

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF LEWIS COUNTY, WASHINGTON**

REQUEST FOR PROPOSALS TO PROVIDE)
MASONRY RESTORATION AND CLEANING)
SERVICES FOR THE LEWIS COUNTY)
HISTORIC COURTHOUSE)

RESOLUTION NO. 15- 021

WHEREAS, the Lewis County Historic Courthouse, originally completed in 1927, has a neo-classical masonry façade that requires periodic rehabilitative maintenance to preserve the beauty and integrity of said facade; and

WHEREAS, Lewis County is eligible for and has been awarded grant funding under the Washington State Department of Archaeology and Historic Preservation Historic Courthouse Rehabilitation Grant Program to perform said rehabilitation work; and

NOW THEREFORE, BE IT RESOLVED, by the BOCC, that the County hereby issue a Request for Proposals for the provision of Masonry Restoration and Cleaning Services for the Historic Courthouse; and

BE IT FURTHER RESOLVED, that the BOCC instruct the Director of Central Services to process with all appropriate and necessary notifications to advertise for said purpose.

PASSED IN REGULAR SESSION THIS 26 DAY OF January, 2015.

APPROVED AS TO FORM:
Jonathan Meyer, Prosecuting Attorney

By: [Signature]
Glenn Carter, Deputy Prosecuting Attorney

ATTEST:

[Signature]
Karri Muir, CMC, Clerk of the Board



BOARD OF COUNTY COMMISSIONERS
LEWIS COUNTY, WASHINGTON

[Signature]
Edna J. Fund, Chair

[Signature]
P.W. Schulte, Vice Chair

[Signature]
Gary Stamper, Commissioner



Lewis County Facilities

351 NW North Street
Chehalis WA 98532

REQUEST FOR PROPOSALS

FOR

HISTORIC LEWIS COUNTY COURTHOUSE MASONRY

RESTORATION AND CLEANING SERVICES

SUBMIT TO:

LEWIS COUNTY
DEPARTMENT OF CENTRAL SERVICES
FACILITIES DIVISION
351 NW NORTH STREET
CHEHALIS, WASHINGTON 98532

PROPOSAL OPENING:

WHERE: BOCC Meeting Room
DATE: February 20, 2015
TIME: 10:30 AM

**REQUEST FOR
PROPOSALS
ADVERTISEMENT**

REQUEST FOR PROPOSALS

NOTICE IS HEREBY GIVEN that Lewis County will open sealed Proposals and publicly read them aloud at 10:30 a.m., on February 20, 2015 at the Lewis County Historic Courthouse – 2nd floor, BOCC Meeting Room, 351 NW North Street, Chehalis, Washington, for:

HISTORIC LEWIS COUNTY COURTHOUSE MASONRY RESTORATION AND CLEANING SERVICES

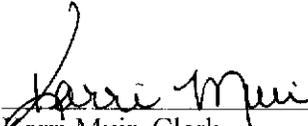
Sealed proposals must be delivered to the BOCC Office (2nd Floor, Lewis County Historic Courthouse, 351 N.W. North St. CMS-01, Chehalis, WA. 98532) by 9:30 a.m. on the date specified for opening in an envelope clearly marked

“PROPOSAL FOR – HISTORIC LEWIS COUNTY COURTHOUSE MASONRY RESTORATION AND CLEANING SERVICES”

Each proposal shall be in accordance with the proposal requirements, scope of work, and instruction to proposer documents now on file with the Lewis County Department of Central Services, Facilities Division, 571 Prindle St., Chehalis, WA 98532-1900. Contact person is Doug Carey, Facilities Manager (360) 740-1192.

The BOCC reserves the right to reject any or all proposals and to waive all informalities.

DATED this 26 day of Jan, 2015



Karri Muir, Clerk
Board of County Commissioners
Lewis County, Washington

PUBLISH: Daily Chronicle Jan 28 & Feb 4, 2015

REQUEST FOR PROPOSAL REQUIREMENTS

REQUEST FOR PROPOSAL REQUIREMENTS

The Lewis County Department of Central Services, Facilities Division is requesting proposals for Masonry Restoration and Cleaning Services for the Historic Lewis County Courthouse. Sealed Proposals shall be delivered to the BOCC Office, 351 NW North St., Room 210, Chehalis, WA, 98532-1900 no later than 9:30 am on the date specified for opening. Proposals shall be clearly marked-

“PROPOSAL FOR: HISTORIC LEWIS COUNTY COURTHOUSE MASONRY RESTORATION AND CLEANING SERVICES”.

Proposals shall be received no later than 9:30 am, February 20, 2015 at the address above.

Delivery Requirements:

Any proposals received after the stated date and time will not be considered. It shall be the sole responsibility of each proposer to have their proposals delivered to the Lewis County for receipt on or before the stated date and time. If a proposal is sent by mail, the proposer assumes the risk and responsibility for its timely delivery to Lewis County.

Clarification and Addenda:

Each proposer shall examine requests for proposal documents and shall judge all matters relating to the adequacy of such document. Any requests concerning clarification, interpretation, or additional information pertaining to the RFP shall be made to Doug Carey, Facilities Manager, Lewis County Department of Central Services at (360) 740-1192.

If any addenda are issued to this proposal, the Department shall attempt to notify all prospective proposers. However, it shall be the responsibility of each proposer, prior to submitting the proposal, to contact the Department to determine if any addenda were issued and to make such addenda part of the proposal.

Miscellaneous:

Proposals shall clearly indicate the legal name, address and telephone number of the proposer (company, firm, partnership, individual). Proposals shall be signed above the typed or printed name and title of the signer. The signer shall possess the legal authority to bind the proposer to the submitted proposal.

All expenses for making proposals to the County are to be borne by the proposer, with the express understanding that no claims against the County or the Department for reimbursement will be accepted. All proposals become the property of the County and will not be returned to the proposer.

Reserved Rights:

The County reserves the right to accept and/or reject any and/or all proposals, to waive irregularities and technicalities, issue addenda, or take whatever other action it deems in

its best interest. There is no obligation on the part of the County to award a contract to the lowest proposer.

The County, with the assistance and advice of its Department of Central Services, shall be the sole judge of a proposal and its decision shall be final. The County also reserves the right to make such investigation, as it deems necessary, to determine the ability of any proposer to perform the work or services provided. Information the County deems necessary shall be provided by the proposer. The County reserves the right to reject any or all bids, waive informalities, and to contract as the best interests of the County may appear. In making awards, consideration will be given to factors of prices quoted, delivery, quality of service and suitability for County purposes. The County will have the final authority to name the successful proposer.

SCOPE OF WORK

Scope of Work

Successful proposer will provide a list of tasks including, but not limited to, cleaning entire building exterior the Historic Lewis County Courthouse, including stairways and steps, tuck pointing brick and masonry, repair of masonry units, replacing failed caulk joints. Such list will provide an anticipated square or linear footage for each task and a per unit price for each. The building is listed on the National Register of Historic Places and falls under the auspices of the Secretary of the Interior's Standards for the Treatment of Historic Buildings and all work shall be performed under those guidelines.

Masonry Restoration

Particular attention should be paid to the south and west side of building. These are the "weather" sides in almost all instances. Most joint repair is anticipated to be on the south side. In addition, there are several masonry units that show signs of weather cracks on these sides.

North and South entrance stairs caulking needs repair/replacement. Backing rod should be used where needed and caulking should match existing color.

Work performed over entrances or walkways shall be performed after business hours and the entrance or walkway closed to pedestrian traffic. Conversely, the contractor may elect to perform such work during business hours if appropriate and suitable protection from overhead hazards such as falling objects or debris is used.

All work shall be done in accordance with the Secretary of the Interior's Standards for Treatment of Historic Buildings.

Cleaning

Building exterior should be cleaning using a low pressure wash system. Due to proximity of feed plant, grain dust accumulates in crack, joints and crevasses and on ledges. This organic material leaves a black mildew stain on the cast sandstone and brick. Any chemicals shall be mild in nature and low odor. Work done on or over sidewalks or streets will need a permit issued by the City of Chehalis for work in the right of way.

Work shall be performed after business hours or protective material shall be used to prevent spray or debris from hitting patrons or employees.

All work shall be done in accordance with the Secretary of the Interior's Standards for Treatment of Historic Buildings.

Contract Work

All work under this contract must be completed and billed prior to June 1, 2015 grant deadline. Budget for all work is \$90,450.00, including taxes.

INSTRUCTION TO PROPOSERS

Instructions to Proposers

The "COUNTY" is the owner and at all times acts through its Board of County Commissioners. The contact representative for the COUNTY will be Doug Carey, Facilities Division Manager or his designee.

1. Examination of Site

It is mutually agreed that submission of a proposal shall be considered evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered, and as to the requirements of the specifications and other contract documents.

Failure to take this precaution will not release the successful bidder from entering into contracts nor excuse him from performing the work in strict accordance with the terms of the contract. CONTRACTOR shall employ, so far as possible, such methods and means in the carrying out of his work as will not cause and interruption or interference with any other contractor

2. Interpretation of Proposed Contract

If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the specifications or other proposed contract documents, he may submit to the COUNTY a written request for an interpretation thereof. The person submitting the request shall be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addendum duly issued and a copy of such addendum will be mailed or delivered to each person receiving a set of such documents. The COUNTY will not be responsible for any other explanations or interpretations of the proposed documents. All requests for interpretations shall be received by the COUNTY not later than seven (7) calendar days prior to bid opening time.

3. Laws and Regulations

The bidder is assumed to be familiar with all Federal, State and County laws and regulations which in any manner affect those engaged or employed in the work, or in the materials and equipment used in the proposed work or which in any way affect the conduct of work, and no pleas of misunderstanding will be considered on account of ignorance thereof.

Should the bidders discover any provision in the specifications or other contract documents which are contrary to or inconsistent with any law, any such correction to the specifications or other contract documents resulting will be answered by addendum addressed to all bidders.

4. Evidence of Qualifications

A bidder whose proposal is under consideration shall, upon request, within 2 business days, furnish satisfactory evidence of his financial resources, his experience, and the organization and equipment he has available for the performance of his contract. The contacted bidder will furnish: (1) Similar contracts performed in the last 12 months, (2) Contact name and number for those contracts, (3) Evidence of adequate equipment and personnel for timely completion of work, (4) List of 5 references, including governmental references if available.

5. Prohibition of Alterations

Except as otherwise provided herein, proposals which are incomplete, or which are conditioned in any way, or contain erasures, alteration, or items not called for in the proposal, or which are not in conformity to the laws, may be rejected as informal.

6. Execution of Proposal Forms

The bidder shall submit his proposal on the forms furnished in the specifications. All blank spaces in the proposal form shall be properly filled in. Any sum of money shown on the proposal form shall cover all work included in the bidding documents together with any addenda thereto, and/or any unit prices called for and/or any alternates called for shall include all items of labor, material, equipment, overhead and compensation to complete all of the work under each particular heading.

Any sum of money shown on the proposal form and any agreed variations thereof shall include all taxes imposed by law, excepting Washington State Sales Tax.

If a proposal is made by a partnership or co-partnership, it shall contain the names of each partner and shall be signed in the firm name, followed by the signatures of the partners. If the proposal is made by a corporation, it shall be signed in the name of the corporation, followed by the written signature of the officer signing, and the printed or typewritten designation of the office he holds in the corporation. The address of the bidders shall be typed or printed on the proposal in the space provided. Bidder's Contractor's License registration number must be stated.

7. Modifications of the Proposal

Modifications of proposals already received will be considered only if the request for the privilege of making such modifications is granted and the modification is made prior to the scheduled closing time for the receipt of the proposals. All modifications must be made in writing over the signature of the bidder.

8. Withdrawal of the Proposal

At any time prior to the scheduled closing time for receipt of proposals, any bidder may withdraw his proposal, either personally or by written request (on the bidder's letterhead signed by the bidder). If withdrawal is made personally, the person making the withdrawal shall present written request and give proper receipt. No telephonic request for withdrawal of proposal will be considered. After the scheduled closing time for the receipt of proposals, or before award of the contract, no bidder will be permitted to withdraw his proposal unless said award is delayed for a period exceeding that noted in the proposal form. Any bids received after the said scheduled closing time for receipt of bids shall be returned to the bidder unopened.

9. Receipt of Proposals

Proposals will be received at the time and place stated in the Advertised Request for Proposals. At the time and place set for opening and reading of proposals, each and every proposal (except those which may have been withdrawn in accordance with "Withdrawal of Proposal") received prior to the scheduled closing time for receipt of proposals will be publicly opened and read aloud, irrespective of any irregularities or informalities in such proposals.

10. Submission of Proposals

No oral, telephonic or telegraphic proposals will be considered. Each proposal, together with bid information, shall be completely sealed in a separate envelope marked as indicated in the Request for Proposal.

11. Acceptance or Rejection of Proposal

The COUNTY reserves the right to reject any and /or all proposals. The COUNTY also reserves the right to waive any informalities in connections with said proposal or bid.

12. Contract Documents

Upon acceptance of the successful bidder's proposal, the COUNTY shall prepare, and the successful bidder shall execute, a contract for the work.

13. Protection of Persons and Property

It shall be the responsibility of the CONTRACTOR to comply with all requirements of the Occupation Safety and Health Act of 1971 (OSHA) and the Washington Industrial Safety & Health Act (WISHA). The methods of compliance with safety and health precautions are the responsibility of the CONTRACTOR and are not shown on the contract specifications.

CONTRACTOR shall be governed at all times by applicable provisions of Federal, State and County law(s).

Contractor shall furthermore indemnify and hold harmless the COUNTY and their agents and employees from and against all fines or penalties levied by any public authority for any failure by the contractor to comply with all applicable laws, ordinances, rules, regulations and orders relating to public safety and health.

14. Evaluation of Proposals

Evaluation of proposals will be based upon economic factors and (1) experience and responsibility, (2) ability prosecute the work in a timely manner, (3) other factors as outlined in Section (4) above.

15. Insurance

The CONTRACTOR shall not commence work under this contract until he has obtained all insurance required hereunder, nor shall the CONTRACTOR allow any sub-contractor to commence work on this contract until all insurance required of the sub-contractor has been so obtained. Each and every CONTRACTOR and sub-contractor shall maintain all insurance required under this article during the life of this contract, and for not less than one (1) year thereafter.

The CONTRACTOR shall furnish a "Certificate of Insurance" on the Lewis County form, based on the coverage outlined herein. This certificate must have a "Notice of Cancellation" clause stating the following: "Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will deliver 30 days written notice to Lewis County". Furthermore, the Certificate of Insurance must also state that "This Certificate does not amend, extend or alter the coverage of the policies below". The required Certificate of Insurance document, with the appropriate wording is attached. The Certificate of Insurance shall state that all liability policies are issued on an "occurrence basis" and not on a "claims made" basis. Each and every policy shall contain an endorsement stating that the insurance company will not, prior to completion of the project or any policy expiration date shown on the policy and certificate, whichever occurs first, terminate the policy or change any coverage therein without first delivery, by registered mail, written notice of such action at least thirty (30) days prior to the termination or change, to the COUNTY at whose request the policy and certificate are issued.

The insurance required is as specified below and in the amount indicated:

- a) Workmen's Compensation and Employer's Liability Insurance Statutory: Amounts and coverage as required by law of the place of work.

Employers Liability: \$100,000 each accident.

- b) Comprehensive General Liability Insurance, other than automobile: Including premises, elevators, products, completed operations and contractual; limits not less than those stated below.

Bodily Injury Liability: \$250,000 each person, \$1,000,000 each occurrence.

Property Damage Liability, including XCU (explosion, collapse and underground damage): \$50,000 each occurrence, \$250,000 aggregate.

- c) Comprehensive Automobile Liability Insurance, including owned, non-owned and hired vehicles; with limits not less than:

Bodily Injury Liability: \$250,000 each person, \$500,000 each occurrence

Property Damage Liability: \$50,000 each occurrence.

- d) The valuation of fire, extended coverage and vandalism insurance shall be in an amount equal to one hundred percent (100%) of cost of replacement at time of replacement, state sales tax and COUNTY'S fees.

Coverage shall include liability arising from water damage to property in care, custody and control of CONTRACTOR and personal injury liability.

The COUNTY assumes no risk of loss by fire to any portion of the work or equipment thereof, whether complete, in process of construction or installation, or stored on the premises during the life of any contract for any portion of the work. The making of partial payments to the CONTRACTOR shall not be construed as creating and insurable interest by or for the COUNTY, or as relieving the various contractors or their sureties of responsibility for loss by fire or other casualty occurring prior to final acceptance of the project. The entire work of the CONTRACTOR shall be at the sole risk of the CONTRACTOR until same shall be promptly repaired, replaced or rebuilt by the CONTRACTOR after any loss or damage.

It is understood that the whole of the work under this contract is to be done at the CONTRACTOR'S risk, and that he has familiarized himself with the conditions and other contingencies likely to affect the work, and has made his bid accordingly, and that he is to assume the responsibility and risk of any loss or damage to material or work which may arise from any cause whatsoever prior to completion.

The Loss Clause shall be made payable to the Lewis County Treasurer as trustee for the insured.

The inception date of this policy will be the date the CONTRACTOR is ordered by the COUNTY to proceed with the contract.

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RESTORATION AND CLEANING OF MASONRY IN HISTORIC STRUCTURES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ACI INTERNATIONAL (ACI)

ACI C-20 (1992) Repair and Rehabilitation II

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

ACGIH 0100Doc (2005) Documentation of the Threshold Limit Values and Biological Exposure Indices

ASTM INTERNATIONAL (ASTM)

ASTM A 36/A 36M (2005) Carbon Structural Steel

ASTM C 109/C 109M (2005) Compressive Strength of Hydraulic Cement Mortars (Using 2-in. [50-mm] Cube Specimens)

ASTM C 1324 (2004) Examination and Analysis of Hardened Masonry Mortar

ASTM C 150 (2005) Portland Cement

ASTM C 1515 (2001) Cleaning of Exterior Dimension Stone, Vertical and Horizontal Surfaces, New or Existing

ASTM C 207 (2005) Hydrated Lime for Masonry Purposes

ASTM C 881/C 881M (2002) Epoxy-Resin-Base Bonding Systems for Concrete

BRICK INDUSTRY ASSOCIATION (BIA)

BIA Tech Note 20 (1990; R 2000) Cleaning Brick Masonry

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with SUBMITTAL PROCEDURES:

SD-02 Shop Drawings
Masonry

Drawings showing location of masonry elements in the work, building elevations, interface with adjacent materials, and special placing instructions, in sufficient detail to cover fabrication, placement, and finishing.

SD-03 Product Data
Cleaning and Restoration Methods

Descriptive narrative in cleaning and repair methods to be employed in the work. Description shall be organized in sequence from preparation through completion of the work. Schedule showing estimated time, in calendar days, for completion of each phase of the work shall be included.

Qualifications

Documentation showing Contractor's experience of 5 consecutive years in masonry restoration, plus a list of similar jobs to the one specified herein.

SD-04 Samples
Materials
Sample Masonry

Samples of the materials listed below; indicating sizes, shapes, finishes, color, and pertinent accessories: Masonry as specified.

SD-07 Certificates
Materials

Certificates of compliance attesting that the materials, equipment, and cleaning agents (chemicals, detergents, etc.) to be used in the work meet the specified requirements.

1.3 GENERAL REQUIREMENTS

Work shall be done in conformance with ACI C-20.

1.3.1 Cleaning and Restoration Methods

The cleaning and restoration methods, and materials selected for a specific structure, shall be submitted for approval before work starts, and shall take into account the total construction system of the building to be worked upon, including different masonry and mortar materials, as well as non-masonry elements which may be affected by the work.

1.3.2 Ionic Cleaners

Ionic chemical cleaners shall be used as specified, in accordance with the manufacturer's instructions, and only upon the direction of the Owner. Ionic cleaners shall be used only after gentler cleaning methods have been determined to be ineffective through the use of test panels.

1.4 QUALIFICATIONS

The Contractor shall provide qualified workers, trained and experienced in restoration of masonry in historic structures, and shall furnish documentation of 5 consecutive years of work of this type. A list of similar jobs shall be provided identifying when, where, and for whom the work was done.

1.5 EQUIPMENT AND TECHNIQUES DEMONSTRATION

Equipment and techniques of operation shall be demonstrated in an approved location and shall be subject to approval. Dependable and sufficient equipment, appropriate and adequate to accomplish the work specified, shall be assembled at the work site in sufficient lead time before the start of the work to permit inspection, calibration of weighing and measuring devices, adjustment of parts, and the making of any repairs that may be required. The equipment shall be maintained in good working condition throughout the project.

1.5.1 Cleaning Equipment

Cleaning equipment shall not cause staining, erosion, marring, or other damage or changes in the appearance of the surfaces to be cleaned.

1.5.1.1 Sandblasting

Sandblasting equipment will not be allowed for cleaning masonry surfaces.

1.5.1.2 Water Blasting

Water blasting equipment shall include a trailer-mounted water tank, pumps, high-pressure hose, wand with safety release cutoff control, nozzle, and auxiliary water re-supply equipment. The equipment shall not be operated at a pressure which will cause etching or other damage to the masonry surface or mortar joints. The equipment shall be operated at a discharge capacity of 0.38 to 3.5 Mpa 55 to 500 psi and 9.5 to 11.4 L/m 2.5 to 3 gpm for general surface cleaning operations. The water tank and auxiliary re-supply equipment shall be of sufficient capacity to permit continuous operations. The Contractor shall provide protective covers and barriers as required to prevent over-spray onto adjacent surfaces.

1.5.2 Drilling Equipment

Equipment used to drill holes in masonry, for patch anchors and other applications, shall be standard handheld masonry drills, commonly used for drilling small holes in concrete and masonry. The drill shall be a small, powered, handheld type, using rotary drilling mode only. Impact and rotary impact type drills will not be allowed.

1.5.3 Finishing and Texturing Equipment

Equipment and hand tools used for placing, finishing and texturing masonry and mortar shall be commercially available and commonly used in masonry construction and repair. Surface grinders, impact tools, and other equipment shall conform to the specified requirements, except as specifically required by the type of finish and texture.

1.5.4 Compressed Air Supplies

Compressed air equipment shall deliver clean, oil and moisture free compressed air at the surface to be cleaned. The compressed air line shall have at least two in-line air filters to remove oil and moisture from the air supply. The compressed air supply shall be tested during each shift for the presence of oil and moisture.

1.5.5 Material Handling and Associated Equipment

1.5.5.1 Mixing, Transporting, and Placing Job Materials

Equipment used for mixing, transporting, placing, and confining masonry and mortar placements shall be capable of satisfactorily mixing material and supporting placement operations in an uninterrupted manner. Defects and deficiencies in operation or capacity shall be resolved prior to use in the work. Equipment used for mixing, conveying, and placing of materials shall be clean, free of old materials and contaminants, and shall conform to the material manufacturer's recommendations.

1.5.5.2 Associated Equipment

Associated equipment such as mixer timing equipment, valves, pressure gauges, pressure hoses, other hardware, and tools shall be provided as required to ensure a continuous supply of material and operation control.

1.6 SAMPLE MASONRY PANELS

Sample panels of each procedure proposed for use in the work shall be submitted for approval. No masonry or mortar shall be used in the work until the samples and the represented mixture have been approved.

1.7 MATERIAL REQUIREMENTS

1.7.1 Strength

Each class or mixture of mortar shall have a 28-day compressive strength matching the compressive strength of the original existing mortar in the structure as determined by ASTM C 109/C 109M for mortar. Test specimens of existing mortar shall be taken from a sound and intact representative portion of the structure, at locations indicated.

1.7.2 Special Properties

Mortar may contain admixtures, such as pigments, to match the characteristics of the original mortar. Use of all admixtures shall be subject to approval.

1.7.3 Cementitious Content of Mortar

Each class or mixture of mortar shall have a cement content matching the cement content of the original existing mortar in order to provide uniform strength, weathering characteristics, and appearance of repaired surfaces in relation to existing surfaces.

1.8 STORAGE OF MATERIALS

Materials shall be stored in weathertight structures which will exclude moisture and contaminants. Cement shall be furnished in suitable bags used for packaging cements. Labeling of packages shall clearly define contents, manufacturer, and batch identification. Detergents, masonry cleaners, paint removers, solvents, epoxies and other chemicals used for masonry cleaning shall be in sealed containers that legibly show the designated name, formula or specification number, quantity, date of manufacture, manufacturer's formulation number, manufacturer's directions including any warnings and special precautions, and name of manufacturer. Accessories shall be stored avoiding contamination and deterioration. Admixtures which have been in storage onsite for six months or longer, or which have been subjected to freezing, shall not be used unless retested and proven to meet the specified requirements.

1.9 SAFETY AND HEALTH

Work shall comply with applicable federal, state, and local laws and regulations, and with the ACCIDENT PREVENTION PLAN, including the Activity Hazard Analysis, specified in the CONTRACT CLAUSES. The Activity Hazard Analysis shall include

analyses of the potential impact of cleaning operations on personnel and on others involved in and adjacent to the work zone.

1.9.1 Worker Exposures

Exposure of workers to chemical substances shall not exceed the limits established by ACGIH 0100Doc, or those required by a more stringent applicable regulation.

1.9.2 Training

Workers having access to an affected work area shall be informed of the contents of the applicable material safety data sheets, of potential health and safety hazard, and of protective controls associated with materials used on the project. An affected work area is one which may receive dust, mists, and odors from the surface preparation operations. Workers involved in masonry cleaning shall be trained in the safe handling and application, and the exposure limit, of each material to be used in the project. Personnel having a need to use respirators and masks shall be instructed in the use and maintenance of such equipment.

1.9.3 Coordination

Work shall be coordinated to minimize exposure of building occupants, other Contractor personnel, and visitors to mists and odors from surface preparation, cleaning, and repair operations.

1.10 PROTECTION

Persons, motor vehicles, adjacent surfaces, surrounding buildings, equipment, and landscape materials shall be protected from chemicals used and runoff from cleaning and paint removal operations. Temporary protection covers, which shall remain in operation during the course of the work, shall be erected over pedestrian walkways and at personnel and vehicular points of entrance and exit.

1.10.1 Interior Protection

The interior of buildings shall be protected from the weather, cleaning, and repair operations at all times.

1.10.2 Environmental Protection

The work shall comply with the requirements of ENVIRONMENTAL PROTECTION and LEAD BASED PAINT HAZARD ABATEMENT, TARGET HOUSING & CHILD OCCUPIED FACILITIES.

1.11 WEATHER LIMITATIONS

Masonry, mortar, and epoxy adhesives shall not be placed when weather conditions detrimentally affect the quality of the finished product. No masonry or mortar shall be placed when the air temperature is below 5 degrees C 40 degrees F in the shade. When air temperature is likely to exceed 35 degrees C 90 degrees F masonry and mortar shall have a temperature not exceeding 35 degrees C 90 degrees F when deposited. Materials to be used in the work shall be neither produced nor placed during periods of rain or other precipitation. Material placements shall be stopped, and all in-place material shall be protected from exposure, during periods of rain or other precipitation.

1.12 WARRANTIES

1.12.1 Cleaning Warranty

Cleaning procedures shall be warranted for a period of two years against harm to substrate (masonry and mortar) or to adjacent materials including, but not limited to, discoloration of substrate from improper procedures or usage, chemical

damage from inadequate rinse procedures, and abrasive damage from improper procedures.

1.12.2 Repair Warranty

Repair procedures, including repointing, shall be warranted for a period of two years against: discoloration or mismatch of new mortar to adjacent original historic mortar, discoloration or damage to masonry from improper mortar clean-up, loss of bond between masonry and mortar, fracturing of masonry edges from improper mortar joint preparation procedures or improper mortar formulation, and occurrence of efflorescence.

PART 2 PRODUCTS

2.1 MATERIALS

Materials, physical and chemical properties, and composition of masonry and mortar used in renovation work shall match that of original existing masonry and mortar to be repaired, unless samples and testing determine that existing mixtures and materials are faulty or non-performing.

2.2 CLEANING MATERIALS

2.2.1 Paint Removers

Chemical paint removers shall be manufacturer's water soluble, low toxicity products, effective for removal of paint on masonry without altering, damaging, or discoloring the masonry surface.

2.2.2 Detergent Cleaners

Detergent cleaners shall be in accordance with manufacturer's recommendations.

2.2.3 Ionic Cleaners

2.2.3.1 Alkaline Prewash Cleaner

Alkaline prewash cleaners shall be as recommended by the manufacturer.

2.2.3.2 One-Part Masonry Cleaner

One-part masonry cleaners shall be the standard, acid formulation recommended by the manufacturer.

2.2.3.3 Two-Part Limestone Cleaner

Two-part limestone cleaners shall be manufacturer's standard, two-part masonry cleaning system consisting of an alkaline prewash cleaner followed by acidic after-wash rinse.

2.2.3.4 Standard Strength Acidic Cleaner

Acidic cleaners shall be manufacturer's standard strength, acidic masonry restoration cleaner composed of hydrofluoric acid blended with other acids and combined with special wetting systems and inhibitors.

2.2.3.5 Extra Strength Acidic Cleaner

Masonry restoration extra strength acidic cleaners shall be as recommended by the manufacturer.

2.2.4 Liquid Strippable Masking Agent

Liquid strippable masking agent shall be manufacturer's standard liquid, film-forming, strippable masking material for protecting glass, metal, and polished stone surfaces from the damaging effect of acidic and alkaline masonry cleaners.

2.2.5 Spray Equipment

Spray equipment for chemical cleaners shall be low-pressure tanks or chemical pumps suitable for chemical cleaner indicated, and shall be equipped with stainless steel, cone-shaped spray-tip. Spray equipment for water shall disperse water through a fan-shaped spray tip at an angle of not less than 15 degrees. Spray equipment shall deliver water at a pressure not greater than 3.5 Mpa 500 psi and at a volume between 9.5 and 11.4 L/m 2.5 and 3 gpm. Spray equipment for heated water shall be capable of maintaining temperature, at flow rates indicated, between 60 and 82 degrees C 140 and 180 degrees F.

2.2.6 Cleaning Implements

Brushes shall have natural or nylon fiber bristles only. Wire brushes shall not be used. Scrapers and application paddles shall be made of wood with rounded edges. Metallic tools shall not be used.

2.2.7 Water

Potable water shall be obtained from a local source and shall be filtered to remove minerals resulting in a neutral pH, prior to application. Backflow prevention devices shall be provided at the point of connection to the water supply.

2.3 REPAIR MATERIALS

2.3.1 Masonry and Mortar

Masonry and mortar materials used for repair and renovation shall match the original existing historic materials as closely as possible in composition, color, texture, strength, size, finishing and porosity.

2.3.2 Cementitious Materials

Cementitious materials shall be of one type and from one source, when used in mortar which will have surfaces exposed in the finished structure. Cement composition shall match that of cement used in existing mortar to be repaired, as determined by samples and testing, and shall conform to the basic requirements of ASTM C 150, Type low alkali.

2.3.3 Epoxy Anchor Adhesives

An epoxy-resin grout shall be used to bond steel anchors to masonry, and shall be a 100 percent solids, moisture insensitive, low creep, structural adhesive. The epoxy shall conform to ASTM C 881/C 881M, Type IV; Grade and Class selected to conform to the manufacturer's recommendations for the application.

2.3.4 Metal attachments

Anchors for spall repairs shall be threaded stainless steel, size as indicated. Other plates, angles, anchors, and embedments shall conform to ASTM A 36/A 36M, and shall be prime painted with inorganic zinc primer.

PART 3 EXECUTION

3.1 EVALUATION AND ANALYSIS

Evaluation and analysis shall conform to the requirements specified herein. Masonry renovation shall be undertaken only after complete evaluation and analysis of the areas to be repaired are completed; this shall include sampling and testing of the existing mortar to determine its composition and qualities. No repair work shall be undertaken until conditions that have caused masonry deterioration have been identified; such conditions shall be corrected, if possible, prior to start of the work.

3.2 MASONRY CLEANING

Historic materials shall not be damaged or marred in the process of cleaning. Cleaning shall conform to ASTM C 1515. Open joints shall be temporarily caulked or otherwise protected to prevent water and cleaner intrusion into the interior of the structure from pressure spraying. Non-masonry materials and severely deteriorated masonry shall be protected by approved methods prior to initiation of cleaning operations. Masonry cleaning shall remove all organic and inorganic contaminants from the surface and pores of the substrate, returning the masonry to its natural color. Surfaces shall be evenly cleaned with no evidence of streaking or bleaching. The cleaning process shall not affect the density, porosity, or color of the masonry or mortar. Cleaned masonry shall have a neutral pH. Methods used for cleaning historic masonry shall be the gentlest possible to achieve the desired results. Test patches shall be made to determine a satisfactory cleaning result. Cleaning shall proceed in an orderly manner, working from top to bottom of each scaffold width and from one end of each elevation to the other. Cleaning shall be performed in a manner which results in uniform coverage of all surfaces, including corners, moldings, interstices and which produces an even effect without streaking or damage to masonry. The cleaning materials, equipment, and methods shall not result in staining, erosion, marring, or other damage to the surfaces of the structure. Following an initial inspection and evaluation of the structure and surfaces, the structure shall be given a surface cleaning. The surface cleaning shall be completed prior to start of repair work, and sampling and testing of mortars. The cleaning shall provide for the complete cleaning of all exterior masonry surfaces of the structures, removing all traces of moss, dirt, and other contaminants. The cleaning shall provide a clean masonry surface to allow determination of the masonry's color and shades, finish and texture, and other properties. Following completion of the surface cleaning of the structure (or side of structure) the masonry shall be dried prior to the start of any repair work. The following sequence of methods shall be used to determine the least aggressive, effective cleaning method:

1. Water with brushes
2. Water with mild soap
3. Water with stronger soap
4. Water with stronger soap plus ammonia
5. Water with stronger soap plus vinegar (but not on calcareous masonry)
6. Stronger chemical cleaners, only when above methods are determined to be ineffective by the Contracting Officer

3.2.1 Project Conditions

Masonry surfaces shall be cleaned only when air temperatures are above 5 degrees C 40 degrees F and will remain so until masonry has dried out, but for not less than 7 days after completion of the work.

3.2.2 Chemical Cleaners

Acidic chemical cleaners shall not be used on limestone, marble, concrete and other calcareous (calcium containing) masonry materials. If chemical cleaners are used on such materials, they shall be alkaline based and utilized with neutralizing after-washes.

3.2.3 Test Patches

The materials, equipment, and methods to be used in cleaning shall be demonstrated in a test section approximately 1 by 1 m 3 by 3 ft square. The location of the test section, and the completed test section shall be subject to approval. The cleaning process shall be adjusted as required and the test

section rerun until an acceptable process is obtained. Test patches shall be located in inconspicuous areas of the building. The areas tested shall exhibit soiling characteristics representative of those larger areas to be cleaned. Tests shall also be conducted on areas to be stripped of paint. Tested areas shall be allowed to dry before a determination is made on the effectiveness of a particular treatment.

3.2.4 Paint Removal

Paint and other coatings shall be removed from masonry surfaces in areas indicated prior to general cleaning. Masonry shall not be damaged or marred in the process of paint removal. Areas where paint is to be removed shall first be cleaned with water and detergent solution to remove surface dirt, rinsed, and allowed to dry. Chemical paint removers shall be applied in accordance with manufacturer's instructions. Surrounding painted surfaces to remain intact shall be protected from exposure to chemical paint removers to avoid damage. Paint containing lead that is to be removed shall be removed in accordance with LEAD BASED PAINT HAZARD ABATEMENT, TARGET HOUSING & CHILD OCCUPIED FACILITIES.

3.2.5 Water Cleaning

3.2.5.1 Pressure Spraying

Water shall be spray applied to masonry surfaces to comply with requirements indicated by test patches for location, purpose, water temperature, pressure, volume, and equipment. Unless otherwise indicated, the surface washing shall be done with clean, low pressure water (pressure of less than 0.38 MPa 55 psi and 9.5 to 11.4 L/m 2.5 to 3 gpm discharge) and the spray nozzle shall not be held less than 300 mm 12 inches from surface of masonry. Water shall be applied side to side in overlapping bands to produce uniform coverage.

3.2.5.2 Hand-scrubbing

Pre-wetted surfaces shall be scrubbed using hand-held natural bristle or nylon brushes. Wire brushes shall not be used. Surfaces to be cleaned shall be scrubbed to remove surface contaminants.

3.2.5.3 Rinsing

Scrubbed surfaces shall be rinsed clean of all contaminants and cleaning solutions with water in a low-to-moderate pressure spray, working upwards from bottom to top of each treated area. The rinsing cycle shall remove all traces of contaminants and cleaning solutions.

3.2.6 Chemical Cleaning

Chemical cleaning of historic masonry shall use the gentlest means possible to achieve the desired result as determined by test patches. Chemical cleaning shall be the use of any product in addition to water, including detergents, ammonia, vinegar, and bleach. Cleaning shall proceed in an orderly manner, working from top to bottom of each scaffold width and from one end of each elevation to the other. Cleaning shall result in uniform coverage of all surfaces, including corners, moldings, interstices and shall produce an even effect without streaking or damage to masonry. Chemical cleaners shall not be applied to the same masonry surfaces more than twice.

3.2.6.1 Surface Prewetting

Masonry surfaces to be cleaned with chemical cleaners shall be wetted with water using a low pressure spray before application of any cleaner.

3.2.6.2 Acidic Chemical Cleaning

Acidic chemical cleaners shall be applied according to manufacturer's instructions. Acidic chemical cleaners shall not be applied to masonry with high calcium content (e.g. marble, limestone). Acidic cleaners shall be applied to masonry surfaces by low pressure spray 0.35 MPa 50 psi max., roller, or brush. Cleaner shall remain on masonry surface for the time period recommended by manufacturer. Manual scrubbing by brushes shall be employed as indicated by test patches for the specific location. Cleaned surfaces shall be rinsed with a low-to-moderate pressure spray of water to remove all traces of chemical cleaner.

3.2.6.3 Alkaline Chemical Cleaning - Prewash Phase

Alkaline chemical cleaners shall be applied according to manufacturer's instructions. Alkaline cleaners shall be applied to masonry surfaces by low pressure spray 0.35 Mpa 50 psi max., roller, or brush. Cleaner shall remain on masonry surface for the time period recommended by the manufacturer. Manual scrubbing by brushes shall be employed as indicated by test patches for the specific location. Cleaned surfaces shall be rinsed with a low-to-moderate pressure spray of water.

3.2.6.4 Alkaline Chemical Cleaning - Afterwash Phase

Immediately after rinsing of alkaline cleaned surfaces, a neutralizing afterwash shall be applied to the cleaned masonry areas. Neutralizing afterwash shall be applied according to manufacturer's instructions. Neutralizing afterwash shall be applied to masonry surfaces by low pressure spray 0.35 MPa 50 psi max., roller, or brush. Afterwash shall remain on masonry surface for the time period recommended by manufacturer. Cleaned surfaces shall be rinsed with a low-to-moderate pressure spray of water to remove all traces of chemical cleaners.

3.2.6.5 pH Testing

Masonry surfaces which have been chemically cleaned shall be pH tested using pH monitoring pencils or papers. Chemically cleaned masonry shall be rinsed of all chemical residues until a neutral pH (7) reading is obtained from the masonry surface.

3.3 MASONRY REPAIR

Repaired surfaces shall match adjacent existing surfaces in all respects. Masonry repair shall proceed only after the cause of deterioration has been identified and corrected. Masonry repair shall conform to ACI C-20. Repair of terra cotta masonry shall be as directed.

Masonry repair shall proceed only after the area to be repaired has been cleaned. The materials, methods and equipment proposed for use in the repair work shall be demonstrated in test panels. The location, number, size and completed test panels shall be subject to approval. Products shall be used in accordance with the manufacturer's instructions.

3.3.1 Repointing

Repointing work shall be as directed. Old caulking, grout, or mortar shall be removed from previously repaired cracks where it is failing. Loose particles shall be removed from cracks. Cracks shall be cleaned, rinsed with water followed by blowing with filtered, dry, compressed air.

3.3.1.1 Mortar Analysis

Existing original historic mortar shall be analyzed before repointing in order to provide a match with the new repointing mortar. Historic mortars are usually softer than newer mortars, often using lime as a binder rather than cement. Lime for repointing mortar shall conform to ASTM C 207, Type S, unless otherwise specified. Full laboratory analysis of the existing mortar shall conform to ASTM C 1324. Field analysis of the existing mortar shall be as specified below.

3.3.1.2 Taking and Preparation of Samples

Samples of unweathered original historic mortar shall be taken and analyzed in order to match the new mortar to be used for repointing. Samples of each different type of mortar in the structure shall be taken and analyzed. Three or four samples of each type of mortar to be matched shall be removed with a hand chisel from several locations on the building. The largest sample shall be set aside for comparison with the repointing mortar. The remaining samples shall be broken apart with a wooden mallet, powdering them into their constituent parts.

3.3.1.3 Binder Analysis

A part of the sample shall be stirred into diluted hydrochloric acid. If a vigorous chemical reaction (bubbling) occurs and most of the binder disappears, leaving clean aggregate, the binder was lime. A portland cement binder will result in a murky liquid and will dissolve very slowly over several days.

3.3.1.4 Aggregate Analysis

Aggregate of the mortar sample shall be separated from the binder. This shall be accomplished by taking the crushed mortar sample and either gently blowing away the fine binder material, placing the crushed sample in a centrifuge, or chemically separating the aggregate from the binder. The separated aggregate shall be rinsed clean with water and dried. The aggregate shall be examined with a magnifying glass, and the component materials shall be recorded as to range of materials, sizes, colors, as well as the presence of other materials.

3.3.2 Mechanical Repair

Original historic masonry materials shall be repaired or replaced only if surfaces are extensively deteriorated (surface missing to a depth of 100 mm 4 inches or more) or are threatening the safety of the structure or individuals. Deteriorated surfaces shall be removed and repaired or replaced only upon approval. Repairs and replacements shall match the materials, colors, and finish of the existing historic masonry as closely as possible.

3.3.2.1 Areas To Be Removed

Unsound, weak, or damaged masonry and mortar shall be removed in areas as indicated. Loose particles, laitance, spalling, cracked, or debonded masonry and mortar and foreign materials shall be removed with hand tools unless otherwise noted. Surfaces prepared for repair shall be cleaned free of dust, dirt, masonry chips, oil or other contaminants, rinsed with water, and dried before repair work is begun. Surfaces of the structure, and surfaces adjacent to the work area shall be protected from damage which may result from removal, cleaning, and repair operations.

3.3.2.2 Application of Masonry and Mortar

Masonry and mortar shall be placed to rebuild spalled or damaged areas to match the original surface finish, level, texture, and color. The finished appearance of the patch shall match the adjacent existing surface.

3.3.2.3 Patch Anchors

Patch anchors shall be provided to ensure that the patch is tied to the existing masonry structure. Patch anchors shall be provided at a frequency of at least one patch anchor per 93 square mm square foot of patch plan surface area; specific locations for patch anchors shall be as indicated. Small handheld, low-speed rotary masonry drills shall be used to produce holes in the existing masonry, within the limits for the patch anchor installation.

3.3.2.4 Holes

Holes shall be drilled into the existing substrate material of the masonry using rotary (non-hammer) drills. Holes shall have a diameter of 3 mm 1/8 inch larger than the anchor diameter. The holes shall be drilled to a depth of 100 mm 4 inches, except as otherwise indicated or directed. Drill holes shall not penetrate completely through the masonry, and shall provide at least 25 mm 1 inch of cover around the drill hole. Holes shall be cleaned by water blasting to remove drill dust and other debris and then blown dry with filtered, dry, compressed air. Drill holes shall be conditioned in accordance with the epoxy adhesive manufacturer's recommendations.

3.3.2.5 Anchor Installation

Anchors shall be cleaned to remove all contaminants which may hinder epoxy bond. Epoxy adhesive shall be pressure injected into the back of the drilled holes. The epoxy shall fill the holes without spilling excess epoxy when the anchors are inserted. Anchors shall be inserted immediately into the holes. The anchors shall be set back from the exterior face at least 25 mm 1 inch. Anchors shall be installed without breaking or chipping the exposed masonry surface.

3.3.2.6 Cleanup

Excess epoxy and spills shall be removed from the surface of the masonry. The surface of the masonry shall be left in a clean and uncontaminated condition. Spills on adjacent surfaces shall also be removed and surfaces repaired as required.

3.3.2.7 Dutchman Repairs

The piecing-in of small patches of masonry to repair or replace damaged areas (Dutchman repair) shall be used in areas indicated. Repair pieces shall be held in place with epoxy with the joint between the new and old materials kept as narrow as possible to maintain the appearance of a continuous surface. Repairs shall be made to blend in with the surrounding original materials as closely as possible.

3.4 EPOXY-RESIN GROUT

The epoxy adhesive shall be conditioned, proportioned, mixed, applied, protected, and cured in accordance with the manufacturer's recommendations, except as otherwise specified herein or indicated on the drawings. The adjacent surfaces and ambient conditions shall be maintained within the manufacturer's recommendations. The patch anchors and epoxy adhesive shall be protected from displacement and disturbances.

3.4.1 Mixing Epoxy-Resin Grout Components

Epoxy-resin grout components shall be mixed in the proportions recommended by the manufacturer. The components shall be conditioned within 20 to 30 degrees C 70 to 85 degrees F for 48 hours prior to mixing. The two epoxy components shall be mixed with a power-driven, explosion-proof stirring device in a metal or polyethylene container having a hemispherical bottom. The polysulfide curing agent component shall be added gradually to the epoxy-resin component with constant stirring until a uniform mixture is obtained. The rate of stirring shall be such that the entrained air is at a minimum.

3.4.2 Tools and Equipment

Tools and equipment to be used again in the work shall be cleaned before the epoxy-resin grout sets.

3.4.3 Health and Safety Precautions

Full-face shields shall be provided for mixing, blending, and placing operations as required. Protective coveralls and neoprene-coated gloves shall be provided for workers engaged in the operations. Protective creams of a suitable nature for the operation shall be supplied. Adequate fire protection shall be maintained at mixing and placing operations. Smoking or the use of spark- or flame-producing devices shall be prohibited within 15 m 50 feet of mixing and placing operations. The mixing, placing, or storage of epoxy-resin grout or solvent shall be prohibited within 15 m 50 feet of any vehicle, equipment, aircraft, or machinery that could be damaged from fire or could ignite vapors from the material.

3.5 MASONRY REPLACEMENT

Masonry shall be replaced with material that matches the original in terms of composition, color, texture, strength, finishing, and porosity as closely as possible. If a few isolated masonry units are to be replaced, each shall be removed without disturbing the surrounding masonry. Deteriorated masonry units and mortar requiring replacement shall be removed by hand chiseling. Adjoining masonry units shall not be damaged during the removal of deteriorated units and mortar. The new element shall be tested for fitting into its space without mortar. If wedges are used to support and align the new unit, they shall be covered with at least 38 mm 1-1/2 inches of mortar when pointing is complete. The four sides and back of the space shall be covered with sufficient mortar to ensure that there will be no air spaces when the new unit is set. The new unit shall be lined up and set by tapping it into place with a wooden or rubber mallet. Face of new unit shall align with that of existing masonry. Joints shall be repointed to match the rest of the wall after new units have been properly installed and adjusted. Replacement areas shall be cleaned with a non-metallic brush and water to remove excess mortar

3.6 MASONRY AND MORTAR FINISHES AND COLOR

The exposed surfaces of masonry and mortar repair shall match the finish, color, texture, and surface detail of the original surface. Mechanical finishing and texturing may be required to produce the required finish and appearance. The finishing and texturing shall conceal bond lines between the repaired area and adjacent surfaces. The texturing shall provide replication of all surface details, including tooling and machine marks. The equipment used in finishing and texturing shall be a low-impact energy type which will not weaken the patch or damage the patch bond and the adjacent concrete.

3.7 JOINT SEALING

Joint sealing shall be as specified in Section 07920 JOINT SEALANTS.

3.8 FINAL CLEANING

No sooner than 72 hours after completion of the repair work and after joints are sealed, faces and other exposed surfaces of masonry shall be washed down with water applied with a soft bristle brush, then rinsed with clean water. Discolorations which cannot be removed by these procedures shall be considered defective work. Cleaning work shall be done when temperature and humidity conditions allow the surfaces to dry rapidly. Adjacent surfaces shall be protected from damage during cleaning operations.

3.9 PROTECTION OF WORK

Work shall be protected against damage from subsequent operations.

3.10 DEFECTIVE WORK

Defective work shall be repaired or replaced, as directed, using approved procedures.

3.11 FINAL INSPECTION

Following completion of the work, the structure shall be inspected for damage, staining, and other distresses. The patches shall be inspected for cracking, crazing, delamination, unsoundness, staining and other defects. The finish, texture, color and shade, and surface tolerances of the patches shall be inspected to verify that all requirements have been met. Surfaces exhibiting defects shall be repaired as directed.

End of Section

PROPOSAL SUMMARY SHEET

Name of Proposer: _____

Address: _____

City, State, ZIP: _____

Telephone: _____

UBI or Contractor License # _____

Name of authorized representative of the above named company: _____

Title: _____

Signature: _____

Masonry Cleaning (Including steps, ramps and entrances. Excludes sidewalks) \$ _____

Masonry Restoration (Includes tuck-pointing, caulking, repair/replacement of cast sandstone units)

<u>Item</u>	<u>Est. footage (sq or lin.)</u>	<u>Price per Unit</u>
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- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.