

**DeKalb County
Department of Purchasing and Contracting**

Maloof Administration Building, 1300 Commerce Drive, 2nd Floor, Decatur, Georgia 30030

**July 29, 2019
INVITATION TO BID (ITB) NO. 19-101127
FOR
COMMON BRICK
(ANNUAL CONTRACT WITH 2 OPTIONS TO RENEW)
DEKALB COUNTY, GEORGIA**

Procurement Agent:

Phone:

Email:

Mandatory DeKalb First LSBE Meeting:
(Bidders must attend 1 meeting on either of the
dates listed in person or via video conference.)

Judi Moore

404-371-6338

jmoore@dekalbcountyga.gov

July 31, 2019 or August 7, 2019

4572 Memorial Drive, Decatur, Georgia 30032

Main Conference Room - A

(Meetings are held at 10:00 a.m. and 2:00 p.m.)

Video Conference: Utilize the link supplied on our
webpage labeled ***“DeKalb First LSBE Video Meeting”***

Deadline for Submission of Questions:

Bid Opening:

Price Schedule Opening:

5:00 P.M. ET August 23, 2019

3:00 P.M. ET, September 16, 2019

3 – 5 Business days after Bid Opening

FIRM'S NAME AND ADDRESS: (Street, City, State and Zip Code. (Type or print): Federal Tax ID No. _____ ARE YOU A DEKALB COUNTY FIRM? Yes ____ No ____	TELEPHONE AND FAX NUMBERS WITH AREA CODE: Phone: _____ Fax: _____ E-mail: _____
SIGNATURE OF PERSON AUTHORIZED TO SIGN BID AND DATE: _____	SIGNER'S NAME AND TITLE (Type of Print): _____

THE RESPONSIBILITY FOR SUBMITTING A RESPONSE TO THIS BID TO THE DEPARTMENT OF PURCHASING AND CONTRACTING OF DEKALB COUNTY GOVERNMENT ON OR BEFORE THE STATED DATE AND TIME WILL BE SOLELY AND STRICTLY THE RESPONSIBILITY OF THE BIDDER.

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FOR

INVITATION TO BID NO. 19-101127

REPAIR PARTS FOR WATERLINES

(ANNUAL CONTRACT WITH 2 OPTIONS TO RENEW)

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INVITATION TO BID OVERVIEW

A. PURPOSE:

DeKalb County Government (the County) is soliciting bids for **INVITATION TO BID NO. 19-101127 COMMON BRICK (Annual Contract with 2 Options to Renew)** from responsible contractors.

B. GENERAL INFORMATION:

1. BID TIMETABLE:

The anticipated schedule for the bid process is as follows:

Mandatory DeKalb First LSBE Meeting: (Bidders must attend 1 meeting on either of the dates listed in person or via video conference.)	July 31, 2019 or August 7, 2019 4572 Memorial Drive, Decatur, Georgia 30032 Main Conference Room - A (Meetings are held at 10:00 a.m. and 2:00 p.m.) Video Conference: Utilize the link supplied on our webpage labeled <i>“DeKalb First LSBE Video Meeting”</i>
Deadline for Submission of Questions:	5:00 P.M. ET August 23, 2019
Bid Opening:	3:00 P.M. ET, <u>September 16, 2019</u>
Price Schedule Opening:	3 – 5 Business days after Bid Opening
Bids Valid Until:	Bids shall be valid for 90 days from and including the bid opening date.

Sealed bids are to be addressed and delivered to:

DeKalb County Department of Purchasing and Contracting
Maloof Administration Building
1300 Commerce Drive, 2nd Floor
Decatur, Georgia 30030, not later than **3:00 P.M. ET September 16, 2019**

*****NEW-PRICE SCHEDULE MUST BE SUBMITTED IN A SEPARATE SEALED ENVELOPE OR BIDDER WILL BE DEEMED NON-RESPONSIVE AND WILL NOT BE CONSIDERED FOR AWARD*****

Submit **one original bid package** (inclusive of the entire Invitation to Bid document and required documents with the exception of the price schedule) stamped “Original” and **two sealed identical copies** stamped “Copy” of the bid package to the address listed above.

2. CONTACT PERSON:

The contact person for this bid is **Judi Moore**, Procurement Agent General inquiries concerning the meaning or interpretation of this Invitation to Bid (ITB) may be requested from the contact person via telephone at 404-371-6338 or via email at jmoore@dekalbcountyga.gov. Questions and requests for information or clarification concerning the specifications in this ITB must be submitted to the above listed contact person via email no later than the date and time listed in the bid timetable. Questions and requests received after the above stated time or sent to anyone other than the listed contact person will not receive a response or be the subject of addenda.

3. QUESTIONS:

All requests must be in writing. Any explanation desired by a bidder regarding the meaning or interpretation of the Invitation to Bid, drawings, specifications, requirements, etc., must be requested in writing and with sufficient time allowed for a reply to reach bidders before the submission of their bids. If any statement in the bidding documents, specifications, plans, etc., appear ambiguous to the Bidder, Bidder is specifically instructed to make a written request to the Department of Purchasing and Contracting as outlined *in* the preceding sentence. Any information given to a prospective bidder concerning an Invitation to Bid will be furnished to all prospective bidders, as an addenda to the Invitation, if such information is necessary to bidders in submitting bids on the Invitation or if the lack of such information would be prejudicial to uninformed bidders. Oral explanations or instructions given before the award of the contract will not be binding. **Questions must be submitted no later than 5:00 pm EST on August 23, 2019 @ 5:00 P.M.**

4. ADDITIONAL INFORMATION/ADDENDA:

The County will issue responses to inquiries and any other corrections or amendments it deems necessary in written addenda issued prior to the bid opening date. Bidders should not rely on any representations, statements or explanations other than those made in this ITB or in any addendum to this ITB. Where there appears to be a conflict between the ITB and any addenda issued, the last addendum issued will prevail. It is the responsibility of the Bidder to ensure awareness of all addenda issued for this solicitation. Please acknowledge the addenda and submit to the DeKalb County Department of Purchasing and Contracting as requested. Bidders may contact the above listed contact person to verify the number of addenda prior to submission. Addenda issued for this ITB will be posted on DeKalb County's website, http://www.dekalbcountyga.gov/purchasing/pc_index_formal_solicitations.html. Bidder should regularly check the County's website for addenda.

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INVITATION TO BID PROCEDURES

A. BIDDER INFORMATION:

1. **FAILURE TO SUBMIT THE PRICE SCHEDULE IN A SEPARATE SEALED ENVELOPE SHALL DEEM THE BID NON-RESPONSIVE. INCLUDING THE PRICE SCHEDULE IN ANY AREA OUTSIDE OF ITS SEPARATE, SEALED ENVELOPE WILL RESULT IN BIDDER'S BID BEING DEEMED NON-RESPONSIVE.**
2. Failure to return all pages of this Invitation to Bid may result in bid being deemed non-responsive.
3. Minimum specifications are intended to be open and non-restrictive. Contractors are invited to inform the DeKalb County Department of Purchasing and Contracting whenever specifications or procedures appear not to be fair and open. Such information should be supplied as early in the procurement process as possible. Information received in less than five (5) days prior to the scheduled bid opening will not be acted upon unless the DeKalb County Department of Purchasing and Contracting rules that it is in the best interest of the County to consider.
4. Brand names and numbers when provided in solicitations are for reference and to establish a quality standard. Any reference to a brand name shall not be construed as restricting Bidders to that manufacturer (unless "no substitutes" is stated). Bids on equal items will be considered, provided the bid clearly describes the article offered and it is equal or better in quality and function and fully compatible with this requirement.
5. By submitting a bid, Bidder warrants that any goods or services supplied to DeKalb County Government meet or exceed the specifications set forth in this solicitation.
6. If any supplies, materials, and equipment are provided to the County under this solicitation, then such items shall be new and in first-class condition unless the solicitation specifically allows offers of used, reconditioned, or remanufactured items. If newly manufactured products are specified, such products shall be of recent origin and not previously used. No equipment of any type is acceptable if serial numbers or any other manufacturer's identification labels or marks have been removed, obliterated, or changed in any way. A Contractor delivering any such equipment to the County will be deemed to have breached the contract and appropriate action will be taken by the DeKalb County Government Purchasing and Contracting Department.
7. Time of delivery is a part of the solicitation and an element of the contract that is to be awarded. If the Bidder cannot meet the required service delivery dates, a bid should not be submitted. Failure to deliver in accordance with the contract could result in the Contractor being declared in default.
8. Bid Withdrawal
Bids may be withdrawn at any time prior to the bid opening. After bids have been publicly opened, withdrawal of bids shall be based upon Part 3, Section IV, F. within the DeKalb County Purchasing Policy.
9. Expenses of Preparing Responses to this ITB
The County accepts no responsibility for any expenses incurred by Bidders who submit bids in response to this ITB. Such expenses are to be borne exclusively by the Bidders.

10. It is the responsibility of each Bidder to ensure that its submission is received by 3:00 p.m. on the bid due date. The time/date stamp clock located in the Department of Purchasing & Contracting shall serve as the official authority to determine lateness of any bid. The bid opening time shall be strictly observed. Be aware that visitors to our offices will go through a security screening process upon entering the building. Bidders should plan enough time to ensure that they will be able to deliver their submission prior to our deadline. Late submissions, for whatever reason, will not be evaluated. Bidders should plan their deliveries accordingly. Telephone or fax bids will not be accepted.

11. Federal Work Authorization

Pursuant to O.C.G.A. §13-10-91, the County cannot enter into a contract for the physical performance of services unless the Contractor, its Subcontractor(s) and sub-subcontractor(s), as that term is defined by state law, register and participate in the Federal Work Authorization Program to verify specific information on all new employees. The Bidder certifies that he/she has complied and will continue to comply throughout the contract term with O.C.G.A. §13-10-91 and any related and applicable Georgia Department of Labor Rule. Contractor agrees that in the event it employs or contracts with any Subcontractor(s) in connection with this contract, Contractor will secure from each Subcontractor an affidavit that certifies the Subcontractor's current and continuing compliance with O.C.G.A. §13-10-91 throughout the contract term. Each Subcontractor agrees that in the event it employs or contracts with any sub-subcontractor(s), each Subcontractor will secure from each sub-subcontractor an affidavit that certifies the sub-subcontractor's current and continuing compliance with O.C.G.A. §13-10-91 throughout the contract term.

12. LSBE Information

- a. It is the objective of the Chief Executive Officer and Board of Commissioners of DeKalb County to provide maximum practicable opportunity for all businesses to participate in the performance of government contracts. The current DeKalb County List of Certified Vendors may be found on the County website at <http://www.dekalbcountyga.gov/purchasing/pdf/supplierList.pdf>
- b. It is required that all responding Bidders attend the mandatory LSBE meeting within two-weeks of the solicitation's advertisement, and comply, complete and submit all LSBE forms with the Bidder's response in order to remain responsive. Attendance can be in person, via video conference and teleconference. Video conferencing is available through Skype/Lync. Instructions for attendance via video conference can be found on the County's website at <https://www.dekalbcountyga.gov/purchasing-contracting/dekalb-first-lsbe-program>.
- c. For further details regarding the DeKalb First Local Small Business Enterprise Ordinance, contact the LSBE Program representative at pcadmin-ops@dekalbcountyga.gov or (404) 371-7051.

13. First Source Jobs Information

The DeKalb County First Source Jobs Ordinance requires contractors or beneficiaries entering into any type of agreement with the County, including purchase orders, regardless of what they may be called for the procurement or disposal of supplies, services, construction projects, professional or consultant services, which is funded in whole or part with County funds or County administered funds in which the contractor is to receive \$50,000 or more in County

expenditures or committed expenditures and recipient of urban redevelopment action grants or community development block funds administered in the amount of \$50,000 or more make a good faith effort to hire DeKalb County residents for at least 50% of jobs using the First Source Registry (candidate database). The work to be performed under this contract is subject to the provisions of the DeKalb County First Source Jobs Ordinance.

For more information on the First Source Jobs Ordinance requirement, please contact WorkSource DeKalb at www.dekalbworkforce.org or 404-687-3400.

14. Attention to General Terms and Conditions

Bidders are cautioned to thoroughly understand and comply with all matters covered under the General Terms and Conditions section of this ITB. The successful Bidder(s) will enter into a contract approved by the County. The County's ITB document and attachments, subsequent County addenda, and the Bidder's response documents are intended to be incorporated into a contract. All Bidders should thoroughly review this document prior to submitting a bid. Any proposed revisions to the terms or language of this document must be submitted in writing with the bid. Since proposed revisions may result in a bid being rejected if the revisions are unacceptable to the County, bidders should review any proposed revisions with an officer of the firm having authority to execute the contract. No alterations can be made in the contract after award is made.

15. Required Signatures

Bids must be signed by an officer or agent of the firm having the authority to execute contracts.

16. Ethics Rules

Bidders are subject to the Ethics provision within the DeKalb County Purchasing Policy; the Organizational Act, Section 22A, the Code of DeKalb County; and the rules of Executive Order 2014-4. Any violations will be addressed, pursuant to these policies and rules.

To the extent that the Organizational Act, Section 22A, the Code of DeKalb County, and the rules of Executive Order 2014-4 allow a gift, meal, travel expense, ticket, or anything else of value to be purchased for a CEO employee by a contractor doing business with the County, the contractor must provide written disclosure, quarterly, of the exact nature and value of the purchase to the Chief Integrity Officer, if created, or the Finance Director or his/her designee. Every contractor conducting business with the County will receive a copy of these ethical rules at the time of execution of the contract.

17. Business License

Please provide a copy of a valid company business license with your bid or upon award. Georgia companies are to submit a valid county or city business license. Contractors that are not Georgia companies are to provide a certificate of authority to transact business in the State of Georgia and a copy of a valid business license issued by its home jurisdiction. If Bidder holds a professional certification which is licensed by the state of Georgia, then Bidder may submit a copy of its valid professional license with Bidder's bid or upon award unless the Minimum Specifications require submittal with the bid. Any license submitted in response to this ITB shall be maintained by the Contractor for the duration of the contract.

B. BID SUBMITTAL:

1. All bids should be completed in ink or typewritten. Errors should be crossed out and corrections entered in ink or typewritten adjacent to the error. The person signing the bid should initial corrections in ink.
2. Bidders shall complete and submit Attachment A - Required Documents Checklist and all documents responsive to this requirement with the bid submittal.
3. If applicable, provide evidence that the Bidder is a DeKalb County Firm.
4. Bids must be submitted in a sealed envelope(s) or box (s) with the Bidder's name and **ITB 19-101127** on the outside of each envelope or box. All Bidders delivering submittals via delivery services, please place the sealed bid envelope(s) or box(s) inside the delivery service envelope(s) or box(s). Bidders are responsible for informing any delivery service of all delivery requirements. No responsibility shall attach to the County for the premature opening of a submission not properly addressed and/or identified. The Decatur postmaster will not deliver certified or special delivery mail to specific addresses within DeKalb County Government.

C. CONTRACT AWARD:

1. Bids submitted will be evaluated and recommended for award to the lowest, responsive, and responsible Bidder(s).
2. The intent of this bid is to make an all-award; however, the County reserves the right to award by line item. The County may accept any item or group of items on any bid, whichever is in the best interest of DeKalb County.
3. The County reserves the right to reject any and all bids, to waive informalities, and to re-advertise.
4. The judgment of DeKalb County Purchasing and Contracting on matters, as stated above, shall be final. The County reserves the right to decide which Bid will be deemed lowest, responsive and responsible.

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GENERAL TERMS AND CONDITIONS

- A. In the event of a conflict between any provisions contained in any of the documents governing this transaction, the following shall be the order of precedence: Change Orders or modifications; the Contractor's accepted Response; and the County's ITB.
- B. The Contractor's services shall include all things, personnel, and materials necessary to provide the goods or services that are in compliance with the specifications as authorized by the County.
- C. Bidder extends to the County the option to renew the contract for two (2) additional one-year terms, under the same price(s), terms and conditions, and in accordance with Paragraph L, *Term*.
- D. **DELIVERY:**

DELIVERY SITES:

DeKalb County Department of Watershed Management
 Warehouse Facility
 1580 Roadhaven Drive
 Stone Mountain, Georgia 30083
 Contact: John Mann, Inventory Warehouse, Superintendent
 Tel: 770-621-7240
 Email: jamann@dekalbcountyga.gov

DeKalb County Department of Roads & Drainage
 727 Camp Road
 Decatur Georgia 30032
 Contact: Travis Cherry
 Tel: 404-294-2377
 Email: tcherry@dekalbcountyga.gov

Delivery of services or goods will commence within seven days of delivery requirements in days seven (7) calendar days upon request.

1. Bidder state agreement: Yes _____ No _____

Contact Person: _____

Telephone Number: _____ Cellular Phone Number: _____

Address: _____

Alternate delivery time may be considered provided it is so stated. Bidder state alternate terms for delivery or services below.

1. All prices are to be firm, F.O.B. Destination, Freight Prepaid and Allowed. This shall include;

E. DELIVERIES BEYOND THE CONTRACTUAL PERIOD:

This contract covers all requirements that may be ordered, as distinguished from delivered, during the contract term. This is for the purpose of providing continuity of supply by permitting the County to place orders as requirements arise in the normal course of supply operations. Accordingly, any order mailed (or received, if forwarded by other means than through the mail) to the Contractor on or before the expiration date of the contract and providing for delivery within the number of days specified in the contract, shall constitute a valid order.

F. FOREIGN PRODUCTS:

DeKalb County prefers to buy items produced and/or manufactured in the United States of America; however, foreign products may be considered provided it is so stated. Bidder certifies that items offered on this bid is/are manufactured and produced in the United States.

Yes _____ No _____

If "No", state the exact location of plant or facility where items will be produced:

G. COUNTY REQUIREMENT:

The contract will be an "Indefinite Quantity" type with County requirements to be satisfied on an "as ordered" basis. The County makes no promise, real or implied, to order any quantity whatsoever. This invitation and resulting contract will provide for the normal requirements of DeKalb County, and contracts will be used as primary sources for the articles or services listed herein. Articles or services will be ordered from time to time in such quantities as may be needed. As it was impossible to determine the precise quantities of items described in this invitation that will be needed during the contract term, each contractor is obligated to deliver all articles and services that may be ordered during the contract term.

H. WARRANTY AND/OR GUARANTY:

The bidder will state below or will furnish a separate letter attachment, which fully explains the conditions of Warranty and/or Guaranty. If no Warranty and/or Guaranty are applicable, it must be so stated. **NOTE: FAILURE TO RESPOND TO THE REQUIREMENTS OF THIS PARAGRAPH MAY RESULT IN THE BID BEING DEEMED NON-RESPONSIVE.**

SAMPLES & TESTING:

Samples of items, when required, must be submitted within the time specified, and unless otherwise specified by the County, at no expense to the County. If not destroyed by testing, samples will be returned at bidder's request and expense, unless otherwise specified by the Invitation to Bid. Since tests may require several days for completion, the County reserves the right to use a portion of any supplies before the results of the tests are known, without prejudice to any final adjustments, rejecting the unused portion of the delivery and payment will be made on an adjusted basis for the used portion. The costs of inspections and tests of any item which fails to meet the advertised specifications shall be borne by the bidder.

I. LITERATURE:

When the bidder proposes to furnish another product, he is required to furnish, with his bid, literature describing the item(s) being offered. Failure to furnish this literature may result in the bid being deemed non-responsive.

J. SILENCE OF SPECIFICATIONS:

The apparent silence of these specifications and any supplemental specifications as to any details, or the omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of this specification shall be made upon the basis of this statement, with County interpretation to prevail.

K. TERM:

The Contractor shall commence the Work under this Contract within ten (10) days from the acknowledgement of receipt of the Notice to Proceed ("Commencement Date"). The Initial Term of this Agreement shall be for twelve (12) calendar months, beginning on the Commencement Date. This annual contract comes with two (2) options to renew. Prior to the expiration of the Initial Term, the parties have the option to renew this agreement for a First annual Renewal Term of twelve (12) calendar months. Prior to the expiration of the First annual Renewal Term, the parties have the option to renew this Agreement for a Second annual Renewal Term of twelve (12) calendar months. Without further action by either party, this Agreement will terminate at the end of the Initial Term or at the end of each annual Renewal Term. Each option to renew must be exercised prior to the beginning of each annual Renewal Term and, is only effective upon adoption and approval by the DeKalb County Governing Authority and the Contractor in accordance with the terms of this Contract.

L. PRICING:

1. Alterations to the Price Schedule may result in the Bidder being deemed non-responsive and his bid may be rejected.
2. **Price Reductions:** If at any time after the date of award, the Contractor makes a general price reduction in the comparable price of any article or service covered by the contract to customers generally, an equivalent price reduction based on similar quantities and/or considerations shall apply to the contract for the duration of the contract period (or until the price is further reduced). Such price reduction shall be effective at the same time and in the same manner as the reduction in the price to customers generally. An occasional sale at a lower price, or sale of distressed merchandise at a lower price, would not be considered a general price reduction under this paragraph. For purposes of this paragraph, a general price reduction shall mean any reduction in the price of an article or service offered:

- To Contractor's customers.

- In the Contractor's price schedule for the class of customers; i.e., wholesalers, jobbers, retailers, etc., which was used as the basis for bidding on this contract.

The Contractor shall invoice the County at such reduced price indicating on the invoice that the reduction is pursuant to General Terms and Conditions, paragraph I. as stated within the ITB.

3. **Price Escalation Clause:** **During the initial term of the annual contract, all pricing provided on the Price Schedule shall remain firm unless a price reduction is issued to the County.** After the initial term, the awarded bidder shall furnish price lists to the County for increases, and those of the bidder's supplier (e.g. factory) increases, should prices change. The bidder must also provide a list of the suppliers' (e.g. factory's) previous price(s) to the County for purposes of comparison. Price changes will be in effect only after receipt and approval by the Director of the Department of Purchasing and Contracting. Price lists and changes thereto are to be furnished under the contract and without charge to the County. Catalogue(s) or Price List(s) must be submitted to the Department of Purchasing and Contracting, Maloof Administration Building, 1300 Commerce Drive, 2nd Floor, Decatur, Georgia 30030.
4. By submission of this bid, the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization that in connection with this procurement:
 - a. The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
 - b. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other bidder or to any competitor; and
 - c. No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.

M. PAYMENT:

1. The County shall pay the Contractor based upon the accepted bid prices submitted by Bidder. Invoices should be signed by the Bidder or authorized delegate and must contain the authorizing DeKalb County Purchase Order (PO) and/or Contract Purchase Agreement (CPA) Number in order for payment to be processed. PO Number must also be on the delivery ticket.

A Contract Purchase Agreement is being issued in lieu of a formal contract. Any reference to a contract refers to the CPA.

2. Invoices (s) must be submitted as follows:
 - a. The original invoice (s) must be submitted to:
DeKalb County, GA
Accounts Payable
1300 Commerce Dr.
Decatur, GA 30030

- b. A copy of the original invoice(s) must be submitted to the department requesting services.

Department of Watershed Management
 580 Roadhaven Drive
 Stone Mountain, GA 30083
 Contact: John Mann, Inventory Warehouse, Superintendent
 Tel: 770-621-7240
 Email: jamann@dekalbcountyga.gov

Department of Roads Drainage
 727 Camp Road
 Decatur, Georgia 30032
 Contact: Travis Cherry
 Tel: 404-294-*2377
 Email: tcherry@dekalbcountyga.gov

- c. Upon award, Prime Contractor(s) with Local Small Business Enterprise (LSBE) Subcontractor(s) shall enter utilization reports electronically at www.dekalblsbe.info. Proof of payment to the LSBE Subcontractor must be uploaded and submitted. LSBE Subcontractors shall confirm receipt of payment from the Prime, electronically also, at www.dekalblsbe.info.
3. The County's official payment terms are Net 30. Payment dates that fall on a weekend or on a holiday will be issued on the County's next business day.

N. ACCURACY OF WORK:

The Contractor shall be responsible for the accuracy of the Work and any error and/or omission made by the Contractor in any phase of the Work under this Agreement.

O. ADDITIONAL WORK:

The County shall in no way be held liable for any work performed under this section which has not first been approved in writing by the County in the manner required by applicable law and/or the terms of this Contract. The County may at any time order changes within the scope of the Work without invalidating the Contract upon seven (7) days written notice to the Contractor. The Contractor shall proceed with the performance of any changes in the Work so ordered by the County unless such change entitles the Contractor to a change in Contract Price, and/or Contract Term, in which event the Contractor shall give the County written notice thereof within fifteen (15) days after the receipt of the ordered change, and the Contractor shall not execute such changes until it receives an executed Change Order from the County. No extra cost or extension of time shall be allowed unless approved by the County and authorized by execution of a Change Order. The parties' execution of any Change Order constitutes a final settlement of all matters relating to the change in the Work which is the subject of the Change Order. The County shall not be liable for payment for any work performed under this section which has not first been approved in writing by the County in the manner required by applicable law and/or the terms of this Contract.

P. OWNERSHIP OF DOCUMENTS:

All documents, including drawings, estimates, specifications, and data are and remain the property of the County. The Contractor agrees that the County may reuse any and all plans, specifications, drawings, estimates, or any other data or documents described herein in its sole discretion without first obtaining permission of the Contractor and without any payment of any monies to the Contractor therefore. Any reuse of the documents by the County on a different site shall be at its risk and the Contractor shall have no liability where such documents are reused.

Q. RIGHT TO AUDIT:

The County shall have the right to audit all books and records, including electronic records, relating or pertaining to this contract or agreement, including but not limited to all financial and performance related records, property, and equipment purchased in whole or in part with County funds and any documents or materials which support those records, kept under the control of the Contractor, including but not limited to those kept by the Contractor's employees, agents, assigns, successors and subcontractors. The County also has the right to communicate with Contractor's employees related to the audited records.

The Contractor shall maintain such books and records, together with such supporting or underlying documents and materials, for the duration of this contract and for seven (7) years after termination or expiration, including any and all renewals thereof. The books and records, together with supporting documents and materials shall be made available, upon request to the County or its designee, during normal business hours at the Contractor's office or place of business. In the event that no such locations is available, then the books, records and supporting documents shall be made available for audit at a time and location which is convenient for the County.

R. SUCCESSORS AND ASSIGNS:

The Contractor agrees it 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 written consent of the County. If the County consents to any such assignment or transfer, then the Contractor binds itself, its partners, successors and assigns to all covenants of this Contract. Nothing contained in this Contract shall create, nor be interpreted to create privity, or any other relationship whatsoever, between the County and any person, or entity or than Contractor.

S. REVIEWS AND ACCEPTANCE:

Work performed by the Contractor shall be subject to review and acceptance in stages as required by the County. Acceptance shall not relieve the Contractor of its professional obligation to correct, at his own expense, any errors in the Work.

T. TERMINATION OF AGREEMENT:

The Contractor understands and agrees that the date of the beginning of Work, rate of progress, and time for completion of the Work are essential conditions of this Contract. Both parties may,

for its own convenience and at its sole option, without cause and without prejudice to any other right or remedy of the party, elect to terminate the Contract by delivering to the other party, at the address listed in the Notices article of this Contract, a written notice of termination specifying the effective date of termination. Such notice shall be delivered to the other party at least thirty (30) days prior to the effective date of termination. If Contractor's services are terminated by the County, the termination will not affect any rights or remedies of the County then existing or which may thereafter accrue against Contractor or its surety. In case of termination of this Contract before completion of the Work, Contractor will be paid only for the portion of the Work satisfactorily performed through the effective date of termination as determined by the County. Neither party shall be entitled to recover lost profits, special, consequential or punitive damages, attorney's fees or costs from the other party to this Contract for any reason whatsoever. This Contract shall not be deemed to provide any third-party with any remedy, claim, right of action, or other right. The parties' obligations pursuant to this Section shall survive any acceptance of Work, or termination or expiration of this Contract.

U. INDEMNIFICATION AGREEMENT:

The Contractor shall be responsible from the execution date or from the time of the beginning of the Work, whichever shall be the earlier, for all injury or damage of any kind resulting from the Work, to persons or property, including employees and property of the County. The Contractor shall exonerate, indemnify, and save harmless the County, its elected officials, officers, employees, agents and servants, hereinafter collectively referred to in this Section as "the County Indemnitees," from and against all claims or actions based upon or arising out of any damage or injury (including without limitation any injury or death to persons and any damage to property) caused by or sustained in connection with the performance of this Contract or by conditions created thereby or arising out of or any way connected with Work performed under this Contract, as well as all expenses incidental to the defense of any such claims, litigation, and actions. Furthermore, Contractor shall assume and pay for, without cost to the County Indemnitees, the defense of any and all claims, litigation, and actions suffered through any act or omission of the Contractor, or any Subcontractor, or anyone directly or indirectly employed by or under the supervision of any of them. Notwithstanding any language or provision in this Contract, Contractor shall not be required to indemnify any County Indemnitee against claims, actions, or expenses based upon or arising out of the County Indemnitee's sole negligence. As between the County Indemnitees and the Contractor as the other party, the Contractor shall assume responsibility and liability for any damage, loss, or injury, including death, of any kind or nature whatever to person or property, resulting from any kind of claim made by Contractor's employees, agents, vendors, Suppliers or Subcontractors caused by or resulting from the performance of Work under this Contract, or caused by or resulting from any error, omission, or the negligent or intentional act of the Contractor, vendors, Suppliers, or Subcontractors, or any of their officers, agents, servants, or employees. The Contractor shall defend, indemnify, and hold harmless the County Indemnitees from and against any and all claims, loss, damage, charge, or expense to which they or any of them may be put or subjected by reason of any such damage, loss, or injury. The Contractor expressly agrees to provide a full and complete defense against any claims brought or actions filed against the County Indemnitees, where such claim or action involves, in whole or in part, the subject of the indemnity contained in this Contract, whether such claims or actions are rightfully or wrongfully brought or filed. The County has the sole discretion to choose the counsel who will provide the defense. No provision of this Contract and nothing herein shall be construed as creating any individual or personal liability on the part of any elected official, officer, employee, agent or servant of the County, nor shall the

Contract be construed as giving any rights or benefits hereunder to anyone other than the parties to this Contract. The parties' obligations pursuant to this Section shall survive any acceptance of Work, or termination or expiration of this Contract.

V. INSURANCE:

Insurance must meet the County's requirements and will be furnished by the successful Bidder(s) upon award.

1. Successful Bidder(s) will advise their insurance agent of the County's requirements as listed below and that they may not proceed with any work until insurance is provided that is in compliance with these requirements.
2. Contractor's insurance company or agent must mail, email, or bring an original certificate of insurance and applicable declarations or endorsements to the DeKalb County address listed within this Insurance provision. Insurance must be from companies able to do business in Georgia and acceptable to the County as follows:
 - a. Certificates must cover:
 - i. Statutory Workers Compensation
 - (1) Employer's liability insurance by accident, each accident \$1,000,000
 - (2) Employer's liability insurance by disease, policy limit \$1,000,000
 - (3) Employer's liability insurance by disease, each employee \$1,000,000
 - ii. Business Auto Liability Insurance with a minimum \$500,000 Combined Single Limit/Each Occurrence (Including operation of non-owned, owned, and hired automobiles).
 - iii. Commercial General Liability Insurance
 - (1) Each Occurrence - \$1,000,000
 - (2) Fire Damage - \$250,000
 - (3) Medical Expense - \$10,000
 - (4) Personal & Advertising Injury - \$1,000,000
 - (5) General Aggregate - \$2,000,000
 - (6) Products & Completed Operations - \$1,500,000
 - (7) Contractual Liability where applicable
 - b. DeKalb County, GA shall be named as Additional Insured under any General Liability, Business Auto and Umbrella Policies. Coverage shall apply as Primary and non-contributory with Waiver of Subrogation in favor of DeKalb County, Georgia. Such additional insured coverage shall be endorsed to Contractor's policy by attachment of ISO Additional Insured Endorsement forms CG 20 10 10 01 (ongoing operations) and CG 20 37 10 01 (products- completed operations), or form(s) providing equivalent coverage.

- c. This insurance for the County as 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 County as the additional insured.
- d. Contractor agrees to waive all rights of subrogation and other rights of recovery against the County and its elected officials, officers, employees or agents, and shall cause each Subcontractor to waive all rights of subrogation for all coverages.
- e. Certificates shall state that the policy or policies shall not expire, be cancelled or altered without at least sixty (60) days prior written notice to the County.
- f. Contractor understands and agrees that the purchase of insurance in no way limits the liability of the Contractor.
- g. The insurance carrier must have a minimum A.M. Best rating of not less than "A" (Excellent) with a Financial Size Category of VII or better.
- h. Certificates to contain policy number, policy limits and policy expiration date of all policies issued in accordance with this contract.
- i. Certificates to contain the location and operations to which the insurance applies.
- j. Certificates to contain successful contractor's protective coverage for any subcontractor's operations. If this coverage is included in General Liability, please indicate on the Certificate of Insurance.
- k. Certificates to contain successful contractor's contractual insurance coverage. If this coverage is included in the General Liability, please indicate this on the Certificate of Insurance.
- l. Certificates shall be issued and delivered to the County and must identify the "Certificate Holder" as follows:

DeKalb County, Georgia
Director of Purchasing and Contracting
Maloof Administration Building
1300 Commerce Drive, 2nd Floor
Decatur, Georgia 30030
- m. The successful contractor shall be wholly responsible for securing certificates of insurance coverage as set forth above from all subcontractors who are engaged in this work.

W. GEORGIA LAWS GOVERN:

The laws of the State of Georgia shall govern the construction of this Contract without regard for conflicts of laws. Should any provision of this Contract require judicial interpretation, it is

agreed that the court interpreting or construing the same shall not apply a presumption that the terms hereof shall be more strictly construed against one party, by reason of the rule of construction, that a document is to be construed more strictly against the party who itself or through its agent prepared same; it being agreed that the agents of all parties have participated in the preparation hereof, and all parties have had an adequate opportunity to consult with legal counsel. In interpreting this Contract in its entirety, the printed provisions of this Contract, and any additions written or typed hereon, shall be given equal weight, and there shall be no inference by operation of law or otherwise; that any provision of this Contract shall be construed against either party hereto.

X. VENUE:

This Agreement shall be deemed to have been made and performed in DeKalb County, Georgia. For the purposes of venue, all suits or causes of action arising out of this Agreement shall be brought in the courts of DeKalb County, Georgia.

Y. COUNTY REPRESENTATIVE:

The County may designate a representative through whom the Contractor will contact the County. In the event of such designation, said representative shall be consulted and his written recommendation obtained before any request for extra work is presented to the County. Payments to the Contractor shall be made only upon itemized bill submitted to and approved by said representative.

Z. CONTRACTOR'S STATUS:

The Contractor will supervise and direct the Work, including the Work of all Subcontractors. Only persons skilled in the type of work which they are to perform shall be employed. The Contractor shall, at all times, maintain discipline and good order among his employees, and shall not employ any unfit person or persons or anyone unskilled in the work assigned him. The relationship between the County and the Contractor shall be that of owner and independent contractor. Other than the consideration set forth herein, the Contractor, its officers, agents, servants, employees, and any Subcontractors shall not be entitled to any County employee benefits including, but not limited to social security, insurance, paid annual leave, sick leave, worker's compensation, free parking or retirement benefits. All services provided by Contractor shall be by employees of Contractor or its Subcontractors and subject to supervision by Contractor. No officer or employee of Contractor or any Subcontractor shall be deemed an officer or employee of the County. Personnel policies, tax responsibilities, social security payments, health insurance, employee benefits and other administrative policies, procedures or requirements applicable to the Work or services rendered under this Contract shall be those of the Contractor, not the County.

AA. SOLE AGREEMENT:

This Contract constitutes the sole contract between the County and the Contractor. The terms, conditions, and requirements of this Contract may not be modified. No verbal agreement or conversation with any officer, agent, or employee of the County, either before or after the award of the Contract, shall affect or modify any of the terms or obligations herein contained. No representations, oral or written, shall be binding on the parties unless expressly incorporated herein.

BB. SEVERABILITY:

If any provision of this Contract or the application thereof to any person or circumstance shall to any extent be held invalid, then the remainder of this Contract or the application of such provision to persons or circumstances, other than those as to which it is held invalid, shall not be affected thereby, and each provision of this Contract shall be valid and enforced to the fullest extent permitted by law.

CC. NOTICES:

Any notice or consent required to be given by or on behalf of any party hereto to any other party hereto shall be in writing and shall be sent to the Director of the Department of Purchasing and Contracting or to the Contractor or his authorized representative on the work site by (a) registered or certified United States mail, return receipt requested, postage prepaid, (b) personal delivery, or (c) overnight courier service. All notices sent to the addresses listed below shall be binding unless said address is changed in writing no less than fourteen days before such notice is sent. Future changes in address shall be effective upon written notice being given by the Contractor to the Director of the Department of Purchasing and Contracting or by the County to the Contractor's authorized representative via certified first class U.S. mail, return receipt requested. Such notices will be addressed as follows:

If to the County:

Chief Procurement Officer
Department of Purchasing and
Contracting Maloof Administration
Building
1300 Commerce Drive, 2nd Floor
Decatur, Georgia 30030

If to the Contractor: Notices shall be sent to the contact information that is listed in the Bidder's Response to the ITB.

DD. GEORGIA OPEN RECORDS ACT:

Without regard to any designation made by the person or entity making a submission, DeKalb County considers all information submitted in response to this invitation or request to be a public record that will be disclosed upon request pursuant to the Georgia Open Records Act, O.C.G.A. §50-18-70 et seq., without consulting or contacting the Responder person or entity making the submission, unless a court order is presented with the submission. Bidders or Responders may wish to consult an attorney or obtain legal advice prior to making a submission.

EE. COOPERATIVE PROCUREMENT

The County through the Department of Purchasing & Contracting may permit piggybacks to this contract from other city, county, local authority, agency, or board of education if the vendor will extend the same prices, terms, and conditions to the city. Piggybacking shall only be available where competition was used to secure the contract and only for a period of 12-months following entry, renewal or extension of the contract. This provision shall not apply to any contract where otherwise prohibited or mandated by state law.

MINIMUM SPECIFICATIONS

A. GENERAL REQUIREMENTS:

1. Masonry standards incorporates terms and definitions of terms associated with the standards specific to clay masonry units, to Specifications C32, C62, C126, C216 and to Test Methods C67.

B. SPECIFIC REQUIREMENTS:

Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale)
ASTM C32 - 13

An ASTM designation number identifies a unique version of an ASTM standard.

C32 - 13

C = ceramic, concrete, and masonry materials;

32 = assigned sequential number

13 = year of original adoption (or, in the case of revision, the year of last revision)

This specification covers brick intended for use in drainage structures for the conveyance of sewage, industrial wastes, and storm water, and related structures such as manholes and catch basins. The bricks are classified as sewer bricks (Grades SS and SM) and manhole bricks (Grades MS and MM). Sewer brick shall have plain or smooth surfaces on both ends and on the face side. Manhole brick shall have plain, slightly, or moderately textured surfaces. The brick shall be sampled and tested in accordance with applicable requirements specified.

This abstract is a brief summary of the referenced standard. It is informational only and not an official part of the standard; the full text of the standard itself must be referred to for its use and application. ASTM does not give any warranty express or implied or make any representation that the contents of this abstract are accurate, complete or up to date.

1. **Scope**

1.1 This specification covers brick intended for use in (1) drainage structures for the conveyance of sewage, industrial wastes, and storm water, and (2) related structures such as manholes and catch basins.

1.2 The property requirements of this standard apply at the time of purchase. The use of results from testing of brick extracted from masonry structures for determining conformance or non-conformance to the property requirements (Section 5) of this standard is beyond the scope of this standard.

1.3 Brick covered by this standard are manufactured from clay, shale, or similar naturally occurring substances and subjected to a heat treatment at elevated temperatures (firing). The heat treatment must develop sufficient fired bond between the particulate constituents to provide the strength and durability requirements of this specification. (See *firing* and *fired bond* in Terminology C1232.)

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

Standard Specification for Building Brick (Solid Masonry Units Made from Clay or Shale) ASTM C62 - 13a

An ASTM designation number identifies a unique version of an ASTM standard.

C62 - 13a

C = ceramic, concrete, and masonry materials;

62 = assigned sequential number

13 = year of original adoption (or, in the case of revision, the year of last revision)

a = indicates subsequent revision in same year

1. Abstract

This specification covers building bricks intended for use in structural and nonstructural masonry where external appearance is not a requirement. The bricks are prismatic units available in a variety of sizes, shapes, textures, and colors and are manufactured from clay, shale, or similar naturally occurring earthy substances by firing. The heat treatment should develop sufficient fired bond between material particulates to produce a material that conforms to the required strength and durability. During manufacture, the bricks are shaped by molding, pressing, or extrusion. Bricks are classified into grades according to their resistance to damage by freezing when wet. All the materials should comply with the requirements on appearance, durability, absorption alternate, freezing and thawing alternative, breakage, cracking, weathering index alternative, strength, and initial absorption rate.

This abstract is a brief summary of the referenced standard. It is informational only and not an official part of the standard; the full text of the standard itself must be referred to for its use and application. ASTM does not give any warranty express or implied or make any representation that the contents of this abstract are accurate, complete or up to date.

1.1 This specification covers brick intended for both structural and nonstructural masonry where external appearance is not a requirement. The brick are prismatic units available in a variety of sizes, shapes, textures, and colors. The specification does not cover brick intended for use as facing units or where surface appearance is a requirement. If brick is required to have a particular color, texture, finish, uniformity, or limits on cracks, warpage, or other imperfections detracting from the appearance they are purchased under Specification C216. This specification does not cover brick intended for use as paving brick (see Specification C902).

1.2 The property requirements of this standard apply at the time of purchase. The use of results from testing of brick extracted from masonry structures for determining conformance or nonconformance to the property requirements (Section 4) of this standard is beyond the scope of this standard.

1.3 Brick are manufactured from clay, shale, or similar naturally occurring earthy substances and subjected to a heat treatment at elevated temperatures (firing). The heat treatment must develop sufficient fired bond between the particulate constituents to provide the strength and durability requirements of this specification (see Terminology C1232).

1.4 Brick are shaped during manufacture by molding, pressing, or extrusion, and the shaping method is a way to describe the brick.

1.5 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.6 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale) ASTM C216 - 15

Abstract

This specification covers brick intended for use in masonry and supplying structural or facing components, or both, to the structure. Bricks shall be classified according to their resistance to damage by freezing when saturated at a moisture content: Grade SW and Grade MW. The facing bricks shall be classified into three types: Types FBS; FBX; and FBA. Durability; absorption alternate; freezing and thawing alternative; breakage and weight loss; cracking; low weathering index alternative; compressive strength; and initial rate of absorption requirements shall be tested for the material to meet the specified requirements.

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1. Scope

1.1 This specification covers brick intended for use in masonry and supplying structural or facing components, or both, to the structure.

1.2 The property requirements of this specification apply at the time of purchase. The use of results from testing of brick extracted from masonry structures for determining conformance or nonconformance to the property requirements (Section 7) of this specification is beyond the scope of this specification.

1.3 The brick are prismatic units available in a variety of sizes, textures, colors, and shapes. This specification is not intended to provide specifications for paving brick (see Specification C902).

1.4 Brick are ceramic products manufactured primarily from clay, shale, or similar naturally occurring earthy substances and subjected to a heat treatment at elevated temperatures (firing). Additives or recycled materials are permitted to be included at the option of the manufacturer. The heat treatment must develop a fired bond between the particulate constituents to provide the strength and durability requirements of this specification (see Terminology C1232).

1.5 Brick are shaped during manufacture by molding, pressing, or extrusion, and the shaping method is a way to describe the brick.

1.5.1 This standard and its individual requirements shall not be used to qualify or corroborate the performance of a masonry unit made from other materials, or made with other forming methods, or other means of binding the materials.

1.6 Three types of brick in each of two grades are covered.

1.7 The text of this specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.8 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

Abstract

This specification covers hollow building brick and hollow facing brick made from clay, shale, fire clay, or mixtures thereof, and fired to incipient fusion. Hollow brick shall be understood to mean hollow clay masonry units whose net cross-sectional area (solid area) in any plane parallel to the surface, containing the cores, cells, or deep frogs, is less than 75 % of its gross cross-sectional area measured in the same plane. The bricks are manufactured from clay, shale, or similar naturally occurring substances and subjected to a heat treatment at elevated temperatures (firing). The heat treatment shall develop sufficient fired bond between the particulate constituents to provide the strength and durability requirements specified. Bricks that are colored by flashing or textured by sanding, where sand does not form a continuous coating, shall not be considered as surface-colored brick. Hollow bricks require greater shell and web thicknesses and higher minimum compressive strength than structural clay tile but permit greater void area and lesser distance from exposed edge to core hole than solid brick. Therefore, environmental and structural performance may be different in elements constructed of hollow brick from those constructed of structural clay tile or solid brick. The hollow bricks can be classified into Grades SW and MW according to their degree of resistance to frost action and disintegration by weathering. According to their physical properties, the bricks can be classified into Types HBS, HBX, HBA, and HBB. In terms of size of void areas or hollow spaces, the bricks can be designated into Classes H40V and H60V. The brick shall be free of defects, deficiencies, and surface treatments, including coatings, that would interfere with the proper laying of the brick or significantly impair the strength or performance of the construction. Physical properties like compressive strength, water absorption, saturation coefficient, breakage, and cracks shall be determined.

This abstract is a brief summary of the referenced standard. It is informational only and not an official part of the standard; the full text of the standard itself must be referred to for its use and application. ASTM does not give any warranty express or implied or make any representation that the contents of this abstract are accurate, complete or up to date.

1. Scope

1.1 This specification covers hollow building brick and hollow facing brick made from clay, shale, fire clay, or mixtures thereof, and fired to incipient fusion. Four types of hollow brick in each of two grades and two classes are covered. In this specification, the term hollow brick shall be understood to mean hollow clay masonry units whose net cross-sectional area (solid area) in any plane parallel to the surface, containing the cores, cells, or deep frogs, is less than 75 % of its gross cross-sectional

area measured in the same plane (see 4.3). This specification does not cover brick intended for use as paving brick (see Specification C902).

1.2 The property requirements of this specification apply at the time of purchase. The use of results from testing of brick extracted from masonry structures for determining conformance or nonconformance to the property requirements (Section 6) of this standard is beyond the scope of this specification.

1.3 Brick covered by this specification are ceramic products manufactured primarily from clay, shale, or similar naturally occurring substances and subjected to a heat treatment at elevated temperatures (firing). The heat treatment shall develop sufficient fired bond between the particulate constituents to provide the strength and durability requirements of this specification. Additives or recycled materials are permitted to be included at the option of the manufacturer. (See “firing” and “firing bond” in Terminology C1232.)

1.3.1 This specification and its individual requirements shall not be used to qualify or corroborate the performance of a masonry unit made from other materials, or made with other forming methods, or other means of binding the materials.

1.4 Hollow brick differ from unglazed structural clay tile (Specifications C34 and C212) and solid brick (Specifications C62 and C216). Hollow brick requires greater shell and web thicknesses and higher minimum compressive strength than structural clay tile but permit greater void area and lesser distance from exposed edge to core hole than solid brick. Therefore, environmental and structural performance may be different in elements constructed of hollow brick from those constructed of structural clay tile or solid brick.

1.5 The text of this specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

1.6 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

- A.** In the event of a conflict between any provisions contained in any of the documents governing this transaction, the following shall be the order of precedence: Change Orders or modifications; the Contractor’s accepted Response; and the County’s ITB.
- B.** The Contractor’s services shall include all things, personnel, and materials necessary to provide the goods or services that are in compliance with the specifications as authorized by the County.

*****NEW – PRICE SCHEDULE MUST BE SUBMITTED IN A SEPARATE SEALED ENVELOPE OR BIDDER WILL BE DEEMED NON-RESPONSIVE AND WILL NOT BE CONSIDERED FOR AWARD. INCLUDING THE PRICE SCHEDULE IN ANY AREA OUTSIDE OF THE SEPARATE SEALED ENVELOPE WILL RESULT IN THE BID *****

BID SCHEDULE					
ITEM NO.	ITEM DESCRIPTION	ESTIMATED NUMBER OF UNITS	UNIT OF MEASURE	UNIT PRICE	AMOUNT
1.	Brick, common, solid, in accordance with ASTM Specifications C-62-62, Grade SW, size 2-1/4 inches x 3-5/8 inches, x 8 inches or acceptable equal. MANUFACTURER & ITEM NO. _____	25	M	\$	\$
2.	Brick, common, cored, in accordance with ASTM Specifications C-62-62, Grade SW, 3-hole maximum, size 2-1/4 inches x 3-5/8 inches x 8 inches or acceptable equal. MANUFACTURER & ITEM NO. _____	25	M	\$	\$
3.	Brick, utility, in accordance with ASTM Specifications C-216, Grade SW, size 3-1/2 inches x 3-1/2 inches x 11-1/2 inches or acceptable equal. MANUFACTURER & ITEM NO. _____	90	M	\$	\$
M = One (1) lot of 1,000 bricks. Bidder shall provide pricing in the indicated unit of measure.					
GRAND TOTAL				\$	

NOTE TO SUPPLIER

NOTE 1: Price to include delivery charge to DeKalb County

NOTE 2: ANNUAL= 12 MONTHS; 365 DAYS

NOTE 3: OPTION= Choice to renew entire contract

NOTE 4: ASTM-American Society for Testing and materials
SW-Sever Weathering

NOTE 5: Contractor shall inspect County facilities equipment/storage capability prior to first delivery. Contractor state if his/her personnel have inspected equipment at the facility and approved mechanical delivery capability of equipment for storage of material; contractor state whether such inspection has been done.

YES _____ NO _____

- END OF PRICE SCHEDULE -

BID ACKNOWLEDGEMENT FORM

I, the undersigned, acknowledge that I have read the Bid Document in its entirety and agree to conform to its every requirement. I further acknowledge that failure to prepare, submit, or execute this bid in the exact manner requested will be just cause to reject my entire bid.

Name of Business Entity Submitting Bid Print Name and Title of Authorized Signer

Business Entity Street Address Authorized Signature

Business Entity City, State and Zip Code Contact Person's Phone Number

Business Entity County Contact Person's E-mail Address

- Bidder acknowledges addendum(s): No. 1__, No. 2__, No. 3__ (If Applicable)

_____(Initial)

- Bidder acknowledges that this bid is valid for 90 days from and including
_____(Initial)
the bid opening date.

- Bidder acknowledges that bid meets or exceeds minimum specifications.
_____(Initial)

Any deviation from minimum specifications must be explained, in detail,
by bidder as to how the bid does not meet the exact specifications.

- Bidder acknowledgement of Revisions to the above Terms and Conditions:

- No revisions
_____(Initial)

- There are revisions and they are included with the bid submittal
_____(Initial)

The above acknowledgment must be properly signed and firmly attached to your bid. The acknowledgment becomes a part of your bid and without it your bid is not be complete and will be subject to rejection.

THIS PAGE MUST BE RETURNED WITH YOUR BID. FAILURE TO SUBMIT THIS COMPLETED FORM WILL RESULT IN YOUR BID BEING DEEMED NON-RESPONSIVE.

ATTACHMENT A**REQUIRED DOCUMENTS CHECKLIST**

Bidder shall complete and submit the following documents with their bid:

Bid Page No.	Title	Check This Box If Included With Bid
28	Bid Acknowledgement Form	
29	Required Documents Checklist	
30	Contractor Reference and Release Form	
31	Subcontractor Reference and Release Form, if applicable	
33	Contractor Affidavit	
34	Subcontractor Affidavit, if applicable	
35-44	LSBE - Exhibits A and/or B of Attachment G*	
45	New Employee Tracking Form	
46	First Source Jobs Acknowledgement Form	
48	Preferred Employee Tracking Form	

***If these mandatory forms are not completed and submitted with the bid, the bidder will be deemed non-responsive.**

I, the undersigned, acknowledge that I have included the requested documents as listed above.

Printed Name

Signature

ATTACHMENT B**CONTRACTOR REFERENCE AND RELEASE FORM**

List below at least three (3) references, including company name, contact name, address, email address, telephone numbers and contract period who can verify your experience and ability to perform the type(s) of product(s)/ service(s) listed in the solicitation.

Company Name	Contract Period		
Contact Person Name and Title	Telephone Number (include area code)		
Complete Primary Address	City	State	Zip Code
Email Address	Fax Number (include area code)		
Project Name and Description			

Company Name	Contract Period		
Contact Person Name and Title	Telephone Number (include area code)		
Complete Primary Address	City	State	Zip Code
Email Address	Fax Number (include area code)		
Project Name and Description			

Company Name	Contract Period		
Contact Person Name and Title	Telephone Number (include area code)		
Complete Primary Address	City	State	Zip Code
Email Address	Fax Number (include area code)		
Project Name and Description			

REFERENCE CHECK RELEASE STATEMENT

You are authorized to contact the references provided above for purposes of this ITB.

Signed _____ Title _____
(Authorized Signature of Bidder)

Company Name _____ Date _____

ATTACHMENT C**SUBCONTRACTOR REFERENCE AND RELEASE FORM**

List below at least three (3) references, including company name, contact name, address, email address, telephone numbers and contract period who can verify your experience and ability to perform the type(s) of product(s)/ service(s) listed in the solicitation.

Company Name	Contract Period		
Contact Person Name and Title	Telephone Number (include area code)		
Complete Primary Address	City	State	Zip Code
Email Address	Fax Number (include area code)		
Project Name and Description			

Company Name	Contract Period		
Contact Person Name and Title	Telephone Number (include area code)		
Complete Primary Address	City	State	Zip Code
Email Address	Fax Number (include area code)		
Project Name and Description			

Company Name	Contract Period		
Contact Person Name and Title	Telephone Number (include area code)		
Complete Primary Address	City	State	Zip Code
Email Address	Fax Number (include area code)		
Project Name and Description			

REFERENCE CHECK RELEASE STATEMENT

You are authorized to contact the references provided above for purposes of this ITB.

Signed _____ Title _____
(Authorized Signature of Bidder)

Company Name _____ Date _____

ATTACHMENT D**CONTRACTOR & SUBCONTRACTOR EVIDENCE OF COMPLIANCE:**

- (1) County contracts for the physical performance of services within the state of Georgia shall include the following provisions:¹
 - a. the contractor has registered with and is authorized to use the federal work authorization program to verify information on all newly hired employees or subcontractors;
 - b. by affidavit, the contractor must attest to the contractor's name, address, user identification number, date of authorization, and verification of the continual participation throughout the contract period, and
 - c. the affidavit shall become a part of the covered contract and must be attached.
- (2) No contractor or subcontractor who enters into a contract with the County shall enter into such a contract or subcontract in connection with the physical performance of services within Georgia unless the contractor or subcontractor registers and participates in the federal work authorization program to verify information of all newly hired employees. Any employee, contractor, or subcontractor of such contractor or subcontractor shall also be required to satisfy the requirements of O.C.G.A. § 13-10-91, as amended.
- (3) Upon contracting with a new subcontractor, a contractor or subcontractor shall, as a condition of any contract or subcontract entered into pursuant to O.C.G.A. § 13-10-91, as amended, agree to provide the County with notice of the identity of any and all subsequent subcontractors hired or contracted by the contractor or subcontractor. Such notice shall be provided within five (5) business days of entering into a contract or agreement for hire with any subcontractor. Such notice shall include an affidavit from each subsequent contractor attesting to the subcontractor's name, address, user identification number, and date of authorization to use the federal work authorization program.
- (4) An affidavit shall be considered an open public record; provided, however, that any information protected from public disclosure by federal law or by Article 4 of Chapter 28 of Title 50 shall be redacted. Affidavits shall be maintained by the County for five years from the date of receipt.
- (5) To verify compliance, the contractor agrees to participate in random audits conducted by the Commissioner of the Georgia Department of Labor. The results of the audits shall be published on the www.open.georgia.gov website, and on the Department of Labor's website no later than December 31 of each year.
- (6) Any person who knowingly and willfully makes a false, fictitious, or fraudulent statement in an affidavit submitted pursuant to O.C.G.A. § 13-10-91 shall be guilty of a violation of Code § 16-10-20 and, upon conviction, shall be punished as provided in such section. Contractors and subcontractors convicted for false statements based on a violation of such section shall be prohibited from bidding on or entering into any public contract for twelve (12) months following such conviction.

¹ O.C.G.A. § 13-10-91, as amended

ATTACHMENT E**CONTRACTOR AFFIDAVIT**

By executing this affidavit, the undersigned verifies its compliance with O.C.G.A. § 13-10-91, as amended, stating affirmatively that the individual, firm or corporation which is contracting with DEKALB COUNTY, GA, a political subdivision of the State of Georgia, 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, as amended]. The affiant agrees to continue to use the federal work authorization program throughout the contract period.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the COUNTY, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. § 13-10-91, as amended, on the Subcontractor Affidavit form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the COUNTY, within five (5) days from when the subcontractor(s) is retained to perform such service.

BY: _____
Authorized Officer or Agent
(Bidder's Name)

Federal Work Authorization
Enrollment Date

Title of Authorized Officer or Agent of Bidder

Identification Number

Printed Name of Authorized Officer or Agent

Address (* do not include a post office box)

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _____, 20__

Notary Public

My Commission Expires: _____

ATTACHMENT- F**SUBCONTRACTOR AFFIDAVIT**

By executing this affidavit, the undersigned verifies its compliance with O.C.G.A. § 13-10-91, as amended, stating affirmatively that the individual, firm, or corporation which is engaged in the physical performance of services under a contract with _____ name of contractor) on behalf of DEKALB COUNTY, GA, a political subdivision of the State of Georgia, 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, as amended]. The affiant agrees to continue to use the federal work authorization program throughout the contract period.]

BY: _____
Authorized Officer or Agent
(Bidder's Name)

Federal Work Authorization
Enrollment Date

Title of Authorized Officer or Agent of Bidder

Identification Number

Printed Name of Authorized Officer or Agent

Address (* do not include a post office box)

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _____, 20__

Notary Public

My Commission Expires: _____

ATTACHMENT G**DEKALB FIRST LSBE INFORMATION
WITH EXHIBITS A – B****SCHEDULE OF LOCAL SMALL BUSINESS ENTERPRISE PARTICIPATION
OPPORTUNITY TRACKING FORM**

The Chief Executive Officer and the Board of Commissioners of DeKalb County believe that it is important to encourage the participation of small and local businesses in the continuing business of County government; and that the participation of these types of businesses in procurement will strengthen the overall economic fabric of DeKalb County, contribute to the County's economy and tax base, and provide employment to local residents. Therefore, the Chief Executive Officer and the Board of Commissioners have made the success of local small businesses a permanent goal of DeKalb County by implementing the DeKalb First Local Small Business Enterprise Ordinance.

PROVISIONS OF DEKALB FIRST LOCAL SMALL BUSINESS ENTERPRISE (LSBE) ORDINANCE

Percentage of LSBE Participation Required
20% of Total Award

Certification Designation	Request For Proposals (RFP)
LSBE Within DeKalb (LSBE-DeKalb)	Ten (10) Preference Points
LSBE Outside DeKalb (LSBE-MSA)	Five (5) Preference Points
Demonstrated GFE	Two (2) Preference Points

Certified Local Small Business Enterprises (LSBEs) located within DeKalb County and prime contractors utilizing LSBEs that are locally-based inside DeKalb County shall receive ten (10) points in the initial evaluation of their response to any Request for Proposal. Certified LSBEs located outside of DeKalb County but within the nine (9) County Metropolitan Statistical Area (MSA) consisting of Cherokee, Clayton, Cobb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale Counties shall receive five (5) points in the initial evaluation of their response to any Request for Proposal. Prime Contractors who demonstrate sufficient good faith efforts in accordance with the requirements of the ordinance shall be granted two (2) points in their initial evaluation of responses to any Request for Proposal. Pro-rated points shall be granted where a mixture of LSBE-DeKalb and LSBE MSA firms are utilized. Utilization of each firm shall be based upon the terms of the qualified sealed solicitation.

Prime Contractor(s) deemed responsible and remains responsive to an Invitation to Bid (ITB) because they are either a certified LSBE-DeKalb or LSBE-MSA firm or has obtained 20% participation of an LSBE-DeKalb or LSBE-MSA firm, submits the lowest bid price shall be deemed the lowest, responsive and responsible bidder.

Prime Contractor(s) deemed responsible and remains responsive to an Invitation to Bid (ITB) and documented good faith efforts, submits a lower bid price than a Prime Contractor that achieved 20% LSBE participation, or otherwise required benchmark, then the Prime Contractor who actually met the benchmark will be given the opportunity to match the lowest bid price of the Prime Contractor who only made good faith efforts. Prime Contractor(s) who choose **not** to match the lowest bid price, then the Prime Contractor who made the good faith efforts will be deemed the lowest, responsive and responsible bidder.

For all qualified sealed solicitations, the Director of Purchasing and Contracting, DeKalb County Government, shall determine if the bidder/proposer has included written documentation showing that at least twenty percent (20%) of the total contract award will be performed by a certified LSBE. This written documentation shall be in the form of a notarized Schedule of LSBE Participation (Attached hereto as “Exhibit A”.) For all contracts, a signed letter of intent from all certified LSBEs describing the work, material, equipment and/or services to be performed or provided by the LSBE(s) and the agreed upon percentage shall be due with the bid or proposal documents and included with “Exhibit A”. The certified vendor list establishes the group of Certified LSBE’s from which the bidder/proposer must solicit subcontractors for LSBE participation. This list can be found on our website <http://www.dekalbcountyga.gov/purchasing-contracting/about-purchasing-and-contracting> or obtained from the Special Projects LSBE Program team.

Prime Contractors failing to meet the LSBE benchmark must document and demonstrate Good Faith Efforts in accordance with the attached “Checklist for Good Faith Efforts” portion of “Exhibit A.” The notarized Schedule of LSBE Participation shall be due and submitted with each bid or proposal. Failure to achieve the LSBE benchmark or demonstrate good faith efforts shall result in a bid or proposal being rejected. Prime Contractors that fail to attend the mandatory LSBE meeting in person or via video conference shall mean that the Prime Contractor has not demonstrated sufficient good faith efforts and its bid or proposal if submitted, shall be deemed non-responsive without any further review.

Upon award, Prime Contractors are required to submit a report detailing LSBE Sub-Contractor usage with each request for payment and not less than on a monthly basis. Prime Contractors shall ensure that all LSBE sub-contractors have been paid within seven (7) days of the Prime’s receipt of payment from the County. Failure to provide requested reports/documentation shall constitute a material breach of contract, entitling the County to terminate the Contract for default or pursue other remedies. LSBE sub-contractors must confirm payments received from the Prime(s) for each County contract they participate in.

For eligible bids/proposals valued over \$5,000,000.00, the Mentor-Protégé provision of the Ordinance shall apply. Prime Contractors must agree to become mentors and take on an LSBE protégé in an effort to enhance the potential of future LSBEs. Qualifying projects shall be performed by both Mentor and Protégé through a subcontract between both parties. This requirement is in addition to all other applicable sections of the DeKalb First Ordinance. Please review the ordinance, section 2-214 or contact the LSBE Program Representative for detailed information regarding this initiative.

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EXHIBIT A**SCHEDULE OF DEKALB FIRST LOCAL SMALL BUSINESS ENTERPRISE PARTICIPATION
OPPORTUNITY TRACKING FORM**

As specified, Bidders and Proposers are to present the details of LSBE participation below:

PRIME BIDDER/PROPOSER _____

SOLICITATION NUMBER: **ITB No. 19-101127**

TITLE OF UNIT OF WORK – **COMMON BRICK (Annual Contract with 2 Options to Renew)**

1. My firm, as the prime bidder/proposer on this unit of work, is a certified (check all that apply):
 _____LSBE-DeKalb _____LSBE-MSA
2. If you are a Certified LSBE-DeKalb or MSA, please indicate below the percentage of that your firm will carry out directly: _____.
3. If the prime bidder/proposer is a joint venture, please describe below the nature of the joint venture and level of work and percentage of participation to be provided by the LSBE-DeKalb or MSA joint venture firm.

4. List the LSBE-DeKalb or MSA subcontractors and/or firms (including suppliers) to be utilized in of this contract, if awarded. No changes can be made in the subcontractors listed below without the prior written approval of the County. Please attach a signed letter of intent from all certified LSBEs describing the work, materials, equipment or services to be performed and/or provided and the agreed upon percentage of work to be performed. A Letter of Intent form is attached hereto as “Exhibit B”.

Name of Company	
Address	
Telephone	
Fax	
Contact Person	
Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA	
Description of services to be performed	
Percentage of work to be performed	

Name of Company	
Address	
Telephone	

Fax	
Contact Person	
Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA	
Description of services to be performed	
Percentage of work to be performed	

Name of Company	
Address	
Telephone	
Fax	
Contact Person	
Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA	
Description of services to be performed	
Percentage of work to be performed	

Name of Company	
Address	
Telephone	
Fax	
Contact Person	
Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA	
Description of services to be performed	
Percentage of work to be performed	

Name of Company	
Address	
Telephone	
Fax	
Contact Person	
Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA	
Description of services to be performed	
Percentage of work to be performed	

Please attach additional pages, if necessary.

EXHIBIT A, CONT'D**DEKALB COUNTY**
CHECKLIST FOR GOOD FAITH EFFORTS

A bidder/proposer that does not meet the County's LSBE participation benchmark is required to submit documentation to support all "Yes" responses as proof of "good faith efforts." Please indicate whether or not any of these actions were taken:

	Yes	No	Description of Actions
1.			Prime Contractors shall attend a MANDATORY LSBE Meeting in person or via video conference within two-weeks of advertisement of the solicitation.
2.			Provide a contact log showing the company's name, contact person, address, email and contact number (phone or fax) used to contact the proposed certified subcontractors, nature of work requested for quote, date of contact, the name and title of the person making the effort, response date and the percentage of work.
3.			Provide interested LSBEs via email, of any new relevant information, if any, at least 5 business days prior to submission of the bid or proposal.
4.			Efforts made to divide the work for LSBE subcontracting areas likely to be successful and to identify portions of work available to LSBEs consistent with their availability. Include a list of divisions of work not subcontracted and the reasons for not including them. The ability or desire of a bidder/proposer to perform the contract work with its own organization does not relieve it of the responsibility to make good faith efforts on all scopes of work subject to subcontracting.
5.			Efforts were made to assist potential LSBE subcontractors meet bonding, insurance, or other governmental contracting requirements. Where feasible, facilitating the leasing of supplies or equipment when they are of such a specialized nature that the LSBE could not readily and economically obtain them in the marketplace.
6.			Communication via email or phone with DeKalb First Program Staff seeking assistance in identifying available LSBEs. Provide DeKalb First Program Staff representative name and title, and date of contact.
7.			For all contracts, a signed letter of intent from all certified LSBEs describing the work, materials, equipment or services to be performed or provided by the LSBE(s) and the agreed upon LSBE participation percentage shall be due with the bid or proposal documents.
8.			Other Actions, to include Mentor/Protégé commitment for solicitations \$5M and above (specify):

Please explain all "no" answers above (by number):

This list is a guideline and by no means exhaustive. The County will review these efforts, along with attached supporting documents, to assess the bidder/proposer's efforts to meet the County's LSBE Participation benchmark. If you require assistance in identifying certified, bona fide LSBEs, please contact the Purchasing and Contracting Department - DeKalb First Program, Felton Williams, Procurement Projects Manager at 404-371-6312.

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EXHIBIT A, CONT'D**DEKALB FIRST LOCAL SMALL BUSINESS ENTERPRISE SCHEDULE OF PARTICIPATION
OPPORTUNITY TRACKING FORM****Bidder/Proposer Statement of Compliance**

Bidder(s)/Proposer(s) hereby state that they have read and understand the requirements and conditions as set forth in the objectives and that reasonable effort were made to support the County in providing the maximum practicable opportunity for the utilization of LSBEs consistent with the efficient and economical performance of this contract. The Bidder and any subcontractors shall file compliance reports at reasonable times and intervals with the County in the form and to the extent prescribed by the Director of DeKalb County Purchasing and Contracting Department. Compliance reports filed at such times as directed shall contain information as to the employment practices, policies, programs and statistics of Contractors and their subcontractors.

1. Non-Discrimination Policy

- a. During the performance of this agreement, Contractor agrees to conform to the following Non-Discrimination Policy adopted by the County.
- b. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or disability. The Contractor will take action to ensure that applicants are employed, and the employees are treated during employment without regard to their race, color, religion, sex, national origin, or disability. Such action shall include, but not be limited to, the following:
 - (1) Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth provisions of this non-discrimination clause.
 - (2) Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or disability.
- c. Without limiting the foregoing, Contractor shall not discriminate on the basis of disability in the admission or access to, or treatment or employment in, the programs and activities, which form the subject of the contract. The Contractor will take action to ensure that applicants for participation in such programs and activities are considered without regard to disability. Such action shall include, but not be limited to, the following:
 - (1) Contractor agrees to post in conspicuous places available to participants in its programs and activities notices to be provided setting forth the provisions of this non-discrimination clause.
 - (2) Contractor shall, in all solicitations or advertisements for programs or activities, which are the subject of the contract, state that all qualified applicants will receive consideration for participation without regard to disability.

2. Commitment

The undersigned certifies that he/she has read, understands, and agrees to be bound by the bid specifications, including the accompanying Exhibits and other terms and conditions of the Invitation to Bid and/or Request for Proposal regarding LSBE utilization. The undersigned further certifies that he/she is legally authorized by the bidder or responder to make the statements and representations in

Exhibit A and that said statements and representations are true and correct to the best of his/her knowledge and belief. The undersigned will enter into formal agreement(s) with the LSBE(s) listed in this Exhibit A, which are deemed by the owner to be legitimate and responsible LSBEs. Said agreement(s) shall be for the work and contract with the Prime Contractor. The undersigned understands and agrees that if any of the statements and representations are made by the Bidder knowing them to be false, or if there is a failure of the successful Bidder (i.e., Contractor) to implement any of the stated agreements, intentions, objectives, goals and commitments set forth herein without prior approval of the County, then in any such events the contractor's act or failure to act, as the case may be, shall constitute a material breach of contract, entitling the County to terminate the Contract for default. The right to so terminate shall be in addition to, and not in lieu of, any other rights and remedies the County may have for other defaults under the Contract. Additionally, the Contractor will be subject to the loss of any future contract awards by the County for a period of one year.

Firm Name (Please Print):

Firm's Officer:

(Authorized Signature and Title Required)

Date

Sworn to and Subscribed to before me this ____ day of _____, 201__.

Notary Public

My Commission Expires: _____

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EXHIBIT B**LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR
PROVIDING MATERIALS OR SERVICES**

Instructions:

1. Complete the form in its entirety and submit with bid documents.
2. Attach a copy of the LSBE's current valid Certification Letter.

To: _____**(Name of Prime Contractor Firm)****From:** _____
(Name of Subcontractor Firm)☐ **LSBE –DeKalb** ☐ **LSBE –MSA**
(Check all that apply)**ITB Number:** 19-101127**Project Name:** Common Brick (Annual Contract with 2 Options to Renew)

The undersigned subcontractor 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 Materials or Services	Project/Task Assignment	% of Contract Award

Prime Contractor**Sub-contractor****Signature:** _____ **Signature:** _____**Title:** _____ **Title:** _____**Date:** _____ **Date:** _____

FIRST SOURCE JOBS ORDINANCE INFORMATION
(WITH EXHIBITS 1 – 4)

EXHIBIT 1

FIRST SOURCE JOBS ORDINANCE ACKNOWLEDGEMENT

Contract No. _____

The DeKalb County First Source Ordinance requires contractors or beneficiaries of eligible projects entering into any type of agreement with the County, including purchase orders, regardless of what they may be called, for the procurement or disposal of supplies, services, construction projects, professional or consultant services, which is funded in whole or part with County funds or County administered funds in which the contractor is to receive \$50,000 or more in County expenditures or committed expenditures and recipient of urban redevelopment action grants or community development block funds administered in the amount of \$50,000 or more to make a good faith effort to hire DeKalb County residents for at least 50% of jobs created using the First Source Registry (candidate database) within one hundred twenty (120) days of contract execution. The work to be performed under this contract is subject to the provisions of the DeKalb County First Source Jobs Ordinance. All contractors will be asked to submit an ***Employment Roster*** and/or copies of active payroll registers on a monthly basis to verify compliance. The undersigned acknowledges and agrees to comply with the provisions of the DeKalb County First Source Jobs Ordinance.

CONTRACTOR OR BENEFICIARY INFORMATION:

 Contractor or Beneficiary Name (Signature)

 Contractor or Beneficiary Name (Printed)

 Title

 Telephone

 Email

 Name of Business

Please answer the following questions:

1. How many job openings do you anticipate filling related to this contract? _____
2. How many incumbents/existing employees will retain jobs due to this contract?
 DeKalb Residents: _____ Non-DeKalb Residents: _____
3. How many work hours per week constitutes Full Time employment? _____

Please return this form to WorkSource DeKalb, fax (404) 687-4099 or email to FirstSourceJobs@dekalbcountyga.gov.

EXHIBIT 2
NEW EMPLOYEE TRACKING FORM

Name of Bidder _____

Address _____

E-Mail _____

Phone Number _____

Fax Number _____

Do you anticipate hiring from the First Source Candidate Registry? Y or N (Circle one)

If so, the approximate number of employees you anticipate hiring: _____

Type of Position (s) you anticipate hiring: (List position title, one position per line) Attach job description per job title:	The number you anticipate hiring:	Timeline

Please return this form to WorkSource DeKalb, fax (404) 687-4099 or email to
FirstSourceJobs@dekalbcountyga.gov.

FIRST SOURCE JOBS ORDINANCE INFORMATION
EXHIBIT 3

BUSINESS SERVICE REQUEST FORM

note: We need one form completed for each position that you have available.

FEDERAL TAX ID:

COMPANY NAME:

WEBSITE:

ADDRESS:

(WORKSITE ADDRESS IF DIFFERENT):

CONTACT NAME:

CONTACT PHONE:

CONTACT FAX:

CONTACT E-MAIL ADDRESS:

Are you a private employment agency or staffing agency? ☐ YES ☐ NO

JOB DESCRIPTION: (PLEASE INCLUDE A COPY OF JOB DESCRIPTION)

POSITION TITLE:

NUMBER OF POSITIONS AVAILABLE: _____ TARGET START DATE: _____

WEEKLY WORK HOURS: 20-30 hours ☐ 30-40 hours ☐ Other ☐

SPECIFIC WORK SCHEDULE:

SALARY RATE(OR RANGE):

PERM ☐ TEMP ☐ TEMP-TO-PERM ☐ SEASONAL ☐

PUBLIC TRANSPORTATION ACCESSIBILITY YES ☐ NO ☐

IF SCREENINGS ARE REQUIRED, SELECT ALL THAT APPLY:

☐ CREDIT ☐ DRUG ☐ MVR ☐ BACKGROUND ☐ OTHER _____

Please return form to: Business Solutions Unit (First Source)

774 Jordan Lane Bldg. #4

Decatur, Ga. 30033

Phone: (404) 687-3400

FirstSourceJobs@dekalbcountyga.gov

EXHIBIT 4

EMPLOYMENT ROSTER

DeKalb County

[illegible]

ATTACHMENT K

PREFERRED EMPLOYEE TRACKING FORM

Name of Proposer: _____

Address: _____

Email: _____

Phone Number: _____

Fax Number: _____

Do you anticipate hiring from the WorkSource DeKalb Preferred Employee Candidate Registry: Yes or No (Circle which applies.)

If so, approximate number of employees you anticipate hiring: _____

[illegible]

ATTACHMENT



TECHNICAL NOTES on Brick Construction

1850 Centennial Park Drive, Reston, Virginia 20191 | www.gobrick.com | 703-620-0010

9A

October
2007

Specifications for and Classification of Brick



TECHNICAL NOTES on Brick Construction

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9A

October
2007

Specifications for and Classification of Brick

Abstract: This *Technical Note* describes the predominant-consensus standard specifications for brick and the various classifications used in each. Specific requirements — including physical properties, appearance features and coring — are described. Additional requirements for each brick specification also are covered.

Key Words: appearance, ASTM standards, brick, chippage, classification, CSA standard, dimensions, distortion, durability, exposure, grade, physical properties, specification, tolerances, type, use.

SUMMARY OF RECOMMENDATIONS:

- Identify the appropriate brick specification for the intended use
- Specify each classification in the specification or verify that the default classification is valid
- Specify each required action of the purchaser and specifier
- Evaluate and specify any optional requirement
- Use requirements in consensus-based specifications; deviate from them only with consideration of effect on performance and cost

INTRODUCTION

Brick selection is made according to the specific application in which the brick will be used. Standards for brick cover specific uses of brick and classify the brick by performance characteristics. The performance criteria include strength, durability and aesthetic requirements. Selection of the proper specification and classification within that specification, along with proper design and construction, should result in expected performance.

ASTM International (ASTM) publishes the most widely accepted standards on brick. These standards are voluntary consensus standards that are reviewed and updated periodically to contain the most recent information. All have been through a thorough review process by a balanced committee of interested ASTM members classified as producers, users and general interest. All of the model building codes in the United States reference ASTM standards for brick.

Standards used in Canadian building codes are prepared by the Canadian Standards Association (CSA). The process used to prepare and revise CSA standards is similar to ASTM's. The sole CSA standard for brick, A82 *Fired Masonry Brick Made from Clay or Shale*, is similar in content to the ASTM standards for face brick and hollow brick. It also includes test methods.

This *Technical Note* identifies the standards for brick and the specific requirements for its various classifications. Other *Technical Notes* in this series address the fundamentals of brick manufacturing and the proper selection of brick.

BRICK SPECIFICATIONS

Depending on its use, brick is covered by one of several specifications. See [Table 1](#). Because firebox brick, chemical resistant brick, sewer and manhole brick, and industrial floor brick are special uses, they will not be addressed in this *Technical Note*.

TABLE 1
Specifications for Brick

Title of Specification	ASTM Designation ¹	CSA Designation ²
Building Brick	C 62	—
Facing Brick	C 216	A82
Hollow Brick	C 652	A82
Thin Veneer Brick Units Made from Clay or Shale	C 1088	—
Pedestrian and Light Traffic Paving Brick	C 902	—
Heavy Vehicular Paving Brick	C 1272	—
Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units	C 126	—
Glazed Brick, Single Fired	C 1405	—
Firebox Brick, Residential Fireplaces	C 1261	—
Chemical-Resistant Masonry Units	C 279	—
Sewer and Manhole Brick	C 32	—
Industrial Floor Brick	C 410	—

1. ASTM International, 100 Bar Harbor Drive, West Conshohocken, PA 19428.

2. Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6 Canada.

Beginning with the 2007a edition of ASTM C 216, an appendix has been added. The appendix is designed to explain the specification, noting subtleties and relationships that might not otherwise be clear. In many instances the use of brick is similar to the title of its ASTM specification.

Facing Brick

Facing brick are intended for use in both structural and nonstructural masonry, including veneer, where appearance is a requirement.

Hollow Brick

Hollow brick are used as either building or facing brick but have a greater void area. Most hollow brick are used as facing brick in anchored veneer. Hollow brick with very large cores are used in reinforced brickwork and contain steel reinforcement and grout.

Building Brick

Building brick are intended for use in both structural and nonstructural brickwork where appearance is not a requirement. Building brick are typically used as a backing material.

Thin Brick

Thin veneer brick have normal face dimensions but a reduced thickness. They are used in adhered veneer applications.

Paving Brick

Paving brick are intended for use as the wearing surface on clay paving systems. As such they are subject to pedestrian and light or heavy vehicular traffic.

Glazed Brick

Glazed brick have a ceramic glaze finish fused to the brick body. The glaze can be applied before or after the firing of the brick body. These brick may be used as structural or facing components in masonry.

CLASSIFICATIONS

There are several classifications used in each standard. Classifications include grade, class, type, application and use. The criteria for these classifications may include exposure or use conditions; appearance items; physical properties needed for performance; tolerances on dimensions and distortion; chippage; and void area.

Brick qualify for a particular classification based on their properties after manufacturing. While most brick can be manufactured to attain all the attributes desired by a user, certain attributes may be dictated by the production method, durability classification or appearance classification designated by the user. For example, a molded brick cannot be made to meet the classification for the tightest dimensional tolerances since the production method uses a higher percentage of water that may result in greater shrinkage. Brick manufactured by the extrusion process can be made to meet the classification for tight or loose dimensional tolerances.

When specifying brick each classification should be designated. Some ASTM brick specifications default to a certain classification if it is not designated. The default classification may not be suitable for the intended use.

Table 2 contains a listing of the classifications in ASTM and CSA brick specifications.

TABLE 2
Classifications in Specifications for Brick

	Classification			
	Durability	Appearance	Void Area	Use
ASTM Specification				
C 62 Building Brick	Grade	None	None	None
C 216 Facing Brick	Grade	Type	None	None
C 652 Hollow Brick	Grade	Type	Class	None
C 1088 Thin Veneer Brick	Grade	Type	None	None
C 902 Pedestrian and Light Traffic Paving Brick	Class and Type	Application	None	Type
C 1272 Heavy Vehicular Paving Brick	Type	Application	None	Type
C 126 Ceramic Glazed Facing Brick	None	Grade and Type	None	None
C 1405 Single Fired Glazed Brick	Class	Grade and Type	Division	None
CSA Specification				
A82 Fired Masonry Brick Made from Clay or Shale	Grade	Type	None ¹	None

1. No classification given, but solid, cored and hollow brick are defined. See Void Area.

Durability and Exposure

Since the environmental and service conditions that brick are subjected to vary, each brick specification classifies brick for its specific durability. The classification is based on the severity of weather and the exposure of the brick. The classification assigned to the brick is typically based on physical properties of the brick. See *Technical Note 9B* for selection of the appropriate level of durability. The durability classifications for each specification are listed in [Table 3](#).

TABLE 3
Durability Classifications

	Durability Classification	More Severe Exposure	Less Severe Exposure
ASTM Specification			
C 62 Building Brick	Grade	SW MW NW	
C 216 Facing Brick	Grade	SW	MW
C 652 Hollow Brick	Grade	SW	MW
C 1088 Thin Veneer Brick	Grade	Exterior	Interior
C 902 Pedestrian and Light Traffic Paving Brick	Class	SX MX NX	
	Type	I II III	
C 1272 Heavy Vehicular Paving Brick	Type	F	R
C 126 Ceramic Glazed Facing Brick	None	—	
C 1405 Single Fired Glazed Brick	Class	Exterior	Interior
CSA Specification			
A82 Fired Masonry Brick Made from Clay or Shale	Grade	Exterior (EG)	Interior (IG)

For durability classifications the letters S, M and N in C 62, C 216, C 652 and C 902 indicate the following exposure conditions:

- S indicates severe weathering.
- M indicates moderate weathering.
- N indicates negligible or no weathering.

Physical Property Requirements. The physical property requirements in most specifications are compressive strength, water absorption and saturation coefficient. These properties must be determined in accordance with ASTM C 67, *Standard Methods of Sampling and Testing Brick and Structural Clay Tile* [Ref. 1] or CSA A82 [Ref. 3]. The minimum compressive strength, maximum water absorption and maximum saturation coefficient are used in combination to predict the durability of the bricks in use. The saturation coefficient, also referred to as the C/B ratio, is the ratio of 24-hour cold water absorption to the five-hour boiling absorption. The physical property requirements for each standard are listed in [Table 4](#).

Some brick are durable but cannot be classified under the physical requirements shown in Table 4. Using alternates and alternatives in the specifications allows brick that are known to perform well to meet the durability requirement. A brick qualifying for a classification by an alternate or alternative does not signify that it is of a lower quality.

The Absorption Alternate is found in ASTM C 62, C 216, C 652, C 1088, C 902 and C 1405. The Freezing and Thawing Alternative is found in ASTM C 62, C 216, C 652, C 1088, C 902, C 1272 and C 1405. The Low Weathering Index Alternative is found in ASTM C 62, C 216 and C 1088. CSA A82 includes a freeze-thaw test as an alternative if the brick does not meet the physical property requirements. Other unit specifications include alternates as well. These are discussed in the Additional Requirements section.

Absorption Alternate- The saturation coefficient requirement does not apply, provided the cold water absorption of any single brick of a random sample of five brick does not exceed 8 percent.

TABLE 4
Physical Properties in Brick Specifications

		Minimum Compressive Strength, Gross Area ¹ psi (MPa)		Maximum Cold Water Absorption, %		Maximum Five-Hour Boiling Absorption, %		Maximum Saturation Coefficient		Minimum Breaking Load, lb/in. (kN/mm)	
		Average of 5 brick	Individual	Average of 5 brick	Individual	Average of 5 brick	Individual	Average of 5 brick	Individual	Average of 5 brick	Individual
ASTM Specification and Classification											
C 62 Grade	SW	3000 (20.7)	2500 (17.2)	—	—	17.0	20.0	0.78	0.80	—	—
	MW	2500 (17.2)	2200 (15.2)	—	—	22.0	25.0	0.88	0.90	—	—
	NW	1500 (10.3)	1250 (8.6)	—	—	No limit	No limit	No limit	No limit	—	—
C 216 Grade	SW	3000 (20.7)	2500 (17.2)	—	—	17.0	20.0	0.78	0.80	—	—
	MW	2500 (17.2)	2200 (15.2)	—	—	22.0	25.0	0.88	0.90	—	—
C 652 Grade	SW	3000 (20.7)	2500 (17.2)	—	—	17.0	20.0	0.78	0.80	—	—
	MW	2500 (17.2)	2200 (15.2)	—	—	22.0	25.0	0.88	0.90	—	—
C 1088 Grade	Ext.	—	—	—	—	17.0	20.0	0.78	0.80	—	—
	Int.	—	—	—	—	22.0	25.0	0.88	0.90	—	—
C 902 Class	SX	8000 [4000] ² (55.2) [(27.6)] ²	7000 [3500] ² (48.3) [(24.1)] ²	8.0 [16.0] ²	11.0 [18.0] ²	—	—	0.78	0.80	—	—
	MX	3000 (20.7)	2500 (17.2)	14.0	17.0	—	—	No limit	No limit	—	—
	NX	3000 (20.7)	2500 (17.2)	No limit	No limit	—	—	No limit	No limit	—	—
C 1272 Type	F	10,000 (69.0)	8800 (60.7)	6.0	7.0	—	—	—	—	475 (83)	333 (58)
	R	8000 (55.2)	7000 (48.3)	6.0	7.0	—	—	—	—	—	—
C 126 Coring	Vert.	3000 (20.7)	2500 (17.2)	—	—	—	—	—	—	—	—
	Horiz.	2000 (13.8)	1500 (10.3)	—	—	—	—	—	—	—	—
C 1405 Class	Ext.	6000 (41.4)	5600 (34.8)	—	7.0	—	—	0.78	0.80	—	—
	Int.	3000 (20.7)	2500 (17.2)	—	—	—	—	—	—	—	—
CSA Specification and Classification											
A82	Ext.	3000 (20.7)	2500 (17.2)	—	8.0 ³	—	17.0	—	0.78 ³	—	—
	Int.	2500 (17.2)	2200 (15.2)	—	—	22.0	25.0	0.88	0.90	—	—

1. Brick in bearing position or loaded in the same direction as in service.
2. Numbers in brackets are for molded brick and apply provided the requirements for saturation coefficient are met.
3. Either of these requirements must be met, not both.

Freezing and Thawing Alternative- The requirements for five-hour boiling water absorption and saturation coefficient do not apply, provided a sample of five brick, meeting the strength requirements, passes the freezing and thawing test as described in the Rating section of the Freezing and Thawing test procedures of ASTM C 67 with a weight loss not greater than 0.5 percent in dry weight of any individual brick (for Grade SW). Unlike ASTM C 67, CSA A 82 stipulates that brick must be kept in a frozen state during any interruption of the freeze-thaw test.

Low Weathering Index Alternative- If the brick are intended for use where the weathering index is less than 50 and have a minimum average compressive strength of 2500 psi (17.2 MPa), the requirements given for five-hour boiling water absorption and for saturation coefficient shall not apply.

Consult the appropriate ASTM specification for specific alternates.

Appearance

Classification related to the appearance may include limits tolerances on dimensions, distortion, out-of-square and chippage. The appearance classification is established on the size and precision attained in manufacturing. The classifications for appearance of brick for each specification are listed in [Table 5](#), and requirements for size variation, distortion and chippage are listed in Table 6, Table 7 and Table 8, respectively. There are no color-related tolerances in the ASTM standards for brick. Those are dictated by the sample panel or project specification.

TABLE 5
Appearance Classifications

	Appearance Classifications	More Stringent Requirements	Less Stringent Requirements
ASTM Specification			
C 62 Building Brick	None	—	
C 216 Facing Brick	Type	FBX	FBS FBA
C 652 Hollow Brick	Type	HBX	HBS HBA HBB
C 1088 Thin Veneer Brick	Type	TBX	TBS TBA
C 902 Pedestrian and Light Traffic Paving Brick	Application	PX	PS PA
C 1272 Heavy Vehicular Paving Brick	Application	PX	PS PA
C 126 Ceramic Glazed Facing Brick	Grade	SS	S
	Type	II	I
C 1405 Single Fired Glazed Brick	Grade	SS	S
	Type	II	I
CSA Specification			
A82 Fired Masonry Brick Made from Clay or Shale	Type	X	S A

For appearance classifications the letters X, S and A have the following meanings:

X indicates extreme or extra control in the criteria.

S indicates standard production.

A indicates architectural or aesthetic criteria that must be specified and in many specifications must be less stringent than the S designation.

Dimensional Tolerances. Variations in raw materials and the manufacturing process will result in brick that vary in size. Permitted size variation is based on the brick classification and the relative dimensional range measured. These permitted variations in size are listed in [Table 6A](#), [Table 6B](#) and [Table 6C](#). The variation is plus or minus from the specified dimension. Size variation becomes important when vertical alignment of brick (stack bond) is used, when bands of brick from different production runs are combined, or when a short horizontal extent of brickwork is constructed, such as between closely spaced window openings.

TABLE 6A
Dimensional Tolerances for ASTM C 216 and CSA A82¹

Specified Dimension or Average Brick Size in Job Lot Sample, in. (mm)	Maximum Permissible Variation, in. (mm), plus or minus from:				
	Column A (for Specified Dimension)		Column B (for Average Brick Size in Job Lot Sample) ²		
	Type FBX	Type FBS	Type FBX	Type FBS Smooth ³	Type FBS Rough ⁴
3 (76) and under	1/16 (1.6)	3/32 (2.4)	1/16 (1.6)	1/16 (1.6)	3/32 (2.4)
Over 3 to 4 (76 to 102), inclusive	3/32 (2.4)	1/8 (3.2)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
Over 4 to 6 (102 to 152), inclusive	1/8 (3.2)	3/16 (4.8)	3/32 (2.4)	3/32 (2.4)	3/16 (4.8)
Over 6 to 8 (152 to 203), inclusive	5/32 (4.0)	1/4 (6.4)	3/32 (2.4)	1/8 (3.2)	1/4 (6.4)
Over 8 to 12 (203 to 305), inclusive	7/32 (5.6)	5/16 (7.9)	1/8 (3.2)	3/16 (4.8)	5/16 (7.9)
Over 12 to 16 (305 to 406), inclusive	9/32 (7.1)	3/8 (9.5)	3/16 (4.8)	1/4 (6.4)	3/8 (9.5)

1. Dimensional tolerances for Type FBA and A in C 216 and A82, respectively, shall be as specified by the purchaser, but not more restrictive than Type FBS and S (Rough), respectively.

2. Lot size shall be determined by agreement between purchaser and seller. If not specified, lot size shall be understood to include all brick of one size and color in the job order.

3. Type FBS Smooth brick have relatively fine texture and smooth edges, including wire cut surfaces. These definitions relate to dimensional tolerances only.

4. Type FBS Rough bricks are molded brick or extruded brick with textured, rounded or tumbled edges or faces. These definitions apply to dimensional tolerances only.

TABLE 6B
Dimensional Tolerances

ASTM Specification and Classification		Maximum Permissible Variation, in. (mm), plus or minus					
		3 (76) and under	Over 3 to 4 (102) inclusive	Over 4 to 6 (152) inclusive	Over 6 to 8 (204) inclusive	Over 8 to 12 (306) inclusive	Over 12 to 16 (408) inclusive
C 62		3/32 (2.4)	1/8 (3.2)	3/16 (4.8)	1/4 (6.4)	5/16 (8.0)	3/8 (9.5)
C 652	HBX	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)	7/32 (5.6)	9/32 (7.1)
	HBS and HBB	3/32 (2.4)	1/8 (3.2)	3/16 (4.8)	1/4 (6.4)	5/16 (7.9)	3/8 (9.5)
	HBA	As specified by the purchaser, but not more restrictive than HBS and HBB					
C 1088	TBX	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)	7/32 (5.6)	9/32 (7.2)
	TBS	3/32 (2.4)	1/8 (3.3)	3/16 (4.8)	1/4 (6.4)	5/16 (8.0)	3/8 (9.5)
	TBA	As specified by the purchaser					
C 126		See ASTM C 126					
C 902 and C 1272	PX	1/16 (1.6)	3/32 (2.4)	—	1/8 (3.2)	7/32 (5.6)	—
	PS	1/8 (3.2)	3/16 (4.8)	—	1/4 (6.4)	5/16 (8.0)	—
	PA	No limit	No limit	—	No limit	No limit	—

TABLE 6C
Dimensional Tolerances for ASTM C 1405

Specified Dimension or Average Brick Size in Job Lot Sample, in. (mm)	Maximum Permissible Variation in Dimensions, in. (mm) plus or minus from:			
	Column A (for Specified Dimension)		Column B (for Average Brick Size in Job Lot Sample) ¹	
	Grade S	Grade SS	Grade S	Grade SS
3 (76) and under	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)
Over 3 to 4 (76-102), inclusive	3/32 (2.4)	1/16 (1.6)	1/16 (1.6)	1/16 (1.6)
Over 4 to 6 (102-152), inclusive	1/8 (3.2)	1/16 (1.6)	3/32 (2.4)	1/16 (1.6)
Over 6 to 8 (152-203), inclusive	5/32 (4.0)	1/16 (1.6)	3/32 (2.4)	1/16 (1.6)
Over 8 to 12 (203-305), inclusive	7/32 (5.6)	1/16 (1.6)	1/8 (3.2)	1/16 (1.6)
Over 12 to 16 (305-406), inclusive	9/32 (7.1)	1/16 (1.6)	3/16 (4.8)	1/16 (1.6)

1. Lot size shall be determined by agreement between purchaser and seller. If not specified, lot size shall be understood to include all brick of one size and color in the job order.

TABLE 7
Distortion Tolerances

		Maximum Permissible Distortion, in. (mm)		
		8 (204) and under	Over 8 to 12 (306), inclusive	Over 12 to 16 (408), inclusive
ASTM Specification and Classification				
C 62		No limit	No limit	No limit
C 216	FBX	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
	FBS	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)
	FBA	As specified by the purchaser		
C 652	HBX	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
	HBS	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)
	HBA	As specified by the purchaser		
C 1088	TBX	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
	TBS	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)
	TBA	As specified by the purchaser		
C 902 and C1272	PX	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
	PS	3/32 (2.4)	1/8 (3.3)	5/32 (4.0)
	PA	No limit		
C 126		Special requirements – see ASTM C 126		
C 1405	SS	1/16 (1.6)	3/32 (2.4)	3/32 (2.4)
	S	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
CSA Specification and Classification				
A82	X	(1.5)	(2.5)	(3.0)
	S	(2.5)	(3.0)	(4.0)
	A	As specified by purchaser, but not more restrictive than Type S (Rough)		

Distortion. Permitted distortion, or warpage, of brick is listed in **Table 7**. The amount of distortion is based on the brick specification and face dimension. Distortion may be convex or concave and may be in the plane of the wall or perpendicular to it, as illustrated in **Figure 1**. Other terms for distortion are "bowed" or "banana" brick. A brick that is over the distortion limitations is difficult to lay and is easily noticeable in the brickwork.

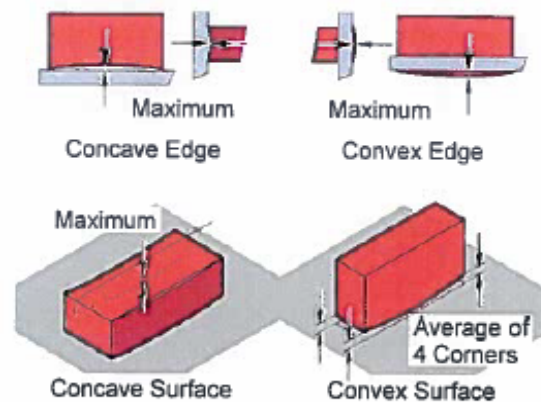


Figure 1
Distortion Measurements

Chippage. Brick may be damaged or chipped during packaging, shipping or on the job site. Limitations to the size and number of chips on individual brick are listed in [Table 8](#). The amount of chippage is based upon the brick specification and classification.

A delivery of brick may contain up to 5 percent broken brick or brick chipped beyond the limits in [Table 8](#). The chippage requirements in [Table 8](#) are based on the remaining 95 percent of the shipment. The chips are measured from an edge or a corner, and the total length of these chips may not be greater than 10 percent of the perimeter of the face of the brick. Chips are more noticeable on brick that have a surface color different from the body of the brick. Chips on "through-body" color brick are less noticeable.

TABLE 8
Maximum Permissible Range of Chippage¹

Specification and Type or Application						Percent Allowed	Chippage in From		Percent Allowed	Chippage in From	
ASTM C 216	ASTM C 652	ASTM C 1088	ASTM C 902	ASTM C 1272	CSA A82		Edge, in. (mm)	Corner, in. (mm)		Edge, in. (mm)	Corner, in. (mm)
FBX	HBX	TBX	—	—	X	95 to 100%	0 to 1/8 (0 to 3.2)	0 to 1/4 (0 to 6.4)	5% or less	1/8 to 1/4 (3.2 to 6.4)	1/4 to 3/8 (6.4 to 9.5)
FBS ²	HBS ²	TBS ²	—	—	S ²	90 to 100%	0 to 1/4 (0 to 6.4)	0 to 3/8 (0 to 9.5)	10% or less	1/4 to 5/16 (6.4 to 7.9)	3/8 to 1/2 (9.5 to 12.7)
FBS ³	HBS ³	TBS ³	—	—	S ³	85 to 100%	0 to 5/16 (0 to 7.9)	0 to 1/2 (0 to 12.7)	15% or less	5/16 to 7/16 (7.9 to 11.1)	1/2 to 3/4 (12.7 to 9.1)
FBA	HBA HBB	TBA	PA	PA ⁴	A	As specified by the purchaser ⁵					
—	—	—	PS	PS PX	—	100%	5/16 (7.9)	1/2 (12.7)	—	—	—
—	—	—	PX	—	—	100%	1/4 (6.4)	3/8 (9.5)	—	—	—

1. There are no chippage requirements for C 62, C 126 or C 1405.

2. Extruded brick with unbroken natural die finish face and dry-pressed brick.

3. Extruded brick with finished face sanded, combed, scratched, scarified, or broken by mechanical means such as wire cutting or wire brushing, and molded brick.

4. No limit.

5. Not more restrictive than FBS (Textured) in C 216 or HBS (altered).

ADDITIONAL REQUIREMENTS

Void Area

In ASTM standards brick are generally classified as solid or hollow. A solid brick is defined as a unit whose net cross-sectional area in every plane parallel to the bearing surface is 75 percent or more of its gross cross-sectional area measured in the same plane. Thus, a solid brick has a maximum coring or void area of 25 percent. A hollow brick is defined as a unit whose net cross-sectional area in every plane parallel to the bearing surface is less than 75 percent of its gross cross-sectional area measured in the same plane. A hollow brick has a minimum coring or void area greater than 25 percent, and a maximum of 60 percent. Brick are cored or frogged at the option of the manufacturer.

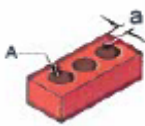
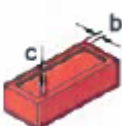

Cores. Holes in brick less than or equal to 1½ square inches (9.68 cm²) in cross-sectional area, referred to as cores, are used to aid in the manufacturing process and shipping of brick. The cores permit better utilization of raw materials, create more uniform drying and firing of the brick, reduce the amount of fuel necessary to fire the brick and reduce shipping costs by reducing weight. Additional advantages, such as aiding in mechanical bond in a wall, easier laying of the brick, etc., also may result from brick manufactured with cores. Cores are found only in brick manufactured by the extrusion or dry-press process. Limits to the amount of coring allowed in brick, the distance from a core to a face, and web thickness where applicable are listed in [Table 9](#).

Cells. Cells are similar to cores except that a cell is larger in minimum dimension and has a cross-sectional area greater than 1½ square inches (9.68 cm²). Some requirements for cells are shown in Table 9. Additional requirements for cells can be found in ASTM C 652, C 126 and C 1405 and CSA A82.

Frogs. Frogs are depressions in brick, usually located on one bed surface, and are included for the same reasons as cores and cells. Frogs are found in brick manufactured by the molded process. Panel frogs are limited to a specified depth and a specified distance from a face. Requirements for panel frogs are listed in Table 9. Deep frogs are depressions deeper than 3/8 in. (10 mm), and must conform to the requirements for coring, hollow spaces and void area of the applicable standard.

The Canadian Standards Association takes a different approach. CSA A82 defines a solid brick as one without cores, cells or frogs deeper than 3/8 in. (10 mm); cored brick as those of which the net cross-sectional area in any plane parallel to the bed face shall be at least 75 percent of the gross cross-sectional area measured in the same plane; and hollow brick as brick whose net cross-sectional area in a plane parallel to the bed face is not less than 40 percent and not more than 75 percent of its gross cross-sectional area measured in the same plane. Further, there is a required minimum dimension of 1/2 in. (6 mm) between cores, 1 in. (13 mm) between cells; and 3/4 in. (19 mm) to an edge from a core, cell or frog.

TABLE 9
Requirements for Void Areas¹

ASTM Specification		Void Area, %									
			Cores		Frogs		Cells				
			a in. (mm), min.	A in. ² (cm ²), max.	b in. (mm), min.	c in. (mm), min.	E in. ² (cm ²), max.	e in. (mm), min.	f in. (mm), min.	g in. (mm), min.	h in. (mm), min.
C 62		< 25	3/4 (19.1)	—	3/4 (19.1)	3/8 (9.5)	No Requirements for Cells				
C 216		< 25	3/4 (19.1)	—	3/4 (19.1)	3/8 (9.5)	No Requirements for Cells				
C 652 ²	H40V	> 25, ≤ 40	5/8 (16)	≤ 1½ (9.68)	5/8 (16)	3/8 (9.5)	< 1½ (9.68)	3/4 (19.1)	3/4 (19.1)	1/2 (13)	—
	H60V ³	> 40, ≤ 60	5/8 (16)	≤ 1½ (9.68)	5/8 (16)	3/8 (9.5)	> 1½ (9.68)	3/4 (19.1)	3/4 (19.1)	1/2 (13)	—
C 1088		—	No Requirements for Cores, Frogs or Cells								
C 902		—	No Requirements for Cores, Frogs or Cells								
C 1272		—	Cores and Cells Not Permitted								
C 126 ⁴		—	No Requirements for Cores or Frogs				> 1½ (9.68)	3/4 (19.1)	3/4 (19.1)	1/2 (13) ⁵	1/2 (13)
C 1405 ²	Solid	≤ 25	3/4 (19.1)	—	3/4 (19.1)	3/8 (9.5)	No Requirements for Cells				
	H40V	> 25, ≤ 40	5/8 (16)	1½ (9.68)	5/8 (16)	3/8 (9.5)	> 1½ (9.68)	3/4 (19.1)	3/4 (19.1)	1/2 (13)	—
	H60V ³	> 40, ≤ 60	—	5/8 (16)	1½ (9.68)	5/8 (16)	3/8 (9.5)	1½ (9.68)	3/4 (19.1)	3/4 (19.1)	1/2 (13)

1. Deep frogs shall meet coring requirements of the applicable specification (see ASTM C 62, C216, C 652 and C 1405).

2. Cored-shell and double-shell hollow brick shall meet additional coring requirements of applicable specification in ASTM C 652 and C 1405.

3. Based on 3 in. (76 mm) and 4 in. (102 mm) nominal width (for larger dimensions see C 652 and C 1405).

4. Cells shall meet additional requirements of ASTM C 126.

5. Web thickness in cored brick shall meet additional requirements of ASTM C 126.

Efflorescence

Efflorescence is a crystalline deposit of water-soluble salts that can form on the surface of some brickwork. The principal objection is an unsightly appearance, though it typically is not harmful to brick. The test for efflorescence is described in ASTM C 67 and CSA A82. Brick tested under C 67 are given a rating of "effloresced" or "not effloresced." The specifier must invoke this part of the standard for the requirement of "not effloresced" to apply. CSA A82 also includes a rating of "slightly effloresced," and it is this rating that must be met if efflorescence testing is invoked. Requirements on efflorescence are not included in C 62 and C 126.

Strength

Brickwork may be used as a structural material, so there may be instances when it is important to specify a minimum compressive strength of the brick. This possibility is noted in ASTM C 62, C 216, C 652 and C 1405. Most brick have compressive strengths considerably higher than the minimum compressive strengths required for durability and abrasion resistance.

Initial Rate of Absorption

The initial rate of absorption (IRA) is a measure of how quickly the brick will remove water from mortar spread on it. IRA is not a qualifying property or condition of brick in the ASTM or CSA specifications. IRA values may be of interest when selecting mortar and in use of the brick on the jobsite. If the purchaser wishes to learn the IRA of the brick, the IRA test must be requested. Initial rate of absorption information is included in ASTM C 62, C 216, C 652 and C 1405.

Sampling and Testing

All brick under ASTM specifications are sampled and tested in accordance with ASTM C 67. The purchaser designates the place of selection of the brick for testing when the order is placed. Brick for efflorescence testing must be sampled at the point of manufacture. This is because the brick may be contaminated by efflorescing materials after leaving the brick plant. Brick are sampled and tested for compliance to their specification prior to use. ASTM C 126 and C 1405 include additional tests for properties of the glaze. These are described in the following section on Glazed Brick.

CSA A82 includes sampling and test methods as part of the standard.

Facing Brick, ASTM C 216 and CSA A82

An additional tolerance is found in the ASTM standard for solid facing brick specification and in CSA A82. The amount that the exposed face of a brick can be "out-of-square" is limited. This is more critical as brick height increases. The maximum permitted dimension for out-of-square of the exposed face of the brick in C 216 is 1/8 in. (3.2 mm) for Type FBS brick and 3/32 in. (2.4 mm) for Type FBX brick. Tolerances on out-of-square for Type FBA brick shall be specified by the purchaser.

CSA A82 contains similar requirements: Type S of 3.0 mm and Type X of 2.5 mm. Tolerances on out-of-square for Type A brick shall be specified but shall not be more restrictive than for Type S (Rough) brick.

Paving Brick, ASTM C 902 and C 1272

Not only must paving brick conform to the physical properties required in Table 4, but they also must have additional alternatives for durability and must meet requirements for abrasion resistance.

Alternative Performance Requirements. If information on the performance of brick in a pavement subject to similar exposure and traffic conditions is documented, then the physical property requirements in Table 4 may be waived. This is identified as the Performance Alternative.

An optional test for the freeze and thaw test is ASTM C 88 *Test Method for Soundness of Aggregates by Use of Sodium Sulfate*. The sulfate soundness test, like the freeze and thaw test, is not required unless the paving brick do not meet the saturation coefficient and absorption requirements.

Abrasion Resistance. Since paving brick are used in a horizontal application and are exposed to traffic, they must meet a specified abrasion limit. Pedestrian and light traffic paving brick (C 902) are assigned a Type by the traffic or abrasion expected. Type I pavers are exposed to extensive abrasion, such as driveways or public entries. Type II pavers are exposed to high levels of pedestrian traffic, such as in stores, restaurant floors or exterior walkways. Type III pavers are exposed to light pedestrian traffic, such as floors or patios in homes.

Heavy vehicular paving brick (C 1272) are assigned a Type depending on their intended installation. Type R pavers are intended to be set in a mortar or asphalt setting bed supported by an adequate base. Type R pavers must be at least 2¼ in. (57.2 mm) thick. Type F pavers are intended to be set in a sand setting bed, with sand joints, and supported by an adequate base. Type F pavers must be at least 2¼ in. (66.7 mm) thick. The abrasion requirements are the same for Type F and Type R pavers.

The abrasion resistance index can be determined in either of two ways: 1) by dividing the absorption by the compressive strength and multiplying by 100, or 2) by determining the volume abrasion loss in accordance with ASTM C 418 *Test Method for Abrasion Resistance of Concrete by Sandblasting*. The abrasion requirements are listed in Table 10.

TABLE 10
Abrasion Resistance Requirements for Pavers

ASTM Specification	Traffic Type	Abrasion Index, Max.	Volume Abrasion Loss, Max. (cm ³ /cm ²)
C 902 Pedestrian and Light Traffic Paving Brick	Type I	0.11	1.7
	Type II	0.25	2.7
	Type III	0.50	4.0
C 1272 Heavy Vehicular Paving Brick	Types F and R	0.11	1.7

Glazed Brick, ASTM C 126 and C 1405

ASTM C 126 and C 1405 are specifications for glazed brick and contain requirements for properties of the glaze. These properties include imperviousness, opacity, resistance to fading, resistance to crazing, flame spread, fuel contribution and smoke density, toxic fumes, hardness, and abrasion resistance.

SUMMARY

This *Technical Note* identifies brick specifications used in the United States and Canada. Classification designations for each brick specification and the criteria used to qualify for them are explained. Potential performance issues can be minimized by designating the proper brick specification and applicable classifications based on the environmental and service conditions of the project.

The information and suggestions contained in this Technical Note are based on the available data and the experience of engineering staff and members of the Brick Industry Association. The information contained herein should be used in conjunction with good technical judgment and a basic understanding of the properties of brick masonry. Final decisions on the use of the information discussed in this Technical Note are not within the purview of the Brick Industry Association and must rest with the project architect, engineer and owner.

REFERENCES

1. *Annual Book of ASTM Standards*, ASTM International, West Conshohocken, PA 2006:

Volume 04.02 – Concrete and Aggregate

ASTM C 88 Test Method for Soundness of Aggregates by Use of Sodium Sulfate

ASTM C 418 Test Method for Abrasion Resistance of Concrete by Sandblasting

Volume 4.05 – Chemical Resistant Nonmetallic Materials; Vitrified Clay Pipe; Concrete Pipe; Fiber-Reinforced Cement Products; Mortars and Grouts; Masonry; Precast Concrete

C 32, Standard Specification for Sewer and Manhole Brick (Made From Clay or Shale)

C 62, Standard Specification for Building Brick (Solid Masonry Units Made From Clay or Shale)

C 67, Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile

C 126, Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units

C 216, Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)

C 279, Standard Specification for Chemical-Resistant Masonry Units

C 410, Standard Specification for Industrial Floor Brick

C 652, Standard Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale)

C 902, Standard Specification for Pedestrian and Light Traffic Paving Brick

C 1088, Standard Specification for Thin Veneer Brick Units Made from Clay or Shale

C 1261, Standard Specification for Firebox Brick for Residential Fireplaces

C 1272, Standard Specification for Heavy Vehicular Paving Brick

C 1405, Standard Specification for Glazed Brick (Single Fired, Brick Units)

2. Borchelt, J. G., Danforth, L., Jr., and Hunsicker, R., "Specifying Brick: Getting what you want for appearance and function," *The Construction Specifier*, Construction Specifications Institute, Alexandria, VA, January 2006, pp. 20-28.

3. CSA A82, Fired Masonry Brick Made from Clay or Shale, Canadian Standards Association, Mississauga, Ontario, Canada, 2006.