are not completed and submitted, the bid may be considered nonresponsive.

Each bidder or proposer is required to maintain records of such efforts in detail adequate to permit a determination of compliance with these requirements. All contracts will reflect **Good Faith Efforts** and reporting requirements for the term of the contract. The County particularly urges general contractors to give emphasis to subcontracting with local area firms. **For information on the program or M/WBE contractors/vendors please contact Connell C. Heyward, Chatham County Minority and Women Business Coordinator, 124 Bull Street, Suite 310, Savannah, Georgia 31401, (912) 652-7828 phone, or (912) 652-7951 fax. Email: [cheyward@chathamcounty.org](mailto:cheyward@chathamcounty.org)**

- 2.27 **GEORGIA OPEN RECORDS ACT** - The responses will become part of the County's official files without any obligation on the County's part. Ownership of all data, materials and documentation prepared for and submitted to Chatham County in response to a solicitation, regardless of type, shall belong exclusively to Chatham County and will be considered a record prepared and maintained or received in the course of operations of a public office or agency and subject to public inspection in accordance with the Georgia Open Records Act, Official Code of Georgia Annotated, Section 50-18-70, et. Seq., unless otherwise provided by law.

Responses to RFPs shall be held confidential from all parties other than the County until after the contract is awarded by the Board of Commissioners.

The vendor and their bid price in response to ITBs will be read allowed at public bid openings. After Bid Tabulations, the ITB shall be available for public viewing.

Chatham County shall not be held accountable if material from responses is obtained without the written consent of the vendor by parties other than the County, at any time during the solicitation evaluation process.

- 2.28 **GEORGIA TRADE SECRET ACT of 1990** - In the event a Bidder/Proposer submits trade secret information to the County, the information must be clearly labeled as a Trade Secret. The County will maintain the confidentiality of such trade secrets to the extent provided by law.
- 2.29 **CONTRACTOR RECORDS** -The Georgia Open Records Act is applicable to the records of all contractors and subcontractors under contract with the County. This applies to those specific contracts currently in effect and those which have been completed or closed for up

three (3) years following completion.

2.30 **REFERENCES - \$500,000 or more:** For bidders to be responsive each must provide information on the most recent five (5) projects with similar scope of work as well as other information to determine experience and qualifications as follows:

a. Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

Owner: \_\_\_\_\_

Address: \_\_\_\_\_

City and State: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone & Fax: \_\_\_\_\_

\*Architect or Engineer: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone & Fax: \_\_\_\_\_

b. The awarded bid amount and project start date.

Final cost of project and completion date.

Number of change orders.

Contracted project completion in days.

Project completed on time. Yes \_\_\_\_\_ No \_\_\_\_\_ Days exceeded \_\_\_\_\_.

List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.

Has contractor ever failed to complete a project? If so, provide explanation.

Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

**\$499,000 and less:** Provide references from owners of at least three (3) projects of various sizes. Include government owners if possible. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government. Provide in the format as in (a) above on the attached form.

**Failure to provide the above information may result in your firm's bid being rejected and ruled as non-responsive.**

**NOTE: FORMS FOR YOU TO FILL OUT FOR YOUR REFERENCES ARE ATTACHED TO THE BACK OF THIS BID PACKAGE.**

## ADDITIONAL CONDITIONS

- 3.1 **METHOD OF COMPENSATION.** The compensation provided for herein shall include all claims by the CONTRACTOR for all costs incurred by the CONTRACTOR in the conduct of the Project as authorized by the approved Project Compensation Schedule and this amount shall be paid to the CONTRACTOR after receipt of the invoice and approval of the amount by the COUNTY. The COUNTY shall make payments to the CONTRACTOR within thirty (30) days from the date of receipt of the CONTRACTOR's acceptable statement on forms prepared by the CONTRACTOR and approved by the COUNTY.

Should the Project begin within any one month, the first invoice shall cover the partial period from the beginning date of the Project through the last day of the month (or on a mutually agreeable time) in which it began. The invoices shall be submitted each month until the Project is completed. Invoices shall be itemized to reflect actual expenses for each individual task; also refer to the requirements concerning changes, delays and termination of work under Sections I-8, 9, and 10 of the contract. Each invoice shall be accompanied by a summary progress report which outlines the work accomplished during the billing period and any problems that may be inhibiting the Project execution. The terms of this contract are intended to supersede all provisions of the Georgia Prompt Pay Act.

As long as the gross value of completed work is less than 50% of the total contract amount, or if the contractor is not maintaining his construction schedule to the satisfaction of the engineer, the County shall retain 10% of the gross value of the completed work as indicated by the current estimate approved by the engineer.

After the gross value of completed work becomes to or exceed 50% of the total contract amount within a time period satisfactory to the County, then the total amount to be retained may be reduced to 5% of the gross value of the completed work as indicated by the current estimate approved by the engineer, until all pay items are substantially completed.

When all work is completed and time charges have ceased, pending final acceptance and final payment the amount retained may be further reduced at the discretion of the County.

The CONTRACTOR may submit a final invoice to the County for the remaining retainage upon COUNTY'S acceptance of the Certificate of Substantial Completion. Final payment constituting the entire unpaid balance due shall be paid by the COUNTY to the

CONTRACTOR when work has been fully completed and the contract fully performed, except for the responsibilities of the CONTRACTOR which survive final payment. The making of final payment shall constitute a waiver of all claims by Chatham County except those arising from unsettled liens, faulty or defective work appearing after substantial completion, failure of the work to comply with the requirements of the Contract Documents,

or terms of any warranties required by the Contractor Documents or those items previously made in writing and identified by the COUNTY as unsettled at the time of final application for payment. Acceptance of final payment shall constitute a waiver of all claims by the CONTRACTOR, except those previously made in writing and identified by the CONTRACTOR as unsettled at the time of final application for payment.

3.3 **SURETY REQUIREMENTS and Bonds:** (check where applicable)

- A. Such bidder shall post a bid bond, certified check or money order made payable to the Chatham County Finance Department in the amount of 5% of the bid price.**
- B. Contractor(s) shall be required at time of contract to shall post a payment/performance bond, certified check or money order made payable to the Chatham County Finance Department in the amount of 100% of the bid price if awarded the purchase. Such bond(s) are due prior to contract execution as a guarantee that goods meet specifications and will be delivered per contract. Such bonds will also guarantee quality performance of services and timely payment of invoices to any subcontractors.**
- C. Whenever a bond is provided, it shall be executed by a surety authorized to do business in the State of Georgia and approved by Chatham County.**
- D. Bidder acknowledges Chatham County's right to require a Performance and Payment Bond of a specific kind and origin. "Performance Bond" means a bond with good and sufficient surety or surities for the faithful performance of the contract and to indemnify the governmental entity for any damages occasioned by a failure to perform the same within the prescribed time. Such bond shall be payable to, in favor of, and for the protection of the governmental entity for which the work is to be done. "Payment Bond" means a bond with good and sufficient surety or surities payable to the governmental entity for which the work is to be done and intended for the use and protection of all subcontractors and all persons supplying labor, materials, machinery, and equipment in the prosecution of the work provided for in the public works construction contract.**
- E. Forfeit the amount of the Bid Bond if he/she fails to enter into a contract with Chatham County to do and/or furnish everything necessary to provide service and/or accomplish the work stated and/or specified in this bid proposal for the bid amount.**

3.4 **WARRANTY REQUIREMENTS:**

- a. Provisions of item 2.7 apply.
- b. Warranty required.

- X
  - 1. Standard warranty shall be offered with bid.
  - 2. Extended warranty shall be offered with bid. The cost of the extended warranty will be listed separately on the bid sheet.

3.5 **TERMS OF CONTRACT:** (check where applicable):

- a. Annual Contract (With automatic renewal options for four (4) additional one (1) year terms if all parties agree)
- b. One-time Purchase
- X c. Other **ONE TIME CONTRACT**

3.6 **AUDITS AND INSPECTIONS:**

At any time during normal business hours and as often as the County may deem necessary, the Contractor and his subcontractors shall make available to the County and/or representatives of the Chatham County Department of Internal Audit for examination of all its records with respect to all matters covered by this Contract. It shall also permit the County and/or representatives of the Department of Internal Audit to audit, inspect, examine and make copies, excerpts or transcripts from such records of personnel, conditions of employment and other data relating to all matters covered by this Contract. All documents to be audited shall be available for inspection at all reasonable times in the main offices of the County or at the offices of the Contractor as requested by the County.

**CONVERSATIONS OR CORRESPONDENCE REGARDING THIS SOLICITATION OR REPORT BETWEEN PROSPECTIVE OFFERORS AND PERSONS OUTSIDE THE CHATHAM COUNTY PURCHASING OFFICE WILL NOT BE CONSIDERED OFFICIAL OR BINDING UNLESS OTHERWISE SPECIFICALLY AUTHORIZED WITHIN THIS DOCUMENT.**

The undersigned bidder or proposer certifies that he/she has carefully read the preceding list of instructions to bidders and all other data applicable hereto and made a part of this invitation; and,

further certifies that the prices shown in his/her bid/proposal are in accordance with all documents contained in this Invitation for Bids/ Proposals package, and that any exception taken thereto may disqualify his/her bid/proposal.

This is to certify that I, the undersigned bidder, have read the instructions to bidder and agree to be bound by the provisions of the same.

This \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_.

BY \_\_\_\_\_

SIGNATURE

TITLE

COMPANY

Phone / Fax No's. / e-mail

CHATHAM COUNTY, GEORGIA  
SURETY REQUIREMENTS

A Bid Bond for five percent (5%) of the amount of the bid is required to be submitted with each bid.

A Performance Bond for one hundred percent (100%) of the bid shall be required of the successful bidder.

The Bidder certifies that he/she has examined all documents contained in this bid package, and is familiar with all aspects of the proposal and understands fully all that is required of the successful bidder. The Bidder further certifies that his/her bid shall not be withdrawn for thirty (30) days from the date on which his bid is publicly opened and read.

The Bidder agrees, if awarded this bid, he/she will:

- A. Furnish, upon receipt of an authorized Chatham County Purchase Order, all items indicated thereon as specified in this bid proposal for the bid amount, or;
- B. Enter a contract with Chatham County to do and/or furnish everything necessary to provide the service and/or accomplish the work as stated and/or specified in this bid proposal for the bid amount, and;
- C. Furnish, if required, a Performance Bond, and acknowledges Chatham County's right to require a Performance Bond of a specific kind and origin, and;
- D. Forfeit the amount of the Bid Bond if he/she fails to enter a contract with Chatham County as stated in (B) above, within fifteen (15) days of the date on which he/she is awarded the bid, and/or;
- E. Forfeit the amount of the Performance Bond if he/she fails to execute and fulfill the terms of the contract entered. The amount of forfeiture shall be:
  - 1. The difference between his/her bid and the next lowest, responsible bid that has not expired or been withdrawn, or;
  - 2. The difference between his/her bid and the amount of the lowest, responsible bid received as a result of rebidding, including all costs related to rebidding.

\_\_\_\_\_  
COMPANY

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
TELEPHONE NUMBER

**PROPOSAL**

**SPECIFICATIONS FOR:**

**BID NO. 17-0086-4**

**CHATHAM COUNTY RECORDS CENTER PARKING LOT REHABILITATION**

**This project is located at the Chatham County Records Center, 4225 Augusta Road, Garden City, Georgia.**

The work will consist of furnishing all materials, labor and equipment for the Records Center Parking Lot Rehabilitation project, to include:

Removal of existing asphalt and base as shown on plans, new curb and gutter and pavement, storm drainage improvements, installation of sod, repairing of potholes, design and installation of an irrigation system for sodded areas, design and installation of shallow irrigation well and tank adequate to supply irrigation system, and all other associated work included in the construction drawings.

**This shall be a Line Item contract.**

**COMMENCEMENT AND COMPLETION:**

**WORK SHALL BEGIN WITHIN 10 DAYS AFTER RECEIPT OF "NOTICE TO PROCEED". ALL WORK SHALL BE COMPLETED WITHIN 180 CALENDAR DAYS AFTER THE TEN DAY PERIOD.**

# Chatham County Records Center Parking Lot Rehabilitation

August 2017

Bid Schedule

ITEM NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	TOTAL PRICE
1	Mobilization (Less than 5% of Total Cost)	1	LS		\$ -
2	Construction Exit, Co	1	EA		\$ -
3	Silt Fence, Sd1-NS	745	LF		\$ -
4	Sediment Trap, Sd2-F	4	EA		\$ -
5	Sediment Trap, Sd2-P	1	EA		\$ -
6	Stone Check Dam, Cd-S	1	EA		\$ -
7	Remove Asphalt Paving	5,686	SY		\$ -
8	Remove Curb & Gutter	1,061	LF		\$ -
9	Remove Miscellaneous Concrete	128	SY		\$ -
10	Remove/Replace Existing Chain Link Fence	450	LF		\$ -
11	Remove/Replace Unsuitable Subgrade Material as Directed	500	CY		\$ -
12	Remove and Replace Asphalt Pavement as Directed	100	SY		\$ -
13	Grading	1	LS		\$ -
14	Fill Material	1,000	CY		\$ -
15	Adjust Manhole Top to Grade	2	EA		\$ -
16	Concrete Header Curb	710	LF		\$ -
17	Concrete Pavement	1,710	SY		\$ -
18	Type B Curb Inlet	1	EA		\$ -
19	18" RCP	64	LF		\$ -
20	12" HDPE	140	LF		\$ -
21	24"x24" NDS Catch Basin	3	EA		\$ -
22	Connect 18" to Existing Inlet	1	EA		\$ -
23	Concrete Flume	1	EA		\$ -
24	Rip Rap including filter fabric	2	SY		\$ -
25	Shallow Well and Pump for Irrigation	1	LS		\$ -
26	Irrigation System	1	LS		\$ -
27	Temporary Mulch, Ds1	4,400	SY		\$ -
28	Sod, Ds4	4,400	SY		\$ -
29	4" PVC Sleeve under Drive	114	LF		\$ -
30	Signage and Pavement Markings	1	LS		\$ -
31	Field Condition Allowance	1	LS		\$ -

<b>TOTAL</b>	<b>\$</b>	<b>-</b>
--------------	-----------	----------

\_\_\_\_\_  
NAME / TITLE

\_\_\_\_\_  
COMPANY

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
PHONE / FAX

\_\_\_\_\_  
E-MAIL



## SPECIAL CONDITIONS

### INDEX TO SECTION 01600 – SPECIAL CONDITIONS

#### PART 1 – PROJECT DESCRIPTION

1.01 Location and Description of Work 01600-1

#### PART 2 – CONTRACT DOCUMENTS

2.01 Technical Specifications 01600-1

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#### PART 9- IRRIGATION SYSTEM AND WATER WELL

9.01 Irrigation System and Water Well

01600-4

#### PART 10– SPECIAL CONDITIONS OF CONSTRUCTION

10.01 Requirements 01600-5

**SECTION 01600**

**SPECIAL CONDITIONS**

**PART 1 – PROJECT DESCRIPTION**

**1.01 LOCATION AND DESCRIPTION OF WORK**

- A. The project is located at 4225 Augusta Road in Garden City at the Chatham County Records Center.
- B. The work consists of the following:
  - 1. Removal of existing asphalt pavement and base as shown on plans or directed by owner.
  - 2. Construction of new concrete curb and pavement in a portion of the area of pavement removal.
  - 3. Construction of storm drainage improvements
  - 4. Installation of sod on areas of pavement removal which are not to be covered by new pavement
  - 5. Pavement removal and replacement to repair potholes or other defects in the areas of pavement to be retained.
  - 6. Design and installation of an irrigation system to cover the sodded areas.
  - 7. Design and installation of a shallow irrigation well and tank adequate to supply the irrigation system.
  - 8. All associated work for the project is included on the construction drawings.
- C. Access to the site shall be from SR 21 or Minis Avenue across property owned by Chatham County.

**PART 2 – CONTRACT DOCUMENTS**

**2.01 TECHNICAL SPECIFICATIONS**

- A. 01600 Special Conditions
- B. 02200 Earthwork
- C. 02270 Erosion and Sedimentation Control
- D. 02400 Storm Drainage
- E. 02485 Grassing
- F. 03213 Concrete Pavement

## **2.02 DRAWINGS**

- |    |         |                                    |
|----|---------|------------------------------------|
| A. | Sheet 1 | Cover Sheet                        |
| B. | Sheet 2 | General Notes                      |
| C. | Sheet 3 | Demolition Plan                    |
| D. | Sheet 4 | Paving, Grading, and Drainage Plan |
| E. | Sheet 5 | Construction Details               |
| F. | Sheet 6 | Erosion Control Details            |

## **PART 3 – PRECONSTRUCTION AND POST-CONSTRUCTION INSPECTIONS**

### **3.01 PRE-CONSTRUCTION INSPECTION**

- A. A preconstruction conditions video (standard DVD format) is required and must be submitted to Chatham County Department of Engineering for approval prior to start of any land disturbing work. Special emphasis shall be given to record pre-disturbance condition of roadway pavements to remain, curbing, sidewalks, driveways, buildings, utilities and other features located within 100 feet of the project limits. This is in addition to other inspections and surveys required of the Contractor or performed by the County.

### **3.02 POST-CONSTRUCTION INSPECTION**

- A. If required by the County, the Contractor shall provide and pay all costs of a video inspection record of the completed pipe systems produced by a qualified sewer inspection company or agency (Chatham County or City of Savannah inspection crews are acceptable, however the Contractor shall remain responsible for paying all costs). The video inspection record shall be provided on standard DVD and compatible with County viewing software. All deficiencies identified by the inspection shall be corrected by the Contractor prior to acceptance of the work as substantially complete.

## **PART 4 – STAKING**

### **4.01 CONSTRUCTION STAKING AND CONTROL OF WORK**

- A. Horizontal and vertical controls are shown on the construction plans. The Contractor shall be responsible for all staking and project layout.

## **PART 5 - DOCUMENTATION**

### **5.01 DOCUMENTATION TO BE PROVIDED WITH REQUESTS FOR PAYMENT**

- A. In addition to the documentation described elsewhere in the Contract Documents, the Contractor shall submit with each request for payment the following:

1. Copies of material delivery tickets. The Contractor shall be responsible for collecting these documents at the time of delivery. The delivery tickets shall not relieve the Contractor of his responsibility to ensure the materials are in accordance with the contract documents. Missing or incomplete documentation of delivered materials may be cause for delay/denial of payment.
2. Prior to submitting a request for payment, the Contractor shall review the extent of work completed with the County's representative for accuracy and completeness.

## **PART 6 – EROSION AND SEDIMENTATION CONTROL**

### **6.01 DUTIES**

- A. The Contractor will be responsible for installation, maintenance and repair of the sedimentation and erosion control facilities and for any modifications or adjustments necessary for the project to remain in compliance with the Georgia Erosion and Sedimentation Act during performance of the work. The Contractor will have on site at all times of construction activity a Georgia Soil and Water Conservation Commission Level 1A certified person.
- B. The contractor shall perform sediment and erosion control inspections. Any deficiencies shall be corrected as soon as noted.

## **PART 7 - FINES AND LIQUIDATED DAMAGES**

### **7.01 FINE**

- A. A \$300 per day fee shall be assessed against the Contractor and withheld from the Lump Sum Contract Price for each and every day that the erosion and sedimentation control plan is not in proper operation. This fee shall be in addition to any penalties or assessments made against the Contractor for non-compliance of the Georgia Water Quality Control Act.

### **7.02 LIQUIDATED DAMAGES**

- A. Liquidated Damages shall be assessed at \$150 per calendar day for work not completed within the Contract period. The full amount of liquidated damages will be deducted from the final payment to the Contractor.

## **PART 8 - ALLOWANCE**

### **8.01 FIELD CONDITION ALLOWANCE**

- A. The Field Condition Allowance shown on the bid sheet shall belong to Chatham County. Bidders shall not use this Allowance to assume any Contractor costs known or unknown at the bidding. Chatham County must approve use of the Allowance. Bidders shall include this Field Condition Allowance within their base bid. Any unused allowance shall revert to Chatham County.

## **PART 9- IRRIGATION SYSTEM AND WATER WELL**

### **9.01 IRRIGATION SYSTEM AND WATER WELL**

- A. The project features several large areas where existing pavement will be removed and sod will be installed in the area of removal. To ensure that the sod becomes well established after installation, and to provide a means of maintaining viability during periods of limited rainfall, the County needs an irrigation system to cover the sodded areas.

As part of the project, the Contractor, through his own forces or an approved subcontractor, shall design and install said irrigation system. The irrigation system plan will be submitted to the County for review and approval prior to installation. The plan will show the locations of the sprinkler heads, the projected spray patterns with at least 50% overlap, the locations of the master valve, each control valve, the system controller, pipes (with size and material), control valve wiring, master valve wiring, and power supply wiring. The plan shall also note the manufacturer and model of each head. In a separate document, or on the plan, the designer shall note the pressure range required to attain the indicated spray pattern, the required flow to achieve the application rate needed, and the total flow per zone. The plan shall identify the zones numerically, and each control valve shall be labelled to reflect its zones. The controller shall be automatic with manual override capability and have sufficient stations to allow for all proposed zones. The system will be provided with rain sensor capacity to override the automatic settings when adequate rainfall is occurring. The contractor shall provide the initial controller settings following consultation with the County. The contractor will also demonstrate the system operation to the end user and shall show, and leave instructions on, how to change or reset the controller.

The irrigation designer shall coordinate with the supply well provider (see B below) to ensure that there is sufficient water supply for the completed irrigation system.

- B. As noted above, the project will have an irrigation system designed and installed by the contractor. Due to restrictions from Garden City in regard to the use of

potable water needs a shallow irrigation well to serve as the source of water for the irrigation system.

As part of the project, the contractor, through his own forces or an approved subcontractor, shall design and install said water supply well along with all necessary appurtenances. The well system plan will be submitted to the County for review and approval prior to installation. The plan will show the location of the well, the pressure tank, and the well controls, including the power supply line for the well. The plan will also contain a section showing the well with total depth and any screening, the location of the pump, and the size of the boring. The contractor shall be responsible for exploratory borings or other investigations to determine the normal and dry period flows to be expected. This shall be provided to the County in a separate document. The plan shall also list the type and capacity of the pump and storage tank. The combined well system shall have the capacity to provide the flow needs of the irrigation system, by a combination of direct and stored flow, for a full cycle. The well designer shall coordinate this with the irrigation designer.

- C. All materials, labor and equipment required to design and construct the irrigation system and the supply well will be included in the respective lump sum bid item for each. The cost of obtaining any required approvals or permits shall also be included.

## **PART 10- SPECIAL CONDITIONS OF CONSTRUCTION**

### **10.01 REQUIREMENTS**

- A. Work hours shall be limited to 7:00 am to 7:00 pm Monday through Friday and shall exclude holidays unless otherwise approved by Chatham County.
- B. The Contractor shall submit a schedule showing the several operations associated with the project and how they come together. The schedule shall be submitted to the County for review and approval prior to beginning construction activities.
- C. The County Records Center and other adjacent businesses or agencies will remain in operation during the course of construction. The Contractor shall develop a plan showing how access will be maintained to the different entities and when alternate means, such as remote parking, may be necessary. The plan shall also indicate how traffic through and around the project site will be controlled. The plan shall be submitted to the County for review and approval prior to beginning construction.
- D. The Contractor will perform rehabilitation work on failed areas of pavement to remain as directed by the County. This will include removal of the existing pavement and base and replacement with the section shown on the plans. Should the subgrade fail at these locations, then removal and replacement of the subgrade

shall be done as directed. Payment for this work is to be at the unit prices bid for remove and replace pavement and/or unsuitable subgrade material.

- E. There are existing waterlines and sewer lines within the project. Water and sewer lines are under the jurisdiction of the City of Garden City. Any relocations shall be coordinated with Garden City
- F. Unsuitable material shall be removed and replaced with suitable material meeting the requirements of the specifications. Measurement of unsuitable material shall exclude excavation of all materials within the limits of excavation shown on the drawings. Measurements of unsuitable material shall be made by cross section method as approved by Chatham County. Measurement by truck count will not be allowed unless otherwise stated.

**END OF SECTION**

INDEX TO  
SECTION 02200 – EARTHWORK

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3.01	Compaction Testing	02200 - 4

## SECTION 02200

### EARTHWORK

#### **PART 1 – PRODUCTS**

##### **1.01 MATERIALS:**

- A. General: Where the terms "approved", "suitable", "unsuitable" and similar designations are used in specifications section pertaining to earthwork, it means earth or material designated as being approved, suitable or unsuitable for their intended use by the soils technician or the owner.
- B. Suitable Soil Materials are defined as those complying with ASTM D-2487 soil classification groups: GW, GP, GM, SM, SW, and SP.
- C. Unsuitable Soil Materials are defined as those complying with ASTM D-2487 soil classification groups GC, SC, MH, ML, CL, CH, OL, OH, PT. Clays, silts, and organic soils will be considered as unsuitable materials. Excess water in materials will be a basis for establishing unsuitable material regardless of gradation.
- D. Backfill and Fill Materials shall be suitable soil materials, free of clay, rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, vegetable and other deleterious matter. Suitable materials for earth fill shall generally be composed of sands, clays and silt-sand mixtures and shall be approved by the soils technician or the owner prior to being incorporated in fills.
- E. Borrow shall consist of sand or sand clay soils capable of being readily shaped and compacted to the required densities, and shall be free of roots, trash and other deleterious material.

#### **PART 2 – EXECUTION**

##### **2.01 EXCAVATION**

- A. Excavation is unclassified and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered.
- B. All excavation shall be in conformity with the lines, grades and cross sections shown on the Plans or established by the Engineer. All suitable

material removed in the excavation shall be used as far as practicable in formation of embankment, subgrades and shoulders and at such other places as may be indicated on the Plans or directed by the owner.

- C. Unauthorized Excavation consists of the removal or loosening of materials beyond indicated subgrade elevations or dimensions without specific directions of the owner. Unauthorized excavation, as well as remedial work directed by owner, and as specified herein shall be at Contractor's expense. Under footings, foundation bases, or retaining walls, fill unauthorized excavations by extending indicated bottom elevation of footing or base to the bottom of the excavation, without altering required top elevation. Elsewhere, backfill and compact unauthorized walls, fill unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by the owner.
- D. Additional Excavation: When excavation has reached required subgrade elevations and unsuitable materials exist, carry excavations deeper and replace excavated materials as directed by the owner. Dispose of unsuitable material as directed by the owner. The Contractor shall dispose of unsuitable and surplus materials except where the owner permits the use of such fill slopes, or unless specific disposal areas are shown on the Plans.
- E. Dewatering: Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area. Do not allow water to accumulate in excavations. Remove water to prevent softening of roadway subgrades and foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rain water and water removed from excavations to collection or run-off areas. Do not use trench excavations as temporary drainage ditches. The Contractor will be responsible for all damage incurred in handling water conditions.
- F. Material Storage: Stockpile satisfactory excavated materials where directed, until required for backfill or fill. Place, grade and shape stockpiles for proper drainage and to minimize erosion. Locate and retain soil materials away from edge of excavations. Do not store within drip-line of trees indicated to remain.
- G. Excavation for Structures: Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10', and extending of sufficient distance from footings and foundations to permit placing and removal of concrete framework, installations to permit placing and removal of concrete

framework, installation of services, other constructions, and for inspection. In excavating for footings and foundations, take care not to disturb bottom of excavation. Excavate by hand to final grade before concrete reinforcement is placed. Trim bottoms to required lines and grades to leave solid base to receive other work.

- H. Proper drainage shall be maintained at all times.
- I. Perform excavation within the critical root zones of large trees to remain by hand or by other approved means which will not result in twisting, tearing, breakage or other injury to roots remaining on the tree. Protect existing trees and shrubs at all times during earthwork operations.

## **2.02 BORROW**

- A. Borrow material shall be excavated and hauled by the Contractor from his own sources and shall meet the requirements as specified.
- B. Borrow shall be procured by the Contractor.
- C. Contractor shall bear all expenses in developing borrow sources including drying material, haul roads, excavation and hauling.

## **2.03 GROUND SURFACE PREPARATION FOR FILL**

- A. All vegetation such as roots, brush, heavy sods, heavy growth of grass, decayed vegetation matter, rubbish, and other unsuitable material within the areas to be filled shall be stripped and removed prior to beginning the fill operation.
- B. Sloped ground surfaces steeper than 1 vertical to 4 horizontal, on which fill is to be placed shall be plowed, stepped, benched or broken up as directed, in such a manner that the fill material will bond with the existing surface.
- C. Surfaces on which fill is to be placed and compacted shall be wetted or dried as may be required to obtain the specified compaction.

## **2.04 FILL**

- A. Shall be reasonably free from roots, organic material, trash and stones having maximum dimensions of 6 inches.
- B. Shall be placed in successive horizontal layers of 8 inches (4 inches for hand tamped compaction) in loose depth for the full width of the cross-section and compacted as required with heavy compaction equipment.

## **2.05 FINISH GRADING**

- A. All areas covered by the project including excavated and filled sections and adjacent transition areas shall be smooth graded and free from irregular surface changes.
- B. Degree of finish shall be that ordinarily obtainable from either blade-grader or scraper operations, supplemented with hand raking and finishing, except as otherwise specified.
- C. The finished surface of unpaved areas shall be not more than 0.05' feet above or below the established grade or designed cross-section. Grading shall be done in order that no ponding will occur.
- D. Ditches shall be finished smooth to reduce erosion and permit adequate drainage.

## **2.06 DISPOSAL OF WASTE MATERIAL**

All vegetation, roots, brush, sod, broken pavements, curb and gutter, rubbish, and other unsuitable or surplus material stripped or removed from the limits of construction shall be disposed of by the Contractor.

## **2.07 PROTECTION**

- A. Protect existing trees and shrubs at all times during earthwork operations. No trees shall be removed without prior authorization from the Owner.
- B. The Contractor shall be responsible for protection of below grade utilities shown on the drawings or indicated to him by the Owner at all times during earthwork operations.
- C. Graded areas shall be protected from traffic, erosion, settlement, or any washing away that may occur from any cause prior to acceptance.
- D. Any repair or reestablishment of grades prior to final acceptance shall be at the Contractors expense.

## **PART 3 – TESTING**

### **3.01 COMPACTION TESTING**

- A. General: Compaction of earth fill and all pavement subgrades shall be performed to the percentage of maximum standard of modified dry densities and to the depths as indicated below:

1. Roadway Subgrades: 100% Standard (ASTM Test D-698) Compact top 12" in Parking areas and top 15" in Driveways.
2. Subgrades under pavement removed and replaced for utility pothole repairs: 100% Standard (ASTM Test D-698) to 12 inch depth.
3. Subgrade below Sidewalks and Curb and Gutters: 100% Standard (ASTM Test D-698) Compact top 6 inches.
4. Unpaved Areas to be grassed, sodded or landscaped: 90% Standard (ASTM Test D-698) full depth.

All other areas not described above: as directed by the owner.

- B. Moisture Control: All compaction shall be performed at material moisture contents within 3 percentage points, plus or minus, of optimum. Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations. Remove, and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by dicing, harrowing or pulverizing until moisture content to a satisfactory value.
- C. Field Density Tests: Tests shall be made in accordance with ASTM Method D-1556 and/or ASTM 2922 or such other test as may be acceptable to the owner. Minimum testing frequency shall be based on the most stringent of the following requirements (as applicable). Additional tests may be required by the owner in areas he deems critical.
- One every layer of fill,
  - One every 200 cubic yards of fill,
  - One every 250 square yards of roadway subgrade of fill
  - One every building subgrade
  - Areas where degree of compaction is in question

Testing shall be performed by an independent testing laboratory contracted by Chatham County. The Contractor shall coordinate and cooperate with the personnel performing the tests. The Contractor and owner's representative shall determine when tests are needed and shall keep the lab informed of such needs.

All initial tests shall be paid for by the owner. The owner reserves the right

to back charge the contractor for tests which fail to meet requirements.

If in opinion of Engineer, based on testing service reports and inspection, subgrade or fills which have been placed are below specified density, additional compaction and testing will be required.

- D. Proof Rolling: Proof rolling of the subbase or subgrade of all areas of new road paving will be required. Equipment shall have a minimum axle load of 6,000 pounds and a maximum axle load of 15,000 pounds or as determined by the Engineer.

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**SECTION 02270**

**EROSION AND SEDIMENTATION CONTROL**

**PART 1 - PRODUCTS**

**1.01 CHEMICALS FOR DUST CONTROL:**

- A. Calcium Chloride, Anionic Asphalt Emulsion, Latex Emulsion or Resin-in-Water Emulsion may be used for dust control.

**1.02 SILT FENCE FABRIC:**

- A. Silt fence fabric shall be a woven fabric certified to meet FHWA's Task Force 25 minimum roll average per ASTM-D-4354. The geotextile fabric shall be a woven sheet of plastic yarn, of a long chain synthetic polymer composed of at least 85% by weight propylene, ethylene, amide, ester, or vinylidene chloride, and shall contain stabilizer and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultra-violet and/or heat exposure. The fabric should be finished so that the filaments will retain their relative position with respect to each other. The fabric shall be free of defects, rips, holes, or flaws. The fabric shall meet the following requirements:

<u>Woven Fabrics</u>	
Grab Strength	90 lbs.
Mullen Burst Strength	250 lbs.
UV Resistance	90%
Permittivity	15 gal/min/sf

Product shall be equivalent to EXXON GTF-180 Fabric or AMOCO Woven Construction Fabric No. 1380.

**1.03 HAY BALES:**

Hay bales rectangular in shape shall be bound with wire or nylon to securely contain the material. Pine straw bales may be used in lieu of hay bales. Bales shall be placed in a single row, lengthwise, on the contour and embedded in the soil to a depth of four (4) inches. Bales must be securely anchored in place by stake or bars driven through the bales.

**1.04 PLASTIC FILTER FABRIC:**

- A. Plastic filter fabric shall be a pervious sheet of plastic yarn, of a long chain synthetic polymer composed of at least 85% by weight propylene, ethylene,

amide, ester, or vinylidene chloride, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultra-violet and/or heat exposure. The cloth should be finished so that the filaments will retain their relative position with respect to each other. The cloth shall be free of defects, rips, holes, or flaws. During shipment and storage, the filter fabric shall be wrapped in a protective material. The fabric shall meet the following requirements.

Woven Fabrics:

Tensile Strength (any direction)	200 lbs.
Bursting Strength	400 psi
Elongation before Breaking	15%
Permittivity	4 gal/min/sf

Product shall be equivalent to EXXON GTF-400E or AMOCO Woven Construction Fabric No. 2002.

- B. Seams - Fabric may be sewn together with thread of a material having the same chemical requirements as the material forming the fabric or shall be bonded by cementing or by heat. The strength of the seams shall be equal to that of the unaged fabric. Fabrics to be used under Rip-Rap are allowed to be bonded or sewn together forming sections not less than six feet wide.

**1.05 STONE:**

Stone shall be hard quarry, granite or field stone and shall be of such quality that the stone will not disintegrate on exposure to water or weather. The stone size, type and weight shall be as shown in conjunction with the structure with which it is associated. The stone shall be accepted by the Engineer prior to delivery.

**1.06 RIP-RAP:**

- A. Rip-rap shall be hard quarry or field stone, and shall be of such quality that they will not disintegrate on exposure to water and weather. The stone shall range in weight from a minimum of 25 pounds to a maximum of 150 pounds. At least 50 percent of the stone pieces shall weigh more than 60 pounds. The stone pieces shall have a minimum plane dimension of 12 inches. The stone analysis, source and other pertinent data shall be submitted for review by the Engineer prior to delivery. The filter fabric for permanent Rip-rap shall be Mirafi 140N or equivalent.

**PART 2 – EXECUTION**

**2.01 GENERAL:**

Every effort shall reasonably be employed by the Contractor to control erosion with the use of, but not limited to, grassing and silt fencing during the project. All erosion and sedimentation control measures or facilities, whether temporary or permanent, shall be continuously maintained by the Contractor so as to be effective, or as ordered by the Owner.

**2.02 CONSTRUCTION EXIT:**

Construction exits shall be located at the exits of the project to remove mud from the tires of all vehicles leaving the site. The construction exit shall consist of a minimum of six (6) inch thick pad of washed stone meeting Section AASHTO M288-96, Section 7.4, Stabilization Requirements. The aggregate size shall be in accordance with National Stone Association R-2 (1 ½"-3 ½" diameter in size and of the necessary length to accomplish the task for which it is intended. The pad may require periodic top dressing with 2" of similar stone. Geotextiles are required and a Separation/ Stabilization fabric to keep the aggregate stone from becoming contaminated with subgrade soils. The geotextile shall be based on AASHTO M288-96 Specifications. The entrance area must be excavated to a depth of 3 inches and be cleaned of all vegetation and roots. Geotextile underliner must be placed the full length and width of the entrance.

**2.03 DISTURBED AREA STABILIZATION:**

Vegetative cover will be placed on completed areas. This vegetative plan will be carried out on road cut and fill slopes, shoulders, and other critical areas created by construction. Plant grass seed as soon as construction in an area is completed. Planting will be made to control erosion, to reduce damage from sediment and runoff to downstream areas and to improve the safety and beauty of the development area.

Due to grading and construction, the areas to be treated are mainly subsoil and substrate. Fertility is low and the physical characteristics of the exposed material are unfavorable to all but the hardiest plants.

Conventional Seeding Equipment - Grade, shape and smooth where needed to provide for safe equipment operation at seeding time and for maintenance purposes. The lime and fertilizer in dry form will be spread uniformly over the area immediately before seedbed preparation. A seedbed will be prepared by scarifying to a depth of 1 to 4 inches as determined on site. The seedbed must be well pulverized, smoothed and firmed. Seeding will be by a cultipacker-seeder, drill, rotary seeder, mechanical seeder, hand seeder or hydro-seeding. Seed will be distributed

uniformly over a freshly prepared seedbed and covered lightly. Within 24 hours after seeding, with exception to hydro-seeding, straw or hay mulch will be spread uniformly over the area, leaving about 25 percent of the ground surface exposed. Mulch will be spread with blower-type mulch equipment or by hand and anchored immediately after it is spread. A disk harrow with the disk set straight or a special packer disk may be used to press the mulch into the soil.

The per acre application rates are as follows using conventional seeding equipment on slopes less than 3:1:

<u>Soil Treatment</u>	<u>Application Rate/Acre</u>
Agricultural limestone	4000#/acre
Fertilizer, 10-10-10 (with micro-nutrients)	1500#/acre
Mulch, straw or hay	4000#/acre

<u>Seed Species</u>	<u>Application Rates/Acre</u>	<u>Planting Dates</u>
Hulled common bermuda	10#	3/1 - 9/30
Rye grass	50#	10/1 - 2/28
Hay mulch	4000#	N/A

Top-dressing: Apply when plants are 2-4 inches tall

Fertilizer (Ammonium Nitrate 33.5%) at 300#/acre

**2.04 DUST CONTROL ON DISTURBED AREAS:**

Dust raised from vehicular traffic will be controlled by wetting down the access road with water or by the use of a deliquescent chemical, such as calcium chloride, if the relative humidity is over 30%. Chemicals shall be applied in accordance with the manufacturer's recommendations. Calcium chloride, anionic asphalt emulsion, latex emulsion or resin-in-water emulsion may be used for dust control.

**2.05 SEDIMENT BARRIER:**

Sediment barrier shall be constructed of hay bales (pine bales) anchored and embedded into the soil to prevent washout or water washing under the barrier. A minimum of two (2) re-bars, steel pickets or 2" x 2" stakes shall be used per bale and shall be long enough to extend through the bale and be driven into the ground a minimum of 1-1/2 feet. Where two (2) rows are called for, the bales shall be staggered. Bales shall be embedded in the soil to a depth of 4 inches. Bales shall be placed in a single row, lengthwise, on the contour and embedded in the soil to a depth of four (4) inches. Bales must be securely anchored in place by stakes or bars driven through the

bales.

**2.06 SILT FENCE:**

Silt fence shall be placed at the approximate location shown on the plans and installed in accordance with the Georgia Erosion and Sediment Control Manual recommendations. Silt fence shall not be placed in waterways or areas of concentrated flow.

**2.07 RIP-RAP:**

Rip-rap shall be placed in accordance with the notes on the drawings. Any rip rap that shall be permanent shall have an underlayment of filter fabric.

**2.08 STORM DRAIN OUTLET PROTECTION:**

Storm drain outlets shall be paved or have a rock or other energy dispersion device associated with it, as called for on the drawings. The length shall be a minimum of six (6) times the pipe diameter and placed on a 1% grade unless otherwise specified on the drawings. To prevent undermining of the rip-rap apron a separation geotextile shall be used beneath the entire length of apron. The geotextile shall be specified in accordance with AASHTO M288-96, Section 7.5, "Permanent Erosion Control Requirements".

**2.09 INLET SEDIMENT TRAP:**

The Contractor shall erect silt fence or hay bales at and around inlets under construction. Existing inlets in paved areas shall be protected by the use of concrete blocks wrapped with filter fabric as per detail. Sufficient quantities of selected devices shall be utilized to completely protect the entire length of the inlet. Contractor may alternately construct a temporary baffle in the inlet on the effluent pipe per detail providing that accumulated sediment be removed after each erosion event.

**2.10 SITE SAFETY:**

- A. The Contractor shall incorporate and utilize all necessary fencing and other safety barriers as necessary, or directed by Owner, to prevent trespassing into potentially dangerous areas of the erosion control area.

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## SECTION 02400

### STORM DRAINAGE

#### PART 1 – PRODUCTS

##### 1.01 PIPE:

- A. Concrete Pipe - Shall be reinforced Class III and shall conform to ASTM Specification C-76.
  - 1. Joints - Shall be water tight flexible rubber gasket and shall meet ASTM Specification C-443 and AASHTO M-198. Each joint shall be wrapped in filter cloth. The cloth shall be at least 2" wide, shall overlap by 50% and shall be secured prior to backfill.
  - 2. Filter Fabric - Mirafi 140N or equivalent.
  - 3. Concrete pipe shall be designed with no lifting holes. The lifting holes will jeopardize the structural integrity and hydraulic capacity of the pipe once installed.
  - 4. A minimum depth of 12 inches cover is required for RCP Class III.
- B. Plastic Pipe - To be used for landscaping drainage shall be rigid heavy duty corrugated polyethylene pipe and shall conform to AASHTO M 252.

##### 1.02 DRAINAGE STRUCTURES:

- A. Details - See plans.
- B. Concrete - Reinforced and non-reinforced.
  - 1. Shall have a compressive strength of 3,000 PSI in 28 days. Concrete shall be ready mixed conforming to ASTM C-94.
  - 2. Reinforcing steel shall conform to ASTM A-615, Grade 60. Mesh reinforcing shall conform to ASTM A-185. Reinforcing shall be covered by a minimum 1" of concrete for covers and 1-1/2" for walls and flooring and 3" where concrete is deposited directly against the ground.
  - 3. Expansion joint filler materials shall conform to ASTM Specification D-1751, to AASHTO M-90 or shall be resin impregnated fiberboard conforming to the physical requirements of ASTM Specification D-1752.

C. Mortar:

1. Mortar used at connections of pipe and drainage structures shall be composed of one part by volume of Portland cement and two parts of sand. The Portland cement shall conform to ASTM C-150, Type I or II. The sand shall conform to AASHTO Standard M-45 and shall be of an accepted gradation. Hydrated lime may be added to the mixture of sand and cement in an amount equal to 25% of the volume of cement used. Hydrated lime shall conform to ASTM C-141, Type A. The quantity of water in the mixture shall be sufficient to produce a workable mortar, but shall in no case exceed 7 gallons of water per sack of cement. Water shall be clean and free of harmful acids, alkalies and organic impurities. The mortar shall be used within 30 minutes from the time the ingredients are mixed with water.

- D. Brick Masonry - Brick shall conform to ASTM Specification C- 62, Grade SW or C-55, Grade P-I or P-II. Mortar for jointing and plastering shall consist of one part Portland cement and two parts fine sand. Lime may be added to the mortar in the amount not more than 25% of the volume of cement. The joints shall be completely filled and shall be smooth and free from surplus mortar on the inside of the structure. Brick structures shall be plastered with ½-inch of mortar over the entire outside surface of the walls. For square or rectangular structures, brick shall be laid in stretcher courses with a header course every sixth course, and for round structures, brick shall be laid radially with every sixth course a stretcher course.

- E. Precast - Shall be constructed in accordance with ASTM C-478 and conform to the details on the project drawings.

1. Joints - Shall be tongue and groove sealed with flexible gaskets or mastic sealant. Gaskets shall be O-Ring or Type A or B "Tylox" conforming to A.S.T.M. C-443 and mastic shall be "Ram-nek", or equivalent, with primer. The primer shall be applied to all contact surfaces of the manhole joint at the factory in accordance with the manufacturer's instructions.
2. Steps - Shall be aluminum alloy equivalent to Neenah R-1982-W or polypropylene equivalent to M.A. Industries, Type PS-1 or PS-1-PF. The steps shall be installed at the manhole factory and in accordance with the recommendations of the step manufacturer. Manholes will not be acceptable if steps are not installed accordingly, and properly aligned vertically.
3. Leaks - No leaks in the manhole will be acceptable. All repairs made from inside the manhole shall be made with mortar composed of one

part Portland cement and two parts clean sand; the mixing liquid shall be straight bonding agent equivalent to "Acryl 60".

- F. Frames, Covers & Grates shall conform to the details shown on the project drawings. Grates in pavement and in other flush-mounted type surfaces shall be of a "bicycle-safe" configuration consisting of 45 degrees diagonal bars or slotted grates with a maximum clear opening of 1" and a maximum length of 4". In any case, the long dimension of the openings shall be located transverse to the direction of traffic.

**1.03 SAND BACKFILL:**

Shall be free from clay and organic material. Not more than 10% shall pass the No. 100 sieve.

**1.04 BORROW:**

Where it is determined by the Engineer that sufficient suitable material is not available from the site to satisfactorily backfill the pipe to at least 2 feet above the top of the pipe, the Contractor shall furnish suitable sandy borrow material to accomplish the requirements. The material shall have not more than 60% passing the No. 100 sieve, nor more than 20% passing the No. 200 sieve.

**PART 2 - EXECUTION & TESTING**

**2.01 LOCATION AND GRADE:**

- A. The line and grade of the sewer and ditches and the position of all manholes and other structures are shown on the drawings. The grade line as given on the profile or mentioned in these specifications means the invert or bottom of the inside of the pipe or bottom of ditch. The Contractor shall be responsible for the proper locations and grade of the sewers. The pipe line shall be straight and show a uniform grade between manholes.

**2.02 EXCAVATION FOR PIPE:**

- A. Excavated material shall be piled a sufficient distance from the trench banks to avoid overloading to prevent slides or cave-ins.
- B. Remove from site all material not required or suitable for backfill.
- C. Grade as necessary to prevent water from flowing into excavations.
- D. Remove all water accumulating in the excavation from surface flow,

seepage or otherwise, by pumping or other accepted method.

- E. Sheeting, bracing or shoring as necessary for the protection of the work and safety of personnel.

### **2.03 TRENCHING FOR PIPE:**

- A. Trenching for Pipe - The width of trenches at any point below the top of the pipe shall not be greater than the outside diameter of the pipe, plus 2'-0" for pipes measuring through 30-inches, and 3'-0" for pipes greater than 30-inches, to permit satisfactory jointing and thorough tamping of the bedding material under and around the pipes. Sheeting and bracing where required shall be placed within the trench width as specified. Care shall be taken not to over-excavate. Where trench widths are exceeded, redesign with a resultant increase in cost of stronger pipe or special installation procedures shall be necessary. Cost of this re-design and increased cost of pipe or installation shall be borne by the Contractor without additional cost to the Owner.
- B. Removal of Unstable Material - Where wet or otherwise unstable soil, incapable of supporting the pipe, as determined by the Owner, is encountered in the bottom of the trench, such material shall be removed to the depth required and replaced to the proper grade with select material, compacted as provided in Paragraph 2.08, "BACKFILLING PIPE", hereinafter.

### **2.04 BEDDING:**

- A. The bedding surface for the pipe shall provide a firm foundation of uniform density throughout the entire length of the pipe. The trench bottom shall be dewatered before laying pipe by the use of well points. Where the nature of the soil is such that well points will not remove the water, the Contractor shall construct sumps and use sump pumps to remove all water from the bedding surface. The pipe shall be carefully bedded in a soil foundation that has been accurately shaped and rounded to conform to the lowest one-fourth (1/4) of the outside portion of circular pipe, or to the lower curved portion of arch pipe for the entire length of the pipe. When necessary, the bedding shall be tamped to compact it to 98% of optimum density. Bell holes and depressions for joints shall be only of such length, depth and width as required for properly making the particular type joint.
- B. Sand Backfill - Where in the opinion of the Engineer, the character of the soil is such that the material even though dewatered is unsuitable for pipe bedding, an additional foot of excavation shall be made and replaced with clean sand furnished by the Contractor.

**2.05****PLACING PIPE:**

- A. Each pipe shall be carefully examined before being laid and defective or damaged pipe shall not be used. Pipe lines shall be laid to the grades and alignment indicated. Proper facilities shall be provided for lowering sections of pipe into trenches. Under no circumstances shall pipe be laid in water, and no pipe shall be laid when trench conditions or weather are unsuitable for such work. Diversion of drainage or dewatering of trenches during construction shall be provided as necessary. All pipe in place shall have been checked before backfilling. When storm drain pipe terminates in a new ditch, the headwall or end section together with ditch pavement, if specified, shall be constructed immediately as called for on the plans. Ditch slopes and disturbed earth areas shall be grassed and mulched as required. The Contractor will be responsible for maintaining these newly constructed ditches and take immediate action subject to acceptance to keep erosion of the ditch bottom and slopes to a minimum during the life of the contract. No additional compensation will be given to the Contractor for the required diversion of drainage and/or dewatering of trenches. Grassing of the completed earth surface of the trench backfill shall conform to the technical specification for Grassing.
  
- B. Concrete Pipe - Laying shall proceed upgrade with the spigot ends of bell and spigot pipe and the tongue ends of tongue and groove pipe pointing in the direction of the flow.

**2.06****JOINTS IN PIPES:**

- A. Concrete Pipe - Flexible watertight joint shall be made with rubber-type gaskets for concrete pipe. The design of joints and the physical requirements for rubber-type gaskets shall conform to ASTM Specification C-443 or AASHTO Standard M-198. Gaskets and jointing materials shall have not more than one splice, except that two splices of the rubber gasket type will be permitted if the nominal diameter of the gasket exceeds 54-inches.
  - 1. Installation of Filter Fabric at Joint - After each joint is joined together the Contractor shall place two layers of filter fabric around the joint a minimum width of four feet, centered on the joint.

**2.06****BACKFILLING PIPE:**

- A. After the bedding has been prepared and the pipe installed, select material from excavation or borrow, at a moisture content that will facilitate compaction, shall be placed along both sides of the pipe in layers not

exceeding six inches (6") in compacted depth. The backfill shall be brought up evenly on both sides of the pipe for the full length of the pipe. Care shall be taken to ensure thorough compaction of the fill under the haunches of the pipe. Each layer shall be thoroughly compacted with mechanical tampers or rammers. This method of filling and compaction shall continue until the fill has reached an elevation of at least 12-inches above the top of the pipe. The remainder of the trench shall be backfilled and compacted by spreading and rolling or compacted by mechanical tampers or rammers in layers not to exceed 8-inches.

- B. For pipe placed in fill sections, the backfill material and the placement and compaction procedures shall be as specified above and in subparagraph "COMPACTION" hereinafter. The fill material shall be uniformly spread in layers longitudinal on both sides of the pipe, not exceeding six inches (6") in compacted depth, and shall be compacted by rolling parallel with pipe or by mechanical tamping or ramming. Prior to commencing normal filling operations, the crown width of the fill at a height of 12-inches above the top of the pipe shall extend a distance of not less than twice the outside diameter on each side of the pipe or 12 feet, which ever is less. After the backfill has reached at least 12-inches above the top of the pipe, the remainder of the fill shall be placed and thoroughly compacted in layers not exceeding 8-inches.
- C. In compacting by rolling or operating heavy equipment parallel with the pipe, displacement of or injury to the pipe shall be avoided. Movement of construction machinery over a culvert at any stage of the construction shall be at the Contractor's risk. Any pipe damaged thereby shall be repaired or replaced at the expense of the Contractor.

**2.08**

**COMPACTION:**

Soil and compaction tests shall be made by a testing laboratory contracted by the Owner and shall be made at the Owner's direction and expense. Failed tests shall be rescheduled at the Owner's direction and retesting shall be paid for by the Contractor. Laboratory tests of the soil shall be made in accordance with AASHTO Method T-99. In-place density tests shall be made in accordance with AASHTO Method T-191 or T-238. Results of the tests shall be furnished to the Owner by the testing laboratory. The minimum number of tests required shall be:

Backfill over pipe in traffic areas

Backfill over pipe in non-traffic areas

1 per 100 lf or less for each 4 feet of depth or portion thereof.

(Minimum of 2 for any line segment.)

1 per 200 lf or less for each 6 feet of depth or portion thereof.

The minimum percent of compaction of the backfill material (in accordance to AASHTO T-99) shall be the following:

In traffic areas	100%
In non-traffic areas	95%

**2.09 DRAINAGE STRUCTURES:**

Drainage structures shall be constructed of the materials specified for each type and in accordance with the details shown on the drawings.

**2.10 MANHOLES:**

Manholes shall be constructed where shown on the drawings or where directed by the Owner. The channel in the bottom of the manholes shall be smooth and properly shaped. Special care must be exercised in laying the channel in adjacent pipes to grade. The tops of manholes shall be built to grades designed by the Owner. Manhole sections with either honeycomb defects; exposed reinforcing; broken/fractured tongue or groove; or cracked walls will be subject to rejection by the owner.

**2.11 CONNECT PIPE TO EXISTING STRUCTURES:**

The Contractor shall connect the system to the existing structure where indicated. A hole not more than 4-inches larger than the outside diameter of the new pipe shall be cut neatly in the structure, the new pipe laid so that it is flush with the inside face of the structure, and the annular space around the pipe filled with a damp, expanding mortar or grout to make a watertight seal.

**2.12 CLOSING PIPE:**

When the work or pipe laying is suspended, either for night or at other times, the end of the sewer must be closed with a tight cover. The Contractor will be held responsible for keeping the sewer free from obstructions.

**2.13 CLEANING:**

Prior to televising and before acceptance of the storm systems, all storm lines shall be cleaned to the satisfaction of the Engineer. Where any obstruction occurs, the Contractor will be required to clean the lines by means of flushing and rods and swabs or other instruments.

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**SECTION 02485**

**GRASSING**

**PART 1 – PRODUCTS**

**1.01 MATERIALS GENERAL:**

- A. The Contractor shall, at the time of delivery, furnish the owner invoices of all materials, received in order that the application rate of materials may be determined.

**1.02 FERTILIZER:**

- A. 10-10-10, commercial fertilizer of accepted type, conforming to state fertilizer laws.

**1.03 LIME:**

- A. Lime shall be agricultural grade, ground limestone and shall conform to the requirements of the Georgia Department of Agriculture. Lime to be added based on soil tests.

**1.04 SEED:**

- A. All seed shall conform to all State Laws and to all requirements and regulations of the Georgia Department of Agriculture.
- B. The several varieties of seed shall be individually packaged or bagged, and tagged to show name of seed, net weight, origin, germination, lot number, and other information required by the Department of Agriculture.
- C. The owner reserves the right to test, reject, or accept all seed before seeding.
- D. Mixtures of different types of seed called for in the seeding schedule shall be weighted and mixed in the proper proportions at the site of the work in the presence of the owner.

**1.05 SEEDING SCHEDULE:**

- A. Hulled Bermuda Seeds are to be used at a rate of 40 pounds per acre, and at a depth of 1/4 to 1/8 inch. Pure line seed to be 82% by weight, with a maximum weed seed of 0.50%.
- B. In shaded areas, or other areas as directed by the Owner, the Contractor

shall use a mixture of hulled Bermuda seed at a rate of 25 pounds per acre and carpet seed at a rate of 30 pounds per acre.

- C. Temporary grassing shall consist of annual rye grass seed at a rate of 75 pounds per acre.
- D. In areas where existing grasses are to be matched, the Contractor shall sow the seed at the rate recommended by the seed distributor.

**1.06 STRAW MULCH:**

Straw mulch material shall consist of straw or hay. Straw shall be stalks of wheat, rye, barley, oats, or other accepted straw. Hay shall consist of timothy, peavine, alfalfa, coastal bermuda or other grasses from accepted sources. These materials shall be reasonably dry and shall be reasonably free from mature seed-bearing stalks, roots, or bulblets or Johnson Grass, Nutgrass, Sandbur, Wild Garlic, Wild Onion, Wild Mustard, Crotolaria, Pigweed, Witchweed and Coclebur. The Contractor shall also comply with all State and Federal domestic plant quarantine regulations.

**1.07 SOD:**

Sod shall be densely rooted, good quality centipede grass, free from noxious weeds. The sod shall be obtained from areas where the soil is reasonably fertile. The sod shall be raked free of all debris and the grass mowed to two inches before cutting. The sod shall contain practically all of the dense root system and not be less than one (1) inch thick. Sod shall be cut in uniform strips not less than twelve (12) inches in width and not less than twenty-four (24) inches in length.

**1.08 PRODUCT REVIEW:**

The Contractor shall provide the Engineer with a complete description of all products before ordering. The Engineer will review all products before they are ordered.

**PART 2 - EXECUTION**

**2.01 STAND OF GRASS:**

- A. Before acceptance of the seeding performed for the establishment of permanent vegetation, the Contractor will be required to produce a satisfactory stand of perennial grass whose root system shall be developed sufficiently to survive dry periods and the winter weather and be capable of re-establishment in the spring.

- B. Before acceptance of the seeding performed for the establishment of temporary vegetation, the Contractor will be required to produce a stand of grass sufficient to control erosion for a given area and length of time before the next phase of construction or the establishment of permanent vegetation is to commence.

**2.02 SEEDING DATES AND RATES OF APPLICATION:**

- A. Seeding shall be performed during the periods and at the rates specified in the seeding schedules. Seeding work may, at the discretion of the Contractor, be performed throughout the year using the schedule prescribed for the given period. Seeding work shall not be conducted when the ground is frozen or excessively wet. The Contractor will be required to produce a satisfactory stand of grass regardless of the period of the year the work is performed.

**2.03 PREPARATION:**

- A. The areas to be seeded or sodded shall be made smooth and uniform and shall conform with the finished grade and cross section shown on the plans or as otherwise designated. Minor shaping and smoothing of uneven and rough areas outside the graded section shall be performed as directed by the Engineer in order to provide for more effective erosion control and for ease of subsequent mowing operations.
- B. The areas to be grassed, if not loose, shall be loosened to a minimum depth of 3 inches before agricultural lime, fertilizer, seed or sod is applied. The areas to be seeded shall be cleared of stones larger than 2-1/2-inches, in any dimension, roots, and other debris.

**2.04 APPLYING LIME AND FERTILIZER:**

Following advance preparation and placing selected material for shoulders and slopes when called for in the contract, lime if called for based on soil tests and fertilizer shall be spread uniformly over the designated areas and shall be thoroughly mixed with the soil to a depth of approximately 2 inches. Fertilizer shall be applied at the rate of 500 pounds per acre for the initial application, unless otherwise directed by the Engineer. Lime shall be applied at the rate determined by the soil test. Unless otherwise provided, lime will not be applied for temporary seeding. In all cases where practicable, acceptable mechanical spreaders shall be used for spreading fertilizer. On steep slopes subject to slides and inaccessible to power equipment, the slopes shall be adequately scarified. Fertilizer may be applied on steep slopes by hydraulic methods as a mixture of fertilizer and seed. When fertilizer is applied in combination seed and fertilizer drills, no further incorporation will be necessary. The fertilizer and seed shall be applied together when the method of seeding is used. Any stones larger than 2-1/2

inches in any dimension, larger clods, roots, or other debris brought to the surface shall be removed.

**2.05 SEEDING:**

- A. Seed shall be sown within 24 hours following the application of fertilizer and lime and preparation of the seedbed as specified in Section 2.04. Seed shall be uniformly sown at the rate specified by the use of acceptable mechanical seed drills. Rotary hand seeders, power sprayers or other satisfactory equipment may be used on steep slopes or on other areas that are inaccessible to seed drills.
- B. The seeds shall be covered and lightly compacted by means of a cultipacker or light roller if the drill does not perform this operation. On slopes inaccessible to compaction equipment, the seed shall be covered by dragging spiked chains, by light harrowing or by other satisfactory methods.
- C. Apply water with fine spray immediately after each area has been sown.
- D. Do not sow seed when ground is too dry, during windy periods or immediately following a rain.
- E. All seeded areas seeded with permanent grasses shall be uniformly mulched in a continuous blanket immediately following seeding and compacting operations, using at least 2 tons of straw per acre.

**2.06 SODDING:**

- A. Sod shall be placed between March 1st and December 1st.
- B. Sod shall be placed within 48 hours of cutting.
- C. Sod shall be moist when laid and placed on moist ground. The sod shall be carefully placed by hand, beginning at the toe of slopes and working upwards. The length of the strips shall be at right angles to the flow of surface water. All joints shall be tightly butted and end joints shall be staggered at least 12 inches. The sod shall be immediately pressed firmly into the ground by tamping or rolling. Fill all joints between strips with fine screened soil. Sod on slopes shall be pegged with sod pegs to prevent movement. The sod shall be watered, mowed, weeded, repaired or otherwise maintained, to insure the establishment of a uniform healthy stand of grass until acceptance.

**2.07 MAINTENANCE:**

- A. Maintain seeded and sodded surfaces until final acceptance.
- B. Maintenance shall consist of providing protection against traffic, watering to

ensure uniform seed germination and to keep surface of soil damp, and repairing any areas damaged as a result of construction operations or erosion.

**2.08 ACCEPTANCE:**

Before release of the performance bond on the seeding and sodding performed for the establishment of permanent vegetation, the Contractor will be required to produce a satisfactory stand of perennial grass whose root system shall be developed sufficiently to survive dry periods and the winter weather and be capable of reestablishment in the spring

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## SECTION 3213

### CONCRETE PAVEMENT

#### PART 1 – PRODUCTS

##### **1.01 CONCRETE MATERIALS**

- A. Comply with ASTM C94/C94M and the following requirements.
  - 1. Cement: Conforms to ASTM C150, C595 or C1157.
  - 2. Supplementary Cementitious Materials (SCMs):
    - a. Fly ash conforming to ASTM C618.
    - b. Slag cement conforming to ASTM C989.
    - c. Silica fume conforming to ASTM C1240.
  - 3. Water: Conforms to ASTM C1602/C1602M. Provide documentation required by ASTM C1602/C1602M when non-potable water is proposed for use.
  - 4. Aggregates: Conform to ASTM C33.

##### **1.02 ADMIXTURES**

- A. Air-Entraining Admixture: Conform with ASTM C260/C260M.
- B. Chemical Admixtures: The following admixtures are permitted. Do not use calcium chloride or admixtures containing calcium chloride.
  - 1. Water-Reducing Admixture: ASTM C494/C494M, Type A.
  - 2. Retarding Admixture: ASTM C494/C494M, Type B.
  - 3. Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type D.
  - 4. High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.
  - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type G.
  - 6. Special Performance Admixture: ASTM C494/C494M, Type S.
  - 7. Plasticizing Admixture for flowing concrete: ASTM C1017/C1017M, Type I.

8. Plasticizing and Retarding Admixture for flowing concrete: ASTM C1017/C1017M, Type II.

### 1.03 FIBER REINFORCEMENT

- A. Synthetic Fiber: Utilize fibrillated polypropylene fibers engineered and designed for use in concrete pavement, complying with ASTM C1116/C1116M, Type III, ½ in or ¾ in long.

### 1.04 CURING MATERIALS

- A. Liquid Membrane-Forming Compounds: Utilize a Membrane-Forming Curing Compound complying with ASTM C309, Type 2, Class A consisting of a waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Absorptive Cover: If used, comply with AASHTO M182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz/yd<sup>2</sup> when dry.
- C. Moisture-Retaining Cover: If used, comply with ASTM C171, polyethylene film or white burlap-polyethylene sheet.

### 1.05 JOINT AND SEALANT MATERIALS

- A. Isolation Joint Materials: When used, comply with ASTM D994/D994M, D1751, or D1752, or as shown on plans.
- B. Joint Sealing Materials: When used, comply with the following:
  1. Hot-Poured Elastomeric Type; ASTM D3406
  2. Silicone Rubber Type (cold applied); ASTM D5893/D5893M
  3. Single-Component Elastomeric Type (preformed); ASTM D2628

### 1.06 CONCRETE MIXTURES

- A. Mixture Design: Prepare design mixtures for each type and strength of concrete required, proportioned on the basis of field test records or laboratory trial mixtures according to ACI 301. Use a qualified laboratory in accordance with Section 1.6.E for preparing and reporting proposed mixture designs when proposed mixtures are based on laboratory trial mixtures.
  1. Supplementary Cementitious Materials (SCMs): For concrete that will be in a Severe Exposure Condition, limit percentage of supplementary cementitious materials, by weight of total cementitious materials, to a maximum quantity as follows:

- a. Fly Ash: 25 percent.
  - b. Slag Cement: 50 percent.
  - c. Silica Fume: 10 percent.
2. Strength: Specified compressive strength shall be 4,000 psi (28 MPa) at 28 days, unless otherwise specified.
  3. Total Air Content: Comply with Table 1, unless otherwise specified. The tolerance for air content shall be  $\pm 1.5\%$ .
  4. Aggregates: Nominal maximum aggregate size shall not exceed  $\frac{1}{3}$  of the specified pavement thickness.
    - a. When required by the Engineer, provide results of aggregate tests for alkali silica reactivity in accordance with ASTM C1260.
    - b. When ASTM C1260 expansion at 14 days measured on each source of aggregate exceeds 0.10%, provide test results with the aggregate and proposed combination of cementitious materials with an expansion that is less than or equal to 0.10% at 14 days, in accordance with ASTM C1567.
  5. Slump: For pavements placed other than by using slipform equipment, nominal slump shall be 4 in. (100 mm), unless otherwise permitted. For pavements placed using slipform equipment the maximum slump shall be 2 in. (50 mm), unless otherwise permitted. Tolerance for slump stated in ASTM C94/C94M shall apply.
- B. Submit documentation for mixture proportions of concrete mixtures proposed for use in accordance with ACI 301 and Section 1.5.B herein.

**Table 1. Required Total Air Content<sup>1</sup>.**

	Total Air Content, % <sup>2</sup>		
	Ne	Mo	S
Nominal Maximum Aggregate Size, in. (mm)			

$\frac{3}{8}$ (9.5)	N/	6.0	7.
$\frac{1}{2}$ (12.5)		5.5	7.
$\frac{3}{4}$ (19.0)		5.0	6.
1 (25.0)		4.5	6.
$1\frac{1}{2}$ (37.5)		4.5	5.

Note 1: Measured in accordance with ASTM C173 or C231.

Note 2: Air content tolerance  $\pm 1.5\%$

Note 3: Non-air entrained concrete, unless the concrete supplier chooses to entrain air in concrete mixtures.

## **PART 2 - EXECUTION & TESTING**

### **2.01 SUBGRADE PREPARATION**

- A. Prepare subgrade as required by the plans. If not specified on the plans or related specification, compact subgrade to a minimum of 95% of the maximum dry density as determined by ASTM D698 and within  $\pm 2\%$  of the optimum moisture content.
- B. Re-grade and re-compact subgrade disturbed by concrete delivery vehicles or other construction equipment to the requirements of Section 2.01.A.
- C. Do not use sand or loose material to obtain final subgrade elevation.
- D. At the time of concrete paving the subgrade density and moisture shall be in the condition described in section 2.01.A.

### **2.02 FORMWORK**

- A. Construct formwork so concrete pavement is of size, shape, alignment, elevation, and position indicated and so that the pavement is within the tolerance limits of Section 2.08 Tolerances.
- B. Construct forms tight enough to prevent loss of concrete mortar.
- C. Fabricate forms for easy removal without hammering or prying against concrete surfaces.

- D. Clean forms and adjacent surfaces to receive concrete. Remove debris from forms just before placing concrete.
- E. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- F. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement, if used.
- G. The edge of previously placed concrete may be used as a form. Do not apply form release agent to previously placed concrete, unless prevention of bond between the new and the old concrete is desired.
- H. Formwork may be removed after cumulatively curing at not less than 50°F for 24 hours after placing concrete, if concrete is hard enough to not be damaged by form-removal operations and curing and protection operations are maintained.
- I. Clean and repair surfaces of forms to be reused in the Work. Damaged forms will not be acceptable. Apply new form-release agent.
- J. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets

### **2.03 CONCRETE PLACEMENT**

- A. Measure, batch, mix, and deliver concrete according to ASTM C94/C94M, and ASTM C1116/C1116M when fibers are used, and furnish batch ticket information required by these specifications.
- B. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- C. When placing and finishing fixed-form concrete pavement, comply with the following steps:
  - 1. Deposit concrete directly from the transporting equipment onto the subgrade or subbase.
  - 2. Do not place concrete on frozen subgrade or subbase.
  - 3. Other methods of conveying the concrete may be used when specified or permitted by the Engineer.
  - 4. Deposit concrete between the forms to a uniform height.
  - 5. Consolidate concrete to remove voids and air pockets. Do not move concrete horizontally with a vibrator.

6. Strike off concrete between forms using a form riding paving machine, vibrating screed, or laser screed. Other strikeoff devices may be used, such as a highway straightedge or scraping straightedge, when approved by the owner.
  7. Immediately after strikeoff and before bleed water appears on the surface, level concrete with a bull float.
  8. Do not use steel trowels or power finishing equipment, unless otherwise specified or permitted.
  9. Finish the pavement to the elevations, cross slope, and thickness specified in the project drawings and meet the requirements of Section 2.08, Tolerances.
- D. When placing and finishing slipform concrete pavement, comply with the following steps:
1. Deposit and finish concrete in conformance with Section 2.05.C.
  2. The slipform paver shall be operated with adherence to continuous forward movement as possible, and as such, all delivery and spreading of concrete shall be coordinated so as to provide uniform progress without stopping and starting the machine. Coordination with the concrete supplier is especially important to achieve the desired result.
  3. Adjust the vibrator frequency for varying paver speeds and turn off vibrators when the paver stops.
  4. When the slipform paver is to ride on the edge of a new concrete pavement, the concrete strengths of the riding surface shall be greater than 2,000 psi (14 MPa), determined by testing field cured specimens in accordance with ASTM C31 or maturity methods.
  5. String lines or other means for setting grade should be checked frequently
- E. Edging:
1. Edge top surface edges to a radius of 1/4 in. (6 mm).
  2. Do not tool edges if the joint is to be widened to provide a reservoir for joint sealant.
- F. Final Surface Texture: Complete final texturing as soon as possible after finishing, but before the concrete has attained its initial set.
1. Broom Finish:

- a. Broom concrete surface with a steel or fiber broom to produce corrugations between 1/16 and 1/8 in. (2 and 3 mm) deep.
  - b. Broom perpendicular to nearest edge of pavement. Broom all areas of a panel in the same direction.
  - c. Use the same type and manufacture of broom for all paved surfaces to provide a consistent appearance.
  - d. Other methods of producing final surface texture may be permitted when specified or accepted by the owner.
- G. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, initial freezing, freezing and thawing cycles, or low temperatures.
1. Concrete temperature as delivered and temperature of placed concrete shall be maintained within the temperature range required by ACI 301.
  2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
  3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified or permitted.
- H. Hot-Weather Placement: Comply with ACI 301 and as follows:
1. Maintain concrete temperature below 95°F at time of placement. Chilled mixing water or ice may be used to control temperature. Quantity of ice used shall be included in the total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
  2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas

## **2.04 CONCRETE PROTECTION AND CURING**

- A. Protect the concrete from damage due to rain. Have available, near the site of the work, materials for protection of the edges and surface of the concrete. Should any damage result, the Engineer will suspend operations until corrective action is taken and may require removal and replacement of the rain-damaged concrete.

- B. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- C. Apply curing compound immediately after final surface texture has been obtained and water sheen has disappeared.
- D. Apply membrane-forming curing compound to all exposed surfaces at a maximum coverage rate of 180 ft<sup>2</sup>/gal. (5 m<sup>2</sup>/L).
- E. When using liquid membrane-forming compounds, if the evaporation rate during paving operations does not exceed 0.1 lb/ft<sup>2</sup>/hr (0.49 kg/m<sup>2</sup>/hr), then only 1 coat of membrane curing compound at an individual application rate not to exceed 180 ft<sup>2</sup>/gal. (5 m<sup>2</sup>/L) is permissible. Do not allow the concrete surface to dry before applying the curing compound. Remove any standing pools of bleed water that may be present on the surface before applying the curing compound. Apply the first coat within 10 min. after completing texturing operations. If applicable, apply the second coat within 30 min. after completing texturing operations.
- F. Maintain and promptly repair damage to curing materials on exposed surfaces of concrete pavement continuously for at least 3 curing days, or until the pavement is open to the traveling public, whichever occurs first. A curing day is defined as a 24-hr. period when either the temperature taken in the shade away from artificial heat is above 50°F (10°C) for at least 19 hr. or when the surface temperature of the concrete is maintained above 40°F (5°C) for 24 hr. Curing begins when the concrete curing system has been applied. Stop concrete paving if curing compound is not being applied promptly and maintained adequately.
- G. Apply curing compound to pavement edges after forms, if used, have been removed.
- H. Alternative curing methods may be used in accordance with this specification or with ACI 308.1 when acceptable to the Engineer

## 2.05 JOINTS

- A. Construct joints at the locations, depths, and with dimensions indicated on the project drawings or accepted drawings submitted by the contractor.
- B. If jointing requirements are not indicated on the project drawings, the contractor shall submit drawings describing proposed jointing in accordance the requirements of 2.07.B.1 through 2.0.B.9. The contractor shall not proceed with work until the jointing requirements are accepted by the owner.
  - 1. Indicate locations of contraction joints, construction joints, and isolation joints. Spacing between contraction joints shall conform to Table 2, unless otherwise permitted.

2. The larger dimension of a panel shall not exceed 125% of the smaller dimension.
  3. The minimum angle between two intersecting joints shall be 80 degrees, unless otherwise specified or permitted.
  4. Joints shall intersect pavement free edges at 90-degree angles and shall extend straight for a minimum of 1½ ft (0.5 m) from the pavement edge, where possible.
  5. Align joints of adjacent panels.
  6. Align joints in integral curbs with joints in pavement.
  7. Ensure joint depth and width dimensions are as specified.
  8. Minimum contraction joint depth, using a conventional saw, hand tools, or inserts, shall be ¼ of the pavement thickness. Minimum joint width for saw cutting is ⅛ in. (3 mm). When using an early-entry dry-cut saw, the depth of the cut shall be at least 1 in. (25 mm).
  9. Use isolation joints only where pavement abuts buildings, foundations, existing pavements, manholes, and other fixed objects.
- C. Construct contraction joints by one of the following methods:
1. Tool contraction joints in fresh concrete after the concrete has set sufficiently to maintain the formed joint to the specified depth and width.
  2. Insert plastic strips vertically into the fresh concrete. Depress strips into pavement until flush with surface.
  3. Saw-cut concrete after concrete has hardened sufficiently to prevent aggregate being dislodged and soon enough to control pavement cracking. Discontinue sawing joint if a crack precedes the saw-cut. Resume sawing at the next joint location.
- D. Extend isolation joints through the full depth of the pavement. Fill the entire isolation joint with isolation joint material, unless otherwise required by project drawings or by accepted jointing drawings submitted by the contractor (see Section 1.06 for material requirements).

**Table 2. Spacing Between Contraction Joints.**

Pavement Thickness, in. (mm)	Maximum Spacing, ft. (m)
3½ (90)	8½ (2.5)
4, 4½ (100, 110)	10 (3)
5, 5½ (125, 140)	12½ (4)

6 or greater (150 or greater)	15 (4.5)
-------------------------------	----------

## 2.06 JOINT FILLING

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.
- C. Hot-Poured Liquid Sealants:
  - 1. Place joint sealer when the pavement and surrounding air temperature are 40°F (5°C) or higher.
  - 2. Where specified, backer rods shall be installed to provide proper shape factor.
  - 3. Use an indirect heating kettle with an agitator to prevent localized overheating. Discard overheated material.
  - 4. Use insulated hoses. Fit the application wand with a recirculation line to prevent the temperature of the sealant in the hose from dropping below application temperature.
  - 5. Make sure that the top of the sealant is  $\frac{1}{8}$  to  $\frac{1}{4}$  in. (3 to 6 mm) below the pavement surface.
  - 6. Clean any spilled or overfilled joint sealant from the concrete surface.
- D. Cold-Poured Silicone Sealants:
  - 1. Place joint sealer when the pavement and surrounding air temperature are 40°F (5°C) or higher.
  - 2. Where specified, backer rods shall be installed to provide proper shape factor.
  - 3. Use joint primer provided by the manufacturer to ensure a good bond between the sealant and the joint reservoir face.
  - 4. Tool non-self-leveling sealants before the material cures.
  - 5. Clean any spilled or overfilled joint sealant from the concrete surface.
- E. Preformed Compression Sealers:
  - 1. Check joint width for compatibility.

2. Make sure the joint width doesn't vary, especially at points where the saw reenters the joint.
3. Clean and dry the saw cut reservoir before sealing the joint. Seal joints only when the joint surfaces appear dry.
4. Follow the manufacturer's recommendation for sealant sizing and installation.
5. Make sure the sealant is lubricated, straight, vertical, and undamaged before installation.
6. Make sure that the installation device does not stretch the sealant.

## **2.07 OPENING TO TRAFFIC**

- A. Do not open the pavement to vehicular traffic until the in-place compressive strength is at least 3,000 psi (21 MPa), or 75% of the specified strength, or until the pavement is accepted by the owner for opening to traffic. In-place strength shall be determined using field cured cylinders in accordance with ASTM C31/C31M or maturity methods in accordance with ASTM C1074.

## **2.08 TOLERANCES**

- A. Construct pavement to comply with the following tolerances:
  1. Elevation:  $\frac{3}{4}$  in (19 mm)
  2. Thickness:  $+\frac{3}{8}$  in,  $-\frac{1}{4}$  in (+10 mm, -6 mm)
  3. Surface: In any direction, the gap below a 10 ft (3 m) unlevelled straightedge resting on high spots shall not exceed  $\frac{1}{2}$  in (13 mm)
- B. Joint spacing (see Table 2)
  1. Contraction joint depth:  $+\frac{1}{4}$  in (6 mm), -0 in.
  2. Joint width:  $+\frac{1}{8}$  in (3 mm), -0 in.

## **2.09 FIELD QUALITY ACCEPTANCE**

- A. Testing and Inspecting: The County shall engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports for acceptance.
- B. Inspections: Prior to commencement of portions of the work, the inspection agency shall provide verification that the following items meet the specification requirements:
  1. Subgrade and/or subbase density and elevation.

2. Steel tie and dowel bar reinforcement placement, if used.
  3. Use of required design mixture.
  4. Concrete placement, including conveying and depositing.
  5. Curing procedures.
  6. Concrete strength before removal of forms, if used.
- C. Compaction tests shall be made at the County's direction and expense. Failed tests shall be rescheduled at the County's direction and retesting shall be paid for by the Contractor.
1. Subgrade Compaction - One (1) test (100% Standard (ASTM Test D-698) per 250 square yards.
  2. Base - One (1) test (Field Determination of Compaction) each per 250 square yards.
- D. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C172/C172M shall be performed according to the following requirements:
1. Preliminary Samples/Tests: Preliminary samples to measure slump and air content and to make necessary adjustments to mixtures to achieve specified requirements are permitted in accordance with ASTM C94/C94M.
  2. Testing Frequency: Obtain at least one random composite sample for each **100 yd<sup>3</sup>** or fraction thereof of each concrete mixture placed each day.
    - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
  3. Slump: ASTM C143/C143M; one test at point of placement for each composite sample when compressive strength specimens are made, but not less than one test for each day's pour of each concrete mixture.
  4. Air Content: ASTM C231/C231M, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  5. Density: ASTM C138/C138M; one test for each composite sample when strength specimens are made.

6. Concrete Temperature: ASTM C1064/C1064M; one test hourly when air temperature is 40°F and below and when 80°F and above, and one test for each composite sample when strength specimens are made.
  7. Compression Test Specimens: ASTM C31/C31M; two sets of two standard-cured cylinder specimens for each composite sample. Specimen sizes of 6 x 12 in. (150 x 300 mm) or 4 x 8 in. (100 x 200 mm) are permitted.
  8. Compressive-Strength Tests: ASTM C39/C39M; test one set of two standard-cured specimens at 7 days and one set of two specimens at 28 days. A compressive-strength test result shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
    - a. Strength of each concrete mixture is satisfactory if every average of any three consecutive compressive-strength test results equals or exceeds specified compressive strength and no compressive-strength test result falls below specified compressive strength by more than 500 psi.
- E. Reporting: Test results shall be reported in writing to Engineer within 48 hours of testing. Reports shall contain Project identification information, date of concrete placement, name of concrete testing and inspecting agency, and location of concrete batch in Work.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Engineer. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42/C42M or by other methods as directed by Engineer.
- G. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- H. Correct deficiencies in the Work that test reports and inspections indicate does not comply with this specification and/or the Contract Documents.

**END OF SECTION**

ATTACHMENT A

DRUG - FREE WORKPLACE CERTIFICATION

THE UNDERSIGNED CERTIFIES THAT THE PROVISIONS OF CODE SECTIONS 50-24-1 THROUGH 50-24-6 OF THE OFFICIAL CODE TO GEORGIA ANNOTATED, RELATED TO THE \*\*DRUG-FREE WORKPLACE\*\*, HAVE BEEN COMPLIED WITH IN FULL. THE UNDERSIGNED FURTHER CERTIFIES THAT:

1. A Drug-Free Workplace will be provided for the employees during the performance of the contract; and
2. Each sub-contractor under the direction of the Contractor shall secure the following written certification:

\_\_\_\_\_ (CONTRACTOR)  
certifies to Chatham County that a Drug-Free Workplace will be provided for the employees during the performance of this contract known as procurement Chatham County Records Center Parking Lot Rehabilitation (PROJECT) pursuant to paragraph (7) of subsection (B) of Code Section 50-24-3. Also, the undersigned further certifies that he/she will not engage in the unlawful manufacture, sale, distribution, possession, or use of a controlled substance or marijuana during the performance of the contract.

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
DATE

\_\_\_\_\_  
NOTARY

\_\_\_\_\_  
DATE

**ATTACHMENT B**

**PROMISE OF NON-DISCRIMINATION STATEMENT**

Know All Men By These Presence, that I (We), \_\_\_\_\_  
Name

\_\_\_\_\_  
Title Name of Bidder

(herein after Company) in consideration of the privilege to bid/or propose on the following Chatham County project procurement **Chatham County Records Center Parking Lot Rehabilitation**

hereby consent, covenant and agree as follows:

- (1) No person shall be excluded from participation in, denied the benefit of or otherwise discriminated against on the basis of race, color, national origin or gender in connection with the bid submitted to Chatham County or the performance of the contract resulting therefrom;
- (2) That it is and shall be the policy of this Company to provide equal opportunity to all business persons seeking to contract or otherwise interested with the Company, including those companies owned and controlled by racial minorities, and women;
- (3) In connection herewith, I (We) acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide minority and women owned companies with the maximum practicable opportunities to do business with this Company on this contract;
- (4) That the promises of non-discrimination as made and set forth herein shall be continuing throughout the duration of this contract with Chatham County;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made a part of and incorporated by reference in the contract which this Company may be awarded;
- (6) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth above may constitute a material breach of contract entitling the County to declare the contract in default and to exercise appropriate remedies including but not limited to termination of the contract.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**ATTACHMENT C**

**DISCLOSURE OF RESPONSIBILITY STATEMENT**

Failure to complete and return this information will result in your bid/offer/proposal being disqualified from further competition as non-responsive.

1. List any convictions of any person, subsidiary, or affiliate of the company, arising out of obtaining, or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract.

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2. List any indictments or convictions of any person, subsidiary, or affiliate of this company for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offenses indicating a lack of business integrity or business honesty which affects the responsibility of the contractor.

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3. List any convictions or civil judgments under states or federal antitrust statutes.

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4. List any violations of contract provisions such as knowingly (without good cause) to perform, or unsatisfactory performance, in accordance with the specifications of a contract.

---

5. List any prior suspensions or debarments by any governmental agency.

---

6. List any contracts not completed on time.

---

7. List any penalties imposed for time delays and/or quality of materials and workmanship.

---

8. List any documented violations of federal or any state labor laws, regulations, or standards, occupational safety and health rules.

---

I, \_\_\_\_\_, as \_\_\_\_\_  
Name of individual Title & Authority

of \_\_\_\_\_, declare under oath that

Company Name \_\_\_\_\_

the above statements, including any supplemental responses attached hereto, are true.

\_\_\_\_\_  
Signature

State of \_\_\_\_\_

County of \_\_\_\_\_

Subscribed and sworn to before me on this \_\_\_\_\_ day of \_\_\_\_\_

20\_\_ by \_\_\_\_\_ representing him/herself to be

\_\_\_\_\_ of the company named herein.

\_\_\_\_\_  
Notary Public

My Commission expires:

\_\_\_\_\_

Resident State: \_\_\_\_\_

**ATTACHMENT D**

**CONTRACTOR AFFIDAVIT under O.C.G.A. § 13-10-91(b)(1)**

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of CHATHAM COUNTY has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

\_\_\_\_\_  
Federal Work Authorization User Identification Number

\_\_\_\_\_  
Date of Authorization

\_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Name of Project

\_\_\_\_\_  
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_, \_\_\_\_, 201\_\_ in \_\_\_\_\_(city), \_\_\_\_\_(state).

\_\_\_\_\_  
Signature of Authorized Officer or Agent

\_\_\_\_\_  
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:  
\_\_\_\_\_

**SUBCONTRACTOR AFFIDAVIT under O.C.G.A. § 13-10-91(b)(3)**

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with \_\_\_\_\_ (name of contractor) on behalf of CHATHAM COUNTY has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91 (b). Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five (5) business days of receipt. If the undersigned subcontractor receives notice of receipt of an affidavit from any sub-subcontractor that has contracted with a sub-subcontractor to forward, within five (5) business days of receipt, a copy of such notice to the contractor. Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

\_\_\_\_\_  
Federal Work Authorization User Identification Number

\_\_\_\_\_  
Date of Authorization

\_\_\_\_\_  
Name of Subcontractor

\_\_\_\_\_  
Name of Project

\_\_\_\_\_  
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_, \_\_\_\_\_, 201\_\_ in \_\_\_\_\_ (city), \_\_\_\_\_ (state).

\_\_\_\_\_  
Signature of Authorized Officer or Agent

\_\_\_\_\_  
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_.

\_\_\_\_\_  
NOTARY PUBLIC  
My Commission Expires:

ATTACHMENT E

CHATHAM COUNTY, GEORGIA

**BIDDER'S CERTIFICATION REGARDING DEBARMENT, SUSPENSION,  
INELIGIBILITY AND VOLUNTARY EXCLUSION**

The undersigned certifies, by submission of this proposal or acceptance of this contract, that neither Contractor nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency, State of Georgia, City of Savannah, Board of Education or local municipality. Bidder agrees that by submitting this proposal that Bidder will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts and subcontracts. Where the Bidder or any lower tier participant is unable to certify to this statement, that participant shall attach an explanation to this document.

Bidder must verify Sub-Tier Contractors and Suppliers are not debarred, suspended, ineligible, pending County litigation or pending actions from any of the above government entities.

**Certification - the above information is true and complete to the best of my knowledge and belief.**

\_\_\_\_\_  
(Printed or typed Name of Signatory)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**NOTE:** The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001

\_\_\_\_\_  
**END OF DOCUMENT Mod. CC P & C 6/2005**

**ATTACHMENT F**

**Chatham County  
Minority and Women Business Enterprise Program  
M/WBE Participation Report**

Name of Bidder: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Bid No: \_\_\_\_\_

M/WBE Firm	Type of Work	Contact Person/ Phone #	City, State	%	MBE or WBE

MBE Total \_\_\_\_\_

WBE Total \_\_\_\_\_%

M/WBE Combined \_\_\_\_\_%

The undersigned should enter into a formal agreement with M/WBE Contractor identified herein for work listed in this schedule conditioned upon execution of contract with the Chatham County Board of Commissioners.

Signature \_\_\_\_\_ Print \_\_\_\_\_

Phone (    ) \_\_\_\_\_

Fax (    ) \_\_\_\_\_

ATTACHMENT G

*Systematic Alien Verification for Entitlements (SAVE)  
Affidavit Verifying Status for Chatham County Benefit Application*

By executing this affidavit under oath, as an applicant for a Chatham County, Georgia Business License or Occupation Tax Certificate, Alcohol License, Taxi Permit, Contract or other public benefit as reference in O.C.G.A. Section 50-36-1, I am stating the following with respect to my bid for a Chatham County contract for \_\_\_\_\_. [Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity]

1.) \_\_\_\_\_ I am a citizen of the United States.

**OR**

2.) \_\_\_\_\_ I am a legal permanent resident 18 years of age or older.

**OR**

3.) \_\_\_\_\_ I am an otherwise qualified alien (8 § USC 1641) or non-immigrant under the Federal Immigration and Nationality Act (8 USC 1101 et seq.) 18 years of age or older and lawfully present in the United States.\*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of Code Section 16-10-20 of the Official Code of Georgia.

Signature of Applicant:

Date

\_\_\_\_\_  
Printed Name:

SUBSCRIBED AND SWORN  
BEFORE ME ON THIS THE  
\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_

\* \_\_\_\_\_  
Alien Registration number for non-citizens.

Notary Public  
My Commission Expires:

**REFERENCE FORM**

**REFERENCES - \$499,999 or more:** On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of \$499,999 or less, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

- a. Project Name: \_\_\_\_\_  
Location: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Address: \_\_\_\_\_  
City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
\*Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
Email: \_\_\_\_\_
  
- b. The awarded bid amount and project start date. \_\_\_\_\_
- c. Final cost of project and completion date. \_\_\_\_\_
- d. Number of change orders. \_\_\_\_\_
- e. Contracted project completion in days. \_\_\_\_\_
- f. Project completed on time. Yes \_\_\_\_\_ No \_\_\_\_\_ Days exceeded \_\_\_\_\_
  
- g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.
- h. Has contractor ever failed to complete a project? \_\_\_\_\_ If so, provide explanation.
- i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? \_\_\_\_\_ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

**REFERENCE FORM**

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- a. Project Name: \_\_\_\_\_  
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Owner: \_\_\_\_\_  
Address: \_\_\_\_\_  
City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
\*Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

- b. The awarded bid amount and project start date. \_\_\_\_\_
- c. Final cost of project and completion date.
- d. Number of change orders. \_\_\_\_\_
- e. Contracted project completion in days. \_\_\_\_\_
- f. Project completed on time. Yes \_\_\_\_\_ No \_\_\_\_\_ Days exceeded \_\_\_\_\_.
- g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.
- h. Has contractor ever failed to complete a project? \_\_\_\_\_ If so, provide explanation.
- i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? \_\_\_\_\_ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

**REFERENCE FORM**

**REFERENCES - \$499,999 or more:** On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of \$499,999 or less, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

a. Project Name: \_\_\_\_\_  
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City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
\*Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
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**REFERENCE FORM**

**REFERENCES - \$499,999 or more:** On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of \$499,999 or less, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

a. Project Name: \_\_\_\_\_  
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Owner: \_\_\_\_\_  
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City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
\*Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

- b. The awarded bid amount and project start date. \_\_\_\_\_
- c. Final cost of project and completion date.
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## CHECKLIST FOR SUBMITTING BID

Sign below and submit this sheet with Bid

**NOTE: All of the following items must be submitted with your Bid to be considered "responsive".**

1. ACKNOWLEDGMENT OF ANY/ALL ADDENDUMS (Page 3 of ITB).
2. ORIGINAL SURETY BOND (5% OF BID) ALONG WITH SURETY REQUIREMENTS SHEETS FILLED OUT.
3. BID SHEET COMPLETELY FILLED OUT AND SIGNED.
4. "LIST OF SUBCONTRACTORS" SHEET FILLED OUT WITH ALL SUBCONTRACTORS AND SUPPLIERS.
5. "% TO MBE SUBCONTRACTORS/SUPPLIERS' SHEET COMPLETELY FILLED OUT SHOWING \$ AMOUNT AS WELL AS % OF PROJECT THAT IS PROJECTED TO GO TO MBE/WBE SUBCONTRACTORS/SUPPLIERS.
6. SECTION 2.31 OF ITB - REFERENCES: Read this section and submit the correct number of "References" (based on total dollar amount of project) Note: Supply ALL the information that is requested for each Reference. NOTE: *Forms for Reference Information are attached to this Bid Package.*
7. ALL FIRMS REQUESTING TO DO BUSINESS WITH CHATHAM COUNTY MUST REGISTER ON-LINE AT [HTTP://PURCHASING.CHATHAMCOUNTY.ORG](http://PURCHASING.CHATHAMCOUNTY.ORG).
8. COMPLETE AND SUBMIT ALL ATTACHMENTS TO THE ITB (Attachments A thru H). D-2 IS TO BE FILLED OUT FOR EACH SUBCONTRACTOR.

---

NAME/TITLE

---

COMPANY NAME

---

ADDRESS

---

CITY/STATE/ZIP

---

PHONE NUMBER

---

FAX NUMBER

LEGAL NOTICE

CC NO. 166923

Invitation to Bid

Sealed Bids will be received until 2:00 P.M. on SEPTEMBER 28, 2017 and publicly opened in Chatham County Purchasing & Contracting Department, at The Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406, for: BID NO : 17-0086-4 CHATHAM COUNTY RECORDS CENTER PARKING LOT REHABILITATION.

**PRE-BID CONFERENCE:** Conference will be held at the Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia on SEPTEMBER 14, 2017, at 2:00 P.M. You are encouraged to attend.

The Bid Package can be downloaded and printed from the County website <http://purchasing.chathamcounty.org> Also, all firms requesting to do business with Chatham County must also register on-line at website: <http://purchasing.chathamcounty.org>

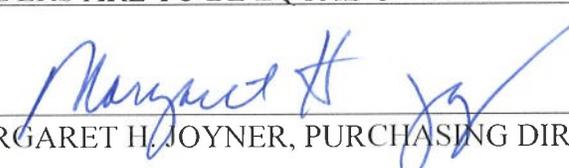
**Plans must be purchased at Clayton Digital Reprographics by logging into www.cdrepro.com. Login to DFS. New users must register. For technical support contact CDR at (912) 447-5445, fax (912) 233-7020 or email: [cdrwest@cdrepro.com](mailto:cdrwest@cdrepro.com).**

For any additional questions regarding this bid , please contact Robert Marshall, Senior Procurement Specialist, at 912-790-1622.or [rmarshall@chathamcounty.org](mailto:rmarshall@chathamcounty.org)

Bid Bond is required at the time of bid. (5% of total bid)  
Payment and Performance Bonds (100% of bid) will be required for this project at the time of contract award.

CHATHAM COUNTY HAS THE AUTHORITY TO REJECT ALL BIDS AND WAIVE MINOR FORMALITIES.

"CHATHAM COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER, M/F/H. ALL BIDDERS ARE TO BE EQUAL OPPORTUNITY EMPLOYERS"

  
MARGARET H. JOYNER, PURCHASING DIRECTOR

SAVANNAH NEWS/PRESS INSERT: Aug. 28, 2017  
Please send affidavit to:  
Chatham County Purchasing & Contracting Department  
1117 Eisenhower Drive, Suite C  
Savannah, Georgia 31406  
(912) 790-1622