



CITY OF HOUSTON

INVITATION TO BID

July 13, 2012

Bid Opening:

Sealed bids, in duplicate, will be received by the City Secretary of the City of Houston, in the City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002 until **10:30 A.M. Thursday, August 9, 2012**, and all bids will be opened and publicly read in the City Council Chamber, City Hall Annex, Public Level, 900 Bagby at 11:00 A.M. on that date for the purchase of:

FABRICATE AND INSTALL HURRICANE SHUTTERS FOR THE GENERAL SERVICES DEPARTMENT

Bid No. S50-C24343

NIGP Code: 450-75

Buyer:

Questions regarding this solicitation should be addressed to Arturo Lopez, Senior Procurement Specialist, at **832-393-8731** or e-mail to **arturo.lopez@houstontx.gov**.

Electronic Bidding:

In order to submit a bid for the items associated with this procurement, you must fill in the pricing information on the "PLACE BID" page.

Prebid Conference:

A Pre-Bid Conference will be held for all Prospective Bidders in the Strategic Purchasing Division, Concourse Level (Basement), Conference Room #1, City Hall, 901 Bagby, at 2:00 pm. on **Wednesday, July 25, 2012**. The site visit will be scheduled at the pre-bid conference.

All Prospective Bidders are urged to be present. It is the bidder's responsibility to ensure that they have secured and thoroughly reviewed all aspects of the solicitation documents prior to the Pre-Bid Conference. Any revisions to be incorporated into this solicitation document arising from discussions before, during and subsequent to the Pre-Bid Conference will be confirmed in writing by Letter(s) of Clarification prior to the bid due date. Verbal responses will not otherwise alter the specifications, terms and conditions as stated herein.

Bidding forms, specifications, and all necessary information should be downloaded from the Internet at **www.purchasing.houstontx.gov**. By registering and downloading this solicitation document, all updates to this solicitation document will be automatically forwarded via e-mail to any registered bidders. This information may also be obtained from the Supplier Assistance Desk, Strategic Purchasing Division, 901 Bagby, Concourse Level, Houston, Texas 77002.

The place of the bid opening may be transferred in accordance with Paragraph (b), (5) of Section 15-3 of The Code of Ordinances, Houston, Texas. The bid-opening meeting may be rescheduled in accordance with Paragraph (b), (6) of said Section 15-3.

The City reserves the right to reject any or all bids or to accept any bid or combination of bids deemed advantageous to it.

City employees are prohibited from bidding on this solicitation in accordance with the Code of Ordinances Section 15-1.

***CONTENTS:**

- A. OFFER
- B. SCOPE OF WORK/SPECIFICATIONS
- C. GENERAL TERMS AND CONDITIONS, GENERAL, SUPPLEMENTAL CONDITIONS AND BOND FORMS

*NOTE 1: Actual page numbers for each section may change when the solicitation document is downloaded from the Internet or because of letters of clarification. Therefore, bidders must read the solicitation document in its entirety and comply with all the requirements set forth therein.

*NOTE 2: **To be considered for award please submit the electronic bid form and the forms listed in section A, including the signature page, which must be signed by a company official authorized to bind the company and a 10% Bid Bond.**

SECTION A



**FORMAL ONE-TIME BID
FABRICATE AND INSTALL HURRICANE SHUTTERS
FOR THE GENERAL SERVICES DEPARTMENT
Bid No. S50-C24343
NIGP Code: 450-75**

To The Honorable Mayor
and City Council Members
of the City of Houston, Texas (the "City"):

The undersigned hereby offers to provide services necessary to **Fabricate and Install Hurricane Shutters at Various Locations in the of City of Houston for the General Services Department**, F.O.B. destination point Houston, Texas, in accordance with the City's Specifications and General Terms & Conditions and/or samples/drawings provided herein. When issued by the City of Houston, Letters of Clarification shall automatically become part of this bid document and shall supersede any previous specifications or provisions in conflict with Letters of Clarification. It is the responsibility of the bidder to ensure that it has obtained all such letters. By submitting a bid on this project, bidder shall be deemed to have received all Letters of Clarification and to have incorporated them into the bid.

The City may accept this bid offer by issuance of a Notice of Award Letter and/or a Purchase Order at any time on or before the 120th day following the day this Official Bid Form is opened by the City. This offer shall be irrevocable for 120 days after bid opening or for 90 days after City Council awards the bid, whichever comes last, but this period may be extended by written agreement of the parties.

The City reserves the right to INCREASE quantities during the twelve-month period following the issuance of the first purchase order subject to agreement in writing by the Prime Contractor/Supplier to honor the same bid price.

The City reserves the option, after bids are opened, to adjust the quantities listed on the electronic bid form upward or downward, subject to the availability of funds, and/or make award (s) on a line item basis.

SECTION A

Documents/forms must be downloaded from the City's Website
<http://www.houstontx.gov/purchasing/index.html>

Additional Required Forms to be Included with this bid:

In addition to the electronic Bid Form and the Official Signature Page, the Forms listed in Table 1 **must be completed and submitted to the Office of the City Secretary on or before the date and time the bid is due:**

Table 1
Affidavit of Ownership
Fair Campaign Ordinance
Statement of Residence
Conflict of Interest Questionnaire
10% Bid Bond
Contractor References / Questionnaire
Pay or Play Health Insurance Program Acknowledgement Form 1A

Table 2 lists other documents and forms that should be viewed/downloaded from the City's website, but are not required to be submitted with the bid. The City will request these forms, as applicable, to be completed and submitted to the City by the recommended/successful bidder:

Table 2
Formal Instructions for Bid Terms
Drug Forms
Sample Insurance Certificate & Endorsements / Over \$50,000
Construction Insurance OCP
Construction 2012 Building Wage Decision
Pay or Play Certification of Agreement Form 2
Pay or Play Form 3 / List of all Subcontractors
Bonds for Construction

Note:

Questions concerning the Bid should be submitted in writing to: City of Houston, Strategic Purchasing Division, 901 Bagby, Room B506, Houston, TX 77002, Attn: Arturo Lopez or via fax: 832-393-8759 or via email (preferred method) to arturo.lopez@cityofhouston.net no later than **4:00 PM, Monday, July 30, 2012.**

PERMITS:

The successful Contractor shall be responsible for securing any and all permits for the proposed work. Any fee charged for these permits should be the responsibility of the Contractor and not the City of Houston.

CITY BUILDING CODES:

All work performed or equipment installed shall be in strict accordance with the City of Houston Building Codes. The Contractor will immediately correct any deficiencies discovered during work or after completion. Failure to correct deficiencies will result in the City having corrections made at the Contractor's expense.

BID BOND:

The Contractor shall be required to provide and submit with the bid a Bid Bond in the amount of 10% of the total amount bid by the Contractor. The Bid Bond shall be in the same form as that distributed by the City, and attached hereto, all duly executed by this Bidder (as "Principal") and by a corporate surety company licensed to do business in the State of Texas, and if the amount of the bond is greater than \$100,000.00 the surety must hold a certificate of authority from the United States Secretary of the Treasury, or a Cashier's or a Certified check in a like amount. Company or personal checks are not acceptable.

PERFORMANCE BOND and PAYMENT BOND:

The successful Contractor(s) shall be required to provide a Performance and Payment Bond in the total amount (100%) of the Contract if the award is in excess of \$25,000.00.

The Performance and/or Payment Bond shall be in the same form as that distributed by the City, and attached hereto, all duly executed by this bidder (as "Principal") and by an incorporated surety company licensed to do business in the State of Texas. If the amount of the bond is greater than \$100,000.00 the surety must hold a certificate of authority from the United States Secretary of the Treasury.

The Contractor(s) shall be required to provide a Performance and/or Payment Bond as outlined above, which will be delivered to the City Purchasing Agent of the City, on or before the tenth (10th) day following the day the bidder receives notice from the City.

MAINTENANCE BOND:

The Contractor shall furnish a maintenance bond in the total (100%) bid amount in the form required by the City (samples attached). One bond, also referred to as the One Year Maintenance Bond, will be conditioned upon Contractor's repair, replacement or restoration of any work or any portion of the work which is found to be defective or fails in any way to comply strictly with this contract or the plans and specifications for such work within a period of one (1) year from the date of acceptance of such work by the City Council or after the date that the "CO", or his designee in writing, determines, in a written notice to the Contractor, to be the date upon which the project is both substantially complete and available for the full and beneficial occupancy or use of the City.

QUALITY AND WORKMANSHIP

The bidder must be able to demonstrate, upon request, that it has performed satisfactorily services similar to the services specified herein. The bidder will provide records of warranty and repair services performed for others upon request. The City of Houston shall be the sole judge whether the services performed are similar to the scope of services specified herein.

SITE INSPECTION

The City of Houston reserves the right to inspect the bidder's current place of business to evaluate equipment condition and capabilities, staff experience, training and capabilities, and storage capabilities as they relate to the performance of this contract.

HIRE HOUSTON FIRST:

Designation as a City Business or Local Business

To be designated as a City or Local Business for the purposes of the Hire Houston First Program, as set out in Article XI of Chapter 15 of the Houston City Code, a bidder or proposer must submit the **Hire Houston First Application and Affidavit ("HHF Affidavit")** to the Director of the Mayor's Office of Business Opportunities and receive notice that the submission has been approved prior to award of a contract. Bidders are encouraged to secure a designation prior to submission of a bid or proposal if at all possible.

Download the HHF Affidavit from the Office of Business Opportunities Webpage at the City of Houston e-Government Website at the following location:

www.houstontx.gov/obo/moreforms/hirehoustonfirstaffidavit.pdf

Submit the completed application forms to: Mayor's Office of Business Opportunity, One Stop Business Center, 900 Bagby St., Public Level, Houston, TX 77002 or Applications may be submitted via e-mail to HHF-MOBO@houstontx.gov or faxed to 832.393.0952.

Award of Procurement of \$100,000 or More for Purchase of Non-Professional Services, Including Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A "CITY BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE"):

- IF THE BID OF THE LOCAL BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

Award of Procurement under \$100,000 Purchase of Non-Professional Services Including Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A "LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE"):

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

Award of Procurement that may be More or Less than \$100,000 for Purchase of Non-Professional Services, Including Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A "LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE"):

- IF THE BID OF THE LOCAL BUSINESS IS LESS THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, OR
- IF THE BID OF THE LOCAL BUSINESS IS MORE THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

INTERLOCAL AGREEMENTS:

Under the same terms and conditions hereunder, the Contract may be expanded to other government entities through inter-local agreements between the City of Houston and the respective government entity that encompass all or part of the products/services provided under this contract. Separate contracts will be drawn to reflect the needs of each participating entity.

LOBBYING AND OTHER FORMS OF INFLUENCE PROHIBITED

Neither Bidder(s) nor any person acting on Bidder(s)'s behalf shall attempt to influence the outcome of the award by the offer, presentation or promise of gratuities, favors, or anything of value to any appointed or elected official or employee of the City of Houston, their families or staff members. All inquiries regarding the solicitation are to be directed to the designated City Buyer identified on the first page of the solicitation. Upon issuance of the solicitation through the pre-award phase and up to the award, aside from Bidder's formal response to the solicitation, communications publicly made during the official pre-bid conference, written requests for clarification during the period officially designated for such purpose by the City Buyer, neither Bidder(s) nor persons acting on their behalf shall

communicate with any appointed or elected official or employee of the City of Houston, their families or staff through written or oral means in an attempt to persuade or influence the outcome of the award or to obtain or deliver information intended to or which could reasonably result in an advantage to any Bidder. However, nothing in this paragraph shall prevent Bidder from making public statements to the City Council body convened for a regularly scheduled session after the official selection has been made and placed on the City Council agenda for action.

CONTRACTOR'S QUESTIONNAIRE

In order to receive bid award consideration, the bidder must be able to demonstrate that they are currently providing or have had at least one contract, similar in size and scope, for ***hurricane shutter installation*** that is similar in size and scope to this contract. **Bidder must have references documenting that it has fabricated and installed hurricane shutters of a similar size and scope as stipulated in the scope of work/specifications.**

The reference(s) should be included in the space provided below. Please attach another piece of paper if necessary. If references are not included with the bid, the bidder shall be required to provide such references to the City of Houston within five working days from receipt of a written request from the City of Houston to do so. **Bidder's capability and experience shall be a factor in determining the Contractor's responsibility.**

1. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____ Fax: _____ Email: _____

No. of Years providing Service to this business: _____

2. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____ Fax: _____ Email: _____

No. of Years providing Service to this business: _____

3. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____ Fax: _____ Email: _____

No. of Years providing Service to this business: _____

4. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____ Fax: _____ Email: _____

No. of Years providing Service to this business: _____

SECTION B
SCOPE OF WORK/SPECIFICATIONS

1.0 General:

1.1 The Contractor shall be required to provide all equipment, materials, tools, labor, supervision and transportation necessary to fabricate and install manually operated hurricane shutters at the locations listed below. The Contractor shall also be required to field measure all openings before fabrication, show recorded measurements, details and calculations on shop drawings and submit documentation indicating that the proposed materials and installation meet or exceed the structural performance requirements specified by Miami/Dade County, Florida and set fourth in Section 08.23.33, Subsection 2.2, entitled "Performance Requirements".

1.2 List of locations:

1.2.1 Clear Lake Police Station - 2855 Bay Area Blvd *(618G)

1.2.2 Fire Station 47 – 2615 Tidewater & Almeda RD *(572L)

1.2.3 Fire Station 52 – 10343 Hartsook & Freewood *(576K)

1.2.4 Fire Station 55 – 11212 Cullen & Selinski *(573H)

1.2.5 Fire Station 59 – 13925 S Post Oak & Prudence *(571Q)

1.2.6 Fire Station 61 – 9726 Monroe & Swiss *(575Q)

1.2.7 Fire Station 70 – 11410 Beamer & South Belt *(576X)

1.2.8 Fire Station 71 – 15200 Space Center Blvd *(618F)

1.2.9 Fire Station 72 – 17401 Saturn *(618Q)

1.2.10 Fire Station 80 – 16111 Chimney Rock & Court *(611A)

1.2.11 Fire Station 81 – 7990 Paul B Koonce Rd *(575F)

1.2.12 Fire Station 93 – 911 FM 1959 & Gulf Stream *(617B)

1.2.13 Fire Station 94 – 235 El Dorado & Piper's View *(617R)

* Key map locations

2.0 Performance Time:

2.1 The Contractor shall have **180 calendar days** to order all supplies/equipment and complete all the work associated with and required by the contract after receipt of the written Notice to Proceed from the City.

3.0 Warranty:

- 3.1 The Contractor shall warranty all materials, equipment for **ten-years** and workmanship for **five-years**.

TECHNICAL SPECIFICATIONS

SECTION 05 50 00

METAL FABRICATIONS

PART 1 – GENERAL:

1.1 SUMMARY:

1.1.1 Section includes miscellaneous aluminum framing and supports.

1.2 ACTION SUBMITTALS:

1.2.1 Shop Drawings: Show fabrication and installation details for metal fabrications.

1.2.1.1 Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.

PART 2 – PRODUCTS:

2.1 PERFORMANCE REQUIREMENTS:

2.1.1 Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.

2.1.1.1 Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

2.2 METALS, GENERAL:

2.2.1 Metal Surfaces, General: Provide materials with smooth, flat surfaces without blemishes.

2.3 NONFERROUS METALS:

2.3.1 Aluminum Extrusions: ASTM B 221, Alloy 6063-T6.

2.3.2 Aluminum Castings: ASTM B 26/B 26M, Alloy 443.0-F.

2.4 FASTENERS:

2.4.1 General: Unless otherwise indicated, provide Type 304 stainless-steel fasteners.

2.4.2 Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors.

2.4.2.1 Material for Exterior Locations and Where Stainless Steel is Indicated: Alloy Group 1 stainless-steel bolts, ASTM F 593, and nuts, ASTM F 594.

2.5 MISCELLANEOUS MATERIALS:

- 2.5.1 Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

2.6 FABRICATION, GENERAL:

- 2.6.1 Shop Assembly: Use connections that maintain structural value of joined pieces.
- 2.6.2 Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.
- 2.6.3 Weld corners and seams continuously to comply with the following:
 - 2.6.3.1 Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2.6.3.2 Obtain fusion without undercut or overlap.
 - 2.6.3.3 Remove welding flux immediately.
 - 2.6.3.4 At exposed connections, finish exposed welds and surfaces smooth and blended.
- 2.6.4 Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Locate joints where least conspicuous.
- 2.6.5 Fabricate seams and other connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.

2.7 MISCELLANEOUS FRAMING AND SUPPORTS:

- 2.7.1 General: Provide supplementary aluminum framing and supports not specified in Division 08 "Overhead Coiling Doors" as needed to complete the Work.
- 2.7.2 Fabricate units from aluminum shapes, plates, and bars of welded construction. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.

2.8 FINISHES:

- 2.8.1 General:
 - 2.8.1.1 Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
 - 2.8.1.2 Finish metal fabrications after assembly.

- 2.8.2 Aluminum Finishes: Finish exposed components to match finish selected by Owner for aluminum overhead coiling hurricane shutters.

PART 3 – EXACUTION:

3.1 INSTALLATION:

- 3.1.1 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.
- 3.1.2 Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings.
- 3.1.3 Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood, or dissimilar metals with the following:
- 3.1.3.1 Aluminum Extrusions: Heavy coat of bituminous paint.
- 3.1.4 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.
- 3.1.5 Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction.

3.2 ADJUSTING AND CLEANING:

- 3.2.1 Touchup: Immediately after erection, clean bolted connections and abraded areas. Touchup shop applied finish to with the same material as used for shop finishing to match undamaged surfaces.

END OF SECTION

SECTION 07 92 00

JOINT SEALANTS

PART 1 – GENERAL:

1.1 SUMMARY:

- 1.1.1 Section includes silicone joint sealants.

1.2 ACTION SUBMITTALS:

- 1.2.1 Product Data: For each joint-sealant product indicated.

1.3 INFORMATIONAL SUBMITTALS:

1.3.1 Field-adhesion test reports.

1.3.2 Warranties.

1.4 WARRANTY:

1.4.1 *Special Installer's Warranty:* Manufacturer's standard form in which 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.

1.4.1.1 *Warranty Period: Five years from date of Substantial Completion.*

1.4.2 *Special Manufacturer's Warranty:* Manufacturer's standard form in which joint-sealant manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.

1.4.2.1 *Warranty Period: Ten years from date of Substantial Completion.*

PART 2 – PRODUCTS:

2.1 MATERIALS, GENERAL:

2.1.1 Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.

2.2 SIUCONE JOINT SEALANTS:

2.2.1 Neutral-Curing Silicone Joint Sealant: ASTM C 920.

2.2.1.1 Manufacturers: Subject to compliance with requirements, provide products by one of the following:

2.2.1.1.1 Dow Corning Corporation.

2.2.1.1.2 GE Advanced Materials - Silicones.

2.2.1.1.3 Tremco Incorporated.

2.2.1.2 Type: Single component (S),

2.2.1.3 Grade: Nonsag (NS).

2.2.1.4 Class: 50.

2.2.1.5 Uses Related to Exposure: Nontraffic (NT).

2.3 JOINT SEALANT BACKING:

- 2.3.1 Cylindrical Sealant Backings: ASTM C 1330, of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance and as approved in writing by joint-sealant manufacturer for joint application indicated.
- 2.3.2 Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer.

2.4 MISCELLANEOUS MATERIALS:

- 2.4.1 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.
- 2.4.2 Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials.
- 2.4.3 Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 – EXECUTION:

3.1 PREPARATION:

- 3.1.1 Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.
 - 3.1.1.1 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 of joint sealants.
- 3.1.2 Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- 3.1.3 Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contactor by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.2 INSTALLATION:

- 3.2.1 Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- 3.2.2 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.

- 3.2.2.1 Do not leave gaps between ends of sealant backings.
- 3.2.2.2 Do not stretch, twist, puncture, or tear sealant backings.
- 3.2.2.3 Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- 3.2.3 Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- 3.2.4 Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 3.2.4.1 Place sealants so they directly contact and fully wet joint substrates.
 - 3.2.4.2 Completely fill recesses in each joint configuration.
 - 3.2.4.3 Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- 3.2.5 Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint,
 - 3.2.5.1 Remove excess sealant from surfaces adjacent to joints,
 - 3.2.5.2 Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces,
 - 3.2.5.3 Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
- 3.2.6 Clean off excess sealant or sealant smears adjacent to joints as the work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.3 FIELD QUALITY CONTROL:

- 3.3.1 Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:
 - 3.3.1.1 Extent of Testing: Test completed and cured sealant joints as follows:
 - 3.3.1.1.1 Perform 3 tests for the first 1000 feet of joint length for each kind of sealant and joint substrate,
 - 3.3.1.1.2 Perform 1 test for each 1000 feet of joint length there after or 1 test per each floor per elevation.

3.3.1.1.3 Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C1193 or Method A, Tail Procedure, in ASTM C1521.

3.3.2 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:

3.4.1 Exterior joints in vertical surfaces and horizontal nontraffic surfaces.

3.4.1.1 Joint Locations:

3.4.1.1.1 Joints between aluminum components.

3.4.1.1.2 Joints between metal components and any of the following:

3.4.1.1.2.1 Clay masonry.

3.4.1.1.2.2 Concrete unit masonry.

3.4.1.1.2.3 Cement plaster.

3.4.1.1.2.4 Fiber cement panels.

3.4.1.2 Joint Sealant: Silicone.

3.4.1.3 Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors.

END OF SECTION

SECTION 08 33 23

OVERHEAD COILING DOORS

PART 1 – GENERAL:

1.1 SUMMARY:

1.1.1 Section includes overhead coiling hurricane shutters at existing exterior openings.

1.1.2 Related Sections include Division 05 Section "Metal Fabrications" for miscellaneous aluminum supports.

1.2 DEFINITIONS:

- 1.2.1 Shutter Unit: Overhead coiling shutter curtain, jamb guides, and hood.
- 1.2.2 Shutter Assembly: May include more than one overhead coiling shutter unit.

1.3 ACTION SUBMITTALS:

- 1.3.1 Product Data: For each type and size of overhead coiling shutter and accessory required.
- 1.3.2 Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.
 - 1.3.2.1 Include points of attachment and their corresponding static and dynamic loads imposed on structure.
 - 1.3.2.2 Show locations of controls, locking devices, and other accessories.
- 1.3.3 Samples: For each exposed product and for each color and texture specified.

1.4 INFORMATIONAL SUBMITTALS:

- 1.4.1 Certifications: Manufacturer's certification indicating compliance with specified performance requirements.
 - 1.4.1.1 Submit Notice of Acceptance from Miami / Dade County indicating that shutter units have been tested and approved for use in Miami / Dade County.

1.5 CLOSEOUT SUBMITTALS:

- 1.5.1 Maintenance data.

1.6 QUALITY ASSURANCE:

- 1.6.1 Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project,

PART 2 – PRODUCTS:

2.1 DESCRIPTION:

- 2.1.1 Provide overhead coiling shutter units suitable for application intended and sized to meet the following requirements:
 - 2.1.1.1 Provide shutter assemblies completely covering window openings.
 - 2.1.1.2 Each shutter unit must cover full height of designated opening.
 - 2.2.1.3 Width of shutter assemblies may include more than one shutter unit. Intermediate supports must align with existing window

framing as approved by Owner.

- 2.1.2 Installed overhead coiling shutter assemblies must not impede proper operation of door or window units.
- 2.1.3 Installed overhead coiling shutter assemblies must permit replacement of glazing in each window lite.

2.2 PERFORMANCE REQUIREMENTS:

- 2.2.1 Structural Performance, Exterior Shutters: Suitable for installation on exterior face of building wall and capable of withstanding the following as required by Miami/Dade County, Florida.
 - 2.2.1.1 Design wind loads resulting from a wind speed of 135 mph.
 - 2.2.1.2 Large and small missile impact.
- 2.2.2 Structural Performance, Shutter Assembly Anchorage: Provide anchorages to structural substrates designed to transfer positive and negative wind loads and impact loads to building structure.

2.3 SHUTTER ASSEMBLY:

- 2.3.1 Overhead coiling shutter formed with curtain of interlocking aluminum slats.
- 2.3.2 Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Project include, but are not limited to, the following:
 - 2.3.2.1 Advanced Hurricane Technology, Inc.
 - 2.3.2.2 American Shutter System Associates, Inc.
 - 2.3.2.3 Croci North America.
 - 2.3.2.4 QMI.
 - 2.3.2.5 Rollac Shutter of Texas, Inc.
 - 2.3.2.6 USA Shutter Company LLC.
- 2.3.3 Door Curtain Material: Extruded aluminum.
- 2.3.4 Door Curtain Slats: Manufacturer's proprietary curved aluminum section of 1-7/8-inch to 2-5/8-inch center-to-center height.
 - 2.3.4.1 Slats may be either formed aluminum sheet metal or extruded aluminum.
- 2.3.5 Curtain Jamb Guides: Aluminum with exposed finish matching curtain slats.
- 2.3.6 Hood: Match curtain material and finish.

2.3.6.1 Mounting: Face of wall.

2.3.7 Manual Shutter Operator: Manufacturer's standard crank operator.

2.3.8 Shutter Finish:

2.3.8.1 Aluminum Finish: Clear anodized.

2.4 SHUTTER CURTAIN MATERIALS AND CONSTRUCTION:

2.4.1 Shutter Curtains: Fabricate overhead coiling shutter curtain of interlocking metal slats, designed to withstand wind loading indicated, in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by shutter manufacturer for performance, size, and type of door indicated, and as follows:

2.4.2 Curtain Jamb Guides: Manufacturer's standard extrusions of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow curtain to operate smoothly, and to withstand loading. Slotbolt holes for guide adjustment. Provide removable stops on guides to prevent overtravel of curtain.

2.5 HOODS:

2.5.1 General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.

2.6 COUNTERBALANCING MECHANISM:

2.6.1 General: Counterbalance overhead coiling shutters by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.

2.6.2 Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

2.7 MANUAL SHUTTER OPERATORS

2.7.1 General: Equip overhead coiling shutter with manual shutter operator by shutter manufacturer.

2.7.2 Crank Operator: Consisting of crank and crank gearbox, steel crank drive shaft, and gear-reduction unit, of type indicated. Size gears to require not more than 25-lb force to turn the crank. Fabricate gearbox to be oil tight and to completely enclose operating mechanism. Provide manufacturer's standard crank-locking device with removable crank.

PART 3 – EXECUTION:

3.1 INSTALLATION:

- 3.1.1 Provide overhead coiling hurricane shutter assemblies at each window and sliding door on the building exterior.
- 3.1.2 Install overhead coiling shutters and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- 3.1.3 Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion. Lubricate bearings and sliding parts as recommended by the manufacturer.

3.2 DEMONSTRATION:

- 3.2.1 Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling shutters.

END OF SECTION

SECTION C

A PDF version of this 2012 Building Wage Decision
can be viewed at the following web link

<https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24343>

DOCUMENT 00700 GENERAL TERMS AND CONDITIONS

A PDF version of the General Terms and Conditions can be viewed at the
following web link

<https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24343>

Document 00800 SUPPLEMENTARY CONDITIONS

The following Paragraphs amend and supplement the General Conditions. Unaltered portions of General Conditions remain in effect.

ARTICLE 1 - GENERAL PROVISIONS

1.1 *DEFINITIONS: Replace the definition of "Specifications" with the following Paragraph 1.1.40.*

1.1.40 Specifications: Divisions 01 through 49 of the documents that are incorporated into the Agreement, consisting of written General Requirements and requirements for Products, standards, and workmanship for the Work, and performance of related services.

ARTICLE 3 - THE CONTRACTOR

3.5 *LABOR: Insert the following Paragraph 3.5.3.1.1.*

3.5.3.1.1 If the original contract price is greater than \$1 Million Dollars, the Contractor shall make good faith efforts to comply with the City ordinances regarding Minority Business Enterprises (MBE), Persons with Disabilities Business Enterprises (PDBE) and Small Business Enterprise (SBE) participation goals which are as follows:

- .1 the MBE goal is 0 percent,
- .2 the SBE goal is 0 percent, and

ARTICLE 7 – CHANGES IN THE WORK

7.1 *CHANGES: Replace Paragraph 7.1.2 with the following Paragraph 7.1.2.*

7.1.2 The following types of Change Orders require City Council approval:

- .1 a single Change Order that exceeds ten percent of Original Contract Price,

- .2 a Change Order which, when added to previous Change Orders, exceeds ten percent of Original Contract Price,
- .3 a Change Order, in which the total value of increases outside of the general scope of work approved by City Council, when added to increases outside the general scope of work approved by City Council in previous Change Orders, exceeds 40 percent of the Original Contract Price, even if the net increase to the Original Contract Price is ten percent or less. In this context, “increase” means an increase in quantity resulting from the addition of locations not within the scope of work approved by City Council, or the addition of types of goods or services not bid as unit price items.

Nothing in this Paragraph is intended to permit an increase of the Contract Price in excess of the limit set out in TEX. LOC. GOV'T CODE ANN. §252.048 or its successor statute.

ARTICLE 8 – TIME

- 8.1 *PROGRESS AND COMPLETION: Insert the following Paragraph 8.1.6.1.*
- 8.1.6.1 Contractor shall credit the City by Change Order for inspection services for overtime work or work performed on Sundays or Legal Holidays. The amount Contractor credits the City will be \$120.00 per hour per inspector for inspection services.

ARTICLE 9 - PAYMENTS AND COMPLETION

- 9.1 *UNIT PRICE WORK: Replace Paragraph 9.1 in its entirety with the following Paragraph 9.1.*
- 9.1 *UNIT PRICE WORK*
- 9.1.1 References to Unit Prices in individual Specification sections are not applicable to the Contract. Include payment for portions of the Work required by these sections in the Stipulated Price for the Contract.
- 9.12 *LIQUIDATED DAMAGES: Insert the following Paragraph 9.12.1.1.*
- 9.12.1.1 The amount of liquidated damages provided in General Conditions Paragraph 9.12.1 payable by Contractor or Surety for each and every day of delay beyond Contract Time, are **\$800.00 per day**.

ARTICLE 11 - INSURANCE AND BONDS

- 11.2 *INSURANCE TO BE PROVIDED BY CONTRACTOR: Insert the following Paragraph 11.2.1.2.*
- 11.2.1.2 Contractor shall purchase for the duration of the Contract the insurance set out in Table 2 in addition to the minimum insurance coverage set out in section 11.2.1.

Document 00612
ONE-YEAR MAINTENANCE BOND

THAT WE, _____, as Principal, hereinafter called Contractor, and the other subscriber hereto, _____, as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Houston, a municipal corporation, in the sum of \$ _____, for the payment of which sum well and truly to be made to the City of Houston and its successors, the said Contractor and Surety do bind themselves, their heirs, executors, administrators, successors, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a Contract in writing with the City of Houston for _____,
_____,
all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein.

NOW THEREFORE, if the said Contractor shall comply with the provisions of Paragraph 11.5.1 of the General Conditions, and correct work not in accordance with the Contract documents discovered within the established one-year period, then this obligation shall become null and void, and shall be of no further force and effect; otherwise, the same is to remain in full force and effect.

Notices required or permitted hereunder shall be in writing and shall be deemed delivered when actually received or, if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other party at the address prescribed in the Contract documents, or at such other address as the receiving party may hereafter prescribe by written notice to the sending party.

IN WITNESS THEREOF, the said Contractor and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

ATTEST, SEAL: (if a corporation)
WITNESS: (if not a corporation)

Name of Contractor

By: _____
Name:
Title:

By: _____
Name:
Title:
Date:

ATTEST/SURETY WITNESS:

(SEAL)

Full Name of Surety

Address of Surety for Notice

Telephone Number of Surety

By: _____
Name:
Title:
Date:

By: _____
Name:
Title: Attorney-in-Fact
Date:

This Ordinance or Contract has been reviewed as to form by the undersigned legal assistant and have been found to meet established Legal Department criteria. The Legal Department has not reviewed the content of these documents.

Legal Assistant

Date

Document 00610
PERFORMANCE BOND

THAT WE, _____, as Principal, (the "Contractor"), and the other subscriber hereto, _____, as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Houston (the "City"), a municipal corporation, in the penal sum of \$_____ for the payment of which sum, well and truly to be made to the City, its successors and assigns, Contractor and Surety do bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a Contract in writing with the City for _____, _____, all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein.

NOW THEREFORE, if the said Contractor shall faithfully and strictly perform the Contract in all its terms, provisions, and stipulations in accordance with its true meaning and effect, and in accordance with the Contract documents referred to therein and shall comply strictly with each and every provision of the Contract and with this Bond, then this obligation shall become null and void and shall have no further force and effect; otherwise the same is to remain in full force and effect. Should the Contractor fail to faithfully and strictly perform the Contract in all its terms, including but not limited to the indemnifications thereunder, the Surety shall be liable for all damages, losses, expenses and liabilities that the City may suffer in consequence thereof, as more fully set forth herein.

It is further understood and agreed that the Surety does hereby relieve the City or its representatives from the exercise of any diligence whatever in securing compliance on the part of the Contractor with the terms of the Contract, and the Surety agrees that it shall be bound to take notice of and shall be held to have knowledge of all acts or omissions of the Contractor in all matters pertaining to the Contract. The Surety understands and agrees that the provision in the Contract that the City will retain certain amounts due the Contractor until the expiration of 30 days from the acceptance of the Work is intended for the City's benefit, and the City will have the right to pay or withhold such retained amounts or any other amount owing under the Contract without changing or affecting the liability of the Surety hereon in any degree.

It is further expressly agreed by Surety that the City or its representatives are at liberty at any time, without notice to the Surety, to make any change in the Contract documents and in the Work to be done thereunder, as provided in the Contract, and in the terms and conditions thereof, or to make any change in, addition to, or deduction from the Work to be done thereunder; and that such changes, if made, shall not in any way vitiate the obligation in this Bond and undertaking or release the Surety therefrom.

It is further expressly agreed and understood that the Contractor and Surety will fully indemnify and save harmless the City from any liability, loss, cost, expense, or damage arising out of Contractor's performance of the Contract.

If the City gives Surety notice of Contractor's default, Surety shall, within 45 days, take one of the following actions:

1. Arrange for Contractor, with consent of the City, to perform and complete the Contract; or
2. Take over and assume completion of the Contract itself, through its agents or through independent contractors, and become entitled to the payment of the balance of the Contract Price.

If the Surety fails to take either of the actions set out above, it shall be deemed to have waived its right to perform and complete the Contract and receive payment of the balance of the Contract Price and the City shall be entitled to enforce any remedies available at law, including but not limited to completing the Contract itself and recovering any cost in excess of the Original Contract Price from the Surety.

This Bond and all obligations created hereunder shall be performable in Harris County, Texas. This Bond is given in compliance with the provisions of Chapter 2253, Texas Government Code, as amended, which is incorporated herein by this reference.

Notices required or permitted hereunder shall be in writing and shall be deemed delivered when actually received or, if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other Party at the address prescribed in the Contract documents, or at such other address as the receiving party may hereafter prescribe by written notice to the sending party.

EXECUTED in multiple originals this _____ day of _____, 20____.

ATTEST/SEAL: (if a corporation)
WITNESS: (if not corporation)

(Name of Principal)

(Address of Principal)

By: _____
Name:
Title:
Date:

By: _____
Name:
Title:
Date:

ATTEST/SEAL
SURETY WITNESS:

(Name of Surety)

(Address of Surety)

By: _____
Name:
Title:
Date:

By: _____
Name:
Title:
Date:

REVIEWED:

This Bond has been reviewed as to form by the undersigned Paralegal and has been found to meet established Legal Department criteria.

Date

Paralegal

Document 00611
STATUTORY PAYMENT BOND

THAT WE, _____, as Principal, hereinafter called Contractor and the other subscriber hereto, _____, as Surety, do hereby acknowledge ourselves to be held and firmly bound unto the City of Houston, a municipal corporation, in the sum of \$_____ for the payment of which sum, well and truly to be made to the City of Houston, and its successors, the said Contractor and Surety do bind themselves, their heirs, executors, administrators, successors, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a contract in writing with the City of Houston for _____, _____, all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein;

NOW, THEREFORE, if the said Contractor shall pay all claimants supplying labor and materials to him or a Subcontractor in the prosecution of the Work provided for in the Contract, then, this obligation shall be void; otherwise the same is to remain in full force and effect;

PROVIDED HOWEVER, that this Bond is executed pursuant to the provisions of Chapter 2253, Texas Government Code, as amended, and all liabilities on this Bond shall be determined in accordance with the provisions of said Article to the same extent as if it were copied at length herein.

IN WITNESS THEREOF, the said Contractor and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

ATTEST, SEAL: (if a corporation)
WITNESS: (if not a corporation)

Name of Contractor

By: _____
Name:
Title:

By: _____
Name:
Title:
Date:

ATTEST/SURETY WITNESS:
(SEAL)

Full Name of Surety

Address of Surety for Notice

Telephone Number of Surety

By: _____
Name:
Title:
Date:

By: _____
Name:
Title: Attorney-in-Fact
Date:

This Ordinance or Contract has been reviewed as to form by the undersigned legal assistant and have been found to meet established Legal Department criteria. The Legal Department has not reviewed the content of these documents.

Legal Assistant

Date