

PART 1 GENERAL

1.1 DEFINITIONS

- .1 Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
- .2 Patching: Fitting and repair work required to restore surfaces and substrates to original conditions after installation of other Work.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Cutting and Patching Proposal: Submit a proposal describing procedures at least 7-days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
 - .1 Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 - .2 Changes to Existing Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
 - .3 Products: List products to be used and firms or entities that will perform the Work.
 - .4 Dates: Indicate when cutting and patching will be performed.
 - .5 Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
 - .6 Departmental Representative's Acceptance: Obtain acceptance of cutting and patching proposal before cutting and patching. Review and acceptance of cutting and patching proposal does not waive right to later require removal and replacement of unsatisfactory work.

1.3 QUALITY ASSURANCE

- .1 Structural Elements: Do not cut and patch structural elements in a manner that could change their load carrying capacity or load deflection ratio.
- .2 Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety, including the following:
 - .1 Primary operational systems and equipment.
 - .2 Air or smoke barriers.
 - .3 Fire protection systems.
 - .4 Control systems.
 - .5 Communication systems.
 - .6 Electrical wiring systems.
- .3 Miscellaneous Elements: Do not cut and patch the following elements or related components in a manner that could change their load carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety, including the following:
 - .1 Water, moisture, or vapour barriers.
 - .2 Membranes and flashings.
 - .3 Exterior wall construction.
 - .4 Equipment supports.

- .5 Piping, ductwork, vessels, and equipment.
- .6 Noise and vibration control elements and systems.
- .4 Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Departmental Representative's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner. If possible, retain original installer or fabricator to cut and patch exposed Work listed below. If it is impossible to engage original installer or fabricator, engage another recognized, experienced, and specialized firm.
- .5 Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- .6 Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 PRODUCTS

2.1 MATERIALS

- .1 General: Comply with requirements specified in other Sections of the Contract Specifications.
- .2 Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces as closely as possible:
 - .1 If identical materials are unavailable or cannot be used, use materials that, when installed, will match the appearance and functional performance of existing materials.

PART 3 EXECUTION

3.1 EXAMINATION

- .1 Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed:
 - .1 Provide X-ray, ultrasound or other approved methods to determine locations of existing services and reinforcing steel in existing concrete slabs and block walls before cutting and renovations. Advise Departmental Representative of findings before proceeding with the Work and revise penetration locations as required and directed by Departmental Representative. Existing concrete slab thickness is to be confirmed by Contractor.
 - .2 Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - .3 Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- .1 Temporary Support: Provide temporary support of Work to be cut as required.
- .2 Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- .3 Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- .4 Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to minimize interruption of services to occupied areas.

3.3 PERFORMANCE

- .1 General: employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay:
 - .1 Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
 - .2 Acceptable Level of Finishing: new Work shall visually match existing adjacent surfaces in appearance as closely as possible.
- .2 Cutting: cut existing construction by sawing, drilling, coring, breaking, chipping, grinding, and similar operations, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations:
 - .1 In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Core, and cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - .2 Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - .3 Concrete or Concrete Unit Masonry: Cut using a cutting or coring machine, such as an abrasive saw or a diamond core coring drill.
 - .4 Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 - .5 Proceed with patching after construction operations requiring cutting are complete.
- .3 Patching: patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications:
 - .1 Inspection: where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 - .2 Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

- .3 Floors and Walls: where walls or partitions that are removed extend from one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, colour, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform colour and appearance.
 - .1 Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
- .4 Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
- .5 Ceilings: patch, repair, or re-hang existing ceilings as necessary to provide an even plane surface of uniform appearance.
- .6 Exterior Building Enclosure: patch components in a manner that restores enclosure to a weather tight condition.

3.4 CLEANING

- .1 Progress Cleaning: clean in accordance with Division 01: Cleaning. Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Division 01: Cleaning. Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .3 Manage and dispose of demolition and construction waste materials in accordance with Division 01: Construction/Demolition Waste Management and Disposal.

3.5 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by Work of this Section.

END OF SECTION

PART 1 GENERAL

1.1 REFERENCES

- .1 American National Standards Institute (ANSI)
 - .1 ANSI A10.8-2011, Safety Requirements for Scaffolding.
- .2 Canadian Federal Legislation
 - .1 Motor Vehicle Safety Act (MVSA), 1995.
 - .2 Hazardous Materials Information Review Act, 1985.
- .3 CSA Group (CSA)
 - .1 CSA S350-M1980 (R2003), Code of Practice for Safety in Demolition of Structures.
- .4 Provincial Legislation
 - .1 Legislation specific to authority having jurisdiction for work governed by this Section.

1.2 DEFINITIONS

- .1 Contaminated Material: Native material including, without limitation, soil and granular material having contaminants exceeding guidelines for commercial/industrial land use, defined in the Environmental Protection Act
- .2 Deconstruction (deconstruct) systematic dismantling of structure in a manner that achieves safe removal/disposal of hazardous materials and maximum salvage/recycling of materials.
 - .1 Ultimate objective is to recover potentially valuable resources while diverting from landfill what has traditionally been significant portion of waste system.
- .3 Demolition (demolish): Detach items from existing construction and legally dispose of them off site, unless indicated to be removed and salvaged or removed and reinstalled.
- .4 Disassembly (dismantle): physical detachment of materials from structure: prying, pulling, cutting, unscrewing.
- .5 Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.
- .6 Hazardous Materials: Dangerous substances which are defined in the Environmental Protection Act., including, without limitation, native material soil and granular material dangerous goods, hazardous commodities and hazardous products, may include but not limited to: asbestos PCB's, CFC's, HCFC's, poisons, corrosive agents, flammable substances, ammunition, explosives, radioactive substances, or other material that can endanger human health or well being or environment if handled improperly.
- .7 Non-Registerable Contaminated Material: Native material including, without limitation, soil and granular material which is non-registerable waste as defined in the Environmental Protection Act.
- .8 Registerable Contaminated Material: Native material including, without limitation, soil and granular material which is registerable waste as defined in the Environmental Protection Act.

- .9 Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- .10 Remove and Salvage: Detach items from existing construction and deliver them to Departmental Representative.

1.3 SPECIAL CONSTRAINTS

- .1 Shutdown of power, water, fire alarm system, public address system, phone, or data systems during hours of operation of existing facilities is not permitted without express written permission of Departmental Representative and facility operator; minimum 72-hours notice must be provided.
- .2 Any fire alarm disruption requires a 24-hour fire watch for the duration of the disruption.

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Pre-Demolition Meeting: Conduct a pre-demolition meeting at Project site in accordance with requirements listed in Division 01: Project Meetings to confirm extent of salvaged and demolished materials and to review Contractor's demolition plan prepared by Engineer (P.Eng.) licenced to practice in Nova Scotia. Invite Departmental Representative and existing facility operator to meeting and provide minimum 5-days' advance notice to all parties.
- .2 Coordination:
 - .1 Coordinate demolition work so that work of this Section adheres to aesthetic criteria established by the Drawings and specified dimensions with all elements in planes as drawn, maintaining their relationships with all other building elements.
 - .2 Coordinate with existing facility operator's ongoing site operations, and limit the number of interruptions during regular business hours.
 - .3 Coordination with continuing occupancy of portions of existing building and of partial occupancy of completed Work.
 - .4 Coordinate with Departmental Representative and existing facility operator for shutoff, capping, and continuation of utility services.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Division 01: Submittal Procedures.
- .2 Qualification Data: For firms and persons specified below to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses and other information specified.
- .3 Prior to beginning of Work on site submit detailed Waste Reduction Workplan in accordance with Division 01: Submittal Procedures.
- .4 Removal and Dismantling Program: Prepare and submit a written, detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of removal and dismantling work, including protection of surrounding and substrate materials and site.

- .5 Proposed Dust-Control and Noise-Control Measures: Submit statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation. Departmental Representative reserves the right to make modifications where proposed methods interfere with existing facility's ongoing operations.
- .6 Inventory: Submit a list of items that have been removed and salvaged after demolition is complete.
- .7 Pre-demolition digital Photographs (high-definition, well lit, clear) or Videotape (high-definition, well lit, clear): Submit photographs or videotape indicating existing conditions of adjoining construction and site improvements prior to starting Work. Include finish surfaces that may be misconstrued as damage caused by demolition operations.

1.6 SUBMITTALS - RENOVATIONS, REPAIRS, REMEDIAL WORK

- .1 Submit samples of all materials to be used for repairs, restoration and/or making good for initial review and approval prior to ordering.
- .2 Submit samples of all finishes to be used for repairs, restoration and/or making good for initial review and approval prior to ordering.

1.7 DEMOLITION DRAWINGS

- .1 Where required by authorities having jurisdiction, submit for approval drawings, diagrams and details showing sequence of deconstruction work, materials designated for salvage and support of structures and underpinning.
- .2 Submit drawings stamped and signed by qualified professional engineer (P.Eng.) licensed to practice in Province of Nova Scotia, Canada

1.8 QUALITY ASSURANCE

- .1 Indoor Air Quality: meet or exceed requirements of Occupational Health and Safety Act and Regulations. Prevent migration of dust outside of work areas. Clean up all surfaces daily, and as part of closeout operations.
- .2 Regulatory Requirements: Perform work as follows; use most restrictive requirements where differences occur between the municipal, provincial and federal jurisdictions:
 - .1 Provincial and Federal Requirements: Perform work in accordance with governing environmental notification requirements and regulations of the Authority Having Jurisdiction.
 - .2 Municipal Requirements: Perform hauling and disposal operations in accordance with regulations of authority having jurisdiction.
- .3 Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project:
 - .1 Conform to Workplace Safety and Insurance Board guidelines.
- .4 Apply for, pay for and obtain a permit for the demolition parts of the Work as required by the NBC 2015. The Owner will provide any information he might have (if any) concerning the nature of the existing structure to be demolished.
- .5 Arrange and pay for permits, notices and inspections necessary for the execution and completion of the demolition parts of the Work.

- .6 Do not commence the demolition parts of the Work until the permit is received and posted.

1.9 SITE CONDITIONS

- .1 Investigate site and structure to determine dismantling, processing and storage logistics required prior to beginning of Work. Note all characteristics and irregularities affecting the work of this Section.
- .2 Develop strategy for deconstruction and demolition to facilitate optimum salvage of reusable and recyclable materials.
- .3 Portions of building immediately adjacent to demolition area are occupied throughout the Work:
 - .1 Conduct demolition so that occupant's operations are not be disrupted.
 - .2 Provide not less than 72 hours notice to Departmental Representative and existing facility operator of activities that will affect occupant's operations
- .4 Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities:
 - .1 Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from authorities having jurisdiction.
- .5 Should material resembling spray or trowel-applied asbestos, or other asbestos containing material, or other designated substance listed as hazardous as defined in the Hazardous Materials Act be encountered, stop work in location identified, take preventative measures, and notify Departmental Representative and existing facility operator immediately.

PART 2 PRODUCTS

2.1 TEMPORARY SUPPORT STRUCTURES

- .1 Design temporary support structures required for demolition work and underpinning and other foundation supports necessary for the project using a qualified professional engineer registered or licensed in province of the Work.

2.2 DEBRIS

- .1 Make all arrangements for transport and disposal of all demolished materials from the site.

2.3 EQUIPMENT

- .1 Provide all equipment required for safe and proper demolition of the building.

2.4 MATERIALS FOR REPAIRS, RENOVATIONS, MAKING GOOD, AND RESTORATIONS

- .1 Use materials identical to existing materials:
 - .1 If identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.

- .2 Use material whose installed performance equals or surpasses that of existing materials.
 - .3 Comply with material and installation requirements specified in individual Specification Sections.
 - .4 Match existing adjacent finishes so new work cannot be distinguished from adjacent existing finishes to remain; submit samples for initial and selection for review and approval prior to ordering materials and prior to executing work on site. Review and approval of selections prior to execution is mandatory.
- .2 Concrete repair and levelling materials: to Section 03 01 30.71- Concrete Repairs.
 - .3 Gypsum Board Patching Compounds: Joint compound to ASTM C475, bedding and finishing types thinned to provide skim coat consistency to patch and prepare existing gypsum board walls ready for new finishes in accordance with Section 09 21 16 – Gypsum Board Assemblies.
 - .4 Hoarding and Dust Screens: Refer to Division 01: Temporary Barriers and Enclosures for stud framing and gypsum board sheathing materials.

2.5 SALVAGE

- .1 All materials from the demolition, except as otherwise noted, shall become the property of the Contractor.

2.6 REMOVE AND REINSTALL

- .1 Drawings indicate and provide directions concerning individual items to be carefully removed, cleaned and made ready for reuse and/or reinstallation as noted.
- .2 Coordinate and sequence work to safeguard materials to remain or to be reused and/or reinstalled later in the Project.

PART 3 EXECUTION

3.1 EXAMINATION

- .1 Inspect building with Departmental Representative and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.
- .2 Locate and protect utilities. Verify that utilities have been disconnected and capped as required.
- .3 Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- .4 Notify the Departmental Representative where existing mechanical, electrical, or structural elements conflict with intended function or design:
 - .1 Investigate and measure the nature and extent of conflict and submit a written report to Departmental Representative.
 - .2 Departmental Representative will issue additional instructions or revise drawings as required to correct conflict.

- .5 Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 TRANSPIRATION AND DISPOSAL OF HAZARDOUS MATERIALS

- .1 Comply with governing federal and provincial laws and regulations when encapsulating, removing, handling, transporting and/or disposing of hazardous materials and/or designated substances.
- .2 Obtain and pay for all required licences, inspections, fees and permits.

3.3 DECONSTRUCTION

- .1 Deconstruct carefully as required to salvage in as-found condition reusable items or items scheduled on Drawings to be reused and/or reinstalled later in the Project.
- .2 Use deconstruction methods where items to be removed can be diverted from landfill and transported to reuse or recycling facilities.
- .3 Sale of items while on property not permitted.

3.4 UTILITY SERVICES

- .1 Coordinate existing services indicated to remain and protect them against damage during selective demolition operations.
- .2 Locate, identify, disconnect, and seal or cap off indicated utilities serving areas to be selectively demolished.
 - .1 Arrange to shut off affected utilities with utility companies.
 - .2 If utility services are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary utilities that bypass area of selective demolition and that maintain continuity of service to other parts of building.
 - .3 Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
- .3 Coordinate with mechanical and electrical sections for shutting off, disconnecting, removing, and sealing or capping utilities.
- .4 Do not start selective demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.5 PREPARATION

- .1 Identify and mark all equipment and materials identified to be retained by Departmental Representative or to be re-used in subsequent construction. Separate and store items to be retained in an area away from area of demolition and protect from accidental disposal.
- .2 Post warning signs on electrical lines and equipment that must remain energized to serve other areas during period of demolition.
- .3 Confirm that all electrical and telephone service lines entering building are not disconnected.
- .4 Do not disrupt active or energized utilities crossing the demolition site.

- .5 Provide and maintain barricades, warning signs, protection for workmen and the public during the full extent of the Work. Read drawings carefully to ascertain extent of protection required.
- .6 Mark all materials required to be re-used, store in a safe place until ready for re-installation.
- .7 Adjust all junction boxes, receptacles and switch boxes flush with new wall construction where additional layers to existing construction are indicated.

3.6 PROTECTION

- .1 Take precautions to guard against damage to adjacent work. Be liable for any damage or injury caused.
- .2 Cease operations and notify Departmental Representative if safety or any adjacent work appears to be endangered. Do not resume operations until reviewed with Departmental Representative.
- .3 Ensure safe passage of building occupants around and through area of demolition.
- .4 Keep noise, dust, and inconvenience to occupants to minimum.
- .5 Protect building systems, services and equipment.
- .6 Provide temporary dust screens, covers, railings, supports and other protection as required.
- .7 Provide and maintain fire prevention equipment and alarms accessible during demolition.
- .8 Do Work in accordance with 01 35 29 – Health and Safety Requirements.

3.7 REMOVE AND REINSTALL

- .1 Where indicated, carefully disassemble indicated items; retain and store safely and securely ready for re-use.
- .2 Clean and refurbish to reusable condition as required.
- .3 Reinstall items designated for re-use where indicated in accordance with manufacturer's printed installation instructions and illustrations, and as required to meet or exceed the requirements of the National Building Code of Canada, 2015.
 - .1 Integrate with adjacent materials and assemblies, and restore finishes as required to match adjacent existing, or to level of finish found at time of Project start-up, as determined by Departmental Representative.

3.8 SELECTIVE DEMOLITION

- .1 Demolish and dismantle work in a neat and orderly manner and in strict accordance with all regulations.
- .2 At end of each day's work, leave Work in safe condition so that no part is in danger of toppling or falling.
- .3 Demolish in a manner to minimize dusting and to prevent migration of dust.
- .4 Selling or burning of materials on the site is not permitted.

- .5 Remove concrete bases by cutting and chipping, take precautions against slab cracking and degradation. Grind edges smooth, fill and make level with self levelling grout.
- .6 Fill all openings in concrete block walls where required with concrete masonry units, coursing to match existing, prepare ready to receive new finishes to match existing.
 - .1 Provide bond beams in new openings cut into existing concrete masonry unit walls.
 - .2 Provide finished end masonry units to patch and repair for new jamb sections in existing concrete masonry unit walls.
- .7 Fill all openings in gypsum board walls where required with gypsum board and steel framing to match existing, skim coat to make wall smooth and even.
- .8 Where indicated or otherwise required in order to complete the Work, demolish existing flooring and adhesive remnants as follows:
 - .1 Vacuum existing carpet thoroughly, prior to removal, using vacuum equipped with power head/sweeper.
 - .2 Apply fine mist water spray to floors to minimize dust generation during removal. Avoid spraying near electrical outlets.
 - .3 Demolish existing residual floor finishes, remove and dispose of off site.
 - .4 Remove adhesive to the greatest extent possible using scrapping tools and as follows:
 - .1 Do not use solvent based cleaners to remove adhesive remnants.
 - .2 Lightly shot blast or grind floor using machine designed for purpose to remove adhesive remnants.
 - .3 Vacuum floor ready for application of skim coating.
 - .4 Repair all slab depressions and damage with cementitious patching compound.
 - .5 Skim coat floor with minimum 1 mm thick cementitious floor underlayment compatible with new flooring materials.
 - .5 Floor substrate shall be smooth, free from ridges and depressions, and adhesive remnants that could telegraph through resilient flooring materials and carpets.
- .9 Where indicated or otherwise required in order to complete the Work, demolish existing tile finishes. Remove setting bed or adhesive to the greatest extent possible using mechanical scrapping tools and as follows:
 - .1 Saw cut edge of tile for clean and even transition joint between existing tile to remain and new flooring materials.
 - .2 Lightly shot blast or grind floor to remove remnants of setting materials.
 - .3 Vacuum floor ready for application of skim coating.
 - .4 Repair all slab depressions and damage with cementitious patching compound. Skim coat floor with minimum 1 mm thick cementitious floor underlayment compatible with new flooring materials.
- .10 Where indicated or otherwise required in order to complete the Work, demolish ceiling finishes as indicated on drawings.

- .11 Remove all wall coverings scheduled for demolition. Patch and repair wall surfaces with skim coat of gypsum board joint compound leaving wall surfaces smooth and even ready for new wall finishes.
- .12 Patch and repair all walls, floor and ceilings damaged during demolition with material matching adjacent walls, prepare ready for new finishes.
- .13 Patch and repair all mechanical equipment and electrical fixtures damaged or exposed during demolition to match adjacent finished surfaces.

3.9 CORING, DRILLING AND SAW-CUTTING CONCRETE

- .1 Complete an x-ray or ultrasound inspection of affected concrete area before coring. Employ the services of an experienced inspector. Confirm with Departmental Representative before coring or drilling, location of reinforcing steel and raceways that may be present.
- .2 Perform coring and drilling after normal working hours, unless specified otherwise. Confirm coring and drilling times with Departmental Representative.
- .3 Wet or dry core drilling and saw-cutting are acceptable. Reduce amount of cooling water used to minimum required and collect water used in suitable containers, or use a suitable vacuum system that will collect water.
- .4 Do not core structural beams or cut conduits or reinforcing steel without written permission from Landlord.

3.10 PATCHING AND REPAIRING

- .1 Floors and Walls:
 - .1 Where walls or partitions that are demolished extend from one finished area into another, patch and repair floor and wall surfaces in the new space.
 - .2 Provide a level and smooth surface having uniform finish colour, texture, and appearance.
 - .3 Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform colour and appearance.
 - .4 Patch with durable seams that are as invisible as possible.
 - .5 Provide materials and comply with installation requirements specified in other Sections of these Specifications.
 - .6 Where patching occurs in a painted surface, apply primer and intermediate paint coats over patch and apply final paint coat over entire unbroken surface containing patch. Provide additional coats until patch blends with adjacent surfaces.
 - .7 When requested, test and inspect patched areas after completion to demonstrate integrity of installation.
- .2 Ceilings: Patch, repair, or re-hang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

3.11 FINISHING

- .1 Prepare surfaces and finish new work using reviewed and approved materials, finishes and colours as required to match adjacent existing so new work is indistinguishable from adjacent existing materials to remain. Contractor agrees that Departmental Representative has sole right to determine acceptable match in case of dispute.

3.12 REMOVAL FROM SITE

- .1 Transport material designated for alternate disposal to approved facilities and receiving organizations listed in waste reduction workplan and in accordance with applicable regulations. Do not deviate from facilities and receiving organizations listed in waste reduction workplan without prior written authorization from Departmental Representative.
- .2 Dispose of materials not designated for alternate disposal in accordance with applicable regulations. Disposal facilities must be approved of and listed in waste reduction workplan. Do not deviate from disposal facilities listed in waste reduction workplan without prior written authorization from Departmental Representative

3.13 CLEANING

- .1 Progress Cleaning: clean in accordance with Division 01: Cleaning. Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Division 01: Cleaning. Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .3 Manage and dispose of demolition and construction waste materials in accordance with Division 01: Construction/Demolition Waste Management and Disposal.

3.14 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by Work of this Section.

3.15 SCHEDULE

- .1 Refer to Drawings for demolition scope of work and requirements.

END OF SECTION