Part 1 General

1.1 General Instructions

.1 These instructions add information to all articles of contracts with professionals.

.2 For each project, “McGill University Facilities Management and Ancillary Services” assigns a Project Manager. All communication with the University, through all the phases of the project, will be done through the Project Manager.

.3 The floor plans of University buildings are available in AutoCAD format. Mechanical and electrical plans are, most often, in paper format. These plans are for reference and general planning only. For detailed design, on-site inspections are always required. These inspections are part of the basic contract of the Consultants.

.4 The Project Manager must pre-approve all work which will require extra cost.

.5 Each Consultant shall confirm that the design plans and specifications are in conformity with “McGill Building Design Standards” by completing the “Design Standards Conformity Form”:

   Any deviation from the standards must be addressed in the “Variance Form”:

.6 The McGill project number should appear on all documents, and in all correspondence. The title of the project on all documentation should always be the one given by the PM at the beginning of the project.

.7 In the event of a change to the plan asked for by the client, the Project Manager must be notified, in writing, before obtaining permission to continue.

.8 When further investigations are required on-site (extra to the basic contract), the following procedures should be followed:
   .1 Consult existing drawings and specifications to make sure that the needed information is not to be found on them.
   .2 Locate the site at which work must be done.
   .3 Inform the Project Manager, by way of email, the requirements of the project.

.9 If the presence of asbestos is suspected on-site, a request for further investigation must be sent by way of e-mail, to the Project Manager. (See section 02 80 00 Hazardous materials)

.10 Final documents must be verified and returned as documents for tender to the Project Manager within the next five working days following the approval meeting with the users and consultants.

1.2 Participants

.1 Participants:
   .1 Owner: McGill University (Royal Institution for the Advancement of Learning)
   .2 Project Manager: the official representative of the owner and the directives given by the project manager have the same value as the ones given by the owner unless otherwise specified by the owner.
   .3 Client: member of the research, teaching, or administrative staff of the University, main recipient of the project’s benefits
.4 Consultant: expert advisor hired by the Owner.

1.3 **Useful Addresses**

.1 Telephone numbers and mailing addresses for McGill staff:  
http://www.mcgill.ca/directory

.2 Interactive map of Downtown campus:  
http://www.mcgill.ca/maps

.3 Access to floor plans for McGill buildings in AutoCAD format:  
Contact Mr. Ian Tattersfield, by sending email request to ian.tattersfield@mcgill.ca  
at the office of Campus and Space Planning.

.4 Research pertaining to archives:  
Contact Design Services by sending email request to infodesignservices@mcgill.ca  
at the office of Facilities Management and Ancillary Services.

.5 Consultants and contractor contracts:  
Contact the Senior Administrative coordinator, Ms. Sophie Brosseau, by sending  
email request to sophie.brosseau@mcgill.ca , at the office of Facilities Operations and Development.

1.4 **Codes**

.1 All of the applicable building code and standards listed below are to be followed. In case of  
discrepancies the most restrictive item will apply:

.1 Construction Code (latest version in effect).


.3 Commission des normes, de l’équité, de la santé et de la sécurité du travail  
(CNESST) (latest version in effect).

.2 Code analysis performed for a project should appear on documents, as a reference for the  
owner.

1.5 **Protected Buildings and Spaces**

.1 Some University buildings have been identified as buildings requiring historic preservation.  
The consultants must ask the Project Manager for the list of protected Buildings and  
Spaces.

.2 If a building is identified as protected, the Project Manager must be informed and the  
proposal for alterations must be reviewed by the Architectural Advisory Committee.

.3 If a space is identified as a “Protected area” on McGill master plans, any alterations in  
these spaces must be reviewed by the Architectural Advisory Committee.

1.6 **Construction Documents**

.1 Construction Document Production  
It is preferred that Architects/Engineers create and edit their drawings with ‘Autodesk’  
AutoCAD 2007 (or greater) software. The use of BIM software such as Revit 2011 (or  
greater) is highly recommended for best coordination. They may use their own layer  
and numbering systems but must supply McGill with the relevant CTB’s (Plot Style Table) and  
fonts. All relevant Xref’s and image files must be included when transmitting drawings.
Xref’s must be attached using a “relative path” setup. At the end of the project, as built drawings shall be submitted as PDF files and AutoCAD files.

.2 Minimum Drawing Requirements

The following drawing standards are required for all design work done for the University.

.1 Drawing units must be metric.

.2 All final plans must also be submitted as AutoCAD files, on (two) 2 discs, one (1) for archives and one (1) for the Planning office.

.3 All plans should be on standard drawing sizes. Other drawing sizes require the approval of the University Project Manager. It is the responsibility of the Architect to determine the size of drawings and coordinate with other consultants.

.4 Symbols/references:

.1 Include complete index to drawings on 1st or 2nd sheet of the entire set. When sheets are added or deleted during the course of construction, final Record drawing set shall have the index updated to reflect the final documents.

.2 Where a portion of a plan or elevation appears on a sheet, a key plan shall be provided in the lower right portion of the drawing area to show the location of that portion relative to the whole.

.3 Cross-reference all plans, elevations, sections, and details as applicable.

.4 Equipment and structural load capacities shall be listed on drawings.

.5 Drawings shall clearly distinguish between existing, new, and replacement work.

.6 The building occupancy classification as per Quebec Construction Code shall be listed on drawings.

.5 Title Block Content

.1 The University will identify the Project Title and project number, which the A/E shall put on each document concerning the project...

.2 Sheet title shall be as descriptive as possible, shall always be unique within the drawing set.

.3 When submitting to the University any sheet with information not previously submitted, a note shall be included on one of the issuance lines on the title block, indicating purpose of submittal and date. This applies to design review and contract issuances as well as addenda, bulletins, etc. All such notations of issue shall remain on each sheet. In addition to the note on the issuance line, sheets, which have already been released for bids, shall have changes clearly delineated, by “clouding” or similar means.

.4 The title block, located at the lower right corner of the sheet shall contain the following information:

.1 McGill University building name and building number in parenthesis.

.1 Building numbers may be obtained by accessing the following link:


Ex: Bronfman building (102).
.2 McGill University project number
.3 Project title
.4 Sheet title
.5 All plans, specifications and reports shall be sealed by the Architect and/or Engineer responsible for the work, as required by law.

.3 Specifications
.1 The general requirements (Division 1) and technical portions (Divisions 2 through 32) of the specifications may be included on drawings, or in book (project manual) form. Generally, projects with anticipated construction costs of more than 1 million dollars are required to take the project manual approach. Consult with University Project Manager.
.2 Specification Standard: The University recommends compliance with the principles and practices outlined in the NMS Manual of Practice.
.3 Use the current version NMS Section numbers and titles for organizing Documents and specifications within Project Manuals. Comply with guidelines for contents of each Division and Section of the specifications.

.4 Format of Documents
.1 Letters, guarantees, contracts and other documents requiring a signature shall be in paper format.
.2 Plans and specifications will be accepted in electronic format.

.5 Language of Documents
.1 Plans and specifications must be written in French. The minutes of design meeting must be written in English. The minutes of construction meeting must be written in French.
.2 Eliminate the term “by others” from drawings and specifications. If work is not part of the Contract, say so directly using (N.I.C.) or similar instructions.

.6 McGill University Standard General Conditions
.1 The University maintains its own Standard General Conditions. Obtain a copy of this document and make sure the specification writer is fully familiar with it.
.2 In general, Supplemental Conditions are not required. However an Architect/Engineer may wish to modify language concerning shop drawing review or other items. Coordinate use of supplemental conditions with the Project Manager.

1.7 Coordination
.1 General:
.1 All work in ceiling spaces, mechanical rooms, reflected ceiling plans, etc. shall be coordinated to provide maximum accessibility. Consider additional drawing sections or extraordinary construction measures to assure this. Pay particular attention to this when the user and/or other design staff have consciously decided to install mechanical equipment in marginally accessible locations.
.2 Keep maximum height under ceilings: new ceilings should not be lower than existing ceilings. Efforts have to be made by all parties to coordinate services over ceilings in order to maximise space and not lower ceilings uselessly.
.2 Drawing Requirements:

.1 The Architect/Engineer must place notes on the drawings, as appropriate, directing the Contractors to coordinate all work to allow free access to mechanical and electrical equipment for servicing. Drawings must include access to panels, doors, service entrances, etc. existing or new. Architectural plans must incorporate access panels and other mechanical equipment that will appear as a finish product in the space. The removal of other components such as light fixtures in order to service any equipment shall be discouraged. The specifications should require that the General Contractor, for major renovation and new construction projects, submit the coordination drawings. These drawings shall clearly show the priority by trade required to assure access to the equipment and devices in the ceiling cavity. Of particular importance is the free access to all variable volume boxes, reheat coils and their controls—including free and easy removal of the entire box. Nothing shall be located beneath these devices. (Fire protection or other piping is to be offset around the device footprint, etc.) The Architect/Engineer must witness the construction to assure that the required accessibility is achieved.

.3 Permits:

.1 Any design work that affects the exterior envelope of a building, the addition of new or modification of existing openings, or changes to the type, finish or color of exterior materials (including roofs), must also comply with City of Montreal regulations. As the McGill campus is mostly located within the 'Arrondissement historique et naturel de Mont Royal', approval may also be required from the Ministry of Culture of Quebec. While there is no set guideline for what is or is not permitted, the choices and decisions on design and materials must be made in the context of the building in question and its immediate context. The project may be sent to the City’s internal architectural review committee once the approvals process is undertaken. Unless there is a zoning element affected, there is no need to consult with Planning and Institutional Analysis. However, the project manager should consult with Architectural Advisory Committee (AAC) and with Building, Ground and special events, and obtain the necessary approval from this group before submitting any such requests to the City.

.2 Consultants must be joined by a McGill representative when they are going to present the documents in order to get the city’s permit.

1.8 Room Numbering and Room Naming

.1 All new or revised room numbering and room naming shall be coordinated with McGill Planning Office (through the project manager) before documents are issued for approval.

Part 2 Additional Documentation Requirements

2.1 Indoor Air Quality Management Plan

.1 In order to minimize the indoor air quality problems associated with construction, outline measures for an indoor air quality (IAQ) management plan. The plan must aim to reduce the creation and propagation of pollutants during the construction and preoccupancy phases of the project. It must address all applicable measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction, 2nd edition, 2007. Refer to the IAQ Management Plan Guidelines in McGill’s LEED Documentation Guide. See 01 56 00 Temporary Barriers and Enclosures.
.2 Integrate the applicable SMACNA control measures into the project’s drawings and specifications.

.1 For Architects:
   .1 Consider the implications on design decisions, HVAC equipment, and finishing materials.
   .2 Specify that an IAQ plan must be developed and implemented by the General Contractor. The General Contractor must provide documentation and photographs as proof of conformity.
   .3 Specify requirements to protect materials stored on site.
   .4 Specify methods of containment for construction pollutants.
   .5 Specify methods to prevent contamination of completed or occupied areas.
   .6 Specify the order of installation such that high pollutant emitting materials are installed first and highly absorptive materials installed last.

.2 For Engineers:
   .1 In consultation with McGill’s HVAC Manager, determine whether a permanent HVAC system will be used during construction. If not, specify temporary measures.
   .2 Specify measures to protect ductwork and mechanical equipment.
   .3 Specify the filters to be used, minimum MERV 8 during construction, and MERV 13 post construction.

2.2 Waste Management
   .1 Specify that the General Contractor must create and implement a Waste Management Plan. Refer to 01 74 19.

2.3 Construction Activity Pollution Prevention
   .1 In order to reduce construction pollution, an erosion and sedimentation control (ESC) plan must be developed and implemented for all construction activities. The plan must follow the EPA’s 2012 Construction General Permit. Refer to the ESC Plan Guidelines in McGill’s LEED Documentation Guide. See 01 56 00 Temporary Barriers and Enclosures.
   .2 The Professional must specify in the project’s drawings and specifications:
      .1 Implementation is the responsibility of the General Contractor. The General Contractor must provide documentation and photographs as proof of conformity.
      .2 The installation of perimeter controls.
      .3 Measures to minimize sediment track-out onto off-site areas.
      .4 Measures to reduce discharges from materials stored on site.
      .5 The preservation of topsoil.
      .6 The protection of storm drain inlets.
      .7 Measures for soil stabilization.
      .8 Prevent disturbance of steep slopes.

END OF SECTION