

**Part 1            General**

**1.1                MINIMUM STANDARDS**

- .1        Materials shall be new and work shall conform to the minimum applicable standards of the Canadian General Standards Board, the Canadian Standards Association, 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 requirements shall apply.

**1.2                FIRE SAFETY REQUIREMENTS**

- .1        Comply with the National Building Code of Canada 2015 (NBC) for fire safety in construction and the National Fire Code of Canada 2015 (NFC) for fire prevention, fire fighting and life safety in building in use.

**1.3                ACTION AND INFORMATIONAL SUBMITTALS**

- .1        Submittals: in accordance with Section 01 33 00 – Submittal Procedures.
- .2        Submit written request in advance of cutting or alteration which affects:
  - .1        Structural integrity of elements of project.
  - .2        Integrity of weather-exposed or moisture-resistant elements.
  - .3        Efficiency, maintenance, or safety of operational elements.
  - .4        Visual qualities of sight-exposed elements.
  - .5        Work of Departmental Representative or separate contractor.
  - .6        Building services in areas other than the designated construction area.
- .3        Include in request:
  - .1        Identification of project.
  - .2        Location and description of affected Work.
  - .3        Statement on necessity for cutting or alteration.
  - .4        Description of proposed Work, and products to be used.
  - .5        Alternatives to cutting and patching.
  - .6        Effect on Work of Departmental Representative or separate contractor.
  - .7        Written permission of affected separate contractor.
  - .8        Date and time work will be executed.

**1.4                CONTRACT DOCUMENTS**

- .1        Drawings and specifications are complementary, items shown or mentioned in one and not in the other are deemed to be included in the contract work.
  - .2        The contract documents are intended to describe complete fully functional systems although not all components are indicated.
  - .3        Discrepancies in the design documents, or doubt to the full intent of the design shall be brought to the Departmental Representative's attention prior to tender close. Failure to do this means, that the Contractor is fully aware and shall be responsible of design intent and requirements and shall provide fully functional and coordinated systems.
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**1.5 WELDING AND CUTTING**

- .1 At least 48 hours prior to commencing cutting or welding, provide to Departmental Representative:
  - .1 Completed hot work permit.
  - .2 Return hot work permit to Departmental Representative immediately upon completion of procedures for which permit was issued.
  - .3 A firewatcher shall be assigned when welding or cutting operations are carried out in areas where combustible materials within 10 m may be ignited by conduction or radiation. Fire watcher shall remain in area for a minimum period of one (1) hour following the completion of hot work.

**1.6 FIELD QUALITY CONTROL**

- .1 Carry out work using qualified licensed workers or apprentices in accordance with Provincial Act respecting manpower vocational training and qualifications.
- .2 Permit employees registered in Provincial apprenticeship program to perform specific tasks only if under direct supervision of qualified licensed workers.
- .3 Determine permitted activities and tasks by apprentices, based on level of training attended and demonstration of ability to perform specific duties.

**1.7 TEMPORARY UTILITIES**

- .1 Point of power supply for power will be supplied by the Departmental Representative at no cost to the contractor. The contractor shall provide equipment and labour to connect to power source and coordinate the use of existing services with Departmental Representative.

**1.8 STORAGE HANDLING OF MATERIALS INTENDED FOR REUSE**

- .1 Store, materials to be reused, recycled and salvaged in locations as directed by Departmental Representative.
- .2 Protect structural components not removed for demolition from movement or damage.
- .3 Support affected structures. If safety of building is endangered, cease operations and immediately notify Departmental Representative.
- .4 Protect architectural, mechanical and electrical systems from damage.
- .5 Separate and store materials produced during dismantling of structures in designated areas.

**1.9 PREPARATION**

- .1 Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
  - .2 After uncovering, inspect conditions affecting performance of Work.
  - .3 Beginning of cutting or patching means acceptance of existing conditions.
  - .4 Provide supports to assure structural integrity of surroundings; provide devices and methods to protect other portions of project from damage.
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- .5 Provide protection from elements for areas which are to be exposed by uncovering work; maintain excavations free of water.

**1.10 EXECUTION**

- .1 Execute cutting, fitting, and patching to complete Work.
- .2 Fit several parts together, to integrate with other Work.
- .3 Uncover Work to install ill-timed Work.
- .4 Remove and replace defective and non-conforming Work.
- .5 Provide openings in non-structural elements of Work for penetrations of mechanical and electrical Work.
- .6 Execute Work by methods to avoid damage to other Work and existing surfaces and finishes, and which will provide proper surfaces to receive patching and finishing.
- .7 Employ original installer to perform cutting and patching for weather-exposed and moisture-resistant elements, and sight-exposed surfaces.
- .8 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed on masonry work without prior approval.
- .9 Restore work with new products in accordance with requirements of Contract Documents.
- .10 Fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- .11 At penetration of fire rated wall, ceiling, or floor construction, completely seal voids with fire stopping material in accordance with Section 07 84 00 – Fire stopping full thickness of the construction element.
- .12 Refinish surfaces to match adjacent finishes: Refinish continuous surfaces to nearest intersection. Refinish assemblies by refinishing entire unit.
- .13 Conceal pipes, ducts and wiring in floor, wall and ceiling construction of finished areas except where indicated otherwise.

**1.11 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 – Construction/Demolition Waste Management And Disposal.

**1.12 PROGRESS BILLING BREAKDOWN**

- .1 Before submitting first progress claim and within one (1) week of award of contract, submit progress billing breakdown of Contract Amount in detail. Indicate material and labour costs separately for Division and system. After acceptance by Departmental Representative, cost breakdown will be used as the basis of progress payments.
  - .2 After acceptance by Departmental Representative, cost breakdown will be used as the basis of progress payments.
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**1.13 CONSTRUCTION SCHEDULE**

- .1 On award of contract submit to Departmental Representative within five (5) working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress.
  - .2 Submit Project Schedule to Departmental Representative within five (5) working days of receipt of acceptance of Master Plan.
    - .1 Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT).
  - .3 Departmental Representative will review and return revised schedules within five (5) working days.
    - .1 Revise impractical schedule and resubmit within five (5) working days.
  - .4 Accepted revised schedule will become Master Plan and be used as baseline for updates.
  - .5 Develop detailed Project Schedule derived from Master Plan.
  - .6 When schedule has been reviewed by the Departmental Representative, take necessary measure to complete work within scheduled time. Any changes to schedule following approval must be authorized by the Departmental Representative.
  - .7 Carry out work during "regular hour" Monday to Friday from 07:00 to 18:00 hours, unless otherwise indicated or required to meet project schedule.
  - .8 Carry out the following work during "silent hours", as defined as Monday to Friday from 18:00 to 07:00 hours and anytime on Saturdays, Sundays, and statutory holidays:
    - .1 To meet project schedule.
    - .2 For building service interruptions, provide at least seventy-two (72) hours notice.
  - .9 All building operations in areas not under construction must be maintained during all phases of construction.
  - .10 Contractor to submit a written notice to the Departmental Representative with a minimum of seventy-two (72) hours notice for work to be carried out during "silent hours", including the number, names of employees, name(s) of company(ies) and dates and times required for access to site.
  - .11 Definitions:
    - .1 Construction Work Week: Monday to Sunday inclusive and define schedule calendar working days as part of Bar (GANTT) Chart submission.
    - .2 Construction Start: First day that Contractor will have access to site for construction activities.
    - .3 Construction Completion: Last day of construction access to site for Contractor, before which point, all construction activities including but not limited to erection, testing, commissioning, certification, painting, demolition, cleanup, etc. are to be completed.
    - .4 Duration: number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
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- .5 Project Schedule: planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .12 Requirements:
- .1 Ensure Master Plan and Detail Schedules are practical and remain within specified Contract duration.
- .2 Plan to complete Work in accordance with prescribed milestones and time frame.
- .3 Limit activity durations to maximum of approximately ten (10) working days, to allow for progress reporting.
- .4 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of the essence in this contract.
- .13 Project milestones form interim targets for Project Schedule:
- .1 On site mobilization starting on Construction Start date.
- .2 Phase I:
- .1 Isolation, disconnection, removal and capping of ductwork and plumbing services within two (2) weeks of Construction Start.
- .2 Assembly of new AHU-7 (supplied by Departmental Representative) in Mechanical Room M6.
- .3 Completion of mechanical, electrical, controls, testing, commissioning and certification of AHU-7 performance.
- .4 Contractor shall minimize shutdown of services associated with AHU-5 (E) mounted on roof, but serving adjacent Bay 2 and Anechoic Chamber. All work associated with plumbing and ductwork serving, or affecting AHU-5(E) from operating shall be planned and coordinated to ensure that AHU-5(E) has ability to heat with maximum 24 shut down window. Coordinate schedule of shutdowns with Departmental Representative.
- .3 Work between Phase I and Phase II:
- .1 Testing and commissioning with (duration of fifteen (15) consecutive days) prior start of Phase II. Phase II:
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- .1 Decommissioning and removal of AHU-8 (X) in Mechanical Room M6 c/w isolation, disconnection, removal of associated ductwork and capping of plumbing services serving units.
- .2 Assembly of AHU-8 (N) (supplied by Departmental Representative).
- .3 Completion of mechanical, electrical, controls, testing, commissioning and certification of AHU-8 performance.
- .4 Testing and commissioning with Departmental Representative (duration of fifteen (15) consecutive days) five (5) weeks prior to Construction Completion date.
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- .5 Construction Completion and turnover to Departmental Representative including cleanup prior to Construction Completion date.
- .14 Project schedule:
  - .1 Develop detailed Project Schedule derived from Master Plan.
  - .2 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
    - .1 Award.
    - .2 Shop drawings.
    - .3 Permits.
    - .4 Mobilization.
    - .5 Phase 1:
      - .1 Electrical disconnection.
      - .2 Supplied equipment long delivery items.
      - .3 Construction of new ductwork.
      - .4 Construction of new AHU-7.
      - .5 Electrical new work.
      - .6 Mechanical new work.
      - .7 Demolition and reinstatement of affected services.
      - .8 Controls.
      - .9 Commissioning of controls system.
    - .6 Work between Phase 1 and Phase 2:
      - .1 Testing and commissioning (duration of fifteen (15) consecutive days) prior to start of Phase 2.
    - .7 Phase 2:
      - .1 Protection of Bay 3. Demolition and modifications of ductwork and provision of new ductwork in Bay 3.
      - .2 Electrical disconnection.
      - .3 Demolition of existing units and services.
      - .4 Supplied equipment long delivery items.
      - .5 Construction of new ductwork.
      - .6 Construction of new AHU-8.
      - .7 Electrical new work.
      - .8 Mechanical new work.
      - .9 Demolition and reinstatement of affected services.
      - .10 Controls.
    - .8 Testing, commissioning and certification.
    - .9 Correction of deficiencies.
    - .10 Cleanup.
    - .11 Testing, and commissioning with Departmental Representative.

- .12 Turnover of site to Departmental Representative.
- .13 Demonstration and training for Departmental Representative's personnel.
- .14 Operational & maintenance manual submittals, etc.
- .3 Allow in schedule for review of shop drawing submissions by departmental representative.
- .15 Project schedule reporting:
  - .1 Update Project Schedule on weekly basis reflecting activity changes and completions, as well as activities in progress. Submit updated schedule to department representative weekly.
  - .2 Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.
- .16 Project meetings:
  - .1 Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule. Contractor shall allow for weekly construction meetings. Department Representative shall determine if weekly or bi-weekly construction meetings shall be required during specific durations of the project.

#### 1.14 DFL MECHANICAL STANDARDS

1. Contractor to arrange for all necessary hot work permits, allow for 24 hours' notice at least for Departmental Representative to issue.
  2. Be responsible for removal and reinstating ceilings as necessary. Protect T-bar grid & tiles during work.
  3. Contractor shall be responsible for relocating any services obstructing the path of new piping / ductwork / equipment and shall do so after Departmental Representative's approval and at no additional cost.
  4. Smoke eaters & powered exhaust fans vented to outside of building must be used during all brazing / welding / soldering / cutting / grinding activities to minimize contamination & odor to adjacent areas particularly in clean rooms.
  5. All building HVAC return / exhaust grills within construction area must be blocked at all times during construction. Provide dust seals or temporary filters on all supply diffusers. Do not operate HVAC until final clean-up.
  6. Contractor to provide complete system of pipe supports and to anchor all piping in accordance with MSS SP-58 and MSS SP-69 and to match existing building supports. All supports & hangers to be
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- e. MYATT, ITT Grinnell, copper b-line or approved equal. Provide full support plan to Departmental Representative for approval before commencing work.
7. Contractor to support piping from structural members with clevis hangers at adequate spacing to insure no sag or failure of joints. Adequately brace piping and allow for expansion or contraction. Provide expansion loops or joints sized to compensate for changes in pipe length caused by a temperature differential of 65°C (150°F)
  8. Use of perforated band, wire chain or solid ring type hangers is not permitted.
  9. Use of c-clamps on beams is not permitted, use beam clamp to support all threaded rods.
  10. Several systems or part of systems will be subject to a shut-down period. Be responsible for having all necessary tools, manpower and equipment required to maximize the production during a shut-down. All shut downs shall be coordinated with Departmental Representative with a 48 hours' notice.
  11. Verify the exact location of existing services and mains to be tying-in, removed or capped prior to commencing work.
  12. Provide vibration hanger kit & duct flexible connections to all ceiling exhaust fans. Wire bridge all duct connectors for electrical continuity, use #8 AWG.
  13. Use flat bottom duct transition pieces for effective drainage.
  14. All duct work and sheet metal shall be in accordance with S.M.A.C.N.A. - low velocity system.
  15. Seal all longitudinal and circumference duct joints with high velocity duct sealer, "Duro Dyne" or approved equal.
  16. As a minimum, provide 25mm thick, heavy density, rigid fiberglass insulation with vapor barrier and jacketing on all plumbing piping. Insulate the last 3048mm from outside of all exhaust & fresh air intake ductwork with 38mm fiberglass wrap. All insulation joints to be staggered.  
All joints to be taped with foil tape, electric tape is not permitted.  
Provide removable insulation joints at all valves & unions with Velcro strips.
  17. All exposed jacketing to be GCI 0.4mm Alumaclad, pebbled (stucco) finish.
  18. Provide 305mm insulation protection galvanized shield / saddle plates with lock tabs at each pipe hanger location.
  19. All piping to be pressure tested for a minimum of 24 hours and in accordance with the code requirements, do not conceal or insulate any piping until tested, inspected & approved by Departmental Representative.
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20. Provide new volume control and splitter dampers on all new and modified ductwork. Fire dampers must be provided on all ducts or air transfer openings penetrating a building fire separation.
  21. Flexible ducts shall be limited to a maximum length of 1828mm and minimum diameter of 152mm.
  22. All HVAC controls and wiring shall be sized, selected by a specialized controls sub-trade in full accordance with equipment manufacturer recommendations.
  23. Isolate copper pipe from hanger or other piping where electrolytic action can occur.
  24. Vent and prime all p-trap fixtures in accordance with the Ontario latest edition plumbing code. Use automatic primers, "Ancon" or "Zurn" at all new & existing floor drains. All fixtures vent to be connected to the building common plumbing vents.
  25. Approved plumbing accessories & valves: Ancon, Zurn, Watts or Crane.
  26. All drainage and vent piping to be cast iron with MJ joints or DWV copper as rated by manufacturers for return air plenum use and approved by code.
  27. All plumbing piping shall be type "L" new copper with lead free soldered joints unless otherwise specified.
  28. All temperature & pressure gauges to be 102-127mm dial size, stainless steel & glycerin fill. Use thermos-wells on all temperature gauges.
  29. Use VMC Korfund Maxi-Flex neoprene mounting floor pads on all heavy equipment to isolate vibration & protect flooring. Grade / color to match load.
  30. Use Parker QIX filter / regulator w/ gauge at all compressed air terminals, model B20-G.
  31. Use Armstrong CBV for all circuit balancing valves.
  32. All fire protection work to be carried out by CFAA technicians. Distribute all pendant sprinkler heads in accordance with NFPA-13 ordinary hazards classification. All new pendant heads to be recessed series RFII – Royal Flush II by TYCO – model# TY3551 or approved equal. Contractor to engage “Simplex Grinnell” in all sprinklers work and “Chubb Edwards” on all fire panel modifications & commissioning.
  33. Label all piping, equipment & ductwork with reference to their service and location. Use W.H.Brady labels style, B-946 vinyl film, 2" wide. Match building identification / labeling system as follow:
    - 33.1 White letters & arrows on green tape:
      - 33.1.1 Domestic & separated cold water
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- 33.1.2 Chilled water supply & return
- 33.1.3 Condensed & tower water supply & return
- 33.1.4 Drainage, sanitary, storm & vents
- 33.1.5 HVAC supply & return, exhaust air & fresh air intake ductwork
- 33.2 Black letters & arrows on yellow tape:
  - 33.2.1 Domestic hot water
  - 33.2.2 Heating water supply & return
  - 33.2.3 Compressed air
- 33.3 White letters & arrows on red tape:
  - 33.3.1 Fire & sprinklers protection system
- 33.4 White letters & arrows on blue tape:
  - 33.4.1 Lab services (LN2, GN2 supply, purge & vents)

**1.15 TRAFFIC MANAGEMENT PLAN**

- .1 Access to building will be through CRC campus Main Gate.
- .2 Access to interior of David Florida Laboratory will be through stair G
- .3 Access for equipment & tools will be through Large Loading Dock.

**1.16 STAGING PLAN**

- .1 Submit to Departmental Representative for review and approval, a staging plan that outlines work stages in compliance with specified implementation restrictions and in accordance with submitted schedule. Once approved by the Departmental Representative, do not make changes to specified stages without prior written approval of Departmental Representative. Any proposed changes to the Phasing Plan will require a minimum of 7 days advanced notice. Do not work in staging areas outside of indicated times.

**1.17 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, maintaining separate colours for each major system. In addition, provide a complete colour scan of said final marked up drawings and submit each drawing in electronic PDF format to the Departmental Representative. The Departmental Representative will provide one set of clean white prints for this purpose.
  - .2 Drawings are to be updated at the end of each work period.
    - .1 Drawings are to be submitted for review by the Departmental Representative at the regularly scheduled construction project meetings.
    - .2 Store drawings on site in a clean dry area.
  - .3 Make drawings available for review when requested by Departmental Representative.
  - .4 Specifications: Mark each item to record actual construction including:
    - .1 Manufacturer, trade name, and catalogue number of each product actually installed.
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- .2 Changes made by Addenda and Change Orders.

### **1.18 ACCESS AND EGRESS**

- .1 Design, construct and maintain temporary "access to" and "egress from" work areas, including stairs, runways, ramps or ladders, independent of finished surfaces and in accordance with relevant municipal, provincial and other regulations.

### **1.19 PROTECTION**

- .1 Protect and seal adjacent work to prevent the spread of dust and dirt for the protection of workers, finished areas of work and adjacent laboratory facilities beyond the work areas.
- .2 Protect finished work against damage until take-over.
- .3 Protect all floor areas in mechanical room with layer of the following:
  - .1 Flexible foam under pad
  - .2 Oriented standard board (minimum 6mm thick)
- .4 Protect all floor areas in clean rooms and other areas with the following:
  - .1 Wipe clean from any debris or dust particles.
  - .2 Provide minimum 3.2mm thick foam layer on entire area to be protected.
  - .3 Provide 12mm plywood sheets on top of foam layer and tape all seams with duct tape to prevent debris and dust from getting trapped under the floor protection. Use of OSB sheets is not permitted.
- .5 Areas used for access to construction site as a means of travel or for demolition shall be protected in similar fashion as mechanical room floor to prevent damage of floor surface.
- .6 Protect operatives and other users of site from all hazards.

### **1.20 HOARDING**

- .1 Erect temporary site enclosure around work site in mechanical room & around perimeter of waste disposal bin.
- .2 Hoarding to be in full compliance with requirements of the Ontario Health and Safety Act and Regulations - 1990 (OSHA)
  - .1 In accordance with OSHA, where required, provide 1.8m high sturdy fence to protect personnel from hazards.
- .3 Keep site fenced off at all times from general public. Only remove portion of fence to provide opening to site to accommodate access, minimize duration of opening, and immediately close when not required.
- .4 Ensure site is fully enclosed when work force is not on site.
- .5 Continually monitor condition of hoarding and make good repairs.
- .6 Provide temporary hoarding in corridors during delivery of materials & removal of waste.

### **1.21 PROJECT CLEANLINESS**

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- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, including that caused by other Contractors.
  - .2 Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.
  - .3 Make arrangements with and obtain permits from Authorities Having Jurisdiction for disposal of waste and debris.
  - .4 Provide on-site dump containers for collection of waste materials and debris.
  - .5 Provide and use marked separate bins for recycling.
  - .6 Dispose of waste materials and debris at off site.
  - .7 Clean interior areas prior to start of finishing work, and maintain areas free of dust and other contaminants during finishing operations.
  - .8 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
  - .9 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
  - .10 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
  - .11 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.

**1.22 FINAL CLEANING**

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
  - .2 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
  - .3 Remove waste products and debris including that caused by other Contractors.
  - .4 Remove waste materials from site at regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.
  - .5 Make arrangements with and obtain permits from Authorities Having Jurisdiction for disposal of waste and debris.
  - .6 Clean hardware and mechanical and electrical fixtures.
  - .7 Remove stains, spots, marks and dirt from decorative work, electrical and mechanical fixtures, walls, and floors.
  - .8 Vacuum clean and dust building interiors, behind grilles, louvers, screens, tops of roll up drum louvers, beams, and open web steel joist.
  - .9 Inspect finishes, fitments and equipment and ensure specified workmanship and operation.
  - .10 Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds affected by work.
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- .11 Sweep and wash clean paved areas.
- .12 Clean equipment and fixtures to sanitary condition; clean or replace filters of mechanical equipment.
- .13 Upon completion remove temporary protection and surplus materials. Make good defects noted at this stage.

**1.23 USE OF SITE AND FACILITIES**

- .1 Execute work with least possible interference or disturbance to the normal use of premises. Make arrangements with Departmental Representative to facilitate work as stated.
- .2 Maintain existing services to building and provide for personnel and vehicle access, including emergency vehicles.
- .3 Maintain vehicle and pedestrian access, including emergency vehicles to and from the site.
- .4 Where security is reduced by work provide temporary means to maintain security.

**1.24 SANITARY FACILITIES**

- .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
- .2 Post notices and take precautions as required by local health authorities. Keep area free and premises in sanitary condition.
- .3 Portable facility shall be outside in a secured area covered by hoarding in a location approved by Departmental Representative.

**1.25 SITE STORAGE**

- .1 Storage and stockpile areas shall be equipped and maintained by the contractor.
  - .1 Storage and stockpile areas are to be contained entirely within the laydown/work area indicated.
  - .2 Contractor employee parking shall be contained within the indicated laydown/work area.
- .2 Do not unreasonably encumber site with materials or equipment.
- .3 Move stored products or equipment, which interfere with operations of Departmental Representative or other contractors.
- .4 Obtain and pay for use of additional storage or work areas needed for operations.

**1.26 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.
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**1.27 EXAMINATION**

- .1 Examine site and conditions which will affect the work. Submission of tender shall be deemed as confirmation that tenderer has inspected site and is conversant with conditions, and shall not constitute additional costs as a result of site conditions.
- .2 Verify existing conditions including but not limited to, structural elements, sprinkler piping and heads, roof drains and storm piping, electrical conduit and wiring, process utility piping, ductwork and other building services.
- .3 The fact that not all existing conditions discussed in Item .2 above are shown on the drawings does not relieve the responsibility of coordinating the work with the existing construction.

**1.28 SIGNS**

- .1 Provide common-use signs related to traffic control, information, use of equipment, construction public safety devices, etcetera, in both official languages or by the use of commonly understood graphic symbols to the Department Representative's approval.

**Part 2 Products**

**2.1 NOT USED**

- .1 Not Used
  - .1 Not Used

**Part 3 Execution**

**3.1 NOT USED**

- .1 Not Used
  - .1 Not Used