

**MASONRY REPAIRS AND ASSOCIATED WORK
AT THE CENTER BUILDING
67 INDEPENDENCE DRIVE
AUGUSTA, MAINE**

February 29, 2024



Prepared For:

State of Maine Bureau of General Services
111 Sewall Street
77 State House Station
Augusta, ME 04333

Prepared By:

Gale Associates, Inc.
5 Moulton Street
Portland, ME 04101
Gale JN 839100

**MASONRY REPAIRS AND ASSOCIATED WORK
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**GALE JN 839100
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**MASONRY REPAIRS AND ASSOCIATED WORK
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67 INDEPENDENCE DRIVE
AUGUSTA, MAINE**

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NOT USED.

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00 11 13
Notice to Contractors

Masonry Repairs and Associated Work at the Center Building

BGS#3381

Masonry repairs including repointing, rebuilding, brick replacement, and throughwall flashing installation at the Center Building.

Please note requestes for information associated with the project are due by 5:00 PM on March 26, 2024. Respones to requests for information will be provided via addendum by 5:00 PM on April 2, 2024.

The cost of the work is approximately \$ 0. The contract shall designate the Substantial Completion Date on or before *June 25, 2024*, and the Contract Final Completion Date on or before *July 16, 2024*.

1. Submit bids on a completed Contractor Bid Form, plus bid security when required, all scanned and included as an attachment to an email with the subject line marked "**Bid for Masonry Repairs and Associated Work at the Center Building**" and addressed to the Bid Administrator at: BGS.Architect@Maine.gov, so as to be received no later than **2:00 PM** on *April 9, 2024*.

Bid submissions will be opened and read aloud at the time and date noted above at the Bureau of General Services office, accessible as a video conference call. Those who wish to participate in the call must submit a request for access to BGS.Architect@Maine.gov.

Any bid received after the noted time will not be considered a valid bid and will remain unopened. Any bid submitted by any other means will not be considered a valid bid. The Bid Administrator may require the Bidder to surrender a valid paper copy of the bid form or the bid security document in certain circumstances.

Questions on the bid opening process shall be addressed to the Bid Administrator: Joseph H. Ostwald, Director, Division of Planning, Design & Construction, Bureau of General Services, 77 State House Station, Augusta, Maine 04333-0077, BGS.Architect@Maine.gov.

2. The bid shall be submitted on the Contractor Bid Form (section 00 41 13) provided in the Bid Documents. The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.
3. Bid security *is required* on this project.
If noted above as required, the Bidder shall include a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with the completed bid form submitted to the Owner. The Bid Bond form is available on the BGS website.
4. Performance and Payment Bonds *are required* on this project.
If noted above as required, or if any combination of Base Bid and Alternate Bids amounts selected in the award of the contract exceeds \$125,000.00, the selected Contractor shall furnish a 100% contract Performance Bond (section 00 61 13.13) and a 100% contract Payment Bond (section 00 61 13.16) in the contract amount to cover the execution of the Work. Bond forms are available on the BGS website.
5. Filed Sub-bids *are not required* on this project.

00 11 13
Notice to Contractors

6. There *are no* Pre-qualified General Contractors on this project.
If Pre-qualified General Contractors are identified for this project, the name of each company, with their city and state, are listed below.

7. An on-site pre-bid conference *will* be conducted for this project.
If a pre-bid conference is scheduled, it is *mandatory* for General Contractors and optional for Subcontractors and suppliers. Contractors who arrive late or leave early for a mandatory meeting may be prohibited from participating in this meeting and bidding. *Pre-bid confrence will be held on site at 25 Tyson Drive, Augusta, ME on Thursday, March 21, 2024 at 9:00 AM.*

8. Bid Documents - full sets only - will be available on or about *March 11, 2024* and may be obtained *at no cost* from:
Gale Associates Inc.
6 Bedford Farms Drive, Suite 101
Bedford, NH 03110
Alan Pinciaro
Phone: 603-471-1887
Email: acp@gainc.com

9. Bid Documents may be examined at:

<i>AGC Maine</i>	<i>Construction Summary</i>
<i>188 Whitten Road</i>	<i>734 Chestnut Street</i>
<i>Augusta, ME 04330</i>	<i>Manchester, NH 03104</i>
<i>Phone: 207-622-4741 Fax: 207-622-1625</i>	<i>Phone: 603-627-8856 Fax: 603-627-4524</i>

00 21 13
Instructions to Bidders

1. Bidder Requirements

- 1.1 A bidder is a Contractor which is evidently qualified, or has been specifically pre-qualified by the Bureau of General Services, to bid on the proposed project described in the Bid Documents.
- 1.2 Contractors and Subcontractors bidding on projects that utilize Filed Sub-bids shall follow the requirements outlined in these Bid Documents for such projects. See Section 00 22 13 for additional information.
- 1.3 Contractors and Subcontractors are not eligible to bid on the project when their access to project design documents prior to the bid period distribution of documents creates an unfair bidding advantage. Prohibited access includes consultation with the Owner or with design professionals engaged by the Owner regarding cost estimating, constructability review, or project scheduling. This prohibition to bid applies to open, competitive bidding or pre-qualified contractor bidding or Filed Sub-bidding. The Bureau may require additional information to determine if the activities of a Contractor constitute an unfair bidding advantage.
- 1.4 Each bidder is responsible for becoming thoroughly familiar with the Bid Documents prior to submitting a bid. The failure of a bidder to review evident site conditions, to attend available pre-bid conferences, or to receive, examine, or act on addenda to the Bid Documents shall not relieve that bidder from any obligation with respect to their bid or the execution of the work as a Contractor.
- 1.5 Prior to the award of the contract, General Contractor bidders or Filed Sub-bidders may be required to provide documented evidence to the Owner or the Bureau showing compliance with the provisions of this section, their business experience, financial capability, or performance on previous projects.
- 1.6 The selected General Contractor bidder will be required to provide proof of insurance before a contract can be executed.
- 1.7 Contracts developed from this bid shall not be assigned, sublet or transferred without the written consent of the Owner.
- 1.8 By submitting a bid the Contractor attests that it has not been declared ineligible to bid on State of Maine projects. The Director of the Bureau of General Services may disallow award of this contract to any Contractor if there is evidence that the Contractor or any of its Subcontractors, through their own fault, have been terminated, suspended for cause, debarred from bidding, agreed to refrain from bidding as part of a settlement, have defaulted on a contract, or had a contract completed by another party.
- 1.9 The Contractor attests that it is not presently indicted for or otherwise criminally or civilly charged by a Federal, State or local government entity with commission of any of the following offenses and has not within a three-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction, or contract under a public transaction, violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

00 21 13
Instructions to Bidders

- 1.10 The Contractor shall not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs or State of Maine projects.
2. Authority of Owner
- 2.1 The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.
- 2.2 Subject to the Owner's stated right to accept or reject any or all bids, the Contractor shall be selected on the basis of the lowest dollar value of an acceptable Base Bid, or any combination of Base Bid plus Alternate Bids, as well as other limited cost modifications the Owner determines may best serve the interests of the Owner. An acceptable bid is a duly submitted bid from a responsive and responsible bidder.
- 2.3 The Owner reserves the right to require Bid Bonds or Performance and Payment Bonds for any project of any contract value.
3. Submitting Bids and Bid Requirements
- 3.1 Each bid shall be submitted on the forms provided in the Bid Documents.
- 3.2 Each bid shall be valid for a period of thirty calendar days following the Project bid closing date and time. The bid expiration date may be extended in unusual circumstances by mutual consent of the Bidder and the Owner. The bid amount shall not be modified due to the bid expiration date extension.
- 3.3 Any provision contained in a bid which shows cost escalation, or any modification of schedule or other requirements shall not be accepted. Such a provision causes the bid to be invalid, or, at the discretion of the Owner and BGS, that element of the bid submission may be disregarded for the purpose of awarding the contract without that provision.
- 3.4 Bidders shall include a Bid Bond or other approved bid security with the bid form submitted to the Owner when the bid form indicates such bid security is required. The bond value shall be 5% of the bid amount. The form of bond is shown in section 00 43 13.
- 3.5 Bidders recognize that inclusion of contract bonds and the cost of those bonds is dependent on the awarded contract dollar value. Therefore, a Base Bid, or any combination of Base Bid plus Alternate Bids, as well as other limited cost modifications, resulting in a contract award shall include the cost of Performance and Payment Bonds in the submitted bid amount when the construction contract value is over \$125,000.00. Similarly, the cost of Performance and Payment Bonds is excluded in the submitted bid amount when the construction contract value is \$125,000.00 or less unless bonds are specifically required by the Bid Documents. When required for the project, the selected Contractor shall provide these bonds before a contract can be executed, pursuant to 14 M.R.S.A., Section 871, Public Works Contractors' Surety Bond Law of 1971, subsection 3. The form of bonds is shown in section 00 61 13.13 and 00 61 13.16.

00 21 13
Instructions to Bidders

- 3.6 Bidders may modify bids in writing, by the same means as the original bid submission, prior to the bid closing time. Such written amendments shall not disclose the amount of the initial bid. If so disclosed, the entire bid is considered invalid.
- 3.7 Bidders implicitly acknowledge all Addenda issued when they submit the bid form. By usual practice the Consultant shall not issue Addenda less than 72 hours prior to the bid closing time, to allow ample time for bidders to incorporate the information. However, some information, such as extending the bid due date and time, may be issued with shorter notice. Addenda shall be issued to all companies who are registered holders of Bid Documents.
- 3.8 A bid may be withdrawn without penalty if a written request by the bidder is presented to the Owner prior to the bid closing time. Such written withdrawal requests are subject to verification as required by the Bureau.
- A bid may be withdrawn without penalty after the bid closing time if, in the determination of the Bureau, evidence provided by the Contractor shows an apparent unintended error such as a miscalculation, or an erroneous number on estimating documents, was the cause of an inaccurate bid. The Bureau may allow withdrawal in consideration of the bid bond or, without utilizing a bid bond, if the Bureau considers documented evidence provided by the Contractor shows factual errors had been made on the bid form.
- 3.9 In the event State of Maine Offices unexpectedly close on the published date of a public bid opening in the location of that bid opening, prior to the time of the scheduled deadline, the new deadline for the public bid opening will be the following business day at the originally scheduled hour of the day, at the original location. Official closings are posted on the State of Maine government website.
- 3.10 The Owner may require, in a Notice of Intent to Award letter to the apparent low bidder, a Schedule of Values, Project Schedule, and List of Subcontractors and Suppliers as both a demonstration of capability of the Bidder and as a condition of award.
- 3.11 Projects which require a State of Maine wage determination will include that schedule as part of the Bid Documents. See section 00 73 46, if such rates are required.
- 3.12 Projects which require compliance with the Davis-Bacon Act are subject to the regulations contained the Code for Federal Regulations and the federal wage determination which is made a part of the Bid Documents. See section 00 73 46, if such rates are required.
- 3.13 The Owner is exempt from the payment of Maine State sales and use taxes as provided in 36 M.R.S. §1760 (1). The Contractor and Subcontractors shall not include taxes on exempt items in the construction contract.

**00 41 13
Contractor Bid Form**

Masonry Repairs and Associated Work at the Center Building

BGS#3381

Bid Form submitted by: *email only to email address below*

Bid Administrator:

Linda Greeley
Bureau of General Services
111 Sewall Street, Cross State Office Building, 4th Floor
77 State House Station
Augusta, Maine 04333-0077

Linda.Greeley@maine.gov

Bidder:

Signature: _____

Printed name and title: _____

Company name: _____

Mailing address: _____

City, state, zip code: _____

Phone number: _____

Email address: _____

State of incorporation, if a corporation: _____

List of all partners, if a partnership: _____

The Bidder agrees, if the Owner offers to award the contract, to provide any and all bonds and certificates of insurance, as well as Schedule of Values, Project Schedule, and List of Subcontractors and Suppliers if required by the Owner, and to sign the designated Construction Contract within twelve calendar days after the date of notification of such acceptance, except if the twelfth day falls on a State of Maine government holiday or other closure day, or a Saturday, or a Sunday, in which case the aforementioned documents must be received before 12:00 noon on the first available business day following the holiday, other closure day, Saturday, or Sunday.

As a guarantee thereof, the Bidder submits, together with this bid, a bid bond or other acceptable instrument as and if required by the Bid Documents.

**00 41 13
Contractor Bid Form**

1. The Bidder, having carefully examined the *Masonry Repairs and Associated Work at the Center Building* Project Manual dated *February 29, 2024*, prepared by *Gale Associates Inc.*, as well as Specifications, Drawings, and any Addenda, the form of contract, and the premises and conditions relating to the work, proposes to furnish all labor, equipment and materials necessary for and reasonably incidental to the construction and completion of this project for the **Base Bid** amount of:

\$ _____.00

2. Allowances *are included* on this project.
Bid amount above includes the following Allowances
Include \$1,000.00 for the replacement of additional cracked or spalled brick masonry units.

Include \$2,000.00 for the repointing of additional deteriorated mortar.

Include \$2,000 for the rebuilding of additional displaced masonry. \$ 5,000.00

3. Alternate Bids *are not included* on this project.
No Alternate Bids
Any dollar amount line below that is left blank by the Bidder shall be read as a bid of **\$0.00**.

1 Not Used \$ _____.00

2 Not Used \$ _____.00

3 Not Used \$ _____.00

4 Not Used \$ _____.00

4. Bid security *is required* on this project.
If noted above as required, or if the Base Bid amount exceeds \$125,000.00, the Bidder shall include with this bid form a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with this completed bid form submitted to the Owner.

5. Filed Sub-bids *are not required* on this project.
If noted above as required, the Bidder shall include with this bid form a list of each Filed Sub-bidder selected by the Bidder on the form provided (section 00 41 13F).

**00 43 13
Contractor Bid Bond**

Bond No.: insert bond number

We, the undersigned, insert company name of Contractor, select type of entity of insert name of municipality in the State of insert name of state as principal, and insert name of surety as Surety, are hereby held and firmly bound unto select title of obligee in the penal sum of five percent of the bid amount, 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 insert date, i.e.: 8th day of select month, select year, which is the same date as that of the first specified bid due date, or subsequent bid due date revised by addendum.

The condition of the above obligation is such that whereas the principal has submitted to the Owner, or State of Maine, to a certain bid, attached hereto and hereby made a part hereof, to enter into a contract in writing, for the construction of insert name of project as designated in the contract documents

Now therefore:

If said bid shall be rejected, or, in the alternate,

If said bid shall be accepted and the principal shall execute and deliver a contract in the form of contract attached hereto, properly completed in accordance with said bid, and shall furnish a bond for the faithful performance of said contract, and for the payment of all persons performing labor or furnishing material in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

Otherwise, the same shall remain in force and 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.

The Surety, for value received hereby stipulates and agrees that the obligation of said Surety and its bonds shall be in no way impaired or affected by any extension of the time within which the Obligee may accept such bid and said Surety does hereby waive notice of any such extension.

**00 43 13
Contractor Bid Bond**

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 above.

Signed and sealed this *insert date, i.e.: 8th* day of *select month, select year*, which is the first specified bid due date, or subsequent bid due date revised by addendum.

Contractor

(Signature)

insert name and title

insert company name

*insert address
insert city state zip code*

Surety

(Signature)

insert name and title

insert company name

*insert address
insert city state zip code*

If Contractor is a partnership, all partners shall execute the bond. A power of attorney document indicating that it still is in full force and effect shall be provided by the person executing this bond.

**State of Maine
CONSTRUCTION CONTRACT**

Large Construction Project

*This form is used when the Contract value is \$50,000 or greater.
The Project Manual, Specifications and Drawings, and any Addenda are considered part of this Contract.*

Agreement entered into by and between the contracting entity name hereinafter called the **Owner** and Contractor company name hereinafter called the **Contractor**.

BGS Project No.: number assigned by BGS Other Project No.: _____

For the following Project: title of project as shown on bid documents at facility or campus name, municipality, Maine.

The Specifications and the Drawings have been prepared by Consultant firm name, acting as Professional-of-Record and named in the documents as the Consultant Architect or Engineer.

The *Owner* and *Contractor* agree as follows:

ARTICLE 1 COMPENSATION AND PAYMENTS

1.1 The Owner shall pay the Contractor to furnish all labor, equipment, materials and incidentals necessary for the construction of the Work described in the Specifications and shown on the Drawings the Contract Amount as shown below.

Base Bid	\$0.00
<u>Alternate Bid number and name or "no Alternates"</u>	\$0.00
<u>Alternate Bid number and name or "no Alternates"</u>	\$0.00
<u>Alternate Bid number and name or "no Alternates"</u>	\$0.00
<u>Alternate Bid number and name or "no Alternates"</u>	\$0.00
<u>Alternate Bid number and name or "no Alternates"</u>	\$0.00
Total Contract Amount	\$0.00

1.2 The Contractor’s requisition shall contain sufficient detail and supporting information for the Owner to evaluate and support the payment requested.

1.2.1 Payments are due and payable twenty-five working days from the date of receipt of a Contractor requisition which is approved by the Owner.

1.2.2 Provisions for late payments are governed by 5 M.R.S. Chapter 144, *Payment of Invoices Received from Business Concerns*, and interest shall be calculated at 1% per month.

ARTICLE 2 COMMENCEMENT AND COMPLETION DATES

2.1 The Work of this Contract shall commence no sooner than the date this document is executed by the approval authority, or a subsequent date designated in the contract documents.

2.2 The Substantial Completion Date shall be _____.

2.3 The Work of this Contract shall be completed on or before the Contract Final Completion Date of _____.

2.4 The Contract Expiration Date shall be _____. (This date is the Owner's deadline for internal management of contract accounts. The Contract Expiration Date does not directly relate to any contract obligation of the Contractor.)

ARTICLE 3 INELIGIBLE BIDDER

3.1 By signing this contract the Contractor attests that it has not been declared ineligible to bid on State of Maine projects. The Bureau of General Services may disallow award of this contract to any Contractor if there is evidence that the Contractor or any of its Subcontractors, through their own fault, have been terminated, suspended for cause, debarred from bidding, agreed to refrain from bidding as part of a settlement, have defaulted on a contract, or had a contract completed by another party.

3.2 By signing this contract the Contractor attests that it is not presently indicted for or otherwise criminally or civilly charged by a Federal, State or local government entity with commission of any of the following offenses and has not within a three-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction, or contract under a public transaction, violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

3.3 The Contractor shall not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs or State of Maine projects.

ARTICLE 4 CONTRACTOR'S RESPONSIBILITIES

4.1 On this project, the Contractor shall furnish the Owner the appropriate contract bonds in the amount of 100% of the Contract Sum. Contract bonds are mandated if the Contract Sum exceeds \$125,000, or if bonds are specifically required by the Contract Documents.

4.2 The Contractor shall comply with all laws, codes and regulations applicable to the Work.

4.3 The Contractor shall acquire all permits and third-party approvals applicable to the Work not specifically identified as provided by the Owner. Costs for Contractor-provided permits and third-party approvals shall be included in the Contract Sum identified in Section 1.1 above.

4.4 The Contractor shall remain an independent agent for the duration of this Contract, shall not become an employee of the State of Maine, and shall assure that no State employee will be compensated by, or otherwise benefit from, this Contract.

4.5 The Contractor shall be responsible for any design cost, construction cost, or other cost incurred on the Project to the extent caused by the negligent acts, errors or omissions of the Contractor or their Subcontractors in the performance of Work under this Contract.

ARTICLE 5 OWNER'S RESPONSIBILITIES

5.1 The Owner shall provide full information about the objectives, schedule, constraints and existing conditions of the project. The Owner has established a budget with reasonable contingencies that meets the project requirements.

5.2 By signing this contract, the Owner attests that all State of Maine procurement requirements for this contract have been met, including the solicitation of competitive bids.

ARTICLE 6 INSTRUMENTS OF SERVICE

6.1 The Contractor's use of the drawings, specifications and other documents known as the Consultant's Instruments of Service is limited to the execution of the Contractor's scope of work of this project unless the Contractor receives the written consent of the Owner and Consultant for use elsewhere.

ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1 This Contract shall be governed by the laws of the State of Maine.

7.2 The Owner and Contractor, respectively, bind themselves, their partners, successors, assigns and legal representatives to this Contract. Neither party to this Contract shall assign the Contract as a whole without written consent of the other party, which consent the Owner may withhold without cause.

7.3 Notwithstanding any other provision of this Agreement, if the Owner does not receive sufficient funds to fund this Agreement or funds are de-appropriated, or if the Owner does not receive legal authority from the Maine State Legislature or Maine Courts to expend funds intended for this Agreement, then the Owner is not obligated to make payment under this Agreement; provided, however, the Owner shall be obligated to pay for services satisfactorily performed prior to any such non-appropriation in accordance with the termination provisions of this Agreement. The Owner shall timely notify the Contractor of any non-appropriation and the effective date of the non-appropriation.

ARTICLE 8 CONTRACT DOCUMENTS

8.1 The Project Manual, Specifications and Drawings, and any Addenda, together with this agreement, form the contract. Each element is as fully a part of the Contract as if hereto attached or herein repeated.

8.2 Specifications: *indicate date of issuance of project manual*

8.3 Drawings: *note here or attach each sheet number and title*

8.4 Addenda: *note each addenda number and date, or "none"*

00 61 13.13
Contractor Performance Bond

Bond No.: insert bond number

We, the undersigned, insert company name of Contractor, select type of entity of insert name of municipality in the State of insert name of state as principal, and insert name of surety as Surety, are hereby held and firmly bound unto select title of obligee in the penal sum of the Contract Price \$ insert the Contract Price in numbers 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.

The condition of the above obligation is such that if the principal shall promptly and faithfully perform the contract entered into this insert date, i.e.: 8th day of select month, select year, which is the same date as that of the notice of intent to award letter, or in the absence of such a letter, not later than the date the Owner signs the construction contract, for the construction of insert name of project as designated in the contract documents, then this obligation shall be null and void.

Otherwise, the same shall remain in force and 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.

The Surety, for value received hereby stipulates and agrees that the obligation of said Surety and its bonds shall be in no way impaired or affected by any extension of the time which the Obligee may accept during the performance of the contract and said Surety does hereby waive notice of any such extension.

**00 61 13.13
Contractor Performance Bond**

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 above.

Signed and sealed this *insert date, i.e.: 8th* day of *select month, select year*, which is the same date as that of the notice of intent to award letter, or in the absence of such a letter, not later than the date the Owner signs the construction contract.

Contractor

(Signature)

insert name and title

insert company name

insert address

insert city state zip code

Surety

(Signature)

insert name and title

insert company name

insert address

insert city state zip code

If Contractor is a partnership, all partners shall execute the bond. A power of attorney document indicating that it still is in full force and effect shall be provided by the person executing this bond.

00 61 13.16
Contractor Payment Bond

Bond No.: insert bond number

We, the undersigned, insert company name of Contractor, select type of entity of insert name of municipality in the State of insert name of state as principal, and insert name of surety as Surety, are hereby held and firmly bound unto select title of obligee in the penal sum of the Contract Price \$ insert the Contract Price in numbers for the use and benefit of claimants, defined as an entity having a contract with the principal or with a subcontractor of the principal for labor, materials, or both labor and materials, used or reasonably required for use in the performance of the contract, 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.

The condition of the above obligation is such that if the principal shall promptly satisfy all claims and demands incurred for all labor and materials, used or required by the principal in connection with the work described in the contract entered into this insert date, i.e.: 8th day of select month, select year, which is the same date as that of the notice of intent to award letter, or in the absence of such a letter, not later than the date the Owner signs the construction contract, for the construction of insert name of project as designated in the contract documents, and shall fully reimburse the obligee for all outlay and expense with said obligee may incur in making good any default of said principal, then this obligation shall be null and void.

Otherwise, the same shall remain in force and 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.

The Surety, for value received hereby stipulates and agrees that the obligation of said Surety and its bonds shall be in no way impaired or affected by any extension of the time which the Obligee may accept during the performance of the contract and said Surety does hereby waive notice of any such extension.

**00 61 13.16
Contractor Payment Bond**

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 above.

Signed and sealed this *insert date, i.e.: 8th* day of *select month, select year*, which is the same date as that of the notice of intent to award letter, or in the absence of such a letter, not later than the date the Owner signs the construction contract.

Contractor

(Signature)

insert name and title

insert company name

insert address

insert city state zip code

Surety

(Signature)

insert name and title

insert company name

insert address

insert city state zip code

If Contractor is a partnership, all partners shall execute the bond. A power of attorney document indicating that it still is in full force and effect shall be provided by the person executing this bond.

**State of Maine
CONSTRUCTION CONTRACT
Application for Payment**

Project name
location / school / campus

Application Number: **1**

Contractor Company name
address
city state zip code

Period Start Date: **1-Jul-2020**
Period End Date: **31-Jul-2020**
BGS Project No.: **n**
Other Project No.: **x**

1	Original Contract Amount		\$0
2	Net of Change Orders to Date	(from table below)	\$0
3	Contract Sum to Date	(line 1 plus or minus line 2)	\$0
4	Total Completed and Stored to Date	(column G on Continuation Sheet)	\$0
5a	5% Retainage of Completed Work	(columns D + E x 5%)	\$0
5b	5% Retainage of Stored Materials	(column F x 5%)	\$0
5c	Total Retainage	(column I)	\$0
6	Total Earned Less Retainage	(line 4 minus line 5c)	\$0
7	Less Previous Approved Applications for Payment	(line 6 from previous Application)	\$0
8	Current Payment Due	(line 6 minus line 7)	\$0
9	Balance to Finish, Including Retainage	(line 3 minus line 6)	\$0

Change Order Summary	Additions	Deductions
Total Changes Approved in Previous Months	\$0	\$0
Total Changes Approved this Month	\$0	\$0
Subtotals	\$0	\$0
Net of Change Orders to Date		\$0

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 the previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

Contractor
Type company name here
Type person's name, title here

signature date

In accordance with the Contract Documents, based on on-site observations and the data comprising this Application, the Consultant certifies to the Owner that to the best of the Consultant'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:** _____

Consultant (Architect or Engineer)
Type firm name here
Type person's name, title here

signature date

Owner
Type contracting entity name here
Type person's name, title here

signature date

Owner's Rep / other - clear this text if not used
Type entity name here
Type person's name, title here

signature date

Bureau of General Services
Type person's name, title here

signature date

00 62 76.01

	Total	\$0	\$0	\$0	\$0	\$0	0.0%	\$0	\$0
--	--------------	-----	-----	-----	-----	-----	------	-----	-----

State of Maine
CONSTRUCTION CONTRACT
Construction Change Directive

Project name
location / school / campus

C. C. D. Number: **1**
CP (Change Proposal) Number: **1**
Issue Date of this Document: **31-Oct-2021**

Contractor Company name
address
city state zip code

BGS Project No.: **n**
Other Project No.: **x**

CCD Item	Type name of CCD item here		
Description of Work	Type brief description here of work scope here.		
Reason or Necessity of Work	Type brief justification for change here.		
Method of Compensation	Select from drop down box...	Projected Total Cost	\$0
Supporting Documentation	is attached	Projected Calendar Days*	0

* Calendar Days refers to Contract Final Completion Date only.

Fully describe the scope of work of the CCD item in the table above and on attached drawings and specifications as necessary.

Indicate the reason for the work, and the estimated schedule and cost impacts.

This CCD records the order to do the work. The documented actual final time and cost changes are subject to approval in a subsequent Change Order process.

Consultant
(Architect or Engineer) Type firm name here
Type person's name, title here

signature date

Contractor Type company name here
Type person's name, title here

signature date

Owner Type contracting entity name here
Type person's name, title here

signature date

Owner's Rep Type entity name here
Type person's name, title here

signature date

Bureau of
General Services Division of Planning, Design & Construction
Type person's name, title here

signature date

**State of Maine
CONSTRUCTION CONTRACT
Change Order**

Project name
location / school / campus

Change Order Number: **1**

Contractor Company name
address
city state zip code

Issue Date of this Document: **31-Dec-2022**

BGS Project No.: **n**
Other Project No.: **x**

Cost Change

Show Deduct as a negative number, e.g.: "-\$850".

	Add	Deduct	Total
Net Amount of this Change Order	\$0	\$0	
Net Amount of Previous Change Orders	\$0	\$0	
Net of Change Orders to Date	\$0	\$0	\$0
Original Contract Amount			\$0
Revised Contract Amount			\$0

Time Change

Show Deduct as a negative number, e.g.: "-8".

	Add	Deduct	Total
Net Calendar Days Adjusted by this Change Order	0	0	
Net Calendar Days Adjusted by Previous Change Orders	0	0	
Net of Change Orders to Date	0	0	0
Original Contract Final Completion Date			31-Dec-2023
Revised Contract Final Completion Date*			31-Dec-2023

Consultant (Architect or Engineer)

Type firm name here
Type person's name, title here

signature date

Contractor

Type company name here
Type person's name, title here

signature date

Owner

Type contracting entity name here
Type person's name, title here

signature date

Type Entity, such as "Owner's Rep", or "not used"

Type entity name here
Type person's name, title here

signature date

Bureau of General Services

Division of Planning, Design & Construction
Type person's name, title here

signature date

Attach the "List of Change Order Items" sheet, plus all supporting documentation for each Change Order Item.

Substantial Completion Date: the deadline for first beneficial use by Owner, as certified by Consultant.

* **Contract Final Completion Date** : the Contractor's final completion deadline for contract work.

Contract Expiration Date: the Owner's deadline for internal management of contract accounts;

Contract Expiration Date does not directly relate to any contract obligation of the Contractor.

1-Dec-2023
31-Dec-2023
29-Feb-2024

List of Change Order Items

Project name
Contractor Company name

C. O. Number: 1

CO Item No.	CP No.	Item Name	Reason Code	Calendar Days*	Cost
1	1	Type brief name of Change Order Item here		0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
				0	\$0
Totals				0	\$0

Reason Codes

- EO Error or omission of Consultant
- UC Unforeseen job site condition
- OC Owner-generated change
- RC Regulatory authority-generated change
- CC Contractor-generated change

* Calendar Days shows Contract Final Completion Date impact only.

Attach this sheet to the BGS "Change Order" cover sheet (with cost and time summaries, and signatures). Attach a "Details" sheet, and other supporting documentation, for each Change Order Item listed above.

Details of Change Order Item

Project name
location / school / campus

Change Order Item Number **1**
CP (Change Proposal) Number **1**
Issue Date of this Document: **31-Oct-2021**

Contractor Company name
address
city state zip code

BGS Project No.: **n**
Other Project No.: **x**

Change Order Item	Type name of Change Order Item here			
Description of Work	Type brief description here of work scope here.			
Reason or Necessity of Work	Type brief justification for change here.			
Cost Breakdown	Work by Subcontractor only	Work by Sub and Contractor	Work by Contractor only	
Subcontractor base cost	\$0	\$0		
Subcontractor markup	\$0	\$0		
Contractor base cost		\$0	\$0	
Contractor markup	\$0	\$0	\$0	
Subtotal	\$0	\$0	\$0	
Compensation	lump sum		Total Cost	\$0
Initiated by	Consultant		Calendar Days*	0
Reason Code	CC	Supporting Documentation		is attached

<i>EO</i>	<i>UC</i>	<i>OC</i>	<i>RC</i>	<i>CC</i>
<i>Error or omission of Consultant</i>	<i>Unforeseen job site condition</i>	<i>Owner-generated change</i>	<i>Regulatory authority-generated change</i>	<i>Contractor-generated change</i>

* Calendar Days shows Contract Final Completion Date impact only.

Consultant (Architect or Engineer) Type firm name here
Type person's name, title here

signature date

Contractor Type company name here
Type person's name, title here

signature date

Owner Type contracting entity name here
Type person's name, title here

signature date

Owner's Rep Type entity name here
Type person's name, title here

signature date

**Bureau of
General Services**

Division of Planning, Design & Construction
Type person's name, title here

signature

date

00 71 00
Definitions

1. Definitions
 - 1.1 *Addendum*: A document issued by the Consultant that amends the Bid Documents. Addenda shall not be issued less than seventy-two hours prior to the specified bid opening time.
 - 1.2 *Allowance*: A specified dollar amount for a particular scope of work or service included in the Work that is identified in the Bid Documents and included in each Bidder's Bid. The Contractor shall document expenditures for an Allowance during the Project. Any unused balance shall be credited to the Owner. The Contractor is responsible for notifying the Owner of anticipated expenses greater than the specified amount and the Owner is responsible for those additional expenses.
 - 1.3 *Alternate Bid*: The Contractor's written offer of a specified dollar amount, submitted on the Bid Form, for the performance of a particular scope of work described in the Bid Documents. The Owner determines the low bidder based on the sum of the base Bid and any combination of Alternate Bids that the Owner selects.
 - 1.4 *Architect*: A Consultant acting as, or supporting, the Professional-of-Record who is responsible for the design of the Project. Equivalent to "Consultant" in State of Maine contract forms.
 - 1.5 *Architectural Supplemental Instruction (ASI)*: A written instruction from the Architect for the purpose of clarification of the Contract Documents. An ASI does not alter the Contract Price or Contract Time. ASIs may be responses to RFIs and shall be issued by the Architect in a timely manner to avoid any negative impact on the Schedule of the Work.
 - 1.6 *Bid*: The Contractor's written offer of a specified dollar amount or amounts, submitted on a form included in the Bid Documents, for the performance of the Work. A Bid may include bonds or other requirements. A base Bid is separate and distinct from Alternate Bids, being the only cost component necessary for the award of the contract, and representing the minimum amount of Work that is essential for the functioning of the Project.
 - 1.7 *Bid Bond*: The security designated in the Bid Documents, furnished by Bidders as a guaranty of good faith to enter into a contract with the Owner, should a contract be awarded to that Bidder.
 - 1.8 *Bidder*: Any business entity, individual or corporation that submits a bid for the performance of the work described in the Bid Documents, acting directly or through a duly authorized representative. See also *Responsive and Responsible Bidder*.
 - 1.9 *Bid Documents*: The drawings, procurement and contracting requirements, general requirements, and the written specifications -including all addenda, that a bidder is required to reference in the submission of a bid.
 - 1.10 *Bureau*: The State of Maine Bureau of General Services, or BGS, in the Department of Administrative and Financial Services.
 - 1.11 *Calendar days*: Consecutive days, as occurring on a calendar, taking into account each day of the week, month, year, and any religious, national or local holidays. Calendar days are used for changes in Contract Time.

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Definitions

- 1.12 *Certificate of Substantial Completion*: A document developed by the Consultant that describes the final status of the Work and establishes the date that the Owner may use the facility for its intended purpose. The Certificate of Substantial Completion may also include a provisional list of items - a "punch list" - remaining to be completed by the Contractor. The Certificate of Substantial Completion identifies the date from which the project warranty period commences.
- 1.13 *Certificate of Occupancy*: A document developed by a local jurisdiction such as the Code Enforcement Officer that grants permission to the Owner to occupy a building.
- 1.14 *Change Order (CO)*: A document that modifies the contract and establishes the basis of a specific adjustment to the Contract Price or the Contract Time, or both. Change Orders may address correction of omissions, errors, and document discrepancies, or additional requirements. Change Orders should include all labor, materials and incidentals required to complete the work described. A Change Order is not valid until signed by the Contractor, Owner and Consultant and approved by the Bureau.
- 1.15 *Change Order Proposal (COP) (see also Proposal)*: Contract change proposed by the Contractor regarding the contract amount, requirements, or time. The Contractor implements the work of a COP after it is accepted by all parties. Accepted COPs are incorporated into the contract by Change Order.
- 1.16 *Clerk of the Works*: The authorized representative of the Consultant on the job site. Clerk of the Works is sometimes called the Architect's representative.
- 1.17 *Construction Change Directive (CCD)*: A written order prepared by the Consultant and signed by the Owner and Consultant, directing a change in the Work prior to final agreement with the Contractor on adjustment, if any, in the Contract Price or Contract Time, or both.
- 1.18 *Contract*: A written agreement between the Owner and the successful bidder which obligates the Contractor to perform the work specified in the Contract Documents and obligates the Owner to compensate the Contractor at the mutually accepted sum, rates or prices.
- 1.19 *Contract Bonds (also known as Payment and Performance Bonds)*: The approved forms of security, furnished by the Contractor and their surety, which guarantee the faithful performance of all the terms of the contract and the payment of all bills for labor, materials and equipment by the Contractor.
- 1.20 *Contract Documents*: The drawings and written specifications (including all addenda), Standard General Conditions, and the contract (including all Change Orders subsequently incorporated in the documents).
- 1.21 *Contract Expiration Date*: Date determined by the Owner as a deadline for internal management of contract accounts. This allows time after the Contract Final Completion Date for processing the final Requisition for Payment. The Contract Expiration Date does not directly relate to any contract obligation of the Contractor.
- 1.22 *Contract Final Completion Date*: Point of time when the Work is fully completed in compliance with the Contract Documents, as certified by the Consultant. Final payment to the Contractor is due upon Final Completion of the Project.
- 1.23 *Contract Price*: The dollar amount of the construction contract, also called *Contract Sum*.

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Definitions

- 1.24 *Contract Time*: The designated duration of time to execute the Work of the contract, with a specific date for completion.
- 1.25 *Contractor*: Also called the "General Contractor" or "GC" the individual or entity undertaking the execution of the general contract work under the terms of the contract with the Owner, acting directly or through a duly authorized representative. The Contractor is responsible for the means, methods and materials utilized in the execution and completion of the Work.
- 1.26 *Consultant*: The Architect or Engineer acting as Professional-of-Record for the Project. The Consultant is responsible for the design of the Project.
- 1.27 *Drawings*: The graphic and pictorial portion of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
- 1.28 *Engineer*: A Consultant acting as, or supporting, the Professional-of-Record who is responsible for the design of the Project. Equivalent to "Consultant" in State of Maine contract forms.
- 1.29 *Filed Sub-bid*: The designated major Subcontractor's (or, in some cases, Contractor's) written offer of a specified dollar amount or amounts, submitted on a form included in the Bid Documents, for the performance of a particular portion of the Work. A Filed Sub-bid may include bonds or other requirements.
- 1.30 *General Requirements*: The on-site overhead expense items the Contractor provides for the Project, typically including, but not limited to, building permits, construction supervision, Contract Bonds, insurance, field office, temporary utilities, rubbish removal, and site fencing. Overhead expenses of the Contractor's general operation are not included. Sometimes referred to as the Contractor's General Conditions.
- 1.31 *Owner*: The State agency which is represented by duly authorized individuals. The Owner is responsible for defining the scope of the Project and compensation to the Consultant and Contractor.
- 1.32 *Owner's Representative*: The individual or entity contracted by the Owner to be an advisor and information conduit regarding the Project.
- 1.33 *Overhead*: General and administrative expenses of the Contractor's principal and branch offices, including payroll costs and other compensation of Contractor employees, deductibles paid on any insurance policy, charges against the Contractor for delinquent payments, and costs related to the correction of defective work, and the Contractor's capital expenses, including interest on capital used for the work.
- 1.34 *Performance and Payment Bonds (also known as Contract Bonds)*: The approved forms of security, furnished by the Contractor and their surety, which guarantee the faithful performance of all the terms of the contract and the payment of all bills for labor, materials and equipment by the Contractor.
- 1.35 *Post-Bid Addendum*: Document issued by the Consultant that defines a potential Change Order prior to signing of the construction contract. The Post-Bid Addendum allows the Owner to negotiate

00 71 00
Definitions

contract changes with the Bidder submitting the lowest valid bid, only if the negotiated changes to the Bid Documents result in no change or no increase in the bid price.

A Post-Bid Addendum may also be issued after a competitive construction Bid opening to those Bidders who submitted a Bid initially, for the purpose of rebidding the Project work without re-advertising.

- 1.36 *Project*: The construction project proposed by the Owner to be constructed according to the Contract Documents. The Project, a public improvement, may be tied logistically to other public improvements and other activities conducted by the Owner or other contractors.
- 1.37 *Proposal (see also Change Order Proposal)*: The Contractor's written offer submitted to the Owner for consideration containing a specified dollar amount or rate, for a specific scope of work, and including a schedule impact, if any. A proposal shall include all costs for overhead and profit. The Contractor implements the work of a Proposal after it is accepted by all parties. Accepted Proposals are incorporated into the contract by Change Order.
- 1.38 *Proposal Request (PR)*: An Owner's written request to the Contractor for a Change Order Proposal.
- 1.39 *Punch List*: A document that identifies the items of work remaining to be done by the Contractor at the Close Out of a Project. The Punch List is created as a result of a final inspection of the work only after the Contractor attests that all of the Work is in its complete and permanent status.
- 1.40 *Request For Information (RFI)*: A Contractor's written request to the Consultant for clarification, definition or description of the Work. RFIs shall be presented by the Contractor in a timely manner to avoid any negative impact on the Schedule of the Work.
- 1.41 *Request For Proposal (RFP)*: An Owner's written request to the Contractor for a Change Order Proposal.
- 1.42 *Requisition for Payment*: The document in which the Contractor certifies that the Work described is, to the best of the Contractor's knowledge, information and belief, complete and that all previous payments have been paid by the Contractor to Subcontractors and suppliers, and that the current requested payment is now due. See *Schedule of Values*.
- 1.43 *Responsive and Responsible Bidder*: A bidder who complies, when submitting a bid on a given project, with the following *responsive* standards, as required by the Bid Documents:
- submits specific qualifications to bid the project, if required;
 - attends mandatory pre-bid conferences, if required;
 - submits a bid prior to the close of the bid period;
 - submits a complete bid form;
 - submits a bid without indications of intent contrary to the stated requirements;
 - submits other materials and information, such as bid security, as required;
- and, meets the following minimums regarding these *responsible* standards:
- sustains a satisfactory record of project performance;
 - maintains a permanent place of business in a known physical location;
 - possesses the financial means for short- and long-term operations;
 - possesses the appropriate technical experience and capabilities;
 - employs adequate personnel and subcontractor resources;

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Definitions

maintains the equipment needed to perform the work;
complies with the proposed implementation schedule;
complies with the insurance and bonding requirements;
provides post-construction warranty coverage;
and other criteria which can be considered relevant to the contract.

- 1.44 *Retainage*: The amount, calculated at five percent (5%) of the contract value or a scheduled value, that the Owner shall withhold from the Contractor until the work or portion of work is declared substantially complete or otherwise accepted by the Owner. The Owner may, if requested, reduce the amount withheld if the Owner deems it desirable and prudent to do so. (See Title 5 M.R.S.A., Section 1746.)
- 1.45 *Sample*: A physical example provided by the Contractor which illustrates materials, equipment or workmanship and establishes standards by which the Work will be judged.
- 1.46 *Schedule of the Work*: The document prepared by the Contractor and approved by the Owner that specifies the dates on which the Contractor plans to begin and complete various parts of the Work, including dates on which information and approvals are required from the Owner.
- 1.47 *Schedule of Values*: The document prepared by the Contractor and approved by the Owner before the commencement of the Work that specifies the dollar values of discrete portions of the Work equal in sum to the contract amount. The Schedule of Values is used to document progress payments of the Work in regular (usually monthly) requisitions for payment. See *Requisition for Payment*.
- 1.48 *Shop Drawings*: The drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- 1.49 *Specifications*: The portion of the Contract Documents consisting of the written requirements of the Work for materials, equipment, systems, standards, workmanship, and performance of related services.
- 1.50 *Subcontractor*: An individual or entity undertaking the execution of any part of the Work by virtue of a written agreement with the Contractor or any other Subcontractor. Also, an individual or entity retained by the Contractor or any other Subcontractor as an independent contractor to provide the labor, materials, equipment or services necessary to complete a specific portion of the Work.
- 1.51 *Substantial Completion Date*: Point of time when the Work or a designated portion of the Work is sufficiently complete in compliance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended purpose without unscheduled disruption. Substantial Completion is documented by the date of the Certificate of Substantial Completion signed by the Owner and the Contractor.
- 1.52 *Superintendent*: The representative of the Contractor on the job site, authorized by the Contractor to receive and fulfill instructions from the Consultant.
- 1.53 *Surety*: The individual or entity that is legally bound with the Contractor and Subcontractor to insure the faithful performance of the contract and for the payment of the bills for labor, materials and equipment by the Contractor and Subcontractors.

00 71 00
Definitions

- 1.54 *Work*: The construction and services, whether completed or partially completed, including all labor, materials, equipment and services provided or to be provided by the Contractor and Subcontractors to fulfill the requirements of the Project as described in the Contract Documents.

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General Conditions

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General Conditions

1. Preconstruction Conference

- 1.1 The Contractor shall, upon acceptance of a contract and prior to commencing work, schedule a preconstruction conference with the Owner and Consultant. The purpose of this conference is as follows.
- 1.1.1 Introduce all parties who have a significant role in the Project, including:
Owner (State agency or other contracting entity)
 Owner's Representative
Consultant (Architect or Engineer)
 Subconsultants
 Clerk-of-the-works
Contractor (GC)
 Superintendent
 Subcontractors
Other State agencies
Construction testing company
Commissioning agent
Special Inspections agent
Bureau of General Services (BGS);
- 1.1.2 Review the responsibilities of each party;
- 1.1.3 Review any previously-identified special provisions of the Project;
- 1.1.4 Review the Schedule of the Work calendar submitted by the Contractor to be approved by the Owner and Consultant;
- 1.1.5 Review the Schedule of Values form submitted by the Contractor to be approved by the Owner and Consultant;
- 1.1.6 Establish routines for Shop Drawing approval, contract changes, requisitions, et cetera;
- 1.1.7 discuss jobsite issues;
- 1.1.8 Discuss Project close-out procedures;
- 1.1.9 Provide an opportunity for clarification of Contract Documents before work begins; and
- 1.1.10 Schedule regular meetings at appropriate intervals for the review of the progress of the Work.

2. Intent and Correlation of Contract Documents

- 2.1 The intent of the Contract Documents is to describe the complete Project. The Contract Documents consist of various components; each component complements the others. What is shown as a requirement by any one component shall be inferred as a requirement on all corresponding components.
- 2.2 The Contractor shall furnish all labor, equipment and materials, tools, transportation, insurance, services, supplies, operations and methods necessary for, and reasonably incidental to, the construction and completion of the Project. Any work that deviates from the Contract Documents which appears to be required by the exigencies of construction or by inconsistencies in the Contract Documents, will be determined by the Consultant and authorized in writing by the Consultant, Owner and the Bureau prior to execution. The Contractor shall be responsible for requesting clarifying information where the intent of the Contract Documents is uncertain.
- 2.3 The Contractor shall not utilize any apparent error or omission in the Contract Documents to the disadvantage of the Owner. The Contractor shall promptly notify the Consultant in writing of such errors or omissions. The Consultant shall make any corrections or clarifications necessary in such a situation to document the true intent of the Contract Documents.

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General Conditions

3. Additional Drawings and Specifications

- 3.1 Upon the written request of the Contractor, the Owner shall provide, at no expense to the Contractor, up to five sets of printed Drawings and Specifications for the execution of the Work.
- 3.2 The Consultant shall promptly furnish to the Contractor revised Drawings and Specifications, for the area of the documents where those revisions apply, when corrections or clarifications are made by the Consultant. All such information shall be consistent with, and reasonably inferred from, the Contract Documents. The Contractor shall do no work without the proper Drawings and Specifications.

4. Ownership of Contract Documents

- 4.1 The designs represented on the Contract Documents are the property of the Consultant. The Drawings and Specifications shall not be used on other work without consent of the Consultant.

5. Permits, Laws, and Regulations

- 5.1 The Owner is responsible for obtaining any zoning approvals or other similar local project approvals necessary to complete the Work, unless otherwise specified in the Contract Documents.
- 5.2 The Owner is responsible for obtaining Maine Department of Environmental Protection, Maine Department of Transportation, or other similar state government project approvals necessary to complete the Work, unless otherwise indicated in the Contract Documents.
- 5.3 The Owner is responsible for obtaining any federal agency project approvals necessary to complete the Work, unless otherwise indicated in the Contract Documents.
- 5.4 The Owner is responsible for obtaining all easements for permanent structures or permanent changes in existing facilities.
- 5.5 The Contractor is responsible for obtaining and paying for all permits and licenses necessary for the implementation of the Work. The Contractor shall notify the Owner of any delays, variance or restrictions that may result from the issuing of permits and licenses.
- 5.6 The Contractor shall comply with all ordinances, laws, rules and regulations and make all required notices bearing on the implementation of the Work. In the event the Contractor observes disagreement between the Drawings and Specifications and any ordinances, laws, rules and regulations, the Contractor shall promptly notify the Consultant in writing. Any necessary changes shall be made as provided in the contract for changes in the work. The Contractor shall not perform any work knowing it to be contrary to such ordinances, laws, rules and regulations.
- 5.7 The Contractor shall comply with local, state and federal regulations regarding construction safety and all other aspects of the Work.
- 5.8 The Contractor shall comply with the Maine Code of Fair Practices and Affirmative Action, 5 M.R.S. §784 (2).

00 72 13
General Conditions

6. Taxes

- 6.1 The Owner is exempt from the payment of Maine State sales and use taxes as provided in 36 M.R.S. §1760 (1). The Contractor and Subcontractors shall not include taxes on exempt items in the construction contract.
- 6.2 Section 1760 further provides in subsection 61 that sales to a construction contractor or its subcontractor of tangible personal property that is to be physically incorporated in, and become a permanent part of, real property for sale to or owned by the Owner, are exempt from Maine State sales and use taxes. Tangible personal property is defined in 36 M.R.S. §1752 (17).
- 6.3 The Contractor may contact Maine Revenue Services, 24 State House Station, Augusta, Maine 04333 for guidance on tax exempt regulations authorized by 36 M.R.S. §1760 and detailed in Rule 302 (18-125 CMR 302).

7. Labor and Wages

- 7.1 The Contractor shall conform to the labor laws of the State of Maine, and all other laws, ordinances, and legal requirements affecting the work in Maine.
- 7.2 The Consultant shall include a wage determination document prepared by the Maine Department of Labor in the Contract Documents for state-funded contracts in excess of \$50,000. The document shows the minimum wages required to be paid to each category of labor employed on the project.
- 7.3 On projects requiring a Maine wage determination, the Contractor shall submit monthly payroll records to the Owner ("the contracting agency") showing the name and occupation of all workers and all independent contractors employed on the project. The monthly submission must also include the Contractor's company name, the title of the project, hours worked, hourly rate or other method of remuneration, and the actual wages or other compensation paid to each person.
- 7.4 The Contractor shall not reveal, in the payroll records submitted to the Owner, personal information regarding workers and independent contractors, other than the information described above. Such information shall not include Social Security number, employee identification number, or employee address or phone number, for example.
- 7.5 The Contractor shall conform to Maine statute (39-A M.R.S. §105-A (6)) by providing to the Workers' Compensation Board a list of all subcontractors and independent contractors on the job site and a record of the entity to whom that subcontractor or independent contractor is directly contracted and by whom that subcontractor or independent contractor is insured for workers' compensation purposes.
- 7.6 The Contractor shall enforce strict discipline and good order among their employees at all times, and shall not employ any person unfit or unskilled to do the work assigned to them.
- 7.7 The Contractor shall promptly pay all employees when their compensation is due, shall promptly pay all others who have billed and are due for materials, supplies and services used in the Work, and shall promptly pay all others who have billed and are due for insurance, workers compensation coverage, federal and state unemployment compensation, and Social Security

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charges pertaining to this Project. Before final payments are made, the Contractor shall furnish to the Owner affidavits that all such payments described above have been made.

- 7.8 The Contractor may contact the Maine Department of Labor, 54 State House Station, Augusta, Maine 04333 for guidance on labor issues.
- 7.9 The Contractor may contact the Maine Workers' Compensation Board, 27 State House Station, Augusta, Maine 04333 for guidance on workers' compensation issues.

8. Indemnification

- 8.1 The Contractor shall indemnify and hold harmless the Owner and its officers and employees from and against any and all damages, liabilities, and costs, including reasonable attorney's fees, and defense costs, for any and all injuries to persons or property, including claims for violation of intellectual property rights, to the extent caused by the negligent acts or omissions of the Contractor, its employees, agents, officers or subcontractors in the performance of work under this Agreement. The Contractor shall not be liable for claims to the extent caused by the negligent acts or omissions of the Owner or for actions taken in reasonable reliance on written instructions of the Owner.
- 8.2 The Contractor shall notify the Owner promptly of all claims arising out of the performance of work under this Agreement by the Contractor, its employees or agents, officers or subcontractors.
- 8.3 This indemnity provision shall survive the termination of the Agreement, completion of the project or the expiration of the term of the Agreement.

9. Insurance Requirements

- 9.1 The Contractor shall provide, with each original of the signed Contract, an insurance certificate or certificates acceptable to the Owner and BGS. The Contractor shall submit insurance certificates to the Owner and BGS at the commencement of this Contract and at policy renewal or revision dates. The certificates shall identify the project name and BGS project number, and shall name the Owner as certificate holder and as additional insured for general liability and automobile liability coverages. The submitted forms shall contain a provision that coverage afforded under the insurance policies will not be canceled or materially changed unless at least ten days prior written notice by registered letter has been given to the Owner and BGS.
- 9.2 The Owner does not warrant or represent that the insurance required herein constitutes an insurance portfolio which adequately addresses all risks faced by the Contractor or its Subcontractors. The Contractor is responsible for the existence, extent and adequacy of insurance prior to commencement of work. The Contractor shall not allow any Subcontractor to commence work until all similar insurance required of the Subcontractor has been confirmed by the Contractor.
- 9.3 The Contractor shall procure and maintain primary insurance for the duration of the Project and, if written on a Claims-Made basis, shall also procure and maintain Extended Reporting Period (ERP) insurance for the period of time that any claims could be brought. The Contractor shall ensure that all Subcontractors they engage or employ will procure and maintain similar insurance

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in form and amount acceptable to the Owner and BGS. At a minimum, the insurance shall be of the types and limits set forth herein protecting the Contractor from claims which may result from the Contractor's execution of the Work, whether such execution be by the Contractor or by those employed by the Contractor or by those for whose acts they may be liable. All required insurance coverages shall be placed with carriers authorized to conduct business in the State of Maine by the Maine Bureau of Insurance.

9.3.1 The Contractor shall have Workers' Compensation insurance for all employees on the Project site in accordance with the requirements of the Workers' Compensation law of the State of Maine. Minimum acceptable limits for Employer's Liability are:

Bodily Injury by Accident.....	\$500,000
Bodily Injury by Disease.....	\$500,000 Each Employee
Bodily Injury by Disease.....	\$500,000 Policy Limit

9.3.2 The Contractor shall have Commercial General Liability insurance providing coverage for bodily injury and property damage liability for all hazards of the Project including premise and operations, products and completed operations, contractual, and personal injury liabilities. The policy shall include collapse and underground coverage as well as explosion coverage if explosion hazards exist. Aggregate limits shall apply on a location or project basis. Minimum acceptable limits are:

General aggregate limit.....	\$2,000,000
Products and completed operations aggregate	\$1,000,000
Each occurrence limit.....	\$1,000,000
Personal injury aggregate.....	\$1,000,000

9.3.3 The Contractor shall have Automobile Liability insurance against claims for bodily injury, death or property damage resulting from the maintenance, ownership or use of all owned, non-owned and hired automobiles, trucks and trailers. Minimum acceptable limit is:

Any one accident or loss	\$500,000
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9.3.4 For the portion of a project which is new construction, the Contractor shall procure and maintain Builder's Risk insurance naming the Owner, Contractor, and any Subcontractor as insureds as their interest may appear. Covered causes of loss form shall be all Risks of Direct Physical Loss, endorsed to include flood, earthquake, transit and sprinkler leakage where sprinkler coverage is applicable. Unless specifically authorized in writing by the Owner, the limit of insurance shall not be less than the initial contract amount, for the portion of the project which is new construction, and coverage shall apply during the entire contract period and until the work is accepted by the Owner.

9.3.5 The Contractor shall have Owner's Protective Liability insurance for contract values \$50,000 and above, naming the Owner as the Named Insured. Minimum acceptable limits are:

General aggregate limit.....	\$2,000,000
Each occurrence limit.....	\$1,000,000

10. Contract Bonds

10.1 When noted as required in the Bid Documents, the Contractor shall provide to the Owner a Performance Bond and a Payment Bond, or "contract bonds", upon execution of the contract. Each bond value shall be for the full amount of the contract and issued by a surety company authorized to do business in the State of Maine as approved by the Owner. The bonds shall be

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executed on the forms furnished in the Bid Documents. The bonds shall allow for any subsequent additions or deductions of the contract.

- 10.2 The contract bonds shall continue in effect for one year after final acceptance of the contract to protect the Owner's interest in connection with the one year guarantee of workmanship and materials and to assure settlement of claims for the payment of all bills for labor, materials and equipment by the Contractor.

11. Patents and Royalties

- 11.1 The Contractor shall, for all time, secure for the Owner the free and undisputed right to the use of any patented articles or methods used in the Work. The expense of defending any suits for infringement or alleged infringement of such patents shall be borne by the Contractor. Awards made regarding patent suits shall be paid by the Contractor. The Contractor shall hold the Owner harmless regarding patent suits that may arise due to installations made by the Contractor, and to any awards made as a result of such suits.
- 11.2 Any royalty payments related to the work done by the Contractor for the Project shall be borne by the Contractor. The Contractor shall hold the Owner harmless regarding any royalty payments that may arise due to installations made by the Contractor.

12. Surveys, Layout of Work

- 12.1 The Owner shall furnish all property surveys unless otherwise specified.
- 12.2 The Contractor is responsible for correctly staking out the Work on the site. The Contractor shall employ a competent surveyor to position all construction on the site. The surveyor shall run the axis lines, establish correct datum points and check each line and point on the site to insure their accuracy. All such lines and points shall be carefully preserved throughout the construction.
- 12.3 The Contractor shall lay out all work from dimensions given on the Drawings. The Contractor shall take measurements and verify dimensions of any existing work that affects the Work or to which the Work is to be fitted. The Contractor is solely responsible for the accuracy of all measurements. The Contractor shall verify all grades, lines, levels, elevations and dimensions shown on the Drawings and report any errors or inconsistencies to the Consultant prior to commencing work.

13. Record of Documents

- 13.1 The Contractor shall maintain one complete set of Contract Documents on the jobsite, in good order and current status, for access by the Owner and Consultant.
- 13.2 The Contractor shall maintain, continuously updated, complete records of Requests for Information, Architectural Supplemental Instructions (or equivalent), Information Bulletins, supplemental sketches, Change Order Proposals, Change Orders, Shop Drawings, testing reports, et cetera, for access by the Owner and Consultant.

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14. Allowances

- 14.1 The Contract Price shall include all allowances described in the Contract Documents. The Contractor shall include all overhead and profit necessary to implement each allowance in their Contract Price.
- 14.2 The Contractor shall not be required to employ parties for allowance work against whom the Contractor has a reasonable objection. In such a case, the Contractor shall notify the Owner in writing of their position and shall propose an alternative party to complete the work of the allowance.

15. Shop Drawings

- 15.1 The Contractor shall administer Shop Drawings prepared by the Contractor, Subcontractors, suppliers or others to conform to the approved Schedule of the Work. The Contractor shall verify all field measurements, check and authorize all Shop Drawings and schedules required by the Work. The Contractor is the responsible party and contact for the Contractor's work as well as that of Subcontractors, suppliers or others who provide Shop Drawings.
- 15.2 The Consultant shall review and acknowledge Shop Drawings, with reasonable promptness, for general conformity with the design concept of the project and compliance with the information provided in the Contract Documents.
- 15.3 The Contractor shall provide monthly updated logs containing: requests for information, information bulletins, supplemental instructions, supplemental sketches, change order proposals, change orders, submittals, testing and deficiencies.
- 15.4 The Contractor shall make any corrections required by the Consultant, and shall submit a quantity of corrected copies as may be needed. The acceptance of Shop Drawings or schedules by the Consultant shall not relieve the Contractor from responsibility for deviations from Drawings and Specifications, unless the Contractor has called such deviations to the attention of the Consultant at the time of submission and secured the Consultant's written approval. The acceptance of Shop Drawings or schedules by the Consultant does not relieve the Contractor from responsibility for errors in Shop Drawings or schedules.

16. Samples

- 16.1 The Contractor shall furnish for approval, with reasonable promptness, all samples as directed by the Consultant. The Consultant shall review and approve such samples, with reasonable promptness, for general conformity with the design concept of the project and compliance with the information provided in the Contract Documents. The subsequent work shall be in accord with the approved samples.

17. Substitutions

- 17.1 The Contractor shall furnish items and materials described in the Contract Documents. If the item or material specified describes a proprietary product, or uses the name of a manufacturer, the term "or approved equal" shall be implied, if it is not included in the text. The specific item or material specified establishes a minimum standard for the general design, level of quality, type, function, durability, efficiency, reliability, compatibility, warranty coverage, installation factors

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and required maintenance. The Drawing or written Specification shall not be construed to exclude other manufacturers products of comparable design, quality, and efficiency.

- 17.2 The Contractor may submit detailed information about a proposed substitution to the Consultant for consideration. Particular models of items and particular materials which the Contractor asserts to be equal to the items and materials identified in the Contract Documents shall be allowed only with written approval by the Consultant. The request for substitution shall include a cost comparison and a reason or reasons for the substitution.
- 17.3 The Consultant may request additional information about the proposed substitution. The approval or rejection of a proposed substitution may be based on timeliness of the request, source of the information, the considerations of minimum standards described above, or other considerations. The Consultant should briefly state the rationale for the decision. The decision shall be considered final.
- 17.4 The duration of a substitution review process can not be the basis for a claim for delay in the Schedule of the Work.

18. Assignment of Contract

- 18.1 The Contractor shall not assign or sublet the contract as a whole without the written consent of the Owner. The Contractor shall not assign any money due to the Contractor without the written consent of the Owner.

19. Separate Contracts

- 19.1 The Owner reserves the right to create other contracts in connection with this Project using similar General Conditions. The Contractor shall allow the Owner's other contractors reasonable opportunity for the delivery and storage of materials and the execution of their work. The Contractor shall coordinate and properly connect the Work of all contractors.
- 19.2 The Contractor shall promptly report to the Consultant and Owner any apparent deficiencies in work of the Owner's other contractors that impacts the proper execution or results of the Contractor. The Contractor's failure to observe or report any deficiencies constitutes an acceptance of the Owner's other contractors work as suitable for the interface of the Contractor's work, except for latent deficiencies in the Owner's other contractors work.
- 19.3 Similarly, the Contractor shall promptly report to the Consultant and Owner any apparent deficiencies in their own work that would impact the proper execution or results of the Owner's other contractors.
- 19.4 The Contractor shall report to the Consultant and Owner any conflicts or claims for damages with the Owner's other contractors and settle such conflicts or claims for damages by mutual agreement or arbitration, if necessary, at no expense to the Owner.
- 19.5 In the event the Owner's other contractors sue the Owner regarding any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor, who shall defend such proceedings at the Contractor's expense. The Contractor shall pay or satisfy any judgment that may arise against the Owner, and pay all other costs incurred.

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20. Subcontracts

- 20.1 The Contractor shall not subcontract any part of this contract without the written permission of the Owner.
- 20.2 The Contractor shall submit a complete list of named Subcontractors and material suppliers to the Consultant and Owner for approval by the Owner prior to commencing work. The Subcontractors named shall be reputable companies of recognized standing with a record of satisfactory work.
- 20.3 The Contractor shall not employ any Subcontractor or use any material until they have been approved, or where there is reason to believe the resulting work will not comply with the Contract Documents.
- 20.4 The Contractor, not the Owner, is as fully responsible for the acts and omissions of Subcontractors and of persons employed by them, as the Contractor is for the acts and omissions of persons directly or indirectly employed by the Contractor.
- 20.5 Neither the Contract Documents nor any Contractor-Subcontractor contract shall indicate, infer or create any direct contractual relationship between any Subcontractor and the Owner.

21. Contractor-Subcontractor Relationship

- 21.1 The Contractor shall be bound to the Subcontractor by all the obligations in the Contract Documents that bind the Contractor to the Owner.
- 21.2 The Contractor shall pay the Subcontractor, in proportion to the dollar value of the work completed and requisitioned by the Subcontractor, the approved dollar amount allowed to the Contractor no more than seven days after receipt of payment from the Owner.
- 21.3 The Contractor shall pay the Subcontractor accordingly if the Contract Documents or the subcontract provide for earlier or larger payments than described in the provision above.
- 21.4 The Contractor shall pay the Subcontractor for completed and requisitioned subcontract work, less retainage, no more than seven days after receipt of payment from the Owner for the Contractor's approved Requisition for Payment, even if the Consultant fails to certify a portion of the Requisition for Payment for a cause not the fault of the Subcontractor.
- 21.5 The Contractor shall not make a claim for liquidated damages or penalty for delay in any amount in excess of amounts that are specified by the subcontract.
- 21.6 The Contractor shall not make a claim for services rendered or materials furnished by the Subcontractor unless written notice is given by the Contractor to the Subcontractor within ten calendar days of the day in which the claim originated.
- 21.7 The Contractor shall give the Subcontractor an opportunity to present and to submit evidence in any progress conference or disputes involving subcontract work.

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- 21.8 The Contractor shall pay the Subcontractor a just share of any fire insurance payment received by the Contractor.
- 21.9 The Subcontractor shall be bound to the Contractor by the terms of the Contract Documents and assumes toward the Contractor all the obligations and responsibilities that the Contractor, by those documents, assumes toward the Owner.
- 21.10 The Subcontractor shall submit applications for payment to the Contractor in such reasonable time as to enable the Contractor to apply for payment as specified.
- 21.11 The Subcontractor shall make any claims for extra cost, extensions of time or damages, to the Contractor in the manner provided in these General Conditions for like claims by the Contractor to the Owner, except that the time for the Subcontractor to make claims for extra cost is seven calendar days after the receipt of Consultant's instructions.
22. Supervision of the Work
- 22.1 During all stages of the Work the Contractor shall have a competent superintendent, with any necessary assistant superintendents, overseeing the project. The superintendent shall not be reassigned without the consent of the Owner unless a superintendent ceases to be employed by the Contractor due to unsatisfactory performance.
- 22.2 The superintendent represents the Contractor on the jobsite. Directives given by the Consultant or Owner to the superintendent shall be as binding as if given directly to the Contractor's main office. All important directives shall be confirmed in writing to the Contractor. The Consultant and Owner are not responsible for the acts or omissions of the superintendent or assistant superintendents.
- 22.3 The Contractor shall provide supervision of the Work equal to the industry's highest standard of care. The superintendent shall carefully study and compare all Contract Documents and promptly report any error, inconsistency or omission discovered to the Consultant. The Contractor may not necessarily be held liable for damages resulting directly from any error, inconsistency or omission in the Contract Documents or other instructions by the Consultant that was not revealed by the superintendent in a timely way.
23. Observation of the Work
- 23.1 The Contractor shall allow the Owner, the Consultant and the Bureau continuous access to the site for the purpose of observation of the progress of the work. All necessary safeguards and accommodations for such observations shall be provided by the Contractor.
- 23.2 The Contractor shall coordinate all required testing, approval or demonstration of the Work. The Contractor shall give sufficient notice to the appropriate parties of readiness for testing, inspection or examination.
- 23.3 The Contractor shall schedule inspections and obtain all required certificates of inspection for inspections by a party other than the Consultant.

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- 23.4 The Consultant shall make all scheduled observations promptly, prior to the work being concealed or buried by the Contractor. If approval of the Work is required of the Consultant, the Contractor shall notify the Consultant of the construction schedule in this regard. Work concealed or buried prior to the Consultant's approval may need to be uncovered at the Contractor's expense.
- 23.5 The Consultant may order reexamination of questioned work, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to conform to the Contract Documents, the Owner shall pay the expense of the reexamination and remedial work. If the work is found to not conform to the Contract Documents, the Contractor shall pay the expense, unless the defect in the work was caused by the Owner's Contractor, whose responsibility the reexamination expense becomes.
- 23.6 The Bureau shall periodically observe the Work during the course of construction and make recommendations to the Contractor or Consultant as necessary. Such recommendations shall be considered and implemented through the usual means for changes to the Work.
24. Consultant's Status
- 24.1 The Consultant represents the Owner during the construction period, and observes the work in progress on behalf of the Owner. The Consultant has authority to act on behalf of the Owner only to the extent expressly provided by the Contract Documents or otherwise demonstrated to the Contractor. The Consultant has authority to stop the work whenever such an action is necessary, in the Consultant's reasonable opinion, to ensure the proper execution of the contract.
- 24.2 The Consultant is the interpreter of the conditions of the contract and the judge of its performance. The Consultant shall favor neither the Owner nor the Contractor, but shall use the Consultant's powers under the contract to enforce faithful performance by both parties.
- 24.3 In the event of the termination of the Consultant's employment on the project prior to completion of the work, the Owner shall appoint a capable and reputable replacement. The status of the new Consultant relative to this contract shall be that of the former Consultant.
25. Management of the Premises
- 25.1 The Contractor shall place equipment and materials, and conduct activities on the premises in a manner that does not unreasonably hinder site circulation, environmental stability, or any long term effect. Likewise, the Consultant's directions shall not cause the use of premises to be impeded for the Contractor or Owner.
- 25.2 The Contractor shall not use the premises for any purpose other than that which is directly related to the scope of work. The Owner shall not use the premises for any purpose incompatible with the proposed work simultaneous to the work of the Contractor.
- 25.3 The Contractor shall enforce the Consultant's instructions regarding information posted on the premises such as signage and advertisements, as well as activities conducted on the premises such as fires, and smoking.

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- 25.4 The Owner may occupy any part of the Project that is completed with the written consent of the Contractor, and without prejudice to any of the rights of the Owner or Contractor. Such use or occupancy shall not, in and of itself, be construed as a final acceptance of any work or materials.
26. Safety and Security of the Premises
- 26.1 The Contractor shall designate, and make known to the Consultant and the Owner, a safety officer whose duty is the prevention of accidents on the site.
- 26.2 The Contractor shall continuously maintain security on the premises and protect from unreasonable occasion of injury all people authorized to be on the job site. The Contractor shall also effectively protect the property and adjacent properties from damage or loss.
- 26.3 The Contractor shall take all necessary precautions to ensure the safety of workers and others on and adjacent to the site, abiding by applicable local, state and federal safety regulations. The Contractor shall erect and continuously maintain safeguards for the protection of workers and others, and shall post signs and other warnings regarding hazards associated with the construction process, such as protruding fasteners, moving equipment, trenches and holes, scaffolding, window, door or stair openings, and falling materials.
- 26.4 The Contractor shall restore the premises to conditions that existed prior to the start of the project at areas not intended to be altered according to the Contract Documents.
- 26.5 The Contractor shall protect existing utilities and exercise care working in the vicinity of utilities shown in the Drawings and Specifications or otherwise located by the Contractor.
- 26.6 The Contractor shall protect from damage existing trees and other significant plantings and landscape features of the site which will remain a permanent part of the site. If necessary or indicated in the Contract Documents, tree trunks shall be boxed and barriers erected to prevent damage to tree branches or roots.
- 26.7 The Contractor shall repair or replace damage to the Work caused by the Contractor's or Subcontractor's forces, including that which is reasonably protected, at the expense of the responsible party.
- 26.8 The Contractor shall not load, or allow to be loaded, any part of the Project with a force which imperils personal or structural safety. The Consultant may consult with the Contractor on such means and methods of construction, however, the ultimate responsibility lies with the Contractor.
- 26.9 The Contractor shall not jeopardize any work in place with subsequent construction activities such as blasting, drilling, excavating, cutting, patching or altering work. The Consultant must approve altering any structural components of the project. The Contractor shall supervise all construction activities carried out by others on site to ensure that the work is neatly done and in a manner that will not endanger the structure or the component parts.
- 26.10 The Contractor may act with their sole discretion in emergency situations that potentially effect health, life or serious damage to the premises or adjacent properties, to prevent such potential loss or injury. The Contractor may negotiate with the Owner for compensation for expenses due to such emergency work.

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- 26.11 The Contractor and Subcontractors shall have no responsibility for the identification, discovery, presence, handling, removal or disposal of, or exposure of persons to, hazardous materials in any form at the project site. The Contractor shall avoid disruption of any hazardous materials or toxic substances at the project site and promptly notify the Owner in writing on the occasion of such a discovery.
- 26.12 The Contractor shall keep the premises free of any unsafe accumulation of waste materials caused by the work. The Contractor shall regularly keep the spaces “broom clean”. See the Close-out of the Work provisions of this section regarding cleaning at the completion of the project.
27. Changes in the Work
- 27.1 The Contractor shall not proceed with extra work without an approved Change Order or Construction Change Directive. A Change Order which has been properly signed by all parties shall become a part of the contract.
- 27.2 A Change Order is the usual document for directing changes in the Work. In certain circumstances, however, the Owner may utilize a Construction Change Directive to direct the Contractor to perform changes in the Work that are generally consistent with the scope of the project. The Owner shall use a Construction Change Directive only when the normal process for approving changes to the Work has failed to the detriment of the Project, or when agreement on the terms of a Change Order cannot be met, or when an urgent situation requires, in the Owner's judgment, prompt action by the Contractor.
- 27.3 The Consultant shall prepare the Construction Change Directive representing a complete scope of work, with proposed Contract Price and Contract Time revisions, if any, clearly stated.
- 27.4 The Contractor shall promptly carry out a Construction Change Directive which has been signed by the Owner and the Consultant. Work thus completed by the Contractor constitutes the basis for a Change Order. Changes in the Contract Price and Contract Time shall be as defined in the Construction Change Directive unless subsequently negotiated with some other terms.
- 27.5 The method of determining the dollar value of extra work shall be by:
- .1 an estimate of the Contractor accepted by Owner as a lump sum, or
 - .2 unit prices named in the contract or subsequently agreed upon, or
 - .3 cost plus a designated percentage, or
 - .4 cost plus a fixed fee.
- 27.6 The Contractor shall determine the dollar value of the extra work for both the lump sum and cost plus designated percentage methods so as not to exceed the following rates. The rates include all overhead and profit expenses.
- .1 Contractor - for any work performed by the Contractor's own forces, up to 20% of the cost;
 - .2 Subcontractor - for work performed by Subcontractor's own forces, up to 20% of the cost;
 - .3 Contractor - for work performed by Contractor's Subcontractor, up to 10% of the amount due the Subcontractor.
- 27.7 The Contractor shall keep and provide records as needed or directed for the cost plus designated percentage method. The Consultant shall review and certify the appropriate amount which

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- includes the Contractor's overhead and profit. The Owner shall make payments based on the Consultant's certificate.
- 27.8 Cost reflected in Change Orders shall be limited to the following: cost of materials, cost of delivery, cost of labor (including Social Security, pension, Workers' Compensation insurance, and unemployment insurance), and cost of rental of power tools and equipment. Labor cost may include a pro-ratio share of a foreman's time only in the case of an extension of contract time granted due to the Change Order.
- 27.9 Overhead reflected in Change Orders shall be limited to the following: bond premium, supervision, wages of clerks, time keepers, and watchmen, small tools, incidental expenses, general office expenses, and all other overhead expenses directly related to the Change Order.
- 27.10 The Contractor shall provide credit to the Owner for labor, materials, equipment and other costs but not overhead and profit expenses for those Change Order items that result in a net value of credit to the contract.
- 27.11 The Owner may change the scope of work of the Project without invalidating the contract. The Owner shall notify the Contractor of a change of the scope of work for the Owner's Contractors, which may affect the work of this Contractor, without invalidating the contract. Change Orders for extension of the time caused by such changes shall be developed at the time of directing the change in scope of work.
- 27.12 The Consultant may order minor changes in the Work, not involving extra cost, which is consistent with the intent of the design or project.
- 27.13 The Contractor shall immediately give written notification to the Consultant of latent conditions discovered at the site which materially differ from those represented in the Drawings or Specifications, and which may eventually result in a change in the scope of work. The Contractor shall suspend work until receiving direction from the Consultant. The Consultant shall promptly investigate the conditions and respond to the Contractor's notice with direction that avoids any unnecessary delay of the Work. The Consultant shall determine if the discovered conditions warrant a Change Order.
- 27.14 The Contractor shall, within ten calendar days of receipt of the information, give written notification to the Consultant if the Contractor claims that instructions by the Consultant will constitute extra cost not accounted for by Change Order or otherwise under the contract. The Consultant shall promptly respond to the Contractor's notice with direction that avoids any unnecessary delay of the Work. The Consultant shall determine if the Contractor's claim warrants a Change Order.
28. Correction of the Work
- 28.1 The Contractor shall promptly remove from the premises all work the Consultant declares is non-conforming to the contract. The Contractor shall replace the work properly at no expense to the Owner. The Contractor is also responsible for the expenses of others whose work was damaged or destroyed by such remedial work.

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- 28.2 The Owner may elect to remove non-conforming work if it is not removed by the Contractor within a reasonable time, that time defined in a written notice from the Consultant. The Owner may elect to store removed non-conforming work not removed by the Contractor at the Contractor's expense. The Owner may, with ten days written notice, dispose of materials which the Contractor does not remove. The Owner may sell the materials and apply the net proceeds, after deducting all expenses, to the costs that should have been borne by the Contractor.
- 28.3 The Contractor shall remedy any defects due to faulty materials or workmanship and pay for any related damage to other work which appears within a period of one year from the date of substantial completion, and in accord with the terms of any guarantees provided in the contract. The Owner shall promptly give notice of observed defects to the Contractor and Consultant. The Consultant shall determine the status of all claimed defects. The Contractor shall perform all remedial work without unjustifiable delay in either the initial response or the corrective action.
- 28.4 The Consultant may authorize, after a reasonable notification to the Contractor, an equitable deduction from the contract amount in lieu of the Contractor correcting non-conforming or defective work.
29. Owner's Right to do Work
- 29.1 The Owner may, using other contractors, correct deficiencies attributable to the Contractor, or complete unfinished work. Such action shall take place only after giving the Contractor three days written notice, and provided the Consultant approves of the proposed course of action as an appropriate remedy. The Owner may then deduct the cost of the remedial work from the amount due the Contractor.
- 29.2 The Owner may act with their sole discretion when the Contractor is unable to take action in emergency situations that potentially effect health, life or serious damage to the premises or adjacent properties, to prevent such potential loss or injury. The Owner shall inform the Contractor of the emergency work performed, particularly where it may affect the work of the Contractor.
30. Termination of Contract and Stop Work Action
- 30.1 The Owner may, owing to a certificate of the Consultant indicating that sufficient cause exists to justify such action, without prejudice to any other right or remedy and after giving the Contractor and the Contractor's surety seven days written notice, terminate the employment of the Contractor. At that time the Owner may take possession of the premises and of all materials,

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tools and appliances on the premises and finish the work by whatever method the Owner may deem expedient. Cause for such action by the Owner includes:

- .1 the contractor is adjudged bankrupt, or makes a general assignment for the benefit of its creditors, or
- .2 a receiver is appointed due to the Contractor's insolvency, or
- .3 the Contractor persistently or repeatedly refuses or fails to provide enough properly skilled workers or proper materials, or
- .4 the Contractor fails to make prompt payment to Subcontractors or suppliers of materials or labor, or
- .5 the Contractor persistently disregards laws, ordinances or the instructions of the Consultant, or is otherwise found guilty of a substantial violation of a provision of the Contract Documents.

- 30.2 The Contractor is not entitled, as a consequence of the termination of the employment of the Contractor as described above, to receive any further payment until the Work is finished. If the unpaid balance of the contract amount exceeds the expense of finishing the Work, including compensation for additional architectural, managerial and administrative services, such balance shall be paid to the Contractor. If the expense of finishing the Work exceeds the unpaid balance, the Contractor shall pay the difference to the Owner. The Consultant shall certify the expense incurred by the Contractor's default. This obligation for payment shall continue to exist after termination of the contract.
- 30.3 The Contractor may, if the Work is stopped by order of any court or other public authority for a period of thirty consecutive days, and through no act or fault of the Contractor or of anyone employed by the Contractor, with seven days written notice to the Owner and the Consultant, terminate this contract. The Contractor may then recover from the Owner payment for all work executed, any proven loss and reasonable profit and damage.
- 30.4 The Contractor may, if the Consultant fails to issue a certificate for payment within seven days after the Contractor's formal request for payment, through no fault of the Contractor, or if the Owner fails to pay to the Contractor within 30 days after submission of any sum certified by the Consultant, with seven days written notice to the Owner and the Consultant, stop the Work or terminate this Contract.

31. Delays and Extension of Time

- 31.1 The completion date of the contract shall be extended if the work is delayed by changes ordered in the work which have approved time extensions, or by an act or neglect of the Owner, the Consultant, or the Owner's Contractor, or by strikes, lockouts, fire, flooding, unusual delay in transportation, unavoidable casualties, or by other causes beyond the Contractor's control. The Consultant shall determine the status of all claimed causes.
- 31.2 The contract shall not be extended for delay occurring more than seven calendar days before the Contractor's claim made in writing to the Consultant. In case of a continuing cause of delay, only one claim is necessary.
- 31.3 The contract shall not be extended due to failure of the Consultant to furnish drawings if no schedule or agreement is made between the Contractor and the Consultant indicating the dates

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which drawings shall be furnished and fourteen calendar days has passed after said date for such drawings.

31.4 This article does not exclude the recovery of damages for delay by either party under other provisions in the Contract Document.

32. Payments to the Contractor

- 32.1 As noted under *Preconstruction Conference* in this section, the Contractor shall submit a Schedule of Values form, before the first application for payment, for approval by the Owner and Consultant. The Consultant may direct the Contractor to provide evidence that supports the correctness of the form. The approved Schedule of Values shall be used as a basis for payments.
- 32.2 The Contractor shall submit an application for each payment (“Requisition for Payment”) on a form approved by the Owner and Consultant. The Consultant may require receipts or other documents showing the Contractor's payments for materials and labor, including payments to Subcontractors.
- 32.3 The Contractor shall submit Requisitions for Payment as the work progresses not more frequently than once each month, unless the Owner approves a more frequent interval due to unusual circumstances. The Requisition for Payment is based on the proportionate quantities of the various classes of work completed or incorporated in the Work, in agreement with the actual progress of the Work and the dollar value indicated in the Schedule of Values.
- 32.4 The Consultant shall verify and certify each Requisition for Payment which appears to be complete and correct prior to payment being made by the Owner. The Consultant may certify an appropriate amount for materials not incorporated in the Work which have been delivered and suitably stored at the site. The Contractor shall submit bills of sale, insurance certificates, or other such documents that will adequately protect the Owner’s interests prior to payments being certified.
- 32.5 In the event any materials delivered but not yet incorporated in the Work have been included in a certified Requisition for Payment with payment made, and said materials thereafter are damaged, deteriorated or destroyed, or for any reason whatsoever become unsuitable or unavailable for use in the Work, the full amount previously allowed shall be deducted from subsequent payments unless the Contractor satisfactorily replaces said material.
- 32.6 The Contractor may request certification of an appropriate dollar amount for materials not incorporated in the Work which have been delivered and suitably stored away from the site. The Contractor shall submit bills of sale, insurance certificates, right-of-entry documents or other such documents that will adequately protect the Owner’s interests. The Consultant shall determine if the Contractor's documentation for the materials is complete and specifically designated for the Project. The Owner may allow certification of such payments.
- 32.7 Subcontractors may request, and shall receive from the Consultant, copies of approved Requisitions for Payment showing the amounts certified in the Schedule of Values.
- 32.8 Certified Requisitions for Payment, payments made to the Contractor, or partial or entire occupancy of the project by the Owner shall not constitute an acceptance of any work that does

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not conform to the Contract Documents. The making and acceptance of the final payment constitutes a waiver of all claims by the Owner, other than those arising from unsettled liens, from faulty work or materials appearing within one year from final payment or from requirements of the Drawings and Specifications, and of all claims by the Contractor, except those previously made and still unsettled.

33. Payments Withheld

- 33.1 The Owner shall retain five percent of each payment due the Contractor as part security for the fulfillment of the contract by the Contractor. The Owner may make payment of a portion of this “retainage” to the Contractor temporarily or permanently during the progress of the Work. The Owner may thereafter withhold further payments until the full amount of the five percent is reestablished. The Contractor may deposit with the Maine State Treasurer certain securities in place of retainage amounts due according to Maine Statute (5 M.R.S. §1746).
- 33.2 The Consultant may withhold or nullify the whole or a portion of any Requisitions for Payment submitted by the Contractor in the amount that may be necessary, in his reasonable opinion, to protect the Owner from loss due to any of the following:
- .1 defective work not remedied;
 - .2 claims filed or reasonable evidence indicating probable filing of claims;
 - .3 failure to make payments properly to Subcontractors or suppliers;
 - .4 a reasonable doubt that the contract can be completed for the balance then unpaid;
 - .5 liability for damage to another contractor.

The Owner shall make payment to the Contractor, in the amount withheld, when the above circumstances are removed.

34. Liens

- 34.1 The Contractor shall deliver to the Owner a complete release of all liens arising out of this contract before the final payment or any part of the retainage payment is released. The Contractor shall provide with the release of liens an affidavit asserting each release includes all labor and materials for which a lien could be filed. Alternately, the Contractor, in the event any Subcontractor or supplier refuses to furnish a release of lien in full, may furnish a bond satisfactory to the Owner, to indemnify the Owner against any lien.
- 34.2 In the event any lien remains unsatisfied after all payments to the Contractor are made by the Owner, the Contractor shall refund to the Owner all money that the latter may be compelled to pay in discharging such lien, including all cost and reasonable attorney’s fees.

35. Workmanship

- 35.1 The Contractor shall provide materials, equipment, and installed work equal to or better than the quality specified in the Contract Documents and approved in submittal and sample. The installation methods shall be of the highest standards, and the best obtainable from the respective trades. The Consultant’s decision on the quality of work shall be final.

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- 35.2 The Contractor shall know local labor conditions for skilled and unskilled labor in order to apply the labor appropriately to the Work. All labor shall be performed by individuals well skilled in their respective trades.
- 35.3 The Contractor shall perform all cutting, fitting, patching and placing of work in such a manner to allow subsequent work to fit properly, whether that be by the Contractor, the Owner's Contractors or others. The Owner and Consultant may advise the Contractor regarding such subsequent work. Notwithstanding the notification or knowledge of such subsequent work, the Contractor may be directed to comply with this standard of compatible construction by the Consultant at the Contractor's expense.
- 35.4 The Contractor shall request clarification or revision of any design work by the Consultant, prior to commencing that work, in a circumstance where the Contractor believes the work cannot feasibly be completed at the highest quality, or as indicated in the Contract Documents. The Consultant shall respond to such requests in a timely way, providing clarifying information, a feasible revision, or instruction allowing a reduced quality of work. The Contractor shall follow the direction of the Consultant regarding the required request for information.
- 35.5 The Contractor shall guarantee the Work against any defects in workmanship and materials for a period of one year commencing with the date of the Certificate of Substantial Completion, unless specified otherwise for specific elements of the project. The Work may also be subdivided in mutually agreed upon components, each defined by a separate Certificate of Substantial Completion.
36. Close-out of the Work
- 36.1 The Contractor shall remove from the premises all waste materials caused by the work. The Contractor shall make the spaces "broom clean" unless a more thorough cleaning is specified. The Contractor shall clean all windows and glass immediately prior to the final inspection, unless otherwise directed.
- 36.2 The Owner may conduct the cleaning of the premises where the Contractor, duly notified by the Consultant, fails to adequately complete the task. The expense of this cleaning may be deducted from the sum due to the Contractor.
- 36.3 The Contractor shall participate in all final inspections and acknowledge the documentation of unsatisfactory work, customarily called the "punch list", to be corrected by the Contractor. The Consultant shall document the successful completion of the Work in a dated Certificate of Substantial Completion, to be signed by Owner, Consultant, and Contractor.
- 36.4 The Contractor shall not call for final inspection of any portion of the Work that is not completely and permanently installed. The Contractor may be found liable for the expenses of individuals called to final inspection meetings prematurely.
- 36.5 The Contractor and all major Subcontractors shall participate in the end-of-warranty-period conference, typically scheduled close to one year after the Substantial Completion date.

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37. Date of Completion and Liquidated Damages

- 37.1 The Contractor may make a written request to the Owner for an extension or reduction of time, if necessary. The request shall include the reasons the Contractor believes justifies the proposed completion date. The Owner may grant the revision of the contract completion date if the Work was delayed due to conditions beyond the control and the responsibility of the Contractor. The Contractor shall not conduct unauthorized accelerated work or file delay claims to recover alleged damages for unauthorized early completion.

- 37.2 The Contractor shall vigorously pursue the completion of the Work and notify the Owner of any factors that have, may, or will affect the approved Schedule of the Work. The Contractor may be found responsible for expenses of the Owner or Consultant if the Contractor fails to make notification of project delays.

- 37.3 The Project is planned to be done in an orderly fashion which allows for an iterative submittal review process, construction administration including minor changes in the Work and some bad weather. The Contractor shall not file delay claims to recover alleged damages on work the Consultant determines has followed the expected rate of progress.

- 37.4 The Consultant shall prepare the Certificate of Substantial Completion which, when signed by the Owner and the Contractor, documents the date of Substantial Completion of the Work or a designated portion of the Work. The Owner shall not consider the issuance of a Certificate of Occupancy by an outside authority a prerequisite for Substantial Completion if the Certificate of Occupancy cannot be obtained due to factors beyond the Contractor’s control.

- 37.5 Liquidated Damages may be deducted from the sum due to the Contractor for each calendar day that the Work remains uncompleted after the completion date specified in the Contract or an approved amended completion date. The dollar amount per day shall be calculated using the Schedule of Liquidated Damages table shown below.

If the original contract amount is:	The per day Liquidated Damages shall be:
Less than \$100,000	\$250
\$100,000 to less than \$2,000,000	\$750
\$2,000,000 to less than \$10,000,000	\$1,500
\$10,000,000 and greater	\$1,500 plus \$250 for each \$2,000,000 over \$10,000,000

38. Dispute Resolution

38.1 Mediation

- 38.1.1 A dispute between the parties which arises under this Contract which cannot be resolved through informal negotiation, shall be submitted to a neutral mediator jointly selected by the parties.

- 38.1.2 Either party may file suit before or during mediation if the party, in good faith, deems it to be necessary to avoid losing the right to sue due to a statute of limitations. If suit is filed before good faith mediation efforts are completed, the party filing suit shall agree to stay all proceedings in the lawsuit pending completion of the mediation process, provided such stay is without prejudice.

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38.1.3 In any mediation between the Owner and the Consultant, the Owner has the right to consolidate related claims between Owner and Contractor.

38.2 Arbitration

38.2.1 If the dispute is not resolved through mediation, the dispute shall be settled by arbitration. The arbitration shall be conducted before a panel of three arbitrators. Each party shall select one arbitrator; the third arbitrator shall be appointed by the arbitrators selected by the parties. The arbitration shall be conducted in accordance with the Maine Uniform Arbitration Act (MUAA), except as otherwise provided in this section.

38.2.2 The decision of the arbitrators shall be final and binding upon all parties. The decision may be entered in court as provided in the MUAA.

38.2.3 The costs of the arbitration, including the arbitrators' fees shall be borne equally by the parties to the arbitration, unless the arbitrator orders otherwise.

38.2.4 In any arbitration between the Owner and the Consultant, the Owner has the right to consolidate related claims between Owner and Contractor.

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Wage Determination Schedule

PART 1- GENERAL

1.1 Related Documents

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

1.2 Summary

- A. This Section includes the wage determination requirements for Contractors as issued by the State of Maine Department of Labor Bureau of Labor Standards or the United States Department of Labor.

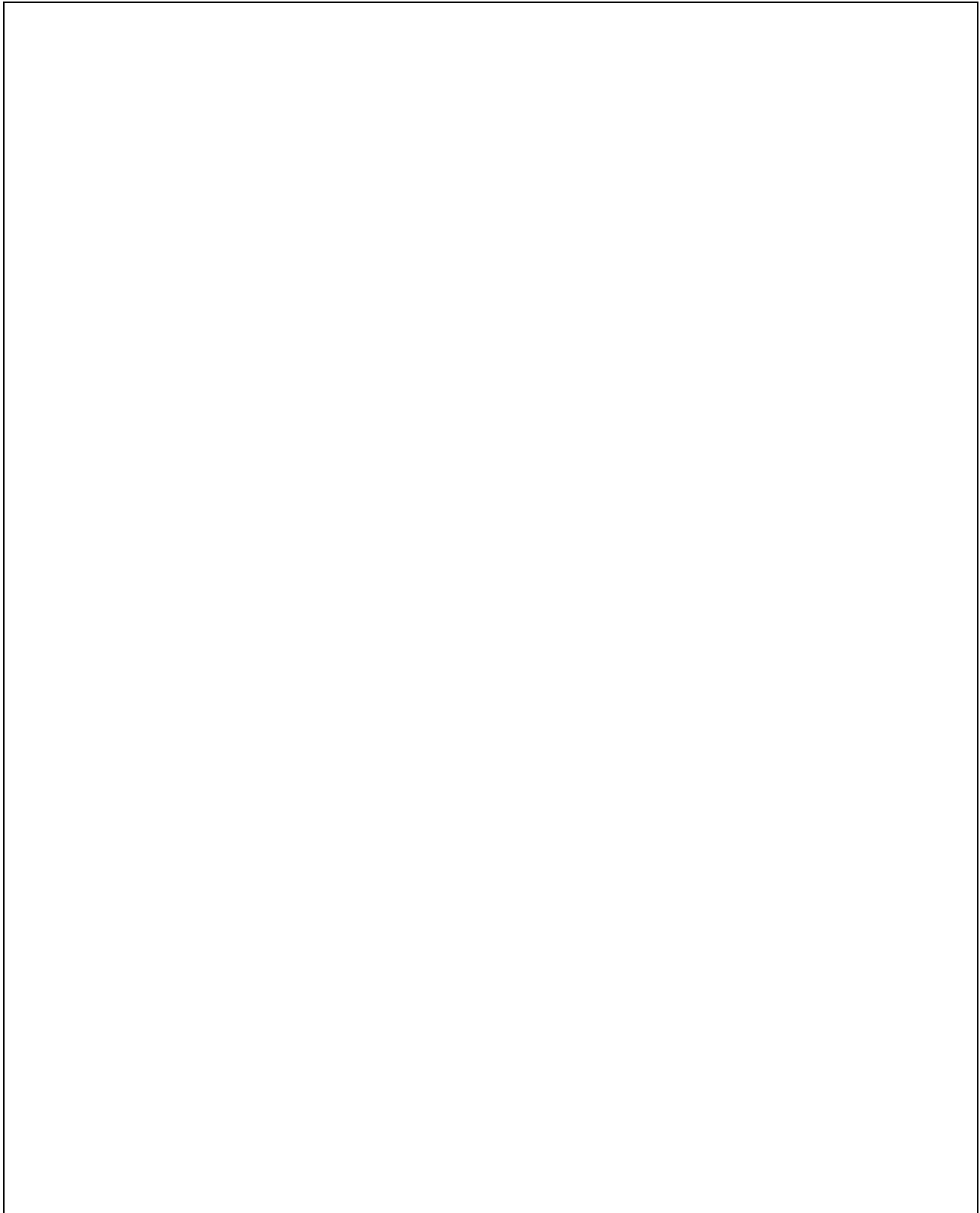
1.3 Requirements

- A. Conform to the wage determination schedule for this project which is shown on the following page.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION (not used)

00 73 46
Wage Determination Schedule



End of Section 00 73 46

SUMMARY OF WORK

SECTION 01 10 00

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

In general, the Contractor shall supply all labor, materials, equipment, temporary protection, tools, and appliances necessary for the proper completion of the work, as required in the Specifications, in accordance with good construction practice, and as required by the materials manufacturer. The work includes, but is not limited to, the following items:

- A. This building is listed on the National Register of Historic Places. The contractor is to perform masonry repairs and related accessory construction in accordance with the Contract Documents and the Secretary of Interior's Guidelines for the treatment of historic properties. Any deviations from the Contract Documents are to be reviewed with the Owner and Engineer.
- B. The building is currently partially abandoned and vacant with most utilities removed, capped or shut down. Refer to Temporary Facilities – Section 01 50 00 for additional information.
- C. The building is monitored by security and requires key card access. The contractors' employees and sub-contractors requiring access must apply for a access card which will require a background check.
- D. Supply all temporary shoring, lighting, barricades, signage, and protection necessary to protect the building areas, building systems, and building patrons and public. Maintain such protection for the complete duration of the project.
- E. Supply all disposal facilities, transportation and labor necessary to dispose of all demolished materials, dirt, and debris off-site in a legal dumping area. The Contractor shall obtain all permits necessary to transport and dispose of all materials, rubbish, and debris.
- F. Provide temporary fencing around set-up and storage locations. Set-up and lay down areas should be sufficient for all sub-trades to have adequate area to store materials and equipment. Set-up and lay down areas must be within areas designated by the Owner.
- G. Complete all associated work in accordance with the project specifications and Contract Drawings. Coordinate the work with the Owner.
- H. The Contractor shall provide all lifts, cranes, and equipment necessary to access and perform the work.

- I. Remove existing brick masonry as required to install new sheet metal throughwall flashing at brick masonry rising walls at locations and as indicated in the Contract Documents.
- J. Install new reglet flashing at locations and as indicated in the Contract Documents.
- K. Remove and replace damaged, cracked, or spalled brick masonry units at locations as indicated on the Contract Drawings. Refer to Section 01 21 00 – Allowances for additional quantities.
- L. Cut and repoint masonry mortar joints at locations as indicated on the Contract Drawings. Refer to Section 01 21 00 – Allowances for additional quantities.
- M. Rebuild brick masonry at locations as indicated on the Contract Drawings. Refer to Section 01 21 00 – Allowances for additional quantities.
- N. Repair cracked or spalled stone at locations as indicated on the Contract Drawings.
- O. Remove abandoned fasteners and replace affected brick masonry units and/or cut and point mortar joints at locations as indicated on the Contract Drawings.
- P. Remove and replace deteriorated sealants at locations and as indicated in the Contract Drawings.
- Q. Clean areas of efflorescence and rust staining at locations as indicated on the Contract Drawings.
- R. Clean and restore all areas affected by the work, including the site, to the satisfaction of the Owner.

1.2 PROJECT CONDITIONS

- A. Contractor to coordinate the masonry scope of work installation with roof replacement work being performed under a separate contract. Installation of sheet metal flashings and counterflashings to be coordinated with roof replacement work being installed under a separate contract.
- B. Contractor to coordinate and strictly follow the Owner's requirements for construction, including performance of mock-ups, interior access, and protection requirements. Contractor to obtain a copy from the Owner.
- C. The Contractor will be required to provide their own fall arrest system as required to access and work on the building, as no arrest systems are currently in place.
- D. Provide walk through overhead protection where work areas are above doors, walkways, or sidewalks in accordance with OSHA.

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- E. The Contractor shall comply with all requirements of the Owner regarding temporary protection, staging and use of the site.
- F. All existing items including windows, doors, building, plant life and site features, including but not limited to, pavement, lawns, sidewalks, frames, glazing, flashings, sealants, and trim shall be protected from the effects of all new work. Any damages to existing to remain items resulting from construction will be repaired/replaced by the Contractor at no additional cost to the Owner.
- G. All temporary protection shall be properly secured and able to withstand all perils of weather and use. The contractor to protect the building and grounds.
- H. The Contractor shall supply, install and maintain all barriers; protection or warning lines; lights and lighting; and personnel as required to support the structure, fixtures and facilities affected by the work, and to segregate the work area(s) from pedestrian and/or vehicular traffic, as applicable, as well as to prevent damage to the building, its occupants and the surrounding site elements as required. All applicable OSHA and D.L.I. requirement shall be strictly followed by the Contractor at all times during the performance of the work under this Contract. Refer to Section 01 50 00 - Temporary Facilities for additional information.
- I. The Contractor shall schedule and execute all work without exposing the interior of the buildings to the effects of weather. Protect the buildings and their occupants and users against such risks, at all times during the course of the work hereunder. All work/weather related damage shall be repaired/replaced to the satisfaction of the Owner at no additional cost to the Owner.
- J. The Contractor shall conform to all requirements of this Specification as well as those of all manufacturers of materials used in performing the work hereunder.
- K. All materials and workmanship shall be of the best quality and the highest standard of construction practice. Refer to the requirements of materials manufacturers and the specifications for handling and installation of all materials used in the work under this Contract.
- L. Protect the buildings and site and any other areas not included in the scope of work. The Contractor shall replace or repair all damage to the buildings or site elements because of the performance of the work hereunder to the satisfaction of the Owner at no additional cost to the Owner.
- M. The contractor shall provide protection for existing roof membrane and other roof top equipment, fenestration, penetrations, and similar items to protect from damage. Items damaged as a result of the work shall be repaired or replaced by the Contractor to the satisfaction of, and at no additional cost to, the Owner.

- N. Supply all labor, vacuums, tools, appliances, shoring, supports or other items required to properly support, elevate and protect fixtures, equipment, and facilities affected by the work and to properly install the work.
- O. At the end of each workday, the Contractor shall confirm and make the site safe and secure to all public access to the building's interior.
- P. The Contractor shall notify the Owner a minimum of seventy-two hours (72 hrs.) in advance of doing any interior work so that the Owner may provide entry into the required areas.
- Q. Remove only as much existing construction as can be completely replaced and made weathertight by the end of each workday including all flashing work. Install temporary barriers during all work breaks as required to protect the public and the work.
- R. A disposal plan, materials delivery and storage plan shall be submitted by the Contractor (for Owner and Engineer review and approval) outlining all methods and techniques to be used in the transportation, storage and delivery of debris and materials at the site.
- S. Supply all necessary disposal facilities, transportation and labor in connection therewith as necessary to legally dispose of all demolished materials, dirt and debris off-site. The Contractor shall obtain all permits required to transport and dispose of all materials rubbish and debris in strict compliance with all legal requirements.
- T. Any open ducts, grills, thermostats, electric boxes or similar fixtures and/or items which could be soiled or adversely affected by the work shall be masked, protected and cleaned as necessary by the Contractor at no additional cost to the Owner.
- U. Provide an adequate number of skilled workers who are trained and experienced in the necessary crafts and are completely familiar with the specified requirements and the methods needed for proper performance of the work of each trade.
- V. The Contractor shall cooperate, coordinate, and work in harmony with all Contractors working at the site during the course of work hereunder.
- W. Upon completion of the work, all temporary protection installed by the Contractor shall be removed and areas shall be cleaned to the satisfaction of the Owner.

1.3 SUBMITTALS

- A. Emergency Response Contacts
- B. Project Contact Directory
- C. Construction Schedule
- D. Schedule of Values
- E. Safety Plan
- F. Material Data Sheets (MDS)

- C. The Owner shall review the Contractor's Construction Schedule prior to the start of any work. It shall be the responsibility of the Contractor to supply the Owner with written notice, seventy-two hours (72 hrs.) in advance, if his work location(s) for a workday is different from the schedule. The Contractor shall update his Construction Schedule weekly and submit a copy to the Owner for review.

1.8 DIMENSIONS AND QUANTITIES

- A. The Contractor is solely responsible for compliance with the project specifications, plans and drawings. Make necessary investigations and take necessary precautions to properly supply, fabricate, and install work.

1.9 SCHEDULE OF VALUES

- A. Provide a line-item breakdown of construction labor and materials costs for each Specification Section included in these Contract Documents. Itemize units of work, as they will be shown on the Application for Payment (use AIA Form G703). The value of work shall be itemized for each technical section within the Specification.
- B. Utilize the State of Maine Construction Contract Application for Payment Continuation Sheet to prepare and submit the Schedule of Values.
- C. Schedule of Values to include all allowances within the final construction amount.

1.10 WORK RESTRICTIONS

- A. Contractor shall maintain public driveway access at all times. On-Site Work Hours: Work shall be generally performed during normal business working hours of 7:00 A.M. to 6:00 P.M., Monday through Friday, except otherwise indicated by the Owner.
- B. Contractor shall maintain work areas in an orderly condition and will be responsible for cleanup and removal of debris to the Contractor's dumpster on a daily basis. If, in the opinion of the Owner, cleanup is not being performed satisfactorily, the Owner shall, after twenty-four hours (24 hrs.) of having notified the Contractor of the same, have the work performed by others and all charges incurred thereby deducted from the next progress payment of the Contractor.
- C. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas where work is directly being performed. Do not disturb portions of the site beyond the areas in which the Work is indicated.
- D. Site Enclosure Fence: Required around perimeter of dumpster and storage/staging areas to enclose and prevent the general public from access.

1.11 PROGRESS MEETINGS

- A. The Owner shall establish a time and date for reoccurring weekly meetings throughout the duration of the construction period in which the contractor's representative is required to attend. The Owner reserves the right to schedule additional meetings as deemed necessary, and/or change the reoccurring meeting and time.

1.12 SAFETY DATA SHEETS

- A. Safety data sheets (SDS) shall be submitted in complete sets for all products to be used prior to any work being performed.

1.13 GUARANTEES

- A. Refer to specific Sections of this specification for systems and product warranty requirements. Verify with Manufacturer of proposed systems and products that specified warranty requirements are acceptable, without exception, prior to selecting materials for use on this project.
- B. Submit a full Contractor Warranty of the Work to be free from defect in materials and workmanship upon Substantial Completion, and prior to final payment. This Warranty shall be for a period of two years (2 yrs.) from the date of Substantial Completion and shall be signed by a Principal of the Contractor's firm and sealed if a Corporation. Warranty shall include all work performed by sub-contractors. Separate two-year (2-yr.) subcontractor warranties shall be provided.

1.14 INDEMNIFICATION AND WAIVER OF LIENS

- A. Beginning with the first Application for Payment and thereafter, the Contractor, Sub-Contractor(s) and suppliers shall submit an Indemnification and Waiver of Liens for the construction period covered by the previous application on the form attached as part of the required documentation in any application for payment.

1.15 DUST AND ODOR CONTROL

- A. Contractor to coordinate and strictly follow the Owner's requirements for construction and temporary protection to mitigate dust and odor contamination within the interior of the facility.
- B. The Contractor will install clear plastic secured with duct tape over all air intake vents at the beginning of each workday to reduce any construction related odors and dust from entering the building. The Contractor will remove the plastic at the end of the project.
- C. During removal operations, the Contractor shall be responsible for the containment of all dust, dirt, debris, overspray and/or run-off resulting from the performance of the work. The Contractor shall collect and contain all materials and repair any resulting damage to adjacent materials, building and/or site elements and personal property.

Specific attention is drawn to the use of chemicals and cleaners that must be used responsibly in strict compliance with manufacturer's requirements and all applicable regulatory guidelines.

1.16 WORK INSIDE THE BUILDING

- A. Contractor to coordinate and strictly follow the Owner's requirements for construction and temporary protection inside the building.
- B. The Contractor shall not leave or store any tools, equipment, materials, debris or other items on or within the building unless permission is given by Owner.
- C. Contractor shall not use building's dumpster for debris associated with this project.

1.17 CLEANUP

Restore property of the Owner to its original condition prior to the completion of construction. Refer to Section 01 50 00 – Temporary Facilities. General cleanup of the site shall be performed on a daily basis.

- A. Clean, restore and/or replace items stained, dirtied, discolored or otherwise damaged due to the Work, as required by the Owner.
- B. Clean roof, building (interior and exterior), landscaped and parking areas so they are free of trash, debris and dirt caused by, or associated with the Work.
- C. Sweep paved areas clean.
- D. Site cleanup shall be performed daily.

1.18 WORK UNDER OTHER CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.
- B. Separate Contract: The Owner reserves the right to perform construction operations at the site. Those operations may be conducted simultaneously with work under this Contract. No specific projects are planned at this time.

1.19 USE OF PREMISES

- A. General: Contractor shall have full use of the rooftop for construction operations, including limited use of Project site as defined by the Owner, during construction period.
- B. The Contractor is responsible for safety on the job site at all times. The Contractor

shall take the appropriate actions to assure the areas of construction are secured from the public. The Contractor shall construct and/or install temporary fencing, signs and barricades as required assuring a safe and secure environment.

- C. Contractor's staging/lay down areas is to be coordinated through an Owner representative. Contractor is responsible for repairing any damage to staging/lay down area. Contractor shall not place trailers, equipment, lay down, storage facilities outside of project site after normal working hours. Contractor shall have no vehicles, trailers, storage containers in any fire lanes or prohibited areas.
- D. Contractor shall not restrict the owner's access to the building's entrances area. If, the Contractor should need to temporarily restrict the owner's access to any areas, the Contractor shall submit a written notice to the Owner seventy-two hours (72 hrs.) in advance of access restriction.
- E. Contractor to supply temporary facilities (toilets).
- F. The Contractor must provide safe assisted means to access the roof from the exterior. Access must be maintained and secure at all times. The access must be locked or restricted during off work hours.
 - 1. Accessing the work areas by climbing or scaling existing obstacles or structures will not be allowed.
 - 2. Accessing the work areas through the interior of the building will not be allowed, there will be exterior access only.

PART 2 – PRODUCTS

NOT USED.

PART 3 – EXECUTION

NOT USED.

END OF SECTION

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ALLOWANCES

SECTION 01 21 00

PART 1 – GENERAL

1.1 GENERAL PROVISIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Examine all other Sections of the Specifications for requirements that affect work of this Section whether or not such work is specifically mentioned in this Section.
- C. Coordinate work with that of all other trades affecting, or affected by work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.

1.2 SCOPE OF WORK

- A. In general, the Contractor shall supply all labor, equipment, temporary protection, tools, and appliances necessary for the proper completion of the work as required in the Specifications, in accordance with good construction practice, and as required by the materials manufacturer, as amended.
- B. The Allowances for items of Work, as set forth in the Schedule of Allowances, shall be included in the Contract Amount when changes in the Work involving said items are made in accordance with the Contract Documents.
- C. Materials, methods of installation, and definitions of terms set forth under the various Allowance items in the Schedule of Allowances shall be as indicated in the Contract Documents.
- D. The successful Bidder shall coordinate related work and modify or adjust adjacent work as necessary to ensure that work affected by each Allowance Item is complete and fully integrated into the project.
- E. The specific quantities of Allowance Work included in the Base Bid are provided herein. This applies to items whose exact quantities are unknown but are anticipated to exist, for example, deteriorated roof decking.
- F. The quantities of Allowance Work listed in this Section and the bid and contract forms **are in addition to the quantities shown on the Contract Drawings (if any).**

1.3 ALLOWANCE FOR PRODUCTS AND SERVICES

Section contains instructions that relate to an Allowance to be included in the Contract sum. Owner may elect certain aspects of work that cannot be determined at this time.

- A. The amount of the allowance includes:
 - 1. The cost of the product or services to the Contractor, less any applicable trade discount.
 - 2. Delivery of product to the site.
 - 3. Labor required under the allowance to perform the work.
 - 4. Applicable taxes.
 - 5. Applicable Contractor mark-up.
- B. Refer to Part 4.1 – Schedule of Allowances for additional information regarding scope of work to be included within the Contractor’s base bid scope of work that is in addition to quantities shown in the Contract Drawings.

1.4 SELECTION OF PRODUCTS UNDER ALLOWANCE

- A. Owner’s duties:
 - 1. Consult with Contractor in consideration of work, products and suppliers, or installers.
 - 2. Make selection designating:
 - a. Product, model, finish.
 - b. Accessories and attachments.
 - c. Supplier and installer, as applicable.
 - d. Cost to contractor, delivered to the site or installed, as applicable.
 - e. Manufacturer’s warranties.
 - f. Define scope of additional work.
 - 3. Transmit decision to Contractor.
 - 4. Prepare Field Directive and Authorization of Cost Proposal.
- B. Contractor’s duties:
 - 1. Assist Owner in determining qualified suppliers or installers.
 - 2. Obtain proposals from suppliers and installers when requested by Owner.
 - 3. Make appropriate recommendations for consideration of Owner.
 - 4. Notify Owner promptly of:
 - a. Any reasonable objections Contractor may have against any supplier or party under consideration for installation.
 - b. Any effect on the construction schedule anticipated by selections under consideration.

1.5 CONTRACTOR RESPONSIBILITY FOR PURCHASE, DELIVER, AND INSTALLATION

- A. On notification of selection, execute purchase agreement with designated supplier and perform the designated work.
- B. Arrange for and process Shop Drawings, product data, and samples, as required.
- C. Make all arrangements for delivery.
- D. Upon delivery, promptly inspect products for damage or defects.
- E. Submit claims for transportation damage.

- F. Install, work, and finish products in compliance with requirements of Contract Documents.

1.6 ADJUSTMENT OF COSTS

- A. Upon determination of scope of repairs by Owner, submit cost proposal in accordance with Contract Conditions.
- B. Should the net cost be more than the specified amount of the allowance, the Contract Sum will be adjusted accordingly by Change Order.
- C. Should the net cost be less than the specific amount of the allowance, the Contract Sum will be adjusted accordingly by the Change Order.
- D. Submit documentation for actual additional costs at the site or other expenses caused by the selection under the allowance, within thirty (30) days after completion of execution of the work.
- E. Failure to submit claims within the designated time will constitute a waiver of claims for additional costs.
- F. At Contract closeout, reflect all approved authorizations of allowance funds in the final statement of accounting.

1.7 UNUSED MATERIALS

- A. Return unused materials to the manufacturer or supplier for credit to the Owner, after installation has been completed and accepted.
- B. Where it is not economically feasible to return unused material for credit and when requested by the Architect, prepare unused material for the Owner's storage, and deliver to the Owner's storage space as directed. Otherwise, disposal of excess material is the Contractor's

1.8 WARRANTY

- A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official.
- B. See Division 01 Section "Summary of Work" for contractor's warranty.

PART 2 – PRODUCTS

NOT USED.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Inspect products covered by an allowance promptly upon delivery for damage or defects.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related construction activities.

PART 4 – SCHEDULES

4.1 SCHEDULE OF ALLOWANCES

- A. **Allowance No. 01:** Include \$1,000.00 for the replacement of additional cracked or spalled brick masonry units. See Section 04 50 00 – Masonry for additional requirements and information.
- B. **Allowance No. 02:** Include \$2,000.00 for the repointing of additional deteriorated mortar. See Section 04 50 00 – Masonry for additional requirements and information.
- C. **Allowance No. 03:** Include \$2,000 for the rebuilding of additional displaced masonry. See Section 04 50 00 – Masonry for additional requirements and information.

END OF SECTION

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SHOP DRAWINGS AND SUBMITTALS

SECTION 01 33 00

PART 1 – GENERAL

1.1 IN GENERAL

This section contains instructions for submittals and shop drawings required at various stages of the project. The following submittals will be required of all construction materials and systems:

- A. List of materials stating manufacturer's name and address, as well as material trade name and manufacturer's designation.
- B. Shop Drawings.
- C. Samples (as specified in the Technical Sections).
- D. Manufacturer's Catalog Data.
- E. Material Data Sheets (MDS).
- F. Safety Data Sheets (SDS).
- G. Manufacturer's Installation Instructions.
- H. Construction Photographs.
- I. Contractor's Schedule as it affects the contracted completion date and sequence of construction.

1.2 SUBMITTALS

The following submittals are required during the various phases of the Contract. Each submittal item shall have the technical section and paragraph number clearly indicated. All submittal items without the proper designations will be returned and will not be reviewed.

- A. Contract Submissions: The Contractor shall provide electronic copies of the following submittals to the Architect/Engineer:
 - 1. Proposed Construction Schedule for completion of the Work specified in this project manual.
 - 2. List of Manufacturers for each product proposed. Include manufacturer's literature with system designations and a sample of the product guarantee.
 - 3. Shop Drawings.
 - 4. Cataloging of the stone pieces to be removed.
 - 5. Scaffolding plans.
 - 6. Complete Materials List.
 - 7. Manufacturer's Technical Literature as selected.
 - 8. Manufacturer's Instructions.
 - 9. Catalog Data ("SPEC-DATA" Sheets).
 - 10. Material Safety Data Sheets (MDS).
 - 11. Safety Data Sheets (SDS).
 - 12. Samples of materials of construction.
 - 13. Certificates as approved Applicator by Manufacturer.

14. List of proposed storage facilities and their location(s).
 15. Proposed location(s) of dumpsters.
 16. Schedule of Values.
 17. Emergency Response Contacts.
 18. Disposal Plan and Methods of removal of materials.
 19. Temporary protection procedures.
 20. Staging/set-up procedures.
- B. Weekly Submissions: At the end of each weekly period during construction, the Contractor shall submit an updated construction schedule which will show the status of the work with respect to the schedule, anticipated completion date, and a list of all completed work.
- C. Resubmittals: All resubmittals required from the Contractor shall be submitted within five (5) working days of return of original submittals.
- D. Permits: Prior to start of construction, the Contractor is to provide the Owner with copies of all building permits, licenses, and other documents required by the General Conditions.
- E. Close-Out Submission: See Section 01 70 00 – Project Closeout for required Submittals.
- F. OSHA Requirements: All employees to be employed at the worksite must have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten (10) hours in duration at the time the employee begins work.

1.3 SHOP DRAWINGS

- A. Original Submittal: An electronic copy of all shop drawings shall be submitted for approval within five (5) days of Award of Contract.
- B. Shop drawings for all aspects of this project shall be submitted. The shop drawings shall include existing conditions, all applicable dimensions, new products to be installed, locations, etc.
- C. Resubmittal: When a resubmittal is required, the original transparency so indicating will be returned to the Contractor. After revision of the original, one (1) new reproducible and one (1) print shall be submitted for review.
- D. Review: The above procedure shall be repeated until approval is obtained. The original reproducible copy of the reviewed shop drawing will be returned to the Contractor, at which time the Contractor shall make prints in sufficient numbers for the Engineer (four [4] copies), as well as sufficient copies for his use.

- E. Shop drawings of an engineering nature shall be sent directly to the Engineer for review, with a copy of the transmittal and one (1) print sent to the Owner.
- F. Transmittal: All reproducibles shall be transmitted rolled in mailing tubes and not folded.
- G. Changes on the submitted shop drawings that deviate from the Design Drawings must be brought to the Owners and Designers attention in writing prior to review. Changes must be clearly visible on the shop drawings in the form of written notation, ballooning or highlighting the intended change. A written description for the proposed change must also be included and submitted on company letterhead. Changes to drawings and details not submitted in accordance with these requirements will not be recognized as an approved deviation from the Design of Record. Construction repairs, renovations or replacements required as a result of shop drawing and submittal deviations that are not documented in accordance with these requirements are subject to removal and/or replacement by the Contractor, at the sole cost of the Contractor.

1.4 RECORD DRAWINGS

- A. The Contractor shall provide a copy of all Contract Drawings showing as-built conditions and any Contract changes to the Owner at the completion of the project.

1.5 SAMPLES

- A. Original Submittal: Four (4) samples, unless otherwise specified, of each item for which samples are required shall be furnished for approval. Approval shall be obtained prior to delivery of the materials to the project site. Such samples shall be representative of the actual material proposed for use in the project and of sufficient size to demonstrate design, color, texture and finish when these attributes will be exposed to view in the finished work.
- B. Resubmittal: All rejected samples will be returned upon request, and any or all resubmittals shall consist of four (4) new samples.
- C. Review: Upon approval by the Engineer, one sample so noted will be returned and the remainder will be retained by the Engineer until completion of the work. When requested, all approved samples will be returned for installation, provided their identity is maintained in an approved manner until final acceptance of the project.
- D. Important specific samples are specified in Technical Sections of the Specifications. The Contractor is cautioned to quickly provide specified samples.
- E. Each submittal item shall have the technical section and paragraph number clearly indicated. All submittal items without the proper designations will be returned and will not be reviewed.

1.6 CATALOG DATA

- A. Submittals: Four (4) copies of catalog data are required for the original submittal and each subsequent resubmittal along with shop drawings. Following review, one (1) copy will be returned with its status noted. If approved, such additional copies may be requested by the Engineer and shall be furnished without additional cost.
- B. Data: Each submittal shall have all pertinent data contained therein that is applicable to the item submitted for review, adequately and permanently designated.

1.7 CERTIFICATES AND GUARANTEES

- A. Certificates of performance, treatment and conformance to specified standards (four [4] printed copies) shall be submitted prior to initiating work on the project.
- B. Copies of all guarantees (four [4] printed copies) required on the project shall be submitted for review and acceptance as to form.

1.8 IDENTIFICATION

- A. Data: All submittals for review shall have the following identification data, as applicable, contained thereon or permanently adhered thereto:
 - 1. Project name and location.
 - 2. Engineer's name.
 - 3. Subcontractor's, Vendor's and/or Manufacturer's name and address.
 - 4. Product Identification. (It is important that the specific product intended for use is indicated on manufacturer's literature).
 - 5. Shop drawing title, drawing number, revision number and date of drawing and revision.
 - 6. Applicable Contract Drawings and Specification Section numbers.
- B. Catalog Data: Each separate catalog, brochure or single page submitted shall have the identification required hereinbefore.
 - 1. Catalogs or brochures submitted containing multiple items for approval need the identification on the exterior and on each specific item clearly circled, flagged or otherwise identified.
 - 2. In the event that one or more of the multiple items are not approved in any submittal, the additional copies required will not be requested until all items are approved.
 - 3. Do not commence work until every submittal is accepted.
- C. Space: Vacant space approximately two- and one-half inches wide by four inches high (2-1/2" W x 4" H) shall be provided adjacent to the identification data to receive the Engineer's status stamp.

1.9 CONTRACTOR'S RESPONSIBILITY

- A. Representation: By his submittal of any shop drawing or catalog data, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data, or will do so, and that he has checked and coordinated each item with other applicable approved shop drawings and the Contract requirements. Certification shall appear on each shop drawing stating that the Contractor has made this check. All drawings without this certification will be returned without examination.
- B. Deviations: Changes on the submitted shop drawings that deviate from the Design Drawings must be brought to the Owners and Designers attention in writing prior to review. Changes must be clearly visible on the shop drawings in the form of written notation, ballooning or highlighting the intended change. A written description for the proposed change must also be included and submitted on company letterhead. Changes to drawings and details not submitted in accordance with these requirements will not be recognized as an approved deviation from the Design of Record. Construction repairs, renovations, or replacements required as a result of shop drawing and submittal deviations that are not documented in accordance with these requirements are subject to removal and/or replacement by the Contractor, at the sole cost of the Contractor.
- C. Prohibitions: No portion of the work requiring a shop drawing, sample or catalog data shall be started, nor shall any materials be fabricated or installed, prior to the approval of such item.
- D. Review: Project work, materials, fabrication and installation shall conform with approved shop drawings, applicable samples and catalog data.
- E. Failure to submit shop drawings in ample time for review, approval and resubmission (if required) prior to the commencement of construction shall not affect the completion date of the Contract.
- F. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Designer's receipt of submittal.
1. Initial Review: Allow **ten (10)** workdays for initial review of each submittal. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Engineer will advise the Contractor when a submittal being processed must be delayed for coordination.
 2. Concurrent Review: Where concurrent review of submittals by the Engineer's consultants, or other parties is required, allow **ten (10)** workdays for initial review of each submittal.
 3. Direct Transmittal to Consultant: Where the Contract Documents indicate that submittals may be transmitted directly to Engineer's consultants,

provide duplicate copy of the transmittal to the Engineer. The submittal will be returned to Engineer before being returned to Contractor.

4. If intermediate submittal is necessary, process it in same manner as initial submittal.
5. Allow **ten (10)** workdays for processing each re-submittal.
6. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
7. The engineer will schedule one (1) working day for submittal review for this project, typically on a Wednesday of each week. Unless a time critical submittal requires immediate attention, all individual, or partial submittal packages will be retained, and not reviewed until multiple items are provided until said designated day. The contractor shall take this into account when scheduling and coordinating submittal and construction activities to prevent delays in their work activities.
8. Multiple individual submittal reviews or incomplete packages are subject to potential back charges to the contractor due to unreasonable review times which may be required. The contractor is to provide complete submittal packages for technical section.

1.10 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Procedures: Comply with procedures required by the Owner.
- B. Time Frame: Extend schedule from date established for commencement of the Work or the Notice to proceed to date of Final Completion.
 1. Contractor shall indicate specific dates which may require the Designer's attention to proceed on a critical path.
- C. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than sixty (60) days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
- D. Submittal Review Time: Include review and resubmittal times and coordinate with Contractor's Construction Schedule with Submittals Schedule.
- E. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Owner, OPM, Designer's and administrative procedures necessary for certification of Substantial Completion.
- F. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, interim milestones, Substantial Completion, and Final Completion.
- G. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis to demonstrate the effect of the proposed change on the overall project schedule.

1.11 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Within twenty (20) days of written notice to proceed or contract award, submit preliminary horizontal bar-chart-type construction schedule prior to the Preconstruction conference.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for the duration of construction.

1.12 CONTRACTOR'S CONSTRUCTION SCHEDULE, GANTT CHART

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within twenty (20) days of the Preconstruction meeting. Base schedule on the Preliminary Construction Schedule and any updates and feedback received since the start of Project.
- 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 (3 mo.) or longer to complete, indicate an estimated completion percentage in twenty percent (20%) increments within time bar.

PART 2 – PRODUCTS

NOT USED.

PART 3 – EXECUTION

NOT USED.

END OF SECTION

Masonry Repairs and Associated Work
at the Center Building
67 Independence Drive
Augusta, ME
Gale JN 839100

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TEMPORARY FACILITIES

SECTION 01 50 00

PART 1 – GENERAL

1.1 GENERAL

- A. This Section contains instructions and requirements for the provision and utilization of temporary facilities to protect the Owner's property, the site and construction materials; and daily maintenance and cleanup of the site during the project.

1.2 STORAGE FACILITIES

- A. See Section 01 63 00 – Weather Protection and Materials Storage

1.3 CONTRACTOR'S USE OF EXISTING FACILITIES

- A. The Contractor shall provide all protection, guards and barriers necessary to segregate the work area and adjacent or below areas from pedestrian and vehicular traffic. Protect existing building, building finishes, landscaping and paved areas from damage.
- B. Limit use of the premises to the work indicated, so as to allow for the Owner's uninterrupted occupancy and use. Confine operations to the areas indicated under the Contract. Conformance to the regulations set forth by the Owner, regarding use of existing facilities is mandatory.
- C. Take precautions necessary and provide equipment, materials and labor to adequately protect previous construction, the building, its contents and occupants, and surrounding landscaped areas from damage due to construction as well as from inclement weather during construction.
- D. Clean interior and exterior areas affected by the construction on a daily basis. Do not allow construction debris, waste materials, tools, excess packaging materials or other construction related materials to accumulate on the roof, in the facility, or at the exterior grounds and pavements.
- E. Coordinate with the Owner for additional interior cleaning and protections required for the work.
- F. See Section 01 63 00 – Weather Protection and Materials Storage for product storage facilities and requirements.

1.4 SANITARY FACILITIES

- A. The Contractor will furnish portable toilets. Temporary toilets shall be kept in a

sanitary condition at all times and properly supplied at appropriate locations by the Owner until completion of the project. Use of the sanitary facilities within the building is not permitted.

1.5 BARRIERS

- A. The Contractor shall install temporary fencing, warning lines, barriers and the like, as required, to segregate the construction areas from existing facilities, occupants and the public.
- B. Silt mesh shall be placed in roof drains during masonry cutting, pointing, and rebuilding operations.
- B. All Contractors are required to conform to OSHA requirements and all local, state and federal safety regulations.
- C. The Contractor shall provide guard lights on all barriers and all lighting necessary to prevent vandalism of work and storage areas. The Owner is not responsible for Contractor's losses due to damage or theft by vandals.

1.6 CRANES AND HOISTING EQUIPMENT

- A. All hoisting equipment and machinery required for the proper and expeditious prosecution and progress of the work shall be furnished, installed, operated and maintained in a safe condition by the Contractor. All costs for hoisting operating services shall be borne by the Contractor including street permits and police details.

1.7 ACCESS

- A. Provide ladders, scaffolding, staging and hoists as required to access the project area(s) in accordance with OSHA and D.L.W.D. guidelines. Should damage to the building and/or grounds occur, restore damaged areas to the original condition and clean up debris.
- B. Where scaffolding and staging is required for the proper installation of the work it shall be erected to provide a minimal impact on the site.
- C. All barriers and warning lines shall be installed at the base of any scaffolding or staging and around ground areas below elevated staging.
- D. Provide walk through overhead protection where work areas are above doors, walkways, or sidewalks in accordance with OSHA.
- E. All scaffolding and staging shall be erected in conformance with all applicable state, federal and local codes. The Contractor shall follow all applicable local, state, and federal requirements regarding the construction of scaffolding and staging and the protection of public safety. Specific reference shall be made to the OSHA

Construction Safety Regulations and all requirements of the State of Maine Department of Labor.

1.8 SETUP AREAS AND USE OF THE SITE

- A. The Owner shall determine the locations of the Contractor's designated setup areas. The Contractor may not utilize any other locations unless permission is obtained from the Owner.
- B. The Contractor shall permit the Owner and Engineer access to the staging, work areas and test areas at any time, as required to perform inspections and review mock-ups. The Contractor shall not move or remove staging or access to the work areas until instructed by the Owner and Engineer to do so. Any staging or access to the work areas removed by the Contractor without approval of Owner and Engineer, shall be reinstalled and setup at the request of the Owner and/or Engineer at no additional cost to the Owner.
- C. Other specific requirements of the Owner will be addressed and outlined at the Pre-Construction meeting to be held prior to the start of work.
- D. Take precautions necessary and provide equipment, materials and labor to adequately protect previous construction, the building, its contents and occupants, and surrounding landscaped areas from damage due to construction as well as from inclement weather during construction.

1.9 UTILITIES

- A. The building is currently abandoned and vacant. Most utilities have been shut-off, removed, capped or are no longer in service. The Contractor should anticipate providing their own utilities assuming what is there is not working.
- B. The Owner, through exterior electrical outlets, if operable, will provide electrical service to the Contractor free of charge. Use shall be limited to construction hours. The Contractor and/or subcontractors shall provide their own electrical generator for welding equipment, HEPA vacuum, and grinding equipment. The Owner reserves the right to charge the Contractor(s) for excessive electrical service usage (i.e., wasteful usage). Should charges be considered, the Owner will notify the Contractor in writing of his intent forty-eight hours (48 hrs.) in advance.
- C. Owner will provide water for construction purposes free of charge through exterior water spigots, if operable. The Owner reserves the right to charge the Contractor for excessive or wasteful use. Should charges be considered, the Owner will notify the Contractor in writing of his intent forty-eight hours (48 hrs.) in advance. The Contractor shall provide drinking water.
- D. Contractor shall provide all other utilities required by the work.

- E. Ensure proper and safe operation and maintenance of utility systems within the construction limits, whether these are supplied by the Owner's distribution system or otherwise, until the Owner accepts the work. Maintain and operate appurtenances within the construction area that serve the distribution system, subject to periodic inspection by the Owner's operating personnel. Inspection by any representative or personnel of the Owner shall not relieve the Contractor of his responsibilities in connection with operation and maintenance of these facilities and equipment.

1.10 TEMPORARY PROTECTION

- A. Provide suitable Owner-approved temporary protection to prevent the entrance of debris, obstructions, and water infiltration into the building. Provide warning signs to reroute personnel around areas of dangerous work. Place warning barriers at roof perimeters and at deck openings. Clearly label temporary covers over deck openings. Do not permit openings to remain unprotected overnight. Use special care to avoid damaging existing roofing and flashing when working on the roof of the building.
- B. Avoid traffic on completed roof areas. Coordinate work to prevent this situation. Should temporary access be required, provide temporary substrate protection for trafficked areas.
- C. Protect materials scheduled for reuse from damage by placing them in labeled containers or wrappings stored in a weathertight trailer.
- D. Provide temporary protection such as plywood and tarps for streets, drives, curbs, sidewalks, landscaping and existing exterior improvements during all phases of the project.

1.11 DEBRIS REMOVAL

- A. The Owner shall designate crane and refuse container locations. This area shall be sectioned off with proper warning lines.
- B. Removed materials shall not be thrown freely from the roof but shall be discarded in an enclosed chute, in order to reduce the spread of dust and other debris.
- C. Supply adequate covered receptacles for waste, debris and rubbish. One (1) receptacle will be allowed on site at a time, and must be immediately removed from the site when full. Clean the project area daily and prior to moving the receptacle to another location on the site. Locations shall be as permitted by the Owner. Disposal shall be off-site in a legal dump authorized to accept construction demolition solid wastes. The Contractor shall be responsible for receptacle-related damage to site grounds.
- D. Receptacles shall be removed from the site daily. Should, for any reason, receptacle removal is not possible on any given day, the Contractor shall move the receptacle a minimum of fifty feet (50') from the building or as required by local fire officials.

1.12 ACCESS TO THE WORK

- A. The Contractor is responsible for providing access to all roof areas included within the project's scope of work. Contractor is required to maintain, clean and keep clear all exterior pathways utilized to access roof. Tools, materials or equipment will not be permitted within the building unless it is specifically required to complete the work. Failure to comply with Owner's requirements will result in the Contractor providing their own access to the roof at no additional cost to the Owner. A Contractor's staging and/ or laydown area will be designated by the Owner adjacent to the building.

1.13 ACCESS TO THE INTERIOR

- A. The Contractor must secure and coordinate access with the Owner prior to entering building or performing work at the building interior. All access to the roof shall be provided by the Contractor from the exterior of the facility. All roof access locations/methods shall be located at an Owner approved location for this purpose, and shall be made secure at the end of each work day to prevent un-authorized access onto the unit. As an alternative, an extension ladder erected and removed daily will be permitted.
- B. The Owner will designate which portions of the site the Contractor may utilize and access for the performances of the work. The Contractor must submit a site plan indicating his locations of set up, material storage, and parking. Parking at other locations throughout the lot, without prior authorization, is subject to vehicle removal at no cost to the Owner.
- C. All hoisting of equipment and materials must be done on the exterior of the building. No tools will be permitted inside the building unless they are specific to perform the required work.
- D. The Contractors will be required to provide a clean change of clothes, and shall be responsible for any damages or stained interior components should access to the interior be required.
- E. The Contractor will be required to provide access to the designer and manufacturer's representatives at no additional cost, to review the work operations, and to perform final observations.

1.14 VEHICLES

- A. Contractor to park vehicles in the designated storage/laydown location or at locations designated by the Owner.

1.15 TRAFFIC CONTROL

- A. The Contractor shall arrange and pay for all police details required to control traffic affected by any part of the work, if required.

1.16 CLEANUP

- A. Site cleanup shall be complete and to the satisfaction of the Owner. Site cleanup shall be performed daily.
- B. All building (interior and exterior), landscape and parking areas shall be cleaned of all trash, debris, and dirt caused by or associated with the work.
- C. All landscape areas damaged or littered due to the work shall be raked clean and reseeded if required.
- D. All paved areas shall be swept clean of debris daily. All paved areas shall be washed clean at the completion of work.
- E. All areas stained, dirtied, discolored or otherwise damaged due to the work shall be cleaned, restored or replaced as required.

1.17 SIGNS

- A. If requested by Owner, the Contractor shall conspicuously post a project sign at ground level. This sign shall designate the project entrance. Only one (1) entry may be used by the Contractor. The entry location shall be as directed by the Owner.
- B. The Contractor shall install adequate signage to inform facility users of any changes to existing conditions or construction areas.
- C. The Contractor shall also construct a project sign must be at least four feet (4') tall by eight feet (8') wide or as designated by the Owner. Contractor to provide small scale graphic illustration of the sign for review and approval prior to final construction.

PART 2 – PRODUCTS

NOT USED.

PART 3 – EXECUTION

NOT USED.

END OF SECTION

WEATHER PROTECTION AND MATERIALS STORAGE

SECTION 01 63 00

PART 1 – GENERAL

1.1 GENERAL

- A. The Contractor shall take the necessary precautions and provide all equipment, materials and labor necessary to adequately protect the Contract Area, previous construction, the building and its contents and occupants, and surrounding landscape areas from damage due to the construction or inclement weather during construction.
- B. No storage on or within the building will be allowed without prior authorization from the Owner and Engineer.
- C. The Contractor shall provide all access to the work. Staging and other access shall be provided until new work has been accepted by the Owner.
- D. Refer to the “Roofing Superintendent’s Workbook” by the National Roofing Contractors Association and the Brick Industry Association (BIA) manual for additional information.

1.2 WEATHER PROTECTION

- A. Weather protection shall mean the temporary protection of that work adversely affected by moisture, wind, heat and cold by covering, patching, sealing, enclosing, ventilating, cooling and/or heating. This protection shall be provided for all work areas, the building and its contents, trafficked adjacent areas, and all construction materials and accessories.
- B. The Contractor shall be responsible for protecting the Work form moisture in order to prevent the growth of fungus, bacteria, and other biological contaminates. Remove and replace work that has been wet for twenty-four hours (24 hrs.) or more, or that shows evidence of biological growth due to the presence of moisture.
- C. The cost of heat, fuel and power necessary for proper weather protection shall be the responsibility of the Contractor.
- D. Installation of weather protection shall comply with all safety regulations, including provisions for adequate ventilation and fire protection devices.

1.3 FIRE PROTECTION

- A. The Contractor shall provide all necessary temporary fire protection for the building, building contents and materials during construction. The Contractor shall provide

incombustible protective blankets where necessary to protect surfaces or building contents from damage.

- B. At no time shall any combustibles be stored inside the building. All adhesives, caulks and cleaning solvents shall be stored well away from the building in a method approved by local fire officials.
- C. Should any cutting, burning or welding be necessary, the Contractor shall provide a fire watch. This watch will continue during the operations and for four hours minimum after completion.
- D. At no time shall open flames be present around adhesives, caulks or cleaning solvents as they will readily ignite. Rags soaked with cleaning solvents shall not be discarded in the dumpsters but shall be stored in a metal receptacle and removed from the site daily.
- E. The Contractor shall be required to comply with all local fire codes and shall obtain all permits necessary from the local fire department and provide one (1) copy to the Engineer.
- F. The Contractor shall provide recently tested, fully charged fire extinguishers around the storage area, rubbish receptacle and two (2) within one hundred feet (100') of the work area or as specifically required by local fire officials.
- G. Provide necessary temporary fire protection for the buildings, their contents and materials during construction. Do not store combustibles inside the buildings or on the roofs. Store adhesives, caulks and cleaning solvents away from the building using a method approved by local fire officials. Should cutting, burning or welding be necessary, provide a fire watch during operations and for four hours (4 hrs.) minimum after completion of the operations.
- H. Comply with local fire codes and obtain permits necessary from the local fire department. Provide a copy to the Owner. Provide recently tested, fully charged fire extinguishers around the storage area, rubbish receptacle and two (2) fire extinguishers on the roof within fifty feet (50') of the Work.

1.4 MATERIALS STORAGE

- A. In the event that materials are exposed to the elements, they shall be marked as unacceptable and immediately removed from the site. They may not be used.
- B. On-site storage of materials is the responsibility of the Contractor. The Owner is not responsible for Contractor's losses due to damage or vandalism.

1.5 ROOF PROTECTION

- A. The existing roof systems shall be totally protected in the work areas by installation of a layer of rigid insulation followed by a layer of plywood. Plywood shall be adequately ballasted to prevent wind blow off of the plywood and roof system.
- B. All existing roof areas, trafficked during construction, shall be protected as noted above.
- C. Silt mesh shall be placed in roof drains during masonry cutting operations.
- D. The Contractor and all Sub-Contractors are responsible for the prompt repair of any damage to the existing roof systems resulting from the work at the project.

1.6 NOTIFICATION

- A. If, during the Contract period, the Contractor is notified of insufficient weather protection, he shall, immediately, properly restore the weather protection and repair or replace any damaged unprotected materials and systems. Should the Contractor not effect immediate repair or replacement when notified, the Owner shall have the proper protection installed at the Contractor's expense.

1.7 MANUFACTURER'S INFORMATION

- A. The manufacturers of all the materials shall supply written instructions concerning the storage and handling of all supplied materials, including sealants, and accessories. The manufacturer shall also provide information concerning storage and handling of flammable or volatile materials.
- B. Storage facilities shall be acceptable to the manufacturer and conform to his written requirements concerning temperature, humidity, ventilation and the like.
- C. The "shelf-life" of materials shall be provided with the date of manufacture of all perishables, including volatiles, caulking and mastics.
- D. The Contractor shall supply a copy of all manufacturer's written instructions to the Owner and the Engineer as outlined in Section 01 33 00 - Shop Drawings and Submittals. The Contractor shall comply with all storage and handling requests and instructions of the manufacturer.

1.8 VOLATILE MATERIALS

- A. The Contractor is reminded that the adhesives, solvents, bitumens, etc., are highly volatile and flammable materials. Do not store these materials, contaminated tools, applicators or rags, on or within the buildings. No overnight storage on the roofs will be allowed. Do not transport materials through the building. Take precautions and

closely follow the Specification requirements for fire protection on site during construction.

- B. Locate and use flame-heated equipment so as not to endanger the structure, other materials on site, or adjacent property. Do not place flame-heated equipment on the roof. Locate and use flame-heated equipment in specific areas approved by the Owner. Do not relocate flame-heated equipment without prior approval from the Owner.
- C. The use of flame-heated equipment or torches on the roof is prohibited unless specifically approved in writing by the Owner.

PART 2 – PRODUCTS

NOT USED.

PART 3 – EXECUTION

NOT USED.

END OF SECTION

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PROJECT CLOSEOUT

SECTION 01 70 00

PART 1 – GENERAL

1.1 GENERAL

- A. When the project is established to be substantially complete, preparations will be made to close out the project prior to Owner's final acceptance. The preparations are as follows:

1.2 SUBSTANTIAL COMPLETION

- A. Substantial completion for this project is defined as the date when the Owner and Owner's Representative mutually agree and certify that all project related work has been properly installed and completed in a manner conforming to the Contract Documents. Work specified within the Contract Documents which has not been performed or has been performed in a manner which does not conform with the Contract Documents shall be deemed as not achieving substantial completion.

1.3 PUNCH LIST

- A. After the project is determined to be substantially complete the Engineer and a representative of the Owner will tour the project and compile a "punch list" of minor unsatisfactory conditions. A copy of this list will be sent to the Contractor and will be used by the Contractor. He shall then correct the unsatisfactory conditions. When all items on the list have been corrected, the Contractor shall notify the Engineer and the Owner representative, and a reinspection will be made by that representative.
- B. Minor "punch list" items shall be only those items which have been installed and are functional, requiring cosmetic repair or cleaning which does not affect the integrity of the system. Any work specified within the Contract Documents, which has not been performed or has been performed in a non-conforming manner to the Contract Documents shall not be defined as minor "punch-list" items, and must be performed or corrected as appropriate in order to achieve substantial completion.
- C. Should additional re-inspections be required due to punch list items which are reported to be complete but are not completed or improperly completed, the costs of these re-inspections will be assessed to the General Contractor.

1.4 PUNCH LIST RE-INSPECTIONS

- A. After providing written notification to Owner and the Engineer that the punch list work has been completed, the Owner and the Engineer will perform one (1) final inspection.

- B. Should additional re-inspections be required due to punch list items which are not completed or improperly completed, the costs of these re-inspections will be assessed to the Contractor as liquidated damages.

1.5 MANUFACTURER'S INSPECTION

- A. After the re-inspection by the Owner's representative, the Materials Manufacturer's representative will be required to tour the site. The representative shall determine if the materials have been installed as required by the Manufacturer.
- B. Any items the representative determines were not so installed shall be reinstalled so as to comply with the Manufacturer's intended use. The Manufacturer shall forward a copy of the list of all items determined to be not installed as intended by the Manufacturer to the Engineer.
- C. Costs associated with all manufacturer inspections shall be the responsibility of the General Contractor.

1.6 GUARANTEES

- A. When both the Owner's representative and the Manufacturer's representative agree that the Contractor has performed according to the Specifications and has installed the materials to the satisfaction of the Manufacturer, the Contractor shall petition the Manufacturer for the materials guarantee. He shall forward this guarantee to the Owner and provide a copy for the Engineer.
- B. The Contractor will be required to provide lien releases for their work. The Contractor shall then forward his guarantee covering the construction to the Owner and provide one (1) copy for the Engineer.

1.7 RETAINAGE RELEASE

- A. When all guarantees, certifications, close out documents and requested lien releases have been received, the Owner shall release to the Contractor the project retainage and any other monies retained by the Owner to guarantee project completion. Except with the Owner's prior approval, payments to the Contractor shall be subject to retention of ten percent (10%).

1.8 DOCUMENTS REQUIRED FROM THE CONTRACTOR PRIOR TO FINAL PAYMENT

- A. Documents will be submitted to the Engineer in triplicate, each set-in individual binders for submission to the Owner. These items include, but are not limited to, the following:
 - 1. All applicable manufacturer's warranties.
 - 2. Contractor and Sub-Contractor's two-year (2-yr.) guarantee.
 - 3. Manufacturer's roof system warranties.

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4. Executed Punch List Inspection letter(s).
5. Consent of Surety Company to Final Payment (AIA Form G707).
6. Lien Releases from Contractor, subcontractor and suppliers (AIA Forms G706, G706A).
7. Contractor's Affidavit of Payment of Debts and Claims.
8. Final Application and Certificate for Payment.
9. Completed waste shipment records and dumping manifests.
10. As Built Drawings.
11. Other documents which may be specifically required by the Owner or the Engineer.

PART 2 – PRODUCTS

NOT USED.

PART 3 – EXECUTION

NOT USED.

END OF SECTION

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MASONRY

SECTION 04 50 00

PART 1 - GENERAL

1.1 IN GENERAL

- A. The General Conditions, and all parts of the Bid and Contract Documents are made part of this Section as if fully repeated herein.
- B. Refer to all Sections within Division 1 for additional information.

1.2 SCOPE OF WORK

In general, the Contractor shall supply all labor, equipment, staging, temporary protection, tools and appliances necessary for the proper completion of the work in this section, as required in the specification and in accordance with good construction practice. All concrete repairs shall be completed as part of the scope of work. The work under this Section includes, but is not limited to, the following:

- A. Remove and replace damaged, cracked, or spalled brick masonry units at locations indicated in the Contract Drawings. Refer to Section 01 21 00 – Allowances for additional quantities.
- B. Carefully remove existing brick masonry as required to install new throughwall at locations as indicated in the Contract Drawings. Install new through wall flashings as indicated in the Contract Documents.
 - 1. Existing brick masonry units that are removed for new throughwall flashing and found to be in good/sound condition are to be salvaged for reuse.
- C. Install new reglet flashing at locations as indicated in the Contract Drawings.
- D. Cut and repoint masonry mortar joints at locations and as indicated in the Contract Documents. Refer to Section 01 21 00 – Allowances for additional quantities.
- E. Rebuild locations of displaced/bulging masonry at locations as indicated on the Contract Drawings. Refer to Section 01 21 00 – Allowances for additional quantities.
- F. Remove abandoned anchors/fasteners and infill with new brick or mortar at locations as indicated on the Contract Drawings.
- G. Repair cracked cast stone at locations and as indicated in the Contract Documents.

- H. Remove and replace deteriorated sealants at locations and as indicated in the Contract Drawings.
- I. Clean all surfaces at work locations and adjacent to where masonry renovations were performed.

1.3 JOB CONDITIONS

- A. The Contractor shall supply, install and maintain all shoring, supports, barriers, protection, temporary heat, warning lines, lighting and personnel required to support the structure, fixtures and facilities affected by his work and segregate the work area(s) from pedestrian or vehicular traffic, as well as to prevent damage to the building, occupants and the surrounding landscaped and paved areas.
- B. The Contractor shall use dust collection vacuums (HEPA vacuums) to limit airborne dust associated with grinding the existing mortar joints. All costs associated with additional power generators shall be the Contractor's responsibility.
- C. Coordinate the location of the new throughwall flashing with the Contract Documents for future installation of new roofing system.
- D. Materials which have a temperature other than the application temperatures of the manufacturer shall not be applied.
- E. Cold Weather Application: (Applies only to rebuilding, no repointing shall be completed when air temperature is less than forty degrees Fahrenheit [$< 40^{\circ}\text{F}$]). The Contractor shall comply with the following cold weather masonry construction requirements at no change in contract price and provide all necessary heat:
 - 1. The cold weather construction and protection requirements shall be closely followed.
 - 2. Construction materials shall be received, stored, and protected in ways that prevent water from entering the materials.
 - 3. If climatic conditions warrant, temperatures of construction materials should be measured. Frozen sand and wet masonry units must be thawed. Masonry units below twenty degrees Fahrenheit ($< 20^{\circ}\text{F}$) must be heated above twenty degrees Fahrenheit ($> 20^{\circ}\text{F}$) without overheating.
 - a. Sufficient mortar ingredients should be heated to produce mortar temperatures between forty- and one hundred twenty degrees Fahrenheit ($40^{\circ}\text{F} - 120^{\circ}\text{F}$). Every effort should be made to produce consecutive batches of mortar with the same temperatures falling within this range. The mortar temperature after mixing and before use should be above forty degrees Fahrenheit ($> 40^{\circ}\text{F}$), maintainable either by auxiliary heaters under the mortar board or by more frequent mixing of mortar batches. Heated mortar on mortar boards should not

become excessively hot (greater than one hundred twenty degrees Fahrenheit [$> 120^{\circ}\text{F}$]).

4. During below-normal temperatures, masonry should be placed only on sound unfrozen foundations. Masonry should never be placed on a snow or ice-covered surface, because of the danger of movement when the base thaws and the possibility of very little bond being developed between the mortar and the supporting surface.
5. At the end of the day, the top surface of all masonry should be protected to prevent moisture, as rain, snow or sleet, from entering the masonry. This protection must cover the top surface and should extend a minimum of two feet (2') down all sides of the masonry.

WORKDAY TEMPERATURE	CONSTRUCTION REQUIREMENT	PROTECTION REQUIREMENT
Above 40°F	Normal masonry procedures.	<i>Cover walls with plastic or canvas at end of workday to prevent water entering masonry.</i>
40°F - 32°F	Heat mixing water to produce mortar temperatures between 40°F - 120°F.	<i>Cover walls and materials to prevent wetting and freezing. Covers should be plastic or canvas.</i>
32°F - 25°F	Heat mixing water and sand to produce mortar temperatures between 40°F - 120°F.	<i>With wind velocities over fifteen miles per hour (> 15 mph) provide windbreaks during day and cover walls and materials at the end of the workday to prevent wetting and freezing. Maintain masonry above freezing for sixteen hours (16 hrs.) using auxiliary heat or insulated blankets.</i>
25°F - 20°F	Mortar on boards should be maintained above 40°F.	<i>Provide enclosures and supply sufficient heat to maintain masonry enclosure above 32°F for twenty-four hours (24 hrs.).</i>
20°F - 0°F and below	Heat mixing water and sand to produce mortar temperatures between 40°F - 120°F.	

Note: Construction requirements, while work is in progress, are based on *ambient* temperatures. Protections requirements, after masonry is placed, are based on *mean* daily temperatures.

- F. Hot Weather Application: The Contractor shall keep the areas being built sufficiently moist at all times during the operations. Mortar mixed and ready for application shall be used within one hour's time and continually remixed to prevent excessive evaporation of moisture from the mortar. Discard all mortar which has begun to set or is not used within two hours' (2 hrs.) time. Water for tempering shall be available at all times.
- G. Under no circumstances shall the Contractor remove existing materials and systems to the ground in an uncontrolled manner. Machinery or devices used shall

be manufactured for this purpose. Adjacent building and property areas shall be protected from airborne debris.

- H. No building interiors, whether new or existing shall be left exposed to the weather at the end of each workday.
- I. During removal operations, the Contractor is responsible for the containment of all dust, dirt, debris, overspray and run-off resulting from the work. The Contractor shall collect and contain all materials and repair any resulting damage to adjacent surfaces, site fixtures or personal property. Specific attention is drawn to the use of chemicals and cleaners.
- J. The Contractor shall put silt debris protection within the adjacent roofing drains to collect masonry dust from entering the leader lines.
- K. Fully charged, inspected and approved fire extinguishers shall be on site at all times. No cutting, grinding or welding of any kind shall proceed without an approved fully charged fire extinguisher.
- L. The general nature, quantity and surface area of the various work items are shown on the Contract Drawings.
- M. The Contractor shall provide a dust proof site during the course of the work. Wet cutting methods, dust tight staging and enclosures as well as other methods shall be employed as necessary to meet this requirement.

1.4 DIMENSIONS AND QUANTITIES

- A. All dimensions and quantities shall be determined or verified by the Contractor. The Contract Drawings have been compiled from various sources and may not reflect the actual condition at the moment of construction. The Contractor is cautioned to take all precautions and make all investigations necessary to install the proposed work. The Owner will not consider unfamiliarity with the job conditions as a basis for additional compensation.

1.5 SUBMITTALS

- A. Submittals shall be made in accordance with the General Conditions and Section 01 33 00 – Shop Drawings and Submittals.
- B. Submit a site-specific safety plan.
- C. The Contractor shall submit the following items with their submittal package.
 - 1. Methods of removal of materials.
 - 2. Temporary protection procedures.
 - 3. Staging/set-up procedures.

4. Program for containment of cleaning chemicals.
- D. Submit a range to match the existing color, size and texture.
- E. Proposed method of providing a dust proof site (dust removal) during masonry demolition work.
- F. Proposed method of protection for adjacent landscaping, pavement, walkways, site plantings, and related sitework from damage.

1.6 TEST AREAS

- A. Before full scale work is commenced, execute the following work for trial work areas to be reviewed by the Owner as to acceptability of color, texture and appearance match with the existing construction. Test areas will be at locations established by the Owner and Engineer:
 1. Two (2) square feet of repointing.
 2. Six (6) square feet of cleaning.
 3. Two (2) linear feet of throughwall flashing with soldered end dam.
 4. Four (4) square feet of brick masonry rebuild or replacement.
 5. Two (2) linear feet of sealant replacement.
 6. One (1) linear feet of cast stone route and seal repair
- B. Prepare, install and cure all materials in accordance with these specifications and the manufacturer's instructions.
- C. Trial areas shall be repeated until acceptable results are obtained. The accepted work shall be a standard for all subsequent work. Areas of masonry repointing shall be allowed to weather for seven days prior to Owner acceptance.

1.7 CLEANUP

- A. Site clean-up shall be complete and performed daily to the satisfaction of the Owner.
- B. All roof, building (interior and exterior), landscape and parking areas shall be cleaned of all trash, debris and dirt caused by, or associated with, the work.
- C. All trash and debris shall be completely removed from the site daily during the work and at the completion of the work. All debris shall be legally disposed of off-site.

1.8 GUARANTEE

- A. Upon completion of the work and prior to final payment, the Contractor shall submit a Guarantee of his work to be free from defect in materials and workmanship. This Guarantee shall be for a period of two years (2 yrs.) and shall be signed by a Principal of the Contractor's firm and sealed if a corporation.

PART 2 – MATERIALS

2.1 SALVAGED MATERIALS AND ITEMS

- A. All building materials, equipment and debris of whatever nature from the portions of the existing structure removed under this project and not designated to be reused or reinstalled shall become the property of the Contractor and legally disposed of off-site. The Contractor will be required to place all discarded materials in the appropriate rubbish receptacles for legal disposal by the Contractor.

2.2 BRICK MASONRY

- A. Replacement brick masonry shall conform to ASTM C 216, Grade SW, Type FBS specifications. Brick shall match existing in size, configuration, color and texture. The majority of the brick masonry units appear to be 2" x 3-1/2" x 7-5/8" in dimension. However, these units vary and will require the Contractor to confirm brick masonry unit sizes prior to ordering.
- B. All brick shall be submitted to the Owner for acceptability as to color and appearance match with the existing brick. The Contractor may be required to submit additional brick samples for approval. No brick shall be purchased or installed until approval by the Owner is obtained.

2.3 MORTAR

- A. Mortar for rebuilding brick veneer shall be Type N, conforming to ASTM C270 specifications and shall match the existing in color, texture and appearance. Mortar shall conform to Parts 8 and 11 E of the BIA Technical Notes.
- B. Mortar for tuck pointing shall be Type N, conforming to ASTM C270 specifications and shall match the existing in color, texture and appearance. Mortar shall be pre-hydrated and conform to Part 7 of the BIA Technical Notes.
- C. Portland cement shall be Type II (Type III may be used only if previously approved) conforming to ASTM C150, specifications.
- D. Hydrated lime shall conform to ASTM C207, Type S specifications.

- E. Sand shall conform to ASTM C144, amended as follows:

Sieve Size	% Passing (By Weight)
#4	100
#8	95-100
#16	70-100
#30	40-75
#50	20-40
#100	10-25
#200	0-10

- F. Tinting or coloring agent shall be added to the sand, lime cement to color the fully-cured, in-place mortar to match the physical and chemical characteristics and specified requirements of the Type N mortar.
- G. Admixtures: No admixtures shall be allowed.
- H. Water shall be clean, potable tap water.

2.4 MASONRY CLEANERS

- A. Cleaner for newly installed, brick masonry, and repointing areas shall be Sure-Kleen 101 lime solvent by Pro-So-Co, Inc., Hydroclean HT 455 by Hydrochemical Techniques, Inc., 200 Lime Solvent as manufactured by Diedrich Technologies, or approved equal.
- B. The cleaner shall be specifically recommended by the manufacturers for the removal of efflorescence from masonry, Radonseal Efflorescence cleaner, or approved equal. Cleaners with harsh chemicals and/or strong acids are not recommended but may be considered. Windows should be protected when using cleaners.
- C. Masking materials shall be commercially available masking or duct tape of appropriate width. Self-adhesive materials shall be completely strippable, leaving no adhesive residue when removed.
- D. Plastic sheet for masking tape areas shall be four (4) mils. thick minimum polyethylene sheet of appropriate size to cover the required areas.

2.5 SEALANT AND ACCESSORIES

- A. Sealant for exposed locations shall be a one-part polyurethane conforming to ASTM C920-87, Type S, Grade NS, Class 25, Uses NT, M, A, and O such as manufactured by Tremco, BASF-Sonneborn, Sika Corp., or Engineer approved equal.

1. Contractor to provide sealant manufacturer's standard five-year (5-yr.) warranty.
- B. Color(s) shall be selected by the Owner from the approved manufacturer's color chart. Colors shall be the manufacturer's available premium colors.
- C. Primer shall be non-staining type as manufactured or recommended by the sealant manufacturer for each substrate.
- D. Substrate cleaner shall be non-corrosive and non-staining as recommended by the sealant manufacturer. Cleaner shall be totally compatible with the sealant for each substrate.
- E. Masking material shall be commercially available masking tape of appropriate width or other material recommended by the sealant manufacturer. Self-adhesive masking materials shall be of low tack and completely strippable, leaving no adhesive residue behind when removed.

2.6 MASONRY ACCESSORIES

- A. Baffles to be installed in full head joint weeps of brick masonry shall be 3/8" x 2-1/2" x 3-3/8" baffle comprised of a bonded cellular material such as Wire Bond - Cell Vent, No. 3601 as manufactured by Masonry Reinforcing Corporation of America, Quadro-Vent by Hohmann & Barnard, Inc., Cell Vent by Dur-O-Wall, Inc., or approved equal.
- B. Anchors for use at new throughwall flashing locations shall be dual leg adjustable pintel, one-quarter inch (1/4") diameter stainless steel tie such as Series 316 as manufactured by Heckman, D/A 5231 as manufactured by Dur-O-Wall, or approved equal.

2.7 THROUGHWALL FLASHING AND ACCESSORIES

- A. Plain copper shall be cold rolled sheet copper conforming to ASTM B 370-88 Specifications, sixteen-ounce (16 oz.) and twenty-ounce (20 oz.) as required. Sheet length shall be eight feet (8') maximum.
- B. Solder for copper shall be fifty percent (50%) block tin and fifty percent (50%) pig lead conforming to ASTM Specification B 32, Grade SN 60.
- C. Flux for copper shall conform to ASTM B 32, Type IS.
- D. Copper fabric flashing shall consist of a full 5 oz. copper sheet permanently bonded between two (2) layers of textured, woven high tensile strength glass fabric with asphalt compound or epoxy-based coating. Primers and mastic adhesive required for the proper installation of the fabric flashing shall be as specifically recommended by the fabric flashing manufacturer. Fabric flashings shall be as

manufactured by York Manufacturing, Inc., Advanced Building Products, Inc., Sandell Manufacturing Company, Inc. or approved equal.

- E. All accessories, including but not limited to nails, screws and clip strips shall be copper, brass, stainless steel or galvanized steel and completely compatible with the surrounding metal to prevent galvanic reaction.
- F. Concealed sealant for metal-to-metal connections, or for seating termination bars: ASTM C1085, single components, butyl (polyisobutylene) rubber sealant, heavy bodied for joints with limited movement.
- G. Termination bar shall be one-eighth of an inch by one-inch ($\frac{1}{8}$ " x 1") copper bar with pre-punched holes spaced six inches (6") on-center.
- H. Fasteners for securing termination bar at top of throughwall flashing, blind nailers, and cladding at concrete substrate shall be one-inch (1") to one- and one-half inch ($1\frac{1}{2}$ ") long drive pins with zinc alloy sheaths as manufactured by Star, Rawl, or approved equal.
- I. Rivets shall be three-sixteenths of an inch ($\frac{3}{16}$ ") diameter copper as required by the metal being secured.
- J. Sheet metal flashings shall be shop fabricated. All breaks, bends and hems shall be uniform, clean, straight lines.
 - 1. Drip edges shall be hemmed three-quarter inch ($\frac{3}{4}$ ") wide and break at a thirty degree (30°) angle.
 - 2. Clips shall be two-inch (2") wide minimum.
 - 3. All copper joints shall be soldered.
 - 4. Blind nailers shall be four-inch (4") wide, folded to two-inch (2") wide final dimension.
- J. The Contractor shall coordinate the use of compatible metals to prevent galvanic corrosion.
- K. Fabrication Schedule:
 - 1. Copper (16 oz.)
 - a. Throughwall flashing.
 - b. End dams.
 - c. Reglet flashing.

2.8 CRACK ROUTE AND SEAL

- A. Sealant for crack repairs less than or equal to $\frac{3}{16}$ " in width shall be a two-component, non-sagging, solvent-free, moisture tolerant flexible epoxy sealer and adhesive such as Sikadur 51 ns as manufactured by Sika Corporation or approved equal.

2.9 ELASTOMERIC (EPDM) TEMPORARY MEMBRANE FLASHING

- A. Flashing membrane used at rising walls shall be 0.060" thick uncured elastomer completely compatible with other components used in the existing roofing system, and as manufactured by Firestone, Carlisle SynTec Systems, Inc., or approved equal.

PART 3 – EXECUTION

3.1 GENERAL WORKMANSHIP

- A. Follow all applicable local, state and federal requirements regarding construction of scaffolding and protection of the public safety. Specific reference should be made to OSHA Construction Safety Regulations.
- B. Set up of scaffolding or similar access and location of on-site storage areas shall be subject to review and approval by the Owner.
- C. Do not leave any partially completed sections exposed to the elements overnight. Provide all devices (including heaters and insulation) necessary to maintain areas at the correct temperature and humidity for proper curing of mortar.
- D. During freezing weather, the Contractor shall protect all masonry with tarpaulins or other approved material. Masonry materials shall be stacked on platforms and covered, or stored in a manner acceptable to the Owner, to protect them from contact with soil and weather exposure. Materials with stained faces will not be used in the walls.
- E. No masonry work shall be executed when the temperature in the work area has dropped below forty degrees Fahrenheit (< 40°F) unless it is rising. The Contractor shall provide heat and maintain the temperature of masonry materials and protect the completed work from freezing. Protection shall consist of heating and maintaining the temperature of masonry materials to at least forty degrees Fahrenheit (40°F), but not more than one hundred degrees Fahrenheit (100°F), and maintain an air temperature above forty degrees Fahrenheit (40°F) on both sides of completed masonry for a period of at least seventy-two hours (72 hrs.).
- F. Keep covers tightly sealed on all evaporative products to prevent premature curing.
- G. All debris shall be transported to dumpsters, in locations approved by the Owner, at ground level by enclosed chute or crane and scaling bucket. Uncontrolled dropping of debris to ground level will not be permitted.

- H. During the removal of any existing component, the Contractor shall report to the Owner any areas of damaged, deteriorated or otherwise unsuitable framing, wood blocking, or wall materials uncovered during the work. Do not cover unacceptable areas until reviewed by the Owner and Engineer. Provide temporary protection to the area in question.
- I. Any wall areas opened for replacement shall receive the new system that day and shall be enclosed with masonry. Should rebuilding of masonry not be completed, temporary weather protection and shoring for the wall shall be provided by the Masonry Contractor at no additional charge to the Owner.
- J. If needed, the Contractor shall lay-up granite units' plumb, level, and true to the lines and dimensions at the existing walls. Chipped or broken units shall be repaired. If any such units are placed in the finished wall, they shall be removed and replaced with new units at no additional cost to the Owner.
- K. The repointing of granite mortar joints is included at the locations shown on the Contact Drawings, and as specified in the Unit Price Section. Only additional scope of work designated by the Owner will be paid for at the Unit Price. The Contractor must confirm additional unit price items with the Owner prior to performing the work should compensation be desired. Adjacent masonry units damaged or removed as a result of the work will be removed and replaced at no cost to the Owner.
- L. All shoring of the masonry components will be the responsibility of the masonry Contractor. Maximum spacing of temporary shoring shall be twelve inches (12") on-center. Any damage as a result of insufficient shoring shall be repaired or replaced at no additional cost to the Owner.
- M. Refer to Brick Industry Association (BIA) technical notes for standard practice for masonry repointing, rebuilding and repair.

3.2 MASONRY STORAGE

- A. Storage of all masonry shall be in the area designated by the Owner. All stored masonry units shall be covered.

3.3 REMOVAL OF BRICK MASONRY

- A. Coordinate the location of the new throughwall flashing with the Contract Drawings for future installation of new roofing system.
- B. Remove brick masonry units in the locations shown on the Contract Drawings. Use hand and power tools to remove masonry. Pneumatic demolition tools are not permitted.

- C. Remove maximum four (4) linear foot sections of masonry walls at a time, or as required to prevent deflection or displacement of the existing masonry to remain. Shore the sections as required to prevent displacement.
- D. Saw-cut surrounding mortar joints to remove the designated masonry units. Remove adjacent units as required. Provide temporary shoring and protection, as necessary.
- E. Remove masonry units in a manner so as not to damage sound materials designated to remain.
- F. All throughwall flashings shall extend a minimum of eight inches (8") above the limits of the roof edges and shall be terminated with an end dam.

3.4 BRICK MASONRY REPLACEMENT

- A. Reconstruct brickwork with new brick to follow the existing profile and configuration. All brick masonry shall be plumb, level and true to the lines and dimensions of existing wall. Chipped or broken units shall not be used. If any such units are placed in the finished wall they shall be removed and replaced with new units at no additional cost to the Owner.
- B. The Contractor shall supply all jacks, shoring and temporary supports necessary to support brickwork above and adjacent to any area to assure proper installation of the work.
- C. Wet all new and existing masonry units in the work area. Masonry shall be kept damp but without standing water.
- D. Utilize rotary mixers when fabricating all mortar. Be sure to maintain relative proportions of mortar materials to provide the texture and color to match the existing mortar. No anti-freeze compounds or other substances shall be added to the mortar. Mix all mortar for at least three minutes (3 min.) and not more than five minutes (5 min.) with the minimum amount of water to produce a workable consistency. The maximum allowable air content of cured mortar shall be twelve percent (12%) by volume. Re-tempering of mortars that have stiffened because of evaporation of water will be allowed in order to provide the proper consistency provided all mortar in a batch is utilized within two hours (2 hrs.) of initial mixing.
- E. Set each brick in a full bed of mortar and build upward. Tool all joints to match the existing joint profile. Fully butter all heads.
- F. Work mortar into joints for complete width and depth. Consolidate and tool into joint using tooling equipment to completely fill the joint cavity to match the existing joint profile. Tool exposed joints slightly with a suitable jointer when the mortar is thumbprint hard. For horizontal joints, jointers shall be at least twelve inches (12") long for brickwork. Jointers shall be slightly larger than the width of the joint so that

complete contact is made along the edges of the units, compressing and sealing the surface of the joint. Strike flush joints that will not be exposed. Tool vertical joints first. Brush joints to remove all loose and excess mortar. Horizontal joints shall be level; vertical joints shall be plumb and in alignment from top to bottom of wall.

- G. Set new masonry unit in full beds of mortar, top, bottom and sides. Utilize slate wedges as required to maintain mortar joint width. Should new masonry set in mortar require removal due to un-level/plumb conditions, that masonry unit shall be removed from the work area, cleaned and allowed to dry prior to reinstallation.
- H. Provide full joint depth of new mortar. Strike off and tool joints to match existing joint configuration. Allow areas to fully cure prior to cleaning.
- I. Where brick masonry replacement occurs in areas to be repointed, rake back joints and repoint together with the wall area.
- J. Totally clean the areas of masonry rebuilding only after the rebuilding is completed and the mortar has been allowed to cure for eight (8) days minimum. Clean surfaces free of all dust, dirt and mortar stains as described in this section.

3.5 TEMPORARY SHORING

- A. It is the responsibility of the Contractor to design, erect, and maintain all necessary shoring procedures sufficient to comply with applicable regulations, securely support all masonry or other elements left unsupported by the required removals and permit the work of other trades to proceed.
 - 1. If cracks occur in mortar joints of brick intended to remain, completely stabilize the area with additional shoring or new construction, cut out the damaged joint area and repoint it after removal of shoring. Secure the Engineer's approval of repair.
 - 2. Solidly patch all holes (with new mortar) left in mortar by withdrawal of shore fastenings.
 - 3. Completely remove shoring system when no longer needed.
 - 4. Notify the Owner forty-eight hours (48 hrs.) in advance of installation of shoring.
 - 5. The maximum spacing of temporary shoring vertical supports shall be twelve inches (12") on-center.
 - 6. The addition of temporary lateral bracing or blocking between vertical shoring elements is required.
 - 7. A sequenced shoring scheme is recommended at all shoring applications. The minimum length of remaining solid masonry wall located between each removed masonry section shall be four feet (4').
 - 8. Masonry and flashing replacement work must be completed in the same day that existing components are removed unless adequate temporary weather protection is provided to the satisfaction of the Owner and

Engineer. Submit the intended demolition, shoring, and construction sequencing to accommodate this requirement. Submit the means and methods of temporary weather protection to include materials and methods of fastening or securing.

9. Submit the means and methods of temporary protection to low roof areas and their components.
10. Submit the means and methods of temporary covering or masking of wall and roof penetrations, grills, vents, and mechanical units.
11. All temporary shoring of the brick masonry components to complete the masonry and flashing repairs will be the sole responsibility of the masonry Contractor. The Contractor must supply, install, and maintain all temporary shoring for the duration of the project.

3.6 REPOINTING

- A. Any masonry unit damaged during the repointing process shall be replaced by the Contractor at no additional cost to the Owner. Repoint the deteriorated masonry mortar joints as designated on the Contract Drawings.
- B. Cut and point one hundred percent (100%) of masonry mortar joints where shown on the Contract Drawings..
- C. Refer to Technical Notes, Section 7 of the Brick Industry Association concerning methods and materials for tuck pointing repairs.
- D. Remove existing mortar to a depth of at least three- quarter inch ($\frac{3}{4}$ ") in the areas to be repointed. Removal shall be accomplished using hand and power tools so as not to damage the existing masonry. Remove both horizontal and vertical joints. Brush the joint clean of all loose mortar and dust and wet the exposed surface down with a light water spray. Keep exposed surface damp throughout procedure.
- E. Utilize rotary mixers when fabricating mortar. Be sure to maintain relative proportions of mortar materials to provide the texture and color to match the existing mortar. No antifreeze compounds or other substances shall be added to the mortar. Mix dry ingredients before adding water. Mix all mortar for at least three minutes (3 min.) and not more than five minutes (5 min.) with the minimum amount of water to produce a workable consistency. The maximum allowable air content of cured mortar shall be twelve percent (12%) by volume. Retempering of mortars that have stiffened because of evaporation of water will be allowed in order to provide the proper consistency, provided all mortar in a batch is utilized within two hours (2 hrs.) of initial mixing.
- F. Pre-hydrated mortar shall be used for tuck pointing of masonry. Add only a sufficient amount of water to produce a damp mass of such a consistency that it would retain its form when pressed into a ball with hands but will not flow under a trowel. Allow mortar to stand for not less than one hour (1 hr.) nor more than two hours (2 hrs.).

Be sure that the color and texture sample of the cured mortar has been viewed and approved by the Owner.

- G. Work mortar into prepared joints for complete width and depth. Consolidate and tool into joint using concave tooling equipment to completely fill the joint cavity and to match the existing joint profile. Repoint rebuilt masonry areas along with the existing. Repointed masonry shall be raked or concave as required to match the existing wall mortar joints.
- H. Protect areas of repointing from inclement weather during cure.
- I. Allow repointing areas to fully cure prior to masonry cleaning as described in this section.

3.7 THROUGHWALL FLASHING INSTALLATION

- A. Fabricate and install new flashings a minimum of twelve inches (12") above the finished roof surface and as shown on the Contract Drawings. Maintain step flashing so flashing heights stay above the finished roof or curtain wall eight-inch (8") minimum. Refer to Contract Drawings for configuration of step flashings and end dams.
- B. Fabricate new flashing and extend rear leg of flashing three inches (3") minimum up the back of the wall or as shown on the Contract Drawings. Secure the rear leg of the flashing to the back-up masonry wall with the specified fasteners and termination bar. Provide a full bead of sealant behind the flashing.
- C. Secure rear leg of flashing to substrate with the specified fasteners and termination bar at 8" on center.
- D. Extend throughwall flashing a minimum of eight inches (8") beyond the roof edge below.
- E. Provide the finish profile for the exposed portion of the flashing as shown on the Contract Drawings, with hemmed edge formed drip extending one-half inch (1/2") beyond finish face of masonry.
- F. Overlaps in flashing shall be six-inch (6") minimum and soldered. Rivet overlaps and solder watertight completely enveloping rivets in solder.
- G. Form the flashing to shed water. Provide two-inch (2") high end dams at limits of throughwall flashings. Provide completely watertight seams and overlaps. Rivet and solder end dam connections. End dams shall be two-inch (2") high minimum.
- H. Install copper fabric flashing in a full bed of mastic over the vertical surface of the existing concrete masonry back-up wall and flashing. All seams shall be lapped

six-inch (6") minimum and set in full bed of sealant. Secure copper fabric to masonry backup wall with pre-punched termination bar at eight inches (8") on-center. Extend fabric one-half inch ($\frac{1}{2}$ ") minimum beyond the exterior face of the brick masonry wall face, eight-inch (8") minimum up the back of wall and lap onto metal flashings as indicated in the Contract Drawings. Provide a bead of sealant at the top of the reglet/termination bar, tooled to shed water.

- I. Note: provide field confirmation of all dimensions prior to fabricating the flashings. Where irregularities in the surface occur, backer rod and filler material can be used to provide positive support for the fabric coated copper flashings. Unsupported flashing will not be acceptable.

3.8 SOLDERING OF SHEET METAL

- A. Refer to the publication, "Copper and Common Sense" by Revere Copper and Brass and all recommendations of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) concerning methods and materials to be used in the fabrication and construction of sheet metal flashings.
- B. It is the intent of this Specification to utilize the most effective joint configuration possible to properly install strong, weathertight, metal flashings. Comply with the following standards unless otherwise specified when fabricating metal components to be joined:
 1. Whenever one-piece construction is not possible, solderable metals shall utilize interlocked, crimped, and fully soldered seams and joints.
 2. Seams and joints of non-solderable metals shall be interlocked, riveted, and completely filled with sealant.
- C. Comply with Military Specification MIL-S-6872B entitled, "General Specifications for Soldering Process" when forming soldered joints. Use conduction soldering methods. Clean areas to be joined of oil, grease, pencil marks, paint, dirt, or other foreign substances. Remove burrs using files, grinding stones, or other methods. Hold parts in place using clamps, jigs, and supports or by self-fixturing. If parts are tack-soldered to hold them in place, the area of tack-soldering shall be reworked into the final soldering. Parts cannot be allowed to move during the soldering process.
- D. Apply flux to surfaces that are to receive solder. Do not use flux-cored solder. Flux shall be fluid when heated and effective in removing and excluding oxides and other impurities from the joint. The molten solder should readily displace flux.
- E. Heat areas to be joined above the liquidous temperature of the solder. To deliver maximum heat, apply the copper bit of the soldering iron at the right angle so that the flat side of the iron's bit provides maximum contact area. Apply solder to the joint and not the bit of the iron. Allow solder to flow in place to provide a minimum one-inch (1") final width of solder over the joint. Do not disturb the joint until it has

been allowed to completely cool. After soldering, completely remove flux and acid by washing and scrubbing with a neutralizing agent.

- F. Shop fabricate sheet metal flashings to the fullest extent possible. Fabricate all breaks, bends, and hems with uniform, clean, straight lines.
- G. Sheet metal flashings shall be as specified herein and as required to match the existing sheet metal systems. Refer to the publication, "Copper and Common Sense" by Revere Copper and Brass and all recommendations of the Sheet Metal and Air Conditioning Contractors National Association concerning methods and materials to be used in the fabrication and construction of sheet metal flashings.

3.9 SEALANT INSTALLATION

- A. Install sealant where shown on the Contract Drawings and as required for the proper completion of the work.
- B. Clean and prime substrates in strict accordance with sealant manufacturer's requirements.
- C. Precondition sealants to a temperature between sixty- and seventy degrees Fahrenheit (60°F - 70°F) or as required by the manufacturer. Apply sealant to clean dry surfaces only when the ambient temperature is between sixty- and eighty-five degrees Fahrenheit (60°F - 85°F).
- D. Joint primer shall be applied to all properly prepared, cleaned, and dry substrates. Primer shall be approved by the sealant manufacturer for each substrate and shall be completely compatible with the existing materials and proposed sealants and accessories.
- E. Sealant shall have a minimum application life of three hours (3 hrs.) after mixing.
- F. Unless otherwise required by the sealant manufacturer, the sealant shall be mixed for a period of six minutes (6 min.) minimum with a slow speed electrical drill and mixing paddle. The sides of the container shall be repeatedly scraped to ensure adequate mixing.
- G. Sealant shall be applied to clean, dry, joints by knife, trowel, manual or air pressure caulking guns using proper nozzle sizes.
- H. All joint sealant shall be immediately tooled to assure full adhesion. Sealant shall be dry tooled, straight, uniform, smooth, and neatly finished to the profiles detailed. No soaps, wetting of slicking agents will be allowed.

3.10 MASONRY CLEANING

- A. Totally clean all repaired, or repointed masonry areas of all construction stains and excess mortar. Do not perform any cleaning until mortar joints and adjacent sealants are fully cured.
- B. Test the specified cleaners on a small area of masonry wall to determine compatibility with the masonry, window units, sealants, etc. Evidence of discoloration, metallic salts or other detritus shall be grounds for requiring the use of a substitute cleaner.
- C. The Contractor will be required to clean the masonry units with the minimum cleaning solution mix ratios as recommended by the cleaner manufacturer. Should the minimum dilution ratios not clean the masonry, the Contractor will be required to slightly decrease the dilution rates to clean the surfaces. It is recommended that the Contractor use care when performing the masonry repairs to prevent increasing the mixing solutions.
- D. Apply the cleaner at the manufacturer's recommended dilution rate and dwell duration. Pre-wet the wall if the manufacturer so recommends.
- E. Allow the cleaner to stand for the manufacturer's recommended dwell period while monitoring to ensure that the surface does not dry. Steel bristle wire brushes are not to be used.
- F. Rinse all cleaner from the wall with water applied at the manufacturer's recommended flow and pressure. High pressure washing equipment may be required. Coordinate activities so that the Architect may witness and approve a mockup cleaning with the use of the proper spray tip and high-pressure equipment. Any acid neutralizing agent required by the manufacturer shall be applied as part of this rinse. Ensure that effluent does not accumulate at ground level, and fully rinse all effluent from sidewalks, streets and landscaping each day.
- G. The Contractor must provide sufficient site protection to prevent the cleaning effluent from draining into the adjacent storm drains. The Contractor will provide a narrative as to how the site protection will be performed.

3.11 CLEANUP

- A. Prior to acceptance of the masonry work covered in this section, the Contractor shall perform a thorough clean-up of the work site, building surfaces, landscaping, etc. Any plantings or other items damaged shall be repaired or replaced to the satisfaction of and at no additional cost to the Owner.

END OF SECTION