



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 294-2010

**LIMESTONE STABILIZATION – PUBLIC SAFETY BUILDING – 151 PRINCESS
STREET**

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Addenda	1
B6. Substitutes	2
B7. Bid Components	3
B8. Bid	3
B9. Prices	4
B10. Qualification	4
B11. Opening of Bids and Release of Information	5
B12. Irrevocable Bid	5
B13. Withdrawal of Bids	6
B14. Evaluation of Bids	6
B15. Award of Contract	7

PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	1
D4. Contractor's Supervisor	1
D5. Notices	1

Submissions

D6. Authority to Carry on Business	2
D7. Safe Work Plan	2
D8. Insurance	2
D9. Performance Security	3
D10. Security Clearance	3

Schedule of Work

D11. Commencement	4
D12. Critical Stages	5
D13. Substantial Performance	5
D14. Total Performance	5
D15. Liquidated Damages	5

Control of Work

D16. Job Meetings	6
D17. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	6

Measurement and Payment

D18. Payment	6
D19. Payment Schedule	6

Warranty

D20. Warranty	6
---------------	---

Form H1: Performance Bond	7
Form H2: Irrevocable Standby Letter of Credit	9

Form P-608: Security Clearance Check

11

PART E - SPECIFICATIONS

General Requirements

E1. Applicable Specifications, Standard Details and Drawings	1
E2. Work Covered in this Section	1
E3. Design Considerations	1
E4. Delivery, Storage and Handling	1
E5. Storage and Protection	2
E6. Existing Conditions	2
E7. Work Included	2
E8. Products	3
E9. Execution	3
E10. Cleaning	5
E11. Rejected Work	5
E12. Testing	5

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 LIMESTONE STABILIZATION – PUBLIC SAFETY BUILDING – 151 PRINCESS STREET

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, April 23, 2010.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Contract Administrator or an authorized representative will be available at the Site from 2:00 pm to 3:00 pm on April 15, 2010 to provide Bidders access to the Site.

B3.2 The Bidder is advised that walkway hording has been installed at four (4) elevations of the building.

B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. ADDENDA

B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.

- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.

- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B6.10 Notwithstanding B6.2 to B6.9, and in accordance with B7.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B7.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B7.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.6 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B14.1(a).
- B7.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.
- B7.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B7.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;

- (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
- (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.

B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B8.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B8.4.2 All signatures shall be original.

B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B9. PRICES

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B9.4 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. QUALIFICATION

B10.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B10.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>

B10.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- (d) the bidders supervisor has successful experience with this type of work.

B10.4 Further to B10.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractors has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>)

B10.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B10.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B11. OPENING OF BIDS AND RELEASE OF INFORMATION

B11.1 Bids will not be opened publicly.

B11.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>

B11.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B12. IRREVOCABLE BID

B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B12.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B13. WITHDRAWAL OF BIDS

B13.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

B13.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

B13.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.

B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B14. EVALUATION OF BIDS

B14.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B6.

B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.

B14.4 Further to B14.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

B14.4.2 Further to B14.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B15. AWARD OF CONTRACT

B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B14.

B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

B15.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

B15.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Construction*, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of stabilization of limestone cladding/repair.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Tuplin Group Inc., represented by:

Garth Darrach
Principal
Unit L – 301 Weston Street, Winnipeg, Manitoba, R3E 3H4
Telephone No. (204) 942-6818
Facsimile No. (204) 943-7516

D3.2 At the pre-construction meeting Garth Darrach will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4. CONTRACTOR'S SUPERVISOR

D4.1 At the pre-construction meeting, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5. NOTICES

D5.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

D5.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Financial Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

D5.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

The City of Winnipeg
Internal Services Department
Legal Services Division
Attn: City Solicitor
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

D6.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D7. SAFE WORK PLAN

D7.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D7.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D8. INSURANCE

D8.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;

D8.2 Deductibles shall be borne by the Contractor.

D8.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.

D8.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D9. PERFORMANCE SECURITY

- D9.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D9.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D9.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

D10. SECURITY CLEARANCE

- D10.1 The City will conduct a Level Two Security Clearance Check, for any individual proposed to perform Work under the Contract at Winnipeg Police Service facilities.
- D10.2 The Contractor shall provide the Contract Administrator with a list of individuals proposed to perform Work under the Contract at Winnipeg Police Service facilities:
- (a) within five (5) Business Days of the Award of Contract; or
 - (b) in the case of additional or replacement individuals during the term of the Contract, at least thirty (30) Calendar Days before each individual is proposed to commence Work at Winnipeg Police Service facilities.
- D10.3 Each individual or Contractor proposed to perform Work under the Contract at Winnipeg Police Service facilities shall provide:
- (a) A list of names (including maiden names), addresses, dates of birth and telephone numbers of all immediate family members including stepbrothers, stepsisters, half-brothers and half-sisters, and their spouses, common-law spouses, boyfriends, girlfriends and their family members. The list should be typed in the following format:

John James SMITH	Dob: 45 Aug 24 (father)
123 Anywhere Street	555-5555
Winnipeg, Manitoba	
 - (b) A list of names, addresses, dates of birth and telephone numbers of four closest friends. Include information indicating when, where and how they met. The list should be typed in the following format:

Joseph James SMITH	Dob: 46 Aug 4 (best friend)
789 Anywhere Street	555-5555
Winnipeg, Manitoba	
When they met:	
Where they met:	
How they met:	

- (c) The name, title or position, and telephone number of the immediate supervisor.
 - (d) A list of every past address, including the dates of residence, the names of any persons with whom the residence was shared and the reason for moving.
 - (e) Identification - driver's license (with photo), birth certificate or social insurance number (SIN).
 - (a) Photocopies of the identification must be legible, signed as true copies and witnessed by the contact person stated on Paragraph 3 of Form A: Bid.
 - (f) A completed Form P-608: Security Clearance Check authorization form.
 - (a) Signature of Witness shall be signed by the contact person stated on Paragraph 3 of Form A: Bid.
- D10.4 Each individual shall submit the required information and form to the Winnipeg Police Service Division 30 Clerk at Main Floor, 151 Princess Street:
- (a) within five (5) Business Days of the Award of Contract; or
 - (b) in the case of an additional or replacement individual during the term of the Contract, at least thirty (30) Calendar Days before the individual is proposed to commence Work at Winnipeg Police Service facilities.
- D10.5 Any individual for whom a satisfactory Level Two Security Clearance is not obtained will not be permitted to perform any Work within Winnipeg Police Service facilities.
- D10.6 Any satisfactory Security Clearance obtained thereby will be deemed valid for two (2) years from the date of clearance, subject to a repeated Security Clearance Check as hereinafter specified.
- (a) Each individual doing Work in a Winnipeg Police Service Facility shall provide identification upon entry to verify they have received a Level Two security clearance.
- D10.7 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require a further Security Clearance Check. Any individual who fails to obtain a satisfactory Security Clearance Check as a result of a repeated Security Clearance Check will not be permitted to continue to perform Work under the Contract at Winnipeg Police Service Facilities.
- D10.8 Any individual who fails to obtain a satisfactory Security Clearance Check may request reconsideration by writing to:
- Winnipeg Police Service
Division 30
Service Security
Attn: Service Security Officer
151 Princess Street
Winnipeg, Manitoba
R3B 1L1

SCHEDULE OF WORK

D11. COMMENCEMENT

- D11.1 The Contractor shall not commence any Work until he is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D11.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D6;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D7;

- (iv) evidence of the insurance specified in D8;
 - (v) the performance security specified in D9;
 - (vi) the security clearances specified in D10.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D11.3 The Contractor shall commence the Work on the Site within fourteen (14) Working Days of receipt of the Purchase Order.

D12. CRITICAL STAGES

D12.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) Phase 1 – Start the work within fourteen (14) Working Days of receipt of the purchase order and complete Phase 1 of the work within thirty-five (35) Working Days.
- (b) Phase 2 – Start the work for Phase 2 October 26, 2010.

D13. SUBSTANTIAL PERFORMANCE

D13.1 The Contractor shall achieve Substantial Performance by December 7, 2010 as specified in D12.1.

D13.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D13.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D14. TOTAL PERFORMANCE

D14.1 The Contractor shall achieve Total Performance by December 7, 2010 as specified in D12.1.

D14.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D14.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D15. LIQUIDATED DAMAGES

D15.1 If the Contractor fails to achieve Critical Stages or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:

- (a) Phase 1 Critical Stage - two hundred dollars (\$200.00) per Working Day.
- (b) Total Performance - two hundred dollars (\$200.00) per Working Day.

- D15.2 The amounts specified for liquidated damages in D15.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.
- D15.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D16. JOB MEETINGS

- D16.1 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D17.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

MEASUREMENT AND PAYMENT

D18. PAYMENT

- D18.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D19. PAYMENT SCHEDULE

- D19.1 Further to C12 payment shall be in accordance with the following payment schedule.
- (a) Contractor to submit monthly progress billings on the 25th day of each month to the Contract Administrator for approval.

WARRANTY

D20. WARRANTY

- D20.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

FORM H1: PERFORMANCE BOND
(See D9)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$_____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

BID OPPORTUNITY NO. 294-2010

LIMESTONE STABILIZATION – PUBLIC SAFETY BUILDING – 151 PRINCESS STREET

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D9)

(Date)

The City of Winnipeg
Internal Services Department
Legal Services Division
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 294-2010

LIMESTONE STABILIZATION – PUBLIC SAFETY BUILDING – 151 PRINCESS STREET

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL REQUIREMENTS

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the work.
- E1.1.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following Drawings are applicable to the Work:
- | <u>Drawing No.</u> | <u>Drawing Name/Title</u> |
|--------------------|---------------------------|
| SK-1 | Plan View and Elevations |
| SK-2 | Details and Notes |

E2. WORK COVERED IN THIS SECTION

- E2.1 Cracking and debonding in select stone sections has continued. As a result, a program of interim stabilization is again required. The identification and stabilization of such areas is required to reduce the possibility of sections of the stone panel falling away from the building. The following section covers all aspects of the repair and/or removal of the limestone cladding.

E3. DESIGN CONSIDERATIONS

- E3.1 The limestone cladding has a nominal thickness of 1.5", bonded to a precast concrete panel approximately 3.5" thick. This section therefore includes details of temporarily anchoring the stone panels to the structural backup in areas required, as determined on-site by the Contract Administrator.
- E3.2 Small, shallow stone spalls or sections that are fully debonded from the substrate are to be removed by the Contractor. All locations to be identified and measured by the Contract Administrator.
- E3.3 This specification shall be read in conjunction with attached contract drawings.
- E3.4 All unit quantities to be identified and measured by the Contract Administrator.
- E3.5 Follow manufacturer's specifications.

E4. DELIVERY, STORAGE AND HANDLING

- E4.1 Keep material dry. Protect from weather, freezing and contamination.
- E4.2 Ensure that manufacturer's labels and seals are intact upon delivery.
- E4.3 Remove rejected or contaminated material from site.
- E4.4 Following manufacturer's specifications.

E5. STORAGE AND PROTECTION

E5.1 Protect adjacent finished work against damage which may be caused by on-going work.

E6. EXISTING CONDITIONS

E6.1 Report in writing, to Contract Administrator areas of deteriorated limestone masonry revealed during work which fall outside of the specified repair scope.

E7. WORK INCLUDED

E7.1 The Work shall include all material, labour, equipment, testing, access, and incidentals. The additional time required to complete the inspection passes with the Contract Administrator and the loose fracture removal shall be included in the fixed price of the swing-stage supply and installation.

E7.2 This specification section presents seven individual procedures for the limestone masonry stabilization.

Method A: Installing through-stone Helifix anchors to reinforce existing anchorage and weather seal the void created by the anchor with Dow Corning 790 sealant as per manufacturer's specifications.

Method B: Anchoring steel straps over stones and window mullions, secured into the concrete precast backup.

Method C: Removal of entire stone panel. Measured on a 1.0 square foot basis. Weather seal entire perimeter of removal area with Dow Corning 790 Sealant. Cut any remaining anchors flush with the exterior surface of the precast concrete substrate. Reinforce perimeter of removal area with 8 Helifix Anchors.

Method D: Removal of loose fractured segments of stone panels on a 0.5 square foot basis, anchoring the perimeter and weather sealing the stone/concrete interface with Dow Corning 790 Sealant. Reinforce perimeter of removal area with 2 Helifix Anchors.

Method E: Removal of stone mullion on one side only of the louvers at the 6th floor. Includes only removal of square mullion, not angled stone cladding panels or stone louver jambs, lintels, or sills. Payment will be for removal of one full height mullion. Includes application of Dow Corning 790 Sealant around the entire perimeter of the removal area, trimming all exposed, existing anchors flush with the exterior surface of the precast concrete substrate, as well as reinforcement of adjacent angled limestone cladding panels with 6 Helifix anchors.

Method F: Removal of large stone mullion located at 1st, 2nd, and 5th, floor windows. Payment will be for removal of one full height mullion. Includes application of Dow Corning 790 Sealant around the entire perimeter of the removal area, trimming all exposed, existing anchors flush with the exterior surface of the precast concrete substrate, as well as reinforcement of adjacent cladding panels on the jambs of the windows with 8 Helifix anchors.

Method G: Removal of small stone mullion located at 3rd and 4th floor windows. Payment will be for removal of one full height mullion. Includes application of Dow Corning 790 Sealant around the entire perimeter of the removal area, trimming all exposed, existing anchors flush with the exterior surface of the precast concrete substrate, as well as reinforcement of adjacent cladding panels on the jambs of the windows with 4 Helifix anchors.

E8. PRODUCTS

E8.1 Materials

- E8.1.1 Anchors used to reinforce existing stone cladding panel anchorage to be 10 mm Helifix stainless steel wall ties, manufactured and supplied by Helifix North America Corporation, 110 Maplecrete Road, Concord, ON, Phone: 1-888-992-9989.
- E8.1.2 Anchors to secure steel straps and stone to be Hilti 304 or 316 stainless steel 10 mm Kwik Bolt 3 Expansion Anchors, available from Hilti, 120 Bannister Road, Winnipeg, MB, Phone: 1-800-363-4458.
- E8.1.3 Stainless steel short strapping to be Type 302 stainless or better, with a thickness of not less than 16 gauge.

E9. EXECUTION

E9.1 REPAIR TYPE A: Reinforcement of existing in-situ panels using Helifix anchors.

- E9.1.1 The anchors have been based on a minimum capacity of 250 pounds in both tension and shear. At panels designated for reinforcement, one anchor shall be installed for every 2.5 square feet of stone area, but panels designated for reinforcement measuring 1 square larger shall have a minimum of two (2) anchors installed.
- E9.1.2 Pre-drill an 8 mm entry hole into the limestone and pre-cast concrete backup to a depth of 3" into the concrete. The hole must be of sufficient depth so that the anchor head will be recessed below the stone surface by 1/4". The hole shall be drilled at 30° above the horizontal. Confirm that drilled hole diameter is in accordance with manufacturer's specifications for anchors to be utilized.
- E9.1.3 Connect insertion tool assembly to a high speed hammer drill to drive Helifix 10 mm anchor through the limestone into the concrete until the end of the tie is recessed a minimum 1/4" below face of the limestone.
- E9.1.4 Patch outer face of stone in accordance with specifications using Dow Corning 790 so that anchor location is concealed. Surface that is to be weather sealed must be free of contaminants.
- E9.1.5 Work of this section, except as specified otherwise, will be measured by the Contract Administrator. It will be paid for under payment items for which a unit price applies. Anchor installations shall be based on a per anchor (each) basis.

E9.2 REPAIR TYPE B: Anchoring of stainless steel strapping to secure large areas of stone or stone window mullions.

- E9.2.1 At areas designated for anchoring with steel strapping, 16 gauge Type 302 or better stainless steel strapping, 10 mm stainless steel Hilti Kwik Bolt 3 expansion anchors, complete with 1" diameter stainless steel washer and Hex nut are to be utilized to secure the metal strap to the concrete precast back up.
- E9.2.2 Using an electric drill, drill a 12 mm hole through the stone and 2" into the precast concrete structural backup. Use non-hammer setting when drilling through the stone only. Ensure new anchors are a minimum of 4" from existing pins.
- E9.2.3 Supply and install Hilti 10 mm anchors through the stone cladding, and set 2" into concrete backup. Anchors to be 304 or 316 stainless steel complete with stainless steel plate washer and hex nut.
- E9.2.4 Ensure anchors are torqued to manufacturer's specifications.
- E9.2.5 Work of this section, except as specified otherwise, will be measured by the Contract Administrator. It will be paid for under payment items for which a unit price applies. Steel strap installations shall be based on a per steel strap (each) basis.

- E9.3 REPAIR TYPE C: Removal of entire stone panel.
- E9.3.1 Using a grinder, cut around the perimeter of the unsound panel designated for removal by the Contract Administrator.
- E9.3.2 Using a cold chisel or electric chipping hammer, remove the limestone (only) from the unsound area, leaving the underlying concrete unscathed.
- E9.3.3 Weather seal entire perimeter (stone/concrete interface) with a cant strip of Dow Corning 790 Sealant. Surface that is to be weather sealed must be free of contaminants.
- E9.3.4 Install 8 Helix anchors around perimeter of removal area.
- E9.3.5 Work of this section, except as specified otherwise, will be measured by the Contract Administrator. It will be paid for under payment items from which a unit price applies. Payment for this repair item will be based on the area of stone removed measured in square feet.
- E9.4 REPAIR TYPE D: Removal of localized areas of stone exhibiting significant fracturing.
- E9.4.1 Using a grinder, cut a fracture plane around the perimeter of the unsound area designated for removal by the Contract Administrator.
- E9.4.2 Using a cold chisel or electric chipping hammer, remove the limestone (only) from the unsound area, leaving the underlying concrete unscathed.
- E9.4.3 Install Helifix anchors, one per side per square foot of stone removal. For example, if the stone removal is one foot by one foot, install two Helifix anchors per side of the opening.
- E9.4.4 Weather seal stone/concrete interface with a cant strip of Dow Corning 790 Sealant. Surface that is to be weather sealed must be free of contaminants.
- E9.4.5 Work of this section, except as specified otherwise, will be measured by the Contract Administrator. It will be paid for under payment items from which a unit price applies. Payment for this repair item will be based on the area of stone removed measured in square feet.
- E9.5 REPAIR TYPE E: Removal of entire stone mullion at 6th floor level louvers.
- E9.5.1 Using a grinder, cut around the perimeter of the unsound mullion designated for removal by the Contract Administrator.
- E9.5.2 Using a cold chisel or electric chipping hammer, remove the limestone (only), leaving the underlying concrete unscathed.
- E9.5.3 Weather seal entire perimeter (stone/concrete interface) with a cant strip of Dow Corning 790 Sealant. Surface that is to be weather sealed must be free of contaminants.
- E9.5.4 Install 6 Helix anchors around perimeter of removal area, into the angled limestone cladding panels adjacent to the mullion. Space anchors evenly around the perimeter of the repair area.
- E9.5.5 Work of this section, except as specified otherwise, will be measured by the Contract Administrator. It will be paid for under payment items for which a unit price applies. Payment for this repair item will be per a 6th floor level mullion removed.
- E9.6 REPAIR TYPE F: Removal of entire large stone mullion at 1st, 2nd, and 5th floor windows.
- E9.6.1 Using a grinder, cut around the perimeter of the unsound mullion designated for removal by the Contract Administrator.
- E9.6.2 Using a cold chisel or electric chipping hammer, remove the limestone (only), leaving the underlying concrete unscathed.
- E9.6.3 Weather seal entire perimeter (stone/concrete interface) with a cant strip of Dow Corning 790 Sealant. Surface that is to be weather sealed must be free of contaminants.

- E9.6.4 Install 8 Helix anchors around perimeter of removal area, into the window jamb limestone cladding panels adjacent to the mullion. Space anchors evenly around the perimeter of the repair area.
- E9.6.5 Work of this section, except as specified otherwise, will be measured by the Contract Administrator. It will be paid for under payment items for which a unit price applies. Payment for this repair item will be per a 1st, 2nd, or 5th floor level mullion removed.
- E9.7 REPAIR TYPE G: Removal of entire small stone mullion at 3rd and 4th floor windows.
- E9.7.1 Using a grinder, cut around the perimeter of the unsound mullion designated for removal by the Contract Administrator.
- E9.7.2 Using a cold chisel or electric chipping hammer, remove the limestone (only), leaving the underlying concrete unscathed.
- E9.7.3 Weather seal entire perimeter (stone/concrete interface) with a cant strip of Dow Corning 790 Sealant. Surface that is to be weather sealed must be free of contaminants.
- E9.7.4 Install 4 Helix anchors around perimeter of removal area, into the window jamb limestone cladding panels adjacent to the mullion. Space anchors evenly around the perimeter of the repair area.
- E9.7.5 Work of this section, except as specified otherwise, will be measured by the Contract Administrator. It will be paid for under payment items for which a unit price applies. Payment for this repair item will be per a 3rd or 4th floor level mullion removed.
- E9.8 Some work may require additional set-up due to noise control considerations for the accommodation of interior operations.
- E9.9 Repair types C, through G may require the relocation and or remobilization of the swing-stage and equipment. The contractor shall therefore provide a unit price to re-mobilize the necessary material, labour, and equipment to remove stone panels at locations designated by the Contract Administrator after the pass in questions has been completed. Existing unit prices shall apply for the removal of stone cladding panels or mullions.
- E10. CLEANING**
- E10.1 Clean surfaces of sealant droppings, stains and other blemishes resulting from work of this contract as work progresses.
- E10.2 Provide on-site containers for collection of all stones that is removed. The debris must be removed from the site on a daily basis.
- E10.3 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of the debris. Depositing the debris to the public water container is prohibited.
- E10.4 Smears on the wall must be cleaned immediately.
- E10.5 Use only clean water for all cleaning.
- E11. REJECTED WORK**
- E11.1 Remove defection Work, whether the results of poor workmanship, use of defective products or damage and whether incorporated in the Work or not, which has been rejected by the Contract Administrator as failing to conform to the Contract Documents and/or contract drawings. Replace or re-execute Work.
- E12. TESTING**
- E12.1 Tensile Testing of Hilti Anchors

- E12.1.1 The Contractor shall have a manufacturer's representative complete no less than five (5) load tests on the specified anchor in the existing substrate prior to commencement of the stone masonry repairs. The average minimum level of tensile resistance required is 500 pounds with no single test less than 400 pounds. Results are to be verified by the Contract Administrator. All costs associated with testing shall be carried by the contractor and/or manufacturer.
- E12.2 Load Testing of Helifix Anchors
- E12.2.1 At five locations designated by the Contract Administrator, the contractor shall pre-drill holes and insert 10 mm Helifix anchors in accordance with the manufacturer's specifications and as specified herein, to a depth of 3" into the stone and not into the backup. Five additional tests shall then be completed with the 10 mm Hilti anchors installed 2" into the concrete structural backup.
- E12.2.2 The anchor manufacturer, Helifix North America has an in-situ non-destructive load testing device. The contractor shall be responsible for obtaining and renting this load test device from the manufacturer. All costs associated with the unit rental shall be carried by the contractor and/or manufacturer.
- E12.2.3 The tensile load test shall be carried out by the contractor in accordance with the manufacturer's specifications. Results are to be verified by the Contract Administrator. Anchor design is based on average ultimate capacity of not less than 250 pounds both in tension and shear. If results are less than 250 pounds, the anchor spacing will be decreased.