



INVITATION TO BID 13ITB03281K-DJ

**FULTON COUNTY JAIL – SECURITY LOCKS  
RETROFIT**

For

**FACILITIES AND TRANSPORTATION SERVICES DEPARTMENT**

**BID DUE DATE AND TIME: Monday, May 13, 2013 at 11:00 A.M.**

**BID ISSUANCE DATE: Monday, April 1, 2013**

**PRE-BID CONFERENCE DATE: Monday, April 8, 2013**

**PURCHASING CONTACT: Donna Jenkins**

**E-MAIL: [Donna.Jenkins@fultoncountyga.gov](mailto:Donna.Jenkins@fultoncountyga.gov)**

**LOCATION: FULTON COUNTY DEPARTMENT OF PURCHASING &  
CONTRACT COMPLIANCE  
130 PEACHTREE STREET, S.W., SUITE 1168  
ATLANTA, GA 30303**

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## INVITATION TO BID

### 13ITB03281K-DJ, FULTON COUNTY JAIL – SECURITY LOCKS RETROFIT

Sealed Bids for furnishing all materials, labor, tools, equipment and appurtenances necessary for Fulton County Jail – Security Retrofit will be received by the Fulton County Department of Purchasing and Contract Compliance at 130 Peachtree Street, S.W. Suite 1168 Atlanta, GA 30303, **no later than 11:00 a.m.**, local time, on **Monday, May 13, 2013**.

#### **SCOPE OF WORK**

The detailed scope of work and technical specifications are outlined in the Division of Work Section 01 10 00, Project Summary and Scope of Work of this bid document.

#### **BID DOCUMENTS**

This document and supporting documents can be downloaded at the Fulton County Website, <http://www.fultoncountyga.gov> under “Bid Opportunities”.

#### **PURCHASING CONTACT**

Information regarding the bid or bid requirements, either procedural or technical, may be obtained by submitting questions in writing to:

Fulton County Government  
Department of Purchasing & Contract Compliance  
Attn: Donna Jenkins, Chief Assistant Purchasing Agent  
Fulton County Public Safety Building  
130 Peachtree Street, S.W. Suite 1168  
Atlanta, GA 30303  
Email: [Donna.Jenkins@fultoncountyga.gov](mailto:Donna.Jenkins@fultoncountyga.gov)  
Fax: (404) 893-1744  
Reference Bid # 13ITB03281K-DJ

#### **BID DOCUMENTS**

This document and supporting documents can be downloaded at the Fulton County Website, <http://www.fultoncountyga.gov> under “Bid Opportunities”.

The Bid Documents and Drawings for this project may be examined and copies obtained at a cost of \$116.68 at the following location:

Action Blueprint  
2705 Monroe Drive  
Atlanta, Georgia 30324  
(404) 885-1433  
Web site: [action@actiondis.com](mailto:action@actiondis.com)

## **PRE-BID CONFERENCE**

Date: **Monday, April 8, 2013**  
Time: **10:00 A.M.**  
Location: Fulton County Jail  
901 Rice Street  
Atlanta, Georgia 30318  
Old Roll Call Conference Room  
Atlanta, GA 30303

A Pre-Bid Conference will be held at the Fulton County Jail, located at 901 Rice Street, Atlanta, Georgia 30318, Old Roll Call Room. ***Inquiries regarding the solicitation either technical or otherwise may be submitted in writing prior to the pre-bid conference and will be addressed at the pre-bid conference.***

### **Special Instructions:**

- Please arrive at 9:30 am in order to obtain the appropriate jail access pass.
- Due to limited availability, parking for the Pre-Bid Conference can be found directly across the street from the Jail's Main Entrance at 901 Rice St.
- Cell phones are generally not allowed in the facility. However, each company in attendance will be allowed to bring **one (1)** cell phone.

Any additional questions asked at the Pre-Bid conference must be submitted in written form at the Pre-Bid conference and will be responded to in the form of an addendum with the County's official responses.

The Pre-Bid conference will be conducted for the purpose of explaining the County's bid process, the specifications/technical documents, and to provide non-binding verbal responses to questions concerning these bid specifications and to discuss issues from the Bidders perspective. However, no verbal response provided at the Pre-Bid conference binds the County. Only those responses to written questions that are responded to by the County in written communications will be official.

**END OF SECTION**

**OWNER - CONTRACTOR AGREEMENT**

**[INSERT PROJECT # AND TITLE]**

Contractor: \_\_\_\_\_ Project No. \_\_\_\_\_

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

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

THIS AGREEMENT is effective as of the \_\_\_\_\_ day of \_\_\_\_\_, 2013, by and between Fulton County, a political subdivision of the State of Georgia (hereinafter called the "County"), and the above named CONTRACTOR in accordance with all provisions of this Construction Agreement ("Contract"), which consists of the following: Owner-Contractor Agreement, Owner's invitation for bid, instructions to bidders, bid form, performance bond, payment bond, acknowledgments, general conditions, special conditions, scope of work and specifications, plans, drawings, exhibits, addenda, Purchasing forms, Office of Contract Compliance Forms, Risk Management insurance provisions forms and written change orders.

The specific Exhibits of this Contract are as follows:

- Exhibit A: General Conditions
- Exhibit B: Special Conditions (if applicable)
- Exhibit C: Addenda
- Exhibit D: Bid Form
- Exhibit E: Bonds (Bid, Payment & Performance)
- Exhibit F: Scope of Work and Technical Specifications
- Exhibit G: Exhibits
- Exhibit H: Purchasing Forms
- Exhibit I: Office of Contract Compliance Forms
- Exhibit J: Risk Management Insurance Provisions Forms

WITNESSETH: That the said Contractor has agreed, and by these present does agree with the said County, for and in consideration of a Contract Price of **[INSERT CONTRACT AMOUNT IN WORDS]**, (\$**[INSERT CONTRACT AMOUNT IN NUMBERS]**) and other good and valuable consideration, and under the penalty expressed on Bonds hereto attached, to furnish all equipment, tools, materials, skill, and labor of every description necessary to carry out and complete in good, firm, and workmanlike manner, the Work specified, in strict conformity with the Drawings and the Specifications hereinafter set forth, which Drawings and Specifications together with the bid submittals made by the Contractor, General Conditions, Special Provisions, Detailed Specifications, Exhibits, and this Construction Agreement, shall all form essential parts of this Contract. The Work covered by this Contract includes all Work indicated on Plans and Specifications and listed in the Bid entitled:

Project Number: **[INSERT PROJECT #]**

**[INSERT PROJECT NAME]**

The Contractor, providing services as an Independent Contractor, shall commence the Work with adequate force and equipment within 10 days from receipt of Notice to Proceed ("NTP") from the County, and shall complete the work within **[INSERT CONTRACT DURATION]** calendar days from the Notice to Proceed or the date work begins, whichever comes first. The Contractor shall remain responsible for performing, in accordance with the terms of the Contract, all work assigned prior to the expiration of the said calendar days allowed for completion of the work even

if the work is not completed until after the expiration of such days. The Contractor shall agree that in the performance of this Contract he will comply with all lawful agreements, if any, which the contractor has made with any association, union or other entity, with respect to wages, salaries and working conditions, so as to cause inconvenience, picketing or work stoppage.

***[Insert if applicable]** For each calendar day that any work remains uncompleted after the time allowed for completion of the work, the Contractor shall pay the County the sum of \$ 500.00 not as a penalty but as liquidated damages, which liquidated damages the County may deduct from any money due the contractor. At the County's convenience and not to its prejudice the County may provide written notice of the commencement of the assessment of liquidated damages.*

As full compensation for the faithful performance of this Contract, the County shall pay the Contractor in accordance with the General Conditions and the prices stipulated in the Bid, hereto attached.

It is further mutually agreed between the parties hereto that if, at any time after the execution of this Agreement and the Surety Bonds hereto attached for its faithful performance, the County shall deem the surety or sureties upon such bonds to be unsatisfactory, or, if, for any reason, such bonds cease to be adequate to cover the performance of the Work, the Contractor shall, at his expense, within five days after receipt of notice from the County so to do, furnish an additional bond or bonds in such form and amount, and with such surety or sureties as shall be satisfactory to the County. In such event no further payment to the Contractor shall be deemed to be due under this Agreement until such new or additional security for the faithful performance of the Work shall be furnished in manner and form satisfactory to the County.

The Contractor hereby assumes the entire responsibility and liability for any and all injury to or death of any and all persons, including the Contractor's agents, servants, and employees, and in addition thereto, for any and all damages to property caused by or resulting from or arising out of any act or omission in connection with this contract or the prosecution of work hereunder, whether caused by the Contractor or the Contractor's agents, Servants, or employees, or by any of the Contractor's subcontractors or suppliers, and the Contractor shall indemnify and hold harmless the County, the Construction Manager, County's Commissioners, officers, employees, successors, assigns and agents, or any of their subcontractors from and against any and all loss and/or expense which they or any of them may suffer or pay as a result of claims or suits due to, because of, or arising out of any and all such injuries, deaths and/or damage, irrespective of County or Construction Manager negligence (except that no party shall be indemnified for their own sole negligence). The Contractor, if requested, shall assume and defend at the Contractor's own expense, any suit, action or other legal proceedings arising there from, and the Contractor hereby agrees to satisfy, pay, and cause to be discharged of record any judgment which may be rendered against the County and the Construction Manager arising there from.

In the event of any such loss, expense, damage, or injury, or if any claim or demand for damages as heretofore set forth is made against the County or the Construction Manager, the County may withhold from any payment due or thereafter to become due to the Contractor under the terms of this Contract, an amount sufficient in its judgment to protect and indemnify it and the Construction Manager, County's Commissioners, officers, employees, successors, assigns and agents from any and all claims, expense, loss, damages, or injury; and the County, in its discretion, may require the Contractor to furnish a surety bond satisfactory to the County providing for such protection and indemnity, which bond shall be furnished by the Contractor within five (5) days after written demand has been made therefore. The expense of said Bond shall be borne by the Contractor. **[See General Conditions for similar provision]**

This Contract constitutes the full agreement between the parties, and the Contractor shall not sublet, assign, transfer, pledge, convey, sell or otherwise dispose of the whole or any part of this

Contract or his right, title, or interest therein to any person, firm or corporation without the previous consent of the County in writing. Subject to applicable provisions of law, this Contract shall be in full force and effect as a Contract, from the date on which a fully executed and approved counterpart hereof is delivered to the Contractor and shall remain and continue in full force and effect until after the expiration of any guarantee period and the Contractor and his sureties are finally released by the County.

This agreement was approved by the Fulton County Board of Commissioner on [Insert approval date and item number].

[SIGNATURES NEXT PAGE]

A PLE CONTRACT ACT

**IN WITNESS THEREOF**, the Parties hereto have caused this Contract to be executed by their duly authorized representatives as attested and witnessed and their corporate seals to be hereunto affixed as of the day and year date first above written.

OWNER:

**FULTON COUNTY, GEORGIA**

\_\_\_\_\_  
John H. Eaves, Commission Chair  
Board of Commissioners

ATTEST:

\_\_\_\_\_  
Mark Massey  
Clerk to the Commission (Seal)

APPROVED AS TO FORM:

\_\_\_\_\_  
Office of the County Attorney

APPROVED AS TO CONTENT:

\_\_\_\_\_  
***[Insert Department Head Name]***  
***[Insert Department Head Title]***

CONTRACTOR:

***[Insert Contractor COMPANY NAME]***

\_\_\_\_\_  
***[Insert Name & Title of person authorized to sign contract]***

ATTEST:

\_\_\_\_\_  
Secretary/  
Assistant Secretary

(Affix Corporate Seal)

END OF SECTION

PLEASE CONTACT ACT

## INSTRUCTIONS TO BIDDERS

### 1. CONTRACT DOCUMENTS

The Contract Documents include the Contract Agreement, Contractor's Bid (including all documentation accompanying the Bid and any post-Bid documentation required by the County prior to the Notice of Award), Bonds, all Special Conditions, General Conditions, Supplementary Conditions, Specifications, Drawings and addenda, together with written amendments, change orders, field orders and the Construction Manager's written interpretations and clarifications issued in accordance with the General Conditions on or after the date of the Contract Agreement.

Shop drawing submittals reviewed in accordance with the General Conditions, geotechnical investigations and soils report and drawings of physical conditions in or relating to existing surface structures at or contiguous to the site are not Contract Documents.

The Contract Documents shall define and describe the complete work to which they relate.

### 2. BID PREPARATION

Bidders shall **SUBMIT ONE (1) ORIGINAL, SIGNED AND DATED, AND TWO (2) COPIES** on the forms provided in the Bid Document.

All bids must be made on the bid forms contained herein and shall be subject to all requirements of the Agreement Documents. All bids must be regular in every respect and no interlineations, excisions, or special conditions shall be made or included in the bid by the Bidder.

Lump sum, unit price and extensions of unit prices must be entered in the appropriate spaces provided on the Bid Schedule/Bid Form. Unit prices shall include an appropriate allocation of overhead and other indirect costs so that the summation of unit price extensions and lump sum items represents the total bid amount. All blank spaces must be typed or hand written in blue ink on the "Original". All dollar amounts must be BOTH in writing and figures and represent prices for the published scope of work without exceptions.

The County may, in its sole discretion, reject any bid determined as irregular, a conditional bid or any bid on which there is an alteration of, or departure from the Bid Schedule attached.

Erasures or other changes in the bids must be explained or noted over the signature of the Bidder. All corrections to any entry must be lined out and initialed by the Bidder. Please do not use correction tapes or fluid. Failure to do so shall render the Bidder as non-responsive and cause rejection of the bid.

Failure to execute the Bid Schedule/Bid Form documents may result in Bidder being deemed non-responsive and cause rejection of the bid.

### **3. RECEIPT AND OPENING OF BIDS**

Sealed bids will be received by the Fulton County Department of Purchasing & Contract Compliance at Fulton County Public Safety Building, 130 Peachtree Street, S.W., Suite 1168 Atlanta, Georgia 30303. The original signed Bid with three (3) copies shall be submitted in a sealed envelope, addressed to the Department of Purchasing and Contract Compliance and labeled **13ITB03281K-DJ, Fulton County Jail – Security Locks Retrofit.**

**REQUIRED SUBMITTALS:** The bidder **must complete and execute** the following:

1. Bid Form
2. Acknowledgement of each Addendum
3. Bid Bond
4. Purchasing Forms (See Submittal Check List at end of this Section), fully executed
5. Contract Compliance Forms (See Submittal Check List at end of this Section), fully executed
6. Risk Management Insurance Provisions Form

Any bids received after the stated time and date will not be considered. It shall be the sole responsibility of the bidder to have his/her bid delivered to the Fulton County Department of Purchasing and Contract Compliance for receipt on or before the stated time and date (see Section 00020). If a bid is sent by U.S. Mail, the bidder shall be responsible for its timely delivery to the Purchasing Department. Bids delayed by mail will not be considered, shall not be opened, and arrangements shall be made for their return at the bidder's request and expense.

Bid shall be publicly opened, with only the names and total bid price of the bidders disclosed at the opening.

### **4. ADDENDA AND INTERPRETATIONS**

No interpretations of the meaning of the Drawings, Specifications or other pre-bid documents will be made to any Bidder orally.

Bidders requiring clarification or interpretation of the Contract Documents shall make a request in writing, either by mail, hand delivery, e-mail or fax, to the Purchasing Agent at the address below. To be given consideration, requests must be received no later than 2:00 PM, Monday, May 6, 2013. The County will not respond to any requests, oral or written, received after this date. Telephone inquiries will not be accepted.

Department of Purchasing and Contract Compliance  
Attn: Donna Jenkins, Chief Assistant Purchasing Agent  
Fulton County Public Safety Building

130 Peachtree Street, S.W., 1168  
Atlanta, GA 30303  
Fax: (404) 893-1744  
donna.jenkins@fultoncountyga.gov  
Bid # 13ITB03281K-DJ

Only communications from firms that are in writing and signed will be recognized by the County as duly authorized expressions on behalf of proposers/bidders. Any and all such interpretations and any supplemental instructions will be in the form of written Addenda to the Specifications which, if any addend are issued to this Invitation to Bid.

Failure of Bidders to receive or acknowledge any Addendum shall not relieve them of any obligation under the Bid. All Addenda shall become part of the Contract Documents.

#### **5. SITE EXAMINATION**

There will be a site visit for this project. It will be held on **Monday, April 8, 2013, immediately following the Pre-Bid Conference**. Bidders **are** required to attend.

#### **6. BIDDER'S MODIFICATION AND WITHDRAWAL OF BIDS**

A Bidder may modify or withdraw its bid by written request, provided that the request is received by the County prior to the bid due date and time at the address to which bids are to be submitted. Provided further, that in case of an electronic request (i.e. facsimile, e-mail, etc.) a written confirmation thereof over the authorized signature of the Bidder must be received by the County at the address to which original Bids are to be submitted within three (3) calendar days after issue of the electronic message. Following withdrawal of its bid, the Bidder may submit a new bid, providing delivery is affected prior to the established bid opening date and time. **No bid may be withdrawn after bid due date for sixty (60) calendar days.**

#### **7. BID AND CONTRACT SECURITY**

A Bid Bond for an amount equal to five percent (5%) of the bid amount must accompany each Proposal. The bid bond shall be submitted in a separate, sealed envelope marked "Bid Bond". **Bids must be accompanied by a bid bond or certified check** in an amount of five percent (5%) of the TOTAL AMOUNT of the base bid. The bid bond or certified check shall apply ONLY TO THIS BID. The bid name and contract number must appear on the security instrument. The bond must remain in full force and effect until the Bidder executes the final Contract. Bids not satisfying the bonding requirements of this project will be declared non-responsive.

Any bid bond, performance bond, payment bond, or security deposit required for public works construction contract shall be approved and filed with purchasing agent. At the option of the County, if the surety named in the bond is other than a

surety company authorized by law to do business in this state pursuant to a current certificate of authority to transact surety business by the Commissioner of Insurance, such bond shall not be approved and filed unless such surety is on the United States Department of Treasury's list of approved bond sureties.

A Purchasing Agent shall approve as to form and as to the solvency of the surety any bid bond, performance bond, or payment bond required by this. In the case of a bid bond, such approval shall be obtained prior to acceptance of the bid or proposal. In the case of payment bonds and performance bonds, such approval shall be obtained prior to the execution of the contract.

Whenever, in the judgment of the County:

- (1) Any surety on a bid, performance, or payment bond has become insolvent;
- (2) Any corporation surety is no longer certified or approved by the Commissioner of Insurance to do business in the state; or
- (3) For any cause there are no longer proper or sufficient sureties on any or all the bonds

The County may require the contractor to strengthen any or all of the bonds or to furnish a new or additional bond or bonds within ten days. Thereupon, if so ordered by the County, all work on the contract shall cease unless such new or additional bond or bonds are furnished. If such bond or bonds are not furnished within such time, the County may terminate the contract and complete the same as the agent of and at the expense of the contractor and his or her sureties.

As a condition of responsiveness the bidder must contain a Bid Bond for an amount equal to 5% of the bid amount. The Bid Bond shall be included in a separate envelope marked on the outside "Bid Bond". Checks or letters of credit of any type will not be accepted. A certified cashier's check will be acceptable. Provide a completed and fully executed Bid Bond. When the bidder's package is opened, a purchasing agent will verify the presence of the Bid Bond and remove it from the Proposal Package.

If the bidder withdraws its bid from the competition after the selection of its bid for a reason not authorized by Georgia law, the County will proceed on the Bid Bond, along with any other available remedies.

The Surety of the Bid Bond shall be from a surety company authorized to do business in the State of Georgia, shall be listed in the Department of Treasury Circular 570, and shall have an underwriting limitation in excess of 100% of the bid amount. The Bonds and Surety shall be subject to approval by the County Attorney.

Attorneys-in-fact for bidders who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

## 8. **SURETY BONDS**

The submission of surety bonds subsequent to the Bid submission shall be:

- a. Any surety bond submitted in accordance with the Bid or Agreement requirements must be issued by a corporate surety company satisfactory to the Commission and authorized to act as such in the State of Georgia;
- b. Such bonds shall conform to the forms provided with the Bid Documents and be completed in accordance with the instructions thereon; and
- c. In accordance with Georgia law, and upon award of the Agreement, separate performance and payment bonds shall be required of the successful Bidder, each in an amount not less than the total amount payable under the Agreement. The performance bond shall remain in effect for one (1) year after final acceptance of the Work or the guaranty period under the Agreement, whichever is the larger.

The payment bond shall remain in effect for the period required under Georgia law for the payment bonds on public construction agreements. Reference is made to the bond forms and the Agreement Documents for additional particulars of the terms required in the bonds. In the case of any inconsistency between the Bond Forms and Georgia law, the law shall control. Alterations, extension of the time allowed for performance, extra and additional Work, and other changes authorized under the Agreement may be made without notice to or consent of the surety or sureties.

**9. INSURANCE REQUIREMENTS**

The Contractor shall procure and maintain during the life of this Agreement, Workmen's Compensation, Public Liability, Property Damage, Automobile Liability insurance and any other insurance necessary to satisfy the requirements of the Agreement Documents.

**10. RIGHT TO REJECT BIDS**

The County reserves the right to reject any or all bids and to waive informalities. No bids will be received after the time set for opening bids. Any unauthorized conditions, limitations or provisions attached to the Bid, except as provided herein, will render it informal and may cause its rejection. Unbalanced bids will be subject to rejection. Any bidder may withdraw his/her bid, either personally or by telegraphic or written request, at any time prior to the scheduled closing time for receipt of bids. Telegraphic or written requests for withdrawal must be in the possession of the County prior to the closing time for receipt of bids.

**11. APPLICABLE LAWS**

All applicable laws and regulations of the State of Georgia and ordinances and regulations of Fulton County shall apply. Protestors shall seek resolution of their complaints in the manner provided in the Fulton County Code of Laws §2-324, which is incorporated by reference herein.

**12. EXAMINATION OF CONTRACT DOCUMENTS**

Prospective bidders shall examine the contract documents and before submitting a bid, shall make a written request to the County for an interpretation or correction of any ambiguity, in consistency or error therein which could be discovered by a bidder. At the bid opening each bidder shall be presumed to have read and be familiar with the contract documents.

**13. BID EVALUATION**

- a. Each Bid timely received and in the County's hands at the time set forth for the Bid opening shall constitute an offer to perform the Agreement on the terms and conditions thereof, in strict accordance with the Agreement documents, and all other requirements, all for the Bid total. For good cause and valuable consideration, the sufficiency of which is acknowledged by submittal of a Bid, each Bidder promises and agrees that its Bid shall be irrevocable for a period of **sixty calendar days** after the Bid opening and will not be withdrawn or modified during that time. The County may accept any Bid by giving the Bidder Written Notice of acceptance during that time. If necessary, the period of time specified may be extended by written agreement between the County and the Bidder or Bidders concerned.
- b. After the Bids have been opened and before any award is made, the County will evaluate the Bid process, the Bid total, the supplements to the Bid form, Bidder's experience, proposed Subcontractors and equipment manufacturers and other data relating to Bidders' responsibility and qualifications to perform the Agreement satisfactorily.
- c. All extension of the unit prices shown and the subsequent addition of extended amounts may be verified by the County. In the event of a discrepancy between the unit price bid and the extension, the unit price will be deemed intended by the Bidder and the extension shall be adjusted. In the event of a discrepancy between the sum of the extended amounts and the bid total, the sum of the extended amounts shall govern.
- d. Bidder may be required to submit, in writing, the addresses of any proposed Subcontractors or Equipment manufacturers listed on the Bid, and to submit other material information relative to proposed Subcontractors or Equipment manufacturers. The County reserves the right to disapprove any proposed Subcontractor or Equipment manufacturers whose technical or financial ability or resources or whose experience are deemed inadequate.
- e. The County reserves the right to reject any Bid the prices of which appear to be unbalanced, and to reject any or all Bids, or parts thereof, if it determines, in its sole discretion, that such rejection is in the best interest of the Commission. Where only a single responsible and responsive Bid is received, the County may in its sole discretion, elect to conduct a price or cost analysis of the Bid. Such Bidder shall cooperate with such analysis and provide such supplemental information as may be required. The determination whether to enter into an Agreement with such sole Bidder

shall be solely within the County's discretion and not dependent upon performance of a price or cost analysis.

- f. Bids will be evaluated on the basis of determining the lowest Bid total of a Bidder, not including alternates, whose Bid is responsive to the Invitation to Bid and who is determined to be technically, financially and otherwise responsible to perform the Agreement satisfactorily, and to meet all other requirements of the Bidding Documents relating thereto. Any Bid may be rejected if it is determined by the County to be non-responsive, provided, however, that the Commission reserves the right to waive any irregularities or technicalities which it determines, within its sole discretion, to be minor in nature and in the interest of the public. Furthermore, any Bid may be rejected if it is determined by the County, in its sole discretion, that the Bidder is not capable of performing the Agreement satisfactorily based upon review of its experience and technical and financial capabilities, or the failure of such bidder to provide information requested relating to such determination. Additionally, the County reserves the right to disqualify Bids, before and after the bid opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of any Bidder(s).
- g. The County intends to award the Agreement at the earliest practicable date to the lowest responsive, responsible Bidder(s), provided that the Bid is within the funds available for the project. In addition, the Commission reserves the right to reject all Bids if it determines, in its sole discretion, that the public interest will be best served by doing so.
- h. A Pre-award Conference may be conducted with the apparent low Bidder(s) to review general requirements of the Bidding Documents.

#### 14. **AWARD CRITERIA**

Award will be made after evaluating the prices, responsiveness and responsibility of each Bidder.

- A. **Responsiveness:** The determination of responsiveness will be determined by the following:
  - a. The completeness of all material, documents and/or information required by the County;
  - b. Whether the bidder has submitted a complete Bid form without irregularities, excisions, special conditions, or alternative bids for any item unless specifically requested in the Bid form.
- B. **Responsibility:** The determination of the bidder's responsibility will be determined by the following
  - a. The ability, capacity and skill of the Bidder to perform and/or provide the Work required;
  - b. The County reserves the right to reject any bid if the evidence submitted by, or investigation of, the bidder fails to satisfy the County

- that he/she is properly qualified to carry out the obligations of the Contract;
- c. The character, integrity, reputation, judgment, experience and efficiency of the Bidder;
  - d. The quality of performance of work on previous contracts or work; Maintains a permanent place of business individually or in conjunction with the prime contractor.
  - e. Has the appropriate and adequate technical experience necessary to perform the Work;
  - f. Has adequate personnel and equipment to do the Work expeditiously;
  - g. Has suitable financial means to meet obligations incidental to the work.

**15. DISQUALIFICATION OF BIDDERS**

Any of the following may be considered as sufficient for disqualification of a Bidder and the rejection of the Bid:

- a. Submission of more than one Bid for the same work by an individual, firm, partnership or Corporation under the same of different name(s);
- b. Evidence of collusion among Bidders;
- c. Previous participation in collusive bidding on Work for the County;
- d. Submission of an unbalanced Bid, in which the prices quoted for same items are out of proportion to the prices for other items;
- e. Lack of competency of Bidder. The Agreement will be awarded only to a Bidder(s) rated as capable of performing the Work.

**16. BASIS OF AWARD**

The Contract, if awarded, will be awarded to the lowest responsive and responsible bidder. No bid may be withdrawn for a period of sixty (60) days after the date of bid opening except as permitted by O.C.G.A., §36-91-41 et seq., as amended. Each Bid must be accompanied by a Bid Bond in accordance with the Bid Bond Requirements provided in the Contract Documents, on a Surety Company's Standard Bid Bond Form acceptable to the County in an amount no less than 5% of the amount bid. The successful bidder will be required to furnish a Performance Bond and Payment Bond, **on or before** the issuance of Notice to Proceed, each in the amount of 100% of the Contract Amount. All other required Contract Documents must be fully completed and executed by the Contractor and his/her Surety, and submitted to the Owner **on or before** the issuance of the Notice to Proceed.

**17. DETENTION EQUIPMENT CONTRACTOR (DEC) REQUIRED SUBMITALLS**

Below is a list of the required submittals for the DEC:

ITEM	SPECIFICATION	DEC RESPONSE CRITERIA DESCRIPTION
1	11 19 00-1.05-E-1	Lock/Door Compatibility Certificate
2	11 19 00-1.05-E-2	Manufacturer's Instruction Compliance/Detail
3	11 19 00-1.06-C-2	Compliance Certification Statement
4	11 19 00-1.06-C-3	Schedule Detail Samples
5	11 19 00-1.06-C-7	Lock Certification and Training
6	11 19 00-3.05-B	Resume's of Key Personnel
7	08 71 63-1.04-A	Installer's Qualifications
8	08 71 63-1.04-B	Manufacturer's Qualifications - Locks
9	08 34 63-1.03-E	Welder's Training and Certifications
10	08 34 63-1.04-A	Manufacturer's Qualifications – Hollow Metal
11	08 34 63-1.04-B	Welder's Qualifications – Hollow Metal
12	08 34 63-1.07	Sequencing and Scheduling Solutions

**18. WAGE CLAUSE**

Pursuant to 102-391, Each Contractor shall agree that in the performance of the Contract he will comply with all lawful agreements, if any, which the Contractor had made with any association, union, or other entity, with respect to wages, salaries, and working conditions, so as not to cause inconvenience, picketing, or work stoppage.

**19. NOTICE OF AWARD OF CONTRACT**

As soon as possible, and within sixty (60) days after receipt of bids, the County shall notify the successful Bidder of the Award of Contract.

The award shall be made by the Board of Commissioners of Fulton County to the lowest responsive, responsible bidder(s) as soon as possible after receipt of bids, taking into consideration price and the responsiveness to the requirements set forth in the Invitation for Bid. In such case, no claim shall be made by the selected Contractor(s) for loss of profit if the contract is not awarded or awarded for less work than is indicated and for less than the amount of his bid. The total of the awarded contract shall not exceed the available funds allocated for this project.

Should the County require additional time to award the contract, the time may be extended by mutual agreement between the County and the successful bidder. If an Award of Contract has not been made within sixty (60) days from the bid date or

within the extension mutually agreed upon, the Bidder may withdraw the Bid without further liability on the part of either party.

Any award made by the Board of Commissioners as a result of this bid will begin from the date of the notice to proceed. The Bidder agrees hereby to commence work under this Contract, with adequate personnel and equipment, on a date to be specified in a written order from the user department. The contract shall become effective on the Contract Date and shall continue in effect until the end of the term of the contract or until the project has been closed-out unless earlier terminated pursuant to the termination provisions of the contract.

**20. EXECUTION OF CONTRACT DOCUMENTS**

Upon notification of Award of Contract, the County shall furnish the Contractor the conformed copies of Contract Documents for execution by the Contractor and Contractor's surety.

Within ten (10) days after receipt the Contractor shall return all the documents properly executed by the Contractor and the Contractor's surety. Attached to each document shall be an original power-of-attorney for the person executing the bonds for the surety and certificates of insurance for the required insurance coverage.

After receipt of the documents executed by the Contractor and his surety with the power-of-attorney and certificates of insurance, the County shall complete the execution of the documents. Distribution of the completed documents will be made upon completion.

Should the contractor and/or surety fail to execute the documents within the time specified, the County shall have the right to proceed on the Bid Bond accompanying the bid.

If the County fails to execute the documents within the time limit specified, the Contractor shall have the right to withdraw the Contractor's bid without penalty.

Should an extension of any of the time limits stated above be required, this shall be done only by mutual agreement between both parties.

Any agreement or contract resulting from the acceptance of a bid shall be on a County approved document form. The County reserves the right to reject any agreement that does not conform to the Invitation for Bid and any County requirements for agreements and contracts. The County reserves the right to modify the agreement resulting from this bid upon the recommendation of the County Attorney.

**21. EQUAL EMPLOYMENT OPPORTUNITY ("EEO") IN PURCHASING AND CONTRACTING**

It is the policy of Fulton County Government that discrimination against businesses by reason of the race, color, gender or national origin of the ownership of any such business is prohibited.

**22. JOINT VENTURE**

Any Bidder intending to respond to this solicitation as a joint venture must submit an executed joint venture agreement with its offer. The agreement must designate those persons or entities authorized to execute documents or otherwise bind the joint venture in all transactions with Fulton County, or be accompanied by a document, binding upon the joint venture and its constituent members, making such designation. Offers from joint ventures that do not include these documents will be rejected as being non-responsive.

**23. CONTRACTORS COMPLIANCE WITH ALL ASSURANCES AND/OR PROMISES MADE IN RESPONSE TO PROCUREMENT**

Should any Bidder submit a response to the County promising to provide a certain level of service for either the scope of work, MFBE participation, or any other matter, including where such promise or assurance is greater than what is required by the procurement documents, and should this response containing the promise or assurance be accepted by the County and made a part of the Contract Documents, then this degree or level of service promised by the bidder relating to the scope of work, MFBE participation, or other matter shall be considered to be a material part of the Agreement between the bidder and the County, such that the bidder's failure to provide the agreed upon degree or level of service or participation shall be a material breach of the Agreement giving the County just cause to terminate the Agreement for cause, pursuant to the General Conditions of the Agreement.

**24. GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT**

This Invitation to Bid is subject to the Georgia Security & Immigration Compliance Act. Pursuant to the Georgia Security & Immigration Compliance Act of 2006, as amended on May 11, 2009, bidders and proposers are notified that all bids/proposals for services that are to be physically performed within the State of Georgia must be accompanied by proof of their registration with and continuing and future participation in the E-Verify program established by the United States Department of Homeland Security. A completed affidavit must be submitted on the top of the bid/proposal at the time of submission, prior to the time for opening bids/proposals. Under state law, the County cannot consider any bid/proposal which does not include a completed affidavit. It is not the intent of this notice to provide detailed information or legal advice concerning the Georgia Security & Immigration Compliance Act. All bidders/proposers intending to do business with the County are responsible for independently apprising themselves and complying with the requirements of that law and its effect on County procurements and their participation in those procurements. For additional information on the E-Verify program or to enroll in the program, go to: <https://e-verify.uscis.gov/enroll>.

See Section 6, Purchasing Forms & Instructions for declarations and affidavits.

**25. SUBCONTRACTING OPPORTUNITIES**

Potential prime contractors submitting a bid on this project for Fulton County and are seeking subcontractors and/or suppliers can advertise those subcontracting opportunities on the County's website, <http://www.fultoncountyga.gov> under "Subcontracting Bid Opportunities".

**26. TERM OF CONTRACT**

The term of the Agreement shall be for a period of three hundred sixty five calendar days, or as may be amended under the Agreement to comprise the Agreement Time. Contractor shall commence the Work within ten calendar days after receipt of Notice to Proceed and shall substantially complete the Work within two hundred seventy (270) calendar days from issuance of the Notice to Proceed and finally complete the Work within three hundred calendar (300) days of issuance of the Notice to Proceed.

**27. NO CONTACT PROVISION**

It is the policy of Fulton County that the evaluation and award process for County contracts shall be free from both actual and perceived impropriety, and that contacts between potential vendors and County officials, elected officials and staff regarding pending awards of County contracts shall be prohibited.

- A. No person, firm, or business entity, however situated or composed, obtaining a copy of or responding to this solicitation, shall initiate or continue any verbal or written communication regarding this solicitation with any County officer, elected official, employee, or designated County representative, between the date of the issuance of this solicitation and the date of the County Manager's recommendation to the Board of Commissioners for award of the subject contract, except as may otherwise be specifically authorized and permitted by the terms and conditions of this solicitation.
- B. All verbal and written communications initiated by such person, firm, or entity regarding this solicitation, if same are authorized and permitted by the terms and conditions of this solicitation, shall be directed to the Purchasing Agent.
- C. Any violation of this prohibition of the initiation or continuation of verbal or written communications with County officers, elected officials, employees, or designated County representatives shall result in a written finding by the Purchasing Agent that the submitted Bid or proposal of the person, firm, or entity in violation is "non-responsive", and same shall not be considered for award.

**28. AUTHORIZATION TO TRANSACT BUSINESS**

If the Contractor is a corporation or corporations combined to form a joint venture, the corporation or members of the joint venture team, prior to Agreement execution, must submit documentary evidence from the Secretary of State that the corporation

is in good standing and that the corporation is authorized to transact business in the State of Georgia.

**29. PRE-CONSTRUCTION CONFERENCE**

A pre-construction conference may be held with the successful Bidder and all known Subcontractors at a time and place set by the County.

**30. SUBSTITUTIONS**

See Division of Work 08 71 63 – 4, Item K.

**31. BID GENERAL CONDITIONS**

1. Bids may be withdrawn upon receipt of a written request prior to the stated due date and time. If a firm seeks to withdraw a bid after the due date and time, the firm must present a notarized statement indicating that an error was made, with an explanation of how it occurred. The withdrawal request must be accompanied by documentation supporting the claim. Prior to approving or disapproving the request, an opinion will be obtained from Fulton County's Legal Counsel indicating whether the firm is bound by its proposal.

Bids for projects that are solicited pursuant to the Georgia Local Government Public Works Construction Law (O.C.G.A. § 36-91-1 et seq.) may be withdrawn as follows:

The County must advise Bidders in the Invitation to Bid of the number of days that Bidders will be required to honor their proposals. If an Bidder is not selected within 60 days of opening the proposals, any Bidder that is determined by the governmental entity to be unlikely of being selected for contract award will be released from the proposal.

2. Fulton County shall be the sole judge of the quality and the applicability of all bids. Design, features, overall quality, local facilities, terms and other pertinent considerations will be taken into account in determining acceptability.
3. The successful Bidder must assume full responsibility for delivery of all goods and services proposed.
4. The successful Bidder must assume full responsibility for replacement of all defective or damaged goods and/or performance of contracted services within thirty (30) days' notice by the County of such defect, damage or deficiency.
5. The successful Bidder must assume full responsibility for providing warranty service on all goods, materials, or equipment provided to the County with warranty coverage. Should a Bidder be other than the manufacturer, the vendor and not the County is responsible for contacting

the manufacturer. The Bidder is solely responsible for arranging for the service to be performed.

6. The successful Bidder shall be responsible for the proper training and certification of personnel used in the performance of the services proposed.
7. The successful Bidder shall not assign, transfer, convey, sublet, or otherwise dispose of any contract resulting from the ITB or of any of its rights, title or interest therein without prior written consent of the Fulton County Board of Commissioners.
8. In case of default by the successful Bidder, Fulton County may procure the articles or services from another source and hold the successful Bidder responsible for any resultant excess cost.
9. All proposals and bids submitted to Fulton County are subject to the Georgia "Open Records Act", Official Code of Georgia, Annotated (O.C.G.A.) § 50-18-70 et seq.
10. All proposals and bids submitted to Fulton County involving Utility Contracting are subject to the Georgia law governing licensing of Utility Contractors, O.C.G.A. §43-14-8.2(h).

**END OF SECTION**

**BID FORM**

Submitted To: Fulton County Government

Submitted By: \_\_\_\_\_

For: **13ITB03281K-DJ, Fulton County Jail – Security Locks Retrofit**

Submitted on \_\_\_\_\_, 2013.

The undersigned, as Bidder, hereby declares that the only person or persons interested in the Bid as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Bid or in the Contract to be entered into; that this Bid is made without connection with any other person, company or parties making a Bid; and that it is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the place where the work is to be done; that he has examined the Drawings and Specifications for the work and contractual documents relative thereto, and has read all instructions to Bidders and General Conditions furnished prior to the openings of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees, if this Bid is accepted, to contract with the Board of Commissioners of Fulton County, Atlanta, Georgia, in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary, and to complete the construction of the work in full and complete accordance with the shown, noted, and reasonably intended requirements of the Specifications and Contract Documents to the full and entire satisfaction of the Board of Commissioners of Fulton County, Atlanta, Georgia, with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents for the following prices.

THE BASE BID IS THE AMOUNT UPON WHICH THE BIDDER WILL BE FORMALLY EVALUATED AND WHICH WILL BE USED TO DETERMINE THE LOWEST RESPONSIBLE BIDDER.

The base bid may not be withdrawn or modified for a period of sixty (60) days following the receipt of bids.

**BASE BID AMOUNT** (Do not include any Bid Alternates)

\$ \_\_\_\_\_  
(Dollar Amount In Numbers)

\_\_\_\_\_  
(Dollar Amount in Words)

The Bidder agrees hereby to commence work under this Contract, with adequate personnel and equipment, on a date to be specified in a written "Notice to Proceed" from the County.

The Bidder declares that he understands that the quantities shown for the unit prices items are subject to either increase or decrease, and that should the quantities of any of the items of work be increased, the Bidder proposes to do the additional work at the unit prices stated herein; and should the quantities be decreased, the Bidder also understands that payment will be made on the basis of actual quantities at the unit price bid and will make no claim for anticipated profits for any decrease in quantities; and that actual quantities will be determined upon completion of work, at which time adjustments will be made to the contract amount by direct increase or decrease.

**BASE BID AMOUNT**

Cost associated with sections 08-34-63, 08-71-63, 11-19-00, and 28-05-00 and 28-05-10 of the bid specifications as it pertains to the installation of swing door locks, sliding door operators, and associated controls on all listed floors.

PRODUCT	PER UNIT COST	QUANTITY	TOTAL COST
1. Swing Door Lock and Pocket		936	
2. Sliding Door Operator		384	
3. PLC Data Network Conversion to Ethernet		1	
4. Cell Door Hinge		230	
5. Owner Controlled Contingency			\$500,000.00
<b>TOTAL COST (lines 1-5)</b>			

**ALTERNATE #1**

Cost associated with the installation of new Touchscreen Control systems (TCS) to replace the graphic locking control panels in housing units as per specification 28-40-20.

PRODUCT	PER UNIT COST	QUANTITY	TOTAL COST
Touchscreen Control Panels (2 per Housing Tower)		13 Housing Towers	

**ALTERNATE #2**

Work associated with the provision of new locking control systems mobile Tablet PC controllers, and the installation of new WiFi wireless access systems for Tablet PC controller as per specifications outlined in section 28-40-20.

PRODUCT	PER UNIT COST	QUANTITY	TOTAL COST
1. WiFi Access System		13	
2. Tablet PC Controller		26	
<b>TOTAL COST (lines 1-2)</b>			

The Bidder furthermore agrees that, in the case of a failure on his part to execute the Contract Agreement and Bonds within ten days after receipt of conformed contract documents for execution, the Bid Bond accompanying his bid and the monies payable thereon shall be paid into the funds of the Owner as liquidated damages for such failure.

Enclosed is a Bid Bond in the approved form, in the sum of:

\_\_\_\_\_ Dollars

(\$\_\_\_\_\_) according to the conditions of "Instructions to Bidders" and provisions

thereof.

The undersigned acknowledges receipt of the following addenda (list by the number and date appearing on each addendum) and thereby affirms that its Bid considers and incorporates any modifications to the originally issued Bidding Documents included therein.

ADDENDUM # \_\_\_\_\_ DATED \_\_\_\_\_

**BIDDER:** \_\_\_\_\_

Signed by: \_\_\_\_\_  
[Type or Print Name]

Title: \_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

Business Phone: \_\_\_\_\_

Note: If the Bidder is a corporation, the Bid shall be signed by an officer of the corporation; if a partnership, it shall be signed by a partner. If signed by others, authority for signature shall be attached.

The full name and addresses of persons or parties interested in the foregoing Bid, as principals, are as follows:

Name	Address
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**END OF SECTION**

**SECTION 3**  
**SCOPE OF WORK AND TECHNICAL SPECIFICATIONS**

**SECTION 00 35 53 - SECURITY PROCEDURES FOR WORKFORCE**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Refer to attachment (Fulton County Sheriff's Office Jail ID Application)

**1.2 SUMMARY**

- A. Section includes: Fulton County Sheriff's Office - Jail Bureau Application for Jail Identification Card (The form includes a Cover Page and 5 pages).

**PART 2 – EXECUTION**

- A. This application must be completed in its entirety by all Contractor employees and/or subcontractors that will be assigned to this project. Applications will be approved by the Sheriff's Office prior to commencement of work. All approved persons will be issued a jail photo ID badge that should be worn on the upper torso at all times while working in the facility.

**END OF SECTION 00 35 53**

**SECTION 01 04 20****TOOL CONTROL****1.01 PART 1 - GENERAL****1.1 DESCRIPTION OF WORK**

- A. The Contractor shall become thoroughly familiar with the requirements of the Contract Documents, as well as jobsite conditions and the work of separate contractors, and shall make any adjustments necessary to maintain tool control.
- B. Work included: Any item that may be used to aid in or accomplish an escape, cause bodily injury, or which represents a general hazard to the safety and security of the facility shall be placed under control and maintained under strict supervision of the contractor's Tool Control Officer and Sheriff Department's Jail Security Commander. Fulton County reserves the right to determine whether or not a specific tool meets the above-listed criteria.

**1.2 REFERENCE STANDARDS**

- A. All requirements of this section shall comply with the following standard:
  - 1. ACA Standards 2-4197; 3-4188

**1.3 PART 2 - POLICY**

- A. All tools received in the facility will be given to the Tool Control Officer prior to issue for assignment to inventory. A tool receiving report is required for all tools received by the facility, and will be completed by the Tool Control Officer. The original copy of this report shall be forwarded to the security sergeant and the Tool Control Officer will retain a copy. The tool receiving report shall be placed in a binder and kept in the Safety Library and destroyed when the tool is eliminated from the inventory.
- B. A master inventory list of tools will be prepared for each area in which tools are stored/used. A complete set of master lists will be maintained in the Security Sergeant's office and with the Tool Control Officer. These inventories will be current, filed and readily available for tool inventory and daily tool accountability.

**1.4 TOOL INVENTORY RECORDS**

- A. A daily check of tools will be made by each work area employee.
- B. A weekly tool report (See attached Sample Report) of all tools will be submitted by the work area employee to the Tool Control Office, and a copy to the Security Sergeant stating that all tools assigned to his area are present.

**1.5 MARKING OF TOOLS**

- A. All tools assigned to a specific facility will be marked with an etching tool for identification of its assigned area prior to use. Markings will also consist of
-

sequential numbering by assigned area, i.e., tools in a vocational shop should be identified by area and then sequential number.

## **1.6 STORAGE AND ISSUE OF TOOLS**

- A. After assignment by the Tool Control Officer, all tools shall be secured in strong and secure tool room facilities when not in use. These facilities will be located on the Fulton County Jail Campus in an area designated by the Fulton County Sheriff's Office and will be apart from the inmate housing and activity areas. Only authorized personnel will have access to the tool room.

## **1.7 OXYGEN/ACETYLENE/CUTTING TORCHES**

- A. All cutting tips, including welding tips, and mixing chambers will be stored and issued from a secure location. They will be accounted for on a daily log. The log will indicate the name of the employee(s) using the tips, date, time of issue, and time of return. Also, the log will be signed by the issuing employee as well as the employee to whom the tips have been issued. Tips will be included in the quarterly audit of tools as well as in the daily tool inspection.
- B. When a tool is lost or misplaced, any inmate(s) and/or staff member(s) who had access to the toll will be held accountable and appropriate disciplinary action taken in accordance with the sheriff department policies.
- C. The Tool Control Officer shall maintain a file listing all tools reported lost or missing. Identifiable and serviceable tools found shall be forwarded to the Tool Control Office with written notice to the Security Sergeant. If found tools have already been replaced, the found tools will be placed in secure storage or if unserviceable, the found tool will be destroyed.

## **1.8 PRIVATE OR CONTRACT REPAIR AND MAINTENANCE WORKERS**

- A. Private or contract repair and maintenance workers employed by, or under contract to, perform services, or construction within the institution will submit a written inventory of all tools, tool boxes, and related equipment prior to admittance into the facility. The inventory list will be used to inventory the tools, tool boxes and other equipment each time these workers enter and leave the facility. A security officer will escort these workers while in the facility. This will confirm that no tools are left behind, activities are confined to the authorized are, and work is performed with proper security and safety precautions. In emergency situations advance lists of tools cannot always be provided, but thorough inventories will be done.

## **1.9 LADDERS**

- A. Inventory will be available by ladder size and type to facilitate inspection and handling.
  - B. Must be stored in approved and secure storage area when not in use
  - C. All ladders will be chained and locked when not in use.
  - D. Six foot ladders may be locked on tool board for frequent use. All ladders over six (6) feet must be stored in a central location, chained and inventoried.
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**SECTION 01 10 00 DETENTION EQUIPMENT / LOCKING SYSTEMS****I. SUMMARY:**

- A. This division of the Specifications covers the provision, renovation, and enhancement of the electrically operated locks and slider door operators for the Fulton County Jail.
  - B. It has been determined that several elements of the inmate locking systems currently installed at the Fulton County jail are no longer effective, and are in need of replacement and/or renovation. The specific locking systems elements that will comprise the work for this project are as follows:
    - a. Electrically operated, jamb-mounted locksets which are currently installed at all inmate housing unit swing-type cell doors.
    - b. Heavy duty detention hinges that are currently installed for swing-type inmate cell doors, where shown on the floorplan drawings.
    - c. Door frame mounted door position switches, currently installed for all swing-type inmate cell doors.
    - d. Motor operated, chain-driven inmate cell slider door operator units installed where shown on the floorplan drawings.
    - e. Emergency manual release cabinets, provided for inmate cell doors equipped with slider door operators.
    - f. Corridor slider door operators, for entry into inmate housing and treatment areas, where shown on the floorplan drawings.
  - C. The work associated with the inmate swinging cell doors is the replacement of the existing jamb mounted lockset with a new surface mounted frame unit that contains a new motor-driven electrically operated lockset. This new surface mounted frame and lockset unit shall be welded to the existing door frame and provided as a complete package. Included with the surface mounted lock apparatus shall be an integral door position switch (DPS), a strike/receiver plate for the lockset, pull handle, and status LED unit on the front of the unit. One surface mounted lock apparatus shall be supplied and installed for each existing inmate swinging cell door.
  - D. The work associated with the inmate sliding cell doors shall consist of the provision and installation of a new retrofit door operator unit. The replacement door operator shall include, but shall not be limited to, the following elements:
    - a. New motor and pinion gear drive unit
    - b. Wire harness and interface devices
    - c. Door track sets
    - d. Wheel bar units and hangers for door
    - e. Status LED unit, mounted to existing cover plate assembly
    - f. Door position switches to translate door status
    - g. Mounting hardware
    - h. Cable extensions and harness
    - i. Door side plates as required
-

- j. Bottom door skirts
- E. The renovation of the emergency, mechanical slider door release cabinets is required in order to open the cell doors in the event of an emergency condition. This work requires that all emergency release cabinets shall be rehabilitated by the contractor, so that it will be fully compatible and certified by the contractor and the manufacturer of the new cell slider operator units. This work includes, but shall not be limited to the following elements:
  - a. Replacement/renovation of release levers/handles
  - b. New push/pull cables as required
  - c. New raceway, enclosures, pulleys as required
  - d. Crank handles, gear set, if required for operation
- F. Certain doors shall require new heavy-duty adjustable hinges as shown on the floorplan drawings. These new hinge units shall be horizontal/vertical adjustable hinge with hardened steel pin. Work shall include bracing of door frame, mounting plates, and hardware, through-bolting to secure frame, welding of devices and plates, and full adjustment of door to fit new surface mounted frame and lockset unit.

## II. ELECTRONIC SYSTEMS GENERAL

### SUMMARY:

- A. This division of the Specifications covers the complete provisions, requirements, modifications, upgrades, reuse, and installations of the electronic security systems as indicated in the Contract Drawings and Specifications. These systems shall provide complete and functional integrated electronic security systems for the Project. Provide all labor and installation, assembly and fabrication, materials, equipments, software and programming, and supervision to furnish fully functional and operational specified systems. All equipment specified in the Division 28 series Sections shall be general purpose, non-proprietary, COTS "consumer-off-the-shelf" in nature and custom configured for this application. The contractor shall provide all documentation and shall perform all duties involved in obtaining work permits and licenses as required to complete the project. All permitting required by the Contractor shall be within the associated City, County, and State jurisdictions.
  - B. The installation of all security equipment and coordination of the raceways and electrical power for the security systems shall be the full responsibility of the Division 28 contractor for this project. All equipment specified in Division 28 series sections shall be powered by emergency circuits provided by Division 28. Where required the new power circuitry for the security equipment specified within this division of work shall where possible be connected to the existing UPS power systems, else furnish and install additional UPS power.
  - C. ADA Requirements
    - a. Mounting heights and accessibility to equipment requiring access by
-

individuals with disabilities shall comply with ADA and ANSI 117 requirements.

- D. The facility currently contains existing security equipment, components, devices, materials, wires and cables, door lock hardware, and graphic locking control panels, TCS-touchscreen computer stations, cabinets, millwork, etc (Contractor should field verify complete list of items affected by this project). The Contract Documents indicate general layouts of the existing conditions of the security systems. The Division 28 Contractor will be fully responsible for field researching the existing security equipment cabinet layouts, existing conduit and cabling routes, field device mounting surfaces and locations, control room and security equipment room spaces and layouts, etc. Results of the field research shall be used to configure the new security system layouts in accordance with the Contract Documents. The existing security equipment, components, devices, and materials required by the Contract Documents to be reused with the new security systems shall be field tested by the Division 28 Contractor prior to connection to the new security systems. The DIV 28 Contractor shall field test each existing graphic locking control panel, PLC-programmable logic controller location, TCS-location, door lock hardware, and inmate call-in pushbutton station and written test reports shall be provide to the A/E indicating the operational condition of the existing equipment, components, devices, and materials and any items found non-functional shall be stated in the report for replacement. Designated existing wiring and cabling required by the Contract Documents to be re-connected to the newly configured security systems shall be field tested and re-labeled by the Division 28 Contractor prior to connection to the new security systems. A written test report shall be provide the A/E indicating the electrical condition of the existing wires and cables and any items found non-functional shall be stated in the report for replacement.

The new work shall include, but not be limited to, the provision and installation of DIN rail mounted electromechanical relays, fuses, +24VDC power supplies, Fiber optic cables, fiber optic patch panels, data switches, 3ea TCS-touchscreen computer stations, 1ea Server Computer Station, Ethernet Comm. modules, Software and programming, and control, data, and signal wiring into the new and existing portions of the locking control systems.

The Central/Master Control Room currently has 3ea (TCS's), which shall be removed and replaced with 2ea new (TCS's). The Security Data Room shall be provided with 1ea new (TCS) and 1ea new (SCS)-Server/Data logging computer station. Each existing PLC-programmable logic controller location shall be retrofitted to accommodate controlling and monitoring the new door lock hardware being installed at all inmate cell doors and designated corridor doors. Additionally, each (PLC) location shall be reconfigured to data communicate via Ethernet connectivity with the new head end equipment (TCS's) in Central/Master Control Room and Security Data Room, as well as the new (SCS) being located in the Security Data Room to provide functionality consistent with the existing and new systems. The (TCS) system shall monitor and control all existing and new Central override and emergency functions consistent with the existing graphic locking control panels and as outlined in the Contract

### Documents.

Provide all new equipment as indicated on the Contract Documents and integrate the equipment into the existing (PLC) equipment and head end equipment and touchscreen controlling and monitoring systems. The programming for the touchscreen software shall be modified to accommodate the new equipment. All newly modified doors and devices shall be monitored and controlled from the touchscreen system in central/master control and Security Data Room. All door hardware devices to be controlled and monitored in the existing housing POD's shall be interfaced to the existing PLC I/O modules in the existing security equipment rooms in the housing POD's. The new PLC equipment shall interface with the existing PLC equipment in the security equipment rooms to provide monitoring and controlling of all new door hardware devices from the existing Locking Control panels and the new (TCS's) as consistent with the monitoring and control functions of the existing housing POD's.

Provide all new wiring connections at the new door lock hardware and existing (PLC) systems as shown on the contract drawings. Interface to the building PLC system to provide monitoring and controlling of the system at the Central Control Room and Security data room (TCS's).

### (Line Item-2) Work Scope Phasing:

TCS-touchscreen computer station replacement of existing locking control panels:

1. The existing housing POD control rooms are outfitted with locking control panels for controlling and monitoring the existing door lock hardware. The DIV28 contractor shall at the direction of the Owner replace the existing locking control panels with (TCS) touchscreen computer workstations. The new (TCS's) shall be established in a temporary location in the housing POD control room. Route all additional cabling required from the security equipment room to the (TCS) location, and incorporate all new connections required to incorporate the new equipment. Each security function shall be fully tested in the presence of the A/E/Owner, and all operational functions such as central overrides, bypassing, door control, emergency release, etc shall be fully implemented and functional prior to commencement of the cutover from the graphic panel. All cabling shall be routed from the security equipment room to both the temporary station as well as the permanent location and tested prior to cutover. Upon satisfactory completion of the testing and acceptance by the Owner, schedule the cutover time and date with the Owner. During cutover, the existing locking control panel shall be removed, and the (TCS) workstation shall be relocated to the permanent location within the housing POD control room.
  2. The (TCS) shall allow for integrating the various security technologies and allowing for seamless automated monitoring and control, as well as providing for ease of operation and maintenance. The operator shall have the ability to perform a variety of security related functions from (TCS)
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stations. The security controlling and monitoring shall be displayed and operated primarily through graphical representations of the floor plans, pinpointing the control, monitor, and alarm location with emergency instructions. Selecting the appropriate icon shall cause automatic functions to be initiated.

3. The work for the DIV 28 contractor includes all new equipment, cabling, conduit, backboxes, programming, interface equipment, and communication to the head end security systems. The head end security systems for this facility shall monitor all security devices. All security devices described in these sections shall be controlled and monitored from the security touchscreen stations and graphic control panels locations indicated in drawings. The DIV 28 contractor shall provide all related devices, equipment, associated hardware, software, appurtenances, connections, devices, power supplies, transformers, panelboards, circuit breakers, wiring/cabling, conduit, backboxes, fittings and programming necessary to complete the work as a complete and fully operational system. The Security Contractor shall furnish and install all of the above material in accordance with the manufacturer's recommendations, and to comply with the Division 28 specifications.

(Line Item-3) Work Scope Phasing:

Addition of PAD-personal digital assistant or Tablet PC as wireless mobile door locking control stations in designated dayroom locations:

1. A wireless (Wi-Fi) network, fully encrypted, shall be provided for all prisoner housing and control areas utilizing PDA's. The PDA's shall be restricted to only operating within the designated areas controlling and monitoring (designated cell doors, and prisoner call-in pushbutton stations located within each cell), perform Group Unlock operation of cell doors, control on/off (lights, water, TV electrical outlets, prisoner collect-call/pay phones).
2. 32-total PDA or Tablet PC's shall be furnished and programmed to operate via a new secure wireless network being provided and installed by the contractor to operate in conjunction with the existing PLC-programmable logic controller systems.

**END OF 01 10 00**

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**SECTION 08 34 63 DETENTION HOLLOW METAL FABRICATION****PART 1 – GENERAL**

## 1.01 SUMMARY

- A. Section provided for reference with regard to work involving the installation of surface mounted detention hollow metal lockset enclosure to secure the existing inmate cells that currently have swinging doors. Requirements for hollow metal construction of door and window frames shall apply to construction of surface mounted lockset enclosure for this project.
- B. All references to “detention hollow metal”, “detention door frame”, “detention window frame”, and “detention frame” shall apply to the construction and installation of the surface mounted lockset enclosure to be supplied and installed for this project.
- C. Related sections:
  - 1. Security Hardware.
  - 2. Painting.
  - 3. Detention Equipment General
  - 4. Locking Control Systems.

## 1.02 REFERENCES

- A. Standards of the following as referenced herein:
  - 1. American National Standards Institute (ANSI).
  - 2. American Society for Testing and Materials (ASTM).
  - 3. American Welding Society (AWS).
  - 4. Code of Federal Regulations (CFR).
  - 5. Hollow Metal Manufacturers Association (HMMA).
  - 6. National Association of Architectural Metal Manufacturers (NAAMM)
  - 7. National Fire Protection Association (NFPA).
  - 8. Underwriters Laboratories, Inc. (UL).
  - 9. ANSI/NAAMM/HMMA 863 -98 Guide Specifications for Detention Security Hollow Metal Doors and Frames.
  - 10. ANSI/NAAMM/HMMA 840-99 Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames

## 1.03 SUBMITTALS

- A. Product data: Submit manufacturer's product literature and technical data indicating compliance with specified requirements and performance criteria. Include material and fabrication specifications, installation instructions and manufacturer's recommendations for storage, handling and protection of products.
  - B. Shop drawings: Submit schedules and drawings showing elevations, sections and details of security hollow enclosures and frames.
    - 1. Indicate designs and security grades, sizes, materials, metal gauges, finishes, door swings, anchorage and fastening methods, reinforcement, accessories and fire rating
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- requirements. Include transverse and longitudinal section through door showing reinforcing and construction.
2. Include fabrication and erection details, dimensioned locations of hardware and preparation requirements, grout and access hole locations when required, and details of openings.
  3. Use same reference numbers indicated on contract drawings in preparing schedules.
- D. Samples:
1. Surface mounted lockset wedge enclosure – provide one actual sample of the exact device to be provided.
  2. Anchors: Submit one of each type specified.
- E. Welder certification: Submit welder's certification for Owner or Designated Representative's information only in compliance with specified qualification requirements. Certification shall be current within the previous 12 months.
- F. Test Reports: Submit for Owner or Designated Representative's information only.
1. Submit certified reports by an independent testing laboratory indicating that manufacturer's security hollow metal lockset enclosure proposed for use has been tested in compliance with specified ANSI/NAAMM/HMMA 863-98 standard and ASTM F1450-97.
    - a. Tests shall have been made from fabrications of identical construction proposed for installation on the Project complying with requirements of specified standard. Test reports shall include specifications and construction details of tested assemblies and document all pass criteria as required by the specification.
    - b. Tests shall indicate satisfactory testing to meet structural and security performance requirements specified, as a minimum and shall have been performed no more than 2 (two) years prior to bid date.
  2. If test data is not available for proposed security hollow metal work, or if data does not indicate compliance with specified requirements, Contractor shall be responsible for securing satisfactory tests by an independent testing agency acceptable to Owner or Designated Representative prior to acceptance/approval of submittal drawings. All costs for such testing shall be borne by Contractor.

#### 1.04 QUALITY ASSURANCE

A. Manufacturer's Qualifications:

1. Manufacturer shall have been regularly engaged in the production of security hollow metal fabrications of similar design and construction as specified for this Project with minimum ten (10) years experience.
2. If requested by Owner or Designated Representative, submit satisfactory evidence of at least three (3) projects of similar size and complexity completed within the past five (5) years. Include names and locations of projects, references, and owner contacts with phone numbers, manufacturer's qualification statement and audited financial statement current for recent fiscal year.

B. Welder Qualifications:

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1. Welders employed for this project shall be qualified in accordance with AWS B2.1-84 test procedures for welding work required and shall have passed qualification tests current within the past twelve (12) months.
- C. Regulatory Requirements: Doors, including locations of related hardware, required to be accessible to the physically disabled shall comply with the Americans with Disabilities Act (ADA), 28-CFR Part 36, Appendix A, "Accessibility Guidelines for Buildings and Facilities."
- D. Single source requirements: Security hollow metal items installed throughout Project shall be by a single manufacturer.
- E. Pre-installation conference: Contractor shall schedule and convene meeting during submittal review period and prior to installation of specified materials to review and coordinate work to be accomplished.
  1. Contractor, Owner or Designated Representative security hollow metal fabricator, security hardware supplier, electronic security systems subcontractor and other trades affect by work shall be present.
  2. Contractor shall notify applicable parties at least seven (7) days prior to time of meeting.
  3. Contractor shall record minutes of meeting and distribute copies to all parties in attendance.

#### 1.05 DESIGN AND PERFORMANCE REQUIREMENTS

- A. Security Hollow Metal Doors and Frames: Comply with ANSI/NAAMM HMMA 863-98, "Guide Specifications for Detention Security Hollow Metal Doors and Frames", except where more stringent requirements are specified herein.
  - B. Welding: Comply with applicable AWS standards specified as follows for welding work required.
    1. AWS D1.1-98, "Structural Welding Code-Steel".
    2. AWS D1.3-89, "Structural Welding Code-Sheet Steel".
  - C. Performance and Testing: Security hollow metal doors and frames shall comply with performance requirements specified in referenced HMMA 863-98 standard and meeting minimum Security Grade No.2 in accordance with ASTM F1450-97. All exterior doors shall be Grade 1.
    1. The following test procedures shall be performed as described in ANSI/NAAMM/HMMA standard:
      - a. Door Static Load Test.
      - b. Door Rack Test.
      - c. Door Edge Crush Test.
      - d. Removable Glazing Stop Test.
    2. An independent testing laboratory retained by the manufacturer certifying compliance with specified requirements shall perform testing.
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**1.06 DELIVERY, STORAGE AND HANDLING:**

- A. Deliver security hollow metal work to job site cartoned or wrapped for protection. Subcontractor should comply with ANSI/NAAMM/HMMA 840-99 Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames, and as noted herein.
- B. Remove coverings, wrappings or cartons and inspect materials for damages upon delivery.
  - 1. Reject damaged materials which cannot be repaired and remove from site.
  - 2. Clean and touch-up scratches, abrasions, and minor damages to pre-finished metal surfaces with matching coating material applied in shop.
- C. Store materials in vertical position on raised platform, minimum 4" off of floor and under cover with provisions for adequate air circulation.
  - 1. Provide wood spacer between units to permit circulation.
  - 2. Protect stored materials from moisture. Do not use non-vented plastic or canvas shelters that can create a humidity chamber for covering materials.
- D. Materials not properly stored and protected, which results in rusting or damages shall not be permitted for installation and removed from the site. Replace damaged or rusted materials at no additional cost to Owner.

**1.07 COORDINATION, SEQUENCING AND SCHEDULING**

- A. Schedule and sequence installation with work specified in other sections. Coordinate security hollow metal fabrication with security hardware, security glazing and electronic security system work.
- B. Coordinate fabrication of security hollow metal lock enclosure with wall construction. in which it is to be installed. Coordinate installation of anchors and items required to be built into other work.
- C. Coordinate location and installation of hardware specified in Security Hardware section.
  - 1. Obtain hardware manufacturer's templates for prepping doors and frames.
  - 2. Verify frame depths and widths to ensure fitting of jamb-mounted locks, intercommunication devices and other specified hardware scheduled to be mounted in frames.
- D. Coordinate locations of conduits, junction boxes and similar items required to be installed in security hollow metal work to facilitate electrical and electronic security systems for interconnecting electric operated hardware, monitoring devices, intercommunication systems and other components scheduled in security hardware section.

**PART 2 - PRODUCTS****2.01 MANUFACTURERS**

- A. Acceptable manufacturers, subject to compliance with specified requirements:
    - 1. Chief Industries, Inc.
    - 2. Habersham Metal Products Company
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3. Trussbilt, Inc.
4. Steel Door Industries (SDI)/Slate Security Systems.
5. Willo Products

- B. Any potential bidder that chooses to propose a hardware manufacturer not listed above must submit a written substitution request that will be evaluated by the Owner and/or Designated Representative for compliance with all specifications and requirements referenced within this bid document.

## 2.02 MATERIALS AND FINISHES:

- A. Steel: Complying with specified HMMA 863 standard. Material shall be free of scale, pitting, coil breaks, buckles, waves surface blemishes or any other defects caused by the use of improper leveled sheets.
1. Interior doors and frames: Commercial quality, leveled cold-rolled carbon steel sheet meeting ASTM A366/A366M-97 or hot-rolled, pickled, and oiled carbon steel sheet meeting ASTM A569/A569M-97.
  2. Exterior doors and frames: Hot-dipped galvanized, steel sheet meeting ASTM A653/A653M-97, Commercial Steel (CS classification), Coating Designation G60.
- B. Primer Finish: Complying with requirements specified in referenced HMMA 863 standard and as follows.
1. Interior doors and frames: Minimum one coat of manufacturer's standard rust-inhibitive primer on steel surfaces ,unless otherwise specified.
  2. Exterior doors and frames: Minimum one coat of manufacturer's standard rust-inhibitive primer after chemical treatment of galvanized surfaces for paint adhesion.
- C. Glazing materials: As specified in Security Glazing section.

## 2.03 FRAMES

- A. Types, Sizes and Profiles: As indicated on drawings.
- B. Frame Construction: Complying with referenced HMMA 863-98 standard, except where more stringent requirements are specified. Frames shall be welded construction formed to profiles indicated with backbends.
1. Corner joints: Construct with faces mitered and stops either butted or mitered with contact edges closed tight and joints continuous welded. Use of gussets or splice plates shall not be permitted.
  2. Integral stops: Fabricate frames for swinging doors and borrowed lite frames with integral stops as specified.
    - a. Stop heights: Provide specified heights for frame types as follows, unless otherwise indicated:
      - 1) Frames for swinging doors: Minimum 0.625-inch (5/8") height, unless otherwise indicated.
      - 2) Borrowed lite frames: Minimum 1.25-inch (1-1/4") height unless otherwise indicated.

- b. Cut-off stops: Where shown, cap stops at 45 degrees or 90 degrees at heights as indicated on final reviewed and accepted shop drawings. Jamb joints below cut-off stops shall be tight fitting and welded; finished to a neat, flush appearance.
- C. Fasteners: Provide tamper-resistant, center pin round head, pan head or oval head, 1/4-20 or 1/4-28, Grade No. 8, cadmium coated, security machine screws for attachment of glazing stops.

#### 2.04 HARDWARE PREPARATION

- A. Mortised Hardware: Reinforce, mortise, drill, tap and prepare doors and frames for templated mortised hardware in the factory in accordance with final reviewed hardware schedule and templates furnished by hardware manufacturer.
- B. Surface Applied Hardware: Where surface-mounted hardware, including anchor hinges, thrust pivots, pivot reinforced hinges or non-templated hardware, are to be installed, reinforce doors and frames as required and perform drilling and taping in the field to mount specified hardware.
- C. Hardware Reinforcement: Provide hardware reinforcing plates for doors and frames in steel thickness as specified below.
  - 1. Doors:
    - a. Full mortise hinges and pivots: Minimum 0.187-inch (3/16") thickness.
    - b. Surface applied security hinges: Minimum 0.250-inch (1/4") thickness.
    - c. Strike reinforcements: Minimum 0.187-inch (3/16") thickness.
    - d. Reinforcement for lock fronts, concealed holders, or surface mounted closer: Minimum 12 gauge (0.093 inch thickness).
    - e. Internal reinforcements for all other surface applied hardware: Minimum 12 gauge (0.093-inch thickness).
  - 2. Frames:
    - a. Hinge and pivot reinforcements: Minimum 0.187-inch (3/16") by 1.5-inch (1-1/2") width by 10-inch length. Provide additional minimum 12 gauge (0.093-inch thickness) steel angle welded to back of frame face and hinge reinforcement to resist deformation under swinging door load.
    - b. Strike reinforcement: Minimum 0.187-inch (3/16").
    - c. Closer reinforcements: Minimum 0.187-inch (3/16").
    - d. Flush bolt reinforcements: Minimum 0.187-inch (3/16").
    - e. Reinforcement for surface applied hardware: Minimum 12 gauge (0.093-inch thickness).
- D. Key Cylinders: Factory prepares frames to receive key cylinder extensions furnished with lock assemblies as specified in security hardware section. Key wells or hand holes shall not be permitted.

- E. Electric operated hardware and security system devices: Provide hardware enclosures and junction boxes interconnected with required conduits and connectors for installation of electric operated and monitored hardware, intercom systems, intercommunication devices and other specified electronic security system devices.
1. Conduits and Connectors: Provide minimum 0.75-inch (3/4") size electrical metallic tubing (EMT) conduits with steel compression type connectors having insulated throats; UL Approved.
  2. Access Covers: Provide access covers for junction boxes and at other locations required in frames to facilitate installation of wiring, electrical components and security system devices required to be incorporated into frame fabrication.
    - a. Access covers shall be fabricated from same material and metal thickness as specified for frames.
    - b. Fabricate cut-outs in frames prepared to receive access covers with tight accurate fitting, seated flush with adjacent surfaces.
    - c. Fasten access covers in place to frames with same type and size fasteners specified for glazing stops spaced at maximum 6-inch center, but not less than four (4) per cover.
    - d. Access covers shall be chemically treated for paint adhesion and finished same as frame.
    - e. Coordinate access cover locations with electrical and security system work.
- F. Hardware Locations: Comply with referenced HMMA 863 standard for location of hardware and as indicated below, unless superceded by specified ADA requirements.
1. Jamb-mounted locks: Locate centerline of lockbolt or latchbolt 40-inches (3'-4") up from finished floor except as specified for exit door jamb-mounted locks and auxiliary latches.
  2. Exit door jamb-mounted locks and auxiliary latchsets: Locate centerline of lockbolt or latchbolt 50-inches (4'-2") up from finished floor with auxiliary latchset lever handle or rose centerline located 32-inches (2'-8") up from finished floor.
  3. Weatherstripping and silencers: Comply with manufacturer's recommendations.

## 2.05 SECURITY SEALANTS

- A. Acceptable products, subject to compliance with specified requirements:
4. Euclid Chemical Company; EUCO #452-P Epoxy System.
  5. ChemRex, Inc./Master Builders, Inc.; Coneresive® Paste LPL.
  6. Polytite Manufacturing Corporation; Prison Loc 20 or Prison Loc 30.
  7. Powers Fasteners, Inc.; Power-Fast Epoxy Injection Gel.
  8. Prime Resins, Inc.; Prime Gel 2100-Low Mod or Prime Gel 2000-High Mod.
  9. Sika Corporation; Sikadur 31Hi-Mod Gel or Sikadur® Injection Gel.
  10. Tamms Industries, Inc.; Duracrete® LV or Duracrete® Gel. \*\*
- B. Characteristics: Two-component, 100% solids, epoxy resin adhesive compound formulated for use as pick-proof sealant.
- C. Location/Use: DEC shall provide and install security sealant product in security/detention/potential vandalism areas for construction joints located in walls, ceilings, floors, and other areas within the interior of the building, with the following exceptions:
1. Masonry control and expansion joints, and between concrete and masonry materials.

- 2 Joints between metal and concrete, ceramic tile, masonry, drywall, plaster or adjacent materials.
- 3 Joints in concrete (including precast) or between concrete and adjacent materials.
- 4 Tight metal to metal joints (less than 1/32" wide).
- 5 Underneath thresholds.
- 6 Joints in cement plaster or between cement plaster and adjacent materials.
- 7 Between plumbing fixtures and adjacent materials.

DEC shall install security sealant at all construction gaps otherwise in detention areas (or areas of typical inmate population) which exceed 1/32". This includes any gaps associated with equipment installation or construction gaps.

- D. DEC shall be fully responsible for the installation of security sealants for any gaps between security walls and floors; between security walls and ceilings; gaps within any security wall; gaps within any security ceiling; and gaps at equipment located on the floor.
- E. DEC shall install security sealant at all locations of detention frames, detention furniture, detention accessories, or any other detention or vandalism-resistant product/component/material provided by the DEC or otherwise installed for this project.
- F. Full demonstration of the approved security sealant shall be performed at sample locations within the detention areas, allowed to dry/cure, and then fully tested by the Owner or Designated Representative prior to the DEC proceeding with the installation of the security sealants.
- G. Joints located on the outside of the building (with exterior exposure) shall receive sealants as specified in Division 7 or as specified elsewhere within the Drawings or Project Manual for the materials involved. Do not use security sealants at exterior exposure locations.

## 2.11 FABRICATION

- A. Fabricate security hollow metal work in accordance with final reviewed and accepted shop drawings and complying with referenced ANSI/NAAMM HMMA 863 standard, except where more stringent requirements are specified.
  - B. Form members straight and uniform in profile throughout its entire lengths. Construct work rigid, square and free of defects, warp or buckles.
  - D. Form edge bends true and straight with minimum radius for thickness of material used.
  - E. Construct joints with aligned faces and arrises. Grind welded joints and dress smooth to be indistinguishable in completed work.
  - F. Install specified hardware reinforcement and anchors without distortions or blemishes on exposed surfaces.
  - G. Install specified hardware enclosures, junction boxes and conduits to doors and frames interconnecting electric operated hardware, monitoring devices, keeper switches, key switches, call buttons, electric hinges, intercom stations, intercommunication devices and other similar electrical items specified in security hardware section and in electronic security systems
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sections. Coordinate fabrication work to provide for complete concealed installation of conduits, junction boxes and hardware enclosures.

- H. Fabricate specified security hollow metal, steel plate and expanded metal panels to sizes, shapes and configurations required for accurate, neat and uniform fit for installation at locations indicated in accord with final reviewed and accepted shop drawings.
- I. Remove tool marks and surface imperfections from work after fabrication. Surface imperfections and tool marks shall be filled and sanded smooth to provide surfaces of face sheets, vertical edges and weld joints free of irregularities for finishing.
- J. Manufacturing Tolerances: Comply with tolerance limits specified in referenced HMMA 863 standard.
- K. Clearances: Modify existing swinging doors to provide edge clearances as specified.
  - 1. Between door and frame, at head and jambs: 0.0625-inch (1/16").
  - 2. At meeting edges of pairs of doors: 0.0625-inch (1/16").
  - 3. At sills without thresholds: 0.375-inch (3/8") maximum above finish floor; unless otherwise noted where door undercuts are required.
  - 4. At sills with thresholds: 0.375-inch (3/8") maximum above top of thresholds.
  - 5. At sills of fire-rated doors: Comply with requirements of NFPA 80 but not exceeding clearances specified for non-rated doors.
- L. Shop Priming:
  - 1. Clean steel surfaces of mill scale, rust, oil, grease, dirt or other foreign materials. Chemically treat surfaces for paint adhesion in accordance with manufacturer's standard procedures meeting specified requirements.
  - 2. Apply shop coat rust-inhibitive primer to provide an even, consistent and uniform finished surface for field painting. Coat surfaces with specified primer to achieve minimum 2 mils dry film thickness.

### **PART 3 - EXECUTION**

#### **3.01 INSTALLATION**

- A. Install security hollow metal enclosures and frames plumb, level, square, rigid, aligned and anchored in position in accordance with final reviewed and accepted shop drawings, manufacturer's product data and ANSI/NAAMM/HMMA 840-99 Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames ANSI/NAAMM HMMA 863 standard.
- B. Perform field drilling and taping for surfaced applied hardware complying with recommendations of ANSI A250.6-1997.

#### **3.02 CLEANING, ADJUSTING AND PROTECTION**

- A. Keep exposed frame surfaces clean and free of mortar droppings, grout, concrete, dirt, mud and other harmful substances as work progresses.
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- B. Upon completion of installation, clean and touch-up damaged shop-primed surfaces including field welds. Sand rusted or damaged areas smooth and apply compatible air-drying primer to surfaces.
- C. Verify proper fit and operation of doors. Make adjustments as required to ensure smooth, quiet operation. Re-hang or replace doors which bind or sag.
- D. Protect security hollow metal work from damage and staining until Date of Substantial Completion. Replace or repair damaged or stained components.
- E. Replace components, which exhibit warp, buckle or broken welds, and components, which cannot be adjusted.
- F. Prior to field painting work, caulk around full perimeter of installed security hollow metal frames, each side, with specified security sealant to seal joint between backend of frame and wall substrate. Clean and prepare substrate surfaces complying with sealant manufacturer's product data for application of materials.
- G. Leave security hollow metal doors and frames, including panels, in clean, sound condition for field finishing as specified in Painting section.

End of Section 08 34 53

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**SECTION 08 71 63 DETENTION HARDWARE****PART 1 – GENERAL****1.01 SUMMARY**

- A. Section includes furnishing and installing detention grade and high security hardware with required accessories for complete operable locking and control system of the facility. Coordinating and interfacing with electronic security systems, and providing training to Owner's personnel in the proper installation of security hardware shall also be included with the Work.
- B. This section includes all detention hardware required to provide complete and operational systems as shown on the drawing and contained elsewhere in the specifications. Detention hardware shall be used to increase the level of security for the Fulton County Jail, by replacing and renovating certain aspects of the existing locking hardware that is currently installed. Existing jamb-mounted electrically operated locksets for inmate cells with swinging doors shall be replaced by a surface mounted DHM assembly that shall house a motor operated lockset, DPS units, strikeplates, LED status indicators, cable connections, integral door pulls, and associated hardware to secure the doors. Existing inmate cells equipped with sliding door operators shall be renovated with a drop-in slider door retrofit kit designed for such a purpose, replacing the existing unit and increasing the level of security as shown on the drawings and indicated within the contract specifications.
- C. Related sections:
  - 1. 08 34 53 - Security Hollow Metal Fabrication.
  - 2. 11 19 00 – Detention Equipment General
  - 3. 28 40 00 - Locking Control Systems.
  - 4. 28 05 00 - Electronic Systems General
- D. A single acceptable Detention Equipment Contractor (DEC) shall provide the entire scope of work specified below. None of the materials, equipment, systems or labor specified or required for the complete installation of the scope of work below shall be provided or bid as separate packages outside of the Detention Equipment Contractor's subcontract.
- E. DEC shall furnish all labor, equipment, appliances, services and materials, perform work, and otherwise assume all responsibility related to procurement and installation of equipment, products and materials as indicated in the scope of work below. DEC shall self-perform installation of materials required in this scope of work. Installation subcontractors will not be allowed.
- F. DEC shall coordinate and interface with Security Electronics Contractor (SEC) as required for a complete, operational system.
- G. DEC must base its bid on the products by the manufacturers that are specified in this scope of work.
- H. Any bid from a Contractor that does not include the name of an acceptable DEC in the appropriate space provided on the bid form will be automatically rejected.

**1.02 REFERENCES**

- A. Standards of the following as referenced herein:
    - 1. American National Standards Institute (ANSI).
    - 2. American Society for Testing and Materials (ASTM).
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3. American Welding Society (AWS).
4. Builders Hardware Manufacturers Association (BHMA).
5. Code of Federal Regulations (CFR).
6. Door and Hardware Institute (DHI).
7. Factory Mutual (FM).
8. Hollow Metal Manufacturers Association (HMMA).
9. National Association of Architectural Metal Manufacturers (NAAMM).
10. National Fire Protection Association (NFPA).
11. Underwriters' Laboratories, Inc. (UL).

### 1.03 SUBMITTALS:

- A. Product Data: Submit manufacturer's product literature for each type hardware item indicating compliance with specified requirements.
- B. Security Hardware Schedule: Submit schedule in vertical format with security hardware organized into sets.
  1. Indicate manufacturer's name, product type, style, function, size, locations and finish of each hardware item.
  2. List terminology, abbreviations and symbols used in schedule with explanations.
  3. Cross reference hardware schedule with specified products. Use same reference designation indicated on Contract Drawings in preparing schedule.
  4. Include wiring diagrams for electric operated locks and devices.
- C. Templates: Furnish hardware templates along with final reviewed finish hardware schedule to security door and frame manufacturers and related work requiring security hardware installation for use in fabrication. Coordinate submittals to avoid delay in fabrication work and to prevent improper preparation for hardware installation.
- D. Samples: If requested by Owner or Designated Representative, submit actual samples of hardware items for review and acceptance with security hardware schedule. Samples will be returned to supplier after review.
- E. Locking Control System Certification: Prior to commencement of work, submit letter written by manufacturer certifying that electrical circuits for locking control system have been reviewed and have compatible voltage with adequate protection against overload, and consistent duty cycle capability.
- F. Maintenance Data: Upon substantial completion, submit manufacturer's specifications, operation instructions, and repair and maintenance information for installed security hardware. Assemble information in loose-leaf binders organized in format following Owner's instructional video. Include in each binder, name, address and telephone numbers of manufacturer's representative servicing area where project is located.

### 1.04 QUALITY ASSURANCE:

- A. Installer Qualifications: Security hardware installer shall have minimum 10 years experience in the successful completion of work similar in scope and complexity as required for this Project. If requested by Owner or Designated Representative, submit references for projects completed and occupied within the past three years. Include qualification statements and current audited financial statement indicating capability to fulfill contractual obligations.
  - B. Supplier qualifications: Supplier shall be regularly engaged in furnishing security hardware by specified manufacturers.
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- C. Welder Qualifications:
1. Welders employed for this project shall be qualified in accordance with AWS B2.1-84 or D1.1-96 test procedures for welding work required and shall have passed qualification tests current within the past twelve (12) months.
- D. Manufacturer's Field Services: Obtain the services of security hardware manufacturer's field representative to be present at the job site when locks are being installed to provide assistance and observe installation of specified hardware products.
- E. Regulatory requirements:
1. Comply with requirements of NFPA 80, "Standard for Fire Doors and Windows" and NFPA 101, "Life Safety Code," current editions, in providing hardware for fire rated openings.
  2. Comply with the Americans with Disabilities Act (ADA), 28-CFR Part 36, Appendix A, "Accessibility Guidelines for Buildings and Facilities" for hardware required to be accessible to the physically disabled.
- F. Hardware items of the same type shall be products of a single manufacturer.
- G. Product Standards:
1. Electric Locking Mechanisms and Related Devices: Complying with UL 1034-87, "Burglary Resistant Electric Locking Mechanisms."
  2. Key Cylinders: Complying with UL 437-86 "Key Locks."
  3. Hinges, Mortise Locks and Latches, Closers, Thresholds, Trim, Finishes and Auxiliary Hardware: Complying with ANSI/BHMA A156 series standards listed below applicable to specified hardware and finishes.
    - a. ANSI/BHMA A156.1-2000, "Butts and Hinges."
    - b. ANSI/BHMA A156.4-2000, "Door Controls-Closers."
    - c. ANSI/BHMA A156.5-1992, "Auxiliary Locks and Associated Products."
    - d. ANSI/BHMA A156.6-2001, "Architectural Door Trim."
    - e. ANSI/BHMA A156.7-1997, "Template Hinge Dimensions."
    - f. ANSI/BHMA A156.13-1994, "Mortise Locks and Latches."
    - g. ANSI/BHMA A156.15-1995, "Closer/Holder/ Release Devices."
    - h. ANSI/BHMA A156.16-1997, "Auxiliary Hardware."
    - i. ANSI/BHMA A156.18-2000, "Materials and Finishes."
    - j. ANSI/BHMA A156.21-1996, "Thresholds."
  4. Detention Hinges: Complying with ASTM F1758-96, "Test Methods for Detention Hinges Used on Detention-Grade Swinging Doors," for performance level specified.
  5. Detention Locks: Complying with ASTM F1577-96, "Test Methods for Detention Locks for Swinging Doors," for performance level specified.
- H. Welding Standards: Comply with applicable AWS standards specified as follows for welding work required.
1. AWS D1.1-98, "Structural Welding Code-Steel".
  2. AWS D1.3-89, "Structural Welding Code-Sheet Steel".
  3. AWS D9.1-90, "Sheet Metal Welding Code."
  4. AWS B2.1-84, "Welding, Procedures and Performance Qualifications."
- I. Standard of Quality: Products listed in hardware schedule shall serve as the standard of quality in evaluating specified products by other manufacturers submitted for use on this Project, where permitted. Substitute hardware products submitted shall include components, accessories and
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finishes matching those specified in hardware schedule. Acceptance of other submitted products shall be subject to Owner or Designated Representative's review and determination of equivalency.

- J. In order to establish and maintain the standard of quality required for this project, only the acceptable DEC's listed below, or DEC's subsequently accepted by addendum will be allowed to perform the work under this section of specification. Pre-qualification of a DEC does not relieve that DEC from the requirement to furnish all materials from the manufacturers specified herein. The following DEC's are acceptable to perform the work of this section:
1. CCC Group, Inc. – San Antonio, TX
  2. Norment Security Group – Montgomery, AL
  3. Chief Industries, Inc. – Grand Island, NE
  4. U.S. Security Systems, Inc. – Montgomery, AL
  5. Detention Equipment Service, Inc. – New Castle, DE
  6. ISI Detention Contracting Group – San Antonio, TX
  7. Southern Steel Company – San Antonio, TX
  8. Willo Products, Inc. – Decatur, AL
  9. Cornerstone Detention Products – Tanner, AL
  10. Pauly Jail Building Company – Noblesville, IN
- K. **DEC Qualifications/Requirements:** Any DEC not listed above that intends to submit a bid to perform the work under this section of the specifications must submit the following acceptance data to the Owner or Designated Representative in writing no later than twenty-one (21) days prior to bid date. If approved, acknowledgement shall be by addendum prior to bid date. Verbal approval will not satisfy this requirement. All DEC's except those listed above shall submit all information exactly as indicated below, or they will not be accepted to perform this portion of the Work. Grounds for disqualification shall exist if any of the information submitted is inaccurate, or if in the opinion of the Owner or Designated Representative, does not satisfy the pre-qualification requirements.
1. Evidence that the DEC has a minimum of ten (10) years experience in successfully completing projects of equal scope and magnitude with products as herein specified. This evidence shall consist of a list of ten (10) projects that have been complete and operational for a minimum of five (5) years. Provide the following information for each facility:
    - a. Name and location of the facility.
    - b. Value of the contract and scope of work performed.
    - c. Date of occupancy by the Owner.
    - d. Names and phone numbers of the representatives to contact for the Construction Manager or General Contractor and the Owner or Designated Representative.
  2. Sample CPM schedules for each of at least two (2) previously completed projects commensurate in size and scope to this project, graphically indicating both initially projected and actual durations required for all major activities in the respective scopes of work.
  3. Independently audited financial statements for the previous three (3) years.
  4. Current letter from the security lock manufacturer to be utilized on this project stating that DEC seeking pre-qualification is a factory trained, fully authorized installer of the manufacturer's complete line of products.
  5. Complete list of key employees (both office and field personnel) indicating areas of responsibility and years of experience.
- L. The Owner or Designated Representative will promptly review acceptance requests to determine the acceptability of each prospective DEC. Those found acceptable will be named subsequently by addendum as accepted to bid and perform the scope of work under this section. Verbal approval will not satisfy this requirement.
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- M. Owner or Designated Representative reserve the right to disqualify manufacturers, equipment suppliers and contractors who do not strictly comply with requirements of this section or product substitution procedures called for in this section and Division 1. Grounds for disqualification shall exist if it is determined that the information submitted is inaccurate, or in the opinion of the Owner or Designated Representative, does not satisfy the pre-qualification requirements.
- N. Any bid from a General Contractor that does not include the name of a accepted DEC in the appropriate space provided on the bid form will be automatically rejected. Only one (1) name will be allowed
- O. Surface Mounted Lock Pocket and Strike Assembly - Samples Required Before Being Approved to Bid:
1. Full size sample including lock pocket, LED, lock, and DPS must be submitted for approval at least 14 days prior to bid.
  2. Lock Pocket shall incorporate specific security features to achieve the following :
    - a. prevent inmate from having access to the lock bolt from inside or outside the cell
    - b. prevent sheeting of the door (popping the lock open using a sheet or cord)
    - c. prevent packing the strike to keep the lock from dead-locking
    - d. Provide removable cover to allow for easy clean out of the strike pocket
    - e. Visual indication at the door itself indicating the secure status of the door, RED or GREEN.
    - f. Protective heavy 12 gauge shield over the High-Intensity LED to protect it from vandalism
    - g. Sloped top and bottom to prevent jumping on or prying against the lock pocket.
  3. Proof of use must be submitted along with the sample listing a minimum of two facilities where the product has been installed and in use for a minimum of six months. List Facility name, contact name, and phone number for making contact.
  4. Lock pocket and strike: completed lock pocket and strike assemblies including reinforcement for strike, lock mounting plate and bolts and internal construction.
  5. All samples submitted shall be of the production type and shall represent in all respects the minimum quality of work to be furnished by the manufacturer
  6. Any bid received that includes a non-approved lock pocket shall be rejected.
- P. Test Report
1. Manufacturer shall submit to the Owner or Designated Representative, fourteen (14) days prior to bid date, a report certifying that the lock pocket assembly meets the performance requirements described herein and that it is constructed in accordance with these specifications.
- Q. TESTING AND PERFORMANCE
1. Performance grade or level for the surface mounted lock pocket shall be as described herein. Contractor to certify that the assembly being utilized for this project meets or exceeds these requirements and testing criteria.
  2. Lock Pocket Assembly Impact Test
    - a. Lock pocket assembly and strike shall be constructed in accordance with these specifications and the details shown on the drawings.
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- b. Test lock pocket and strike shall be prepared and furnished with hardware, installed and tested in accordance with ASTM F 1450-05, Section 6, "Specimen Preparation" and Section 7.2 "Door Assembly Impact Test."
  3. The following grade number shall be used to rate openings and to assign grade numbers to detention hollow metal doors and frames. The attack ratings shall be used to define the effectiveness of the surface mounted lock pocket for this project. For purposes of this project, the lock pocket assembly shall conform to Grade #1/LTP.
    - a. Grade #1 with Lock Tamper Protection (LTP): 1200 Impacts at lock/strike:
      - (1) A typical Grade 1 LTP opening should be considered for use when keeping the inmate locked down in his cell is of utmost importance. This LTP grade is specifically for use where inmates have a history of getting out of their cells and committing inmate on inmate or inmate on officer attacks. It must be used in conjunction with a special lock pocket design that addresses inmate tampering with the lock and/or receiver. A standard Security Hollow Metal lock pocket does not meet this LTP requirement.
    - b. Grade #1: 600 Impacts at lock/strike:
      - (1) A typical Grade 1 opening can be considered for use in separating the inmate from freedom. A possible application is an opening from a day room or corridor to the exterior, such as a fire escape.
    - c. Grade #2: 400 Impacts at lock/strike:
      - (1) A typical Grade 2 opening can be considered for use in separating classifications of inmates. Possible applications are an opening connecting two-day rooms and an opening connecting two housing pods.
    - d. Grade #3: 200 Impacts at lock/strike:
      - (1) A typical Grade 3 opening can be considered for use in applications where vandalism is a higher concern than security. Possible applications are segregated housing cell fronts and direct supervision areas. In a Grade #3 application, if opening is defeated, the inmate still is confined to the housing area.
    - e. Grade #4: 100 Impacts at lock/strike:
      - (1) A typical Grade 4 opening can be considered for use when vandalism is essentially the only priority. Possible applications are within a housing pod, conference room, janitor closet, storage room, and visiting area.
  4. QUALITY ASSURANCE
    - a. Manufacturer's Qualification
      - (1) Manufacturer shall provide evidence of having personnel and plant equipment capable of fabricating hollow metal door and frame assemblies of similar construction as the lock pocket and strike assembly specified herein.
    - b. Installer's Qualification
      - (1) Installer shall receive special training from Manufacturer on how to install and adjust the special lock pocket. This training shall be done either at the Manufacturer's facility or at the job site and must be completed prior to or at the time of first installation of the new lock pockets. The installing company shall have a minimum of one representative designated as the Certified Installer and this individual shall be the one trained and the one responsible for training all other personnel within that company who will be installing the new lock pocket and lock at the project.
    - c. Manufacturer shall provide the Certified Installer with a certificate designating him/her as a acceptable installer for this product.
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## d. Quality Criteria

- (1) All door strike and frame lock pocket construction shall be in accordance with assemblies which meet the requirements these specifications.
- (2) Fabrication methods and product quality shall meet standards set by the Hollow Metal Manufacturers Association, HMMA, a Division of the National Association of Architectural Metal Manufacturers, NAAMM, a set forth in these specifications.
- (3) Job Site Lock Pocket Check:
  - (a) At the owner's option, a lock pocket at the job site shall be selected at random and sawed in half or otherwise taken apart as deemed necessary, for verification that construction is in accordance with these specifications.

## 1.05 PRE-INSTALLATION MEETINGS

- A. Pre-installation Conference: Installer and hardware supplier shall be required to attend pre-installation conference specified in Security Hollow Metal section to review and coordinate work to be accomplished.
- B. Keying Meeting: Contractor shall schedule, coordinate and convene a meeting with Owner or Designated Representative and hardware suppliers to establish keying requirements for the project. Notify participants of time and place of meeting at least seven days in advance.
  1. Incorporate and coordinate all hardware in the Project to provide for a complete unified system of keying.
  2. Individual keying of all cylinders shall be only as directed by the Owner or Designated Representative.
  3. A complete keying schedule shall be submitted to the Owner or Designated Representative for review after meeting.
  4. Contractor shall record minutes of meeting and distribute copies to all parties in attendance.

## 1.06 DELIVERY, STORAGE AND HANDLING:

- A. Deliver security hardware to project site in manufacturer's original packaging with labels intact and legible.
  1. Packaging shall be marked with hardware set numbers and door numbers corresponding with final reviewed hardware schedule identifying correct locations for installation.
  2. Include manufacturer's printed installation instructions, fasteners and installation tools.
  3. Ship in cartons marked 'SECURITY HARDWARE' for identification at job site.
- B. Inventory hardware upon delivery to verify order and quantity with final reviewed hardware schedule.
- C. Store hardware indoors in a clean, dry, secured storage area. Provide lockable storage areas to protect hardware.

## 1.07 COORDINATION, SEQUENCING AND SCHEDULING

- A. Verify hardware compatibility with locking control system. Review and coordinate wiring diagrams prepared by locking control system manufacturer for proper connections, conductors, monitoring requirements and lock operation.
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- B. Review and coordinate security hollow metal door and frame shop drawings with security hardware submittals to ensure proper preparation and installation. Modifications made to doors and frames during construction to facilitate proper hardware operation as a result of improper preparation or lack of coordination shall be performed at no additional cost to the Owner.
- C. Schedule and sequence installation of security hardware with locking control system work to cause no delay in construction of Project to provide for a secure operable facility.
- D. Coordinate tagging, indexing and installation of key control system for keys. Contractor shall be responsible for maintaining security of key distribution during construction and if required, replacement of locks or re-keying as specified.

1.08 WARRANTIES

- A. Security Hardware shall be warranted by manufacturer to be free of defects in materials and workmanship for a period of minimum One year beginning at Date of Substantial Completion, except door closers shall be warranted for minimum Ten years.

1.09 MAINTENANCE

- A. Maintenance Service: Approximately six months after Owner's final acceptance of the facility, the Installer, accompanied by the representative of the security hardware manufacturer, shall return to the project and re-adjust hardware to restore proper function of doors and hardware. Include items listed below with service.
  - 1. Consult with and advise Owner's personnel in making recommended additions to maintenance procedures.
  - 2. Replace hardware components which have deteriorated or failed due to faulty design, defective materials, poor workmanship or improper installation.
  - 3. Prepare written report of current and predictable problems in the performance of installed hardware.
- B. Spare Parts:
  - 1. Furnish Owner with the following spare parts for maintenance use:

<i>ITEM DESCRIPTION</i>	<i>QUANTITY</i>
Surface Mounted Hollow Metal Lockset Enclosure Unit	2 each hand
Electric Motor Operated Lockset Device (Provide right hand and left hand of each type and function used for this project)	10 each hand
Cell Slider Door Retrofit Kit	2 each hand
Door Position Switches	10 each
Electric Lockset Motors	5 each
Electric Limit Switches	10 each type

(Provide each type and size used inside the locksets)	
Adjustable Heavy Duty Hinge	2 each
Institutional Door Bumpers	5 each
LED Status Display Units – Slider Doors	5 each
LED Status Display Units – Swing Doors	5 each
Security Fastener Hardware (Provide each type and size used for project)	50 each type
Security Tool Sets – Bits, Drivers, Holders (provide each type and size used for project)	3 complete sets

2. Parts shall be packed in suitable containers and labeled with clear legible identification. Deliver and store spare parts maintenance materials where directed by Owner upon completion of the project.

**PART 2 - PRODUCTS**

2.1 SURFACE MOUNTED LOCK POCKET AND STRIKE ASSEMBLY

A. Materials

1. Lock pocket and strike assembly shall be constructed of commercial quality, level, cold-rolled steel conforming to ASTM A 366 or hot-rolled, pickled and oiled steel conforming to ASTM A 569. The steel shall be free of scale, pitting, coil breaks or other surface blemishes. It shall also be free of buckles, waves or any other defects caused by the use of improperly leveled sheets.
2. Interior assemblies: Shall be 12 gage or 10 gage as required to meet testing performance requirements defined within these specifications.

Note: For interior areas subject to corrosive conditions it is recommended that zinc coated face sheets be used.

3. Exterior Doors: Face sheets shall have a zinc coating applied by the hot-dip process conforming to ASTM A 653/A 653M Commercial Quality, coating designation A60 or G60 (Z180 or ZF180).
- B. For severely corrosive conditions and where specified on individual openings either interior or exterior, face sheets shall be stainless steel meeting ASTM A 666, Type 304.

C. Construction

1. All assemblies shall be of the types and sizes shown on the approved submittal drawings, shall be constructed in accordance with the specifications and shall meet the performance requirements stated herein, where applicable. Alternate methods of construction, which meet the aforementioned performance criteria, shall be permitted.
2. Where required, face sheets shall be joined at their vertical edges by a continuous weld extending the full height of the assembly. See “continuously welded” in the Glossary of Terms for Hollow Metal Doors and Frames, HMMA 801. Edge welding shall be ground smooth with no visible seams. Metal filler used at the door edges is unacceptable.

3. Assemblies shall be designed to accommodate the existing door thickness and to accommodate detention hardware. Assemblies shall be neat in appearance and free from warpage or buckle. Edge bends shall be true and straight and of minimum radius for the thickness of material used.
  4. Lock pocket and
  5. Minimum height of formed stops in door openings shall be 3/4".
- D. Secure and Unsecured Condition Indication:
1. One High-Intensity LED shall be furnished at each door to show secure status of the door at all times.
  2. Lock pocket assembly shall provide, within the assembly itself, continuous indication of the following conditions:
    - a. Secured condition (door closed and dead-locked): "Green" indication
    - b. All other unsecured conditions: "Red" indication
  3. "Green" and "Red" indications shall be clearly visible from secure side of door at all traffic directions and from the control room.
  4. LED shall be High-Intensity, 30 mm fully strike assembly shall be of same material as required to meet performance requirements stated within these specifications.
  5. All exposed fasteners of the lock pocket and strike assembly shall be flat head, Torx with pin. Quantity and positioning of fasteners shall be as needed to meet testing performance requirements defined herein.
  6. Hardware reinforcements:
    - a. Assemblies shall be mortised, reinforced, drilled and tapped at the factory for completely templated mortised hardware only, in accordance with the final approved hardware schedule and templates provided by the hardware supplier.
    - b. Minimum thickness for hardware reinforcements shall be as follows:
      - (1) Strikes: 7 gage. In addition to satisfying the performance criteria outlined herein, an additional backup angle (10 ga. min.) shall be added at the lock bolt opening and securely welded to the strike assembly.
      - (2) Reinforcements for lock fronts, concealed holders, or surface mounted closer: 12 gage min.
      - (3) Lock pocket assembly shall be provided with (2) silencers.
    - c. Where required, flush, integral pull shall be provided within the strike assembly. Bolt-on flush pull not permitted.
  7. In cases where electrically operated hardware is required, and where shown on approved submittal drawings, hardware enclosures, junction boxes and/or knockouts shall be provided to facilitate the proper connection to the existing field wiring.
  8. All finished work shall be neat in appearance, square, and free of defects, warps and buckles.
  9. Pressed steel members shall be straight and of uniform profile throughout their lengths.
  10. Corner joints shall have all contact edges closed tight with faces mitered and stops either butted or mitered. Corner joints shall be continuously welded and the use of gussets or splice plates shall be unacceptable.
  11. translucent dome, 120 VAC or 24 VDC as required by the control system, 4 or 5-pin Micro QD Connection, self contained. Must be UL rated and meet IP69K rating.
- E. Wiring Harness:
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1. One special Wiring Harness shall be factory wired and included inside each lock pocket. This Wiring Harness shall connect the lock, DPS, LED, and added relays to the existing field wires using a standard six-pin Molex connector. The mating pigtail shall be furnished for butt splicing to the field wires.
- F. Closure plates for existing lock faceplates and strikes:
1. Closure plates for existing strikes and lock faceplates shall be provided and installed by lock pocket supplier.
  2. Closure plate material thickness shall be as required to match existing door and frame cutouts. Flat head security screws shall be provided for all closure plates.
- G. Anchorage:
1. The structural integrity of the existing wall must be maintained.
  2. Lock pocket and strike assemblies shall be cut into the wall and/or field welded to existing frame and door as required to meet test performance criteria.
    - (1) All welding shall be concealed within lock pocket and strike assembly. No visible or exposed welds.
    - (2) Additionally, anchor lock pocket assembly to existing wall as required per test performance criteria defined in these specifications.
- H. Basis of Design:
1. Willo Products Co.- Model SMLP-1
- I. Hardware:
1. Lock shall be a RR Brink model 5020, 24 VDC, motor operated, or equal that has been ASTM tested with the lock pocket in accordance with criteria established herein. Solenoid locks shall not be acceptable.
  2. Door Position Switch shall be a RR Brink 201023 TB DPS or equal.
  3. Door Pull shall be made integral in the receiver.
- J. CLEARANCES AND TOLERANCES
1. Edge clearances for swinging doors shall not exceed the following:
  2. Between doors and frames at jamb: 1/8 in.
  3. Manufacturing tolerance shall be maintained within the following limits:
    - a. Width, measured between rabbets at the head: Nominal opening width + 1/16 in., - 1/32 in.
    - b. Cross sectional profile dimensions:
      - a. Face  $\pm 1/32$  in.
      - b. Stop  $\pm 1/32$  in.
      - c. Rabbet  $\pm 1/32$  in.
      - d. Depth  $\pm 1/32$  in.
      - e. Throat  $\pm 1/16$  in
  2. Lock pocket and strike assemblies:
    - a. Width:  $\pm 3/64$ "
    - b. Height:  $\pm 3/64$ "
    - c. Thickness  $\pm 1/16$ "
    - d. Hardware cutout dimensions: Template dimensions +0.015", - 0".
    - e. Hardware location  $\pm 1/32$ "
-

- f. Bow/flatness  $\pm 1/16''$

#### K. FINISH

1. After fabrication, all tool marks and surface imperfections shall be filled and sanded as required to make face sheets, vertical edges and weld joints free from irregularities. After appropriate metal preparation, all surfaces shall be finish painted, inside and out, with an epoxy paint or durable polyester finish paint (Powder Coat) to match the existing door and frame.
2. All weld burns and smoke damage done to the existing door or frame shall be primed and painted to blend with the existing paint.

#### L. INSTALLATION

##### 1. Demolition

- a. Remove existing lock and receiver.
- b. Remove and relocate the door bumper and any light switch, cover plate, or any other fixture on the wall or door that will interfere with installation of the new lock pocket.
- c. Remove existing DPS Hinge and disconnect wiring. Route wiring back to the lock pocket for use with the new DPS located in the new lock pocket.

##### 2. Installation

- a. Check for loose or missing hinge screws.
- b. Tighten and add new where necessary.
- c. Install lock pocket and strike plumb, level, square, rigid, aligned and anchored in accordance with the final reviewed and accepted shop drawings and manufacturer's product data.
- d. Manufacturer shall provide the contractor appropriate fixtures, for the Owner or Designated Representative's review and approval with the shop drawings, that insure that the lock pocket and strike cannot be installed out of alignment.
- e. Lock pocket and strike shall be attached to the door and wall as required by manufacturer. All connections shall be hidden from view and not visible once the covers are placed on the lock pocket and strike.
- f. Reinstall the existing door bumper on the new strike portion of the lock pocket.
- g. Add relays, wiring, and other components to the existing Locking Control Panels as necessary to provide a positive and negative 24 VDC for the newly added LED in the new lock pocket. Existing conditions do not have this. Conveniently locate relays and all new wires for easy identification and future maintenance. Provide a new cabinet to house the relays if necessary.
- h. Lock pocket and strike shall be touched up with primer and finish painted as described above.

#### M. FINAL CLEANING AND ADJUSTING

1. Doors and hinges shall be adjusted to ensure proper operation and performance with the new lock and lock pocket.
2. Clean exposed frame and door surfaces of all weld smoke, grease, and grime caused by construction after completion of each cell block.

#### 2.1 HINGES

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- A. Standard institutional hinges shall be supplied and installed where necessary in order to align existing doors to accept new surface mounted enclosure and lockset units.
- B. Institutional Hinges:
1. Acceptable products; subject to compliance with specified requirements:
    - a. Brookfield Industries, Inc.; Series I-400.
    - b. Folger Adam Security, Inc.; Model 4-1/2FM-ICS.
    - c. Hager Hinge Company; HTHB953-RSS.
    - d. Portland Hardware Company, Inc.; PH 745 FM SSC ST.
    - e. Southern Steel Company; 204FMSS.
  2. Characteristics:
    - a. Type: Full mortise, detention strength, three knuckle anti-friction bearing hinges with security studs for security hollow metal doors and frames; complying with ANSI A156.1, Grade 1 and ASTM F1758-96, Security Grade 1.
    - b. Material: Investment cast stainless steel.
    - c. Hinge tips and pins: Hospital type sloping barrel tips with concealed non-removable hinge pins. Hinge tips shall be either continuous solid cast construction enclosing spring loaded hinge pin, or welded tips with hinge pin secured in place with permanent concealed hardened cross pins. Set screws shall not be permitted for securing hinge pins.
    - d. Security studs: Integral cast shear resistant studs positioned on back of each hinge leaf.
    - e. Size: 4-1/2" length by 4-1/2" width.
  3. Fasteners: Furnish flathead tamper-resistant security screws with each hinge.
- C. Heavy Duty Adjustable Hinges:
1. Acceptable Products; subject to compliance with specified requirements:
    - a. Portland Hardware, Model 755.
  2. Characteristics:
    - a. Type: Fully adjustable – horizontal and vertical axis.
    - b. Hinge material: Investment cast stainless steel or brass.
    - c. Hinge tips and pins: Hardened steel hinge pin.
  3. Fasteners: Furnish flathead tamper-resistant security screws with each hinge.

## 2.02 JAMB MOUNTED ELECTRIC LOCKS

- A. Acceptable products; subject to compliance with specified requirements:
1. R.R. Brink Locking Systems, Inc.; 5020 Series Electromechanical Lock.
- B. Performance requirements: Meeting ASTM F1577, Security Grade 2.
- C. Characteristics:
1. Type: Electric motor operated, wide profile lock designed for jamb mounting in door frames.
  2. Lock case and cover: Minimum 10 gage (0.1345-inch thickness) steel plate case construction with cover of same material and gage.
  3. Latchbolt or Deadbolt:
    - a. Material: Case hardened, plated high strength alloy steel or stainless steel.
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- b. Size: Minimum 1.5-inch (1-1/2") by 0.75-inch (3/4").
  - c. Throw: Minimum 1-inch; flush when retracted.
4. Deadlock actuator: Stainless steel, mechanical roller type for locks equipped with latchbolts.
  5. Key cylinders: Mogul, six-pin tumbler cylinders; keyed as specified. Provide cylinder extensions to frame face where locks are keyed two sides. Handholes in frame are not acceptable.
  6. Strike/keeper: Manufacturer's mortise type case hardened cold-rolled steel or investment cast stainless steel. Provide with dust box and four flathead tamper-resistant (Torx®) security screws. Furnish templates for door and frame hardware preparation.
  7. Fire rating: Up to three hours rating when tested in accordance with UL standard 10B-86(1992) or NFPA 252-1995.
  8. Electrical components:
    - a. Electric motor: 24 V DC, continuous duty.
    - b. Wiring: Factory wired to a plug connector. Furnish with 16 AWG wire leads for field connections. Provide dedicated grounding conductor with lug for each lock, terminated at ground bus in security equipment cabinet and on lock body within lock pocket.
    - c. Lock status switch: Single pole double throw type, 5 amp rated; UL Listed. Use of magnetic reed switches are not acceptable. Provide switch for interlocking capabilities with indications listed below.
      - 1) Locked/deadlock.
      - 2) Unsecure.

D. Lock Operation:

1. Locks shall be controlled from a remote location and operate as specified for the following functions:
  - a. Cell function: When power is applied, latchbolt shall retract and remain retracted mechanically until door is opened approximately 2-inches, then latchbolt shall extend allowing lock to mechanically latch and automatically deadlock when door is closed.
  - b. Sallyport function: Latchbolt shall remain retracted as long as power is applied to the lock. When power is removed, latchbolt shall extend regardless of position of door, allowing lock to mechanically latch and automatically deadlock when door is closed.
  - c. Exit function: When power is applied, latchbolt shall retract and remain mechanically retracted until relocked by key to extend latchbolt.
2. Key cylinder shall manually operate locks to retract latchbolt and where specified to extend latchbolt.
3. When door is locked in the manual mode, lock shall automatically deadlock even in the event of a total loss of operating power.

## 2.03 POSITION SWITCHES

A. Concealed Door Position Switch:

1. Acceptable products; subject to compliance with specified requirements:
  - a. R.R. Brink Locking Systems, Inc.; Model 201030.
  - b. Folger Adam Security, Inc.; Model 523.
  - c. Southern Steel Company; Model 240CPS.

2. Characteristics:
  - a. Type: Full mortise, overhead concealed in frame, door-actuated monitoring switch with mortise type track for installation into top rail of door; tamperproof design.
  - b. Maximum swing: Allowing for full 180 degree opening of door.
  - c. Wiring: Minimum 12-inch (1'-0") length, 18 AWG wire leads with plug connector.
  - d. Switch: Single pole, double throw type, rated maximum 5 amps at 125/250 VAC; UL Listed. Indication switch shall be factory set to trip when leading edge of door moves maximum 0.5-inch (1/2") away from the door stop.
  - e. Adjustment capabilities: Switch shall be equipped with adjustment mechanism on control arm to compensate for variations in field conditions.
  - f. Faceplate: Minimum 0.0625-inch (1/16") thickness cold-rolled steel or stainless steel.
  - g. Fasteners: Furnish with tamper-resistant (Torx®) security screws at exposed locations and for mounting.
- C. Magnetic Door Position Switch:
  1. Acceptable product; subject to compliance with specified requirements: Sentrol, Inc; Model 2727A w/1961 Brackets
  2. Type: Surface mounted, tamperproof magnetic contact switch with triple biased reeds; UL Listed.
    - a. Switch: Single pole, double throw type.
    - b. Wiring: Factory wired with minimum 3 foot (915 mm) length stainless steel armored cable leads.
  3. Mounting brackets: Manufacturer's aluminum brackets as specified.
  4. Fasteners: Furnish with tamper-resistant (Torx®) security screws.

## 2.3 DOOR STOPS

- A. Acceptable products; subject to compliance with specified requirements:
  1. Airteq Systems/Division Norment Security Group; Door Stop 650
  2. Portland Hardware Company, Inc.; PH 706.
- B. Characteristics:
  1. Type: Silicone rubber bumper with threaded steel shank for mounting.
  2. Size: Minimum 2-inch diameter by 2.25-inch (2-1/4") length bumper projection.
- C. Mounting requirements: Where scheduled in hardware sets, mount to wall as a first preference and to floor when wall mounting is not practical. Wall or floor mounting shall be set with epoxy at locations acceptable to Owner or Designated Representative.

## 2.4 SILENCERS

- A. Acceptable products; subject to compliance with specified requirements:
    1. Builders Brass Works Corp.; Model W 07.
    2. Glynn-Johnson Corp./Subsidiary Von Duprin, Inc.; Model GJ 64.
    3. Hager Hinge Company; Model 307D.
    4. H.B. Ives/Harrow Company; Model 20.
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- B. Characteristics: Gray rubber or neoprene types of pneumatic design with tamperproof air chambers, for mounting to metal door frames; meeting ANSI A156.16.

## 2.5 WEATHERSTRIPPING AND SEALS

- A. Acceptable manufacturers; subject to compliance with specified requirements:

1. National Guard Products, Inc.
2. Pemko Mfg. Co.
3. Reese Enterprises, Inc.

- B. Types: Provide as specified in hardware schedule and meeting specified requirements for types indicated.

1. Bulb Seal with Retainer: Manufacturer's silicone or polyurethane bulb type seal insert in extruded aluminum retainer housing designed for mounting to door frame stops.
2. Door Shoe: Manufacturer's ribbed vinyl seal inserts in extruded aluminum retainer housing designed for mounting to bottom edge of door.

- C. Fire and smoke performance:

1. Fire: Tested in accord with UL Standard 10B or NFPA 252-95; UL Classified as gasketing material for use on fire doors.
2. Smoke: Meeting requirements of NFPA 105 when tested in accord with UL Standard 1784 or ASTM E283.

- D. Finish for aluminum retainers: Clear anodized or mill finish.

- E. Fasteners: Furnish with stainless steel tamper-resistant (Torx®) security screws.

## 2.6 KEY CYLINDERS AND KEYING

- A. Mogul Cylinders:

1. Acceptable manufacturers; subject to compliance with specified requirements:
  - a. Airteq Systems/Division Norment Security Group.
  - b. R.R. Brink Locking Systems, Inc.
  - c. Folger Adam Security, Inc.
  - d. Southern Steel Company.
2. Characteristics: Large size, high security, six-pin tumbler cylinder; meeting UL 437 standard.
  - a. Body: Brass alloy, precision machined from bar stock material.
  - b. Tumbler assembly: Stainless steel pin-tumblers, springs and cylinder engagement balls.
  - c. Cylinder size: Approximately 2.25-inch (2-1/4") diameter by 2-inch (50 mm) length; designed to fit specified security hardware.
3. Keys: Investment cast silicon bronze alloy or hard temper copper alloy, of design to fit mogul cylinders. Furnish quantities as specified with restricted keying.

- B. Keying:

1. Key Systems: Establish separate key systems for Project; one for mogul cylinders and one for dual-axis builders hardware cylinders (IF REQUIRED). Each key system shall be keyed in sets as directed by Owner. Include masterkey sets for mogul cylinders.

2. Key Quantities:
  - a. Assume key quantities for each type lock cylinders specified as follows will be required. Lock openings include door openings, pass openings and other similar openings scheduled with locks.
    - 1) Mogul cylinders: Provide 2 keys per lock opening.
  - b. Quantities indicated shall be used as the basis for adjustments to the Contract, if required, after keying is established with Owner. Coordinate actual number of keys to be furnished with key cabinet capacity.
3. Key Control: Hardware manufacturer shall be responsible for providing and establishing key control system. The sale of cut keys and blanks shall be factory regulated to control usage and reproduction.
  - a. Key Exclusivity and Duplication Control: Level of key combination shall be established exclusive within the State of Georgia. No other facilities within region shall have the same combination of keyway or bitting.
    - 1) Provide keyway and bitting which can only be duplicated by hardware manufacturer, with release of duplication equipment and key blanks restricted to prevent regional distributor or local locksmith duplication.
    - 2) Maintain manufacturer's procedures requiring verification of the identity of a Owner's single designated personnel responsible for authorizing key duplication.
  - b. All keys shall be accounted for at all times and delivered to the designated personnel as directed by Owner. Index, tag and deliver keys in sealed containers; shipped direct to Owner by prepaid registered mail or other secure method acceptable to Owner.
  - c. Owner will issue keys required to Contractor for use during construction. All keys assigned to Contractor shall be surrendered to Owner upon completion of the project. The Owner will provide a receipt for all keys received.
  - d. If at any time a key cannot be accounted for, the lock cylinder shall be re-keyed, or the entire lock replaced if re-keying is not possible, at no additional cost to the Owner.
4. Key Identification: Each key shall be stamped or engraved with permanent identification markings as directed by the Owner. Owner's identification markings shall be in addition to the manufacturer's standard markings.

## 2.7 HARDWARE FINISHES

- A. Hardware finishes shall comply with ANSI A156.18, unless otherwise specified. Finish designations indicated are those defined in standard.
- B. Finishes shall be as follows for specified hardware unless otherwise indicated:
  1. Hinges:
    - a. Institutional hinges: 630 (US32D) satin stainless steel..
  2. Jamb mounted electric locks:
    - a. Interior locations: 600 (USP) primed for painting or manufacturer's zinc plated or galvanized finish.
    - b. Exterior locations and where mounted to galvanized doors and frames: Manufacturer's zinc plated or galvanized finish.

3. Door closers:
  - a. Interior locations: 689 (US28) aluminum painted.
  - b. Exterior locations and where mounted to galvanized doors and frames: 689 (US28) aluminum painted finish over manufacturer's special rust inhibiting (SRI) process.
4. Door Pulls:
  - a. Loop pulls: 626 (US26D) satin chromium plated.
  - b. Offset Pull Plates: 630 (US32D) satin stainless steel.
  - c. Recessed Flush Pull: 630 (US32D) satin stainless steel or 626 (US26D) satin chromium plated.
5. Key cylinders; mogul: 626 (US26D) satin chromium plated.

## 2.8 SECURITY HEAD SCREWS

- A. Acceptable manufacturers; subject to compliance with specified requirements:
  1. Folger Adam Security, Inc.
  2. Sentry Security Fasteners, Inc.
  3. Tamperproof Screw Co., Inc.
  4. Tamper-Pruf Screws, Inc.
- B. Tamper-resistant security screws: Screws designed with special tamper-resistant heads having a deep hex-lobular recess with a solid post formed in the center based on Camcar/Div. Textron Inc., Torx® Drive System requiring a special mated driver to install or remove screw. Fasteners and tools shall be produced by a Camcar licensed manufacturer.
  1. Types:
    - a. Flathead Torx® machine screws: Provide where countersinking is required. Flathead screws shall be sized to match countersunk holes to provide a proper fitted installation with heads seated flush and aligned with adjacent surfaces.
    - b. Button-head Torx® machine screws: Provide where no countersinking is required.
  2. Materials and Finishes: Base metal for screws shall be of steel or stainless steel as required for hardware finishes specified; except where installed at exterior or wet locations screws shall be stainless steel types.
    - a. Finishes for screws shall match hardware finish to which it is applied.
    - b. Where finishes cannot be matched, provide specified screws with satin stainless steel finish (US32D).
- C. Drivers: Provide five complete sets of drivers for use with specified screws. Drivers shall be of design to insert substantially into recesses of screwheads to eliminate drive tool slippage. Deliver drivers to Owner with specified spare parts for maintenance use.

## 2.9 CELL SLIDER OPERATOR DEVICE UNIT

- A. Operation
    1. Primary control and operation of doors equipped with these devices shall be accomplished by electrical means from a remote control panel or Touchscreen control unit (TCS).
    2. Mechanical locking, unlocking, and door operation shall be by a rack and pinion drive system. Door shall hold its fixed position when blocked. The motor shall not be back drivable allowing the door to be pushed toward the open position when the motor is stopped or when the door
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is traveling closed. Devices with back-drivable motors allowing the door to be moved by hand when the rack and pinion gear is engaged will not be accepted.

3. The locking device shall have four lock points in both the locked open and locked close positions. Three lock points shall be incorporated in the locking device itself and the fourth lock point shall be the lock bar engaging at the bottom of the door.
4. Door shall be positively locked and deadlocked with equal security in both the open and close positions.
5. The vertical Lock Bar shall be mechanically forced into the locked and deadlocked position at both the open and close positions. Lock Bars that fall by gravity only without the use of mechanical force will not be accepted.
6. Electric gear motor shall be equipped with thermal overload device, and self-lubricating provisions. Thermal overload device shall protect motor against burn out by interrupting power when overheating occurs. Device shall reset itself automatically and restore power to motor when temperature returns to normal operating range.

#### B. Manual Control and Operation of cell doors

1. A mechanical means shall be provided to manually unlock each cell door at the door by use of a special tool inserted through a port in the track box. When not in use, port shall be securely closed and protected from tampering. When unlocked in this manner, door may be manually moved to fully open or fully closed position, and will automatically lock and deadlock in the closed position.
2. A mechanical means shall be provided to simultaneously unlock a group of cell doors from a release cabinet located per contract drawings. When all doors in a group are simultaneously unlocked in this manner, they may be manually moved toward open or closed positions, but will not lock or deadlock in the closed position. This is a life safety issue to prevent uncontrolled locking of a door in an emergency situation.
3. It is vital that a highly reliable Mechanical Release System be installed for the cell doors. The path between the Manual Release Cabinet (MRC) and the cell doors is complicated in that the linkage contains (up to) seven turns between the Manual Release Cabinet and the cell door run. The new system must accommodate all existing conditions and provide a highly reliable manual release system. A special presentation shall be made prior to award of contract by the manufacturer (not by the installer) to the Fulton County Jail and Owner or Designated Representative to show the intent of the manufacturer.

#### C. Components

1. Electric Gear Motor shall be not less than 1/10 HP, 120 VAC, 60 Hz, 1PH, equipped with thermal overload protection.
2. Door track shall be fabricated of cold rolled steel, not less than 3/8" wide on the bearing surface, and of sufficient depth to prevent deflection during operation of the door.
3. Wheels shall be machined from solid stock tool steel and hardened to minimum Rockwell C56. They will be equipped with roller bearings operating on hardened steel shoulder bolts with grease fittings to facilitate periodic lubrication.
4. Rack shall be high carbon steel with 1" wide teeth. Engagement between rack and pinion gear shall be not less than 7/8 inch.
5. Heavy-duty rubber bumpers shall be located at each end of travel; both open and close, to cushion the mechanism.

#### D. Safety Design Features

1. Devices shall be designed to stall without damage to the power transmission or other assemblies when a door in transit is opposed by a force of approximately 30 to 40 pounds.
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Upon removal of the obstruction, stalled door shall resume its travel to either the fully open or fully closed position where it will automatically lock and deadlock.

2. Stalling of one or more doors within a group shall in no way affect continued operation of other unobstructed doors.

E. Secure and Unsecure Condition Indication:

1. One High-Intensity, 50mm LED shall be furnished at each door to show security status of the door at all times.
2. This LED shall show continuous indication of the following conditions:
  - a. Secure Condition – “GREEN” - Door closed and dead-locked
  - b. Unsecure Condition – “RED” - Any time the door is not dead-lock closed
3. “Green” and “Red” indications shall be clearly visible from secure side of door at all traffic directions and from the control room.
4. LED shall be High-Intensity, 50 mm fully translucent dome, 120 VAC or 24 VDC as required by the control system, 4 or 5-pin Micro QD Connection, self-contained. Must be UL rated and meet IP69K rating.
5. LED shall be mounted on the column beside the door approximately 4” below the bottom of the device housing so it is clearly visible from inside the Control Room.
6. LED shall be protected from abuse by inmates with minimum 12 gauge steel guard over the LED.

F. Wiring:

1. One special Wiring Harness shall be factory wired and included inside each locking device. This Wiring Harness shall connect the device wiring and the LED using a standard six-pin Molex connector. A pig-tail shall be included for butt splicing to the field wires.
2. Additional relays required to make the device perform as designed shall be added in the Electrical Room in a neat and orderly fashion. Additional cabinets shall be furnished if required to house the new relays.

G. Additional Components Required

1. Door Skirts shall be added to the bottom of each door to reduce the opening between the bottom of the door and the floor. Skirts shall be 10-gauge steel and secured to the door with security screws. Skirts shall wrap the trailing edge of the door as necessary to close up the opening.
2. A new Lock Post and Receiver shall be installed when necessary to accommodate the new locking device.

H. Manual Release Cabinet (for use on cell doors)

1. The Manual Release Cabinet (MRC) shall be retrofitted to provide access to the port at each door for individual release and also to provide group release of all cell doors.
2. Provide a new gear box, push-pull cables, main bar, and other linkage necessary to have a properly working remote manual group release of all doors and as necessary to open the port for the tool to be used for manual release of an individual door.

I. Manual Release Column (for use on individual doors not connected to a Manual Release Cabinet)

1. Furnish one Manual Release Column located beside each individual door to provide for manual operation of that door during times of power outage.
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2. Primary remote control and operation of doors equipped with these devices shall be accomplished by electrical means from remote control consoles (RCC).
  3. A paracentric key is used to unlock a release handle located in the release column adjacent to the door. The release handle can be placed in one of three positions:
    - a. "ELECTRICAL OPERATION": Door can only be controlled by electrical means and cannot be moved by hand. Handle remains in this position during normal electrical operation.
    - b. "SNAPLOCK": Electrical power to door is interrupted. If already open, door can be moved by hand and will automatically lock and deadlock when closed.
    - c. "UNLOCK": Electrical power to door is interrupted. Door mechanically unlocks and can be moved by hand. Door remains freewheeling until handle is returned to either the "Electrical Operation" or "Snap lock" position.
- J. Slider Operator Basis of Design:
1. Willo Products Co.- Model SD88 w/LED

### **PART 3 - EXECUTION**

#### **3.01 EXAMINATION:**

- A. Examine doors, frames and substrates prior to mounting security hardware. Verify that materials and construction have received proper hardware preparation and are within correct tolerances for installation.
- B. Verify that proper electrical circuits are in place for operation of each locking system. Examine and verify operation of security hardware prior to commencing installation.
- C. Inspect and verify that work of other trades affecting security hardware operation is in place and acceptable to proceed with installation. Verify that inserts, conduits, backing plates and related accessories are in place and at proper locations.
- D. Notify Owner or Designated Representative if materials or conditions are not satisfactory to receive hardware installation. Replace damaged, defective or improper prepared materials which cannot be corrected to Owner or Designated Representative's satisfaction.
- E. Do not proceed with installation until unsatisfactory conditions have been corrected.

#### **3.02 PREPARATION**

- A. Coordinate equipment installation to ensure that proper components and related accessories are provided and installed in place at required locations.
- B. Correct deficiencies and defects in construction which will affect installation of security hardware.
- C. Coordinate installation of electrical wiring, conduits and similar components with locking control system for proper operation of specified security hardware.
- D. Check and adjust hardware prior to installation to verify operation and function. Do not install damaged or inoperable hardware. Replace damaged or inoperable hardware.

#### **3.03 HARDWARE INSTALLATION**

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- A. Install security hardware in accordance with manufacturer's product data, final reviewed hardware schedule and shop drawings.
  - B. Mount hardware at locations in accordance with requirements specified in security hollow metal doors and frames section complying with ANSI/NAAMM HMMA 863-98, unless otherwise indicated or directed by Owner or Designated Representative.
  - C. Installation shall be performed by skilled workmen using proper tools and equipment to facilitate mounting of specified hardware. Fit and mount hardware accurate, secured and adjusted for proper operation.
  - D. Prepare substrates for hardware installation using manufacturer's templates.
    1. Perform cutting and fitting without damaging or weakening substrate.
    2. Mortise work to correct size, configuration and location without splintering, gouging or defacing exposed finished surfaces.
    3. Do not enlarge holes or alter mounting hardware.
  - E. Install hardware to proper locations, plumb, level and true to line. Mount hardware positioned to cover cut-outs concealing edges, holes and gaps to provide a neat and proper trimmed installation.
  - F. Do not install surface-mounted hardware until substrates have been finished.
  - G. Install door closers to doors and set stops to prevent hardware trim from striking wall or other objects.
  - H. Attach flat goods using flathead tamper-resistant (Torx®) security screws at uniform spacings around the perimeter not exceeding 6-inches on center. Countersink all screws.
  - I. Where cutting and fitting is required for installation of hardware onto substrates to be finished or painted; trial fit, install and adjust hardware prior to finishing. After verifying fit and operation, remove hardware and replace in original packaging for temporary storage during finishing work. Reinstall hardware to fitted locations upon completion of finishing operation when surfaces have dried and cured.
  - J. Where field welding is required to facilitate installation of security hardware components, perform welding work complying with AWS welding standards, fusing materials without distortion, undercut, overlap, or defacing exposed finish. Welds shall be of strength that it removes parent metal when tested to failure.
    1. Perform welds to provide neat, uniform and clean appearance.
    2. Construct joints tight and true with adjoining members for an accurate fit.
    3. Grind and dress welds smooth, blending in with contours of materials to which it is fused.
    4. Remove welding flux immediate after performing work.
  - K. Drill and countersink components which are not factory-prepared to receive fasteners which require attachment. Space fasteners and anchors in accordance with industry standards except where more stringent requirements are specified.
  - L. Train or fasten wiring located adjacent to moving or operating hardware parts out of the way to prevent contact or wear.
  - M. Prohibit installation techniques which undermine long-term security and maintenance of the hardware components, doors and frames.
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1. Do not grind, bend, warp, deform or otherwise damage hardware components, doors or frames to force fit installation.
2. Do not shim doors to exceed specified edge tolerances.
3. Do not alter factory prepared openings, predrilled holes or hardware reinforcements without written approval of security hollow metal manufacturer and Owner or Designated Representative.

### 3.04 ADJUSTING AND CLEANING

- A. Upon completion of installation, remove manufacturer's temporary labels and identification marks. Wash surfaces and remove foreign material. Leave installed hardware and work area in neat, orderly, clean condition.
  1. Clean adjacent surfaces soiled by hardware installation.
  2. Replace damaged parts and surfaces which are not free from imperfections.
- B. Adjust and verify operation of each security hardware item to ensure for proper function after installation. Lubricate moving parts using lubricants recommended by hardware manufacturer. Replace hardware which cannot be adjusted to operate smooth and free as intended.
- C. Obtain services of closer manufacturer to adjust and regulate all closers and inspect installation. Representative of closer manufacturer shall verify that installation is in accordance with factory recommendations. Adjust springs on closers to comply with opening force requirements specified in ADA Accessibility Guidelines.
- D. Clean and touch up all factory finished surfaces to same standards as required for shop finishing using identical primers and paint or coating materials as recommended by hardware manufacturer.
- E. Field finish exposed surfaces of all prime coated and galvanized hardware components in accordance with Painting section.
- F. Prior to Owner's final acceptance or occupancy of the Project, re-adjust and re-lubricate installed hardware. Repair or replace defective components or entire assembly if required. Clean hardware, removing dust and stains, in accordance with manufacturer's recommendations.
  1. Restore proper function and finish to hardware if required.
  2. Adjust door control devices to compensate for final operating temperature following final adjustment of heating and ventilating equipment.
  3. Provide access to job site by security hardware manufacturer's authorized representative to perform final adjustment work.
- G. Damaged or inoperable components shall be repaired or replaced, if required, at no additional cost to the Owner. Repairs shall be made to the satisfaction of the Owner or Designated Representative.

### 3.05 DEMONSTRATION

- A. Just prior to Date of Substantial Completion schedule training session by security hardware manufacturer to instruct Owner's personnel in the proper operation, use and maintenance of locks.
  - B. Manufacturer shall provide a factory representative, specially trained in the operation of security hardware equipment with a thorough knowledge of its mechanisms, for a minimum eight hour instruction and training session.
    1. Factory representative shall be capable of training Owner's personnel in operation, repair and upkeep of installed security hardware.
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2. Training program shall be video taped. Three copies of the video tape shall be provided to the Owner.
- C. Coordinate training session with Owner's designated personnel. Notify Owner or Designated Representative when training program is to take place.
- D. Review emergency provisions during training session, including access and procedures to be followed in event of failure in operations, malfunctions and other building emergencies. Train Owner's personnel in normal procedures to be followed in checking for sources of operational failures or malfunctions.
- E. Check operation of locks with Owner's personnel present to determine that control systems and operating components are functioning properly. Instruct Owner's personnel in proper adjustment and maintenance of hardware and hardware finishes

### 3.06 SECURITY HARDWARE SCHEDULE

#### A. Abbreviations:

##### 1. Manufacturers:

AS	=	Assa, Inc.
BI	=	Brookfield Industries, Inc.
FA	=	Folger Adam, Inc.
GJ	=	Glynn-Johnson Corp.
HS	=	Hy-Security Gate Operators
LCN	=	LCN Closers/Ingersoll-Rand Company.
NG	=	National Guard Products, Inc.
PH	=	Portland Hardware Company, Inc.
RRB	=	R.R. Brink, Inc.
RO	=	Rockwood Manufacturing Company, Inc.
SE	=	Sentrol, Inc.
SG	=	Schlage, Inc.
SM	=	Securitron Magnalock Corp.
SS	=	Southern Steel Company.

##### 2. Hardware Terminology:

AL	=	Aluminum
Con.	=	Concealed
Dr.	=	Door
DPS	=	Door Position Switch
Du-Ax.	=	Dual-Axis Builders Hardware Cylinder
Elect.	=	Electric
Galv.	=	Galvanized
Hdw.	=	Hardware
HM	=	Hollow metal
K1S	=	Keyed one side
K2S	=	Keyed two sides
KCE	=	Key cylinder extension
KSW	=	Key switch operator at door

Mech.	=	Mechanical
Mtd.	=	Mounted
Opng.	=	Opening
Mog.	=	Mogul
SHS	=	Security head screws
Slid.	=	Sliding
Sm.	=	Small
Std.	=	Standard
Swg.	=	Swinging

B. Hardware Sets:

Hardware Set "SH-1" - Cell Dr – Swing – K1S

1	Ea	Elect Jamb Lock	5022M-MCLH-M-24 VDC	USP	RRB
1	Ea	Surf. Lock Pocket	SLMP	HM	Willo
1	Ea	Concealed DPS	201030	US32D	RRB

Hardware Set "SH-2" – Cell Door, Slider Unit

1	Ea	Slider Operator	SD-88	USP	Willo
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End of Section 08 71 63

**SECTION 11 19 00 BASIC REQUIREMENTS FOR DETENTION SYSTEMS****PART 1 - GENERAL**

## 1.01 SUMMARY

- A. This division of the Specifications covers the provision, renovation, and enhancement of the electrically operated locks and slider door operators for the Fulton County Jail.
  - B. It has been determined that several elements of the inmate locking systems currently installed at the Fulton County jail are no longer effective, and are in need of replacement and/or renovation. The specific locking systems elements that will comprise the work for this project are as follows:
    - 1. Electrically operated, jamb-mounted locksets which are currently installed at all inmate housing unit swing-type cell doors.
    - 2. Heavy duty detention hinges that are currently installed for swing-type inmate cell doors, where shown on the floorplan drawings.
    - 3. Door frame mounted door position switches, currently installed for all swing-type inmate cell doors.
    - 4. Motor operated, chain-driven inmate cell slider door operator units installed where shown on the floorplan drawings.
    - 5. Emergency manual release cabinets, provided for inmate cell doors equipped with slider door operators.
    - 6. Corridor slider door operators, for entry into inmate housing and treatment areas, where shown on the floorplan drawings.
  - C. The work associated with the inmate swinging cell doors is the replacement of the existing jamb mounted lockset with a new surface mounted frame unit that contains a new motor-driven electrically operated lockset. This new surface mounted frame and lockset unit shall be welded to the existing door frame and provided as a complete package. Included with the surface mounted lock apparatus shall be an integral door position switch (DPS), a strike/receiver plate for the lockset, pull handle, and status LED unit on the front of the unit. One surface mounted lock apparatus shall be supplied and installed for each existing inmate swinging cell door.
  - D. The work associated with the inmate sliding cell doors shall consist of the provision and installation of a new retrofit door operator unit. The replacement door operator shall include, but shall not be limited to, the following elements:
    - 1. New motor and pinion gear drive unit
    - 2. Wire harness and interface devices
    - 3. Door track sets
    - 4. Wheel bar units and hangers for door
    - 5. Status LED unit, mounted to existing cover plate assembly
    - 6. Door position switches to translate door status
    - 7. Mounting hardware
    - 8. Cable extensions and harness
    - 9. Door side plates as required
    - 10. Bottom door skirts
  - E. The renovation of the emergency, mechanical slider door release cabinets is required in order to open the cell doors in the event of an emergency condition. This work requires that all emergency release cabinets shall be rehabilitated by the contractor, so that it will be fully
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compatible and certified by the contractor and the manufacturer of the new cell slider operator units. This work includes, but shall not be limited to the following elements:

1. Replacement/renovation of release levers/handles
  2. New push/pull cables as required
  3. New raceway, enclosures, pulleys as required
  4. Crank handles, gear set, if required for operation
- F. Certain doors shall require new heavy-duty adjustable hinges as shown on the floorplan drawings. These new hinge units shall be horizontal/vertical adjustable hinge with hardened steel pin. Work shall include bracing of door frame, mounting plates, hardware, through-bolting to secure frame, welding of devices and plates, and full adjustment of door to fit new surface mounted frame and lockset unit.
- G. A single acceptable Detention Equipment Contractor (DEC) shall provide the entire scope of work specified below. None of the materials, equipment, systems or labor specified or required for the complete installation of the scope of work below shall be provided or bid as separate packages outside of the Detention Equipment Contractor's subcontract.
- H. DEC shall furnish all labor, equipment, appliances, services and materials, perform work, and otherwise assume all responsibility related to procurement and installation of equipment, products and materials as indicated in the scope of work below. DEC shall self-perform installation of materials required in this scope of work. Installation subcontractors will not be allowed.
- I. DEC shall coordinate and interface with Security Electronics Contractor (SEC) as required for a complete, operational system.
- J. DEC must base its bid on the products by the manufacturers that are specified in this scope of work.
- K. Any bid that does not include the name of an accepted DEC in the appropriate space provided on the bid form will be automatically rejected. Only one (1) name will be allowed.

#### 1.02 SECTION INCLUDES

- A. The scope of work for the DEC includes the following specification sections:
1. Section 11 00 00 – Basic Requirements for Detention Systems
  2. Section 08 71 53 – Security Hardware
  3. Section 08 34 53 – Security Doors and Frames
- B. Products furnished and installed under this scope of work:
1. Security hollow metal doors per the door schedule.
  2. Security hardware per the security hardware schedule.
  3. Detention metal fabrications as indicated on the drawings and specified below.
- C. Products furnished, but not installed under this scope of work:
1. New detention hollow metal surface mounted lockset frame assemblies.
  2. New medium/maximum security electrically operated locksets.
  3. Adjustable maximum security heavy duty door hinges.
  4. Modified inmate cell motorized slider door operators.
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## D. Related work to be performed by others:

1. Electrical work, except as specified herein.
2. Electrical items or fixtures, including light fixtures.
3. Provision of electrical power.

## 1.03 SYSTEM DESCRIPTION

## A. Design requirements:

Detention equipment shall be designed specifically for detention use, simple in construction and operation, and free from parts susceptible to unusual wear or maintenance requirements.

## B. Performance requirements:

Detention equipment shall be use-proven through satisfactory performance under actual jail or prison conditions.

## 1.04 DEFINITIONS

A. DEC: Detention Equipment Contractor

B. GC: General Contractor

## 1.05 SUBMITTALS

A. Shop drawings of all materials and equipment provided in this scope of work shall be submitted for approval. They shall indicate item location, size, type of materials, construction, finishes, spacing of anchors and joinery details with adjacent work. The DEC shall extensively check each of the submittals under its scope of work, ensuring their correctness and compatibility not only with each other, but also with the contract documents. It shall be the General Contractor's responsibility to coordinate the DEC's work with other trades.

B. Unless required otherwise in Division 1, the DEC shall submit six (6) complete sets of documentation for approval.

## C. Quality control submittals (for information only):

1. Certified test reports from an independent testing laboratory verifying that security hollow metal lock enclosure that will secure the swinging inmate cell doors meet or exceed specified design criteria and that it meets all specification requirements.
2. Manufacturer's installation instructions.

## D. Contract closeout submittals:

## 1. Operating/Maintenance manuals:

- a. Include the following, as applicable, for each type of detention door hardware and operating and locking device provided under this scope of work:
    - 1) Operating instructions.
    - 2) Wiring diagrams for locking device wiring.
    - 3) Lubrication and maintenance requirements.
    - 4) Spare parts list.
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2. Owner instruction reports.
  3. Warranty.
  4. Letter verifying that spare parts have been delivered.
  5. Key release form.
- E. Substitutions: No substitutions of materials or equipment will be permitted where specific trade names or manufacturers are listed, unless the Owner or Designated Representative adds the proposed substitution by addendum.
1. Materials and products specified by name of manufacturer or brand trade name shall be the basis of the bids received, unless changed by addendum prior to the bid dates.
  2. In the event a contractor wishes to use any materials or products other than those specified, a written request shall be made to the Owner or Designated Representative within the required time frame identifying the proposed substitution and providing sufficient data for the Owner or Designated Representative to make a determination.
  3. All additional costs resulting from the use of an approved substitution by the DEC shall be borne by the DEC without additional expense to the Owner. Such additional costs shall include necessary modifications and alterations to structures, equipment, raceways and furnishing of all additional materials required to affect the substitution.

#### 1.06 QUALITY ASSURANCE

- A. In order to establish and maintain the standard of quality required for this project, only the accepted DEC's listed below, or DEC's subsequently accepted by addendum will be allowed to perform the work under this section of the specifications.
- B. The following DEC's are accepted to perform the work of this section:
1. CCC Group, Inc. – San Antonio, TX
  2. Norment Security Group – Montgomery, AL
  3. Chief Industries, Inc. – Grand Island, NE
  4. U.S. Security Systems, Inc. – Montgomery, AL
  5. Detention Equipment Service, Inc. – New Castle, DE
  6. ISI Detention Contracting Group – San Antonio, TX
  7. Southern Steel Company – San Antonio, TX
  8. Cornerstone Detention Products, Inc. – Tanner, AL
  9. Pauly Jail Building Company – Noblesville, IN
  10. Willo Products, Inc. – Decatur, AL
- Pre-qualification of a DEC does not relieve that DEC from the requirement to furnish all materials from the manufacturers specified herein.
- C. Any DEC not listed above that intends to submit a bid to perform the work under this section of the specifications must submit the following data to the Owner or Designated Representative in writing no later than twenty-one (21) days prior to bid date. If approved, acknowledgement shall be by addendum prior to bid date. Verbal approval will not satisfy this requirement. All DEC's except those listed above shall submit all information exactly as indicated below, or they will not be acceptable to perform this portion of the Work. Grounds for disqualification shall exist if any of the information submitted is inaccurate, or if in the opinion of the Owner or Designated Representative, does not satisfy the pre-qualification requirements.
1. Evidence that the DEC has a minimum of ten (10) years experience in successfully completing projects of equal scope and magnitude with products as herein specified. This evidence shall

- consist of a list of ten (10) projects that have been complete and operational for a minimum of five (5) years. Provide the following information for each facility:
- a. Name and location of the facility.
  - b. Value of the contract and scope of work performed.
  - c. Date of occupancy by the Owner.
  - d. Names and phone numbers of the representatives to contact for the Construction Manager or General Contractor and the Owner or Designated Representative.
2. Notarized statement indicating that employees of the firm seeking pre-qualification will install all equipment provided under this scope of work in lieu of DEC utilizing an installation subcontractor.
  3. Sample CPM schedules for each of at least two (2) previously completed projects commensurate in size and scope to this project, graphically indicating both initially projected and actual durations required for all major activities in the respective scopes of work.
  4. Current letter from the security lock manufacturer to be utilized on this project stating that DEC seeking pre-qualification is a factory trained, fully authorized installer of the manufacturer's complete line of products.
  5. Complete list of key employees (both office and field personnel) indicating areas of responsibility and years of experience.
  6. Failure to provide any of above information or to comply with any of above requirements will result in disqualification of firm seeking pre-qualification.
- D. The Owner or Designated Representative will promptly review requests to determine the acceptability of each prospective DEC. Those found acceptable will be named subsequently by addendum as acceptable to bid and perform the scope of work under this section. Verbal approval will not satisfy this requirement.
- E. Owner or Designated Representative reserve the right to disqualify manufacturers, equipment suppliers and contractors who do not strictly comply with requirements of this section or product substitution procedures called for in this section and Division 1. Grounds for disqualification shall exist if it is determined that the information submitted is inaccurate, or in the opinion of the Owner or Designated Representative, does not satisfy the pre-qualification requirements.
- F. Any bid from a General Contractor that does not include the name of an acceptable DEC in the appropriate space provided on the bid form will be automatically rejected. Only one (1) name will be allowed.
- 1.07 DELIVERY, STORAGE AND HANDLING
- A. The Contractor shall be responsible for the following:
1. Receive from carrier, unload and store all products and materials that are furnished-only by the DEC for installation by others.
  2. Provide temporary access openings required through walls to permit the placing of the detention equipment in the areas of the building where it is to be installed and provide use of hoist, cranes, elevators and lifts and/or cranes on regular time with qualified operators.
  3. Protect all materials during storage on the job and after installation. All protection required while working and/or cleaning adjacent materials should be the responsibility of the General Contractor.
  4. Provide an adequate, secure, dry, lockable storage area or room in each building and floor (if high rise) for all materials specified in this section.
  5. Ensure that all embedded items are installed plumb and true.
  6. Complete all floor finish, concrete curbs, waterproofing, and other concrete work where shown or specified in connection with the detention equipment.
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7. Promptly clean and touch up any scratches or disfigurement caused by shipping or handling with a compatible rust inhibitive primer, or the shipment must be rejected at time of receiving.
  8. Remove protective materials and clean all finished surfaces using clear water and non-abrasive detergent. Any protection required to clean adjacent materials shall be the responsibility of the General Contractor.
  9. Provide an environmentally controlled room in each building and floor for the on-site storage of all hardware and electronic devices and equipment, or the hardware and electronic devices shall be shipped to the DEC's home office where it shall be inventoried and securely stored until required at the facility for installation. In this case, the DEC shall submit a notarized list indicating exactly what has been received and stored each month and its value with the current Contractor's Monthly Pay Request. Prompt payments will be made for equipment and materials properly stored at the DEC's home office.
- B. The DEC shall be responsible for receiving, unloading and distribution of all products furnished and installed under this scope of work.

#### 1.08 REGULATORY REQUIREMENTS

- A. All work is to be performed in compliance with latest editions of:
1. Federal, state, and local codes and ordinances, or agencies having jurisdiction.
  2. National Electric Code, NFPA 70.
  3. Standard for Fire Doors and Windows, NFPA 80.
  4. Life Safety Code, NFPA 101.
- B. In cases where Specifications call for materials or construction of better quality or larger size than codes require, Specifications shall take preference. Codes shall govern in cases of direct conflict with Specifications or Contract Drawings.

#### 1.09 WARRANTY

- A. Provide Owner with written warranty covering products provided under this section for period of one (1) year from date of Owner acceptance. During this period, make necessary repairs and corrections to defects in the Work and replace defective parts at no cost to Owner.
- B. Warranty does not cover consequential or incidental damages. Work made necessary by abuse, misuse, accidents, or negligence of using personnel is excluded from this agreement.
- C. Provide emergency service during warranty period, including maximum twenty-four (24) hour response time for emergency calls requiring visits to facility.

#### 1.10 MAINTENANCE MANUALS/SPARE PARTS

- A. Provide Owner with three (3) copies of operating and maintenance manuals for products furnished and installed under this scope of work. Clearly identify all parts and include manufacturer's standard part number for each component of various mechanisms.
- B. Provide spare parts per requirements of individual specification sections.

#### 1.11 KEYS FOR LOCKS

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- A. Provide safekeeping of keys for locks provided under this section. Ensure that building security is not breached through job site loss or theft of keys being used for hardware installation or "fit-up" purposes.
- B. Die-stamp each key with identification code designated on approved keying schedule.
- C. Upon completion of work and prior to final acceptance, present complete sets of keys, as outlined in the detention hardware specifications, to Owner's designated representative and obtain a signed receipt. Send all keys subsequently ordered to same individual via registered mail, return receipt requested.

## **PART 2 - PRODUCTS**

- 2.01 The DEC shall utilize only listed approved manufacturers, component fabricators and suppliers. Any other manufacturers, component fabricators or suppliers must be approved by addendum no later than fourteen (14) days prior to bid date.
- 2.02 The DEC shall be responsible for the integration, interfacing and coordination of all products and systems with other related parties as hereinafter defined and specified.

## **PART 3 - EXECUTION**

### **3.01 PREPARATION**

#### **A. DEC responsibilities:**

- 1. Examine the areas and conditions under which installation is to occur and document conditions detrimental to the proper and timely completion of the work. Report unsatisfactory conditions to Owner or Designated Representative in writing. Do not proceed with installation until unsatisfactory conditions have been corrected.
- 2. Prior to installation, meet at project site for purpose of reviewing products and installation methods selected, procedures to be followed in performing the work and coordination with other trades.
- 3. Protect adjacent surfaces from damage and stains during installation of materials provided in this scope of work.
- 4. Ascertain location and arrangement of anchorage required for equipment supplied under this scope of work; coordinate with other trades where necessary to make provisions for installation.
- 5. Furnish setting drawings, diagrams, templates, instructions and directions for installation of all products. Coordinate delivery of such products to project site.
- 6. Distribute all items to installation locations immediately prior to installation, complying with all applicable product handling requirements. Coordinate timing of distribution.
- 7. Coordinate with other trades for proper location of rough-in services and service connections specified elsewhere.
- 8. Broom clean, properly light and heat areas of building where detention equipment is to be installed.

### **3.02 INSTALLATION**

#### **A. General:**

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1. Install fixtures, materials, assemblies and equipment in strict compliance with Specifications, Contract Drawings and manufacturers' recommendations and instructions.
  2. Provide necessary drawings, setting diagrams or other information required to contractor responsible for installation of DEC-furnished items to be installed by others.
- B. Attachment of detention equipment:
1. Secure detention equipment permanently in place with minimum of exposed fasteners and free from warp, twists, bends, rough edges, cracks, or open joints. Exposed fasteners shall be uniform in size, spacing, and appearance and shall be tamper-resistant.
  2. Punch boltholes not more than 1/16 inch larger in diameter than bolts to be used. Accurately space and align holes to permit insertion of bolts. When bolts are used, nuts shall be tightly drawn and bolt threads battered to prevent removal.
  3. Remove loose scale, rust, oil, or other foreign matter from surfaces to be welded. Welds shall show uniform cross-sections, good penetration of base metals and smoothness of weld metal with a minimum of craters, porosity and clinkers.
  4. Thoroughly clean burns, welds, and welding spatter on detention equipment resulting from fabrication and installation.
  5. Welds that are neat in appearance and evenly spaced shall not require grinding.
- C. Supervision:
1. Work shall be performed under direct supervision of a competent, experienced, factory-trained project superintendent who shall be a full-time employee of the DEC.
  2. DEC's superintendent shall be present at job site during all phases of installation of the equipment furnished and installed under this section.
  3. DEC shall be responsible for conduct and performance of job site personnel and shall ensure that this scope of work progresses without serious conflict with related work being performed simultaneously by other trades.
- 3.03 PROTECTION AND CLEANING
- A. During installation, protect adjacent surfaces and detention equipment from damage. Work shall be free from scratches, dents, permanent discolorations and other defects.
  - B. During installation, keep storage and work areas neat, orderly and in a broom clean condition.
  - C. Whenever hardware is located in areas where it may be subject to damage during construction by other trades, GC shall ensure that hardware is adequately protected or schedule the installation to occur after the hazardous condition is eliminated.
  - D. Hardware shall be cleaned as necessary to restore correct operation, function and finish.
  - E. All final cleaning shall be the responsibility of the General Contractor.
- 3.04 ADJUSTMENTS
- A. Prior to final inspection, test all electric locks, sliding door locking devices and door position sensors and adjust as required to provide proper functions.
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- B. Check all mechanical hardware items to ensure correct operation and function. Adjust and lubricate moving parts as required to operate smoothly and quietly without binding. Replace any items that cannot be adjusted to operate as intended for its application.

### 3.05 DEMONSTRATION, OPERATING INSTRUCTIONS AND TRAINING

- A. The object of the operating/maintenance manuals, training materials and instruction period shall be to communicate a total understanding of operations and maintenance of all detention equipment included in this scope of work. Submit proposed operating/maintenance materials and training materials for review, comment and approval by the Owner or Designated Representative. Coordinate with Owner to review materials and instruction periods to assure Owner instruction and information requirements will be met. Obtain approval prior to scheduling training session.
- B. Provide representative(s) with thorough knowledge of products provided under this scope of work to the Owner for an on-site instruction and training period involving Owner's designated personnel. Representative(s) must be capable of training personnel in the adjustment and operation of detention equipment, including pertinent safety requirements, as well as instructing maintenance personnel in operation, repair and upkeep. Instruction shall be given during the first week after substantial completion, unless additional adjustments or repairs are required prior to training. In such case, training sessions are not to occur until such adjustments or repairs have been satisfactorily completed. On-site instruction and training period will not exceed five (5) consecutive eight (8) hour days.

### 3.06 FIELD QUALITY CONTROL

- A. Upon completion of installation of detention equipment and electronic security systems, perform and document detailed quality assurance inspection confirming proper installation and operation of equipment and systems, and provide confirmation in writing to Owner or Designated Representative. Include written request to Owner or Designated Representative to inspect Work.
- B. Owner or Designated Representative shall respond within five (5) working days after receipt of request for inspection. Upon completion of inspection, Owner or Designated Representative shall provide DEC with written acceptance of Work, noting any exceptions discovered during inspection.
- C. Within one (1) week of inspection, Owner or Designated Representative shall furnish DEC with final punch list of all exceptions noted.
- D. Address items noted on final punch list and return to Owner or Designated Representative with written request for punch list completion verification.
- E. Within two (2) weeks after receipt of written request, Owner or Designated Representative shall perform punch list completion verification. Only items noted on final punch list shall be addressed.
- F. Within five (5) working days of punch list completion verification, Owner or Designated Representative shall provide DEC with written final acceptance.

END OF SECTION 11 19 00

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**SECTION 28 05 00****ELECTRONIC SYSTEMS GENERAL****PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

- A. Contract Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this section.

## 1.2 SUMMARY:

- A. This division of the Specifications covers the complete provisions, requirements, modifications, upgrades, reuse, and installations of the electronic security systems as indicated in the Contract Drawings and Specifications. These systems shall provide complete and functional integrated electronic security systems for the Project. Provide all labor and installation, assembly and fabrication, materials, equipments, software and programming, supervision, training, and warranty and furnish fully functional and operational specified systems. All equipment specified in the Division 28 series Sections shall be general purpose, non-proprietary, COTS "consumer-off-the-shelf" in nature and custom configured for this application. The contractor shall provide all documentation and shall perform all duties involved in obtaining work permits and licenses as required to complete the project. All permitting required by the Contractor shall be within the associated City, County, and State jurisdictions.
  - B. The installation of all security equipment and coordination of the raceways and electrical power for the security systems shall be the full responsibility of the Division 28 contractor for this project. All equipment specified in Division 28 series sections shall be powered by emergency circuits provided by Division 28. Where required the new power circuitry for the security equipment specified within this division of work shall where possible be connected to the existing UPS power systems, else furnish and install additional UPS power.
  - C. ADA Requirements
    - a. Mounting heights and accessibility to equipment requiring access by individuals with disabilities shall comply with ADA and ANSI 117 requirements.
  - D. a. The facility currently contains existing security equipment, components, devices, materials, wires and cables, door lock hardware, and graphic locking control panels, (TCS)-touchscreen computer stations, cabinets, millwork, etc (Contractor should field verify complete list of items affected by this project). The Contract Documents indicate general layouts of the existing conditions of the security systems. The Division 28 Contractor will be fully responsible for field researching the existing security equipment cabinet layouts, existing conduit and cabling routes, field device mounting surfaces and locations, control room and (SER)-security equipment room spaces and layouts, etc. Results of the field research shall be used to configure the new security system layouts in accordance with the Contract Documents. The existing security equipment, components, devices, and materials required by the Contract Documents to be reused with the new security systems shall be field tested by the Division 28
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Contractor prior to connection to the new security systems. The DIV 28 Contractor shall field test each existing graphic locking control panel, (PLC)-programmable logic controller location, (TCS)-location, door lock hardware, and inmate call-in pushbutton station and written test reports shall be provided to the Owner's designated representative indicating the operational condition of the existing equipment, components, devices, and materials and any items found non-functional shall be stated in the report for replacement. Designated existing wiring and cabling required by the Contract Documents to be re-connected to the newly configured security systems shall be field tested at the existing security equipment cabinet location and re-labeled by the Division 28 Contractor prior to connection to the new security systems. A written test report shall be provided to the Owner's designated representative indicating the electrical condition of the existing wires and cables and any items found non-functional shall be stated in the report for replacement.

- b. The new work shall include, but not be limited to, the provision and installation of DIN rail mounted electromechanical relays, DIN rail mounted fuse terminal blocks and wire terminal blocks, +24VDC power supplies, Fiber optic cables, fiber optic patch panels, Ethernet data switches, 3ea (TCS)-touchscreen computer stations, 1ea Server/Data logging Computer Station, Ethernet Comm. modules, (PLC) Ethernet modules, Software and programming, consoles/cabinetry, UPS's, and control, data, and signal wiring into the new and existing portions of the security locking control systems.
  - c. The Central/Master Control Room currently has 3ea (TCS's), which shall be removed and replaced with 2ea new (TCS's) and UPS units. The Security Data Room shall be provided with 1ea new (TCS) and 1ea new (SDLCS)-Server/Data logging computer station and UPS units. All existing PLC-programmable logic controller locations shall be retrofitted to accommodate controlling and monitoring the new door lock hardware being installed at all inmate cell doors and designated corridor doors as well as continuing to control and monitor the existing door lock hardware locations not being retrofitted with new hardware. The reconfigured PLC locations shall continue to monitor all existing inmate call-in pushbuttons at the inmate cell doors. Additionally, each (PLC) location shall be reconfigured to data communicate via Ethernet connectivity with the new head end equipment (TCS's) in Central/Master Control Room and Security Data Room, as well as the new (SDLCS) being located in the Security Data Room to provide functionality consistent with the existing and new systems. The (TCS) system shall monitor and control all existing and new Central override and emergency functions consistent with the existing (GLCP)-graphic locking control panels and as outlined in the Contract Documents.
  - d. Provide all new equipment as indicated on the Contract Documents and integrate the equipment into the existing (PLC) equipment and head end equipment and touchscreen controlling and monitoring systems. The programming for the touchscreen software shall be developed to accommodate the new equipment. All newly modified doors and devices and existing door hardware shall be monitored and controlled from the touchscreen system in central/master control and Security Data Room. All door hardware devices to be controlled and monitored by the existing (GLCP) currently located in the existing housing POD area locations are currently interfaced to the existing (PLC) I/O modules mounted in the existing security equipment rooms located beneath the housing POD control rooms. All door hardware devices to be controlled and monitored by the existing (GLCP) currently located in non-housing POD area locations are
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currently interfaced to the existing (PLC) I/O modules mounted in the existing security equipment cabinets located within designated security equipment room locations. The new (PLC) equipment shall interface with the existing (PLC) equipment within the security equipment rooms to provide monitoring and controlling of all new and existing door hardware devices, inmate call-ins, chase-mounted smoke detector alarm status, Duress station alarm status, TV on/off, water shut on/off, Secure Mode, and Group Unlock, from the existing Locking Control panels and the new (TCS's).

- e. Provide all new wiring connections at the new door lock hardware and existing (SEC) locations as shown on the contract drawings. The Contractor should field research the existing security system locking control equipment located within the existing (SEC)-security equipment cabinets. The Contractor should determine the appropriate location within each (SEC) to install the new DIN rail mounted components and other security system equipment required to retrofit the existing (PLC)-based locking control systems.
- f. The Contractor shall replace the existing fiber optic communication loop currently routed between the existing (PLC) locations and furnish and install new CAT5e Ethernets (LAN)-local area network (provide and install fiber optic cables where distances between termination locations exceed 300-feet) between all (PLC) locations, (TCS) locations, and (SDLCS) location (failure of any new Ethernet link shall not disrupt data communications via all undamaged Ethernet links). The Contractor shall furnish and install all needed Ethernet equipment, including but not limited to, Ethernet switches, router, HUB's, patch panels, patch cables, link cables, and software and interface to the facility-wide PLC systems with the (GLCP's) and (TCS's) to provide monitoring and controlling functions.

**Additional (LINE-ITEM2) Work Scope and General Phasing:**

Replace existing (GLCP) graphic locking control panels with new TCS-touchscreen computer stations (See Contract Drawings for exact locations):

1. The existing housing POD control rooms are outfitted with (GLCP) graphic locking control panels for controlling and monitoring the existing door lock hardware and other devices. The DIV28 contractor shall at the direction of the Owner replace the existing locking control panels with (TCS) touchscreen computer workstations. The new (TCS's) shall first be established in a temporary location within the housing POD control room. Route all additional CAT5e cabling required from the security equipment room to the (TCS) location, and incorporate all new (UPS) power connections required to incorporate the new equipment. Each security control and monitoring functions shall be fully tested in the presence of the Owner's designated representative/Owner, and all operational functions such as central overrides, bypassing, door control, emergency release, etc shall be fully implemented and functional prior to commencement of the cutover from the (GLCP). All cabling shall be routed from the security equipment room to both the temporary station as well as the permanent location and tested prior to cutover. Upon satisfactory completion of the testing and acceptance by the Owner, schedule the cutover time and date with the Owner. During cutover, the existing locking control panel shall be removed, and the (TCS) workstations shall be relocated to the permanent location within the housing POD control room.
  2. The Contractor shall be responsible for developing the graphic floor plan layouts to display on the (TCS) to replicate the control and monitoring functions of the
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- existing (GLCP). The operator shall have the ability to perform a variety of security related functions from (TCS) stations. The security controlling and monitoring shall be displayed and operated primarily through graphical representations of the floor plans, with icons pinpointing the control, monitor, and alarm location with emergency instructions. Selecting the appropriate icon shall cause automatic functions to be initiated. The (TCS) displays shall have icons representative of door unlock touch points, door status monitoring icon displays, inmate call-in icon displays, chase-mounted smoke detector alarm status icon displays, duress station alarm status icon displays, TV on/off icons, water shut on/off icons, Secure Mode on/off icons, and Group Unlock icons, shall allow for operating various existing security technologies and allow for seamless automated monitoring and controlling functions via the (TCS).
3. The work for the DIV 28 contractor includes all new equipment, cabling, conduit, backboxes, programming, interface equipment, and communication to the head end security systems. The head end security systems for this facility shall monitor all security devices. All security devices described in these sections shall be controlled and monitored from the security touchscreen stations and graphic control panels locations indicated in drawings. The DIV 28 contractor shall provide all related devices, equipment, associated hardware, software, appurtenances, connections, devices, power supplies, transformers, panelboards, circuit breakers, wiring/cabling, conduit, backboxes, fittings and programming necessary to complete the work as a complete and fully operational system. The Security Contractor shall furnish and install all of the above material in accordance with the manufacturer's recommendations, and to comply with the Division 28 specifications.
  4. Refer to Specification Section 28 40 20 Touchscreen Control system for (TCS) details.

**Additional (LINE-ITEM3) Work Scope and General Phasing:**

Furnish and install secure/encrypted wireless communications network to support utilization of (PAD)-personal digital assistant and Tablet PC as wireless mobile door locking control stations in designated dayroom locations. (See Contract Drawings for exact locations):

1. The existing housing POD control rooms are outfitted with (GLCP) graphic locking control panels for controlling and monitoring the existing door lock hardware and other devices. The DIV28 contractor shall at the direction of the Owner furnish and install a wireless (Wi-Fi) network, fully encrypted, for all designated prisoner housing POD areas utilizing PDA's and Tablet PC's. The PDA's/Tablet PC's shall be restricted to only operating within the designated areas controlling and monitoring (designated cell doors, and prisoner call-in pushbutton stations located within each cell), perform Group Unlock operation of cell doors, monitor Duress alarms, and control on/off (water, and TV electrical outlets). The PDA's/Tablet PC's shall be enabled/disabled via Central Control (TCS) and Security Data Room (TCS). Once enabled the PDA's/Tablets PC's require using password/pass-code to log-onto the handheld device.
2. 32-total rugged Tablet PC's shall be furnished and programmed to operate via a new secure Wi-Fi wireless network being provided and installed by the contractor to operate in conjunction with the existing PLC-programmable logic controller systems. The handheld device shall be rugged type construction having shock and vibration dampening cover and sealed design that is easily cleaned with "standard cleaners". The device should be (IP52 rated for moisture and dust

resistant). The device should have hot-swappable dual battery capability giving the ability for a full day of performance. The device should have a wide view screen display size between 7.0" to 12.1" with resolution 1280 x 800 to 1920 x 1080 and (ppi) 190 to 224, and shall be backlit for low-light level conditions. The device should have Wi-Fi wireless link IEEE 802.11n compliant, Window 8 compatible (OS)-operating system, Processor should be Intel Core 2 Duo 1.6GHz, Intel Core i5 1.7GHz, Intel Atom 1.8GHz, or other industry standard compatible (OS). The device should Solid state hard drive 64GB or larger, Active stylus, 2 (USB) 2.0 ports, Gigabit Ethernet, HDMI port, audio output, software, and two-year warranty.

3. The Contractor shall furnish and install IEEE 802.11n compliant wireless access point at the ceiling level of the designated dayrooms shown in the Contract Drawings. The Contractor shall field locate the best mounting location for the wireless access point that offers the optimum coverage area within the dayroom with no dead spots and high throughput, but not be susceptible to inmate vandalism. The wireless access points shall be powered via POE-power over Ethernet derived from the 16-port 10/100 Mbps POE layer-2 managed switch furnished and installed in the associated security equipment room by the Contractor. The contractor shall install CAT5e cable within ½" EMT conduit from the Ethernet switch to the wireless access point.
3. The Contractor shall provide all labor, materials, equipment, cabling, raceways, programming and software, coordination, training, and warranty to implement fully functional and operational systems.
4. Acceptable manufacturers Ethernet switch: Netgear, CISCO, 3Com, ICC, Linksys, and equals approved by A/E/Owner.
5. Acceptable manufacturers Tablet PC: Motorola, DELL, Motion Computing, Samsung, Toshiba, and equals approved by A/E/Owner.
6. Acceptable manufacturers wireless access point: Black Box, Firetide, Linksys, Netgear, D-link, and equals approved by Owner's designated representative/Owner.

E. Related Sections: The Division 28 work shall consist of, but shall not be limited to the following systems:

1. DIV 28 - Touchscreen Control Systems
2. DIV 28 - Locking Control and Monitoring Systems
3. DIV 28 - PLC Systems
4. DIV 11 – Detention Equipment
5. DIV 08 – Detention Hardware

### 1.3 SUBMITTALS

- A. SHOP DRAWING SUBMITTALS: Submit for review by the Owner's designated representative, complete engineering and product data for each system for evaluation of the proposed system with respect to Contract Specification and Drawing requirements. Submittals for each system shall consist of engineering product data sheets, device and termination schedules, and manufacturers descriptive catalog sheets for each system component, point to point wiring diagrams, one-line diagram showing all major equipment and Ethernet cabling, equipment assembly drawings, locking control system operational narratives, and manufacturer prepared shop Drawings and floor plan drawings showing all field devices and major equipment to indicate conformance with the Contract Documents. Manufacturer's standard product data sheets should be clearly marked by

the Contractor indicating the exact item that is being submitted for approval, else the submittal shall not be approved by the Owner's designated representative/Owner.

1.4 QUALITY ASSURANCE: All work specified under this division of the Specifications shall be in accordance with the latest locally adopted version of the following codes and agencies:

1. The National Electrical Code NFPA 70
2. National Fire Protection Association NFPA 72
3. National Fire Protection Association NFPA 101
4. Applicable Municipal Electrical Regulation
5. Manufacturers Recommendations.
6. International Building Codes, 2009 Edition.
7. International Fire Code, 2009 Edition.
8. BOCA Code, current edition.
9. National Electrical Code, 2009 Edition.

MANUFACTURERS QUALIFICATIONS: The equipment furnished under Division 28 Specifications and Contract Drawings shall be the standard products of manufacturers who have been supplying equipment similar to that specified or shown on the Contract Drawings for a period of not less than 5-years. Custom-made or proprietary products and systems, and products and systems that are not readily available to be purchased and serviced by any DIV 28 Contractor/Vendor/manufacturer approved by the Owner's designated representative and Owner, shall not be acceptable and permitted on this project without prior approval by the Owner's designated representative and Owner. Acceptable DIV28 Manufacturers/Security Integrators/Security Contractors: Norment Industries/Trentech, Southwestern Communications, and AE Security Group, others may receive acceptance only by submitting a request-for-approval in writing to the Owner's designated representative/Owner.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation. Coordinate storage locations at the site with the Owner.

1.6 RECORD DRAWINGS (As-builds):

- A. At the time of final inspection, provide three (3) sets of complete Maintenance and operating instructions on all systems. This data shall be in bound form and shall include all detailed engineering shop drawings and manufacturing/assembly drawings required for this project that have been modified and updated in accordance with the actual installed field conditions and requirements. Manufactures standard product data sheets not specific to this project are not acceptable and will be "Rejected".

## PART 2 – PRODUCTS

### 2.1 MATERIALS

- A. Materials or equipment specified by manufacturer's name shall be provided, unless approval of other manufacturers is listed in addendum to these Specifications. Any materials or equipment approved in addendum functions the same as the equipment specified.
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- B. All material shall be new and shall conform to the applicable standard or standards where such have been established for the particular material in question. Publications and standards of the organizations listed below are applicable to those materials specified herein:
1. American Society for Testing and Materials (ASTM)
  2. Underwriters Laboratories (UL)
  3. National Electrical Manufacturer Association (NEMA)
  4. Institute of Electrical and Electronic Engineers (IEEE)
  5. National Fire Protection Association (NFPA)
  6. American National Standards Institute (ANSI)
  7. Building Industry Consultant Service International (BICSI)
- C. UL listed material shall bear UL label.
- D. All like materials shall be of the same manufacturer.
- E. All materials and connections shall be installed in strict accordance with all applicable codes, UL standard and manufacturer's written requirements. All Division 28 systems shall be certified in accordance with NEC Article 110.

### **PART 3 - EXECUTION**

#### **3.1 SYSTEMS OPERATIONAL TEST**

- A. The manufacturer's technical representatives shall certify in writing that the systems are installed in compliance with the manufacturer recommendations, comply with the requirements of the Contract Documents and are operating correctly. These written certifications shall be submitted to the Architect and shall signify that the total integrated security locking control system is operational and ready for substantial completion testing by the Owner's designated representative.
- B. At substantial completion of the electronic systems, the Contractor, in cooperation with and as directed by the Architect/Engineer shall conduct testing of Division 28 systems. The Contractor shall provide all personnel, equipment, instrumentations and walkie-talkie communication equipment and shall include the cost of final acceptance testing and follow-up testing in the base Contract. These final acceptance tests shall generally consist of but not limited to the following:
1. Door locking control touchscreen control stations shall be tested by operation of all individual features and functions.
  2. Door locking control panels shall be tested by operation of all individual features and functions.
  3. PLC systems shall be tested shall be tested by operation of all individual features and functions.
  4. Each individual door interlock scheme operating both individually and collectively shall be tested for "interlock active" and "interlock bypass" functions.
  5. All locking control system doors shall be tested by operation of each individual locking device with status visual display observed upon signal initiation and loss of power signal initiation as directed by the Owner's designated representative.
  6. All locking control system doors controlled by the PLC control system shall be tested to properly operate by locations systems.
  7. Each individual alarm system and each group of alarm systems operating both
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individually and collectively shall be tested for alarm signal initiation, tamper signal initiation and loss of power signal initiation as directed by the Owner's designated representative.

8. Testing will include interface with new PLC locking system for touchscreen controlled door unlock and monitoring functions of doors.
9. Inmate call-in stations shall be tested by operation of all individual stations and features including displaying onto touchscreen stations and locking control panels.
10. UPS system power distribution to all security systems shall be tested and loss of utility power shall display onto the touchscreen stations indicating the security systems are operating via battery-backup.
11. Test override and takeover functions of locking control panels by the touchscreen PC stations via PLC-LAN interfaces located throughout the facility.
12. Test LAN interface of touchscreen and PLC systems with each other.
13. Test all PDA/Tablet PC functions.

### 3.1 TRAINING

- C. The Contractor shall include in the base Contract all costs required to train the Owner operating and maintenance personnel in the use and maintenance of systems provided under this division of the specifications.
- D. Sessions shall be conducted for not less than four-hour periods during normal working hours, i.e., Monday through Friday, 8:00 AM to 5:00 PM. Training session schedules shall conform to the requirements of the Owner; therefore such schedules shall be submitted to the Owner for approval not less than two weeks prior to the training session. Training sessions for different systems shall not be scheduled concurrently. All training sessions shall be video recorded for future use by Owner. At Owner's discretion, provisions shall be made to allow up to 2 owner's personnel to participate in final system check out of all systems.
- E. Video recordings shall be of professional quality both for video and audio and must be approved by the Owner's designated representative. Provide two copies to the Owner.
- F. Training time to be included in base Contracts for specific systems:
  1. Locking Control, Touchscreen Control, PDA's and Tablet PC's, and PLC Systems - [36 hours]

### 3.2 EQUIPMENT CONNECTIONS

- G. Interconnection of new Division 28 equipment with other existing systems shall be as required to provide fully operational systems in accordance with these specifications and contract drawings.

### 3.3 SUBSTANTIAL COMPLETION

- A. The Contractor shall provide a Sign-in sheet indicating the start and end time, as well as the personnel that have been trained. The Owner's designated representative and Owner shall be presented with a copy of the Sign-in sheet within 3-days of the Demonstration end time. This is required before a Certificate of Substantial Completion can be issued.
  - B. A considerable amount of the security and communication equipment is mounted in finished spaces, (control rooms, dayrooms, corridors, offices, etc.). The checkout and debugging process for security and communication equipment can take a considerable amount of time (30-45 days minimum) once the equipment is installed. The DIV 28 contractor shall coordinate with the
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- Owner the time and tasks/work performed by other trades needing to be completed prior to the completion of the DIV 28 work being completed in order to not prevent the project from completing on time and on schedule.
- C. The Contractor shall provide two-way hand radios to aid in performing the (Substantial Completion) testing.

END OF SECTION 280500

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**SECTION 28 05 10****PROGRAMMABLE LOGIC CONTROL SYSTEMS****PART 1 - GENERAL**

## 1.1 SUMMARY

- A. Scope of work: Furnish and install all needed Ethernet components to convert the existing PLC data network into an Ethernet LAN topology from each PLC CPU rack location to the Central headend security system equipment for a complete and integrated system. The existing Programmable Logic Controller (PLC) is connected to existing Graphic Locking Control Panels (GLCP) and shall remain operational throughout and after completion of this project. Via this project scope the existing PLC's shall be reconfigured and be integrated with the Touchscreen Computer System (TCS), and PDA's and Tablet PC's as indicated on the plans and described herein.
- B. The DIV 28 Contractor shall be responsible for providing, installing, and coordinating the reconfiguration of the PLC systems. The Contractor shall retain and reuse portions of the existing PLC system equipment consisting of but not limited to (digital input and output modules, power supplies, PLC processor, PLC rack, and cabling, etc). The Contractor shall replace the existing PLC data communication module with an Ethernet communications module (i.e., (Omron) CS1W-ETN21 Ethernet unit). The Contractor shall furnish and install CAT5e cables in EMT conduit from each PLC rack location to the new Central headend security system equipment. Where possible the Contractor shall remove the existing fiber optic cable currently routed between the existing PLC rack locations to install the new CAT5e cables.

## 1.2 SYSTEM DESCRIPTION

- A. PLC: The facility currently contains existing PLC security equipment, components, devices, materials, power supplies, wires and cables, and graphic locking control panels. The PLC network shall control logic functions and interface with the operator interface stations (i.e., TCS touchscreen computer station) and PDA's/Tablet PC's for control and annunciation of locking control and security systems and devices.
  - B. PLC CPU: The existing PLC CPU's shall be reprogrammed to provide the necessary logic and timing functions, memory, software variables, and communication transmissions required to meet the functions described in the specifications. Each PLC location is already provided with a CPU to allow independent autonomous operations in the event of loss of Ethernet network communications.
  - C. Master Clock: Furnish and install programming to automatically update the PLC clock for daylight savings time across all PLC's, and Computer Control Station. The current time shall be transmitted to all PLC CPU's. All system clocks shall be updated within 2 seconds of a change being entered at the main PLC master clock.
  - D. The PLC system are industrial general purpose in nature, not custom designed and built for this isolated application, but have been configured location specific for the existing facility. The PLC controller has been operationally customized and made location specific by installing the applicable software to control and monitor the existing field devices. All new PLC components shall be manufacturer's standard modules.
  - E. Currently furnished and installed is a complete PLC system in each SEC security equipment controller cabinet noted on the plans.
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- F. Program Back-up Storage Media: At the end of the project each PLC CPU program shall be back-up to a permanent storage media. The existing CPU should have a programming data port allowing for downloading PLC program for storage.

### 1.3 SYSTEMS INTEGRATION

- A. The PLC units are integrated with the other security control, monitoring, and detection system components (i.e., passive duress pushbutton stations, inmate call-in pushbutton stations, and designated fire alarm smoke detectors, etc) and with door lock hardware, designated TV set electrical outlets on/off functions, and water solenoid control valves on/off functions.
- B. The contractor shall furnish and install new CAT5e Ethernet LAN from each PLC system locations to the new TCS system headend equipment locations. The new Ethernet LAN shall replace the existing PLC fiber optic data loop network.

## PART 2 - PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURERS

- A. The existing PLC system CS-series products are manufactured by (Omron). The existing (Omron) PLC systems consist mainly of, but are not limited to the following type equipment (The confirmation of the existing PLC equipment and materials, and PLC configurations is the responsibility of the Contractor to be field verified):
1. PLC CPU (Omron) Sysmac CS1G programmable controller (CPU44H).
  2. PLC CPU (Omron) Sysmac CS1G programmable controller (CPU43-V1)
  3. PLC power supply (Omron) PA204.
  4. PLC Comm. (Omron) CLK52
  5. PLC Comm. (Omron) ETN21
  6. PLC Comm. (Omron) CLK11
  7. PLC Comm. (Omron) ASC02
  8. PLC output module (Omron) OD292
  9. PLC input module (Omron) ID291
  10. PLC output module (Omron) OC225
  11. PLC input module (Omron) ID212
  12. PLC Base Unit (Omron) CS1W-BI083

### 2.2 GENERAL

- A. Existing logic control systems are programmable controllers, which control field-side input/output functions of the TCS station.
- B. The existing logic control system shall be redesigned so that each PLC CPU controller location operates totally independent of one another. Failure or loss of any controller shall not hamper the operation of any other controller.
- C. The existing programmable logic controller and I/O modules are of modular construction and can be installed and removed to and from the Base rack Unit.
- D. All modules are key-coded to ensure proper slot placement and polarity. All identical function modules are coded alike.
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- E. The controllers are constructed to withstand as a minimum, the following climatic conditions without the need for special enclosures or additional environmental control equipment such as fans or air conditioning.
    - a. Temperature: 0 to 60 C (operating), -20 to 70 C (storage)
    - b. Humidity: 10 to 90% r. h. (non-condensing)
  - F. The existing Controller is capable of operating over a voltage range of 88-132V with a frequency of 45-63 Hz.
  - G. Where more than one controller is used, all controllers are of one single manufacturer and if different size controllers are used, these must be fully compatible.
  - H. All controllers shall share the same control language and I/O structure.
  - I. All controller and I/O structures of the single manufacturer shall be capable of being mounted on the same size fixing centers to allow for larger capacity controllers to be installed in the future should the facility require an expansion beyond the limits specified in the original contract documents.
  - K. Programmable controller manufacturer must guarantee the availability of replacement/spare parts for a minimum of ten (10) years.
  - L. All input/output modules and housings are of a standard type and should be fully interchangeable with all controllers of the same size.
  - M. All controllers should have built-in comprehensive self-test and self-diagnostic capabilities to ensure reliable operation.
  - N. All controllers shall have built-in status indication of power supply voltages and controller healthy signal to show proper operation.
  - O. All I/O cards are rated for 24V DC and each card shall have as minimum, thirty-two (32) discrete circuits. These circuits are rated such that they have a minimum of 50% more current capacity than required by the respective I/O devices connected to them.
  - P. Controllers must be capable of driving local I/O cabinets, where local is defined as up to one hundred (100) feet from the control unit, without the need for further intelligent interface modules or additional power supplies.
  - Q. The existing PLC systems are capable of communicating with (TCS's) over high-speed Ethernet links by replacing the existing Communications modules with the (Omron) Ethernet Unit. Communications over the new Ethernet links shall be accomplished using CAT5e UTP cables.
  - R. Fiber Optic Equipment
    - a. Where distances between the existing PLC rack locations and the Central headend security system equipment exceeds 300-feet, the contractor shall install fiber optic cables (i.e., 50-micron, multimode) between the existing PLC rack locations and the Central headend security system equipment along with any needed fiber optic convertor modules, fiber optic patch panels and fiber optic patch cords (50-micron, multimode, LC to LC), Fiber optic Ethernet switches, etc required for proper system operation.
    - b. New Fiber Optic communications Modules are to be furnished and located in PLC CPU
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cabinets with continuous fiber cables routed through to the new Central headend security system equipment.

- c. Acceptable manufacturer fiber optic cables: Superior Essex, Corning Cable Systems, Belkin, and equal approved by Owner's designated representative/Owner.
- d. Acceptable manufacturer Gigabit fiber optic Ethernet switch: Netgear, CISCO, 3Com, ICC, Linksys, and equals approved by Owner's designated representative /Owner.

## 2.3 FUNCTIONAL REQUIREMENTS

- A. The system application program and operating software and fixed database shall be stored in EPROM.
  - B. Memory battery backup for general purpose ram shall be for a minimum period of twenty-four (24) months in the event of a power failure.
  - C. The controllers shall provide all necessary logic functions, timing functions, input points, output points, memory, communication capabilities and software for the operating features shown in the contract documents.
  - D. Functions shall include but not be limited to the following which can be implemented in bit logic, word logic or a mixture of both bit and word logic sufficient levels, variations and quantities to provide the operating features shown in the contrast documents.
    - a. Logical AND, OR, XOR and INVERT
    - b. On/Off Delay
    - c. Counters
    - d. Timers
    - e. Sequencers
    - f. Four Function Math (Add, Subtract, Multiply, Divide)
    - g. VCD Input and Output
    - h. Contacts
    - i. Coils
    - j. Block Instructions (conditional jumps)
    - k. Group Logic Functions
    - l. Array Math Functions
  - E. Communications capability shall be provided in logic controllers to allow serial communication between distributed controllers, and ASCII serial devices. Serial communications shall be RS232, RS422, or 20 mA and shall operate at selectable speeds from 300 to 19,200 baud.
  - F. The programmable logic controllers shall be configured to communicate to all other PLC's and (TCS's) via industry standard Ethernet LAN network utilizing non-proprietary protocols.
  - G. The following modes of operation of the CPU must be selectable via a key operated switch or programming software commands:

PROGRAM – Processor is not scanning program in memory and all outputs are held OFF.  
MONITOR – Processor is executing program and changes in user memory and data memory are allowed.  
RUN – Processor is executing program in memory and outputs are controlling to the program.  
No editing of data registers is allowed.
  - H. The above settings shall require either a key, or programming console with a key, or programming software loaded on a computer to change the operating mode of the CPU.
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- I. The processor shall incorporate extensive self-diagnostic features that will not half the processor. In addition, separate visual indicators will annunciate at the following conditions.
- POWER – Logic Power is applied to the CPU and I/O cabinet from the power supply.  
RUN – Processor is executing the program in memory and outputs are being controlled according to the program.  
OUTPUT INHIBIT – Processor is executing program in memory according to input status, but outputs are being held in the OFF state.  
ALARM – A non-fatal error (such as a low memory battery condition) has occurred in the PLC hardware or program software. The PLC is still running and the outputs are being controlled according to the program.  
ERROR – A fatal error (such as a memory parity error) has occurred, the CPU is not scanning the program and the outputs are held in the OFF state.
- J. In addition to visual self-diagnostic indicators (LED's), the processor shall have a specifically designated block of at least 100 WOR of internal diagnostic words and bits. These shall provide more detailed system status and fault diagnostic information accessible by programming equipment or intelligent peripherals.
- K. The processor must contain an error log area. This area must be able to log what error occurred and when the error happened, giving exact time and date. This area must be able to store a minimum of 1000 records.
- L. At a minimum, the internal diagnostic registers shall provide the type of digital (input or output) or intelligent (analog, ASCII, etc.) I/O unit inserted in console or programming software.
- M. The program storage medium shall be Battery Backed Random Access Memory (RAM). The memory shall be housed in the same enclosure as the processor.
- N. Each Network Interface unit for each PLC shall not consume more than one I/O slot in the main PLC cabinet.
- O. The Network Interface units on each of the PLC's shall be powered directly by the terminals located on the cabinet across the backplane like the other I/O units on that cabinet. In addition, the Network Interface units shall have auxiliary power supply terminals located on the cabinet, so that it can be powered separately from some uninterruptable source in the event of a CPU power supply failure.
- P. The data rate of the network shall not be less than 2-millions B.P.S. This data rate will remain the same regardless of the number of nodes on the network loop.
- Q. The network shall accommodate at least 62 nodes on any network loop.
- R. The transmitted data packets from any node must be capable of carrying not less than 512 bytes of data.
- S. The PLC and network system shall be designed so that each PLC system will accept at least four Network Interface Units operating simultaneously on their cabinets.
- T. Any node on the network must be able to send data to every other node on the network simultaneously.
- U. Using a single command, a network node can communicate with other nodes on three network
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levels: Nodes on the local network, nodes on the network connected directly via a gateway/bridge, and nodes on networks separated by one other network (i.e., connected via two network gateways/bridges). The main data communication protocol shall be via CAT5e Ethernet LAN.

- V. The logic control system installed I/O shall be no greater than 80% of the controller's capacity.
- W. The logic control system shall be supplied with 20% spare memory capacity available after completion of system software required by the contract documents for future system expansion.
- X. Standard PLC communication protocols confirmed by a third party are acceptable for lower level controls. Protocols shall provide a means of supervision to annunciate loss of communication.

## 2.4 CABLING AND WIRE

- A. Acceptable manufacturers:
    - Liberty Wire and Cable
    - Eastman Wire & Cable
    - West Penn Wire
    - Belden
    - Carol
    - General Cable
    - Clifford of Vermont, Inc.
  - B. Wire Size: Furnish and install sufficient wire gauge to limit voltage drop to 5% or less.
  - C. Listings: Wiring shall be listed for the installation. Wire indicated below is intended to provide electrical characteristic requirements.
  - D. Control Wiring: All control wiring within the relay cabinets shall be installed using good workmanship and standard shop wiring and control practices. Conductors shall be grouped and laced with nylon tie straps. Straps will be placed on each side of all bundle breakouts. Wiring will be supported at intervals not exceeding four inches and labeled at both ends. Each relay shall be labeled with its circuit number.
  - E. Line Voltage Wiring: Line Voltage Wiring that extends from electronic control relay screw terminal strips to the 120 VAC locks; receptacles, etc. shall meet Article 300 of the National Electric Code. All power conductors shall be a minimum 14 AWG THWN, 600 volt rated and shall be installed in raceways and equipment enclosures with other conductors within limitations defined by Article 300 of the National Electric Code.
  - F. Class 2 Circuit Wiring that extends from the electronic control relay screw terminal strips to the low voltage devices shall be Class 2 as defined by article 725 of the National Electric Code. All control conductors shall be a minimum of 20 AWG, jacketed, control cable. All control cable insulation shall be 600 volt rated.
  - G. All control wiring shall use stranded copper conductors. All terminations shall be made on screw terminal strips or shall be made with crimp type lugs correctly sized and applied to conductor with crimping tool intended for use with the lug or connector used.
  - H. All wiring systems shall be labeled and color-coded with labeling and coding shown on shop drawings. White conductors shall be used only for neutral conductors, green only for grounding conductors with exceptions of low voltage control wiring that meet the requirements of Article 725
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of the National Electric Code.

- I. All conductors within junction boxes pull boxes, and equipment enclosures shall be grouped and laced with nylon tie straps. Attach identification tabs in individual sets serving individual locks or groups. Conductor groups shall be identified on the tab with respect to room or area served.
- J. Control system conductors shall not be spliced. All conductors shall be continuous between the control termination point and the controlled device.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. **Coordination With Other Trades:** The contractor shall coordinate the work of this section with that of other Divisions as required to ensure that the entire work of this Project will be carried out in an orderly, complete, and coordinated fashion.
- B. **Ground System:** Connection to grounds for Transient Voltage Surge Suppressors shall be 1 ohm or less. All grounds shall be installed as required by the NEC. Provide necessary ground at each component and fence cabinet.
- C. **Ground Wire:** Furnish and install a ground wire sized as required by the NEC in all conduits containing conductors carrying voltages above 30 volts rms.
- D. **Listing:** All wiring and raceways shall be listed for the intended installation and installed in strict accordance with the National Electric Code as required by the conditions of where it is stalled. This includes but is not limited to ratings for riser, plenum, or wet installations.

#### **3.2 FABRICATION**

- A. All cables between cabinets for PLC inputs and outputs shall be provided with connectors for ease of trouble-shooting and service.
- B. All field wiring shall be landed on appropriately labeled screw terminal strips.
- C. All wiring shall be cabled or neatly bundled and secured to the housing with wire ties and internal wire ducts.

#### **3.3 FIELD QUALITY CONTROL**

- A. All functions specified shall be individually activated and the result documented. Utilize preprinted test sheets with space for comments and indicate "pass" or "fail" for each. These test reports shall be copied and submitted to the engineer prior to requesting the Owner's designated representative to witness the final functional test.
- B. All functions shall be demonstrated for the owner and Owner's designated representative.

#### **3.4 SOFTWARE**

- A. For each PLC, furnish to the owner uniquely identified:  
  
One (1) separate back-up CD or Disc for each PLC with the ladder logic file (programmer's notated file) and the source code. Each disk will be labeled with the project name, programs, PLC, programmer, and revision date. One (1) copy of the source code of the application software
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on magnetic media (disk, tape or cartridge).

- B. Furnish a single Microsoft Word file detailing all passwords for each PLC. This file shall also identify the following by system and panel:

- The file name of each program required for restoration of each failed PLC.
- The passwords required for each PLC as well as required programs.
- The name of the programmers for each custom program.
- The date of the last program change.

- C. Furnish documents listed in 3.4 A-B at project completion. Furnish a new set with all revisions after the completion of the Contract specifications.

3.5 SPARES

- A. The contractor shall turn over to the Owner, the minimum following program documentation and materials:  
 One (1) copy of the programming and source codes of the PLC system application software shall be saved onto Compact Disk media, or thumb drive, or other removable storage media. The copy shall have all programmer comments variable names and mnemonics, and annotated programming statements/lines of coding included. All programming keys, passwords, and access codes for accessing to the new programming software shall be provided to the Owner allowing the Owner to make any desired future programming changes to the reconfigured and re-programmed PLC system programs. All needed programming decoder software and de-compiler programs shall be provided to the Owner allowing the Owner to make any desired future programming changes to the reconfigured and re-programmed PLC system programs.  
  
 Furnish one (1) PLC central processor of each type installed.  
 Furnish one (1) power supply of each type installed.  
 Furnish one (1) group of programmed memory media for each program installed.  
 Furnish one (1) (Omron) ETN21 unit.
- B. Furnish one (1) spare input card of each type installed in the facility.
- C. Furnish one (1) spare output card of each type installed in the facility.
- D. Furnish one CPU memory card for each PLC CPU.
- E. Spare parts shall be packaged in appropriate protective packing material.
- F. Box spare parts for easy storage and clearly identify the contents of each box on four sides of each container.

LOCKING CONTROL SCHEDULE

NOTE: The following schedule should be used as a guide to offer estimated door quantities for the Contractor to consider when determining the amount of doors that are controlled and monitored from each existing graphic locking control panel location, and touchscreen computer station location.

LOCATIONS	ESTIMATE QTY OF CONTROLLED AND MONITORED DOORS

LCP1-locking control panel in 7-North Control Room (N7-903)	See Floor Plan
LCP2-locking control panel in 7-North Control Room (N7-903)	See Floor Plan
LCP3-locking control panel in 7-North Control Room (N7-903)	See Floor Plan
LCP4-locking control panel in 6-North Control Room (N6-903)	See Floor Plan
LCP5-locking control panel in 6-North Control Room (N6-903)	See Floor Plan
LCP6-locking control panel in 6-North Control Room (N6-903)	See Floor Plan
LCP7-locking control panel in 5-North Control Room (N5-903)	See Floor Plan
LCP8-locking control panel in 5-North Control Room (N5-903)	See Floor Plan
LCP9-locking control panel in 5-North Control Room (N5-903)	See Floor Plan
LCP10-locking control panel in 4-North Control Room (N4-903)	See Floor Plan
LCP11-locking control panel in 4-North Control Room (N4-903)	See Floor Plan
LCP12-locking control panel in 4-North Control Room (N4-903)	See Floor Plan
LCP13-locking control panel in 3-North Control Room (N3-903)	See Floor Plan
LCP14-locking control panel in 3-North Control Room (N3-903)	See Floor Plan
LCP15-locking control panel in 3-North Control Room (N3-903)	See Floor Plan
LCP16-locking control panel in 2-North Control Room (N2-903)	See Floor Plan
LCP17-locking control panel in 2-North Control Room (N2-903)	See Floor Plan
LCP18-locking control panel in 2-North Control Room (N2-903)	See Floor Plan
LCP19-locking control panel in 1-North Control Room (N1-903)	See Floor Plan
LCP20-locking control panel in 1-North Control Room (N1-903)	See Floor Plan
LCP21-locking control panel in 1-North Control Room (N1-903)	See Floor Plan
LCP22-locking control panel in 7-South Control Room (S7-903)	See Floor Plan
LCP23-locking control panel in 7-South Control Room (S7-903)	See Floor Plan
LCP24-locking control panel in 7-South Control Room (S7-903)	See Floor Plan
LCP25-locking control panel in 6-South Control Room (S6-903)	See Floor Plan
LCP26-locking control panel in 6-South Control	See Floor Plan

Room (S6-903)	
LCP27-locking control panel in 6-South Control Room (S6-903)	See Floor Plan
LCP28-locking control panel in 5-South Control Room (S5-903)	See Floor Plan
LCP29-locking control panel in 5-South Control Room (S5-903)	See Floor Plan
LCP30-locking control panel in 5-South Control Room (S5-903)	See Floor Plan
LCP31-locking control panel in 4-South Control Room (S4-903)	See Floor Plan
LCP32-locking control panel in 4-South Control Room (S4-903)	See Floor Plan
LCP33-locking control panel in 4-South Control Room (S4-903)	See Floor Plan
LCP34-locking control panel in 3-South Control Room (S3-903)	See Floor Plan
LCP35-locking control panel in 3-South Control Room (S3-903)	See Floor Plan
LCP36-locking control panel in 3-South Control Room (S3-903)	See Floor Plan
LCP37-locking control panel in 2-South Control Room (S2-903)	See Floor Plan
LCP38-locking control panel in 2-South Control Room (S2-903)	See Floor Plan
LCP39-locking control panel in 2-South Control Room (S2-903)	See Floor Plan
CP40-locking control panel in Central/Master Control Room.	11ea Sliding Doors, 2ea Swing Doors
TCS41/CC1-touchscreen computer station in Central/Master Cont. Room.	All Doors
TCS42/CC2-touchscreen computer station in Central/Master Cont. Room.	All Doors
TCS43/CC3-touchscreen computer station in Security Data Room.	All Doors
CP44-locking control panel in Sallyport Control Room B124.	2ea Sliding Doors, 2ea Swing Doors
CP45-locking control panel in Sallyport Control Room B124.	2ea Sliding Doors, 2ea Swing Doors
LCP46-locking control panel in Intake Booking Control Room 162.	1ea Sliding Door, 1ea Swing Door
CP47-locking control panel in Intake Booking Control Room 162.	10ea Sliding Doors, 4ea Swing Doors
LCP48-locking control panel in Intake Booking Control Room 162.	9ea Sliding Doors, 12ea Swing Doors
LCP49-locking control panel in Old Loading Dock Control Room B105.	4ea Sliding Doors, 4ea Swing Doors
LCP50-locking control panel in Old Intake Control Room D224.	5ea Sliding Doors, 4ea Swing Doors

P51-locking control panel in Old Intake Control Room D224.	4ea Roll-up Doors, 2ea Swing Doors
LCP52-locking control panel in Old Intake Control Room D224.	4ea Sliding Doors, 4ea Swing Doors
LCP53-locking control panel in Kitchen Prep-Area Security Office K138	4ea Sliding Doors, 4ea Swing Doors
CP54-locking control panel in Kitchen Loading Dock Control Rm. K127	4ea Sliding Doors, 4ea Swing Doors
LCP55-locking control panel in Medical-1 Control Rm. B316 3 <sup>rd</sup> Floor.	6ea Sliding Doors, 4ea Swing Doors
CP56-locking control panel in Medical-1 Control Rm. B316 3 <sup>rd</sup> Floor.	4ea Sliding Doors, 18ea Swing Doors
LCP57-locking control panel in Medical-1 Control Rm. B316 3 <sup>rd</sup> Floor.	14ea Sliding Doors, 6ea Swing Doors
CP58-locking control panel in Medical-2 Control Rm. D346 3 <sup>rd</sup> Floor.	4ea Sliding Doors, 4ea Swing Doors
CP59-locking control panel in Medical-2 Control Rm. D346 3 <sup>rd</sup> Floor.	4ea Sliding Doors, 18ea Swing Doors
CP60-locking control panel in Medical-2 Control Rm. D346 3 <sup>rd</sup> Floor.	7ea Sliding Doors, 4ea Swing Doors
LCP61-locking control panel in Medical Observation Unit Control Rm. D341 3 <sup>rd</sup> Floor.	14ea Sliding Doors, 6ea Swing Doors
LCP62-locking control panel in Medical Observation Unit Control Rm. D341 3 <sup>rd</sup> Floor.	10ea Sliding Doors, 4ea Swing Doors

END OF SECTION 28 05 10

**SECTION 28 40 20****TOUCH SCREEN CONTROL SYSTEM****1.0 PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes the following:
    - 1. Furnish and install all components, and software and programming for fully functional and operational integrated locking control security systems as indicated on the plans and described herein. The (TCS)- touchscreen computer Stations and locking control panels shall be the primary operator interfaces connected to the (PLC)-programmable logic controllers. Security equipment monitors and controls the operating systems, based on PLC technology with touchscreen video control station operator interface(s), and graphic locking control pushbutton panels shall be utilized on this project.
    - 2. The (TCS) touchscreen control system shall be provided to perform override and lockdown of any and all other Locking Control System Functions required for this project. The (TCS) shall have graphic floor plan displays of all areas of the facility having control and monitoring requirements defined in these and other Division 28 Contract Documents for this project.
    - 3. The Contractor shall be responsible for providing and installing 2ea new (TCS's) and UPS units in the Central Control room, 1ea new (TCS) and UPS unit and 1ea new (SDLCS)-Server/Data logging computer station and UPS units in the Security Data Room. The contractor shall furnish and install new Ethernet LAN between the (TCS) locations and (SDLCS) and existing (PLC) locations via CAT5e cables.
    - 4. The contractor is responsible for creating all of the floor plan screen displays having icons for controlling and monitoring all required field devices.
    - 5. The locking control systems control and monitor all electrically controlled solenoid operated and motor operated hardware, motorized sliding or roll-up gates and/or doors, and other devices as indicated in the contract drawings and specifications. The locking control system shall also monitor status conditions, security conditions, and other functions as described herein. The software and programming, and logic functions necessary for operating and annunciating the field devices conditions to the locking control systems shall be provided by programmable logic controllers (PLC) and (TCS) touchscreen control stations and existing graphic locking control panels as described in the contract drawings and this and other sections of the contract specifications.
    - 6. The (TCS) touchscreen systems shall be interconnected and interfaced with the (PLC) locking control systems, TV system electrical outlets, water controls, CAT5e Ethernet LAN, and passive duress systems, inmate call-ins, chase-mounted smoke detector alarm status, Secure Mode, Group Unlock, and other functions described in the Contract Documents.
    - 7. Basic Operation: All areas of the buildings will be graphically represented displaying all monitored and controlled icons as required for proper operation. The graphics for the (TCS) shall fit the screen size with the need for navigating from one screen to the next
-

- in order to view the designated floor/building areas. Configuration and icon functions shall be as described in the Division 28 specifications and Contract Documents.
8. This project requires the modification of the existing Locking Control Systems to accommodate the new door lock hardware being furnished and installed by the DEC-detention equipment contractor. The existing door lock wiring physically located at the designated existing cell doors and existing designated swing doors (and the designated inmate call-in pushbutton wiring) shall be re-wired in accordance with the wiring diagrams provided in the Contract Drawings. The door lock wiring and inmate call-in pushbutton wiring physically located within the existing security equipment cabinets shall be re-wired in accordance with the wiring diagrams provided in the contract drawings and shall consist mainly of, but not be limited to, new and updated (PLC Ethernet NIC-network interface communications boards, cabling, etc), new electromechanical relays, new fuses and fuse terminal blocks, new wire terminal blocks-designated blocks, new 24VDC power supplies, new interconnection cables/wiring, and new TVSS-transient voltage surge suppression devices. The wiring modifications should be installed within the new metal SEC security equipment cabinets, and should be interfaced with the newly modified locking control system metal panel assemblies by interconnecting the existing field door lock wiring terminations into the PLC digital input modules and interconnecting the PLC digital output modules with the new electromechanical relays and fuse terminal blocks. Where possible reuse the existing field wiring and add as needed any new wiring and conduits to provide fully functional and operational PLC-based locking control systems. All existing equipment, components, materials, wiring, cabinets, etc removed by the Contractor shall be turned-over to the Owner.
  9. The scope of this project also requires replacing the designated existing (GLCP-graphic locking control panels) with new (TCS-touchscreen computer stations). Several designated existing (GLCP) locations shall not be replaced with (TCS's), (See Contract Drawings for new (GLCP) locations). The TCS systems shall be the operator interface to designated controlled systems for the facility. Graphical user interface (GUI) control stations configured as (TCS) touchscreen computer stations along with (PLC's) shall provide all control functionality for the operators to effectively control and monitor all systems and field devices as indicated on the Contract drawings and in the Contract specifications. All (TCS) shall have software programming configured to emulate the operational requirements shown on the contract drawings and contained within the Division 28 specifications. The (TCS) system computers all shall have software licenses configured as (thick-client) license and shall data connect via secure Ethernet LAN with the associated (PLC) programmable logic controllers for each building location. Should the Ethernet connection between any (TCS) and (PLC) system location and the other (TCS) and (PLC) system locations become severed the isolated (TCS) and (PLC) system shall remain fully functional as a standalone system and continue to perform all of the local functions and operational requirements shown in the contract documents. Once the Ethernet connection is restored the severed (TCS) and (PLC) system shall function as normal with the entire locking control systems.
  10. The two new main (TCS) Touch Screen Computer Stations in Master Control room, and the new touchscreen system (TCS) Touch Screen Computer Station in the Security Data Room shall be programmed to monitor and control all of the door locks, gates operators, DPS-door position switches, inmate call-in pushbuttons, duress stations, UPS status, LAN heartbeat status, emergency release functions, group unlock/release functions, access functions, Night Secure functions, posted note functions, Silence/select/acknowledge and Reset functions, Interlock and bypass functions, Lockdown functions and other functions shown on the Contract Drawings and in the Contract Specifications in the Detention areas and Administration Services Areas of the facility. The touchscreen system (TCS) Touch Screen Computer
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- Stations in the Housing Unit Control rooms shall operate all of the controlled doors and monitored doors, TV on/off functions, and water controls, inmate call-ins, chase-mounted smoke detector alarm status, designated duress stations, secure mode, and group unlock/release functions, etc shown in the Contract Documents in the respective designated Detention areas. The two (TCS's) in each housing POD control room shall have the ability to display the screen layouts of each other via icon activation located on each of the two (TCS's). The two (TCS's) in a housing building should always display the proper orientation of the screen display of the other (TCS) located in the same housing unit control room. In the event that one of the two (TCS's) should fail to operate the other (TCS) shall be able to perform the operations and functions of both (TCS's). The contractor will be responsible for developing the floor plan graphical layout displays for the (TCS's) containing all required icon functions.
11. The two main (TCS) Touchscreen Computer Stations in Master Control room and the (TCS) in Security Data Room shall be redundant and operate simultaneously at all times, and perform override/takeover and lockdown (enable/disable) functions of all other (TCS) locations facility-wide as well as perform override/takeover and lockdown (enable/disable) functions of all existing (GLCP's) graphic locking control panels (i.e., North Tower, South Tower, Low-rise areas, 1<sup>st</sup> floor mezzanine areas, etc). When the main (TCS's) in Master Control room and/or Security Data Room override/takeover any other (TCS) locations and/or (GLCP) locations all of the operations and functions of that (TCS) and (GLCP) transfers to the main (TCS's) in Master Control room and/or Security Data Room until Master Control/Security Data Room (releases) that (TCS) or (GLCP) and the (TCS) or (GLCP) becomes (re-enabled) via log-in process or re-enable activation.
  12. The locking control system shall have a Central Control and Alarm Reporting Data-logging computer System that shall be programmed to log, store/archive, and retrieve (PLC) and (TCS) function activations. Data Logging of all alarms and critical actions are recorded to the hard drive. Critical actions initiated at any station are reported to the data logging system. Such reports shall consist of a time and date tag, activity description, station tag and the operator logged on to the system. Special alarms and conditions shall be reported in a similar manner. Critical actions are defined as follows: a) Alarm activations b) UPS failure system running on back-up battery c) Emergency Release activation. d) Bypass functions e) log-on and log-off events f) emergency functions activations. The data logging system shall maintain and store files from which reports may be generated. The Data Logger shall purge old files after a preset time. The log files will be stored on the hard drive and kept for a predetermined amount of time. The owner shall have the option to archive data files to CDs.
  13. The contractor shall provide and install new Ethernet data networking systems at each of the modified PLC-based locking control system locations. Each of the new Ethernet data networking systems shall connect back to the two (TCS's) in Master Control Room, and Central Control and Alarm Reporting Data-logging computer System and (TCS) in the Security Data Room via Contractor provided fiber optic cables. The new Ethernet LAN should connect the new TCS's and their associated PLC's together as well with the two main TCS's in the Central Control room and TCS in Security Data Room allowing them to communicate via Ethernet LAN to the Alarm Reporting Data-logging computer System in the Security Data room via Contractor provided fiber optic cables routed between each PLC locking control system location. The contractor will be responsible for providing all Ethernet equipment for fully functional and operation. LAN.
  14. All Locking Control Systems equipment and (TCS's) shall have UPS battery back-up via new UPS units as part of the work scope of this project.
- B. Related Sections include the following:
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1. Division Section "Detention Door Hardware"
2. Division Section "Detention Work"
3. Division Builders Hardware
4. Division 28 Security Systems

### 1.3 DEFINITIONS

- A. LAN: Local Area Network
- B. LED: Light-emitting diode.
- C. MOV: Metal-oxide varistor.
- D. Monitoring: Acquisition, processing, communication, and display of system and equipment status data, and event and alarm signals.
- E. Secure: Closed and locked and with no unlock or open commands pending. (For doors and gates.). Unless specified otherwise, each door and or gate equipped to be monitored, or monitored and controlled shall be annunciated in the following manner: The red color icon indicator on the touchscreen control station shall illuminate on any non-secure condition of the door or gate. The secured status of controlled doors and gates on this project will be a gray color icon on the touchscreen control station and will be monitored by two or more position switches which include but are not limited to door/gate position, lock-bar position, roller bolt position, latch bolt position, and motor limit switches.
- F. PLC: Programmable logic controller.
- G. Unsecured: Unlocked or open. (For doors and gates.)
- H. TCS: Touchscreen Control Station
- I. Systems Integration: The bringing together of components of several systems containing interacting components to achieve indicated functional operation of combined systems.
- J. TVSS: Transient voltage surge suppressor.
- K. Zone: A space or area defined on Drawings for a specific purpose.

### 1.4 SUBMITTALS

- A. Product Data: For components for detention monitoring and control and systems integration. Include dimensions and data on features, performance, electrical characteristics, ratings, and finishes.
  - B. Shop Drawings: Detail assemblies of standard components that are custom assembled for specific application on this Project.
    1. Outline Drawings: Indicate dimensions, weights, arrangement of components, and clearance and access requirements.
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2. Touchscreen Control Station Screen Layout: At reduced scale, show required artwork and device identification of screen display.
  3. Wiring Diagrams: Detail specific power, control, signal, communication, and data wiring and cabling to suit Project. Coordinate nomenclature and presentation with block diagram.
  4. Raceway Riser Diagrams: Detail raceway runs required for detention monitoring and control and for systems integration. Include designation of devices connected by raceway, raceway type and size, and type and size of wire and cable fill for each raceway run.
  5. Product data information for touchscreen computer station including CPU, monitor, keyboard, mouse, touchscreen overlay, touchscreen controller, LAN equipment, memory size, processor speed, video card, etc.
- C. Coordination Drawings:
1. Functional Block Diagram: Show single-line interconnections between components including interconnections between components specified in this Section and those furnished under other Sections.
    - a. Indicate methods used to achieve systems integration.
    - b. Indicate control, signal, and data communication paths and identify PLC's, networks, control interface devices, and media to be used.
    - c. Describe characteristics of network and other data communication lines.
    - d. Describe methods used to protect against power outages and transient voltages including types and ratings of isolation and surge suppression devices used in data, communication, signal, control, and ac and dc power circuits.
- D. Samples for Initial Color Selection: For touchscreen control station graphics.
- E. Touchscreen Audible Tones and Visual Indications: Include the following material for use at touchscreen video control station:
1. Audible indication, notification, and alarm tones.
  2. Visual materials for touchscreen video control panel display screens, complete with proposed shapes, colors, scale, and textual content, including:
    - a. Graphics, including floor and site plan maps.
    - b. Icons.
    - c. Dialog boxes.
    - d. Help messages, prompts, and instructions.
  3. Submittal Media: CD-ROM with color printout of graphic and screen displays.
- F. Qualification Data: For Detention Electronic Systems Integrator.
- G. Field quality-control test reports.
-

- H. Operation and Maintenance Data: For detention monitoring and control equipment components to include in emergency, operation, and maintenance manuals.
- I. Program documentation, software licenses, and backup copies of software used on Project.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by detention monitoring and control equipment manufacturer and with detention facility construction and systems integration experience with the following but not limited to electronic systems:
  - 1. Card Access.
  - 2. Video Visitation.
  - 3. Intercommunications.
  - 4. Paging.
  - 5. Wireless Duress.
  - 6. CCTV Video surveillance.
  - 7. Watchtour Systems
  - 8. Touchscreen and PLC controlled locking control systems.
  - 9. CATV system
- B. Detention Electronic Systems Integrator Qualifications: A qualified detention electronics systems Installer who has completed detention electronic systems integration work for installations similar in material, design, and extent to that indicated for Project, and whose work has resulted in construction with a record of successful in-service performance.
  - 1. Experience: Full detention electronic systems integration responsibility for no fewer than 5 detention facility projects (jails or prisons) that have been completed and in operation for a minimum of 5 years. At least one of the projects shall be a lock and door replacement project.
  - 2. Experience: Detention Electronic Systems Integrator shall employ personnel that have documented experience exercising full responsibility for overall systems integration for the types of detention monitoring and control systems indicated for this Project and for facilities similar in scope to this Project.
    - A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use and installation conditions.

## 1.6 SERVICE CONDITIONS

- A. Environmental Service Conditions: Systems, equipment, and components shall be capable of operating continuously in the following conditions without mechanical or electrical damage or degradation of operating capability:
    - 1. Ambient Temperature: 140 degree F (60 deg C).
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2. Relative Humidity: 10 to 95 percent, non-condensing.

B. Electrical Service Conditions: Equipment shall operate continuously in the following conditions without damage or degradation of operating capability:

1. Voltage Range for Equipment with a Nominal Rating of 120-V AC: 88 to 132 V.
2. Voltage Range for Equipment with a Nominal Rating of 24-V DC: 22 to 85 V.
3. Frequency Range for Equipment with a Nominal Frequency Rating of 60 Hz: 45 to 63Hz.

## 1.7 COORDINATION

- A. Coordinate Work of this Section with that of Sections specifying systems and components required to be integrated with detention monitoring and control equipment.
- B. Coordinate features of detention monitoring and control components with those of related detention electronic systems.
1. Provide integrated interconnections of compatible components.
  2. Match components and interconnections for optimum performance of indicated functions.

## 1.8 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, provide 24 months' full maintenance by skilled employees of Detention Electronic Systems Integrator. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper detention monitoring and control system operation. Provide parts and supplies same as those used in the manufacture and installation of original equipment and components.

## 1.9 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Fuses: A quantity equal to 10 percent of each type and rating indicated, but no fewer than 20 of each.
  2. Fuse Blocks: 5 of each type used.
  3. Power Supplies: 1 of each type installed.
  4. Network Interface Cards: 1 of each type installed.
  5. Relay Modules: 5 of each type used.
  6. Wire and Cable Terminals: 50 of each type and size used.
  7. PLC's: 1 of each type and configuration used.
  8. PLC I/O Modules: 1 of each type and configuration used.
  9. PLC EPROM's: 1 completely programmed module for each program used.
  10. I/O Modules: 1 of each type installed.
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11. 1ea Ethernet switch.
12. 1ea Complete Touchscreen computer station.

## **PART 2 - PRODUCTS**

### **A. PART 2 – PRODUCTS**

#### **2.0 MANUFACTURERS**

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
  2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

#### **2.1 FUNCTIONAL DESCRIPTION OF SYSTEM**

- A. System Architecture: As follows:
1. Control Panels for Monitoring and Control Operator Interface:
    - a. Touchscreen video control stations.
  2. Normal System and Device Programming Equipment:
    - a. Touchscreen video control station.
    - b. Laptop portable computer.
    - c. Maintenance printer (laser ink jet)
  3. Interconnection of Touchscreen Video Control Panels: Through an Ethernet network.
  4. Interconnection of PLC's with Each Other and with Touchscreen Control Stations: Through a Ethernet data communication network (LAN).
  5. Interface between PLC System and Controlled and Monitored Devices: Relay and fuse assemblies and terminal block interfaces.
  6. Interface between PLC System and Touchscreen System: Through (Server-based) dedicated, secured, Ethernet Local Area Network.
- B. Systems Integration: Detention monitoring and control system (Touchscreen System) shall be integrated with, but not limited to, features and functions of the following systems and equipment:
1. Locking Control System(s)
-

- 
2. PLC System(s)
  3. TCS touchscreen computer station(s)
- C. Reliability: Select components and arrange, assemble, construct, wire, connect, integrate, adjust, and program the system so no single malfunction or equipment failure can impair the normal operational control function of no more than 1 percent of doors and associated components controlled by the overall system.
- D. Independent Operation: System equipment, software, operation, controls, and communications shall provide, as an optional emergency control mode, totally independent operation for the primary local control panel for each operational area.
- E. System Response Time: For indicated items, shall be within the following limits:
1. Electromechanical Locking and Unlocking of Doors: Within one second of operator action at touchscreen control station.
  2. Initiate Mechanical Movement of Electrically Controlled Doors and Gates: Within one second of operator action at touchscreen control station.
  3. Initiate Audible and Visual Indications at Control Panels: Within one second of change of state of monitored field devices, or of alarm or intercom call-in events.
  4. Initiate Automatic Switching and Start of Automatic Countdown Cycles: Within one second of occurrence of specified triggering event.
- F. Automatic Logging of System Events: To a system central-processing server and/or touchscreen central-processing server.
1. Stores, processes, and reports on logged data using an approved software package designed for the purpose.
  2. Events to Be Logged: System shall be capable of logging any combination of events that may be registered on the system. Provide logging of the following events in initial programming of the system:
    - a. Operator log-on and log-off.
    - b. Alarms and alarm responses.
    - c. Door interlock overrides.
    - d. Gate operation.
    - e. Overrides and Lockdowns
    - f. Fire Exit Doors
    - g. Duress
    - h. Emergency Release
    - i. UPS failure
    - j. PLC Controller Error (via watchdog relay)
    - k. Network communication failure
  3. Data to be logged for each event:
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- a. Date and time of occurrence.
  - b. Action-point identification.
  - c. Operator name (for operator actions).
- G. Audible Tone: A distinctive, audible, confirmation signal tone shall sound locally for 0.25 second each time an operator performs a switching, selection, acknowledgment, silence, reset, or other similar operation at a control panel.

## 2.2 COMPONENT PROTECTION

- A. Surge Protection: Protect components from voltage surges originating external to equipment housings and entering through power, communication, signal, control, and sensing leads. Include surge protection for external wiring of each conductor entry connecting to components.
1. Minimum Protection for AC Power Circuits 120 V and More: Multistage surge suppressors, listed under UL 1449, using a combination of inductors and silicon avalanche diodes or equivalent, and with 300-V suppression level and 5-nanosecond maximum response time.
    - a. Silicon Avalanche Diodes: Bipolar, Grade A, plus or minus 5 percent tolerance.
    - b. Discrete TVSS Units External to Protected Equipment: Enclosed modules with indicating lights labeled "power on" and "failure."
  2. Minimum Protection for Communication, Signal, Data, Control, and Low-Voltage Power Circuits: Silicon avalanche diode, Gas-discharge, MOV, Silicon avalanche diode, gas-discharge, or MOV-type arresters rated 90 V at 5000 A, and as recommended by equipment manufacturer.
- B. Interference Protection: Component function shall be unaffected by radiated-radio-frequency interference and electrical induction of 15 V/m over a frequency range of 10 to 10,000 MHz, or by conducted interference signals up to 0.25-V RMS injected into power supply lines at 10 to 10,000 MHz.

## 2.3 LOCKING CONTROL PANELS (Hardwired)

- A. Existing to be retained and reused, and reprogrammed integrated into the retrofitted locking control systems.

## 2.4 TOUCHSCREEN COMPUTER STATIONS

- A. Acceptable Manufacturers:  
Complete and functional products, conforming to the Contract Documents, shall be provided by one of the following manufacturers, other products approved by A/E and Owner:
1. Locking Control Graphic Panels (existing panels to be retained and re-used).
  2. Programmable Logic Controllers manufactured by Omron.
  3. Touchscreen displays manufactured by Elo Touch Solutions
  4. Touchscreen Software manufactured by (Invensys)/Wonderware InTouch
  5. Uninterruptible Power Supplies manufactured by Powerware, APC, and Eaton
  6. Server and Client Workstations manufactured by IBM, Dell, Hewlett Packard

7. Network Equipment manufactured by Nortel, Cisco, Netgear, Black Box
- B. Description: Touchscreen Computer-operated, video control unit (TCS) complying with 47 CFR 15, Subparts A and B, for Class A and B digital devices and having dynamic presentation of annunciation and controls on a monitor equipped with a touch-sensitive panel overlay on the front of display screen. Include the following minimum features, components, and capabilities: (See other specification sections and contract drawings)

Minimum Hardware Requirements:

1. Each Touch Screen Control Station (TCS) shall consist of the following:
    - a. An IBM™ compatible with an Intel™ Pentium-4 class microprocessor chip set or equivalent. The operating speed shall be a minimum of two gigahertz (2.0 GHz), and a minimum of one hundred-twenty eight megabyte (128MB) of high speed on board memory shall be provided.
    - b. One 1.44mb three and one half inch (3.5") floppy drive, one 30.0GB (minimum) fixed hard drive and 48X variable speed CD-ROM
    - c. Flat Panels- A 19 (18.1" viewable-thin profile (3.6" deep)), TFT active matrix flat panel and video resolution of 1280 X 1024 at a 60Hz refresh rate with a 160-degree viewing angle. 3-line digital comb filter for separating the black and white from the color signals. Flat panel shall have S-video inputs, front A/V and headset inputs and 1 rear A/V input. The flat panel shall be fitted with a surface acoustic wave (SAW) type overlay. The base may be detachable and shall contain all basic user controls (power on/off, key 1, up, down, key 2, volume controls for integral speakers).
    - d. Integrated audio sound card and attachable speakers.
    - e. All necessary boards for integration to local area network, PLC's Distributed Controls, trackball and/or trackman™, touch screens, sound system, etc., shall be provided.
  2. Surface Acoustic Wave touch screen overlay (SAW):
    - a. The SAW shall utilize a single glass panel design with no front layers or coating. Touch point activation shall be by piezoelectric transducers attached to the corners of the touch screen assembly.
    - b. The SAW shall have a minimum light transmission from the attached CRT screen of ninety two percent (90%).
    - c. The position accuracy of the SAW shall have a standard deviation of error that is less than 0.080 in. (2.03 mm). This equates to less than +/- 1% error on most displays.
    - d. The SAW shall have a minimum of fifty (50) million touches with a finger at any given point and regardless of screen size.
    - e. The SAW shall have a maximum activation force of twelve ounces and shall have the capability (through software) of setting the activation force from one ounce up to the maximum (typically set for 3 ounces).
    - f. The SAW active area of the touchscreen is resistant to all chemicals that do not affect glass, such as: Acetone, Toluene, Methyl ethyl ketone, Isopropyl alcohol, Methyl alcohol, Ethyl alcohol, Ammonia-based glass cleaners, Gasoline, Kerosene, and Vinegar.
  3. File Server
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- a. The file server shall be an IBM compatible with an Intel Pentium-4 class processor chip set or equivalent with a minimum operating speed of three gigahertz (3.0GHz) and a minimum of two hundred-fifty six megabyte (256MB) of high speed on board memory shall be provided.
  - b. One 1.44mb three and one half inch (3.5") floppy drive, one 60.0GB (minimum) fixed hard drive and 48X variable speed CD-ROM.
  - c. Flat Panels- A 19 (18.1" viewable-thin profile (3.6" deep)), TFT active matrix flat panel and video resolution of 1280 X 1024 at a 60Hz refresh rate with a 160-degree viewing angle. 3-line digital comb filter for separating the black and white from the color signals. Flat panel shall have S-video inputs, front A/V and headset inputs and 1 rear A/V input. The base may be detachable and shall contain all basic user controls (power on/off, key 1, up, down, key 2, volume controls for integral speakers).
  - d. Integrated audio sound card.
  - e. All necessary boards for integration to local area network, PLC's Distributed Controls, trackball and/or trackman™, touch screens, sound system, etc., shall be provided.
  - f. Server Software (Minimum 4.0 or latest version)
4. LAN Type
- a. Ethernet 10 – 100 combo card RG58 Thinnet when loop, less than 500'
  - b. Network must meet IEEE 802 Standards
- C. Minimum Software Base Requirements
1. The software will be an *Off-the-Shelf* package available through a distributor network. The Off-the-Shelf software will be programmed and tailored to the specified functions and features described herein and shown on the drawings. Approved manufacturers of software are Wonderware, InduSoft, Omron CX Supervisor (touchscreen software) and approved equal by A/E are acceptable. *Custom or Proprietary software code will not be approved.*
  2. The software will convey an accurate floor plan of all areas, which require display on the monitor. The software will utilize the maximum resolution and colors of the monitor to enhance and simplify the displayed control and status information. Fast orientation and ergonomics will be the goal of all graphic displays.
  3. The software will provide log-on security password protection for all TCS's. There shall be a minimum of sixteen (16) levels access, expandable. The software will provide a database for users. This database shall support a minimum of two hundred fifty six (256) users, expandable.
  4. The software shall provide on-line utilities, accessed through the System Utilities function icon. These utilities shall provide the operator with the ability to edit and update required databases, system operating variables, report configuration and generation, alarm tags and point descriptions, etc. Security levels and password requirements shall protect these utilities.
  5. The software will automatically align and adjust the SAW during the boot-up sequence of the TCS without interaction of the correction officer.
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6. All software licenses shall be transferred to the Owner at completion of the project. This shall include, but not be limited to all original installation disks, software manuals, equipment manuals, etc., all projects specific application software shall be transferred at the end of warranty period.
  - D. Spare Parts:
    1. As a minimum provide the following for spares:
      - a. One (1) 32" flat panel display with Touchscreen installed as specified under the hardware section of this specification. Packed in the original shipping carton. This shall include; power cords, Touchscreen interface unit and all required interconnecting cables.
      - b. One (1) Pentium class - CPU as specified in the hardware section of this specification. This shall include; power cords and all required interconnecting cables.
  - E. Additional Programming: The Division 28 contractor shall include all associated costs for a three (3) month post occupancy system walk through with owner and shall allow for forty (40) hours of site specific program changes to the system.

Recovery Time: The Division 28 contractor shall be able to demonstrate to the owner at project completion that, in the event the TCS hard drive does not function properly, the DIV 28 contractor can bring the system to a fully operational capacity (log-on screen) upon performing a software routine to a new formatted hard drive. This operation shall be completed within 15 minutes.
  - F. Software: Custom developed from a detention application package, and commercially available through a distributor network. Proprietary software and programming is not acceptable.
    1. Acceptable Manufacturers:
      - a. InduSoft HMI software
      - b. Wonderware HMI software
      - c. Omron CX Supervisor (touchscreen software)
    2. Description: Programmed to provide features and functional performance indicated without use of proprietary software code (proprietary software will not be approved or accepted). Include the following:
      - a. Automatic alignment and adjustment of touchscreen interface with video monitor and its graphics.
      - b. Visual and Audible Presentations: Designed for simplicity and rapid operator orientation, and conducive to operator focus on the highest-priority mission functions assigned to operator and station.
      - c. Maps: Facility floor and site plans presented in selectable, scaled, on-screen, part-plan increments.
      - d. Access Protection: Log-on passwords provide 16 levels of security for access to various functional capabilities provided at each touchscreen station. System shall support 500 users.
-

- e. On-Line Utilities: Accessed through utility icons or menu items on screen and providing the following capabilities:
    - 1) Configures, generates, and prints reports, using automatically logged event data.
    - 2) Edits and updates programs, databases, system operating variables, point descriptions, help and operating protocol screens, and icon designations.
    - 3) Operator Assistance Material: Provides interactive help messages and other material, including the following:
      - a) Descriptions of functions initiated by control icons and menu items.
      - b) Explanations of conditions denoted by audible and visual indications.
      - c) Instructions for performing control process.
      - d) Synopses of policies governing control panel operation and standard operating procedures.
  - f. Audible Tones: Multiple computer-generated tones that can be programmed for frequency, volume, duration, and repetition rate and selected for each audio annunciation application.
3. Telephone Technical Support: Unlimited technical support to respond to user questions about hardware and communication link troubleshooting, reconfiguring, and adjusting.
- a. Telephone Calls: Toll free.
  - b. Availability: 24 hours per day, 7 days per week.
  - c. Responder Qualifications: Engineer or technician familiar with touchscreen based detention monitoring and control equipment.

## 2.5 TOUCHSCREEN LAN FILE SERVER

Description: IBM-compatible Pentium-4 microcomputer configured as a network file server. Minimum features, components, and capabilities shall be same as specified for touchscreen video control station central-processing unit, with the following exceptions:

1. An IBM™ compatible computer with an Intel™ Quad core microprocessor chip set or equivalent.
2. 3.0 GHZ minimum clock speed
3. 4 – USB Ports minimum
4. 2 – 1394 type communication Firewire Ports
5. Minimum 4 gig DDR2 SDRAM FBD Memory, 667MHz primary ram memory
6. Hard Drive: 320 gig SATA 3.0Gb/s, 7200 RPM Hard Drive with 8MB Cache
7. DVD+/-RW/CD-RW Internal Drive:  
8x DVD+R DL and DVD-R DL write speeds; 18x maximum DVD+R and DVD-R write speeds 8x DVD+RW and DVD-RW rewrite speeds 18x DVD-ROM read speed 12x DVD-RAM write speed 40x CD-R write speed 48x CD-ROM read speed
8. One 1.44mb three and one half inch (3.5") floppy drive
9. 40X minimum variable speed read write CD-ROM
10. Two -24 Bit, 96 kHz, 100 dB SNR Internal Sound Cards with Speakers.  
Speakers with integrated amplifiers and/or volume controls are not acceptable.

11. All necessary boards for integration to local area network, PLC's, trackball and/or trackman™, sound system, etc., shall be provided.
12. CCS Monitor: NEC MultiSync LCD 2070NX flat screen monitor. Unit shall provide the following features:
  1. 55 Watts or less power consumption.
  2. Operating temperature range of 41 to 95 degrees Fahrenheit.
  3. Pivot enabled stand.
  4. Height adjustable stand.
13. SCC Touchscreen Monitor
  1. Form factor: Desktop, wall-mount
  2. Enclosure color: Black
  3. Diagonal size: 42.0"
  4. Aspect ratio: 16 x 9
  5. Useful screen area: Horizontal: 36.8" (935 mm), Vertical: 20.8" (527 mm)
  6. Native (optimal) resolution: 1360 x 768 at 60 Hz
  7. Other supported resolutions: 1360 x 768 at 60 Hz, 1280 x 768 at 60 Hz, 1280 x 720 at 60 Hz, 1024 x 768 at 60, 70 or 75 Hz, 800 x 600 at 56, 60, 72 or 75 Hz, 640 x 480 at 60, 67, 72 or 75 Hz
  8. Colors: 16.7 million
  9. Brightness (typical): LCD panel: 500 nits, IntelliTouch: 450 nits
  10. Response time -total (typical): 5 msec
  11. Viewing angle (typical): Horizontal: 178° total, Vertical: 178° total
  12. Contrast ratio (typical): 3000:1
  13. Input video format: Analog VGA, DVI-HDMI
  14. Input video signal connector: Mini D-Sub 15-Pin VGA type
  15. Input frequency: Horizontal: 45-50 kHz, Vertical: 56-75 Hz
  16. Connectivity (PC): VGA-in D-Sub 15HD, RS232 D-Sub9, 3.5 mm PC audio input x1
  17. Connectivity (AV Input): Audio (left/right) for YPbPr x 1, Audio (left/right) x 1, CVBS in, Audio (left/right) in, S-Video in, HDMI, HDMI to DVI converter cable
  18. Power supply: Internal AC
  19. Warranty: 3 years
  20. Backlight lamp life: 50,000 hours to half brightness
  21. MTBF: 100,000 hours
  22. Agency approvals: FCC, CE, UL
  23. Speakers: 2 x 10W RMS speakers
  24. Mounting: 400 x 200 mm VESA mount – anchor stand to counter top
  25. Sealing: Touchscreen sealed to bezel, Touchscreen sealed to LCD

## 2.6 PORTABLE PROGRAMMING COMPUTER

- A. Description: IBM-compatible Pentium-4 microcomputer configured with internal high-speed network interface and the following additional minimum features and capabilities: CPU Speed: 2.0GHz. Minimum features, components, and capabilities shall be same as specified for touchscreen video control station central-processing unit, with the following exceptions:
  1. Random Access Memory: 512MB SDRAM
  2. Fixed-Disk Drive: 40GB
  3. CD-ROM Drive: 24 X.
  4. Floppy Disk Drive: One, 3-1/2 inches.

5. Network Interface Cards: Matched to protocol and media used for PLC network.
6. Modem: Internal – PCI 56K byte
7. Operating System: Windows NT
8. Sound Card: Sound Blaster Compatible
9. Internal Speakers: Two.
10. Ports: One parallel, two serial.
11. Display: 14-inch (305-mm) active matrix.
12. Cables required for programming and troubleshooting connections.
13. Spare battery and external battery charger.
14. Protective Case: Permanent, fitted unit with space for cables, and carry handle.

## 2.7 PLC SYSTEM

- A. See Specification 20 05 10 for details.

## 2.8 DATA COMMUNICATIONS

- A. Touchscreen video computer station shall communicate via LANs as follows:
  1. Communication between Touchscreen Video Computer station and PLC's: Via PLC LAN, using PLC network interfaces.
  2. Communication between Touchscreen Video Computer stations: Ethernet network.
  3. Touchscreen Video Computer station Communication: Via a touchscreen Ethernet LAN with file server workstation computer.
    - a. Touchscreen Ethernet LAN: Interconnect touchscreen video computer station and touchscreen LAN file server (optional, as needed), providing indicated reliability level, maximum response times, and the following additional features:
      - 1) Hardware: Network interface components with self-diagnostic capability to identify causes of network malfunctions and describe appropriate remedial action in on-screen displays accessible at touchscreen video computer stations, File Server CPU, and hand-held portable programming computer.
      - 2) Media: Redundant signal paths with automatic switching from normal to alternate signal paths in the event of normal path failure. Use Ethernet twisted-pair copper cable.
- B. Touchscreen video computer stations and PLC's shall communicate directly with each other via Ethernet links.

## 2.9 PRINTER

- A. Dot Matrix: Tractor feed; 24 pins, with 32-kb minimum buffer.
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- B. Laser: Capable of 10-ppm pages per minute minimum nominal printing rate in draft mode.

## 2.10 DEDICATED UPS

- A. Description: Single-phase units, rated 120 V, 60-Hz input and output, complying with requirements for UPS-type central battery inverters in Division 28 Section and with the following:
  - 1. Capacity: Adequate to supply full connected load for a minimum of four hours.
  - 2. TVSS: Comply with UL 1449. Provide let-through voltage of 300 V or less.
  - 3. Annunciation of UPS malfunctions at TCS.

## 2.11 CABLES

- A. Low-Voltage Control Cable: Multiple conductor, color-coded, No. 20 AWG copper, minimum.
  - 1. Sheath: PVC, except use sheath listed for plenums in plenum-type spaces.
- B. Twisted-Pair Signal and Data Cable:
  - 1. Comply with Division 28 Section
- C. Fiber-Optic Cables and Connectors: Factory fabricated, jacketed, low loss, glass type, multimode, step index, operating at 650 to 850 nm.
  - 1. Strands per Cable: Two.
  - 2. Dimensions: 200-micrometer core diameter, 250-micrometer cladding diameter.
  - 3. Maximum Attenuation: Minus 12 dB/km at 850 nm, minus 6 dB/km at 850 nm.
  - 4. Minimum Modal Bandwidth: 160 MHz/km at 850 nm; 500 MHz/km at 1300 nm.
  - 5. Operating Temperature Range: Minus 40 to plus 80 deg C.
  - 6. Plenum Cable: Listed for use in plenums.
  - 7. Cable Connectors: Quick-connect, quick-disconnect ST couplers."

## 2.12 ACCESSORIES

- A. Interfaces with equipment specified in other sections include accessories, adapters, electronic interface units, and connections required for functional performance indicated.

## PART 3 - EXECUTION

### 3.0 PART 3 – EXECUTION

### 3.1 EXAMINATION

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- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of detention monitoring and control system.
  - 1. Examine roughing-in for embedded and built-in anchors to verify actual locations of system connections before detention monitoring and control system installation.
  - 2. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of detention monitoring and control system.
- B. Inspect built-in and cast-in anchor installations, before installing detention monitoring and control system, to verify that anchor installations comply with requirements. Prepare inspection reports.
  - 1. Remove and replace anchors where inspections indicate that they do not comply with requirements. Re-inspect after repairs or replacements are made.
  - 2. Perform additional inspections to determine compliance of replaced or additional anchor installations. Prepare inspection reports.
- C. For material whose orientation is critical for its performance as a ballistic barrier, verify installation orientation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 SYSTEMS INTEGRATION

- A. Integrate installations and connections of equipment and systems specified in this Section with those specified in Division 28 Sections "Telephone Control", and "Television Equipment power."

### 3.3 INSTALLATION

- A. Install equipment level and plumb. Anchor to building structural elements and support according to requirements in Division 28 Section.
- B. Mounting heights indicated are to bottom of unit for suspended items and to center of unit for wall-mounting items.
- C. Maintain minimum clearances and workspace at equipment according to manufacturer's written instructions and NFPA 70.
- D. Security Fasteners: Where accessible to inmates, install detention monitoring and control components using security fasteners with head style appropriate for fabrication requirements, strength, and finish of adjacent materials, except that a maximum of two different sets of tools shall be required to operate security fasteners for Project. Provide stainless-steel security fasteners in stainless-steel materials.

### 3.4 GROUNDING

- A. AC Power and Lighting Circuits: Comply with Division 28 Section "Grounding and Bonding" for materials and installation requirements per NEC.
-

- B. Class 2 Power--Limited Power, Signal, and Control Circuits: Ground systems and equipment according to manufacturer's written instructions and NEC.

### 3.5 WIRE AND CABLE INSTALLATION

- A. Low-Voltage Analog Circuits: Install wiring as specified in Division 28 Section
- B. Network and Data-Line Twisted-Pair Circuits: Install wiring as specified in Division 28 Section.
- C. Fiber-Optic Cable: Install and terminate as specified in Division 28 Section.
- D. Bundle, train, and support wire and cable in enclosures.
- E. Connections: Make connections according to manufacturer's wiring diagrams, unless otherwise indicated.
- F. Wiring Method: Install wire and cable in metal raceway except where another wiring method is indicated.

### 3.6 IDENTIFICATION

- A. Identify components and power and control wiring according to NEC "Electrical Identification."
- B. Label each monitoring and control module and equipment unit with a unique designation that is consistent with wiring diagrams and schedules in operation and maintenance manual. Label conductors and cables at each end and where exposed within troughs and pull-and-junction boxes.

### 3.7 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Engage a factory-authorized service representative to inspect, test, and adjust and program security system monitoring and control equipment and to assist in field-testing. Report results in writing to the A/E.
- B. Schedule security systems tests and visual and mechanical inspections with at least seven days' advance notice.
- C. Inspect security systems monitoring and control components for defects and physical damage, labeling of testing laboratory, and nameplate compliance with the Contract Documents.
  - 1. Inspect interiors of enclosures, including the following:
    - a. Integrity of mechanical and electrical connections.
    - b. Component type and labeling verification.
    - c. Ratings of installed components.
- D. Electrical Tests: Use caution when testing devices containing solid-state components. Perform the following according to manufacturer's written instructions:

2. Continuity tests of all circuits.
3. Operational Tests: Set and operate controls at each (TCS) and graphic locking control panel and at each monitored and controlled device to demonstrate their functions and capabilities. Use a methodical sequence that cues and reproduces actual operating functions as recommended by manufacturer. Record response to each test command and operation, including logging and printout of events. Record time intervals between initiation of alarm conditions and registration of alarms at control (panel), and between initiation of commands and execution at controlled equipment. Provide written report to A/E of the test results.
  - a. Coordinate testing required by this Section with that required by Sections specifying equipment being monitored and controlled and systems to be integrated with security systems monitoring and control work.
  - b. Simulate (where possible) malfunctions to verify protective features and appropriate alarm indications.
- E. Seismic-restraint tests and inspections shall include the following:
  4. Type, size, quantity, arrangement, and proper installation of mounting or anchorage devices.
  5. Test mounting and anchorage devices according to requirements in NEC "Seismic Controls for Electrical Work."
- F. Correct deficiencies, make necessary adjustments, and retest. Verify that specified requirements are met.
- G. Test Labeling: After satisfactory completion of tests and inspections, apply a label to tested components indicating test results, date, and responsible agency and representative.
- H. Record of Tests and Inspections: Maintain and submit documentation of tests and inspections, including references to manufacturers' written instructions and other test and inspection criteria. Include results of tests, retests, and inspections. Include printout of testing event log, annotated to provide a machine record of testing that corresponds to written test records.

### 3.8 DEMONSTRATION

- I. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain systems. Refer to Division 1 Section "Closeout Procedures Demonstration and Training."
- J. Video Training: Provide 2ea DVD copies of instructional video recording covering features, capabilities, and operation of installed control panels. Illustrate actual equipment and related functions. Show cause-and-effect sequences during operation. Cross-reference instruction manuals throughout. Follow same order of presentation as instruction manual. Include the following:
  1. Touchscreen Control Station Operation:
    - a. Describe and demonstrate indications, controls, and features.

- b. Demonstrate responses to all indications, call-ins, and emergencies.
  - c. Demonstrate setup of control panels and related equipment.
  - d. Describe and demonstrate safety and security precautions.
  - e. Show how to get help.
2. System and Equipment Maintenance:
    - a. Describe and demonstrate safety and security precautions.
    - b. Demonstrate basic maintenance; need for qualified technician for internal maintenance; basic maintenance schedule; techniques for keeping terminals properly tightened, filter screens clean, and overheat sensors checked; and techniques for performing other required servicing.
    - c. Demonstrate adjustment of controls. Describe warranty and show how to get help.
3. System Troubleshooting:
    - a. Demonstrate troubleshooting procedure for common software, programming, control panel, communications, and field device problems.

### 3.9 ON-SITE ASSISTANCE

- A. Occupancy Adjustments: Within one year of date of Substantial Completion, provide a minimum of four Project-site visits, when requested by Owner, to adjust and calibrate components, to make programming adjustments and revisions, and to assist Owner's personnel in making program changes and in adjusting equipment and controls. Provide up to 80 hours of services, exclusive of travel time, for these purposes without additional cost. Occupancy adjustment visits as specified here shall be in addition to any required by warranty.

### 3.10 TOUCHSCREEN COMPUTER STATION SCHEDULES

- A. Panel Designation: See Contract Drawings.
- B. Type of Panel: Touchscreen (SAW)-surface acoustic wave.
- C. Configuration of icon and other functions on TCS: Graphic.
- D. Controls, Visual Status Indicator icons, and other Features: Include the indicator icons specified as associated with controls in Part 2 and 3 of these and other specifications.

### 3.11 GENERAL CONTROL AND ANNUNCIATION HARDWARE RELATED FUNCTIONS

All electrically controlled and monitored hardware and security subsystems devices (i.e., duress stations, UPS status, etc) as indicated in the contract documents shall provide control and status by use of symbolic icons. All control icons (switch functions) that are used shall be of a size that will facilitate a positive selection point; the minimum size of 0.5 inches square shall be required. All status indicators shall be a minimum of three-sixteenths inch in diameter or a large, square or rectangle symbol may be used at an equal size. All symbols shall provide status by its color and/or associated text, both the control icons and its associated status indicators. Global function icons shall be located on the bottom or side of each touchscreen display. These icons, if active, shall control global functions for the associated graphically displayed area of the touchscreen. Refer to Contract Drawings for icon details.

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**SIGNAL SILENCE:**

Touching the Silence icon (Figure 28A) shall silence the Inmate Call-in audible tone (i.e., speakers) at the TCS.

**ALARM MANAGEMENT:**

The TCS station utilizes an Alarm Queue that displays Time, Date and Active Alarm Comment fields (queue) to inform the operator of the types of active alarms, and the time and date of the alarmed event. The Alarm Select, Alarm Silence, and Alarm Reset icons to the left of the queue are for managing alarms (Figure 17).

Only six alarm events are visible in the queue window at one time. Viewing all alarms currently in the alarm queue is performed by utilizing the scroll bar displayed on the right side of the alarm queue window. Using the scroll bar allows the operator the ability to scroll through all active alarmed events.

All alarms that appear in the queue will have an audible alarm message play at the TCS station to further inform the operator of an active alarm.

*Note: Events such as Duress, Emergency Release, Door breach violations, Night Secure Mode alarm, UPS on Batteries, and Interlock violations may appear in the alarm queue.*

Priority levels: The system shall provide 25 levels of alarm priorities. Que entry into the activity window shall be chronological by priority level. The higher priority alarms shall be at the top of the queue. The queue entries shall also be color coded into three groups to provide immediate level recognition.

1. Priority levels 1-10 shall be color coded green; priority levels 11-20 shall be color coded yellow; and priority levels 21-25 shall be color coded red.
2. All alarm points shall be logged to the Alarm Log with the following minimum information:
  1. Time and date of alarm activation
  2. Alarm point name (Owner configured)
  3. Time and date of acknowledgment
  4. Time and date of reset
  5. Operator handling alarm
3. Priority Level Implementation: For processing and registering alarms, device signals, and intercom activity in the following order:
  - 1) Staff-duress alarms.
  - 2) Door-monitoring alarms and trouble signals.
  - 3) System and equipment derangement and trouble alarms.

**ALARM SILENCE and ALARM ACKNOWLEDGE:**

When an alarm is received at the TCS station the Alarm message appears in the Queue window displayed in red color text and an audible alarm message is played at the TCS station. The operator may then Silence the audible message by touching the Alarm Silence Icon (Figure 17). To select and acknowledge the alarm, the operator must touch the desired alarm text message listed in the queue window and then touch the Alarm Select Button. This will cause the selected alarm message to change color to light blue (Figure 18) and change the screen display depicting the location of the alarm.

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**ALARM RESET:**

To reset/clear acknowledged alarms from the alarm queue, simply touch the Alarm Reset Icon (Figure-18). All alarms that have been acknowledged and cleared at the device will be reset and cleared from the queue.

Certain alarms can only be reset once they have been acknowledged and the device causing the alarm has been cleared.

The following list identifies which field devices require being reset first, before being able to become removed from the alarm queue.

**UPS running on batteries, Door breach Violation, Duress stations having key-reset function, and Night secure Mode alarms.**

The alarms listed above must first have the associated field device(s) become (restored to the non-alarmed condition) then the alarm can be acknowledged and selected in the queue window area to remove the alarm from the alarm queue.

**Individual Door Emergency Release, Emergency Group Release, Interlock Violated**

The alarms listed above will automatically clear (restore to the non-alarm condition) from the alarm queue window regardless of the alarm function being acknowledged and selected at the TCS station alarm queue window immediately after the alarm function that is causing the alarm condition clears. No touching the ALARM RESET icon is required to clear the alarm message from the alarm queue.

**CONTROLLED SWINGING DOOR:**

To UNLOCK a controlled and monitored door, simply touch the DOOR icon, which will cause the door to unlock.

The Gray color icon indicates a door that is closed and locked/secured (Figure-1A).

The Red color icon indicates a door that is opened and unlocked/unsecured (Figure-1B).

**MONITOR ONLY DOOR:**

The Gray color icon indicates a door that is closed and locked/secured (Figure-2A).

The Red color icon indicates a door that is opened and unlocked/unsecured (Figure-2B).

**CONTROLLED (MANUAL) SLIDING DOOR (Not-in-Contract):**

To UNLOCK a controlled and monitored (manual) sliding door, simply touch the gray-color DOOR UNLOCK icon (Figure-33A), which will cause the door to unlock and change the padlock symbol to red-color (Figure-33B) allowing the slider door to be manually slid/pulled to the fully-opened position mechanically latching/locking the slider door in the fully-opened position. Touching the red-color padlock symbol (Figure-33B) will cause the door to unlock allowing the slider door to be manually slid/pulled to the fully-closed position. Upon returning the slider door to the fully-closed position the red-color icon (Figure-33B) will return to the gray-color DOOR UNLOCK icon (Figure-33A) and the slider door will be locked/secured.

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The Gray color icon indicates a slider door that is closed and locked/secured (Symbol-33A).

The Red color icon indicates a slider door that is opened and unlocked/unsecured (Figure-33B).

#### **CONTROLLED (MOTOR-OPERATED) SLIDING DOOR:**

To UNLOCK a controlled and monitored (motor-operated) sliding door, simply touch the gray-color DOOR UNLOCK icon (Figure-33A), which will cause the sliding door to unlock and began sliding open (until the door reaches and activates the fully-opened door status contacts only then shall the door unlock power be disconnected from the motor) and immediately change the padlock symbol to red-color (Figure-33B) upon first movement of lock-bar. Touching (Figure-33A) allows the slider door to slide to the fully-opened position unless the slider door is stopped during mid-travel by touching the STOP icon (Figure-32B). Touching the red-color padlock symbol (Figure-33B) will cause the slider door to unlock and began sliding closed (until the door reaches and activates the fully-closed door status contacts only then shall the door lock power be disconnected from the motor) unless the slider door is stopped during mid-travel by touching the STOP icon (Figure-32B). Upon returning the slider door to the fully-closed and locked position the red-color icon (Figure-33B) will return to the gray-color DOOR UNLOCK icon (Figure-33A) and the slider door will be locked/secured.

The Gray color icon indicates a slider door that is closed and locked/secured (Figure-33A).

The Red color STOP icon (Figure-32B) is touched to stop the motor-operated slider door that is unlocked/unsecured and opened (Figure-33B) and that is in mid travel.

The Red color CLOSE icon (Figure-33B) is touched to CLOSE the motor-operated slider door that is unlocked/unsecured and opened.

#### **INTERLOCKED CONDITION: (designated doors only)**

If a controlled and monitored door is part of an INTERLOCK GROUP, the icon outline shall become yellow when its door or any door in the group is unsecure. (Figure-3A, interlock group shown closed and locked/secured); and (Figure-3B, door in interlock group shown opened and unlocked/unsecured)

An attempt to UNLOCK a door that is part of an interlock group (while another door in the interlock group is unsecure) shall cause a dialogue box to pop-up and be displayed indicating the presence of an interlock function/group (Figure-3H).

The dialogue box shall include icons for OVERRIDE or CANCEL. Touching the OVERRIDE icon shall defeat the interlock and unlock the selected door and send a log to the reporting database for recording and printing. Touching the CANCEL icon shall cancel the dialogue box (return dialog box to invisible) and continue displaying the floor plan screen and maintain the interlock. Note: The dialogue box is normally (invisible-not displayed on the screen).

*The selected door's number will appear in the dialogue box. Door "K135" shown for example only.*

#### **FIRE EXIT DOOR CONTROL ICONS:**

For Fire Exit Doors, touching the Door Lock Icon (Figure-1A) will pop-up and display a dialogue box (Figure-4B) indicating this door to be a fire exit door. Touching the "UNLOCK" icon will unlock the designated door (Figure-1B) and send a log to the reporting database for recording and printing. If the door is part of an interlock group and the "UNLOCK" icon displayed in the dialogue box is touched, the interlock function for the selected door shall be overridden and the door shall immediately be unlocked.

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Touching the "CANCEL" icon shall cancel the dialogue box (return dialog box to invisible) and continue displaying the floor plan screen.

#### **INDIVIDUAL CELL LOCKDOWN DOOR FUNCTION:**

Electrically controlled doors can be isolated and locked down so they cannot be opened via the (TCS). To lockdown a cell door the operator/user touches the Door Lockdown Icon (Figure-5A) located within the Control Bar area of the (TCS) display screen and then selects the desired Door lock Icon (Figure-1A) then icon displays as (Figure-5B). Other cell doors can be locked down within three seconds after touching the Door Lockdown icon (Figure-5A), but after three seconds the Door Lockdown function times-out. Repeating the process on the same Door Icon (Figure-5B) will reverse the condition restoring the selected cell door to being able to be unlocked from the (TCS). When a door is locked down the Door lock Icon will have a Blue "X" over it indicating the door cannot be opened (Figure-5B). Doors placed in the locked down mode also will not unlock during the activation of the GROUP UNLOCK function from the (TCS). Doors placed in the locked down mode will unlock during the activation of the EMERGENCY RELEASE function from the (TCS).

If the operator attempts to unlock a door that is in the Lockdown mode, a pop-up message will appear stating; "Unlock Function is not Allowed. Door is Locked Down" (Figure-34).

#### **GROUP RELEASE CELL DOORS (SWINGING):**

To unlock a group of swinging type cell doors, touch the GROUP RELEASE icon (Figure-6A) located within the Control Bar area of the (TCS) display screen. A dialogue box (Figure-6C) will appear. Selecting YES in the dialogue box (Figure-6C) will cause GROUP icons (Figure-6D) and (Figure-6F) to appear in the graphic area of the (TCS) near each group of cell doors that form a cell door group. For swinging type cell doors touching the GROUP – OPEN icon (Figure-6D) and (Figure-6F) will unlock the associated group of cell doors, sequentially one time, at one second intervals, and will extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-6C) and the GROUP OPEN icon (Figure-6D) and/or (Figure-6F) that had just been touched/activated. Touching the NO icon in the dialogue box (Figure-6C) will not unlock any associated cell doors and will extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-6C) and continue displaying the graphic area of the floor plan screen. Touching the GROUP RELEASE icon (Figure-6A) located within the Control Bar area of the (TCS) display screen a second time will extinguish (make invisible - not displayed on the screen) the remaining GROUP icons (Figure-6D) and (Figure-6F) that had not been touched/activated.

#### **GROUP RELEASE CELL DOORS (MOTOR-OPERATED SLIDING DOOR):**

To unlock a group of motor-operated sliding type cell doors, touch the GROUP RELEASE icon (Figure-6A) located within the Control Bar area of the (TCS) display screen. A dialogue box (Figure-6C) will appear. Selecting YES in the dialogue box (Figure-6C) will cause GROUP icons (Figure-6E) and (Figure-6G) to appear in the graphic area of the (TCS) near each group of cell doors that form a cell door group. For motor-operated sliding cell doors touching the GROUP – OPEN icon (Figure-6E) and/or (Figure-6G) will unlock the associated group of sliding cell doors, sequentially one time, at one second intervals, and will extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-6C) and continue displaying the GROUP icons (Figure-6E) and (Figure-6G). To relock a group of motor-operated sliding cell doors, touch the GROUP - CLOSE icon in (Figure-6E) and/or (Figure-6G) which will activate the relocking function of the associated sliding cell doors, sequentially one time, at one second intervals, and then extinguish (make invisible - not displayed on the screen) the GROUP icon (Figure-6E) that had just been touched/activated and continue displaying the graphic area of the floor plan screen. Touching the GROUP RELEASE icon (Figure-6A) located within the Control Bar area of the (TCS) display screen a second time will extinguish (make invisible - not displayed on the screen) the remaining GROUP icons (Figure-6E) and (Figure-6G) that had not been touched/activated.

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## INMATE ACCESS FUNCTION

To activate the INMATE ACCESS mode, touch the Inmate Access icon located in the Control Bar area of the (TCS) display screen (Figure-7B). While in the INMATE ACCESS mode, the icon box color will turn yellow and the icon text color will turn black (Figure-7D), cause all designated cell door locks to be placed into the inmate access mode, and illuminate solid a yellow-colored "Access" icons for each cell location on the (TCS) (Figure-7F). (Note: while the Inmate Access "On" mode is enabled, pressing the inmate pushbutton located within each inmate cell room shall cause the associated cell door lock to momentarily unlock, unless the individual inmate access yellow-colored icon is extinguished (invisible - not displayed on the screen), which means inmate access is denied/disabled for that cell). Touching a yellow-colored "ACCESS" icon shall remove this door from the INMATE ACCESS mode and extinguish (make invisible - not displayed on the screen) the associated yellow-colored "Access" icon (Figure-7F), and prevent/disable the cell door from being unlocked via the inmate pushbutton switch located within the inmate cell room. When the Inmate Access "On" mode is enabled (Figure 7D) and the individual cell "Access" yellow-colored icon is extinguished (invisible - not displayed on the screen) the locking control system shall permit the inmate pushbutton switch located within the inmate cell room to place an "Inmate Call-in" green color flashing icon (Figure-8E, or Figure-8F) (with audible tone) to the (TCS) (See Inmate Call-in Function Mode, below). Touching the INMATE ACCESS-ON icon (Figure-7D) located in the Control Bar area of the (TCS) display screen shall cause the INMATE ACCESS function to "disable" causing all yellow-colored "Access" icons (Figure-7F) to extinguish (become invisible - not displayed on the screen), prevent/disable the cell door from being unlocked via the inmate pushbutton switch located within the inmate cell room, extinguish (become invisible - not displayed on the screen) the INMATE ACCESS-ON icon (Figure-7D), and then display the INMATE ACCESS icon (Figure-7B) in the Control Bar area of the (TCS) display screen.

While the Inmate Access mode is active (Figure-7D), the door unlock icons (Figure-1A) on the (TCS) will be able to activate door unlocking of the cell doors, and the Group Release Control Icon will remain functional.

## INMATE CALL-IN FUNCTION (MODE):

To activate the INMATE CALL-IN mode, touch the Inmate Call-in icon (Figure-8B) located in the Control Bar area of the (TCS) display screen. While in the INMATE Call-in mode, the icon box color will turn green and the icon text color will turn black (Figure-8D). When the system is in the "Inmate Call-in" mode pressing the pushbutton switch located within the inmate cell room shall place a call-in to the associated (TCS) by flashing the corresponding green-colored CALL-IN icon (Figure-8F) and activating an audible tone at the (TCS), send a log to the reporting database for recording and printing. Touching the signal silence icon (Figure-28A ALT) located on the (TCS) shall silence the audible tone and illuminate solid the green-colored CALL-IN icon (Figure-8F). Touching the (TCS) "Reset" icon (Figure-29A Alt) shall extinguish (make invisible - not displayed on the screen) the green-colored CALL-IN icon" (Figure-8F). (Note: the inmate call-in icon is invisible – not displayed on the screen, until activated by an inmate Call-in). Touching the INMATE CALL-IN-ON icon (Figure-8D) located in the Control Bar area of the (TCS) display screen shall cause the INMATE CALL-IN function to "disable" causing all green-colored "Call-in" icons (Figure-8F) to extinguish (become invisible - not displayed on the screen), prevent/disable the inmate pushbutton switch located within the inmate cell room from placing a call-in to the (TCS), extinguish (become invisible - not displayed on the screen) the INMATE CALL-IN-ON icon (Figure-8D), and then display the INMATE CALL-IN icon (Figure-8B) in the Control Bar area of the (TCS) display screen.

While the Inmate Call-in mode is active (Figure-8D), the door unlock icons (Figure-1A) on the (TCS) will be able to activate door unlocking, and the Group Release Control Icon will remain functional.

## EMERGENCY RELEASE CELL DOORS (MODE):

To activate the emergency release mode simply touch the EMERGENCY RELEASE icon (Figure-9C) located in the Control Bar area of the (TCS) display screen and a dialogue box will appear (Figure-9B). Selecting YES in the dialogue box (Figure-9B) will display the Emergency Release Countdown Timer (Figure-14). The Countdown Timer (Figure-14) will display a digital clock counting down from 30-seconds to 0-seconds to automatically initiate Emergency Release for the designated groups of cell doors by unlocking and retaining unlocked the associated cell doors sequentially at one second intervals, change the Emergency Release icon (Figure-9C) to an Emergency Reset icon (Figure-11A), cause a red alarm active dot (Figure-10C) to appear in the key plan of the control screen located at Central/Master Control Room indicating an alarm in that area, NOT extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-9B), place specific Emergency Release alarm text in the alarm queue Figure-17, and send a log to the reporting database for recording and printing.

Once the Countdown Timer (Figure-14) is displayed and counting down, touching the ABORT icon will extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-9B) and the Countdown Timer (Figure-14), cancel the activation of an Emergency Release function, change the Emergency Reset icon (Figure-11A) back to an Emergency Release icon (Figure-9C), automatically reset the Emergency Release alarm text in the alarm queue, and send a log to the reporting database for recording and printing, cause a red alarm active dot (Figure-10C) to extinguish in the key plan of the control screen located at Central/Master Control Room, and resume normal (TCS) operations.

*Note: Refer to ALARM QUEUE Theory of Operations for specifics regarding alarms.*

Selecting NO in the dialogue box (Figure-9B) will extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-9B), not activate an Emergency Release function, and resume normal (TCS) operations.

*Note: The (TCS) will automatically extinguish the Emergency Release Mode Icon after 5 seconds of idle time of displaying the dialogue box (Figure-9B).*

While the Emergency Release countdown timer is counting down to 0-time all door lock icons included within the emergency release group will display rapidly flashing.

Once the Emergency Release countdown timer reaches 0-time all door lock icon included within the emergency release group will activate unlocking and retaining unlocked the associated cell doors sequentially at one second intervals, and display the unlocked/unsecure door status icon (according to the real-time door position status condition of the doors).

#### **EMERGENCY RELEASE - RESET CELL DOORS:**

To take a group of cell doors out of Emergency Release touch the Emergency Release Reset icon (Figure-11A) located in the Control Bar area of the (TCS) display screen. A dialogue box (Figure-11B) will appear. Selecting YES in the dialogue box (Figure-11B) will cancel Emergency Release for the groups of cell doors (allow cell doors to be closed and relocked), cause a red alarm active dot (Figure-10C) to disappear in the key plan of the control screen located at Central/Master Control Room (NOTE: The red alarm active dot (Figure-10C), located in the key plan will only become (invisible – not displayed on the screen) when there are no alarms), extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-11B), change the Emergency Release Reset icon (Figure-11A) to display the Emergency Release icon (Figure-9C) located in the Control Bar area of the (TCS) display screen, place specific Emergency Release alarm reset text in the alarm queue, and send a log to the reporting database for recording and printing.

When EMERGENCY RELEASE has been reset and is no longer active, the doors icons will appear as (Figure-1A, or Figure-1B) (according to the real-time door position status condition of the doors), change the Emergency Release Reset icon (Figure-11A) to display the Emergency Release icon (Figure-9C) in the Control Bar area of the (TCS) display screen.

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Selecting NO in the dialogue box (Figure-11B) will extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-11B) and retain the current EMERGENCY RELEASE active, and continue to display the Emergency Reset icon (Figure-11A) in the Control Bar area of the (TCS) display screen.

#### **EMERGENCY RELEASE INDIVIDUAL DOOR:**

To activate the emergency release mode for a single door simply touch the EMERGENCY RELEASE icon (Figure-12G) located in the Control Bar area of the (TCS) display screen, then touch the door unlock icon (Figure-1A) and a dialogue box (Figure-12A) will display showing the selected door number in the text message (NOTE: If the selected door unlock icon (Figure-1A) has not been pre-determined as having Emergency Release Individual Door function, touching the door unlock icon (Figure-1A) will cause a dialogue box (Figure-12C) to momentarily display on the TCS screen stating (Emergency Release Individual Door Function – NOT ALLOWED)). Selecting YES in the dialogue box (Figure-12A) will initiate Emergency Release for the selected door by unlocking and retaining unlocked the selected door, extinguish (make invisible - not displayed on the screen) (Figure-12A), cause a red alarm active dot (Figure-12B) to appear in the key plan of the control screens located at Central/Master Control Room indicating an alarm in the affected area, place specific Emergency Release alarm text in the alarm queue, and send a log to the reporting database for recording and printing.

Doors capable of being individually EMERGENCY RELEASED shall be pre-determined and programmed into the security systems. Doors not capable of being individually EMERGENCY RELEASED will cause a dialogue box (Figure-12C) to momentarily display on the TCS screen (Emergency Release Individual Door Function – NOT ALLOWED).

*Note: Refer to ALARM QUEUE Theory of Operations for specifics concerning alarms.*

Selecting NO in the dialogue box (Figure-12A) will extinguish (make invisible - not displayed on the screen) (Figure-12A), and cancel the Emergency Release function and not unlock the selected door.

#### **EMERGENCY RELEASE - RESET INDIVIDUAL DOOR:**

To take an individual door out of Emergency Release simply touch the door unlock icon (Figure-1B) and a dialogue box will appear (Figure-13A) showing the selected door number in the text message. Selecting YES in the dialogue box (Figure-13A) will cancel Emergency Release for the selected door allowing the door to be closed and re-locked, extinguish (make invisible - not displayed on the screen) (Figure-13A), and cause a red alarm active dot (Figure-12B) to disappear/extinguish in the key plan of the control screens located at Central/Master Control Room, place specific Emergency Reset alarm text in the alarm queue, and send a log to the reporting database for recording and printing.

*Note: The (TCS) station will automatically extinguish the Emergency Release Reset Icon (Figure-13A) after 5 seconds of idle time of displaying the dialogue box (Figure-13A).*

When EMERGENCY RELEASE has been reset and is no longer active, the door icon will appear (according to the real-time door position status condition of the door, Figure-1A or 1B).

Selecting NO in the dialogue box (Figure-13A) will extinguish (make invisible - not displayed on the screen) the dialogue box (Figure-13A).

#### **TOUCHSCREEN HEARTBEAT ALARM:**

When a TCS-Touchscreen Control Station loses communication with the associated PLC-programmable Logic Controller, the following occurs at the TCS in Master Control room: an alarm message is displayed in the alarm queue (Figure-17) at Master Control TCS, an audible message is played,

and a red dot (Figure-10C) will flash in the key plan indicating the general area location of the affected TCS. Control of the devices which were previously controlled at the affected TCS station will have the ability to revert back to Master Control TCS stations.

When the alarm is acknowledged (Figure-18) at the Master Control TCS stations the floor plan map(s)/display(s) and control of the devices that were previously by the affected TCS station with the alarm shall be displayed at and reverted back to the Master Control TCS stations.

The alarm can be silenced by activating the silence icon (Figure-18) without acknowledging the alarm.

When communication has been re-established, the alarm will be removed from the queue (figure-18).

*Refer to Alarm Queue Theory of Operations for acknowledging, silencing and resetting alarms.*

#### **LOGIN FAILURE ALARM:**

When an operator has tried to Log-On to a TCS Control Station unsuccessfully three consecutive times, the TCS Control Station will be disabled. At Master Control TCS, the LOGIN Failure icon (Figure-15) shall rapidly flash, an alarm message is displayed in the alarm queue (Figure-17), an audible message is played, and a red dot (Figure-10C) will flash in the key plan indicating the general area location of the affected TCS that has been disabled.

When the alarm is acknowledged and selected (Figure-17) at Master Control TCS, the floor plan map/area of the alarm shall be displayed on the Master Control TCS screen, the LogIn Failure icon (Figure-15) will cease flashing.

The alarm can be silenced by activating the silence icon (Figure-18) without acknowledging the alarm first.

After the LogIn Failure alarm is reset (Figure-18), the LogIn Failure icon (Figure-15) will disappear and the affected TCS Control Station Disabled screen will change to a Log-On screen.

*Refer to Alarm Queue Theory of Operations for acknowledging, silencing and resetting alarms.*

#### **NAVIGATING SCREENS:**

The operator can move between various screens by pressing the Navigation Arrow indicating the direction the operator wants the screen to move toward (Figure-16A). Each Navigation Arrow is labeled with the screen it will display. The screen area the operator is currently viewing will be highlighted on the Key Plan located on each screen of the TCS.

The operator can access the Site Plan screen by pressing the Site Plan button located in the lower area of the Control Bar Menu.

#### **BACK/FORWARD BUTTONS:**

For convenience, the computer retains previous screens the operator has used and allows the operator to go backwards to those screens by touching the Back Arrow (Figure-16B) located in the lower area of the Control Bar Menu or forward in the stack by touching the Forward Arrow (Figure-16C) also located in the lower area of the Control Bar Menu.

#### **UTILITIES ICON FUNCTIONS:**

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The Utilities Control icon (Figure-19A) is located in the main Control Bar area of the TCS station screen. Touching this icon cause the (Utilities) icons (Figure 19B) to appear on the main screen of the TCS. Touching icon (Figure 19A) again will extinguish (make invisible - not displayed on the screen) (Figure-19B).

Television on/off control: TV "on/off" shall be operated from the TCS. The icons shall be momentary-touch two-state touch-on/touch-off icons. Touching the TV icon "Off" shall cause the locking control system to disconnect the 120VAC power from the designated television power receptacle/outlet(s) in the dayrooms and extinguish the associated TV icon on the TCS. Touching the TV icon "On" shall cause the locking control system to connect the 120VAC power to the designated television power receptacle/outlet(s) and illuminate the associated yellow color TV icon on the TCS.

Water On/Off functions: The icons shall be momentary-touch two-state touch-on/touch-off icons. The momentary-touch icon shall be provided on designated TCS that have water controls. Touching the water icon "On" shall cause the designated water valve to turn-on/run and illuminate solid the associate icon on the TCS. Touching the water icon "Off" shall cause the designated water valve to turn-off/stop running and extinguish the associated icon.

#### **AUXILIARY FUNCTIONS:**

The auxiliary functions controls appear on the main Control Bar area of the TCS station at the bottom of the Touchscreen (Figure-20). The use of these functions is as follows:

1. TS Config: Selecting this icon will bring up a large pop-up window (Figure-22) with user configuration, clean screen, calibrate touch screen, TCS control panel enable-disable, touchscreen area assignments, Etc.....
2. Site Plan: Selecting this icon will shall change the screen display to the Site Plan map.
3. Logoff: Touching this icon (Figure-20) will display a blue pop-up message saying "LOGOFF- Are you sure?" To exit the TCS touch screen, the operator shall select YES and will be "logged-off". This should be done if the operator will be away from the TCS station for any length of time and at shift changes.
4. Heartbeat: This Red icon (Figure-20) will blink as long as there is a communication path with the PLC unit and the Touchscreen control station. A break in communications will cause the red icon to cease blinking, place specific alarm text in the alarm queue, and send a log to the reporting database for recording and printing. Upon restoring the communication path the red color icon (Figure-20) will resume blinking.
5. Time and Date: This icon area constantly displays the correct time (Eastern Standard Time) and date (m/d/y) Figure-38.

#### **STICKY NOTES:**

All cells contain a sticky note icon (Figure-21A, or 21B, or 21C) allowing the operator to enter a general note and/or a medical note for each cell. Touching the "STICKY NOTES" icon (Figure-21) located in the Control Bar area of the TCS station then within 3-seconds touching the door unlock icon will display a white notepad with a grey cross (Figure-21A) when no notes exist for the selected cell.

To enter a note, press the sticky note icon and then select "General" or "Medical". Enter up to 131 characters in the applicable note window displayed. Save and extinguish (make invisible - not displayed on the screen) the note by touching the icon (Figure-21) again.

When a note has been entered, the notepad will change to yellow with a grey cross (Figure-21B). When a medical note has been entered, the grey cross will change to a red cross (Figure-21C).

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The note(s) can be deleted as needed by pressing the sticky note icon and selecting "Delete All" or by pressing the "Delete" icon for the applicable note type.

All notes entered will be logged in the reporting database along with the date and time the note was entered or deleted and the operator and touchscreen information.

#### **TOUCHSCREEN CONFIGURATION UTILITIES:**

The operator can adjust many features on the touchscreen by touching the TS Configure icon (Figure-22) on the lower Control Bar Menu area. The TS Configure Screen will then be displayed allowing the following options:

On-Line Utilities: Accessed through utility icons or menu items on screen and providing the following capabilities:

- 1) Configures, generates, and prints reports, using automatically logged event data.
- 2) Edits and updates programs, databases, system operating variables, point descriptions, help and operating protocol screens, and icon designations.
- 3) Operator Assistance Material: Provides interactive help messages and other material, including the following:
  - a) Descriptions of functions initiated by control icons and menu items.
  - b) Explanations of conditions denoted by audible and visual indications.
  - c) Instructions for performing control process.
  - d) Synopses of policies governing control panel operation and standard operating procedures.

Set Time and Date – This feature allows the operator modify the time and date display icon (Figure 38).

Area Transfers – This feature allows the operator to assign areas of control to the Touchscreen Stations (Figure-35).

Touchscreen Enable/Disable – This feature displays icons which show the status of the remote Touchscreen Stations (Figure-35). They can be disabled from Master Control TCS thereby transferring control of the building to Master Control. Master Control must re-enable the controls for the TCS remote station to become active again.

User Configuration – This feature allows for the set up of user names, passwords and access levels for security purposes. This feature is only enabled with an access level of 5000 or greater (Figure-22).

Clean Screen – This feature provides the operator with a display screen which allows the operator to clean the screen. This screen will be displayed for up to 60 seconds and a countdown timer will indicate the time remaining (Figure-22).

Calibrate Touchscreen – This feature allows the user to calibrate the Touchscreen to his or her specific line of sight to the Touchscreen. It serves as a targeting feature to maximize accuracy when touching buttons on the screen (Figure-22).

Sound Configuration – Multiple computer-generated tones that can be programmed for frequency, volume, duration, and repetition rate and selected for each audio annunciation application. This feature allows the operator to change the audible voice messages to a Male or Female voice. It also provides the operator with the ability to adjust the sound volume (Figure-22).

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Icon Legend – This feature displays an educational screen which allows the operator to simulate the different states of an Icon (Figure-22).

Alarm Reporting – This feature allows the operator to generate reports for alarms and events which have been logged. This feature also provides instructions for running the reports thru the Help feature provided (Figure-22).

The following events will be logged for reporting purposes. System Monitoring: The system shall automatically monitor and report any conditions that compromise the system operation or integrity. As a minimum, the system shall report:

1. Loss of communication by node.
2. Loss of commercial power by cabinet.
3. Battery disconnected.
4. Battery load test fail.
5. Low battery.
6. Cabinet Tamper.
7. PLC Low Battery.
8. UPS low battery.
9. Log In / Log Out Information
10. All Door Activities

Device Numbers – This feature allows the operator to turn visibility On or Off for the text objects as noted in the graphic above.

#### **TOUCHSCREEN AREA TRANSFER CONTROLS:**

The Touchscreen control capabilities will be divided into areas. An area is a logical grouping of control functions assignable to any Touchscreen Control Station.

The Area Transfer Controls (Figure-35) are available at Master Control TCS only. These controls allow the Master Control operators to transfer control of certain areas between the two Master Control Stations TCS. An area can only be assigned to one Master Control Station at a time. The area button color indicates which Master Control TCS Station controls the area. Red "Disable" color indicates the area is controlled by Master Control TCS Station (and not by the local TCS) and Green "Enable" color indicates not controlled by Master Control TCS Station (area is controlled by the local TCS, when yellow text is displayed). If a remote TCS Control Station that normally has control of the area is logged in, the actual device control will remain with the remote TCS Control Station and the area button color will be Green for both Master Control TCS Stations.

Control and annunciation of devices shall be assigned by areas. When an area is assigned to a particular Master Control Station TCS, all annunciation and controls will occur at that TCS Control Station and all control functions shall transfer with the area.

#### **TOUCHSCREEN ENABLE/DISABLE:**

The Touchscreen Enable/Disable Control icon (Figure-35) is located in the main Control Bar area of the TCS station screen. This icon control allows the operator at Master Control TCS to "Enable" or "Disable" remote TCS Touchscreen Computer Stations. To enable or disable a remote TCS, first touch the Enable/Disable icon (Fig. 35), which will cause the (Touchscreen Enable/Disable) icons (Figure 35A or Figure 35B) to appear on the main site plan screen of the Master Control TCS stations. (Figure 35A or Figure 35B) will display on the screen near the building locations having remote TCS stations. If the remote TCS is "enabled" Figure 35A will be displayed on the screen, and if the remote TCS is "disabled" Figure 35B will be displayed on the screen.

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When Master Control TCS "Enables" a remote TCS Touchscreen Control Station, the Enable/Disable icon for the applicable TCS Touchscreen is displayed with a green color background with "Enable" text. The remote TCS Touchscreen Control Stations will display a Log-In screen. Until the TCS Touchscreen Control Station has logged in (color of the Touchscreen text is black color), control of the applicable devices will remain at Master Control TCS. When the TCS Touchscreen Control Station is logged-In, the (color of the Touchscreen text will change to yellow color) (Figure 35A) and control of the applicable devices will be transferred from Master Control TCS to the remote TCS Touchscreen Control Station.

When Master Control TCS "Disables" a remote TCS Touchscreen Control Station, the Enable/Disable icon for the applicable TCS Touchscreen is displayed with a red color background with "Disable" text. The remote TCS Touchscreen Control Station displays a "Station Has Been Disabled" screen and control of all applicable devices is immediately transferred back to Master Control TCS. In addition, the Touchscreen text color will change to black (Figure-35B).

#### **NIGHT SECURE MODE FUNCTIONS:**

Night Secure Mode: The night secure enable icon (Figure-36A) shall be a momentary touch icon located in the lower area of the Control Bar Menu for activating the Night Secure function. Touching the night secure enable icon (Figure-36A) shall cause a dialogue box to appear (Figure-36B). Selecting "ON" in the dialogue box (Figure-36B) will display solid the "Night Secure Mode is "On" icon (Figure-36C) and shall activate night secure mode on the associated TCS. Touching the night secure enable icon (Figure-36A) a second time shall deactivate the night secure function on the associated TCS and extinguish (make invisible - not displayed on the screen) the Night Secure Mode is "On" icon (Figure-36C). When night secure is enabled/ON, a non-secure DPS condition from any designated door such as cell doors, housing entry doors, housing fire exit doors, etc shall cause the locking control system to illuminate the corresponding unsecure door status icon (Figure-1B) in a flashing mode on the local TCS. Additionally, a distinctive audio tone shall sound and the green color Night Secure Mode is "On" icon (Figure-36C) on the TCS shall illuminate in a flashing mode. Night secure alarms shall annunciate on the TCS alarm queue (Figure-17) for each door that becomes un-secure while the Night Secure function is enabled/ON. This condition shall exist until an alarm silence function is activated (Figure-18), which will silence the audible tone, illuminate solid the Night Secure mode is "On" icon (Figure-36C), and maintain flashing the door status icon (Figure-1B) . After first re-securing the breached door(s), touching the "Reset" icon (Figure-18) shall cause the unsecure door status red icon to change to the secure door status icon (Figure-1A). If the corresponding DPS remained in a non-secure status after touching the reset icon, the associated unsecure red door status icon (Figure 1B) on the TCS shall continue to illuminate in a flashing mode. Silencing or resetting of previous night secure alarms shall not prevent other and subsequent night secure alarms from annunciating on the TCS. Touching the green color Night Secure Mode is "On" icon (Figure-36C) shall cause a dialogue box to appear (Figure-36E). Touching the "No" icon (Figure-36E) will extinguish (make invisible - not displayed on the screen) the (Night Secure mode is On do You wish to Turn it Off) icon (Figure-36E) and retain the Night Secure Mode green color Night Secure Mode is "On" icon (Figure-36C) active. Touching the "Yes" icon (Figure-36E) will cause the Night Secure On/Off dialogue box to appear (Figure-36B) and extinguish (make invisible - not displayed on the screen) the (Night Secure mode is On do You wish to Turn it Off) icon (Figure-36E). Touching the "On" icon (Figure-36B) will extinguish (make invisible - not displayed on the screen) the Night Secure Mode On/Off icon (Figure-36B) and retain the Night Secure Mode is "ON" icon (Figure-36C) active. Touching the "Off" icon (Figure-36B) will change the Night Secure Mode is "ON" icon (Figure-36C) to display the Night Secure Mode is "OFF" icon (Figure-36F) momentarily (3-seconds) and then extinguish (make invisible - not displayed on the screen) (Figure-36F) and then Turn-off the Night Secure Mode function, and resume normal (TCS) operations.

#### **MONITOR ONLY DOOR WITH ACCESS/SECURE FUNCTION:**

For designated monitor-only door locations (Access and Secure) icon (Figure 37) will be provided to function as follows. Touching the Gray color icon (Figure-2A) or the Red color icon (Figure-2B) (according to the real-time door position status condition of the door), for pre-designated monitor-only doors having (Access/Secure) function, will cause (Figure 37) icon to appear (for 5-seconds) on the screen near the graphic location of the door status icon (Figure-2A or Figure-2B) (according to the real-time door position status condition of the door). After (Figure-37) appears for 5-seconds it will extinguish (make invisible - not be displayed on the screen). Touching the (Access) icon (Figure 37) will allow the designated monitor-only door to be manually opened without activating an audible or text alarm on the Master Control TCS's (placing a door in the access-mode will send a log to the reporting database for recording and printing). While in the access-mode, manually unlocking the door will cause the door status icon (Figure 2B) to display slow flashing without activating an audible or text alarm condition on the Master Control TCS. Re-locking/securing the door while in the access-mode will cause the door status icon (Figure 2A) to display. Touching the (Secure) icon (Figure 37) will place the designated monitor-only door into the secure-mode, which will create an audible and text alarm (Figure 17) and cause the door status icon (Figure 2B) to display rapid flashing at the Master Control TCS whenever the door is unlocked. First silence the alarm via (Figure 17) then re-lock/secure the door, and then Reset the alarm condition (Figure 18) to cause the door status icon (Figure 2A) to display.

#### NOTIFICATION ICON FUNCTIONS:

1. FIRE ALARM EMERGENCY INDICATION (Not-in-Contract): Receipt of a Fire Alarm condition into the Locking Control System from a designated area will display a flashing pop-up icon (Figure-27A, or Figure-27B) indicating a fire alarm condition is active, sound an audible alert at the TCS, place specific Emergency alarm text in the alarm queue (Figure-17), and send a log to the reporting database for recording and printing. This condition shall exist until an alarm silence function is activated (Figure-18), which will silence the audible tone, illuminate solid the Fire Alarm Emergency icon (Figure-27A, or Figure-27B). After first clearing and re-setting the fire alarm condition, touching the "Reset" icon (Figure-18) shall cause the red color Fire Alarm Emergency icon (Figure-27A, or figure-27B) to extinguish (make invisible - not displayed on the screen) and clear fire alarm message from the alarm queue (Figure-18).
2. SMOKE ALARM INDICATION: Receipt of a Smoke Alarm condition into the Locking Control System from a designated area will display a flashing pop-up icon (Figure-27C) indicating a smoke alarm condition is active, sound an audible alert at the TCS, place specific smoke alarm text in the alarm queue (Figure-17), and send a log to the reporting database for recording and printing. This condition shall exist until an alarm silence function is activated (Figure-18), which will silence the audible tone, illuminate solid the Smoke Alarm icon (Figure-27C). After first clearing and re-setting the smoke alarm condition, touching the "Reset" icon (Figure-18) shall cause the orange color Smoke Alarm icon (Figure-27C) to extinguish (make invisible - not displayed on the screen) and clear smoke alarm message from the alarm queue (Figure-18).
3. TROUBLE ALARM INDICATION (Not-in-Contract): Receipt of a Trouble Alarm condition into the Locking Control System from a designated area will display a flashing pop-up icon (Figure-27D) indicating a trouble alarm condition is active, sound an audible alert at the TCS, place specific trouble alarm text in the alarm queue (Figure-17), and send a log to the reporting database for recording and printing. This condition shall exist until an alarm silence function is activated (Figure-18), which will silence the audible tone, illuminate solid the Trouble Alarm icon (Figure-27D). After first clearing and re-setting the smoke alarm condition, touching the "Reset" icon (Figure-18) shall cause the yellow color Trouble Alarm icon (Figure-27D) to extinguish (make invisible - not displayed on the screen) and clear trouble alarm message from the alarm queue (Figure-18).
4. DURESS ALARM INDICATION: Receipt of a DURESS Alarm condition into the Locking Control System from a designated area will display a flashing pop-up icon (Figure-27E) indicating a duress alarm condition is active, sound an audible alert at the TCS, place specific duress alarm text in the alarm queue (Figure-17), and send a log to the reporting database for recording and

printing. This condition shall exist until an alarm silence function is activated (Figure-18), which will silence the audible tone, illuminate solid the Duress Alarm icon (Figure-27E). After first clearing and re-setting the duress alarm condition, touching the "Reset" icon (Figure-18) shall cause the yellow/red border color Duress Alarm icon (Figure-27E) to extinguish (make invisible - not displayed on the screen) and clear trouble alarm message from the alarm queue (Figure-18)

#### **OFFICER DURESS ICON FUNCTIONS:**

Officer Duress: The Officer Duress momentary-touch icon shall be provided on all TCS Stations. Touching the Officer Duress icon shall immediately disable/override and lockdown the associated TCS and display a "Disable" text message on the screen, illuminate the associated red color flashing "Officer Duress" icon (Figure-25) on the Master Control TCS, illuminate a corresponding enable/disable "Override and Lockdown" icon (Figure-23) on the Master Control TCS, and cause a local audible tone to sound at the Master Control TCS, place specific duress alarm text in the alarm queue (Figure-17), and send a log to the reporting database for recording and printing. Touching the "Silence" icon (Figure-18) on the Master Control TCS shall cause the audible tone to be silenced and the "Duress" icon (Figure-25) shall illuminate solid and the "Override and Lockdown" icon (Figure-23) shall remain illuminated. Touching the "Override and Lockdown" "Enable" icon on the Master Control TCS shall allow for the designated local TCS functions to be able to be re-enabled via the LogIn function, and cause the "Override and Lockdown" icon to extinguish on the Master Control TCS. Touching the "Reset" icon (Figure-18) at the Master Control TCS shall extinguish the "Duress" icon (Figure-25) on the Master Control TCS and also cause the "Emergency Lockdown" icon to extinguish (make invisible - not displayed on the screen) and clear the alarm message from the alarm queue (Figure-18). Activating the "Log-In" function on the overridden TCS while disabled by the Master Control TCS or during activation of the "Officer Duress" function from the local TCS shall not automatically "re-enable" the overridden TCS. Only the Master Control TCS (TCS-CG) located within Central/Master Control can initiate the "re-enablement" of an overridden TCS. Once the local TCS is re-enabled by the main Central Control locking control/alarm reporting TCS (TCS-CG), the "Log-in" function on the local TCS must be performed for the local TCS to completely function again.

END OF SECTION 28 40 20

**SECTION 4**  
**BOND FORMS**  
**(Bid Bond, Payment Bond and Performance Bond)**

### **BID BOND**

No bid for a contract in Fulton County for work to be done shall be valid for any purpose unless the Contractor shall give a Bid Bond with good and sufficient surety payable to, in favor of, and for the protection of Fulton County. The Bid Bond shall not be less than 5% of the total amount payable by the terms of the Contract. No bid shall be read aloud or considered if a proper bid bond has not been submitted.

Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Georgia.

Attestation for the corporation must be by the corporate officer; for a partnership by another partner; for an individual by a notary with the corporate seal.

**BID BOND**  
**[INSERT PROJECT # AND TITLE]**  
**FULTON COUNTY GOVERNMENT**

KNOW ALL MEN BY THESE PRESENTS, THAT WE \_\_\_\_\_  
\_\_\_\_\_  
hereinafter called the PRINCIPAL, and \_\_\_\_\_  
\_\_\_\_\_  
hereinafter call the SURETY, a corporation chartered and existing under the laws of the State of \_\_\_\_\_ and duly authorized to transact Surety business in the State of Georgia, are held and firmly bound unto the Fulton County Government (COUNTY), in the penal sum of \_\_\_\_\_ Dollars and Cents (\$ \_\_\_\_\_) good and lawful money of the United States of America, to be paid upon demand of the COUNTY, to which payment well and truly to be made we bind ourselves, our heirs, executors, and administrators and assigns, jointly and severally and firmly by these presents.

WHEREAS the PRINCIPAL has submitted to the COUNTY, for **[INSERT PROJECT # AND PROJECT TITLE]**, a Bid;

WHEREAS the PRINCIPAL desires to file this Bond in accordance with law:

NOW THEREFORE: The conditions of this obligation are such that if the Bid be accepted, the PRINCIPAL shall within ten (10) calendar days after receipt of written notification from the COUNTY of the award of the Contract execute the Contract in accordance with the Bid and upon the terms, conditions and prices set forth therein, in the form and manner required by the COUNTY, and execute sufficient and satisfactory Performance and Payments Bonds payable to the COUNTY, each in the amount of one hundred percent (100%) of the total contract price, in form and with security satisfactory to said COUNTY, then this obligation to be void; otherwise, to be and remain in full force and virtue in law; and the SURETY shall upon failure of the PRINCIPAL to comply with any or all of the foregoing requirements within the time specified above immediately pay to the COUNTY, upon demand the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

In the event suit is brought upon this Bond by the COUNTY and judgment is recovered, the SURETY shall pay all costs incurred by the COUNTY in such suit, including attorney's fees to be fixed by the Court.

Enclosed is a Bid Bond in the approved form, in the amount of \_\_\_\_\_  
\_\_\_\_\_ Dollars  
(\$\_\_\_\_\_) being in the amount of five percent (5%) of the Contract Sum.  
The money payable on this bond shall be paid to the COUNTY, for the failure of the Bidder to  
execute a Contract within ten (10) days after receipt of the Contract and at the same time furnish  
a Payment Bond and Performance Bond.

(SIGNATURES ON NEXT PAGE)

IN TESTIMONY THEREOF, the PRINCIPAL and SURETY have caused these presents to be duly signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

ATTEST:

\_\_\_\_\_  
PRINCIPAL

\_\_\_\_\_ BY \_\_\_\_\_

(SEAL)

**CERTIFICATE AS TO CORPORATE PRINCIPAL**

I, \_\_\_\_\_, certify that I am the Secretary of the Corporation named as principal in the within bond; that \_\_\_\_\_, who signed the said bond of said corporation; that I know this signature, and his/her signature thereto is genuine; and that said bond was duly signed, sealed and attested for in behalf of said Corporation by authority of its governing body.

\_\_\_\_\_  
SECRETARY

(CORPORATE SEAL)

\_\_\_\_\_  
SURETY

\_\_\_\_\_ BY \_\_\_\_\_

(SEAL)

**END OF SECTION**

### **PAYMENT BOND**

No Contract with Fulton County for work to be done shall be valid for any purpose unless the Contractor provides a Payment Bond with good and sufficient surety payable to Fulton County for the use and protection of all sub-contractors and all persons supplying labor, materials, machinery, and equipment in the prosecution of the work provided for in the Contract. The Payment Bond shall be in the amount of 100% of the total contract amount, payable by the terms of the Contract, and shall be written on the following form.

Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Georgia.

Attestation for the corporation must be by the corporate officer; for a partnership by another partner; for an individual by a notary with the corporate seal.

**PAYMENT BOND**

**KNOW ALL MEN BY THESE PRESENTS** that \_\_\_\_\_  
*(Insert name of Contractor)*  
(hereinafter called the "Principal") and \_\_\_\_\_  
*(Insert name of Surety)* (hereinafter called the  
"Surety"), are held and firmly bound unto **FULTON COUNTY**, a political subdivision of the State  
of Georgia (hereinafter called the "Owner"), its successors and assigns as obligee, in the penal  
sum of \_\_\_\_\_  
*[100% of Contract amount]*, lawful money of the United States of America,  
for the payment of which the Principal and the Surety bind themselves, their administrators,  
executors, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered, or is about to enter, into a certain written contract  
with the Owner, dated \_\_\_\_\_, which is incorporated herein by reference in  
its entirety (hereinafter called the "Contract"), for construction-type services of a project known as  
**[NAME OF PROJECT]**, as more particularly described in the Contract (hereinafter called the  
"Project");

**NOW, THEREFORE**, the condition of this obligation is such that if the Principal shall  
promptly make payment to all persons working on or supplying labor or materials under the  
Contract, and any amendments thereto, with regard to labor or materials furnished and used in  
the Project, and with regard to labor or materials furnished but not so used, then this obligation  
shall be void; but otherwise it shall remain in full force and effect.

1. A "Claimant" shall be defined herein as any subcontractor, person, party, partnership, corporation or the entity furnishing labor, services or materials used, or reasonably required for use, in the performance of the Contract, without regard to whether such labor, services or materials were sold, leased or rented, and without regard to whether such Claimant is or is not in privity of contract with the Principal or any subcontractor performing work on the Project, including, but not limited to, the following labor, services, or materials: water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
2. In the event a Claimant files a lien against the property of the Owner, and the Principal fails or refuses to satisfy or remove it promptly, the Surety shall satisfy or remove the lien promptly upon written notice from the Owner, either by bond or as otherwise provided in the Contract.
3. The Surety hereby waives notice of any and all modifications, omissions, additions, changes, alterations, extensions of time, changes in the payment terms, and any other amendments in or about the Contract and agrees that the obligations undertaken by this Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, alterations, extensions of time, changes in payment terms, and amendments.
4. The Surety hereby agrees that this Bond shall be deemed amended automatically and immediately, without formal or separate amendments hereto, upon any amendment or modifications to the Contract, so as to bind the Principal and Surety, jointly and severally, to the full payment of any Claimant under the Contract, as amended or modified, provided only that the Surety shall not be liable for more than the penal sum of the Bond, as specified in the first paragraph hereof.
5. This Bond is made for the use and benefit of all persons, firms, and corporations who or which may furnish any materials or perform any labor for or on account of the

construction-type services to be performed or supplied under the Contract, and any amendments thereto, and they and each of them may sue hereon.

6. No action may be maintained on this Bond after one (1) year from the date the last services, labor, or materials were provided under the Contract by the Claimant prosecuting said action.
7. This Bond is intended to comply with O.C.G.A. Section 13-10-1, and shall be interpreted so as to comply with the minimum requirements thereof. However, in the event the express language of this Bond extends protection to the Owner beyond that contemplated by O.C.G.A. Section 13-10-1, or any other statutory law applicable to this Project, then the additional protection shall be enforced in favor of the Owner, whether or not such protection is found in the applicable statutes.

**IN WITNESS WHEREOF** the undersigned have caused this instrument to be executed and their respective corporate seals to be affixed and attested by their duly authorized representatives this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_(SEAL)  
(Principal)

By: \_\_\_\_\_

Attest:

\_\_\_\_\_  
Secretary

\_\_\_\_\_(SEAL)  
(Surety)

By: \_\_\_\_\_

Attest:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
(Address of Surety's Home Office)

\_\_\_\_\_  
(Resident Agent of Surety)

**END OF SECTION**

### PERFORMANCE BOND

No contract with Fulton County for work to be done shall be valid for any purpose unless the Contractor provides a Performance Bond with good and sufficient surety payable to, in favor of, and for the protection of Fulton County. The Performance Bond shall be in the amount of 100% of the total contract amount, payable by the terms of the Contract, and shall be written on the following form.

Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business as a surety in Georgia.

Attestation for the corporation must be by the corporate officer; for a partnership by another partner; for an individual by a notary with the corporate seal.

**PERFORMANCE BOND**

**KNOW ALL MEN BY THESE PRESENTS** that \_\_\_\_\_  
*(Insert name of Contractor)*  
(hereinafter called the "Principal") and \_\_\_\_\_  
*(Insert name of Surety)* (hereinafter called the  
"Surety"), are held and firmly bound unto **FULTON COUNTY**, a political subdivision of the State  
of Georgia (hereinafter called the "Owner"), its successors and assigns, in the penal sum of  
\_\_\_\_\_  
*[100% of Contract amount]*, lawful money of the United States of America, for the  
payment of which the Principal and the Surety bind themselves, their administrators, executors,  
successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered, or is about to enter, into a certain written contract  
with the Owner, dated \_\_\_\_\_, which is incorporated herein by reference in  
its entirety (hereinafter called the "Contract"), for construction-type services of a project known as  
**[NAME OF PROJECT]**, as more particularly described in the Contract (hereinafter called the  
"Project");

**NOW, THEREFORE**, the conditions of this obligation are as follows, that if the Principal  
shall fully and completely perform all the undertakings, covenants, terms, conditions, warranties,  
and guarantees contained in the Contract, including all modifications, amendments, changes,  
deletions, additions, and alterations thereto that may hereafter be made, then this obligation shall  
be void; otherwise it shall remain in full force and effect.

Whenever the Principal shall be, and declared by the Owner to be, in default under the  
Construction-Type Contract, the Surety shall promptly remedy the default as follows:

1. Complete the Contract in accordance with its terms and conditions; or, at the sole  
option of the Owner,
2. Obtain a bid or bids for completing the Contract in accordance with its terms and  
conditions, and upon determination by the Surety and the Owner of the lowest  
responsible bidder, arrange for a contract between such bidder and Owner and make  
available as the work progresses (even though there should be a default or  
succession of defaults under the Contract or contracts of completion arranged under  
this paragraph) sufficient funds to pay the cost of completion less the balance of the  
contract price; but not exceeding, including other costs and damages for which the  
Surety may be liable hereunder, the penal sum set forth in the first paragraph hereof,  
as may be adjusted, and the Surety shall make available and pay to the Owner the  
funds required by this Paragraph prior to the payment of the Owner of the balance of  
the contract price, or any portion thereof. The term "balance of the contract price," as  
used in this paragraph, shall mean the total amount payable by the Owner to the  
Contractor under the Contract, and any amendments thereto, less the amount paid  
by the Owner to the Contractor; or, at the sole option of the Owner,
3. Allow Owner to complete the work and reimburse the Owner for all reasonable costs  
incurred in completing the work.

In addition to performing as required in the above paragraphs, the Surety shall indemnify  
and hold harmless the Owner from any and all losses, liability and damages, claims, judgments,  
liens, costs and fees of every description, including reasonable attorney's fees, litigation costs  
and expert witness fees, which the Owner may incur, sustain or suffer by reason of the failure or  
default on the part of the Principal in the performance of any or all of the terms, provisions, and  
requirements of the Contract, including any and all amendments and modifications thereto, or

incurred by the Owner in making good any such failure of performance on the part of the Principal.

The Surety shall commence performance of its obligations and undertakings under this Bond promptly and without delay, after written notice from the Owner to the Surety.

The Surety hereby waives notice of any and all modifications, omissions, additions, changes, alterations, extensions of time, changes in payment terms, and any other amendments in or about the Contract, and agrees that the obligations undertaken by this Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, alterations, extensions of time, change in payment terms, and amendments.

The Surety hereby agrees that this Bond shall be deemed amended automatically and immediately, without formal or separate amendments hereto, upon any amendment to the Contract, so as to bind the Principal and the Surety to the full and faithful performance of the Contract as so amended or modified, and so as to increase the penal sum to the adjusted Contract Price of the Contract.

No right of action shall accrue on this Bond to or for the use of any person, entity or corporation other than the Owner and any other obligee named herein, or their executors, administrators, successors or assigns.

This Bond is intended to comply with O.C.G.A. Section 36-91-1 et seq., and shall be interpreted so; as to comply with; the minimum requirements thereof. However, in the event the express language of this Bond extends protection to; the Owner beyond that contemplated by O.C.G.A. Section 36-91-1 et seq. and O.C.G.A. Section 13-10-1, as amended, or any other statutory law applicable to this Project, then the additional protection shall be enforced in favor of the Owner, whether or not such protection is found in the applicable statutes.

**IN WITNESS WHEREOF** the undersigned have caused this instrument to be executed and their respective corporate seals to be affixed and attested by their duly authorized representatives this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
(Principal) (SEAL)

By: \_\_\_\_\_

Attest:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
(Surety) (SEAL)

By: \_\_\_\_\_

Attest:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
(Address of Surety's Home Office)

\_\_\_\_\_  
(Resident Agent of Surety)

**END OF SECTION**

**SECTION 5**  
**INSURANCE AND RISK MANAGEMENT PROVISIONS**

**Insurance and Risk Management Provisions  
 Fulton County Jail – Security Locks Retrofit Project**

It is Fulton County Government’s practice to obtain Certificates of Insurance from our Contractors and Vendors. Insurance must be written by a licensed agent in a company licensed to write insurance in the State of Georgia. Respondents shall submit with the bid/proposal evidence of insurability satisfactory to Fulton County Government as to form and content. Either of the following forms of evidence is acceptable:

- A letter from an insurance carrier stating that upon your firm/company being the successful Bidder/Respondent that a Certificate of Insurance shall be issued in compliance with the Insurance and Risk Management Provisions outlined below.
- A Certificate of Insurance complying with the Insurance and Risk Management Provisions outlined below (Request for Bid/Proposal number and Project Description must appear on the Certificate of Insurance).
- A combination of a specific policy written with an umbrella policy covering liabilities in excess of the required limits is acceptable to achieve the applicable insurance coverage levels.

Upon award, the Contractor/Vendor must maintain at their expense, insurance with policy limits equal to or greater than the limits described below. Any and all Insurance Coverage(s) and Bonds required under the terms and conditions of the contract shall be maintained during the entire length of the contract, including any extensions or renewals thereto, and until all work has been completed to the satisfaction of Fulton County Government.

**Accordingly the Respondent shall provide a certificate evidencing the following:**

**1. WORKERS COMPENSATION/EMPLOYER’S LIABILITY INSURANCE – STATUTORY  
 (In compliance with the Georgia Workers Compensation Acts and any other State or Federal Acts or Provisions in which jurisdiction may be granted)**

Employer’s Liability Insurance	BY ACCIDENT - EACH ACCIDENT	\$500,000
Employer’s Liability Insurance	BY DISEASE - POLICY LIMIT	\$500,000
Employer’s Liability Insurance	BY DISEASE - EACH EMPLOYEE	\$500,000

**2. COMMERCIAL GENERAL LIABILITY INSURANCE (Including contractual Liability Insurance)**

Bodily Injury and Property Damage Liability	Each Occurrence	-	\$1,000,000
(Other than Products/Completed Operations)	General Aggregate	-	\$2,000,000
Products\Completed Operations	Aggregate Limit	-	\$2,000,000
Personal and Advertising Injury	Limits	-	\$1,000,000
Damage to Rented Premises	Limits	-	\$100,000

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**Fulton County Jail – Security Locks Retrofit**

3. **BUSINESS AUTOMOBILE LIABILITY INSURANCE**

**Combined Single Limits (Symbol 1)**      Any One Accident      -      \$1,000,000  
(Property Damage and Bodily Injury)

4. **UMBRELLA LIABILITY**

Each Occurrence      -      \$2,000,000  
(In excess of Auto, General Liability and Employers Liability)

**Certificates:**

Certificates shall state that the policy or policies shall not expire, be cancelled or altered without at least thirty (30) days prior written notice to Fulton County Government. Policies and Certificates of Insurance are to list Fulton County Government, Its Employees, Servants and Agents as an Additional Insured (except for Workers' Compensation) and shall conform to all terms and conditions (including coverage of the indemnification and hold harmless agreement) contained in the Insurance and Risk Management Provisions.

The insurance for the additional insured shall be as broad as the coverage provided for the named insured Contractor. It shall apply as Primary Insurance before any other insurance or self-insurance, including any deductible, non-contributory, and Waiver of Subrogation provided to the Additional Insured.

Additional Insured under the General Liability, Auto Liability, Umbrella Policies (with exception of Workers Compensation), with no Cross Suits exclusion.

If Fulton County Government shall so request, the Respondent, Contractor or Vendor will furnish the County for its inspection and approval such policies of insurance with all endorsements, or confirmed specimens thereof certified by the insurance company to be true and correct copies.

Such certificates and notices shall be sent to:

Fulton County Government – Purchasing Department  
130 Peachtree Street, S.W.  
Suite 1168  
Atlanta, Georgia 30303-3459

**Important:**

It is understood that **Insurance in no way Limits the Liability of the Contractor/Vendor.**

**USE OF PREMISES**

Contractor/Vendor shall confine its apparatus, the storage of materials and the operations of its workers to limits/requirements indicated by law, ordinance, permits and any restrictions of Fulton County Government and shall not unreasonably encumber the premises with its materials.

**PROTECTION OF PROPERTY**

Effective 03-29-2013

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**Fulton County Jail – Security Locks Retrofit**

Contractor/Vendor will adequately protect its own work from damage, will protect Fulton County Government's property from damage or loss and will take all necessary precautions during the progress of the work to protect all persons and the property of others from damage or loss.

Contractor/Vendor shall take all necessary precautions for the safety of employees of the work and shall comply with all applicable provisions of the Federal, State and local safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where work is being performed.

Contractor/Vendor shall erect and properly maintain at all times as required by the conditions and progress of the work, all necessary safeguards for the protection of its employees, Fulton County Government employees and the public and shall post all applicable signage and other warning devices to protect against potential hazards for the work being performed.

**INDEMNIFICATION AND HOLD HARMLESS AGREEMENT**

To the fullest extent of the Law, Contractor/Vendor hereby agrees to release, indemnify, defend and hold harmless Fulton County, its Commissioners, officers, employees, subcontractors, successors, assigns and agents, from and against any and all losses (including death), claims, damages, liabilities, costs and expenses (including but not limited to all actions, proceedings, or investigations in respect thereof and any costs of judgments, settlements, court costs, attorney's fees or expenses, regardless of the outcome of any such action, proceeding, or investigation), caused by, relating to, based upon or arising out of any act or omission by Contractor/Vendor, its directors, officers, employees, subcontractors, successors, assigns or agents, or otherwise in connection (directly or indirectly) with its acceptance, or the performance, or nonperformance, of its obligations under these agreements. Such obligations shall not be construed to negate, abridge or otherwise reduce any other rights or obligations of indemnity which would otherwise exist as to any party or person as set forth in this paragraph.

Contractor/Vendor further agrees to protect, defend, indemnify and hold harmless Fulton County, its Commissioners, officers, employees, subcontractors, successors, assigns and agents from and against any and all claims or liability for compensation under the Worker's Compensation Act, Disability Benefits Act, or any other employee benefits act arising out of injuries sustained by any employees of

THE RESPONDENT ACKNOWLEDGES HAVING READ, UNDERSTANDING, AND AGREES TO COMPLY WITH THE ABOVE STATEMENTS, AND IS AUTHORIZED TO SIGN CONTRACTS ON BEHALF OF THE RESPONDING COMPANY.

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

SIGNATURE: \_\_\_\_\_

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

DATE: \_\_\_\_\_

**13ITB03281K-DJ**  
**Fulton County Jail – Security Locks Retrofit**

## PURCHASING FORMS & INSTRUCTIONS

This section contains the procurement forms that are required to be executed and submitted with the bid package. This section does not contain all forms required to be included with the bid package submittal.

To be deemed responsive to this ITB, Bidders must provide the information requested and complete in detail all Purchasing Forms. The appropriate individual(s) authorized to commit the Bidder to the Project must sign the Purchasing Forms. Bidders should reproduce each Purchasing Form, as required, and complete the appropriate portions of the forms provided in this section.

- Form A: Non-Collusion Affidavit of Prime Bidder/Offeror
- Form B: Certificate of Acceptance of Request for Bid/Proposal Requirements
- Form C: Professional License Certifications (***not applicable***)
  - Form C1 – Georgia Utility License Contractor License
  - Form C2 – Georgia General Contractors License
  - Form C3 – Georgia Professional License
- Form D: Certification Regarding Debarment
- Form E: Disclosure Form and Questionnaire
- Form F: Georgia Security and Immigration Contractor Affidavit and Agreement
- Form G: Georgia Security and Immigration Subcontractor Affidavit

**FORM A: NON-COLLUSION AFFIDAVIT OF BIDDER/OFFEROR**

**STATE OF GEORGIA**

**COUNTY OF FULTON**

I, \_\_\_\_\_ certify that pursuant to Fulton County Code Section 2-320 (11), this bid or proposal is made without prior understanding, agreement or connection with any corporation, firm or person submitting a bid for the same work, labor or service to be done or the supplies, materials or equipment to be furnished and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of state and federal law and can result in fines, prison sentences and civil damages awards. I agree to abide by all conditions of this bid or proposal and certify that I am authorized to sign this bid or proposal for the bidder.

Affiant further states that pursuant to O.C.G.A. Section 36-91-21 (d) and (e), \_\_\_\_\_ has not, by itself or with others, directly or indirectly, prevented or attempted to prevent competition in such bidding or proposals by any means whatsoever. Affiant further states that (s)he has not prevented or endeavored to prevent anyone from making a bid or offer on the project by any means whatever, nor has Affiant caused or induced another to withdraw a bid or offer for the work.

Affiant further states that the said offer of \_\_\_\_\_ is bona fide, and that no one has gone to any supplier and attempted to get such person or company to furnish the materials to the bidder only, or if furnished to any other bidder, that the material shall be at a higher price.

\_\_\_\_\_  
(COMPANY NAME)

\_\_\_\_\_  
(PRESIDENT/VICE PRESIDENT)

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(SECRETARY/ASSISTANT SECRETARY)

(Affix corporate seal here, if a corporation)

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

County: \_\_\_\_\_

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

**NOTE:**

**IF THE OFFEROR IS A PARTNERSHIP, ALL OF THE PARTNERS AND ANY OFFICER, AGENT, OR OTHER PERSON WHO MAY HAVE REPRESENTED OR ACTED FOR THEM IN BIDDING FOR OR PROCURING THE CONTRACT SHALL ALSO MAKE THIS OATH.**

**IF THE OFFEROR IS A CORPORATION, ALL OFFICERS, AGENTS, OR OTHER PERSONS WHO MAY HAVE ACTED FOR OR REPRESENTED THE CORPORATION IN BIDDING FOR OR PROCURING THE CONTRACT SHALL MAKE THE OATH.**

**FORM B: FULTON COUNTY CERTIFICATE OF ACCEPTANCE OF BID/PROPOSAL  
REQUIREMENTS**

This is to certify that on this day, offeror acknowledges that he/she has read this solicitation document, pages # \_\_\_\_\_ to # \_\_\_\_\_ inclusive, including any addenda # \_\_\_\_\_ to # \_\_\_\_\_ exhibit(s) # \_\_\_\_\_ to # \_\_\_\_\_, attachment(s) # \_\_\_\_\_, and/or appendices # \_\_\_\_\_ to # \_\_\_\_\_ in its entirety, and agrees that no pages or parts of the document have been omitted, that he/she understands, accepts and agrees to fully comply with the requirements therein, and that the undersigned is authorized by the offeror to submit the proposal herein and to legally obligate the offeror thereto.

This is also to certify that the offeror has reviewed the form Fulton County contract included in the solicitation documents and agrees to be bound by its terms, or that the offeror certifies that it is submitting any proposed modification to the contract terms with its proposal. The offeror further certifies that the failure to submit proposed modifications with the proposal waives the offeror's right to submit proposed modifications later. The offeror also acknowledges that the indemnification and insurance provisions of Fulton County's contract included in the solicitation documents are non-negotiable and that proposed modifications to said terms may be reason to declare the offeror's proposal as non-responsive.

Company: \_\_\_\_\_

Signature: \_\_\_\_\_

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

Title: \_\_\_\_\_

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

(Corporate Seal)

**FORM C1: CONTRACTOR'S GEORGIA UTILITY LICENSE CERTIFICATION**

Contractor's Name: \_\_\_\_\_

Utility Contractor's Name: \_\_\_\_\_

Expiration Date of License: \_\_\_\_\_

I certify that the above information is true and correct and that the classification noted is applicable to the Bid for this Project.

Signed:

\_\_\_\_\_

Date:

\_\_\_\_\_

**(ATTACH COPY OF LICENSE)**

**FORM C2: CONTRACTOR'S GEORGIA GENERAL CONTRACTOR'S LICENSE  
CERTIFICATION**

Contractor's Name: \_\_\_\_\_

General Contractor's License Number: \_\_\_\_\_

Expiration Date of License: \_\_\_\_\_

I certify that the above information is true and correct and that the classification noted is applicable to the Bid for this Project.

Signed:

\_\_\_\_\_

Date:

\_\_\_\_\_

**(ATTACH COPY OF LICENSE)**

**FORM C3: GEORGIA PROFESSIONAL LICENSE CERTIFICATION**

**NOTE: Please complete this form for the work your firm will perform on this project.**

Contractor's Name: \_\_\_\_\_

Performing work as: Prime Contractor \_\_\_\_ Sub-Contractor \_\_\_\_

Professional License Type: \_\_\_\_\_

Professional License Number: \_\_\_\_\_

Expiration Date of License: \_\_\_\_\_

I certify that the above information is true and correct and that the classification noted is applicable to the Bid for this Project.

Signed: \_\_\_\_\_

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

**(ATTACH COPY OF LICENSE)**

### FORM D: CERTIFICATION REGARDING DEBARMENT

- (1) The Offeror certifies that neither it or its subcontractors is presently debarred, suspended, proposed for debarment, declared ineligible, or otherwise excluded from doing business with any government agency. Any such exclusion may cause prohibition of your firm from participating in any procurement by the Fulton County Government.
- (2) If the Offeror is unable to certify to any of the statements in this certification, such Offeror or subcontractor shall attach an explanation to this bid or proposal.

#### INSTRUCTIONS FOR CERTIFICATION

By signing and submitting this certification, the Offeror is providing the certification set out below:

- (1) The certification in this clause is a material representation of fact upon which reliance will be placed. If it is later determined that the prospective vendor knowingly rendered a false certification, the Purchasing Agent may pursue all available remedies, including suspension and/or debarment, for withdrawal of award or termination of a contract.
- (2) The prospective Offeror shall provide immediate written notice to the Purchasing Agent if at anytime the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (3) Offeror shall be under a continuing duty to immediately inform the Purchasing Agent in writing of any changes, if as a result of such changes, the Offeror certification regarding debarment is affected.

#### DEBARMENT ORDINANCE

The following Section 2-322 of Fulton County Code of Laws establishes the procedure for the debarment of contractors.

**(a) Authority to suspend.**

After reasonable notice to the entity involved and reasonable opportunity for that entity to be heard, the Purchasing Agent, after consultation with user department, the County Manager and the County Attorney shall have the authority to suspend an entity for cause from consideration for award of county contracts. As used in this section, the term entity means any business entity, individual, firm, contractor, subcontractor or business corporation, partnership, limited liability corporation, firm, contractor, subcontractor or business structured; provided, further, that any such entity shall also be subject to suspension under this section if any of its constituents, members, subcontractors at any tier of such entity's and the entity, or any constituent or member, knew or should have known of the commission of the act. The suspension shall be for a period not to exceed three (3) years unless cause is based on a felony conviction for an offense related or associated with fraudulent contracting or misappropriation of funds wherein the suspension shall not exceed seven (7) years.

**(b) Causes for Suspension. The causes for suspension include:**

- (1) Conviction for commission of a criminal offense as an incident to obtain or attempting to obtain a public or private contract or subcontract, or in performance of such contract or subcontract;

- (2) Conviction of state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property or other offense indicating a lack of business integrity or business honesty which currently, seriously and directly affects responsibility as a county contractor.
- (3) Conviction of state or federal anti-trust statutes arising out of the solicitation and submission of bids and proposals;
- (4) Violation of contract provisions, as set forth below, of a character which is regarded by the Purchasing Agent to be so serious as to justify suspension action:
  - a. Failure to perform in accordance with the specifications within a time limit provided in a county contract;
  - b. A recent record of failure to perform or unsatisfactory performance in accordance with the terms of one or more contracts; provided, that failure to perform or unsatisfactory performance caused by acts beyond the control of the contractor shall not be considered to be a basis for suspension;
  - c. Material representation of the composition of the ownership or workforce or business entity certified to the county as a minority business enterprise; or
  - d. Falsification of any documents.
- (5) For violation of the ethical standards set forth in Fulton County Code Chapter 9, Code of Ethics.
- (6) Knowing misrepresentation to the county, of the use which a majority owned contractor intends to make a minority business enterprise (a business entity at least 51 percent of which is owned and controlled by minority persons, as defined in Fulton County Code Chapter 6, Article B, Minority Business Enterprise Affirmative Action Program and certified as such by the County) as a subcontractor or a joint venture partner, in performing work under contract with the County.

Failure to fully and truthfully provide the information required, may result in the disqualification of your bid/proposal from consideration or termination of the Contract, once awarded. This document must be completed and included as a part of the bid/proposal package along with other required documents.

[SIGNATURES ON NEXT PAGE]

Under penalty of perjury, I declare that I have examined this certification and all attachments hereto, if applicable, to the best of my knowledge and belief, and all statements contained hereto are true, correct, and complete.

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
(Legal Name of Offeror) (Date)

\_\_\_\_\_  
(Signature of Authorized Representative) (Date)

\_\_\_\_\_  
(Title)

### FORM E: DISCLOSURE FORM AND QUESTIONNAIRE

1. Please provide the names and business addresses of each of the Offeror's firm's officers and directors.

For the purposes of this form, the term "Offeror" means an entity that responds to a solicitation for a County contract by either submitting a proposal in response to a Request for Proposal or a Request for Qualification or a Bid in response to an Invitation to Bid. Describe accurately, fully and completely, their respective relationships with said Offeror, including their ownership interests and their anticipated role in the management and operations of said Offeror.

2. Please describe the general development of said Offeror's business during the past five (5) years, or such shorter period of time that said Offeror has been in business.

3. Please state whether any employee, agent or representative of said Offeror who is or will be directly involved in the subject project has or has ever: (i) directly or indirectly had a business relationship with Fulton County; (ii) directly or indirectly received revenues from Fulton County; or (iii) directly or indirectly receives revenues from the result of conducting business on Fulton County property or pursuant to any contract with Fulton County. Please describe in detail any such relationship.

**LITIGATION DISCLOSURE:**

Failure to fully and truthfully disclose the information required, may result in the disqualification of your bid or proposal from consideration or termination of the Contract, once awarded.

1. Please state whether any of the following events have occurred in the last five (5) years with respect to said Offeror. If any answer is yes, explain fully the following:

(a) whether a petition under the federal bankruptcy laws or state insolvency laws was filed by or against said Offeror, or a receiver fiscal agent or similar officer was appointed by a court for the business or property of said Offeror;

Circle One:                    YES                    NO

(b) whether Offeror was subject of any order, judgment, or decree not subsequently reversed, suspended or vacated by any court of competent jurisdiction, permanently enjoining said Offeror from engaging in any type of business practice, or otherwise eliminating any type of business practice; and

Circle One:                    YES                    NO

(c) whether said Offeror's business was the subject of any civil or criminal proceeding in which there was a final adjudication adverse to said Offeror, which directly arose from activities conducted by the business unit or corporate division of said Offeror which submitted a bid or proposal for the subject project. If so please explain.

Circle One:                    YES                    NO

2. Have you or any member of your firm or team to be assigned to this engagement ever been indicted or convicted of a criminal offense within the last five (5) years?

Circle One:                    YES                    NO

3. Have you or any member of your firm or team been terminated (for cause or otherwise) from any work being performed for Fulton County or any other Federal, State or Local Government?

Circle One:                    YES                    NO

4. Have you or any member of your firm or team been involved in any claim or litigation adverse to Fulton County or any other federal, state or local government, or private entity during the last three (3) years?

Circle One:                    YES                    NO

5. Has any offeror, member of offeror’s team, or officer of any of them (with respect to any matter involving the business practices or activities of his or her employer), been notified within the five (5) years preceding the date of this offer that any of them are the target of a criminal investigation, grand jury investigation, or civil enforcement proceeding?

Circle One:                    YES                    NO

If you have answered “YES” to any of the above questions, please indicate the name(s) of the person(s), the nature, and the status and/or outcome of the information, indictment, conviction, termination, claim or litigation, the name of the court and the file or reference number of the case, as applicable. Any such information should be provided on a separate page, attached to this form and submitted with your proposal.

**NOTE: If any response to any question set forth in this questionnaire has been disclosed in any other document, a response may be made by attaching a copy of such disclosure. (For example, said Offeror's most recent filings with the Securities and Exchange Commission (“SEC”) may be provided if they are responsive to certain items within the questionnaire.) However, for purposes of clarity, Offeror should correlate its responses with the exhibits by identifying the exhibit and its relevant text.**

Disclosures must specifically address, completely respond and comply with all information requested and fully answer all questions requested by Fulton County. Such disclosure must be submitted at the time of the bid or proposal submission and included as a part of the bid/proposal submitted for this project. Disclosure is required for Offerors, joint venture partners and first-tier subcontractors.

Failure to provide required disclosure, submit officially signed and notarized documents or respond to any and all information requested/required by Fulton County can result in the bid/proposal declared as non-responsive. This document must be completed and included as a part of the bid/proposal package along with other required documents.

[SIGNATURES ON NEXT PAGE]

Under penalty of perjury, I declare that I have examined this questionnaire and all attachments hereto, if applicable, to the best of my knowledge and belief, and all statements contained hereto are true, correct, and complete.

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
(Legal Name of Proponent) (Date)

\_\_\_\_\_  
(Signature of Authorized Representative) (Date)

\_\_\_\_\_  
(Title)

**Sworn to and subscribed before me,**

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
(Notary Public) (Seal)

Commission Expires \_\_\_\_\_  
(Date)

**FORM F: GEORGIA SECURITY AND IMMIGRATION CONTRACTOR AFFIDAVIT  
AND AGREEMENT**

**Instructions:**

Contractors must attest to compliance with the requirements of O.C.G.A 13-10-91 and the Georgia Department of Labor Rule 300-10-01-.02 by executing the Contractor Affidavit provided.

**STATE OF GEORGIA**

**COUNTY OF FULTON**

**FORM F: GEORGIA SECURITY AND IMMIGRATION CONTRACTOR AFFIDAVIT  
AND AGREEMENT**

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 under a contract with **[insert name of prime contractor]** \_\_\_\_\_ on behalf of **Fulton County Government** has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services to this contract with **Fulton County Government**, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A/ 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the **Fulton County Government** at the time the subcontractor(s) is retained to perform such service.

\_\_\_\_\_  
EEV/Basic Pilot Program\* User Identification Number

\_\_\_\_\_  
BY: Authorized Officer of Agent  
(Insert Subcontract Name)

\_\_\_\_\_  
Title of Authorized Officer or Agent of Subcontractor

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

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

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

County: \_\_\_\_\_

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

**NOTE:**

\* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the “EEV/Basic Pilot Program” operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

**FORM G: GEORGIA SECURITY AND IMMIGRATION SUBCONTRACTOR  
AFFIDAVIT**

**Instructions:**

In the event that your company is awarded the contract for this project, and will be utilizing the services of any subcontractor(s) in connection with the physical performance of services pursuant to this contract, the following affidavit must be completed by such subcontractor(s). Your company must provide a copy of each such affidavit to Fulton County Government, Department of Purchasing & Contract Compliance with the proposal submittal.

All subcontractor affidavit(s) shall become a part of the contract and all subcontractor(s) affidavits shall be maintained by your company and available for inspection by Fulton County Government at any time during the term of the contract. All subcontractor(s) affidavit(s) shall become a part of any contractor/subcontractor agreement(s) entered into by your company.

**STATE OF GEORGIA**

**COUNTY OF FULTON**

**FORM G: GEORGIA SECURITY AND IMMIGRATION SUBCONTRACTOR  
AFFIDAVIT**

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 **[insert name of prime contractor]** \_\_\_\_\_ behalf of **Fulton County Government** has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

\_\_\_\_\_  
EEV/Basic Pilot Program\* User Identification Number

\_\_\_\_\_  
BY: Authorized Officer of Agent  
(Insert Subcontract Name)

\_\_\_\_\_  
Title of Authorized Officer or Agent of Subcontractor

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

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

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

County: \_\_\_\_\_

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

**NOTE:**

\* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the “EEV/Basic Pilot Program” operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

## **CONTRACT COMPLIANCE REQUIREMENTS**

### **NON-DISCRIMINATION IN PURCHASING AND CONTRACTING**

It is the policy of Fulton County Government that discrimination against businesses by reason of the race, color, gender or national origin of the ownership of any such business is prohibited. Furthermore, it is the policy of the Board of Commissioners (“Board”) that Fulton County and all vendors and contractors doing business with Fulton County shall provide to all businesses the opportunity to participate in contracting and procurement paid, in whole or in part, with monetary appropriations of the Board without regard to the race, color, gender or national origin of the ownership of any such business. Similarly, it is the policy of the Board that the contracting and procurement practices of Fulton County should not implicate Fulton County as either an active or passive participant in the discriminatory practices engaged in by private contractors or vendors seeking to obtain contracts with Fulton County.

#### **Implementation of Equal Employment Opportunity (EEO) Policy**

The County effectuates Equal Employment Opportunity thru Policy #800-8, Non-Discrimination in Contracting and Procurement. This policy considers racial and gender workforce availability. The availability of each workgroup is derived from the work force demographics set forth in the 2000 Census EEO file prepared by the United States Department of Commerce for the applicable labor pool normally utilized for the contract.

#### **Monitoring of EEO Policy**

Upon award of a contract with Fulton County, the successful bidder/proposer must complete an Equal Employment Opportunity Report (EEOR), describing the racial and gender make-up of the firm’s work force. If the EEOR indicates that the firm’s demographic composition indicates underutilization of employee’s of a particular ethnic group for each job category, the firm will be required to submit an aggressive action plan setting forth steps the firm will take to address the identified underutilization.

### **DETERMINATION OF GOOD FAITH EFFORTS**

During the course of the project, the Prime Contractor shall demonstrate that they have made all efforts reasonably possible to ensure that Minority and Female Business Enterprises (MFBE) have had a full and fair opportunity to compete and win subcontracts on this project. The Prime Contractor is required to include all outreach attempts that would demonstrate a “Good Faith Effort” in the solicitation of sub-consultants/subcontractors.

Written documentation demonstrating the Prime Contractor’s outreach efforts to identify, contact, contract with or utilize Minority or Female owned businesses shall include holding pre-bid conferences, publishing advertisements in general circulation media, trade association publications, minority-focused media, and the County’s bid board, as well as other efforts.

Include a list of publications where the advertisement was placed as well as a copy of the advertisement. Advertisement shall include at a minimum, scope of work, project location, location(s) of where plans and specifications may be viewed or obtained and trade or scopes of work for which subcontracts are being solicited.

## EQUAL BUSINESS OPPORTUNITY PLAN (EBO PLAN)

In addition to the proposal submission requirements, each vendor **must** submit an Equal Business Opportunity Plan (EBO Plan) with their bid/proposal. The EBO Plan is designed to enhance the utilization of a particular racial, gender or ethnic group by a bidder/proposer, contractor, or vendor or by Fulton County. The respondent **must** outline a plan of action to encourage and achieve diversity and equality in the available procurement and contracting opportunities with *this solicitation*.

The EBO Plan **must** identify and include:

1. Potential opportunities within the scope of work of *this solicitation* that will allow for participation of racial, gender or ethnic groups.
2. Efforts that will be made by the bidder/proposer to encourage and solicit minority and female business utilization in *this solicitation*.

Fulton County encourages joint ventures, teaming, partnering and mentor-protégé relationships with minority and female businesses in an effort to achieve contracting and procurement diversity.

**Prompt Payment:** The prime contractor **must** certify in writing and **must** document all subcontractors, sub-consultants and suppliers have been promptly paid for work and materials, (less any retainage by the prime contractor prior to receipt of any further progress payments). In the event the prime contractor is unable to pay subcontractors, sub-consultants or suppliers until it has received a progress payment from Fulton County, the prime contractor shall pay all subcontractors, sub-consultants or suppliers funds due from said progress payment within forty-eight (48) hours of receipt of payment from Fulton County. In no event shall a subcontractor, sub-consultant or supplier be paid later than fifteen (15) days as provided for by state law.

## REQUIRED FORMS AND EBO PLAN

In order to be compliant with the intent and provisions of the Fulton County Non-Discrimination in Purchasing and Contracting Ordinance (99-0960), bidders/proposers **must** submit the following completed documents. Failure to provide this information **shall** result in the proposal being deemed non-responsive.

- Exhibit A – Promise of Non-Discrimination
- Exhibit B – Employment Report
- Exhibit C – Schedule of Intended Subcontractor Utilization
- Exhibit D – Letter of Intent to Perform as a Subcontractor or Provide Materials or Services
- Exhibit E – Declaration Regarding Subcontractors Practices
- Exhibit F – Joint Venture Disclosure Affidavit
- Equal Business Opportunity Plan (EBO Plan). This document is not a form rather a statement created by the bidder/proposer on its company letter head addressing the EBO Plan requirements.
- Exhibit H – First Source Jobs Program Information, Form 2

The following document must be completed as instructed if awarded the project:

- Exhibit G – Prime Contractor's Subcontractor Utilization Report
- Exhibit H – First Source Jobs Program Agreement, Form 3

All Contract Compliance documents (Exhibits A – H and EBO Plan) are to be placed in a **separate sealed envelope** clearly marked "Contract Compliance". The EBO Plan must be submitted on company letterhead. These documents are considered part of and should be submitted with the Technical Proposal.

**EXHIBIT A – PROMISE OF NON-DISCRIMINATION**

“Know all persons by these presents, that I/We ( \_\_\_\_\_ ),  
Name

\_\_\_\_\_ Title \_\_\_\_\_ Firm Name  
Hereinafter “Company”, in consideration of the privilege to bid on or obtain contracts funded, in whole or in part, by Fulton County, 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 any bid submitted to Fulton County for the performance of any resulting there from,
- 2) That it is and shall be the policy of this Company to provide equal opportunity to all businesses seeking to contract or otherwise interested in contracting with this Company without regard to the race, color, gender or national origin of the ownership of this business,
- 3) That the promises of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption,
- 4) That the promise of non-discrimination as made and set forth herein shall be made a part of, and incorporated by reference into, any contract or portion thereof which this Company may hereafter obtain,
- 5) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling the Board to declare the contract in default and to exercise any and all applicable rights and remedies, including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and/or forfeiture of compensation due and owing on a contract; and
- 6) That the bidder shall provide such information as may be required by the Director of Contract Compliance pursuant to Section 4.4 of the Fulton County Non-Discrimination in Purchasing and Contracting Ordinance.

**SIGNATURE:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

\_\_\_\_\_  
**TELEPHONE NUMBER:** \_\_\_\_\_

**EXHIBIT B – EMPLOYMENT REPORT**

The demographic employment make-up for the bidder must be identified and submitted with this bid/proposal. In addition, if subcontractors will be utilized by the bidder/proposer to complete this project, then the demographic employment make-up of the subcontractor(s) must be identified and submitted with this bid.

JOB CATEGORIES	TOTAL EMPLOYED		TOTAL MINORITIES		WHITE (Not Hispanic Origin)		BLACK or AFRICAN AMERICAN (Not of Hispanic Origin)		HISPANIC or LATINO		AMERICAN INDIAN or ALASKAN NATIVE (AIAN)		ASIAN		NATIVE HAWAIIAN or OTHER PACIFIC ISLANDER (NHOP)		TWO or MORE RACES		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
EXECUTIVE/SENIOR LEVEL OFFICIALS and MANAGERS																			
FIRST/MID LEVEL OFFICIALS and MANAGERS																			
PROFESSIONALS																			
TECHNICIANS																			
SALES WORKERS																			
ADMINISTRATIVE SUPPORT WORKERS																			
CRAFT WORKERS																			
OPERATIVES																			
LABORERS & HELPERS																			
SERVICE WORKERS																			
<b>TOTAL</b>																			

FIRMS'S NAME  
 ADDRESS  
 TELEPHONE

This completed form is for (Check only one):

\_\_\_\_\_ Bidder/Proposer

\_\_\_\_\_ Subcontractor



**EXHIBIT C - SCHEDULE OF INTENDED SUBCONTRACTOR UTILIZATION**

If the bidder/proposer intends to subcontract any portion of this scope of work/service(s), this form **must be** completed and **submitted with the bid/proposal**. All prime bidders/proposers **must** include Letter(s) of Intent (Exhibit D) in the bid document for all subcontractors who will be utilized under the scope of work/services.

**Prime Bidder/Proposer:** \_\_\_\_\_

**ITB/RFP Number:** \_\_\_\_\_

**Project Name or Description of Work/Service(s):** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

1. My firm, as Prime Bidder/Proposer on this scope of work/service(s) is \_\_\_\_\_ is not \_\_\_\_\_ a minority or female owned and controlled business enterprise. (Please indicate below the portion of work, including, percentage of bid/proposal amount that your firm will carry out directly):

\_\_\_\_\_  
\_\_\_\_\_

2. If the Prime Bidder/Proposer is a Joint Venture, please complete Exhibit F: Joint Venture Disclosure Affidavit and attach a copy of the executed Joint Venture Agreement.

3. Sub-Contractors (including suppliers) to be utilized in the performance of this scope of work/service(s), if awarded, are:

SUBCONTRACTOR NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

ETHNIC GROUP\*: \_\_\_\_\_ COUNTY CERTIFIED\*\* \_\_\_\_\_

WORK TO BE PERFORMED: \_\_\_\_\_

DOLLAR VALUE OF WORK: \$ \_\_\_\_\_ PERCENTAGE VALUE: \_\_\_\_\_ %

**\*Ethnic Groups: African American (AABE); Asian American (ABE); Hispanic American (HBE); Native American (NABE); White Female American (WFBE); \*\*If yes, please attach copy of recent certification.**

SUBCONTRACTOR NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_  
ETHNIC GROUP\*: \_\_\_\_\_ COUNTY CERTIFIED\*\* \_\_\_\_\_  
WORK TO BE PERFORMED: \_\_\_\_\_  
DOLLAR VALUE OF WORK: \$ \_\_\_\_\_ PERCENTAGE VALUE: \_\_\_\_\_ %

---

SUBCONTRACTOR NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_  
ETHNIC GROUP\*: \_\_\_\_\_ COUNTY CERTIFIED\*\* \_\_\_\_\_  
WORK TO BE PERFORMED: \_\_\_\_\_  
DOLLAR VALUE OF WORK: \$ \_\_\_\_\_ PERCENTAGE VALUE: \_\_\_\_\_ %

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SUBCONTRACTOR NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_  
ETHNIC GROUP\*: \_\_\_\_\_ COUNTY CERTIFIED\*\* \_\_\_\_\_  
WORK TO BE PERFORMED: \_\_\_\_\_  
DOLLAR VALUE OF WORK: \$ \_\_\_\_\_ PERCENTAGE VALUE: \_\_\_\_\_ %

---

SUBCONTRACTOR NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_  
ETHNIC GROUP\*: \_\_\_\_\_ COUNTY CERTIFIED\*\* \_\_\_\_\_  
WORK TO BE PERFORMED: \_\_\_\_\_  
DOLLAR VALUE OF WORK: \$ \_\_\_\_\_ PERCENTAGE VALUE: \_\_\_\_\_ %

**\*Ethnic Groups: African American (AABE); Asian American (ABE); Hispanic American (HBE); Native American (NABE); White Female American (WFBE); \*\*If yes, please attach copy of recent certification.**

<b>Total Dollar Value of Subcontractor Agreements: (\$)</b>
---

**Total Percentage Value: (%)**

**CERTIFICATION:** The undersigned certifies that he/she has read, understands and agrees to be bound by the Bid/Proposer provisions, including the accompanying Exhibits and other terms and conditions regarding sub-contractor utilization. The undersigned further certifies that he/she is legally authorized by the Bidder/Proposer to make the statement and representation in this Exhibit and that said statements and representations are true and correct to the best of his/her knowledge and belief. The undersigned understands and agrees that if any of the statements and representations are made by the Bidder/Proposer knowing them to be false, or if there is a failure of the intentions, objectives and commitments set forth herein without prior approval of the County, then in any such event the Contractor's acts or failure to act, as the case may be, shall constitute a material breach of the contract, entitling the County to terminate the Contract for default. The right to so terminate shall be in addition to, and in lieu of, any other rights and remedies the County may have for other defaults under the contract.

**Signature:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**Firm or Corporate Name:** \_\_\_\_\_

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

**Telephone:** (     ) \_\_\_\_\_

**Fax Number:** (     ) \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**EXHIBIT D**

**LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR  
OR  
PROVIDE MATERIALS OR SERVICES**

This form **must** be completed by **ALL** known subcontractor and submitted with the bid/proposal. The Prime Contractor **must** submit Letters of Intent for **ALL** known subcontractors at time of bid submission.

To: \_\_\_\_\_  
(Name of Prime Contractor Firm)

From: \_\_\_\_\_  
(Name of Subcontractor Firm)

ITB/RFP Number: \_\_\_\_\_

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

The undersigned is prepared to perform the following described work or provide materials or services in connection with the above project (specify in detail particular work items, materials, or services to be performed or provided):

Description of Work	Project Commence Date	Project Completion Date	Estimated Dollar Amount

\_\_\_\_\_  
(Prime Bidder)

\_\_\_\_\_  
(Subcontractor)

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

**EXHIBIT E - DECLARATION REGARDING SUBCONTRACTING PRACTICES**

If the bidder/proposer **does not intend to subcontract** any portion of the scope of work services(s), this form **must be** completed and submitted with the bid/proposal.

\_\_\_\_\_ hereby declares that it is my/our intent to  
**(Bidder)**

perform 100% of the work required for \_\_\_\_\_  
**(ITB/RFP Number)**

\_\_\_\_\_  
**(Description of Work)**

In making this declaration, the bidder/proposer states the following:

1. That the bidder/proposer does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform **all elements** of the work on this project with his/her own current work forces;
2. If it should become necessary to subcontract some portion of the work at a later date, the bidder/proposer will comply with all requirements of the County's Non-Discrimination Ordinance in providing equal opportunities to all firms to subcontract the work. The determination to subcontract some portion of the work at a later date shall be made in good faith and the County reserves the right to require additional information to substantiate a decision made by the bidder/proposer to subcontract work following the award of the contract. Nothing contained in this provision shall be employed to circumvent the spirit and intent of the County's Non-Discrimination Ordinances;
3. The bidder will provide, upon request, information sufficient for the County to verify Item Number one.

**AUTHORIZED COMPANY REPRESENTATIVE**

**Name:** \_\_\_\_\_ **Title:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Firm:** \_\_\_\_\_

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

**Phone Number:** \_\_\_\_\_

**Fax Number:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**EXHIBIT F - JOINT VENTURE DISCLOSURE AFFIDAVIT**

**ITB/RFP No.** \_\_\_\_\_

**Project Name** \_\_\_\_\_

This form must be completed and submitted with the bid/proposal if a joint venture approach is to be undertaken.

In order to evaluate the extent of small, minority and female business involvement being proposed by a Bidder/Proposer, certain relevant information must be provided prior to contract award. The information requested below is to clearly identify and explain the extent of small business participation in the proposed joint venture. All items must be properly addressed before the business entity can be evaluated.

**1. Firms:**

- 1) **Name of Business:** \_\_\_\_\_  
**Street Address:** \_\_\_\_\_  
**Telephone No.:** \_\_\_\_\_  
**Nature of Business:** \_\_\_\_\_
  
- 2) **Name of Business:** \_\_\_\_\_  
**Street Address:** \_\_\_\_\_  
**Telephone No.:** \_\_\_\_\_  
**Nature of Business:** \_\_\_\_\_
  
- 3) **Name of Business:** \_\_\_\_\_  
**Street Address:** \_\_\_\_\_  
**Telephone No.:** \_\_\_\_\_  
**Nature of Business:** \_\_\_\_\_

**NAME OF JOINT VENTURE (if applicable):** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**PRINCIPAL OFFICE:** \_\_\_\_\_

**OFFICE PHONE:** \_\_\_\_\_

**Note:** Attach additional sheets as required

1. Describe the capital contributions by each joint venturer and accounting thereof.
2. Describe the financial controls of the joint venture, e.g., will a separate cost center be established? Which venturer will be responsible for keeping the books? How will the expense therefore be reimbursed? What is the authority of each joint venture to commit or obligate the order?
3. Describe any ownership, options for ownership, or loans between the joint ventures. Identify terms thereof.
4. Describe the estimated contract cash flow for each joint venturer.
5. To what extent and by whom will the on-site work be supervised?
6. To what extent and by whom will the administrative office be supervised?
7. Which joint venturer will be responsible for material purchases including the estimated cost thereof? How will the purchase be financed?
8. Which joint venturer will provide equipment? What is the estimated cost thereof? How will the equipment be financed?
9. Describe the experience and business qualifications of each joint venturer.
10. Submit a copy of all joint venture agreements and evidence of authority to do business in the State of Georgia as well as locally, to include all necessary business licenses.
11. Percent of Minority/Female Business Enterprises ownership by each joint venture in terms of profit and loss sharing: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
12. The authority of each joint venturer to commit or obligate the other: \_\_\_\_\_  
\_\_\_\_\_
13. Number of personnel to be involved in project, their crafts and positions and whether they are employees of the Minority/Female Business Enterprises enterprise, the majority firm or the joint venture: \_\_\_\_\_  
\_\_\_\_\_

14. Identification of control and participation in venture; list those individuals who are responsible for day-to-day management and policy decision-maker, including, but not limited to, those with prime responsibility for areas designated below; (use additional sheets if necessary)

<u>Name</u>	<u>Race</u>	<u>Sex</u>	<u>Financial Decisions</u>	<u>Supervision Field Operation</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

In connection with any work that these firms, as a joint venture, might be authorized to perform in connection with above captioned contract, we each do hereby authorize representatives of the Fulton County Department of Contract Compliance, Departments of Purchasing and Contract Compliance, and Finance, under the direction of the County Manger's Office, to examine, from time to time, the books, records and files to the extent that such relate to this County project.

**WE DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT WE ARE AUTHORIZED, ON BEHALF OF THE ABOVE FIRMS, TO MAKE THIS AFFIDAVIT AND GRANT THE ABOVE PRIVILEGE.**

FOR \_\_\_\_\_  
(Company)

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

\_\_\_\_\_  
(Signature of Affiant)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Company)

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

\_\_\_\_\_  
(Signature of Affiant)

\_\_\_\_\_  
(Printed Name)

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

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

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, appeared \_\_\_\_\_, the undersigned officer, personally appeared \_\_\_\_\_ known to me to be the person described in the foregoing Affidavit and acknowledges that he (she) executed the same in the capacity therein stated and for the purpose therein contained.

**EXHIBIT – G PRIME CONTRACTOR/SUB-CONTRACTOR UTILIZATION REPORT**

This report **must** be submitted by the **tenth day** of each month, along with a copy of your monthly invoice (schedule of values/payment application) to Contract Compliance. Failure to comply **shall** result in the County commencing proceedings to impose sanctions to the prime contractor, in addition to pursuing any other available legal remedy. Sanctions may include the suspending of any payment or part thereof, termination or cancellation of the contract, and the denial of participation in any future contracts awarded by Fulton County.

<b>REPORTING PERIOD</b>	<b>PROJECT NAME:</b>
<b>FROM:</b>	<b>PROJECT NUMBER:</b>
<b>TO:</b>	<b>PROJECT LOCATION:</b>

<b>PRIME CONTRACTOR</b>	<b>Contract Award Date</b>	<b>Contract Award Amount</b>	<b>Change Order Amount</b>	<b>Contract Period</b>	<b>% Complete to Date</b>
<b>Name:</b>					
<b>Address:</b>					
<b>Telephone #:</b>					

AMOUNT OF REQUISITION THIS PERIOD: \$ \_\_\_\_\_  
 TOTAL AMOUNT REQUISITION TO DATE: \$ \_\_\_\_\_  
 TOTAL AMOUNT REQUISITION TO DATE: \$ \_\_\_\_\_

**SUBCONTRACTOR UTILIZATION (add additional rows as necessary)**

Name of Sub-Contractor	Description of Work	Contract Amount	Amount Paid To Date	Amount Requisition This Period	Contract Starting Date	Contract Period Ending Date
<b>TOTALS</b>						

Executed By: \_\_\_\_\_

**(Signature)**

**(Printed Name)**

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

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

**Should you have questions regarding any of the documents contained in Section 6, please feel free to contact the Office of Contract Compliance at (404) 612-6300, for further assistance.**

## EXHIBIT H

### FULTON COUNTY FIRST SOURCE JOBS PROGRAM

#### **STATEMENT OF POLICY:**

It is the policy of Fulton County Government to provide employment opportunities to the citizens of Fulton County. This policy will apply to all contracts procured through the Department of Purchasing & Contract Compliance valued in excess of \$200,000. The Prime Contractor is expected to utilize the First Source Jobs Program to fill 50% of the entry level jobs which arise as a result of any project funded in whole or in part with County funds with residents of Fulton County.

#### **PURPOSE:**

The purpose of this policy is to create a pool of employable persons who are residents of Fulton County to be called upon as a source to fill jobs created as a result of any eligible project funded in whole or in part with County funds in order to provide stable economic opportunities for families throughout the County. The First Source Jobs Program will be implemented by the Department of Purchasing & Contract Compliance and the Office of Workforce Development.

#### **MONITORING POLICY:**

Upon execution of a contract with Fulton County Government, the First Source Jobs Agreement (FSJ Form 2) will become a part of the contract between the bidder/proposer and Fulton County Government. The First Source Jobs Program will be monitored during routine site visits by the Office of Contract Compliance along with the Office of Workforce Development.

FORM 1

**FULTON COUNTY**

**First Source Jobs Program Information**

**Company Name:** \_\_\_\_\_

**Project Number:** \_\_\_\_\_

**Project Name:** \_\_\_\_\_

The following entry-level positions will become available as a result of the above referenced contract with Fulton County.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

Include a job description and all required qualifications for each position listed above.

Identify a company representative and contact phone number who will be responsible for coordinating with the First Source Jobs Program:

**Company Representative:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**FORM 2**

**FULTON COUNTY  
First Source Jobs Program Agreement**

Awarded Contractor's Name: \_\_\_\_\_

Formal Contract Name: \_\_\_\_\_

RFP/ITB Number: \_\_\_\_\_

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

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

The contractor listed above agrees to the following:

1. The contractor shall make a good faith effort to fill 50% of the entry level position(s) created by this project using the Fulton County First Source Jobs Program.
2. The contractor shall provide the applicable details of every entry level job in writing within the required form.
3. The contractor shall be expected to present documentation that confirms employment terms to both the employee and Fulton County.

The Office of Contract Compliance will assist with monitoring the participation of First Source Jobs Program employees during routine site visits and report findings to the Office of Workforce Development for confirmation and follow-up. The Office of Workforce Development shall notify the Director of Human Services and the Purchasing Agent of any determination of non-compliance with the requirements of this policy and recommend a resolution or action to be taken.

Upon a determination by the Purchasing Agent and the Director of Human Services that a contractor has failed to comply with any portion of this policy, the County may impose the following:

1. Ten percent (10%) of all future payments under the involved eligible project shall be entitled to be withheld from a contractor that has violated this policy until the contractor complies with the provisions of this policy.

The undersigned agrees to the terms and conditions set forth in this agreement.

Contractor's Official Title: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor's Name: \_\_\_\_\_

Contractor's Signature: \_\_\_\_\_

**FORM 3**

**SECTION 8**  
**GENERAL CONDITIONS**

### **00700-1 FAMILIARITY WITH SITE**

Execution of this agreement by the Contractor is a representation that the Contractor has visited the site, has become familiar with the local conditions under which the work is to be performed, and has correlated personal observations with the requirements of this agreement.

### **00700-2 CONTRACT DOCUMENTS**

This agreement consists of Owner's invitation for bid, instructions to bidders, bid form, performance bond, payment bond, acknowledgments, the contract, general conditions, special conditions, specifications, plans, drawings, exhibits, addenda, and written change orders.

- A. Notice of Award of Contract:
- B. Execution of Contract Documents

Upon notification of Award of Contract, the Owner shall furnish the Contractor the conformed copies of Contract Documents for execution by the Contractor and the Contractor's surety.

Within ten (10) days after receipt the Contractor shall return all the documents properly executed by the Contractor and the Contractor's surety. Attached to each document shall be an original power-of-attorney for the person executing the bonds for the surety and certificates of insurance for the required insurance coverage.

After receipt of the documents executed by the Contractor and his surety with the power-of-attorney and certificates of insurance, the Owner shall complete the execution of the documents. Distribution of the completed documents will be made upon completion.

Should the Contractor and/or Surety fail to execute the documents within the time specified; the Owner shall have the right to proceed on the Bid Bond accompanying the bid.

If the Owner fails to execute the documents within the time limit specified, the Contractor shall have the right to withdraw the Contractor's bid without penalty.

Drawings and Specifications:

The Drawings, Specifications, Contract Documents, and all supplemental documents, are considered essential parts of the Contract, and requirements occurring in one are as binding as though occurring in all. They are intended to define, describe and provide for all Work necessary to complete the Project in an acceptable manner, ready for use, occupancy, or operation by the Owner.

In case of conflict between the Drawings and Specifications, the Specifications shall govern. Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings.

In cases where products or quantities are omitted from the Specifications, the description and quantities shown on the Drawings shall govern.

Any ambiguities or need for clarification of the Drawings or Specifications shall be immediately reported to the Construction Manager in writing. Any such ambiguity or need for clarification shall be handled by the Construction Manager in writing. No clarification of the Drawings and Specifications hereunder by the Construction Manager shall entitle the Contractor to any additional monies unless a Change Order has been processed as provided by "Changes in the Contract" hereof.

Any work done by the Contractor following a discovery of such differing site condition or ambiguity or need for clarification in the Contract Drawings and Specifications prior to a written report to the Construction Manager shall not entitle the Contractor to additional monies and shall be done at the Contractor's risk.

The Construction Manager will furnish the Contractor five (5) copies of the Contract Drawings and the Specifications, one copy of which the Contractor shall have available at all times on the Project site.

### **00700-3 DEFINITIONS**

The following terms as used in this agreement are defined as follows to the extent the definitions herein differ or conflict with those in the Instructions for Bidders, Section 00100, the definitions herein shall control.

Alternate bids – the amount stated in the bid or proposal to be added to or deducted from the amount of the base bid or base proposal if the corresponding change in project scope or alternate materials or methods of construction is accepted.

Base bid – the amount of money stated in the bid or proposal as the sum for which the bidder or proposer offers to perform the work.

Change Order - an alteration, addition, or deduction from the original scope of work as defined by the contract documents to address changes or unforeseen conditions necessary for project completion. A written order to the Contractor issued by the County pursuant to Fulton County Policy and Procedures 800-6 for changes in the work within the general scope of the contract documents, adjustment of the contract price, extension of the contract time, or reservation of determination of a time extension.

Construction Manager shall mean the individual designated in writing, by the Director of the Facilities and Transportation Services Department as the Construction Manager.

Contractor shall mean the party of the second part to the Contract Agreement or the authorized and legal representative of such party.

Contract Documents include the Contract Agreement, Contractor's Bid (including all documentation accompanying the Bid and any post-Bid documentation required by the County prior to the Notice of Award), Bonds, all Special Conditions, General Conditions, Supplementary Conditions, Specifications, Drawings and addenda, together with written amendments, change orders, field orders and the Construction Manager's written interpretations and clarifications issued in accordance with the General Conditions on or after the date of the Contract Agreement.

Shop drawing submittals reviewed in accordance with the General Conditions, geotechnical investigations and soils report and drawings of physical conditions in or relating to existing surface structures at or contiguous to the site are not Contract Documents.

Contract Price - The sum specified in the Agreement to be paid to the Contractor in consideration of the Work.

Contract Time shall mean the number of consecutive calendar days as provided in the Contract Agreement for completion of the Work, to be computed from the date of Notice to Proceed.

Owner or County shall mean Fulton County Government, party of the first part to the Contract Agreement, or its authorized and legal representatives.

Day - A calendar day of twenty-four hours lasting from midnight of one day to midnight the next day.

Detention Equipment Contractor (“DEC”) – Any legally chartered business entity whose primary activity is the supply and/or installation of detention hardware equipment and related systems.

Director - Director of the Facilities and Transportation Services Department of Fulton County, Georgia or the designee thereof.

Engineer of Record – Hellmuth, Obata, Kassabaum, Inc., in conjunction with SafeTech Engineering developed the specifications and drawings referred to herein.

Final Completion shall mean the completion of all work as required in accordance with the terms and conditions of the contract documents.

Liquidated Damages shall mean the amount, stated in the Contract Agreement, which the Contractor agrees to pay to the Owner for each consecutive calendar day beyond the Contract time required to complete the Project or for failing to comply with associated milestones. Liquidated Damages will end upon written notification from the Owner of Final Acceptance of the Project or upon written notification of from the Owner of completion of the milestone.

Notice to Proceed - A written communication issued by the County to the Contractor authorizing it to proceed with the work, establishing the date of commencement and completion of the work, and providing other direction to the Contractor.

Products shall mean materials or equipment permanently incorporated into the work.

Program Manager - Not used in this contract. Delete all references.

Project Manual - The Contract Documents.

Provide shall mean to furnish and install.

Substantial Completion - The date certified by the Construction Manager when all or a part of the work, as established pursuant to General Condition 0700-81, is sufficiently completed in accordance with the requirements of the contract documents so that the identified portion of the work can be utilized for the purposes for which it is intended.

Work or Project - All of the services specified, indicated, shown or contemplated by the contract documents, and furnishing by the Contractor of all materials, equipment, labor, methods, processes, construction and manufacturing materials and equipment, tools, plans, supplies, power, water, transportation and other things necessary to complete such services in accordance with the contract documents to insure a functional and complete facility.

#### **00700-4 CODES**

All codes, specifications, and standards referenced in the contract documents shall be the latest editions, amendments and revisions of such referenced standards in effect as of the date of the request for proposals for this contract.

#### **00700-5 REVIEW OF CONTRACT DOCUMENTS**

Before making its proposal to the County, and continuously after the execution of the agreement, the Contractor shall carefully study and compare the contract documents and shall at once report to the Construction Manager any error, ambiguity, inconsistency or omission that may be discovered, including any requirement which may be contrary to

any law, ordinance, rule, or regulation of any public authority bearing on the performance of the work. By submitting its proposal, the Contractor agrees that the contract documents, along with any supplementary written instructions issued by or through the Construction Manager that have become a part of the contract documents, appear accurate, consistent and complete insofar as can be reasonably determined. If the Contractor has timely reported in writing any error, inconsistency, or omission to the Construction Manager, has properly stopped the affected work until instructed to proceed, and has otherwise followed the instructions of the Construction Manager, the Contractor shall not be liable to the County for any damage resulting from any such error, inconsistency, or omission in the contract documents. The Contractor shall not perform any portion of the work without the contract documents, approved plans, specifications, products and data, or samples for such portion of the work. For purposes of this section “timely” is defined as the time period in which the contractor discovers, or should have discovered, the error, inconsistency, or omission, with the exercise of reasonable diligence.

#### **00700-6 STRICT COMPLIANCE**

No observation, inspection, test or approval of the County or Construction Manager shall relieve the Contractor from its obligation to perform the work in strict conformity with the contract documents except as provided in General Condition 00700-48.

#### **00700-7 APPLICABLE LAW**

All applicable State laws, County ordinances, codes, and rules and regulations of all authorities having jurisdiction over the construction of the project shall apply to this agreement. The Contractor shall comply with the requirements of any Fulton County program concerning non-discrimination in contracting. All work performed within the right of way of the Georgia Department of Transportation and any railroad crossing shall be in accordance with Georgia Department of Transportation regulations, policies and procedures and, where applicable, those of any affected railroad. The Contractor shall comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work as specified and the Contractor agrees to indemnify and hold harmless the County, its officers, agents and employees, as well as the Construction Manager and the Program Manager against any claim or liability arising from or based on the violation of any law, ordinance, regulation, order or decree affecting the conduct of the work, whether occasioned by the Contractor, his agents or employees.

#### **00700-8 PERMITS, LICENSES AND BONDS**

All permits and licenses necessary for the work shall be secured and paid for by the Contractor. If any permit, license or certificate expires or is revoked, terminated, or suspended as a result of any action on the part of the Contractor, the Contractor shall not be entitled to additional compensation or time. The Contractor shall obtain and keep in force at all times performance and payment bonds payable to Fulton County in penal amounts equal to 100% of the Contract price.

#### **00700-9 TAXES**

- A. The Contractor shall pay all sales, retail, occupational, service, excise, old age benefit and unemployment compensation taxes, consumer, use and other similar taxes, as well as any other taxes or duties on the materials, equipment, and labor for the work provided by the Contractor which are legally enacted by any municipal, county, state or federal authority, department or agency at the time bids are received, whether or not yet effective. The Contractor shall maintain

records pertaining to such taxes and levies as well as payment thereof and shall make the same available to the County at all reasonable times for inspection and copying. The Contractor shall apply for any and all tax exemptions which may be applicable and shall timely request from the County such documents and information as may be necessary to obtain such tax exemptions. The County shall have no liability to the Contractor for payment of any tax from which it is exempt.

- B. The Contractor is obligated to comply with all local and State Sales and Use Tax laws. The Contractor shall provide the Owner with documentation to assist the Owner in obtaining sales and/or use tax refunds for eligible machinery and equipment used for the primary purpose of reducing or eliminating air or water pollution as provided for in Chapter 48-8-3 (36) and (37) of the Official Code of Georgia. All taxes shall be paid by the Contractor. All refunds will accrue to the Owner.

Acceptance of the project as complete and final payment will not be made by the Owner until the Contractor has fully complied with this requirement.

**00700-10 DELINQUENT CONTRACTORS**

The County shall not pay any claim, debt, demand or account whatsoever to any person firm or corporation who is in arrears to the County for taxes. The County shall be entitled to a counterclaim, backcharge, and offset for any such debt in the amount of taxes in arrears, and no assignment or transfer of such debt after the taxes become due shall affect the right of the County to offset any taxes owed against said debt.

**00700-11 LIEN WAIVERS**

The Contractor shall furnish the County with evidence that all persons who have performed work or furnished materials pursuant to this agreement have been paid in full prior to submitting its demand for final payment pursuant to this agreement. A final affidavit, Exhibit A, must be completed, and submitted to comply with requirements of 00700-11. In the event that such evidence is not furnished, the County may retain sufficient sums necessary to meet all lawful claims of such laborers and materialmen. The County assumes no obligation nor in any way undertakes to pay such lawful claims from any funds due or that may become due to the Contractor.

**00700-12 MEASUREMENT**

All items of work to be paid for per unit of measurement shall be subject to inspection, measurement, and confirmation by the Construction Manager.

**00700-13 ASSIGNMENT**

The Contractor shall not assign any portion of this agreement or moneys due there from (include factoring of receivables) without the prior written consent of the County. The Contractor shall retain personal control and shall provide personal attention to the fulfillment of its obligations pursuant to this agreement. Any assignment without the express written consent of the County shall render this contract voidable at the sole option of the County.

**00700-14 FOREIGN CONTRACTORS**

In the event that the Contractor is a foreign corporation, partnership, or sole proprietorship, the Contractor hereby irrevocably appoints the Secretary of State of Georgia as its agent for service of all legal process for the purpose of this contract only.

### **00700-15 INDEMNIFICATION**

The Contractor hereby assumes the entire responsibility and liability for any and all injury to or death of any and all persons, including the Contractor's agents, servants, and employees, and in addition thereto, for any and all damages to property caused by or resulting from or arising out of any act or omission in connection with this contract or the prosecution of work hereunder, whether caused by the Contractor or the Contractor's agents, Servants, or employees, or by any of the Contractor's subcontractors or suppliers, and the Contractor shall indemnify and hold harmless the County, the Construction Manager, County's Commissioners, officers, employees, successors, assigns and agents, or any of their subcontractors from and against any and all loss and/or expense which they or any of them may suffer or pay as a result of claims or suits due to, because of, or arising out of any and all such injuries, deaths and/or damage, irrespective of County or Construction Manager negligence (except that no party shall be indemnified for their own sole negligence). The Contractor, if requested, shall assume and defend at the Contractor's own expense, any suit, action or other legal proceedings arising there from, and the Contractor hereby agrees to satisfy, pay, and cause to be discharged of record any judgment which may be rendered against the County and the Construction Manager arising there from.

In the event of any such loss, expense, damage, or injury, or if any claim or demand for damages as heretofore set forth is made against the County or the Construction Manager, the County may withhold from any payment due or thereafter to become due to the Contractor under the terms of this Contract, an amount sufficient in its judgment to protect and indemnify it and the Construction Manager, County's Commissioners, officers, employees, successors, assigns and agents from any and all claims, expense, loss, damages, or injury; and the County, in its discretion, may require the Contractor to furnish a surety bond satisfactory to the County providing for such protection and indemnity, which bond shall be furnished by the Contractor within five (5) days after written demand has been made therefore. The expense of said Bond shall be borne by the Contractor.

### **00700-16 SUPERVISION OF WORK AND COORDINATION WITH OTHERS**

The Contractor shall supervise and direct the work using the Contractor's best skill and attention. The Contractor shall be solely responsible for all construction methods and procedures and shall coordinate all portions of the work pursuant to the contract subject to the overall coordination of the Construction Manager. All work pursuant to this agreement shall be performed in a skillful and workmanlike manner.

The County reserves the right to perform work related to the Project with the County's own forces and to award separate contracts in connection with other portions of the project, other work on the site under these or similar conditions of the contract, or work which has been extracted from the Contractor's work by the County.

When separate contracts are awarded for different portions of the project or other work on the site, the term "separate contractor" in the Contract Documents in each case shall mean the contractor who executes each separate County Agreement.

The Contractor shall cooperate with the County and separate contractors in arranging the introduction and storage of materials and equipment and execution of their work, and shall cooperate in coordinating connection of its work with theirs as required by the Contract Documents.

If any part of the Contractor's Work depends for proper execution or results upon the work of the County or any separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Construction Manager any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results **within fourteen (14) days** of discovery of such discrepancy or defect. Failure of the Contractor to so report in writing shall constitute an acceptance of the County's or separate contractor's work as fit and proper to receive the Work, except as to any defects which may subsequently become apparent in such work by others.

Any costs caused by defective or untimely work shall be borne by the party responsible therefore.

Should the Contractor wrongfully cause damage to the work or property of the County or to other work or property on the site, including the work of separate contractors, the Contractor shall promptly remedy such damage at the Contractor's expense.

Should the Contractor be caused damage by any other contractor on the Project, by reason of such other contractor's failure to perform properly his contract with the County, no action shall lie against the County or the Construction Manager inasmuch as the parties to this agreement are the only beneficiaries hereof and there are no third party beneficiaries and neither the County nor the Construction Manager shall have liabilities therefore, but the Contractor may assert his claim for damages solely against such other contractor. The Contractor shall not be excused from performance of the contract by reason of any dispute as to damages with any other contractor or third party.

Where the Work of this Contract shall be performed concurrently in the same areas as other construction work, the Contractor shall coordinate with the Construction Manager and the separate contractors in establishing mutually acceptable schedules and procedures that shall permit all jobs to proceed with minimum interference.

If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up, the County may clean up and charge the cost thereof to the Contractor or contractors responsible therefore as the County shall determine to be just.

#### **00700-17 ADMINISTRATION OF CONTRACT**

The Program Manager and the Construction Manager shall provide administration services as hereinafter described.

For the administration of this Contract, the Construction Manager shall serve as the County's primary representative during design and construction and until final payment to the Contractor is due. The Construction Manager shall advise and consult with the County and the Program Manager. The primary point of contact for the Contractor shall be the Construction Manager. All correspondence from the Contractor to the County shall be forwarded through the Construction Manager. Likewise, all correspondence and instructions to the Contractor shall be forwarded through the Construction Manager.

The Construction Manager will determine in general that the construction is being performed in accordance with design and engineering requirements, and will endeavor to guard the County against defects and deficiencies in the Work.

The Construction Manager will not be responsible for or have control or charge of construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, nor will it be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

The Construction Manager will not be responsible for or have control or charge over the acts or omissions of the Contractor, its engineers, consultants, subcontractors, or any of their agents or employees, or any other persons performing the Work.

Based on the Construction Manager's observations regarding the Contractor's Applications for Payment, the Construction Manager shall determine the amounts owing to the Contractor, in accordance with the payment terms of the Contract, and shall issue Certificates for Payment in such amount to the County.

The Construction Manager shall render interpretations necessary for the proper execution or progress of the Work. Either party to the Contract may make written requests to the Construction Manager for such interpretations.

Claims, disputes and other matters in question between the Contractor and the County relating to the progress of the Work or the interpretation of the Contract Documents shall be referred to the Construction Manager for interpretation.

All interpretations of the Construction Manager shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in graphic form.

Except as otherwise provided in this Contract, the Construction Manager shall issue a decision on any disagreement concerning a question of fact arising under this Contract. The Construction Manager shall reduce the decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Construction Manager shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Contractor files a written appeal with the Director of Public Works and mails or otherwise furnishes the Construction Manager a copy of such appeal. The decision of the Director of Public Works or the Director's duly authorized representative for the determination of such appeals shall be final and conclusive. Such final decision shall not be pleaded in any suit involving a question of fact arising under this Contract, provided such is not fraudulent, capricious, arbitrary, so grossly erroneous as necessarily implying bad faith, or is not supported by substantial evidence. In connection with any appeal proceeding under this Article, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of Contractor's appeal. Pending any final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract as directed by the Construction Manager.

The Construction Manager shall have authority to reject Work which does not conform to the Contract Documents. Whenever, in the Construction Manager's opinion, it is considered necessary or advisable for the implementation of the intent of the Contract Documents, the County shall have authority to require special inspection or testing of the Work whether or not such Work be then fabricated, installed or completed. The Contractor shall pay for such special inspection or testing if the Work so inspected or tested is found not to comply with the requirements of the contract; the County shall pay for special inspection and testing if the Work is found to comply with the contract. Neither the Construction Manager's authority to act under this Subparagraph, nor any decision made by the Construction Manager in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Construction Manager to the Contractor, any subcontractor, any of their agents or employees, or any other person performing any of the Work.

The Contractor shall provide such shop drawings, product data, and samples as may be required by the Construction Manager and/or as required by these Contract Documents.

The Construction Manager shall conduct inspections to determine Substantial Completion and Final Completion, and shall receive and forward to the County for review written warranties and related documents required by the Contract Documents and assembled by the Contractor. The Construction Manager shall approve and issue Certificates for Payment upon compliance with Substantial and Final Completion requirements indicated in General Conditions 00700-81, 00700-82, 00700-84 and 00700-85 of this Agreement.

Except as provided in General Condition 00700-48, the Contractor shall not be relieved from the Contractor's obligations to perform the work in accordance with the contract documents by the activities or duties of the County or any of its officers, employees, or agents, including inspections, tests or approvals, required or performed pursuant to this agreement.

#### **00700-18 RESPONSIBILITY FOR ACTS OF EMPLOYEES**

The Contractor shall employ only competent and skilled personnel. The Contractor shall, upon demand from the Construction Manager, immediately remove any superintendent, foreman or workman whom the Construction Manager may consider incompetent or undesirable.

The Contractor shall be responsible to the County for the acts and omissions of the Contractor's employees, subcontractors, and agents as well as any other persons performing work pursuant to this agreement for the Contractor.

#### **00700-19 LABOR, MATERIALS, SUPPLIES, AND EQUIPMENT**

Unless otherwise provided in this agreement, the Contractor shall make all arrangements with necessary support agencies and utility companies provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the execution and completion of the work.

#### **00700-20 DISCIPLINE ON WORK SITE**

The Contractor shall enforce strict discipline and good order among its employees and subcontractors at all times during the performance of the work, to include compliance with the Fulton County Drug Free Work Place Policy. The Contractor shall not employ any subcontractor who is not skilled in the task assigned to it. The Construction Manager may, by written notice, require the Contractor to remove from the work any subcontractor or employee deemed by the Construction Manager to be incompetent.

#### **00700-21 HOURS OF OPERATION**

All work at the construction site shall be performed during regular business hours of the Fulton County government, except upon the Construction Manager's prior written consent to other work hours. It is further understood that the Contractor's construction schedule is based on a normal 40 hours, five day work week, less Fulton County-recognized holidays. Contractors work schedule shall not violate Fulton County Noise Ordinance by working hours inconsistent with the Fulton County Noise Ordinance. The County's current noise ordinance or other applicable ordinance shall govern. If the Contractor desires to work in excess of this limit, the Contractor shall submit a written request to the Construction Manager, a minimum of five days prior to the desired work date. The Contractor shall be responsible for any additional expenses incurred by the Owner as a result of the extended work hours, including resident inspection overtime.

The cost associated with resident inspector overtime shall be deducted from the Contractor monthly payment request.

**00700-22 FAMILIARITY WITH WORK CONDITIONS**

The Contractor shall take all steps necessary to ascertain the nature and location of the work and the general and local conditions which may affect the work or the cost thereof. The Contractor's failure to fully acquaint itself with the conditions which may affect the work, including, but not limited to conditions relating to transportation, handling, storage of materials, availability of utilities, labor, water, roads, weather, topographic and subsurface conditions, other separate contracts to be entered into by the County relating to the project which may affect the work of the Contractor, applicable provisions of law, and the character and availability of equipment and facilities necessary prior to and during the performance of the work shall not relieve the Contractor of its responsibilities pursuant to this agreement and shall not constitute a basis for an equitable adjustment of the contract terms. The County reserves the right to perform with its own forces or to contract with other entities for other portions of the project work, in which case the Contractor's responsibility to assure its familiarity with work conditions hereunder shall include all coordination with such other contractors and the County necessary to insure that there is no interference between contractors as will delay or hinder any contractor in its prosecution of work on the project. The County assumes no responsibility for any understandings or representations concerning conditions of the work made by any of its officers, agents, or employees prior to the execution of this agreement.

**00700-23 RIGHT OF ENTRY**

The County reserves the right to enter the site of the work by such agent, including the Construction Manager, as it may elect for the purpose of inspecting the work or installing such collateral work as the County may desire. The Contractor shall provide safe facilities for such access so that the County and its agents may perform their functions.

**00700-24 NOTICES**

Any notice, order, instruction, claim or other written communication required pursuant to this agreement shall be deemed to have been delivered or received as follows:

Upon personal delivery to the Contractor, its authorized representative, or the Construction Manager on behalf of the County. Personal delivery may be accomplished by in-person hand delivery or bona fide overnight express service.

Three days after depositing in the United States mail a certified letter addressed to the Contractor or the Construction Manager for the County. For purposes of mailed notices, the County's mailing address shall be 141 Pryor Street, 6th Floor, Atlanta, Georgia 30303, or as the County shall have otherwise notified the Contractor. The Contractor's mailing address shall be the address stated in its proposal or as it shall have most recently notified the Construction Manager in writing.

**00700-25 SAFETY**

A. SAFETY, HEALTH AND LOSS PREVENTION

The Contractor shall be responsible for implementing a comprehensive project-specific safety, health and loss prevention program and employee substance abuse program for this project. All Sub-Contractors must either implement their own program or follow the Contractor's safety, health and loss prevention program and employee substance abuse program.

The Contractor's safety, health and loss prevention program and employee substance abuse program must meet or exceed all governmental regulations (OSHA, EPA, DOT, State, local), and any other specific Fulton County requirements

**B. COUNTY'S SAFETY, HEALTH, AND LOSS PREVENTION PROCESS GUIDELINES AND REQUIREMENTS**

The County and its agents reserve the right, but assume no duty, to establish and enforce safety, health, and loss prevention guidelines and to make the appropriate changes in the guidelines, for the protection of persons and property and to review the efficiency of all protective measures taken by the Contractor. The Contractor shall comply with all safety, health, and loss prevention process guidelines and requirements and changes made by the County or its agent(s). The issuance of any such guidelines or changes by the County or its agent(s) shall not relieve the Contractor of its duties and responsibilities under this Agreement, and the County or its agent(s) shall not thereby assume, nor be deemed to have assumed, any such duties or responsibilities of the Contractor.

**C. COMPLIANCE OF WORK, EQUIPMENT, AND PROCEDURES WITH ALL APPLICABLE LAWS and REGULATIONS**

All Work, whether performed by the Contractor or its Sub-Contractors of any tier, or anyone directly or indirectly employed by any of them, and all equipment, appliances, machinery, materials, tools and like items incorporated or used in the Work, shall be in compliance with and conform to:

1. All applicable laws, ordinances, rules, regulations and orders of any public, quasi-public or other governmental authority relating to the safety of persons and their protection against injury, specifically including, but in no event limited to, the Federal Occupational Safety and Health Act of 1970, as amended, and all rules and regulations now or hereafter in effect pursuant to said Act.
2. All rules, regulations, and requirements of the County or its agent(s) and its insurance carriers relating there to. In the event of a conflict or differing requirements the more stringent shall govern.

**D. PROTECTION OF THE WORK**

1. The Contractor shall, throughout the performance of the Work, maintain adequate and continuous protection of all Work and temporary facilities against loss or damage from whatever cause, shall protect the property of the County and third parties from loss or damage from whatever cause arising out of the performance of the Work, and shall comply with the requirements of the County or its agent(s) and its insurance carriers, and with all applicable laws, codes, rules and regulations, (as same may be amended) with respect to the prevention of loss or damage to property as a result of fire or other hazards.
2. The County or its agent(s) may, but shall not be required to, make periodic inspections of the Project work area. In such event, however, the Contractor shall not be relieved of its aforesaid responsibilities and the County or its agent(s) shall not assume, nor shall it be deemed to have assumed, any responsibility otherwise imposed upon the assurance of Contractor by this Agreement.

E. SAFETY EQUIPMENT

1. The Contractor shall provide to each worker on the Project work area the proper safety equipment for the duties being performed by that worker and will not permit any worker on the Project work area who fails or refuses to use the same. The County or its agent shall have the right, but not the obligation, to order the removal of a worker from the Project work site for his/her failure to comply with safe practices or substance abuse policies.

F. EMERGENCIES

1. In any emergency affecting the safety of persons or property, or in the event of a claimed violation of any federal or state safety or health law or regulation, arising out of or in any way connected with the Work or its performance, the Contractor shall act immediately to prevent threatened damage, injury or loss and to remedy said violation. Failing such action the County or its agent(s) may immediately take whatever steps it deems necessary including, but not limited to, suspending the Work as provided in this Agreement.
2. The County or its agent(s) may offset any and all costs or expenses of whatever nature, including attorneys' fees, paid or incurred by the County or its agent(s) (whether such fees are for in-house counsel or counsel retained by the County or its agent), in taking the steps authorized by Section 00700-25(G) (1) above against any sums then or thereafter due to the Contractor. The Contractor shall defend, indemnify and hold the County, its officers, agents, and employees harmless against any and all costs or expenses caused by or arising from the exercise by the County of its authority to act in an emergency as set out herein. If the Contractor shall be entitled to any additional compensation or extension of time change order on account of emergency work not due to the fault or neglect of the Contractor or its Sub-Contractors, such additional compensation or extension of time shall be determined in accordance with General Condition 00700-52 and General Condition 00700-87 of this Agreement.

G. SUSPENSION OF THE WORK

1. Should, in the judgment of the County or its agent(s), the Contractor or any Sub-Contractor fail to provide a safe and healthy work place, the County or its agent shall have the right, but not the obligation, to suspend work in the unsafe areas until deficiencies are corrected. All costs of any nature (including, without limitation, overtime pay, liquidated damages or other costs arising out of delays) resulting from the suspension, by whomsoever incurred, shall be borne by the Contractor.
2. Should the Contractor or any Sub-Contractor fail to provide a safe and healthy work place after being formally notified in writing by the County or its agents of such non-compliance, the contract may be terminated following the termination provision of the contract.

H. CONTRACTOR'S INDEMNITY OF THE COUNTY FOR CONTRACTOR'S NON-COMPLIANCE WITH SAFETY PROGRAM

1. The Contractor recognizes that it has sole responsibility to assure its Safety Program is implemented and to assure its construction services are safely provided. The Contractor shall indemnify, defend and hold the County and its agents harmless, from and against any and all liability (whether public or private), penalties (contractual or otherwise), losses, damages, costs, attorneys' fees, expenses, causes of action, claims or judgments resulting, either in whole or in part, from any failure of the Contractor, its Sub-Contractors of any tier or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, to comply with the safety requirements of the contract. The Contractor shall not be relieved of its responsibilities under the safety requirements of the Contract should the County or its agent(s) act or fail to act pursuant to its rights hereunder.
2. The Contractor shall not raise as a defense to its obligation to indemnify under this Subparagraph I any failure of those indemnified hereunder to assure Contractor operates safely, it being understood and agreed that no such failure shall relieve the Contractor from its obligation to assure safe operations or from its obligation to so indemnify. The Contractor also hereby waives any rights it may have to seek contribution, either directly or indirectly, from those indemnified hereunder.
3. In any and all claims against those indemnified hereunder by any employee of the Contractor, any Sub-Contractor of any tier or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Subparagraph I shall not be limited in any way as to the amount or type of damages, compensation or benefits payable by or for the Contractor or any Sub-Contractor of any tier under any workers' compensation act, disability benefit or other employee benefit acts.

#### **00700-26 BLASTING AND EXCAVATION**

The Contractor acknowledges that it is fully aware of the contents and requirements of O.C.G.A. § 25-9-1 through 25-9-12 concerning blasting and excavation near underground gas pipes and facilities and shall fully comply therewith.

#### **00700-27 HIGH VOLTAGE LINES**

The Contractor acknowledges that it is fully aware of the contents and requirements O.C.G.A. § 46-3-30 through 46-3-39 concerning safeguards against contact with high voltage lines, and the Contractor shall fully comply with said provisions.

#### **00700-28 SCAFFOLDING AND STAGING**

The Contractor acknowledges that it is the person responsible for employing and directing others to perform labor within the meaning of O.C.G.A. § 34-1-1 and agrees to comply with said provisions.

#### **00700-29 CLEAN-UP**

The Contractor shall clean up all refuse, rubbish, scrap materials, and debris caused by its operations to the end that the site of the work shall present a neat, orderly and workmanlike appearance at all times.

**00700-30 PROTECTION OF WORK**

The Contractor shall be responsible for maintenance and protection of the work, which shall include any County-furnished supplies, material, equipment, until final completion of this agreement and acceptance of the work as defined herein. Any portion of the work suffering injury, damage or loss shall be considered defective and shall be corrected or replaced by the Contractor without additional cost to the County.

**00700-31 REJECTED WORK**

The Contractor shall promptly remove from the project all work rejected by the Construction Manager for failure to comply with the contract documents and the Contractor shall promptly replace and re-execute the work in accordance with the contract documents and without expense to the County. The Contractor shall also bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

**00700-32 DEFECTIVE WORK**

If the Contractor defaults or neglects to carry out any portion of the work in accordance with the contract documents, and fails within three days after receipt of written notice from the Construction Manager to commence and continue correction of such default or neglect with diligence and promptness, the County may, after three days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy the County may have, make good such deficiencies and complete all or any portion of any work through such means as the County may select, including the use of a separate Contractor. In such case, an appropriate change order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies. In the event the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the County on demand.

The County may, at its option, accept defective or nonconforming work instead of requiring its removal or correction. In such case, a change order shall be issued reducing the price due the contractor to the extent appropriate and equitable. Such contract price adjustment shall be effected whether or not final payment has been made.

**00700-33 WARRANTY OF NEW MATERIALS**

The Contractor warrants to the County that all materials and equipment furnished under this contract will be new unless otherwise specified, and the Contractor further warrants that all work will be of good quality, free from faults and defects, and in conformance with the contract documents. The warranty set forth in this paragraph shall survive final acceptance of the work.

**00700-34 CONTRACTOR'S WARRANTY OF THE WORK**

If within one year after the date of issuance of the certificate of final payment pursuant to General Condition 84, or within such longer period of time as may be prescribed by law or by the term of any applicable special warranty required by the contract documents, any of the work is found to be defective or not in accordance with the contract documents, the Contractor shall correct such work promptly after receipt of written notice from the Construction Manager to do so. This obligation shall survive both final payment for the work and termination of the contract.

**00700-35 ASSIGNMENT OF MANUFACTURERS' WARRANTIES**

Without limiting the responsibility or liability of the Contractor pursuant to this agreement, all warranties given by manufacturers on materials or equipment incorporated in the work are hereby assigned by the Contractor to the County. If requested, the Contractor shall execute formal assignments of said manufacturer's warranties to the County. All such warranties shall be directly enforceable by the County.

**00700-36 WARRANTIES IMPLIED BY LAW**

The warranties contained in this agreement, as well as those warranties implied by law, shall be deemed cumulative and shall not be deemed alternative or exclusive. No one or more of the warranties contained herein shall be deemed to alter or limit any other.

**00700-37 STOP WORK ORDERS**

In the event that the Contractor fails to correct defective work as required by the contract documents or fails to carry out the work in accordance with contract documents, the Construction Manager, in writing, may order the Contractor to stop work until the cause for such order has been eliminated. This right of the County to stop work shall not give rise to any duty on the part of the County or the Construction Manager to execute this right for the benefit of the Contractor or for any other person or entity.

**00700-38 TERMINATION FOR CAUSE**

If the Contractor is adjudged bankrupt, makes a general assignment for the benefit of creditors, suffers the appointment of a receiver on account of its insolvency, fails to supply sufficient properly skilled workers or materials, fails to make prompt payment to subcontractors or materialmen, disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, fails to diligently prosecute the work, or is otherwise guilty of a material violation of this agreement and fails within seven days after receipt of written notice to commence and continue correction of such default, neglect, or violation with diligence and promptness, the County may, after seven days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy the County may have, terminate the employment of the Contractor and take possession of the site as well as all materials, equipment, tools, construction equipment and machinery thereon. The County may finish the work by whatever methods the County deems expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is completed. If the unpaid balance of the contract price exceeds the cost of completing the work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the County on demand. This obligation for payment shall survive the termination of the contract. Termination of this agreement pursuant to this paragraph may result in disqualification of the Contractor from bidding on future County contracts.

**00700-39 TERMINATION FOR CONVENIENCE**

The County may, at any time upon written notice to the Contractor, terminate the whole or any portion of the work for the convenience of the County. The effective date of the terminations shall be provided in the written notice. Said termination shall be without prejudice to any right or remedy of the County provided herein. In addition, in the event this agreement has been terminated due to the default of the Contractor, and if it is later determined that the Contractor was not in default pursuant to the provisions of this agreement at the time of termination, then such termination shall be considered a termination for convenience pursuant to this paragraph.

**00700-40 TERMINATION FOR CONVENIENCE - PAYMENT**

If the Contract is terminated for convenience by the Owner as provided in this article, Contractor will be paid compensation for those services actually performed as approved by the Owner or his representative. Partially completed tasks will be compensated for based on a signed statement of completion prepared by the Project Manager and submitted to the Contractor which shall itemize each task element and briefly state what work has been completed and what work remains to be done. Contractor shall also be paid for reasonable costs for the orderly filing and closing of the project.

**00700-41 TERMINATION FOR CONVENIENCE - PAYMENT LIMITATIONS**

Except for normal spoilage, and except to the extent that the County shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor the fair value, as determined by the Construction Manager, of property which is destroyed, lost, stolen or damaged so as to become undeliverable to the County or to another buyer.

**00700-42 COST TO CURE**

If the County terminates for cause the whole or any part of the work pursuant to this agreement, then the County may procure upon such terms and in such manner as the Construction Manager may deem appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to the County for any excess costs for such similar supplies or services. The Contractor shall continue the performance of this agreement to the extent not terminated hereunder.

**00700-43 ATTORNEY'S FEES**

Should the Contractor default pursuant to any of the provisions of this agreement, the Contractor and its surety shall pay to the County such reasonable attorney's fees as the County may expend as a result thereof and all costs, expenses, and filing fees incidental thereto.

**00700-44 CONTRACTOR'S RESPONSIBILITIES UPON TERMINATION**

After receipt of a notice of termination from the County, and except as otherwise directed by the Construction Manager, the Contractor shall:

1. Stop work under the contract on the date and to the extent specified in the notice of termination;
2. Place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the work under the agreement as is not terminated;
3. Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination;
4. Assign to the County in the manner, at the times, and to the extent directed by the Construction Manager, all of the rights, title and interest of the Contractor under the orders and subcontracts so terminated, in which case the County shall have the right, at its discretion, to settle or pay any and all claims arising out of the termination of such orders or subcontracts;
5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts with the approval or ratification of

- the Construction Manager, to the extent the Construction Manager may require, which approval or ratification shall be final for all purposes;
6. Transfer title and deliver to the entity or entities designated by the Construction Manager, in the manner, at the times, and to the extent, if any, directed by the Construction Manager, and to the extent specifically produced or specifically acquired by the Contractor for the performance of such portion of the work as has been terminated:
    - a. The fabricated or un-fabricated parts, work, and progress, partially completed supplies, and equipment, materials, parts, tools, dyes, jigs, and other fixtures, completed work, supplies, and other material produced as a part of or acquired in connection with the performance of the work terminated by the notice of termination; and
    - b. The completed or partially completed plans, drawings, information, and other property to the work.
  7. Use its best efforts to sell in the manner, at the times, to the extent, and at the prices directed or authorized by the Construction Manager, any property described in Section 6 of this paragraph, provided, however, that the Contractor shall not be required to extend credit to any buyer and further provided that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the County to the Contractor pursuant to this agreement.
  8. Complete performance of such part of the work as shall not have been terminated by the notice of termination; and
  9. Take such action as may be necessary, or as the Construction Manager may direct, for the protection and preservation of the property related to the agreement which is in the possession of the Contractor and in which the County has or may acquire an interest.

#### **00700-45 RECORDS**

The Contractor shall preserve and make available to the County all of its records, books, documents and other evidence bearing on the costs and expenses of the Contractor and any subcontractor pursuant to this agreement upon three days advance notice to the Contractor.

#### **00700-46 DEDUCTIONS**

In arriving at any amount due the Contractor pursuant to the terms of this agreement, there shall be deducted all liquidated damages, advance payments made to the Contractor applicable to the termination portion of the contract, the amount of any claim which the County may have against the Contractor, the amount determined

By the Construction Manager to be necessary to protect the County against loss due to outstanding potential liens or claims, and the agreed price of any materials acquired or sold by the Contractor and not otherwise recovered by or credited to the County.

#### **00700-47 REIMBURSEMENT OF THE COUNTY**

In the event of termination, the Contractor shall refund to the County any amount paid by the County to the Contractor in excess of the costs properly reimbursable to the Contractor.

#### **00700-48 SUSPENSION, INTERRUPTION, DELAY, DAMAGES**

The Contractor shall be entitled to only those damages and that relief from termination by the County as specifically set forth in this agreement. The Construction Manager may issue a written order requiring the Contractor to suspend, delay or interrupt all or any part of the work for such period of time as the County may determine to be appropriate for the convenience of the County. If the performance of the work is interrupted for an unreasonable period of time by an act of the County or any of its officers, agents, employees, contractors, or consultants in the administration of this agreement, an equitable adjustment shall be made for any increase in the Contractor's costs of performance and any increase in the time required for performance of the work necessarily caused by the unreasonable suspension, delay, or interruption. Any equitable adjustment shall be reduced to writing and shall constitute a modification to this agreement. In no event, however, shall an equitable adjustment be made to the extent that performance of this agreement would have been suspended, delayed or interrupted by any other cause, including the fault or negligence of the Contractor. No claim for an equitable adjustment pursuant to this paragraph shall be permitted before the Contractor shall have notified the Construction Manager in writing of the act or failure to act involved, and no claim shall be allowed unless asserted in writing to the Construction Manager within ten days after the termination of such suspension, delay or interruption.

#### **00700-49 COMMENCEMENT AND DURATION OF WORK**

The County may issue a Notice to Proceed at any time within 120 days following execution of the contract by the County. The Contractor shall commence work pursuant to this agreement within ten days of mailing or delivery of written notice to proceed. The Contractor shall diligently prosecute the work to completion within the time specified therefore in the Agreement. The capacity of the Contractor's construction and manufacturing equipment and plan, sequence and method of operation and forces employed, including management and supervisory personnel, shall be such as to insure completion of the work within the time specified in the Agreement. The Contractor and County hereby agree that the contract time for completion of the work is reasonable taking into consideration the average climatic conditions prevailing in the locality of the work and anticipated work schedules of other contractors whose activities are in conjunction with or may affect the work under this contract.

#### **00700-50 TIME OF THE ESSENCE**

All time limits stated in this agreement are of the essence of this contract.

#### **00700-51 IMPACT DAMAGES**

Except as specifically provided pursuant to a stop work order or change order, the Contractor shall not be entitled to payment or compensation of any kind from the County for direct or indirect or impact damages including, but not limited to, costs of acceleration arising because of delay, disruption, interference or hindrance from any cause whatsoever whether such delay, disruption, interference or hindrance is reasonable or unreasonable, foreseeable or unforeseeable, or avoidable, provided, however, that this provision shall not preclude the recovery of damages by the Contractor for hindrances or delays due solely to fraud or bad faith on the part of the County, its agents, or employees. The Contractor shall be entitled only to extensions in the time required for performance of the work as specifically provided in the contract.

**00700-52 DELAY**

The Contractor may be entitled to an extension of the contract time, but not an increase in the contract price or damages, for delays arising from unforeseeable causes beyond the control and without the fault or negligence of the Contractor or its subcontractors for labor strikes, acts of God, acts of the public enemy, acts of the state, federal or local government in its sovereign capacity, by acts of another separate contractor, or by an act or neglect of the County.

**00700-53 INCLEMENT WEATHER**

The Contractor shall not be entitled to an extension of the contract time due to normal inclement weather. Unless the Contractor can substantiate to the satisfaction of the Construction Manager that there was greater than normal inclement weather and that such greater than normal inclement weather actually delayed the work, the Contractor shall not be entitled to an extension of time therefore. The following shall be considered the normal inclement weather days for each month listed, and extensions of time shall be granted in increments of not less than one half day only for inclement weather in excess of the days set out.

January	10 days
February	10 days
March	7 days
April	6 days
May	4 days
June	3 days
July	4 days
August	2 days
September	2 days
October	3 days
November	6 days
December	9 days

**00700-54 DELAY - NOTICE AND CLAIM**

The Contractor shall not receive an extension of time unless a Notice of Delay is filed with the Construction Manager within ten days of the first instance of such delay, disruption, interference or hindrance and a written Statement of the Claim is filed with the Construction Manager within 20 days of the first such instance. In the event that the Contractor fails to comply with this provision, it waives any claim which it may have for an extension of time pursuant to this agreement.

**00700-55 STATEMENT OF CLAIM - CONTENTS**

The Statement of Claim referenced in Article 00700-54 shall include specific information concerning the nature of the delay, the date of commencement of the delay, the construction activities affected by the delay, the person or organization responsible for the delay, the anticipated extent of the delay, and any recommended action to avoid or minimize the delay.

**00700-56 WORK BEHIND SCHEDULE, REMEDY BY CONTRACTOR**

If the work actually in place falls behind the currently updated and approved schedule, and it becomes apparent from the current schedule that work will not be completed within the contract time, the Contractor agrees that it will, as necessary, or as directed by the Construction Manager, take action at no additional cost to the County to improve the progress of the work, including increasing manpower, increasing the number of working hours per shift or shifts per working day, increasing the amount of equipment at the site, and any other measure reasonably required to complete the work in a timely fashion.

**00700-57 DILIGENCE**

The Contractor's failure to substantially comply with the requirements of the preceding paragraph may be grounds for determination by the County that the Contractor is failing to prosecute the work with such diligence as will insure its completion within the time specified. In such event, the County shall have the right to furnish, from its own forces or by contract, such additional labor and materials as may be required to comply with the schedule after 48 hours written notice to the Contractor, and the Contractor shall be liable for such costs incurred by the County.

**00700-58 SET-OFFS**

Any monies due to the Contractor pursuant to the preceding paragraph of this agreement may be deducted by the County against monies due from the County to the Contractor.

**00700-59 REMEDIES CUMULATIVE**

The remedies of the County under Articles 00700-56, 00700-57, and 00700-58 are in addition to and without prejudice to all of the rights and remedies of the County at law, in equity, or contained in this agreement.

**00700-60 TITLE TO MATERIALS**

No materials or supplies shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sales contract or other agreement by which any interest is retained by the seller. The Contractor hereby warrants that it has good and marketable title to all materials and supplies used by it in the work, and the Contractor further warrants that all materials and supplies shall be free from all liens, claims, or encumbrances at the time of incorporation in the work.

**00700-61 INSPECTION OF MATERIALS**

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards and in accordance with the requirements of the contract documents. Additional tests performed after the rejection of materials or equipment shall be at the Contractor's expense.

**00700-62 CONSTRUCTION MANAGER'S PRESENCE DURING TESTING**

All tests performed by the Contractor shall be witnessed by the Construction Manager unless the requirement therefore is waived in writing. The Construction Manager may perform additional tests on materials previously tested by the Contractor, and the Contractor shall furnish samples for this purpose as requested.

**00700-63 MATERIALS INCORPORATED IN WORK**

The Contractor shall furnish all materials and equipment to be incorporated in the work. All such materials or equipment shall be new and of the highest quality available.

Manufactured materials and equipment shall be obtained from sources which are currently manufacturing such materials, except as otherwise specifically approved by the Construction Manager.

**00700-64 STORAGE OF MATERIALS**

Materials and equipment to be incorporated in the work shall be stored in such a manner as to preserve their quality and fitness for the work and to facilitate inspection.

**00700-65 PAYROLL REPORTS**

The Contractor may be required to furnish payroll reports to the Construction Manager as required by the Owner Controlled Insurance Program.

**00700-66 CONTRACTORS' REPRESENTATIVE**

Before beginning work, the Contractor shall notify the Construction Manager in writing of one person within its organization who shall have complete authority to supervise the work, receive orders from the Construction Manager, and represent the Contractor in all matters arising pursuant to this agreement. The Contractor shall not remove its representative without first designating in writing a new representative. The Contractor's representative shall normally be present at or about the site of work while the work is in progress. When neither the Contractor nor its representative is present at the work site, the superintendent, foreman, or other of the Contractor' employee in charge of the work shall be an authorized representative of the Contractor.

**00700-67 SPECIALTY SUB-CONTRACTORS**

The Contractor may utilize the services of specialty subcontractors on those parts of the project which, under normal contracting practices, are performed by specialty subcontractors. The Contractor shall not award more than seventy-five percent of the work to subcontractors.

**00700-68 INSPECTION BY THE CONSTRUCTION MANAGER**

All work pursuant to this agreement shall be subject to inspection by the Construction Manager for conformity with contract drawings and specifications. The Contractor shall give the Construction Manager reasonable advance notice of operations requiring special inspection of a portion of the work.

**00700-69 WORK COVERED PRIOR TO CONSTRUCTION MANAGER'S INSPECTION**

In the event that work is covered or completed without the approval of the Construction Manager, and such approval is required by the specifications or required in advance by the Construction Manager, the Contractor shall bear all costs involved in inspection notwithstanding conformance of such portion of the work to the contract drawings and specifications.

**00700-70 SCHEDULING OF THE WORK**

The work of this contract shall be planned, scheduled, executed, and reported as required by the Contract Documents.

**00700-71 PROGRESS ESTIMATES**

The Contractor shall prepare a written report for the Construction Manager's approval, on County forms, of the total value of work performed and materials and equipment obtained to the date of submission. Such a report must accompany each request for a progress payment and is subject to review and approval by the Construction Manager.

Approval of a progress estimate or tendering of a progress payment shall not be considered an approval or acceptance of any work performed, and all estimates and payments shall be subject to correction in subsequent estimates. Progress payments shall be made for all completed activities and for materials suitably stored on-site.

#### **00700-72 PROGRESS PAYMENTS**

Upon approval of each monthly estimate of work performed and materials furnished, the Construction Manager shall approve payment to the Contractor for the estimated value of such work, materials, and equipment, less the amount of all prior payments and any liquidated damages. The Contractor will be paid 100 percent, less retainage, of the cost of materials received and properly stored on-site but not incorporated into the work. Payments for materials or equipment stored on the site shall be conditioned upon submission by the Contractor of bills of sale to establish the County's title to such materials or equipment. The Contractor's request for payment shall provide sufficient detail as to the work completed or materials purchased for which payment is requested to permit meaningful review by the Construction Manager.

#### **00700-73 TIME OF PAYMENT**

The Contractor will be paid within 45 days following receipt of an approved Progress Estimate. The Contractor expressly agrees that the payment provisions within this Contract shall supersede the rates of interest, payment periods, and contract and subcontract terms provided for under the Georgia Prompt Pay Act, O.C.G.A. §13-11-1 et seq., and that the rates of interest, payment periods, and contract and subcontract terms provided for under the Prompt Pay Act shall have no application to this Contract. The County shall not be liable for any late payment interest or penalty.

#### **00700-74 RETAINAGE**

The County shall retain from each progress payment ten percent of the estimated value of the work performed until the progress payments, including retainage, total 50 percent of the contract price. If a contract includes two or more projects or assignments that have been separately priced and have separate budgets, and the performances of such projects or assignments are not related to or dependent upon the performance of any other, the 50 per cent limit shall be based upon the price for each individual project or assignment. Thereafter, no further retainage shall be withheld so long as the Contractor is making satisfactory progress to insure completion of the work within the time specified therefore. The County may reinstate the ten percent retainage in the event the Construction Manager determines that the Contractor is not making satisfactory progress to complete the work within the time specified in this agreement or in the event that the Construction Manager provides a specific cause for such withholding. The County may also withhold retainage upon substantial completion of the work as provided in O.C.G.A. §13-10-81(c). Interest may be paid upon the retainage in accordance with Georgia law.

#### **00700-75 PAYMENT OF SUBCONTRACTORS**

The Contractor shall promptly pay each subcontractor upon the receipt of payment from the County. Such payment shall be made from the amount paid to the Contractor pursuant to the subcontractor's work. The Contractor shall also maintain the records of the percentage retained from payments to the Contractor pursuant to such subcontractor's work. The Contractor shall procure agreements from each subcontractor requiring each subcontractor to pay their subcontractors, agents and employees in a similar manner. The County reserves the right to inquire of any subcontractor, supplier,

materialmen, or subconsultant, the status of any indebtedness of the Contractor. The County further reserves the right to require the Contractor to designate on each instrument of payment exceeding \$400.00 to subcontractors, suppliers, materialmen, and subconsultants that such payment is on account of the work under this Contract.

**00700-76 COUNTY'S RESPONSIBILITIES TO SUBCONTRACTORS**

Neither the County nor the Construction Manager shall have any obligation to pay any subcontractor except as otherwise required by law.

**00700-77 PROGRESS PAYMENTS - ACCEPTANCE OF WORK**

Certification of progress payments, as well as the actual payment thereof, shall not constitute the County's acceptance of work performed pursuant to this agreement.

**00700-78 PAYMENTS IN TRUST**

All sums paid to the Contractor pursuant to this agreement are hereby declared to constitute trust funds in the hands of the contractor to be applied first to the payment of claims of subcontractors, laborers, and suppliers arising out of the work, to claims for utilities furnished and taxes imposed, and to the payment of premiums on surety and other bonds and on insurance for any other application.

**00700-79 JOINT PAYMENTS**

The County reserves the right to issue any progress payment or final payment by check jointly to the Contractor and any subcontractor or supplier.

**00700-80 RIGHT TO WITHHOLD PAYMENT**

The Construction Manager may decline to approve payment and may withhold payment in whole or in part to the extent reasonable and necessary to protect the County against loss due to defective work, probable or actual third party claims, the Contractor's failure to pay subcontractors or materialmen, reasonable evidence that the work will not be completed within the contract time or contract price or damage to the County or any other contractor on the project.

**00700-81 CERTIFICATE OF SUBSTANTIAL COMPLETION**

Upon the Contractor's submission of a request for a certificate of Substantial Completion, the Construction Manager shall inspect the work and determine whether the work is Substantially Complete. If the work is Substantially Complete, the Construction Manager shall issue a certificate of Substantial Completion of the work which shall establish the date of Substantial Completion, shall state the responsibilities of the County and the Contractor for security, maintenance, heat, utilities, damage to the work and insurance, and shall fix the time within which the Contractor shall complete the items submitted by the Contractor as requiring correction or further work. The certificate of substantial completion of the work shall be submitted to the County and the Contractor for their written acceptance of the responsibilities assigned to them pursuant to such certificate.

If in the sole opinion of the Construction Manager, the work is not substantially complete, the Construction Manager shall notify the Contractor of such, in writing, and outline requirements to be met to achieve Substantial Completion.

**00700-82 PAYMENT UPON SUBSTANTIAL COMPLETION**

Upon Substantial Completion of the work and upon application by the Contractor and approval by the Construction Manager, the County shall make payment reflecting 100%

work completed, less value of work remaining as determined by Construction Manager and any authorized retainage.

**00700-83 COMMENCEMENT OF WARRANTIES**

Warranties required by this agreement shall commence on the date of final completion of the project as determined under Article 00700-84 unless otherwise provided in the certificate of Substantial Completion.

**00700-84 FINAL PAYMENT - WAIVER OF CLAIMS, DISPUTE OF FINAL PAYMENT**

The acceptance of the Substantial Completion 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 application for payment at Substantial Completion and except for the retainage sums due at final acceptance. Following the Construction Manager's issuance of the certificate of Substantial Completion and the Contractor's completion of the work pursuant to this agreement, the Contractor shall forward to the Construction Manager a written notice that the work is ready for final inspection and acceptance. If after inspection the Construction Manager certifies that the work is complete and issues written notification of such to the Contractor, the Contractor shall forward to the Construction Manager a final application for payment. The Construction Manager shall issue a certificate for payment, which shall approve final payment to the Contractor and shall establish the date of final completion.

In the event the Contractor timely disputes the amount of the final payment, the amount due the Contractor shall be deemed by the Contractor and the County to be an unliquidated sum and no interest shall accrue or be payable on the sum finally determined to be due to the Contractor for any period prior to final determination of such sum, whether such determination be by agreement of the Contractor and the County or by final judgment of the proper court in the event of litigation between the County and the Contractor. The Contractor specifically waives and renounces any and all rights it may have under O.C.G.A. §13-6-13 and agrees that in the event suit is brought by the Contractor against the County for any sum claimed by the Contractor under the Contract or for any extra or additional work, no interest shall be awarded on any sum found to be due from the County to the Contractor in the final judgment entered in such suit. All final judgments shall draw interest at the legal rate, as specified by law.

**00700-85 DOCUMENTATION OF COMPLETION OF WORK**

Neither the final payment nor the remaining retainage shall become due until the Contractor submits the following documents to the Construction Manager:

- a. An affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work have been paid other otherwise satisfied;
- b. The surety's consent to final payment; and
- c. Any other data reasonably required by the County or Construction Manager establishing payment or satisfaction of all such obligations, including releases, waivers of liens, and documents of satisfaction of debts.

In the event that a subcontractor refuses to furnish a release or waiver as required by the County or Construction Manager, the Contractor may furnish a bond satisfactory to the County to indemnify the County against such loss. In the event that any lien or indebtedness remains unsatisfied after all payments are made, the contractor shall

refund to the County all moneys that the County may become compelled to pay in discharging such lien or other indebtedness, including all costs and reasonable attorney's fees.

**00700-86 GOVERNING LAW**

Each and every provision of this agreement shall be construed in accordance with and governed by Georgia law. The parties acknowledge that this contract is executed in Fulton County, Georgia and that the contract is to be performed in Fulton County, Georgia. Each party hereby consents to the Fulton Superior Court's sole jurisdiction over any dispute which arises as a result of the execution or performance of this agreement, and each party hereby waives any and all objections to venue in the Fulton Superior Court.

**00700-87 CHANGES IN THE WORK**

A. CHANGE ORDERS

1. A Change Order is a written order to the Contractor signed to show the approval and the authorization of the County, issued after execution of the Contract, authorizing a change in the Work and/or an adjustment in the Contract Sum or the Contract Time. Change Orders shall be written using forms designated by the County with Contractor providing supporting documentation as required by the Construction Manager. The Contract Sum and the Contract Time may be changed only by approved Change Order pursuant to Fulton County Procedure 800-6. The amount payable by the Change Order is payment in full for all direct and indirect costs incurred and related to the work under said Change Order, including but not limited to delays, imports, acceleration, disruption and extended overhead. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including the adjustment in either or both of the Contract Sum or the Contract Time.
2. The County, without invalidating the Contract, may order changes in the Work within the general scope of the Contract as defined herein. The time allowed for performance of the work and the contract price to be paid to the Contractor may be adjusted accordingly.
3. The cost or credit to the County resulting from a change in the Work shall be determined in one or more of the following ways:
  - a. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
  - b. By unit prices stated in the Contract Documents or subsequently agreed upon;
  - c. By cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
  - d. By the method provided in Subparagraph A4 below.
4. If none of the methods set forth in Subparagraphs 3a, 3b, or 3c above is agreed upon, the Contractor, provided a written order signed by the Construction Manager is received, shall promptly proceed with the Work involved. The cost of such Work shall then be determined by the Construction Manager on basis of the reasonable expenditures and

savings of those performing the Work attributable to the change. The cost of the change shall include only the items listed in Subparagraph 5a below, and in the case of either a decrease or an increase in the Contract Sum, an allowance for overhead and profit in accordance with the schedules set forth in Subparagraphs 5b and 6 below shall be applied to the cost or credit.

- a. In such case, and also under Subparagraph 3a above, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting of all actual costs expended, together with appropriate supporting data for inclusion in a Change Order.
  - b. All hourly rate charges shall be submitted to the Construction Manager for prior review and approval. All hourly rate charges shall be properly supported as required by the Construction Manager with certified payrolls, or their acceptable equivalent. When authorized to proceed for a given change and actual expenditures have been made prior to execution of a Change Order for the entire change, such actual expenditures may be summarized monthly, and if approved, incorporated into a Change Order. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase or decrease, if any, with respect to that change.
5. In Subparagraphs 3 and 4 above, the items included in “Cost and “Overhead” shall be based on the following schedule:
- a. Unless otherwise provided in the Contract Documents, “Cost” shall be limited to the following: cost of materials incorporated into the Work, including sales tax and cost of delivery; cost of direct labor (labor cost may include a pro rata share of foreman’s account of the change) including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; workers’ or workmen’s compensation insurance; rental value of equipment and machinery; costs for preparing Shop Drawings.
  - b. Unless otherwise provided in the Contract Documents, “Overhead” shall include the following: bond and insurance premiums including increase and decreases from change in the Work, supervision, superintendence, construction parking, wages of timekeepers, watchmen and clerks, small tools, consumable supplies, expendables, incidentals, general office expense, the cost of additional reproduction for the Contractor’s subcontractors beyond that agreed upon in the Contract Documents, construction parking, any additional costs of craft supervision by the Contractor’s or subcontractors’ superintendents, and overhead charges which would be customary and expended regardless of the change in the Work due to other overlapping activities which are included as part of the original Contract, and all other expenses not included in “Cost” above.

- c. In the event that a change is issued by the County which would require the expenditure of substantial amounts of special supervision (beyond the foreman level) by the Contractor, the Contractor may, at the sole direction of the Construction Manager, be allowed to incorporate these charges into the agreement cost for the change.
  6. In Subparagraphs 3 and 4 above, the allowance for overhead and profit combined, included in the total cost or credit to the County, shall be based on the following schedule:
    - a. For the Contractor, for any work performed by the Contractor's own forces, ten (10) percent of the cost.
    - b. For the Contractor, for any work performed by a Contractor's subcontractor, five (5) percent of the amount due the subcontractor.
    - c. For each subcontractor or sub-subcontractor involved, for any work performed by that subcontractor's or sub-subcontractor's own forces, ten (10) percent of the cost.
    - d. For each subcontractor, for work performed by a sub-subcontractor, five (5) percent of the amount due to the sub-subcontractor.
    - e. Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 5 above unless modified otherwise.
  7. In order to facilitate checking of quotations for extras or credits, all proposals or bids, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs, including labor cost, materials and subcontracts. Labor and materials shall be itemized in the manner defined in Subparagraph 4 above. Where major cost items are subcontracts, they shall be itemized also. In no case shall a change be approved without such itemization.
  8. No payment shall be made for any changes to the contract that are not included in a fully executed Change Order.
- B. CONCEALED, UNKNOWN AND DIFFERING CONDITIONS
  1. Should concealed conditions be encountered in the performance of the Work below the surface of the ground, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions below the surface of the ground or concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum and Contract Time shall be equitably adjusted by Change Order upon request by either party made within twenty (20) days after the first observance of the conditions. No such request for equitable adjustment shall be valid unless the Contractor complies with this (20) days notice and Subparagraph C.1. below.

2. The Contractor shall promptly, and before such conditions are disturbed, notify the Construction Manager in writing of any claim of concealed, unknown or differing conditions pursuant to this paragraph. The Construction Manager shall authorize the Engineer to investigate the conditions, and if it is found that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be recommended to the Construction Manager.
3. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in (a) above, prior to disturbing the condition.
4. No claim by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this Contract.
5. Any materially differing site condition as between what is shown on the Drawings and Specifications and actually found on site shall be immediately reported to the Construction Manager in writing prior to the commencement of Work at the site. Failure of the Contractor to notify the Construction Manager in writing of the differing site condition prior to performance of Work at the site shall constitute a waiver of any claim for additional monies. Any Change Order necessitated by the differing site condition shall be processed as provided under "Changes in the Contract".

C. REQUESTS FOR ADDITIONAL COST

1. If the Contractor wishes to request an increase in the Contract Sum, the Contractor shall give the Construction Manager written notice thereof within twenty (20) days after the occurrence of the event, or identification of the conditions, giving rise to such request. This notice shall be give by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Article 00700-25 and Subparagraph A.4 above. No such request shall be valid unless so made within the twenty (20) days specified above. If the County and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined by the Construction Manager. Any change in the Contract Sum resulting from such claim shall be documented by Change Order.
2. If the Contractor claims that addition cost is involved because of, but not limited to (1) any written interpretation pursuant to General Condition 00700-17 of this Agreement, (2) any order by the County to stop the Work pursuant to Articles 00700-25 and 00700-37 of this Agreement where the Contractor was not at fault, or any such order by the Construction Manager as the County's agent, or (3) any written order for a minor change in the Work issued pursuant to Paragraph D below, the Contractor shall submit a request for an increase in the Contract Sum as provided in Subparagraph C.1 above. No such claim shall be valid unless the Contractor complies with Subparagraph C.1 above and approved by the County pursuant to Change Order Policy 800-6.

D. MINOR CHANGES IN THE WORK

The Construction Manager may order minor changes in the Work not involving an adjustment in the Contract Price, extension of the time allowed for performance of the work and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by a written Change Directive issued by the Construction Manager, and shall be binding on the County and the Contractor. The Contractor shall carry out such written orders promptly.

E. BONDS

If any change order results in an increase in the contract price, the contractor shall increase the penal sum of the performance and payment bonds to equal the increased price.

**00700-88 DISAGREEMENT WITH ORDERS FOR CHANGE**

Contractor's written acceptance of a Change Order or other order for changes shall constitute his final and binding agreement to the provisions thereof and a waiver of all claims in connection therewith, whether direct or consequential in nature. Should Contractor disagree with any order for changes, he may submit a notice of potential claim to the Construction Manager, at such time as the order is set forth in the form of a Change Order. Disagreement with the provisions of an order for changes shall not relieve Contractor of his obligation under Article 00700-87 of this Agreement.

**00700-89 NO WAIVER OF REMEDIES**

Exercise by the County of any remedy is not exclusive of any other remedy available to County and shall not constitute a waiver of any such other remedies. Failure of the County to exercise any remedy, including breach of contract remedies, shall not preclude the County from exercising such remedies in similar circumstances in the future.

**00700-90 LAND AND RIGHTS-OF-WAY**

The owner will provide, as indicated in the Contract Documents and prior to Notice to Proceed, the lands upon which the work is to be done, right-of-way for access thereto, and such other lands which are designated for the use of the Contractor. The Contractor shall confine the Contractor's work and all associated activities to the easements and other areas designated for the Contractor's use. The Contractor shall comply with any limits on construction methods and practices which may be required by easement agreements. If, due to some unforeseen reason, the necessary easements are not obtained, the Contractor shall receive an equitable extension of contract time dependent upon the effect on the critical path of the project schedule or the County may terminate the Contract for its convenience.

**00700-91 COORDINATION WITH STATE DEPARTMENT OF TRANSPORTATION**

No clearing or grading shall be completed by Contractor within the State Department of Transportation (DOT) area under construction. The Contractor must coordinate his construction scheduling with DOT.

If the Contractor begins work before DOT's completion date, he must obtain the approval of DOT before starting work in the area. The state DOT has the right to stop the Contractor's work the DOT area.

The Contractor shall receive no additional compensation or damages resulting from delay or work stoppage from DOT actions or scheduling.

Contractor shall obtain DOT drawings of the DOT, project area for verification of road geometry, storm drains, etc. from Georgia Department of Transportation or Fulton County. The Contractor is responsible for obtaining any pertinent DOT revisions.

I N D E X

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**EXHIBIT A**  
**FINAL AFFIDAVIT**

TO FULTON COUNTY, GEORGIA

I, \_\_\_\_\_, hereby certify that all suppliers of materials, equipment and service, subcontractors, mechanic, and laborers employed by \_\_\_\_\_ or any of his subcontractors in connection with the design and/or construction of \_\_\_\_\_ at Fulton County have been paid and satisfied in full as of \_\_\_\_\_, 200\_\_, and that there are no outstanding obligations or claims of any kind for the payment of which Fulton County on the above-named project might be liable, or subject to, in any lawful proceeding at law or in equity.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

Personally appeared before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_. \_\_\_\_\_, who under Oath deposes and says that he is \_\_\_\_\_ of the firm of \_\_\_\_\_, that he has read the above statement and that to the best of his knowledge and belief same is an exact true statement.

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

\_\_\_\_\_  
My Commission expires

END OF SECTION

**SECTION 9  
SPECIAL CONDITIONS**

**No Special Conditions required for this Project**

**SECTION 10**  
**EXHIBITS**

## ITB SERVICES SUBMITTAL CHECKLIST

Proposer Name: [Click here to enter text.](#)

Project # and Title: [Click here to enter text.](#)

E-Verify Number: [Click here to enter text.](#)

A complete proposal package will consist of the items identified below. Proposers must complete this checklist to confirm the items are included in the proposal, and return this checklist with the proposal package. Place a check mark or "X" next to each item that is being submitted with the proposal. For the proposal to be responsive, all required attachments must be returned.

Proposer Requirements	Proposer Completed	County Reviewed
1. One (1) Proposal marked "Original" and five (5) copies of CD's	<input type="checkbox"/>	<input type="checkbox"/>
2. *Form E: Georgia Security and Immigration Contractor Affidavit(s) and Agreements <i>Note: If prime contractor is a joint venture, partnership, or LLC, each member of the entity must submit an affidavit</i>	<input type="checkbox"/>	<input type="checkbox"/>
3. Form F: Georgia Security and Immigration Subcontractor Affidavit(s)	<input type="checkbox"/>	<input type="checkbox"/>
4. Bid Form. All dollar amounts must be Both in writing AND figures and represent prices for the published scope of work without exceptions.	<input type="checkbox"/>	<input type="checkbox"/>
5. Bid Breakdown Form	<input type="checkbox"/>	<input type="checkbox"/>
6. Acknowledgement of each Addendum	<input type="checkbox"/>	<input type="checkbox"/>
7. Bid Bond (separate envelope if Public Works Construction project)	<input type="checkbox"/>	<input type="checkbox"/>
8. Purchasing Forms <input type="checkbox"/> Form A: Certificate Regarding Debarment <input type="checkbox"/> Form B: Non-Collusion Affidavit of Bidder/Offer or <input type="checkbox"/> Form C: Certificate of Acceptance of Request Proposal requirements <input type="checkbox"/> Form D: Disclosure Form & Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>

9. Office of Contract Compliance Requirements (separate envelope)	<input type="checkbox"/>	<input type="checkbox"/>
10. Evidence of Insurability, proposer must submit one (1) of the following: <ul style="list-style-type: none"> <li><input type="checkbox"/> Letter from insurance carrier</li> <li><input type="checkbox"/> Certificate of Insurance</li> <li><input type="checkbox"/> An umbrella policy in excess of required limits for this project</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
11. Verify if Proposer submitted Contract Exceptions. If yes, please forward a copy of the Contract Exceptions to the Purchasing Director immediately.	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION 11**  
**APPENDICES**

# **APPENDIX 1**

## **APPLICATION FOR JAIL IDENTIFICATION CARD**



# Fulton County Sheriff's Office Jail Bureau

## Application for Jail Identification Card

This application must be completed in its **entirety** by all Non-Sheriff's Office Personnel to include **Fulton County Employee's, Contract Employees, Contractors, Consultants, Vendors and Volunteers.**

**Applicants Must Complete This Area**

Applicant's Name: \_\_\_\_\_

Date Application Submitted: \_\_\_\_\_

Agency/Vendor Name: \_\_\_\_\_

Internal Contact Number: \_\_\_\_\_

External Contact Number: \_\_\_\_\_

Emergency Contact Person/Number: \_\_\_\_\_

ARN: \_\_\_\_\_

# Basic Requirements

**THIS APPLICATION APPLIES TO VENDORS, CONTRACTORS, AND NON-FULTON COUNTY SHERIFF'S OFFICE PERSONNEL- WORKING AT THE FULTON COUNTY JAIL WHO ARE NOT INVOLVED IN THE ACTUAL CRIMINAL JUSTICE ADMINISTRATION AND THOSE WHO ARE ENGAGED IN THE ADMINISTRATION OF CRIMINAL JUSTICE:**

Applicants must conform to the following qualifications as required by Fulton County Sheriff's Office, Georgia and Federal Laws.

- ❖ Be a citizen of the United States
  
- ❖ Not have been convicted by any state or federal court of any crime, for which could have been imprisonment in a federal or state prison or institution. Nor shall the applicant have been convicted of sufficient misdemeanors to establish a pattern of disregard for the law.
  
- ❖ Maybe fingerprinted and a search made of local, state, and national fingerprint files to disclose any criminal record.

## **SUBMIT THE FOLLOWING DOCUMENTS**

- ❖ VALID GEORGIA DRIVERS LICENSE, GEORIGA IDENTIFICATION CARD OR VALID DRIVERS LICENSE FROM ANY STATE.
  
- ❖ VALID SOCIAL SECURITY CARD ISSUED BY THE SOCIAL SECURITY ADMINISTRATION.
  
- ❖ ORIGINAL NATURALIZATION PAPERS (IF APPLICABLE)
  
- ❖ OR ANY DOCUMENTS NECESSARY TO DETERMINE APPLICANTSAPPROVAL.

**NOTE: THE BADGE HOLDER AGREES TO WEAR THE L D. CARD ON THE UPPER TORSO OF THE BODY, ON THE OUTER GARMENT. IF THE I. D. BADGE IS LOST OR STOLEN A REPORT WILL BE MADE TO THE JAIL SECURITY SECTION IMMEDIATELY. IT IS FURTHER AGREED THAT A REPLACEMENT FEE OF \$5.00 WILL BE CHARGED.**

# Character Guidelines

ANY OF THE FOLLOWING WILL BE CONSIDERED SUFFICIENT REASON(S) FOR DISQUALIFICATION:

- ❖ Any conviction(s) of a felony or multiple arrests or conviction(s) of misdemeanor
- ❖ Falsification of the contractor's application or any documents submitted to the Sheriff's Office.
- ❖ Any arrest or conviction involving the use of drugs
- ❖ Bringing contraband items into the Fulton County Jail.
- ❖ Must refrain from any personal and social involvement with inmates.
- ❖ Failure to notify the Fulton County Sheriff's Office of changes, such as addresses, telephone numbers, etc..
- ❖ Failure to follow all rules and regulations at the Fulton County Jail.

# Fulton County Sheriff's Office

## Personal Data Sheet

USE BLACK INK ONLY

1. Print your full name:

\_\_\_\_\_

Last                                      First                                      Middle                                      Maiden

2. Include any other names you have used or been known by and the reasons why (If none indicate so): \_\_\_\_\_

3. Height [      ]      Weight [      ]      Hair [      ]      Eyes [      ]

4. Home address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

5. Home Telephone: \_\_\_\_\_ Work telephone: \_\_\_\_\_

6. Email Address: \_\_\_\_\_

7. Date of Birth: \_\_\_\_\_ Place of birth: \_\_\_\_\_

8. Social Security Number: \_\_\_\_\_

9. ARE YOU A CITIZEN OF THE UNITED STATES:      YES       NO

10. Are you:  Single  Married  Separated  Divorced

Emergency Contact: Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Home address: \_\_\_\_\_

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

Do you presently have relatives, business associates or friends incarcerated in the Fulton County Jail or the Georgia Department of Corrections?      YES       NO

If yes, list the full name, relationship and facility of the inmate:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The above information is true and correct to the best of my knowledge:

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

Print Name: \_\_\_\_\_

# Fulton County Sheriff's Office

## Consent Form

I, \_\_\_\_\_, Print Full Name **HEREBY AUTHORIZE The Fulton County Sheriff's Office**, to receive any criminal, history information pertaining to **Me** which may be in the files of any state or local criminal justice agency in Georgia or the United States of America and its territories.

I understand that this information will be used, in part, to determine my eligibility for Issuance of a Jail ID Card. I also understand that as long as I am in possession of a Jail ID Card, a criminal history records check may be repeated at any time.

Address: \_\_\_\_\_ Sex: \_\_\_\_\_ Race: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Social Security Number: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of person of authorization: \_\_\_\_\_

**Copy of State Driver's License or  
State ID Card**

**Copy of Social Security Card**

### GCIC/NCIC

Approved: Yes No Circle One Date: \_\_\_\_\_

SECURITY PERSONNEL: \_\_\_\_\_ DID: \_\_\_\_\_

# Fulton County Sheriff's Office

## Affidavit of Applicant

I, hereby certify that I have read and understand all questions and instructions in this application and that my answers are true and complete.

I understand that any misstatements of material facts will result in:

1. Disqualification of my application.
2. Prosecution for the offense of false swearing (**OCGA Section 16-10-71**), a **Felony** punishable by a maximum fine of \$1000 and or imprisonment for not less than one nor more than five (5) years.
3. I, understand that if i do not wish to answer a question in this Application, it is my option to not do so, however, my application will be terminated.

APPLICANT'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

STATE OF GEORGIA

County of Fulton

Before me personally appeared the said \_\_\_\_\_ who says that He/She executed the above instrument of his own free will and accord, with full knowledge of the purpose therefore.

Sworn to me and subscribed in my presence this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_.

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

## **APPENDIX 2**

# **POLICY 800-6, PROCEDURES FOR HANDLING CHANGE ORDERS**



## POLICY AND PROCEDURE

SUBJECT: Procedures for Handling Change Orders

DATE: September 19, 2001

800-6

### A. STATEMENT OF POLICY:

Fulton County is committed to a policy of open, non-discriminatory and competitive purchasing. When circumstances arise after award of a contract, requiring modification of that contract, such modification will be accomplished in accordance with this Change Order Policy and Procedure, to achieve the following goals:

- (1) Ensure that Fulton County does not pay more than is necessary to complete the contract;
- (2) Preclude a contractor from tendering the lowest bid and then increasing the cost of the contract through the change order process;
- (3) Ensure that the terms and conditions upon which the contract was awarded are met throughout the term of the contract, including any and all change orders;
- (4) Ensure that the change order procedure is not used to bypass the competitive bidding process; and
- (5) Ensure that change orders are not used for work that is independent of and outside the scope of the original contract.

### B. BACKGROUND:

A change order is a written order from Fulton County to a contractor, directing a change within the scope of the contract and necessary for completion of the contract, in the specifications, services, time of performance or terms and conditions of the contract. A change is within the scope of a contract if it concerns the work required by the original contract documents and any subsequent change orders approved to accomplish the intent of the project as described in the solicitation documents.

A contractor is any person or entity, whether designated as a contractor, vendor, consultant or by any other title, having a contractual relationship with Fulton County. In Fulton County, except as otherwise provided in this Policy and Procedure, change orders shall be effected only through a written, bilateral agreement (Modification) between the County, acting through its Board of Commissioners, and the contractor. The Modification modifies the contract and will specify all changes to the contract and the costs thereof.

**C. JUSTIFICATION FOR CHANGE ORDERS:**

Change orders are authorized only for the following reasons:

- (1) Situations creating an immediate need to protect the public health, safety or welfare;
- (2) Corrections of deficiencies in design or construction documents provided by architects or engineers other than the contractor;
- (3) Changes in applicable laws or regulations, or changes that result from public participation when such participation is mandated by laws or regulations;
- (4) Concealed conditions, differing site conditions or abnormal inclement weather;
- (5) Owner requested changes within the scope of the original contract. Such changes may include: deductive change orders and accommodation of value engineering and administrative matters such as closeout change orders for unit price contracts, deductions for approved material substitutions and administrative no-cost change orders.

**D. CHANGE ORDER AUTHORITY:** Except as otherwise provided in this procedure, change orders may be approved only by the Board of Commissioners of Fulton County. Such approval shall be demonstrated by a formal vote on the Contract Modification.

**E. CHANGE ORDER PROCEDURE:** The ordinary sequence of a change order is as follows:

- (1) Need for contract change is identified.
- (2) Contractor is requested to propose price for change and if necessary, schedule changes.
- (3) Contractor and County negotiate price and scope of change.
- (4) Agreement between County and contractor for change is clearly defined in a written Modification.
- (5) Contractor signs Modification and returns it to County.
- (6) Modification is submitted to Board of Commissioners for approval and signature.

Circumstances may alter this general description of change order procedure. The administrative actions necessary to accomplish a change order are described in Section "F" of this Policy and Procedure.

- F. **ADMINISTRATIVE ACTIONS:** Department heads have primary responsibility for completion of the administrative steps necessary to complete a change order. Such responsibility may be exercised through designees and in consultation with other interested departments. Except for change orders falling under Section G, the following regular administrative procedures will govern all change orders:
- (1) The department head will confirm the necessity for and the appropriateness of a change order under this procedure.
  - (2) The department head will submit to the contractor a written description of the proposed change and request that the contractor submit a cost proposal. The written description must provide sufficient details of the change to permit the contractor to submit a realistic price.
  - (3) The department head, in conjunction with the Purchasing Agent, shall review the cost proposal for general reasonableness and compliance with applicable County purchasing policies.
  - (4) If appropriate and necessary, the department head may negotiate the cost and scope of the proposed change with the contractor.
  - (5) If agreement is reached with the contractor, the terms of the agreement shall be reduced to a written Contract Modification suitable for execution by the contractor and Fulton County. The Modification shall clearly describe the changes to the contract, including any changes to the schedule and the obligations of the parties. The Modification also shall clearly describe all elements of the cost of the changes, all previous change orders and the total change to the contract cost.
  - (6) The department head shall submit the proposed Modification to the County Attorney for preliminary review, and to the Purchasing Agent, the Director of Finance and the Director of Contract Compliance for their review. The department head shall attach to the Modification, the documents listed in Attachment 1 to this Procedure. When change order packages are submitted to the County Attorney's Office for review, the original contract and all previous change orders must be attached.
  - (7) Upon completion of the reviews, the department head shall make such changes to the proposed Modification and related documents as necessary and then shall submit five copies of the Modification to the contractor for execution.
  - (8) The Modification, as executed by the contractor, the explanatory memorandum and the Uniform Contract/Purchasing Sign-Off Sheet (Sign-Off Sheet) shall be submitted to the County Attorney's Office for final review, to include review of the formalities of execution by the contractor.
  - (9) The Modification and accompanying documentation shall be submitted to the County Manager for approval and placement on the Board of Commissioners' agenda. The County Manager shall ensure that all required reviews have been

completed and that all necessary documents are attached to the Modification. However, the County Manager may disapprove a change order and return it to the department head to have the work procured through the competitive process.

- (10) Following approval by the Board of Commissioners and receipt of the approval letter from the County Manager, the user department shall forward the originals (with a copy of the approval letter and the routing sheet) to the County Manager for execution. The County Manager shall forward the documents to the Chairman's Office for his/her signature. The Chairman's Office shall forward the documents to the Clerk to the Commission for his/her signature. The Clerk's Office shall retain one original for the file designated by the Board of Commissioners for filing contracts and making them available for public inspection, and shall forward one original to Purchasing and the remainder of the documents to the user department.
- (11) The user department shall distribute copies of the approved and signed Modifications as set out in Section H. The Purchasing Agent shall issue any necessary purchase order modifications to the contractor and the department concerned, and the department head shall issue to the contractor any necessary notices to proceed.

**G. COUNTY MANAGER'S AUTHORITY:** In the following described situations, the County Manager is authorized to approve change orders and authorize the commencement of work pursuant to such change orders, subject to ratification by the Board of Commissioners. The Board of Commissioners will not withhold ratification unless there is credible evidence showing that the contractor induced or procured the change order by fraud.

**(1) Change orders less than 10% of original contract amount:**

- (a) The County Manager is authorized to approve change orders having a total cost that is less than 10% of the original contract cost. A change order may be approved under this procedure if its cost, when combined with that of all previous change orders to the same contract, is an amount less than 10% of the original contract cost. The County Manager may decline to exercise this authority and return change orders for processing through the regular change order procedure, or may direct that the work be procured through the competitive process.
- (b) Change orders submitted under this authority shall be processed according to the regular administrative procedure described in the preceding Section F, up through Step (8).

The procedure thereafter shall be as follows, substituting the numbered steps below:

- (9) The Modification and required documentation shall be submitted to the County Manager for approval. The County Manager shall review the

documents for compliance with this Policy and Procedure and the completion of all required reviews. The County Manager may decline to exercise the authority to approve the change order and may either submit it to the Board of Commissioners under the regular administrative procedure or return it to the department head to procure the work through the competitive process.

- (10) The County Manager shall document approval of the change order by signature on the Sign-Off Sheet and shall notify the user department and the Purchasing Agent of such approval. The department head and the Purchasing Agent shall issue any necessary notices to proceed and purchase order amendments. Work may proceed upon approval by the County Manager.
- (11) Not more than sixty (60) days following approval of a change order under this authority, the County Manager shall have it spread on the minutes by placing it on the consent agenda and subsequently obtaining the signature of the Chairman of the Board of Commissioners on the Modification. The user department shall distribute copies of the executed Modification as stipulated under the regular procedure.

**(2) Extraordinary Circumstances:**

- (a) The County Manager is authorized to approve change orders regardless of the amount when due to extraordinary circumstances, work must be implemented before the Board of Commissioners can act. The County Manager may decline to exercise the authority granted hereunder and may require that the change order be submitted under the regular procedure, or he/she may direct that the work be procured through the competitive process.
- (b) The authority granted in this section may be exercised when immediate action must be taken to protect the County's interests, and only under the following circumstances (in addition to meeting the requirements of Section C):
  - (i) Threat to public health, welfare or safety; or
  - (ii) Threat of litigation when it appears likely that litigation will be commenced and that Fulton County's legal position may be compromised by delay in implementing the change order. Change orders citing this circumstance must be approved by the Office of the County Attorney; or
  - (iii) Loss of substantial resources due to delay, including delay to critical path schedule.
- (c) Department heads proceeding under this authority must comply with as much of the procedure set out in Section G (1) as the situation will permit.

- (d) At a minimum, the following procedures must be observed:
  - (i) The contractor shall execute a written contract Modification that clearly describes the work to be done and its cost. If costs cannot be fully detailed due to the exigencies of the situation, the Modification must set out a maximum cost and state that the cost will be definitized in a final change order.
  - (ii) The department head shall obtain the approval of the Purchasing Agent, prior to submitting the change order to the County Manager.
  - (iii) The work may proceed upon approval by the County Manager. The department head shall prepare all other documentation normally required for a change order, including completion of the Sign-Off Sheet.
  - (iv) Not later than sixty (60) days following approval of the change order, the County Manager shall place the change order on the consent agenda.
  - (v) In cases of change orders without definitized costs under Subsection (i) above, the department head shall commence processing a final change order as soon as circumstances permit.