

SPECIFICATIONS

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Part 1 General

1.1 TAXES

- .1 Pay all taxes properly levied by law including Federal, Provincial and Municipal.

1.2 FEES, PERMITS and CERTIFICATES

- .1 Pay all fees and obtain all permits. Provide authorities with plans and information for acceptance certificates. Provide inspection certificates as evidence that work conforms to requirements of Authority having jurisdiction.

1.3 CONSTRUCTION PROGRESS SCHEDULE

- .1 Schedule and execute work with least possible interference or disturbance to the normal use of premises
- .2 On award of contract submit bar chart construction schedule for work, indicating anticipated progress stages within time of completion. When the Departmental Representative has reviewed schedule, take necessary measures to complete work within scheduled time. Do not change schedule without notifying Departmental Representative.
- .3 Carry out work during "regular hours", Monday to Friday from 07:00 to 18:00 hours
- .4 Give the Departmental Representative 48 hours notice for work to be carried out during "off hours".

1.4 SUBMITTAL PROCEDURES

- .1 Submit promptly to Departmental Representative submittals listed for review, in orderly sequence to not cause delay in work.
- .2 Do not proceed with work affected by submittals until review is complete.
- .3 Shop Drawings:
 - .1 Submit five (5) copies of shop drawings: bearing stamp and signature of qualified Professional Engineer registered or licensed in Province of Ontario.
 - .2 The review is for the sole purpose of ascertaining conformance with the general design concept, and does not mean approval of the design details inherent in the shop drawings, responsibility for which shall remain with the Contractor. Such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents.
- .4 Product Data:
 - .1 Submit five (5) copies of product data: manufacturers catalogue sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products.

.2 Cross reference product data information to applicable portions on Contract Documents.

.5 Samples:

- .1 Submit samples: examples of materials, equipment, quality, finishes and workmanship.
- .2 Where colour, pattern or texture is criterion, submit full range of samples.
- .3 Reviewed and accepted samples will become standard of material and workmanship, against which installed work will be verified.

1.5 REGULATORY REQUIREMENTS

.1 References and Codes:

.1 Materials shall be new and work shall conform to the minimum applicable standards of the "References" indicated in the specification sections, the National Building Code of Canada 2015 (NBC) and all applicable Provincial and Municipal codes. In the case of conflict or discrepancy the most stringent requirement shall apply.

.2 Building Smoking Environment:

.1 Smoking is not permitted in the Building. Obey smoking restrictions on building property.

.3 Hazardous Material Discovery:

.1 Stop work immediately when material resembling spray or trowel-applied asbestos, Polychlorinated Biphenyl (PCB), mould or other designated substance is encountered during demolition work.

.1 Take preventative measure and promptly notify Departmental Representative.

.2 Do not proceed until written instructions have been received from Departmental Representative.

1.6 FIRE SAFETY REQUIREMENTS

.1 Comply with both the National Building Code of Canada 2015 and the National Fire Code of Canada 2015 for safety of persons in buildings in the event of a fire and the protection of buildings from the effects of fire, as follows;

.1 The National Building Code (NBC): for fire safety and fire protection features that are required to be incorporated in a building during construction.

.2 The National Fire Code (NFC):

.1 The on-going maintenance and use of the fire safety and fire protection features incorporated in buildings.

.2 The conduct of activities that might cause fire hazards in and around buildings.

.3 Limitations on hazardous contents in and around buildings.

.4 The establishment of fire safety plans.

.5 Fire safety at construction and demolition sites.

1.7 QUALITY CONTROL

- .1 Testing Laboratory Services:
 - .1 Departmental Representative will appoint and pay for costs of inspection and testing services, unless indicated otherwise.
 - .2 Provide safe working areas and assist with testing procedures, including provisions for materials or services and co-ordination, as required by testing agency and as authorized by Departmental Representative.
 - .3 Where tests indicate non-compliance with specifications, contractor to pay for initial test and all subsequent testing of work to verify acceptability of corrected work.

1.8 HAZARDOUS MATERIALS

- .1 Hazardous Materials: product, substance, or organism that may cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.
- .2 Comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and regarding labelling and the provision of Material Safety Data Sheets (MSDS).
- .3 For work in occupied buildings, give the Department Representative one week notice for work involving designated substances Ontario Bill 208, hazardous substances Canada Labour Code Part II Section 10, and before painting, caulking, installing carpet or using adhesives and other materials, that cause off gassing.

1.9 TEMPORARY UTILITIES

- .1 Existing services required for work, excluding power required for space temporary heating may be used by the Contractor without charge if available. Ensure capacity is adequate prior to imposing additional loads. Connect and disconnect at own expense and responsibility.
- .2 The Contractor shall confirm availability of power with the building operator. Connect to existing power supply in accordance with Canadian Electrical Code and provide meters and switching.
- .3 Notify the Departmental Representative and utility companies of intended interruption of services and obtain requisite permission.
- .4 Give the Departmental Representative one week notice related to each necessary interruption of any mechanical or electrical service throughout the course of the work. Keep duration of these interruptions to a minimum. Carry out all interruptions after normal working hours of the occupants, preferably on weekends.

1.10 CONSTRUCTION FACILITIES

- .1 Access Scaffold:
 - .1 Scaffolding: in accordance with CSA Z797-09 – Code of Practice for Access Scaffold.

- .2 Provide design drawings, signed and sealed by qualified Professional Engineer licensed in the province of Ontario, where prescribed.
- .3 Additions or modifications to scaffolding must be approved by Professional Engineer in writing.
- .2 Designated elevators: to be used by construction personnel and transporting of materials.
 - .1 Co-ordinate with Departmental Representative.
 - .2 Protect from damage, safety hazards and overloading of existing equipment.
- .3 Access to external areas
 - .1 The Contractor shall use the existing external platform to access the work areas
 - .2 All Contractor's staff shall receive training in the operation of the platform from the Owner's safety representative
 - .3 Training shall be coordinated with the Departmental Representative at least one week prior to the use of the platform for the work
- .4 Site Storage:
 - .1 The Departmental Representative will assign storage space that shall be equipped and maintained by the Contractor.
 - .2 Do not unreasonably encumber site with materials or equipment.
 - .3 Move stored products or equipment that interfere with operations of Departmental Representative or other contractors.
 - .4 Obtain and pay for use of additional storage or work areas needed for operations.
 - .5 Do not load or permit to load any part of work with weight or force that will endanger work.
- .5 Where security is reduced by work provide temporary means to maintain security.
- .6 Sanitary facilities: will be assigned for Contractor's personnel. Others shall not be used. Keep facilities clean.
- .7 Signage:
 - .1 Provide common-use signs related to traffic control, information, instruction, use of equipment, public safety devices, etcetera, in both official languages or by the use of commonly understood graphic symbols and to approval of the Departmental Representative.
 - .2 No advertising will be permitted on this project.

1.11 TEMPORARY BARRIERS AND ENCLOSURES

- .1 Maintain existing services to building and provide for personnel and vehicle access.
- .2 Hoarding:
 - .1 Design, erect and maintain covered pedestrian walkways at street level and provide protection, complete with signs and electrical lighting as required by authority having jurisdiction.

- .3 Weather Enclosures: protect work temporarily until completed.
- .4 Dust Control:
 - .1 Provide dust tight screens or partitions to localize dust-generating activities, and for protection of workers, finished areas of work and public.
 - .2 Maintain and relocate protection until such work is complete.
 - .3 Protect all furnishings within work area with 0.102mm thick polyethylene film during construction. Remove film during non-construction hours and leave premises in clean, unencumbered and safe manner for normal daytime function.
- .5 Protection:
 - .1 Protect work against damage until take-over.
 - .2 Protect adjacent work against the spread of dust and dirt beyond the work areas.
 - .3 Protect operatives and other users of site from all hazards.
- .6 Work zones:
 - .1 Work zone locations include Building façade as shown on the Contract Drawings
 - .2 The contractor shall agree to install proper site separation and identification in order to maintain "Time and Space" at all times throughout the life of the project. When Building Operations staff requires access to equipment in order to operate the building, proper coordination and communication must exist between all parties involved.

1.12 COMMON PRODUCT REQUIREMENTS

- .1 Quality of Work:
 - .1 Carry out work using qualified licenced workers or apprentices in accordance with Provincial Act respecting manpower vocational training and qualification.
 - .2 Permit employees registered in Provincial apprenticeship program to perform specific tasks only if under direct supervision of qualified licenced workers.
 - .3 Determine permitted activities and tasks by apprentices, based on level of training attended and demonstration of ability to perform specific duties.
- .2 Storage, Handling and Protection:
 - .1 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions.
 - .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove packaging or bundling until required in work.
- .3 Manufacturer's Instructions: unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers

1.13 EXAMINATION and PREPARATION

- .1 Examine site and conditions likely to affect work and be familiar and conversant with existing conditions.
- .2 Before commencing work, establish location and extent of services lines in area of work and notify Departmental Representative of findings.

1.14 EXECUTION

- .1 Cut, Patch and Make Good:
 - .1 Cut existing surfaces as required to accommodate new work.
 - .2 Remove all items so shown or specified.
 - .3 Patch and make good surfaces cut, damaged or disturbed, to Departmental Representative's approval. Match existing material, colour, finish and texture.
- .2 Inserts: co-ordinate setting and supply and installation of inserts. Obtain Departmental Representative's approval before cutting into structure.
- .3 Unless otherwise specified, materials for removal become the Contractor's property and shall be taken from site.

1.15 WASTE MANAGEMENT

- .1 Comply with Environmental Protection Act, Ontario Regulations: O. Reg. 102/94 – Waste Audits and Waste Reduction Work Plans; and O. Reg. 103/94 – Industrial, Commercial and Institutional Source Separation Programs; for waste management on construction and demolition projects.
- .2 Conduct "waste audit" to determine what waste will be generated during construction and demolition operations. Prepare written "waste reduction work plan" and implement the principles to reduce, reuse and recycle materials to the extent that is possible.
- .3 Submit complete records of all removals from site for both "materials designated for alternative disposal" and "general waste" including:
 - .1 time and date of removal;
 - .2 description of material and quantities; and
 - .3 proof that materials have been received at an approved Waste Processing Site or certified Waste Disposal Site as required.

1.16 CLOSEOUT SUBMITTALS

- .1 Operational and Maintenance Manuals:
 - .1 Suppliers' names, addresses and telephone numbers and materials supplied by them must be included in this section. Components must be identified by a description and manufacturers part number.
 - .2 Guarantees showing:
 - .1 name and address of projects;
 - .2 guarantee commencement date, date of Interim Certificate of Completion;

- .3 duration of guarantee;
- .4 clear indication of what is being guaranteed and what remedial action will be taken under guarantee; and
- .5 signature and seal of Guarantor.
- .3 Additional material used in project listed under various Sections showing name of manufacturer and source of supply.
- .2 Include one complete set of final shop drawings indicating corrections and changes made during installation.
- .2 Records:
 - .1 As work progresses, maintain accurate records to show deviations from contract drawings. Just prior to Departmental Representative's inspection for issuance of final certificate of completion, supply to the Departmental Representative one (1) set of white prints with all deviations neatly inked in. The Departmental Representative will provide two sets of clean white prints for this purpose.
- .3 Guarantees and Warranties:
 - .1 Before completion of work collect all manufacturer's guarantees or warranties and deposit with Departmental Representative.
 - .2 Warranty work for 12 months beginning at the date of the Interim Certificate of Completion

1.17 CLEANING

- .1 Clean up as work progresses. At the end of each work period, and more often if ordered by the Departmental Representative, remove debris from site, neatly stack material for use, and clean up generally.
- .2 Upon completion remove scaffolding, temporary protection and surplus materials. Make good defects noted at this stage.
- .3 Clean areas under contract to a condition equal to what previously existed and to approval of Departmental Representative.

1.18 SECURITY CHECK

- .1 All personnel employed on this project will be subject to security check. Obtain requisite clearance, as instructed, for each individual required to enter the premises.
- .2 Personnel will be checked daily at start of work shift and given a pass, which must be worn at all times. Pass must be returned at end of work shift and personnel checked out.

1.19 COST BREAKDOWN

- .1 Before submitting first progress claim, submit breakdown of Contract Amount in detail as directed by Departmental Representative and aggregating the Contract Amount. After approval by Departmental Representative cost breakdown will be used as the basis of progress payments.

1.20 PRECEDENCE

- .1 For Federal Government projects, Division 01 Sections take precedence over technical specification sections in other Divisions of this Project Manual

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 00 10 General Instructions

1.2 REFERENCES

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Province of Ontario
 - .1 Occupational Health and Safety Act and Regulations for Construction Projects, R.S.O. 1990, c.0.1, as amended and O. Reg. 213/91 as amended - Updated 2017.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 00 10 - 1.4 Submittal Procedures.
- .2 Submit site-specific Health and Safety Plan: Within seven (7) days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
 - .1 Results of site specific safety hazard assessment.
 - .2 Results of safety and health risk or hazard analysis for site tasks and operations..
- .3 Submit (2) copies of Contractor's authorized representative's work site health and safety inspection reports weekly to Departmental Representative
- .4 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .5 Submit copies of incident and accident reports.
- .6 Submit WHMIS MSDS - Material Safety Data Sheets
- .7 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within five (5) days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within two (2) days after receipt of comments from Departmental Representative
- .8 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .9 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative
- .10 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

1.4 FILING OF NOTICE

- .1 File Notice of Project with Provincial authorities prior to beginning of Work.

.2 Contractor shall be responsible and assume the Principal Contractor role for each work zone location and not the entire complex. Contractor shall provide a written acknowledgement of this responsibility within three (3) weeks of contract award.

.3 Work zone locations include:

.1 Building Façade and access

.4 Contractor shall agree to install proper site separation and identification in order to maintain time and space at all times throughout life of project.

1.5 SAFETY ASSESSMENT

.1 Perform site specific safety hazard assessment related to project.

1.6 MEETINGS

.1 Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of Work.

1.7 REGULATORY REQUIREMENTS

.1 Do Work in accordance with Section 01 00 10 – 1.5 Regulatory Requirements.

1.8 GENERAL REQUIREMENTS

.1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.

.2 Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.9 RESPONSIBILITY

.1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.

.2 Contractor will be responsible and assume the role Constructor as described in the Ontario Occupational Health and Safety Act and Regulations for Construction Projects.

1.10 .COMPLIANCE REQUIREMENTS

.1 Comply with Ontario Occupational Health and Safety Act, R.S.O. 1990, c. 0.1 and Ontario Regulations for Construction Projects, O. Reg. 213/91.

1.11 UNFORSEEN HAZARDS

.1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, advise Health and Safety co-ordinator and follow procedures in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

1.12 HEALTH AND SAFETY CO-ORDINATOR

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Health and Safety Co-ordinator must:
 - .1 Have site-related working experience specific to activities associated with the proposed work as carried out on a mechanically operated stage system.
 - .2 Have working knowledge of occupational safety and health regulations.
 - .3 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
 - .4 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.

1.13 POSTING OF DOCUMENTS

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province Ontario on, and in consultation with Departmental Representative.

1.14 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

1.15 POWDER ACTUATED DEVICES

- .1 Use powder actuated devices only after receipt of written permission from Departmental Representative

1.16 WORK STOPPAGE

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

END OF SECTION

PART 1 – GENERAL

1.1 REFERENCES

1. Federal Legislation and Standards
 1. *Canada Labour Code*
 1. *Canada Occupational Health and Safety Regulations*
 2. *Transportation of Dangerous Goods Act, 1992 (TDGA)*
 3. *PSPC Asbestos Management Standard*
2. Provincial Legislation
 1. *Ontario Occupational Health and Safety Act, R.S.O. 1990, 2010 edition.*
 1. *Ontario Regulation 490/09 – Designated Substances (O.Reg. 490/09).*
 2. *Ontario Regulation 278/05 – Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations, (O.Reg. 278/05).*
 3. *Ontario Regulation 213/91 for Construction Projects (O.Reg. 213/91)*
 2. *Ontario Environmental Protection Act, R.R.O. 1990,*
 1. *Ontario Regulation 347/09, General – Waste Management (O.Reg. 347/09).*
 3. *Ontario Dangerous Goods Transportation Act*
3. *Canadian General Standards Board (CGSB).*
4. *Canadian Standards Association (CSA International). CAN/CSA-Z94.4-11 Respiratory Protection*

1.2 DEFINITIONS

Asbestos-Containing Materials (ACMs): means material that contains 1 per cent or more asbestos by dry weight as per Canada Occupational Health and Safety Regulations or 0.5 per cent or more asbestos by dry weight as per Ontario Regulation 278/05. For the purpose of this project, Asbestos-Containing Material means a material that contains 0.5 per cent or more asbestos by dry weight.

Time-weighted average exposure limit (TWAEL): the time-weighted average airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day or work week as prescribed by *O.Reg. 490/09 Designated Substances*, as amended.

1.3 DESIGNATED SUBSTANCES

Confirm with the Departmental Representative that no additional designated substances have been brought to the project area prior to beginning work.

Additional designated substances and hazardous materials may exist outside the accessible survey area but are beyond the scope of this project.

Should any additional material, suspected to be a designated substance, be encountered within the project area, any disturbance of such material must be stopped, precautionary measures taken, and the Departmental Representative

must be notified immediately. Do not proceed until written instructions have been received.

1. ACRYLONITRILE: Not Identified
2. ARSENIC: Not Identified
3. ASBESTOS: **Suspected**

Based on the analytical results presented in past designated substance reports for the L'Esplanade Laurier complex, various old caulking products have been confirmed to contain asbestos.

Newer caulking sampled from the joints in the cladding has been confirmed not to contain asbestos.

If old caulking is encountered during the cladding repairs, assume it contains asbestos and use appropriate asbestos work procedures.

4. BENZENE: Not Identified
5. COKE OVEN EMISSIONS: Not Identified
6. ETHYLENE OXIDE: Not Identified
7. ISOCYANATES: Not Identified
8. LEAD: Not Identified
9. MERCURY: Not Identified

10. SILICA: **Identified**

Silica is assumed to be present in the following building materials within the project area:

- Marble cladding; and
- Concrete building elements beneath cladding.

11. VINYL CHLORIDE MONOMER: Not Identified
12. POLYCHLORINATED BIPHENYLS (PCBs): Not Identified
13. OZONE DEPLETING SUBSTANCES (ODS): Not Identified

1.4 RECOMMENDATIONS

1. ASBESTOS

1. All work that may disturb asbestos must be done in accordance with *Canada Occupational Health and Safety Regulations* (as amended), *O.Reg. 278/05* (as amended) and the *PSPC Asbestos Management Standard*. In the event of conflict between the federal and provincial requirements, the most stringent procedures shall apply.
2. The regulations classify all asbestos disturbances as Low Risk (Type 1), Moderate Risk (Type 2), or High Risk (Type 3), each of which has defined precautionary measures.

2. SILICA

1. Comply with Ontario Regulations *O.Reg. 490/09* when performing works that may disturb silica-containing materials. The regulation defines allowable exposure levels.
2. Silica dust can be generated through such processes as drilling, coring, routing, and grinding silica-containing material. Since silica is present in select materials within the project area, appropriate respiratory protection must be used when working with these materials.
3. Follow recommendations provided in the Ontario Ministry of Labour Guideline entitled "*Guideline: Silica on Construction Projects*". This document classifies all silica disturbances as Type 1, Type 2 or Type 3 work, and assigns different levels of respiratory protection and work procedures for each classification.

END OF SECTION

Part 1 General**1.1 SUMMARY**

- .1 Comply with requirements of this Section when performing following work:
 - .1 Removal of non-friable asbestos-containing materials (e.g. old caulking) if the material is removed by breaking, cutting, drilling, abrading, grinding or vibrating, if the material is wetted to control the spread of dust and fibres, and the work is only done by non-powered hand-held tools.
 - .2 Refer to the Specification Section 01 14 25 – Designated Substances for details on asbestos-containing materials.

1.2 RELATED SECTIONS

- .1 Section 01 14 25 – Designated Substances

1.3 REFERENCES

- .1 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB-1.205-03, Sealer for Application of Asbestos-Fibre Releasing Materials.
- .2 PSPC Asbestos Management Standard
- .3 Department of Justice Canada (Jus).
 - .1 Canadian Environmental Protection Act, 1999 (CEPA).
- .4 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).
- .5 Transport Canada (TC).
 - .1 Transportation of Dangerous Goods Act, 1992 (TDGA).
- .6 Ontario Environmental Protection Act, R.R.O 1990,
 - .1 General – Waste Management, O. Reg. 347/90, as amended.
- .7 Underwriters' Laboratories of Canada (ULC).
- .8 National Joint Council (NJC).
 - .1 Part XI – Hazardous Substances.
- .9 *Canada Labour Code Part II, section 124 and 125.*
 - .1 *Canada Occupational Health and Safety Regulations*
- .10 Ontario Ministry of Labour (MoL).
 - .1 Occupational Health and Safety Act, R.S.O 1990, c. O1 (OSHA)
 - .1 *O.Reg. 278/05 – Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations, as amended*
 - .2 *Ontario Occupational Health and Safety Act, R.S.O. 1990, Regulation 490/09 “Designated Substances”, as amended.*
 - .3 *O.Reg. 213/91 - “Construction Projects”, as amended.*

1.4 DEFINITIONS

- .1 HEPA vacuum: DOP tested High Efficiency Particulate Air filtered vacuum equipment with filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.
- .2 Amended Water: water with non-ionic surfactant wetting agent added to reduce surface tension of water to allow thorough wetting of fibres.
- .3 Asbestos-Containing Materials (ACMs): materials that contain 0.5 percent or more asbestos by dry weight, identified under Existing Conditions including fallen materials and settled dust.
- .4 Asbestos Work Area: area where work takes place which will, or may, disturb ACMs.
- .5 Authorized Visitors: Departmental Representative, and representative(s) of regulatory agencies.
- .6 Competent worker: in relation to specific work, means a worker who:
 - .1 Is qualified because of knowledge, training and experience to perform the work.
 - .2 Is familiar with the provincial laws and with the provisions of the regulations that apply to the work.
 - .3 Has knowledge of all potential or actual danger to health or safety in the work.
- .7 DOP Test: testing method used to determine integrity of unit using Dispersed Oil Particulate (DOP) HEPA-filter leak test.
- .8 Friable material: means material that:
 - .1 When dry, can be crumbled, pulverized or powdered by hand pressure, or is crumbled, pulverized or powdered.
- .9 Hazardous Material Workplan: A brief report identifying the location and quantities of hazardous materials and the methods that will be used to remove, store, transport and dispose of them.
- .10 Non-Friable Material: material that when dry cannot be crumbled, pulverized or powdered by hand pressure.
- .11 Occupied Area: any area of the building or work site that is outside Asbestos Work Area.
- .12 Polyethylene: rip-proof polyethylene sheeting with tape along edges, around penetrating objects, over cuts and tears, and elsewhere as required to provide protection and isolation.
- .13 Sprayer: garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Sprayer must have appropriate capacity for work.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit proof satisfactory to the Departmental Representative that suitable arrangements have been made to dispose of asbestos-containing waste in accordance with requirements of authority having jurisdiction.
- .2 Submit Provincial/Territorial and/or local requirements for Notice of Project Form.

- .3 Submit proof of Contractor's Asbestos Liability Insurance.
- .4 Submit to the Departmental Representative necessary permits for transportation and disposal of asbestos-containing waste and proof that asbestos-containing waste has been received and properly disposed.
- .5 Submit proof that all asbestos workers and/or supervisor have received appropriate training and education by a competent person in the hazards of asbestos exposure, good personal hygiene and work practices while working in Asbestos Work Areas, and the use, cleaning and disposal of respirators and protective clothing.
- .6 Submit proof satisfactory to Departmental Representative that employees have appropriate respirator fitting and testing (fit test certificates). Workers must be fit-tested (qualitative as a minimum) with respirator that is personally issued.
- .7 Asbestos abatement section within Hazardous Material Work Plan.

1.6 QUALITY ASSURANCE

- .1 Regulatory Requirements: comply with Federal, Provincial/Territorial, and local requirements pertaining to asbestos, provided that in case of conflict among these requirements or with these specifications, more stringent requirement applies. Comply with regulations in effect at time Work is performed.
- .2 Health and Safety:
 - Safety Requirements: worker protection.
 - .1 Protective equipment and clothing to be worn by workers while in Asbestos Work Area include:
 - .1 As a minimum, air purifying half-mask respirator with N-100, R-100 or P-100 particulate filter, personally issued to worker and marked as to efficiency and purpose, suitable for protection against asbestos and acceptable to Provincial Authority having jurisdiction. The respirator to be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet. The respirator to be cleaned, disinfected and inspected after use on each shift, or more often if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker. The respirator to have damaged or deteriorated parts replaced prior to being used by a worker; and, when not in use, to be stored in a convenient, clean and sanitary location. The employer to establish written procedures regarding the selection, use and care of respirators, and a copy of the procedures to be provided to and reviewed with each worker who is required to wear a respirator. A worker not to be assigned to an operation requiring the use of a respirator unless he or she is physically able to perform the operation while using the respirator.
 - .2 Disposable-type protective clothing (high-density polyethylene protective clothing (Tyvek or similar, as approved by Departmental Representative) that does not readily retain or permit penetration of asbestos fibres. Protective clothing to be provided by the employer and worn by every worker who enters the work area, and the protective clothing shall consist of a head covering and full body

covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing to include suitable footwear, and to be repaired or replaced if torn.

- .2 Eating, drinking, chewing, and smoking are not permitted in Asbestos Work Area.
- .3 Before leaving Asbestos Work Area, the worker can decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, or, if the protective clothing will not be reused, place it in a container for dust and waste. The container to be dust tight, suitable for asbestos waste, impervious to asbestos, identified as asbestos waste, cleaned with a damp cloth or a vacuum equipped with a HEPA filter immediately before removal from the work area, and removed from the work area frequently and at regular intervals.
- .4 Facilities for washing hands and face shall be provided within or close to the Asbestos Work Area.
- .5 Ensure workers wash hands and face when leaving Asbestos Work Area.
- .6 Ensure that no person required to enter an Asbestos Work Area has facial hair that affects seal between respirator and face.

1.7 WASTE MANAGEMENT AND DISPOSAL

- .1 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .2 Place materials defined as hazardous or toxic in designated containers. Location and transportation of all on-site waste containers must be approved by Departmental Representative in writing prior to work.
- .3 Handle and dispose of hazardous materials in accordance with the CEPA, TDGA, Regional and Municipal regulations.
- .4 Disposal of asbestos waste generated by removal activities must comply with Federal, Provincial, Territorial and Municipal regulations. Dispose of asbestos waste in sealed double thickness 0.15 mm thick bags or leak proof drums. Label containers with appropriate warning labels.
- .5 Provide waste manifests describing and listing waste created. Transport containers by approved means to licensed landfill for burial. All waste landfill manifests are to be provided to the Client/Client Representative at the end of the project.

1.8 EXISTING CONDITIONS

- .1 Non-firable old caulking in several locations at the L'Esplanade Laurier complex has been found to contain asbestos. All old caulking should be treated as asbestos-containing if it is encountered.
- .2 Refer to the Specification Section 01 14 25 – Designated Substances for details on asbestos-containing materials.
- .3 Notify Departmental Representative of asbestos-containing material discovered during Work and not apparent from drawings, specifications, or report pertaining

to Work. Do not disturb such material pending instructions from Departmental Representative.

1.9 SCHEDULING

- .1 Hours of Work: perform work involving asbestos abatement located at the Building during hours specified by Departmental Representative. **The work schedule must be approved in writing by the Departmental Representative in advance of work.** Contractor shall be available to work continuously from beginning to end of project.

1.10 PERSONNEL TRAINING

- .1 Before beginning Work, provide Departmental Representative with satisfactory proof that every worker has had instruction and training in hazards of asbestos exposure, in personal hygiene and work practices, and in use, cleaning, and disposal of respirators and protective clothing.
- .2 Instruction and training related to respirators includes, following minimum requirements:
 - .1 Fitting of equipment.
 - .2 Inspection and maintenance of equipment.
 - .3 Disinfecting of equipment.
 - .4 Limitations of equipment.
- .3 Instruction and training must be provided by a competent, qualified person.

Part 2 Products

2.1 MATERIALS

- .1 Drop Sheets:
 - .1 Polyethylene: 0.15 mm thick.
 - .2 FR polyethylene: 0.15 mm thick woven fibre reinforced fabric bonded both sides with polyethylene.
- .2 Wetting Agent: 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in a concentration to provide thorough wetting of asbestos-containing material.
- .3 Waste Containers: contain waste in two separate containers.
 - .1 Inner container: 0.15 mm thick sealable polyethylene waste bag.
 - .2 Outer container: sealable metal or fibre type where there are sharp objects included in waste material; otherwise outer container may be sealable metal or fibre type or second 0.15 mm thick sealable polyethylene bag.
 - .3 Labelling requirements: affix preprinted cautionary asbestos warning in both official languages that is visible when ready for removal to disposal site.

Part 3 Execution**3.1 SUPERVISION**

- .1 Minimum of one Supervisor for every ten workers is required inside the asbestos work areas at all times.
- .2 Approved Supervisor must remain within Asbestos Work Area during disturbance, removal, or other handling of asbestos-containing materials.

3.2 PROCEDURES

- .1 Before beginning Work, isolate Asbestos Work Area using, at a minimum, preprinted cautionary asbestos warning signs in both official languages that are visible at access routes to Asbestos Work Area.
 - .1 Remove visible dust from surfaces in the work area where dust is likely to be disturbed during course of work.
 - .2 Use HEPA vacuum, or damp cloths where damp cleaning does not create a hazard and is otherwise appropriate.
 - .3 Do not use compressed air to clean up or remove dust from any surface.
- .2 Prevent spread of dust from Asbestos Work Area using measures appropriate to work to be done.
 - .1 Use FR polyethylene drop sheets over flooring such as carpeting that absorbs dust and over flooring in Asbestos Work Area where dust and contamination cannot otherwise be safely contained.
- .3 Wet materials containing asbestos to be cut, ground, abraded, scraped, drilled, or otherwise disturbed unless wetting creates hazard or causes damage.
 - .1 Use garden reservoir type low - velocity fine - mist sprayer.
 - .2 Perform Work to reduce dust creation to lowest levels practicable.
 - .3 Work will be subject to visual inspection.
 - .4 Contamination of surrounding areas indicated by visual inspection or air monitoring will require complete enclosure and clean-up of affected areas.
- .4 Cutting, shaping, grinding, drilling, abrading or otherwise disturbing non-friable asbestos-containing materials shall be executed using non-powered hand-tools only.
- .5 If encountered, collect samples of old caulking suspected of containing asbestos for confirmatory laboratory analysis.
 - .1 Place sample from one location in zip-lock type plastic bag. Seal bag.
 - .2 Label bag with the tower (east or west), side (north, east, south, west) and floor.
 - .3 Give samples to Departmental Representative. Sample analysis will be performed by PSPC.
 - .4 Collect a total of 5 samples from different areas as work progresses.
- .6 Clean-Up:
 - .1 Frequently during Work and immediately after completion of Work, clean up dust and asbestos-containing waste using HEPA vacuum or by damp mopping.

- .2 Place dust and asbestos-containing waste in sealed dust-tight waste bags. Treat drop sheets and disposable protective clothing as asbestos waste; wet and fold these items to contain dust, then place in plastic bags.
- .3 Clean exterior of each waste-filled bag using damp cloths or HEPA vacuum and place in second clean waste bag immediately prior to removal from Asbestos Work Area.
- .4 Seal waste bags and remove from site. Dispose of in accordance with requirements of Provincial and Federal Authority having jurisdiction. Supervise dumping and ensure that dump operator is fully aware of hazardous nature of material to be dumped and that guidelines and regulations for asbestos disposal are followed.
- .5 Perform final thorough clean-up of Work areas and adjacent areas affected by Work using HEPA vacuum or damp wiping.

3.3 INSPECTION

- .1 Perform inspection of Asbestos Work Area to confirm compliance with specification and governing authority requirements. Deviation(s) from these requirements that have not been approved in writing by Departmental Representative may result in Work stoppage, at no cost to Owner.
- .2 Departmental Representative may inspect Work at any time during the project for:
 - .1 Adherence to specific procedures and materials.
 - .2 Final cleanliness and completion.
 - .3 No additional costs will be allowed by Contractor for additional labour or materials required to provide specified performance level.
- .3 When asbestos leakage from Asbestos Work Area has occurred or is likely to occur Departmental Representative may order Work shutdown.
- .4 No additional costs will be allowed by the Contractor for additional labour or materials required to provide specified performance level.

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 00 10 General Requirements
- .2 Section 01 35 29.06 Health and Safety Requirements
- .3 Section 01 14 25 Designated Substances

1.2 REFERENCE STANDARDS

- .1 American National Standards Institute (ANSI)
 - .1 ANSI A108.1-13, Installation of Ceramic Tile (Includes ANSI A108.1A-C, 108.4-.13, A118.1-.10, A136.1).
- .2 ASTM International
 - .1 ASTM C144-11, Standard Specification for Aggregate for Masonry Mortar.
 - .2 ASTM C207-06(2011), Standard Specification for Hydrated Lime for Masonry Purposes.
 - .3 ASTM C503/C503M10, Standard Specification for Marble Dimension Stone.
 - .4 ASTM F593-CW, Standard Specification for Stainless Steel Bolts, Hex, Cap Screws, and Studs.
 - .5 ASTM C920 Standard Specification for Elastomeric Joint Sealants.
 - .6 ASTM SC881 Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-25.20-95, Surface Sealer for Floors.
 - .2 CAN/CGSB 19.13-M87
- .4 CSA Group
 - .1 CAN/CSA-A3000-08, Cementitious Materials Compendium (Consists of A3001, A3002, A3003, A3004 and A3005).

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 00 01 – 1.4 Submittal Procedures
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for repair materials and caulking and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Submit drawings stamped and signed by professional engineer registered or licensed in Ontario, Canada.
 - .1 Indicate sizes and sections of marble, arrangements of joints and bonding, anchoring, dowelling, and cramping.

- .2 Each section of marble indicated on drawings must bear corresponding number marked on its back or bed.
- .4 Samples: N/A
- .5 Sustainable Design Submittals: N/A
- .1 Recycled Content: N/A

1.4 MAINTENANCE MATERIAL SUBMITTALS N/A

1.5 QUALITY ASSURANCE

- .1 Test Reports: submit certified test showing compliance with specified performance characteristics and physical properties.
- .2 Manufacturer's Instructions: submit in accordance with Section 01 00 01 – 1.4 Submittal Procedures.
- .3 Pre-Installation Meetings::
 - .1 Conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Replace defective or damaged materials with new.

1.7 AMBIENT CONDITIONS

- .1 Install only when temperature is more than 12degrees C and less than 38 degrees C.

Part 2 Products

2.1 MATERIALS

- .1 Threaded Rods: Stainless Steel Type 316, 9.5 mm diameter threaded rods.

2.2 MORTAR AND ADHESIVE MATERIALS

- .1 Adhesive Anchoring System:
Two Part Epoxy Anchoring Adhesive conforming to ASTM C881 and suitable for use in wet or dry conditions, Styrene Free and Low VOC

2.3 GROUT. N/A

2.4 CAULKING

- .1 High Performance One-component Polyurethane non-sag elastomeric sealant conforming to CAN/CGSB 19.13-M87, Classification MCG-2-25-B-N and ASTM C920 Type S, Grade NS,

2.5 ACCESSORIES N/A

2.6 FINISHES N/A

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of existing are acceptable for marble veneer repairs as specified installation.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 PREPARATION

- .1 Verify documentation for location and condition of repair locations. Coordinate placement of metal pins in conjunction with caulking. Verify existing caulking type is compatible with proposed use prior to commencement of work.

3.3 INSTALLATION

- .1 Installation shall comply with manufacturer's written recommendations.
- .2 A minimum outdoor temperature of 5°C is required at time of installation of any product.
- .3 Removal of caulking should not be left without placement of new caulking for longer than 1 week without written approval by Departmental Representative.

3.4 FIELD QUALITY CONTROL

- .1 Manufacturer's Field Services: N/A

3.5 CLEANING

- .1 Progress Cleaning:
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment
 - .1 Wash marble with soft fibre brushes, soap powder and clean water.
 - .2 Remove surplus and excess materials, rubbish, tools and equipment.
- .3 Waste Management:

- .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.6 REPAIRS

- .1 Pin-In-Place Repair (D-1)
 - .1 Panel is to be drilled without hammer drilling 90mm deep at a declined angle of 20° perpendicular to panel.
 - .2 Hole is to be cleaned out in accordance to Section 3.4
 - .3 Hole is to be injected with adhesive under manufacturer's recommendations
 - .4 Threaded rod is to be inserted into hole
- .2 Caulking Repair (D-2)
 - .1 Existing caulking to be removed
 - .2 Marble surface to be cleaned as per manufacturers recommendations
 - .3 Insert backer rod
 - .4 Insert caulking
- .3 Remove and Caulk Repair (D-3)
 - .1 Existing un-caulked spalled area to be cleaned
 - .2 Caulking to cover entire area, and properly adhered to surrounding marble
- .4 Crack Repair (D-4)
 - .1 Crack in marble to be routed at 5mm depth, with sufficient width for proper adherence of sealant. OR
 - .2 Existing routed crack to have deteriorating existing caulking removed and cleaned.
 - .3 Insert sealant in routed area.
 - .1 If marble spalls due to small area worked on, remove spalled pieces and follow Section 3.5.4 repair detail
- .5 Pin Re-caulking (D-5)
 - .1 Remove existing caulking
 - .2 Clean out void, contractor to ensure no water is in void
 - .3 Caulk void and ensure no water can infiltrate void

END OF SECTION



Public Works
Government Services
Canada

Architectural and
Engineering Services

Ontario Region

Travaux publics
Services gouvernementaux
Canada

Services d'architecture
et de génie

Région de l'Ontario

Ottawa Ontario

L'Esplanade Laurier
300 Laurier Avenue West
K1A 0S5

Marble Cladding
Inspection and Repairs

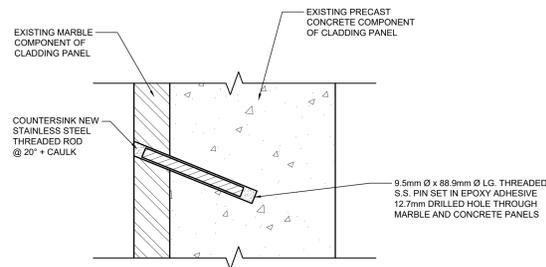
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Canada

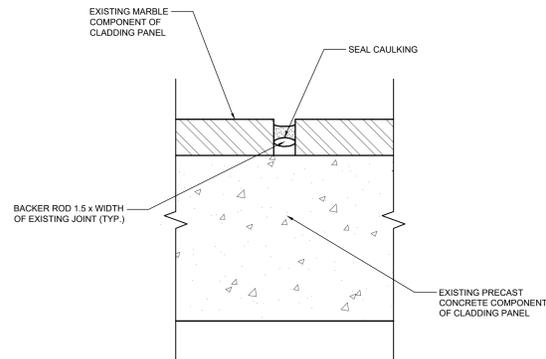
LIST OF DRAWINGS

STRUCTURAL

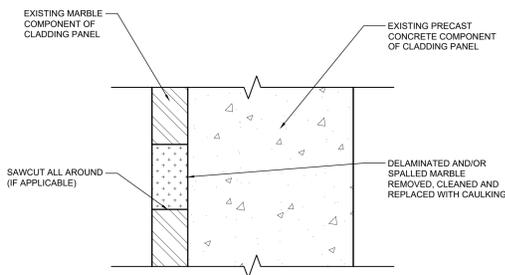
S001	REPAIR DETAILS
S002	EAST TOWER – EAST AND SOUTH ELEVATION
S003	EAST TOWER – WEST AND NORTH ELEVATION
S004	EAST TOWER – EAST FACE – LIST OF REPAIRS
S005	EAST TOWER – NORTH FACE – LIST OF REPAIRS
S006	EAST TOWER – SOUTH FACE – LIST OF REPAIRS
S007	EAST TOWER – WEST FACE – LIST OF REPAIRS
S008	WEST TOWER – EAST AND SOUTH ELEVATION
S009	WEST TOWER – WEST AND NORTH ELEVATION
S010	WEST TOWER – EAST FACE – LIST OF REPAIRS
S011	WEST TOWER – NORTH FACE – LIST OF REPAIRS
S012	WEST TOWER – SOUTH FACE – LIST OF REPAIRS
S013	WEST TOWER – WEST FACE – LIST OF REPAIRS



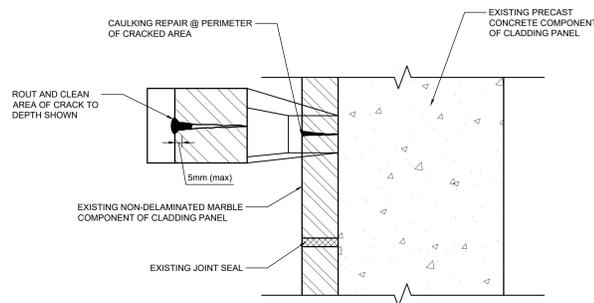
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N.T.S.



D-2: CAULKING REPAIR
N.T.S.

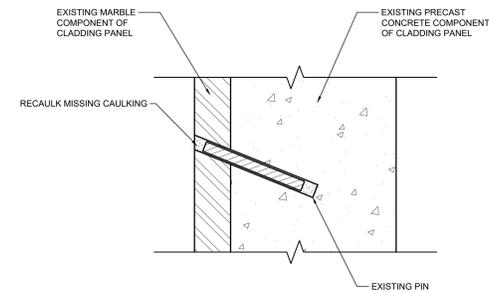


D-3: REMOVE AND CAULK REPAIR
N.T.S.



NOTE :- IF MARBLE PIECE BREAKS OFF DURING REPAIR, REMOVE SPALLED PIECE & CAULK IN ACCORDANCE WITH D-3.
- EXISTING MARBLE WITH DETERIORATED CAULKING, ARE TO HAVE CAULKING REMOVED, CLEANED, AND REPLACED WITH NEW CAULKING AS REQUIRED.

D-4: CRACK CAULK REPAIR
N.T.S.



D-5: PIN RE-CAULK REPAIR
N.T.S.

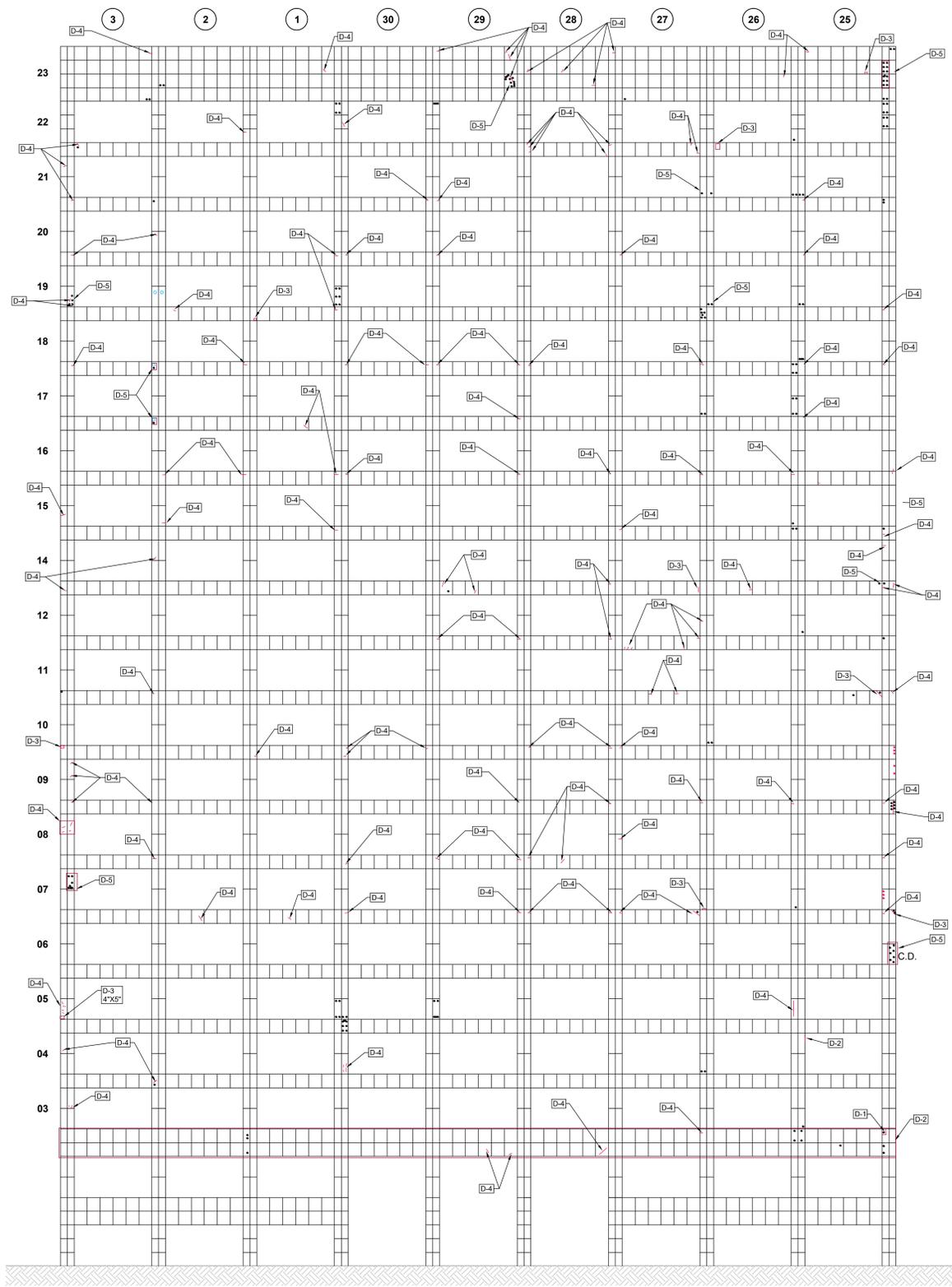


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01	RELEASED FOR TENDER	2018/08/27
revision	description	date

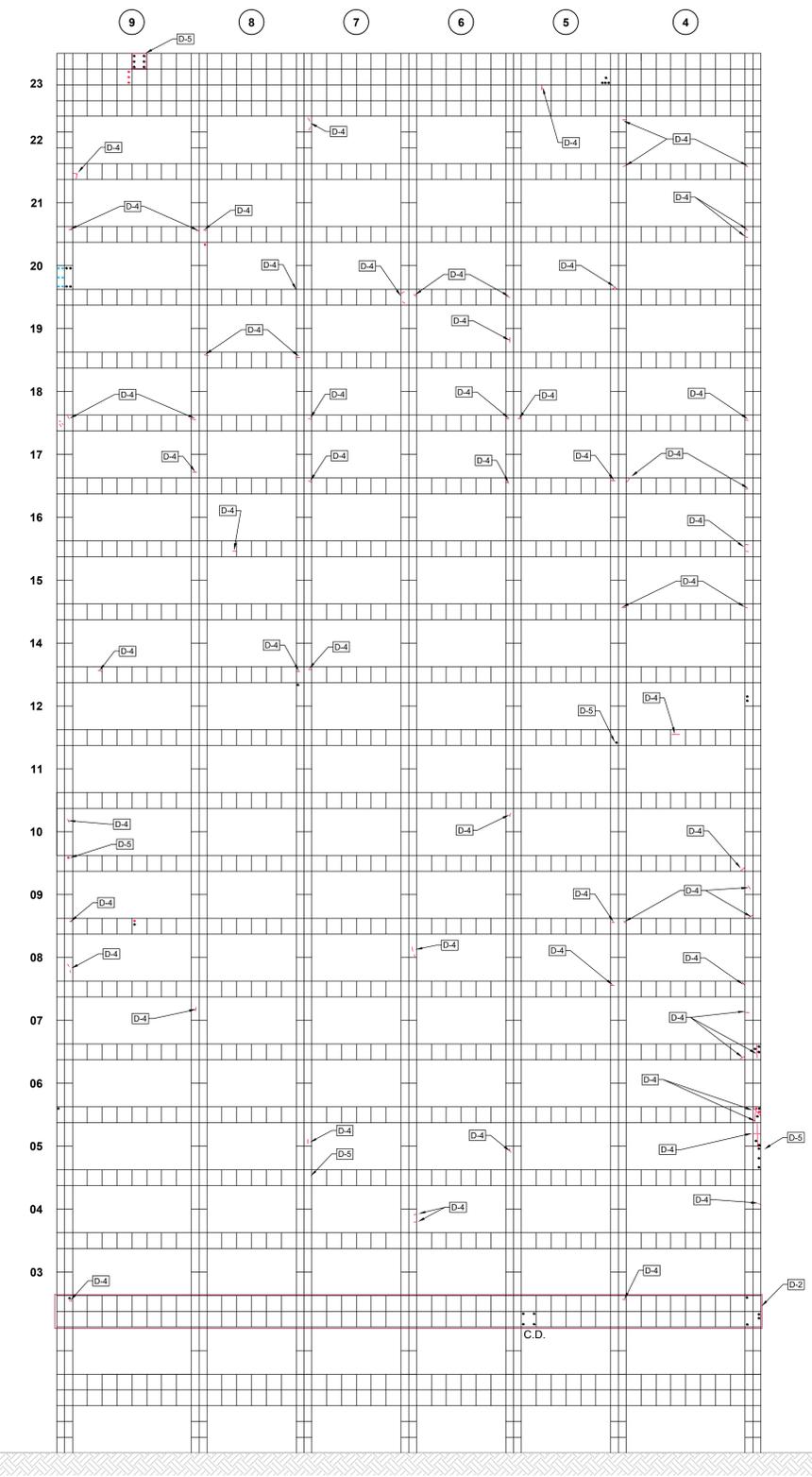
Do not scale drawings.
Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

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B drawing no. - where detail required / dessin no. - où détail exigé
C drawing no. - where detailed / dessin no. - où détaillé

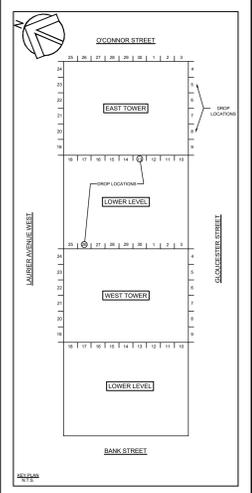
project title / titre du projet	Ottawa Ontario
300 Laurier Avenue West	
MARBLE CLADDING INSPECTION AND REPAIRS	
REPAIR DETAILS	
drawn by / dessiné par	A.S.C.
designed by / conçu par	E.P.B.
approved by / approuvé par	E.P.B.
tender / soumission	project manager / administrateur de projets
project date / date du projet	2018/08/30
project no. / no. du projet	R.082541.100
drawing no. / dessin no.	S001



EAST TOWER - EAST ELEVATION



EAST TOWER - SOUTH ELEVATION



- LEGEND:
- PROPOSED PINS
 - CJEL - PINS
 - EXISTING PINS
 - C.D. COMPLETE DELAMINATION
 - D-# REPAIR DETAIL NO.



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02	RELEASED FOR TENDER	2019/06/27
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- A Detail No. / No. du détail
- B drawing no. - where detail required / dessin no. - où détail exigé
- C drawing no. - where detailed / dessin no. - où détaillé

project title / titre du projet
Ottawa Ontario
 300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS

drawing title / titre du dessin
EAST TOWER EAST & SOUTH ELEVATION

drawn by / dessiné par
A.S.C.

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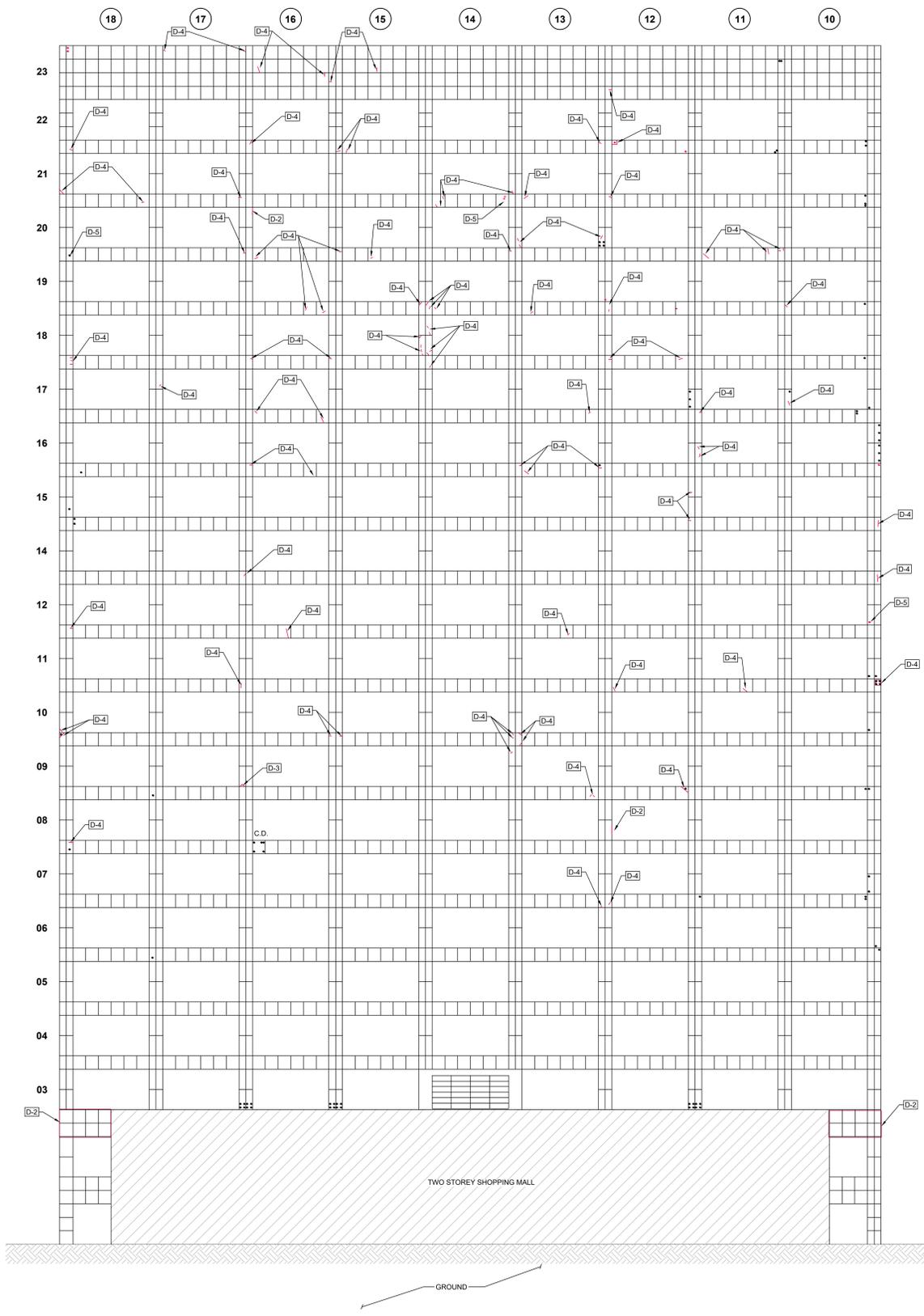
approved by / approuvé par
E.P.B.

tender / soumission project manager / administrateur de projets

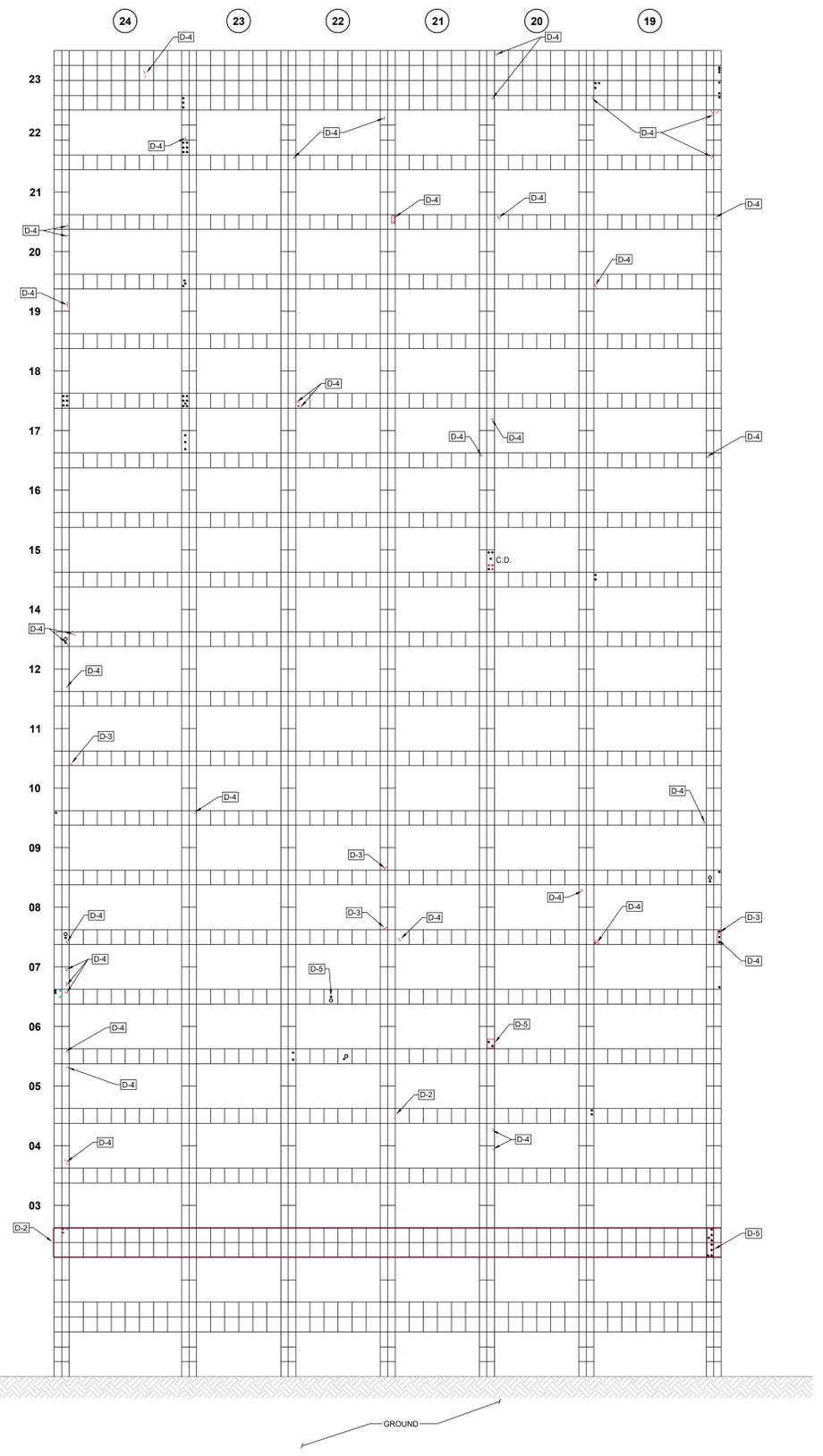
project date / date du projet
2018/08/30

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R.082541.100

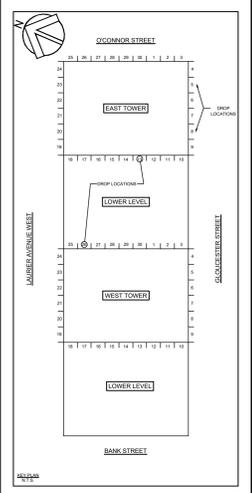
drawing no. / dessin no.
S002



EAST TOWER - WEST ELEVATION



EAST TOWER - NORTH ELEVATION



- LEGEND:
- PROPOSED PINS
 - CJEL - PINS
 - EXISTING PINS
 - C.D. COMPLETE DELAMINATION
 - D-# REPAIR DETAIL NO.



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- Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.
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project title / titre du projet
Ottawa Ontario
 300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS

drawing title / titre du dessin
EAST TOWER WEST & NORTH ELEVATION

drawn by / dessiné par: **A.S.C.**
 designed by / conçu par: **E.P.B.**
 approved by / approuvé par: **E.P.B.**
 tender / soumission: _____ project manager / administrateur de projets: _____

project date / date du projet: **2018/08/30**

project no. / no. du projet: **R.082541.100**

drawing no. / dessin no.: **S003**

L'ESPLANADE LAURIER TENDER QUANTITIES EAST TOWER - EAST FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	1
2	F-1000	Caulking Repair (Type #2)	each*/m	± 250
3	F-1000	Remove & Caulk Repair (Type #3)	each	6
4	F-1000	Crack Repair (Type #4)	each	95
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	9

* Estimated length for "each" repair, 10 cm

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
25	23	Rout & Caulk Crack	D-4	1
25	23	Pin Recaulking	D-5	12
25	21	Rout & Caulk Crack	D-4	1
25	20	Rout & Caulk Crack	D-4	1
25	19	Rout & Caulk Crack	D-4	1
25	18	Rout & Caulk Crack	D-4	2
25	17	Rout & Caulk Crack	D-4	1
25	16	Rout & Caulk Crack	D-4	2
25	15	Pin Recaulking	D-5	1
25	15	Rout & Caulk Crack	D-4	1
25	14	Rout & Caulk Crack	D-4	3
25	14	Pin Recaulking	D-5	1
25	11	Rout & Caulk Crack	D-4	2
25	9	Rout & Caulk Crack	D-4	2
25	8	Rout & Caulk Crack	D-4	1
25	7	Rout & Caulk Crack	D-4	1
25	7	Delaminated - Remove & Caulk	D-3	1
25	6	Pin Recaulking	D-5	7
25	4	Caulking w/ backer rod	D-2	1
25	3	Pin-In-Place Repair	D-1	1

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
26	23	Rout & Caulk Crack	D-4	1
26	22	Delaminated - Remove & Caulk	D-3	1
26	22	Rout & Caulk Crack	D-4	1
26	19	Pin Recaulking	D-5	1
26	16	Rout & Caulk Crack	D-4	1
26	14	Rout & Caulk Crack	D-4	1
26	9	Rout & Caulk Crack	D-4	1
26	5	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
27	23	Rout & Caulk Crack	D-4	2
27	21	Pin Recaulking	D-5	1
27	20	Rout & Caulk Crack	D-4	1
27	18	Rout & Caulk Crack	D-4	1
27	16	Rout & Caulk Crack	D-4	1
27	15	Rout & Caulk Crack	D-4	1
27	14	Rout & Caulk Crack	D-4	5
27	11	Rout & Caulk Crack	D-4	5
27	10	Rout & Caulk Crack	D-4	1
27	9	Rout & Caulk Crack	D-4	1
27	8	Rout & Caulk Crack	D-4	1
27	7	Rout & Caulk Crack	D-4	2
27	7	Delaminated - Remove & Caulk	D-3	1
27	3	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
28	23	Rout & Caulk Crack	D-4	4
28	22	Pin Recaulking	D-5	12
28	18	Rout & Caulk Crack	D-4	1
28	16	Rout & Caulk Crack	D-4	1
28	14	Rout & Caulk Crack	D-4	1
28	12	Rout & Caulk Crack	D-4	1
28	10	Rout & Caulk Crack	D-4	2
28	9	Rout & Caulk Crack	D-4	1
28	8	Rout & Caulk Crack	D-4	2
28	7	Rout & Caulk Crack	D-4	2
28	3	Rout & Caulk Crack	D-4	1

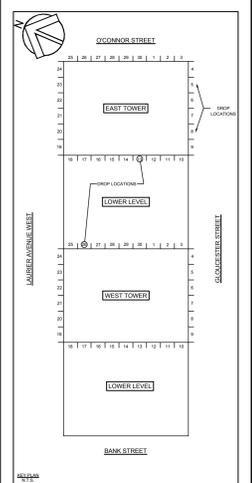
List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
29	23	Rout & Caulk Crack	D-4	4
29	23	Pin Recaulking	D-5	12
29	21	Rout & Caulk Crack	D-4	1
29	20	Rout & Caulk Crack	D-4	1
29	18	Rout & Caulk Crack	D-4	2
29	17	Rout & Caulk Crack	D-4	1
29	16	Rout & Caulk Crack	D-4	1
29	14	Rout & Caulk Crack	D-4	2
29	12	Rout & Caulk Crack	D-4	1
29	9	Rout & Caulk Crack	D-4	1
29	8	Rout & Caulk Crack	D-4	2
29	4	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
30	22	Rout & Caulk Crack	D-4	1
30	21	Rout & Caulk Crack	D-4	1
30	21	Rout & Caulk Crack	D-4	1
30	20	Rout & Caulk Crack	D-4	1
30	18	Rout & Caulk Crack	D-4	2
30	16	Rout & Caulk Crack	D-4	1
30	10	Rout & Caulk Crack	D-4	3
30	8	Rout & Caulk Crack	D-4	1
30	7	Rout & Caulk Crack	D-4	1
30	4	Rout & Caulk Crack	D-4	4

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
1	23	Rout & Caulk Crack	D-4	1
1	20	Rout & Caulk Crack	D-4	1
1	19	Rout & Caulk Crack	D-4	1
1	19	Delaminated - Remove & Caulk	D-3	1
1	17	Rout & Caulk Crack	D-4	1
1	16	Rout & Caulk Crack	D-4	1
1	15	Rout & Caulk Crack	D-4	1
1	14	Rout & Caulk Crack	D-4	1
1	10	Rout & Caulk Crack	D-4	1
1	7	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
2	23	Rout & Caulk Crack	D-4	1
2	22	Rout & Caulk Crack	D-4	2
2	19	Rout & Caulk Crack	D-4	1
2	18	Rout & Caulk Crack	D-4	1
2	16	Rout & Caulk Crack	D-4	2
2	15	Rout & Caulk Crack	D-4	1
2	7	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
3	23	Rout & Caulk Crack	D-4	1
3	22	Rout & Caulk Crack	D-4	1
3	21	Rout & Caulk Crack	D-4	2
3	20	Rout & Caulk Crack	D-4	2
3	19	Pin Recaulking	D-5	4
3	19	Rout & Caulk Crack	D-4	2
3	18	Rout & Caulk Crack	D-4	1
3	18	Rout & Caulk Crack (Core)	D-4	1
3	17	Rout & Caulk Crack (Core)	D-4	1
3	15	Rout & Caulk Crack	D-4	1
3	14	Rout & Caulk Crack	D-4	2
3	11	Rout & Caulk Crack	D-4	1
3	10	Delaminated - Remove & Caulk	D-3	1
3	9	Rout & Caulk Crack	D-4	4
3	8	Rout & Caulk Crack	D-4	5
3	7	Pin Recaulking	D-5	7
3	5	Delaminated - Remove & Caulk	D-3	1
3	5	Rout & Caulk Crack	D-4	3
3	4	Rout & Caulk Crack	D-4	2
3	3	Rout & Caulk Crack	D-4	1



revision	description	date
04		
03		
02		
01	RELEASED FOR TENDER	2019/06/27

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

A	Detail No. / No. du détail
B	drawing no. - where detail required / dessin no. - où détail exigé
C	drawing no. - where detailed / dessin no. - où détaillé

project title / titre du projet
Ottawa Ontario
 300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS

drawing title / titre du dessin
EAST TOWER EAST FACE LIST OF REPAIRS

drawn by / dessiné par
A.S.C.

designed by / conçu par
E.P.B.

approved by / approuvé par
E.P.B.

tender / soumission project manager / administrateur de projets

project date / date du projet
2018/08/30

project no. / no. du projet
R.082541.100

drawing no. / dessin no.
S004

L'ESPLANADE LAURIER TENDER QUANTITIES EAST TOWER - NORTH FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	0
2	F-1000	Caulking Repair (Type #2)	each/m	1
3	F-1000	Remove & Caulk Repair (Type #3)	each	4
4	F-1000	Crack Repair (Type #4)	each	44
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	11

*Estimated length for "each" repair, 10 cm

List of Repairs: East Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
19	22	Rout & Caulk Crack	D-4	1
19	22	Rout & Caulk Crack	D-4	3
19	21	Rout & Caulk Crack	D-4	1
19	20	Rout & Caulk Crack	D-4	1
19	17	Rout & Caulk Crack	D-4	1
19	10	Rout & Caulk Crack	D-4	1
19	8	Delaminated - Remove & Caulk	D-3	1
19	8	Rout & Caulk Crack	D-4	2
19	3	Pin Recaulking	D-5	9

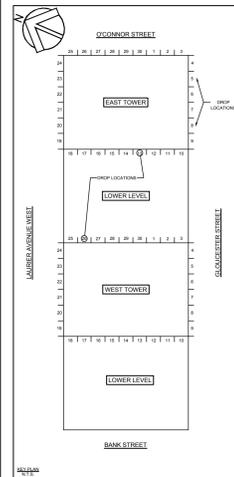
List of Repairs: East Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
20	23	Rout & Caulk Crack	D-4	2
20	21	Rout & Caulk Crack	D-4	1
20	17	Rout & Caulk Crack	D-4	1
20	8	Rout & Caulk Crack	D-4	1
20	6	Pin Recaulking	D-5	2
20	4	Rout & Caulk Repair	D-4	2

List of Repairs: East Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
21	21	Rout & Caulk Crack	D-4	1
21	17	Rout & Caulk Crack	D-4	1
21	8	Rout & Caulk Crack	D-4	1
21	5	Caulking w/ backer rod	D-2	1

List of Repairs: East Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
22	22	Rout & Caulk Crack	D-4	2
22	18	Delaminated - Rout & Caulk	D-4	2
22	9	Delaminated - Remove & Caulk	D-3	1
22	8	Delaminated - Remove & Caulk	D-3	1
22	7	Pin Recaulking	D-5	1

List of Repairs: East Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
23	10	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
24	23	Rout & Caulk Crack	D-4	2
24	22	Rout & Caulk Crack	D-4	1
24	21	Rout & Caulk Crack	D-4	1
24	20	Rout & Caulk Crack	D-4	1
24	14	Rout & Caulk Crack	D-4	2
24	12	Rout & Caulk Crack	D-4	1
24	11	Delaminated - Remove & Caulk	D-3	1
24	8	Rout & Caulk Crack	D-4	1
24	7	Rout & Caulk Crack	D-4	3
24	6	Rout & Caulk Crack	D-4	1
24	5	Rout & Caulk Crack	D-4	1
24	4	Rout & Caulk Crack	D-4	1



revision	description	date
04		
03		
02		
01	RELEASED FOR TENDER	2018/06/27

Do not scale drawings.
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A	B	C
Detail No. No. du détail	drawing no. - where detail required dessin no. - où détail exigé	drawing no. - where detailed dessin no. - où détaillé

project title
titre du projet
Ottawa Ontario
300 Laurier Avenue West
**MARBLE CLADDING
INSPECTION AND REPAIRS**

drawing title
titre du dessin
**EAST TOWER
NORTH FACE
LIST OF REPAIRS**

drawn by
dessiné par **A.S.C.**

designed by
conçu par **E.P.B.**

approved by
approuvé par **E.P.B.**

tender
soumission project manager
administrateur de projets

project date
date du projet **2018/08/30**
project no.
no. du projet **R.082541.100**
drawing no.
dessiné no. **S005**

L'ESPLANADE LAURIER TENDER QUANTITIES EAST TOWER - SOUTH FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	0
2	F-1000	Caulking Repair (Type #2)	each/m	99
3	F-1000	Remove & Caulk Repair (Type #3)	each	0
4	F-1000	Crack Repair (Type #4)	each	51
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	5

* Estimated length for "each" repair, 10 cm

List of Repairs: East Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
4	22	Rout & Caulk Crack	D-4	3
4	21	Rout & Caulk Crack	D-4	2
4	18	Rout & Caulk Crack	D-4	1
4	17	Rout & Caulk Crack	D-4	2
4	16	Rout & Caulk Crack	D-4	2
4	15	Rout & Caulk Crack	D-4	2
4	14	Rout & Caulk Crack	D-4	1
4	10	Rout & Caulk Crack	D-4	1
4	9	Rout & Caulk Crack	D-4	3
4	8	Rout & Caulk Crack	D-4	2
4	7	Rout & Caulk Crack	D-4	3
4	6	Rout & Caulk Crack	D-4	2
4	5	Rout & Caulk Crack	D-4	3
4	5	Pin Recaulking	D-5	2
4	4	Rout & Caulk Crack	D-4	1
4	3	Rout & Caulk Crack	D-4	1

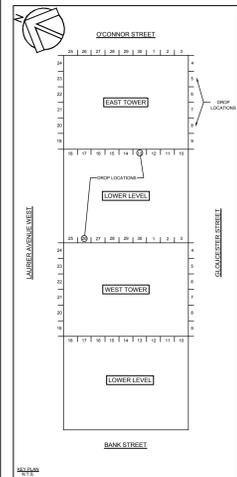
List of Repairs: East Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
5	23	Rout & Caulk Crack	D-4	2
5	20	Rout & Caulk Crack	D-4	1
5	18	Rout & Caulk Crack	D-4	1
5	17	Rout & Caulk Crack	D-4	1
5	15	Rout & Caulk Crack	D-4	1
5	12	Pin Recaulking	D-5	1
5	9	Rout & Caulk Crack	D-4	1
5	8	Rout & Caulk Crack	D-4	1
5	4	Rout & Caulk Crack	D-4	2

List of Repairs: East Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
6	20	Rout & Caulk Crack	D-4	2
6	19	Rout & Caulk Crack	D-4	1
6	18	Rout & Caulk Crack	D-4	1
6	17	Rout & Caulk Crack	D-4	1
6	10	Rout & Caulk Crack	D-4	1
6	8	Rout & Caulk Crack	D-4	2
6	5	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
7	22	Rout & Caulk Crack	D-4	2
7	20	Rout & Caulk Crack	D-4	2
7	18	Rout & Caulk Crack	D-4	1
7	17	Rout & Caulk Crack	D-4	1
7	14	Rout & Caulk Crack	D-4	1
7	5	Rout & Caulk Crack	D-4	1
7	5	Pin Recaulking	D-5	2

List of Repairs: East Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
8	21	Rout & Caulk Crack	D-4	1
8	20	Rout & Caulk Crack	D-4	1
8	18	Rout & Caulk Crack	D-4	2
8	16	Rout & Caulk Crack	D-4	1
8	14	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
9	23	Pin Recaulking	D-5	2
9	22	Rout & Caulk Crack	D-4	1
9	21	Rout & Caulk Crack	D-4	2
9	18	Rout & Caulk Crack	D-4	3
9	17	Rout & Caulk Crack	D-4	1
9	14	Rout & Caulk Crack	D-4	1
9	10	Rout & Caulk Crack	D-4	1
9	10	Pin Recaulking	D-5	1
9	9	Rout & Caulk Crack	D-4	1
9	8	Rout & Caulk Crack	D-4	2
9	7	Rout & Caulk Crack	D-4	1
9	3	Rout & Caulk Crack	D-4	1



revision	description	date
04		
03		
02		
01	RELEASED FOR TENDER	2018/06/27

Do not scale drawings.
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A	B	C
Detail No.	Detail No. - where detail required	Detail No. - where detailed
No. du détail	dessin no. - où détail requis	dessin no. - où détaillé

project title
 titre du projet
Ottawa Ontario

300 Laurier Avenue West
**MARBLE CLADDING
 INSPECTION AND REPAIRS**

drawing title
 titre du dessin
**EAST TOWER
 SOUTH FACE
 LIST OF REPAIRS**

drawn by
 dessiné par **A.S.C.**

designed by
 conçu par **E.P.B.**

approved by
 approuvé par **E.P.B.**

tender
 soumission project manager
 administrateur de projets

project date
 date du projet **2018/08/30**

project no.
 no. du projet **R.082541.100**

drawing no.
 dessin no. **S006**

L'ESPLANADE LAURIER TENDER QUANTITIES EAST TOWER - WEST FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	0
2	F-1000	Caulking Repair (Type #2)	each/m	3
3	F-1000	Remove & Caulk Repair (Type #3)	each	2
4	F-1000	Crack Repair (Type #4)	each	98
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	4

*Estimated length for "each" repair, 10 cm

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
10	19	Rout & Caulk Crack	D-4	1
10	17	Rout & Caulk Crack	D-4	1
10	15	Rout & Caulk Crack	D-4	1
10	14	Rout & Caulk Crack	D-4	1
10	12	Pin Recaulking	D-5	1
10	11	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
11	20	Rout & Caulk Crack	D-4	4
11	17	Rout & Caulk Crack	D-4	1
11	16	Rout & Caulk Crack	D-4	2
11	11	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
12	23	Rout & Caulk Crack	D-4	1
12	22	Rout & Caulk Crack	D-4	1
12	21	Rout & Caulk Crack	D-4	1
12	19	Rout & Caulk Crack	D-4	1
12	18	Rout & Caulk Crack	D-4	2
12	15	Rout & Caulk Crack	D-4	2
12	11	Rout & Caulk Repair	D-4	1
12	9	Rout & Caulk Crack	D-4	1
12	8	Joint Caulking Repair	D-2	1
12	7	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
13	22	Rout & Caulk Crack	D-4	1
13	21	Rout & Caulk Crack	D-4	1
13	20	Rout & Caulk Crack	D-4	3
13	19	Rout & Caulk Crack	D-4	1
13	17	Rout & Caulk Crack	D-4	1
13	16	Rout & Caulk Crack	D-4	3
13	10	Rout & Caulk Crack	D-4	2
13	12	Rout & Caulk Crack	D-4	1
13	10	Rout & Caulk Crack	D-4	2
13	9	Rout & Caulk Crack	D-4	2
13	7	Rout & Caulk Crack	D-4	1

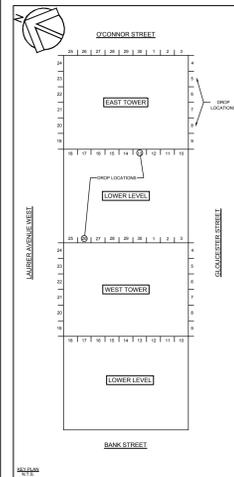
List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
14	21	Rout & Caulk Crack	D-4	3
14	21	Pin Recaulking	D-5	2
14	20	Rout & Caulk Crack	D-4	1
14	19	Rout & Caulk Crack	D-4	3
14	18	Rout & Caulk Crack	D-4	5
14	10	Rout & Caulk Crack	D-4	3

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
15	23	Rout & Caulk Crack	D-4	1
15	22	Rout & Caulk Crack	D-4	2
15	20	Rout & Caulk Crack	D-4	2
15	19	Rout & Caulk Crack	D-4	1
15	18	Rout & Caulk Crack	D-4	4
15	10	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
16	23	Rout & Caulk Crack	D-4	3
16	22	Rout & Caulk Crack	D-4	1
16	20	Joint (sealant) Crack	D-2	1
16	20	Rout & Caulk Crack	D-4	1
16	19	Rout & Caulk Crack	D-4	2
16	18	Rout & Caulk Crack	D-4	2
16	17	Rout & Caulk Crack	D-4	2
16	16	Rout & Caulk Crack	D-4	2
16	12	Rout & Caulk Crack	D-4	1
16	10	Rout & Caulk Crack	D-4	1

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
17	23	Rout & Caulk Crack	D-4	2
17	21	Rout & Caulk Crack	D-4	1
17	20	Rout & Caulk Crack	D-4	1
17	17	Rout & Caulk Crack	D-4	1
17	14	Rout & Caulk Crack	D-4	1
17	11	Rout & Caulk Crack	D-4	1
17	9	Delaminated - Remove Caulk	D-3	2

List of Repairs: East Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
18	22	Rout & Caulk Crack	D-4	1
18	21	Rout & Caulk Crack	D-4	2
18	20	Pin Recaulking	D-5	1
18	18	Rout & Caulk Crack	D-4	3
18	12	Rout & Caulk Crack	D-4	1
18	10	Rout & Caulk Crack	D-4	2
18	8	Caulking w/ backer rod	D-2	1



04		
03		
02		
01	RELEASED FOR TENDER	2019/06/27
revision	description	date

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

A	Detail No. / No. du détail
B	drawing no. - where detail required / dessin no. - où détail exigé
C	drawing no. - where detailed / dessin no. - où détaillé

project title / titre du projet
Ottawa Ontario
300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS

drawing title / titre du dessin
EAST TOWER WEST FACE LIST OF REPAIRS

drawn by / dessiné par
A.S.C.

designed by / conçu par
E.P.B.

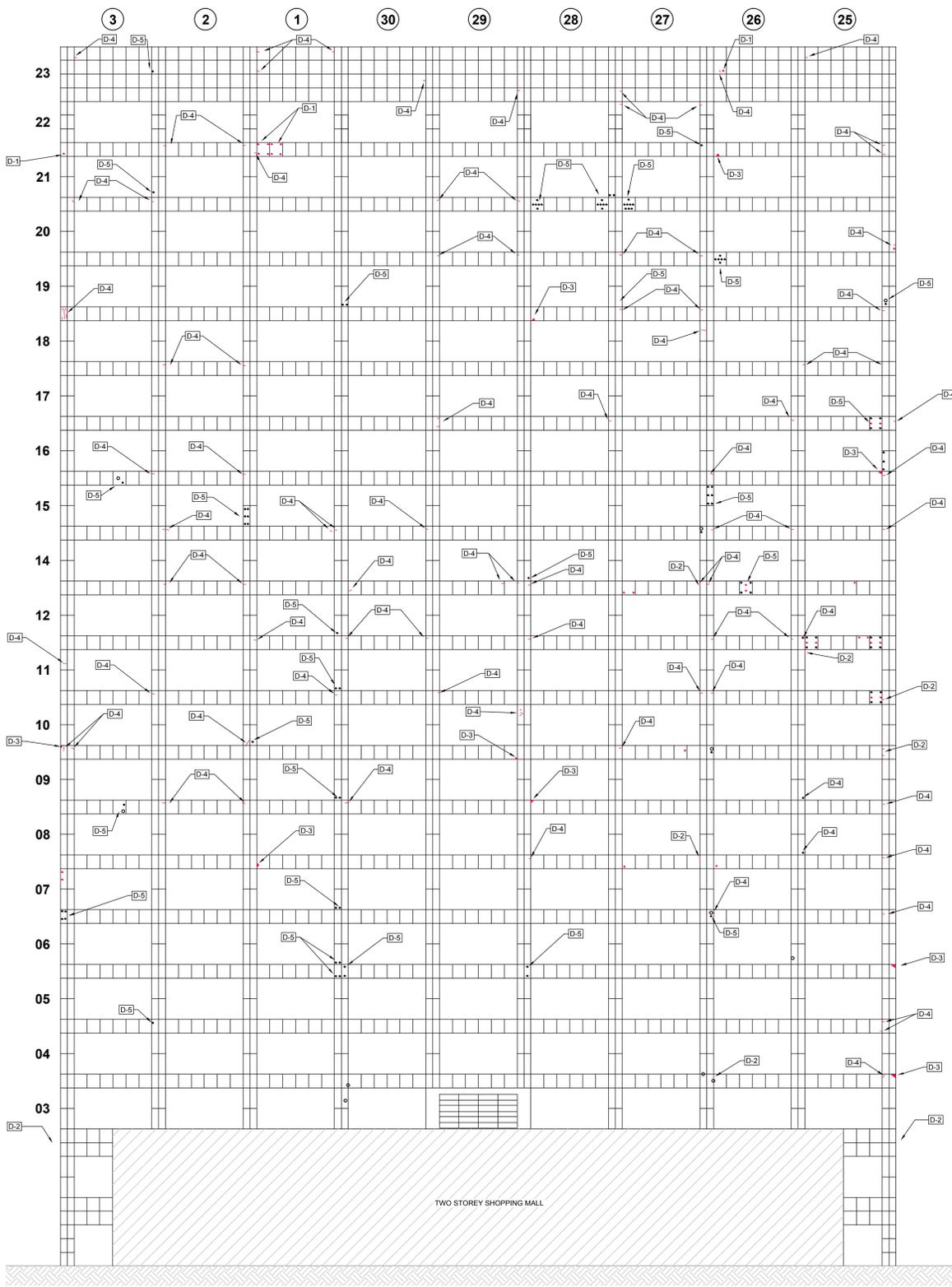
approved by / approuvé par
E.P.B.

tender / soumission project manager / administrateur de projets

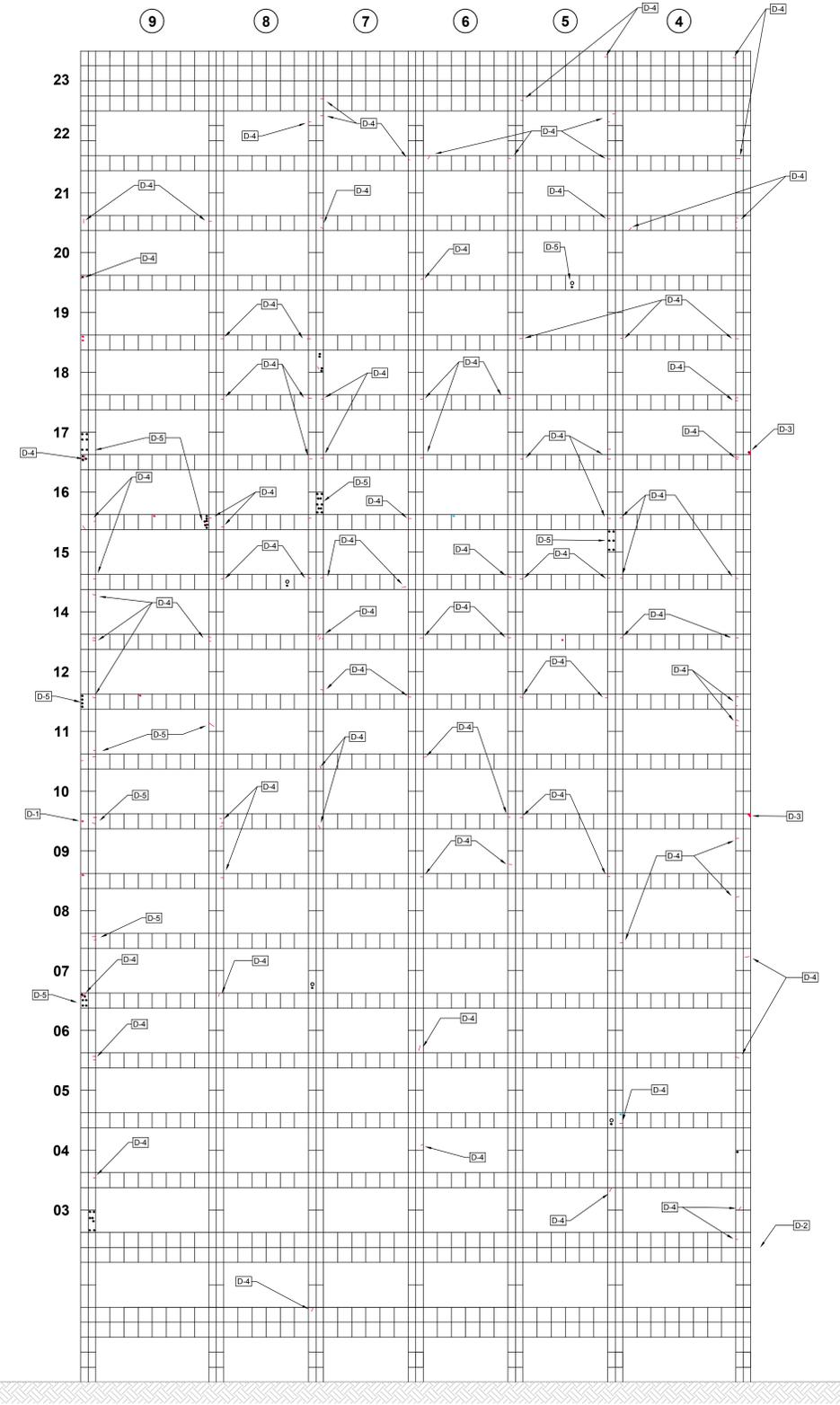
project date / date du projet
2018/08/30

project no. / no. du projet
R.082541.100

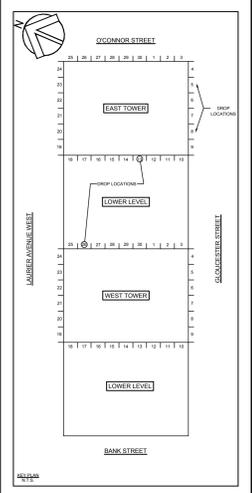
drawing no. / dessin no.
S007



WEST TOWER - EAST ELEVATION



WEST TOWER - SOUTH ELEVATION



- LEGEND:
- PROPOSED PINS
 - CJEL - PINS
 - EXISTING PINS
 - C.D. COMPLETE DELAMINATION
 - D-# REPAIR DETAIL NO.



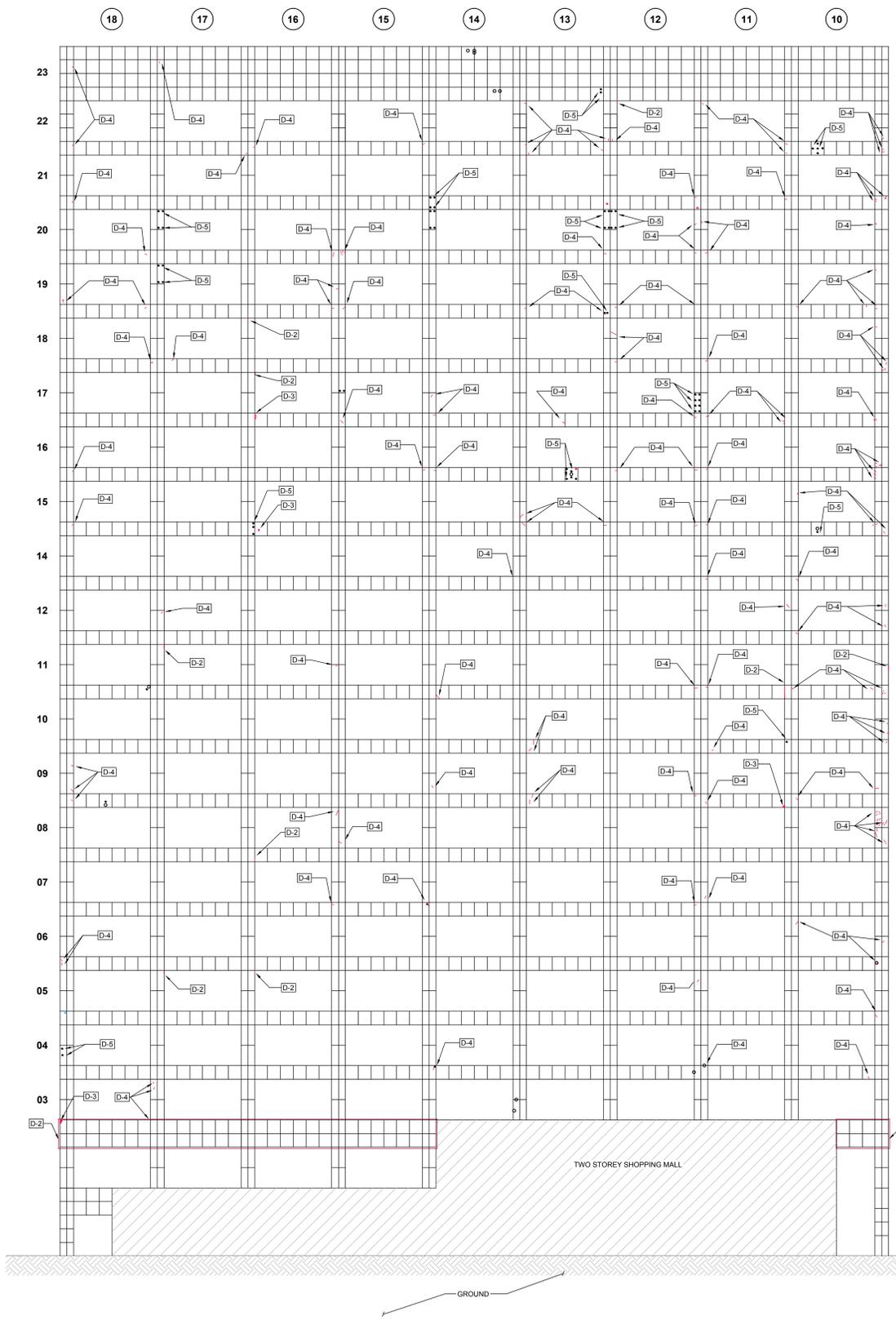
04		
03		
02		
01	RELEASED FOR TENDER	2019/06/27
revision	description	date

- A Detail No. / No. du détail
- B drawing no. - where detail required / dessin no. - où détail exigé
- C drawing no. - where detailed / dessin no. - où détaillé

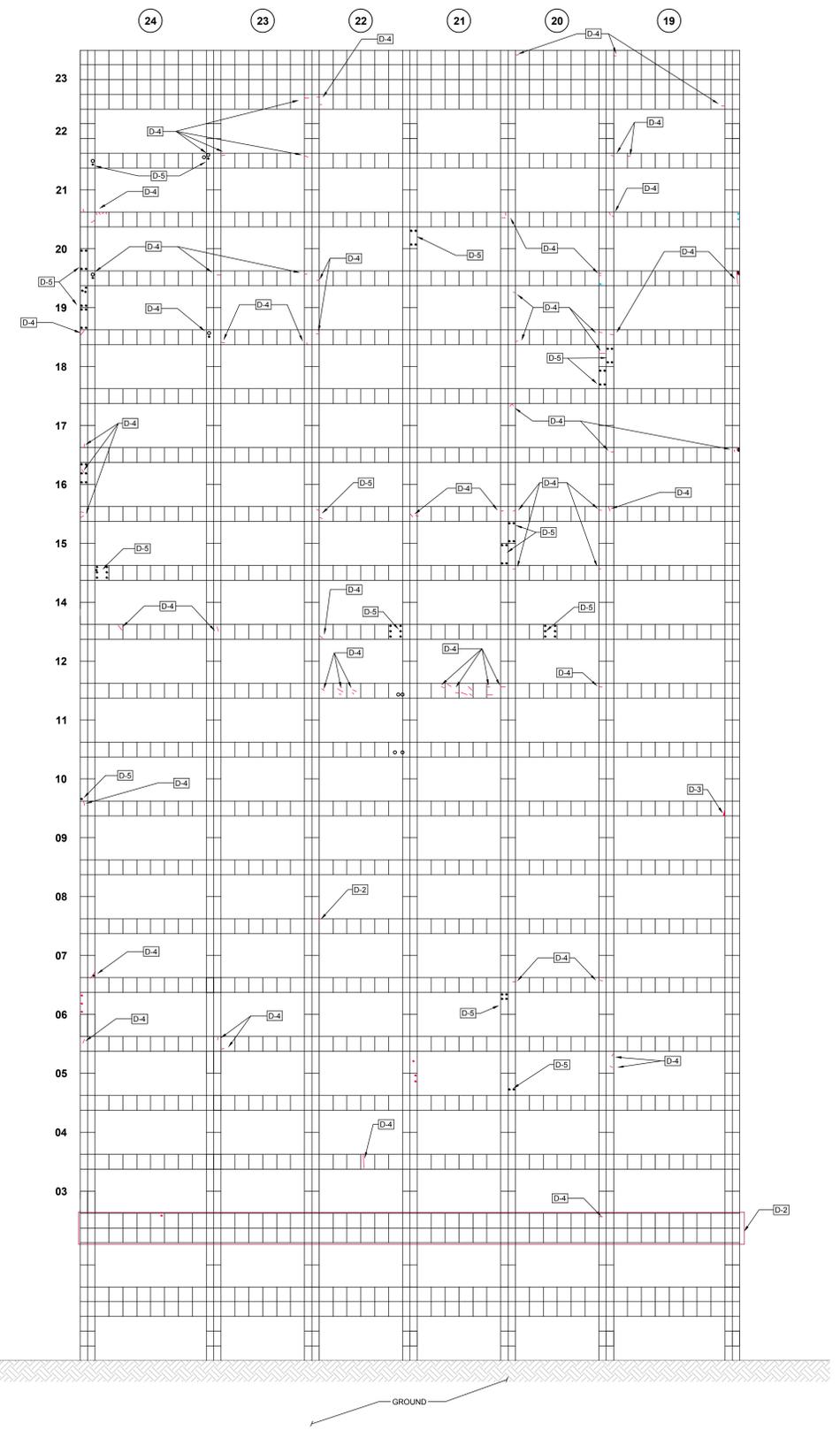
project title / titre du projet
Ottawa Ontario
 300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS
 drawing title / titre du dessin
WEST TOWER EAST & SOUTH ELEVATION

drawn by / dessiné par **A.S.C.**
 designed by / conçu par **E.P.B.**
 approved by / approuvé par **E.P.B.**
 tender / soumission project manager / administrateur de projets

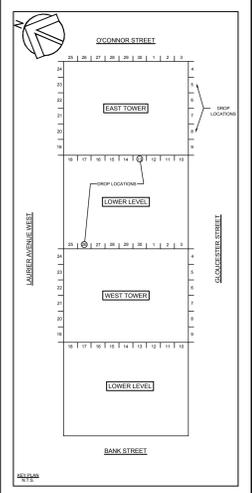
project date / date du projet **2018/08/30**
 project no. / no. du projet **R.082541.100**
 drawing no. / dessin no. **S008**



WEST TOWER - WEST ELEVATION



WEST TOWER - NORTH ELEVATION



- LEGEND:
- PROPOSED PINS
 - CJEL - PINS
 - EXISTING PINS
 - C.D. COMPLETE DELAMINATION
 - D-# REPAIR DETAIL NO.



04		
03		
02	RELEASED FOR TENDER	2018/06/27
revision	description	date

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

- A Detail No. / No. du détail
- B drawing no. - where detail required / dessin no. - où détail exigé
- C drawing no. - where detailed / dessin no. - où détaillé

project title / titre du projet
Ottawa Ontario
 300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS

drawing title / titre du dessin
WEST TOWER WEST & NORTH ELEVATION

drawn by / dessiné par
A.S.C.

designed by / conçu par
E.P.B.

approved by / approuvé par
E.P.B.

tender / soumission
 project manager / administrateur de projets

project date / date du projet
2018/08/30

project no. / no. du projet
R.082541.100

drawing no. / dessin no.
S009

L'ESPLANADE LAURIER TENDER QUANTITIES WEST TOWER - EAST FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	10
2	F-1000	Caulking Repair (Type #2)	each/m	5
3	F-1000	Remove & Caulk Repair (Type #3)	each	10
4	F-1000	Crack Repair (Type #4)	each	157
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	76

* Estimated length for "each" repair, 10 cm

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
25	23	Rout & Caulk Crack	D-4	1
25	22	Rout & Caulk Crack	D-4	2
25	20	Rout & Caulk Crack	D-4	1
25	20	Rout & Caulk Crack	D-4	1
25	19	Rout & Caulk Crack	D-4	1
25	19	Rout & Caulk Crack (Core)	D-4	1
25	18	Rout & Caulk Crack	D-4	2
25	17	Pin Recaulking	D-5	6
25	16	Delaminated - Remove & Caulk	D-3	1
25	16	Rout & Caulk Crack	D-4	1
25	16	Rout & Caulk Crack	D-4	1
25	12	Rout & Caulk Crack	D-4	1
25	11	Rout & Caulk Crack	D-4	1
25	11	Caulking w/ backer rod	D-2	1
25	10	Rout & Caulk Crack	D-4	2
25	9	Pin Recaulking	D-5	1
25	8	Pin Recaulking	D-5	1
25	7	Rout & Caulk Crack	D-4	1
25	6	Delaminated - Remove & Caulk	D-3	1
25	5	Rout & Caulk Crack	D-4	2
25	4	Rout & Caulk Crack	D-4	1
25	4	Delaminated - Remove & Caulk	D-3	1

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
28	23	Rout & Caulk Crack	D-4	2
28	21	Pin Recaulking	D-5	10
28	19	Delaminated - Remove & Caulk	D-3	1
28	18	Rout & Caulk Crack	D-4	1
28	17	Rout & Caulk Crack	D-4	1
28	16	Rout & Caulk Crack	D-4	1
28	15	Rout & Caulk Crack	D-4	2
28	14	Rout & Caulk Crack	D-4	1
28	14	Pin Recaulking	D-5	1
28	12	Rout & Caulk Crack	D-4	2
28	10	Rout & Caulk Crack	D-4	1
28	9	Delaminated - Remove & Caulk	D-3	1
28	8	Rout & Caulk Crack	D-4	1
28	7	Rout & Caulk Crack	D-4	1
28	6	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
1	23	Rout & Caulk Crack	D-4	2
1	22	Rout & Caulk Crack	D-4	2
1	22	Pin-In-Place Repair	D-1	8
1	21	Rout & Caulk Crack	D-4	1
1	20	Rout & Caulk Crack	D-4	1
1	15	Rout & Caulk Crack	D-4	2
1	14	Rout & Caulk Crack	D-4	2
1	14	Rout & Caulk Crack	D-4	2
1	12	Rout & Caulk Crack	D-4	1
1	7	Rout & Caulk Crack	D-4	1
1	12	Pin Recaulking	D-5	1
1	11	Pin Recaulking	D-5	2
1	11	Rout & Caulk Crack	D-4	2
1	10	Pin Recaulking	D-5	1
1	9	Pin Recaulking	D-5	1
1	8	Delaminated - Remove & Caulk	D-3	1
1	7	Pin Recaulking	D-5	2
1	6	Pin Recaulking	D-5	4
1	5	Pin Recaulking	D-5	1

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
26	23	Pin-In-Place Repair	D-1	1
26	23	Rout & Caulk Crack	D-4	1
26	22	Rout & Caulk Crack	D-4	1
26	22	Delaminated - Remove & Caulk	D-3	1
26	20	Pin Recaulking	D-5	6
26	17	Rout & Caulk Crack	D-4	1
26	16	Rout & Caulk Crack	D-4	1
26	15	Rout & Caulk Crack	D-4	2
26	15	Pin Recaulking	D-5	6
26	14	Pin Recaulking	D-5	6
26	14	Rout & Caulk Crack	D-4	1
26	12	Rout & Caulk Crack	D-4	2
26	11	Rout & Caulk Crack	D-4	1
26	7	Rout & Caulk Crack	D-4	4
26	7	Rout & Caulk Crack (Core)	D-4	1
26	4	Caulking w/ backer rod	D-2	1
26	3	Caulking w/ backer rod	D-2	1

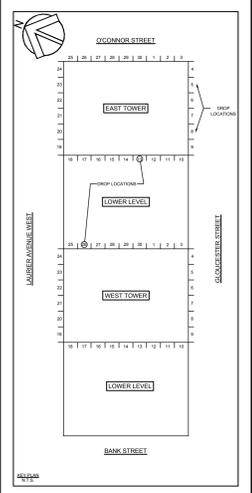
List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
29	23	Rout & Caulk Crack	D-4	2
29	22	Rout & Caulk Crack	D-4	2
29	21	Rout & Caulk Crack	D-4	1
29	20	Rout & Caulk Crack	D-4	3
29	19	Rout & Caulk Crack	D-4	2
29	17	Rout & Caulk Crack	D-4	2
29	16	Rout & Caulk Crack	D-4	1
29	14	Rout & Caulk Crack	D-4	2
29	12	Rout & Caulk Crack	D-4	1
29	11	Rout & Caulk Crack	D-4	1
29	10	Rout & Caulk Crack	D-4	2
29	10	Delaminated - Remove & Caulk	D-3	1
29	6	Rout & Caulk Crack	D-4	1
29	7	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
2	22	Rout & Caulk Crack	D-4	2
2	21	Rout & Caulk Crack	D-4	2
2	19	Rout & Caulk Crack	D-4	1
2	18	Rout & Caulk Crack	D-4	2
2	16	Rout & Caulk Crack	D-4	1
2	15	Rout & Caulk Crack	D-4	2
2	15	Pin Recaulking	D-5	6
2	14	Rout & Caulk Crack	D-4	2
2	12	Rout & Caulk Crack	D-4	2
2	11	Rout & Caulk Crack	D-4	2
2	10	Rout & Caulk Crack	D-4	1
2	9	Rout & Caulk Crack	D-4	2

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
27	23	Rout & Caulk Crack	D-4	1
27	22	Rout & Caulk Crack	D-4	3
27	22	Pin Recaulking	D-5	1
27	21	Pin Recaulking	D-5	9
27	20	Rout & Caulk Crack	D-4	2
27	19	Rout & Caulk Crack	D-4	2
27	19	Pin Recaulking	D-5	1
27	17	Rout & Caulk Crack	D-4	1
27	16	Rout & Caulk Crack	D-4	1
27	14	Rout & Caulk Crack	D-4	1
27	14	Caulking w/ backer rod	D-2	1
27	12	Rout & Caulk Crack	D-4	1
27	11	Rout & Caulk Crack	D-4	1
27	10	Rout & Caulk Crack	D-4	1
27	8	Caulking w/ backer rod	D-2	1
27	7	Rout & Caulk Crack	D-4	2

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
30	23	Rout & Caulk Crack	D-4	1
30	22	Rout & Caulk Crack	D-4	1
30	19	Pin Recaulking	D-5	2
30	15	Rout & Caulk Crack	D-4	1
30	20	Rout & Caulk Crack	D-4	1
30	15	Rout & Caulk Crack	D-4	1
30	14	Rout & Caulk Crack	D-4	1
30	12	Rout & Caulk Crack	D-4	2
30	11	Rout & Caulk Crack	D-4	1
30	9	Rout & Caulk Crack	D-4	1
30	7	Rout & Caulk Crack	D-4	1
30	6	Pin Recaulking	D-5	2

List of Repairs: West Tower: East Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
3	23	Rout & Caulk Crack	D-4	2
3	22	Pin-In-Place Repair	D-1	1
3	21	Rout & Caulk Crack	D-4	2
3	20	Rout & Caulk Crack (Core)	D-4	1
3	19	Rout & Caulk Crack	D-4	5
3	18	Rout & Caulk Crack	D-4	2
3	17	Rout & Caulk Crack	D-4	2
3	16	Rout & Caulk Crack (Core)	D-4	1
3	16	Pin Recaulking	D-5	1
3	16	Rout & Caulk Crack	D-4	1
3	15	Rout & Caulk Crack	D-4	1
3	14	Rout & Caulk Crack	D-4	1
3	12	Rout & Caulk Crack	D-4	2
3	11	Rout & Caulk Crack	D-4	2
3	10	Rout & Caulk Crack	D-4	2
3	10	Delaminated - Remove & Caulk	D-3	1
3	9	Rout & Caulk Crack (Core)	D-4	1
3	9	Pin Recaulking	D-5	7
3	9	Rout & Caulk Crack	D-4	1
3	7	Rout & Caulk Crack	D-4	1
3	5	Delaminated - Remove & Caulk	D-3	1



revision	description	date
04		
03		
02		
01	RELEASED FOR TENDER	2019/06/27

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

A	Detail No. / No. du détail
B	drawing no. - where detail required / dessin no. - où détail exigé
C	drawing no. - where detailed / dessin no. - où détaillé

project title / titre du projet
Ottawa Ontario
 300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS

drawing title / titre du dessin
WEST TOWER EAST FACE LIST OF REPAIRS

drawn by / dessiné par
A.S.C.

designed by / conçu par
E.P.B.

approved by / approuvé par
E.P.B.

tender / soumission project manager / administrateur de projets

project date / date du projet
2018/08/30

project no. / no. du projet
R.082541.100

drawing no. / dessin no.
S010

L'ESPLANADE LAURIER TENDER QUANTITIES WEST TOWER - NORTH FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	0
2	F-1000	Caulking Repair (Type #2)	each/m	1
3	F-1000	Remove & Caulk Repair (Type #3)	each	1
4	F-1000	Crack Repair (Type #4)	each	68
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	63

* Estimated length for "each" repair, 10 cm

List of Repairs: West Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
19	23	Rout & Caulk Crack	D-4	2
19	22	Rout & Caulk Crack	D-4	2
19	21	Rout & Caulk Crack	D-4	2
19	20	Rout & Caulk Crack	D-4	2
19	19	Rout & Caulk Crack	D-4	1
19	18	Pin Recaulking	D-5	4
19	17	Rout & Caulk Crack	D-4	2
19	16	Rout & Caulk Crack	D-4	1
19	10	Delaminated - Remove & Caulk	D-3	1
19	5	Rout & Caulk Crack	D-4	2

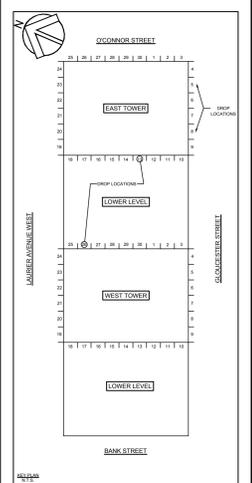
List of Repairs: West Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
20	23	Rout & Caulk Crack	D-4	1
20	20	Rout & Caulk Crack	D-4	2
20	19	Rout & Caulk Crack	D-4	3
20	18	Rout & Caulk Crack	D-4	2
20	18	Pin Recaulking	D-5	4
20	17	Rout & Caulk Crack	D-4	2
20	16	Rout & Caulk Crack	D-4	2
20	15	Pin Recaulking	D-5	4
20	14	Pin Recaulking	D-5	6
20	12	Rout & Caulk Crack	D-4	1
20	7	Rout & Caulk Crack	D-4	2
20	5	Pin Recaulking	D-5	2
20	3	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
21	21	Rout & Caulk Crack	D-4	2
21	20	Pin Recaulking	D-5	4
21	16	Rout & Caulk Crack	D-4	3
21	15	Pin Recaulking	D-5	4
21	12	Rout & Caulk Crack	D-4	8
21	6	Pin Recaulking	D-5	4

List of Repairs: West Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
22	23	Rout & Caulk Crack	D-4	2
22	20	Rout & Caulk Crack	D-4	1
22	19	Rout & Caulk Crack	D-4	1
22	16	Rout & Caulk Crack	D-4	1
22	14	Pin Recaulking	D-5	6
22	14	Rout & Caulk Crack	D-4	1
22	12	Rout & Caulk Crack	D-4	5
22	8	Caulking w/ backer rod	D-2	1
22	4	Rout & Caulk Crack	D-4	2

List of Repairs: West Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
23	23	Rout & Caulk Crack	D-4	1
23	22	Rout & Caulk Crack	D-4	2
23	20	Rout & Caulk Crack	D-4	2
23	18	Rout & Caulk Crack	D-4	2
23	14	Rout & Caulk Crack	D-4	1
23	6	Rout & Caulk Crack	D-4	2

List of Repairs: West Tower: North Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
24	22	Rout & Caulk Crack (Core)	D-4	1
24	22	Pin Recaulking	D-5	2
24	21	Rout & Caulk Crack	D-4	6
24	20	Rout & Caulk Crack (Core)	D-4	1
24	20	Pin Recaulking	D-5	4
24	19	Pin Recaulking	D-5	9
24	19	Rout & Caulk Crack (Core)	D-4	1
24	19	Rout & Caulk Crack	D-4	1
24	17	Rout & Caulk Crack	D-4	1
24	16	Rout & Caulk Crack	D-4	3
24	15	Pin Recaulking	D-5	7
24	14	Rout & Caulk Crack	D-4	1
24	10	Rout & Caulk Crack	D-4	1
24	10	Pin Recaulking	D-5	7
24	7	Rout & Caulk Crack	D-4	1
24	6	Rout & Caulk Crack	D-4	1



04		
03		
02		
01	RELEASED FOR TENDER	2019/06/27
revision	description	date

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A	Detail No.
B	No. du détail
B	drawing no. - where detail required
C	dessin no. - où détail exigé
C	drawing no. - where detailed
C	dessin no. - où détaillé

project title
 titre du projet
Ottawa Ontario
 300 Laurier Avenue West
**MARBLE CLADDING
 INSPECTION AND REPAIRS**

drawing title
 titre du dessin
**WEST TOWER
 NORTH FACE
 LIST OF REPAIRS**

drawn by
 dessiné par **A.S.C.**

designed by
 conçu par **E.P.B.**

approved by
 approuvé par **E.P.B.**

tender
 soumission project manager
 administrateur de projets

project date
 date du projet **2018/08/30**

project no.
 no. du projet **R.082541.100**

drawing no.
 dessin no. **S011**

L'ESPLANADE LAURIER TENDER QUANTITIES WEST TOWER - SOUTH FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	1
2	F-1000	Caulking Repair (Type #2)	each*/m	5
3	F-1000	Remove & Caulk Repair (Type #3)	each	2
4	F-1000	Crack Repair (Type #4)	each	110
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	53

* Estimated length for "each" repair, 10 cm

List of Repairs: West Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
4	23	Rout & Caulk Crack	D-4	1
4	22	Rout & Caulk Crack	D-4	1
4	21	Rout & Caulk Crack	D-4	3
4	19	Rout & Caulk Crack	D-4	2
4	18	Rout & Caulk Crack	D-4	2
4	17	Rout & Caulk Crack	D-4	2
4	17	Delaminated - Remove & Caulk	D-3	1
4	15	Rout & Caulk Crack	D-4	2
4	14	Rout & Caulk Crack	D-4	2
4	12	Rout & Caulk Crack	D-4	2
4	11	Rout & Caulk Crack	D-4	2
4	10	Delaminated - Remove & Caulk	D-3	1
4	9	Rout & Caulk Crack	D-4	1
4	8	Rout & Caulk Crack	D-4	1
4	7	Rout & Caulk Crack	D-4	1
4	6	Rout & Caulk Crack	D-4	1
4	5	Rout & Caulk Crack	D-4	1
4	3	Rout & Caulk Crack	D-4	1

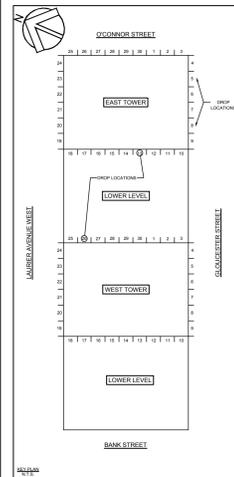
List of Repairs: West Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
5	23	Rout & Caulk Crack	D-4	2
5	22	Rout & Caulk Crack	D-4	3
5	21	Rout & Caulk Crack	D-4	1
5	20	Rout & Caulk Crack (Core)	D-4	1
5	20	Pin Recaulking	D-5	1
5	19	Rout & Caulk Crack	D-4	1
5	17	Rout & Caulk Crack	D-4	3
5	16	Rout & Caulk Crack	D-4	1
5	15	Rout & Caulk Crack	D-4	2
5	15	Pin Recaulking	D-5	6
5	12	Rout & Caulk Crack	D-4	1
5	10	Rout & Caulk Crack	D-4	1
5	9	Rout & Caulk Crack	D-4	1
5	3	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
6	22	Rout & Caulk Crack	D-4	2
6	20	Rout & Caulk Crack	D-4	1
6	18	Rout & Caulk Crack	D-4	2
6	17	Rout & Caulk Crack	D-4	1
6	15	Rout & Caulk Crack	D-4	1
6	14	Rout & Caulk Crack	D-4	2
6	11	Rout & Caulk Crack	D-4	1
6	10	Rout & Caulk Crack	D-4	1
6	9	Rout & Caulk Crack	D-4	2
6	6	Rout & Caulk Crack	D-4	1
6	4	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
7	23	Rout & Caulk Crack	D-4	1
7	22	Rout & Caulk Crack	D-4	2
7	21	Rout & Caulk Crack	D-4	2
7	18	Rout & Caulk Crack	D-4	1
7	18	Pin Recaulking	D-5	6
7	17	Rout & Caulk Crack	D-4	1
7	16	Pin Recaulking	D-5	10
7	16	Rout & Caulk Crack	D-4	1
7	15	Rout & Caulk Crack	D-4	1
7	14	Rout & Caulk Crack	D-4	3
7	12	Rout & Caulk Crack	D-4	2
7	11	Rout & Caulk Crack	D-4	1
7	10	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
8	22	Rout & Caulk Crack	D-4	1
8	19	Rout & Caulk Crack	D-4	2
8	18	Rout & Caulk Crack	D-4	2
8	17	Rout & Caulk Crack	D-4	1
8	16	Rout & Caulk Crack	D-4	2
8	15	Rout & Caulk Crack	D-4	2
8	10	Rout & Caulk Crack	D-4	1
8	9	Rout & Caulk Crack	D-4	1
8	7	Rout & Caulk Crack	D-4	1
8	3	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: South Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
9	21	Rout & Caulk Crack	D-4	2
9	20	Rout & Caulk Crack	D-4	1
9	17	Pin Recaulking	D-5	10
9	17	Rout & Caulk Crack	D-4	1
9	16	Rout & Caulk Crack	D-4	3
9	16	Pin Recaulking	D-5	1
9	15	Rout & Caulk Crack	D-4	1
9	14	Rout & Caulk Crack	D-4	5
9	12	Rout & Caulk Crack	D-4	1
9	12	Pin Recaulking	D-5	4
9	11	Rout & Caulk Crack	D-4	4
9	10	Rout & Caulk Crack	D-4	1
9	10	Pin-In-Place Repair	D-1	1
9	8	Rout & Caulk Crack	D-4	2
9	7	Rout & Caulk Crack	D-4	1
9	7	Pin Recaulking	D-5	8
9	6	Rout & Caulk Crack	D-4	1
9	4	Rout & Caulk Crack	D-4	1
9	3	Pin Recaulking	D-5	7



revision	description	date
04		
03		
02		
01	RELEASED FOR TENDER	2019/06/27

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	A	B	C
Detail No.			
No. du détail			
drawing no. - where detail required			
dessin no. - où détail exigé			
drawing no. - where detailed			
dessin no. - où détaillé			

project title
 titre du projet
Ottawa Ontario
 300 Laurier Avenue West
**MARBLE CLADDING
 INSPECTION AND REPAIRS**

drawing title
 titre du dessin
**WEST TOWER
 SOUTH FACE
 LIST OF REPAIRS**

drawn by
 dessin par
A.S.C.

designed by
 conçu par
E.P.B.

approved by
 approuvé par
E.P.B.

tender
 soumission
 project manager
 administrateur de projets

project date
 date du projet
2018/08/30

project no.
 no. du projet
R.082541.100

drawing no.
 dessin no.
S012

L'ESPLANADE LAURIER TENDER QUANTITIES WEST TOWER - WEST FACE				
ITEM NO.	SPEC NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	F-1000	Pin-In-Place Repair (Type #1)	each	0
2	F-1000	Caulking Repair (Type #2)	each*/m	3
3	F-1000	Remove & Caulk Repair (Type #3)	each	4
4	F-1000	Crack Repair (Type #4)	each	155
5	F-1000	Pin Re-Caulking Repair (Type #5)	each	48

* Estimated length for "each" repair, 10 cm

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
10	22	Rout & Caulk Crack	D-4	3
10	22	Pin Recaulking	D-5	5
10	21	Rout & Caulk Crack	D-4	3
10	20	Rout & Caulk Crack	D-4	1
10	19	Rout & Caulk Crack	D-4	4
10	18	Rout & Caulk Crack	D-4	4
10	17	Rout & Caulk Crack	D-4	2
10	16	Rout & Caulk Crack	D-4	10
10	15	Rout & Caulk Crack	D-4	4
10	15	Pin Recaulking	D-5	1
10	14	Rout & Caulk Crack	D-4	1
10	12	Rout & Caulk Crack	D-4	3
10	11	Rout & Caulk Crack	D-4	5
10	11	Caulking w/ backer rod	D-2	1
10	10	Rout & Caulk Crack	D-4	3
10	9	Rout & Caulk Crack	D-4	2
10	8	Rout & Caulk Crack	D-4	9
10	6	Rout & Caulk Crack	D-4	3
10	5	Rout & Caulk Crack	D-4	1
10	4	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
11	22	Rout & Caulk Crack	D-4	3
11	21	Rout & Caulk Crack	D-4	1
11	20	Rout & Caulk Crack	D-4	2
11	18	Rout & Caulk Crack	D-4	1
11	17	Rout & Caulk Crack	D-4	3
11	16	Rout & Caulk Crack	D-4	1
11	15	Rout & Caulk Crack	D-4	1
11	14	Rout & Caulk Crack	D-4	1
11	12	Rout & Caulk Crack	D-4	1
11	11	Rout & Caulk Crack	D-4	1
11	11	Caulking w/ backer rod	D-2	1
11	10	Rout & Caulk Crack	D-4	2
11	9	Rout & Caulk Crack	D-4	1
11	9	Delaminated - Remove & Caulk	D-3	1
11	7	Rout & Caulk Crack	D-4	1
11	4	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
12	22	Rout & Caulk Crack	D-4	1
12	22	Caulking w/ backer rod	D-2	1
12	21	Rout & Caulk Crack	D-4	1
12	20	Rout & Caulk Crack	D-4	2
12	20	Pin Recaulking	D-5	4
12	19	Rout & Caulk Crack	D-4	1
12	18	Rout & Caulk Crack	D-4	2
12	17	Rout & Caulk Crack	D-4	1
12	17	Pin Recaulking	D-5	8
12	16	Rout & Caulk Crack	D-4	2
12	15	Rout & Caulk Crack	D-4	1
12	11	Rout & Caulk Crack	D-4	1
12	9	Rout & Caulk Crack	D-4	1
12	7	Rout & Caulk Crack	D-4	1
12	5	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
13	23	Pin Recaulking	D-5	2
13	22	Rout & Caulk Crack	D-4	5
13	20	Rout & Caulk Crack	D-4	1
13	20	Pin Recaulking	D-5	4
13	19	Rout & Caulk Crack	D-4	2
13	19	Pin Recaulking	D-5	2
13	17	Rout & Caulk Crack	D-4	1
13	16	Pin Recaulking	D-5	5
13	15	Rout & Caulk Crack	D-4	3
13	10	Rout & Caulk Crack	D-4	2
13	9	Rout & Caulk Crack	D-4	2

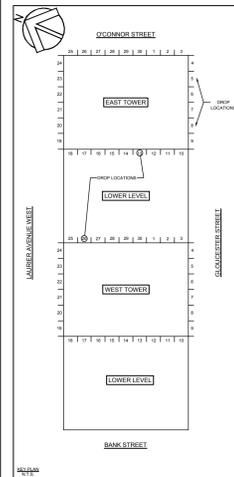
List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
14	21	Pin Recaulking	D-5	4
14	17	Rout & Caulk Crack	D-4	2
14	16	Rout & Caulk Crack	D-4	1
14	14	Rout & Caulk Crack	D-4	1
14	11	Rout & Caulk Crack	D-4	1
14	9	Rout & Caulk Crack	D-4	1
14	4	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
15	22	Rout & Caulk Crack	D-4	1
15	20	Rout & Caulk Crack	D-4	4
15	19	Rout & Caulk Crack	D-4	1
15	17	Rout & Caulk Crack	D-4	1
15	16	Rout & Caulk Crack	D-4	1
15	8	Rout & Caulk Crack	D-4	1
15	7	Rout & Caulk Crack	D-4	1

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
16	22	Rout & Caulk Crack	D-4	1
16	20	Rout & Caulk Crack	D-4	1
16	19	Rout & Caulk Crack	D-4	2
16	18	Caulking w/ backer rod	D-2	1
16	17	Caulking w/ backer rod	D-2	1
16	17	Delaminated - Remove & Caulk	D-3	1
16	15	Delaminated - Remove & Caulk	D-3	1
16	15	Pin Recaulking	D-5	3
16	11	Rout & Caulk Crack	D-4	1
16	8	Caulking w/ backer rod	D-2	1
16	8	Rout & Caulk Crack	D-4	1
16	7	Rout & Caulk Crack	D-4	1
16	5	Caulking w/ backer rod	D-2	1

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
17	23	Rout & Caulk Crack	D-4	1
17	21	Rout & Caulk Crack	D-4	1
17	20	Pin Recaulking	D-5	4
17	19	Pin Recaulking	D-5	4
17	18	Rout & Caulk Crack	D-4	1
17	12	Rout & Caulk Crack	D-4	1
17	11	Caulking w/ backer rod	D-2	1
17	5	Caulking w/ backer rod	D-2	1

List of Repairs: West Tower: West Face				
Drop #	Floor #	Description of Repair	Repair Detail #	Quantities
18	23	Rout & Caulk Crack	D-4	1
18	22	Rout & Caulk Crack	D-4	1
18	21	Rout & Caulk Crack	D-4	1
18	20	Rout & Caulk Crack	D-4	1
18	19	Rout & Caulk Crack	D-4	2
18	18	Rout & Caulk Crack	D-4	1
18	16	Rout & Caulk Crack	D-4	1
18	15	Rout & Caulk Crack	D-4	1
18	9	Rout & Caulk Crack	D-4	3
18	6	Rout & Caulk Crack	D-4	2
18	4	Pin Recaulking	D-5	2
18	3	Delaminated - Remove & Caulk	D-3	1
18	3	Rout & Caulk Crack	D-4	3



revision	description	date
04		
03		
02		
01	RELEASED FOR TENDER	2019/06/27

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

	A	B	C
	Detail No. / No. du détail	drawing no. - where detail required / dessin no. - où détail exigé	drawing no. - where detailed / dessin no. - où détaillé

project title
titre du projet
Ottawa Ontario
300 Laurier Avenue West
MARBLE CLADDING INSPECTION AND REPAIRS

drawing title
titre du dessin
WEST TOWER WEST FACE LIST OF REPAIRS

drawn by
dessiné par
A.S.C.

designed by
conçu par
E.P.B.

approved by
approuvé par
E.P.B.

tender submission
soumission de projet
project manager
administrateur de projets

project date
date du projet
2018/08/30

project no.
no. du projet
R.082541.100

drawing no.
dessiné no.
S013