



Carrie Eklund  
Central Services Manager  
Finance Department

**INVITATION TO BID  
FIRE STATION MASONRY REPAIRS  
BID NO.: 215-F-025**

2/18/15

Name of Bidding Firm: \_\_\_\_\_  
Address \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

**Bid Opening Time and Date 11:00 a.m., Local Time, Tuesday, March 17, 2015**

*Bids will be accepted until the specified opening time and date. Any bidder attempting to deliver after the opening time and date will be refused.*

**Bid Deposit/Bid Bond: YES**  
**Prevailing Wage YES**  
**Performance Bond: YES**

**PLEASE MARK THE RETURN SEALED ENVELOPE:**

1. Bid Opening Date and Time
2. Title of Job
3. Bid Number

**RETURN BIDS TO:**

City of Rockford  
Central Services Manager  
425 East State Street, 4<sup>th</sup> Floor  
Rockford, Illinois 61104

***BIDS SUBMITTED BY FASCIMILE OR E-MAIL WILL NOT BE ACCEPTED***

**BID RESULTS:**

Bid results may be obtained by telephone at (779) 348-7164, by fax at (800) 380-7174, or at [www.rockfordil.gov](http://www.rockfordil.gov)

## CITY OF ROCKFORD, ILLINOIS—BIDDING GENERAL CONDITIONS

1. Pricing. The bidder shall insert price for all bid items and all other information requested in these specifications. The price shall be the *full, delivered cost* to the City of Rockford with no additions.
2. Total versus “Per Item” Awards. The City generally awards contracts based on a lump sum basis to the lowest responsible and responsive bidder. However, the City may choose to award on a per item basis. Therefore, each bidder must submit pricing for each item indicated on the bid forms. Bidders must clearly indicate which items are bid and which are not.
3. Delivery of Merchandise. Delivery terms will always be Freight On Board (FOB)—Destination. The City of Rockford accepts no responsibility for the condition of any merchandise purchased prior to acceptance by City Personnel. Failure to comply with this requirement may constitute rejection of the bid.
4. Acceptance of Merchandise at Delivery. The City of Rockford reserves the right to refuse acceptance of delivered merchandise that differs substantially from the specifications in this invitation to bid or as otherwise permitted by Illinois law.
5. Prompt Payment Act. The City of Rockford intends to comply with the governmental prompt payment act. The awarded vendor will be paid upon submission of invoices to: City of Rockford Accounts Payable, 425 East State Street, Rockford, IL 61104.
6. W-9 Request for Taxpayer Identification Number. Prior to issuance of a purchase order, the successful bidder will be required to supply the City of Rockford with a federal W-9 Request for Taxpayer Identification Number and Certification. Failure to comply with this requirement will be considered a violation of contract terms, for which the City may bar the vendor from bidding for a period of up to three years.
7. Legal Compliance. The vendor awarded this contract will comply with all Federal, State, County, and City laws, ordinances, rules and regulations, which in any manner affect the product or service placed for bid herein. Lack of knowledge on the part of the awarded vendor of applicable law will in no way be cause for release of this obligation. If the City becomes aware of violation of any laws, ordinances, rules and regulations on the part of the awarded vendor, it reserves the right to reject any bid, cancel any contract, and pursue any other legal remedies deemed necessary.
8. Legal Requirements. This contract sets forth the entire final agreement between the City of Rockford and the bidder and shall govern the respective duties and obligations of the parties. The validity of this contract, and any disputes arising from the contract, shall be governed by the laws of the State of Illinois. Any litigation under this agreement shall be resolved in the trial courts of Winnebago County, State of Illinois. Should a provision of this contract be declared invalid by a court of competent jurisdiction, it shall not affect the validity of the remaining provisions of the contract.
9. Safety. Prevention of accidents at any project is the sole responsibility of the awarded vendor and its subcontractors, agents, and employees. The awarded vendor, its subcontractors, agents, and employees shall be fully and solely responsible for the safety of this project. The awarded vendor shall retain exclusive and direct control over the acts or omissions of its subcontractors, agents and employees, and any other persons performing portions of the work and not directly employed by the awarded vendor.

10. Criminal Background Check. When necessary for the protection of citizens and/or City staff, the City may require an awarded vendor to conduct a criminal background check on all of its personnel who will have direct contact with City facilities or residents/businesses served under this contract. Personnel are defined as representatives, agents, employees, subcontractors, or anyone else who will be utilized to fulfill obligations under this contract. Criminal background checks, at a minimum, shall consist of a county level felony and misdemeanor check for each county in which the personnel resided in the last 10 years. The awarded vendor shall notify the City of any of its personnel who have been convicted of a felony or misdemeanor prior to commencing any work under this contract. At the City's discretion, personnel with any felony or misdemeanor convictions which raise a concern about the safety of building, property, or City staff/resident's personal security, or is otherwise job related (as determined by the City) shall not perform work under this contract. Once given notice that a background check(s) will be required, it must be completed within 14 calendar days so as to not delay work to be completed.

11. Control of the Work. With respect to the awarded vendor's own work, the City shall not have contractual, operational, and/or supervisory control over and/or charge of the work and shall not be responsible for construction means, methods, techniques, sequences, procedures, and programs in connection with the awarded vendor's work, since these are solely the vendor's responsibility under the agreement. The City shall not be responsible for the awarded vendor's failure to carry out the work in accordance with the agreement's terms and conditions. The City shall not have control over and/or charge of acts or omissions of the awarded vendor, its subcontractors, and/or their agents or employees, or any other person performing portions of the work not directly employed by the awarded vendor. The awarded vendor shall be considered to be an "independent contractor" pursuant to Illinois law.

12. Bid Bond. When required on the cover sheet, a bid bond for not less than 5 percent of the bid amount must accompany all bids as a guarantee that if the bid is accepted, the bidder will execute and file the proper contract. A bank cashier's check, bank draft, or certified check equal to the amount specified is acceptable in lieu of a bid bond. Bid bonds of the two lowest firms will be retained until the contract is awarded.

13. Performance Bond. When required by the specifications herein, the awarded vendor shall furnish a performance bond equal to the amount of the contract, acceptable to the City, within 14 calendar days after notification of contract award. Failure to furnish the required bond within the time specified may be cause for rejection of the bid and any bid deposit may be retained by the City as liquidated damages and not as a penalty.

14. Taxes. No charge will be allowed for taxes from which the City of Rockford, Illinois is exempt. The City of Rockford, Illinois is not liable for the Illinois Retailers' Occupation Tax, the Service Occupation Tax or the Service Use Tax. The City is exempt from the Federal Excise and Transportation Tax.

15. Withdrawal of Bids. Firms may withdraw or cancel their bids at any time prior to the advertised invitation to bid opening. After the opening time, no bid shall be withdrawn or cancelled. All bids shall be firm and valid for a period of sixty (60) calendar days. If a bidder to whom a contract is awarded refuses to accept the award, the City may, at its discretion, suspend the bidder for a period of time up to three (3) years.

16. Subcontracting. The bidder shall provide information for all subcontractors, leased operators/equipment, and suppliers and all other information requested in the Subcontractor and Supplier Detail Forms attached. Requests for deviations from the completed detail forms submitted must be made in writing, and reviewed and approved by the City's Diversity Procurement Officer and the Central Services Manager or designee. The awarded vendor may not subcontract any portion of the contract after award without written consent of the City of Rockford

Central Services Manager. When subcontractors are used, the awarded vendor is required to pay subcontractors promptly after completion of work. Delay of payment is prohibited.

17. Termination of Contract. The City of Rockford reserves the right to terminate the contract in its entirety or in portions, upon written notice to the awarded vendor, if the Rockford City Council does not appropriate sufficient funds to complete the contract or in the event of default by the awarded vendor. Default is defined as failure of the awarded vendor to perform any of the provisions of this contract or failure to make sufficient progress so as to endanger performance of this contract in accordance with its terms. In the event of default, the City may purchase the product(s) and/or service(s) from other sources and hold the defaulting company responsible for any excess costs occasioned thereby. The City may require payment of liquidated damages for non-performance. Should default be due to failure to perform or because of a request for a price increase, the City reserves the right to remove the firm from the City's bidder list for a period of up to three years.

18. Late Bids and Proposals. Regardless of cause, late bids and proposals will not be accepted and will automatically be disqualified from further consideration. It shall be solely the vendor's risk to ensure delivery at the designated office by the designated time. Late bids and proposals will not be opened and may be returned to the awarded vendor at their request and expense.

19. EEO Forms. Each firm shall be required to submit with its bid information all EEO forms included in the invitation to bid package. Any bid which fails to include the properly completed compliance items will not be read and will not be considered. All subcontractors shall also be required to comply with the same EEO forms as the firm.

20. Restrictive or Ambiguous Specifications. It is the responsibility of the bidding firm to review the invitation to bid specifications and to notify the Central Services Manager if the specifications are formulated in a manner that would unnecessarily restrict competition. Any such protest or question regarding the specifications or invitation to bid procedures must be received by the Central Services Division not less than seventy-two hours prior to the time set for the opening. In the event a contract term is not defined within the contract document, the term will be given its ordinary dictionary definition.

21. Bid Protest. Firms wishing to protest bids or awards shall notify the Central Services Manager in writing within 7 days after the invitation to bid opening. The notification should include the bid number, the name of the firm protesting, and the reason why the firm is protesting the bid. The Central Services Manager will respond to the protest within seven (7) calendar days. A successful protest may result in the reversal of a previously awarded contract.

22. Disputes. In case of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the Central Services Manager, or authorized representative shall be final and binding to all parties. The Central Services Manager has the right to waive technicalities as they see fit. The Central Services Manager may request a written recommendation from the head of the department using the equipment or service being procured.

23. Exceptions. Any deviations from these specifications shall be noted and submitted with the bid. Failure to address deviations from specifications may result in bid rejection.

24. Acceptance/Rejection of Bids. The City of Rockford reserves the right to accept or reject any or all bids or proposals at any time, for any reason, including but not limited to the Rockford City Council not appropriating

sufficient funds to purchase equipment or complete the contract. The City may make awards in any manner deemed in the best interest of the City.

25. **Prevailing Wage.** When indicated on the cover page of this document, this contract calls for the construction of a “public work,” within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 *et seq.* (“the Act”). The Act requires awarded vendors and subcontractors to pay laborers, workers, and mechanics performing services on public works projects no less than the “prevailing rate of wages” (hourly cash wages plus fringe benefits) in the county where the work is performed. When required, awarded vendors are responsible for paying current prevailing wage rates, as posted on the Illinois Department of Labor’s website at: <http://www.state.il.us/agency/idol/rates/rates.HTM>. It is the awarded vendor’s responsibility to verify current wage rates, as they are updated monthly. All awarded vendors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage, notice, and record keeping duties.

26. **Certified Payroll.** All Certified Payroll reports required to be submitted under the Prevailing Wage Act, 820 ILCS 130, must be submitted monthly via the City’s current Certified Payroll reporting system. No paper copies or non-conforming Certified Payroll reports will be accepted. The City reserves the right to withhold payment due to the awarded vendor until the vendor displays compliance with this provision.

27. **Substance Abuse Prevention.** When required by Illinois State Statutes, awarded vendors must have in place and file with the City a written program for prevention of substance abuse among its employees. This program must include pre-hire, random, reasonable suspicion, and post-accident drug and alcohol testing, as required by the Substance Abuse Prevention on Public Works Projects Act.

28. **Apprenticeship Requirement.** For construction contracts over \$50,000, awarded vendors must participate in apprenticeship and training programs approved and registered with the United States Department of Labor’s Bureau of Apprenticeship and Training for all Trades that will be in the awarded vendor’s (or his subcontractor’s) employment, with each worker receiving the required apprenticeship/training appropriate to his trade. Owners or work performed by owners is not exempt from the apprenticeship and training requirement.

29. **Indemnification.** To the fullest extent permitted by law, the awarded vendor shall indemnify and hold harmless the City, its officers, representatives, elected and appointed officials, agents, and employees from and against all claims, damages, losses and expenses, including but not limited to attorney’s fees, arising out of or resulting from the awarded vendor’s performance of work under this agreement, and indemnifies and agrees to defend and hold harmless the City against any and all losses, claims, damages, and expenses arising from the work performed hereunder of the erection, construction, placement, or operation of any scaffold, hoist, crane, stay, ladder, support, or other mechanical contrivance in connection with such work including but not limited to losses, claims, damages, and expenses arising pursuant to claims asserted against the City pursuant to theories premised upon section 414 of the Restatement (Second) of Torts and section 343 of the Restatement (Second) of Torts.

This indemnification agreement shall not be limited in any way by any limitations on the amount or type of damages, compensation, or benefits payable by or for the awarded vendor under Worker’s Compensation Acts, disability benefit acts, or other employee benefit acts, and serves as an express agreement to waive the protection of *Kotecki v. Cyclops Welding Corp.*, 146 Ill.2d 155, 585 N.E.2d 1023 (1991) in Illinois.

Further, the awarded vendor agrees that it is solely responsible for compliance with all safety laws applicable to the work performed hereunder, including but not limited to the Occupational Safety and Health Act of 1970 and

the Construction Safety Act of 1960 and all standards and regulations which have been or shall be promulgated by the agencies which administer the Acts.

Under no circumstances shall the awarded vendor, its subcontractors, agents, and employees be required to indemnify the City for its own negligence.

30. Officers. Each bidder affirms, by submission of a response to this bid or request for proposals, that no officer of the City of Rockford, Illinois, is directly or indirectly interested in the proposal for any reason of personal gain.

31. Non-Waiver. The failure by 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 contract constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

32. Professional Services Selection Act. The City of Rockford intends to comply with 50 ILCS 510/5 governing the selection of professional services. Any reference in these terms and conditions to supplying pricing or price as a determining factor in selection do not apply for services covered by said act.

33. The City of Rockford reserves the right to accept or reject any and all proposals and to waive technicalities in submitted bids.

**BID REQUIREMENTS FOR  
EQUAL EMPLOYMENT OPPORTUNITY**

All bidders seeking to do business with the City of Rockford are **REQUIRED** to submit with any formal, sealed bid all of the following documents and information, attached herewith, completed and signed:

1. Equal Employment Opportunity Affirmative Action Plan Statement of Policy.
2. The Statement of Non-Compliance and Certificate of Non-Segregated Facilities.
3. The Contractor or Vendor Workforce Data Form listing all current employees, by classification, directly employed by the bidder. All categories of information requested must be supplied.  
*Note: The number of employees must be entered under each category (no check marks)*

Below are the Federal definitions of the following racial groups accepted as minorities by the City of Rockford:

Black: A person having origins in any of the Black racial groups of Africa, not of Hispanic origin.

Hispanic: A person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race.

Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes for example, China, Japan, Korea, the Philippine Republic and Samoa.

American Indian or Alaskan Native: A person having origins in any of the original peoples of North America.

4. Your State of Illinois Pre-Qualification Certification Number, issued by the Illinois Department of Human Rights for the Illinois Department of Human Rights Act, **must provide expiration date entered in the place provided therefore.**
5. Certificate of Non-Barred Bidding
6. All executed Subcontractor/Leased Operator and Supplier forms.

**If you have not obtained your State of Illinois Pre-Qualification Number (item #4), by signing these documents you agree to make application for this number within 30 days from the date of bid opening.**

**ANY BID WHICH FAILS TO INCLUDE THE CITY OF ROCKFORD EEO PAGES 2, 4, 5, 6, AND 7, COMPLETED AND SIGNED WITH YOUR SEALED BID WILL NOT BE READ AND WILL NOT BE CONSIDERED – NO EXCEPTIONS.**

Falsification of any required Equal Employment Opportunity or Affirmative Action information on the part of the bidder could result in rejection of the bid submitted or in the case where a contract has already been awarded, in the cancellation of said contract.

Any questions pertaining to E.E.O. requirements should be addressed to Ron Moore, Diversity Procurement Officer, Legal Department, 425 East State Street, Rockford, Illinois 61104, Phone: : (779) 348-7396 or [ron.moore@rockfordil.gov](mailto:ron.moore@rockfordil.gov)

**EQUAL EMPLOYMENT OPPORTUNITY**  
**AFFIRMATIVE ACTION PLAN**  
**STATEMENT OF POLICY**

It is the policy of this company, \_\_\_\_\_  
to provide equal employment opportunity without regard to race, religion, color, national origin, handicap, age or sex through a program of positive action affecting all employees. In this program, our company carries out the requirements of Federal Executive orders 11246 and 11375, Civil Rights Act of 1964, Equal Employment Act of 1972, and all other applicable laws, and indicates its active support of the principle of equal opportunity in employment.

At present, \_\_\_\_\_ % of our work force are minorities and \_\_\_\_\_ % of our work force are females, and we will attempt to utilize minorities and females through a positive, continuing program in all jobs for which we contract in the future. Our company will utilize referrals from the City of Rockford's Diversity Procurement Officer for use of minorities and females regarding any future job vacancies.

It is also our intent to make efforts to purchase supplies or equipment from small business concerns located in the City of Rockford or counties of Winnebago or Boone and owned in substantial part (at least 51 per cent) by minorities or females.

\_\_\_\_\_ is the official who will be responsible for implementing this policy statement.

\_\_\_\_\_ will be designated as the Equal Opportunity Officer in our company, responsible for submission of all required equal employment opportunity documents.

In addition, \_\_\_\_\_ is hereby authorized to sign payroll as well as this company's officers. (NOTE: If only officers will be authorized to sign payrolls, please fill in "No One" in this space.)

## **STATEMENT OF NONCOMPLIANCE**

If the equal employment opportunity hearing committee determines that a contractor, subcontractor/leased operator of equipment or bidder is not in compliance with this chapter, (also known as Chapter 11, Article III the City of Rockford Equal Opportunity Employment Ordinance), the hearing committee shall issue and serve upon such person a written statement of noncompliance setting forth the manner in which it finds such person has violated this chapter, and imposing and/or requiring appropriate sanctions, including, but not limited to any and/or all of the following:

- a. Denying, suspending or revoking qualifications, or declaring the contractor or subcontractor irresponsible and ineligible for future contracts or subcontracts until such time as the contractor or subcontractor shall demonstrate to the equal employment opportunity hearing committee that it is in compliance;
- b. Withholding or delaying payment on the contractor or;
- c. Suspending, avoiding or canceling contract work.

## **CERTIFICATION OF NON-SEGREGATED FACILITIES**

The bidder certifies that he/she does not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that he/she does not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause in any contract resulting from acceptance of this bid.

The bidder agrees that (except where he/she has obtained identical certification from proposed subcontractors/leased operators of equipment for specific time periods) he/she will obtain identical certification from proposed subcontractors/leased operators of equipment from the provisions of the Equal Opportunity clause, and that he/she will retain such certification in his/her files.



**CERTIFICATE OF NON-BARRED BIDDING**

The undersigned certifies that it is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid rigging or bid rotating. The undersigned also certifies that current or prospective employees, contractors, and subcontractors/leased operators of equipment are not listed as Excluded Individuals/Entities with the US Government, as maintained by the US General Services Administration.

By signing below, the firm agrees that all information provided in the previous pages is accurate, and that if the firm below does not currently have a Department of Human Rights number they will apply for one within thirty days with the State of Illinois.

Authorized Signature

Title

Firm

Our firm is a:

Minority Business Enterprise

City-Certified? Yes  No

Women Business Enterprise

City Certified? Yes  No

Neither

(Revised 12/21/09)

**Subcontractor/Leased Operator of Equipment Detail Form**  
**City of Rockford**

Firms submitting bids must supply information on Subcontractors/Leased Operators of Equipment selected for work on the project specified. It is required that Subcontractors/Leased Operators of Equipment listed below will be utilized for actual construction should the firm be awarded a contract. Any deviations from the list below require notice in writing and approval by the Diversity Procurement Officer, Central Services Manager, or their designee. This form may be duplicated if additional space is necessary, all pages must be signed, and submitted.

Subcontractor/Leased Operator Information		Type of Work Supplied	MBE/WBE Business?	Dollar Amount	Subcontract Percent of Bid Total
Please provide business name and address, and a contact person.		Describe the work the subcontractor/leased operator will perform for this contract.			
Name	_____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Address	_____	_____			
City, State	_____	_____			
Contact	_____	_____			
Name	_____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Address	_____	_____			
City, State	_____	_____			
Contact	_____	_____			
Name	_____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Address	_____	_____			
City, State	_____	_____			
Contact	_____	_____			
Name	_____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Address	_____	_____			
City, State	_____	_____			
Contact	_____	_____			
Name	_____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Address	_____	_____			
City, State	_____	_____			
Contact	_____	_____			

The bidder intends to Subcontract/Lease Operators of Equipment for \_\_\_\_\_ % of the total contract with MBE/WBE firms.

Signed \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**Supplier Detail Form  
City of Rockford**

Firms submitting bids must supply information on suppliers selected for the project specified. It is required that suppliers listed below will be utilized during construction should the firm be awarded a contract. Any deviations from the list below require notice in writing and approval by the Diversity Procurement Officer, Central Services Manager, or their designee. This form may be duplicated if additional space is necessary, all pages must be signed, and submitted.

Supplier Information Please provide business name and address, and a contact person.	Type of Product Supplied Describe the product the supplier v provide for this contract.	MBE/WBE Business?	Dollar Amount of Supply Contract	Supplier Percent of Bid Total
Name _____ Address _____ City, State _____ Contact _____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Name _____ Address _____ City, State _____ Contact _____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Name _____ Address _____ City, State _____ Contact _____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Name _____ Address _____ City, State _____ Contact _____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Name _____ Address _____ City, State _____ Contact _____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %
Name _____ Address _____ City, State _____ Contact _____	_____	Y <input type="checkbox"/> N <input type="checkbox"/>	\$ _____	_____ %

The bidder intends to procure \_\_\_\_\_% of the total contract from MBE/WBE firms.

\_\_\_\_\_  
Signed \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_



**Note.** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

## What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

## Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note. ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

**Line 2**

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

**Line 3**

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

**Limited Liability Company (LLC).** If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

**Line 4, Exemptions**

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

**Exempt payee code.**

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

- A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)
- B—The United States or any of its agencies or instrumentalities
- C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)
- E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)
- F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state
- G—A real estate investment trust
- H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940
- I—A common trust fund as defined in section 584(a)
- J—A bank as defined in section 581
- K—A broker
- L—A trust exempt from tax under section 664 or described in section 4947(a)(1)
- M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note.** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

**Line 5**

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

**Line 6**

Enter your city, state, and ZIP code.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

**Part II. Certification**

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.

1. **Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.
2. **Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.
3. **Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.
4. **Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).
5. **Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**What Name and Number to Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee <sup>1</sup>  The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>2</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor <sup>2</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>1</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records from Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

**Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

# **BIDDING DOCUMENTS**

**For**

## **MASONRY REPAIRS – FIRE STATIONS**

**Station #2 - 1004 7th Street**

**Station #5 - 501 N. Trainer Road**

**Station #6 - 3329 W. State Street**

**Station #8 - 505 Sherman Street**



## **ROCKFORD FIRE DEPARTMENT**

**PG Architecture**  
**Design/Build**  
2601 Reid Farm Road  
Rockford, Illinois 61114  
[www.pgarch.com](http://www.pgarch.com)

The contact for this bid is Carrie Eklund, Central Services Manager, 779-348-7467 or [carrie.eklund@rockfordil.gov](mailto:carrie.eklund@rockfordil.gov).

## TABLE OF CONTENTS

<b>COVER</b>			1-01
<b>TABLE OF CONTENTS</b>			1-01
<b>OUTLINE SCOPE OF WORK</b>			1-01
<b>GENERAL NOTES</b>			1-01
<b>BIDDING REQUIREMENTS (BID FORM)</b>		<i>- seperate form not bound with this document</i>	1-04
<b>DIVISION 01 – GENERAL REQUIREMENTS</b>			
SECTION	011000	SUMMARY	011000-1-03
SECTION	012200	UNIT PRICES	012200-1-01
SECTION	012300	ALTERNATES	012300-1-01
SECTION	012500	CONTRACT MODIFICATION PROCEDURES	012500-1-02
SECTION	013100	PROJECT MANAGEMENT AND COORDINATION	013100-1-03
SECTION	013200	CONSTRUCTION PROGRESS DOCUMENTATION	013200-1-03
SECTION	014200	REFERENCES	014200-1-01
SECTION	015000	TEMPORARY FACILITIES AND CONTROLS	015000-1-03
SECTION	016000	PRODUCT REQUIREMENTS	016000-1-06
SECTION	017000	EXECUTION	017000-1-07
SECTION	017419	CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL	017419-1-02
SECTION	017700	CLOSEOUT PROCEDURES	017700-1-04
<b>DIVISION 04 – MASONRY</b>			
SECTION	040121	BRICK MASONRY REPAIR AND REPLACEMENT	040121-1-05
SECTION	040501	MASONRY MORTAR	040501-1-04
SECTION	042200	CONCRETE UNIT MASONRY	042200-1-07
SECTION	042300	GLASS UNIT MASONRY	042300-1-02
<b>DIVISION 05 – METALS</b>			
SECTION	055000	METAL FABRICATIONS	055000-1-03
<b>DIVISION 07 – THERMAL AND MOISTURE PROTECTION</b>			
SECTION	079200	JOINT SEALANTS	079200-1-04
<b>FACILITY PHOTOS with NOTATIONS</b>			1-17

## Outline Scope Of Work

- **Station #2 – 1004 7<sup>th</sup> Street**

1. See enclosed photos of existing facility and scope of work notations.
2. At two North facing windows remove and replace steel lintels and glazed CMU.
3. Under Alternate 1 provide the cost to replace all glazed CMU.
4. Grind out and tuck point 100 lineal feet of the worst deteriorated mortar joints.
5. Clean and coat all exposed steel lintels – rust inhibiting base coat and color top coat.
6. Clean entire building using Prosoco 2010 and power washing.
7. Seal entire building using Prosoco Graffiti Guard II.

- **Station #5 – 501 N. Trainer Road**

1. See enclosed photos of existing facility and scope of work notations.
2. At Northeast building corner – double doors facing North & single man door facing East remove and replace the steel lintels and CMU.
3. Under Alternate 2 provide the cost to replace all glazed CMU.
4. Grind out and tuck point 100 lineal feet of the worst deteriorated mortar joints.
5. Clean and coat all exposed steel lintels – rust inhibiting base coat and color top coat.
6. Clean entire building using Prosoco 2010 and power washing.
7. Seal entire building using Prosoco Graffiti Guard II.

- **Station #6 – 3329 West State Street**

1. See enclosed photos of existing facility and scope of work notations.
2. Remove all existing sealant between precast panels, clean to virgin surface, install primer, backer rod, and Dow Corning 790 Silicone Building Sealant to match existing.
3. Patch one area of precast damage/ spalling on North side.
4. Grind out and tuck point 30 lineal feet of brick masonry worst deteriorated mortar joints.
5. Clean and coat all exposed steel lintels – rust inhibiting base coat and color top coat.
6. Clean entire building using Prosoco 2010 and power washing.
7. Seal entire building using Prosoco Graffiti Guard II.

- **Station #8 – 505 Sherman Street**

1. See enclosed photos of existing facility and scope of work notations.
2. At the existing chimney grind out mortar joints and tuck point.
3. Grind out and tuck point 50 lineal feet of the worst deteriorated brick mortar joints.
4. Replace one 8"x 8" glass block unit on the north side of building.
5. Under Alternate 3 provide a cost per typical window to replace steel lintel.
6. Clean and coat all exposed steel lintels – rust inhibiting base coat and color top coat.

**General notes:** - notations shall coordinate with and not conflict with formal specification sections.

1. Contractor is responsible for protection of and/or removal & reinstallation of all devices, lights within masonry repair work.
2. Contractor is responsible for shoring and dust control.
3. Coordination with the fire department to prevent interference with the operation of the facility.
4. Provide temporary safeguards as required to perform work, to provide safety of workmen and the public, and to provide protection of work installed.
5. Maintain continuous protection of the public along adjacent property and adjacent streets as required in accordance with requirements of governing City authorities.
6. Provide at all times protection against rain, snow, wind, storms, and at the end of each day's work cover all new work subject to damage. Work damaged by failure to provide such protection shall be removed and replaced at Contractor's expense.
7. Cold weather provisions shall not be included within the base bid scope of work. Bidders are encouraged to use the notation page (last page) of the bid form for commentary regarding their bid.
8. Pay application and payment process from the City of Rockford Accounts Payable shall comply with the Governmental Prompt Payment Act.

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Work covered by the Contract Documents.
2. Work phases.
3. Work under other contracts.
4. Use of premises.
5. Owner's occupancy requirements.
6. Specification formats and conventions.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: Masonry Repairs – Fire Stations

1. Station #2 Location: 1004 7<sup>th</sup> Street, Rockford, Illinois
2. Station #5 Location 501 North Trainer Road, Rockford, Illinois
3. Station #6 Location 3329 West State Street, Rockford, Illinois
4. Station #8 Location 505 Sherman Street, Rockford, Illinois

B. Architect PG Architecture Design/ Build

1. Address: 2601 Reid Farm Rd., Suite C, Rockford, IL 61114
2. Representative(s): Steve Howlett, Project Principal / [steve@pgarch.com](mailto:steve@pgarch.com)  
Maged Anton, Project Manager / [maged@pgarch.com](mailto:maged@pgarch.com)

C. General Project Scope

1. The work includes complete masonry repair, cleaning, and restoration work to four (4) existing fire stations. The exterior wall construction varies by location: Station #2 – concrete masonry units / Station #5 – concrete masonry units / Station #6 precast concrete panels & brick masonry / Station #8 brick masonry. It is up to each respective bidder to inspect all locations to become familiar with the existing conditions. The stations will remain open, occupied, and active during the projects. Safety, shoring, dust control, and security is the sole responsibility of the masonry contractor. The masonry contractor will be the prime contractor for this work.

2. Scanned copies (.pdf) of the original construction documents for each building are available to all bidders upon written request.

### 1.3 WORK PHASES

- A. The Work shall be conducted in one phase at each respective project site and can be performed as four (4) consecutive projects or simultaneously.

### 1.4 WORK UNDER OTHER CONTRACTS

- A. General: There are no separate contracts intended or held by the owner or any other parties.

### 1.5 USE OF PREMISES

- A. General: Contractors' use of premises is limited only by Owner's right to perform work.
- B. Highway Access Points: Highway, public street, and easement access points shall be kept unobstructed and clean at all times. Clean up is the responsibility of the offending contractor at the decision of the construction manager.

### 1.6 WORK RESTRICTIONS

- A. Smoking is not permitted in the building.

### 1.7 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the CSI/CSC's "MasterFormat" numbering system.
  - 1. Divisions 00 and 01: Sections in Division 00 and 01 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
  - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may

be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

- a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 01 10 00**

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 01 22 00 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Section:
  - 1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.2 DEFINITIONS

- A. Unit price is a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent survey or acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES.

- A. Unit Price No. 1: Masonry Tuck Pointing Per / LF \$ \_\_\_\_\_
- B. Unit Price No. 2: Control Joint / Panel Joint Prep & Caulking Per / LF \$ \_\_\_\_\_

**END OF SECTION 01 22 00**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 23 00 - ALTERNATES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

##### 1.2 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

##### 1.3 PROCEDURES

A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.

C. Execute accepted alternates under the same conditions as other work of the Contract.

##### 1.4 SCHEDULE OF ALTERNATES

A. Alternate.1: At Station #2 – provide an additive cost to replace all existing red glazed CMU with equal new product.

B. Alternate.2: At Station #5 – provide an additive cost to replace all existing red glazed CMU with equal new product.

C. Alternate 3: At Station #8 – provide an additive cost to completely replace one steel lintel at typical window openings (in lieu of cleaning & painting steel lintel).

**END OF SECTION 01 23 00**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 25 00 - CONTRACT MODIFICATION PROCEDURES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

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

##### 1.2 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" form.

##### 1.3 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. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in proposal request 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 unforeseen conditions require modifications to the Contract, Contractor may propose changes 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 "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

#### 1.4 ALLOWANCES – NOT USED

#### 1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a 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.

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

- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION (Not Used)

#### **END OF SECTION 01 25 00**

Masonry Repairs –  
Rockford Fire Department - Stations #2,5,6,8

01 25 00- 2  
CONTRACT MODIFICATION PROCEDURES

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 25 00 - CONTRACT MODIFICATION PROCEDURES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

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

##### 1.2 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" form.

##### 1.3 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. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in proposal request 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 unforeseen conditions require modifications to the Contract, Contractor may propose changes 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 "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

#### 1.4 ALLOWANCES – NOT USED

#### 1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a 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.
1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION (Not Used)

#### **END OF SECTION 01 25 00**

Masonry Repairs –  
Rockford Fire Department - Stations #2,5,6,8

01 25 00- 2  
CONTRACT MODIFICATION PROCEDURES

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

#### PART 1 - GENERAL

##### 1.1 SUMMARY

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

##### 1.2 DEFINITIONS

- A. RFI: Request from Request from Owner, Architect, or Contractor seeking information from each other during construction

##### 1.3 COORDINATION

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

##### 1.4 SUBMITTALS

- A. Products:
  - 1. Submit 3 copies of all manufacturers literature for each product incorporated or used during the execution of the work.

## 1.5 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three 3 days of the meeting.
    - a. Preconstruction Conference: Contractors will be required to attend a preconstruction conference before starting construction with Architect, at a time convenient to Owner and Architect
- B. Pre-installation 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 other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
  2. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  3. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
  4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
    - a. Progress Meetings: Conduct progress meetings with the owner appropriate the scope & pace of work but at a minimum of weekly intervals.

## 1.6 REQUESTS FOR INFORMATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
1. Project name.

2. Date.
3. Name of Contractor.
4. Name of Architect /Architect.
5. RFI number, numbered sequentially.
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 solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
10. Contractor's signature.
11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.

C. Hard-Copy RFIs: CSI Form 13.2A.

1. Identify each page of attachments with the RFI number and sequential page number.

D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.

1. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
2. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 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 10 days of receipt of the RFI response.

E. 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 days if Contractor disagrees with response.

1.7 PROJECT TEAM QUALIFICATIONS

- A. The project manager and superintendent of the general contractor are required to have ASHE Healthcare Construction Certification. A copy of certificates will be required along with the standard insurance submittals.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 01 31 00**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

#### PART 1 - GENERAL

##### 1.1 SUMMARY

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

##### 1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
1. Critical activities are activities on the critical path. They 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. Major Area: A story of construction, a separate building, or a similar significant construction element.

##### 1.3 SUBMITTALS

- A. Submittals Schedule: Submit three copies of the schedule upon architect's request. Arrange the following information in a tabular format:
1. Scheduled date for first submittal.
  2. Specification Section number and title.
  3. Submittal category (action or informational).
  4. Name of subcontractor.
  5. Description of the Work covered.
  6. Scheduled date for Architect's final release or approval.
- B. Contractor's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.
- C. Field Condition Reports: Submit two copies at time of discovery of differing conditions.

## 1.4 COORDINATION

- A. The Contractor will coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

## PART 2 - PRODUCTS

### 2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
  - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
  - 2. Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

### 2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for commencement of the Work to date of Final Completion.
  - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
  - 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by the Design Builder.
  - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 20 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
    - a. TBD by contractor.
  - 3. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
- C. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion, and the following interim milestones:
  - 1. No additional milestones.
- D. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

## 2.3 REPORTS

- A. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: On an "as required" basis determined by the contractor and/or owner, update schedule to reflect actual construction progress and activities.
  
- B. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

**END OF SECTION 01 32 00**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 014200 - REFERENCES

#### PART 1 - GENERAL

##### 1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION (Not Used)

**END OF SECTION 01 42 00**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. See Division 01 Section "Execution" for progress cleaning requirements.

##### 1.2 USE CHARGES

##### 1.3 QUALITY ASSURANCE

##### 1.4 PROJECT CONDITIONS

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Chain-Link Fencing: Minimum 2-inch, 0.148-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 rails.
- B. Portable Chain-Link Fencing: Minimum 2-inch, 9-gage, 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 concrete bases for supporting posts.
- C. Wood Enclosure Fence: Plywood, 6 feet high, framed with four 2-by-4-inch rails, with preservative-treated wood posts spaced not more than 8 feet apart.
- D. Lumber and Plywood: Comply with requirements in Division 6 Section Rough Carpentry
- E. Gypsum Board: Minimum 1/2 inch thick by 48 inches wide by maximum available lengths; regular-type panels with tapered edges. Comply with ASTM C 36/C 36M.
- F. Insulation: Un-faced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

## 2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

## PART 3 - EXECUTION

### 3.1 TEMPORARY UTILITY INSTALLATION

### 3.2 SUPPORT FACILITIES INSTALLATION

- A. Traffic Controls: Comply with requirements of authorities having jurisdiction.
  - 1. Maintain access for fire-fighting equipment and access to fire hydrants.
- B. 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 Division 01 Section "Execution" for progress cleaning requirements.
- C. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
  - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- D. 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.
- E. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- F. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
  - 1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side.
  - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
  - 3. Insulate partitions to control noise transmission to occupied areas.
  - 4. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
  - 5. Protect air-handling equipment.
  - 6. Provide walk-off mats at each entrance through temporary partition.
- G. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
  - 1. Prohibit smoking in construction areas.

2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

### 3.3 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 materials from water damage and keep porous and organic materials from coming into prolonged contact with concrete.

### 3.4 OPERATION, TERMINATION, AND REMOVAL

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

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 60 00 - PRODUCT REQUIREMENTS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. See Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.

##### 1.2 DEFINITIONS

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

##### 1.3 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: Form provided at end of this Section.

2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
  - a. Statement indicating why specified material or product cannot be provided.
  - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by 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. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
  - 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 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 and is appropriate for applications indicated.
  - l. 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 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
  - a. Form of Acceptance: Change Order.
  - b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.
  
- B. Comparable Product 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. 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 7 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 cannot make a decision on use of a comparable product request within time allocated.

C. Basis-of-Design Product: Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

#### 1.4 QUALITY ASSURANCE

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

#### 1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

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

##### B. Delivery and Handling:

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

##### C. Storage:

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

## 1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
1. **Manufacturer's Warranty:** Preprinted written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
  2. **Special Warranty:** Written warranty by or incorporated into the Contract Documents. Either to extend time limit provided by manufacturer's warranty or to provide more 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. Refer to 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 that are undamaged and, unless otherwise indicated, are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  2. **Standard Products:** If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
  3. 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. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
  6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. **Product Selection Procedures:**
1. **Product:** Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.

2. **Manufacturer/Source:** Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
3. **Products:** Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
4. **Manufacturers:** Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
5. **Available Products:** Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
6. **Available Manufacturers:** Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
7. **Product Options:** Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
8. **Basis-of-Design Product:** Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
9. **Visual Matching Specification:** Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
  - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
10. **Visual Selection Specification:** Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
  - a. **Standard Range:** Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
  - b. **Full Range:** Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

## 2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received within 30 days after the Notice of Award. Requests received after that time may be considered or rejected at discretion of Architect.
- B. 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:
1. 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.
  2. Requested substitution does not require extensive revisions to the Contract Documents.
  3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  4. Substitution request is fully documented and properly submitted.
  5. Requested substitution will not adversely affect Contractor's Construction Schedule.
  6. Requested substitution has received necessary approvals of authorities having jurisdiction.
  7. Requested substitution is compatible with other portions of the Work.
  8. Requested substitution has been coordinated with other portions of the Work.
  9. Requested substitution provides specified warranty.

## 2.3 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Architect will consider Contractor's request for comparable product 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:
1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
  2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  3. Evidence that proposed product provides specified warranty.
  4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
  5. Samples, if requested.

## PART 3 - EXECUTION (Not Used)

### **END OF SECTION 01 60 00**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 017000 - EXECUTION

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
1. Installation of the Work.
  2. Cutting and patching.
  3. Coordination of Owner-installed products.
  4. Progress cleaning.
  5. Starting and adjusting.
  6. Protection of installed construction.
  7. Correction of the Work.
- B. Related Sections:
1. Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

##### 1.2 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 the Architect before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
  2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or those results in increased maintenance or decreased operational life or safety.
  3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
  4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's

aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

### 1.3 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
  - 1. For projects requiring compliance with sustainable design and construction practices and procedures, utilize products for patching that comply with requirements of Division 01 Section "Sustainable Design Requirements."
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to the 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. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  - 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  - 3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  - 4. 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 the Contractor, submit a request for information to Architect according to requirements in 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.
  - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
  - 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. **Tools and Equipment:** Do not use tools or equipment that produce harmful noise levels.
- F. **Templates:** Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- 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. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
  2. Allow for building movement, including thermal expansion and contraction.
  3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- 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. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. 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. Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- E. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- F. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.

4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
  5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  6. Proceed with patching after construction operations requiring cutting are complete.
- G. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
  2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
  3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
  4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
  5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- H. 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 more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
  3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
1. Remove liquid spills promptly.
  2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

- D. **Installed Work:** Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. **Concealed Spaces:** Remove debris from concealed spaces before enclosing the space.
- F. **Exposed Surfaces in Finished Areas:** Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. **Waste Disposal:** Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- H. **During handling and installation,** clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. **Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.** Adjust and lubricate operable components to ensure operability without damaging effects.
- J. **Limiting Exposures:** Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### 3.6 STARTING AND ADJUSTING

### 3.7 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.

### 3.8 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
  - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

**END OF SECTION 017300**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
  - 1. Recycling nonhazardous demolition and construction waste.
  - 2. Disposing of nonhazardous demolition and construction waste.

##### 1.2 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, 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 sale, 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.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

##### 3.1 PLAN IMPLEMENTATION

- A. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.

2. Comply with Division 01 Section "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 SALVAGING DEMOLITION WASTE – Not applicable.

3.3 DISPOSAL OF WASTE

- G. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
3. All carts transporting demolition waste must be covered to limit particulate migration.

- H. Disposal: Transport waste materials off Owner's property and legally dispose of them.

**END OF SECTION 01 74 19**

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 77 00 - CLOSEOUT PROCEDURES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
1. Substantial Completion procedures.
  2. Final completion procedures.
  3. Warranties.
  4. Final cleaning.

##### 1.2 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.
1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  2. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  3. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  4. Complete startup testing of systems.
  5. Submit test/adjust/balance records.
  6. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  7. Advise Owner of changeover in heat and other utilities.
  8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Owner/ Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner/ 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 Owner/ 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.

### 1.3 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
1. Submit a final Application for Payment
  2. Submit certified copy of Owner/ Architect's Substantial Completion inspection list of items to be completed or corrected (punch list). The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Design Builder will either proceed with inspection or notify Contractor of unfulfilled requirements. Design Builder will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

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

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

### 1.5 WARRANTIES

## PART 2 - PRODUCTS

### 2.1 MATERIALS

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

1. Use cleaning products that meet Green Seal GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

### PART 3 - EXECUTION

#### 3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Remove snow and ice to provide safe access to building.
    - f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
    - h. Sweep concrete floors broom clean in unoccupied spaces.
    - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
    - j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
    - k. Remove labels that are not permanent.
    - l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
      - 1) Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates.

- m. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- n. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
- o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- q. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- r. Leave Project clean and ready for occupancy.

**END OF SECTION 01 77 00**

DIVISION 04 - MASONRY

SECTION 04 01 21 - BRICK MASONRY REPAIR AND REPLACEMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes restoration of brick as follows:
  - 1. Repairing brick masonry, including replacing damaged units and removing and replacing units and substrate repairs.
- B. Related Sections include the following:
  - 1. Section 04 05 01 - Masonry Mortar

1.2 REFERENCES

- A. Reference Standards: All standards latest edition as of the date of the Specification.
  - 1. ASTM International.
    - a. C67: Test Methods of Sampling and Testing Brick and Structural Clay Tile
    - b. D1056: Specification for Flexible Cellular Materials - Sponge or Expanded Rubber
  - 2. Brick Institute of America (BIA)
    - a. BIA Technical Notes 1 - All-Weather Construction
    - b. BIA Technical Note 7B - Water Resistance of Brick Masonry - Construction and Workmanship
  - 3. American Concrete Institute (ACI)
    - a. ACI 530.1/ASCE 6/TMS 602 - Specification for Masonry Structures.

1.3 SUBMITTALS

- A. Product Data: For each product listed in Part 2.

1.4 QUALITY ASSURANCE

- A. Contractor Qualifications: Engage an experienced masonry restoration firm to perform work of this Section. Demonstrate that firm has completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance.
  - 1. Field Supervision: maintain experienced full-time supervisors on Project site during times that masonry restoration is in progress. Do not change supervisors during Project except for causes beyond the control of Contractor.
  - 2. Workers and installers: minimum 2-years' experience in related masonry construction. Fully supervise apprentices with an experienced tradesperson.
- B. Source Limitations: Obtain each type of material for masonry restoration from one source with resources to provide materials of consistent quality in appearance and physical properties.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials in such a manner as to prevent damage.
  - 1. Deliver masonry units to the site strapped together in suitable packs or pallets, or in heavy-duty cartons.
  - 2. Deliver other materials to the site in the manufacturer's original and unopened containers, labeled with the manufacturer's name and type of products, and store unopened until required for use.
- B. Store masonry units, accessories, and packaged materials on elevated platforms and protect from weather, moisture including condensation, and neglect. Comply with the manufacturer's recommendations for minimum and maximum temperature requirements for storage. Remove damaged or otherwise unsuitable material from the site.

## 1.6 PROJECT CONDITIONS

- A. Cold-Weather Requirements: When air temperature is below 40 deg F, suspend the Work or comply with the requirements of ACI 530.1/ASCE 6/TMS 602 and BIA Technical Note 1, section on "Cold Weather Construction."
- B. Hot-Weather Requirements for Masonry: When the ambient air temperature exceeds 100 degrees F, or exceeds 90 degrees F with a wind velocity greater than 8 miles per hour, suspend the Work or comply with the requirements of ACI 530.1/ASCE 6/TMS 602 and BIA Technical Note 1, section on "Hot Weather Construction."

## PART 2 - PRODUCTS

### 2.1 MASONRY MATERIALS

- A. Block and Accessories: As specified in Section 04 21 13 - Block Masonry.
- B. Mortar: Type N as specified in Section 04 05 01 - Masonry Mortar and Grout
- C. Sealer: Manufacturer: PROSOCO, Inc., Siloxane sealer

### 2.2 MISCELLANEOUS MATERIALS

- A. Self-Adhered Flashing Membrane: modified asphalt flashing material with polyethylene facing and base of rubberized asphalt adhesive, with a disposable silicone coated release sheet.
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Grace Construction Products - Vycor Plus
    - b. Grace Construction Products - Bituthene

### 2.3 CLEANERS TO REMOVE MORTAR AND DEBRIS FROM REPAIR WORK

- A. Cleaning Solution
  - 1. "Enviro-Klean Mortar and Grout Remover, "as manufactured by Prosoco, Inc.
    - a. Solution: 1 pound cleaner to 1 gallon water
  - 2. Approved equal

3. DO NOT use products containing the following:
  - a. Hydrochloric (muriatic) acid
  - b. Hydrofluoric acid
  - c. Ammonium bifluoride
  
- B. Clean, potable water
  
- C. Soft, natural bristle brush or roller
  1. For acidic cleaners use nylon bristle brushes
  2. For neutral or alkaline cleaners, use natural bristle brushes.
  
- D. Pressure rinsing equipment that can provide controlled application of heated water
  1. Allowable pressure: 400-600 psi, or as approved during cleaning mockups
  2. Water flow rate: 4 to 8 gallons per minute
  3. Water may be heated to 185 degrees F to assist in improving cleaning
  
  4. Use 15-40 degree stainless steel fan tips
  5. Equipment shall have no ferrous parts
  
- E. Cleaner for removing localized ferrous staining from masonry
  1. Oxalic acid or Phosphoric acid
  2. Clean, potable water
  3. Soft, natural bristle brush or roller
  4. Solution: Mix 1 part oxalic or phosphoric acid to 10 parts water. (higher concentrations acceptable for local application or poultices)

### PART 3 - EXECUTION

#### 3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from Work.
  
- B. Prevent mortar from staining face of surrounding masonry and other surfaces.
  1. Cover sills, ledges, and projections to protect from mortar droppings.
  2. Keep wall area wet below Work area to discourage mortar from adhering.
  3. Immediately remove mortar in contact with exposed masonry and other surfaces.
  
- C. Remove downspouts adjacent to Work and store as necessary. Reinstall when Work is complete.
  1. Provide temporary rain drainage during work to direct water away from building.

#### 3.2 BRICK REMOVAL AND REPLACEMENT

- A. At locations indicated on the Drawings and designated by the owner, remove at least three brick courses above the roof flashing. Prior to beginning the Work, notify the Owner's Representative and the Architect/Engineer of locations with damaged or deteriorated brick that are not indicated for repair in the Contract Documents.
  1. Carefully demolish and remove entire units and mortar from joint to joint, without damaging the surrounding masonry, in a manner that permits replacement with full-size units. Remove and replace sound bricks that are damaged during the Work at no cost to the Owner.

- B. Support and protect remaining masonry that surrounds removal area. Maintain flashings, reinforcement, lintels, and adjoining construction in an undamaged condition.
- C. Notify Architect/Engineer of unforeseen detrimental conditions including voids, cracks, bulges, displacements, and loose masonry units in existing masonry backup, rotted wood, corroded metal, and other deteriorated items.
- D. Cover openings and partially completed Work with strong waterproofing membrane at the end of the day, or when the Work is not in progress. Extend the cover at least 2 feet beyond the opening edges and secure in place.
- E. Clean bricks surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.
- F. Brick Installation
  - 1. Install brick in accordance with BIA Technical Note 7B in the bonding and coursing pattern of the existing brick.
  - 2. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
  - 3. Wet both the replacement and the surrounding bricks that have ASTM C67 initial rates of absorption (suction) of more than 25 grams/30 square inch per minute (25 grams/194 square cm per minute). Use wetting methods that ensure that the units are nearly saturated but surface dry when laid (no visible moisture on the surface).
  - 4. Lay the replacement brick as plumb and true to line as the adjacent surfaces will permit; new brickwork shall be flush with the existing.
  - 5. Lay the replacement brick with completely filled bed, head, and collar joints. Do not furrow the bed joints. Butter the ends with sufficient mortar to fill the head joints, and shove into place.
  - 6. Maintain the joint width for the replacement units to match the existing joints.
    - a. Tool the exposed mortar joints in the repair areas when the mortar is thumbprint hard, with a round jointer slightly larger than the width of the joint. Tool the joints to match the joints in the surrounding existing brickwork.
  - 7. Do not pound the corners and jambs to fit stretcher units after they are set in position. Where an adjustment must be made after the brick has been placed, remove and replace the mortar.
  - 8. Install mortar at the top and ends of the repair by packing layers of mortar into the joint with a tuckpointer's tool.
  - 9. If the brick placement is stopped while in progress, either at the end of the day or for some other reason, stop horizontal runs by racking back the mortar of each course one half unit length; do not terminate in a vertical tooth pattern.
  - 10. Seal all masonry surfaces with Prosoco Siloxane sealer.

### 3.3 FINAL CLEANING OF NEW MASONRY

- A. Clean repair areas 24 to 48 hours after completion of the Work. This work is for staining and debris from repair work.

1. Remove large particles of mortar from exposed masonry surfaces with wood paddles or scrapers. Do not use metal scrapers or brushes unless approved by the Architect/Engineer.
  2. Saturate the brickwork with water and flush off loose mortar and dirt. With a stiff-fiber brush, scrub with cleaning solution. Thoroughly wash off the cleaning solution, dirt, and mortar crumbs with clean, low-pressure water.
  3. For the removal of rust stains, apply cleaning mixture with a trowel, and scrape off when dry. Repeat until the stain is removed, and wash thoroughly with water.
- B. Wash adjacent woodwork and other non-masonry surfaces. Use detergent and soft brushes or cloths.
  - C. Clean masonry debris from the roof, and remove debris from gutters and downspouts. Rinse off the roof and flush the gutters and downspouts.
  - D. Sweep and rake the adjacent pavement and grounds to remove masonry debris. Where necessary, pressure wash surfaces to remove mortar, dust, dirt, and stains.
  - E. Remove scaffolding, equipment, surplus materials, debris, and refuse from the site.
- 3.4 FIELD QUALITY CONTROL.
- A. Material Testing: Tests may be requested by Owner's Representative or the Architect/Engineer after certification and delivery of the material. The cost of tests shall be paid by the Owner unless the test results indicate that material does not conform to the Specification requirements, in which case the Contractor shall pay the cost of testing.

**END OF SECTION 04 01 21**

DIVISION 04 - MASONRY

SECTION 04 05 01 - MASONRY MORTAR

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes preparation and mixing of mortar for setting face brick.
- B. Related Sections include the following:
  - 1. Section 04 01 21 – Brick Masonry Repair and Replacement

1.2 REFERENCES

- A. Except as modified by the Project Specifications, applicable portions of the following reference standards shall govern the work. All standards latest edition as of the date of the Specifications:
  - 1. Mortar:
    - a. ASTM International
      - 1) C144: Specifications for Aggregate for Masonry Mortar
      - 2) C150: Specifications for Portland cement
      - 3) C207: Specifications for Hydrated Lime for Masonry Purposes
      - 4) C270: Specifications for Mortar for Unit Masonry
      - 5) C780: Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
    - b. Brick Institute of America (BIA)
      - 1) BIA Technical Notes 7F - Moisture Resistance of Brick Masonry - Maintenance
      - 2) BIA Technical Notes 8A - Standard Specification for Portland Cement-Lime Mortar for Brick Masonry, BIA Designation M1

1.3 SUBMITTALS

- A. Product Data: Materials description for all materials to be used in Work.
- B. Material Certificates: Prior to delivery, submit to the Owner and Architect/Engineer certificates attesting to compliance with the applicable Specifications referenced herein of the following:
  - 1. Portland cement. Include brand, type, and name of manufacturer.
  - 2. Hydrated lime. Include brand, type, and name of manufacturer
  - 3. Aggregate. Include type, sieve analysis and supplier.
  - 4. Pre-blended, dry mortar mixes. Include description of type and proportions of ingredients.
- C. Test Reports: Test reports from an independent laboratory for all required tests.

- D. Mix Designs: For each type of mortar. Include description of type and proportions of ingredients.
  - 1. Include test reports, per UBC Standard 21-16, for mortar mixes required to comply with property specification.
  - 2. Include test reports, per UBC Standard 21-18, for grout mixes required to comply with compressive strength requirement.

#### 1.4 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent agency qualified according to ASTM C1093 for testing indicated, as documented according to ASTM E548.
- B. Contractor Qualifications:
  - 1. Contractor: Must have a minimum of five (5) years experience in construction and supervision of masonry work.
  - 2. Masons: Must have a minimum of two (2) years experience on construction of masonry.
  - 3. Mixers: Must have a minimum of two (2) years experience in Preparation of masonry mortar

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the job site in manufacturer's sealed packaging and store unopened until required for use.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Deliver preblended, dry mortar mix in moisture-resistant containers designed for lifting and emptying into dispensing silo. Store preblended, dry mortar mix in delivery containers on elevated platforms, under cover, and in a dry location or in a metal dispensing silo with weatherproof cover.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Cementitious Materials
  - 1. Portland Cement: ASTM C150, Type I or II, except Type III may be used for cold- weather construction. Provide natural color or white cement as required to produce mortar color indicated.
  - 2. Hydrated Lime: A S T M C207, Type S
- B. Aggregates for Mortar
  - 1. ASTM C144 except that the grading shall comply with the limits specified in Section 4.3 of BIA M1. Sand shall contain no more than 50 parts per million of chloride ions. Sand shall be free of organic contaminants.
  - 2. For mortar that is exposed to view, use washed aggregate consisting of

natural sand or crushed stone.

- C. Water
  - 1. Clean and potable.
  - 2. Free from deleterious amounts of acids, alkalis or organic materials.
- D. Admixtures
  - 1. No admixtures shall be used without written approval, unless otherwise specified.
  - 2. No calcium chloride or admixtures containing calcium chloride shall be used in the mortar.
  - 3. No air-entraining admixtures or material containing air-entraining admixtures shall be used in the mortar.

## 2.2 MORTAR MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.
  - 1. Do not use calcium chloride in mortar.
  - 2. Limit cementitious materials in mortar to portland cement and lime.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix.

Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.

  - 1. Portland Cement-Lime Mix: Packaged blend of portland cement complying with  
ASTM C150, Type I or Type III, and hydrated lime complying with  
ASTM C207, Type S.
- C. Mortar for Unit Masonry: Type N; Comply with UBC Standard 21-15, Proportion Specification. Provide the following types of mortar for applications stated unless another type is indicated or needed to provide required compressive strength of masonry.
- D. Color Matching:
  - 1. Match color of mortar to the existing adjacent mortar joints, unless specified otherwise.

## PART 3 - EXECUTION

### 3.1 MORTAR MIXING

- A. Except as specified herein, mix in accordance with requirements of BIA M1, which will be provided at the pre-construction conference.
- B. Control batching procedure to insure proper proportions by measuring materials by volume with known volume containers.
- C. Do not measure mortar materials by shovels.

### 3.2 MORTAR INSTALLATION

- A. Install in accordance with BIA Standards.
- B. If mortar begins to stiffen, it may be retempered.
- C. Use mortar within 2-1/2 hours of initial mixing.

### 3.3 FIELD QUALITY CONTROL [OWNER'S OPTION AND COST]

#### A. Field Inspection

- 1. Inspectors: Owner will engage qualified independent inspectors to perform inspections and prepare reports. Allow inspectors access to scaffolding and work areas, as needed to perform inspections.
- 2. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections indicated below and prepare test reports:
  - a. Payment for these services will be made by Owner.

- B. Retesting of materials failing to comply with specified requirements shall be done at Contractor's expense.

### 3.4 CLEANING

- A. At the conclusion of masonry Work remove all equipment and surplus material used for mixing mortar, clean up all debris and refuse and remove same from the site

**END OF SECTION 04 05 01**

## SECTION 042200 - CONCRETE UNIT MASONRY

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Concrete masonry units (CMU's).

#### 1.2 SUBMITTALS

##### A. Product Data: For each type of product indicated.

##### B. Samples: Match existing at each repair condition.

##### C. Material Certificates: For each type and size of product indicated. For masonry units include data on material properties .

##### D. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.

1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91 for air content.

#### 1.3 QUALITY ASSURANCE

##### A. Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents.

#### 1.4 PROJECT CONDITIONS

##### A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

##### B. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

## PART 2 - PRODUCTS

### 2.1 MASONRY UNITS, GENERAL

- A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.

### 2.2 CONCRETE MASONRY UNITS

- A. Shapes: Provide shapes and finishes to match each repair condition.
- B. CMUs: ASTM C 90.
  - 1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2800 psi.
  - 2. Density Classification: Normal weight.
  - 3. Size: As indicated on drawings.
  - 4. Color: Match existing.

### 2.3 MASONRY LINTELS

### 2.4 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.
- D. Masonry Cement: ASTM C 91.
- E. Mortar Cement: ASTM C 1329.
- F. Aggregate for Mortar: ASTM C 144.
  - 1. For joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.
  - 2. White-Mortar Aggregates: Natural white sand or crushed white stone.
  - 3. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.
- G. Aggregate for Grout: ASTM C 404.

H. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494/C 494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.

I. Water: Potable.

## 2.5 REINFORCEMENT

A. Uncoated Steel Reinforcing Bars: ASTM A 615/A 615M or ASTM A 996/A 996M, Grade 60.

B. Masonry Joint Reinforcement, General: ASTM A 951/A 951M.

1. Interior Walls: Hot-dip galvanized, carbon steel.
2. Exterior Walls: Hot-dip galvanized, carbon steel.
3. Wire Size for Side Rods: 0.148-inch diameter.
4. Wire Size for Cross Rods: 0.148-inch diameter.
5. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than 16 inches o.c.
6. Provide in lengths of not less than 10 feet.

## 2.6 TIES AND ANCHORS

A. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated.

1. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A 82/A 82M; with ASTM A 153/A 153M, Class B-2 coating.

B. Anchor Bolts: Headed or L-shaped steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers; hot-dip galvanized to comply with ASTM A 153/A 153M, Class C; of dimensions indicated.

## 2.7 EMBEDDED FLASHING MATERIALS

A. Single-Wythe CMU Flashing System: System of CMU cell flashing pans and interlocking CMU web covers made from high-density polyethylene incorporating chemical stabilizers that prevent UV degradation. Cell flashing pans have integral weep spouts that are designed to be built into mortar bed joints and weep collected moisture to the exterior of CMU walls and that extend into the cell to prevent clogging with mortar.

1. Products: Subject to compliance with requirements, provide one of the following:

- a. MasonPro, Inc.; Blok-Flash.
- b. Mortar Net Solutions; BlockFlash
- c. Sandell Manufacturing Co., Inc.; Blok-Flash.
- d. Or Architect approved equal.

## 2.8 MISCELLANEOUS MASONRY ACCESSORIES

- A. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 or PVC, complying with ASTM D 2287, Type PVC-65406 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
- B. Bond-Breaker Strips: Asphalt-saturated, organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).

## 2.9 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
  - 1. Do not use calcium chloride in mortar or grout.
  - 2. For exterior masonry, use masonry cement mortar.
  - 3. For reinforced masonry, use masonry cement mortar.
  - 4. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Unit Masonry: Comply with ASTM C 270, Proportion Specification. Provide the following types of mortar for applications stated unless another type is indicated.
  - 1. For reinforced masonry, use Type N.
  - 2. For exterior, above-grade, load-bearing and non-load-bearing walls and parapet walls; for interior load-bearing walls; for interior non-load-bearing partitions; and for other applications where another type is not indicated, use Type N.
- D. Grout for Unit Masonry: Comply with ASTM C 476.
  - 1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with Table 1.15.1 in ACI 530.1/ASCE 6/TMS 602 for dimensions of grout spaces and pour height.
  - 2. Proportion grout in accordance with ASTM C 476, Table 1 or paragraph 4.2.2 for specified 28-day compressive strength indicated, but not less than 2000 psi.
  - 3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C 143/C 143M.

## PART 3 - EXECUTION

### 3.1 TOLERANCES

#### A. Dimensions and Locations of Elements:

1. For dimensions in cross section or elevation do not vary by more than plus 1/2 inch or minus 1/4 inch.
2. For location of elements in plan do not vary from that indicated by more than plus or minus 1/2 inch.
3. For location of elements in elevation do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

#### B. Lines and Levels:

1. For bed joints and top surfaces of bearing walls do not vary from level by more than 1/4 inch in 10 feet, or 1/2 inch maximum.
2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
3. For vertical lines and surfaces do not vary from plumb by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.
4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
5. For lines and surfaces do not vary from straight by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.

#### C. Joints:

1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
2. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch.
3. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch.

### 3.2 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.

- C. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.
- D. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- E. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below and rod mortar or grout into core.
- F. Fill cores in hollow CMUs with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.

### 3.3 MORTAR BEDDING AND JOINTING

- A. Lay hollow CMUs as follows:
  - 1. With face shells fully bedded in mortar and with head joints of depth equal to bed joints.
  - 2. With webs fully bedded in mortar in all courses of piers, columns, and pilasters.
  - 3. With webs fully bedded in mortar in grouted masonry, including starting course on footings.
  - 4. With entire units, including areas under cells, fully bedded in mortar at starting course on footings where cells are not grouted.
- B. Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- C. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
- D. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint) unless otherwise indicated.

### 3.4 MASONRY JOINT REINFORCEMENT

- A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.
  - 1. Space reinforcement not more than 16 inches o.c.
  - 2. Provide reinforcement not more than 8 inches above and below wall openings and extending 12 inches beyond openings in addition to continuous reinforcement.
- B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C. Provide continuity at wall intersections by using prefabricated T-shaped units.
- D. Provide continuity at corners by using prefabricated L-shaped units.

### 3.5 FLASHING

- A. General: Install embedded flashing in masonry at lintels, ledges, other obstructions to downward flow of water in wall, and where indicated.
- B. Install single-wythe CMU flashing system in bed joints of CMU walls where indicated to comply with manufacturer's written instructions. Install CMU cell pans with upturned edges located below face shells and webs of CMUs above and with weep spouts aligned with face of wall. Install CMU web covers so that they cover upturned edges of CMU cell pans at CMU webs and extend from face shell to face shell.

### 3.6 REINFORCED UNIT MASONRY INSTALLATION

### 3.7 FIELD QUALITY CONTROL

### 3.8 REPAIRING, POINTING, AND CLEANING

- A. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- B. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
  - 1. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes.
  - 2. Clean concrete masonry by cleaning method indicated in NCMA TEK 8-2A applicable to type of stain on exposed surfaces.

### 3.9 MASONRY WASTE DISPOSAL

- A. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed.
  - 1. Do not dispose of masonry waste as fill within 18 inches of finished grade.
- B. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above, and other masonry waste, and legally dispose of off Owner's property.

**END OF SECTION 042200**

## SECTION 042300 - GLASS UNIT MASONRY

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Glass block set in mortar.

#### 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: Glass-block units .

### PART 2 - PRODUCTS

#### 2.1 GLASS BLOCK

- A. Hollow Glass Block GB-1: Hollow units made from transparent glass, with manufacturer's standard edge coating.
  1. Basis-of-Design Product: Subject to compliance with requirements, provide Pittsburgh Corning Corporation or approved equal.
  2. Glass Color: Colorless.
  3. Pattern: Match existing
  4. Edge-Coating Color: Match existing..
  5. Sizes: Manufacturer's standard sizes matching existing conditions.
  6. Thick-Faced Block: Units with faces at least 3/4 inch thick.

#### 2.2 MORTAR MATERIALS

- A. Masonry Cement: ASTM C 91.
- B. Water-Repellent Admixture: Liquid polymeric water-repellent mortar admixture that does not reduce flexural bond strength of mortar.
- C. Water: Potable.

## 2.3 GLASS UNIT MASONRY ACCESSORIES

## 2.4 MORTAR MIXES

- A. General: Do not use admixtures unless otherwise indicated.
  - 1. For mortar in exterior panels, use water-repellent admixture according to admixture manufacturer's written instructions.
- B. Mortar for Glass Unit Masonry Assemblies: Comply with ASTM C 270, Proportion Specification for Type S mortar.

## PART 3 - EXECUTION

### 3.1 INSTALLING GLASS BLOCK WITH MORTAR

- A. Set glass block with completely filled bed and head joints, with no furrowing, accurately spaced and coordinated with other construction. Maintain 1/4-inch exposed joint widths unless otherwise indicated.
- B. Use plastic spacers in mortar joints to produce uniform joint widths and to prevent mortar from being squeezed out of joints.
- C. Keep expansion joints free of mortar.
- D. Point joints with mortar by filling raked joints and voids. Place and compact pointing mortar in layers not more than 3/8 inch thick. Compact each layer thoroughly and allow to become thumbprint hard before applying next layer.
  - 1. Tool exposed joints slightly concave when pointing mortar is thumbprint hard. Use a smooth plastic jointer larger than joint width.

### 3.2 CLEANING

- A. Perform final cleaning of glass unit masonry assemblies when surface is not exposed to direct sunlight. Start at top of panel using generous amounts of clean water. Remove water with clean, dry, soft cloths; change cloths frequently to eliminate dried mortar particles and aggregate.

**END OF SECTION 042300**

DIVISION 05 - METALS

SECTION 05 50 00 - METAL FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes steel lintels.

1.2 SUBMITTALS

- A. Product Data: Materials description for all materials to be used in Work.  
B. Test Reports: Test reports from an independent laboratory for all required tests.

1.3 QUALITY ASSURANCE

- A. Welding: Qualify procedures and personnel according to the following:
1. AWS D1.1, "Structural Welding Code--Steel."
  2. AWS D1.3, "Structural Welding Code--Sheet Steel."

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces, unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.

2.2 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.
- B. Fabricate units from steel shapes, plates, and bars of welded construction, unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction retained by framing and supports. Cut, drill, and tap units to receive hardware, hangers, and similar items.
1. Fabricate units from slotted channel framing where indicated.
  2. Furnish inserts if units are installed after concrete is placed.

- C. Galvanize miscellaneous framing and supports where indicated.
- D. Prime miscellaneous framing and supports with zinc-rich primer where indicated.

### 2.3 LOOSE STEEL LINTELS

- A. Fabricate loose steel lintels from steel angles and shapes of size indicated for openings and recesses in masonry walls and partitions at locations indicated. Weld adjoining members together to form a single unit where indicated.
- B. Size loose lintels to provide bearing length at each side of openings equal to 1/12 of clear span but not less than 8", unless otherwise indicated.
- C. Galvanize new loose steel lintels located in exterior walls.
- D. Prime existing loose steel lintels located in exterior walls with zinc-rich primer.
- E. Finish coat all exposed steel lintels with one coat of exterior grade oil based paint in color compatible with the masonry wall material color.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. Field Welding: Comply with the following requirements:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

- D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag bolts, wood screws, and other connectors.
- E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

### 3.2 INSTALLING BEARING AND LEVELING PLATES

- A. Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve bond to surfaces. Clean bottom surface of plates.
- B. Set bearing and leveling plates on wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts. Do not remove wedges or shims but, if protruding, cut off flush with edge of bearing plate before packing with grout.
  - 1. Use nonshrink grout, either metallic or nonmetallic, in concealed locations where not exposed to moisture; use nonshrink, nonmetallic grout in exposed locations, unless otherwise indicated.
  - 2. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

### 3.3 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
  - 1. Apply by brush or spray to provide a minimum 2.0 mil dry film thickness.
- B. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Division 9 painting Sections.
- C. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

**END OF SECTION 05 50 00**

## SECTION 079200 - JOINT SEALANTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Nonstaining silicone joint sealants.

#### 1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Sample warranties.

#### 1.5 WARRANTY

- A. Special Installer's Warranty: Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer agrees to furnish joint sealants to repair or replace those joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Five years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 JOINT SEALANTS, GENERAL

- A. VOC Content of Interior Sealants: Sealants and sealant primers used inside the weatherproofing system shall comply with the following:
  - 1. Architectural sealants shall have a VOC content of 250 g/L or less.

2. Sealants and sealant primers for nonporous substrates shall have a VOC content of 250 g/L or less.
3. Sealants and sealant primers for nonporous substrates shall have a VOC content of 775 g/L or less.

B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

## 2.2 SILICONE JOINT SEALANTS

### 2.3 NONSTAINING SILICONE JOINT SEALANTS

- A. Nonstaining Joint Sealants: No staining of substrates when tested according to ASTM C 1248.
- B. Silicone, Nonstaining, S, NS, 50, NT: Nonstaining, single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Use NT.
- C. Silicone, Nonstaining, S, NS, 100/50, T, NT: Nonstaining, single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
  1. Products: Subject to compliance with requirements, **[provide the following]**
    - a. Dow Corning Corporation; 790.

## 2.4 URETHANE JOINT SEALANTS

## 2.5 LATEX JOINT SEALANTS

## 2.6 JOINT-SEALANT BACKING

- A. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- B. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer.

## 2.7 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials.

- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove laitance and form-release agents from concrete.
  - 2. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces.

### 3.2 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with ASTM C 1193 and joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
- C. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 1. Provide concave joint profile per Figure 8A in ASTM C 1193 unless otherwise indicated.

### 3.3 FIELD QUALITY CONTROL

- A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:
1. Extent of Testing: Test completed and cured sealant joints as follows:
    - a. Perform [5] tests for the first [100 feet (300 m)] of joint length for each kind of sealant and joint substrate.
    - b. Perform one test for each [1000 feet (300 m)] of joint length thereafter or one test per each floor per elevation.
  2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.
- B. Evaluation of Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

### 3.4 JOINT-SEALANT SCHEDULE

1. Gray.
- B. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surfaces.
1. Joint Locations:
    - a. Control and expansion joints in unit masonry and precast wall panels
    - b. Other joints as indicated on Drawings.
  2. Joint Sealant: Silicone, nonstaining, S, NS, 50, NT.
  3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.
  4. Gray.

**END OF SECTION 079200**

**Station #2 – 1004 7<sup>th</sup> Street**



North Elevation



North Elevation – windows to receive new steel lintels and glazed CMU.



Detail of North facing window lintel & CMU damage



Delaminated glazed CMU at north facing windows – lintel bk-to-bk 3 1/2"x3 1/2"x1/4" angles w/ 1/4" x 7" plate



Typical discoloration of mortar joints and split face CMU



Typical staining & streaking



Inside corner CMU condition



CMU damage at light mounting.



Previous CMU mortar joint repairs



**Station 5 – 501 North Trainer Road**



West elevation



Inside corner facing west & north



Pier facing west



Single door – lintel 3" x 3" x 1/4" w/1/4" x 7" plate



Double door- lintel W8x10 beam w/ 1/4"x7" plate



Typical Wall



Typical Wall



**Station 6 – 3329 West State Street**



**South Elevation**



Partial West elevation



Partial West elevation



Partial North elevation



Partial North elevation



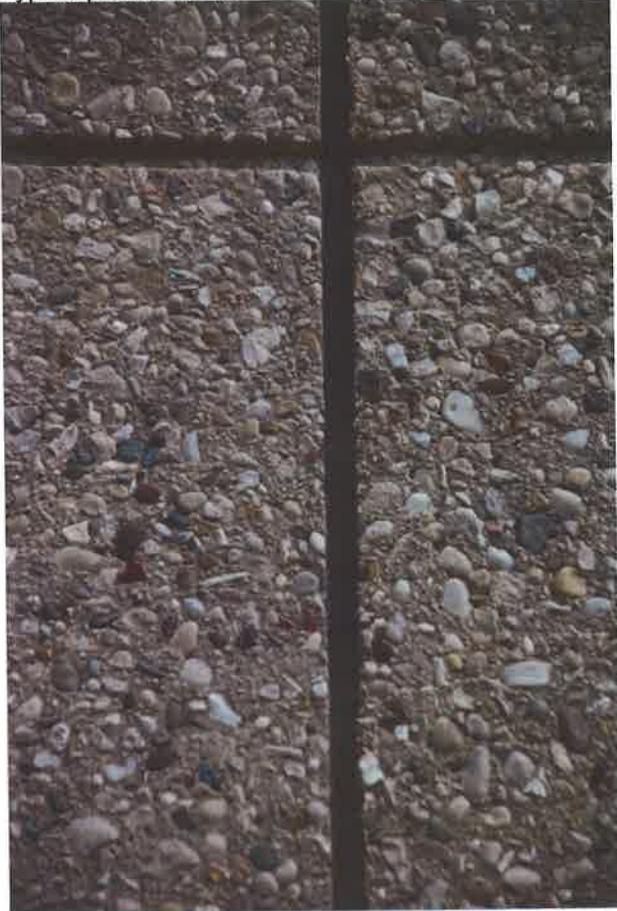
Precast patch on north wall – singular location for this work



Typical precast joints



Typical precast detail – caulked joint & reveal



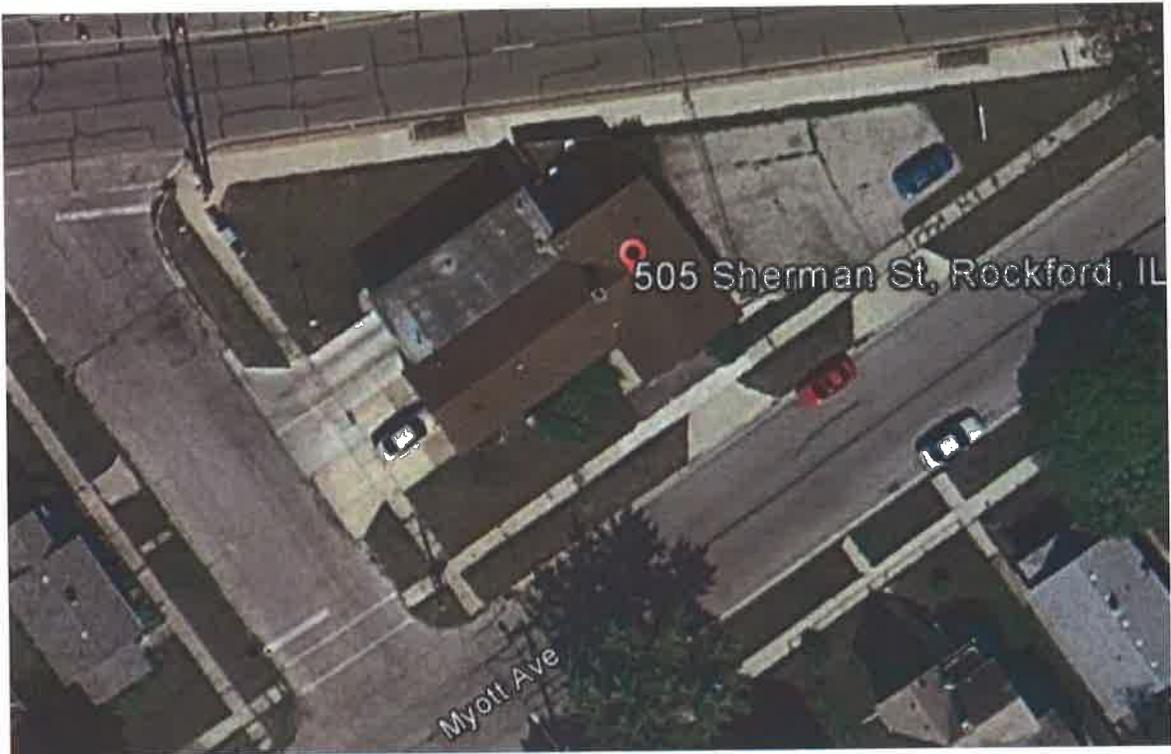
West side entry with precast above & beyond



Typical discoloration – partial east elevation



**Station 8 - 505 Sherman Street**



West elevation



Chimney to be tuck pointed



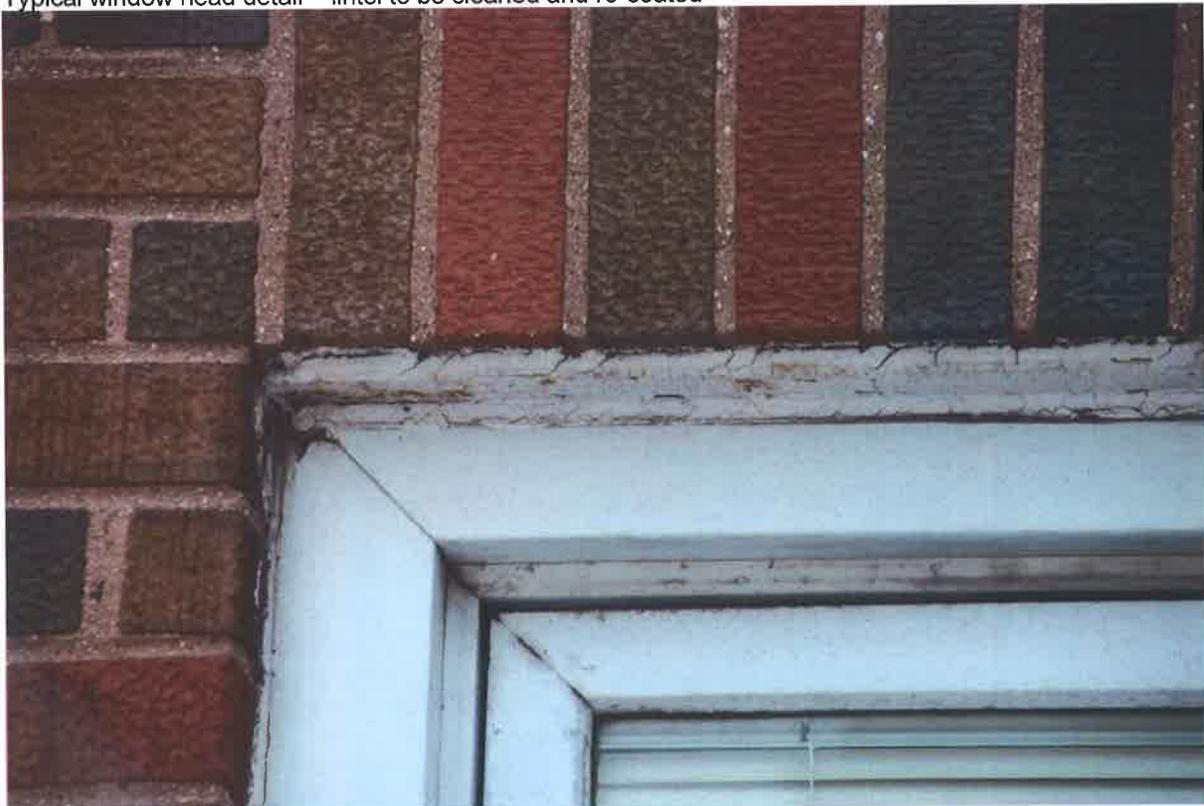
Single glass block to be replaced on the north elevation



Typical window head detail – lintel to be cleaned and re-coated



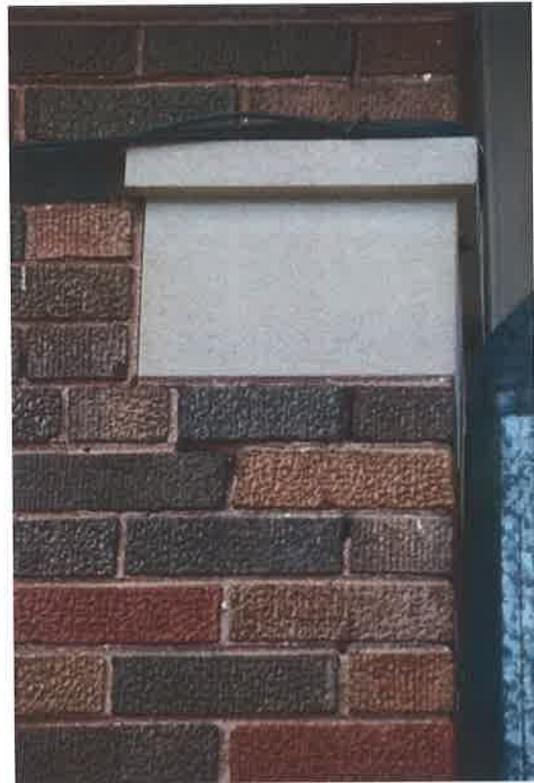
Typical window head detail – lintel to be cleaned and re-coated



Typical brick mortar joints for repair



Typical brick mortar joints for repair



Brick mortar joints for repair



Brick mortar joints for repair



Inside corner joint – north elevation



**Winnebago County Prevailing Wage for February 2015**

(See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng			
ASBESTOS ABT-GEN		BLD		31.130	32.130	1.5	1.5	2.0	8.240	14.14	0.000	0.800			
ASBESTOS ABT-MEC		BLD		18.950	0.000	1.5	1.5	2.0	2.700	3.350	0.000	0.000			
BOILERMAKER		BLD		44.240	48.220	2.0	2.0	2.0	6.970	17.54	0.000	0.350			
BRICK MASON		BLD		37.050	39.800	1.5	1.5	2.0	9.230	12.57	0.000	0.640			
CARPENTER		BLD		37.360	41.470	1.5	1.5	2.0	8.600	12.05	0.000	0.600			
CARPENTER		HWY		42.630	44.380	1.5	1.5	2.0	8.600	11.00	0.000	0.490			
CEMENT MASON		ALL		35.740	38.490	1.5	1.5	2.0	9.300	12.70	0.000	0.500			
CERAMIC TILE FNShER		BLD		32.850	0.000	1.5	1.5	2.0	8.600	5.210	0.000	0.560			
COMMUNICATION TECH		BLD		36.440	40.080	1.5	1.5	2.0	10.39	12.09	0.000	0.760			
ELECTRIC PWR EQMT OP		ALL		37.890	51.480	1.5	1.5	2.0	5.000	11.75	0.000	0.380			
ELECTRIC PWR GRNDMAN		ALL		29.300	51.480	1.5	1.5	2.0	5.000	9.090	0.000	0.290			
ELECTRIC PWR LINEMAN		ALL		45.360	51.480	1.5	1.5	2.0	5.000	14.06	0.000	0.450			
ELECTRIC PWR TRK DRV		ALL		30.340	51.480	1.5	1.5	2.0	5.000	9.400	0.000	0.300			
ELECTRICIAN		BLD		42.960	47.260	1.5	1.5	2.0	10.39	17.47	0.000	0.860			
ELEVATOR CONSTRUCTOR		BLD		46.830	52.680	2.0	2.0	2.0	13.57	14.21	3.750	0.600			
GLAZIER		BLD		35.980	37.980	1.5	1.5	1.5	10.30	8.200	0.000	1.250			
HT/FROST INSULATOR		BLD		33.930	38.550	0.0	0.0	0.0	7.950	14.77	0.000	0.480			
IRON WORKER		ALL		36.290	38.100	2.0	2.0	2.0	8.640	22.69	0.000	0.500			
LABORER		BLD		31.130	32.130	1.5	1.5	2.0	8.240	14.14	0.000	0.800			
LABORER		HWY		33.560	34.310	1.5	1.5	2.0	8.240	16.39	0.000	0.800			
LABORER, SKILLED		HWY		36.160	36.910	1.5	1.5	2.0	8.240	16.39	0.000	0.800			
LATHER		BLD		37.360	41.470	1.5	1.5	2.0	8.600	12.05	0.000	0.600			
MACHINIST		BLD		44.350	46.850	1.5	1.5	2.0	6.760	8.950	1.850	0.000			
MARBLE FINISHERS		BLD		32.850	0.000	1.5	1.5	2.0	8.600	5.210	0.000	0.560			
MARBLE MASON		BLD		35.530	35.780	1.5	1.5	2.0	8.600	7.520	0.000	0.590			
MATERIAL TESTER I		ALL		33.560	0.000	1.5	1.5	2.0	8.240	16.39	0.000	0.800			
MATERIALS TESTER II		ALL		33.560	0.000	1.5	1.5	2.0	8.240	16.39	0.000	0.800			
MILLWRIGHT		BLD		36.700	40.370	1.5	1.5	2.0	8.600	14.37	0.000	0.500			
OPERATING ENGINEER		BLD 1		42.800	46.800	2.0	2.0	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		BLD 2		42.100	46.800	2.0	2.0	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		BLD 3		39.650	46.800	2.0	2.0	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		BLD 4		37.650	46.800	2.0	2.0	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		BLD 5		46.550	46.800	2.0	2.0	2.0	17.10	11.05	0.000	1.300			
OPERATING ENGINEER		BLD 6		45.800	46.800	2.0	2.0	2.0	17.10	11.05	0.000	1.300			
OPERATING ENGINEER		BLD 7		42.800	46.800	2.0	2.0	2.0	17.10	11.05	0.000	1.300			
OPERATING ENGINEER		HWY 1		42.650	46.650	1.5	1.5	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		HWY 2		42.100	46.650	1.5	1.5	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		HWY 3		40.800	46.650	1.5	1.5	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		HWY 4		39.350	46.650	1.5	1.5	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		HWY 5		37.900	46.650	1.5	1.5	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		HWY 6		45.650	46.650	1.5	1.5	2.0	17.10	11.05	2.350	1.300			
OPERATING ENGINEER		HWY 7		45.650	46.650	1.5	1.5	2.0	17.10	11.05	2.350	1.300			
PAINTER		ALL		36.500	38.500	1.5	1.5	1.5	10.30	8.460	0.000	1.350			
PILEDRIIVER		BLD		38.360	42.580	1.5	1.5	2.0	8.600	12.05	0.000	0.600			
PILEDRIIVER		HWY		42.630	44.380	1.5	1.5	2.0	8.600	11.00	0.000	0.490			
PIPEFITTER		BLD		43.100	46.120	1.5	1.5	2.0	8.220	11.29	0.000	1.000			
PLASTERER		BLD		34.250	37.680	1.5	1.5	2.0	9.300	12.30	0.000	0.500			
PLUMBER		BLD		43.100	46.120	1.5	1.5	2.0	8.220	11.29	0.000	1.000			
ROOFER		BLD		40.100	43.100	1.5	1.5	2.0	8.280	10.54	0.000	0.530			
SHEETMETAL WORKER		BLD		37.930	40.210	1.5	1.5	2.0	6.000	16.92	0.520	0.290			
SPRINKLER FITTER		BLD		37.120	39.870	1.5	1.5	2.0	8.420	8.500	0.000	0.350			
STONE MASON		BLD		37.050	39.800	1.5	1.5	2.0	9.230	12.57	0.000	0.640			
SURVEY WORKER		---	NOT IN EFFECT			ALL	35.650	36.400	1.5	1.5	2.0	8.240	13.95	0.000	0.800
TERRAZZO FINISHER		BLD		32.850	0.000	1.5	1.5	2.0	8.600	5.210	0.000	0.560			
TERRAZZO MASON		BLD		35.530	35.780	1.5	1.5	2.0	8.600	7.520	0.000	0.590			
TILE LAYER		BLD		37.360	41.470	1.5	1.5	2.0	8.600	12.05	0.000	0.600			
TILE MASON		BLD		35.530	35.780	1.5	1.5	2.0	8.600	7.520	0.000	0.590			
TRUCK DRIVER		ALL 1		35.020	0.000	1.5	1.5	2.0	8.600	8.600	0.000	0.200			
TRUCK DRIVER		ALL 2		35.170	0.000	1.5	1.5	2.0	8.600	8.600	0.000	0.200			
TRUCK DRIVER		ALL 3		35.370	0.000	1.5	1.5	2.0	8.600	8.600	0.000	0.200			
TRUCK DRIVER		ALL 4		35.480	0.000	1.5	1.5	2.0	8.600	8.600	0.000	0.200			
TUCKPOINTER		BLD		37.050	39.800	1.5	1.5	2.0	9.230	12.57	0.000	0.640			

Legend: RG (Region)  
TYP (Trade Type - All, Highway, Building, Floating, Oil & Chip, Rivers)  
C (Class)  
Base (Base Wage Rate)

FRMAN (Foreman Rate)  
 M-Fx8 (OT required for any hour greater than 8 worked each day, Mon through Fri.)  
 OSA (Overtime (OT) is required for every hour worked on Saturday)  
 OSH (Overtime is required for every hour worked on Sunday and Holidays)  
 H/W (Health & Welfare Insurance)  
 Pensn (Pension)  
 Vac (Vacation)  
 Trng (Training)

## Explanations

### WINNEBAGO COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

### EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

### CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

### COMMUNICATIONS TECHNICIAN

Installing, manufacturing, assembling and maintaining sound and intercom, protection alarm (security), fire alarm, master antenna television, closed circuit television, low voltage control for computers and/or door monitoring, school communications systems, telephones and servicing of nurse and emergency calls, and the installation and maintenance of transmit and receive antennas, transmitters, receivers, and associated apparatus which operates in conjunction with above systems. All work associated with these system installations will be included EXCEPT the installation of protective metallic conduit in new construction projects (excluding less than ten-foot, runs strictly for protection of cable) and 120 volt AC (or higher) power wiring and associated hardware.

### LABORER, SKILLED - HIGHWAY

Individuals engaged in the following types of work, irrespective of the site of the work: asbestos abatement worker, handling of any materials with any foreign matter harmful to skin or clothing, track laborer, cement handlers, chloride handlers, the unloading and loading with steel workers and re-bars, concrete workers wet, tunnel helpers in free air, batch dumpers, mason tenders, kettle and tar men, tank cleaners, plastic installers, scaffold workers, motorized buggies or motorized unit used for wet concrete or handling of building materials, laborers with de-watering systems, sewer workers plus depth, rod and chainmen with technical engineers, rod and chainmen with land surveyors, rod and chainmen with surveyors, vibrator operators, cement silica, clay, fly ash, lime and plasters, handlers (bulk or bag), cofferdam workers plus depth, on concrete paving, placing, cutting and tying of reinforcing, deck hand, dredge hand, and shore laborers, bankmen on floating plant, grade checker, power tools, front end man on chip spreaders, cession workers plus depth, gunnite nozzle men, lead man on sewer work, welders, cutters, burners and torchmen, chainsaw operators, jackhammer and drill operators, layout man and/or drainage tile layer, steel form setter - street and highway, air tamping hammermen, signal man on crane, concrete saw operator, screedman on asphalt pavers, laborers tending masons with hot material or where foreign materials are used, mortar mixer operators, multiple concrete duct - leadsman, lumen, asphalt raker, curb asphalt machine operator, ready mix scalemen (permanent, portable

or temporary plant), laborers handling masterplate or similar materials, laser beam operator, con-crete burning machine operator, coring machine operator, plaster ten-der, underpinning and shoring of buildings, pump men, manhole and catch basin, dirt and stone tamper, hose men on concrete pumps, haz-ardous waste worker, lead base paint abatement worker, lining of pipe, refusing machine, assisting on direct boring machine, the work of lay-ing watermain, fire hydrants, all mechanical joints to watermain work, sewer worker, and tapping water service and forced lift station mechanical worker.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

#### OPERATING ENGINEERS - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver (over 27E cu. ft.); Concrete Paver (27 cu. ft. and under); Concrete Placer; Concrete Pump (Truck Mounted); Concrete Conveyor (Truck Mounted); Concrete Tower; Cranes, All; GCI and similar types (required two operators only); Cranes, Hammerhead; Creter Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, one, two and three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment - excluding hose work and any sewer work); Locomotives, All; Lubrication Technician; Manipulators; Motor Patrol; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Raised and Blind Hole Drill; Rock Drill (self-propelled); Rock Drill - Truck Mounted; Roto Mill Grinder; Scoops - Tractor Drawn; Slipform Paver; Scrapers Prime Movers; Straddle Buggies; Tie Back Machine; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Bobcat (over 3/4 cu. yd.); Boilers; Brick Forklift; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Asphalt Spreader; Combination - Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators - (Rheostat Manual Controlled); Hydraulic Power Units (Pile Driving, Extracting, or Drilling - with a seat); Lowboys; Pumps, Over 3" (1 to 3 not to exceed total of 300 ft.); Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches; Bobcat (up to and including 3/4 cu. yd.).

Class 4. Elevator push button with automatic doors; Hoists, Inside; Oilers; Brick Forklift.

Class 5. Assistant Craft Foreman

Class 6. Mechanics; Welders.

Class 7. Gradall

#### OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Silo Tender; Asphalt Spreader; Autograder; ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Backhoe w/shear attachments; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower of all types; Creter Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Directional Boring Machine over 12"; Dredges; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Mounted; Hoists, One, Two and Three Drum; Hydraulic Backhoes; Hydro Vac, Self

Propelled, Truck Mounted (excluding hose work and any sewer work); Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; GCI Crane; Hydraulic Telescoping Form (Tunnel); Tie Back Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader with attached pusher; Tractor with Boom; Tractaire with Attachments; Traffic Barrier Conveyor Machine; Raised or Blind Hole Drills; Trenching Machine (over 12"); Truck Mounted Concrete Pump with Boom; Truck Mounted Concrete Conveyor; Work Boat (no license required - 90 h.p. or above); Underground Boring and/or Mining Machines; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw (large self-propelled - excluding walk-behinds and hand-held); Conveyor Muck Cars (Haglund or Similar Type); Drills, all; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro Blaster; All Locomotives, Dinky; Off-Road Hauling Units; Non-Self Loading Dump; Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Scoops - Tractor Drawn; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper; Scraper - Prime Mover in Tandem (Regardless of Size); Tank Car Heater; Tractors, Push, Pulling Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Fireman on Boilers; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper - Form - Motor Driven.

Class 4. Air Compressor - Small and Large; Asphalt Spreader, Backend Man; Bobcat (Skid Steer) all; Brick Forklift; Combination - Small Equipment Operator; Directional Boring Machine up to 12"; Generators; Heaters, Mechanical; Hydraulic Power Unit (File Driving, Extracting, or Drilling); Hydro-Blaster; Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Tractaire; Trencher 12" and under; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. Oilers and Directional Boring Machine Locator.

Class 6. Field Mechanics and Field Welders

Class 7. Gradall and machines of like nature.

SURVEY WORKER - Operated survey equipment including data collectors, G.P.S. and robotic instruments, as well as conventional levels and transits.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; TTeamsters Unskilled dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turntrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turntrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole

and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

**BIDDING REQUIREMENTS (BID FORM)**

**PROPOSAL SUBMITTED BY:**

---

---

---

---

DATE: \_\_\_\_\_ 2014

**Gentlemen:**

The Undersigned, having become familiar with the local conditions affecting the cost of the Work and with the Contract Documents including Instructions to Bidders, Bid Form, Drawings, Photographs, Specifications, and Addenda issued thereto, as prepared by PG Architecture Design/ Build.

**BASE BID**

Bidder agrees to perform all Work shown or specified in the Bidding Documents, for the sum of:

**Station #2**

Dollars

(\$ \_\_\_\_\_ )

**Station #5**

Dollars

(\$ \_\_\_\_\_ )

**Station #6**

Dollars

(\$ \_\_\_\_\_ )

**Station #8**

Dollars

(\$ \_\_\_\_\_ )

**Total Cost For All Four Stations**

Dollars

(\$ \_\_\_\_\_ )

**COMPLETION TIME**

The Contractor shall substantially complete all work in accord with the Contract within \_\_\_\_\_ consecutive calendar days from the date of construction start.

The contractor shall begin on-site construction operations \_\_\_\_\_ calendar days from the date of a notice to proceed.

**ALTERNATES**

**Alternate.1: At Station #2** – provide an additive cost to replace all existing red glazed CMU with equal new product.

Add \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_ )

**Alternate.2: At Station #5** – provide an additive cost to replace all existing red glazed CMU with equal new product.

Add \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_ )

**Alternate 3: At Station #8** – provide an additive cost to completely replace one steel lintel at typical window openings (in lieu of cleaning & painting steel lintel).

Add \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_ )

**LIST OF UNIT PRICES**

Item:

Installed Unit Price (each)

#1 Masonry Tuck Pointing

\$ / Lineal Foot \_\_\_\_\_

#2 Control Joint / Panel Joint Prep & Caulking

\$ / Lineal Foot \_\_\_\_\_

**ADDENDUM RECEIPT**

We acknowledge receipt of Addenda # \_\_\_\_\_ through # \_\_\_\_\_.

If the bidder or other interested person is a corporation, give the legal name of the corporation, the state where incorporated and the names of the president and secretary thereof; if the bidder or other interested person is a partnership, give the name of the firm and the names of all individual co-partners composing the firm; if the bidder or other interested person is an individual, give the first and last names in full.

Person, Firm or Corporation: \_\_\_\_\_

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

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

