

**CONTRACT DOCUMENTS
FOR
BUCKS COUNTY FREE LIBRARY - BENSALEM BRANCH
REAR WALL MODIFICATIONS AND WINDOW ADDITION**

**BENSALEM BRANCH LIBRARY
3700 HUMEVILLE ROAD
BENSALEM, PA 19020**

10-29/21

October, 2021

PREPARED FOR:
Bucks County Free Library
150 S Pine Street
Doylestown, PA 18901

PREPARED BY:
Holstein White Engineers
210 E. Street Road
Feasterville, PA 19053

**CONTRACT DOCUMENTS
FOR
BUCKS COUNTY FREE LIBRARY - BENSALEM BRANCH
REAR WALL MODIFICATIONS AND WINDOW ADDITION**

**BENSALEM BRANCH LIBRARY
3700 HUMEVILLE ROAD
BENSALEM, PA 19020**

TABLE OF CONTENTS

SECTION

Legal Notice

Bidding Requirements and Instructions

Instructions to Bidders

Bid Bond

Non-Collusion Affidavit

Agreement

Contract Forms

Public Works Employment Verification Form

Payment Bond

Performance Bond

Maintenance Bond

Contractor's Affidavit of Payment of Debts and Claims

Consent of Surety Company to Final Payment

Contractor's Affidavit of Release of Liens

Contractor's Release of Liens

Certificate of Insurance (*Sample*)

Weekly Payroll Certification for Public Works Projects (*Sample*)

Contractor's Qualification Statement

Conditions of Contract

General Conditions

Rules and Regulations for Outside Contractors

Prevailing Wage Determination

Technical Specifications

DIV 01

00413 Bid Form

01100 Summary

01250 Contract Modification Procedures

01290 Payment Procedures

01310 Project Management and Coordination

01320 Construction Progress Documentation

01330 Submittal Procedures

01420 References

TABLE OF CONTENTS

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

01-1

01500	Temporary Facilities and Controls
01600	Product Requirements
01635	Substitution Procedures
01700	Execution Requirements
01732	Selective Demolition
01770	Closeout Procedures
01781	Project Record Documents
01782	Operation and Maintenance Data
01820	Demonstration and Training

Appendices

1. AIA Document G701 – Change Order (01250.1.4.1)
2. AIA Document G702 – Application for Payment (01290.1.3.C)
3. AIA Document G703 – Schedule of Values (01290.1.2.B.2)
4. AIA Document G710 – Supplemental Instructions (01250.1.2)
5. AIA Document G714 – Construction Change Directive (01250.1.5.A)
6. AIA Document G716 – RFI Form (01310.1.6.C)
7. CSI Form 1.5A – Subcontractor List (01310.1.3.A)
8. CSI Substitution Request Form 1.5C (00260.1.4)
9. CSI Form 13.1A – Substitution Request Form (01635.1.3.A.1)
10. CSI Log Form 13.2B – RFI Log (01310.1.6.E)
11. CSI Form 13.6A – Change Order Request (01250.1.3.B.7)
12. CSI Form 13.6C – Proposal Worksheet Detail (01250.1.3.A.2.e)
13. CSI Form 13.6D – Proposal Worksheet Summary (01250.1.3.A.2.e)

Attachments

S-101 – Floor Plan and Elevations
S-401 – Details

LEGAL NOTICE

Bucks County Free Library/Holstein White will receive sealed bid responses until 2:00 PM on December 7, 2021 at 150 S. Pine Street, Doylestown, PA 18901 for:

BUCKS COUNTY FREE LIBRARY - BENSALEM BRANCH REAR WALL MODIFICATIONS AND WINDOW ADDITION

A **Mandatory** Pre-Bid Meeting will be held at 12:00 PM on November 16, 2021 at Bensalem Branch Library, 3700 Humeville Road, Bensalem, PA 19020.

A security deposit in the form of a properly executed Bid Bond for 5% of the bid amount is required. Performance and Payment Bonds are required in the amount of 100% of the contract amount. A Maintenance Bond is required in the amount of 10% of the contract. Bidders are advised Prevailing Minimum Wage Rates, determined by the Secretary of Labor and Industry, must be paid to all workers employed on this project.

Get full information and detailed specifications at <http://www.buckslib.org/bids>.

Bids will be addressed and sent:

Mr. John Doran, CFO

Bucks county Free Library

150 S Pine Street

Doylestown, PA 18901

Bids shall be received no later than 2:00 PM on December 7, 2021.

INSTRUCTIONS TO BIDDERS

1. RECEIPT AND OPENING OF BIDS

Bids will be opened at the **time and place indicated** in the **Legal Notice** and read aloud publicly. Unofficial bid results will be made available to Bidders after the opening of Bids by e-mail from the Library or Engineer.

Complete sets of the Bidding Documents stated in the Legal Notice may be obtained from the Library/Holstein White.

Complete sets of Bidding Documents must be used in preparing Bids; neither OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

The OWNER may consider non-responsive any bid not prepared and submitted in accordance with the provisions hereto, and may waive any informalities in or reject any and all bids.

Bids must be submitted with a signed Agreement and a Bid Bond properly signed and sealed by the Bidder and Surety Company.

2. MODIFICATION AND WITHDRAWAL OF BIDS

A Bid may be modified or withdrawn via e-mail at any time up to the bid due date and time.

3. PREPARATION OF BIDS

Bidders will have been assumed to have carefully examined the Contract Documents for the work, all attached hereto, and to have carefully investigated physical conditions at the site and character of the work to be done, and to have inquired fully into the difficulties of construction of the work before preparing their bid. The OWNER will not be responsible for failure of the Contractor to properly estimate such difficulties and costs, or for overlooking any of the requirements of the Contract Documents.

4. INTENT OF CONTRACT DOCUMENTS

The intent of the Contract Documents is to obtain a complete job, satisfactory to the ENGINEER. It shall be understood that the bidder has satisfied himself as to the full requirements of the Contract, and has based his bid upon such understanding. Compensation for all work and materials required to complete the Contract shall be considered included in the prices bid for the items listed in the Pricing Form.

5. ADDENDA AND INTERPRETATIONS

All questions about the meaning or intent of the Bidding Documents are to be submitted via e-mail to Holstein White. Interpretations or clarifications considered necessary in response to such questions will be issued through an Addendum (via e-mail). Questions received less than five (5) days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by OWNER or ENGINEER.

Failure of any bidder to download any such addenda or interpretations shall not relieve said bidder from any obligations under this bid as submitted. All addenda so issued shall become part of the Contract Documents.

6. DISCLOSURE OF CONTENTS

All proposals/bids and other material submitted becomes the property of the Library and may be returned only at the County's option. Information contained in the proposals/bids will not be disclosed during the evaluation process. Under Pennsylvania's "Right to Know" laws, public records are required to be open to reasonable inspection and reproduction. All proposal/bid information, including detailed price and cost information, will be held in confidence during the evaluation process and prior to the time a Notice of Award is issued. Thereafter, all proposals/bids will become public information; subject to inspection and reproduction in accordance with the PA Right to Know Law (Act 3 of 2008), unless otherwise exempt under the Act.

Notwithstanding any terms or conditions contained herein, Consultant/Vendor agrees to comply with all Local, State and Federal laws and regulation. Consultant/Vendor specifically agrees to produce all documents that may be subject to public disclosure pursuant to the Pennsylvania Open Records Law.

Trade secrets and other proprietary data contained in a proposal may be held confidential if such data meets the definitions of confidential proprietary information and/or trade secrets under Section 102 of the Right to Know Law. Material considered confidential by the offeror must be clearly identified and the offeror must include a brief statement that sets out the reasons for the confidentiality and how this information meets the criteria of Section 102 of the law.

7. CONDITIONS OF WORK

Each bidder must inform himself fully of the conditions relating to the construction and labor under which the work will be performed; failure to do so will not relieve the successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of the Contract Documents and to complete the contemplated work for the consideration set forth in his bid.

At the time of the opening of bids, each bidder will be presumed to have inspected physical conditions at the site and to have read and to be thoroughly familiar with the Contract Documents (including all addenda); the failure or omission of any bidder to receive or examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect to his bid.

8. TIME FOR COMPLETING WORK AND LIQUIDATED DAMAGES

The time for completion of the work under this Contract shall be **(120)** calendar days after formal Notice-to-Proceed from the Owner/Library.

All bidders are notified that time is of the essence for this Contract. The successful bidder will be required to prosecute the work so as to ensure its completion within the above number of calendar days set forth. It is mutually agreed that damages to the OWNER for failure of the successful bidder to fully complete the work under this Contract on or before the above-stated date shall be **Two Hundred Dollars (\$200.00)** for each calendar day after said date that shall elapse before the work is fully completed, which amount shall in no event be considered as a penalty, but as liquidated damages due the OWNER because of said delay. The OWNER may retain the amount thereof from any moneys which otherwise would be payable hereunder to the successful bidder.

In addition to the above, in order that the work may be accomplished in the shortest possible time, the successful bidder, weather permitting, shall be required to have qualified workmen with designated foreman at work on-site at all times. Contractor's personnel shall remain on-site throughout the duration of the successful bidder's work. At no time shall Contractor pull off project without the express consent of the OWNER. In addition, no change in foreman shall be permitted without approval from the OWNER. Successful bidder will be required to submit a detailed schedule for completion of work which will be subject to the review and approval of the OWNER.

9. QUALIFICATIONS OF BIDDERS

To demonstrate Bidder's qualifications to perform the Work, Bidder must submit with their Bid a complete Contractor's Qualification Statement. Bidder shall also, submit written evidence such as financial data, previous experience, present commitments and such other data as may be reasonably requested.

10. BID SECURITY

Each bid must be accompanied by a Bid Bond, duly executed by the bidder as principal and having as surety thereon a surety company approved by the OWNER, in an amount not less than five percent (5%) of the amount of the base bid. Bid Bonds will be covered with surety of a company authorized to do business in the Commonwealth of Pennsylvania. Bid Bonds provided as surety will not be returned to the bidder after award unless bidder specifically requests the County do so. **Bids submitted with a Bid Bond must be properly signed and sealed by the Bidder and Surety Company.**

11. CONTRACT

The bidder to whom the Contract is awarded shall, within **ten (10)** days after the official notice of acceptance of their bid, submit all required Bonds and Insurance to the OWNER. The time for such submittal may be extended at the election of the OWNER and for the sole benefit of the OWNER. Failure or refusal of the bidder to do so will be considered an abandonment of the Contract, and the security posted with said bid shall be forfeited to and become the property of the OWNER in an amount not to exceed the difference between the amount specified in said bid and such larger amount for which the OWNER may in good faith contract with another party to perform the work covered by said bid.

It is expressly understood and agreed by the Bidders that the contractual obligations of the Library to the Bidders are effective only after the execution of a contract signed by all parties AND the issuance of a Purchase Order by Library for the goods and/or services requested. It is further expressly understood and agreed the mere issuance of a contract between the Library and a Bidder will not oblige the Library in any fashion unless and until a Purchase Order is received by the Bidder.

12. BONDS AND INSURANCE

The successful bidder must deliver to the OWNER executed certificates of insurance as stipulated in the General Conditions or in the Supplementary Conditions and executed bonds as security for the faithful performance of his Contract and for the payment of all persons performing labor or furnishing materials in connection therewith, and for maintenance of the work for the designated period after it has been accepted by the OWNER.

The Performance and Payment Bonds shall each be in the amount of 100% of the Contract Price and the Maintenance Bond shall be in the amount of 10% of the Contract Price, and shall cover a maintenance period of one year.

All bonds shall be prepared in the form of bonds attached hereto and have as security thereon such surety company or companies as are acceptable to the OWNER and as are authorized to transact business in this state. Alterations made in the terms of the Specifications, and/or quantities of work shall in no way violate the bonds.

13. BASIS OF AWARD

The Contract will be awarded on the basis of competitive bidding to the responsible bidder submitting the lowest responsive bid. The Library reserves the right to award locations individually or combine locations as determined to be in our best interest.

14. REJECTION OF BIDS

The OWNER reserves the right to reject any or all bids, or to accept any bid should it deem it to be for its best interest to do so. Bids which are incomplete, conditional, or obscure, or which contain additions not called for, erasures, alterations or irregularities of any kind, may be rejected as non-responsive. The right to reject or accept bids shall be solely for the benefit of the OWNER, and shall create no right, entitlement or expectation in any bidder.

15. PROGRESS PAYMENTS

Refer to General Conditions for details on progress payments and retainage.

16. TRADE NAMES

Wherever trade names are used either on the Drawings or in the Specifications, it is understood that such names and designations indicate a type or kind of material and/or equipment. Approved equal in kind, type, and/or quality will be accepted at the discretion of the OWNER. The Contractor shall submit manufacturers' specifications, etc., sufficient for the ENGINEER to determine equivalency of material and/or equipment as directed in the Instructions to Bidders, Article 23.

17. POWER OF ATTORNEY

Attorneys-in-fact who execute contract bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

18. PERMITS, APPROVALS AND LICENSES

Each Contractor shall be required to determine the necessity for and obtain all necessary permits, licenses and approvals from the municipality or other public authorities, and shall give all notices required by law or municipal ordinances for this work. The Contractor is solely and exclusively responsible for adherence

to any existing historical, local, state, and federal codes and regulations, and all required permits, including permit costs.

19. PROGRESS SCHEDULE

Within seven (7) consecutive calendar days after the award of the Contract to him, the Contractor shall submit a proposed program of operation, showing clearly how he proposes to conduct the work so as to bring about the completion of his work within the time limit specified. This program shall outline the proposed sequence of operations, the rates of progress and the dates when his work will be sufficiently finished to permit the installation of the work under other contracts. The work under this contract shall be so scheduled that as structures are completed, they can be placed in use or operation with a minimum of delay. The program shall be subject to the approval of the OWNER and shall be updated by the Contractor at any time during performance of the Contract, should the OWNER determine that the Contractor's actual progress does not correspond to that projected in the then-existing progress schedule.

20. OTHER CONTRACTS

Bidders are advised that work other than the work covered under their Contract may be in progress at the site of the work during the performance of the work covered by these documents. Accordingly, bidders are warned that coordination of construction activities at the site must be such as to avoid interference. UNDER NO CIRCUMSTANCES SHALL THE OWNER OR ENGINEER BE HELD RESPONSIBLE TO THE CONTRACTOR FOR DELAYS OR EXTRA WORK OCCASIONED BY INTERFERENCE OF OTHER CONTRACTORS.

21. ESTIMATED QUANTITIES

The quantities given in the Pricing Form, if any, are approximate only, being given as a basis for the uniform comparison of bids, and the OWNER does not expressly or by implication warrant that the actual amount of work will correspond therewith.

22. SAFETY

It shall be the single and sole responsibility of the Contractor to ensure that its activities comply with applicable safety requirements. Neither the ENGINEER nor the OWNER shall owe any duty under this Contract or otherwise to the Contractor or its agents, employees or guests to inspect the work or otherwise ensure compliance by the Contractor with applicable safety requirements. No increases in the contract price or extensions in contract completion time shall be given by the OWNER as the consequence of the Contractor's failure to so comply.

23. PRODUCT SPECIFICATIONS

The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to the OWNER, application for such acceptance will be documented on a Substitution Request Form (Similar to CSI Form 13.1A in Appendices).

The OWNER reserves the right to reject any unspecified product or products submitted which requires changes in design, construction, or other changes which may increase the contract price for the performance of the work. The substitute or "or-equal" product submitted by the Contractor shall meet the requirements of the Specifications and shall, in all respects, be equal to the products specified by name herein. The OWNER shall be the sole judge as to the equality of the proposed alternate product.

24. SUPPLEMENTARY CONDITIONS

The bidder's attention is directed to the Supplementary Conditions of these Specifications. The Supplementary Conditions amend and supplement portions of the General Conditions as required for this project.

25. EMPLOYMENT VERIFICATION ACT

The PA Public Works Employment Verification Act (Act 127 of 2012) will apply to this Contract. This Act requires public works contractors and subcontractors to verify employment eligibility; provides for the powers and duties of the Department of General Services; prescribes sanctions; and establishes good faith immunity under certain circumstances.

26. PAST PERFORMANCE

Any bidder who has demonstrated poor performance during either a current or previous agreement with Bucks County may be considered as an unqualified source and their bid may be rejected. Bucks County reserves the right to exercise this option as is deemed proper and/or necessary.

27. ACCESS TO ACCOUNTING RECORDS

The Contractor shall check all materials, equipment and labor entering into the Work and shall keep such full and detailed accounts as may be necessary for proper financial management under this Agreement, and the system shall be satisfactory to the OWNER. The OWNER or its representative shall be afforded access to all the Contractor's records, books, correspondence, instructions, drawings, receipts vouchers, memoranda, and similar data relating to this contract, and the Contractor shall preserve all such records for a period of three years, or for such longer period as may be required by law, after the final payment.

28. ASSIGNMENT OF REFUND RIGHTS

The Contractor agrees to assign and transfer to the OWNER all its rights to sales and use tax which may be refunded as a result of a claim for refund or materials purchased in connections with this contract. The Contractor further agrees that it will not file a claim for refund for any sales or use tax that is the subject of this assignment.

29. CONTRACTS WITH SUBCONTRACTORS

The Contractor agrees to include the "Access to Accounting Records" and "Assignments of Refund Rights" paragraphs, in full, in any contracts with subcontractors.

30. REQUIRED ATTACHMENTS TO BID

The following documents must be attached to the bid submitted:

- Bid Bond (BB). Financial statement of the surety company, certified copy of Power of Attorney of person who signed the Bid Bond, and officer-signed certificate of surety company that they will provide the required bonds if bidder is awarded the Contract.

- Non-Collusion Affidavit (NCA)
- Signed Agreement

BID BOND

KNOW ALL MEN BY THESE PRESENTS, we, the undersigned, _____
_____ as Principal, and
_____ as Surety, are hereby held and firmly
bound unto Bucks County as Owner, in the penal sum of
_____ (\$ _____)

for the payment of which, well and truly to be made, we hereby jointly and severally bind
ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this _____ day of _____, 20____.

The Condition of the above obligation is such that whereas the Principal has submitted to
_____ a certain Bid, attached hereto and hereby made a
part hereof, to enter into a contract in writing for:

**BUCKS COUNTY FREE LIBRARY -
BENSALEM BRANCH REAR WALL
MODIFICATIONS AND WINDOW ADDITION**

With this addition:

Contract # _____ - _____ Contract

NOW, THEREFORE,

- A.) If said Bid shall be rejected, or in the alternate,
- B.) If said Bid shall be accepted and the Principal shall furnish a bond for his faithful
performance of said Contract, and for the payment of all persons performing labor or
furnishing materials in connection therewith, and shall in all respects perform the
agreement created by the acceptance of said Bid,

Then this obligation shall be void, otherwise the same shall remain in force effect; it being
expressly understood and agreed that the liability of the Surety for any and all claims hereunder
shall, in no event, exceed the penal amount of this obligation as herein stated.

BID BOND

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

The Surety, for value received, hereby stipulates and agrees the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

(Principal)

(Surety)

BY: _____

IMPORTANT:

Surety companies executing bonds must be authorized to do business in the Commonwealth of Pennsylvania.

NON-COLLUSION AFFIDAVIT

BUCKS COUNTY FREE LIBRARY – BENSALEM BRANCH

REAR WALL MODIFICATIONS AND WINDOW ADDITION

With this addition:

Contract # _____ - _____ Contract

State of _____

County of _____

I state I am _____ of _____
(Title) (Name of Firm)

and I am authorized to make this affidavit on behalf of my firm and its owners, directors and officers. I am the person responsible in my firm for the price(s) and the amount of this bid.

I state:

1. The price(s) and amount of this bid have been arrived at independently and without consultation, communication, or agreement with any other contractor, bidder, or potential bidder.
2. Neither the price(s) nor the amount of this bid, and neither the approximate price(s) nor approximate amount of this bid have been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before bid opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a bid higher than this bid, or to submit any intentionally high or non-competitive bid or other form of complementary bid.
4. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other non-competitive bid.

5. _____, its affiliates, subsidiaries, officers,
(Name of My Firm)
directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract, except as follows:

I state _____ understands and acknowledges the above
(Name of My Firm)
representations are material and important, and will be relied on by the Bucks County
Board of Commissioners in awarding the contract(s) for which this bid is submitted.

I understand and my firm understands any misstatement in this affidavit is and shall be
treated as fraudulent concealment from Bucks County of the true facts relating to the
submission of bids for this contract.

(Name and Company Position)

Sworn to and subscribed before me this _____ day of _____, 20__

My commission Expires: _____

Notary Public: _____

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

1. This Non-Collusion Affidavit is material to any contract awarded pursuant to this bid. According to the Pennsylvania Anti-bid-Rigging Act, 73 P.S. 1611 et seq., governmental agencies may require Non-Collusion Affidavits to be submitted together with bids.
2. This Non-Collusion Affidavit must be executed by the member, officer, or employee of the bidder, who makes the final decision on prices and the amount quoted in the bid.
3. Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the bidder with responsibilities for the preparation approval, or submission of the bid.
4. In the case of bid submitted by a joint venture, each party to the venture must identified in the bid documents, and an Affidavit must be submitted separately on behalf of each party.
5. The term “complementary bid”, as used in the Affidavit, has the meaning commonly associated with that term in the bidding process, and includes the knowing

submission of bids higher than the bid of another firm, any intentionally high or noncompetitive bid, and any other form of bid submitted for the purpose of giving false appearance of competition.

6. Failure to file an Affidavit in compliance with these instructions will result in disqualification of the bid.

AGREEMENT

BUCKS COUNTY FREE LIBRARY – BENSALEM BRANCH

REAR WALL MODIFICATIONS AND WINDOW ADDITION

With this addition:

Contract # _____ - _____ Contract

THIS AGREEMENT made this _____ day of _____, 20____ by and between Bucks County Free Library, 150 S Pine Street, Doylestown, PA 18901, hereinafter “Library”, and

_____ hereinafter “Contractor”. The Library and the Contractor in consideration of the mutual promises contained in this Agreement, and intending to be legally bound, agree as follow:

GENERAL PROVISIONS:

The Contractor shall:

- (a) have charge of and be responsible for the entire work for which he has contracted until its final completion and acceptance by the Library;
- (b) be held liable for any defects which may appear in the material he has furnished or in his work for a period of one (1) year after final acceptance by the Library;
- (c) be solely liable for any damage occasioned by his work to the property of the Library and others; and,
- (d) upon conclusion, clean up the ground worked over.

RESPONSIBILITIES OF THE CONTRACTOR:

The Contractor agrees to pay for all materials furnished and services rendered for the performance of the Contract and any person or corporation furnishing materials or rendering services to the Contractor as though such person or corporation were expressly named herein, provided the action is brought within one (1) year after the time and cause of the action accrued.

The Contractor shall defend, indemnify and save harmless the Library and Engineer, their officers, employees and agents from and against any and all claims, demands, suits, judgments, costs and expenses of any kind arising out of the work to be performed hereunder and resulting in

METAL DUCTS

AGREEMENT

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

23313-1
06-1

any injury (including death) to any person or damage to any property (including loss of use) caused by any act or failure to act by the Contractor, its officers, employees, agents or guests.

It is also agreed and understood acceptance of final payment by the Contractor shall be considered as a release in full of any claim against the Library out of, or by reason of, the work done and materials furnished under this Contract.

The Contractor shall cooperate with the Library in carrying on the work, without interrupting any service to the public.

BONDS AND INSURANCE CERTIFICATES

The Contract documents are not complete until the Library has received satisfactory performance, material payment bonds executed by responsible surety companies listed to do business in the Commonwealth of Pennsylvania and acceptable to the Library; together with Certificates of Insurance in respect to the insurance required by these specifications under policies issued by companies authorized to do business in the Commonwealth of Pennsylvania and acceptable to the Library.

FAILURE TO SUPPLY PROOF OF INSURANCE SHALL CONSTITUTE MATERIAL BREACH OF THIS AGREEMENT. Remedies for such material breach include termination of agreement by Library and / or the withholding of payments by the Library until such time that material breach is cured.

STARTING AND PROSECUTION OF WORK

The Bidder agrees to begin the work within seven (7) consecutive calendar days after receipt of Notice to Proceed, and to prosecute it expeditiously to a conclusion, using an adequate number of competent men, suitable equipment and machinery at all times, and working each working day weather conditions permit.

WORK INCLUDED IN THE CONTRACT:

The Contract shall consist of furnishing all labor, superintendence, materials, equipment, tools and other facilities, and all things necessary and proper for performance of the work as shown on the Contract Drawings and as described in these Specifications (prepared by the Engineer) and the Advertisement for Bid.

CONTRACT DOCUMENTS:

METAL DUCTS

AGREEMENT
Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

23313-2
06-2

The Contract Documents consist of this Agreement, the General Terms of the Contract, the Contract Drawings, the Specifications, all Addenda issued prior to bidding and all modifications issued after execution of this Agreement. These form the Contract, and all are as fully a part of the Contract if attached to this Agreement or repeated herein. The Library shall furnish the Contractor up to three (3) copies of the Contract Documents for completion of the work.

MATERIALS TO BE FURNISHED BY THE LIBRARY:

No materials shall be furnished by the Library.

WORK DONE BY THE LIBRARY:

No work shall be done by the Library in connection with this Contract.

PAYMENTS:

In consideration of the Contractor faithfully complying with the terms and stipulations of the Contract, the Library covenants and agrees to pay said Contractor the sum set fourth in the bid of said Contractor, and also pay for extra work that may be agreed upon in writing, and said prices shall be full compensation under the terms of the Contract.

APPLICABLE LAW:

This Agreement shall be governed by and interpreted and enforced in accordance with the laws of the Commonwealth of Pennsylvania (without regard to any conflict of law's provisions) and the decisions of the Pennsylvania courts. The Supplier consents to the venue and jurisdiction of the Court of Common Pleas of Bucks County in Pennsylvania, waiving any claim or defense that such forum is not convenient or proper. The Supplier agrees that any such court shall have in personal jurisdiction over it, and consents to service of process in any manner authorized by Pennsylvania law.

INTEGRATION:

The Agreement, including all referenced documents and attachments, constitutes the entire agreement between the parties. No agent, representative, employee or officer of either the Library or Supplier has authority to make, or had made, any statement, agreement or representation, oral or written, in connection with the Agreement, which in any way can be deemed to modify, add to or detract from, or otherwise change or alter its terms and conditions unless otherwise explicitly stated within the agreement. No negotiations between the parties, nor any custom or usage, shall be permitted to modify or contradict any of the terms and conditions of the Agreement. No modifications, alterations, changes, or waiver to the Agreement or any of its terms shall be valid

METAL DUCTS

AGREEMENT
Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

23313-3
06-3

or binding unless accomplished by a written amendment signed by both parties. All such amendments will be made pursuant to the terms of the Agreement or using the appropriate Library form.

CONTROLLING TERMS AND CONDITIONS:

The terms and conditions of this Agreement shall be the exclusive terms of agreement between the Supplier and the Library. Other terms and conditions or additional terms and conditions included or referenced in the Supplier's invoices, business forms, or other documentation shall not become part of the parties' agreement and shall be disregarded by the parties, unenforceable by the Supplier and not binding on the Library.

RIGHT TO KNOW LAW:

- A. The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, ("RTKL") applies to this Agreement.
- B. If the Library needs the Supplier's assistance in any matter arising out of the RTKL related to this Agreement, it shall notify the Supplier using the legal contact information provided in this Agreement. The Supplier, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Library.
- C. Upon written notification from the Library that it requires the Supplier's assistance in responding to a request under the RTKL for information related to this Agreement that may be in the Supplier's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Supplier shall:
 - 1) Provide the Library, within ten calendar days after receipt of written notification, access to, and copies of, any document or information in the Supplier's possession arising out of this Agreement that the Library reasonably believes is Requested Information and may be a public record under the RTKL; and
 - 2) Provide such other assistance as the Library may reasonably request, in order to comply with the RTKL with respect to this Agreement.
- D. If the Supplier considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Supplier considers exempt from production under the RTKL, the Supplier must notify the Library and provide, within seven calendar days of receiving the written notification, a redacted copy of such document along with a written statement signed by a representative of the supplier explaining why the requested material is exempt from public disclosure under the RTKL.
- E. The Library will rely upon the written statement from the Supplier in denying a RTKL request for the Requested Information unless the Library determines that the Requested

METAL DUCTS

Information is clearly not protected from disclosure under the RTKL. Should the Library determine that the Requested Information is clearly not exempt from disclosure, the Supplier shall provide the Requested Information within five business days of receipt of written notification of the Library's determination.

- F. If the Supplier fails to provide the Requested Information within the time period required by these provisions, the Supplier shall indemnify defend and hold the Library harmless for any damages, penalties, costs, detriment or harm that the Library may incur as a result of the Supplier's failure, including any statutory damages assessed against the Library.
- G. The Supplier shall have the obligation to request participation and defend the decision issued by the Bucks County Office of Open Records in any appeal to the Pennsylvania Office of Open Records and subsequent appeal regarding documents of Supplier.
- H. The Supplier's duties relating to the RTKL are continuing duties that survive the expiration of this Agreement and shall continue as long as the Supplier has Requested Information in its possession.

With this addition:

Contract # _____ - _____ Contract

BID PRICING:

TOTAL AMOUNT OF BID:

\$ _____
(Written)

\$ _____
(Numbers)

IN WITNESS WHEREOF: The parties hereto have caused the signature of their proper officers and seals to be affixed thereto:

ATTEST:

METAL DUCTS

AGREEMENT
Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

23313-5
06-5

_____ BY: _____

ATTEST:

_____ BY: _____
Contractor

DATE: _____

Note: An executed copy of this Agreement shall be provided with the Bid.

METAL DUCTS

AGREEMENT
Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

23313-6
06-6

PUBLIC WORKS EMPLOYMENT VERIFICATION ACT

In accordance with Act of July 5, 2012 (P.L. 1086, No. 127), known as the "Public Works Employment Verification Act" (43 P.S. 167.1 et. seq.), CONTRACTOR and subcontractors (if any) shall verify employment eligibility. An employee is an individual hired by CONTRACTOR or a subcontractor for whom CONTRACTOR or subcontractor is required by law to file a Form W-2 with the Internal Revenue Service. The Act does not apply to material suppliers for projects.

CONTRACTOR and subcontractors shall participate in EVP and shall, subject to the requirements of Federal law governing the use of EVP, use EVP to verify employment eligibility of each new employee (EVP is the E-Verify Program operated by the Department of Homeland Security that electronically verifies employment eligibility for employees). The Department of General Services of the Commonwealth shall post on its publicly accessible Internet website information regarding the requirements of Federal law governing the use of EVP. In conducting the verification required, CONTRACTOR and subcontractors shall not discriminate against an employee on the basis of race, ethnicity, color or national origin.

As a precondition of being awarded a contract for a Public Work, as defined in the Pennsylvania Prevailing Wage Act, 43 P.S. 165.1 et. seq.; or with respect such a contract that was awarded prior to the effective date identified in Section 20 of the Act but has not yet been executed, prior to the execution of the contract, CONTRACTOR shall provide OWNER with a verification form described in Subsection (c) of Section 4, acknowledging its responsibilities under and its compliance with Section 3 of the Act. Contracts between CONTRACTOR and subcontractors shall contain information about the requirements of the Act.

Prior to commencing work on a public works project, subcontractor(s) shall provide the OWNER with a verification form described in Subsection (c) of Section 4 of the Act acknowledging subcontractor's responsibilities and compliance with Section 3 of the Act. Contracts between a subcontractor and its subcontractors shall contain information about the requirements of the Act.

The verification required by Section 4 of the Act shall be in a form prescribed by the Secretary of General Services of the Commonwealth and shall be posted on the Internet, and shall comply with the following additional requirements:

- (1) The statement shall include a certification that the information in the statement is true and correct and the individual signing the statement understands the submission of false or misleading information in connection with the verification shall subject the individual and the CONTRACTOR or subcontractor, as the case may be, to sanctions provided by law.
- (2) The statement shall be signed by a representative of the CONTRACTOR or subcontractor, as applicable, who has sufficient knowledge and authority to make the representations and certifications contained in the statement.

The Public Works Employment Verification Form is on the next page.



COMMONWEALTH OF PENNSYLVANIA

PUBLIC WORKS EMPLOYMENT VERIFICATION FORM

Date _____

Business or Organization Name (Employer) _____

Address _____

City _____ State _____ Zip Code _____

Contractor Subcontractor (check one)

Contracting Public Body _____

Contract/Project No _____

Project Description _____

Project Location _____

As a contractor/subcontractor for the above referenced public works contract, I hereby affirm that as of the above date, our company is in compliance with the Public Works Employment Verification Act ('the Act') through utilization of the federal E-Verify Program (EVP) operated by the United States Department of Homeland Security. To the best of my/our knowledge, all employees hired post January 1, 2013 are authorized to work in the United States.

It is also agreed to that all public works contractors/subcontractors will utilize the federal EVP to verify the employment eligibility of each new hire within five (5) business days of the employee start date throughout the duration of the public works contract. Documentation confirming the use of the federal EVP upon each new hire shall be maintained in the event of an investigation or audit.

I, _____, authorized representative of the company above, attest that the information contained in this verification form is true and correct and understand that the submission of false or misleading information in connection with the above verification shall be subject to sanctions provided by law.

Authorized Representative Signature

PAYMENT BOND

KNOWN ALL MEN, we _____, as
Principal, and _____ as
Surety, are held and firmly bound unto Bucks County Free Library, 150 S Pine Street,
Doylestown, PA 18901 and its successors and assigns (hereinafter called the Obligee), in
the just sum of:

_____ (\$_____)

Written

Figures

Lawful money of the United States of America, for the payment of which sum truly to be
made we bind ourselves and each of our respective heirs, personal representatives,
successors and assigns joints and severally by these presents, this _____ day of
_____, 20_____.

WHEREAS, the Principal has entered into a written Agreement with the Obligee, dated
_____, _____, 20_____ for performance of the Contract work in
connection with the **“BUCKS COUNTY FREE LIBRARYBENSALEM BRANCH
REAR WALL MODIFICATIONS AND WINDOW ADDITION**

With this addition:

Contract # _____ - _____ Contract
Contract in connection with Obligee (which agreement together with the specifications
therefore, including all related drawings and documents) and such alterations as may be
made in such specifications as therein provided, are hereby made a part hereof as fully as
if set out herein, and shall together be hereinafter referred to as the “Contract”; and it was
a condition of the award of said Contract that this bond be furnished.

THEREFORE, THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE:

That, if the Principal and all the Principal’s subcontractors shall promptly make payment
for all material furnished and labor supplied or performed in the prosecution of the work
under the Contract, whether or not said material or labor enter into and become

component parts of said work, then this obligation shall be void; but otherwise it shall remain in full force, "Labor" and "materials", as used in this Bond, shall include public utility services and reasonable rentals of equipment, but only for periods when the equipment is rented is actually used at the site of the work.

The Principal and Surety, for value received, hereby agree no change, extension of time, alterations or additions to the terms of any of the Contract Documents or to the items to be provided there under nor any forbearance by either the Obligee or the Principal to the other, shall in any way affect the obligation of either of them on this bond, and they hereby waives notice of any such change, extension of time, alteration or addition.

The Principal and Surety further acknowledge and agree this Bond is furnished pursuant to requirements of the Public Works Contractors' Bond Law of 1967, solely for the protection of claimants supplying labor or material to the Principal or any of the Principal's subcontractors in the prosecution of the work under the Contract, and this Bond is subject to all provisions of said Law as fully as though said provisions were set fourth herein at length. They also agree any claimant entitled under the said Law to sue on this Bond may use a copy of this obligation, certified by the Obligee, for the purpose of establishing his, or its or their claim without requiring production in court of an executed original, and that action by one or more claimants shall not bar any subsequent or concurrent action(s) by the same or other claimant(s). However, the Obligee shall in no event be liable for payment of any costs or expenses of any claimant's suit.

Both Principal and Surety acknowledge all references herein to the Principal, in singular form, shall include plural, as may be appropriate to the Principal.

IN WITNESS WHEREOF, The Principal and Surety, intending to be legally bound, have executed this bond the day and year aforementioned.

Principal

By: _____
Attorney-in-Fact, Surety

PERFORMANCE BOND

KNOWN ALL MEN, we _____, as
Principal, and _____ as
Surety, are held and firmly bound unto Bucks County Free Library, 150 S Pine Street,
Doylestown, PA 18901 and its successors and assigns (hereinafter called the Obligee), in
the just sum of:

_____ (\$_____)

Written

Figures

for faithful performance of the Contract as specified below, in lawful money of the
United States of America, for the payment of which sum truly to be made, we bind
ourselves and each of our respective heirs, personal representatives, successors and
assigns, joints and severally, firmly by these presents, this _____ day of
_____, 20____.

WHEREAS, the Principal has entered into a written Agreement with the Obligee, dated
_____, _____, 20____ for performance of the Contract work in
connection with the **“BUCKS COUNTY FREE LIBRARY BENSLEM BRANCH
REAR WALL MODIFICATIONS AND WINDOW ADDITION**

With this addition:

Contract # _____ - _____ Contract

Contract in connection with Obligee (which agreement together with the specifications
therefore, including all related drawings and documents) and such alterations as may be
made in such specifications as therein provided, are hereby made a part hereof as fully as
if set out herein, and shall together be hereinafter referred to as the “Contract”; and it was
a condition of the award of said Contract that this bond be furnished.

THEREFORE, THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE:

That, if the Principal shall faithfully perform the Contract (including any alterations for
additions thereto) in accordance with the specifications and conditions of the Contract,

PERFORMANCE BOND
Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

and satisfy all claims and demands to persons or property, or for wrongful death in the performance thereof, and shall fully indemnify and save harmless the Obligees from any and all costs and damage which the Obligees may suffer, and fully reimburse and repay the Obligees any and all outlay and expense which it may incur, by reasons of any such default, then this part of the Obligation shall be void, but otherwise it shall remain in full force.

The Surety, for value received, hereby agrees no change, extension of time, alterations or additions to the terms of any of the Contract Documents or to the items to be provided thereunder nor any forbearance by either the Obligees or the Principal to the other, shall in any way affect its obligation on this bond, and it hereby waives notice of any such change, extension of time, alteration or addition.

Both Principal and Surety acknowledge all references herein to the Principal, in singular form, shall include plural, as may be appropriate to the Principal.

IN WITNESS WHEREOF, The Principal and Surety, intending to be legally bound, have executed this bond the day and year aforementioned.

Principal

By: _____
Attorney-in-Fact, Surety

MAINTENANCE BOND

KNOWN ALL MEN, we _____, as Principal,
and _____, as Surety, are
held and firmly bound unto Bucks County Free Library, 150 S Pine Street, Doylestown,
PA 18901 and its successors and assigns (hereinafter called the Obligee), in the just sums
of:

_____ (\$_____)
Written Figures

for maintenance as specified below:

in lawful money of the United States of America, for the payment of which sum truly to be
made, we bind ourselves and each of our respective heirs, personal representatives,
successors and assigns joints and severally, firmly by these presents, this _____ day of
_____, 20____.

WHEREAS, the Principal has entered into a written Agreement with the Obligee, dated
as of _____, _____, 20____ for performance of the Contract work in

connection with the "Contract for the **"BUCKS COUNTY FREE LIBRARY
BENSALEM BRANCH REAR WALL MODIFICATIONS AND WINDOW
ADDITION**

With this addition:

Contract # _____ - _____ Contract

together with the plans and specifications, therefore, (including all related drawings and
documents) and such alterations as may be made in such plans and specifications as
therein provided, are hereby made a part hereof as fully as if set out herein, and shall
together be hereinafter referred to as the "Contract"; and it was a condition of the award
of said Contract that this bond be furnished.

THEREFORE, THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE:

That, if the Principal shall remedy without cost to the Obligee any defects which may
develop during a period of one (1) year from the date of completion and acceptance of the

work performed under the Contract, provided that such defects in the judgment of the Obligee or its successor, are caused by defective or inferior materials or workmanship, then this part of the obligation shall be void, but otherwise it shall remain in full force. However, the Principal agrees the foregoing one-year limitation shall apply to the surety only and shall not relieve the Principal of any liability otherwise provided by law or by the Contract Documents.

The Principal and Surety, for value received, hereby agrees no change, extension of time, alterations or additions to the terms of any of the Contract Documents or to the items to be provided thereunder nor any forbearance by either the Obligee or the Principal to the other, shall in any way affect the obligation of either of them on this bond, and they hereby waives notice of any such change, extension of time, alteration or addition.

Both Principal and Surety acknowledge all references herein to the Principal, in singular form, shall include plural, as may be appropriate to the Principal.

IN WITNESS WHEREOF, The Principal and Surety, intending to be legally bound, have executed this bond the day and year aforementioned.

Principal

By: _____
Attorney-in-Fact, Surety

CONTRACTOR'S AFFIDAVIT OF PAYMENTS OF DEBTS AND CLAIMS

STATE OF: _____

COUNTY OF: _____

**CONTRACT: BUCKS COUNTY FREE LIBRARY BENSALEM BRANCH REAR
WALL MODIFICATIONS AND WINDOW ADDITION**

Before me, the undersigned, a _____ (Notary Public, Justice of
the Peace, or Alderman), in and for said County and State, personally appeared

_____ (Individual, Partner, or Duly Authorized
Representative of Corporate Contractor), who, being duly sworn according to law, deposes and
says all labor, material and outstanding claims and indebtedness of whatever nature arising out of
the performance of the _____, 20__ Contract of Bucks County Free
Library, 150 S Pine Street, Doylestown, PA 18901 (Owner) with

_____ (Contractor) have been paid in full.

(Individual, Partner, or Duly Authorized Representative of Corporate Contractor)

Subscribed and Sworn to me this _____ day of _____, 20__

Notary Public: _____

My Commission Expires: _____

CONSENT OF SURETY COMPANY TO FINAL PAYMENT

In accordance with the provisions of the contract dated _____,
20____ between _____(Contractor), and Bucks
County Free Library, 150 S Pine Street, Doylestown, PA 18901 (Owner).

The _____(Name of Surety),

Surety on the Bond of _____(Contractor)

After careful examination of the books and records of said Contractor, and after receipt of
Affidavit and Releases, satisfies this Company all claims for labor and materials have
been satisfactorily settled, hereby approved of the final payment of said Contractor, and
by these presents witnesseth payment to the Contractor of the final estimates shall not
relieve the Surety Company of any of its obligations to the Bucks County Board of
Commissioners for Contract of **“BUCKS COUNTY FREE LIBRARY BENSALEM
BRANCH REAR WALL MODIFICATIONS AND WINDOW ADDITION**

With this addition:

Contract # _____ - _____ Contract
as set fourth in the said Surety Company's Bond No. _____.

IN WITNESS WHEREOF, the said Surety Company has hereunto set its hand and seal
this _____ day of _____, 20____.

WITNESS:

(Name of Surety)

BY: _____

(Attorney-in-Fact)

CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

**PROJECT: BUCKS COUNTY FREE LIBRARY BENSALM BRANCH REAR
WALL MODIFICATIONS AND WINDOW ADDITION**

TO: Bucks County Free Library
150 S Pine Street
Doylestown, PA 18901

Contract For: _____

Contract Date: _____

State of: _____

County of: _____

The undersigned hereby certifies to the best of his knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of work, labor or services who have or may have liens against any property of the Owner arising in any manner out of performance of the Contract referenced above.

EXCEPTIONS (If none, write "None". If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exemption.)

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Contractor's Release of or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

Contractor: _____

Address: _____

By: _____

Subscribed and Sworn to me this _____ day of _____, 20__.

Notary Public: _____

My Commission Expires: _____

CONTRACTORS AFFIDAVIT OF RELEASE OF LIENS
Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

CONTRACTOR'S RELEASE OF LIENS

The undersigned, _____, hereinafter known as CONTRACTOR, for itself, its subcontractors, and all parties acting through or under it, has furnished labor, equipment and materials, for the erection and construction of certain improvements consisting of the **“BUCKS COUNTY FREE LIBRARY BENSALEM BRANCH REAR WALL MODIFICATIONS AND WINDOW ADDITION**

With this addition:

Contract # _____ - _____ Contract
for Bucks County Free Library, 150 S Pine Street, Doylestown, PA 18901, hereinafter known as OWNER, and has agreed to release all liens which he or any of them have or might have on the improvement and the property by reason of materials furnished or work performed for erecting and constructing the improvement; and

NOW, contingent upon receipt of final payment from the OWNER, the undersigned CONTRACTOR, for itself, its subcontractors and all parties acting through or under it, hereby remise, release and forever quit claim to OWNER, his heirs and assigns all liens, claims and demands which he or any of them now have or might or could have on or against the interest of OWNER in the improvement and the property for labor or materials previously or subsequently furnished for erecting and constructing the improvement; so OWNER, his heirs and assigns shall hold and enjoy the improvement and the property free and clear from all liens, claims or demands for labor or materials furnished by the undersigned CONTRACTOR, which are hereby released and discharged.

CONTRACTOR: _____

ADDRESS: _____

BY: _____

TITLE: _____

Subscribed and Sworn to me this _____ day of _____, 20____.

Notary Public: _____

My Commission Expires: _____



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	PRODUCER CUSTOMER ID #:	
	INSURER(S) AFFORDING COVERAGE	
	NAIC #	
INSURED	INSURER P	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY					EACH OCCURRENCE \$ Gen. Cond.
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence) \$
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person) \$
	GEN'L AGGREGATE LIMIT APPLIES PER:					PERSONAL & ADV INJURY \$ Gen. Cond.
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC					GENERAL AGGREGATE \$ Gen. Cond.
						PRODUCTS - COMP/OP AGG \$ Gen. Cond.
						\$
	AUTOMOBILE LIABILITY					COMBINED SINGLE LIMIT (Ea accident) \$ Gen. Cond.
	<input checked="" type="checkbox"/> ANY AUTO					BODILY INJURY (Per person) \$ Gen. Cond.
	ALL OWNED AUTOS					BODILY INJURY (Per accident) \$ Gen. Cond.
	SCHEDULED AUTOS					PROPERTY DAMAGE (Per accident) \$ Gen. Cond.
	HIRED AUTOS					\$
	NON-OWNED AUTOS					\$
						\$
	<input checked="" type="checkbox"/> UMBRELLA LIAB	<input type="checkbox"/> OCCUR				EACH OCCURRENCE \$ Gen. Cond.
	EXCESS LIAB	<input type="checkbox"/> CLAIMS-MADE				AGGREGATE \$ Gen. Cond.
	DEDUCTIBLE					\$
	RETENTION \$					\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY					<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y/N <input type="checkbox"/> N/A				E.L. EACH ACCIDENT \$ Gen. Cond.
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE \$ Gen. Cond.
						E.L. DISEASE - POLICY LIMIT \$ Gen. Cond.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, If more space is required)

When it applies, Addition Insured shall read exactly as follows- The County of Bucks, its Board of Commissioners, employees, directors, officers, departments and divisions; and Holstein White, it's employees, directors and officers shall be included as additional insured with respect to the work performed for thir Agreement: HVAC Replacement Bensalem, Doylestown and Perkasio Branch Libraries, Spec #44-10/17.

CERTIFICATE HOLDER**CANCELLATION**

County of Bucks Board of Commissioners
Attn: Office of the Controller
55 East Court Street
Doylestown, PA 18901

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.


AUTHORIZED REPRESENTATIVE

© 1988-2009 ACORD CORPORATION. All rights reserved.

WEEKLY PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

☐ Contractor or ☐ Subcontractor (Please check one)

ALL INFORMATION MUST BE COMPLETED

CONTRACTOR ADDRESS		SUBCONTRACTOR ADDRESS		 DEPARTMENT OF LABOR & INDUSTRY <small>COMMONWEALTH OF PENNSYLVANIA</small> BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGE DIVISION 7TH & FORSTER STREETS HARRISBURG PA 17120 1-800-932-0665
PAYROLL NUMBER	WEEK ENDING DATE	PROJECT AND LOCATION Bucks County HVAC Replacement: Bensalem, Doylestown and Perkasi Branch Libraries		
		PROJECT SERIAL #	PROJECT # 44-10/17	

EMPLOYEE NAME	APPR. RATE (%)	WORK CLASSIFICATION	DAY AND DATE							S- TIME 0- TIME	BASE HOURLY RATE	TOTAL FRINGE BENEFITS (C=Cash) (FB=Contributions)*	TOTAL DEDUCTIONS	GROSS PAY FOR PREVAILING RATE JOB(S)	CHECK
			HOURS WORKED EACH DAY												
											C:				
											FB:				
											C:				
											FB:				
											C:				
											FB:				
											C:				
											FB:				
											C:				
											FB:				

*SEE REVERSE SIDE

PAGE NUMBER _____ OF _____

CONTRACTOR'S QUALIFICATION STATEMENT

(NOTE: Attach separate sheets as required.)

**BUCKS COUNTY FREE LIBRARY BENSLEM BRANCH REAR WALL
MODIFICATIONS AND WINDOW ADDITION**

The undersigned certifies under oath the truth and correctness of all statements of all answers to questions made hereinafter:

TO:

Submitted By: _____ Corporation: _____
Name: _____ Partnership: _____
Address: _____ Individual: _____
Principle Office: _____ Joint Venture: _____
Other: _____

1.0 How many years has your organization been in business as a contractor? _____

2.0 How many years has your organization been in business under its present business name?

3.0 If a corporation, answer the following:

3.1 Date of incorporation: _____

3.2 State of incorporation: _____

3.3 President's name: _____

3.4 Vice President's name(s): _____

3.5 Secretary or Clerk's name: _____

3.6 Treasurer's name: _____

3.7 List name and address of all parties holding greater than ten percent (10%) interest in the corporation: _____

4.0 If individual or partnership, answer the following:

4.1 Date of organization: _____

4.2 BUCKS COUNTY FREE LIBRARY Name and address of all Partners: (State whether general or limited partnership):

5.0 If other than corporation or partnership, describe organization and name principals:

6.0 We normally perform _____ % of the work with our own forces. List trades below:

7.0 Have you ever failed to complete any work awarded to you? If so, note when, and why.

8.0 Has any officer or partner of your organization ever been an officer or partner of another organization that failed to complete a construction project? If so, state circumstances.

9.0 List name of project, owner, architect, contract amount, percent complete and scheduled completion of the comparable construction projects your organization has in progress on this date:

10.0 List the names of project, owner, architect, contract amount, date of completion, percent of work with own forces of the projects your organization has completed in the past two (2) years which equal at least fifty percent (50%) of the total amount Bid for the project under consideration:

11.0 List the construction experience of the principal individuals of your organization:

12.0 List the categories in which your organization is legally qualified to do business in Pennsylvania:

13.0 Trade References:

14.0 Bank References:

15.0 Name of Bonding Company and name and address of agent:

16.0 Dated at _____ this _____ day of _____, 20__.

Name of Organization: _____

By: _____

Title: _____

17.0 M _____, being duly sworn, deposes and says he/she is the _____ of Contractor(s), and answers to the foregoing questions and all statements herein contained are true and correct.

Subscribed and Sworn before me this _____ day of _____, 20__.

Notary Public: _____

My Commission Expires: _____

GENERAL CONDITIONS

BUCKS COUNTY FREE LIBRARY BENSALEM BRANCH REAR WALL MODIFICATIONS AND WINDOW ADDITION

SPEC #10-29/21

**BENSALEM BRANCH LIBRARY
3700 HULMEVILLE ROAD
BENSALEM, PA 19020**

**LEVITTOWN BRANCH LIBRARY
7311 NEW FALLS ROAD
LEVITTOWN, PA 19055**

1. **"OWNER" DEFINED**

Wherever the word "Owner" is used in these Specifications, it shall be understood to mean:

Bucks County Free Library
150 S Pine Street
Doylestown, PA 18901

2. **"ENGINEER" DEFINED**

Wherever the word "Engineer" is used in these Specifications, it shall be understood to mean:

Holstein White Engineers
210 E. Street Road
Feasterville, PA 19053

3. **"CONTRACTOR" DEFINED**

Wherever the word "Contractor" is used in these Specifications, it shall be understood to mean the person, firm or corporation to whom the execution of any part of the work herein contemplated shall be awarded by the Owner.

4. **SPECIFICATIONS AND DRAWINGS -COMPREHENSIVE**

All of the contemplated installation and each and every part thereof, shall be subject to all of the requirements throughout these specifications - which the Engineer may deem pertinent. All of the installations to be furnished and all of the work to be done by the Contractor shall strictly conform to these specifications, to the general and detailed drawings made for the work and forming part thereof, and to such further drawings as may be furnished to the Contractor by the Engineer at any time during the progress of the work and prior to its entire completion.

5. **PRECEDENCE**

The Drawings and Specifications are intended to be consistent with each other, but should there be any discrepancy, the Specifications shall take precedence. Technical specifications shall take precedence over general specifications or conditions. The Contractor shall closely examine the Specifications and Drawings prior to commencing work under this Agreement and shall inform the Engineer of discrepancies therein. Except in the case of apparent clerical error or inaccuracy, the figures and notes on the Drawings shall take precedence over measurements by scale. Should the Contractor observe any apparent discrepancy between any point, line or elevation and these Specifications or the Drawings, it shall be the duty of the Contractor to immediately report same to the Engineer.

6. SPECIFICATIONS AND DRAWINGS ON THE JOB

The Contractor or the representatives of the Contractor shall always have on hand on the job site a copy of the Specifications, Drawings, and approved shop drawings for ready reference of the Engineer.

7. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

Within seven (7) days after the effective date of the Agreement, the Contractor shall submit for review a preliminary schedule of shop drawing submissions.

The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the work of the constructor or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents.

By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Engineer's review of Shop Drawings, Product Data or Samples, unless the Contractor has specifically informed the Engineer in writing of such deviation at the time of submission and the Engineer has reviewed the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Engineer's review thereof.

The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been reviewed by the Engineer.

8. ENGINEER'S REVIEW

The review of the Engineer of drawings or other data furnished by the Contractor shall in no way relieve the Contractor from responsibility for the correctness thereof, or for the accurate and satisfactory execution of the Contract.

9. LOCATION

The entire installation during its progress shall be accurately located in plan and elevation as shown on the Drawings, or specified or as located, staked out, marked, or otherwise directed by the Engineer. When directed to do so by the Engineer, the Contractor shall provide and have at hand on the job site, all necessary stakes, straight edges, levels, chalk lines, sounding rods, augers, and all other implements and materials which the Engineer or his representative may desire to use in the location or measurement of the work by the Contractor and in making any tests thereof. The Contractor shall furnish such man or men as the Engineer or his representative may desire to assist in laying out or measuring up all or any portions of the work of the Contractor, and in making any tests thereof.

10. STAKES AND MARKS

The Contractor shall place distinct marks at or near all points where any and all buried or concealed appliances or fittings are located, or at such other points where it may be important to preserve or which might be difficult to find without such marks. Any stakes or other marks set by the Engineer, shall be under the care of the Contractor and if any stake or any mark shall be disturbed or removed, except when authorized by the Engineer, the cost of replacing the said stake or mark shall be paid by the Contractor.

11. LEGAL REQUIREMENTS

The Contractor shall conform to all general, state and local legal requirements having to do with the installation, and shall protect and defend the Owner against any claim for any accident or damage resulting from any violation thereof by the Contractor. The Contractor shall, without additional expense to the Owner, obtain all required licenses and permits.

12. LIENS

The Contractor, for itself, its subcontractors and all parties acting through or under it, covenants and agrees that no mechanics' claims or liens shall be filed or maintained by it, them or any of them against the work and the lot of ground appurtenant thereto for or on account of the work done or materials furnished by it, them or any of them, under this Contract or otherwise, for, towards, in or about the work; and the Contractor, for itself, its subcontractors, and others under it, hereby expressly waives and relinquishes the right to have, file or maintain any mechanics' liens or claim against the work, and the lot of ground appurtenant thereto, and further agrees that this waiver of the right of lien shall be an independent covenant and shall operate and be effective as well with respect to work and labor done and materials furnished under any supplemental Contract, verbal or written, or Contract for extra work, as to work and labor done and materials furnished under this Contract. Before the final payment is made to the Contractor, he shall, if required by the Owner, furnish the Owner with a complete Release of Liens, or other acceptable evidence that all payments have been made in full for all labor and materials used in the work. In case any lien, stop notice or claim for work, labor or materials done, performed, or delivered and used in the prosecution of the work herein provided for shall be filed (whether in strictly legal form or otherwise) then, in that case, the Owner may retain from any moneys due the Contractor a sum equal to the amount of said claim or notice, until such time as the Contractor shall furnish a receipt or release there from or thereof.

13. PATENT INFRINGEMENTS

The Contractor shall protect and defend the Owner against any claim for royalty, bonus, license or other expense or cost or damage, by reason of the introduction or use of any patented invention, arrangement or appliance, whether or not included in the requirements of these Specifications or shown on the Drawings herein referred to, which invention, arrangement or appliance may enter into or form part of the permanent work, or be used in connection with the construction thereof.

14. GENERAL RISKS

The Contractor shall assume all risks whatsoever as to all damages from the natural elements, fire, flood, trespass, and from any and all other causes, and shall protect accordingly all materials both before and after installation.

15. NON-INTERFERENCE

The Contractor shall, in such manner as the Engineer may require, so arrange the execution of the work as not to unnecessarily interfere with the execution of any other work which may be in progress or with the existing system. If any part of Contractor's work depends for proper execution or results upon the work of any such other contractor or utility owner (or Owner), Contractor shall inspect and promptly report to Engineer in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. Contractor's failure so to report will constitute an acceptance of the work as fit and proper for integration with Contractor's work except for latent or non-apparent defects and deficiencies in the other work.

If Owner contracts with others for the performance of other work on the project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the

various prime contractors will be identified herein and the specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided herein. Unless otherwise provided herein, neither Owner nor Engineer shall have any authority or responsibility in respect of such coordination.

16. STORAGE LOCATIONS

All materials delivered for the work, or excavated or otherwise disturbed, and which are not subject to immediate removal, shall be stored or placed where and as the Engineer may direct or approve, and so as to interfere as little as possible with public or other safety and convenience, and with the simultaneous prosecution of any other work.

17. TEMPORARY PASSAGEWAYS

The Contractor shall provide and maintain such safe and adequate temporary passageways as the Engineer or other authorities may direct or approve.

18. PROTECTION OF WORK AND PROPERTY

The Contractor shall provide adequate signs, lights, barricades and other devices necessary or appropriate to warn the public of the work being performed hereunder, and shall undertake such measures necessary to prevent any injury to the public or to the property of the Owner or others. The Contractor shall not interfere with or interrupt the Owner's current operations and shall coordinate with the Owner's employees in connection therewith. The Contractor shall protect existing facilities within and/or adjacent to his work.

19. PROTECTION OF THE PUBLIC

In all cases where any of the operations of the Contractor, including the temporary storage or placing the material, appliances or plant, might endanger travel or traffic on any public highway or any other thoroughfare, or persons, animals, and vehicles, sufficient barricades shall be placed and maintained during daylight. The area so affected shall be equipped with warning devices of the types, in the numbers, and at intervals required by all applicable laws and regulations.

20. NO TRESPASS

Before entering upon or in any way disturbing any public, corporation or private property, the Contractor shall give sufficient notice to the responsible official or to the Owner thereof, and shall conform to all of the reasonable requirements of such official or Owner.

21. THE PROPERTY OF THE OWNER

In obtaining free of charge and making use of any materials which the Owner may permit the Contractor to so obtain from the property of the Owner, by excavation or otherwise, the Contractor shall not only conform to all requirements herein but also to all of the wishes of the Owner.

22. PROTECTION OF THE SUSPENDED WORK

During all hours of the day and night when active work is suspended, including Sundays, the Contractor shall provide such watchmen, or take such other precautions as may be necessary to prevent injurious

trespass upon, and the entire safety of all of the materials and finished work, for the protection of all of which the Contractor shall be responsible until it is finally accepted.

23. REPAIR AND RESTORATION

The Contractor shall care for, repair, restore and make good any structure or surface or things on or in any private, corporation or public property, which may in any way be disturbed, injured, or destroyed by, or in consequence of, the work of the Contractor.

24. REFUSE MATERIAL AND FINISH

The Contractor shall promptly remove, during the progress of the work, to the satisfaction of the Engineer, all false works, rubbish, and waste materials which may accumulate on any private or public property on account of the work, and the whole work and its vicinity shall be neatly finished and made clean and tidy in every particular before it will be accepted by the Owner.

25. GENERAL RESPONSIBILITY OF CONTRACTOR

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and Engineer and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

In any and all claims against the Owner or the Engineer or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefits acts or other employee benefit acts.

26. MATERIALS, PLANT AND LABOR

The Contractor shall furnish all of the materials, in the rough or finished, of whatsoever kind, which may be required or desirable to completely execute the Contract. The Contractor shall furnish all of the tools, and other working plant and construction materials and appliances, of whatsoever kind, which may be required or desirable to completely execute the Contract. The Contractor shall furnish all of the skilled and other labor which may be required or desirable to completely execute the Contract.

27. SKILLED AND LOCAL LABOR

All work shall be done by tradesmen specialty skilled in the parts of the work to which they may be assigned.

In the employment of labor, the Contractor shall give a just preference to the residents of the general neighborhood of the proposed installations, but shall not be required to continue the employment of such local labor when more efficient labor can be obtained from elsewhere. This paragraph shall not alter or abridge the Contractor's responsibility to comply with federal, state or local laws or regulations concerning the employment of resident labor or affirmative action requirements or any authority.

28. INFORMATION NOT GUARANTEED

All information relating to existing subsurface structures and/or underground facilities, pipes or other utilities is from the best sources at present available to the Owner and the Engineer. All such information and the drawings of existing construction are furnished only for the information and convenience of Contractors.

It is agreed and understood that the Owner and the Engineer do not warrant or guarantee that the subsurface structures and/or underground facilities, pipes or other utilities encountered during construction will be the same as those indicated by the information given on the Drawings or in the Specifications.

The Contractor is responsible for ascertaining the character, location, quantities, and conditions of the various materials and the work to be done. Test pits to locate utilities may be dug at the Contractor's discretion and at the Contractor's expense.

It is further agreed and understood that the Contractor will not use any of the information made available to him or obtained in any examination made by him in any manner as a basis or ground of claim or demand of any nature, against the Owner or the Engineer, arising from or by reason of any variance which may exist between the information offered and the actual materials or structures encountered during the construction work, except as may otherwise be provided for in the Contract Documents.

The Contractor shall notify the Engineer of any and all variances from the Drawings which are discovered from test pits which the Contractor chooses to dig.

29. HAULING

The Contractor shall furnish all vehicles, and drivers and other helpers which may be required for all transportation incidental to the entire work, and the Contractor shall make any roadways which may be required, and shall restore the lines of said roadways to their original condition, upon the completion of the work.

30. REJECTION OF MATERIALS OR WORKMANSHIP

All materials and workmanship may be rejected by the Engineer if, in his opinion, they do not conform, in general and in detail, to these specifications and to the drawings, or to any drawings, descriptions and samples which the Contractor may furnish, when bidding or thereafter.

31. ORDER OF EXECUTION

All of the materials shall be delivered, and all of the different parts of the work shall be executed, at the time and in the order and sequence which may be designated or approved by the Engineer.

32. CONTRACTOR TO PROMPTLY UNLOAD AND CARE FOR SHIPMENTS

As soon as any shipment, which the Contractor is required to unload, arrives at the railroad station, or elsewhere, it shall be under the care of the Contractor, who shall henceforward be responsible for its safety, and who shall be liable for any demurrage or other costs on account of failure to immediately remove from the railroad station, or other point of delivery, any shipments which may be acceptable under these Specifications.

33. EMERGENCY WORK

Should any emergency occur, which, in the opinion of the Engineer, should demand it, the execution of the Contract shall be prosecuted with extraordinary vigor, additional shifts of men shall be employed, and the work shall be accelerated as the Engineer shall require. If such acceleration causes an increase in the Contractor's cost of performance of this work the Contractor may request a Change Order in accordance with the "Changes Clause" of the Contract.

34. IN CASE OF TARDINESS

Upon the refusal, neglect or failure of the Contractor to deliver any portion of the material, or to do or complete any part of the work, when, within the time named in the Contract, the Engineer shall order the same to be delivered or completed, the Engineer may order such portion or portions of the material elsewhere, and employ such labor as he may require to do the said work, and charge the cost thereof to the account of the Contractor.

35. MATERIALS AND WORKMANSHIP

All materials, patterns, shapes, dimensions, workmanship, methods and finish, in general and in detail, shall be such as shall be ordered or approved by the Engineer, and the Engineer shall be the sole and final judge of the quality and fitness thereof.

36. INSPECTIONS AND TESTS

Contractor shall give Engineer timely notice or readiness of the work for all required inspections, tests or approvals. If laws or regulations of any public body having jurisdiction require any work (or part thereof) to specifically be inspected, tested or approved, Contractor shall assume full responsibility therefore, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection, testing or approval. Contractor shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with Owner's or Engineer's acceptance of a supplier of materials or equipment proposed to be incorporated in the work, or of materials or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the work. All inspections, tests, or approvals other than those required by laws or regulations of any public body having jurisdiction shall be performed by organizations acceptable to Owner and Contractor (or by Engineer if so specified).

If any work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence it must, if requested by the Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given the Engineer timely notice of Contractor's intention to cover the same and the Engineer has not acted with reasonable promptness in response to such notice.

If Engineer considers it necessary or advisable that covered work be observed by the Engineer or inspected or tested by others, the Contractor, at the Engineer's request, shall uncover, expose or otherwise make available for inspection or testing as Engineer may require, that portion of the work in question, furnishing all necessary labor, material and equipment. If it is found that such work is defective, the Contractor shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction (including, but not limited to fees and charges of engineers, architects, attorneys and other professionals), and Owner shall be entitled to an appropriate decrease in the contract price. If, however, such work is not found to be defective, the Contractor shall be allowed an increase in the contract price or an extension of the contract completion time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

The Engineer, or his representative, shall be afforded all opportunities, and all convenient facilities that may be requested to inspect and test all materials and appliances, in the shops, on the ground, or elsewhere, and the Contractor shall subject each and all of the installations to such tests as shall satisfy the Engineer that all of these specifications have been complied with, before the installations shall be eligible for final acceptance. Any or all such inspections or tests shall be for the sole benefit of the Owner and shall be for the purpose of ascertaining whether the work complies with Contract requirements as set forth herein. Such observations shall not create or constitute a duty on the part of the Engineer to the Contractor, its agents, employees or guests to perform such observations. The Contractor shall at all times be solely responsible for compliance with job safety requirements as set forth herein.

37. INSPECTION NOT ACCEPTANCE

No materials or workmanship will be considered as accepted, which may be found to be defective in manufacture, construction or execution, or deficient in any of the requirements of these specifications, in consequence of any negligence of any inspector or subordinate engineer to point out said defect or deficiency, during or subsequent to manufacture, and during the entire progress of the work; and the Contractor will be required to correct any imperfect work, remedy, and make good or replace any defective material, whenever discovered, before the final acceptance of the work and before the release of the Surety of the Contractor.

38. CONTRACTOR TO PAY FOR REPAIRS

All materials used and all plant and labor furnished for the replacing or making good of any defective materials or workmanship shall be at the expense of the Contractor, with no extra allowance therefore by the Owner.

39. REMOVAL AND REPLACEMENT OF DEFECTIVE MATERIAL

Should the Contractor fail to promptly make good, to the satisfaction of the Engineer, any defect, or fail to remove from the work any material which the Engineer shall pronounce imperfect, the Engineer may employ workmen to remedy such defect or to remove such materials, and may order such other material elsewhere as may be required to replace that which is removed, and the cost of all such labor and material shall be charged to the account of the Contractor.

40. CONTRACTOR RESPONSIBILITY FOR EMPLOYEES

The Contractor shall at all times enforce strict discipline and good order among his employees, and shall not employ any unfit person or anyone not skilled in the task assigned to him.

41. ONE YEAR'S RESPONSIBILITY

It shall be understood that the Contractor agrees to furnish such material and appliances, and to construct the whole work in such substantial and workmanlike manner that it shall be continuously stable and efficient, and the Contractor shall promptly make good, or replace, any or all parts of the materials or installation, including all details, which may be found to be unstable or defective in any particular, ordinary wear and tear excepted, for a period of guarantee of one (1) year after the whole installation has been entirely completed, tested and accepted by the Owner.

42. ONE YEAR'S RESPONSIBILITY NOTWITHSTANDING INSPECTION

The acceptance, after inspection by the Engineer, or his representative, of any portion of the work or material, shall be subject to its freedom from the exhibition of any inherent or developed defect, or any failure to conform to these Specifications, between the time of its acceptance, and the expiration of the above-named period of one (1) year.

43. ONE YEAR'S RESPONSIBILITY FOR DIMENSIONS

The acceptance by the Engineer of any of the dimensions proposed by the Contractor shall always be understood to be with the proviso, whether stated at the time of acceptance or not, that the said dimensions shall be proved to be adequate and proper at all times until the expiration of the above-named period of one (1) year.

44. EXCELLENCE OF WHOLE - WHETHER OR NOT HEREIN SPECIFIED

It is understood that these Specifications are intended to provide that all necessary and desirable materials and appliances shall be furnished by the Contractor, and that all of the same shall be of the best quality and kind, and that the whole work shall be done and entirely completed in a workmanlike and satisfactory manner, in all details, whether herein particularly specified or not.

45. EXTRA WORK

No claim shall be allowed, and no bill shall be paid for any extra work, unless said extra work shall have been done by special written agreement with the Owner entered into prior to the commencement of said work.

If prices for such extra work are not included in the unit price bid, the Contractor shall agree to furnish the necessary materials and perform such labor as extra work, and shall agree to accept in full payment therefore the actual field cost of the material and labor plus fifteen (15) percent.

46. SUBLETTING OF WORK

Assignment or subletting of the furnishing of any materials or of the execution of any part of the work shall be subject to approval by the Engineer. Unauthorized assignment or subletting of any or all the Contract by the Contractor shall constitute a material breach of this Contract.

47. AUTHORITY OF ENGINEER'S ASSISTANTS

In the absence of the Engineer, any person whom he may designate as having charge of the work, or any part thereof, shall have and exercise all the powers of the said Engineer in all matters relating to the execution of the work herein specified, and the orders of said person shall be fully observed and obeyed.

48. TERMS OF PAYMENT FOR MACHINERY UNITS

The Contractor shall receive payment in three installments of the contract price for furnishing and installing any machinery, as follows:

- A. Thirty-five (35) percent thereof upon delivery of all of the machinery at the construction site.
- B. Thirty-five (35) percent thereof when the erection, setting and connections thereof shall be entirely completed and the whole installation be finished in every particular.
- C. Thirty (30) percent thereof when the whole installation shall have been tested and is in successful operation and is ready, as herein required, for approval and acceptance by the Engineer and by the Owner.

The term machinery shall be defined for this article as meaning any equipment with rotating or reciprocating parts.

49. MONTHLY ESTIMATE

Unless otherwise expressly provided in the Contract, monthly payment will be made for all work and materials other than machinery, by the Owner to the Contractor, during the progress of the installation according to the following:

- B. Up to fifty (50) percent completion - Ninety (90) percent of the contract value rendered by the Contractor to the Owner.
- B. Fifty (50) percent completion to beneficial occupancy - Ninety-five (95) percent of the contract value rendered by the Contractor to the Owner.

Value rendered shall be determined by monthly estimates made by the Contractor and approved by the Engineer and Owner. Increasing the percentage paid at the 50% completion point will be subject to the Engineer's determination of satisfactory and diligent performance by the Contractor.

NOTE: Applications for Payment shall be submitted for review. Sample document provided in these Specifications is for reference purposes only.

When the Contract provides for the furnishing of materials only, the said estimates shall be based upon the quantity thereof which has been delivered during the preceding month.

When the Contract provides for the furnishing of labor and the furnishing and installation of materials, the said monthly estimates shall be based upon the amount of labor performed and the quantity of materials delivered to the job site (including transportation costs) during the preceding month.

50. FINAL ESTIMATES

The balance will be paid by the Owner to the Contractor upon the satisfactory completion of the Contract obligation, the filing with the Owner by the Contractor of such satisfactory Release of Liens, or other assurance as is provided for in the following paragraph, and the approval and acceptance of all materials and work contracted for, by the Engineer and by the Owner.

51. RELEASE OF LIENS

Before the work shall be finally accepted and final payment be made, the Contractor shall furnish the Owner with a complete Release of Liens, or with such other evidence as shall be entirely satisfactory to the Owner that the finished work, including all materials therein incorporated and thereunto appertaining is, and will be, entirely free from any then present or future liens or claims.

52. SPECIFICATIONS NOT PROHIBITIVE

These Specifications are issued to bidders as a guide as to what is to be required, and it is not intended to ignore manufacturers' standards and patterns, and should any bidder wish to submit a proposal for an equivalent installation, other than that generally contemplated herein, which will be guaranteed under all of the general conditions and requirements herein specified, such a proposal will receive due consideration. The Contractor shall submit manufacturer's data, etc., as required by the Engineer to permit a thorough evaluation of the proposed equivalent installation.

53. CHANGES CLAUSE

The Owner may, at any time, by written order, and without notice to the sureties, make changes in the general scope of this Contract. If such changes cause an increase or decrease in the Contractor's cost of, or time required for, performance of the Contract, an adjustment shall be made and the Contract

modified in writing accordingly. No claim by the Contractor for payment on account of any extra work shall be enforceable unless such extra work is covered by a written order signed by a duly-authorized representative of the Owner. However, nothing in this Contract shall be construed to excuse the Contractor from executing the Contract as amended.

54. TIME EXTENSIONS

The Contractor may at any time during the performance of the contract request in writing an extension of time in performance based upon delays caused by factors beyond the control of the Contractor, such factors include labor stoppages (strikes), acts of God (natural disasters, unusually unseasonable weather), delays in delivery of materials caused by factors beyond the control of material suppliers and manufacturers. Written notice of expected delay and explanation therefore shall be made within ten

(10) calendar days from the time the contractor is aware of the cause for delay, even though the expected duration or effect of delay is not yet known. As soon as possible after the impact of the delay is determined, the Contractor will submit in writing a request for extension of time for a specific number of calendar days with fully substantiated justification therefore. Such a request may entitle the Contractor to an extension of time as recommended by the Engineer and as agreed to in writing by the Owner. Time extensions granted under these provisions are solely to relieve the Contractor's liability for liquidated damages, and will not justify an increase in the cost of the work.

55. NO DAMAGES FOR DELAY

The Contractor shall not be entitled to any claim for damages on account of hindrances or delays in performance of this contract from any cause whatsoever, including acts or failures to act on the part of the Owner or Engineer or their agents, employees or servants. The Contractor acknowledges and agrees that its sole remedy for any such delay in performance shall be an extension of contract completion time in accordance with the terms of Article 54, TIME EXTENSIONS.

56. TERMINATION BY OWNER FOR CAUSE

Without prejudice to any other legal or equitable right to remedy which it would otherwise possess hereunder, or as a matter of law, the Owner shall be entitled, by giving the Contractor five (5) days prior written notice, to terminate this Contract in its entirety at any time:

- A. if the Contractor shall fail to prosecute the work, or any part thereof, with the diligence necessary to insure its progress and completion as set forth in this contract and addenda or change orders thereto, and shall fail to take such steps to remedy such default within ten (10) days after written notice thereof from Owner as Owner shall direct; or,
- B. if the Contractor shall commit a substantial default under any of the terms, provisions, conditions or covenants contained in this contract and shall fail to take such steps to remedy such default within ten (10) days after written notice thereof from the Owner as Owner shall direct.

57. TERMINATION FOR OWNER'S CONVENIENCE

The performance of the work may be terminated at any time in whole or from time to time in part, by the Owner for its convenience. Any such termination shall be affected by delivery to the Contractor of a written notice ("Notice of Termination") specifying the extent to which performance of the work is terminated and the date upon which termination becomes effective. After receipt of a Notice of Termination, and except as otherwise directed by the Owner, the Contractor shall, in good faith, and to the best of its ability, do all things necessary, in light of such notice and of such requests in implementation thereof as the Owner may make to assure the efficient, proper closeout of the terminated work (including the protection of Owner's property).

Among other things, the Contractor shall, except as otherwise directed or approved by the Owner:

- A. stop the work on the date and to the extent specified in the Notice of Termination;
- B. place no further orders or subcontracts for services, equipment or materials except as may be necessary for completion of such portion of the work as is not terminated;
- C. terminate all orders and subcontracts to the extent they relate to the performance of work terminated by the Notice of Termination;
- D. assign to Owner, in the manner and to the extent directed by it, all of the right, title and interest of the Contractor under the orders of subcontracts so terminated, in which case the Owner shall have the right to settle or pay any or all claims arising out of the termination of such orders and subcontracts;
- E. with the approval of the Owner, settle all outstanding liabilities and all claims arising out of such termination or orders and subcontracts; and
- F. deliver to the Owner, when and as directed by the Owner, all documents and all property which, if the work had been completed, the Contractor would be required to account for or deliver to the Owner, and transfer title to such property to the Owner to the extent not already transferred.

In the event of such termination, there shall be a reduction of the amount of this Contract to reflect the reduction in the work. No cost incurred after the effective date of the Notice of Termination shall be treated as a reimbursable cost unless it relates to carrying out the unterminated portion of the work or taking closeout measures.

58. WORKER'S COMPENSATION INSURANCE

The Contractor shall carry Worker's Compensation Insurance during the life of the Contract to insure his statutory liability to his employees in the State of Pennsylvania. Coverage shall include employer's liability at minimum limits as stated in the Supplemental Conditions.

59. COMPREHENSIVE GENERAL LIABILITY INSURANCE

The Contractor shall carry the Comprehensive Form of Commercial General Liability Insurance during the life of the Contract covering the risks itemized in the form of "Certificate of Insurance" provided for in this Contract. The limits shall be as stated in the Supplemental Conditions. The Certificate of Insurance shall include coverage for, but not limited to, explosion, collapse and underground hazards. Comprehensive General Liability Insurance shall be written on an "occurrence" basis. Claims made will not be accepted. The Contractor shall carry a general umbrella liability as shown in the Supplemental Conditions. The umbrella coverage shall include Commercial General Liability, Automobile Liability and Employer's Liability. Policies shall be written in the name of the Contractor, Owner and Engineer "as their respective interests may appear." The policies shall provide coverage against any loss caused by the negligence of the Owner, its officers, employers and agents, except where the loss is caused by the sole negligence of the Owner or its aforesaid representatives.

60. COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE

The Contractor shall carry the Comprehensive Form of Automobile Liability Insurance during the life of the Contract covering the risks itemized in the form of "Certificate of insurance" provided for in this Contract. The limits shall be as stated in the Supplemental Conditions and shall be combined single limit with symbol for any automobile including hired and non-owned.

61. UNEMPLOYMENT INSURANCE

The Contractor hereby agrees to accept exclusive liability for and shall hold the Owner harmless for all payroll taxes for contributions to unemployment insurance, old age pensions, or annuities, as measured by wages, salaries or other remuneration paid to employees of said Contractor.

62. BUILDER'S RISK INSURANCE

The Contractor shall insure the structures and improvements against loss or damage by Builders Risk Insurance using "all risk" form or "special form" of coverage during the progress of the work, and until final acceptance of the work by the Owner. Such insurance shall be written in completed value form for 100% of the completed value of the Contract including stored materials connected therewith, with the amount to be certified to the Contractor by the Engineer.

63. CERTIFICATE OF INSURANCE

All policies will be subject to the approval of the Owner and Engineer.

Certificates of Insurance must be executed in quintuplicate and submitted to the Engineer prior to the execution of the Agreement. Certificates of Insurance will be required of all subcontractors documenting Worker's Compensation Insurance coverage prior to performance of work on the site by subcontractors. Prime Contractors are responsible to make sure all subcontractors have adequate General Liability Insurance. The Owner shall be the certificate holder of all Certificates of Insurance and all Certificates of Insurance shall name the Owner and Engineer as named insured or additional insured. Each certificate shall contain therein or have contained in a rider attached thereto and made a part thereof, a clause to the effect that the insurer will notify the Owner in writing thirty (30) days prior to cancellation of the policy.

The Surety on all bonds and insurance shall be rated "A" or better by A.M. Best Co. and shall be licensed to conduct business in the Commonwealth of Pennsylvania.

64. SITE ACCESSIBILITY

The Contractor must provide that the representatives of the Owner, Federal Government and the State will have access to the work wherever it is in preparation or progress and that the Contractor will provide proper facilities for such access and inspection.

65. UTILITY SERVICES

Except as otherwise provided for in the specifications, reasonable amounts of water and electricity will be made available if practicable, to the Contractor from existing system outlets on the property of the Owner. Provision of all other utility requirements, including sanitary facilities, shall be the responsibility of the Contractor. If temporary service connections are necessary, they shall be the responsibility of the Contractor.

66. DOMESTIC CONSTRUCTION MATERIALS

In obtaining materials for the execution of this Contract, preference shall be given to domestic construction material by the Contractor, subcontractors, materialmen and suppliers. An unmanufactured material shall be construed as a domestic construction material if it has been mined or produced in the United States. A manufactured construction material shall be construed as a domestic construction material if it has been manufactured in the United States substantially from articles, materials or supplies mined, produced or manufactured in the United States.

In accordance with the Buy American provision in Public Law 95-217 (section 215 of public Law 92- 500 as amended) regulations and guidelines, the Contractor agrees that preference will be given to domestic construction material by the Contractor, subcontractor, materialmen, and suppliers in the performance of this Contract.

The Owner may waive the Buy American provision based upon those factors that are deemed relevant:

- A. Such use is not in the public interest or the cost is unreasonable.
- B. The available resources of the project are not sufficient to implement this provision.
- C. The articles, materials, or supplies of the class or kind to be used or the articles, materials, or supplies from which they are manufactured are not mined, produced, or manufactured, as the case may be, in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality for the particular project.

The amount of cost differential by which domestic construction material may be given preference shall generally be the sum determined by computing; up to six percent of the bid or offered price of materials of foreign origin including all cost of delivery to the construction site, including any applicable duty, whether or not accessed. Computations will normally be based on costs on the date of opening of bids or proposals.

67. STEEL PRODUCTS PROCUREMENT ACT

The Contractor shall comply with the Steel Product Procurement Act, Pennsylvania Act No. 3, 1978, including any revisions. Only steel products as defined below shall be used in performance of this Contract.

Steel products shall be defined as products rolled, formed, shaped, drawn, extruded, forged, coast, fabricated or otherwise similarly processed, or processed by a combination of two or more operations from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.

68. LABOREMPLOYMENT REQUIREMENTS

Contractor and all subcontractors shall observe and comply with all Federal and State laws and local ordinances that affect those engaged or employed on the project; they shall note carefully, specific legal requirements as follows, relative to the employment of all labor and mechanics required in the execution of the work on this Program.

- A. Non-Discrimination - No Contractor, subcontractor, nor any persons acting on behalf of such contractor shall by reason of age, sex, race, creed or color, discriminate against any citizen of the Commonwealth of Pennsylvania who is qualified and available to perform the work to which the Program relates. No Contractor, subcontractor nor any person on his behalf, shall in any manner discriminate against or intimidate any employee hired for the performance of work under this Contract on account of age, sex, race, creed, or color.
- B. Affirmative Action
 - (I)) The Contractor shall take Affirmative Action to ensure that applicants are employed, and that employees are treated during employment without regard to their age, race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: 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. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notice to be provided by the Contracting Officer setting forth the provisions of this non-discrimination clause.

- (2) The Contractor agrees to hire local disadvantaged youth to perform unskilled tasks wherever possible. The Contractor will provide constant supervision and training so as to enable training participants to be upgraded from unskilled to skilled in all cases where there is a positive reaction to said training.
- (3) The Contractor shall comply with Federal and State Equal Opportunity Construction Contract Regulations (Executive Order 11246) in all respects. Contractors attention is specifically drawn to the equal opportunity clause and the goals and time tables for minority and female participation set forth in the rules and regulations of the Department of Labor relative there to CER 60-41.
- (4) This Contract may be canceled or terminated by the Owner and all money due or become due hereunder, shall be forfeited for a second or any subsequent violation of the terms or conditions of this portion of the Contract.

69. RE-USE OF DOCUMENTS

Neither Contractor nor any subcontractor or supplier or other person or organization performing or furnishing any of the work under a direct or indirect contract with Owner shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer; and they shall not re-use any of them on extensions of the project or any other project without written consent of Owner and Engineer, and specific written verification or adaptation by Engineer.

70. REQUIREMENTS OF PREVAILING WAGE ACT

The Contractor shall pay no less than the minimum wage rates determined by Secretary of Labor and Industry and attached herein, and shall comply with all conditions of the Pennsylvania Prevailing Wage Act 442 and as amended by Act 342, all Regulations issued pursuant thereto. These requirements shall be included in all sub contractual relations of the Contractor.

Each contractor and each subcontractor shall file a statement each week and a final statement at the conclusion of the work on the Contract with the contracting agency, under oath, and in form satisfactory to the Secretary, certifying that all workmen have been paid wages in strict conformity with the provisions if any wages remain unpaid to set for the amount of wages due and owing to each workman respectively.

Before final payment is made, the Contractor must submit final wage certifications from all contractors and subcontractors.

If notified by Secretary of Labor and Industry of the filing of wage claims by workmen, the Owner shall withhold from the monies due to the Contractor or subcontractor sufficient funds to pay all claims determined to be valid and when so directed by the Secretary of Labor and Industry, shall pay these monies directly to the workmen.

71. SUBSTANTIAL COMPLETION

Substantial Completion means that point at which the construction of the project is sufficiently completed, in the opinion of the Engineer and in accordance with the Contract Documents, so that the project, or specified part, can be utilized for the purposes for which it was intended.

Prior to final payment, Contractor may, in writing to Owner and Engineer, certify that the entire project or part thereof is Substantially Complete and request that Engineer issue a notice of Substantial Completion. Within a reasonable time thereafter, Owner, Contractor and Engineer shall make an inspection of the project to determine the status of completion. If Engineer does not consider the project substantially complete, he will notify Contractor in writing giving his reasons therefore. If Engineer considers the project substantially complete, he will prepare and deliver to the Owner a tentative notice of Substantial Completion which shall fix the date of Substantial Completion and the responsibilities between Owner and Contractor for maintenance, heat and utilities. There shall be attached to the notice a tentative list of items to be completed or corrected before final payment, and the notice shall fix the time within which such items shall be completed or corrected, said time to be within the contract completion time. Owner shall have seven (7) days after receipt of the tentative notice during which he may take written objection to Engineer as to any provisions of the notice or attached list. If, after considering such objections, Engineer concludes that the project is not Substantially Complete, he will within fourteen (14) days after submission of the tentative notice to Owner notify Contractor in writing stating his reasons therefore. If after consideration of Owner's objections, Engineer considers the project substantially complete, he will within said fourteen (14) days execute and deliver to Owner and Contractor a definitive notice of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the tentative notice as he believes justified after consideration of any objections from Owner. Owner shall have the right to exclude Contractor from the project after the date of Substantial Completion, but Owner shall allow Contractor reasonable access to complete or correct items on the punch list.

Prior to final payment, Owner may request Contractor in writing to permit Owner to use a specified part of the project which he believes he may use without significant interference with construction of the other parts of the project. If Contractor agrees, he will certify to Owner and Engineer that said part of the project is Substantially Complete and request Engineer to issue a notice of Substantial Completion for that part of the project. Within a reasonable time thereafter Owner, Contractor, and Engineer shall make an inspection of that part of the project to determine its status of completion. If Engineer does not consider that it is Substantially Complete, he will notify Owner and Contractor in writing giving his reasons therefore. If Engineer, Owner and Contractor consider that part of the project to be Substantially Complete, the Engineer will execute and deliver to Owner and Contractor a notice to that effect, fixing the date of Substantial Completion as to that part of the project, attaching thereto a tentative list of items to be completed or corrected before final payment and fixing the responsibility between Owner and Contractor for maintenance, heat and utilities as to that part of the project. Owner shall have the right to exclude Contractor from any part of the project which Engineer has so certified to be Substantially Complete, but Owner shall allow Contractor reasonable access to complete or correct items on the tentative list.

END OF GENERAL CONDITIONS

RULES AND REGULATIONS FOR OUTSIDE CONTRACTORS

PRACTICE

It is the practice of Bucks County to require outside contractors to abide by established safety rules and regulations designed to protect our personnel and facilities. The intent of this procedure is to provide sufficient information to allow our contractors to conduct business in all County facilities in a safe and professional manner.

PROCEDURE

- A. The General Services Department shall communicate the safety rules and regulations for outside contractors to the contractor or his representative prior to the beginning of work, and inform the contractor that violation of these rules and regulations by the contractor may be **grounds for cancellation of the Agreement** by the County Commissioners or the Chief Operating Officer.
- B. All threats to safety involving outside contractors must be reported to the General Services Department.
- C. Bucks County Purchasing Department or requesting department, shall send a copy of this procedure to all contractors as part of any bid or quote package issued.
- D. The contractor must notify the General Services Department by phone at 215-345-3950 before starting work at any County facility.

RULES

- A. The contractor is responsible for adherence to existing local, state and federal codes and regulations.
- B. Personal vehicles may be parked in designated areas; all parking regulations as posted must be observed.
- C. The possession of any type of weapon on county property is prohibited. The contractor shall not allow his employees to work under the influence of narcotics or intoxicating beverages.
- D. Fighting, horse-play and running are prohibited within the entire facility.
- E. Smoking is not permitted.
- F. Before starting any excavation the contractor must consult with the General Services department for all known underground utilities. The contractor is also responsible to schedule a PA one Call before starting any work. All open pits and excavated areas must be properly protected at all times. Barricades, identification signs or other warning devices must be used at these hazardous locations when no work is being performed.
- G. The treatment of injuries sustained by the contractor's employees shall be the responsibility of the contractor.
- H. Regardless of the type of fuel used, all fuel-driven machines must be shut down for refueling.
- I. Gasoline powered trucks must be equipped with a spark-arrester on tail pipe. No riders, other than the driver, are permitted on either empty or loaded trucks. Refueling must be done outside the building.

- J. Adequate and proper eye protection such as safety glasses, face shields or goggles must be properly worn at all times when work offers an eye injury exposure. Safety glasses must also be worn in any posted area requiring their use.
- K. Oily or otherwise dirty disposable wiping cloths must be deposited in closed covered containers.
- L. Housekeeping is the contractor's responsibility. Clean-up of the respective working areas must be accomplished at the end of the day or shift or more often if an unusual hazard is created.
- M. Bulk storage of flammable liquids must be kept outside of buildings. No more than one day's working supply should be inside the building at any time and they must be kept in properly labeled self-closing covered safety containers.
- N. Dunnage, binding wire, metal strapping and other types of debris must be cleaned up immediately after use and taken to designated collection areas. At no time shall scrap be permitted to remain in aisles and areas where it could become a "tripping" or a "slip and fall" hazard.
- O. Aisles, exits, walkways and fire protection equipment must be maintained free from obstruction at all times. Fire doors must not be blocked or fastened open. Wires, cables or hoses, etc. shall not pass through a doorway and prevent the fire door from closing completely.
- P. Adequate fire protection must be provided at every job site where flame and spark producing equipment is used. This equipment must be inspected by the contractor before it is used to ensure that it is in good working order. A Cutting and Welding Permit must be secured from the General Service Department before starting such work.
- Q. General Services, in conjunction with the Fire Marshal's Office shall show the contractor the various methods of transmitting fire alarms within the facility. It is the responsibility of the contractor to familiarize his employees with these methods.
- R. When welding and/or cutting are done in storage rooms, flammable liquid area and vapor degreaser areas, the flammable material must be adequately covered with flame retardant tarpaulins. While the cutting and/or welding is being done, at least one person must be stationed in the immediate area with a suitable fire extinguisher.
- S. When cutting, welding or grinding work is to be done in the immediate vicinity of county employees, adequate screen protection from flying objects must be provided.
- T. If and when it becomes necessary to use a fire extinguisher, it must be reported immediately to the General Services Department.
- U. All ladders must be substantially built, free of defects and provided with the necessary safety equipment. Extension ladders, while in use, must be securely fastened to prevent them from falling or skidding. Aluminum ladders are not permitted.
- V. Acetylene, oxygen, nitrogen and other compressed gas cylinders must be securely fastened in an upright position.
- W. Contractors must store gas cylinders in a specified location. After completion of the work, the contractor is responsible for the removal of all his gas cylinders.

- X. Any spillage, regardless of its nature, must be cleaned up immediately.
- Y. Safety guards or other devices shall not be removed from tools or equipment except for repairs and must be replaced upon completion of repair.
- Z. Scaffolds planks, ladders, ropes, ground wires, etc., shall be inspected by the contractor and replaced if they prove to be defective.
- AA. Hard hats should be worn when overhead work is being performed.
- BB. Temporary wiring must be properly insulated and substantially supported.
- CC. If work necessitates the turning off of any portion of the sprinkler systems or power, General Services Department in conjunction with the Fire marshal's Office, must be notified 24 hours prior to these systems being turned off or on.
- DD. It is the responsibility of the contractor to see that only authorized, qualified (licensed if required) personnel use power actuated (stud) tools. Adequate shields to lessen the danger of flying materials must be erected if work is done in close proximity to county employees.
- EE. It is the responsibility of the contractor's representative to familiarize himself with the building or work area layout and to instruct employees in the location of emergency exits and evacuation routes.
- FF. The contractor's employees will be permitted access only to those areas necessary for the performance of contractual work. Under no circumstances are the contractor's employees allowed to tour or roam around the facility or enter areas not necessary for the performance of their work.
- GG. "Strike anywhere" matches are not permitted.
- HH. All personnel must wear shirts with sleeves that cover the shoulders and pants that cover the entire leg to the ankle.
- II. At no time is work permitted with materials that the employee does not understand or are not aware of the hazard. The contractor is required to have Material Safety Data Sheets for all materials.

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project Name:	BUCKS COUNTY FREE LIBRARY - BENSALEM BRANCH REAR WALL MODIFICATIONS AND WINDOW ADDITIO
Awarding Agency:	Bucks County Free Library
Contract Award Date:	12/7/2021
Serial Number:	21-07441
Project Classification:	Building
Determination Date:	10/27/2021
Assigned Field Office:	Philadelphia
Field Office Phone Number:	(215)560-1858
Toll Free Phone Number:	
Project County:	Bucks County

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	5/29/2017		\$47.30	\$34.85	\$82.15
Asbestos & Insulation Workers	5/1/2018		\$49.30	\$35.85	\$85.15
Asbestos & Insulation Workers	5/1/2019		\$51.20	\$36.95	\$88.15
Asbestos & Insulation Workers	6/1/2020		\$54.20	\$36.95	\$91.15
Asbestos & Insulation Workers	5/1/2021		\$54.35	\$39.95	\$94.30
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2017		\$28.52	\$18.22	\$46.74
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2018		\$29.52	\$18.22	\$47.74
Boilermaker (Commercial, Institutional, and Minor Repair Work)	1/1/2019		\$29.26	\$18.48	\$47.74
Boilermakers	1/1/2017		\$44.26	\$33.36	\$77.62
Boilermakers	1/1/2018		\$46.26	\$33.36	\$79.62
Boilermakers	3/1/2018		\$45.89	\$33.73	\$79.62
Boilermakers	1/1/2019		\$45.51	\$34.11	\$79.62
Boilermakers	8/1/2019		\$47.21	\$34.11	\$81.32
Boilermakers	1/1/2021		\$49.32	\$34.90	\$84.22
Bricklayer	5/1/2017		\$40.98	\$26.78	\$67.76
Bricklayer	5/1/2018		\$43.73	\$26.78	\$70.51
Bricklayer	5/1/2019		\$46.48	\$26.78	\$73.26
Bricklayer	5/1/2020		\$44.45	\$30.31	\$74.76
Bricklayer	5/1/2021		\$45.45	\$30.61	\$76.06
Carpenter - Chief of Party (Surveying & Layout)	5/1/2017		\$45.25	\$27.59	\$72.84
Carpenter - Chief of Party (Surveying & Layout)	5/1/2018	4/30/2019	\$45.83	\$27.59	\$73.42
Carpenter - Chief of Party (Surveying & Layout)	5/1/2019	4/30/2020	\$46.54	\$27.59	\$74.13
Carpenter - Chief of Party (Surveying & Layout)	5/1/2020		\$47.73	\$27.59	\$75.32
Carpenter - Chief of Party (Surveying & Layout)	5/1/2021		\$47.47	\$28.71	\$76.18
Carpenter - Instrument Person (Surveying & Layout)	5/1/2017		\$39.35	\$27.59	\$66.94
Carpenter - Instrument Person (Surveying & Layout)	5/1/2018	4/30/2019	\$39.85	\$27.59	\$67.44
Carpenter - Instrument Person (Surveying & Layout)	5/1/2019	4/30/2020	\$40.47	\$27.59	\$68.06
Carpenter - Instrument Person (Surveying & Layout)	5/1/2020		\$41.50	\$27.59	\$69.09
Carpenter - Instrument Person (Surveying & Layout)	5/1/2021		\$41.28	\$28.71	\$69.99
Carpenter - Rodman (Surveying & Layout)	5/1/2017		\$19.68	\$19.64	\$39.32
Carpenter - Rodman (Surveying & Layout)	5/1/2018	4/30/2019	\$19.93	\$19.49	\$39.42
Carpenter - Rodman (Surveying & Layout)	5/1/2019	4/30/2020	\$20.24	\$19.69	\$39.93
Carpenter - Rodman (Surveying & Layout)	5/1/2020		\$20.75	\$19.49	\$40.24
Carpenter - Rodman (Surveying & Layout)	5/1/2021		\$20.64	\$20.31	\$40.95
Carpenters	5/1/2017		\$39.35	\$27.59	\$66.94
Carpenters	5/1/2018	4/30/2019	\$39.85	\$27.59	\$67.44
Carpenters	5/1/2019	4/30/2020	\$40.87	\$27.59	\$68.46
Carpenters	5/1/2020		\$41.90	\$27.59	\$69.49
Carpenters	5/1/2021		\$41.28	\$28.71	\$69.99
Carpenters	5/1/2022		\$42.53	\$28.71	\$71.24
Cement Masons	5/1/2017		\$36.45	\$31.76	\$68.21
Cement Masons	5/1/2018		\$37.50	\$32.26	\$69.76

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Cement Masons	5/1/2019		\$38.50	\$32.81	\$71.31
Cement Masons	5/1/2020		\$39.45	\$33.46	\$72.91
DockBuilder/ Divers (Building Heavy & Highway)	5/1/2020		\$52.44	\$37.27	\$89.71
DockBuilder/Pile Drivers (Building, Heavy & Highway)	5/1/2018		\$43.45	\$34.47	\$77.92
DockBuilder/Pile Drivers (Building, Heavy & Highway)	5/1/2020		\$43.70	\$37.27	\$80.97
DockBuilder/Pile Drivers/ Diver Tender(Building Heavy & Highway)	5/1/2020		\$43.70	\$37.27	\$80.97
Dockbuilder/Piledriver (Building, Heavy, Highway)	11/1/2017		\$43.45	\$33.22	\$76.67
Dockbuilder/Piledriver (Building, Heavy, Highway)	5/1/2018		\$44.70	\$33.22	\$77.92
Drapery Installers	5/1/2009		\$31.09	\$21.34	\$52.43
Drywall Finisher	5/1/2017		\$37.11	\$26.75	\$63.86
Drywall Finisher	5/1/2018		\$39.27	\$27.49	\$66.76
Drywall Finisher	5/1/2019		\$37.75	\$28.11	\$65.86
Drywall Finisher	5/1/2020		\$38.27	\$28.59	\$66.86
Electricians	4/30/2017		\$56.50	\$36.24	\$92.74
Electricians	4/29/2018		\$58.33	\$37.41	\$95.74
Electricians	4/29/2019		\$59.79	\$38.95	\$98.74
Electricians	8/2/2020		\$61.93	\$40.31	\$102.24
Elevator Constructor	1/1/2016		\$52.79	\$30.29	\$83.08
Elevator Constructor	1/1/2018		\$55.76	\$33.05	\$88.81
Elevator Constructor	1/1/2020		\$59.44	\$35.25	\$94.69
Elevator Constructor	1/1/2021		\$61.43	\$36.36	\$97.79
Floor Coverer	5/1/2019		\$44.37	\$28.44	\$72.81
Floor Coverer	5/1/2020		\$46.01	\$28.44	\$74.45
Floor Coverer	5/1/2021		\$45.74	\$29.21	\$74.95
Floor Layer	5/1/2017		\$42.51	\$27.91	\$70.42
Floor Layer	5/1/2018		\$43.11	\$28.09	\$71.20
Glazier	5/1/2017		\$41.30	\$30.80	\$72.10
Glazier	5/1/2018		\$43.32	\$32.33	\$75.65
Glazier	5/1/2019		\$43.87	\$33.38	\$77.25
Glazier	5/1/2020		\$44.92	\$33.63	\$78.55
Glazier	5/1/2021		\$45.67	\$34.38	\$80.05
Interior Finish	5/1/2019		\$30.20	\$25.80	\$56.00
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2017		\$47.30	\$32.91	\$80.21
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2018		\$51.46	\$30.60	\$82.06
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2019		\$49.30	\$34.41	\$83.71
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	1/1/2020		\$49.80	\$34.41	\$84.21
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2020		\$50.80	\$34.91	\$85.71
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2021		\$47.70	\$39.51	\$87.21
Iron Workers (Riggers)	7/1/2017		\$39.83	\$27.92	\$67.75
Ironworker (Rodman)	1/1/2017		\$46.20	\$31.26	\$77.46

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Ironworker (Rodman)	7/1/2017		\$42.56	\$29.30	\$71.86
Ironworker (Rodman)	7/1/2018		\$42.88	\$30.60	\$73.48
Ironworker (Rodman)	7/1/2019		\$43.88	\$30.85	\$74.73
Ironworker (Rodman)	7/1/2020		\$44.82	\$31.60	\$76.42
Laborers (Class 01 - General)	5/1/2020		\$32.05	\$25.25	\$57.30
Laborers (Class 01 - See notes)	5/1/2017		\$28.65	\$24.95	\$53.60
Laborers (Class 01 - See notes)	5/1/2019		\$30.20	\$25.80	\$56.00
Laborers (Class 02 - See notes)	5/1/2017		\$30.85	\$25.65	\$56.50
Laborers (Class 02 - See notes)	5/1/2019		\$33.15	\$26.50	\$59.65
Laborers (Class 02 - see notes)	5/1/2020		\$35.15	\$26.15	\$61.30
Laborers (Class 03 - See notes)	5/1/2017		\$28.92	\$25.18	\$54.10
Laborers (Class 03 - See notes)	5/1/2019		\$30.52	\$25.98	\$56.50
Laborers (Class 03 - See notes)	5/1/2020		\$32.47	\$25.43	\$57.90
Laborers (Class 04 - See notes)	5/1/2017		\$28.95	\$24.95	\$53.90
Laborers (Class 04 - See notes)	5/1/2019		\$30.52	\$25.98	\$56.50
Laborers (Class 04 - See notes)	5/1/2020		\$32.47	\$25.43	\$57.90
Laborers (Class 05 - See notes)	5/1/2017		\$28.65	\$24.95	\$53.60
Laborers (Class 05 - See notes)	5/1/2019		\$30.20	\$25.80	\$56.00
Laborers (Class 05 - See notes)	5/1/2020		\$32.05	\$25.25	\$57.30
Landscape Laborer	5/1/2017		\$22.71	\$23.08	\$45.79
Landscape Laborer	5/1/2019		\$24.64	\$23.68	\$48.32
Landscape Laborer	5/1/2020		\$26.55	\$23.13	\$49.68
Marble Finisher	5/1/2017		\$35.55	\$24.17	\$59.72
Marble Finisher	5/1/2018		\$37.55	\$24.17	\$61.72
Marble Finisher	5/1/2019		\$39.75	\$24.17	\$63.92
Marble Finisher	5/1/2020		\$37.57	\$27.65	\$65.22
Marble Mason	5/1/2017		\$40.36	\$26.99	\$67.35
Marble Mason	5/1/2018		\$43.11	\$26.99	\$70.10
Marble Mason	5/1/2019		\$45.86	\$26.99	\$72.85
Marble Mason	5/1/2020		\$44.25	\$30.10	\$74.35
Mason Tender, Cement	5/1/2019		\$30.52	\$25.98	\$56.50
Millwright	7/1/2017		\$41.35	\$32.24	\$73.59
Millwright	5/1/2018		\$43.33	\$32.96	\$76.29
Millwright	5/1/2019		\$45.50	\$33.29	\$78.79
Millwright	6/8/2020		\$46.80	\$33.19	\$79.99
Millwright	5/1/2021		\$48.60	\$33.19	\$81.79
Millwright	5/1/2022		\$50.60	\$33.19	\$83.79
Operators (Building, Class 01 - See Notes)	5/1/2017		\$44.87	\$28.14	\$73.01
Operators (Building, Class 01 - See Notes)	5/1/2018		\$46.41	\$28.60	\$75.01
Operators (Building, Class 01 - See Notes)	5/1/2019		\$46.41	\$30.60	\$77.01
Operators (Building, Class 01 - See Notes)	5/1/2020		\$47.96	\$31.05	\$79.01
Operators (Building, Class 01 - See Notes)	5/1/2021		\$49.50	\$31.51	\$81.01
Operators (Building, Class 01A - See Notes)	5/1/2017		\$47.86	\$29.03	\$76.89
Operators (Building, Class 01A - See Notes)	5/1/2018		\$49.41	\$29.49	\$78.90

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Building, Class 01A - See Notes)	5/1/2019		\$49.41	\$31.49	\$80.90
Operators (Building, Class 01A - See Notes)	5/1/2020		\$50.96	\$31.94	\$82.90
Operators (Building, Class 01A - See Notes)	5/1/2021		\$52.51	\$32.39	\$84.90
Operators (Building, Class 02 - See Notes)	5/1/2017		\$44.62	\$28.07	\$72.69
Operators (Building, Class 02 - See Notes)	5/1/2018		\$46.16	\$28.53	\$74.69
Operators (Building, Class 02 - See Notes)	5/1/2019		\$46.16	\$30.53	\$76.69
Operators (Building, Class 02 - See Notes)	5/1/2020		\$47.71	\$30.98	\$78.69
Operators (Building, Class 02 - See Notes)	5/1/2021		\$49.25	\$31.44	\$80.69
Operators (Building, Class 02A - See Notes)	5/1/2017		\$47.61	\$28.97	\$76.58
Operators (Building, Class 02A - See Notes)	5/1/2018		\$49.16	\$29.42	\$78.58
Operators (Building, Class 02A - See Notes)	5/1/2019		\$49.17	\$31.41	\$80.58
Operators (Building, Class 02A - See Notes)	5/1/2020		\$50.71	\$31.87	\$82.58
Operators (Building, Class 02A - See Notes)	5/1/2021		\$52.26	\$32.32	\$84.58
Operators (Building, Class 03 - See Notes)	5/1/2017		\$40.53	\$26.87	\$67.40
Operators (Building, Class 03 - See Notes)	5/1/2018		\$42.07	\$27.33	\$69.40
Operators (Building, Class 03 - See Notes)	5/1/2019		\$42.08	\$29.32	\$71.40
Operators (Building, Class 03 - See Notes)	5/1/2020		\$43.62	\$29.78	\$73.40
Operators (Building, Class 03 - See Notes)	5/1/2021		\$45.16	\$30.24	\$75.40
Operators (Building, Class 04 - See Notes)	5/1/2017		\$40.24	\$26.78	\$67.02
Operators (Building, Class 04 - See Notes)	5/1/2018		\$41.78	\$27.22	\$69.00
Operators (Building, Class 04 - See Notes)	5/1/2019		\$41.78	\$29.23	\$71.01
Operators (Building, Class 04 - See Notes)	5/1/2020		\$43.32	\$29.69	\$73.01
Operators (Building, Class 04 - See Notes)	5/1/2021		\$44.87	\$30.14	\$75.01
Operators (Building, Class 05 - See Notes)	5/1/2017		\$38.51	\$26.27	\$64.78
Operators (Building, Class 05 - See Notes)	5/1/2018		\$40.05	\$26.73	\$66.78
Operators (Building, Class 05 - See Notes)	5/1/2019		\$40.06	\$28.72	\$68.78
Operators (Building, Class 05 - See Notes)	5/1/2020		\$41.60	\$29.18	\$70.78
Operators (Building, Class 05 - See Notes)	5/1/2021		\$43.14	\$29.64	\$72.78
Operators (Building, Class 06 - See Notes)	5/1/2017		\$37.52	\$25.98	\$63.50
Operators (Building, Class 06 - See Notes)	5/1/2018		\$39.07	\$26.43	\$65.50
Operators (Building, Class 06 - See Notes)	5/1/2019		\$39.07	\$28.43	\$67.50
Operators (Building, Class 06 - See Notes)	5/1/2020		\$40.61	\$28.89	\$69.50
Operators (Building, Class 06 - See Notes)	5/1/2021		\$42.16	\$29.34	\$71.50
Operators (Building, Class 07A- See Notes)	5/1/2017		\$54.14	\$32.47	\$86.61
Operators (Building, Class 07A- See Notes)	5/1/2018		\$55.99	\$33.02	\$89.01
Operators (Building, Class 07A- See Notes)	5/1/2019		\$56.30	\$35.11	\$91.41
Operators (Building, Class 07A- See Notes)	5/1/2020		\$58.16	\$35.65	\$93.81
Operators (Building, Class 07A- See Notes)	5/1/2021		\$60.00	\$36.21	\$96.21
Operators (Building, Class 07B- See Notes)	5/1/2017		\$53.84	\$32.40	\$86.24
Operators (Building, Class 07B- See Notes)	5/1/2018		\$55.70	\$32.92	\$88.62
Operators (Building, Class 07B- See Notes)	5/1/2019		\$56.00	\$35.03	\$91.03
Operators (Building, Class 07B- See Notes)	5/1/2020		\$57.86	\$35.57	\$93.43
Operators (Building, Class 07B- See Notes)	5/1/2021		\$59.72	\$36.11	\$95.83
Painters Class 1 (see notes)	5/1/2021		\$41.24	\$30.29	\$71.53

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 21-07441 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Painters Class 2 (see notes)	2/1/2021		\$47.56	\$29.35	\$76.91
Painters Class 4 (see notes)	5/1/2021		\$41.62	\$30.29	\$71.91
Piledrivers	5/1/2021		\$43.73	\$37.99	\$81.72
Plasterers	5/1/2017		\$37.42	\$28.83	\$66.25
Plasterers	5/1/2018		\$37.42	\$30.04	\$67.46
Plasterers	5/1/2019		\$37.72	\$30.74	\$68.46
Plasterers	5/1/2020		\$38.12	\$31.34	\$69.46
plumber	5/1/2018		\$53.45	\$33.54	\$86.99
plumber	5/1/2019		\$55.45	\$34.54	\$89.99
plumber	8/1/2020		\$57.33	\$35.66	\$92.99
plumber	5/1/2021		\$59.83	\$36.16	\$95.99
Plumbers	5/1/2017		\$51.42	\$32.57	\$83.99
Pointers, Caulkers, Cleaners	5/1/2017		\$42.26	\$25.69	\$67.95
Pointers, Caulkers, Cleaners	5/1/2018		\$45.01	\$25.69	\$70.70
Pointers, Caulkers, Cleaners	5/1/2019		\$47.76	\$25.69	\$73.45
Pointers, Caulkers, Cleaners	5/1/2020		\$45.75	\$29.20	\$74.95
Pointers, Caulkers, Cleaners	5/1/2021		\$46.75	\$29.50	\$76.25
Roofers (Composition)	5/1/2017		\$36.15	\$30.22	\$66.37
Roofers (Composition)	5/1/2018		\$37.15	\$31.27	\$68.42
Roofers (Composition)	5/1/2019		\$38.35	\$31.80	\$70.15
Roofers (Composition)	5/1/2020		\$39.50	\$32.30	\$71.80
Roofers (Composition)	5/1/2021		\$40.33	\$33.12	\$73.45
Roofers (Shingle)	5/1/2016		\$25.70	\$19.17	\$44.87
Roofers (Shingle)	5/1/2019		\$28.50	\$20.87	\$49.37
Roofers (Shingle)	5/1/2020		\$29.50	\$21.25	\$50.75
Roofers (Shingle)	5/1/2021		\$30.50	\$21.55	\$52.05
Roofers (Slate & Tile)	5/1/2016		\$28.70	\$19.17	\$47.87
Roofers (Slate & Tile)	5/1/2018		\$30.50	\$20.37	\$50.87
Roofers (Slate & Tile)	5/1/2019		\$31.50	\$20.87	\$52.37
Roofers (Slate & Tile)	5/1/2020		\$32.50	\$21.25	\$53.75
Roofers (Slate & Tile)	5/1/2021		\$33.50	\$21.55	\$55.05
Sheet Metal Workers	5/1/2017		\$46.42	\$39.51	\$85.93
Sheet Metal Workers	5/1/2018		\$47.58	\$41.60	\$89.18
Sheet Metal Workers	5/1/2019		\$49.79	\$42.89	\$92.68
Sheet Metal Workers	5/1/2020		\$52.04	\$44.19	\$96.23
Sheet Metal Workers	5/1/2021		\$53.84	\$45.94	\$99.78
Sign Makers and Hangars	7/17/2021		\$29.49	\$23.90	\$53.39
Sprinklerfitters	4/1/2017		\$37.40	\$21.74	\$59.14
Sprinklerfitters	4/1/2018		\$38.80	\$22.74	\$61.54
Sprinklerfitters	5/1/2019		\$57.20	\$28.32	\$85.52
Sprinklerfitters	5/1/2020		\$59.10	\$29.22	\$88.32
Sprinklerfitters	5/1/2021		\$60.83	\$30.34	\$91.17
Steamfitters	5/1/2017		\$54.64	\$32.53	\$87.17
Steamfitters	5/1/2018		\$56.37	\$34.39	\$90.76

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 21-07441 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Steamfitters	5/1/2019		\$58.17	\$35.99	\$94.16
Steamfitters	5/1/2020		\$60.47	\$37.24	\$97.71
Steamfitters	5/1/2021		\$60.47	\$40.89	\$101.36
Steamfitters	5/1/2022		\$60.47	\$44.63	\$105.10
Stone Masons	5/1/2017		\$40.36	\$26.99	\$67.35
Stone Masons	5/1/2018		\$43.11	\$26.99	\$70.10
Stone Masons	5/1/2019		\$45.86	\$26.99	\$72.85
Stone Masons	5/1/2020		\$44.25	\$30.10	\$74.35
Stone Masons	5/1/2021		\$44.90	\$30.75	\$75.65
Terrazzo Finisher	5/1/2017		\$39.06	\$22.73	\$61.79
Terrazzo Finisher	5/1/2018		\$41.31	\$22.73	\$64.04
Terrazzo Finisher	5/1/2019		\$43.61	\$22.73	\$66.34
Terrazzo Finisher	5/1/2020		\$41.46	\$26.37	\$67.83
Terrazzo Grinder	5/1/2017		\$39.33	\$22.73	\$62.06
Terrazzo Grinder	5/1/2018		\$41.58	\$22.73	\$64.31
Terrazzo Grinder	5/1/2019		\$43.98	\$22.73	\$66.71
Terrazzo Grinder	5/1/2020		\$41.73	\$26.37	\$68.10
Terrazzo Mechanics	5/1/2017		\$43.71	\$24.81	\$68.52
Terrazzo Mechanics	5/1/2018		\$46.46	\$24.81	\$71.27
Terrazzo Mechanics	5/1/2019		\$49.21	\$24.81	\$74.02
Terrazzo Mechanics	5/1/2020		\$47.51	\$28.01	\$75.52
Terrazzo Mechanics	5/1/2021		\$48.01	\$28.81	\$76.82
Tile Finisher	5/1/2017		\$35.55	\$24.17	\$59.72
Tile Finisher	5/1/2018		\$37.55	\$24.17	\$61.72
Tile Finisher	5/1/2019		\$39.75	\$24.17	\$63.92
Tile Finisher	5/1/2020		\$37.57	\$27.65	\$65.22
Tile Setter	5/1/2017		\$43.71	\$24.81	\$68.52
Tile Setter	5/1/2018		\$46.46	\$24.81	\$71.27
Tile Setter	5/1/2019		\$49.21	\$24.81	\$74.02
Tile Setter	5/1/2020		\$47.51	\$28.01	\$75.52
Truckdriver class 1(see notes)	5/1/2017		\$30.46	\$17.96	\$48.42
Truckdriver class 1(see notes)	5/1/2018		\$31.93	\$17.96	\$49.89
Truckdriver class 1(see notes)	5/1/2019		\$32.21	\$19.19	\$51.40
Truckdriver class 1(see notes)	5/1/2020		\$34.93	\$17.96	\$52.89
Truckdriver class 1(see notes)	5/1/2021		\$36.48	\$17.96	\$54.44
Truckdriver class 2 (see notes)	5/1/2017		\$30.56	\$17.96	\$48.52
Truckdriver class 2 (see notes)	5/1/2018		\$32.03	\$17.96	\$49.99
Truckdriver class 2 (see notes)	5/1/2019		\$32.31	\$19.19	\$51.50
Truckdriver class 2 (see notes)	5/1/2020		\$35.03	\$17.96	\$52.99
Truckdriver class 2 (see notes)	5/1/2021		\$36.58	\$17.96	\$54.54
Truckdriver class 3 (see notes)	5/1/2017		\$30.81	\$17.96	\$48.77
Truckdriver class 3 (see notes)	5/1/2018		\$32.28	\$17.96	\$50.24
Truckdriver class 3 (see notes)	5/1/2019		\$32.56	\$19.19	\$51.75
Truckdriver class 3 (see notes)	5/1/2020		\$35.28	\$17.96	\$53.24

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 21-07441 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Truckdriver class 3 (see notes)	5/1/2021		\$36.83	\$17.96	\$54.79
Window Film / Tint Installer	6/1/2019		\$24.52	\$12.08	\$36.60

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter - Chief of Party (Surveying & Layout)	5/1/2017		\$51.42	\$27.39	\$78.81
Carpenter - Chief of Party (Surveying & Layout)	5/1/2018	4/30/2019	\$53.20	\$27.69	\$80.89
Carpenter - Chief of Party (Surveying & Layout)	5/1/2019	4/30/2020	\$55.38	\$27.69	\$83.07
Carpenter - Chief of Party (Surveying & Layout)	5/1/2020	4/30/2021	\$57.63	\$27.69	\$85.32
Carpenter - Chief of Party (Surveying & Layout)	5/1/2021		\$59.93	\$27.69	\$87.62
Carpenter - Instrument Person (Surveying & Layout)	5/1/2017		\$44.71	\$27.39	\$72.10
Carpenter - Instrument Person (Surveying & Layout)	5/1/2018	4/30/2019	\$46.26	\$27.69	\$73.95
Carpenter - Instrument Person (Surveying & Layout)	5/1/2019	4/30/2020	\$48.16	\$27.69	\$75.85
Carpenter - Instrument Person (Surveying & Layout)	5/1/2020	4/30/2021	\$50.11	\$27.69	\$77.80
Carpenter - Instrument Person (Surveying & Layout)	5/1/2021		\$52.11	\$27.69	\$79.80
Carpenter - Rodman (Surveying & Layout)	5/1/2017		\$35.77	\$21.19	\$56.96
Carpenter - Rodman (Surveying & Layout)	5/1/2018	4/30/2019	\$37.01	\$21.34	\$58.35
Carpenter - Rodman (Surveying & Layout)	5/1/2019	4/30/2020	\$38.53	\$21.34	\$59.87
Carpenter - Rodman (Surveying & Layout)	5/1/2020	4/30/2021	\$40.09	\$21.34	\$61.43
Carpenter - Rodman (Surveying & Layout)	5/1/2021		\$41.69	\$21.34	\$63.03
Carpenter	5/1/2018	4/30/2019	\$46.26	\$27.69	\$73.95
Carpenter	5/1/2019	4/30/2020	\$47.81	\$28.04	\$75.85
Carpenter	5/1/2020		\$49.46	\$28.34	\$77.80
Carpenter	5/1/2021		\$51.76	\$28.04	\$79.80
Cement Masons	5/1/2017		\$34.45	\$31.51	\$65.96
Cement Masons	5/1/2018		\$35.65	\$32.01	\$67.66
Cement Masons	5/1/2019		\$37.90	\$31.51	\$69.41
Cement Masons	5/1/2020		\$37.95	\$33.26	\$71.21
Cement Masons	5/1/2021		\$39.65	\$33.41	\$73.06
DockBuilder/ Divers (Building Heavy & Highway)	5/1/2020		\$52.44	\$37.27	\$89.71
DockBuilder/Pile Drivers/ Diver Tender(Building Heavy & Highway)	5/1/2020		\$43.70	\$37.27	\$80.97
Electric Lineman	5/29/2017		\$52.60	\$26.37	\$78.97
Electric Lineman	5/28/2018		\$53.64	\$27.45	\$81.09
Electric Lineman	5/27/2019		\$54.66	\$28.56	\$83.22
Electric Lineman	6/1/2020		\$55.96	\$29.76	\$85.72
Electric Lineman	5/31/2021		\$57.93	\$30.22	\$88.15
Electric Lineman	5/30/2022		\$59.17	\$31.48	\$90.65
Electric Lineman	5/29/2023		\$60.48	\$32.77	\$93.25
Electric Lineman	6/3/2024		\$62.07	\$33.96	\$96.03
Electricians	6/1/2022		\$44.46	\$23.06	\$67.52
Electricians	6/1/2023		\$46.49	\$23.06	\$69.55
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2016		\$46.20	\$31.26	\$77.46
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	1/1/2017		\$46.20	\$31.26	\$77.46
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2020		\$50.80	\$34.91	\$85.71
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2021		\$47.70	\$39.51	\$87.21
Iron Workers	7/1/2017		\$47.30	\$32.91	\$80.21

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Iron Workers	7/1/2019		\$49.30	\$34.41	\$83.71
Iron Workers	1/1/2020		\$49.80	\$34.41	\$84.21
Ironworker (Rodman)	7/1/2020		\$44.82	\$31.60	\$76.42
Laborers (Class 01 - See notes)	5/1/2017		\$29.75	\$25.65	\$55.40
Laborers (Class 01 - See notes)	5/1/2018		\$31.25	\$25.65	\$56.90
Laborers (Class 01 - See notes)	5/1/2019		\$31.95	\$26.50	\$58.45
Laborers (Class 01 - See notes)	5/1/2020		\$33.95	\$26.15	\$60.10
Laborers (Class 01 - See notes)	5/1/2021		\$36.20	\$25.65	\$61.85
Laborers (Class 02 - See notes)	5/1/2017		\$29.95	\$25.65	\$55.60
Laborers (Class 02 - See notes)	5/1/2018		\$31.45	\$25.65	\$57.10
Laborers (Class 02 - See notes)	5/1/2019		\$32.15	\$26.50	\$58.65
Laborers (Class 02 - See notes)	5/1/2020		\$34.15	\$26.15	\$60.30
Laborers (Class 02 - See notes)	5/1/2021		\$36.40	\$25.65	\$62.05
Laborers (Class 03 - See notes)	5/1/2017		\$29.95	\$25.65	\$55.60
Laborers (Class 03 - See notes)	5/1/2018		\$31.45	\$25.65	\$57.10
Laborers (Class 03 - See notes)	5/1/2019		\$32.15	\$26.50	\$58.65
Laborers (Class 03 - See notes)	5/1/2020		\$34.15	\$26.15	\$60.30
Laborers (Class 03 - See notes)	5/1/2021		\$36.40	\$25.65	\$62.05
Laborers (Class 04 - See notes)	5/1/2017		\$24.55	\$25.65	\$50.20
Laborers (Class 04 - See notes)	5/1/2018		\$26.05	\$25.65	\$51.70
Laborers (Class 04 - See notes)	5/1/2019		\$26.75	\$26.50	\$53.25
Laborers (Class 04 - See notes)	5/1/2020		\$28.75	\$26.15	\$54.90
Laborers (Class 04 - See notes)	5/1/2021		\$31.00	\$25.65	\$56.65
Laborers (Class 05 - See notes)	5/1/2017		\$30.60	\$25.65	\$56.25
Laborers (Class 05 - See notes)	5/1/2018		\$32.10	\$25.65	\$57.75
Laborers (Class 05 - See notes)	5/1/2019		\$32.80	\$26.50	\$59.30
Laborers (Class 05 - See notes)	5/1/2020		\$34.80	\$26.15	\$60.95
Laborers (Class 05 - See notes)	5/1/2021		\$37.05	\$25.65	\$62.70
Laborers (Class 06 - See notes)	5/1/2017		\$30.65	\$25.65	\$56.30
Laborers (Class 06 - See notes)	5/1/2018		\$32.15	\$25.65	\$57.80
Laborers (Class 06 - See notes)	5/1/2019		\$32.85	\$26.50	\$59.35
Laborers (Class 06 - See notes)	5/1/2020		\$34.85	\$26.15	\$61.00
Laborers (Class 06 - See notes)	5/1/2021		\$37.10	\$25.65	\$62.75
Laborers (Class 07 - See notes)	5/1/2017		\$30.50	\$25.65	\$56.15
Laborers (Class 07 - See notes)	5/1/2018		\$32.00	\$25.65	\$57.65
Laborers (Class 07 - See notes)	5/1/2019		\$32.70	\$26.50	\$59.20
Laborers (Class 07 - See notes)	5/1/2020		\$34.70	\$26.15	\$60.85
Laborers (Class 07 - See notes)	5/1/2021		\$36.95	\$25.65	\$62.60
Laborers (Class 08 - See notes)	5/1/2017		\$30.25	\$25.65	\$55.90
Laborers (Class 08 - See notes)	5/1/2018		\$31.75	\$25.65	\$57.40
Laborers (Class 08 - See notes)	5/1/2019		\$32.45	\$26.50	\$58.95
Laborers (Class 08 - See notes)	5/1/2020		\$34.45	\$26.15	\$60.60
Laborers (Class 08 - See notes)	5/1/2021		\$36.70	\$25.65	\$62.35
Laborers (Class 09 - See notes)	5/1/2017		\$30.10	\$25.65	\$55.75

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 09 - See notes)	5/1/2018		\$31.60	\$25.65	\$57.25
Laborers (Class 09 - See notes)	5/1/2019		\$32.30	\$26.50	\$58.80
Laborers (Class 09 - See notes)	5/1/2020		\$34.30	\$26.15	\$60.45
Laborers (Class 09 - See notes)	5/1/2021		\$36.55	\$25.65	\$62.20
Laborers (Class 10- See notes)	5/1/2017		\$30.25	\$25.65	\$55.90
Laborers (Class 10- See notes)	5/1/2018		\$33.30	\$25.65	\$58.95
Laborers (Class 10- See notes)	5/1/2019		\$32.45	\$26.50	\$58.95
Laborers (Class 10- See notes)	5/1/2020		\$34.45	\$26.15	\$60.60
Laborers (Class 10- See notes)	5/1/2021		\$36.70	\$25.65	\$62.35
Laborers (Class 11 -See Notes)	5/1/2017		\$30.15	\$25.65	\$55.80
Laborers (Class 11 -See Notes)	5/1/2018		\$31.55	\$25.65	\$57.20
Laborers (Class 11 -See Notes)	5/1/2019		\$32.35	\$26.50	\$58.85
Laborers (Class 11 -See Notes)	5/1/2020		\$34.35	\$26.15	\$60.50
Laborers (Class 11 -See Notes)	5/1/2021		\$36.50	\$25.65	\$62.15
Laborers (Class 12 -See Notes)	5/1/2017		\$31.85	\$25.65	\$57.50
Laborers (Class 12 -See Notes)	5/1/2018		\$32.45	\$25.65	\$58.10
Laborers (Class 12 -See Notes)	5/1/2019		\$34.05	\$26.50	\$60.55
Laborers (Class 12 -See Notes)	5/1/2020		\$36.05	\$26.15	\$62.20
Laborers (Class 12 -See Notes)	5/1/2021		\$37.40	\$25.65	\$63.05
Laborers (Class 13 -See Notes)	5/1/2017		\$33.88	\$25.65	\$59.53
Laborers (Class 13 -See Notes)	5/1/2018		\$35.38	\$25.65	\$61.03
Laborers (Class 13 -See Notes)	5/1/2019		\$36.08	\$26.50	\$62.58
Laborers (Class 13 -See Notes)	5/1/2020		\$38.08	\$26.15	\$64.23
Laborers (Class 13 -See Notes)	5/1/2021		\$40.33	\$25.65	\$65.98
Laborers (Class 14 -See Notes)	5/1/2017		\$30.00	\$25.65	\$55.65
Laborers (Class 14 -See Notes)	5/1/2018		\$31.50	\$25.65	\$57.15
Laborers (Class 14 -See Notes)	5/1/2019		\$32.20	\$26.50	\$58.70
Laborers (Class 14 -See Notes)	5/1/2020		\$34.20	\$26.15	\$60.35
Laborers (Class 14 -See Notes)	5/1/2021		\$36.45	\$25.65	\$62.10
Laborers Utility (PGW ONLY) (Flagperson)	5/1/2017		\$23.52	\$17.58	\$41.10
Laborers Utility (PGW ONLY)	5/1/2017		\$30.55	\$17.58	\$48.13
Landscape Laborer	5/1/2016		\$21.19	\$22.65	\$43.84
Landscape Laborer	5/1/2019		\$24.22	\$23.50	\$47.72
Landscape Laborer	5/1/2020		\$26.13	\$22.95	\$49.08
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2017		\$44.87	\$28.14	\$73.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2018		\$46.41	\$28.60	\$75.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2019		\$46.41	\$30.60	\$77.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2020		\$47.96	\$31.20	\$79.16
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2021		\$49.50	\$31.51	\$81.01
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2017		\$47.86	\$29.03	\$76.89

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2018		\$49.41	\$29.49	\$78.90
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2019		\$49.41	\$31.49	\$80.90
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2020		\$50.96	\$32.09	\$83.05
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2021		\$52.51	\$32.39	\$84.90
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2017		\$44.62	\$28.07	\$72.69
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2018		\$46.16	\$28.53	\$74.69
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2019		\$46.16	\$30.53	\$76.69
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2020		\$47.71	\$31.13	\$78.84
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2021		\$49.25	\$31.44	\$80.69
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2017		\$47.61	\$28.97	\$76.58
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2018		\$49.16	\$29.42	\$78.58
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2019		\$49.17	\$31.41	\$80.58
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2020		\$50.71	\$32.02	\$82.73
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2021		\$52.27	\$32.31	\$84.58
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2017		\$40.53	\$26.87	\$67.40
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2018		\$42.07	\$27.33	\$69.40
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2019		\$42.08	\$29.32	\$71.40
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2020		\$43.62	\$29.93	\$73.55
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2021		\$45.16	\$30.24	\$75.40
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2017		\$40.24	\$26.78	\$67.02
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2018		\$41.78	\$27.22	\$69.00
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2019		\$41.78	\$29.23	\$71.01
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2020		\$43.32	\$29.84	\$73.16
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2021		\$44.86	\$30.15	\$75.01
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2017		\$38.51	\$26.27	\$64.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2018		\$40.05	\$26.73	\$66.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2019		\$40.06	\$28.72	\$68.78

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 21-07441 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2020		\$41.60	\$29.33	\$70.93
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2021		\$43.14	\$29.64	\$72.78
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2017		\$37.52	\$25.98	\$63.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2018		\$39.07	\$26.43	\$65.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2019		\$39.07	\$28.43	\$67.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2020		\$40.61	\$29.04	\$69.65
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2021		\$42.16	\$29.34	\$71.50
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2017		\$54.14	\$32.47	\$86.61
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2018		\$55.99	\$33.02	\$89.01
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2019		\$56.30	\$35.11	\$91.41
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2020		\$58.16	\$35.80	\$93.96
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2021		\$60.00	\$36.21	\$96.21
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2017		\$53.84	\$32.40	\$86.24
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2018		\$55.70	\$32.92	\$88.62
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2019		\$56.00	\$35.03	\$91.03
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2020		\$57.86	\$35.72	\$93.58
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2021		\$59.72	\$36.11	\$95.83
Painters Class 2 (see notes)	2/1/2021		\$47.56	\$29.35	\$76.91
Painters Class 3 (see notes)	2/1/2021		\$58.52	\$29.39	\$87.91
Piledrivers	5/1/2021		\$43.73	\$37.99	\$81.72
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2017		\$51.91	\$32.53	\$84.44
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2020		\$60.47	\$36.93	\$97.40
Steamfitters	5/1/2018		\$56.37	\$34.39	\$90.76
Truckdriver class 1(see notes)	5/1/2017		\$30.31	\$17.96	\$48.27
Truckdriver class 1(see notes)	5/1/2018		\$31.78	\$17.96	\$49.74
Truckdriver class 1(see notes)	5/1/2019		\$32.06	\$19.19	\$51.25
Truckdriver class 1(see notes)	5/1/2020		\$34.78	\$17.96	\$52.74
Truckdriver class 1(see notes)	5/1/2021		\$36.33	\$17.96	\$54.29
Truckdriver class 2 (see notes)	5/1/2017		\$30.41	\$17.96	\$48.37
Truckdriver class 2 (see notes)	5/1/2018		\$31.88	\$17.96	\$49.84
Truckdriver class 2 (see notes)	5/1/2019		\$32.16	\$19.19	\$51.35
Truckdriver class 2 (see notes)	5/1/2020		\$34.88	\$17.96	\$52.84
Truckdriver class 2 (see notes)	5/1/2021		\$36.43	\$17.96	\$54.39

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 21-07441 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Truckdriver class 3 (see notes)	5/1/2017		\$30.66	\$17.96	\$48.62
Truckdriver class 3 (see notes)	5/1/2018		\$32.13	\$17.96	\$50.09
Truckdriver class 3 (see notes)	5/1/2019		\$32.41	\$19.19	\$51.60
Truckdriver class 3 (see notes)	5/1/2020		\$35.13	\$17.96	\$53.09
Truckdriver class 3 (see notes)	5/1/2021		\$36.68	\$17.96	\$54.64

DOCUMENT 00413 - BID FORM

1.1 BID INFORMATION

- A. Bidder: _____.
- B. Project Name: Bucks County Free Library Bensalem Branch Rear Wall Modifications and Window Additions
- C. Project Locations: Bensalem Branch – 3700 Humeville Road, Bensalem, PA 19020
- D. Owner: Bucks County Free Library
- E. Library Spec #10-29/21
- F. A mandatory Pre-Bid Meeting will be at 12:00 PM on November 9, 2021. Meet at the Bensalem Branch located at 3700 Humeville Road, Bensalem, PA 19020.

1.2 CERTIFICATIONS AND BASE BID

- A. Lump Sum Base Bid (Single Prime Contract):
 - 1. The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Holstein White, Inc. and Engineer's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

Base Bid

_____ Dollars (\$ _____)
Written Figures

1.3 BID GUARANTEE

- A. The undersigned Bidder shall furnish surety as specified within 10 days after a written Notice of Award, if offered within 60 days after receipt of bids, and on failure to do so agrees to forfeit to Library the attached cash, cashier's check, certified check, U.S. money order, or bid bond, in the following amount constituting five percent (5%) of the Base Bid amount above:

_____ Dollars (\$ _____).
(Written amount) (Numbers)

BID FORM

00413-1

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

- B. In the event Library does not offer Notice of Award within the time limits stated above, Library will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.4 SUBCONTRACTORS AND SUPPLIERS

- A. List all subcontractors expected to perform work as part of this project:

1. Company: _____ Trade: _____
2. Company: _____ Trade: _____
3. Company: _____ Trade: _____
4. Company: _____ Trade: _____
5. Company: _____ Trade: _____
6. Company: _____ Trade: _____

1.5 TIME OF COMPLETION

- A. The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Engineer, and shall fully complete the Work within 120 calendar days.

1.6 ACKNOWLEDGEMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. _____ Dated _____.
2. Addendum No. _____ Dated _____.

1.7 BID SUPPLEMENTS

- A. The following supplements are a part of this Bid Form and are attached hereto.
1. Bid Bond Form
 2. Non-Collusion Affidavit
 3. Contractor's Qualification Statement
 4. Proposed Schedule of Values Form
 5. Verification of Performance Bond and Labor and Material Bond
 6. Verification of Certificates of Insurance
 7. Public Works Employment Verification Form.

BID FORM

00413-2

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

1.8 CONTRACTOR'S LICENSE

- A. The undersigned further states that it is a duly licensed contractor, for the type of work proposed, in the Jurisdiction of the Project, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.9 SUBMISSION OF BID

Respectfully submitted this ____ day of _____, 20__.

Submitted By: _____
(Name of bidding firm or corporation)

Authorized
Signature: _____
(Handwritten signature)

Signed By: _____
(Type or print name)

Title: _____
(Owner/Partner/President/Vice President)

Witness By: _____
(Handwritten signature)

Attest: _____
(Handwritten signature)

By: _____
(Type or print name)

Title: _____
(Corporate Secretary or Assistant Secretary)

Street Address: _____

City, State, Zip _____

Phone: _____

License No.: _____

Federal ID No.: _____

(Affix Corporate Seal Here)

Note: Bids submitted with a bid bond that is not properly signed and sealed by the bidder and surety company will be rejected.

Bid responses that do not include pages 00413-1 thru 00413-4 and other items indicated above may not be considered for evaluation and award.

Bids submitted with a bid bond that is not properly signed and sealed by the bidder and Surety Company may not be considered for evaluation and award.

END OF DOCUMENT 00413

SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.

1.2 GENERAL CONDITIONS

- A. The Contractor shall visit the site before he submits his proposal. He shall examine all existing conditions which affect the work. Submission of the proposal shall be considered evidence that this requirement has been fulfilled. No extra payment will be allowed for additional work made necessary by the failure to visit the site.
- B. In preparing his estimate, the Contractor shall review all of the contract documents and visit the site in order to acquaint himself with the existing and related conditions that may, will or could affect his work. He shall be experienced, skilled and knowledgeable with this type of construction and shall be expert and proficient in the preparation of estimates and the comprehension, implementation, and interpretation of contract documents such as those prepared for this project.
- C. The Contractor by his acceptance of the contract guarantees that all work installed shall be free from all defects in workmanship and materials and that all apparatus furnished by him shall develop the capacities and characteristics specified. He further guarantees that if, during a period of one (1) year from the date of the certificate of completion and acceptance of the work, any such defects in workmanship, material or performance appear, such defects shall be remedied by him without cost to the Bucks County Free Library.
- D. The Bid Plans issued for procurement of contract are diagrammatic and indicate the general arrangement of systems. The Contractor shall provide all work required for a complete installation. The Bid Plans are not to be scaled. The contractor is solely responsible to field verify all dimensional information.
- E. The Contractor shall give all necessary notices, obtain all permits, pay all governmental taxes, fees and other costs in connection with his work. He shall file all necessary plans, and prepare all other documents including additional detailed plans that are required for compliance with all applicable laws, ordinances, rules and regulations.

SUMMARY

01100-1

- F. The Contractor shall be responsible for all working conditions and shall maintain a safe working environment at the job site for all employees, and building occupants.

1.3 PROJECT INFORMATION

- A. Project Identification:
 - 1. Bucks County Free Library Bensalem Branch Rear Wall Modifications and Window Addition.
- B. Project Address:
 - 1. Bensalem - 3700 Hulmeville Road, Bensalem, PA 19020
- C. Owner: Bucks County Free Library.
- D. Owner's Representative: Joe Thompson – Administrative Services Director
- E. Project Engineer:
 - 1. Holstein White, Inc.
 - a. Jamie Boles, P.E.
Office: (215)322-7711
Fax: (215)322-7709.

1.4 DEFINITIONS

- A. “Owner” Defined:
 - 1. Wherever the word “Owner” is used in these specifications, it shall be understood to mean:
Bucks County Free Library
Doylestown Branch – 150 S Pine Street
Doylestown, PA 18901
- B. “Engineer” Defined:
 - 1. Wherever the word “Engineer” is used in these Specifications, it shall be understood to mean:
Holstein White, Inc.
210 E. Street Road, Suite 2D
Feasterville, PA 18901
- C. “Contractor” Defined:
 - 1. Wherever the word “Contractor” is used in these Specifications, it shall be understood to mean the person, firm, or corporation to whom the execution of any part of the work herein contemplated shall be awarded by the Bucks County Free Library.
- D. “He” or “Him” as used in the Specifications is intended to identify the responsible party implied in each section of this Specification.

SUMMARY

01100-2

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:

Bensalem Branch Library

1. Demolish and removal areas of the rear wall as indicated on drawing S-101 and S-401.
2. Installation of new expansion joints as documented on drawings S-101 and S-401.
3. Install new windows with wood sills and trim in rear wall as documented on drawings S-101 and S-401.
4. Install new interior drywall along the rear wall, as well as tape, finish and paint wall (color to be selected by Library).
5. Repair cracks in masonry veneer at rear wall.

- B. Type of Contract.

The work will be performed under separate prime contracts as follows:

1. General Contract:
 - a. The General Contract shall include all labor, materials, equipment, and services necessary to furnish and install all work shown on structural plans S-101 and S-401 and as described in Specification Divisions 00, 01. Contract may also include work of other specification sections and other drawings where noted.
2. GENERAL NOTES REGARDING THE PRIME CONTRACTS.
 - a. All contractors are responsible for their respective sections of work, which may include work in other sections or shown on drawings other than their respective format. All contractors must make themselves familiar with the total project and all the project documents. No additions to Contract sums will be approved for any contract where work may be shown or included as part of the Contract Documents including Drawings AND/OR the Project Specifications.
 - b. There shall be no political signs or activities permissible on this project. The Owner (BUCKS COUNTY FREE LIBRARY) will hold the contractor responsible for any non-compliance acts and may be subject to back charges for each occurrence.
3. The Bucks County Free Library reserves the right to award locations individually or combined locations as determined to be in our best interest.

1.6 PROJECT COMPLETION DATE

- A. Project Completion Date: Project must be complete and fully operational with-in 120 days of notice to proceed.

SUMMARY

01100-3

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

1.7 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine construction operations to the areas of work indicated on the plans and as defined by the Owner's representative.
 - 2. Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Bucks County Free Library, Library's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- D. Building Security: Contractor shall be responsible for checking in with building security each day to obtain an ID badge for each employee performing work at the facility.
- E. Contractor shall obtain clearance from Bucks County Free Library prior to commencing work in any areas of building.

1.8 COORDINATION WITH OCCUPANTS

- A. Full Bucks County Free Library Occupancy: Bucks County Free Library will occupy site, existing and adjacent building(s) during entire construction period. Cooperate with Bucks County Free Library during construction operations to minimize conflicts and facilitate County usage. Perform the Work so as not to interfere with Library's day-to-day operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Bucks County Free Library and approval of authorities having jurisdiction.
 - 2. Notify Bucks County Free Library not less than (2) weeks prior to planned activity and confirm work 72 hours in advance of activities that will affect Library's operations.
Coordinate with, and receive written permission and sign-off from Owner.
- B. Contractor shall not proceed with any work in any area of building unless they have obtained clearance to work in that area by the Library's Representative.

SUMMARY

01100-4

- C. All Hazardous material remediation in occupied areas of the building shall occur on the weekends and be coordinated with Library's Representative.

1.9 WORK RESTRICTIONS

- A. Refer to Appendix for General Services Contractor Rules and Regulations. These rules and regulations supersede the specifications and shall be referred to in the event of conflicting information.
- B. General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- C. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7 a.m. to 5 p.m., Monday through Friday, and Weekends as coordinated with Bucks County Free Library, unless otherwise indicated.
- D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Bucks County Free Library or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Bucks County Free Library not less than two (2) weeks in advance of proposed utility interruptions, and provide a detailed schedule indicating exact systems to be interrupted and expected completion time.
 - 2. Obtain Library's written permission before proceeding with utility interruptions.
- E. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Bucks County Free Library occupancy with Library.
 - 1. Notify Bucks County Free Library not less than two (2) days in advance of proposed disruptive operations.
 - 2. Obtain Library's written permission before proceeding with disruptive operations.
- F. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet (8 m) of entrances, operable windows, or outdoor-air intakes.
- G. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.10 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

SUMMARY

01100-5

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 1 General Requirements: Requirements of Sections in Division 1 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Specification.

1.11 NEW WORK AND EXISTING BUILDING SYSTEMS

- A. Retain this article or portions of it if an explanation of conventions used in the Specifications and Drawings is necessary. Revise to suit Project. See Evaluations.
- B. Where existing facilities are being altered, disconnect and remove or relocate all existing electrical work that interferes with or is necessary because of new construction as specified, shown or required.
- C. Perform alterations and additions to present electrical systems with a minimum interruption in the operation of these systems. Obtain written clearance from Owner for such interruptions and schedule same at whatever time specified in writing by Owner.
- D. Circuit breakers made spare due to demolition shall be set in off position and labeled 'SPARE'.
- E. Where specified or required, extend existing systems or tie into same to provide a complete coordinated electrical system to satisfaction of Owner and Engineer.
- F. All existing work to remain, but disturbed or disconnected because of alterations and new construction shall be replaced and put in operating condition unless instructed otherwise in writing by Owner.
- G. Perform all work necessary to permit operation of all existing systems during the construction period. Provide and maintain applicable approved temporary wiring to meet this requirement.
- H. Existing branch circuits not shown shall remain intact to extent practicable, and shall be extended as required.

SUMMARY

01100-6

- I. Demolish and remove existing electrical equipment, feeders and conduit no longer required by new construction.

END OF SECTION 01100

SUMMARY

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

01100-7

SECTION 01250 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

- 1. Engineer will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Engineer's Supplemental Instructions." (Refer to Appendix for sample form).

1.3 PROPOSAL REQUESTS

- A. Bucks County Free Library-Initiated Proposal Requests: Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Engineer are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 20 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail" or forms acceptable to Engineer (Refer to Appendix for sample forms).
- B. Contractor-Initiated Work Change Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Construction Manager.

CONTRACT MODIFICATION PROCEDURES

01250-1

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Division 1 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Work Change Proposal Request Form: Use CSI Form 13.6A, "Change Order Request (Proposal)," with attachments CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail" or form acceptable to Engineer (Refer to Appendix for sample forms).

1.4 CHANGE ORDER PROCEDURES

1. On Library's approval of a Work Changes Proposal Request, Engineer will issue a Change Order for signatures of Bucks County Free Library and Contractor on AIA Document G701 (Refer to Appendix for sample form), or other forms acceptable to the County.

1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Engineer may issue a Construction Change Directive on AIA Document G714 (Refer to Appendix for sample form), or other forms acceptable to the Bucks County Free Library. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

END OF SECTION 01250

CONTRACT MODIFICATION PROCEDURES

01250-2

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

SECTION 01290 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1. Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Engineer at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
 - 3. Sub-schedules for Phased Work: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values coordinated with each phase of payment.
- B. Format and Content: Use Specification table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Bucks County Free Library.
 - c. Library's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Arrange schedule of values consistent with format of AIA Document G703 (Refer to Appendix for sample form).
 - 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with

PAYMENT PROCEDURES

01290-1

Specification table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.

- a. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
9. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Engineer and paid for by Bucks County Free Library.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Submit Application for Payment to Engineer by the 15 of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment (Refer to Appendix for sample forms).
- D. Certified Payroll: Submit certified payroll in accordance with the Pennsylvania Prevailing Wage Act. Certification shall be submitted for the work period applied. Documents shall consist of Certified Payroll Report and a Statement of Compliance. Forms can be downloaded and/or obtained from the Pennsylvania Department of Labor and Industry.

PAYMENT PROCEDURES

01290-2

- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Engineer will return incomplete applications without action.
1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 3. Retainage in the amount of 10% of the work completed shall be held back from each application for payment. At the discretion of the Bucks County Free Library and the Engineer, the retainage amount may be reduced to 5% when the project has reached 80% completion.
- F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Engineer by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 2. When an application shows completion of an item, submit conditional final or full waivers.
 3. County reserves the right to designate which entities involved in the Work must submit waivers.
 4. Waiver Forms: Submit executed waivers of lien on forms acceptable to County.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Schedule of unit prices.
 5. Submittal schedule (preliminary if not final).
 6. List of Contractor's staff assignments.
 7. List of Contractor's principal consultants.
 8. Copies of building permits.
 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 10. Initial progress report.
 11. Report of preconstruction conference.
 12. Certificates of insurance and insurance policies.
 13. Certified Payroll documents.

PAYMENT PROCEDURES

01290-3

- I. Application for Payment at Substantial Completion: After Engineer issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Library occupancy of designated portions of the Work.
 - 3. Certified Payroll documents
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements.
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. Contractor's Affidavit of Payment of Debts and Claims.
 - 5. Contractor's Affidavit of Release of Liens.
 - 6. Consent of Surety Company to Final Payment."
 - 7. Evidence that claims have been settled.
 - 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Library took possession of and assumed responsibility for corresponding elements of the Work.
 - 9. Final liquidated damages settlement statement.
 - 10. Final Certified Payroll reports.
 - 11. Maintenance Bond.
- K. Payment from the Bucks County Free Library will be made in 45 days after all of the appropriate documents have been approved.

END OF SECTION 01290

SECTION 01310 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination drawings.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings.

1.2 DEFINITIONS

- A. RFI: Request from Bucks County Free Library, Engineer, or Contractor seeking information required by or clarifications of the Contract Documents.

1.3 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Use CSI Form 1.5A (Refer to Appendix for sample form). Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.4 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.

- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for County and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.
 - 7. Project closeout activities.
 - 8. Startup and adjustment of systems.

1.5 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 - 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of engineering, structural, civil, mechanical, and electrical systems.
 - b. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Engineer indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
 - 1. Floor Plans and Reflected Ceiling Plans: Show engineering and structural elements, and mechanical, plumbing, fire-protection, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid.
 - 2. Plenum Space: Indicate sub-framing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings.

3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire alarm, and electrical equipment.
4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
6. Review: Engineer will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility.

1.6 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 1. Engineer will return RFIs submitted to Engineer by other entities controlled by Contractor with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Engineer.
 6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
- C. RFI Forms: AIA Document G716 Software-generated form with substantially the same content as indicated above, acceptable to Engineer (Refer to Appendix for sample form).
- D. Engineer's Action: Engineer will review each RFI, determine action required, and respond. Allow seven (7) working days for Engineer's response for each RFI. RFIs received by Engineer after 1:00 p.m. will be considered as received the following working day.

1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Engineer's actions on submittals.
 - f. Incomplete RFIs or inaccurately prepared RFIs.
 2. Engineer's action may include a request for additional information, in which case Engineer's time for response will date from time of receipt of additional information.
 3. Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 1 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Engineer in writing within 10 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Use CSI Log Form 13.2B (Refer to Appendix for sample form).
1. Project name.
 2. Name and address of Contractor.
 3. Name and address of Engineer.
 4. RFI number including RFIs that were dropped and not submitted.
 5. RFI description.
 6. Date the RFI was submitted.
 7. Date Engineer's response was received.
- F. On receipt of Engineer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Engineer within seven days if Contractor disagrees with response.
1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 2. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.7 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Bucks County Free Library and Engineer of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.

PROJECT MANAGEMENT AND COORDINATION

01310-4

3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Bucks County Free Library and Engineer, within three days of the meeting.
- B. Preconstruction Conference: Engineer will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Bucks County Free Library and Engineer, but no later than 15 days after Notice to Proceed.
1. Attendees: Authorized representatives of Bucks County Free Library Engineer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Procedures for processing field decisions and Change Orders.
 - f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.
 - j. Submittal procedures.
 - k. Preparation of record documents.
 - l. Use of the premises and existing building.
 - m. Work restrictions.
 - n. Working hours.
 - o. Library's occupancy requirements.
 - p. Responsibility for temporary facilities and controls.
 - q. Procedures for moisture and mold control.
 - r. Procedures for disruptions and shutdowns.
 - s. Construction waste management and recycling.
 - t. Parking availability.
 - u. Office, work, and storage areas.
 - v. Equipment deliveries and priorities.
 - w. First aid.
 - x. Security.
 - y. Progress cleaning.
 3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Pre-installation Conferences: Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and

installations that have preceded or will follow, shall attend the meeting. Advise Engineer of scheduled meeting dates.

2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

- a. Contract Documents.
- b. Options.
- c. Related RFIs.
- d. Related Change Orders.
- e. Purchases.
- f. Deliveries.
- g. Submittals.
- h. Review of mockups.
- i. Possible conflicts.
- j. Compatibility problems.
- k. Time schedules.
- l. Weather limitations.
- m. Manufacturer's written instructions.
- n. Warranty requirements.
- o. Compatibility of materials.
- p. Acceptability of substrates.
- q. Temporary facilities and controls.
- r. Space and access limitations.
- s. Regulations of authorities having jurisdiction.
- t. Testing and inspecting requirements.
- u. Installation procedures.
- v. Coordination with other work.
- w. Required performance results.
- x. Protection of adjacent work.
- y. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Progress Meetings: Conduct progress meetings at weekly intervals.

1. Attendees: In addition to representatives of Bucks County Free Library and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Status of documentation.
 - 5) Deliveries.
 - 6) Off-site fabrication.
 - 7) Access.
 - 8) Site utilization.
 - 9) Temporary facilities and controls.
 - 10) Progress cleaning.
 - 11) Quality and work standards.
 - 12) Status of correction of deficient items.
 - 13) Field observations.
 - 14) Status of RFIs.
 - 15) Status of proposal requests.
 - 16) Pending changes.
 - 17) Status of Change Orders.
 - 18) Pending claims and disputes.
 - 19) Documentation of information for payment requests.
3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
- a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

END OF SECTION 01310

SECTION 01320 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's construction schedule.
 - 2. Construction schedule updating reports.

1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time belongs to Bucks County Free Library.

1.3 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Five paper copies.
- B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.

- C. Construction Schedule Updating Reports: Submit with Applications for Payment.

1.4 COORDINATION

- A. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of final completion.
 - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each library branch as a separate numbered activity for each main element of the Work. Comply with the following:
 - 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Engineer.
 - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 - 4. Startup and Testing Time: Include no fewer than 15 days for startup and testing.
 - 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Engineer's administrative procedures necessary for certification of Substantial Completion.
 - 6. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 - 1. Phasing: Arrange list of activities on schedule by phase.
 - 2. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.

CONSTRUCTION PROGRESS DOCUMENTATION

01320-2

- f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
- 3. Work Stages: Indicate important stages of construction for each major portion of the Work.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.
- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
 - 1. Unresolved issues.
 - 2. Unanswered Requests for Information.
 - 3. Rejected or unreturned submittals.
 - 4. Notations on returned submittals.
 - 5. Pending modifications affecting the Work and Contract Time.
- F. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule.
- G. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
 - 1. Use Microsoft Project, for Windows XP, Macintosh OS X operating system, or other industry accepted scheduling software capable of exporting a pdf of each schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 30 days of date established from the contract award.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.3 REPORTS

- A. Bi Weekly Construction Reports: Prepare bi-weekly construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. Approximate count of personnel at Project site.
 - 3. Equipment at Project site.
 - 4. Material deliveries.

CONSTRUCTION PROGRESS DOCUMENTATION

01320-3

5. Accidents.
6. Meetings and significant decisions.
7. Unusual events.
8. Stoppages, delays, shortages, and losses.
9. Orders and requests of authorities having jurisdiction.
10. Change Orders received and implemented.
11. Construction Change Directives received and implemented.
12. Equipment or system tests and startups.

- B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate final completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Engineer, Library, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01320

SECTION 01330 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action.
- B. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Engineer's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will be provided by Engineer for Contractor's use in preparing submittals.
 - 1. Engineer will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings and Project record drawings.
 - a. Engineer makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

SUBMITTAL PROCEDURES

01330-1

- a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately 6 by 8 inches (150 by 200 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Engineer and Construction Manager.
 - 3. Include the following information for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name of Engineer.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of subcontractor.
 - g. Name of supplier.
 - h. Name of manufacturer.
 - i. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06100.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06100.01.A).
 - j. Number and title of appropriate Specification Section.
 - k. Drawing number and detail references, as appropriate.
 - l. Location(s) where product is to be installed, as appropriate.
 - m. Other necessary identification.
- 4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Engineer observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Engineer.

SUBMITTAL PROCEDURES

01330-2

5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Engineer will return without review or discard submittals received from sources other than Contractor.
 - a. Transmittal Form for Paper Submittals: Provide locations on form for the following information:
 - 1) Project name.
 - 2) Date.
 - 3) Destination (To:).
 - 4) Source (From:).
 - 5) Name and address of Engineer.
 - 6) Name of Construction Manager.
 - 7) Name of Contractor.
 - 8) Name of firm or entity that prepared submittal.
 - 9) Names of subcontractor, manufacturer, and supplier.
 - 10) Category and type of submittal.
 - 11) Submittal purpose and description.
 - 12) Specification Section number and title.
 - 13) Specification paragraph number or drawing designation and generic name for each of multiple items.
 - 14) Drawing number and detail references, as appropriate.
 - 15) Indication of full or partial submittal.
 - 16) Transmittal number, numbered consecutively.
 - 17) Submittal and transmittal distribution record.
 - 18) Remarks.
 - 19) Signature of transmitter.
- E. Options: Identify options requiring selection by Engineer.
- F. Deviations: Identify deviations from the Contract Documents on submittals.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked with approval notation from Engineer's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer's action stamp.

SUBMITTAL PROCEDURES

01330-3

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements:

1. Submit electronic submittals via email as PDF electronic files.
 - a. Engineer will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
2. Action Submittals: Submit five paper copies of each submittal unless otherwise indicated. Engineer will return two copies.
3. Informational Submittals: Submit five paper copies of each submittal unless otherwise indicated. Engineer will not return copies.
4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.

SUBMITTAL PROCEDURES

01330-4

5. Submit Product Data before or concurrent with Samples.
 6. Submit Product Data in the following format:
 - a. PDF electronic file.
 - b. Five paper copies of Product Data unless otherwise indicated. Engineer will return two copies.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm), but no larger than 30 by 42 inches (750 by 1067 mm).
 3. Submit Shop Drawings in the following format:
 - a. Five opaque (bond) copies of each submittal. Engineer will return two copy(ies).
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.

SUBMITTAL PROCEDURES

01330-5

- b. Samples not incorporated into the Work, or otherwise designated as County's property, are the property of Contractor.
- 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Engineer will return submittal with options selected.
- 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Engineer will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record sample.
 - 1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Submit product schedule in the following format:
 - a. Three paper copies of product schedule or list unless otherwise indicated. Engineer will return two copies.
- F. Coordination Drawings Submittals: Comply with requirements specified in Division 1 Section "Project Management and Coordination."
- G. Contractor's Construction Schedule: Comply with requirements specified in Division 1 Section "Construction Progress Documentation."
- H. Application for Payment and Schedule of Values: Comply with requirements specified in Division 1 Section "Payment Procedures."
- I. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 1 Section "Closeout Procedures."
- J. Maintenance Data: Comply with requirements specified in Division 1 Section "Operation and Maintenance Data."

SUBMITTAL PROCEDURES

01330-6

- K. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of Engineers and Bucks County Free Library, and other information specified.
- L. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- M. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- N. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- Q. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- R. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- S. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
- T. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- U. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- V. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- W. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads.

SUBMITTAL PROCEDURES

01330-7

Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Division 1 Section "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ENGINEER'S ACTION

- A. General: Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or revisions required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

SUBMITTAL PROCEDURES

01330-8

- C. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01330

SECTION 01420 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Engineer's action on Contractor's submittals, applications, and requests, "approved" is limited to Engineer's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Engineer. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

REFERENCES

- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Thomson Gale's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

AA	Aluminum Association, Inc. (The)
AAADM	American Association of Automatic Door Manufacturers
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
AATCC	American Association of Textile Chemists and Colorists
ABAA	Air Barrier Association of America
ABMA	American Bearing Manufacturers Association
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
AEIC	Association of Edison Illuminating Companies, Inc. (The)
AF&PA	American Forest & Paper Association
AGA	American Gas Association
AGC	Associated General Contractors of America (The)
AHA	American Hardboard Association (Now part of CPA)
AHAM	Association of Home Appliance Manufacturers

REFERENCES

AI	Asphalt Institute
AIA	American Institute of Architects (The)
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALCA	Associated Landscape Contractors of America (Now PLANET - Professional Landcare Network)
ALSC	American Lumber Standard Committee, Incorporated
AMCA	Air Movement and Control Association International, Inc.
ANSI	American National Standards Institute
AOSA	Association of Official Seed Analysts, Inc.
APA	Architectural Precast Association
APA	APA - The Engineered Wood Association
APA EWS	APA - The Engineered Wood Association; Engineered Wood Systems (See APA - The Engineered Wood Association)
API	American Petroleum Institute
ARI	Air-Conditioning & Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASCE	American Society of Civil Engineers
ASCE/SEI	American Society of Civil Engineers/Structural Engineering Institute (See ASCE)
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	ASME International (American Society of Mechanical Engineers International)
ASSE	American Society of Sanitary Engineering
ASTM	ASTM International (American Society for Testing and Materials International)

REFERENCES

AWCI	Association of the Wall and Ceiling Industry
AWCMA	American Window Covering Manufacturers Association (Now WCMA)
AWI	Architectural Woodwork Institute
AWPA	American Wood Protection Association (Formerly: American Wood Preservers' Association)
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Industry Association (The)
BICSI	BICSI, Inc.
BIFMA	BIFMA International (Business and Institutional Furniture Manufacturer's Association International)
BISSC	Baking Industry Sanitation Standards Committee
BWF	Badminton World Federation (Formerly: IBF - International Badminton Federation)
CCC	Carpet Cushion Council
CDA	Copper Development Association
CEA	Canadian Electricity Association
CEA	Consumer Electronics Association
CFFA	Chemical Fabrics & Film Association, Inc.
CGA	Compressed Gas Association
CIMA	Cellulose Insulation Manufacturers Association
CISCA	Ceilings & Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CRRC	Cool Roof Rating Council

REFERENCES

CPA	Composite Panel Association
CPPA	Corrugated Polyethylene Pipe Association
CRI	Carpet and Rug Institute (The)
CRSI	Concrete Reinforcing Steel Institute
CSA	Canadian Standards Association
CSA	CSA International (Formerly: IAS - International Approval Services)
CSI	Cast Stone Institute
CSI	Construction Specifications Institute (The)
CSSB	Cedar Shake & Shingle Bureau
CTI	Cooling Technology Institute (Formerly: Cooling Tower Institute)
DHI	Door and Hardware Institute
EIA	Electronic Industries Alliance
EIMA	EIFS Industry Members Association
EJCDC	Engineers Joint Contract Documents Committee
EJMA	Expansion Joint Manufacturers Association, Inc.
ESD	ESD Association (Electrostatic Discharge Association)
ETL SEMCO	Intertek ETL SEMCO (Formerly: ITS - Intertek Testing Service NA)
FIBA	Federation Internationale de Basketball (The International Basketball Federation)
FIVB	Federation Internationale de Volleyball (The International Volleyball Federation)
FM Approvals	FM Approvals LLC
FM Global	FM Global (Formerly: FMG - FM Global)
FMRC	Factory Mutual Research

REFERENCES

01420-5

(Now FM Global)

FRSA	Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.
FSA	Fluid Sealing Association
FSC	Forest Stewardship Council
GA	Gypsum Association
GANA	Glass Association of North America
GRI	(Part of GSI)
GS	Green Seal
GSI	Geosynthetic Institute
HI	Hydraulic Institute
HI	Hydronics Institute
HMMA	Hollow Metal Manufacturers Association (Part of NAAMM)
HPVA	Hardwood Plywood & Veneer Association
HPW	H. P. White Laboratory, Inc.
IAS	International Approval Services (Now CSA International)
IBF	International Badminton Federation (Now BWF)
ICEA	Insulated Cable Engineers Association, Inc.
ICRI	International Concrete Repair Institute, Inc.
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The)
IESNA	Illuminating Engineering Society of North America
IENT	Institute of Environmental Sciences and Technology
IGCC	Insulating Glass Certification Council
IGMA	Insulating Glass Manufacturers Alliance

REFERENCES

ILI	Indiana Limestone Institute of America, Inc.
ISO	International Organization for Standardization Available from ANSI
ISSFA	International Solid Surface Fabricators Association
ITS	Intertek Testing Service NA (Now ETL SEMCO)
ITU	International Telecommunication Union
KCMA	Kitchen Cabinet Manufacturers Association
LMA	Laminating Materials Association (Now part of CPA)
LPI	Lightning Protection Institute
MBMA	Metal Building Manufacturers Association
MFMA	Maple Flooring Manufacturers Association, Inc.
MFMA	Metal Framing Manufacturers Association, Inc.
MH	Material Handling (Now MHIA)
MHIA	Material Handling Industry of America
MIA	Marble Institute of America
MPI	Master Painters Institute
MSS	Manufacturers Standardization Society of The Valve and Fittings Industry Inc.
NAAMM	National Association of Architectural Metal Manufacturers
NACE	NACE International (National Association of Corrosion Engineers International)
NADCA	National Air Duct Cleaners Association
NAGWS	National Association for Girls and Women in Sport
NAIMA	North American Insulation Manufacturers Association
NBGQA	National Building Granite Quarries Association, Inc.

REFERENCES

NCAA	National Collegiate Athletic Association (The)
NCMA	National Concrete Masonry Association
NCPI	National Clay Pipe Institute
NCTA	National Cable & Telecommunications Association
NEBB	National Environmental Balancing Bureau
NECA	National Electrical Contractors Association
NeLMA	Northeastern Lumber Manufacturers' Association
NEMA	National Electrical Manufacturers Association
NETA	InterNational Electrical Testing Association
NFHS	National Federation of State High School Associations
NFPA	NFPA (National Fire Protection Association)
NFRC	National Fenestration Rating Council
NGA	National Glass Association
NHLA	National Hardwood Lumber Association
NLGA	National Lumber Grades Authority
NOFMA	NOFMA: The Wood Flooring Manufacturers Association (Formerly: National Oak Flooring Manufacturers Association)
NOMMA	National Ornamental & Miscellaneous Metals Association
NRCA	National Roofing Contractors Association
MRMCA	National Ready Mixed Concrete Association
NSF	NSF International (National Sanitation Foundation International)
NSSGA	National Stone, Sand & Gravel Association
NTMA	National Terrazzo & Mosaic Association, Inc. (The)
NTRMA	National Tile Roofing Manufacturers Association (Now TRI)

REFERENCES

NWWDA	National Wood Window and Door Association (Now WDMA)
OPL	Omega Point Laboratories, Inc. (Now ITS)
PCI	Precast/Prestressed Concrete Institute
PDCA	Painting & Decorating Contractors of America
PDI	Plumbing & Drainage Institute
PGI	PVC Geomembrane Institute
PLANET	Professional Landcare Network (Formerly: ACLA - Associated Landscape Contractors of America)
PTI	Post-Tensioning Institute
RCSC	Research Council on Structural Connections
RFCI	Resilient Floor Covering Institute
RIS	Redwood Inspection Service
SAE	SAE International
SDI	Steel Deck Institute
SDI	Steel Door Institute
SEFA	Scientific Equipment and Furniture Association
SEI/ASCE	Structural Engineering Institute/American Society of Civil Engineers (See ASCE)
SGCC	Safety Glazing Certification Council
SIA	Security Industry Association
SIGMA	Sealed Insulating Glass Manufacturers Association (Now IGMA)
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association

REFERENCES

SMPTE	Society of Motion Picture and Television Engineers
SPFA	Spray Polyurethane Foam Alliance (Formerly: SPI/SPFD - The Society of the Plastics Industry, Inc.; Spray Polyurethane Foam Division)
SPIB	Southern Pine Inspection Bureau (The)
SPRI	Single Ply Roofing Industry
SSINA	Specialty Steel Industry of North America
SSPC	SSPC: The Society for Protective Coatings
STI	Steel Tank Institute
SWI	Steel Window Institute
SWRI	Sealant, Waterproofing, & Restoration Institute
TCA	Tile Council of America, Inc. (Now TCNA)
TCNA	Tile Council of North America, Inc.
TIA/EIA	Telecommunications Industry Association/Electronic Industries Alliance
TMS	The Masonry Society
TPI	Truss Plate Institute, Inc.
TPI	Turfgrass Producers International
TRI	Tile Roofing Institute
UL	Underwriters Laboratories Inc.
UNI	Uni-Bell PVC Pipe Association
USAV	USA Volleyball
USGBC	U.S. Green Building Council
USITT	United States Institute for Theatre Technology, Inc.
WASTEC	Waste Equipment Technology Association
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Window Covering Manufacturers Association

REFERENCES

WCSC	Window Covering Safety Council (Formerly: WCMA - Window Covering Manufacturers Association)
WDMA	Window & Door Manufacturers Association (Formerly: NWWDA - National Wood Window and Door Association)
WI	Woodwork Institute (Formerly: WIC - Woodwork Institute of California)
WIC	Woodwork Institute of California (Now WI)
WMMPA	Wood Moulding & Millwork Producers Association
WSRCA	Western States Roofing Contractors Association
WWPA	Western Wood Products Association

- C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

IAPMO	International Association of Plumbing and Mechanical Officials
ICC	International Code Council
ICC-ES	ICC Evaluation Service, Inc.
UBC	Uniform Building Code (See ICC)

- D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CE	Army Corps of Engineers
CPSC	Consumer Product Safety Commission
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration

REFERENCES

FCC	Federal Communications Commission
FDA	Food and Drug Administration
GSA	General Services Administration
HUD	Department of Housing and Urban Development
LBL	Lawrence Berkeley National Laboratory
NCHRP	National Cooperative Highway Research Program (See TRB)
NIST	National Institute of Standards and Technology
OSHA	Occupational Safety & Health Administration
PBS	Public Buildings Service (See GSA)
PHS	Office of Public Health and Science
RUS	Rural Utilities Service (See USDA)
SD	State Department
TRB	Transportation Research Board
USDA	Department of Agriculture
USPS	Postal Service

- E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

ADAAG	Americans with Disabilities Act (ADA) Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities Available from U.S. Access Board
CFR	Code of Federal Regulations Available from Government Printing Office
DOD	Department of Defense Military Specifications and Standards Available from Department of Defense Single Stock Point

REFERENCES

DSCC	Defense Supply Center Columbus (See FS)
FED-STD	Federal Standard (See FS)
FS	Federal Specification Available from Department of Defense Single Stock Point Available from Defense Standardization Program Available from General Services Administration Available from National Institute of Building Sciences
FTMS	Federal Test Method Standard (See FS)
MIL	(See MILSPEC)
MIL-STD	(See MILSPEC)
MILSPEC	Military Specification and Standards Available from Department of Defense Single Stock Point
UFAS	Uniform Federal Accessibility Standards Available from Access Board

- F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CBHF	State of California, Department of Consumer Affairs Bureau of Home Furnishings and Thermal Insulation
CCR	California Code of Regulations
CPUC	California Public Utilities Commission
TFS	Texas Forest Service Forest Resource Development

REFERENCES

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01420

REFERENCES

Bucks County Free Library Bensalem Branch
Rear Wall Modifications and Window Addition

01420-14

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

1.2 USE CHARGES

- A. General: Installation and removal of temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to Engineer, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Water and Sewer Service from Existing System: Water from Bucks County Free Library's existing water system is available for use without metering and without payment of use charges.
- C. Electric Power Service from Existing System: Electric power from Bucks County Free Library's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.3 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.4 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Coordinate the use of existing facilities with County. All existing systems required for temporary use shall be returned to preconstruction conditions.

TEMPORARY FACILITIES AND CONTROLS

01500-1

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Office and Material Storage: Location shall be approved by Bucks County Free Library prior to commencement of work.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Existing HVAC system shall be used.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 - 1. Install electric power service overhead unless otherwise indicated.
 - 2. Connect temporary service to Library's existing power source, as directed by Library.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Maintain support facilities until Engineer schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Bucks County Free Library.
- B. Waste Disposal Facilities: Contractor shall be responsible for removal of trash from site daily.
- C. Waste Disposal Facilities: Coordinate waste removal with Library. Waste shall not be allowed to accumulate in any areas. Waste shall be removed from site daily.

TEMPORARY FACILITIES AND CONTROLS

01500-2

- D. Temporary Use of Permanent Stairs: Use of new stairs for construction traffic will be permitted, provided stairs are protected and finishes restored to new condition at time of Substantial Completion.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- C. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- D. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Library and from fumes and noise.
 - 1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
 - 2. Construct dustproof partitions with two layers of 6-mil (0.14-mm) polyethylene sheet on each side. Cover floor with two layers of 6-mil (0.14-mm) polyethylene sheet, extending sheets 18 inches (460 mm) up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
 - a. Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches (1219 mm) between doors. Maintain water-dampened foot mats in vestibule.
 - 3. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 - 4. Insulate partitions to control noise transmission to occupied areas.
 - 5. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
 - 6. Protect air-handling equipment.
 - 7. Provide walk-off mats at each entrance through temporary partition.
- E. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire prevention program.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

TEMPORARY FACILITIES AND CONTROLS

01500-3

4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 1. Materials and facilities that constitute temporary facilities are property of Contractor. Bucks County Free library reserves right to take possession of Project identification signs.
 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 01500

SECTION 01600 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Division 1 Section "Substitution Procedures" for requests for substitutions.

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within one week of receipt of a comparable product

PRODUCT REQUIREMENTS

01600-1

request. Engineer will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

- a. Form of Approval: As specified in Division 1 Section "Submittal Procedures."
- b. Use product specified if Engineer does not issue a decision on use of a comparable product request within time allocated.

- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 1 Section "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

- B. Delivery and Handling:

- 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
- 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

- C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 6. Protect stored products from damage and liquids from freezing.

PRODUCT REQUIREMENTS

01600-2

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to County.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Bucks County Free Library.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
- C. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Bucks County free Library reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Engineer will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
- B. Product Selection Procedures:
 - 1. Products:
 - a. Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" for consideration of an unnamed product.
 - 2. Manufacturers:
 - a. Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that

PRODUCT REQUIREMENTS

01600-3

complies with requirements. Comply with requirements in "Comparable Products" for consideration of an unnamed manufacturer's product.

3. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
- C. Visual Matching Specification: Where Specifications require "match Engineer's sample", provide a product that complies with requirements and matches Engineer's sample. Engineer's decision will be final on whether a proposed product matches.
 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Division 1 Section "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Engineer from manufacturer's full range" or similar phrase, select a product that complies with requirements. Engineer will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Engineer will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Engineer may return requests without action, except to record noncompliance with these requirements:
 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 3. Evidence that proposed product provides specified warranty.
 4. List of similar installations for completed projects with project names and addresses and names and addresses of Engineers and Countys, if requested.
 5. Samples, if requested.

END OF SECTION 01600

PRODUCT REQUIREMENTS

01600-4

SECTION 01635 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A (Refer to Appendix for sample form).
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Bucks County Free Library and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.

SUBSTITUTION PROCEDURES

01635-1

- g. List of similar installations for completed projects with project names and addresses and names and addresses of Engineers and Libraries.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Engineer will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Engineer's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Engineer does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
- 1. Conditions: Engineer will consider Contractor's request for substitution when the following conditions are satisfied:

SUBSTITUTION PROCEDURES

01635-2

- a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- b. Requested substitution will not adversely affect Contractor's construction schedule.
- c. Requested substitution has received necessary approvals of authorities having jurisdiction.
- d. Requested substitution is compatible with other portions of the Work.
- e. Requested substitution has been coordinated with other portions of the Work.
- f. Requested substitution provides specified warranty.
- g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience: Not allowed.

END OF SECTION 01635

SECTION 01700 - EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Cutting and patching.
 - 5. Coordination of County-installed products.
 - 6. Progress cleaning.
 - 7. Starting and adjusting.
 - 8. Protection of installed construction.
 - 9. Correction of the Work.
- B. Related Requirements:
 - 1. Division 1 Section "Summary" for limits on use of Project site.

1.2 INFORMATIONAL SUBMITTALS

- A. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

1.3 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Structural Elements: When cutting and patching structural elements, notify Engineer of locations and details of cutting and await directions from Engineer before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
 - 2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in

EXECUTION REQUIREMENTS

01700-1

reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.

4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Engineer's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Engineer for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- B. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility and County that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

EXECUTION REQUIREMENTS

01700-2

- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Engineer according to requirements in Division 1 Section "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Engineer promptly.
 - 1. Do not scale Drawings to obtain required dimensions.
 - 2. Inform installers of lines and levels to which they must comply.
 - 3. Check the location, level and plumb, of every major element as the Work progresses.
 - 4. Notify Engineer when deviations from required lines and levels exceed allowable tolerances.

3.4 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.

EXECUTION REQUIREMENTS

01700-3

- F. Tools and Equipment: Do not use tools or equipment that produce noise levels disruptive to occupants in adjacent spaces.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Engineer.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.5 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

EXECUTION REQUIREMENTS

01700-4

- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 - 5. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 - 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weather-tight condition and ensures thermal and moisture integrity of building enclosure.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

EXECUTION REQUIREMENTS

01700-5

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
1. Remove liquid spills promptly.
 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.

EXECUTION REQUIREMENTS

01700-6

- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.8 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 01700

SECTION 01732 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Salvage of existing items to be reused or recycled.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to County.
- C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 PREINSTALLATION MEETINGS

- A. Pre-demolition Conference: Conduct conference at Project site prior to commencement of demolition.

1.4 FIELD CONDITIONS

- A. County will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so County's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by County as far as practical.
- C. Notify Engineer of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: Hazardous materials are present in buildings and structures to be selectively demolished.

SELECTIVE DEMOLITION

01732-1

1. Hazardous material remediation is the responsibility of the Contractor.
2. Existing conditions in areas of new work, or work disturbed due to demolition, shall be tested by Contractor, and proper remediation provided.
3. All hazardous materials removal shall be coordinated with County's Representative.
4. All hazardous material remediation in occupied areas of the building shall occur on the Weekends.

E. Storage or sale of removed items or materials on-site is not permitted.

F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

1. Maintain fire-protection facilities in service during selective demolition operations.

1.5 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting selective demolition operations.

B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Engineer.

D. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective building demolition operations.

SELECTIVE DEMOLITION

01732-2

- E. Survey of Existing Conditions: Record existing conditions by use of measured drawings or preconstruction photographs.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
 - 1. Comply with requirements for existing services/systems interruptions specified in Division 1 Section "Summary."
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. County will arrange to shut off indicated services/systems when requested by Contractor.
 - 2. Arrange to shut off indicated utilities with utility companies.
 - 3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 4. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated to be removed.
 - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
 - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.
 - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
 - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
 - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to County.
 - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
 - g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material.
- C. Refrigerant: Remove refrigerant from mechanical equipment to be selectively demolished according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Comply with requirements for access and protection specified in Division 1 Section "Temporary Facilities and Controls."

SELECTIVE DEMOLITION

01732-3

- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
 - 4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 5. Dispose of demolished items and materials promptly.
- B. Removed and Salvaged Items:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until delivery to County.
 - 4. Transport items to County's storage area designated by County.
 - 5. Protect items from damage during transport and storage.
- C. Removed and Reinstalled Items:
 - 1. Clean and repair items to functional condition adequate for intended reuse.
 - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - 3. Protect items from damage during transport and storage.
 - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Engineer, items may be removed to a suitable,

protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain County's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off County's property and legally dispose of them.

3.6 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 01732

SECTION 01770 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Division 1 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
 - 2. Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 3. Division 1 Section "Demonstration and Training" for requirements for instructing County's personnel.

1.2 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

CLOSEOUT PROCEDURES

01770-1

1.5 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Bucks County Free Library unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 1 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 - 3. Submit test/adjust/balance records.
 - 4. Submit changeover information related to Library's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Bucks County Free Library of pending insurance changeover requirements.
 - 2. Make final changeover of permanent locks and deliver keys to Bucks County Free Library. Advise Library's personnel of changeover in security provisions.
 - 3. Complete startup and testing of systems and equipment.
 - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 5. Instruct Bucks County Free Library's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Division 1 Section "Demonstration and Training."
 - 6. Advise Bucks County Free Library of changeover in heat and other utilities.
 - 7. Participate with Bucks County Free Library in conducting inspection and walkthrough with local emergency responders.
 - 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 9. Complete final cleaning requirements, including touchup painting.
 - 10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.

CLOSEOUT PROCEDURES

01770-2

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for final completion.

1.6 FINAL COMPLETION PROCEDURES

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
 1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
 2. Certified List of Incomplete Items: Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 4. Submit pest-control final inspection report and warranty.
 5. Instruct Bucks County Free Library's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings.
- B. Inspection: Submit a written request for final inspection to determine acceptance. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.7 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 3. Submit list of incomplete items in the following format:
 - a. Three paper copies unless otherwise indicated. Engineer will return two copies.

CLOSEOUT PROCEDURES

01770-3

1.8 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Bucks County Free Library's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 - 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
 - 1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

CLOSEOUT PROCEDURES

01770-4

- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:

- a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
- b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
- c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
- d. Remove tools, construction equipment, machinery, and surplus material from Project site.
- e. Remove snow and ice to provide safe access to building.
- f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- h. Sweep concrete floors broom clean in unoccupied spaces.
- i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
- j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
- k. Remove labels that are not permanent.
- l. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- m. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- n. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- o. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
- p. Leave Project clean and ready for occupancy.

- C. Pest Control: Comply with pest control requirements in Division 1 Section "Temporary Facilities and Controls." Prepare written report.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

CLOSEOUT PROCEDURES

01770-5

- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

END OF SECTION 01770

SECTION 01781 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. Related Requirements:
 - 1. Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1) Submit three paper-copy set(s) of marked-up record prints.
 - 2) Submit record digital data files and two set(s) of plots.
 - 3) Engineer will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1) Submit three paper-copy set(s) of marked-up record prints.
 - 2) Submit PDF electronic files of scanned record prints and three set(s) of prints.
 - 3) Print each drawing, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit three paper copies, and one annotated PDF electronic file, of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit three paper copies, and one annotated PDF electronic file, of each submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised Drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Record data as soon as possible after obtaining it.
 - c. Record and check the markup before enclosing concealed installations.
 - 2. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 - 3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 - 4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Engineer. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
 - 1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
 - 2. Format: DWG, Version , Microsoft Windows or Apple Macintosh operating system.
 - 3. Format: Annotated PDF electronic file with comment function enabled.
 - 4. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
 - 5. Refer instances of uncertainty to Engineer for resolution.
 - 6. Engineer will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.
- C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 - 2. Format: Annotated PDF electronic file with comment function enabled.
 - 3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.

PROJECT RECORD DOCUMENTS

01781-2

4. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Engineer.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 4. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic, file paper copy and scanned PDF electronic file(s) of marked-up paper copy of Specifications.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as annotated PDF electronic file, paper copy and scanned PDF electronic file(s) of marked-up paper copy of Product Data.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as PDF electronic file, paper copy and scanned PDF electronic file(s) of marked-up miscellaneous record submittals.

PROJECT RECORD DOCUMENTS

01781-3

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Engineer's reference during normal working hours.

END OF SECTION 01781

SECTION 01782 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Emergency manuals.
 - 3. Operation manuals for systems, subsystems, and equipment.
 - 4. Product maintenance manuals.
 - 5. Systems and equipment maintenance manuals.

1.2 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Engineer will comment on whether content of operations and maintenance submittals are acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Engineer.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
 - b. Enable inserted reviewer comments on draft submittals.
 - 2. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Engineer will return two copies.
- C. Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Engineer will return copy with comments.
 - 1. Correct or revise each manual to comply with Engineer's comments. Submit copies of each corrected manual within 15 days of receipt of Engineer's comments and prior to commencing demonstration and training.

OPERATION AND MAINTENANCE DATA

01782-1

PART 2 - PRODUCTS

2.1 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information.
- B. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- C. Title Page: Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Bucks County Free Library.
 - 4. Date of submittal.
 - 5. Name and contact information for Contractor.
 - 6. Name and contact information for Construction Manager.
 - 7. Name and contact information for Engineer.
 - 8. Name and contact information for Commissioning Authority.
 - 9. Names and contact information for major consultants to the Engineer that designed the systems contained in the manuals.
 - 10. Cross-reference to related systems in other operation and maintenance manuals.
- D. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- E. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- F. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
 - 1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 - 2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily

OPERATION AND MAINTENANCE DATA

01782-2

navigated file tree. Configure electronic manual to display bookmark panel on opening file.

G. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.

1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents, and indicate Specification Section number on bottom of spine. Indicate volume number for multiple-volume sets.
2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
4. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.2 EMERGENCY MANUALS

A. Content: Organize manual into a separate section for each of the following:

1. Type of emergency.
2. Emergency instructions.
3. Emergency procedures.

B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:

1. Fire.
2. Flood.
3. Gas leak.
4. Water leak.
5. Power failure.
6. Water outage.
7. System, subsystem, or equipment failure.
8. Chemical release or spill.

OPERATION AND MAINTENANCE DATA

01782-3

- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of County's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
 - 1. Instructions on stopping.
 - 2. Shutdown instructions for each type of emergency.
 - 3. Operating instructions for conditions outside normal operating limits.
 - 4. Required sequences for electric or electronic systems.
 - 5. Special operating instructions and procedures.

2.3 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
 - 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 - 2. Performance and design criteria if Contractor is delegated design responsibility.
 - 3. Operating standards.
 - 4. Operating procedures.
 - 5. Operating logs.
 - 6. Wiring diagrams.
 - 7. Control diagrams.
 - 8. Piped system diagrams.
 - 9. Precautions against improper use.
 - 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
 - 1. Product name and model number. Use designations for products indicated on Contract Documents.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
 - 1. Startup procedures.
 - 2. Equipment or system break-in procedures.
 - 3. Routine and normal operating instructions.
 - 4. Regulation and control procedures.
 - 5. Instructions on stopping.

OPERATION AND MAINTENANCE DATA

01782-4

6. Normal shutdown instructions.
 7. Seasonal and weekend operating instructions.
 8. Required sequences for electric or electronic systems.
 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.4 PRODUCT MAINTENANCE MANUALS

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
1. Product name and model number.
 2. Manufacturer's name.
 3. Color, pattern, and texture.
 4. Material and chemical composition.
 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
1. Inspection procedures.
 2. Types of cleaning agents to be used and methods of cleaning.
 3. List of cleaning agents and methods of cleaning detrimental to product.
 4. Schedule for routine cleaning and maintenance.
 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

2.5 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures,

OPERATION AND MAINTENANCE DATA

01782-5

maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Bucks County Free Library's operating personnel for types of emergencies indicated.

OPERATION AND MAINTENANCE DATA

01782-6

- B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
- D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
- E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original project record documents as part of operation and maintenance manuals.
- F. Comply with Division 1 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 01782

SECTION 01820 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for instructing County's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.

1.2 INFORMATIONAL SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

1.3 CLOSEOUT SUBMITTALS

- A. At completion of training, submit complete training manual(s) for Bucks County Free Library's use prepared and bound in format matching operation and maintenance manuals and in PDF electronic file format on compact disc.

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative experienced in operation and maintenance procedures and training.
- C. Pre-instruction Conference: Conduct conference at Project site review methods and procedures related to demonstration and training.

DEMONSTRATION AND TRAINING

01820-1

1.5 COORDINATION

- A. Coordinate instruction schedule with Bucks County Free Library's operations. Adjust schedule as required to minimize disrupting Bucks County Free Library's operations and to ensure availability of County's personnel.
- B. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Engineer.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
 - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
 - 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Operations manuals.
 - c. Maintenance manuals.
 - d. Project record documents.
 - e. Identification systems.
 - f. Warranties and bonds.
 - g. Maintenance service agreements and similar continuing commitments.
 - 3. Emergencies: Include the following, as applicable:
 - a. Instructions on meaning of warnings, trouble indications, and error messages.
 - b. Instructions on stopping.

DEMONSTRATION AND TRAINING

01820-2

- c. Shutdown instructions for each type of emergency.
 - d. Operating instructions for conditions outside of normal operating limits.
 - e. Sequences for electric or electronic systems.
 - f. Special operating instructions and procedures.
4. Operations: Include the following, as applicable:
- a. Startup procedures.
 - b. Equipment or system break-in procedures.
 - c. Routine and normal operating instructions.
 - d. Regulation and control procedures.
 - e. Control sequences.
 - f. Safety procedures.
 - g. Instructions on stopping.
 - h. Normal shutdown instructions.
 - i. Operating procedures for emergencies.
 - j. Operating procedures for system, subsystem, or equipment failure.
 - k. Seasonal and weekend operating instructions.
 - l. Required sequences for electric or electronic systems.
 - m. Special operating instructions and procedures.
5. Adjustments: Include the following:
- a. Alignments.
 - b. Checking adjustments.
 - c. Noise and vibration adjustments.
 - d. Economy and efficiency adjustments.
6. Troubleshooting: Include the following:
- a. Diagnostic instructions.
 - b. Test and inspection procedures.
7. Maintenance: Include the following:
- a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.
8. Repairs: Include the following:
- a. Diagnosis instructions.
 - b. Repair instructions.
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.

- d. Instructions for identifying parts and components.
- e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 01782 "Operation and Maintenance Data."

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Bucks County Free Library for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Bucks County Free Library's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - 1. Engineer will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
 - 2. County will furnish an instructor to describe Bucks County Free Library's operational philosophy.
 - 3. Bucks County Free Library will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Bucks County Free Library, through Engineer, with at least Two (2) weeks advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- E. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a demonstration performance-based test.

END OF SECTION 01820

DEMONSTRATION AND TRAINING

01820-4

APPENDICIES

1. Section Not Used
2. Section Not Used
3. Section Not Used
4. AIA Document G701 – Change Order (01250.1.4.1)
5. AIA Document G702 – Application for Payment (01290.1.3.C)
6. AIA Document G703 – Schedule of Values (01290.1.2.B.2)
7. AIA Document G710 – Supplemental Instructions (01250.1.2)
8. AIA Document G714 – Construction Change Directive (01250.1.5.A)
9. AIA Document G716 – RFI Form (01310.1.6.C)
10. CSI Form 1.5A – Subcontractor List (01310.1.3.A)
11. Section Not Used
12. CSI Form 13.1A – Substitution Request Form (01635.1.3.A.1)
13. CSI Log Form 13.2B – RFI Log (01310.1.6.E)
14. CSI Form 13.6A – Change Order Request (01250.1.3.B.7)
15. CSI Form 13.6C – Proposal Worksheet Detail (01250.1.3.A.2.e)
16. CSI Form 13.6D – Proposal Worksheet Summary (01250.1.3.A.2.e)

APPENDIX 4

AIA Document G701 – Change Order (01250.1.4.1)

DRAFT AIA[®] Document G701[™] - 2001

Change Order

PROJECT (Name and address):	CHANGE ORDER NUMBER:	OWNER: <input type="checkbox"/>
	DATE:	ARCHITECT: <input type="checkbox"/>
TO CONTRACTOR (Name and address):	ARCHITECT'S PROJECT NUMBER:	CONTRACTOR: <input type="checkbox"/>
	CONTRACT DATE:	FIELD: <input type="checkbox"/>
	CONTRACT FOR:	OTHER: <input type="checkbox"/>

THE CONTRACT IS CHANGED AS FOLLOWS:

(Include, where applicable, any undisputed amount attributable to previously executed Construction Change Directives)

The original Contract Sum was

\$ _____

The net change by previously authorized Change Orders

\$ _____

The Contract Sum prior to this Change Order was

\$ _____ 0.00

The Contract Sum will be increased by this Change Order in the amount of

\$ _____

The new Contract Sum including this Change Order will be

\$ _____ 0.00

The Contract Time will be increased by Zero (0) days.

The date of Substantial Completion as of the date of this Change Order therefore is

NOTE: This Change Order does not include changes in the Contract Sum, Contract Time or Guaranteed Maximum Price which have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.

ARCHITECT (Firm name)	CONTRACTOR (Firm name)	OWNER (Firm name)
ADDRESS	ADDRESS	ADDRESS
BY (Signature)	BY (Signature)	BY (Signature)
(Typed name)	(Typed name)	(Typed name)
DATE	DATE	DATE

APPENDIX 5

AIA Document G702 – Application for Payment
(01290.1.3.C)

Application and Certificate for Payment

TO OWNER:	PROJECT:	APPLICATION NO:	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	Distribution to:
		PERIOD TO:		OWNER: <input type="checkbox"/>
		CONTRACT FOR:		ARCHITECT: <input type="checkbox"/>
FROM	VIA	CONTRACT DATE:		CONTRACTOR: <input type="checkbox"/>
CONTRACTOR:	ARCHITECT:	PROJECT NOS: / /		FIELD: <input type="checkbox"/>
				OTHER: <input type="checkbox"/>

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM	\$ _____	
2. Net change by Change Orders	\$ _____	
3. CONTRACT SUM TO DATE (Line 1 ± 2)	\$ _____	
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$ _____	
5. RETAINAGE:		
a. _____% of Completed Work (Column D + E on G703)	\$ _____	
b. _____% of Stored Material (Column F on G703)	\$ _____	
Total Retainage (Lines 5a + 5b or Total in Column I of G703).....	\$ _____	
6. TOTAL EARNED LESS RETAINAGE	\$ _____	
(Line 4 Less Line 5 Total)		
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	\$ _____	
(Line 6 from prior Certificate)		
8. CURRENT PAYMENT DUE	\$ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td></tr></table>	
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	\$ _____	

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$	\$
Total approved this Month	\$	\$
TOTALS	\$	\$
NET CHANGES by Change Order	\$	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____

Date: _____

State of:

County of:

Subscribed and sworn to before
me this day of

Notary Public:

My Commission expires:

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ _____
 (Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____

Date:

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract

APPENDIX 6

AIA Document G703 – Schedule of Values
(01290.1.2.B.2)

Continuation Sheet

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:

APPLICATION DATE:

PERIOD TO:

ARCHITECT'S PROJECT NO:

[illegible]

APPENDIX 7

AIA Document G710 – Supplemental Instructions
(01250.1.2)

DRAFT AIA[®] Document G710[™] - 1992

Architect's Supplemental Instructions

PROJECT (Name and address):

ARCHITECT'S SUPPLEMENTAL
INSTRUCTION NO:

OWNER (Name and address):

DATE OF ISSUANCE:

CONTRACT FOR:

FROM ARCHITECT (Name and
address):

CONTRACT DATE:

TO CONTRACTOR (Name and
address):

ARCHITECT'S PROJECT NUMBER:

OWNER: ☐

ARCHITECT: ☐

CONSULTANT: ☐

CONTRACTOR: ☐

FIELD: ☐

OTHER: ☐

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

DESCRIPTION:

ATTACHMENTS:

(Here insert listing of documents that support description.)

ISSUED BY THE ARCHITECT:

(Signature)

(Printed name and title)

APPENDIX 8

AIA Document G714 – Construction Change Directive
(01250.1.5.A)

DRAFT AIA® Document G714™ – 2007

Construction Change Directive

PROJECT: <i>(Name and address)</i>	DIRECTIVE NUMBER:	OWNER: <input type="checkbox"/>
	DATE:	ARCHITECT: <input type="checkbox"/>
	CONTRACT FOR:	CONSULTANT: <input type="checkbox"/>
TO CONTRACTOR: <i>(Name and address)</i>	CONTRACT DATED:	CONTRACTOR: <input type="checkbox"/>
	ARCHITECT'S PROJECT NUMBER:	FIELD: <input type="checkbox"/>
		OTHER: <input type="checkbox"/>

You are hereby directed to make the following change(s) in this Contract:
(Describe briefly any proposed changes or list any attached information in the alternative)

PROPOSED ADJUSTMENTS

- The proposed basis of adjustment to the Contract Sum or Guaranteed Maximum Price is:
 - ☐ • Lump Sum of \$
 - ☐ • Unit Price of \$ per
 - ☐ • As provided in Section 7.3.3 of AIA Document A201–2007
 - ☐ • As follows:

- The Contract Time is proposed to . The proposed adjustment, if any, is .

When signed by the Owner and Architect and received by the Contractor, this document becomes effective IMMEDIATELY as a Construction Change Directive (CCD), and the Contractor shall proceed with the change(s) described above.

Contractor signature indicates agreement with the proposed adjustments in Contract Sum and Contract Time set forth in this CCD.

ARCHITECT *(Firm name)*

OWNER *(Firm name)*

CONTRACTOR *(Firm name)*

ADDRESS

ADDRESS

ADDRESS

BY *(Signature)*

BY *(Signature)*

BY *(Signature)*

(Typed name)

(Typed name)

(Typed name)

DATE

DATE


DATE

APPENDIX 9

AIA Document G716 – RFI Form (01310.1.6.C)

DRAFT AIA[®] Document G716[™] - 2004

Request for Information ("RFI")

TO:		FROM:		
PROJECT:		ISSUE DATE:		RFI No.
PROJECT NUMBERS: /		REQUESTED REPLY DATE: COPIES TO:		

RFI DESCRIPTION: *(Fully describe the question or type of information requested.)*

REFERENCES/ATTACHMENTS: *(List specific documents researched when seeking the information requested.)*

SPECIFICATIONS: DRAWINGS: OTHER:

SENDER'S RECOMMENDATION: *(If RFI concerns a site or construction condition, the sender may provide a recommended solution, including cost and/or schedule considerations.)*

RECEIVER'S REPLY: *(Provide answer to RFI, including cost and/or schedule considerations.)*

BY	DATE	COPIES TO
----	------	-----------

Note: This reply is not an authorization to proceed with work involving additional cost, time or both. If any reply requires a change to the Contract Documents, a Change Order, Construction Change Directive or a Minor Change in the work must be executed in accordance with the Contract Documents.

APPENDIX 10

CSI Form 1.5A – Subcontractor List (01310.1.3.A)

SUBCONTRACTORS AND MAJOR MATERIAL SUPPLIERS LIST

Project: _____ From (Contractor): _____

Date: _____

To (A/E): _____ A/E Project Number: _____

Contract For: _____

List Subcontractors and Major Material Suppliers proposed for use on this Project as required by the Construction Documents. Attach supplemental sheets if necessary.

Section Number	Section Title	Firm	Address	Phone Number (Fax Number)	Contact
-------------------	------------------	------	---------	------------------------------	---------

☐ Attachments

Signed by: _____

Date: _____

Copies: ☐ Owner ☐ Consultants ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ File

APPENDIX 12

CSI Form 13.1A – Substitution Request Form
(01635.1.3.A.1)



SUBSTITUTION REQUEST

(After the Bidding/Negotiating Stage)

Project: _____ Substitution Request Number: _____

From: _____
To: _____ Date: _____

A/E Project Number: _____
Re: _____ Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer: _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____
Installer: _____ Address: _____ Phone: _____

History: ☐ New product ☐ 1-4 years old ☐ 5-10 years old ☐ More than 10 years old

Differences between proposed substitution and specified product: _____

☐ Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____
Address: _____ Owner: _____
_____ Date Installed: _____

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: ☐ No ☐ Yes [Add] [Deduct] _____ days.

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

SUBSTITUTION REQUEST

(After the Bidding/Negotiating Stage - Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments: _____

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01635 Substitution Procedures.
- ☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01635 Substitution Procedures.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ A/E ☐ _____

APPENDIX 13

CSI Log Form 13.2B – RFI Log (01310.1.6.E)



REQUEST FOR

Project: _____ A/E Project Number: _____

Owner _____ Contractor: _____

[illegible]

APPENDIX 14

CSI Form 13.6A – Change Order Request (01250.1.3.B.7)



Knowledge for Creating
and Sustaining
the Built Environment

CHANGE ORDER REQUEST (PROPOSAL)

Project: _____ Change Order Request Number: _____

From (Contractor): _____
To: _____ Date: _____

A/E Project Number: _____
Re: _____ Contract For: _____

This Change Order Request (C.O.R.) contains an itemized quotation for changes in the Contract Sum or Contract Time in response to proposed modifications to the Contract Documents based on Proposal Request No. _____.

Description of Proposed Change:

Attached supporting information from: ☐ Subcontractor ☐ Supplier _____ ☐ _____ ☐ _____

Reason for Change:

Does Proposed Change involve a change in Contract Sum? ☐ No ☐ Yes [Increase] [Decrease] \$ _____
Does Proposed Change involve a change in Contract Time? ☐ No ☐ Yes [Increase] [Decrease] _____ days.

Attached pages: ☐ Proposal Worksheet Summary: _____
☐ Proposal Worksheet Detail(s): _____

Signed by: _____ Date: _____

Copies: ☐ Owner ☐ Consultants ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ File

APPENDIX 15

CSI Form 13.6C – Proposal Worksheet Detail
(01250.1.3.A.2.e)



PROPOSAL WORKSHEET DETAIL

Project: _____ Change Order Request Number: _____
To: _____ From: _____ Contact: _____
Re: _____ Date: _____
Proposal Request Number: _____ A/E Project Number: _____

SHADED AREAS FOR A/E USE

ADDITIONS

			UNIT PRICES		SUBTOTALS		TOTAL	
Ref. No.	Item Description	Quantity	Materials	Labor	Materials	Labor		
1								
2								
3								
4								

Subtotal (Enter this number on Worksheet Summary.)

DEDUCTIONS

			UNIT PRICES		SUBTOTALS		TOTAL	
Ref. No.	Item Description	Quantity	Materials	Labor	Materials	Labor		
1								
2								
3								
4								

Subtotal (Enter this number on Worksheet Summary.)

APPENDIX 16

CSI Form 13.6D – Proposal Worksheet Summary
(01250.1.3.A.2.e)



Knowledge for Creating
and Sustaining
the Built Environment

PROPOSAL WORKSHEET SUMMARY

Project: _____ Change Order Request Number: _____
To: _____ From: _____
Re: _____ Date: _____
Proposal Request Number: _____ A/E Project Number: _____

Complete and attach Proposal Worksheet Detail for each element of Work. Enter Worksheet Information below.

ADDITIONS

	Sheet	Description	Material	Labor	Subtotal
1					
2					
3					
4					
5					
6					
7					
Subtotal					

DEDUCTIONS

	Sheet	Description	Material	Labor	Subtotal
1					
2					
3					
4					
5					
6					
7					
Subtotal					

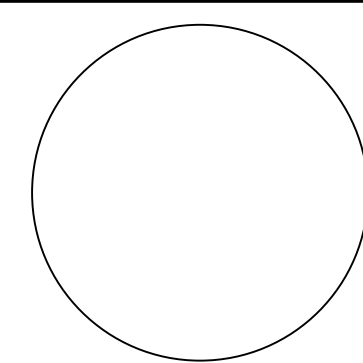
Subcontractor's Net: _____
Subcontractor's OH&P: _____
Subcontractor's Bond: _____
Subcontractor's Total: \$ -
Contractor's OH&P: _____
Contractor's Bond: _____
Insurance: _____
Tax: _____
WORKSHEET TOTAL \$ -



Carroll Engineering Corporation
CORPORATE OFFICE
949 . EASTON . ROAD
WARRINGTON, . PA . 18976
PHONE: 215.343.5700
FAX: 215.343.0875

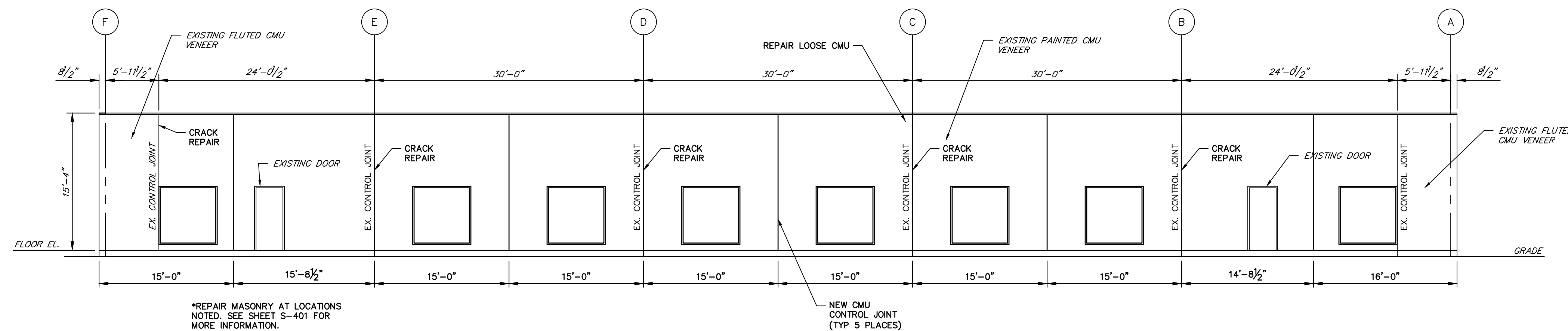
630 Freedom Business Ctr., 3rd Fl. 105 Rankin Boulevard, Suite 206
King of Prussia, PA 19006 188borough, NJ 08044
Phone: 610-807-5100 Phone: 908-874-7540
Phone: 484-875-3075 Fax: 908-874-5762

www.carrollengineering.com



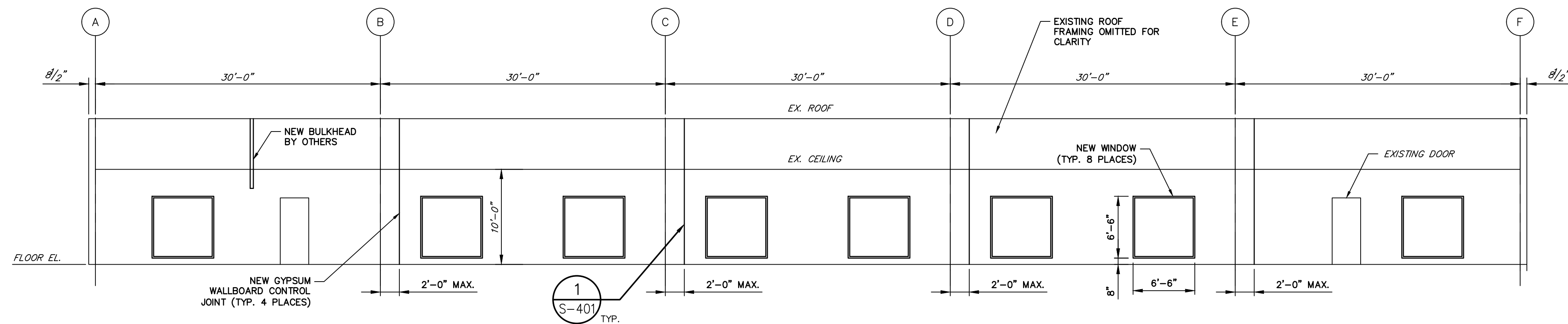
FLOOR PLAN AND ELEVATIONS

BENSALEM BRANCH
BUCKS COUNTY FREE LIBRARY
SITUATED IN
BENSALEM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA
PREPARED FOR
BUCKS COUNTY FREE LIBRARY
150 SOUTH PINE STREET
DOYLESTOWN, PA 18901



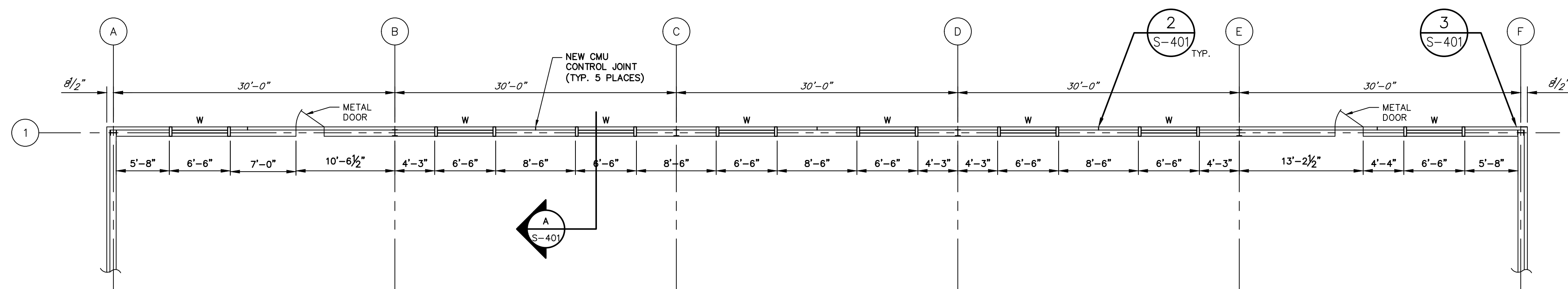
REAR ELEVATION - EXTERIOR

1/8" = 1'-0"



REAR WALL ELEVATION - INTERIOR

1/8" = 1'-0"



PARTIAL FLOOR PLAN

1/8" = 1'-0"

NO.	DESCRIPTION	DATE	INITIALS

DATE 5/28/21
CADD FILE 2021-5-13 BEN
JOB NO 21-1872
DSG BY MAT
DWN BY JMA
CKD BY MAT
SCALE AS NOTED

SHEET 1 OF 2 SHEETS

DRAWING NUMBER

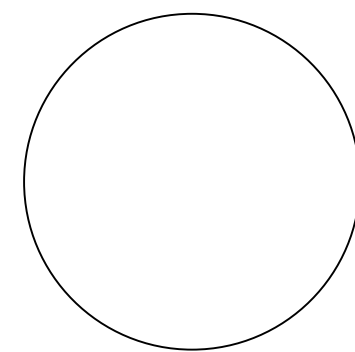
S-101



Carroll Engineering Corporation
CORPORATE OFFICE
949 . EASTON . ROAD
WARRINGTON, . PA . 18976
PHONE: 215.343.5700
FAX: 215.343.0875

630 Freedom Business Ctr., 3rd Fl. 105 Rankin Boulevard, Suite 206
King of Prussia, PA 19006 1880borough, NJ 08044
Phone: 610-897-5100 Phone: 908-874-7540
Makem, PA 17135
Phone: 484-875-3075

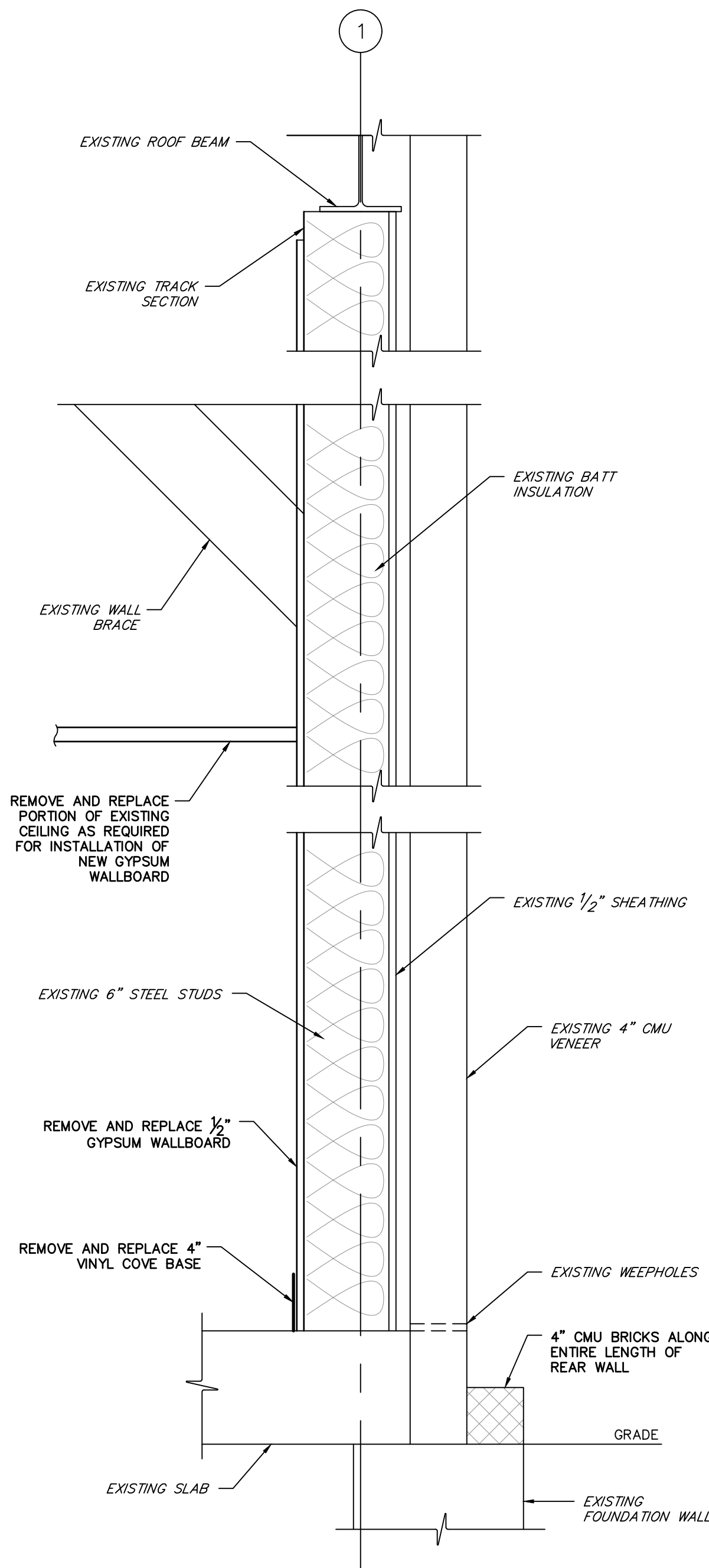
www.carrollengineering.com



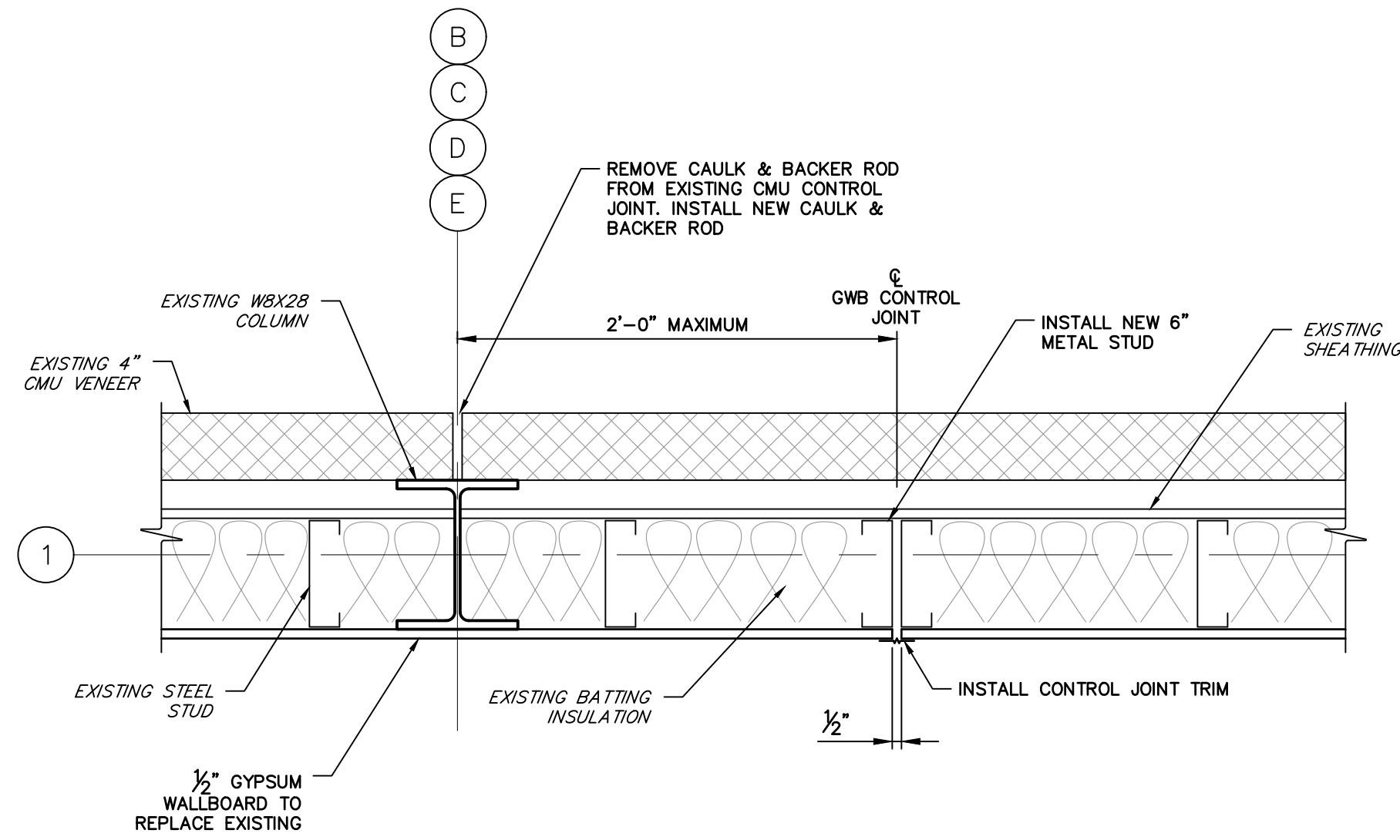
DETAILS

BENSLEM BRANCH BUCKS COUNTY FREE LIBRARY

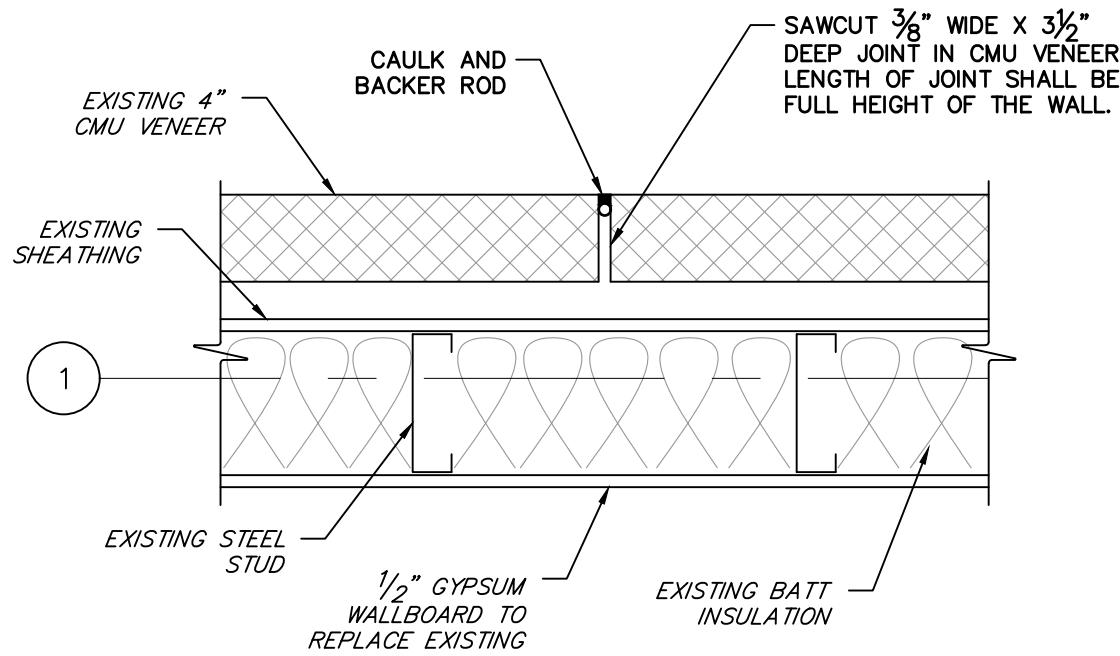
SITUATED IN
BENSLEM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA
PREPARED FOR
BUCKS COUNTY FREE LIBRARY
150 SOUTH PINE STREET
DOYLESTOWN, PA 18901



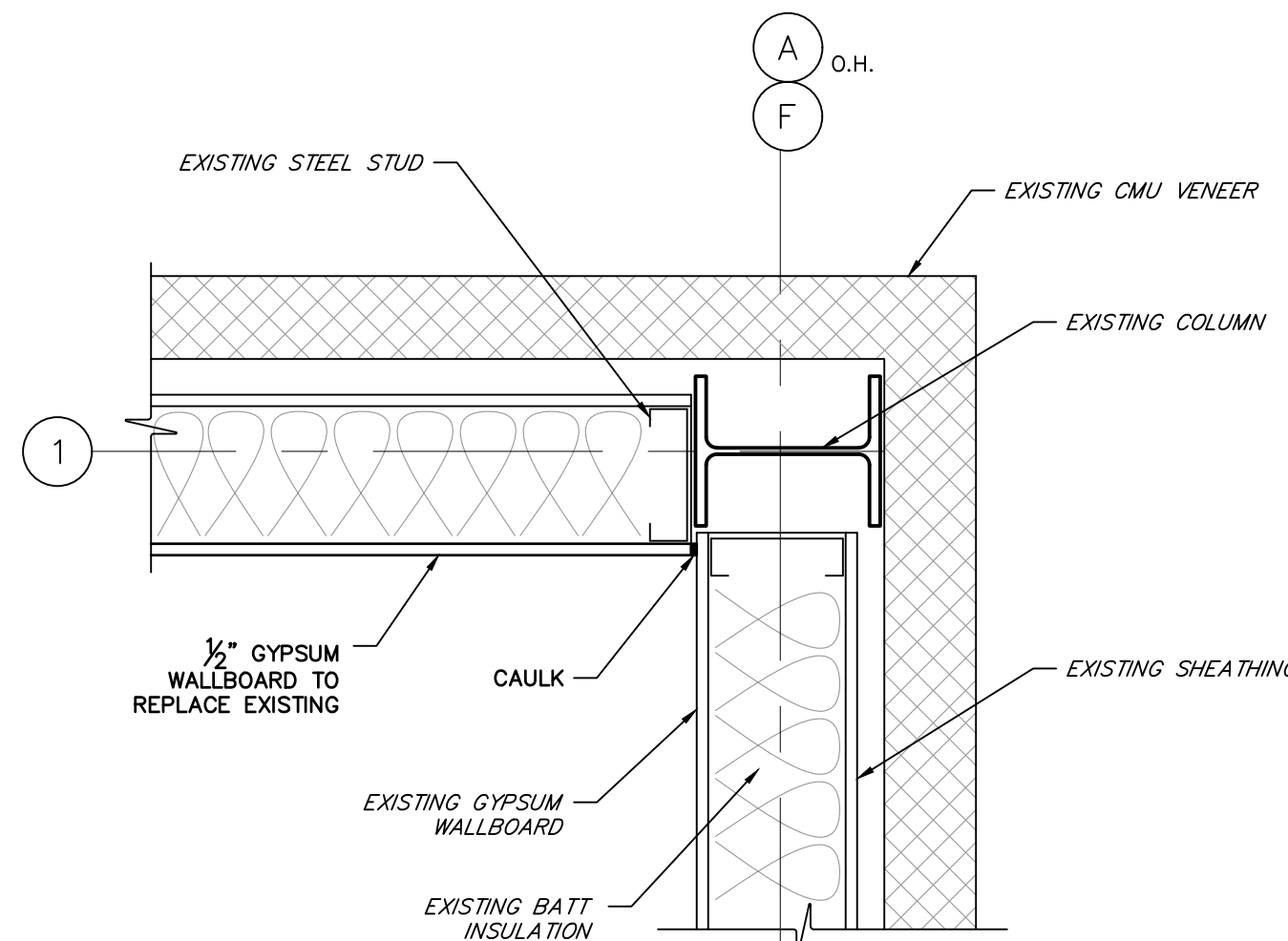
SECTION **A**
SCALE: 1 1/2" = 1'-0" S-101



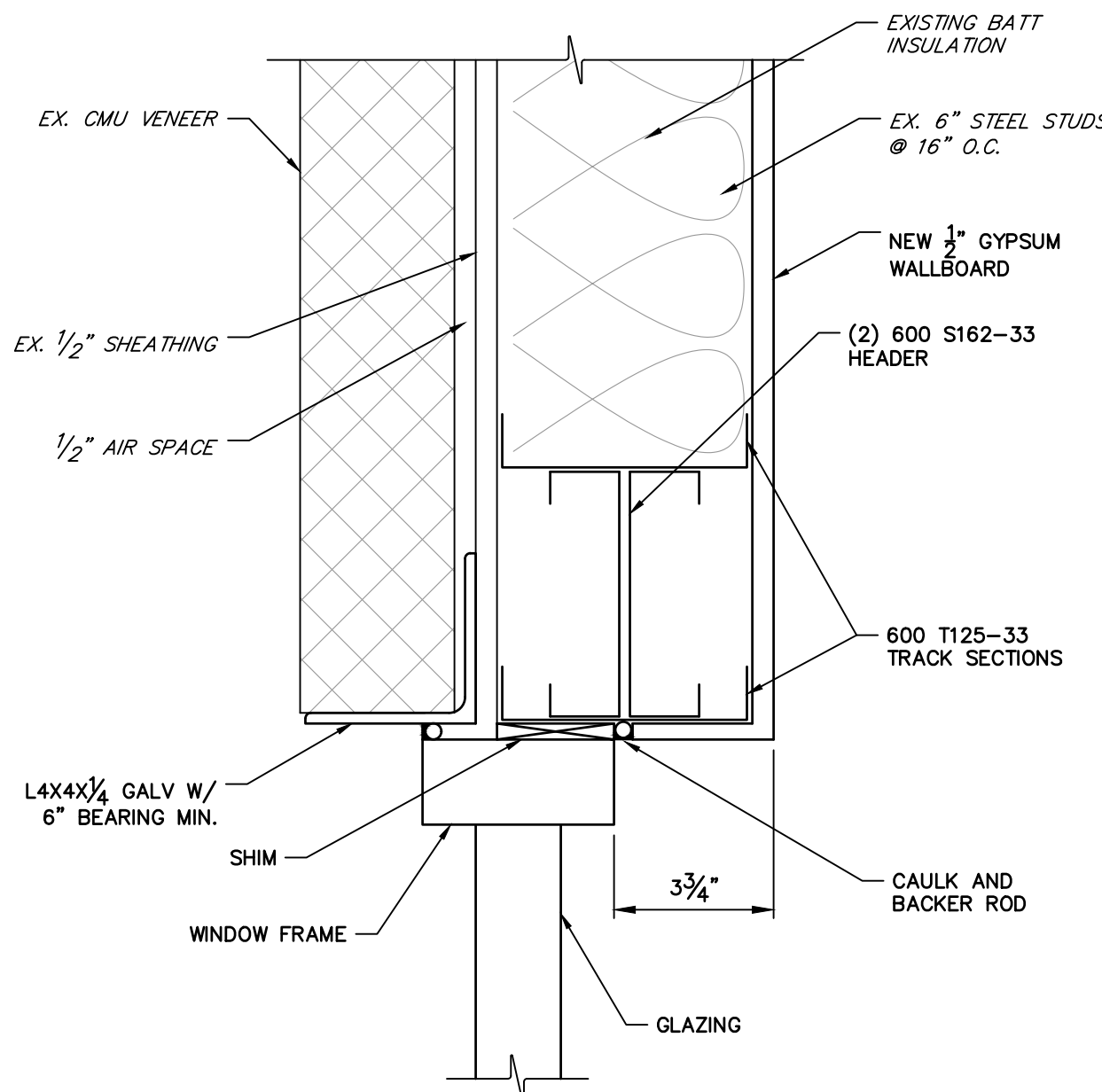
DETAIL **1**
SCALE: 1 1/2" = 1'-0" S-101



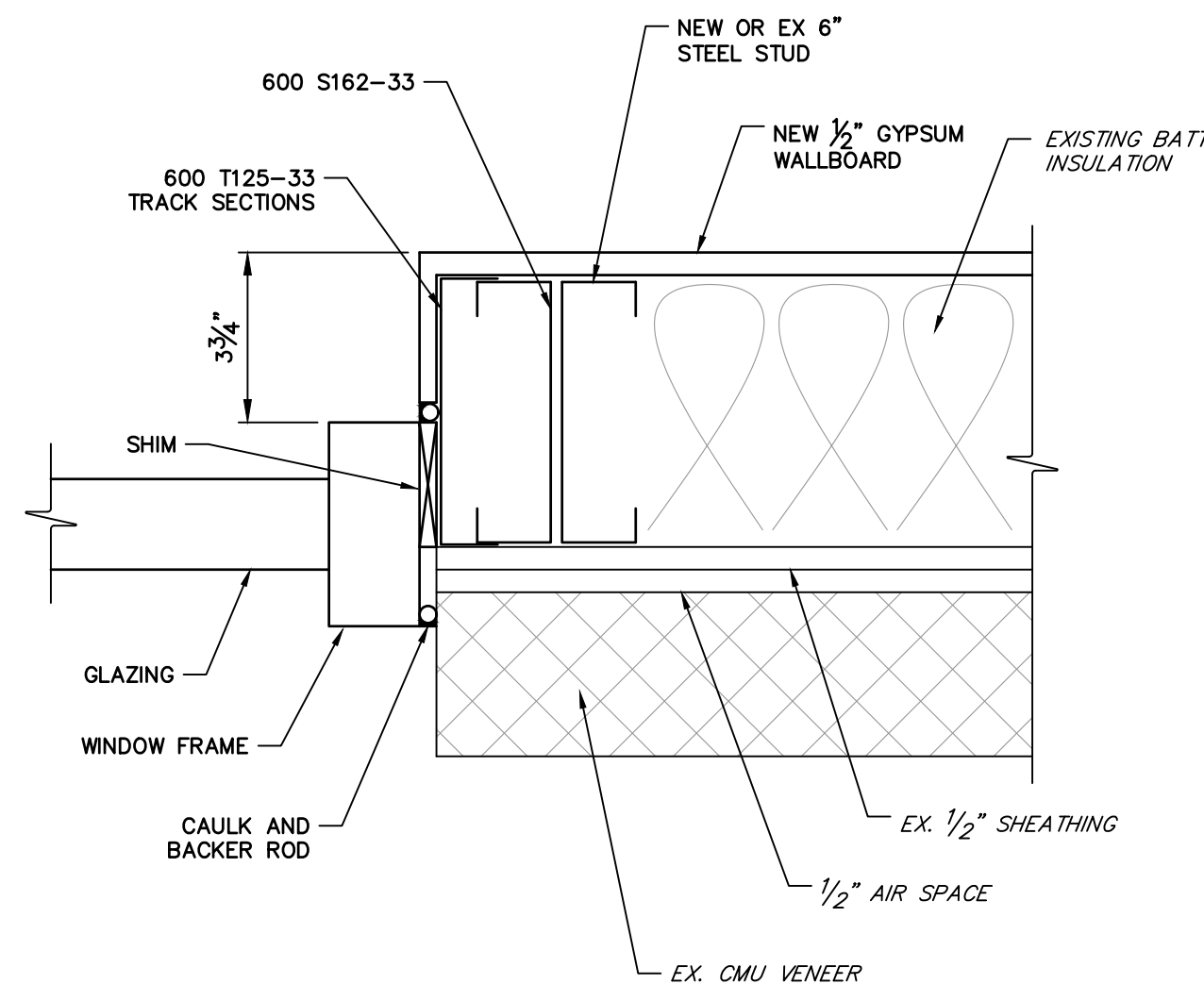
DETAIL **2**
SCALE: 1 1/2" = 1'-0" S-101



DETAIL **3**
SCALE: 1 1/2" = 1'-0" S-101



LINTEL DETAIL
3" = 1'-0"



JAMB DETAIL
3" = 1'-0"

SPECIFICATIONS AND NOTES

- COLD-FORM METAL FRAMING
 - STEEL SHEET FOR STUDS AND TRACK SECTIONS SHALL CONFORM TO ASTM A1003, STRUCTURAL GRADE, TYPE H WITH A MINIMUM YIELD STRENGTH OF 33 KSI.
 - FASTENERS SHALL BE SELF-DRILLING, SELF-TAPPING SCREWS CONFORMING TO ASTM C1513.
 - ALL COLD-FORM METAL FRAMING SHALL BE GALVANIZED CONFORMING TO ASTM A90.
 - ALL COLD-FORM METAL FRAMING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS AND AS SHOWN ON THE DRAWINGS.
- WINDOWS
 - ALL WINDOWS SHALL BE TRIFAB 451T STOREFRONT BY KAWNEER, INC.
 - COLOR OF FRAME SHALL BE BLACK.
 - GLAZING SHALL MATCH EXISTING.
 - WINDOWS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- CAULK
 - ALL CAULK SHALL BE SIKAFLEX 1a BY SIKA CORPORATION OR APPROVED EQUAL.
 - CAULK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - COLOR OF CAULK SHALL BE SELECTED BY OWNER.
 - REPAIR CRACKS IN MASONRY VENEER USING QUIKRETE EPOXY REPAIR SEALANT OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- INTERIOR WOOD
 - LUMBER FOR SILL AND TRIM SHALL BE EASTERN WHITE PINE OR APPROVED EQUAL.
 - SHAPES OF SILL AND TRIM SHALL MATCH EXISTING.
- PAINT
 - WOOD: PRIMER SHALL BE TNESEC SERIES 10-99 WHITE PRIMER 2.0 MILS DFT OR APPROVED EQUAL. FINISH PAINT SHALL BE TWO COATS OF TNESEC SERIES 113 HB TNESEC-TUF-COAT 3.0 MILS DFT PER COAT OR APPROVED EQUAL. COLOR OF FINISH COAT SHALL BE SELECTED BY OWNER.
 - GYPSON WALLBOARD: PRIMER SHALL BE SHERWIN-WILLIAMS PREPRITE 200 1.2 MILS DFT OR APPROVED EQUAL. FINISH PAINT SHALL BE TWO COATS OF SHERWIN-WILLIAMS PROMAR 200 LATEX SATIN FINISH 1.6 MILS PER COAT OR APPROVED EQUAL.
- GYPSON WALLBOARD
 - GYPSON WALLBOARD SHALL BE MANUFACTURED BY U.S. GYPSON, GEORGIA-PACIFIC OR APPROVED EQUAL. GYPSON WALLBOARD SHALL BE IN 4' X 8' SHEETS. JOINT MATERIAL SHALL BE AS FURNISHED OR RECOMMENDED BY MANUFACTURER.
 - SHEETS SHALL BE SCREWED TO STUDS. SPACKLE SCREW HOLES. TAPE AND SPACKLE JOINTS TO SMOOTH FINISH.
 - INSTALL EXPANSION JOINTS AS NOTED ON THE DRAWINGS.
- VINYL COVE BASE
 - VINYL COVE BASE SHALL COMPLY WITH FS SS-W-40 TYPE II. STYLE, HEIGHT, THICKNESS AND COLOR SHALL MATCH EXISTING.
 - INSTALL VINYL COVE BASE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- CONCRETE MASONRY
 - CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N.
 - MORTAR SHALL CONFORM TO ASTM C270, TYPE S.
 - INSTALLATION OF MASONRY SHALL CONFORM TO ACI 530.1.
- GENERAL CONSTRUCTION
 - ALL WORK SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE AND ALL BENSLEM TOWNSHIP ORDINANCES.

WINDOW INSTALLATION SEQUENCE

- AFTER REMOVAL OF GYPSON WALLBOARD, REMOVE EXISTING 6" STEEL STUDS WHERE WINDOWS ARE TO BE INSTALLED. CONTRACTOR HAS THE OPTION TO REMOVE STUDS FULL HEIGHT OF WALL OR TO CUT STUDS IMMEDIATELY ABOVE WHERE NEW HEADER IS TO BE INSTALLED. IF STUDS ARE CUT, CONTRACTOR SHALL PROVIDE TEMPORARY SUPORT AS REQUIRED.
- SAW CUT CMU VENEER WHERE STEEL ANGLE LINTEL IS TO BE INSTALLED. INSTALL ANGLE FROM INSIDE THE BUILDING. AFTER LINTEL IS INSTALLED, SAW CUT OPENING IN CMU VENEER FOR WINDOW.
- INSTALL NEW STEEL STUD HEADER AND JAMBS. NEW JAMB STUDS SHALL EXTEND FULL HEIGHT OF WALL.
- INSTALL NEW WINDOW AS PER MANUFACTURER'S INSTRUCTIONS AND AS SHOWN ON DRAWINGS. SILL AT CMU VENEER SHALL MATCH EXISTING.
- INSTALL NEW 1/2" GYPSON WALLBOARD AS INDICATED ON DRAWINGS.
- INSTALL WOOD SILL AND TRIM TO MATCH EXISTING.

DATE 5/28/21
CADD FILE 2021-5-13 BENS
JOB NO 21-1872
DSG BY MAT
DWN BY IMA
CKD BY MAT
SCALE AS NOTED

SHEET 2 OF 2 SHEETS

DRAWING NUMBER

S-401