

Date Bids Due 7/8/2015		Time of Bid Opening 1:00 PM	Bid Opening Location 800 Lincoln Way, Ames, IA	
Proposal Number 14701	Description NW Wing South Door Replacement			
Contract to Begin 7/15/2015	Date of Completion 8/15/2015	Proposal Guaranty Amount \$0.00	Liquidated Damages \$0.00	
Purchasing Agent Jody McNaughton	E-Mail Address jody.mcnaughton@dot.iowa.gov	Phone 515-239-1298	Fax 515-239-1538	
Company Name			Federal Tax ID	
Street Address		City	State	Zip Code
Supplier Contact (type or print)	E-Mail Address	Phone	Fax	
Supplier agrees to sell items/services at the same prices under the same terms and conditions to any other state agency, Regent or Political Subdivision upon request. Please check Yes or No. <input type="checkbox"/> YES <input type="checkbox"/> NO		Are you a Iowa Targeted Small Business? <input type="checkbox"/> YES <input type="checkbox"/> NO		

GENERAL INFORMATION/PROPOSAL STATEMENT

The entire contents of this Proposal, Addendums to the Proposal, Specifications, Supplemental Terms and Conditions, Standard Terms and Conditions, and Schedule of Prices shall become part of the contract or purchase order. **Faxed or e-mail bids will be accepted.**

We certify that all materials, equipment and/or services proposed meet or exceed the specifications and will be supplied in accordance with the entire contents of this proposal including delivery schedules.

Standard Terms and Conditions for Quotations

Acceptance/Rejection: The State of Iowa reserves the right to accept or reject any or all bids and to waive irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any vendor, in the judgment of the Iowa DOT. The Iowa DOT also reserves the right to accept that bid which is deemed to be in the best interests of the state. Any unauthorized changes, additions, or conditional bids including any ties to another bid or proposal or any reservations about accepting an award or entering into a contract, may result in rejection of the bid.

Method of Award: Award shall be made to the lowest responsible, responsive bidder unless otherwise specified. By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa.

Contracts: Successful contractor(s) may be sent either a formal Contract or a purchase order. The contractor may not assign the contract to another party without written authorization from the Office of Procurement and Distribution.

Pricing and Discount: Unit prices shown on the documents shall be quoted as the price per unit (e.g., gal., case, each, etc.) as stated on the request. If there is a discrepancy between the unit bid prices, extension, or total amount of bid, the unit prices shall prevail. Unless otherwise indicated, prices shall be firm for the duration of the contract or purchase. Discounts for early payment are allowed, but not considered in award of the contract.

Signed: _____ **Date:** _____



Iowa Department of Transportation
Standard Terms and Conditions
For
Bid Proposals/Contracts

-INFORMAL-

Informal - means a limited solicitation type of procurement where a sufficient number of quotation or bids from qualified sources are obtained and the aggregate amount of the purchase is less than \$50,000.

The entire contents of this bid proposal shall become a part of a contract or purchase order. In case of a discrepancy between the contents of the bid documents, the following items listed by descending order shall prevail:

- Addendums to the bid proposal
- Bid Proposal-
 - Schedule of Prices
 - Specifications
 - Plans and Drawings
- Supplemental Terms and Conditions
- Standard Terms and Conditions

(Example -if there is a statement in the specifications that contradicts a statement in the Standard Terms and Conditions, the statement in the specifications shall apply)

Preparation of Bid Response: All bid responses must address all aspects of the proposal including clearly answering all questions within the proposal. Bid responses must be typed or completed in ink and submitted on the forms supplied by the Iowa DOT.

Bid responses must be signed and received prior to the bid opening date and time as indicated on the Bid Response cover page or bid opportunity. The signed, submitted quotation or bidder's proposal shall become the official bid response to be considered for award.

Bid responses may be sent by email, fax, weblink, or delivered by a courier that ensures timely delivery.

A. Bid Proposal

1. **Bid Opening:** Bid openings are made public and conducted at the Iowa DOT, Ames complex unless otherwise specified. Bid responses received after the time of the bid opening will be returned to the bidder and considered non-compliant.
2. **Communications:** Questions concerning this proposal should be directed to the purchasing agent listed on the bid proposal. Inquiries can be written, phoned, or faxed. In all cases, written communication will take precedence over verbal communication.
3. **Pricing and Discount:** Unit prices shown on the bid/response shall be quoted as the price per unit (e.g., gal., case, each, etc.) as stated in the bid proposal. If there is a discrepancy between the unit bid prices, extension, or total amount of bid, the unit prices shall prevail. Unless otherwise indicated, prices shall be firm for the duration of the contract or purchase. Discounts for early payment are allowed, but not considered in award of the contract.
4. **Acceptance/Rejection:** The Iowa DOT reserves the right to accept or reject any or all bids and to waive irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any supplier(s). The Iowa DOT also reserves the right to accept that bid which is deemed to be in the best interests of the state. Any unauthorized changes, additions, or conditional bids including any ties to another bid or proposal or any reservations about accepting an award or entering into a contract, may result in rejection of the bid. Bids must remain available for award for thirty (30) days from date of bid opening.

5. **Bid Results & Disclosure:** A bid tabulation will be sent to all responsive bidders and may be posted on the DOT website at www.iowadot.gov/purchasing under the *Bid Award link* referencing the proposal number with an award recommendation indicated. At the conclusion of the selection process, the contents of all received bid responses will be placed in the public domain and be open to inspection by interested parties, according to state law. Trade secrets or proprietary information that are recognized as such and are protected by law may be withheld if clearly identified as such in the proposal.
6. **Quality:** All material shall be new and of first quality. Items which are used, demonstrators, refurbished, obsolete, seconds, or which have been discontinued are unacceptable without prior written approval by the Iowa DOT.
7. **Recycled Content:** The Iowa Code encourages purchase of products and materials with recycled content, including but not limited to paper products, oils, plastic products, compost materials, aggregate, solvents, and rubber products. Recycled items or alternatives must be noted in the bid response, if known.
8. **Shipping Terms:** Deliveries shall be F.O.B. Destination unless otherwise specified. All deliveries shall be accompanied by a packing slip indicating the Supplier, quantities shipped, and the purchase order number(s). All delivery charges shall be included in the bid price and paid by the Supplier. No collect C.O.D. deliveries shall be accepted. When entering into a contract, the Supplier shall notify the freight company that all freight and delivery charges are to be prepaid by the Supplier. Goods delivered to the Iowa DOT Distribution Center at 800 Lincoln Way, Ames, IA shall be received between the hours of 7:30 a.m. and 3:30 p.m. on any day except Saturday, Sunday, or a holiday. For deliveries to other Iowa DOT locations, the Supplier may contact the destination location for available times to deliver as not all Iowa DOT locations have the same business hours. The Iowa DOT will not be liable for any freight claims or unpaid freight bills arising from contract or purchase order issues.

B. Award

The binding agreement (award) may be issued in the form a purchase order or contract or both depending on the requirements and complexity of the agreement.

1. **Method of Award:** Award shall be made to the lowest responsible, responsive bidder whose bid meets the requirements of the solicitation and is the most advantageous to the Iowa DOT unless otherwise specified. An Iowa bidder will be given preference over an out-of-state bidder when bid responses are equal in all aspects and are tied in price. By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa.
2. **Award Protests:** Protests of award recommendations are to be addressed to the Director of Purchasing, and shall be made in accordance with paragraph 761--20.4(6)"e" of the Iowa Administrative Code.
3. **Contracts:** Successful contractor(s) may be sent either a formal Contract, Notification of Award or purchase order as confirmation of acceptance and award. Any of these binding agreements shall be for the term stated in the bid proposal or on a purchase order and may be renewed for additional period(s) under the same terms and conditions upon mutual agreement as defined. The successful bidder may not assign a contract to another party without written authorization from the Iowa DOT Purchasing Section. A service contract, including all optional renewals, shall not exceed a term of six years unless a state agency obtains a waiver of this provision pursuant to rule 11-11B.16 (8A).
4. **Payment Terms:** The Iowa DOT typically pays properly submitted vendor invoices within thirty (30) days of receipt, providing goods and/or services have been successfully delivered, installed or inspected (if required), and accepted. Invoices presented for payment must be only for quantities received by the Iowa DOT and must reference the purchase order number to be submitted for processing.
5. **Default:** Failure of the Supplier to adhere to specified delivery schedules or to promptly replace rejected materials shall render the Supplier liable for all costs in excess of the bid price when alternate procurement is necessary. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the binding agreement.

6. **Default:** Failure of a Contractor other than a Supplier to meet any specified project completion deadline shall render the Contractor liable for all costs incurred by DOT that were: a) necessary to meet said deadline; or b) necessary to complete said project after said deadline. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the agreement.

C. General

1. **Administrative Rules:** For Additional details on the rules governing the actions of the Iowa DOT Purchasing Section, refer to 761 IAC, Chapter 20, Iowa Administrative Code, entitled "Procurement of Equipment, Materials, Supplies and Services".
2. **Affirmative Action:** The Contractor (and also subcontractor, vendor or supplier) is prohibited from engaging in discriminatory employment practices forbidden by federal and state law, executive orders and rules of the Iowa Department of Management, pertaining to equal employment opportunity and affirmative action. Contractor may be required to have a copy of their affirmative action program on file, containing goal and time specifications. Contractors doing business with Iowa in excess of \$5,000 annually and employing 50 or more full time employees may be required to file with the Iowa Department of Management a copy of their affirmative action plan. Failure to fulfill these non-discrimination requirements may cause the contract to be canceled and the contractor declared ineligible for future state contracts or subject to other sanctions as provided by law or rule.
3. **Applicable Law:** The contract shall be governed under the laws of the State of Iowa. The contractor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of a contract and which in any manner affect the work or its conduct. Any legal action relating to a contract shall only be commenced in the Story County, Iowa, District Court or the United States District Court for the Southern District of Iowa.
4. **Conflict of Interest:** No state or county official or employee, elective or appointive shall be directly or indirectly interested in any contract issued by the Iowa DOT, see Code of Iowa 314.2.
5. **Debarment and Vendor Suspension:** By submitting a proposal, the contractor is certifying that it and its principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Iowa or any Federal department or agency.
6. **Equal Opportunity:** Firms submitting bids must be an "Equal Opportunity Employer" as defined in the Civil Rights Act of 1964 and in Iowa Executive Order Number Thirty-four.
7. **Infringement:** Goods shall be delivered free of the rightful claim of any third party by way of infringement. Contractor shall indemnify and save harmless the State of Iowa and the Iowa DOT against all claims for infringement of, and/or royalties claimed under, patents or copyrights on materials and equipment furnished under this bid.
8. **Records Audit:** The contractor agrees that the Auditor of the State of Iowa or any authorized representative of the state, and where federal funds are involved, the Comptroller General of the U.S. Government, shall have access to and the right to examine, audit, excerpt, and transcribe any directly pertinent books, documents, papers, and records of the contractor relating to orders, invoices, or payments of a contract or purchase order.
9. **Targeted Small Businesses:** The Iowa DOT seeks to provide opportunities for women and/or minority small business enterprises. To apply for certification as an Iowa Targeted Small Business, contact the Iowa Department of Inspection and Appeals (515-281-5796). Contractors shall take documented steps to encourage participation from Targeted Small Businesses for the purpose of subcontracting and supplying of good or services or both.
10. **Taxes:** Prices quoted shall not include state or federal taxes from which the state is exempt. Exemption certificates will be furnished upon request.
11. **Termination:**
 - **Termination Due to Lack of Funds or Change in Law**

The Iowa DOT shall have the right to terminate this Contract without penalty by giving thirty (30) days written notice to the vendor as a result of any of the following:

 - Adequate funds are not appropriated or granted to allow the Iowa DOT to operate as required and to fulfill its obligations under contract.
 - Funds are de-appropriated or not allocated or if funds needed by the Iowa DOT, at the Iowa DOT's sole discretion, are insufficient for any reason.
 - The Iowa DOT's authorization to operate is withdrawn or there is a material alteration in the programs administered by the Iowa DOT.

- The Iowa DOT's duties are substantially modified.

Following a 30 day written notice, the Iowa DOT may terminate a binding agreement in whole or in part without the payment of any penalty or incurring any further obligation to the Supplier. Following termination upon notice, the Supplier shall be entitled to compensation upon submission of invoices and proper proof of claim for goods and services under contract up to and including the date of termination.

**Iowa Department of Transportation
Schedule of Prices
Proposal No.: 14701**

**Project Description: NW Wing South Door Replacement,
Project No. Project No. BG-9A10 (033)-80-85
Letting Date: July 8, 2015 1:00p.m.**

**Location: Iowa Department of Transportation 800 Lincoln Way, Ames, IA 50010
Fax 515-239-1538**

Item No.	Description	Quantity	Unit/Price	Total Bid Amount
1.	Contractor to provide all labor, materials and equipment to Remove existing double door and install a new 3'-8" x 7'-0" aluminum exterior door including frame w/sidelights and transom window, weather stripping, sill sweep strip, threshold, and hinges per drawings and specifications attached.	1	Lump/ sum	\$ _____

I hereby certify that this proposal meets or exceeds the minimum requirements including specifications and addendums.

Authorized
Signature

Contact Person: _____

Company

(Print Name)

Address

Federal Tax I.D. No.: _____

(City) (State) Zip

Code)
Contractor's
Registration No.: _____

Phone No: _____

Email: _____

Fax No.: _____

I acknowledge receipt of addendum nos.: _____

**Iowa Department of Transportation
General Requirements
Proposal No: 14701
NW Wing South Door Replacement
Project No. BG-9A10 (033)-80-85
Letting Date: July 8, 2015 1:00 PM**

Part 1 General Conditions

1.1 Adoption of General Conditions

- A.** The General Requirements of this Contract shall include the "General Conditions", "Instructions to Bidders" and the "Supplementary General Conditions" as herein stated.

- B.** "THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", A.I.A. FORM #A-201, LATEST EDITION AND A.I.A. DOCUMENT, "INSTRUCTIONS TO BIDDERS", FORM #A-701, LATEST EDITION, SHALL BE INCLUDED, AS MODIFIED IN THE "SUPPLEMENTARY INSTRUCTIONS TO BIDDERS" AND "SUPPLEMENTARY GENERAL CONDITIONS", AND BOUND WITH THE STANDARD FORM OF AGREEMENT BETWEEN THE CONTRACTOR AND OWNER", A.I.A. FORM #101, LATEST EDITION, AS A PART OF THIS CONTRACT SPECIFICATION.

- C.** All bidder information and conditions, bid check lists and similar documents included in the specification by the Office of Purchasing and Distribution of the Iowa Department of Transportation, Ames, Iowa are hereby made a part of the General Conditions.

Part 2 Supplementary Instructions to Bidders

2.1 General

- A. Owner**
The Owner of this project is the Iowa Department of Transportation, 800 Lincoln Way, Ames, Iowa 50010.

- B. Contract Document Information**
Questions regarding the bidding documents should be directed to:
Purchasing Section
Purchasing Agent – Jody McNaughton
Phone No.: 515-239-1298 Fax No.: 515-239-1538
Email: jody.mcnaughton@dot.iowa.gov

Location of Project

Iowa Department of Transportation, 800 Lincoln Way, Ames IA 50010
NW Wing of Ames Complex, south set of doors.

C. SCOPE OF WORK

Contractor to provide all labor, materials and equipment to Remove existing double door and install a new 3'-8" x 7'-0" aluminum exterior door including frame w/sidelights and transom window, weather stripping, sill sweep strip, threshold, and hinges per drawings and specifications attached. Coordinated with Iowa DOT personnel for installation of security equipment and rest of hardware. As per the attached drawing and specifications.

All work to be completed on or prior to August 14, 2015.

D. Contract Award

Award will be based on the total lump sum amount of bid price shown on the Schedule of Prices. Bid price will include all requirements listed in Specifications and Supplemental Terms to complete this proposed project. The Prime Contractor shall be responsible for taking all sub-bids and for all coordination between trades.

A single "Prime" contract shall be awarded for all work shown. Contractor shall be responsible for taking all sub-bids and for all coordination between trades.

Protests of award recommendations shall be made in accordance with Paragraph 761--20.4(6)"e", Iowa Administrative Code.

Contractor shall return all contractual documents within fourteen (14) calendar days from date indicated in contract cover letter. ***If this is not returned within this time frame, contract may be voided and awarded to the next low bidder.***

2.2 Bidders Representatives

A. Site Visit

It is recommended, but not required, that prospective bidders on this project shall visit the job site prior to submitting a quotation for this work. To view the site, contact: Jody McNaughton at 515-239-1298 or email at jody.mcnaughton@dot.iowa.gov. No considerations or revision in the contract price or scope of the project will be considered by the Owner for any item which could have been revealed by a thorough on-site inspection and examination.

B. Conditions of Work

Bidders must inform themselves fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve successful bidders of their obligation to furnish all material and labor necessary to carry out the provisions of this contract. Insofar as possible, the Contractor, in carrying out the work, must employ such methods or means as will not cause any interruption of, or interference with the work of any other contractor.

C. Obligation of Bidder

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the drawings, specifications, and other contract documents, including all addenda.

The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect to their bid.

D. Codes, Laws and Regulations

The laws of the State of Iowa in relation to and pertaining to public improvements shall apply to this project. All construction, materials and methods shall comply with the State and Local Building Codes and with Local Ordinances, except where plans and specifications establish a higher standard.

E. Licenses, Permits and Inspections

The Vendor shall give all notices and comply with all codes, laws, ordinances, rules and regulations of any public authority having jurisdiction that bears on the performance of its work. The Vendor shall pay for all licenses, permits and inspection fees required for its work. The Vendor must furnish copies of all approved inspection certificates and approvals from authorities having jurisdiction in a timely fashion upon completion of the work.

2.3 Bidding Documents

A. Plans and Specifications

The Specifications are to remain on file at the Iowa DOT, Purchasing Section, 800 Lincoln Way, Ames, IA 50010.

In the event of a conflict between the specifications and the drawings, the specifications shall take precedence.

B. Contents of the Contract Documents

In case of a discrepancy between contents of the contract documents, the following items listed by descending order shall prevail:

1. Addendum
2. Proposal Form
3. Special Provision
4. Plans
5. Supplemental Specifications
6. Standard Specifications

Should there be a discrepancy between figures and drawings on any of the contract documents, the figures shall govern unless they are obviously incorrect.

C. Interpretation of Contract Documents

If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the Plans, Specifications or other proposed contract documents, the bidder will submit to the Iowa DOT a written request for an interpretation thereof. Requests for interpretation must be received on or before **1:00 P.M., July 6, 2015.**

The person submitting a request will be responsible for its prompt delivery.

No interpretation of the meaning of the drawings, specifications, or other pre-bid documents will be made to any bidder orally. Interpretations will be made only by addendum duly issued.

A copy of such addendum will be mailed or delivered to each person receiving a copy of the contract documents and to such other prospective bidders having requested that they be furnished with a copy of each addendum.

D. Materials and Equipment

Names of Manufacturers and vendors listed in the bidding documents are listed for the bidders only. Manufacturers and vendors, in addition to those specifically listed, are acceptable when it is proven to the satisfaction of the Iowa DOT that:

- A. The level of quality proposed is equal to or better than that of the referenced manufacturer/vendor's quality.
- B. The technical characteristics of the proposed product meet or exceed the requirements of the drawings and specifications.
- C. The use of the materials or equipment does not require major revisions of the drawings and specifications to permit their use.

Any additional cost in other work incurred as a result of these approvals shall be borne by the Contractor, including all costs for modifying other related materials/systems and the cost of any additional engineering or design fees required to accommodate the substitution/approval.

The Contractor must be confident that a proposed product or material meets or exceeds the requirements shown on the drawings and specifications. It will be the responsibility of the Contractor to verify and demonstrate that a proposed product meets or exceed the drawings and specifications at time of shop drawing reviews. If a proposed product or material is determined to be technically unacceptable as judged by the Iowa DOT, the Contractor shall be required to supply products or materials that meet the requirements required to supply products or materials that meet the requirements stated in the drawings and specifications at no cost increase to the Iowa DOT. Under no circumstances will the Iowa DOT be required to prove that proposed substitutions is not equal to the project requirements. The decision of the Iowa DOT on all requested proposals/substitutions is final.

E. Addenda

Addenda, if issued, will be emailed to all known plan holders, and acknowledgement of receipt of addenda will be indicated on the bidder's proposal form.

All addenda so issued shall become part of the contract documents.

2.4 Bidding Procedures

A. Proposed Form

Each Bid must be submitted on the Schedule of Prices form.

All bids received by the Iowa DOT, which require allocation of appropriated state funds, are subject to the acceptance of the issuing department of the State of Iowa.

B. Submitting Proposals

Each proposal must be submitted in ink or typewritten and may be faxed (515-239-1538), e-mailed jody.mcnaughton@dot.iowa.gov or mailed to Jody McNaughton at The Iowa Department of Transportation, Purchasing Section, 800 Lincoln Way, Ames, Iowa 50010.

Bids shall be due on or before **1:00 P.M., July 8, 2015.**

C. Withdrawal Period

Prime bidders, subcontractors and material suppliers on this project agree to guarantee their proposal for a period of thirty (30) days after the date of receipt of bids. No bid may be withdrawn during this period.

D. Extension of Contract Period

The Iowa DOT will grant an extension of the contract period for additional work requiring additional construction time that adds additional work to the controlling item of work.

E. Facsimile Modifications and Bid Closing

Bids received prior to the time of opening will be securely kept, unopened. The officer whose duty it is to open them will decide when the specified time has arrived, and no bid received thereafter will be considered.

Modification of the bid price by facsimile of bids already submitted will be considered if received prior to the time set for the opening. The changes shall not reveal the bid price but shall provide the amount to add or subtract to modify the bid so the total amount is not known until the bid is opened.

F. Informalities and Nonmaterial & Material Variances

The Owner may waive any informality or reject any or all bids.

The Iowa DOT reserves the right to waive or permit cure of nonmaterial variances in the Bidder's Bid Response if, in the judgment of the Iowa DOT, it is in the Iowa DOT best interest to do so. Nonmaterial variances include minor informalities that do not affect responsiveness; that are merely a matter of form or format; that do not change the relative standing or otherwise prejudice other Contractors; that do not change the meaning or scope of the RFB; or that do not reflect a material change in the services. In the event the Iowa DOT waives or permits cure of nonmaterial variances, such waiver or cure will not modify the RFB requirements or excuse the Contractor from full compliance with RFB specifications or other contract requirements if the Contractor is awarded the contract. The determination of materiality is in the sole discretion of the Iowa DOT.

2.5 Consideration of Bids

A. Rejection of Bids

The Iowa DOT reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Iowa DOT that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

Conditional bids will not be accepted.

B. Qualification of Bidder

The Iowa DOT may make such investigations as they deem necessary to determine the ability of the bidder to perform the required work, and the bidder shall furnish to the Iowa DOT all such information and data for this purpose as the Iowa DOT may request.

C. Information From Other Sources

The Iowa DOT reserves the right to obtain and consider information from other sources concerning a Contractor, such as the Contractor's capability and performance under other contracts, the qualifications of any subcontractor identified in the Contractor's Bid Response, specifically, the Contractor's financial stability, past or pending litigation, and publicly available information.

2.6 Performance and Payment Bonds

A. Bonds

If the contracted estimated value is \$25,000 or more, the Bidder shall furnish bonds covering the faithful performance of 100% of the Contract and the payment of all obligations arising thereunder. One copy of the bond shall be submitted on Iowa Department of Transportation Form 131070. All items must be properly filled in, including Bidder's signature. Resident commission agent or attorney-in-fact must file a copy of the power of attorney.

B. Power of Attorney

Attorney-in-fact who signs the proposal guaranty, Performance Bond, and Labor and Material Payment Bond must file with each bond a certified and effectively dated copy of the Power of Attorney.

2.7 Notice of Tax Exempt Status

A Sales Tax Exemption Certificate and authorization letter will be issued to the successfully awarded construction contractor for the purchase of building materials, supplies and equipment used in the performance of this construction contract.

The Department of Transportation is exempt from paying sales and use taxes. ***Do not include sales tax in your bid for this project.***

2.8 Labor Regulations

All contractors, before entering into a contract with the Department, must be registered with the Division of Labor in the Iowa Department of Workforce Development (515-281-3606) according to chapter 91C, Code of Iowa 2003.

2.9 Targeted Small Business Program

The 1986 Iowa Legislature enacted legislation relating to procurement from Iowa Targeted Small Businesses. (Iowa Code, Chapter 73. And Iowa Administrative Code rules 820--[01,B] Chapter 2). It is hereby agreed that when entering into a contract with the State of Iowa, the vendor/contractor will take documented steps to encourage participation from TSB's for the purpose of subcontracting and supplying of materials.

A list of Targeted Small Business Contractors is available on the Internet at <https://dia.iowa.gov/tsb> and click on Search Targeted Small Businesses.

Part 3 Supplementary General Conditions

3.1 The Contractor

A. Guidelines

Contractors shall comply with Iowa Occupational Safety and Health Standards as found in 29 CFR Parts 1910 and 1926. Of particular importance are those standards referring to the use of personal protective equipment, fall protection and ventilation.

Contractor may be required to make available to Iowa DOT at time the apparent low bidder has been determined all Material Safety Data Sheets (MSDS) for all products provided prior to approved contractor and award. These must be faxed to Purchasing 515-239-1538 with cover indicating project the MSDS sheets pertain to. This shall be faxed within two (2) days upon request.

B. Guarantee

The Contractor shall guarantee all work executed under this contract, both as the workmanship and materials, for a period of twelve (12) months after the date of acceptance, except that special guarantee provision specified elsewhere in these Specifications shall take precedence. Neither the final payment nor any provision of the contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship. The Contractor shall remedy any defect thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of the final acceptance. With one month remaining in the guarantee period, the Contractor shall notify the Iowa DOT and set up a complete building walk-through inspection.

All materials, items of equipment, and workmanship furnished under this division of the specifications shall carry the standard warranty against all defects in material and workmanship. Any fault due to defective or improper material, equipment, or workmanship which may develop, shall be made good, forthwith.

The Guarantee shall include, but not be limited to the following elements and services:

- A. Repair or replace defective materials, equipment, workmanship and installation that develops within the guarantee period, promptly and to Iowa DOT's satisfaction and correct damage caused in making necessary repairs and replacements, including all other damage done to areas, materials, and other systems resulting from the failure or defect, under guarantee by and at the expense of the Contractor.
- B. Replace material or equipment that requires excessive service during guarantee period, as defined and as directed by the Iowa DOT.
- C. Make all service calls, replacements, repairs and adjustments during the guarantee period without cost to the Iowa DOT.

C. Workmanship

Work shall be performed in best, most workmanlike manner by mechanics, skilled and employed continuously in their respective trade. Installation shall be made by the manufacturer or their authorized installer where specified. Unsatisfactory work shall be replaced at Contractor's expense.

D. Clean-Up

Throughout the period of construction, the Contractor shall clean up all work and yard areas and keep the area reasonably free of debris, etc., as required for proper protection of the work. Prior to final acceptance, the Contractor shall remove all debris, tools and equipment from the project site.

E. Immunity of Iowa Department of Transportation

The Contractor shall defend, indemnify and hold harmless the Iowa Department of Transportation, and its officials and employees from liability arising out of or resulting from the Contractor's activities at the rest area, its performance or attempted performance of the contract, as well as the Contractor's activities with Sub-Contractors and all other third parties.

F. Suspensions and Debarment

The Vendor certifies pursuant to 48 CFR Part 9 that neither it nor its principles are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this Contract by any federal Agency or agency. The Vendor certifies that it is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in any contracts with the State of Iowa.

G. Termination Due to Lack of Funds or Change in Law

Notwithstanding anything in this Contract to the contrary, and subject to the limitations set forth below, the Iowa DOT shall have the right to terminate this Contract without penalty and without any advance notice as a result of any of the following:

Adequate funds are not appropriated or granted to allow the Iowa DOT to operate as required and to fulfill its obligations under this Contract.

Funds are de-appropriated, reduced, not allocated, or receipt of funds is delayed, or if any funds or revenues needed by the Iowa DOT to make any payment hereunder are insufficient or unavailable for any other reason as determined by the Iowa DOT in its sole discretion; or

The Iowa DOT's authorization to conduct its business or engage in activities or operations related to the subject matter of this Contract is withdrawn or materially altered or modified; or

The Iowa DOT's duties programs or responsibilities are modified or materially altered; or

If there is a decision of any court, administrative law judge or an arbitration panel or any law, rule, regulation or order is enacted, promulgated or issued that materially or adversely affects the Agency's ability to fulfill any of its obligations under this Contract.

The Agency shall provide Vendor with written notice of termination pursuant to this section.

H. Preference

By virtue of statutory authority, a preference will be given to products and provisions grown and coal produced within the state of Iowa. Preference application: Tied responses to solicitations, regardless of the type of solicitation, are decided in favor of Iowa products and Iowa-based businesses per 11 IAC 105.5(1)-(2), 105.12(4).

3.2 Administration of the Contract

A. Inspection and Supervision

All work shall be according to the approved design and shall be under the direct supervision of the Iowa DOT.

Periodic site inspections will be carried on by the Iowa DOT with the contractor to ensure coordination of the project.

The owner will provide a list of items requiring inspection prior to or during installation. The Contractor is to give the Owner notice no less than 24 hours in advance of installation.

The Iowa DOT contact shall be Brett Hambly at 515-239-1275.

B. Contractors Construction Schedule

The successful bidder will, within 10 days after award of contract or at the pre-construction meeting, whichever comes first, submit to the Iowa DOT, Office of Facilities Support, a detailed construction schedule including dates of commencement and completion on each phase of the proposed construction. Upon acceptance of the schedule, the Contractor will be expected to adhere to these dates as proposed.

3.3 Sub Contractors

Specific attention shall be given by the Contractor to Article 5 of the A.I.A. Document A-201, "The General Conditions of the Contract for Construction".

The apparent successful contractor for the project shall, within seven (7) calendar days after opening of the bids, furnish the Iowa DOT with a complete list of subcontractors and major material suppliers.

3.4 Contract Period

The starting and completion dates are stated on the front page of the proposal. The date of completion shall be stated in calendar days on the Contractor's proposal, and if necessary, adjusted by mutual agreement between the Iowa DOT and Contractor prior to executing the contract documents.

The Iowa DOT realizes that deliveries and condition will have a definite bearing on the completion date. The Iowa DOT will demand diligence in the prosecution of the work, but with good cause and satisfactory past performance by the Contractor, the Iowa DOT may revise that completion date to another mutually-acceptable date, when requested in writing and in good faith by the Contractor.

3.5 Payments and Completion

- A. Payments on contract will be made monthly by means of state warrants to the extent of ninety-seven percent (97%) of the value of work performed, including acceptable material stored at the building site, as determined by the Engineer.
- B. Immediately after signing of Contract, the Contractor shall submit schedule of values for approval on the Contract Breakdown form furnished by the Iowa Department of Transportation. Contractor shall submit an Application for Payment on forms furnished by the Iowa Department of Transportation based on Contract Breakdown.
- C. The contractor shall, before the first application, submit to the Iowa DOT a schedule of values of the various parts of the work, aggregating the total sum of the contract, made out in such form as the Iowa DOT may direct and, if required, supported by evidence as to its correctness. This schedule, when approved by the Iowa DOT, shall be used as a basis for requests for payment.
- D. Final payment shall be authorized not later than thirty (30) days following the completion and final acceptance of the contract, provided that paragraph 1-3 herein and all other contract requirements have been fulfilled, accepted and approved, where no claims have been filed or following adjudication or release of claims as provided in Chapter 573 of the Code of Iowa.
- E. No notification of payment being processed, no payment made to the Contractor, no partial payment, nor the entire use or occupancy of the work by the Iowa DOT shall be held to constitute an acceptance, in whole or in part, by the Iowa DOT prior to making the final payment and acceptance in full completion of the contract.

3.6 Protection of Persons and Property

A. Safety and Health Regulations

The Contractor, serving in the role of the employer for the project, shall exercise at all times the protection of all persons and property. Contractor shall comply with all requirements of the Occupational Safety and Health Act of 1970, Iowa Bureau of Labor and all applicable state and municipal laws, as well as building and construction codes. It is the Contractor's responsibility to enforce all regulations that apply to this project.

B. Protection of Site

The Contractor shall furnish all permanent and temporary guards, signs, fencing, shoring, and underpinning and other protection necessary in the performance of the contract and for the necessary protection of all public and private property and shall be responsible for any damage caused by failure to comply with this requirement.

After building operations are completed, the Contractor shall replace or satisfactorily repair all damaged walks or pavements which shall have become damaged due to operations of this project.

The Contractor shall take care of all underground pipes, conduits, etc., encountered in the excavations, and protect same from damage until such time as they can be permanently disposed of.

The Contractor shall continuously maintain adequate protection of all work from damage and shall protect the Owner's property and adjacent property from damage arising in connection with this contract.

3.7 Insurance Requirements

Contractor's Insurance

It shall be the Contractor's responsibility to have liability insurance covering all of the project operations incident to contract completion and the Contractor(s) must have on file with the Contracting Authority a current "Certificate of Insurance" prior to award of contract. The certificate shall identify the insurance company firm name and address, contractor firm name, policy period, type of policy, limits of coverage, and scope of work covered (single contract or statewide). This requirement shall apply with equal force, whether the work is performed by persons employed directly by the Contractor(s) including a subcontractor, persons employed by a subcontractor(s), or by an independent contractor(s).⁴²

In addition to the above, the Contracting Authority shall be included as an insured party, or a separate owner's protective policy shall be filed showing the Contracting Authority as an insured party.

The liability insurance shall be written by an insurance company (or companies) qualified to do business in Iowa. For independent contractors engaged solely in the transportation of materials, the minimum coverage provided by such insurance shall be not less than that required by Chapter 325A, Code of Iowa, for such truck operators or contract carriers as defined therein. For all other contractors, subcontractors, independent contractors, and the Contracting Authority, the minimum coverage by such insurance shall be as follows:

- Comprehensive General Liability including Contractual Liability;
- Contingent Liability; Explosion, Collapse and Underground Drainage
- Damage; Occurrence Basis Bodily Injury; Broad Form Personal Injury; Broad Form Property Damage.

Bodily Injury

The contractor will purchase and maintain throughout the term of this contract the follow minimum limits and coverage:

- Each person \$750,000
- Each accident/occurrence \$750,000
- Workers Compensation \$750,000
- Statutory Limits \$750,000
- Employer's liability \$750,000
- Pollution Liability \$750,000
- Occupation Disease \$750,000

Operations

- Property Damage \$250,000 each occurrence

Builders Risk Insurance:

- Each Contractor holding a valid contract with the Owner shall furnish and pay for builder's risk insurance, providing coverage for at least the following losses: fire, extended coverage, vandalism and malicious damage to materials incorporated in the project, and materials purchased to be incorporated in the project, either stored on or off the permanent job site. If this insurance coverage is not provided, the Contractor shall assume all responsibility for the perils outlined above which may occur prior to project completion and acceptance.
- Failure on the part of the Contractor(s) to comply with the requirements of this Article will be considered sufficient cause to suspend the work, withhold estimates, and to deny the Contractor(s) any further contract awards, as provided in Article 1103.01.
- The Contractor(s) shall require all subcontractor(s) meet the above insurance requirements.

The Certificate of Insurance must include the following;

- **Iowa Department of Transportation must be listed as an additional insured**
- Proposal Number
- Proposal Description
- Letting Date and
- Contract Period

3.8 Miscellaneous Provisions

A. Iowa State Building Code

All construction under this section shall conform to the requirements of the Iowa State Building Code. The provisions of the Iowa State Building Code will be strictly adhered to, and will take precedence over any local Governmental Body Regulations. Work not regulated by the Iowa State Building Code shall be performed in accordance with local Governmental Body Regulations.

All construction shall conform to the Standard Specifications for Highway and Bridge Construction, Series 2009 where applicable.

B. Discriminatory Practices

All contractors or subcontractors working under the terms of this project are prohibited from engaging in discriminatory employment practices as forbidden by the Iowa Civil Rights Act of 1965. These provisions shall be fully enforced, as directed through Executive Order Number 34 dated July 22, 1988. Any breach of the provisions contained in the Iowa Civil Rights Acts of 1965 shall be regarded as a material breach of contract.

Bidder agrees that if awarded a contract to construct and/or remodel any portion of the project described in these Specifications, neither the contractor nor any subcontractors will engage in any discriminatory employment practices based on race, color, creed, religion of natural origin and that they will in all contracts comply with all statutes of the State of Iowa against discrimination. Failure to do so could be deemed a material breach of contract.

3.9 Public Contract Termination

The provisions of Iowa Law as contained in Chapter 573A of the Code of Iowa, an Act to provide for termination of contracts for the construction of public improvements when construction or work thereon is stopped because of national emergency, shall apply to and be a part of this Contract, and shall be binding upon all parties hereto, including sub-contractors and sureties upon any bond given or filed in connection herewith.

**SECTION 00 0101
PROJECT TITLE PAGE**



PROJECT MANUAL FOR:

**IOWA DEPARTMENT OF TRANSPORTATION
800 LINCOLN WAY
AMES, IA 50010**

NW WING - SOUTH DOOR REPLACEMENT

PROJECT NUMBER: BG-9A10(033)-80-85

DATE: JUNE 17, 2015

**SECTION 00 0110
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PROCUREMENT AND CONTRACTING REQUIREMENTS

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- A. 08 4313 - Aluminum-Framed Storefronts
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END OF SECTION

SECTION 01 1000
SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: NW Wing - South Door Replacement
- B. Owner's Name: Iowa Department of Transportation.
- C. The Project consists of the replacement of the exterior door including frame, windows, weatherstripping, sill sweep strip, threshold, and hinges.
 - 1. Contractor to coordinate installation with Iowa Department of Transportation - Office of Support Services. Iowa DOT personnel will remove existing security equipment from existing door and install security equipment and remaining door hardware on new door at the time of door replacement.

1.02 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of alterations work is shown on drawings.

1.03 WORK BY OWNER

- A. Owner will supply and install the following:
 - 1. Door hardware except weatherstripping, sill sweep strip, threshold, and hinges.
 - 2. Security system.

1.04 OWNER OCCUPANCY

- A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to the replacement of the NW Wing-South door and the area immediately adjacent required to complete the work.
- B. Provide access to and from site as required by law and by Owner:
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.

1.06 WORK SEQUENCE

- A. Coordinate construction schedule and operations with Owner.

1.07 SPECIFICATION SECTIONS APPLICABLE TO ALL CONTRACTS

- A. Unless otherwise noted, all provisions of the sections listed below apply to all contracts. Specific items of work listed under individual contract descriptions constitute exceptions.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittals for review, information, and project closeout.
- B. Submittal procedures.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for selection.
 - 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below .

3.02 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. Certificates.
 - 3. Test reports.
 - 4. Inspection reports.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field reports.
 - 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for Owner.

3.03 SUBMITTALS FOR PROJECT CLOSEOUT

- A. Submit Correction Punch List for Substantial Completion.
- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout:
 - 1. Warranties.
 - 2. Other types as indicated.
- D. Submit for Owner's benefit during and after project completion.

3.04 NUMBER OF COPIES OF SUBMITTALS

- A. Documents for Review:
 - 1. Small Size Sheets, Not Larger Than 8-1/2 x 11 inches (215 x 280 mm): Submit the number of copies that Contractor requires, plus two copies that will be retained by Architect.
- B. Documents for Information: Submit two copies.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
 - 1. After review, produce duplicates.
 - 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.05 SUBMITTAL PROCEDURES

- A. Shop Drawing Procedures:
 - 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
 - 2. Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- B. Schedule submittals to expedite the Project, and coordinate submission of related items.
- C. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- D. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- E. When revised for resubmission, identify all changes made since previous submission.
- F. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- G. Submittals not requested will not be recognized or processed.

END OF SECTION

**SECTION 01 6000
PRODUCT REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Re-use of existing products.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations and procedures.

1.02 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.
- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.
- D. Specific Products to be Reused: The reuse of certain materials and equipment already existing on the project site is required.
 - 1. See Section 01 1000 for list of items required to be salvaged for reuse and relocation.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.

2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period. Comply with requirements specified in this section.
- B. Architect will consider requests for substitutions only within 15 days after date of Agreement.
- C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- D. A request for substitution constitutes a representation that the submitter:

1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 2. Will provide the same warranty for the substitution as for the specified product.
 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 4. Waives claims for additional costs or time extension that may subsequently become apparent.
- E. Substitution Submittal Procedure:
1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 3. The Architect will notify Contractor in writing of decision to accept or reject request.

3.02 TRANSPORTATION AND HANDLING

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Prevent contact with material that may cause corrosion, discoloration, or staining.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

SECTION 01 7000
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Cutting and patching.
- D. Cleaning and protection.
- E. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.

1.03 REFERENCE STANDARDS

- A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate Contractor.
 - 6. Include in request:
 - a. Identification of Project.
 - b. Location and description of affected work.
 - c. Necessity for cutting or alteration.
 - d. Description of proposed work and products to be used.
 - e. Alternatives to cutting and patching.
 - f. Effect on work of Owner or separate Contractor.
 - g. Date and time work will be executed.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.

- E. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.04 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
 - 2. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- C. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
- D. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
 - 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.
 - 2. Where a change of plane of 1/4 inch (6 mm) or more occurs in existing work, submit recommendation for providing a smooth transition for Architect review and request instructions.
- E. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- F. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- G. Do not begin new construction in alterations areas before demolition is complete.
- H. Comply with all other applicable requirements of this section.

3.05 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.

- C. Perform whatever cutting and patching is necessary to:
 1. Complete the work.
 2. Fit products together to integrate with other work.
 3. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Patching:
 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.
 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.06 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.07 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.08 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.09 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces,
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.10 CLOSEOUT PROCEDURES

- A. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.

- B. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
- C. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- D. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

END OF SECTION

**SECTION 07 9200
JOINT SEALANTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2006 (Reapproved 2011).
- B. ASTM C834 - Standard Specification for Latex Sealants; 2010.
- C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- D. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.
- E. ASTM C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants; 2002 (Reapproved 2013).

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
 - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
 - 2. List of backing materials approved for use with the specific product.
 - 3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
 - 4. Substrates the product should not be used on.
- C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.
- D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience.

1.05 WARRANTY

- A. Correct defective work within a five year period after date of Substantial Completion.
- B. Warranty: Include coverage for installed sealants and accessories that fail to achieve watertight seal, exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Nonsag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.
 - 1. Pecora Corporation: www.pecora.com.
 - 2. Sika Corporation: www.usa-sika.com.
 - 3. Substitutions: See Section 01 6000 - Product Requirements.

2.02 JOINT SEALANT APPLICATIONS

- A. Scope:

1. Exterior Joints: Seal open joints, whether or not the joint is indicated on the drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.
 - a. Joints between door, window, and other frames and adjacent construction.
 - b. Joints between different exposed materials.
 2. Do not seal the following types of joints.
 - a. Intentional weepholes in masonry.
 - b. Joints where sealant is specified to be provided by manufacturer of product to be sealed.
 - c. Joints where installation of sealant is specified in another section.
- B. Exterior Joints: Use nonsag non-staining silicone sealant, unless otherwise indicated.

2.03 NONSAG JOINT SEALANTS

- A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 50 percent, minimum.
 2. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
 3. Hardness Range: 15 to 35, Shore A, when tested in accordance with ASTM C661.
 4. Color: To be selected by Architect from manufacturer's standard range.
 5. Cure Type: Single-component, neutral moisture curing.
 6. Service Temperature Range: Minus 65 to 180 degrees F (Minus 54 to 82 degrees C).
 7. Products:
 - a. Pecora Corporation; 890NST Ultra Low Modulus Architectural Silicone Sealant - Class 100: www.pecora.com.
 - b. Pecora Corporation; 864NST Low Modulus Architectural Silicone Sealant - Class 50: www.pecora.com.
 - c. Sika Corporation; Sikasil WS-290: www.usa.sika.com.
 - d. Sika Corporation; Sikasil WS-295: www.usa.sika.com.
 - e. Substitutions: See Section 01 6000 - Product Requirements.

2.04 ACCESSORIES

- A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
1. Type for Joints Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type B - Bi-Cellular Polyethylene.
 2. Closed Cell and Bi-Cellular: 25 to 33 percent larger in diameter than joint width.
- B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- C. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
- D. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- E. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.
- C. Verify that backer rods are of the correct size.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.

- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- D. Install bond breaker backing tape where backer rod cannot be used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
- G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

END OF SECTION

SECTION 08 4313
ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Aluminum-framed storefront, with vision glass.
- B. Aluminum doors .
- C. Weatherstripping.

1.02 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: Sealing joints between frames and adjacent construction.
- B. Section 08 8000 - Glazing: Glass and glazing accessories.

1.03 REFERENCE STANDARDS

- A. AAMA CW-10 - Care and Handling of Architectural Aluminum From Shop to Site; American Architectural Manufacturers Association; 2012.
- B. AAMA 501.2 - Field Check of Metal Storefronts, Curtain Walls, and Sloped Glazing Systems for Water Leakage; American Architectural Manufacturers Association; 2009 (part of AAMA 501).
- C. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; American Architectural Manufacturers Association; 2012.
- D. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections; American Architectural Manufacturers Association; 2009.
- E. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2013.
- F. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2013.
- G. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004 (Reapproved 2012).
- H. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2014.
- I. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2009).

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate with installation of other components that comprise the exterior enclosure.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, internal drainage details .
- C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related Work, expansion and contraction joint location and details, and field welding required.
- D. Samples: Submit two samples 6x6 inches (152x152 mm) in size illustrating finished aluminum surface, glass, glazing materials.
- E. Manufacturer's Certificate: Certify that the products supplied meet or exceed the specified requirements.
- F. Design Data: Provide framing member structural and physical characteristics, engineering calculations, and dimensional limitations.

- G. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Manufacturer and Installer Qualifications: Company specializing in manufacturing aluminum glazing systems with minimum three years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Handle products of this section in accordance with AAMA CW-10.
- B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

1.08 FIELD CONDITIONS

- A. Do not install sealants when ambient temperature is less than 40 degrees F (5 degrees C). Maintain this minimum temperature during and 48 hours after installation.

1.09 WARRANTY

- A. Correct defective Work within a five year period after Date of Substantial Completion.
- B. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.
- C. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Aluminum-Framed Storefront and Doors:
 - 1. Coral Architectural Products, a division of Coral Industries, Inc: FL300, 2 x 4 1/2 inch, center-set, insulating glazing, thermally broken, with WS500 wide-stile door: www.coralap.com.
 - 2. C.R. Laurence Co., Inc; U.S. Aluminum: Series IT451, 2 x 4 1/2 inch, center-set, insulating glazing, thermally broken, with wide-stile door: www.crl-arch.com.
 - 3. EFCO Corporation; FL300, 2 x 4 1/2 inch, center-set, insulating glazing, thermally broken, with D502 wide-stile door: www.efcocorp.com.
 - 4. Trulite Glass & Aluminum Solutions, LLC; CT451, 2 by 4-1/2 inch, center-set, insulating glazing, thermally broken, with 500 series wide-stile doors: www.trulite.com.
 - 5. Substitutions: See Section 01 6000 - Product Requirements.

2.02 STOREFRONT

- A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
 - 1. Unitized, shop assembly.
 - 2. Glazing Rabbet: For 1 inch (25 mm) insulating glazing.
 - 3. Glazing Position: Centered (front to back).
 - 4. Vertical Mullion Dimensions: 2 inches wide by 4-1/2 inches deep (50 mm wide by 114 mm deep).
 - 5. Finish: Class II color anodized.
 - a. Factory finish all surfaces that will be exposed in completed assemblies.
 - b. Coat concealed metal surfaces that will be in contact with cementitious materials or dissimilar metals with bituminous paint.
 - 6. Finish Color: Dark bronze.
 - 7. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
 - 8. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.

9. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
 10. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F (95 degrees C) over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.
 11. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.
 12. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.
- B. Performance Requirements:
1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
 - a. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
 2. Water Penetration Resistance: No uncontrolled water on interior face, when tested in accordance with ASTM E331 at pressure differential of 12 lbf/sq ft (575 Pa).
 3. Air Leakage: Maximum of 0.06 cu ft/min/sq ft (0.3 L/s/sq m) of wall area, when tested in accordance with ASTM E283 at 6.27 pounds per square foot (300 Pa) pressure differential across assembly.
 4. Condensation Resistance Factor of Framing: 50, minimum, measured in accordance with AAMA 1503.

2.03 COMPONENTS

- A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
1. Glazing stops: Flush.
- B. Glazing: As specified in Section 08 8000.
1. For Exterior Framing: Type IG-1.
- C. Swing Doors: Glazed Aluminum Wide Stile.
1. Thickness: 1-3/4 inches (43 mm).
 2. Top Rail: 4 inches (100 mm) wide.
 3. Vertical Stiles: 4-1/2 inches (115 mm) wide.
 4. Bottom Rail: 10 inches (254 mm) wide.
 5. Glazing Stops: Square.
 6. Finish: Same as storefront.

2.04 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M).
- B. Fasteners: Stainless steel.
- C. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

2.05 FINISHES

- A. Class II Color Anodized Finish: AAMA 611 AA-M12C22A32 Integrally colored anodic coating not less than 0.4 mils (0.01 mm) thick.
- B. Color: Dark bronze.

2.06 HARDWARE

- A. For each door, include weatherstripping, sill sweep strip, threshold, and hinges.
- B. Weatherstripping: Wool pile, continuous and replaceable; provide on all doors.
- C. Sill Sweep Strips: Resilient seal type, retracting, of neoprene; provide on all doors.

- D. Threshold: Extruded aluminum, one piece per door opening, ribbed surface; provide on all doors.
- E. Hinges: Butt type, swing clear; top, intermediate, and bottom, with ball bearings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify dimensions, tolerances, and method of attachment with other work.
- B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section.

3.02 INSTALLATION

- A. Install wall system in accordance with manufacturer's instructions.
- B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
- C. Provide alignment attachments and shims to permanently fasten system to building structure.
- D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances.
- E. Provide thermal isolation where components penetrate or disrupt building insulation.
- F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.
- G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.
- H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- I. Set thresholds in bed of sealant and secure.
- J. Install glass in accordance with Section 08 8000, using glazing method required to achieve performance criteria.
- K. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 TOLERANCES

- A. Maximum Variation from Plumb: 0.06 inches every 3 ft (1.5 mm/m) non-cumulative or 1/16 inches per 10 ft (1.5 mm/3 m), whichever is less.
- B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch (0.8 mm).

3.04 FIELD QUALITY CONTROL

- A. Test installed storefront for water leakage in accordance with AAMA 501.2.

3.05 ADJUSTING

- A. Adjust operating hardware for smooth operation.

3.06 CLEANING

- A. Remove protective material from pre-finished aluminum surfaces.
- B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

3.07 PROTECTION

- A. Protect installed products from damage during subsequent construction.

END OF SECTION

SECTION 08 8000

GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Glass.
- B. Glazing compounds and accessories.

1.02 RELATED REQUIREMENTS

- A. Section 08 4313 - Aluminum-Framed Storefronts: Glazing furnished by storefront manufacturer.

1.03 REFERENCE STANDARDS

- A. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- B. ASTM C1036 - Standard Specification for Flat Glass; 2011e1.
- C. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.
- D. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.
- E. ASTM E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings; 2012a.
- F. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2010.
- G. GANA (GM) - GANA Glazing Manual; Glass Association of North America; 2009.
- H. GANA (SM) - GANA Sealant Manual; Glass Association of North America; 2008.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data on Glass Types: Provide structural, physical and environmental characteristics, size limitations, special handling or installation requirements.
- C. Product Data on Glazing Compounds: Provide chemical, functional, and environmental characteristics, limitations, special application requirements. Identify available colors.
- D. Samples: Submit two samples 6 x 6 inch (152 x152 mm) in size of glass units.
- E. Samples: Submit 3 inch (75 mm) long bead of glazing sealant, color as selected.
- F. Certificates: Certify that products meet or exceed specified requirements.
- G. Manufacturer's Certificate: Certify that sealed insulated glass meets or exceeds specified requirements.

1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with GANA Glazing Manual and GANA Sealant Manual for glazing installation methods.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience.

1.06 FIELD CONDITIONS

- A. Do not install glazing when ambient temperature is less than 50 degrees F (10 degrees C).
- B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.07 WARRANTY

- A. Sealed Insulating Glass Units: Provide a five (5) year warranty to include coverage for seal failure, interpane dusting or misting, including replacement of failed units.

PART 2 PRODUCTS

2.01 INSULATING GLASS UNITS

- A. Type IG-1 - Sealed Insulating Glass Units: Vision glass, double glazed.
 - 1. Application: All exterior glazing unless otherwise indicated.
 - 2. Outboard Lite: Annealed float glass, 1/4 inch (6 mm) thick, minimum.
 - a. Tint: Bronze.
 - 3. Inboard Lite: Annealed float glass, 1/4 inch (6 mm) thick, minimum.
 - a. Tint: Clear.
 - 4. Total Thickness: 1 inch (25 mm).

2.02 EXTERIOR GLAZING ASSEMBLIES

- A. Performance Criteria: Select type and thickness of glass to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of glass.
 - 1. Use the procedure specified in ASTM E1300 to determine glass type and thickness.
 - 2. Limit glass deflection to 1/200 or flexure limit of glass, whichever is less, with full recovery of glazing materials.
 - 3. Glass thicknesses listed are minimum.

2.03 GLASS MATERIALS

- A. Float Glass: Provide float glass glazing unless otherwise indicated.
 - 1. Annealed Type: ASTM C1036, Type I, transparent flat, Class 1 clear, Quality Q3 (glazing select).
 - 2. Heat-Strengthened and Fully Tempered Types: ASTM C1048.
 - 3. Tinted Types: Color and performance characteristics as indicated.
 - 4. Thicknesses: As indicated; for exterior glazing comply with specified requirements for wind load design regardless of specified thickness.

2.04 SEALED INSULATING GLASS UNITS

- A. Sealed Insulating Glass Units: Types as indicated.
 - 1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
 - 2. Edge Spacers: Aluminum, bent and soldered corners.
 - 3. Edge Seal: Glass to elastomer with supplementary silicone sealant.
 - 4. Purge interpane space with dry hermetic air.

2.05 GLAZING COMPOUNDS

- A. Manufacturers:
 - 1. Bostik Inc: www.bostik-us.com.
 - 2. Momentive Performance Materials, Inc (formerly GE Silicones): www.momentive.com.
 - 3. Pecora Corporation: www.pecora.com.
 - 4. BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com.
 - 5. Substitutions: Refer to Section 01 6000 - Product Requirements.
- B. Butyl Sealant, Type 1: Single component; ASTM C920, Grade NS, Class 12-1/2, Uses M and A, Shore A hardness of 10 to 20; black color.

2.06 GLAZING ACCESSORIES

- A. Setting Blocks: Neoprene, 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot (25 mm for each square meter) of glazing or minimum 4 inch (100 mm) x width of glazing rabbet space minus 1/16 inch (1.5 mm) x height to suit glazing method and pane weight and area.
- B. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound with integral resilient spacer rod applicable to application indicated; hardness range of 5 to 30 cured Shore A durometer; coiled on release paper; black color.
- C. Glazing Gaskets or Splines: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; black color.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that openings for glazing are correctly sized and within tolerance.
- B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and ready to receive glazing.

3.02 PREPARATION

- A. Clean contact surfaces with solvent and wipe dry.
- B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- C. Prime surfaces scheduled to receive sealant.
- D. Install sealants in accordance with ASTM C1193 and GANA Sealant Manual.
- E. Install sealants in accordance with manufacturer's instructions.

3.03 INSTALLATION - EXTERIOR/INTERIOR DRY METHOD (GASKET GLAZING)

- A. Place setting blocks at 1/4 points with edge block no more than 6 inch (152 mm) from corners.
- B. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.
- C. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

3.04 INSTALLATION - EXTERIOR DRY METHOD (TAPE AND GASKET SPLINE GLAZING)

- A. Cut glazing tape to length; install on glazing pane. Seal corners by butting tape and sealing junctions with butyl sealant.
- B. Place setting blocks at 1/4 points with edge block no more than 6 inch (152 mm) from corners.
- C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure to attain full contact.
- D. Install removable stops without displacing glazing spline. Exert pressure for full continuous contact.
- E. Trim protruding tape edge.

3.05 CLEANING

- A. Remove glazing materials from finish surfaces.
- B. Remove labels after Work is complete.
- C. Clean glass and adjacent surfaces.

3.06 SCHEDULE

- A. Aluminum-Framed Storefront Glazing: NW Wing - New Exterior Door and Frame, exterior dry method, and glass thickness as required to comply with performance requirements indicated in Section 08 4313.

END OF SECTION