

# **REQUEST FOR PROPOSALS**

Item Description: ELMWOOD COMMUNITY CENTER ROOF RESTORATION PROJECT

Procurement/MinuteTraq #: 46218

Date to be opened: 9/9/2024

Issuing Department: Public Property

### QUESTIONS

- Please direct questions related to the bidding process, how to fill out forms, and how to submit a bid (Pages 1-6) to the Purchasing Department.
  - Email: <u>purchasing@providenceri.gov</u>
    - Please use the subject line "Solicitation Question"
- Please direct questions relative to the Minority and Women's Business Enterprise Program and the corresponding forms (Pages 14-15) to the MBE/WBE Outreach Director for the City of Providence, Grace Diaz
  - Email: <u>gdiaz@providenceri.gov</u>
    - Please use subject line "MBE WBE Forms"
- Please direct questions relative to the specifications outlined (beginning on page 13) to the issuing department's subject matter expert:
  - Name: Ben Lobaugh
  - o Title: Capital Improvements Project Manager
  - Email Address: blobaugh@providenceri.gov

### **Pre-bid Conference**

There will be a Mandatory Pre-Bid ConferenceDate:Thursday, August 22, 2024Location:325 Washington St, Providence, RI 02903

Deadline for questions submissions: Monday, September 2, 2024 at 12:00pm



### **INSTRUCTIONS FOR SUBMISSION**

Bids may be submitted up to 2:15 P.M. on the above meeting date at the <u>Department of the City Clerk. Room</u> 311, City Hall. 25 Dorrance Street, Providence. At 2:15 P.M. all bids will be publicly opened and read at the Board of Contract Meeting in Conference Room 305, on the 3<sup>rd</sup> floor of City Hall.

- Bidders must submit 2 copies of their bid in sealed envelopes or packages labeled with the captioned Item Description and the City Department to which the solicitation and bid are related and must include the company name and address on the envelope as well. (On page 1).
- If required by the Department, please keep the original bid bond and check in only one of the envelopes.
- Communications to the Board of Contract and Supply that are not competitive sealed bids (i.e. product information/samples) should have "**NOT A BID**" written on the envelope or wrapper.
- Only use form versions and templates included in this solicitation. If you have an old version of a form do not recycle it for use in this bid.
- The bid envelope and information relative to the bid must be addressed to:

Board of Contract and Supply Department of the City Clerk – City Hall, Room 311 25 Dorrance Street Providence, RI 02903

\*\*<u>PLEASE NOTE</u>: This bid may include details regarding information that you will need to provide (such as proof of licenses) to the issuing department before the formalization of an award.

### This information is <u>NOT</u> requested to be provided in your initial bid by design.

<u>All bids submitted to the City Clerk become public record</u>. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record. The City has made a conscious effort to avoid the posting of sensitive information on the City's Open Meetings Portal, by requesting that such sensitive information be submitted to the issuing department only at their request.



### **BID PACKAGE CHECKLIST**

Digital forms are available in the City of Providence Purchasing Department Office or online at <a href="http://www.providenceri.gov/purchasing/how-to-submit-a-bid/">http://www.providenceri.gov/purchasing/how-to-submit-a-bid/</a>

The <u>Technical Proposal for Qualification</u> bid package MUST include the following, in this order:

- Bid Form 1: Bidder's Blank as the cover page/ 1<sup>st</sup> page (see page 6 of this document)
- Bid Form 2: Certification of Bidder as 2<sup>nd</sup> page (see page 7 of this document)
- Bid Form 3: Certificate Regarding Public Records (see page 8 of this document)
- Bid Form 4: Affidavit of City Vendor (see pages 9 and 10 of this document)
- Forms from the Minority and Women Business Enterprise Program: Based on Bidder Category. See forms and instructions enclosed (pages 11-12) or on: <u>https://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/</u>

# \*Please note: MBE/WBE forms must be completed for EVERY bid submitted and must be inclusive of <u>ALL</u> required signatures. Forms without all required signatures will be considered <u>incomplete</u>.

- Bidder's Proposal/Packet: Formal response to the specifications outlined in this RFP, including pricing information and details related to the good(s) or service(s) being provided. Please be mindful of formatting responses as requested to ensure clarity.
- Financial Assurance, *if requested* (as indicated on page 5 of this document under "Bid Terms")

All of the above listed documents are REQUIRED. (With the exception of financial assurances, which are only required if specified on page 5.)

\*\*\*Failure to meet specified deadlines, follow specific submission instructions, or enclose all required documents with all applicable signatures will result in disqualification, or in an inability to appropriately evaluate bids.



### **NOTICE TO VENDORS**

- 1. The Board of Contract and Supply will make the award to the lowest qualified and responsible bidder.
- 2. In determining the lowest responsible bidder, cash discounts based on preferable payment terms will not be considered.
- 3. Where prices are the same, the Board of Contract and Supply reserves the right to award to one bidder, or to split the award.
- 4. No proposal will be accepted if the bid is made in collusion with any other bidder.
- 5. Bids may be submitted on an "equal in quality" basis. The City reserves the right to decide equality. Bidders must indicate brand or the make being offered and submit detailed specifications if other than brand requested.
- 6. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with the Rhode Island Business Corporation Act, RIGL Sec. 7-1.2-1401, et seq.
- 7. The Board of Contract and Supply reserves the right to reject any and all bids.
- 8. Competing bids may be viewed in person at the Department of the City Clerk, City Hall, Providence, immediately upon the conclusion of the formal Board of Contract and Supply meeting during which the bids were unsealed/opened. Bids may also be accessed electronically on the internet via the City's <u>Open Meetings Portal</u>.
- 9. As the City of Providence is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.
- 10. In case of error in the extension of prices quoted, the unit price will govern.
- 11. The contractor will **NOT** be permitted to: a) assign or underlet the contract, or b) assign either legally or equitably any monies or any claim thereto without the previous written consent of the City Purchasing Director.
- 12. Delivery dates must be shown in the bid. If no delivery date is specified, it will be assumed that an immediate delivery from stock will be made.
- 13. A certificate of insurance will normally be required of a successful vendor.
- 14. For many contracts involving construction, alteration and/or repair work, State law provisions concerning payment of prevailing wage rates apply (<u>RIGL Sec. 37-13-1 et seq.</u>)
- 15. No goods should be delivered, or work started without a Purchase Order.
- 16. Submit 2 copies of the bid to the City Clerk, unless the specification section of this document indicates otherwise.
- 17. Bidder must certify that it does not unlawfully discriminate on the basis of race, color, national origin, gender, gender identity or expression, sexual orientation and/or religion in its business and hiring practices and that all of its employees are lawfully employed under all applicable federal, state and local laws, rules and regulations. (See Bid Form 2.)



### **BID TERMS**

- Financial assurances may be required in order to be a successful bidder for Commodity or Construction and Service contracts. <u>If either of the first two checkboxes below is checked, the specified assurance</u> <u>must accompany a bid, or the bid will not be considered by the Board of Contract and Supply</u>. The third checkbox indicates the lowest responsible bidder will be contacted and required to post a bond to be awarded the contract.
  - a) A certified check for **\$\_\_\_\_** must be deposited with the City Clerk as a guarantee that the Contract will be signed and delivered by the bidder.
  - b) A bid bond in the amount of 5 per centum (%) of the proposed total price, must be deposited with the City Clerk as a guarantee that the contract will be signed and delivered by the bidder; and the amount of such bid bond shall be retained for the use of the City as liquidated damages in case of default. Any person signing a bid bond as an attorney-in-fact shall include with the bid bond an original, or a photocopy or facsimile of an original, power of attorney.
  - c)  $\square$  A performance and payment bond with a satisfactory surety company will be posted by the bidder in a sum equal to one hundred per centum (100%) of the awarded contract.
  - d) No financial assurance is necessary for this item.
- 2. Awards will be made within **nighty (90) days of bid opening**. All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.
- 3. Failure to deliver within the time quoted or failure to meet specifications may result in default in accordance with the general specifications. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and Acts of God.

### The following entry applies only for COMMODITY BID TERMS:

4. Payment for partial delivery will not be allowed except when provided for in blanket or term contracts. **The following entries apply only for CONSTRUCTION AND SERVICE BID TERMS:** 

- 5. Only one shipping charge will be applied in the event of partial deliveries for blanket or term contracts.
- 6. Prior to commencing performance under the contract, the successful bidder shall attest to compliance with the provisions of the Rhode Island Worker's Compensation Act, <u>RIGL 28-29-1</u>, et seq. If exempt from compliance, the successful bidder shall submit a sworn Affidavit by a corporate officer to that effect, which shall accompany the signed contract.
- 7. Prior to commencing performance under the contract, the successful bidder shall, submit a certificate of insurance, in a form and in an amount satisfactory to the City.



### **BID FORM 1: Bidders Blank**

- 1. Bids must meet the attached specifications. Any exceptions or modifications must be noted and fully explained.
- 2. Bidder's responses must be in ink or typewritten, and all blanks on the bid form should be completed.
- 3. The price or prices proposed should be stated both in WRITING and in FIGURES, and any proposal not so stated may be rejected. Contracts exceeding twelve months must specify annual costs for each year.
- 4. Bids **SHOULD BE TOTALED** so that the final cost is clearly stated (unless submitting a unit price bid), however **each** item should be priced individually. Do not group items. Awards may be made on the basis of *total* bid or by *individual items*.

### 5. All bids MUST BE SIGNED IN INK.

# Name of Bidder (Firm or Individual): Contact Name: Business Address: Business Phone #: Contact Email Address: Agrees to bid on (Write the "Item Description" here): If the bidder's company is based in a state <u>other than Rhode</u> Island, list name and contact information for a local agent for service of process that is located within Rhode Island Delivery Date (if applicable): Name of Surety Company (if applicable): Total Amount in Writing\*: Total Amount in Figures\*: \*If you are submitting a unit price bid, please insert "Unit Price Bid" Use additional pages if necessary for additional bidding details.

Signature of Representation



### **BID FORM 2: Certification of Bidder**

(Non-Discrimination/Hiring)

Upon behalf of	(Firm or Individual Bidding),		
I,	<u>(</u> Name of Person Making Certification),		
being its	(Title or "Self"), hereby certify that:		

- 1. Bidder does not unlawfully discriminate on the basis of race, color, national origin, gender, sexual orientation and/or religion in its business and hiring practices.
- 2. All of Bidder's employees have been hired in compliance with all applicable federal, state and local laws, rules and regulations.

I affirm by signing below that I am duly authorized on behalf of Bidder, on

this \_\_\_\_\_\_ day of \_\_\_\_\_\_ 20\_\_\_\_.

Signature of Representation

Printed Name



### **BID FORM 3: Certificate Regarding Public Records**

Upon behalf of	(Firm or Individual Bidding),
Ι,	(Name of Person Making Certification),
being its	(Title or "Self"), hereby certify an

understanding that:

- 1. All bids submitted in response to Requests for Proposals (RFP's) and Requests for Qualification (RFQ's), documents contained within, and the details outlined on those documents become public record upon receipt by the City Clerk's office and opening at the corresponding Board of Contract and Supply (BOCS) meeting.
- 2. The Purchasing Department and the issuing department for this RFP/RFQ have made a conscious effort to request that sensitive/personal information be submitted directly to the issuing department and only at request if verification of specific details is critical the evaluation of a vendor's bid.
- 3. The requested supplemental information may be crucial to evaluating bids. Failure to provide such details may result in disqualification, or an inability to appropriately evaluate bids.
- 4. If sensitive information that has not been requested is enclosed or if a bidder opts to enclose the defined supplemental information prior to the issuing department's request in the bidding packet submitted to the City Clerk, the City of Providence has no obligation to redact those details and bears no liability associated with the information becoming public record.
- 5. The City of Providence observes a public and transparent bidding process. Information required in the bidding packet may not be submitted directly to the issuing department at the discretion of the bidder in order to protect other information, such as pricing terms, from becoming public. Bidders who make such an attempt will be disqualified.

I affirm by signing below that I am duly authorized on behalf of Bidder, on

this\_\_\_\_\_day of\_\_\_\_\_20\_\_\_.

Signature of Representation

Printed Name



### **BID FORM 4: Affidavit of City Vendor**

Per our Code of Ordinances <u>Sec. 21.-28.1 (e)</u>, this form applies to a) the business, b) any political action committee whose name includes the name of the business, c) all persons holding ten (10) percent or greater equity interest or five thousand dollars (\$5,000.00) or greater cash value interest in the business at any time during the reporting period, d) all executive officers of the business entity, e) any spouse or dependent child of any individual identified in a) though d) above.

Executive officers who are not residents of the state of Rhode Island are exempted from this requirement.

Per <u>R.I.G.L. § 36-14-2</u>, "Business" means a sole proprietorship, partnership, firm, corporation, holding company, joint stock company, receivership, trust, or any other entity recognized in law through which business for profit or not for profit is conducted.

Name of the person making this affidavit:	
Position in the "Business"	
Name of Entity	
Address:	
Phone number:	
The number of persons or entities in your entity that are required to report under Sec. 2128.1 (e):	

### Read the following paragraph and answer one of the options:

Within the 12 month period preceding the date of this bid submission with the City of Providence, or with respect to the contracts that are not in writing within the 12 month period preceding the date of notification that the contract has reached the \$100,000 threshold, have you made campaign contributions within a calendar year to (please list all persons or entities required under <u>Sec. 21.-28.1 (e)</u>).

a. Members of the Providence City Council?  $\Box$  Yes  $\Box$  No

• If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):

Contribution Amount(s):

b. Candidates for election or reelection to the Providence City Council?  $\Box$  Yes  $\Box$  No

 If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):
 Contribution Amount(s):



- c. The Mayor of Providence?  $\Box$  Yes  $\Box$  No
  - If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):

Contribution Amount(s):

- d. Candidates for election or reelection to the office of Mayor of Providence?  $\Box$  Yes  $\Box$  No
  - If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):

Contribution Amount(s):

Signed under the pains and penalties of perjury.

Position



### MBE/WBE Participation Plan

### Please complete separate forms for each MBE/WBE subcontractor/supplier to be utilized on the solicitation.

Bidder's Name:						
Bidder's Address:						
Point of Contact:						
Telephone:						
Email:						
Procurement #:						
Project Name:						
Which one of the follo business' status in term Owned Business Enter State of Rhode Island?	ns of Minority and/o rprise certification w (Check all that app)	r Woman ith the ly).		]WBE	□Neither MBE nor W	
including a description Please note that all ME time of bid. The MBE/ instructions and requir • Nonprofit or • Construction provide upda	a of the work to be per BE/WBE subcontract WBE Directory can ements). a projects unable to ates to the MBE/WI	erformed and cors/suppliers be found <u>her</u> <b>required to</b> <b>identify sul</b>	I the percentage of t s must be certified b re. Please visit, the <u>c</u> o complete the rest ocontractors prior	he work as subm y the Office of E <u>City's MBE/WB</u> of this form.	BE/WBE subcontractors itted to the prime contra Diversity, Equity and Op <u>E page</u> for details of the <b>Dn (e.g. Design Build)</b> a	actor/vendor. oportunity at the program (e.g.
Name of Subcontracto	**					
Type of RI Certification	on:	$\Box$ MBE	$\Box$ WBE		Neither	
Address:						
Point of Contact:						
Telephone:						
Email:						
Detailed Description of Performed by Subcont to be Supplied by Supp of Work provided in the Total Contract Value (	ractor or Materials plier Per the Scope ne RFP		Subcontract Value (\$):		Participation Rate (%):	
Anticipated Date of Pe	erformance:		value (\$).		Rate (70).	
I certify under penalty		orgoing state	ements are true and	correct.		
Prime Contractor/Ve	1 0 0			Title		Date
Subcontractor/Suppl	ier Signature			Title		Date

\*If you did not meet the 20% MBE/WBE combined participation goal, submit a Waiver Request Form.



### **MBE/WBE Waiver Request Form**

### Fill out this form only if you did not meet the 20% MBE/WBE participation goal. State-certified MBE or WBE Prime Bidders are NOT REQUIRED to fill out this form.

Submit this form to the City of Providence MBE/WBE Outreach Director, Grace Diaz, at <u>gdiaz@providenceri.gov</u>, for review **prior to bid submission**. This waiver applies only to the current bid which you are submitting to the City of Providence and does not apply to other bids your company may submit in the future. **In case a waiver is needed**, **City Department Directors should not** recommend a bidder for an award if this form is not included, absent or is not signed by the city of Providence MBE/WBE director.

Prime Bidder:	Contact Email and Phone	
Company Name, Address:	Trade	
Project /Item Description (as seen on RFP):		

To receive a waiver, you must list the certified MBE and/or WBE companies you contacted, the name of the primary individual with whom you interacted, and the reason the MBE/WBE company could not participate on this project.

MBE/WBE Company Name	Individual's Name	Company Name	Why did you choose not to work with this company?

I acknowledge the City of Providence's goal of a combined MBE/WBE participation is 20% of the total bid value. I am requesting a waiver of \_\_\_\_\_\_% MBE/WBE (20% minus the value of **Box F** on the Subcontractor Disclosure Form). If an opportunity is identified to subcontract any task associated with the fulfillment of this contract, a good faith effort will be made to select MBE/WBE certified businesses as partners.

Signature of Prime Contractor / or Duly Authorized Representative

Signature of City of Providence MBE/WBE Outreach Director / or Duly Authorized Representative Printed Name

Date Signed

Printed Name of City of Providence MBE/WBE Outreach Director Date Signed



### **BID PACKAGE SPECIFICATIONS**

See Construction Drawings and Specifications package under Attachment A (pages XX to XX).

### PROVISIONS OF THIS PROJECT

- Upon the Issuance of the Award from the Board of Contract the City shall issue a Contract to be executed by the City and the vendor incorporating the bid specifications. All Provisions of the Specifications are binding.
- Any Permits Required by the City of Providence and/or State of Rhode Island Shall be Obtained by the Vendor Permit Fees by the City of Providence Shall be Waived – the State ADA Fee Must be Paid
- This project qualifies for prevailing wages per the Davis Bacon Act (HUD). Federal certified payrolls will need to be submitted to the owner for all hours worked on site for this project. The Wage Decision for this project shall be as recorded on the Bid Date and is available at <a href="https://sam.gov/content/wage-determinations">https://sam.gov/content/wage-determinations</a>. Weekly Certified payrolls must be Submitted with Pay Requests Including Monthly Utilization Form
- An Insurance Certificate Shall be Submitted to the City Within 10 Days of Award
- A Copy of the Vendors Contractor's License Must be Submitted within 10 Days of Award
- All On-Site Personnel Shall be Licensed (If Required) and Shall have Proof of All Licenses Required by the State of Rhode Island to Perform the Work Required
- Pay Requests Must be Submitted on Approved AIA Billing Documents (City will Provide if Needed)
- All Subcontractors Shall be Listed on the Bid Form All Insurance & Payroll Requirements Apply
  - General Contractor Shall be the Insurance Certificate Holder and the City Shall be Named as 'Additionally Insured' with Respect to Liability Insurance
- A Submittal Log Must be Submitted within 10 Days of Award

### **CLOSE OUT DOCUMENTS**

- Prior to Final Payment the Vendor Shall Provide the Following:
  - Copies of Permits Signed off and Approved (If Any)
  - o Operating Manuals and Warranties Shall Be Transferred and/or Delivered
  - Full and Completed As-Built Drawings Shall be Submitted for Approval
  - Training Shall be Provided to City Personnel (If Required)
  - Certification by Manufacturers Representative (If Required)

### **QUALIFICATIONS**

Qualifications will be evaluated on the basis of similar project experience for:

- a. Completion of similar projects within the last 5 years.
- b. Size and dollar value of similar completed projects.
- c. Contractor's performance with similar projects. (references will be checked)
- d. Relevant experience of individuals assigned to the project.



### SUPPLEMENTAL INFORMATION

If the issuing department for this RFP determines that your firm's bid is best suited to accommodate their need, you will be asked to provide proof of the following prior to formalizing an award.

An inability to provide the outlined items at the request of the department may lead to the disqualification of your bid.

This information is <u>NOT</u> requested to be provided in your initial bid that you will submit to the City Clerk's office by the "date to be opened" noted on page 1. This list only serves as a list of items that your firm should be ready to provide on request.

<u>All bids submitted to the City Clerk become public record</u>. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record.

### You must be able to provide:

- Business Tax ID will be requested after an award is approved by the Board of Contract and Supply.
- Proof of Insurance.
- Certificate of Good Standing with the Rhode Island Secretary of State.

### The following attachments are included as part of this RFP:

- Attachment A Construction Documents (pages 17 to 150)
- Attachment B Apprentice and First Source Requirements (pages 151 to 153)



### **CITY OF PROVIDENCE STANDARD TERMS & CONDITIONS**

- 1. The terms "you" and "your" contained herein refer to the person or entity that is a party to the agreement with the City of Providence ("the City") and to such person's or entity's employees, officers, and agents.
- 2. The Request For Proposals ("RFP") and these Standard Terms and Conditions together constitute the entire agreement of the parties ("the Agreement") with regard to any and all matters. By your submission of a bid proposal or response to the City's RFP, you accept these Standard Terms & Conditions and agree that they supersede any conflicting provisions provided by bid or in any terms and conditions contained or linked within a bid and/or response. Changes in the terms and conditions of the Agreement, or the scope of work thereunder, may only be made by a writing signed by the parties.
- 3. You are an independent contractor and in no way does this Agreement render you an employee or agent of the City or entitle you to fringe benefits, workers' compensation, pension obligations, retirement or any other employment benefits. The City shall not deduct federal or state income taxes, social security or Medicare withholdings, or any other taxes required to be deducted by an employer, and this is your responsibility to yourself and your employees and agents.
- 4. You shall not assign your rights and obligations under this Agreement without the prior written consent of the City. Any assignment without prior written consent of the City shall be voidable at the election of the City. The City retains the right to refuse any and all assignments in the City's sole and absolute discretion.
- 5. Invoices submitted to the City shall be payable sixty (60) days from the time of receipt by the City. Invoices shall include support documentation necessary to evidence completion of the work being invoiced. The City may request any other reasonable documentation in support of an invoice. The time for payment shall not commence, and invoices shall not be processed for payment, until you provide reasonably sufficient support documentation. In no circumstances shall the City be obligated to pay or shall you be entitled to receive interest on any overdue invoice or payment. In no circumstances shall the City be obligated to pay any costs associated with your collection of an invoice.

outstanding invoice.

- 6. For contracts involving construction, alteration, and/or repair work, the provisions of applicable state labor law concerning payment of prevailing wage rates (R.I. Gen. Laws §§ 37-13-1 et seq., as amended) and the City's First Source Ordinance (Providence Code of Ordinances §§ 21-91 et seq., as amended) apply.
- 7. With regard to any issues, claims, or controversies that may arise under this Agreement, the City shall not be required to submit to dispute resolution or mandatory/binding arbitration. Nothing prevents the parties from mutually agreeing to settle any disputes using mediation or non-binding arbitration.
- 8. To the fullest extent permitted by law, you shall indemnify, defend, and hold harmless the City, its employees, officers, agents, and assigns from and against any and all claims, damages, losses, allegations, demands, actions, causes of action, suits, obligations, fines, penalties, judgments, liabilities, costs and expenses, including but not limited to attorneys' fees, of any nature whatsoever arising out of, in connection with, or resulting from the performance of the work provided in the Agreement.
- 9. You shall maintain throughout the term of this Agreement the insurance coverage that is required by the RFP or, if none is required in the RFP, insurance coverage that is considered in your industry to be commercially reasonable, and you agree to name the City as an additional insured on your general liability policy and on any umbrella policy you carry.
- 10. The City shall not subject itself to any contractual limitations on liability. The City shall have the time permitted within the applicable statute of limitations, and no less, to bring or assert any and all causes of action, suits, claims or demands the City may have arising out of, in connection with, or resulting from the performance of the work provided in the Agreement, and in no event does the City agree to limit your liability to the price of the Agreement or any other monetary limit.
- 11. The City may terminate this Agreement upon five (5) days' written notice to you if you fail to observe any of the terms and conditions of this Agreement, or if the City believes your ability to perform the terms and conditions of this Agreement has been materially impaired in any way, including but in no



way limited to loss of insurance coverage, lapsing of a surety bond, if required, declaration of bankruptcy, or appointment of a receiver. In the event of termination by the City, you shall be entitled to just and equitable compensation for any satisfactory work completed and expenses incurred up to the date of termination.

- 12. Written notice hereunder shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the entity for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known by the party providing notice.
- 13. In no event shall the Agreement automatically renew or be extended without a writing signed by the parties.
- 14. You agree that products produced or resulting from the performance of the Agreement are the sole property of the City and may not be used by you without the express written permission of the City.
- 15. For any Agreement involving the sharing or exchange of data involving potentially confidential and/or personal information, you shall comply with any and all state and/or federal laws or regulations applicable to confidential and/or personal information you receive from the City, including but not limited to the Rhode Island Identity Theft Protection Act, R.I. Gen. Laws § 11-49.3-1, during the term of the Agreement. You shall implement and maintain appropriate physical, technical, and administrative security measures for the protection of, and to prevent access to, use, or disclosure of, confidential and/or personal information. In the event of a breach of such information, you shall notify the City of such breach immediately, but in no event later than twenty-four (24) hours after discovery of such breach.
- 16. The Agreement is governed by the laws of the State of Rhode Island. You expressly submit yourself to and agree that any and all actions arising out of, in connection with, or resulting from the performance of the Agreement or relationship between the parties shall occur solely in the venue and jurisdiction of the State of Rhode Island or the federal court located in Rhode Island.
- 17. The failure of the City to require performance of any provision shall not affect the City's right to

require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

18. If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, in any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and each term and provision shall be valid and enforceable to the fullest extent permitted by law.

# ELMWOOD COMMUNITY CENTER **ROOF RESTORATION PROJECT**

50 Holden Street · Providence, Rhode Island 02908 (401) 272-1730 · www.rgb.net

Architecture · Project Management · Interior Design

THE ROBINSON GREEN BERETTA CORPORATION ARCHITECTURE, ENGINEERING & **INTERIOR DESIGN** 

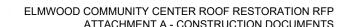


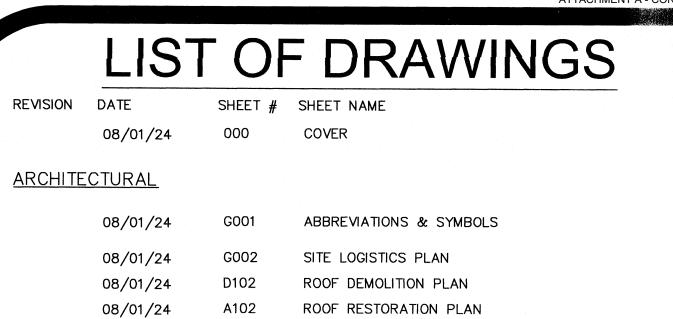
**155 NIAGARA STREET** PROVIDENCE, RI 02907

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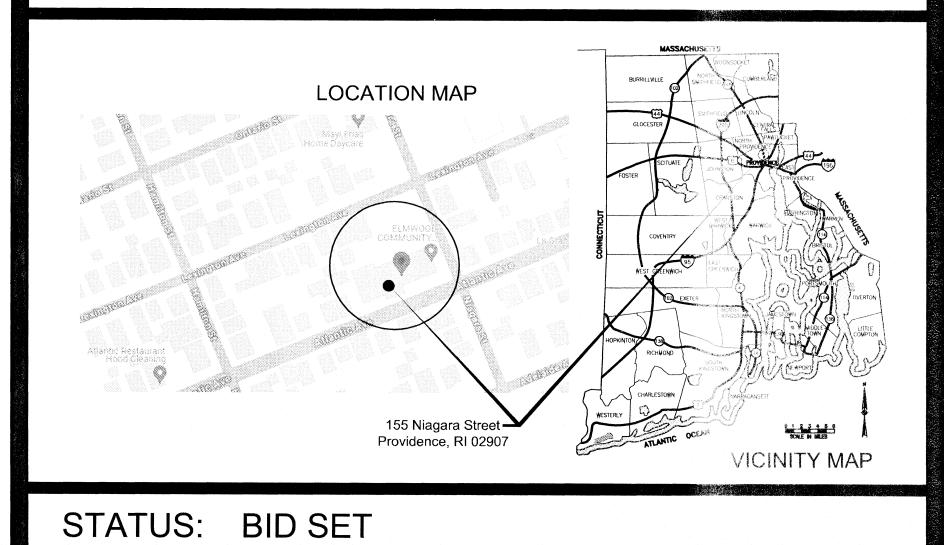


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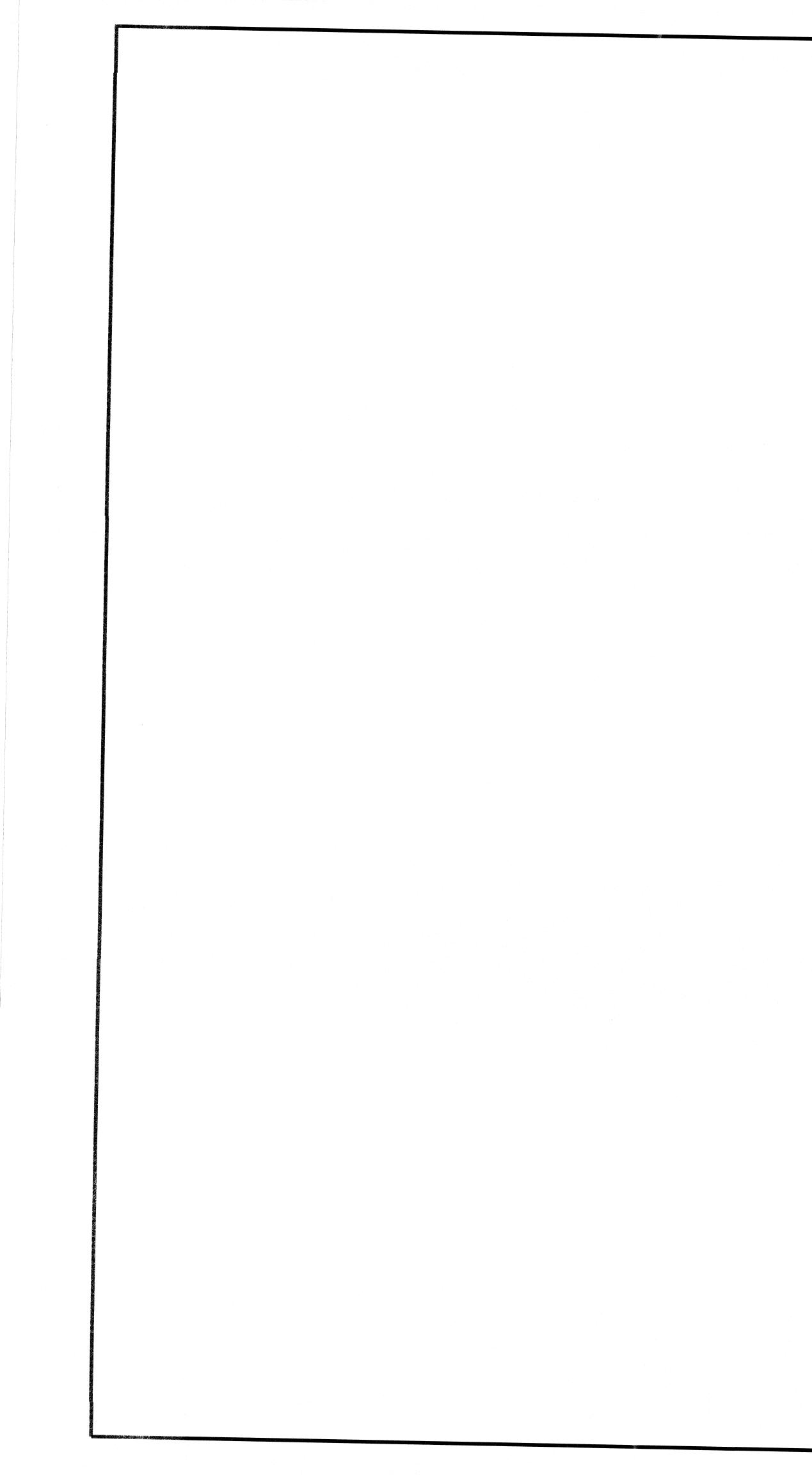
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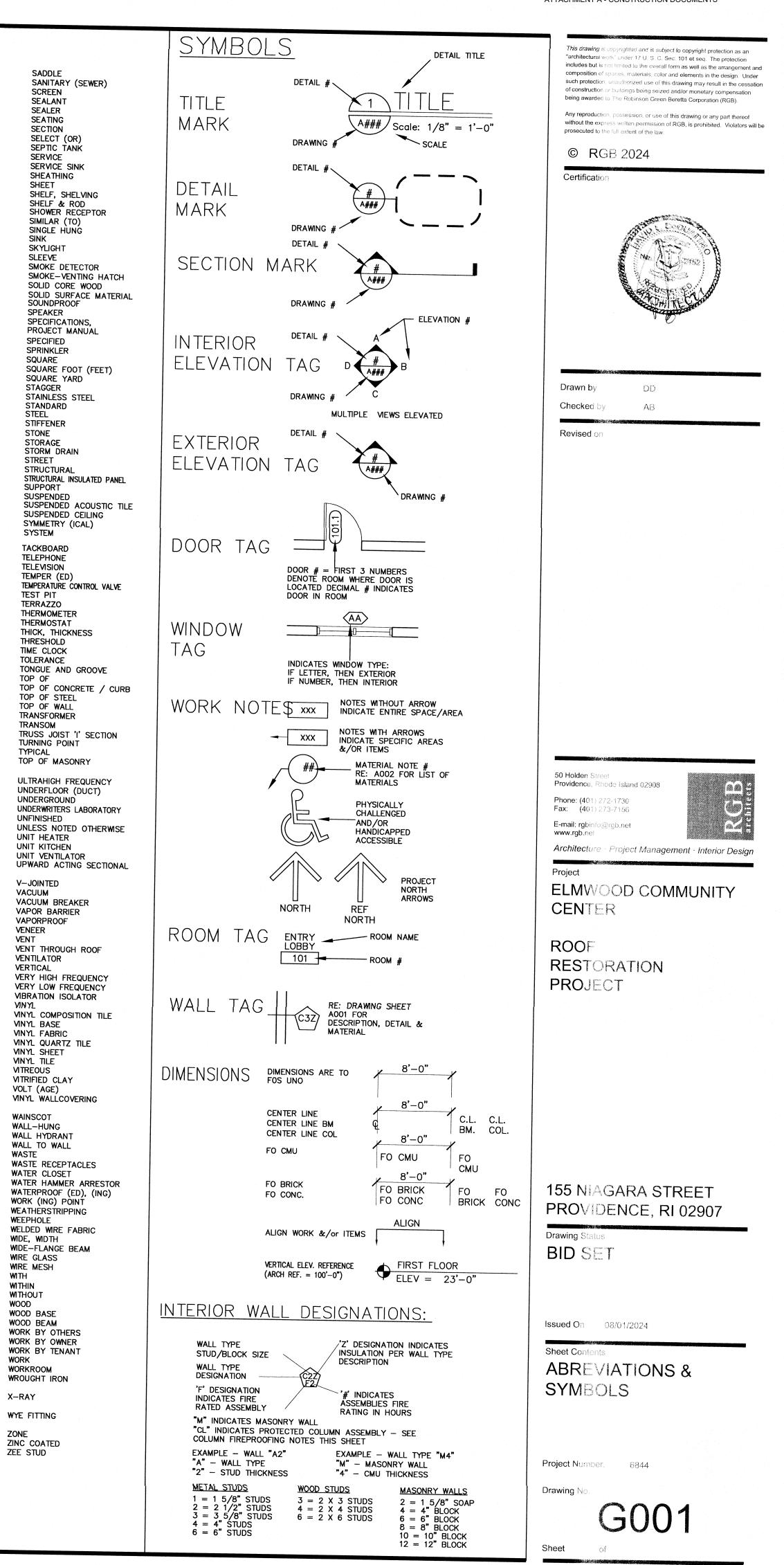
DATE: 08/01/2024

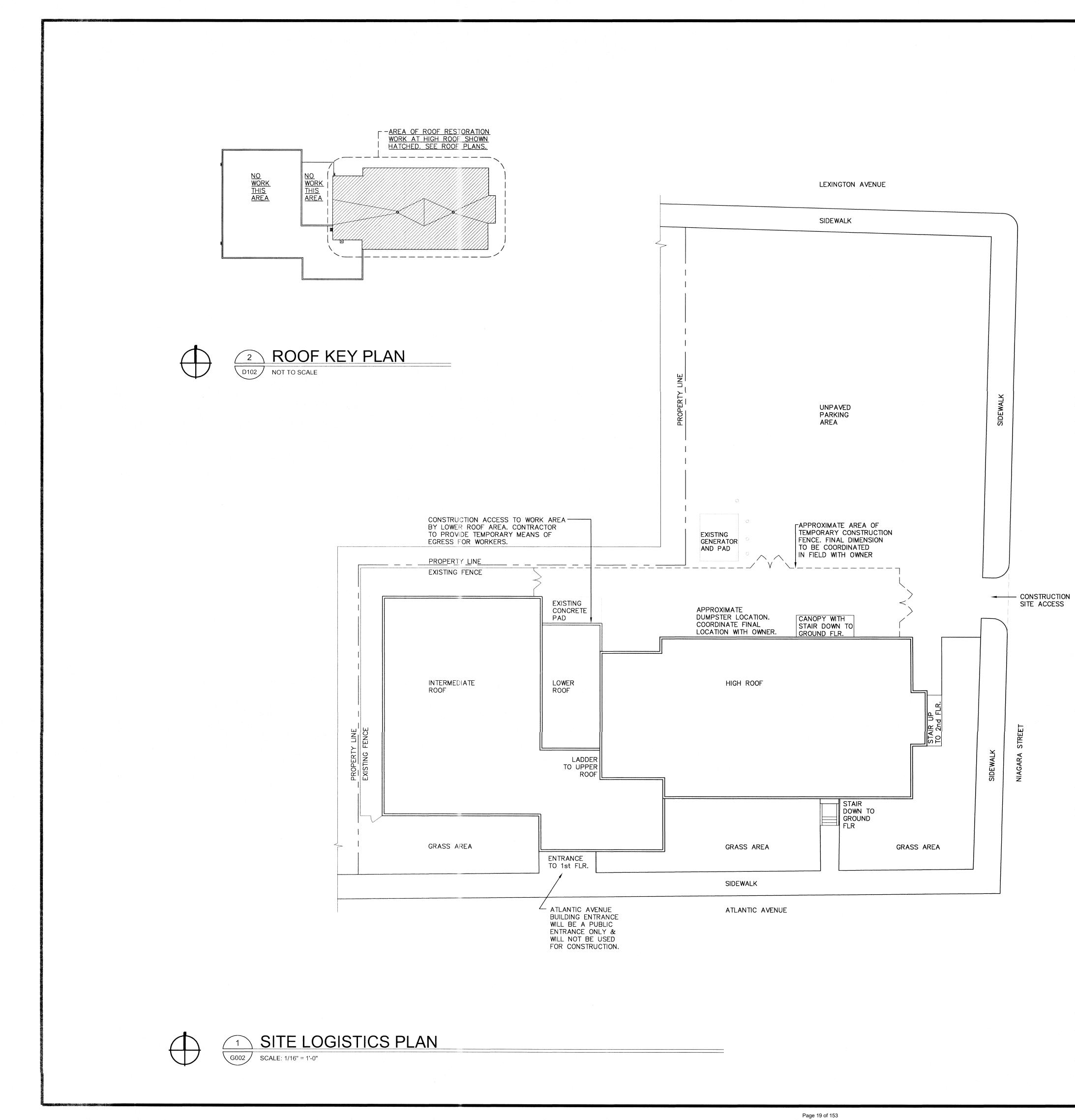


# ABBREVIATIONS

AFF	-	ABOVE FINISHED FLOOR	FBD	FIBERBOARD	MB		
AF ACF ACC	<b>&gt;</b>	ABOVE FLOOR ACCESS PANEL	FGL FIL	FIBERGLASS FILLER (S)	мв MH MFD,MFF	MACHINE BOLT MANHOLE VD MANUFACTURED	SDL SAN
ACC	ous	ACCESSORY, ACCESSORIES ACOUSTICAL ACOUSTIC CEILING TILE	FIN FFE FFL	FINISH FINISH FLOOR ELEVATION	MFR MFG	MANUFACTURER MANUFACTURING	SCN SLT SLR
ADH ADJ	-  	ADHESIVE ADJUSTABLE	FTR	FINISH FLOOR LINE FINNED TUBE RADIATION FIRE ALARM STATION	MBL MK	MARBLE MARK	STG SEC
AGG A/C	2	AGGREGATE (S) AIR CONDITIONING	FDC FE	FIRE DEPARTMENT CONN. FIRE EXTINGUISHER	MAS MCJ	MASONRY MASONRY CONTROL JOINT	SEL SPT
AVB AC		AIR/VAPOR BARRIER ALTERNATING CURRENT	FEC, FXC FHC	FIRE EXTINGUISHER CABINET FIRE HOSE CABINET	MJ MO	MASONRY JOINT MASONRY OPENING	SVC SSK
ALT ALUI	М	ALTERNATE ALUMINUM	FHR FH	FIRE HOSE RACK FIRE HYDRANT	MTL MAX MC	MATERIAL (S) MAXIMUM	STH SHT
		ALUMINUM THRESHOLD ANCHOR (S) ANCHORAGE (S)	FMN FP	FIRE MAIN FIREPROOF (ING)	MED MDF	MEDICINE CABINETS MEDIUM MEDIUM DENSITY FIBERBOARD	SH S&R
AB L,∢ ANO		ANCHOR BOLTS ANGLE ANODIZED	FR FRC	FIRE RESISTANT FIRE-RESISTANT COATING	MBR MMB MFN	MEMBER	SHR SIM SH
ANT		ANTENNA (E) APPROVED, APPROVAL	FRT FSP	FIRE-RETARDANT TREATMENT FIRE STANDPIPE	MTL METC	METAL METAL CLAD	SK SKL
APPI AD		APPROXIMATE AREA DRAIN	FXD FXT FLG	FIXED FIXTURE FLASHING	ME MRE	METAL EDGE METAL ROOF DECK(ING)	SL SDE, SD
© ATT		AT ATTACH, ATTACHMENT	FHCS	FLAT HEAD COUNTERSUNK SC FLAT HEAD WOOD SCREW		METER (S) MEZZANINE	SMV SCWD
ALD AVE		AUTOMATIC LOUVER DAMPER	FLX FLR	FLEXIBLE FLOOR, FLOORING	MIC MM MWK	MICROPHONE MILLIMETER	SSM SP SPK
AVG BTB		AVERAGE BACK TO BACK	FD FGR	FLOOR DRAIN FLOOR GRILLE (REGISTER)	MIN MIR	MILLWORK MINIMUM MIRROR	SPEC
ВМ ВМК		BEAM BENCH MARK	FLU FL FT	FLUORESCENT FLOW LINE	MIS MXV	MISCELLANEOUS MIXING VALVE	SPF SPR
BG BPL		BEARING BEARING PLATE	FC FTG	FOOT, FEET FOOTCANDLES FOOTING	MOD MLD	MODULAR MOLDING	SQ, 中 SF
BIT BC		BITUMINOUS BOTTOM OF CURB	FWK FND, FDW	FORMWORK	MDO MT MHT	MEDIUM DENSITY OVERLAY MOUNT (ED), (ING) MOUNTING HEIGHT	SY STAG
BLK BLKG	;	BLOCK BLOCKING	FR FBO	FRAME (D),(ING) FURNISHED BY OTHERS	MUL	MULLION	SS STD ST
BD BF BO		BOARD BOTTOM OF FOOTING BOTTOM OF	F & I FURR	FURNISH & INSTALL FURRING	NL NAT	NAILABLE NATURAL (FINISH)	STIFF
BOC BS		BOTTOM OF BOTTOM OF CURB BOTH SIDES	FUT FAI FRP	FUTURE FRESH AIR INTAKE	NRC	NOISE-REDUCTION CO-EFFICIENT	STO SD
BW BOT		BOTH WAYS BOTTOM	FSL	FIBER REINFORCED PLASTIC FUSIBLE LINK		NOMINAL NON-CORROSIVE	ST S
BKT BK		BRACKET BRICK	GAL GPH	GALLON (S) GALLONS PER HOUR	NIC NTS NO,#	NOT IN THIS CONTRACT NOT TO SCALE NUMBER	SIP SUP
BRG BTU		BRIDGING, BRIDGE (D) BRITISH THERMAL UNIT	GPM GPS	GALLONS PER MINUTE GALLONS PER SECOND	OC	ON-CENTER	SUSP SAT SUSP CEIL
BLDG BUR CK		BUILDING BUILT-UP ROOFING	GALV GI GST	GALVANIZED GALVANIZED IRON GALVANIZED STEEL	K,L,H OPG, OPN OPR		SUSF CEIL SYM SYS
CK	C 4 -	CHALK	G G GKT	GALVANIZED STEEL GAS GASKET (ED)	OPR OPP O.H.,OPH	OPERATOR OPPOSITE OPPOSITE HAND	ТВ
CBT, CPT CI	CAR	CABINET CARPET CAST IRON	GAV GA	GATE VALVE GAUGE	OHS OSB	OPPOSITE HAND OPPOSITE HAND SIMILAR ORIENTED STRAND BOARD	TEL TV TMP, TEMP
CB CLG		CATCH BASIN CEILING	GLB GMU	GLASS BLOCK GLAZED MASONRY UNITS	OAE OZ	OR APPROVED EQUAL OUNCE (S)	TCV TP
CTR CL, C	L	CENTER CENTERLINE	GB GRD GRT	GRAB BARS GRADE, GRADING	OD OA	OUTSIDE DIAMETER OVERALL	TZ THM
CTC C		CENTER TO CENTER CENTIGRADE (CELSIUS)	GVL GR	GRANITE GRAVEL GRILLE	OH OHB OHD	OVERHEAD OVERHEAD BRACED	THS TH
CT CLF CB		CERAMIC TILE CHAIN-LINK FENCE	GD GT	GROUND (ED) GROUT (ED)	OF OF	OVERHEAD DOOR OWNER FURNISHED OWNER FURNISHED & INSTALLED	THR TCL
СН, [ СМ		CHALKBOARD CHANNEL CENTIMETER	GYP. BD. GWB	GYPSUM WALLBOARD GYPSUM WALLBOARD	OFCI	OWNER FURNISH- CONTRACTOR INSTALL	TOL TG, T & G TO
CV CHWR		CHECK VALVE CHILLED WATER RETURN	GYL GFRC	GYPSUM LATH GLASS FIBER REINF, CONC.	OX PT	OXYGEN PRESSURE TREATED	TOC TOS, TS
CHWS CKT		CHILLED WATER SUPPLY CIRCUIT	GPL	GYPSUM PLASTER	PNT, PTD PR	PAINT, PAINTED PAIR	TOW TRANS
CO CLR CLS		CLEANOUT CLEAR, CLEARANCES	HA HBD	HAND HOLD HANGER HARDBOARD	PNL PAR, // PBD	PANEL PARALLEL	TR TJI
CW C,COL		CLOSURE COLD WATER COLUMN	HC HDN	HANDICAP(PED) HARDENER (ED)	PTN PCT or %	PARTICLE BOARD PARTITION PERCENT (AGE)	tp typ tom
COMP		COMPRESS (ED),(ION),(IBLE) CONCRETE (PORTLAND CEMENT)	HDW HWD	HARDWARE	PF PERIM	PERFORATED (D) PERIMETER	UHF
CMU COND		CONCRETE MASONRY UNITS CONDUIT	HD HDR	HEAD HEADER	PERP, P	PHASE	UF UG
CX CONT		CONNECTION CONTINUOUS	HDE HTG HAC	HEAT DETECTOR HEATING	PLAS PL	PLASTER PLATE	UL UNF
CLL CONTR CJ		CONTRACT LIMIT LINE CONTRACTOR	H & V HVAC	HEATING & AIR CONDITIONING HEATING & VENTILATING HEATING, VENTILATING &	Plumb Plywd Pnu	PLUMBING PLYWOOD PNEUMATIC	UNO UH
CFL CS		CONTROL JOINT COUNTERFLASHING (S) COUNTERSINK, COUNTERSUNK	HVC	AIR CONDITIONING HEATING, VENTILATING, COOLING	POL PE	POLISH (ED) PORCELAIN ENAMEL	UK UV UAS
CU		CUBIC COPPER	Hz HPL	HERTZ (CYCLES PER SECOND) HIGH PRESSURE LAMINATE	PCF PLF	POUNDS PER CUBIC FOOT POUNDS PER LINEAR FOOT	VJ
CFM CFS		CUBIC FEET PER MINUTE CUBIC FEET PER SECOND	HV HWY	HIGH VOLTAGE HIGHWAY	PSF PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH	VA VAB
CF CU IN		CUBIC FEET CUBIC INCH	HO HCWD	HOLD OPEN HOLLOW CORE WOOD	PIC PDF	POURED INPLACE CONCRETE POWER DRIVEN FASTENER (ING)	VB VP
CY CYL		CUBIC YARD CYLINDER, CYLINDRICAL	HM HMD HMF	HOLLOW METAL HOLLOW METAL DOOR HOLLOW METAL FRAME	PCC PREFAB PRN	PRECAST CONCRETE PREFABRICATED	VNR VE
DPR DP		DAMPER DAMPPROOF (ED),(ING)	HK HR	HOOK (S) HOUR	PRF	PREFINISH (ED) PREFORMED PREMOLDED	VR, VTR VTR VER, VERT
DL DB		DEAD LOAD DECIBEL	HOR, HORZ. HP	HORIZONTAL HORSEPOWER	PMTL PVT	PRESSED METAL PRIVATE	VHF VLF
DEG DEM		DEGREE DEMOLISH, DEMOLITION	HB HW	HOSE BIBB HOT WATER	PROJ PL, P	PROJECT PROPERTY LINE	VI VNL
DEP DET DIA or	A	DEPRESSED DETAIL	HWR HWC HWF	HOT WATER RETURN HOT WATER, CIRCULATOR	P&I PUB PA	PROVIDE & INSTALL PUBLIC	VCT VB
DIA OF DIAG DIM		DIAMETER DIAGONAL DIMENSION	HWH	HOT WATER FAUCET HOT WATER HEATING HOT WATER TANK	PB PU	PUBLIC ADDRESS SYSTEM PULL BOX	VF VQT VS
DC DCX		DIRECT CURRENT DISCONNECT (ION)	HYD IN	HYDRANT	PP PD	PULL, PULL CHAIN PUMP PUMP DISCHARGE	VT VT VIT
DPN DPL		DISPENSER DISPOSAL, DISPOSABLE	INCL INFO	INCLUDING (ED),(SIVE) INFORMATION	PIV PC	POST INDICATOR VALUE PHYSICALLY CHALLENGED	VC V
DR DBL		DOOR DOUBLE	ID INSL	INSIDE DIAMETER INSULATE (D),(ATION)	PVC QT	POLY VINYL CHLORIDE QUARRY TILE	VWC
DH DTA DTS		DOUBLE-HUNG DOVETAIL ANCHOR		INSULATED METAL CLAD INTERIOR, INTERNAL	RW	RACEWAY	WN WH
DTS DN DS		DOVETAIL ANCHOR SLOT DOWN DOWNSPOUT	INV IE IDM	INVERT INVERT ELEVATION	RAD RA, R R	RADIATOR, RADIATION RADIUS RISER	WHY WTW W
D DI		DRAIN, DRAINAGE LINE DRAIN INLET	JAN	ISOLATE DISC. METALS JANITOR	RL	RAIL, RAILING RAILROAD	WR WC
DT DWG,DRW	NG	DRAIN TILE DRAWING (S)	JT JF	JOINT JOINT FILLER	RECP REF	RECEPTACLE REFERENCE	WHA WP
DF DMH		DRINKING FÓUNTAIN DROP MANHOLE	JS J JCT	JOINT SEALER JOIST	RFL RE	REFLECTIVE REFER TO	WPT(WP) WST
EIFS EW		EXT. INSUL FINISH SYSTEM EACH WAY	JB	JUNCTION JUNCTION BOX	REG RFC	REGISTER REINFORCE (D) (ING)	WE WWF
EA EFF		EACH EFFICIENCY	KVA KW K	KILOVOLT–AMPERE KILOWATT KIP	RC REQ,REQ'D R & S	REINFORCED CONCRÉTE REQUIRE(ED), REQUIREMENTS	WID WF, ULF WG
E, ELECT EP	1	ELECTRIC, ELECTRICAL ELECTRIC PANEL	KD	KNOCK DOWN	R & D R & R	REMOVE AND SALVAGE REMOVE AND DISPOSE REMOVE AND REINSTALL	WM \ W, W/ \
EWC EL, ELEV ENC	/ I	ELECTRIC WATER COOLER ELEVATION ENCLOSE, ENCLOSURE	LAB LAD	LABORATORY LADDER	RESIL RTN	RESILIENT RETAIN (ED) (ER) (ING)	W/IN WO, W/O
EQ, = EQP, EQL	E	EQUAL (TO) EQUIPMENT	LAM LAT	LAMINATE (D) LATERAL	RVS, REV REV	REVERSE (SIDE) REVISE (ED), REVISION	WD V WB V
EXH ED	E	EXHAUST EXHAUST DUCT	LAV LB	LAVATORY LAG BOLT	RPM RPS RH	REVOLUTIONS PER MINUTE REVOLUTIONS PER SECOND	WBM WBO WBO
EF EH	E	EXHAUST FAN EXHAUST HOOD	LBL LBS, # LCC	LABEL POUND'S LEAD COATED CORDER	ROW	RIGHT HAND RIGHT-OF-WAY ROOF DRAIN	WBOR V WBT V WK V
EXIST. EXP FXP	E	EXISTING EXPANSION	LDR	LEAD COATED COPPER LEADER LEFT-HAND	RFG RM	ROOFING	WKRM V WKRM V
EXP EB EJ	E	EXPOSED EXPANSION BOLT EXPANSION JOINT	LWOD LIN	LESS WIDTH OF DOOR LINEN	RO RU	ROUGH OPENING RUBBER	XR X
ET EPS	E	EXTENDED, EXTENSION EXTENDED, EXTENSION EXTRUDED POLYSTYRENE	LP LS	LIGHT PROOF LIMESTONE	RP	RUSTPROOF (ING)	YW
EXT	Ē	EXTERIOR		LINTEL LIVE LOAD			Z Z ZC Z
FAB FO	F	ABRICATE ACE OF	LW	LONG LEG VERTICAL LIGHT WEIGHT			ZC Z ZS Z
FS, FOS FAS FPM	F	ACE OF STUD ASTEN, FASTENER	LOC	LOW PRESSURE LOCATION LOCKER			
FPS FNDR	F F	EET PER MINUTE EET PER SECOND EMININE NAPKIN DISPENSER UNIT	LG LONG	LONG, LENGTH LONGITUDINAL			
FNDP FF	F	EMININE NAPKIN DISPOSAL UNIT INISH FLOOR	L or LH LVR	LONG SPAN STEEL JOIST LOUVER			
			LV	LOW VOLTAGE			

ELMWOOD COMMUNITY CENTER ROOF RESTORATION RFP ATTACHMENT A - CONSTRUCTION DOCUMENTS





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Checked by	AB	
Revised on		

50 Holden Street Providence, Rhode Island 02908 Phone: (401) 272-1730 Fax: (401) 273-7156 E-mail: rgbinfo@rgb.net

Project ELMWOOD COMMUNITY CENTER

Architecture · Project Management · Interior Design

ROOF RESTORATION PROJECT

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# 155 NIAGARA STREET PROVIDENCE, RI 02907

Drawing Status BID SET

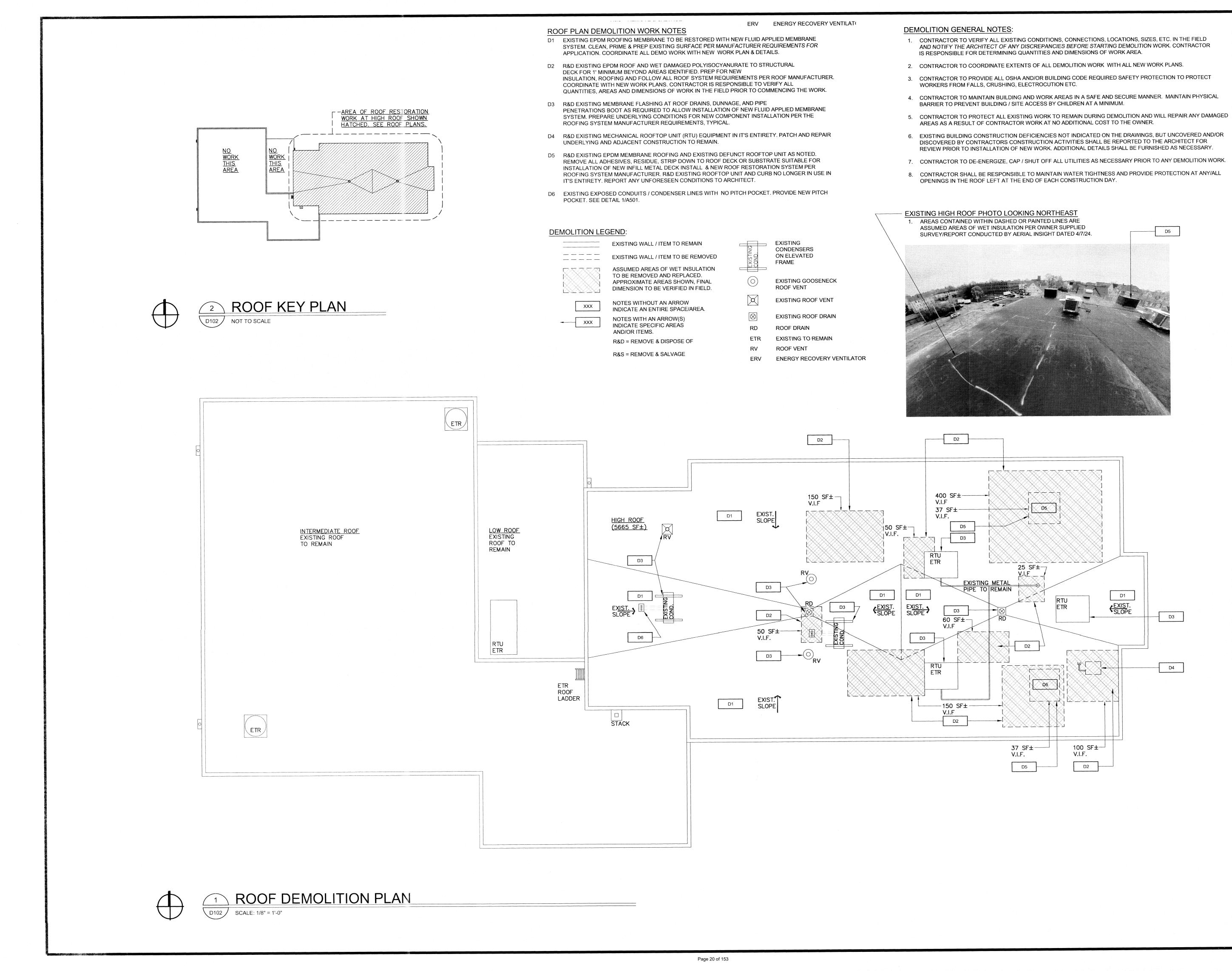
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Sheet Contents

SITE LOGISTICS DIAGRAM

Project Number. 6844

Drawing No. G002 Sheet



	EXISTING WALL / ITEM TO REMAIN	<u> </u>	EXISTING CONDENSERS
	EXISTING WALL / ITEM TO BE REMOVED	XISTIN OND.	ON ELEVATED FRAME
$\mathbb{X}$	ASSUMED AREAS OF WET INSULATION		
	TO BE REMOVED AND REPLACED. APPROXIMATE AREAS SHOWN, FINAL DIMENSION TO BE VERIFIED IN FIELD.	$\bigcirc$	EXISTING GOOSENECK ROOF VENT
xx	NOTES WITHOUT AN ARROW INDICATE AN ENTIRE SPACE/AREA.		EXISTING ROOF VENT
xx ]	NOTES WITH AN ARROW(S)	$\otimes$	EXISTING ROOF DRAIN
	INDICATE SPECIFIC AREAS AND/OR ITEMS.	RD	ROOF DRAIN
	R&D = REMOVE & DISPOSE OF	ETR	EXISTING TO REMAIN
	R&S = REMOVE & SALVAGE	RV	ROOF VENT
	Ras - REIVIOVE & SALVAGE	ERV	ENERGY RECOVERY VE

1. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, CONNECTIONS, LOCATIONS, SIZES, ETC. IN THE FIELD AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING DEMOLITION WORK. CONTRACTOR





ELMWOOD COMMUNITY CENTER ROOF RESTORATION RFP

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# ELMWOOD COMMUNITY CENTER

ROOF RESTORATION PROJECT

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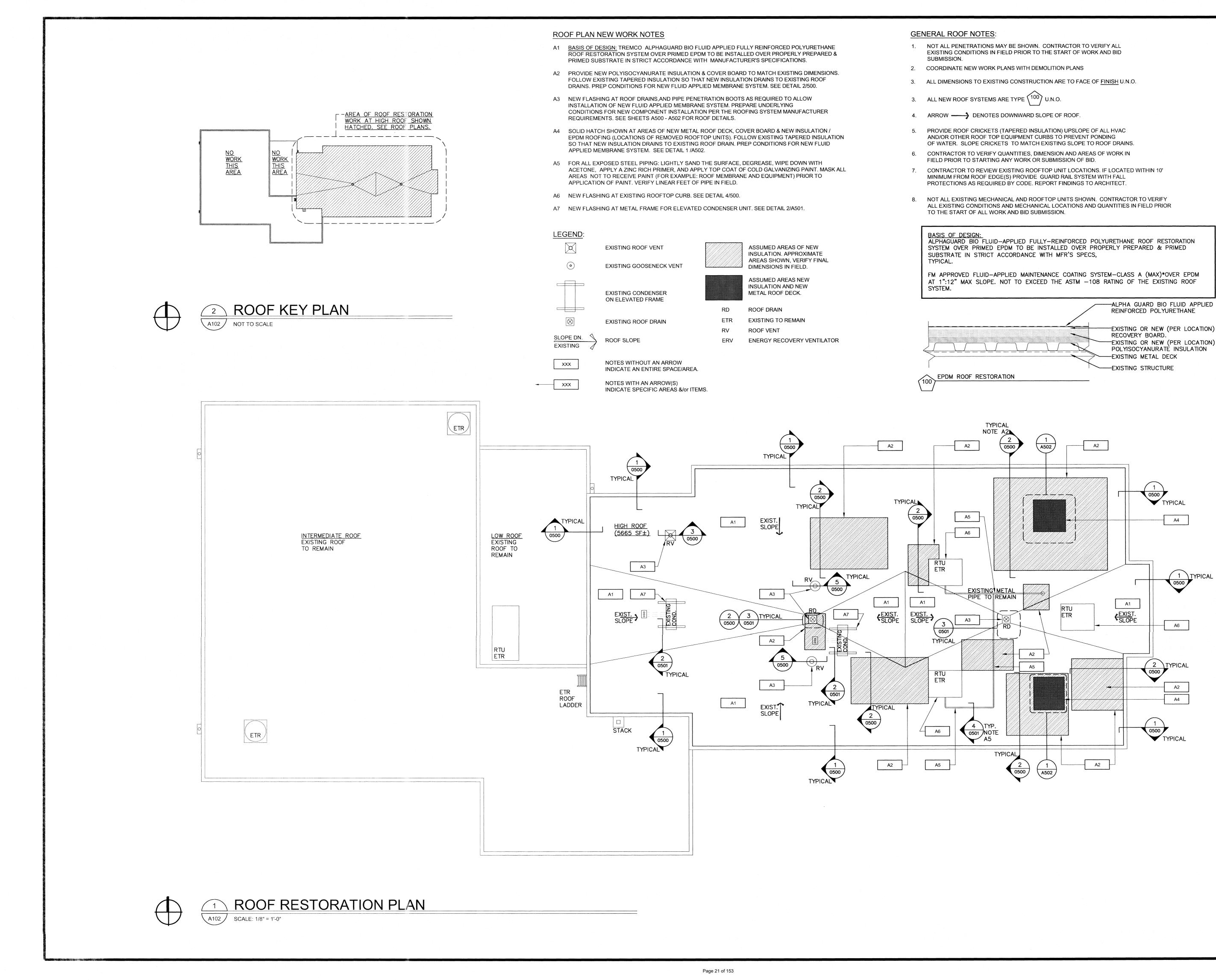
**ROOF DEMOLITION** PLAN

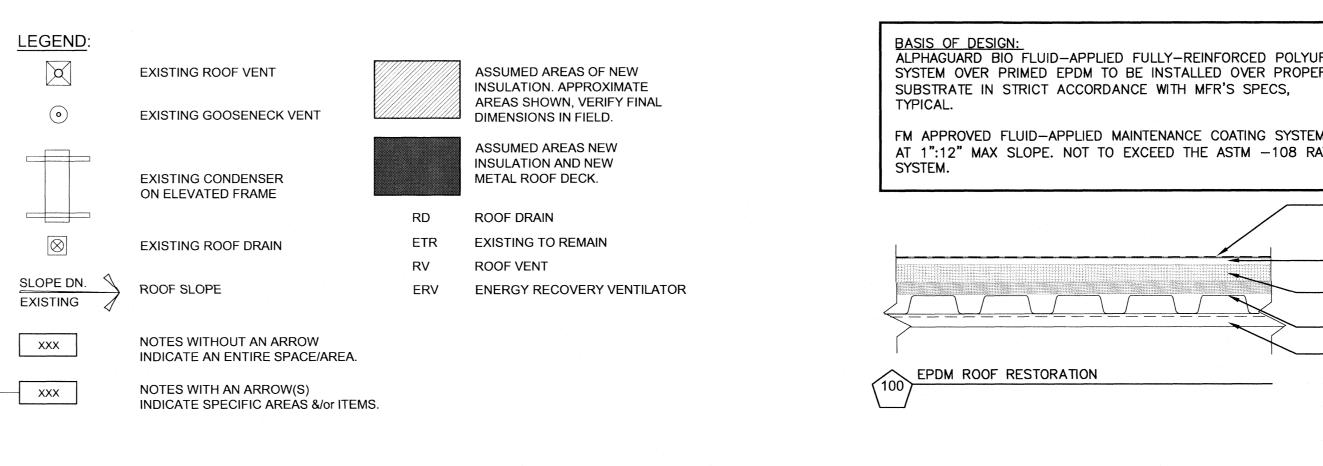
Project Number.

Drawing N

6844 PROVIDENCE COMMUNITY CENTER

D102 Sheet





ELMWOOD	COMMUNITY	CENTER RC	OF RESTO	RATION RFP

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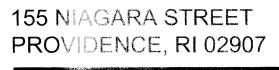


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Project ELMWOOD COMMUNITY CENTER

ROOF RESTORATION PROJECT



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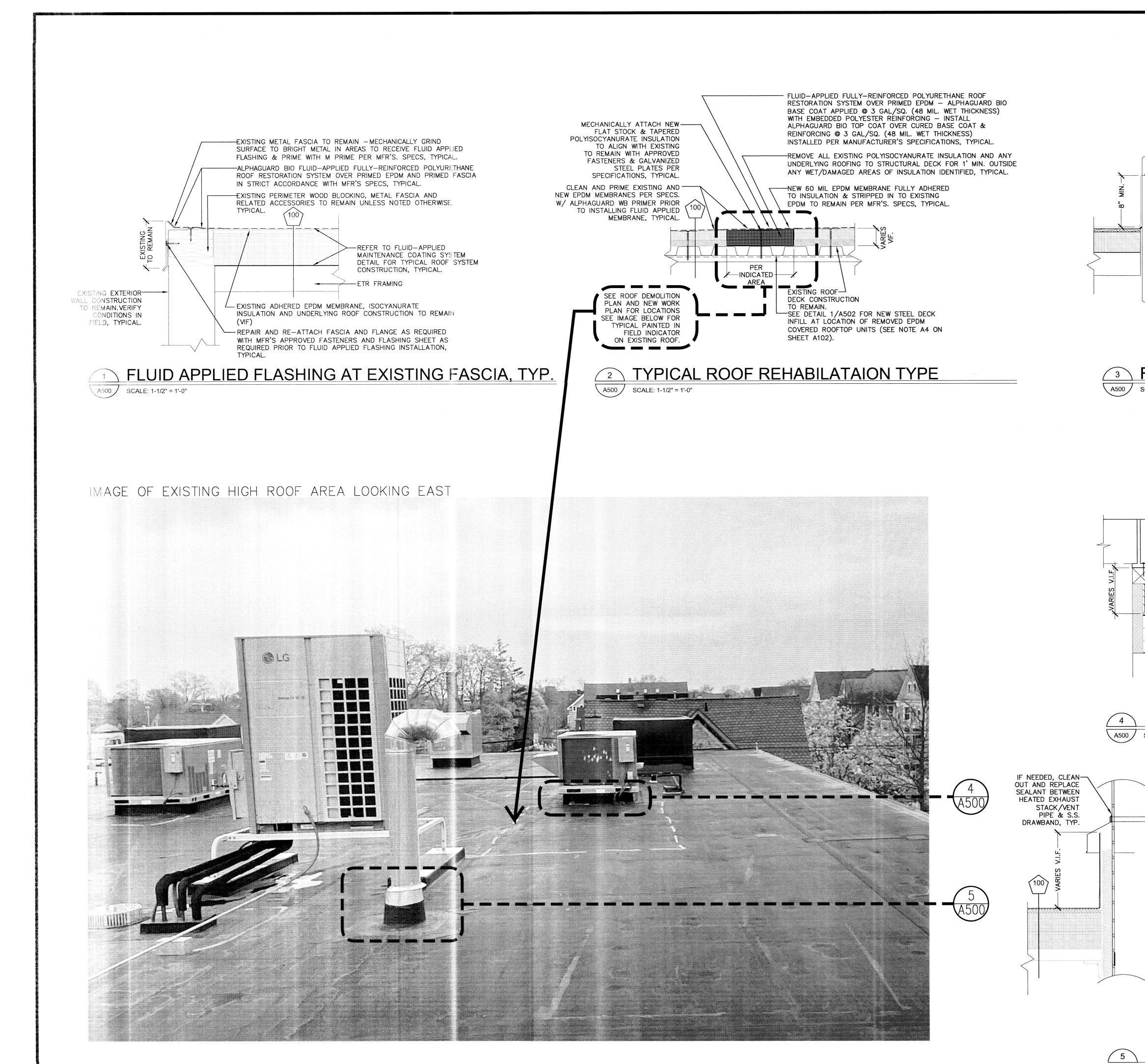
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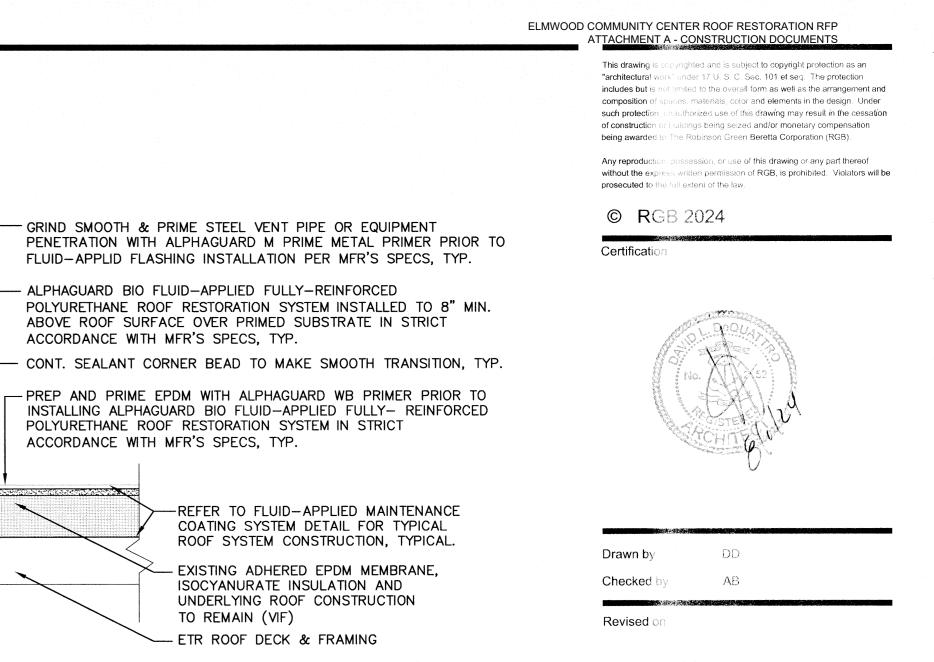
**ROOF RESTORATION** PLAN

Drawing N

Project Number. 6844 PROVIDENCE COMMUNITY CENTER

A102 Sheet

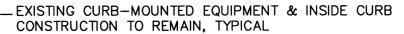




# FLUID APPLIED FLASHING AT VENT PIPE

SCALE: 1-1/2" = 1'-0"

(100)



- SEAL JOINT BETWEEN HVAC UNIT AND LIMIT OF FLUID APPLIED FLASHING WITH COMPATIBLE URETHANE SEALANT AND BACKER ROD, TYPICAL.

ALPHAGUARD BIO FLUID-APPLIED FULLY- REINFORCED
 POLYURETHANE ROOF RESTORATION SYSTEM INSTALLED UP FACE
 OF PRIMED EPDM FLASHING IN STRICT ACCORDANCE WITH MFR'S SPECS, TYPICAL.

-CONT. URETHANE CORNER BEAD TO MAKE SMOOTH TRANSITION AT ALL 90 DEG. INTERSECTIONS AS REQUIRED (TYP) -PREP AND PRIME EPDM WITH ALPHAGUARD WB PRIMER PRIOR TO

INSTALLING ALPHAGUARD BIO FLUID-APPLIED FULLY- REINFORCED POLYURETHANE ROOF RESTORATION SYSTEM IN STRICT ACCORDANCE WITH MFR'S SPECS, TYPICAL.

> -REFER TO FLUID-APPLIED MAINTENANCE COATING SYSTEM DETAIL FOR TYPICAL ROOF SYSTEM CONSTRUCTION, TYPICAL.

-ETR BLOCKING & FRAMING

----ETR ROOF FRAMING

FLUID APPLIED DETAIL AT HVAC CURB, TYP.

A500 SCALE: 1-1/2" = 1'-0"

A500

- EXISTING HEATED EXHAUST STACK / CIRCULAR VENT PIPE TO REMAIN - REPAIR EXISTING COPPER / S.S. VENT SLEEVE & CAP FLASHING WATERTIGHT AS REQUIRED & PRIOR TO INSTALLING NEW FLUID APPLIED FLASHING, TYPICAL.

GRIND EXISTING COPPER / S.S. SLEEVE FLASHING TO BRIGHT FINISH & PRIME WITH M-PRIME PRIOR TO INSTALLING FLUID APPLIED FLASHING PER MFR'S SPECS, TYPICAL. -ALPHAGUARD BIO FLUID-APPLIED FULLY-REINFORCED POLYURETHANE ROOF RESTORATION SYSTEM INSTALLED OVER PRIMED EPDM AND PRIMED SLEEVE FLASHING PER MFR'S. SPECS, TYPICAL. -PREP AND PRIME EPDM WITH ALPHAGUARD WB PRIMER PRIOR

TO INSTALLING ALPHAGUARD BIO FLUID-APPLIED FULLY-REINFORCED POLYURETHANE ROOF RESTORATION SYSTEM IN STRICT ACCORDANCE WITH MFR'S SPECS, TYPICAL.

-REFER TO FLUID-APPLIED MAINTENANCE COATING SYSTEM DETAIL FOR TYPICAL ROOF SYSTEM CONSTRUCTION, TYPICAL.

155 NIAGARA STREET PROVIDENCE, RI 02907

Drawing Status

Issued On 08/01/2024

Sheet Contents ROOF DETAILS

Project Number.



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RGB architects

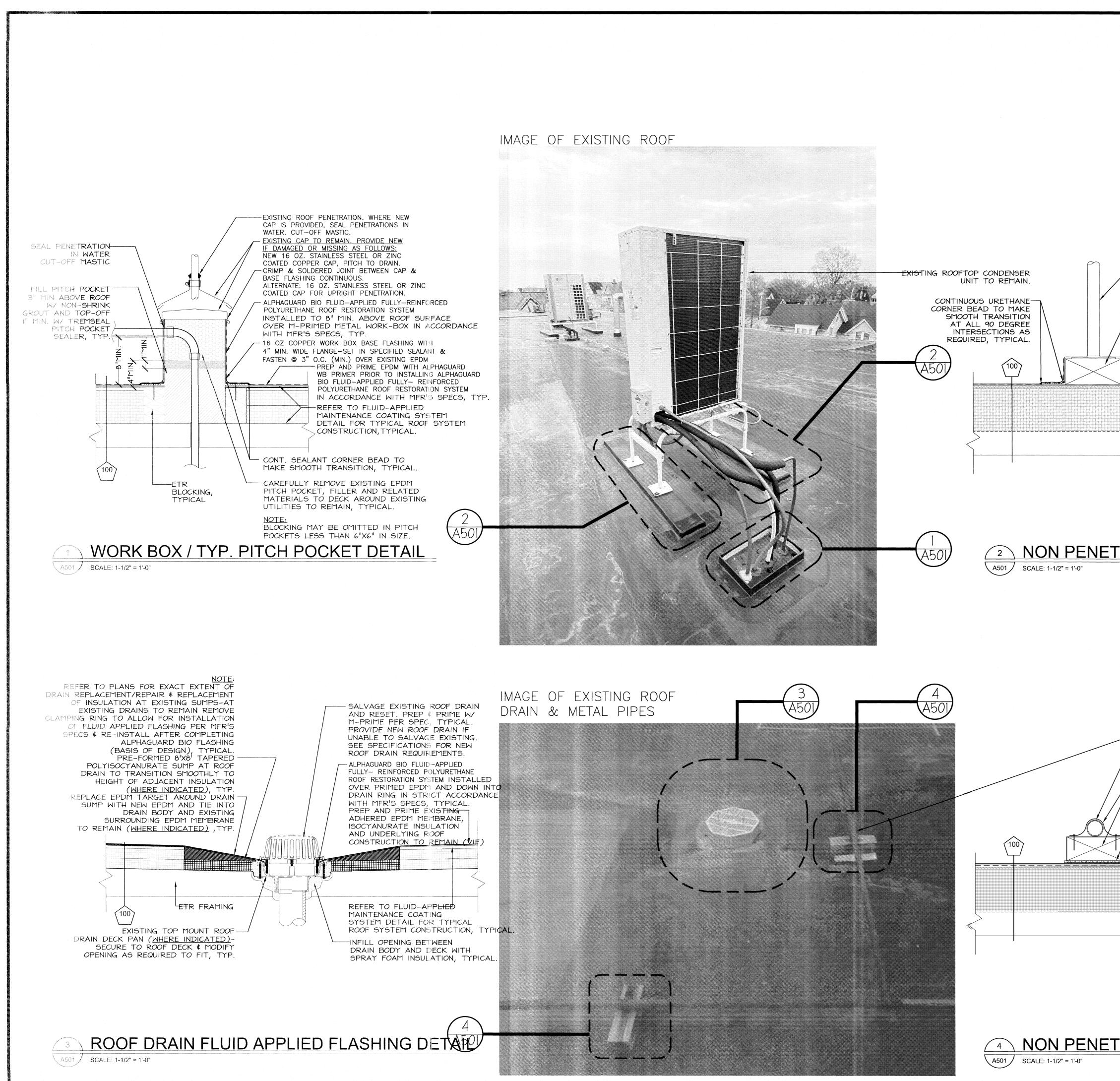
Project ELMWOOD COMMUNITY CENTER

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ROOF RESTORATION PROJECT

A500

6844 PROVIDENCE COMMUNITY CENTER



### ELMWOOD COMMUNITY CENTER ROOF RESTORATION RFP ATTACHMENT A - CONSTRUCTION DOCUMENTS

"a inc cc su of	rchited cludes omposi uch pro constr	tural w but is r ition of otection ruction	ork" unde of limited apaces, r anautho r buildin	ed and is in 17 U. S I to the o naterials, rized use gs being obinson C	6. C. Sec verall for color ar of this d seized a	t 101 e m as v d elen drawing nd/or r	et seq. vell as l nents in g may r nonetal	The p the ar the d esult ry cor	rotec range esign n the npens	tion ment . Unc cess:	der ation
wi	thout t	the expr	ess writh	ssion, or en permis ent of the	ssion of I		~				vill be
(	C	RG	82	024							
С	ertifi	icatio									

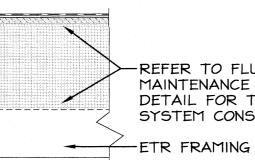
GENERAL NOTES:

- I. THICKNESS OF INSULATION, BLOCKING / ANY OTHER COMPONENTS AND OTHER MATERIALS ARE NOT ACCURATELY-DISPLAYED. ACTUAL WOOD BLOCKING QUANTITIES, INSULATION THICKNESS AND FLASHING HEIGHTS ARE TO BE FIELD VERIFIED (BY BIDDER) PRIOR TO SUBMISSION OF BID.
- 2. PROVIDED DETAILS ARE SUPPLIED IN A "CONCEPTUAL CAPACITY" PRIOR TO COMMENCING WORK, THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING DETAILS/CONSTRUCTION AND PROVIDING SHOP DRAWINGS FOR REVIEW.
- 3. REPORT ANY UNFORESEEN CONDITIONS TO ARCHITECT.
- EXISTING HVAC ROOF TOP UNIT ELEVATED METAL FRAME TO REMAIN.

### - ETR BLOCKING

---PREP, PRIME & EXISTING EPDM COATED BLOCKING WITH ALPHAGUARD BIO FLUID-APPLIED ROOF RESTORATION SYSTEM. COAT UP TO AND OVER EXISTING METAL FRAME.

---PREP AND PRIME EPDM WITH ALPHAGUARD WB PRIMER PRIOR TO INSTALLING ALPHAGUARD BIO FLUID-APPLIED FULLY-REINFORCED POLYURETHANE ROOF RESTORATION SYSTEM IN STRICT ACCORDANCE WITH MFR'S SPECS, TYPICAL.



REFER TO FLUID-APPLIED MAINTENANCE COATING SYSTEM DETAIL FOR TYPICAL ROOF SYSTEM CONSTRUCTION, TYPICAL.

# NON PENETRATING EQUIP. SUPPORT DETAIL, TYP.

- RAISE EXISTING PIPES & FASTENERS TO ALLOW FOR INSTALLATION OF NEW FLUID APPLIED ROOF COATING SYSTEM. EXISTING PIPES TO BE PAINTED, SEE NOTE A5 ON SHEET A102. - REINSTALL EXISTING PIPES & SECURE TO NEW HDPE PLASTIC BLOCK. NEW BLOCK SIZE TO MATCH EXISTING, V.I.F. REUSE EXISTING CLAMP/FASTNERS IF POSSIBLE, OTHERWISE PROVIDE NEW TO MATCH EXISTING. SECURE WITH S.S. GASKETED SCREWS, TYPICAL.

- NEW VR TREMDRAIN 40FD PROTECTION/DRAINAGE MAT BELOW SUPPORT OVER FULLY CURED FLUID APPLIED ROOF COATING SYSTEM, TYPICAL.

-PREP AND PRIME EPDM WITH ALPHAGUARD WB PRIMER PRIOR TO INSTALLING ALPHAGUARD BIO FLUID-APPLIED FULLY-REINFORCED POLYURETHANE ROOF RESTORATION SYSTEM IN STRICT ACCORDANCE WITH MFR'S SPECS, TYPICAL.

> -REFER TO FLUID-APPLIED MAINTENANCE COATING SYSTEM DETAIL FOR TYPICAL ROOF SYSTEM CONSTRUCTION, TYPICAL.

ETR FRAMING

# NON PENETRATING PIPE SUPPORT DETAIL, TYP.

No 2152 No CISTERS
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· · · · · · · · · · · · · · · · · · ·		
Drawn by	DD	
Checked by	AB	
Revised on		

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Project

ELMWOOD COMMUNITY CENTER

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ROOF RESTORATION PROJECT

# **155 NIAGARA STREET** PROVIDENCE, RI 02907

Drawing Status BID SET

Issued On 08/01/2024

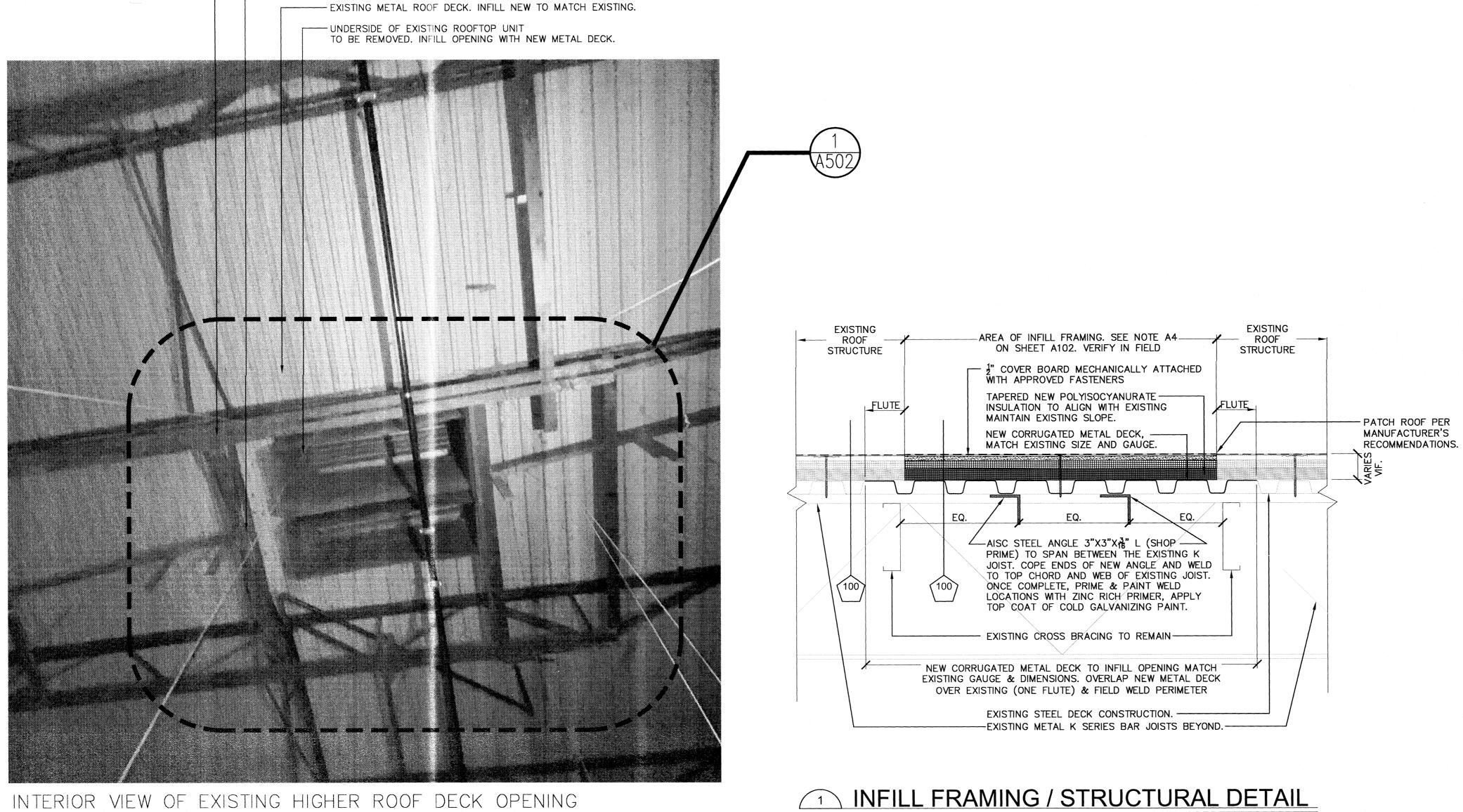
Sheet Contents

**ROOF DETAILS** 

Drawing No

Project Number: 6844 PROVIDENCE COMMUNITY CENTER

A50'



EXISTING BAR JOISTS TO REMAIN. - EXISTING METAL CROSS BRACING TO REMAIN

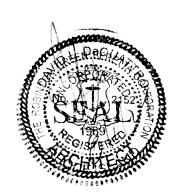
A502 SCALE: 1-1/2" = 1'-0"

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ELMWOOD COMMUNITY CENTER ROOF RESTORATION RFP

Certification



Drawn by	DD	
Checked by	AB	
Revised on		



Project ELMWOOD COMMUNITY CENTER

ROOF RESTORATION PROJECT

# **155 NIAGARA STREET** PROVIDENCE, RI 02907

Drawing Status **BID** SET

Issued On 08/01/2024

Sheet Contents ROOF DETAILS

of

Drawing No.

Sheet

COMMUNITY CENTER A502

Project Number. 6844 PROVIDENCE

# **PROJECT MANUAL SPECIFICATION**

BID DOCUMENTS (DIVISION 00 - 33)

# Elmwood Community Center Roof Restoration Project

# **City of Providence**



## 155 NIAGARA STREET PROVIDENCE, RI 02907

08/01/2024 RGB #6844

### PROJECT MANUAL SPECIFICATION

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### 

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SECTION 00 04 30 - BID BOND FORM

### BID BOND

AlA Document A310 - Bid Bond - 2010 Edition is included, following this page, as an integral part of the Bid documents, and issues of this form signed and executed by the successful Bidder and Surety, will be bound into the executed Contract copies of the Project Manual.

END OF SECTION



### **Bid Bond**

### CONTRACTOR:

(Name, legal status and address)

### SURETY:

(Name, legal status and principal place of business)

OWNER:

Init.

1

(Name, legal status and address)

### **BOND AMOUNT: \$**

PROJECT: (Name, location or address, and Project number, if any)

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

1

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### ELMWOOD COMMUNITY CENTER ROOF RESTORATION RFP ATTACHMENT A - CONSTRUCTION DOCUMENTS

Signed and se	ealed this	day of
---------------	------------	--------

(Witness)

(Contractor as Principal)

(Seal)

(Title)

(Surety)

(Seal)

(Witness)

(Title)

2

SECTION 00 06 10 - PERFORMANCE BOND; PAYMENT BOND

### PERFORMANCE BOND

AIA Document A312 - Performance Bond - 2010 Edition is included, following this page, as an integral part of the Bid documents, and issues of this form signed and executed by the successful Bidder and Surety, will be bound into the executed Contract copies of the Project Manual.

### PAYMENT BOND

AlA Document A312 - Payment Bond - 2010 Edition is included, following this page, as an integral part of the Bid Documents, and issues of this form, signed and executed by the successful Bidder and Surety, will be bound into the executed Contract copies of the Project Manual

END OF SECTION



### Performance Bond

### CONTRACTOR:

(Name, legal status and address)

### SURETY:

(Name, legal status and principal place of business)

**OWNER:** (Name, legal status and address)

CONSTRUCTION CONTRACT
Date:
Amount: \$
Description:
(Name and location)

### BOND

Signature:

Name and

Title:

Date: (Not earlier than Construction Contract Date)

Amount: \$		
Modifications to this Bond:	None [	See Section 16

CONTRACTOR AS PRINCIPAL Company: (Corporate Seal)

Signature: Name and

Company:

SURETY

(Corporate Seal)

Title:

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY - Name, address and telephone) AGENT or BROKER: **OWNER'S REPRESENTATIVE:** (Architect, Engineer or other party:)

### ADDITIONS AND DELETIONS:

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1

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the

Init.

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Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

### § 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

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Init.

§ 16 Modifications to this bond are as follows:

(Space is provided below for add	itional signatures of add	ded parties, other than th	ose appearing on the cover page.)
CONTRACTOR AS PRINCIPAL		SURETY	
Company:	(Corporate Seal)	Company:	(Corporate Seal)

Signature: Name and Title: Address:

Signature: Name and Title: Address:

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4



### **Payment Bond**

### CONTRACTOR:

(Name, legal status and address)

### SURETY:

(Name, legal status and principal place of business)

OWNER: (Name, legal status and address)

### CONSTRUCTION CONTRACT Date: Amount: \$ Description: (Name and location)

### BOND

Date: (Not earlier than Construction Contract Date)

Amount: \$ See Section 18 Modifications to this Bond: None CONTRACTOR AS PRINCIPAL SURETY (Corporate Seal) Company: (Corporate Seal) Company:

Signature: Signature: Name and Name and Title: Title: (Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY - Name, address and telephone) **OWNER'S REPRESENTATIVE:** AGENT or BROKER: (Architect, Engineer or other party:) ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

1

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

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§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### § 16 Definitions

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§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim:
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

3

§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

(Space is provided below for add CONTRACTOR AS PRINCIPAL	litional signatures of ad	ded parties, other than those of <b>SURETY</b>	appearing on the cover page.)	
Company:	(Corporate Seal)	Company:	(Corporate Seal)	
Signature:		Signature:		
Name and Title: Address:		Name and Title: Address:		

4

# SECTION 00 04 50 - LETTER OF INTENT

TO: City of Providence, RI Board of Contract and Supply Department of the City Clerk - City Hall, Room 311 25 Dorrance Street Providence, RI 02903

FOR: \_\_\_\_

To Whom it may concern:

This is to advise you that the \_\_\_\_\_

(Legal Name of Surety)

who is authorized to do business in the State of Rhode Island, is prepared to execute a Performance Bond and Labor and Material Payment Bond, AIA Document A312, each in the amount of 100 percent of the Contract, for the: Elmwood Community Center Roof Restoration Project.

(Legal Name of General Bidder)

should they be awarded a contract for the construction of the

(Name of Surety)

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

(Authorized Representative)

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

Print or Type name:

Date:

END OF SECTION 00 65 00

# SECTION 007400 – LABOR REQUIREMENTS

Wage Determination

- 1. Bids are subject to M.G.L. c. 149 Prevailing Wage Rates apply to this project as determined by the Rhode Island Department of Labor Standards and the U.S. Dept. of Labor.
- 2. Comply with the Code of Federal Regulations Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction 29 CFR 5.5
- 3. Davis Bacon and related Acts

The contractor must comply with the minimum rates for wages for laborers and mechanics as determined by the Secretary of Labor in accordance with the provisions of the Davis-Bacon and Related Acts. The Contractor must provide written certification that they and their subcontractors have complied with the requirements of the Davis-bacon and related Acts for the period during which the work was performed.

Other:

1. Comply with Section 000020 - City of Providence, RI Board of Contract & Supply Request for Proposal.

END OF SECTION 00 74 00

ELMWOOD COMMUNITY CENTER ROOF RESTORATION

SECTION 01 10 00 - SUMMARY OF THE WORK

GENERAL

### RELATED DOCUMENTS

- A. The General Conditions, Supplementary Conditions and applicable portions of Division 1 of the Specification are a part of this Section, which shall consist of all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for the proper execution and completion of the work, whether temporary or permanent and whether or not incorporated or to be incorporated in the work; and as related to the project or projects defined in the Bidding Requirements.
- B. The specification format used herein is in accordance with MASTERFORMAT, CSI and in no way intends to restrict this Contractor from expediting his work as they see fit. There is no intention of segregating the units of work as related to specific trades involving jurisdictional problems.

## WORK COVERED BY CONTRACT DOCUMENTS

Project Identificati	on: Elmwood Community Center Roof Restoration Project
Project Location:	155 Niagara Street, Providence RI 02902
Owner:	City of Providence, Rhode Island
Architect:	The Robinson Green Beretta Corporation
	50 Holden Street, 4 <sup>th</sup> floor,
	Providence, RI 02908
Contractor:	To be determined.

#### SUMMARY OF THE WORK

- C. The scope of the work on this project includes but is not limited to:
- Restoration of the existing EPDM membrane roofing and flashings on the highest portion of the building. The work under this contract will also include the removal and proper disposal of abandoned and nonfunctional RTU/HVAC units no longer in service. Refer to all contract documents drawings and the project manual specification for details.

#### CONTRACTOR'S DUTIES

1. The Contractor is responsible for all personnel involved in the work, including those of his direct employ, his sub-contractors and suppliers of materials and equipment and/or labor. The Technical Specifications have been divided for convenience only to cover the scope of work, and where reference to a particular contractor is noted, it is for convenience only. The Owner and Architect only recognize one Contractor as party to this Contract.

- 2. As it is impractical to enumerate every piece of equipment or device required for proper operation, Sections or Divisions of the Project Manual; call for material and systems, required to ensure proper operation of the roof to be provided as a part of the Work of this Project. To infer the intent is otherwise is to render the specified work or system less than required.
- 3. Except as specifically noted, provide and pay for:
  - a) Labor, materials, and equipment.
  - b) Tools, construction equipment, and machinery.
  - c) Other facilities and services necessary for execution and completion of the Work.
- D. Secure and pay for, as necessary for proper execution and completion of the Work, and as applicable at the time of receipt of Bids:
  - 1. Permits.

All permit fees and obtaining the construction permits is the responsibility of the Contractor, unless noted otherwise.

- 2. City, Town, or Government fees.
- 3. Licenses.
- 4. Utility connection fees
- E. Give required notices for operations that may disturb the function of the facility.
- F. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities which bear on the performance of the Work.
- G. Promptly submit a written notice, within five business days of discovery, to the Architect of observed variance of Contract Documents from legal requirements.
- H. Enforce strict discipline and good order among employees. Do not employ persons not skilled in the assigned task.
- I. Notify all trades, sub-contractors and suppliers of all designated alternatives and be responsible for their coordination.
- J. At your option, certain indicated materials and/or procedures are specified herein to be used in lieu of other indicated materials and/or procedures, at no change in Contract Price. Such options should be analyzed and coordinated during the bidding period, so that the selection of any will be brought to the Architect's attention once the Contract is awarded (within thirty days thereafter).

# HEALTH AND SAFETY PRECAUTIONS

A. OSHA:

1. These construction documents, and the joint and several phases of construction hereby contemplated, are to be governed, at all times, by the applicable portions of the Federal Laws, including but not limited to, the latest amendments of the following:

Williams-Steiger Occupational Safety and Health Act of 1970, Public Law 91-956;

- Part 1910 Occupational Safety and Health Standards, Title 29, Code of Federal Regulations, as amended to date.
- Part 1926 Safety and Health Regulations for Construction, Title 29, Code of Federal Regulations, as amended to date.
  - 2. This Project, the Contractor and his sub-contractors shall, at all times, be governed by applicable Chapters of Title 29, Code of Federal Regulations, Part 1926 Safety and Health Regulations for Construction, as amended to date.

Note: Furnish the Owner and Architect copies of all accident reports.

- B. Emergencies:
  - 1. Should tornado, hurricane, gale or heavy wind warnings be issued, take precautions to minimize the danger to persons, the work, and the adjacent property. Damage caused to any part of the work shall be rectified or replaced to the complete satisfaction of the Architect and Owner, at no expense to the Owner. Injury to personnel or damage to adjacent property because of the work shall be the complete responsibility of the Contractor, and they accept exclusive responsibility for same.
- C. Loading:
  - 1. Do not load any part of the existing work involved in this Contract, during construction, with a load greater than it is calculated to carry with safety. Should any accidents or damage occur through any violation of this requirement, the Contractor shall be held responsible under their Contract and Bond. When, in the opinion of the Architect, portions of the existing areas appear to be overloaded, it shall be the Contractor's responsibility to prove otherwise, or the Contractor shall follow the instructions of the Architect in connection with the reduction of the loads.
  - 2. Contractor to review existing site conditions. Protect systems from damage. Repair or replace any existing to remain systems unless noted otherwise.

#### PROJECT RECORD DOCUMENTS

- A. Maintain at the job site, one copy of:
  - Contract Drawings, Specifications, Addenda, Reviewed Shop Drawings, Record Drawings, Approved materials, samples, and color selections.
- B. Store documents in an approved location, apart from documents used for construction.
- C. Maintain documents in clean, dry, legible condition.

ELMWOOD COMMUNITY CENTER ROOF RESTORATION

- D. Do not use record documents for construction purposes.
- E. Make documents available for inspection by Architect and Owner at all times.
- F. Recording changes:
  - 1. Keep record documents current.
  - 2. Do not permanently conceal any work until required information has been recorded.
  - 3. Contract Drawings: Legibly mark to record actual construction and the following:
  - Record field changes of dimensions and details.
  - Record changes made by Change Order or Field Order.
  - Record details not on original Contract Drawings.
  - 4. Specifications and Addenda: Legibly mark up each Section to record the following:

Manufacturer, name, number, and supplier of each product and item actually installed.

Changes made by Change Order and Field Directive.

Other matters and materials not previously specified.

5. Shop Drawings: Maintain as record documents; legibly annotate drawings to record changes after review.

#### TRANSPORTATION AND HANDLING

- A. Transport all materials and equipment on legally approved conveyances as required or recommended by the respective manufacturer or supplier.
  - 1. Obtain permits, as required.
- B. Receive and handle all materials and equipment, at the project site, by conveyances or methods as recommended by the respective manufacturer or supplier.
- C. Coordinate delivery of equipment and materials when two or more trades, contractors or suppliers, are involved.
- D. Remove from the site any material or item of equipment damaged during the transportation or handling process, and immediately replace it at no additional cost to the Owner.

STORAGE AND PROTECTION

A. Store all materials and equipment as recommended by respective manufacturer or supplier, including the following minimum requirements.

ELMWOOD COMMUNITY CENTER ROOF RESTORATION

- B. Upon receipt of materials and equipment, check, distribute, store, and safeguard in a clean, dry location.
- C. Items stored in exterior locations, elevate off the ground and completely cover them appropriately. Always protect against the elements.
- D. Maintain all storage areas in a clean and orderly condition at all times.
- E. Immediately replace any material or item damaged due to inadequate storage protection, at no additional cost to the Owner.

## CUTTING AND PATCHING

- A. Execute cutting, fitting or patching work to:
  - 1. Make component parts fit properly.
  - 2. Uncover work to provide for installation of ill-timed work.
  - 3. Remove and replace any defective work.
  - 4. Remove and replace work not conforming to the Contract Documents.
  - 5. Remove samples of installed work, as specified, for testing.
  - 6. Install specified work in existing construction.
- B. In addition to the Contract requirements, upon written instructions from Architect:
  - 1. Uncover work to provide for Architect's observation of covered work, as required by General Conditions.
  - 2. Remove samples of installed materials for testing as required by the General Conditions.
- C. Do not endanger any work by cutting or altering work, or any part of it.
- D. Do not cut or alter the work of another Contractor without written permission of the Architect.
- E. Prior to cutting any element which affects the structural safety of the Project, or the work of another Contractor, submit written notice to Architect requesting consent to proceed with cutting.
- F. Prior to cutting and patching, done on instruction of the Architect, submit written cost estimate.
- G. Should conditions of work, or schedule, indicate change of materials or methods, submit written recommendations to the Architect and Owner including:
  - 1. Conditions indicating the need for change.
  - 2. Recommendations for alternative materials or methods.

ELMWOOD COMMUNITY CENTER ROOF RESTORATION

- 3. Submittals required for Substitutions.
- 4. Impact on operations and maintenance, both long and short term.
- H. Submit written notice to the Architect and Owner, designating time work will be uncovered, to provide for observation.
- I. Payment for costs caused by ill-timed or defective work, or work not conforming to the Contract Documents, including costs for additional services of Architect or other costs to the Owner will be borne by the Contractor.

Contractor Inspection:

1. Inspect existing conditions of work, and elements subject to movement or damage during the proposed construction

Cutting and patching.

- 2. After uncovering work, inspect conditions affecting installation of new products.
- A. Preparation: (prior to cutting)
  - 1. Provide shoring, and bracing support required to maintain structural integrity of the Project.
  - 2. Provide protection from the elements appropriate to fully protect other portions of the Project from dust, fumes, humidity, etc.
- B. Performance: Perform all work of fitting, adjustment, cutting, patching, finishing, and restoration to perfectly match the quality as specified throughout these specifications by trade persons skilled in the work being performed.

### CONTRACTOR USE OF PREMISES

- A. Confine operations at the site to areas permitted by: Owner, Law, Ordinances, and Permits.
- B. Do not unreasonably encumber the site with materials and equipment.
- C. Do not load the structure with weight that will endanger the structure.
- D. Assume full responsibility for protection and safekeeping of products stored on the premises.
- E. Move any stored products which interfere with operations of the Owner.
- F. Limit use of site for work and storage within confines of the Project Limit Line.
- G. Limit use of Project site to work in areas within the Contract limits indicated. Do not disturb portions of the Project site beyond areas in which the work is indicated.
  - 1. Confine construction operations to areas indicated/allowed by the Owner.

2. Driveway, Walkways and Entrances: Keep driveway, parking, loading areas and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Schedule deliveries to minimize use of driveway and entrances by construction operations.

### COORDINATION WITH OCCUPANTS

- A. Schedule early completion of designated areas for Owner's usage prior to Substantial Completion of the entire Project.
- B. Contractor to provide:
  - 1. Access for Owner & Building personnel.
  - 2. Operation of mechanical and electrical systems.
  - 3. Prior to occupancy, execute a Certificate of Substantial Completion for designated areas.

# WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Contractor to coordinate work hours with Owner.
  - 1. Coordinate with owner on operation of facility, and extent to be maintained during construction.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
  - 1. Notify Owner not less than three days in advance of any proposed utility interruptions.
  - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
  - 1. Notify Owner not less than three days in advance of proposed disruptive operations. Obtain Owner's written permission before proceeding with work.
- E. Nonsmoking Building: Smoking or Mechanical Vaporization is not permitted within 50 feet of entrances, operable windows, or outdoor-air intakes.

END OF SECTION 01 10 00

# SECTION 01 10 10 – CONTRACT LIST OF DRAWINGS

PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

- A. The General Conditions, Supplementary Conditions and applicable portions of Division 1 of the specification are a part of this Section, which shall consist of all labor, equipment and materials necessary to complete all project meeting work indicated on the drawings and herein specified.
- 1.2 CONTRACT LIST OF DRAWINGS:

# ARCHITECTURAL

- A. COVER SHEET
- B. G001 ABBREVIATIONS & SYMBOLS
- C. G002 SITE LOGISTICS DIAGRAM
- D. D102 ROOF DEMOLITION PLAN
- E. A102 ROOF RESTORATION PLAN
- F. A500 ROOF DETAILS
- G. A501 ROOF DETAILS
- H. A502 ROOF DETAILS

END OF SECTION 01 10 10

SECTION 01 20 00 - PROJECT MEETINGS

PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. The General Conditions, Supplementary Conditions and applicable portions of Division 1 of the specification are a part of this Section, which shall consist of all labor, equipment and materials necessary to complete all project meeting work indicated on the drawings and herein specified.
- 1.2 RELATED REQUIREMENTS SPECIFIED ELSEWHERE
  - A. Summary of the Work: Section 01 10 00.
  - B. Project Management and Coordination: Section 01 31 00.
  - C. Construction Progress Documentation: Section 01 32 00.
  - D. Shop Drawings, Project Data and Submittals: Section 01 33 00.
- 1.3 PRE-INSTALLATION CONFERENCES:
  - A. Roofing system Installation Conference.

# 1.4 PRECONSTRUCTION MEETING

- A. Scheduled, by the Architect, within ten days after Notice to Proceed.
- B. Attendance:
  - 1. Owner or Representatives.
  - 2. Architect and his Consultants.
  - 3. Contractor.
  - 4. Major Sub-contractors.
- C. Minimum Agenda:
  - 1. Distribution and discussion of:
    - a. List of Major Sub-contractors.
    - b. Tentative Construction Schedule.
  - 2. Critical work sequencing.
  - 3. Relation and coordination of Contractors.
  - 4. Designation of responsible personnel.
  - 5. Processing of field decisions and Change Orders.
  - 6. Adequacy of distribution of Contract Documents.

- 7. Submittal of shop drawings, project data and samples.
- 8. Procedures for maintaining record documents.
- 9. Use of Premises:
  - a. Site access and storage/staging areas.
  - b. Owner's requirements.
- 10. Major equipment deliveries and priorities.
- 11. Housekeeping procedures.
- 12. Procedures for Project Closeout, including "punch list" preparation and "Substantial Completion" requirements.

#### 1.5 PROGRESS MEETINGS

- A. Scheduled, agendas prepared and administered by the Contractor.
  - 1. Distribute written notice and agendas of Regular and Called Meetings, three days in advance of meeting date.
  - 2. Make physical arrangements for meetings, as required. For virtual meetings via Microsoft Teams or another approved platform may be accepted where in person meetings are not required.
  - 3. Preside at meetings.
  - 4. Record meeting minutes, that include significant decisions or proceedings.
  - 5. Distribute copies to all attendees, within three days after the meeting.
- B. Architect will attend meetings to ascertain that Work is expedited consistent with Construction Schedule and with the Contract Documents.
- C. Schedule Regular Meetings on a day and time agreeable to all parties.
- D. Hold Called Meetings as progress of the Work dictates.
- E. Location of meetings, as indicated in the Notice.
- F. Attendance:
  - 1. Owner or Representative, when required.
  - 2. Architect and his Consultants, as required.
  - 3. Contractor.
  - 4. Subcontractors, pertinent to agenda.
  - 5. Safety Representative.
- G. Minimum Agenda:
  - 1. Review and approve minutes of previous meeting.
  - 2. Review Work progress since last meeting.
  - 3. Note field observations, problems and decisions.
  - 4. Identify issues/items that may impede progress.
  - 5. Develop corrective measures to regain planned schedule.
  - 6. Revise Construction Schedule as required.
  - 7. Plan progress during next work period. Coordinate with other Contractors.

- 8. Review submittal schedules, expedited to maintain schedule.
- 9.
- Review quality and work standards. Review changes proposed by Owner for: 10.
  - Effect on Construction Schedule. a.
  - Effect on Completion Schedule. b.
- 11. Other current business.

END OF SECTION 012000

# SECTION 01 22 18 - UNIT PRICE FORM

## UNIT PRICES:

## Submit this completed section with the bid form if unit costs are not provided on the bid form.

The undersigned agrees that the following unit prices are applicable for additional work required from that as specified or shown on the Contract Documents. The prices herein established are for additional work and include the net cost plus overhead and profit. The contractor's fees listed under (A) items will apply to account for pricing.

The following Unit Prices will constitute the basis for additions to the Contract as may be required during the life of the Contract:

### LIST OF UNIT PRICES

No.	ITEM	UNIT	ADDITIONS	DEDUCTIONS
1	Wood component replacement	1 In. ft		

- 1. Wood Component replacement: Removal and replacement of deteriorated wood components. Pertaining to the underlying blocking and or framing. New solid pressure treated wood item to match existing in size shape and configuration. Demolished materials to be removed and properly disposed of offsite.
  - A. Additions: Contractor shall be compensated by Owner <u>\$</u> / Per 1 In. ft. for each additional linear foot of wood framing repair, as confirmed by the Architect and submitted to the Owner in writing.

No.	ITEM	UNIT	ADDITIONS	DEDUCTIONS
2	Steel Roof Deck	10 sq. ft		

- 2. Steel Roof Deck: Unforeseen deteriorated steel roof deck removal & and replacement (w/ new 1 ½" galvanized 20-gauge steel deck). New deck to match existing in size shape and configuration. Demolished materials to be removed and properly disposed of offsite.
  - A. Additions: Contractor shall be compensated by Owner <u>\$</u>/ Per 10 sq. ft. for additional square foot of steel deck repair, as confirmed by the Architect and submitted to the Owner in writing.

No.	ITEM	UNIT	ADDITIONS	DEDUCTIONS
3	Polyisocyanurate Insulation and EPDM Roofing	5 sq. ft		

- **3.** Polyisocyanurate Insulation and EPDM Roofing: Unforeseen deteriorated polyisocyanurate insulation, EPDM roofing membrane and ½" cover board removal & and replacement (All New Insulation thickness to match existing. Include new cover board to match existing thickness). Demolished materials to be removed and properly disposed of offsite.
  - B. Additions: Contractor shall be compensated by Owner <u>\$</u>/ Per sq. ft. for additional square footage of Insulation, EPDM roofing and ½" coverboard outside of what is noted on demolition roof plan, new roof plan and details as confirmed by the Architect and submitted to the Owner in writing.

END OF SECTION

# SECTION 01 25 00 - SUBSTITUTION PROCEDURES

# PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
  - 1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
  - 2. Divisions 02 through 33 Sections for specific requirements and limitations for substitutions.

### 1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer an advantage to Contractor or Owner.

#### 1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use CSI Form 13.1A and/or facsimile of form provided in Project Manual.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
    - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by the Owner and separate contractors that will be necessary to accommodate proposed substitution.
    - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size,

durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

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

# 1.5 QUALITY ASSURANCE

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

# 1.6 PROCEDURES

A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

# PART 2 - PRODUCTS

## 2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - b. The substitute request is fully documented and properly submitted.
    - c. Requested substitution will not adversely affect Contractor's construction schedule.
    - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - e. Requested substitution is compatible with other portions of the Work.
    - f. Requested substitution has been coordinated with other portions of the Work.
    - g. Requested substitution provides specified warranty.
    - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Generally, not allowed unless otherwise indicated.
- C. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed and/or the Notice of Award. Requests received after that time may be considered or rejected at discretion of Architect.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
    - b. Requested substitution does not require extensive revisions to the Contract Documents.
    - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - d. The substitute request is fully documented and properly submitted.
    - e. Requested substitution will not adversely affect Contractor's construction schedule.
    - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - g. Requested substitution is compatible with other portions of the Work.
    - h. Requested substitution provides specified warranty.
    - i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved

END OF SECTION 01 25 00

# SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

# PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
  - 1. Division 01 Section "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

### 1.3 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions.

#### 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within 10 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.

- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
- 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- 4. Include costs of labor and supervision directly attributable to the change.
- 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- 6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

# 1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Work Changes Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

# 1.6 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

The Construction Change Directive contains a complete description of changes in the Work. It also designates a method to be followed to determine change in the Contract Sum or the Contract Time.

- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

END OF SECTION 01 26 00

# SECTION 01 29 00 - PAYMENT PROCEDURES

# PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
  - 1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - 2. Division 01 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

#### 1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

#### 1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
  - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
    - a. Application for Payment forms with continuation sheets.
    - b. Submittal schedule.
    - c. Items indicated as separate activities in Contractor's construction schedule.
  - 2. Submit the schedule of values to Architect at earliest possible date, but no later than ten days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
  - 1. Identification: Include the following Project identification on the schedule of values:

- a. Project name and location.
- b. Name of Architect.
- c. Architect's project number.
- d. Contractor's name and address.
- e. Date of submittal.
- 2. Arrange schedule of values with format of AIA Document G703.
- 3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
  - a. Related Specification Section or Division.
  - b. Description of the Work.
  - c. Name of subcontractor.
  - d. Name of manufacturer or fabricator.
  - e. Name of supplier.
  - f. Change Orders that affect value.
  - g. Dollar value of the following, as a percentage of the Contract Sum to nearest onehundredth percent, adjusted to total 100 percent.
    - 1) Labor.
    - 2) Materials.
    - 3) Equipment.
- 4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
- 5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased and stored, but not yet installed.
  - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
- 6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7. Purchase Contracts: Provide a separate line item in the schedule of values for each purchase contract. Show line-item value of purchase contract. Indicate owner payments or deposits, if any, and balance to be paid by Contractor.
- 8. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
  - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
- 9. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders result in a change in the Contract Sum.

# 1.5 APPLICATIONS FOR PAYMENT

A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.

- 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
  - 1. Submit draft copy of Application for Payment seven days prior to due date for review by Architect.
- C. Application for Payment Forms: Use AIA Document G703 as form for Applications for Payment.
- D. Application for Payment Forms: Use forms provided by Owner for Applications for Payment. Sample copies are included in the Project Manual.
- E. Application Preparation: Complete every entry on the form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
  - 1. Entries shall match data on the schedule of values and Contractor's construction schedule.
  - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  - 3. Include amounts of Change Orders issued before the last day of construction period covered by application.
- F. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
  - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
  - 2. Provide supporting documentation that verifies the amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  - 3. Provide summary documentation for stored materials indicating the following:
    - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- G. Transmittal: Submit four signed and notarized original copies of each Application for Payment to the Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments.
  - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

- H. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
  - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  - 2. When an application shows completion of an item, submit conditional final or full waivers.
  - 3. The Owner reserves the right to designate which entities involved in the Work must submit waivers.
  - 4. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- I. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
  - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  - 2. When an application shows completion of an item, submit conditional final or full waivers.
  - 3. The Owner reserves the right to designate which entities involved in the Work must submit waivers.
  - 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
  - 5. Waiver Forms: Submit executed waivers of lien on forms, acceptable to Owner.
- J. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  - 1. List of subcontractors.
  - 2. Schedule of values.
  - 3. Contractor's construction schedule (preliminary if not final).
  - 4. Products list.
  - 5. Schedule of unit prices.
  - 6. Submittal schedule.
  - 7. List of Contractor's staff assignments.
  - 8. List of Contractor's principal consultants.
  - 9. Copies of building permits.
  - 10. Copies of authorizations and licenses from authorities having jurisdiction.
  - 11. Report of preconstruction conference.
  - 12. Certificates of insurance and insurance policies.
  - 13. Performance and Payment Bonds.
  - 14. Data needed to acquire Owner's insurance.
- K. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
  - 1. Include documentation supporting the claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  - 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- L. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

- 1. Evidence of completion of Project closeout requirements.
- 2. Insurance certificates for products and completed operations as required in proof that taxes, fees, and similar obligations were paid.
- 3. Updated final statement, accounting for final changes to the Contract Sum.
- 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
- 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
- 6. AIA Document G707, "Consent of Surety to Final Payment."
- 7. Evidence that claims have been settled.
- 8. Substantial Completion or when Owner assumes possession of and responsibility for corresponding elements of the Work.
- 9. Final liquidated damages settlement statement.
- 10. Building code required contractor certification.

END OF SECTION 01 29 00

# SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

# PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. General coordination procedures.
  - 2. Coordination drawings.
  - 3. Requests for Information (RFIs).
  - 4. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- C. Related Requirements:
  - 1. Division 01 Section "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
  - 2. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

#### 1.3 DEFINITIONS

A. RFI: Request for Information, from Owner, Architect, or Contractor seeking clarifications of the Contract Documents.

### 1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, and telephone number of the entity performing subcontract or supplying products.
  - 2. Number and title of related Specification Section(s) covered by subcontract.
  - 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including the superintendent and other personnel in attendance at the project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers and e-mail addresses. Always keep this list current.

# 1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, which depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, which depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on the installation of other components, before or after its installation.
  - 2. Coordinate installation of different components with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors when appropriate and/or required, to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of Contractor's construction schedule.
  - 2. Preparation of the schedule of values.
  - 3. Installation and removal of temporary facilities and controls.
  - 4. Delivery and processing of submittals.
  - 5. Progress meetings.
  - 6. Project closeout activities.

#### 1.6 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings, at a scale not less than 1/4" = 1'-0", according to requirements in individual Sections, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate the integration of products and materials fabricated or installed by more than one entity.
  - 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
    - a. Use applicable Drawings as a basis for the preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe the relationship of various systems and components.
    - b. Indicate required installation sequences.

c. Indicate the dimensions shown on the Drawings. Specifically, note dimensions that appear to conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to the Architect indicating the proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

# 1.7 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
  - 1. Architect will return RFIs submitted to the Architect by other entities controlled by the Contractor with no response.
  - 2. Coordinate and submit RFIs promptly to avoid delays in the Contractor's work or the work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of the item needing information or interpretation and the following:
  - 1. Project name, Project number, and Date.
  - 2. Name of Contractor.
  - 3. Name of Architect.
  - 4. RFI number, numbered sequentially.
  - 5. RFI subject.
  - 6. Specification Section number and title and related paragraphs, as appropriate.
  - 7. Drawing number and detail references, as appropriate.
  - 8. Field dimensions and conditions, as appropriate.
  - 9. Contractor's suggested resolution. If the Contractor's suggested resolution impacts the Contract Time or the Contract Sum, the Contractor shall state the impact in the RFI.
  - 10. Attachments: Include sketches, descriptions, measurements, photos, data, Shop Drawings other information necessary to fully describe items needing interpretation.
  - 11. Include dimensions, thicknesses, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: Contractors standard AIA form or AIA Document G716, Software-generated form with substantially the same content as indicated above, acceptable to Architect.
  - 1. Attachments shall be electronic files in digital PDF format.
- D. Architect's Action: The Architect and Construction Manager will review each RFI, determine the action required, and respond. Allow seven working days for the Architect's response for each RFI. RFIs received by the Architect after 1:00 p.m. will be considered as received the following working day.
  - 1. The following Contractor-generated RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for approval of Contractor's means and methods.
    - d. Requests for coordination information already indicated in the Contract Documents.
    - e. Requests for adjustments in the Contract Time or the Contract Sum.
    - f. Requests for interpretation of Architect's actions on submittals.
    - g. Incomplete RFIs or inaccurately prepared RFIs.

- 2. Architect's action may include a request for additional information, in which case the Architect's time for response will date from the time of receipt of additional information.
- 3. Architect's action on RFIs that may result in a change to the Contract Time, or the Contract Sum may be eligible for the Contractor to submit a Proposed Change Order (PCO) according to Division 01 Section "Contract Modification Procedures."
  - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 7 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly.
  - 1. Project name.
  - 2. Name and address of Contractor.
  - 3. Name and address of Architect.
  - 4. RFI number including RFIs that were returned without action or withdrawn.
  - 5. RFI description.
  - 6. Date the RFI was submitted.
  - 7. Date Architect's response was received.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven <7> days if Contractor disagrees with response.
  - 1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

# 1.8 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of the date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: OPM is responsible for conducting meetings will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three <5> days of the meeting.
- B. Preconstruction Conference: OPM or Architect will schedule a preconstruction conference before starting construction, at a time convenient to Owner and GC, but no later than fourteen (14) days after execution of the Agreement.
  - 1. Conduct the conference to review responsibilities and personnel assignments.
  - 2. Attendees: Authorized representatives of the Owner, OPM, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 3. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.

- b. Sequencing and long-lead items.
- c. Lines of communication.
- d. Procedure for processing field decisions and Change Orders.
- e. Procedures for RFIs.
- f. Procedures for processing Applications for Payment.
- g. Submittal procedures.
- h. Use of the premises and/or and existing building.
- i. Work restrictions and Working hours.
- j. Owner's occupancy requirements.
- k. Responsibility for temporary facilities and controls.
- I. Procedures for moisture control.
- m. Procedures for disruptions and shutdowns.
- n. Construction waste management and recycling.
- o. Work, and storage areas.
- p. Equipment deliveries and priorities.
- q. Site Safety, First aid.
- r. Security.
- s. Progress cleaning.
- 4. Minutes: OPM is responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
  - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with materials and installations that shall attend the meeting. Advise Architect and OPM of meeting dates.
  - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. Contract Documents.
    - b. Submittals.
    - c. Time schedules.
    - d. Weather limitations.
    - e. Manufacturer's instructions.
    - f. Warranty requirements.
    - g. Temporary facilities and controls.
    - h. Regulations of authorities having jurisdiction.
    - i. Installation procedures.
    - j. Protection of adjacent work.
    - k. Protection of construction and personnel.
  - 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  - 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
  - 5. Do not proceed with installation if a conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work at earliest feasible date.
- D. Project Closeout Conference: Schedule and conduct a project closeout conference, at a time convenient to Owner and Architect, but no later than 90 days prior to the scheduled date of Substantial Completion.

- 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
- 2. Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
- 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
  - a. Preparation of record documents.
  - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
  - c. Submittal of written warranties.
  - d. Requirements for operations and maintenance data.
  - e. Requirements for/of material samples, attic stock, and spare parts.
  - f. Preparation of Contractor's punch list.
  - g. Procedures for Applications for Payment at Substantial Completion and for final payment.
  - h. Submittal procedures.
  - i. Responsibility for removing temporary facilities and controls.
- 4. Minutes: General Contractor conducting meeting will record and distribute meeting minutes.
- E. Progress Construction Meetings: Conduct progress meetings bi-weekly or established intervals.
  - 1. Coordinate dates of meetings with preparation of payment requests.
  - Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. Revise "Agenda" Subparagraph below to suit Project.
  - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to project status.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - 1) Review schedule for next period.
    - b. Review present and future needs of each entity present, including the following:
      - 1) Sequence of operations.
      - 2) Submittal Status.
      - 3) Temporary facilities and controls.
      - 4) Status of RFIs.
      - 5) Documentation of Payment requests.
      - 6) Status of Proposed Change Orders (PCO) or Change Orders (CO).
      - 7) Deliveries.
      - 8) Quality of work standards. Status of correction of deficient items.

- 4. Minutes: General Contractor responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
  - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

# 1.9 DAILY SIGN-IN SHEET

- A. General: Keep a daily sign-in sheet containing the following information within the project field office.
  - 1. Name
  - 2. Company Name
  - 3. Arrival/Departure time

# 1.10 COMPANY LISTINGS

A. General: Keep a list of all insured employees of the General Contractor and All Subcontractors within the project office. Non-employees shall not be permitted to the site.

END OF SECTION 01 31 00

# SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

# PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Construction schedule.
  - 2. Construction schedule updating reports.
  - 3. Daily construction reports.
  - 4. Material location reports.
  - 5. Site condition reports.
- B. Related Requirements:
  - 1. Division 01 Section "Submittal Procedures" for submitting schedules and reports.
  - 2. Division 01 Section "Quality Requirements" for submitting a schedule of tests and inspections.

# 1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
  - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the schedule of values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum unless otherwise approved by the Architect.
- C. Event: The starting or ending point of an activity.
- D. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

# 1.4 INFORMATIONAL SUBMITTALS

A. Format for Submittals: Submit required submittals in the following format:

- 1. Working electronic copy of schedule file, where indicated.
- 2. PDF electronic file.
- B. Startup construction schedule.
  - 1. Approval of cost-loaded, startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.
- C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
- D. Construction Schedule Updating Reports: Submit with Applications for Payment.
- E. Daily Construction Reports: Submit at bi weekly intervals.
- F. Material Location Reports: Submit at monthly intervals.
- G. Site Condition Reports: Submit at time of discovery of differing conditions.

# 1.5 QUALITY ASSURANCE

- A. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to the preliminary construction schedule and Contractor's construction schedule, including, but not limited to, the following:
  - 1. Review submittal requirements and procedures.
  - 2. Review time required for review of submittals and resubmittals.
  - 3. Review requirements for tests and inspections by independent testing and inspecting agencies.
  - 4. Review time required for Project closeout
  - 5. Review and finalize list of construction activities to be included in the schedule.
  - 6. Review procedures for updating schedule.

# 1.6 COORDINATION

- A. Coordinate Contractor's construction schedule with the schedule of values, schedule, progress reports, payment requests.
  - 1. Secure time commitments for performing critical elements of the Work from entities involved.

# PART 2 - PRODUCTS

- 2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL
  - A. Time Frame: Extend the schedule from date established for the Notice to Proceed to date of final completion.
    - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

## B. Activities:

- 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by the Architect.
- 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
- 3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
- 4. Testing Time: Include no fewer than fifteen (15) days for testing.
- 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Architect's procedures necessary for certification of Substantial Completion.
- 6. Punch List and Final Completion: Include not more than 20 days for completion of punch list items and final completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule.
  - 1. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Partial occupancy before Substantial Completion.
    - e. Use of premises restrictions.
    - f. Seasonal variations.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, to substantial Completion, and final completion.
  - 1. Temporary enclosure and site staging.
- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
  - 1. Unresolved issues.
  - 2. Unanswered RFI.
  - 3. Rejected or unreturned submittals.
  - 4. Notations on returned submittals.
  - 5. Pending modifications affecting the Work and Contract Time.
- F. Recovery Schedule: When periodic update indicates the Work is fourteen <14> or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.
- G. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
  - 1. List of subcontractors at Project site.
  - 2. Approximate count of personnel at Project site.

- 3. Equipment at Project site.
- 4. Material deliveries.
- 5. Temperatures and weather conditions, including presence of rain or snow.
- 6. Injuries or Accidents.
- 7. Meetings and significant decisions.
- 8. Stoppages, delays, shortages, and losses.
- 9. Emergency procedures.
- 10. Orders/requests of authorities having jurisdiction.
- 11. Change Orders received and implemented.
- 12. Services connected and disconnected.
- 13. Partial completions and occupancies.
- 14. Substantial Completions authorized.
- H. Material Location Reports: prepare and submit a comprehensive list of materials delivered to and stored at the Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with the list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:
  - 1. Material stored prior to previous report and remaining in storage.
  - 2. Material stored prior to previous report and since removed from storage and installed.
  - 3. Material stored following previous report and remaining in storage.
- I. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

## 2.2 SPECIAL REPORTS

- A. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of reports to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at a Project site, whether related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

## 2.3 RECORD DOCUMENTS

- A. Prior to the start of construction, the Architect shall deliver to the Contractor a complete set of "Issued for Construction" drawings, and a complete project manual, including addenda, for the purpose of maintaining record documents.
- B. Also, maintain a copy of all modifications and change orders.
- C. Maintain the documents in a safe, dry location during the entire construction process. The Contractor, together with his subcontractors, shall indicate clearly and accurately, any and all changes necessitated by field conditions. In addition, accurately maintain dimensions locating all pipes, ducts, etc. built into or under concrete slabs or masonry walls, including elevations, inverts, etc.

- D. With each monthly requisition, send certification, signed by the Contractor's Superintendent and Owner's Field Representative, that the documents are being maintained accurately and currently. At the completion of the Project, return the documents to the Architect, along with certification that the documents are complete in that they represent the true constructed conditions.
- E. Electronic Submission of Record Drawings in AutoCAD is mandatory in addition to hard copies.

### 2.4 ELECTRONIC FILES

- A. The Robinson Green Beretta Corporation shall make electronic drawing files available to the successful Contractor for the purpose of preparing submittals, record drawings, etc in accordance with the following policy:
  - 1. Drawings shall be digitally transferred by flash drive or sharefile link mailed but.
  - 2. Requester must sign an Electronic File Transmittal Form.
  - 3. Copies of documents files in electronic media format, data, graphic or other furnished by the Architect to the Contractor are only for the convenience of the Contractor. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, the Architect make no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems or computer hardware differing from those in use by the Architect at the beginning of this project.

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Distribution: Distribute copies of approved schedule to Architect, Construction Manager, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
  - 1. When revisions are made, distribute updated schedules to the same parties and post them in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION

## SECTION 01 33 00 - SUBMITTAL PROCEDURES

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Requirements:
  - 1. Division 01 Section "Payment Procedures" for submitting Applications for Payment and the schedule of values.
  - 2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes and for submitting Coordination Drawings.
  - 3. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including the Contractor's construction schedule.
  - 4. Division 01 Section "Quality Requirements" for submitting test and inspection reports and for mockup requirements.
  - 5. Division 01 Section "Closeout Procedures" for submitting warranties.
  - 6. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
  - 7. Division 01 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
  - 8. Division 02 through 32 Sections for specific requirements for submittals in those Sections.

#### 1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's and Construction Manager's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's and Construction Manager's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. File Transfer Protocol (FTP): Communications protocol that enables the transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users can access files.

D. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

### 1.4 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
  - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
  - 2. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
  - 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
    - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
  - 4. Format: Arrange the following information in a tabular format:
    - a. Scheduled date for first submittal.
    - b. Specification Section number and title.
    - c. Submittal category: Action; informational.
    - d. Name of subcontractor.
    - e. Description of the Work covered.
    - f. Scheduled date for Architect's final release or approval.
    - g. Scheduled date of fabrication.
- B. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.
  - 1. Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings and Project record drawings.
    - a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
    - **b.** Contractor shall execute a data release agreement with RGB prior to receipt of digital files.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.

- 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
  - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Initial Review: Allow fifteen <15> days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  - 3. Resubmittal Review: Allow fifteen <15> > days for review of each resubmittal.
  - 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow fifteen <15> days for initial review of each submittal.
  - 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow twenty (20) days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
- E. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
  - 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
  - 2. Name file with submittal number or other unique identifier, including revision identifier.
    - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
  - 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
  - 4. Transmittal Form for Electronic Submittals: Use PDF format acceptable to Owner, containing the following information:
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect.
    - d. Name of Construction Manager.
    - e. Name of Contractor.
    - f. Name of firm or entity that prepared submittal.
    - g. Names of the subcontractor, manufacturer, and supplier.
    - h. Category and type of submittal.
    - i. Submittal purpose and description.
    - j. Specification Section number and title.

- k. Specification paragraph number or drawing designation and generic name for each of multiple items.
- I. Drawing number and detail references, as appropriate.
- m. Location(s) where product is to be installed, as appropriate.
- n. Related physical samples submitted directly.
- o. Indication of full or partial submittal.
- p. Transmittal number.
- q. Submittal and transmittal distribution record.
- r. Other necessary identification.
- s. Remarks.
- 5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
  - a. Project name.
  - b. Number and title of appropriate Specification Section.
  - c. Manufacturer name.
  - d. Product name.
- F. Options: Identify options requiring selection by Architect.
- G. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include the same identification information as related submittal.
- H. Resubmittals: Make resubmittals in the same form and number of copies as initial submittal.
  - 1. Note date and content of previous submittal.
  - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

## PART 2 - PRODUCTS

## 2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  - 1. Post electronic submittals as PDF electronic files directly to Project Web site specifically established for Project or via digital file sharing system.

- a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
- 2. Submit electronic submittals via email as PDF electronic files.
  - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
- 3. Action Submittals: Submit three (3) paper copies of each submittal unless otherwise indicated. Architect will return two (2) copies.
- 4. Informational Submittals: Submit two (2) paper copies of each submittal unless otherwise indicated. Architect] will not return copies.
- 5. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
  - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
  - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information must be specially prepared for submittal because standard published data is not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  - 4. Submit Product Data before or concurrent with Samples.
  - 5. Submit Product Data in the following format:
    - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
  - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.

- f. Relationship and attachment to adjoining construction clearly indicated.
- g. Seal and signature of professional engineer if specified.
- 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 30 by 42 inches.
- 3. Submit Shop Drawings in the following format:
  - a. PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
  - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  - 2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of applicable Specification Section.
    - e. Specification paragraph number and generic name of each item.
  - 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
  - 4. Disposition: Maintain sets of approved Samples at Project site, available for qualitycontrol comparisons throughout the course of construction activity. Sample sets may be used to determine the final acceptance of construction associated with each set.
    - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
    - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
  - 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
    - a. Number of Samples: Submit one (1) full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
  - 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected.
    - a. Number of Samples: Submit three (3) Samples. Architect will retain one (1) Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record sample.
      - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.

- 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three (3) sets of paired units that show approximate limits of variations.
- 7. <u>ALL</u> product samples will be submitted to the Architect a minimum of 3 weeks prior to the date that the first required material submittal return to allow for proper selection of materials and colors.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  - 1. Type of product. Include a unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
  - 2. Manufacturer and product name, and model number if applicable.
  - 3. Number and name of room or space.
  - 4. Location within room or space.
  - 5. Submit product schedule in the following format:
    - a. PDF electronic file.
- F. Coordination Drawing Submittals: Comply with requirements specified in Division 01 Section "Project Management and Coordination."
- G. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."
- H. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
- I. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."
- J. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- K. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- L. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- M. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- N. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- O. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

- P. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- Q. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.
  - 6. Test procedures and results.
  - 7. Limitations of use.
- R. Compatibility Test Reports: Submit reports written by a qualified testing agency, on the testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- S. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

## PART 3 - EXECUTION

## 3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Division 01 Section "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

## 3.2 ARCHITECT'S ACTION

A. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. The architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may be returned by the Architect without action.

END OF SECTION 01 33 00

## SECTION 01 40 00 - QUALITY REQUIREMENTS

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other qualityassurance and -control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, Commissioning Authority and/or Construction Manager, or authorities having jurisdiction are not limited by provisions of this Section.

## 1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect and/or Construction Manager.
- C. Product Testing: Tests and inspections that are performed by a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- D. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.

- E. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- F. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- G. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- H. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

# 1.4 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

## 1.5 ACTION SUBMITTALS

- 1. Indicate manufacturer and model number of individual components.
- 2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.

## 1.6 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:
  - 1. Main wind-force-resisting system or a wind-resisting component listed in the wind-forceresisting system quality-assurance plan prepared by Architect.
- C. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

- D. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  - 1. Specification Section number and title.
  - 2. Entity responsible for performing tests and inspections.
  - 3. Description of test and inspection.
  - 4. Identification of applicable standards.
  - 5. Identification of test and inspection methods.
  - 6. Number of tests and inspections required.
  - 7. Time schedule or time span for tests and inspections.
  - 8. Requirements for obtaining samples.

## 1.7 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for the Project.
  - 1. Project quality-control manager may also serve as Project superintendent for small or limited projects.
- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- D. Testing and Inspection: GC include a schedule of Work requiring testing or inspection, including the following:
  - 1. Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements.
- F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

#### 1.8 REPORTS AND DOCUMENTS

A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:

- 1. Date of issue.
- 2. Project title and number.
- 3. Name, address, and telephone number of testing agency.
- 4. Dates and locations of samples and tests or inspections.
- 5. Names of individuals performing tests and inspections.
- 6. Description of the Work and test and inspection method.
- 7. Identification of product and Specification Section.
- 8. Complete test or inspection data.
- 9. Test and inspection results and an interpretation of test results.
- 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
- 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
- 12. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
  - 1. Name, address, and telephone number of technical representative making report.
  - 2. Statement on condition of substrates and their acceptability for installation of product.
  - 3. Statement that products at Project site comply with requirements.
  - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 6. Statement whether conditions, products, and installation will affect warranty.
  - 7. Other required items indicated in individual Specification Sections.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

#### 1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce the required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce the required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according

to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.

- 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
- 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- F. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
  - 1. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect and Commissioning Authority, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

## 1.10 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
  - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  - 2. Payment for these services will be made from testing and inspecting allowances, as authorized by Change Orders.
  - 3. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
  - 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
  - 2. Where services are indicated as the Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
    - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
  - 3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
  - 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  - 5. Testing and inspecting requested by the Contractor and not required by the Contract Documents are Contractor's responsibility.
  - 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they are so direct.

- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."
- D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar qualitycontrol service through Contractor.
  - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 6. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
  - 1. Access to the Work.
  - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 4. Facilities for storage and field curing of test samples.
  - 5. Delivery of samples to testing agencies.
  - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents as a component of Contractor's

quality-control plan. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.

1. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

## 1.11 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Owner will engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, as indicated in Statement of Special Inspections attached to this Section, and as follows:
- B. Special Tests and Inspections: Conducted by a qualified testing agency and/or special inspector as required by authorities having jurisdiction, as indicated in individual Specification Sections and in Statement of Special Inspections attached to this Section, and as follows:
  - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
  - 2. Notifying Architect, Commissioning Authority, , Construction Manager, and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
  - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect and Commissioning Authority, and Construction Manager, with copy to Contractor and to authorities having jurisdiction.
  - 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
  - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
  - 6. Retesting and reinspecting corrected work.

## PART 2 - EXECUTION

## 2.1 ACCEPTABLE TESTING AGENCIES

- A. Firms acceptable to perform designated tests and inspections are:
  - 1. Briggs Engineering & Testing, 100 Weymouth Street, Rockland, MA 02370
  - 2. Other firms as approved by architect

## 2.2 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
  - 1. Date test or inspection was conducted.
  - 2. Description of the Work tested or inspected.
  - 3. Date test or inspection results were transmitted to Architect.
  - 4. Identification of testing agency or special inspector conducting test or inspection.

B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection logs for Architect's, Commissioning Authority's, and Construction Manager's reference during normal working hours.

### 2.3 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Division 01 Section "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are the Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

# SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support and security facilities.
- B. Related Requirements:
  - 1. Division 01 Section "Summary" for work restrictions and limitations on utility interruptions.

#### 1.3 USE CHARGES

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

## 1.4 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas. Note parking areas for construction personnel will be available on the site. Contingent on Owners preference and designation.
- B. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- C. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage.
  - 1. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.

- 2. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.
- 3. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
- D. Dust and HVAC-Control Plan: Submit narrative that indicates the dust and HVAC-control measures proposed for use, locations and time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:
  - 1. Locations of dust-control partitions at each phase of work.
  - 2. HVAC system isolation.
  - 3. Location of proposed air-filtration system discharge.
  - 4. Waste handling procedures.
  - 5. Other dust-control measures.

## 1.5 QUALITY ASSURANCE

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

#### 1.6 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

### 1.7 DRINKING WATER AND SERVICE

- A. Provide potable water in convenient and accessible locations for construction personnel.
- B. Provide all piping, fittings, valves, or connections, necessary for furnishing water during the construction period.
- C. Contractor to Pay costs of potable water and temporary services.

## 1.8 TEMPORARY FIRE PROTECTION

A. Provide general, temporary fire protection requirements.

B. Permanent fire protection equipment, used for fire protection during construction, shall be the responsibility of the Installer.

#### 1.9 WEATHER PROTECTION AND TEMPORARY HEAT/VENTILATION

- A. During construction, provide weather protection and heating/ventilating for protection of the work force and construction:
- B. Refer throughout these specifications for the type, duration and level of requirements for heating/ventilating and weather protection.

### 1.10 STORAGE

- A. Coordinate the use and location of storage areas for various trades and subcontractors.
- B. Storage areas shall be approved by the Owner/Architect.
- C. Maintain such areas in a clean condition at all times.

## 1.11 SPECIAL CONTROLS

- A. Maintain premises and property free from accumulations of waste, debris, and rubbish caused by operations.
- B. Hazards Control:
  - 1. Store volatile waste in covered metal containers and remove them from the premises daily.
  - 2. Prevent accumulation of waste and debris creating hazardous conditions.
  - 3. Provide adequate ventilation during use of volatile or noxious substances.
  - 4. Conduct cleaning and disposal operations to comply with local ordinances and antipollution laws.
  - 5. Do not burn or bury rubbish and waste materials on the project site.
  - 6. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner into the storm or sanitary drains.
  - 7. Do not dispose of waste into streams or waterways.
  - 8. Remove snow and ice from access to buildings.
  - 9. Maintain cleaning until project, or portion thereof, is occupied by the Owner.

## 1.12 OTHER TEMPORARY FACILITIES AND CONTROLS

- A. Project Sign:
  - 1. Provide a temporary project sign, conforming to Architect's Sketch, with lettering as approved, and by a professional sign provider.
  - 2. Project Sign: Provide one (1), as follows.
    - a. Construction fence banner.
    - b. Size: 4 x 8 feet.

- c. Material: Vinyl.
- d. Provide the following minimum information on sign:
  - 1) Project name.
  - 2) Owner's name.
  - 3) Architect's name.
  - 4) Contractor's name.
- 3. Project sign: Architect to provide sketch.
- 4. No other signs or advertisements will be allowed to be displayed without the written approval of the Owner.
- 5. Locate where directed.
  - a. Do not post other signs, unless approved by the Architect and Owner, within the Project or Contract Limit Line.
- B. Protection of Work-In-Place:
  - 1. Thoroughly protect all completed work and stored materials.
  - 2. Provide boards, cloths, planks, waterproof paper, canvas or other means of protection and use as required to prevent damage.
  - 3. Replace or rectify work or materials damaged by workmen, by the elements or by any other cause, to the satisfaction of the Architect and at no additional expense to the Owner.
  - 4. Do not allow workmen, including those of any sub-contractor or supplier, to mark finish surfaces with marking pens or other such devices which are not readily erasable.

## PART 2 - PRODUCTS

#### 2.1 MATERIALS

A. Portable Chain-Link Fencing: Minimum 2-inch thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch OD line posts and 2-7/8-inch OD corner and pull posts, with 1-5/8-inch OD top and bottom rails. Provide cast concrete bases for support of fence posts.

### 2.2 TEMPORARY FACILITIES

A. Storage and Fabrication Sheds: Provide shed or container sized and equipped to accommodate materials and equipment for construction operations.

#### 2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. Air-Filtration Units: Primary and secondary HEPA-filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure filter system to run continuously.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

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

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for the use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of these fixtures.
- C. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas, to the greatest extent possible.
  - 1. Prior to commencing work, isolate any system in work areas to be performed according to drawings.
  - 2. Maintain dust partitions during the Work. Use vacuum collection attachments on dustproducing equipment. Isolate limited work within occupied areas using portable dustcontainment devices.
  - 3. Perform daily construction cleanup using approved, HEPA-filter-equipped vacuum equipment.
- D. Ventilation and Humidity Control: Provide temporary protection of construction activities requiring curing or drying of completed installations of construction from adverse effects of high humidity. Select components and equipment that will not have a harmful effect on completed installations or elements being installed. Insert gas or other utility services if required for Project.
- E. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.
  - 1. Connect temporary service to Owner's existing power source, as directed by Owner.

## 3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
  - 1. Provide storage sheds located within construction area or within 30 feet of building lines that are noncombustible according to ASTM E 136. Comply with NFPA 241.

- 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Permanent Roads and Traffic Controls: Comply with requirements of authorities having jurisdiction.
  - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  - 2. Maintain access for city fire-fighting equipment and access to fire hydrants.
- C. Parking: Due to Urban conditions, there are limited parking areas for construction personnel on the site. Construction workers will have to coordinate and may have to park on the city streets adjacent to the construction site.
- D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
  - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
  - 2. Remove snow and ice as required to minimize accumulations.
- E. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
  - 1. Identification Signs: Provide Project identification signs as indicated on Drawings.
    - 2. Temporary Signs: Provide other signs as indicated and as required to inform the public and individuals seeking entrance to the Project.
      - a. Provide temporary, directional signs for construction personnel and visitors.
    - 3. Maintain and touchup signs so they are legible at all times.
- F. Waste Disposal Facilities: Comply with requirements specified in Division 01 Section "Construction Waste Management and Disposal."
- G. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Division 01 Section "Execution."
- H. Lifts and Hoists: Provide equipment and facilities necessary for hoisting work materials and personnel.
  - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- I. Temporary Stairs: Provide temporary staging and scaffold stairs where ladders are not adequate.
- J. Temporary Use of Permanent Stairs: Use of existing stairs for construction traffic is not considered as part of this work or expected work scope. If necessary, this will be limited and permitted as determined by the Owner or Facility Manager. Use of existing stairs must be protected from damage and degradation during construction. All existing finishes will be restored to new condition by the contractor at time of Substantial Completion.

## 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair any and all damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings requirements of 2003 EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
  - 1. Inspect, repair, and maintain erosion and sedimentation control measures during construction.
  - 2. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
  - 3. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- D. Site Enclosure Fence: Before construction operations begin and prior to commencing work, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering the site except by appropriate entrance gates.
  - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
  - 2. Maintain security by limiting the number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner when required by Owner.
- E. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
- F. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- G. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- H. Temporary Fire Protection:
  - 1. Smoking is prohibited in construction areas.

## 3.5 MOISTURE AND MOLD CONTROL

A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.

- B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
  - 1. Protect porous materials from water damage.
  - 2. Protect stored and installed material from flowing or standing water.
  - 3. Keep porous and organic materials from coming into prolonged contact with concrete.

### 3.6 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
  - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when the need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  - 1. Materials and facilities that constitute temporary facilities are property of Contractor. The Owner reserves right to take possession of Project identification signs.
  - 2. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
  - 3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 01 50 00

## SECTION 01 60 00 - PRODUCT REQUIREMENTS

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

A. Section includes administrative and procedural requirements for selection of products for use in Project.

### 1.3 DEFINITIONS

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

## 1.4 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit a request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
  - 2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request.

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

- a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
- b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

### 1.5 QUALITY ASSURANCE

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

### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

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

### C. Storage:

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

## 1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
  - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
  - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
  - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
  - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
  - 3. See Divisions 02 through 33 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

## PART 2 - PRODUCTS

## 2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
  - 1. Provide products complete with accessories, trim, finish, fasteners, and other appurtenances needed for complete installation and indicated use.
  - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
  - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
  - 4. Where products are accompanied by the term "as selected," Architect will make selection.
  - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
  - 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.

## 2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration: The Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied,

the Architect may return requests without action, except to record noncompliance with these requirements:

- 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
- 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, durability, and specific features and requirements indicated.
- 3. Evidence that proposed product provides specified warranty.
- 4. List of similar installations for completed projects with project names and addresses.
- 5. Samples, if requested.

END OF SECTION 01 60 00

SECTION 01 71 00 - CLEANING

PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Protect absorptive materials from moisture damage and replace filtration media prior to occupancy. If permanently installed air handlers are used during construction, filtration media having a minimum MERV of 8 per ASHRAE 52.2-1999 standards shall be installed at all return air grilles. All filtration media shall be replaced immediately prior to occupancy.

### 1.2 SUBMITTALS

A. The contractor will be required to submit a During Construction Air Quality Management Plan conforming to SMACNA IAQ Guidelines to be followed for the duration of construction activities. The contractor will also be required to submit cut sheets of temporary filtration media highlighting MERV value indicated, as well as photographs taken during construction of IAQ measures in place, such as protection of ducts and, protection of absorptive materials from moisture damage to the architect at the end of the project.

### 1.3 REQUIREMENTS INCLUDED

A. Execute cleaning, during the progress of the work, and at completion of the work, as required by General Conditions.

## 1.4 RELATED REQUIREMENTS

- A. Conditions of the contract.
- B. Each Specification Section: Cleaning for specific products or work.
- 1.5 DISPOSAL REQUIREMENTS
  - A. Conduct cleaning and disposal operations to comply with all State, local codes, ordinances, regulations and anti-pollution laws.

## PART 2 - PRODUCTS

## 2.1 MATERIALS

A. Use only those cleaning materials which will not create hazards to health or property, and which will not damage existing or new surfaces.

- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning product/material manufacturer.

## PART 3 - EXECUTION

#### 3.1 DURING CONSTRUCTION

- A. Execute periodic cleaning, not less than weekly, to keep the work, the site and adjacent properties free from accumulations of waste materials, rubbish and windblown debris resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris and rubbish per Section 015000.
- C. Remove waste materials, debris and rubbish from the site periodically, and dispose of material at legal disposal areas away from the site.

### 3.2 DUST CONTROL

A. Clean interior spaces that have been exposed to dust/debris due to construction activities and continue cleaning on an as-needed basis until the project is finished.

## 3.3 PROGRESSIVE CLEANING

A. Cleaning during construction is the responsibility of the Contractor. All areas shall be cleaned in a manner acceptable to the Owner's Representative. One cleaning personnel with appropriate tools shall be provided at initiation of construction to project completion. The primary function of this individual shall be cleaning the Facility in a manner acceptable to the owner or owner's representative.

#### 3.4 FINAL CLEANING

- A. Final cleaning before final inspection. Interior and exterior areas of the building shall be cleared of all rubbish and debris and thoroughly cleaned by the Contractor, including the following:
  - 1. All construction facilities, debris, and rubbish shall be removed from the Owner's property and disposed of legally.
  - 2. All surfaces exposed to construction activity, directly or indirectly, shall be swept, dusted, washed, or polished.

# 3.5 OTHER CLEANING

A. Broom clean exterior paved surfaces, rake clean other surfaces of the site and grounds disturbed by construction.

- B. All work areas to have the ground surface "swept" with the use of a high-power magnet to clear dropped or loose screws, nails or other attachment materials.
- C. Prior to final completion, the Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces, and all work areas, to verify that the entire work is clean.

END OF SECTION 017100

# SECTION 01 73 00 - EXECUTION

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Construction layout.
  - 2. Installation of the Work.
  - 3. Cutting and patching.
  - 4. Protection of installed construction.
  - 5. Correction of the Work.

### 1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original condition after installation of other work.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For certified land surveyor or professional engineer.
- B. Cutting and Patching Plan: Submit a plan describing procedures at least ten (10) days prior to the time cutting and patching will be performed. Include the following information:
  - 1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
  - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
  - 3. Products: List products to be used for patching and firms or entities that will perform patching work.
  - 4. Dates: Indicate when cutting and patching will be performed.

### 1.5 QUALITY ASSURANCE

A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

- 1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
- 2. Operational or Construction Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
  - a. Tele-Data Control systems.
  - b. Fire-detection and alarm systems.
  - c. Electrical wiring systems.
  - d. Equipment supports.
  - e. Piping, ductwork, and equipment.
- B. Cutting and Patching Conference: Before proceeding, meet at the Project site with parties involved in cutting and patching, including electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in place materials.

# PART 3 - EXECUTION

# 3.1 EXAMINATION

- A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  - 1. Examine electrical systems to verify actual locations of connections before equipment or fixture installation.
  - 2. Examine walls in suitable conditions where products and systems are to be installed.
  - 3. Verify compatibility with and suitability of substrates.

B. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

#### 3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to Division 01 Section "Project Management and Coordination."

#### 3.3 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  - 1. Make vertical work plumb and make horizontal work level.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Conduct construction operations so no part of the Work is subjected to damaging operations.
- D. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Templates: Obtain and distribute to parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
  - 1. Coordinate installation of anchorages. Furnish directions for installing anchorages, including inserts, anchor bolts, and items with integral anchors, that are to be embedded in masonry. Deliver such items to Project site in time for installation.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

### 3.4 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching.
  - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Temporary Support: Provide temporary support of work to be cut.
- C. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- D. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, bypass such services/systems before cutting to prevent interruption to occupied areas.
- E. Cutting: Cut in-place construction by sawing, drilling, chipping, grinding, and similar operations, using methods least likely to damage elements retained or adjoining construction.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  - 3. Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - 4. Proceed with patching after construction operations requiring cutting are complete.
- F. Patching: Patch construction by filling, repairing, refinishing, similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
  - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
    - a. Clean iron, and similar features before applying paint or other finishing materials.
  - 3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- G. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

### 3.5 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold waste materials for more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
    - a. Use containers intended for holding waste materials of type to be stored.
  - 4. Coordinate progress cleaning for joint-use areas where Contractor and other subcontractors are working concurrently.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

# 3.6 PROTECTION OF INSTALLED CONSTRUCTION

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

END OF SECTION 017300

# SECTION 01 74 20 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

# PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
  - 1. Salvaging nonhazardous construction waste.
  - 2. Recycling nonhazardous construction waste.
  - 3. Disposing of nonhazardous construction waste.
- B. Related Requirements:
  - 1. Division 07 Section "Cleaning of Membrane Roofing" for disposal requirements for roofing waste.

#### 1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

#### 1.4 PERFORMANCE REQUIREMENTS

- A. General: Achieve end-of-Project rates for salvage/recycling of 50 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials.
  - 1. Demolition Waste:
    - a. Ridged Insulation panels
    - b. Plastic, vinyl

- c. Wood blocking, furring.
- d. Metals.
- e. Steel supports and hangers.
- 2. Construction Waste:
  - a. EPDM Membrane
  - b. Lumber Wood materials.
  - c. Metals.
  - d. Packaging: Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
    - 1) Paper, Cardboard Boxes.
    - 2) Plastic, Polystyrene packaging.
    - 3) Wood palette or crates.

# 1.5 ACTION SUBMITTALS

A. Waste Management Plan: Submit plan within 30 days of date established for the Notice to Proceed.

# 1.6 INFORMATIONAL SUBMITTALS

- A. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether the organization is tax exempt.
- B. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- C. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

# 1.7 WASTE MANAGEMENT PLAN

- A. Waste Identification: Indicate anticipated types and quantities of demolition and construction waste generated by the Work. Use Form CWM-1 for construction waste and Form CWM-2 for demolition waste. Include estimated quantities and assumptions for estimates.
  - 1. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
  - 2. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
  - 3. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including designated location where materials separation will be performed.

# 1.8 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

A. General: Recycle paper and beverage containers used by on-site workers.

- B. Recycling Receivers and Processors: Use only available recycling receivers and processors licensed to do business in the local area.
- C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
  - 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include a list of acceptable and unacceptable materials at each container and bin.
  - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 3. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

# 1.9 RECYCLING DEMOLITION WASTE

- A. Metals: Separate metals by type.
  - 1. Flashing: Stack according to size, type, and length.
  - 2. Remove and dispose of bolts, nuts, washers, and other rough hardware.

# 1.10 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
  - 1. Cardboard Boxes: Break down packaging into flat sheets. Store in a dry location.
  - 2. Polystyrene Packaging: Separate and bag materials.
  - 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
  - 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
  - 1. Clean Cut-Offs of Lumber and Clean Sawdust: Bag sawdust that does not contain painted wood.

# 1.11 DISPOSAL OF WASTE

A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste from Project site and legally dispose of them as acceptable to authorities having jurisdiction.

- 1. Except as otherwise specified, do not allow waste materials that are to be disposed of to accumulate on-site.
- 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials. No burning of any kind allowed on site.
- C. Disposal: Remove waste materials from Owner's property and legally dispose of them. All building material debris associated with this project to be disposed of at a properly licensed and permitted disposal facility, Contractor to keep documentation and have available for review by Owner and Architect.

END OF SECTION 01 74 19

# SECTION 01 77 00 - CLOSEOUT PROCEDURES

# PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final Completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.
  - 5. Repair of the Work.
- B. Related Requirements:
  - 1. Division 01 Section "Execution" for progress cleaning of Project site.
  - 2. Division 01 Section "Project Record Documents" for submitting record Drawings, Specifications, and Product Data.
  - 3. Division 01 Section "Cleaning"

# 1.3 ACTION SUBMITTALS

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

# 1.4 CLOSEOUT SUBMITTALS

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

# 1.5 SUBSTANTIAL COMPLETION PROCEDURES

A. Contractor's List of Incomplete Items: Prepare and submit a Contractor's "Punch List of items to be completed and corrected, indicating the value of each item on the list and reasons why the Work is incomplete.

- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, and similar final record information.
  - 3. Submit closeout submittals specified in individual Divisions 02-09 Sections, including specific warranties and similar documents.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Perform preventive maintenance prior to Substantial Completion.
  - 3. Terminate and remove temporary facilities from Project site, construction tools, and similar elements.
  - 4. Complete final cleaning requirements, touchup painting, etc.
  - 5. Touch up and otherwise repair and restore marred finishes to eliminate visual defects.
  - 6. Provide the Contractor's comprehensive list of incomplete work items prior to requesting the Architect to perform any inspection for determination of Substantial Completion.
    - a) Note that if no reasonable list of incomplete work items remaining is provided by the Contractor that will be considered an admission by the Contractor that the Contractor is not ready for a Substantial Inspection determination. As such, no inspection will occur by the Architect.
    - b) The Contractor is thus responsible for any failure to meet the Contractor's commitments of construction schedule to the Owner.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion with a reasonable work remaining list a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, the Architect and/or Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for final completion.

# 1.6 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
  - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
  - 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed

and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

- 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, the Architect will either proceed with inspection or notify the Contractor of unfulfilled requirements. The Architect will prepare a final Certificate for Payment after inspection or will notify the Contractor of construction that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.7 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  - 2. Organize items applying to each space by major element, including categories for individual windows, trim, shutters, equipment.
  - 3. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of Contractor.
    - e. Page number.
  - 4. Submit list of incomplete items in the following format:
    - a. PDF electronic file.

#### 1.8 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
  - 1. Bind warranties and bonds in three-ring binder, sized to receive 8-1/2 x 11 paper.
  - 2. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of the installer.
  - 3. Identify binder on the front and spine with printed title "WARRANTIES," Project name, and name of Contractor.
  - 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic file.

# PART 2 - PRODUCTS

# 2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by the manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

# PART 3 - EXECUTION

#### 3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws, ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
    - a. Clean Project site and grounds, in areas disturbed by construction activities, including landscape, staging area, of rubbish and waste material, and of all foreign substances.
    - b. Sweep paved areas broom clean. Remove any spills, stains or other construction deposits.
    - c. Rake or sweep grounds that are neither planted nor paved to a smooth, eventextured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from project site.
    - e. Remove snow and ice to provide safe access to the building.
    - f. Clean exposed exterior materials to a dirt-free condition, free of stains, and similar foreign substances.
    - g. Remove non permanent labels.
    - h. Leave roof clean and ready for use.
- C. Construction Waste Disposal: Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls." Division 01 Section "Construction Waste Management and Disposal."

#### 3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective or damaged surfaces, repair with matching materials. Where damaged items cannot be repaired or restored, provide replacements. Restore damaged construction and permanent facilities used during construction to specified condition.
  - 1. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
    - a. Do not paint over "UL" and other required labels and identification,

END OF SECTION 01 77 00

# SECTION 01 78 30 - PROJECT RECORD DOCUMENTS

# PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

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

# 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - 3. Record Product Data.
  - 4. Miscellaneous record submittals.
- B. Related Requirements:
  - 1. Division 01 Section "Closeout Procedures" for general closeout procedures.
  - 2. Division 01 Section "Closeout Procedures" for operation and maintenance manual requirements.
  - 3. Divisions 02 through 33 Sections for specific requirements for project record documents of the Work in those Sections.

# 1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit copies of record Drawings as follows:
    - a. Initial Submittal:
      - 1) Submit PDF electronic files of scanned record prints.
      - 2) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
    - b. Final Submittal:
      - 1) Submit PDF electronic files of scanned record prints and one set(s) of prints.
      - 2) Print each drawing, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit annotated PDF electronic files and directories of each submittal.
  - 1. Where record Product Data is required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous recordkeeping requirements and submittals in connection with various construction activities. Submit annotated PDF electronic files and directories of each submittal.
- E. Reports: Submit written report weekly indicating items incorporated into project record documents concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.

# PART 2 - PRODUCTS

# 2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
  - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an acceptable drawing technique.
    - c. Record data as soon as possible after obtaining it.
    - d. Record and check the markup before enclosing concealed installations.
    - e. Cross-reference record prints to corresponding archive photographic documentation.
  - 2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Changes made by Change Order or Construction Change Directive.
    - d. Details not on the original Contract Drawings.
    - e. Field records for variable and concealed conditions.
    - f. Record information on the Work that is shown only schematically.
  - 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
  - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  - 6. Note Construction alternate numbers, Change Order numbers or similar identification, as applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
  - 1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.

- 2. Format: Annotated PDF electronic file.
- 3. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
- 4. Refer instances of uncertainty to Architect for resolution.
- 5. Architect will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.
  - a. See Division 01 Section "Submittal Procedures" for requirements related to use of Architect's digital data files.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
  - 1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
  - 2. Consult Architect for proper scale and scope of detailing and notations required to record the actual physical installation in relation to other construction.
- D. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
  - 1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
  - 2. Format: Annotated PDF electronic file.
  - 3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
  - 4. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect.
    - e. Name of Contractor.

# 2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Provide information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
  - 4. For each principal product, indicate whether recorded Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
  - 5. Note related Change Orders and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic file.

SECTION 01 78 30

# 2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  - 1. Provide information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Include significant changes in the product delivered to the Project site and changes in manufacturer's written instructions for installation.
  - 3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as annotated PDF electronic file.
  - 1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

# PART 3 - EXECUTION

# 3.1 RECORDING AND MAINTENANCE

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

END OF SECTION 01 78 30

# SECTION 05 15 40 – CAST IRON ROOF DRAIN

# PART 1 – GENERAL

# 1.1 SECTION INCLUDES

- A. The work under this Section consists of procuring, furnishing and installing new cast-iron roof drain assemblies to replace all existing roof drain assemblies.
- B. The work includes, but is not entirely limited to the following:
  - 1. Mechanical cleaning of existing roof drain lines, in the presence of the Owner, prior to the start of construction. Mechanical cleaning of existing roof drain lines, in the presence of the Owner, at the completion of the construction.
  - 2. Providing any/all necessary modifications to the existing roof deck openings to facilitate the proper installation of new cast iron roof drains, flush to the height of the surrounding steel roof decks.
  - 3. Procurement and installation of new cast iron roof drain assemblies to replace existing drain assemblies. New drains are to be sized to match existing drain system components. New components include cast iron drain bowls with adjustable height sump, cast iron strainers, cast iron clamping rings, galvanized sump pan receivers (as required), and stainless-steel drain bolts.
  - 4. Installation of new "no-hub" clamps at all drain-pipe joints and connections.
  - 5. Installation of new one (1) inch thick, fiberglass pipe insulation and rigid, PVC wrapping to underside of all new cast iron piping and drain bowls. Insulation work shall extend a minimum of eight (8) inches through the first elbow.
  - 6. Completion of all plumbing work in strict compliance with all aspects of applicable building/plumbing codes.
  - C. The drawings indicate and show the limits of construction for this project. The specifications specify the material and work requirements for this project. Both are complementary to each other, and both shall be followed to complete the work.

# 1.2 RELATED WORK

- A. Carefully examine all the Project Documents for requirements that affect the work of this Section. The exact scope of work of this Section cannot be fully determined without a thorough review of all specification sections and other Project Documents.
  - 1. Related Sections (include but are not limited to the following):
    - a. Section 07 01 50 Rehabilitation of Single Ply Roofing

b. Section 07 01 50 – Maintenance Cleaning of Membrane Roofing

# 1.3 SUBMITTALS

- A. Provide the following required product/material data:
  - 1. Roof drain assemblies (cast iron bowls, adjustable height sump, cast iron strainers, cast iron clamping rings, stainless steel drain bolts, and related items).
  - 2. No hub clamps.
  - 3. Pipe clamps.
  - 4. Sump pan receivers.
  - 5. Stainless Steel Protective mesh drain enclosure submit sample
  - 5. Pipe insulation and hard wrap PVC coverings.
  - 6. Miscellaneous plumbing accessories and related items.

# 1.4 DELIVERY, HANDLING AND STORAGE

- A. Contractor shall comply with all recommendations of the pipe manufacturer and of applicable Technical Reports of the Cast Iron Soil Pipe Institute for handling and installation.
- B. All work and materials shall be protected at all times. The Contractor shall make good all damage caused by his workmen either directly or indirectly.
- C. The Contractor shall perform all carting, handling, and hoisting for their materials and equipment in a safe and satisfactory manner. Any damage resulting from the work of this section shall be repaired or paid-for by the Contractor, and at no additional cost to the Owner.

#### 1.5 CODES AND STANDARDS

- A. Perform all plumbing work in strict compliance with the current publication of the applicable building/plumbing Code.
- B. All work shall be installed and completed by a plumber, licensed in the State of Rhode Island. All work shall be performed in strict-accordance with the State Plumbing Code and the best trade practices.
- 1.6 COORDINATION
  - A. Work related to the installation of new roof drains shall be performed prior-to, or inconjunction-with the actual removal and replacement of the surrounding roofing system.

B. The Contractor will not be permitted to install new roof drains <u>after</u> the installation of the new roofing system. All new roofing work shall be installed onto the drain rims of the new roof drains, not cut into the roof after the new roofing system has been installed.

### PART 2 - PRODUCTS

#### 2.01 MATERIALS

- A. Roof drains shall be ZURN Z121-EB-84 12" Diameter roof drain. Dura-coated cast iron body with membrane flashing clamp, adjustable height top-set® deck plate, low silhouette cast iron dome, or approved equivalent product. The contractor to verify the existing drain size prior to the order of drain assembly.
- B. Provide all necessary companion accessories, including, but not limited to:
  - 1. Cast iron drain bodies.
  - 2. Cast iron domes.
  - 3. Deck clamps.
  - 4. Top set deck plate where specified.
  - 5. Galvanized, sump-pan receivers.
  - 6. Bolted clamping rings.
  - 7. Stainless-steel drain bolts.
- D. Pipe Joints: Provide "no hub" clamps as manufactured by Ideal Inc.

# **PART 3 - EXECUTION**

- 3.01 DRAIN INSTALLATION
  - A. Provide and install new roof drains flush with the height of the surrounding roof decking. Modify deck opening as required to suit new drain assembly.
  - B. Install adjustable height sump to align with minimum height of specified insulation at low point of roof drain location.
  - C. Provide and install new galvanized sump pans at the location of all new roof drains located through all roof decks.
  - D. Provide and install all required roof drain supports at drain locations.
  - E. Provide new "no hub" connections at junctures at pipe joints. Ensure permanent, watertight connections between the roof drain bowls and drainage piping.

- F. Install new roof drains in accordance with the manufacturer's recommendations, ensuring the drain flange is flush with the roof deck and all compression seal connections are proper to create a positive watertight connection with the drain leader piping.
- G. At the completion of the project, mechanically-clean all roof drain service-lines, in the presence of the Owner, or their designated Representative, for a distance of at least fifty (50) feet. Perform mechanical-cleaning prior-to the start of construction and at the completion of the designated construction. Ensure that all new drains are free flowing, without accumulated debris or other impediments, at all times.

END OF SECTION 05 15 40

SECTION 07 01 50 - CLEANING OF MEMBRANE ROOFING

PART 1 - GENERAL

- 1.1 SUMMARY
  - A. Section Includes:
    - 1. Pressure washing of roof membrane including membrane flashings, with full water reclamation.
  - B. Related Requirements:
    - 1. Division 07 roofing rehabilitation section for repair and restoration coating of roofing membranes.
- 1.2 ACTION SUBMITTALS
  - A. Product Data: For cleaning compounds.
- 1.3 INFORMATIONAL SUBMITTALS
  - A. Work Plan: For maintenance cleaning, including description of means and methods for water reclamation.
- 1.4 QUALITY ASSURANCE
  - A. Operator Qualifications: Trained and approved by manufacturer of cleaning equipment, with a record of successful roofing membrane cleaning.
  - B. Regulatory Requirements: Comply with governing EPA regulations. Comply with hauling and disposal regulations of authorities having jurisdiction.
- 1.5 PROJECT / FIELD CONDITIONS
  - A. The Owner will occupy portions of the building immediately below roof area to be maintained. Conduct operations so the Owner's operations are not disrupted. Provide the Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
  - B. Protect the building to be cleaned, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from maintenance operations.
  - C. Maintain access to existing walkways, covered entries, and any adjacent occupied or used facilities.

# PART 2 - PRODUCTS

#### 2.1 CLEANING SYSTEM OPERATORS

- A. Source Limitations: Engage a qualified roofing maintenance cleaning firm to perform cleaning of membrane roofing.
- B. Approved Operators: Beachwood OH, (800) 562-2728, Tremco, Inc., RoofTec Cleaning Systems, or other restoration manufacturer's approved equal Roof Cleaning System complying with all specification requirements.

#### 2.2 PERFORMANCE REQUIREMENTS

A. Water Reclamation: Provide maintenance cleaning of membrane roofing that provides 100 percent reclamation of cleaning water and complies with applicable provisions of the US EPA National Pollutant Discharge Elimination System (NPDES) program and requirements of local authorities having jurisdiction.

# 2.3 MATERIALS

- A. Pre-cleaning Treatment: Detergent-free.
  - 1. Basis of Design Product: Tremco, Inc., RoofTec PREKLEEN.
- B. Pressure Wash Cleaning Solution: VOC, detergent, phosphate, and surfactant free.
  - 1. Basis of Design Product: Tremco, Inc., RoofTec RENEW Cleaner.

#### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Comply with warranty requirements of existing roof membrane manufacturer.
- B. Shut off rooftop utilities and service piping before beginning the Work.
- C. Test existing roof drains to verify that they are not blocked or restricted. Immediately notify Owner of any blockages or restrictions.
- D. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover airintake louvers before proceeding with maintenance cleaning work that could affect indoor air quality or activate smoke detectors in the ductwork.
- E. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors.

#### 3.2 MAINTENANCE CLEANING OF ROOF MEMBRANE

A. Pretreat membrane and flashings when recommended by cleaning equipment manufacturer based upon site assessment of membrane condition.

# MAINTENANCE CLEANING OF MEMBRANE ROOFING

07 01 50 Page 2 of 3

- B. Apply pressure wash cleaning solution onto membrane and flashing surfaces.
- C. Pressure wash membrane and flashings using equipment and methods recommended in writing by cleaning equipment manufacturer for specific application. Utilize rotating wash head equipment operated at not less than 2,000 psi (13,800 kPa). Use equipment utilizing vacuum removal of wash water and residues.
- 3.3 DISPOSAL
  - A. Collect cleaning water and associated cleaning compounds and residual material and process to meet US EPA and local environmental requirements for legal discharge.

END OF SECTION

# SECTION 07 01 51 - REHABILITATION OF SINGLE PLY ROOFING

PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Roof membrane coating preparation.
  - 2. Application of reinforced fluid-applied roof membrane and flashings over existing fully adhered EPDM membrane roof.
- B. Related Information:
  - 1. See ECC IR Moisture Survey dated 4/11/24 for Infrared Roof Moisture Survey.
  - 2. Division 01 Section "Summary" for use of the premises and phasing requirements, and for restrictions on use of the premises due to Owner or tenant occupancy.
  - 3. Division 07 Section "Maintenance Cleaning of Membrane Roofing" for reclaimed water cleaning system for preparation of existing roof substrate.
- C. Unit Prices: Refer to Division 01 Section "Unit Prices" for description of Work in this Section affected by unit prices.

#### 1.2 ROOFING CONFERENCES

- A. Roofing Rehabilitation Preinstallation Conference: Conduct conference at Project site to review methods and procedures related to roofing system.
  - 1. Meet with Owner; Architect; roofing coating materials manufacturer's representative; roofing rehabilitation Installer including project manager and foreman; and installers whose work interfaces with or affects rehabilitation including installers of roof accessories and roof-mounted equipment requiring removal and replacement as part of the Work.
  - 2. Review temporary protection requirements for existing roofing system that is to remain uncoated, during and after installation.
  - 3. Review methods and procedures related to re-coating preparation, including coating manufacturer's written instructions.
  - 4. Review roof drainage during each stage of coating and review roof drain plugging and plug removal procedures.
  - 5. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 6. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect coating.
  - 7. Review existing HVAC systems shutdown and sealing of air intakes.

REHABILITATION OF SINGLE PLY ROOFING Page 1 of 13

- 8. Review shutdown of fire-suppression, protection, and alarm and detection systems.
- 9. Review governing regulations and requirements for insurance and certificates if applicable.
- 10. Review existing conditions that may require notification of the Owner before proceeding.

#### 1.3 MATERIALS OWNERSHIP

A. Demolished materials shall become Contractor's property and shall be removed from Project site.

#### 1.4 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D1079 "Standard Terminology Relating to Roofing and Waterproofing" and glossary in NRCA's "The NRCA Roofing Manual: Membrane Roof Systems" for definition of terms related to roofing work in this Section.
- B. Roofing Coating Preparation: Existing roofing that is to remain and be prepared to accept restorative coating application.
- C. Patching: Removal of a portion of existing membrane roofing system from deck or removal of selected components and accessories from existing membrane roofing system and replacement with similar materials.
- D. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.
- E. Existing to Remain: Existing items of construction that are not indicated to be removed.

# 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product specified.
- B. Sustainable Design Submittals:
  - 1. Product Test Reports: For roof coating, indicating that coated roof will comply with solar reflectance index requirement.
  - 2. Indicate Food, Conservation, and Energy Act of 2008 Bio-based material requirement compliance.
    - a. Indicate type of bio-based material in product.
    - b. Indicate the percentage of bio-based content per unit of product.
    - c. Indicate relative dollar value of bio-based content product to total dollar value of product included in project.

### 1.6 INFORMATIONAL SUBMITTALS

A. Contractor's Product Certificate: Submit notarized certificate, indicating products intended for Work of this Section, including product names and numbers and manufacturers' names, with

statement indicating that products to be provided meet the requirements of the Contract Documents.

- 1. Provide manufacturer's FM product listing approvals for fluid-applied maintenance coating system.
- B. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing rehabilitation system.
- C. Qualification Data: For Installer, Manufacturer, and Roofing Inspector.
  - 1. Letter written for this Project indicating manufacturer approval of Installer to apply specified products and provide specified warranty.
- D. Warranties: Unexecuted sample copies of special warranties.
- E. Photographs or Video Recordings: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces, which might be misconstrued as having been damaged by rehabilitation operations. Submit before Work begins.
- F. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, and for dust control. Indicate proposed locations and construction of barriers.
- G. Inspection Reports: Reports of Roofing Inspector. Include weather conditions, description of work performed, tests performed, defective work observed, and corrective actions required and carried out.
  - 1. Submit report within 48 hours after inspection.
- 1.7 CLOSEOUT SUBMITTALS
  - A. Maintenance Data: To include in maintenance manuals.
  - B. Warranties: Executed copies of approved warranty forms.
- 1.8 QUALITY ASSURANCE
  - A. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a full-time on-site supervisor with a minimum of three years' experience installing products similar to those specified, able to communicate verbally with Contractor, Architect, and employees, and the following:
    - 1. Qualified by the manufacturer to install manufacturer's product and furnish warranty of type specified.
  - B. Manufacturer Qualifications: Primary product manufacturer that is FM listed for roofing system identical to that specified for this Project with minimum five years' experience in manufacture of comparable products in successful use in similar applications, and able to furnish warranty with provisions matching specified requirements.

- 1. Approval of Other Manufacturers and Comparable Products: Submit the following in accordance with project substitution requirements, within time allowed for substitution review:
  - a. Product data, including certified independent test data indicating compliance with requirements.
  - b. Samples of each component.
  - c. Sample submittal from similar project.
  - d. Project references: Minimum of five installations of specified products not less than five years old, with Owner and Architect/Owner's Consultant contact information.
  - e. Sample warranty.
- C. Roofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified roofing system, qualified to perform roofing observation and inspection specified in Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. The Roofing Inspector shall be one of the following:
  - 1. An authorized full-time technical employee of the manufacturer.
  - 2. An independent party certified as a Registered Roof Observer by the International Institute of Building Enclosure Consultants (formerly the Roof Consultants Institute) retained by the Contractor or the Manufacturer and approved by the Manufacturer.

# 1.9 FIELD CONDITIONS

- A. Weather Limitations: Proceed with rehabilitation work only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.
  - 1. Store all materials prior to application at temperatures recommended by the manufacturer.
  - 2. Apply coatings within range of ambient and substrate temperatures recommended by manufacturer.
  - 3. Do not apply roofing in snow, rain, fog, or mist.
- B. Protect the building to be rehabilitated, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from rehabilitation operations.
- C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- D. Daily Protection: Coordinate installation of roofing so insulation and other components of roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.

E. The Owner will occupy portions of building immediately below re-coating area. Conduct recoating so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.

### 1.10 WARRANTY

- A. Manufacturer's Warranty: In which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within warranty period, as follows.
  - 1. Form of Warranty: Tremco "Plain and Simple" warranty form.
  - 2. Scope of Warranty: Work of this Section.
  - 3. Warranty Period: 30 years from date of completion.
  - 4. Inspections by Manufacturer: To occur every five years following completion.
- B. Installer Warranty: Installer's warranty signed by Installer, as follows.
  - 1. Form of Warranty: Form acceptable to Roofing Manufacturer and Owner.
  - 2. Scope of Warranty: Work of this Section.
  - 3. Warranty Period: 2 years from date of completion.

# PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
  - A. Basis of Design: The roof system specified in this Section is based upon products of Tremco CPG Inc, Beachwood, OH, (800) 562-2728, www.tremcoroofing.com that are named in other Part 2 articles. Provide specified products or comparable products of one of the following.
    - 1. Kemper Systems, Inc. Kemperol 2K-PUR System.
    - 2. Sika Corp. Sikalastic RoofPro 641 Low-VOC System.
  - B. Source Limitations: Obtain components for roofing system from same manufacturer as membrane roofing or manufacturer approved by membrane roofing manufacturer.

# 2.2 PERFORMANCE REQUIREMENTS

- A. General Performance: Rehabilitated roofing shall withstand exposure to weather without failure or leaks due to defective manufacture or installation.
  - 1. Accelerated Weathering: Roofing system shall withstand 5000 hours of exposure when tested according to ASTM G152, ASTM G154, or ASTM G155.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.

- C. Exterior Fire-Test Exposure: Roofing system exterior fire-test exposure performance following application of rehabilitation coating shall be not be less than that of the pre-rehabilitated roof performance when tested in accordance with ASTM E108, based upon manufacturer's tests of identical applications.
- D. Energy Performance: Provide rehabilitated roof meeting initial solar reflectance of 75 when calculated according to ASTM E1980.
- E. Energy Performance: Provide rehabilitated roofing according to the following when tested according to CRRC-1:
  - 1. Three-year, aged solar reflectance of not less than 0.55 and emissivity of not less than 0.75.
- F. Bio-Based Content: Provide roofing rehabilitation coating materials meeting requirements of USDA Bio-based Affirmative Procurement Program, with not less than 20 percent bio-based content.
- 2.3 MATERIALS, GENERAL
  - A. General: Rehabilitation materials recommended by roofing system manufacturer for intended use and compatible with components of existing membrane roofing system.
  - B. Infill Materials: Where required to replace test cores and to patch existing roofing, use infill materials matching existing membrane roofing system materials, unless otherwise indicated.
  - C. Temporary Roof Drainage: Design and selection of materials for temporary roof drainage are the responsibilities of the Contractor.
- 2.4 FLUID-APPLIED ROOFING MEMBRANE COATING
  - A. Polyurethane Elastomeric Fluid-Applied System: Two-coat fluid-applied roofing membrane formulated for application over prepared existing roofing substrate.
    - 1. Polyurethane Roof Coating System Base Coat: Bio-based, low-odor low-VOC two-part, for use with a compatible topcoat.
      - a. Basis of design product: Tremco, AlphaGuard BIO Base Coat.
      - b. Combustion Characteristics, UL 790: Maintains combustion characteristics of existing roof system.
      - c. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 1 g/L.
      - d. Accelerated Weathering, 5000 hours, ASTM G154: Pass.
      - e. Hardness, Shore A, minimum, ASTM D2240: 80.
      - f. Solids, by volume, ASTM D2697: 100 percent.
      - g. Bio-Based Content, Minimum: 70 percent.

- h. Minimum Thickness, Base Coat reinforced over Smooth BUR, MB, Concrete, Single-Ply: 48 mils (1.22 mm) wet.
- 2. Polyurethane roof coating system topcoat, bio-based low-odor low-VOC two-part, for application over compatible base coat.
  - a. Basis of design product: Tremco, AlphaGuard BIO Topcoat.
  - b. Combustion Characteristics, UL790: Maintains combustion characteristics of existing roof system.
  - c. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 6 g/L.
  - d. Solar Reflectance Index (SRI), ASTM E1980: For white, not less than 103.
  - e. Accelerated Weathering, 5000 hours, ASTM G 154: Pass.
  - f. Hardness, Shore A, minimum, ASTM D2240: 81.
  - g. Solids, by volume, ASTM D2697: 100 percent.
  - h. Bio-Based Content, Minimum: 60 percent.
  - i. Minimum Thickness, reinforced system: 48 mils (1.22 mm) wet.
  - j. Minimum Thickness, Slip-Resistant Coat: 24 mils (0.60 mm) wet.
  - k. Color: White.

# B. Primers:

- 1. Primer for Asphaltic and Single-Ply Membranes: Water-based, polymer-modified quickdry low odor primer.
  - a. Basis of design product: Tremco, AlphaGuard WB Primer.
  - b. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 1 g/L.
  - c. Solids, by weight: 70 percent.
- 2. Primer for Non-Porous Surfaces: Single-part, water-based primer to promote adhesion of urethanes to metals, PVC and other non-porous surfaces.
  - a. Basis of design product: Tremco, AlphaGuard M-Prime.
  - b. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 22 g/L.
  - c. Nonvolatile Content, minimum, ASTM D2369: 5 percent.
  - d. Density at 77 deg F (25 deg C): 8.3 lb/gal (1kg/L).
- 3. Single-component reactivating primer used to prepare aged bio-based urethane products.

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- a. Basis of design product: Tremco, BIO Prime.
- b. Coverage Rate: 1/4 gal / 100 sq. ft. (0.1 L/m2) (4 wet mils) minimum.
- C. Fluid-Applied Roofing Reinforcing Fabric:
  - 1. Polyester Reinforcing Fabric: 100 percent stitch-bonded mildew-resistant polyester fabric intended for reinforcement of compatible fluid-applied membranes and flashings.
    - a. Basis of design product: Tremco, Permafab.
    - b. Tensile Strength, Minimum, ASTM D5034 (2-inch): MD 110 lbs (49.8 kg); XMD 60 lbs (27.2 kg) avg.
    - c. Elongation, Minimum, ASTM D5034 (1-inch): MD 25 percent; XMD 100 percent.
    - d. Tear Strength, Minimum, ASTM D5587: MD 20 lbs (9.0 kg) avg; XMD 20 lbs (9.0 kg) avg.
    - e. Weight: 3 oz./sq. yd (102 g/sq. m).

#### 2.5 AUXILIARY ROOFING REHABILITATION MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with existing roofing system and roofing coating system.
- B. Seam Sealer: Waterproof seam and patching material compatible with applied coating.
  - 1. Seam Sealer: Aromatic polyurethane sealer, single-component, high solids, moisture curing, formulated for compatibility and use with a variety of roofing and flashing substrates.
    - a. Basis of design product: Tremco, GEOGARD Seam Sealer.
    - b. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 189 g/L.
    - c. Tensile Strength, ASTM D412: 270 psi (1860 kPa).
    - d. Tear Strength, ASTM D412: 35 pli (6.13 kNm).
    - e. Elongation, ASTM D412: 220 percent.
    - f. Color: Gray.
- C. Joint Sealant: Elastomeric joint sealant compatible with applied coating, with movement capability appropriate for application.
  - 1. Joint Sealant, Polyurethane: ASTM C920, Type S, Grade NS, Class 50 single-component moisture curing sealant, formulated for compatibility and use in dynamic and static joints; paintable.
    - a. Basis of design product: Tremco, TremSEAL Pro.

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- b. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 40 g/L.
- c. Hardness, Shore A, ASTM C661: 40.
- d. Adhesion to Concrete, ASTM C794: 35 pli.
- e. Tensile Strength, ASTM D412: 350 psi (2410 kPa).
- f. Color: Closest match to substrate.
- D. Miscellaneous Accessories: Provide miscellaneous accessories recommended by the roofing system manufacturer.
- 2.6 WALKWAYS
  - A. Slip Resistant Product for Fluid-Applied Walkways:
    - 1. Aggregate, Slip Resistant Silica Sand: Silica sand, broadcast into fluid-applied roof coating products for use as aggregate fill for slip-resistant, abrasion-resistant coating applications.
      - a. Basis of design product: Aggregate, Slip Resistant Silica Sand.
      - b. Size: 20 40 mesh.
      - c. Application Rate: Minimum 20 30 lb/100 sq ft (1 1.5 k/m2).

# PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine existing roofing substrates, with Installer present, for compliance with requirements and for other conditions affecting application and performance of roof coatings
  - 1. For the record, prepare a written report, endorsed by Installer, listing conditions detrimental to performance.
  - 2. Verify compatibility with and suitability of substrates.
  - 3. Verify that substrates are visibly dry and free of moisture.
  - 4. Verify that roofing membrane surfaces have adequately aged to enable proper bond with base coat.
  - 5. Verify that roofing membrane is free of blisters, splits, open laps, indications of shrinkage, and puncture damage or other indications of impending roof system failure.
  - 6. Commencing application of coatings indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

A. Protect existing roofing system that is indicated not to be rehabilitated, and adjacent portions of building and building equipment.

REHABILITATION OF SINGLE PLY ROOFING Page 9 of 13

- 1. Mask surfaces to be protected. Seal joints subject to infiltration by coating materials.
- 2. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
- 3. Maintain temporary protection and leave it in place until replacement roofing has been completed.
- B. Shut down air intake equipment in the vicinity of the Work in coordination with the Owner. Cover air intake louvers before proceeding with coating work that could affect indoor air quality or activate smoke detectors in the ductwork.
  - 1. Verify that rooftop utilities and service piping affected by the Work have been shut off before commencing Work.
- C. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
  - 1. Do not permit water to enter into or under existing membrane roofing system components that are to remain.

### 3.3 ROOFING COATING PREPARATION

- A. Removal of Wet Insulation: Remove portions of roofing membrane with underlying wet insulation. Remove wet insulation, fill in tear-off areas to match existing insulation and membrane, and prepare patched membrane for application of roof coating as specified below.
- B. Repair of Ponding Areas: Repair areas indicated as ponding areas or areas of inadequate drainage by removing roof membrane, adding additional insulation as required to provide minimum slopes to drain required by roofing rehabilitation coating manufacturer, and replace membrane with material matching existing. Submit photographic report indicating compliance.
- C. Membrane Surface Preparation:
  - 1. Remove walkway pads and pavers from roofing membrane and replace any damaged membrane with new EPDM to match existing.
  - 2. Remove blisters, ridges, buckles, roofing membrane fastener buttons projecting above the membrane, and other substrate irregularities from existing roofing membrane that would inhibit application of uniform, waterproof coating.
  - 3. Broom clean existing substrate.
  - 4. Substrate Cleaning: Clean substrate in accordance with requirements of Division 07 Section "Maintenance Cleaning of Membrane Roofing."
  - 5. Substrate Cleaning: Clean substrate of contaminants such as dirt, debris, oil, and grease that can affect adhesion of coating by power washing at maximum 2,000 psi (13,800 kPa).

- a. Dispose of wastewater in accordance with requirements of authorities having jurisdiction.
- 6. Verify that existing substrate is dry before proceeding with application of coating. Spot check substrates with an electrical capacitance moisture-detection meter.
- 7. Verify adhesion of new products.
- D. Existing Flashing and Detail Preparation: Repair flashings, gravel stops, copings, and other roof-related sheet metal and trim elements. Reseal joints, replace loose or missing fasteners, and replace components where required to leave in a watertight condition.
  - 1. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings of same metal, weight or thickness, and finish.
  - 2. Roof Drains: Remove drain strainer and clamping ring. Grind metal surfaces down to clean, bare, metal.
- E. Surface Priming: Prime surfaces to receive fluid-applied coating using coating manufacturer's recommended product for surface material. Apply at application rate recommended by manufacturer.
  - 1. Ensure primer does not puddle and substrate has complete coverage.
  - 2. Allow to cure completely prior to application of coating.

# 3.4 FLUID-APPLIED FLASHING APPLICATION

- A. Fluid-Applied Flashing and Detail Base Coat Application: Complete base coat and fabric reinforcement at parapets, curbs, penetrations, and drains prior to application of field of fluid-applied membrane. Apply base coat in accordance with manufacturer's written instructions.
  - 1. Apply base coat on prepared and primed surfaces and spread coating evenly. Extend coating minimum of 8 inches (200 mm) up vertical surfaces and 4 inches (100 mm) onto horizontal surfaces.
  - 2. Back roll to achieve minimum coating thickness indicated on Part 2 product listing, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.
  - 3. Reinforcing Fabric: Embed fabric reinforcement into wet base coat. Lap adjacent flashing pieces of fabric minimum 3 inches (75 mm) along edges and 6 inches (150 mm) at end laps.
    - a. Roll surface of fabric reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
  - 4. Roof Drains: Install base coat onto surrounding membrane surface and metal drain bowl flange. Install target piece of fabric reinforcement immediately into wet base coat and roll to fully embed and saturate fabric. Reinstall clamping ring and strainer following application of topcoat. Replace broken drain ring clamping bolts.

### 3.5 FLUID-APPLIED MEMBRANE APPLICATION

- A. Fluid-Applied Membrane Base Coat: Apply base coat to field of membrane in accordance with manufacturer's written instructions.
  - 1. Apply base coat on prepared and primed surfaces and spread coating evenly.
  - 2. Back roll to achieve minimum coating thickness indicated on Part 2 product listing, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.
  - 3. Fabric Reinforcement: Embed fabric reinforcement into wet base coat. Lap adjacent pieces of fabric minimum 3 inches (75 mm) along edges and 6 inches (150 mm) at end laps.
    - a. Roll surface of fabric reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
- B. Fluid-Applied Membrane Topcoat: Apply topcoat to field of membrane and flashings uniformly in a complete, continuous installation.
  - 1. Allow base coat to cure prior to application of topcoat.
  - 2. Following curing of base coat and prior to application of topcoat, sand raised or exposed edges of fabric reinforcement.
  - 3. Prime base coat prior to application of topcoat if topcoat is not applied within 72 hours of the base coat application, using manufacturer's recommended primer.
  - 4. Apply topcoat extending coating up vertical surfaces and out onto horizontal surfaces. Install topcoat over field base coat and spread coating evenly.
  - 5. Back roll to achieve minimum coating thickness indicated on Part 2 product listing, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.
  - 6. Avoid foot traffic on new fluid-applied membrane for a minimum of 24 hours.

#### 3.6 WALKWAY INSTALLATION

- A. Install walkways following application of coating. Locate as indicated, or as directed by Owner.
- B. Slip-Resistant Walkway Topcoat: Apply walkway second topcoat following application and curing of topcoat. Locate as indicated on Drawings.
  - 1. Mask walkway location with tape.
  - 2. Prime first topcoat prior to application of walkway topcoat if walkway topcoat is not applied within 72 hours of the first topcoat application, using manufacturer's recommended primer.

- 3. Apply walkway topcoat and back roll to achieve minimum coating thickness indicated on Part 2 product listing, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.
- 4. Broadcast Slip-Resistant Topcoat Aggregate in wet topcoat at rate indicated in Part 2 product listing or as otherwise recommended by coating manufacturer.
  - a. Back roll aggregate and topcoat creating even dispersal of aggregate. Remove masking immediately.

# 3.7 FIELD QUALITY CONTROL

- A. Roofing Inspector: Owner will engage a qualified roofing inspector to perform roof tests and inspections and to prepare test reports.
- B. Roofing Inspector: Contractor shall engage a qualified roofing inspector for a minimum of 5 fulltime days on site, per 40-hour crew week, to perform roof tests and inspections and to prepare start up, interim, and final reports. Roofing Inspector's quality assurance inspections shall comply with criteria established in Quality Control and Quality-assurance Guidelines for the Application of Membrane Roof Systems."
- C. Roof Inspection: Contractor shall engage roofing system manufacturer's technical personnel to inspect roofing installation and submit report. Notify Architect 48 hours in advance of dates and times of inspections. Inspect work as follows:
  - 1. Upon completion of preparation of first component of work, prior to application of recoating materials.
  - 2. Following application of re-coating to flashings and application of base coat to field of roof.
  - 3. Upon completion of re-coating but prior to re-installation of other roofing components.
- D. Repair fluid-applied membrane where test inspections indicate that they do not comply with specified requirements.
- E. Arrange for additional inspections, at Contractor's expense, to verify compliance of replaced or additional work with specified requirements.
- 3.8 PROTECTING AND CLEANING
  - A. Protect roofing system from damage and wear during remainder of construction period.
  - B. Correct deficiencies in or remove coating that does not comply with requirements, repair substrates, and reapply coating.
  - C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

SECTION 11 24 29 – FACILITY FALL PROTECTION, NON-PENETRATING

PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Non-penetrating fall protection systems, including:
  - 1. Roof edge rail system.
  - 2. Ladder safety roof guardrails.

#### 1.2 REFERENCES

- A. General: Applicable edition of references cited in this Section is current edition published on date of issue of Project specifications, unless otherwise required by building code in force.
- B. Code of Federal Regulations (CFR):
  - 1. 29 CFR 1910.28 Duty to have fall protection and falling object protection.
  - 2. 29 CFR 1910.29 Fall protection systems and falling object protection criteria and practices.
- C. Association for Materials Protection and Performance (AMPP):
  - 1. SSPC PAINT 20: Organic Zinc Rich Primer, Type II.
  - 2. SSPC PA 1: Shop, Field, and Maintenance Coating of Metals.

#### 1.3 COORDINATION

A. Coordinate layout and location of temporary facility fall protection with Architect.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of fall protection and accessory, including brackets and fasteners.
  - 1. Submit manufacturer's published literature including structural properties data, certificates of compliance, and test reports as applicable.
- B. Shop Drawings: Show locations and layout of fall protection components; include dimensioned plans, elevations, and details of installation.
- 1.5 INFORMATION SUBMITTALS
  - A. Qualification Data: For Installer.
  - B. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E894 and ASTM E935.

SECTION 11 24 29

# 1.6 QUALITY ASSURANCE

A. Installer Qualifications: A firm or individual experienced in installing, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

### 1.7 PRODUCT DELIVERY AND STORAGE

- A. Deliver materials in original, unbroken pallets, packages, containers, or bundles bearing the label of the manufacturer.
- B. Store and handle materials carefully to prevent abrasion, cracking, twisting, other deformations, and other types of damage.

#### 1.8 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components that fail in materials within specified warranty period.
  - 1. Warranty Period: Two (2) years from date of Substantial Completion.

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide facility fall protection components by Tremco CPG Inc, Beachwood, OH, (800) 562-2728. Provide specified products or comparable products by one of the following:
  - 1. Kee Safety.
  - 2. BlueWater by Tractel.
  - 3. Manufacturer of comparable products, approved by the Architect.
- B. Single Source: Provide fall protection components from a single manufacturer through a single source, unless otherwise indicated.

# 2.2 PERFORMANCE REQUIREMENTS

- A. Occupational Safety and Health Standards: Provide fall protection components complying with requirements of 29 CFR 1910.28 and 1910.29 including structural performance.
- B. Structural Performance: Railings, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  - 1. Top Rails of Guards:
    - a. Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.
    - b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.

- c. Uniform and concentrated loads need not be assumed to act concurrently.
- 2. Infill of Guards and Bottom Rails:
  - a. Concentrated load of 50 lbf applied horizontally on an area of 1 sq. ft.
  - b. Infill load and other loads need not be assumed to act concurrently.

### 2.3 RAIL SYSTEMS, NON-PENETRATING

- A. Fall Protection Rail Systems: Freestanding counterweighted fall protection safety railing system including pipe or tubing, fittings, and accessories corresponding to design indicated on Drawings, and complying with requirements of authorities having jurisdiction.
  - 1. Basis of Design Product: Tremco, TremSafe Guardrail S Fall Protection System.
  - 2. Configuration/System:
    - a. Roof edge protection: TremSafe Guardrail.
    - b. Roof access ladder protection: TremSafe Ladder Defender.
  - 3. Application: Flat or low slope roof.
    - a. Maximum Slope without Parapet: 3.6 degrees.
    - b. Maximum Slope with Parapet: 5 degrees ; where parapet has a height of not less than 3 inches .
  - 4. Uprights: 42-inch by 1.5625-inchsteel pipe factory assembled with manufacturer's standard clamp fittings accepting railings, adjustable up to 11 deg. from vertical.
  - 5. Mounting Bases: Class 30 gray iron material cast with four receiver posts, with anti-skid rubber pad base. Provide toe board receivers at open conditions.
    - a. Receiver Posts: Shall have a positive locking system into slots that allow rails to be mounted in any direction. Friction locking systems are not allowed. Receiver posts shall have drain holes.
  - 6. Railings: 1-5/8-inch OD, hot-rolled, pickled, electric weld tubing, free of sharp edges and snag points.
  - 7. Upright and Railing Finish: Galvanized, exposed.
  - 8. Accessories: Provide manufacturer's standard accessories, with clamping hardware, preformed corners, and splice kits, in finish to match railings
    - 1) Width: As selected from manufacturer's standard range.
    - 2) Top Rail: 42 inches, minimum.
    - 3) Bottom Rail: 21 inches, minimum.

- 4) Hardware: Provide the following:
  - a) Gate Hardware: U-Bolts.
  - b) Universal Hinge Assembly: Fits railing types up to 2 inches OD or flat surface mounting.
  - c) Railing adapter kit.
  - d) Self-Closing Springs: Two stainless steel torsion springs.
- 5) Finish: Hot Dipped Galvanized w/ Powder Coat.
  - a) Color: Safety yellow.

#### 2.4 MISCELLANEOUS MATERIALS

- A. Hardware: Manufacturer's standard hardware as required for a complete installation; corrosion resistant, and identical to hardware utilized in tested assemblies meeting performance requirements.
- B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

### 2.5 FABRICATION

- A. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- B. Form work true to line and level with accurate angles and surfaces.
- C. Nonwelded Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
- D. Form changes in direction by inserting prefabricated elbow fittings.
- E. Close exposed ends of railing members with prefabricated end fittings.
- F. Brackets, Flanges, Fittings, and Anchors: Provide brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.
- 2.6 STEEL AND IRON FINISHES
  - A. Comply with ASTM A123/A123M for hot-dip galvanized railings.
  - B. Comply with ASTM A153/A153M for hot-dip galvanized hardware.
  - C. Powder-Coat Finish: Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

# PART 3 - EXECUTION

# 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of the Work.
- B. Verify that roof assembly is sound, dry, smooth, clean, sloped for drainage, securely anchored and ready for placement of fall protection.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer for the substrate, under the project conditions.

# 3.3 INSTALLATION OF NON-PENETRATING FALL PROTECTION DEVICES

- A. Install fall protection to comply with requirements of 29 CFR 1910.28 and 1910.29, and authorities having jurisdiction.
- B. Install fall protection in accordance with manufacturer's written instructions.
- C. Set fall protection components accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
  - 1. Do not weld, cut, or abrade surfaces of components that are coated or finished after fabrication intended for field connection by mechanical or other means without further cutting or fitting.
  - 2. Set components plumb within a tolerance of 1/8 inch in 3 feet.
  - 3. Align horizontal members so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.
- D. Test action of operable components of facility fall protection equipment. Adjust for proper operation.
- E. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

# 3.4 REPAIR AND CLEANING

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.
  - 1. Touchup Painting: Immediately after erection, clean bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting to comply with SSPC-PA 1 requirements for touching up shop-painted surfaces.

- 2. Galvanized Surfaces: Clean field welds, bolted connections, abraded areas, and repair galvanizing to comply with ASTM A780/A780M.
- 3. Replace components that have been damaged or that cannot be successfully repaired by finish touchup or minor repair procedures.

END OF SECTION



ELMWOOD COMMUNITY CENTER ROOF RESTORATION RFP

Brett P. Smiley, Mayor

# **MEMORANDUM**

To:Department of Public Property; Parks DepartmentFrom:Law DepartmentRe:Compliance with apprenticeship and "First Source" ordinancesDate:April 21, 2023

The City of Providence has hired "Building Futures," an outside consulting group, to assist with monitoring the City's compliance with ordinances relating to construction projects. Specifically, Building Futures is monitoring the City's compliance with two (2) ordinances that require the City to maximize utilization of apprentices and Providence residents in City construction projects.

1) Providence Code of Ordinances Sec. 21-28.1, governing construction contracts of \$100,000 or more, requires that no less than 15% of the total labor hours performed by contractors and subcontractors on any given project are to be completed by apprentices registered in state-registered apprenticeship programs. This requirement pertains to all labor hours for a given project, not just those for new hires.

The Law Department recommends the inclusion of the following notice (or one substantially similar) in all RFP's for construction projects valued at \$100,000 or more:

# **APPRENTICE REQUIREMENTS.**

Attention of prospective bidders is called to the fact that this project is to be bid upon and executed under the City of Providence Code of Ordinances Chapter 21 Art. II Section 21-28.1 c(1) and (2) related to utilizing apprentices in the contract. This ordinance outlines requirements for utilizing not less than 15% of total hours worked by apprentices. The City may lower this percentage only if it determines in writing that compliance is not feasible or that it would be unduly cost prohibitive to the project. The attention of prospective bidders is also called to the fact that reporting the efforts undertaken and progress towards achieving the requirements in this ordinance is a condition for payment. Compliance reporting shall be submitted with any contract payment requisition, in a format to be specified by the City. This demonstration of compliance through such reports shall be a condition of the requisition for payment to be processed. Upon the contract being awarded to the successful bidder, a mandatory meeting will be scheduled to review the project

requirements relative to apprenticeship requirements and the process and protocols by which these goals will be achieved. At this meeting, specific forms and procedures for the documentation and achievement of these requirements by the successful bidder will be provided, discussed and agreed upon for the execution of the contract.

2) Providence "First Source" Ordinance Sec. 21-91 – Sec. 21-96 requires that when hiring new workers for a construction project, employers seek to hire Providence residents when available. If the awarded contractor, regardless of tier, is a signatory to a Collective Bargaining Agreement that governs the contractor's hiring and referral process, the contractor must contact both Building Futures and the local hiring halls to request apprentices or journey workers who are residents of Providence. In the case of apprentices, this is a way to meet the requirements of both ordinances with one hire.

The Law Department recommends the inclusion of the following notice (or one substantially similar) in all RFP's for City construction projects:

# **"FIRST SOURCE" REQUIREMENTS.**

Attention of prospective bidders is called to the fact that this project is to be bid upon and executed under the City of Providence Code of Ordinances Chapter 21 Art. III 1/2 First Source Agreements Sec. 21-91 through 21-96. This ordinance outlines requirements for hiring Providence residents to work on this project. The City may waive this requirement only upon a determination in writing that qualified residents of Providence are not available for the project, pursuant to Sec. 21-94(e). The attention of prospective bidders is called to the fact that reporting the efforts undertaken and progress towards achieving the requirements in this ordinance is a condition for payment. Compliance reporting shall be submitted with any contract payment requisition, in a format to be specified by the City. This demonstration of compliance through such reports shall be a condition of the requisition for payment to be processed. Upon the contract being awarded to the successful bidder, a mandatory meeting will be scheduled to review the project requirements relative to the First Source Agreements and the process and protocols by which these goals will be achieved. At this meeting, specific forms and procedures for the documentation and achievement of these requirements by the successful bidder will be provided, discussed and agreed upon for the execution of the contract.

If your department or any of your contractors has difficulty securing registered apprentices or Providence residents to participate in construction projects, you are encouraged to contact Building Futures, who may be able to assist:

William Bryan, AUP Manager, Renowned Advising <renownedadvising@gmail.com> or

Rita Holahan, Building Futures <rholahan@bfri.org>