
Memorandum

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TO: Senate

FROM: Mr. Robert Couvrette, Associate Vice-Principal (University Services)

SUBJECT: Annual Report from the Senate Committee on Physical Development

DATE: October 30, 2013

DOCUMENT #: D13-22

ACTION REQUIRED: INFORMATION APPROVAL/DECISION

ISSUE: The 2012-2013 annual report of the Senate Committee on Physical Development, a Senate standing committee, is presented for information.

BACKGROUND & RATIONALE: The Senate Committee on Physical Development (SCPD) has been active since 1971. It operates with a membership and terms of reference that were last approved by Senate in May 2009.

A report on the activities of the committee over the course of 2012-2013 is attached (Appendix A). Also attached are the 2012-2013 lists of members (Appendix B) and the terms of reference of the Committee (Appendix C).

Five meetings are scheduled during 2013-2014. Priorities for the coming year continue to include focused presentations and discussions to seek the input of SCPD members on specific themes related to the physical development of the campus in service of academic priorities. Planned themes for the 2013-14 session include: 2013 McGill Transportation Survey (Transportation Research at McGill - TRAM); Annual Space Report (Campus and Space Planning); Deferred Maintenance (Facilities Operations and Development); Graduate Student Space (Teaching and Learning Services) and Macdonald Campus Sustainability Initiatives (McGill Office of Sustainability).

MOTION OR RESOLUTION FOR APPROVAL: N/A

PRIOR CONSULTATION: Members of the Senate Committee on Physical Development

NEXT STEPS: N/A

APPENDICES:

- Appendix A: SCPD Annual Report 2012-2013
- Appendix B: SCPD Membership 2012-2013
- Appendix C: SCPD Terms of Reference

Senate Committee on Physical Development Annual Report 2012-2013

ACTIVITIES DURING THE 2012-2013 ACADEMIC YEAR

The Committee held five (5) meetings during the 2012-2013 session. This document summarizes the physical development and environment related activities of McGill University for this period as discussed at meetings of the Senate Committee on Physical Development (SCPD). The membership and terms of reference of the Committee are attached as appendices.

MAJOR CONSTRUCTION/RENOVATION PROJECTS - COMPLETED OR UNDERWAY

Various projects reported over the course of 2012-2013 include:

Downtown Campus

- **Bronfman Building** - 5th floor renovation project. **Expected Completion Date:** December 2013.
- **Burnside Hall**
 - Replacement of NCS electrical infrastructures including modernization of the electrical distribution system and increase of electrical capacity. **Funding Source:** Deferred maintenance. **Budget:** \$ 4.4M. **Status:** Completed.
 - Ventilation upgrade including replacement of the Computer Room Air Conditioning. **Funding Sources:** Data Centre Renovations fund; Deferred Maintenance. **Budget:** \$ 2.4M. **Status:** Completed.
 - Replacement of the two existing absorption chillers with electric units, which are more efficient and will reduce demand for steam. **Funding Source:** Deferred Maintenance. **Budget:** \$3.0M. **Status:** Completed.
 - NCS server room - new emergency power including a dedicated 1.5 mw generator. **Funding Source:** Deferred maintenance. **Budget:** \$1.8M. **Status:** Completed.
- **Davis House** - Waterproofing and exterior envelope repairs & Renovations to room B2. **Funding Source:** Deferred Maintenance; Capital Budget. **Budget:** \$2.6M. **Expected Completion Date:** November, 2013.
- **Duff Building** – Preparation of a functional and technical program (FTP) that will serve the Duff Medical building's Biomedical Engineering, Microbiology & Immunology, Pathology, Nephrology and animal facility's needs. **Funding Source:** (DM) Deferred maintenance, **Budget:** \$300K. **Status:** Completed.
- **Ferrier Building** - Summer Boiler project - project is complete and energy savings began as of April 2013 when the main boilers were closed down. Payback is less than 4 years.
- **Ludmer Building**
 - Animal Facility upgrades. **Funding Source:** McGill Capital Projects, Rockefeller Foundation Endowment Fund & Compacts. **Budget** \$4.0M. **Status:** Completed.
 - Major renovation, including mechanical infrastructure upgrades and replacement of all exterior windows – **Funding Source:** Donor funding @ 50% **Budget:** \$ 2.8M. **Status:** Completed.
- **Maass Chemistry Building** – Second phase of teaching lab renovation project - renovation of teaching labs 1 & 100, including new lab benches and 30 new fume hoods. **Funding Source:** Deferred Maintenance. **Budget:** \$4.0M. **Status:** Completed.
- **Macdonald Engineering Building** – Replacement of slate and copper roof. **Funding Source:** Deferred maintenance **Budget (anticipated):** \$3.5M. **Expected Completion Date:** Spring 2014.
- **Macdonald Stewart Library Building** – Replacement of slate and copper roof and dormers. **Funding Source:** Deferred Maintenance. **Budget (anticipated):** \$3.3M. **Expected Completion Date:** Spring 2014.
- **Martlet House** – Stabilization of façade & elements **Funding Source:** Deferred Maintenance. **Budget (anticipated):** \$1.9M. **Expected Completion Date:** December 2013.
- **McGill College, 2001** – Renovations to rental space to house Undergraduate Dental Clinic, Deanery, etc. for the Faculty of Dentistry. Work is being undertaken by the Landlord. **Estimated Completion Date:** April 2014.
- **McIntyre Medical Building**
 - 2nd floor renovations (CyberMed) - New state-of-the-art interactive teaching and student facility, including interactive learning classrooms, discussion/seminar rooms; a large flexible area for group study and quiet study zones, with computers and library support and redevelopment of the Faculty of Medicine's Herbert Black small

group teaching facility. Several programs in Medicine are relying on the upgraded teaching spaces to meet their accreditation requirements. **Funding Sources:** MELS grant, Libraries, Teaching and Learning Services, Deferred Maintenance and Medicine **Budget:** \$4.0M. **Status:** Completed.

- Replacement of the ventilation system in the lower 6 floors. **Funding Source:** Deferred Maintenance. **Budget:** \$10.8M. **Expected Completion Date:** December 2014.
- **Molson Stadium** - Replacement of turf and upgrading of field drainage. **Funding Source:** McGill Athletics. **Budget:** \$2.4M. **Status:** Completed.
- **McLennan-Redpath Terrace** – Phase 3 of the terrace restoration project (north section). Work began in summer 2013. **Expected Completion Date:** November 2013.
- **Sherbrooke, 410 (La Citadelle Residence)** – Conversion of this former hotel to a student residence was completed in 2012 and opened for occupancy as of the winter 2013 term. This project was self-funded.
- **Stewart Biology Building** – HVAC work related to the animal facility. **Status:** Completed.
- **Strathcona Anatomy & Dentistry Building**
 - Building fire safety upgrades. **Status:** Completed.
 - Emergency repairs to masonry. **Funding Source:** Deferred Maintenance. **Budget:** \$3.8M. **Status:** In progress.
- **Other**
 - Waste energy recovery project - Uses excess heat produced in the Burnside Hall main computer room to pre-heat air going to the Maass Chemistry Building, which has a high air exchange demand. The infrastructure is located in the Maass mechanical room. **Status:** Completed.
 - Systematic energy audits - Based on observations made from energy use profiles (energy dashboard) which involved the installation of a series of meters to monitor energy consumption. **Status:** Completed.
 - Lighting retrofits – A series of energy savings initiatives to automate lighting systems. **Status:** Ongoing

Residences:

- **Douglas Hall** – Renovations including exterior. **Expected Completion Date:** July 2014.
- **McConnell, Molson & Gardner Halls** - HVAC Units Replacement. **Funding Source:** Residences. **Budget:** \$1.2M. **Status:** Completed.
- **Molson Hall** - Window Replacement Funding Sources: Residences, **Budget:** \$2.3M. **Status:** Substantially complete.
- **New Residence Hall** - Renovation of the Ballroom floor & replacement of an existing escalator by a stair. **Funding Source:** Residences. **Budget:** \$3.2M. **Status:** Completed.

Macdonald Campus

- **Old Cattle Barn** - Roof replacement, window replacement, masonry repairs and demolition of two building sections. **Funding Source:** Deferred maintenance. **Budget:** \$ 1.7M. **Status:** Completed.

MAJOR CONSTRUCTION/RENOVATION PROJECTS – IN PLANNING

- **Ferrier Building** – replacement of chiller for Ferrier building with refurbishment of water tower. **Funding Source:** Deferred Maintenance. **Budget (anticipated):** \$ 2.4M. **Expected Completion Date:** To be determined.
- **Maass Chemistry Building** – Third phase of teaching lab renovation project. **Funding Source:** To be determined. **Budget:** \$4.0M. **Status:** In planning
- **Maass Chemistry Building and Pulp & Paper Building** – Fit out of space for approved CERC ‘Green Chemistry’ project. Scope and budget to be determined.
- **Montreal Neurological Institute (expansion)** – Second phase involving the outfitting of the remaining interior spaces in support of research and clinical activities. Work to begin in summer 2014. **Funding Source:** MESRST; McGill. **Budget:** \$ 21.5M + \$11M equipment. **Expected Completion Date:** January 2016
- **Royal Victoria Hospital** – The facility is to be vacated by 2015. At this time its future use remains unclear. Discussions continue between McGill, the MUHC and the Ministry of Education about potential future University use of the complex.
- **Duff to Strathcona Anatomy and Dentistry Service Tunnel** – Reconstruction of tunnel for northeast sector (MNI and Duff Medical complexes from the Pine Avenue intersection to the MNI north wing expansion). To begin after completion of major City of Montreal waterworks infrastructure project in the area, anticipated - March 2014. Work will take up to a year to complete but will be mostly underground. **Expected Completion Date:** Summer 2016.
- **Strathcona Anatomy & Dentistry Building** – Replacement of windows. **Funding Source:** Deferred Maintenance. **Budget (anticipated):** \$ 35M. **Expected Completion Date:** To be determined.

- **Wilson Hall** – This project must be administered through Infrastructure Quebec. Plans are being prepared for a redevelopment of the entire building with potential expansion. The occupants will have to vacate the building temporarily during the reconstruction. **Funding Source(s):** MELS; Capital Budget. Budget (anticipated): \$51M. Expected Completion Date: To be determined, depending on procedures imposed by Infrastructure Québec.
- **Wong Building** – Replacement of the exterior masonry walls of the Wong Building. **Estimated Budget:** \$8 to \$12M **Funding Source:** To be determined.
- **Other** –
 - Proposed new building, to be constructed on Dr. Penfield Ave. between the Ferrier building and the Wong building will house two 1.5 MW diesel generators and associated electrical distribution equipment. **Estimated Budget:** \$10 to \$15M. **Status:** Design completed – project has been put on-hold.
 - Fit out space for approved CERC ‘Pain’ projects. Location, scope and budget to be determined.
 - McTavish Street – Consultants have been engaged to prepare a permanent plan for lower McTavish Street, to be undertaken in partnership with the City of Montreal after the underground infrastructure is replaced..
 - Campus Entrances - Consultants have been engaged to prepare a permanent plan for configuring the main McGill entrances (Roddick, McTavish, Milton), and the “Y” intersection, with the Milton entrance as a priority.
- **Macdonald Campus** – Energy conservation refit incl. modification to the production of heating for the entire Macdonald lower campus and modification to the power house equipment and the construction of a new power house. To begin in spring 2014. **Funding Source:** Energy deferred maintenance **Budget (anticipated):** \$7.9M (less subsidies of approximately \$800K).

SUBCOMMITTEE ACTIVITY

Within its terms of reference, the Committee may create or dissolve sub-committees as required.

- **The Architectural Advisory Sub-Committee** - Is currently active and is chaired by Professor David Covo of the School of Architecture. Membership includes both McGill staff and outside professionals. The sub-committee meets monthly to review McGill projects. Terms of reference for the Committee were approved by the SCPD during the 2012-13 sessions.
- **The Gardens and Grounds Sub-Committee** - Has been reconstituted and is chaired by Brian Karasick of Campus and Space Planning. The committee functions with a new formal ‘Terms of Reference’ including a new committee membership aimed at improving its effectiveness. The sub-committee works to ensure that all undertakings on the campus grounds are consistent with the Master Plan principles. Some key planning projects underway include: McTavish Street; Campus entrances; Commemorative installations, Signage, and Campus furniture/infrastructure. Terms of reference for the Committees were also modified during the 2012-13 session so as to be in accordance with the approved terms of reference for the Architectural Advisory Sub-Committee.
- **The Visual Arts Sub-Committee** - Is likely to be replaced by a formal Visual Arts group staffed by a full time curator that will be charged with managing the University’s visual arts collection. The mandate for this group is currently being developed.
- **Sustainability** - In recognition of the growing number of sustainability initiatives across McGill and the need for their coordination, a Sustainability Coordinating Group was created in 2010 with representation of students and staff. The Sustainability Projects Fund (SPF) which provides financial support for groups to allow them to bring sustainability initiatives to fruition was recently renewed. The Vision2020 process is also acting as a major vehicle for engaging the community in sustainability planning and engagement and is in the process of presenting its priorities, planning objectives and goals to university committees, SCPD included. The group made two presentations to the Senate Committee on Physical Development during the 2012-2013 session.

OTHER INITIATIVES

- **SCPD Annual Report 2011-2012** – The report was presented to Senate in November, 2012.
- **Teaching and Learning Services Work Group** – Annual funding for TLS initiatives for both classrooms and teaching labs is to be increased by \$1M for both infrastructure and technology. Allocations will now be as follows: Classrooms - \$2M infrastructure - Teaching Labs \$2M infrastructure + \$1M technology
- **Gault Nature Reserve** – A recent fire in a remote area on the public side of the Reserve was put out. The area affected was approximately 50m x 75m.
- **City of Montreal**

- Infrastructure Repairs - Phase 2 of the waterworks repair project was completed. Phase 3 began in May 2013. Work on the reservoir itself is to continue for several years. The City is also anticipating major underground work on lower McTavish Street as early as February 2014.
- February 2013 Flood - The flood resulting from water supply pipes that burst during the repair project caused extensive damage to McGill. Some 75 staff were temporarily relocated off campus. Serious water damage was sustained in the Wong Building, The James Administration Building and Annex, as well as 3534 University, with minor damage to the McLennan Library and Birks Buildings. Damage was also sustained to the campus grounds, including McTavish Street. Temporary flood barriers have been deployed in key areas around campus to protect McGill buildings from potential future damages during the City's waterworks reconstruction project. Cleanup from the flood was largely completed and displaced staff from the James Building returned by May 2013. Work on 3534 University and repairs to the campus grounds are in progress.
- **Research competitions with an infrastructure element:**
 - CFI (Round VII) – McGill received \$21M in CFI funding with successful projects from prof. Grutter (Physics), prof. McKee (Dentistry), and prof. Gehring (Chemistry).

The typical format of meetings includes a focus on a specific theme of interest to the Committee where the input of members is sought. Tours of related or new facilities also took place following several of the sessions. Themes and presentations covered over the past year are summarized below:

'Materials Analysis Tool' - Developed by McGill Facilities Operations and Development and the Office of Sustainability as a tool to aid in design decision making – Presentation by Lorraine Mercier, Director, Design Office, Facilities, Operations and Development.

In 2009, the Design Department and the Office of Sustainability at McGill University began to develop an internal rating system for material selection in order to assist their department, and ultimately the university, in making more sustainable material choices for construction and restoration projects on campus.

The Materials Analysis Tool (MAT) is a free online ranking system to assist designers with the specification of final products in building and renovation projects. MAT is most useful for those who already have an understanding of the nature of the material they are looking to use, but need help in evaluating the sustainability of various comparable products available on the market. MAT can also be helpful for those looking to understand how different materials might rank in accordance to certain sustainability criteria.

The criteria used for this assessment are:

- Certification of the company, product or product attributes
- Durability of the product
- Health implications of the product on users and occupants
- Rapidly renewable content of the product
- Recycled content of the product and packaging
- Recyclability of the product and packaging
- Region of manufacture and extraction

"Vision 2020: Vision and Goals for Creating a Sustainable McGill" – Presentation of project for Committee endorsement in advance of presentation to Senate, by Martin Krayer von Krauss, Manager of the Office of Sustainability and Lilith Wvatt, Sustainability Projects Fund Administrator

The McGill community embarked on Vision 2020, a year of conversation, consultation and planning to set McGill's sustainability strategy for the next decade. Themes included: Research; Education; Connectivity; Operations; Administration & Governance. Status report is as follows:

- Situational Analysis: COMPLETE
- Vision and Goals: FINAL DRAFT
 - Developed & validated by the community; Moving to governance bodies (Senate/Board) for endorsement.

- Action Plan: EMERGING DRAFT
 - Partner meetings and community engagement; Distributed leadership and partnerships; Transition statements, actions, indicators.
- Action & Implementation
 - Category Jams to workshop Action Plan; Implementation; Ongoing community engagement.

A document had been distributed in advance. Several comments were presented by members:

- Overall it needs to be made clear throughout that this is an aspirational proposal; an executive summary would also be very useful.
- Sustainable sourcing for products - It was mentioned this may not be feasible given market logistics and availabilities. It is advised that aspirational statements be used vs. 5 year implementation goals.

The following motion was proposed and unanimously approved at the meeting:

“Be it resolved that the Senate Committee on Physical Development endorses the submission of the Vision and Goals statements outlined in ‘Vision 2020: Creating a Sustainable McGill’ to Senate”.

“Strategic Summit on Student Spaces”- Presentation by Maggie Knight and Carol Fraser on the outcome of an event sponsored by the SSMU held on February 3, 2012.

The presentation was divided into thematic sections. As a summary of suggestions for improvement for each section is as follows:

- Active/Social space – Recommendations
 - Improve the booking process ; Improve communications between McGill and Student; Societies regarding alcohol permits; Improve transparency related to room use costs; and Use empty or unused classrooms as study space
- Academic Space - Recommendations
 - Add more electrical outlets and clocks in classrooms; Train professors in proper use of technology; Improve after-hours access to computer labs; Improve library security; Use the SSMU basement for engineering design teams; and Renovate McLennan 3rd floor
- Outdoor Space – Recommendations
 - Strategy for winter use of outdoor space and activities; Outdoor gazebo with heat lamps and acoustic jam space; Expand Edible Campus; Expand student garden projects; Plant more fruit trees; Add steps to lower field from McLennan/Redpath terrace; Restrain use of leaf blowers; and Consider constructing an ‘adult’ playground
- General - Recommendations
 - Consider similar events to the Summit (annually or for special subject themes) as a means to improve dialogue; An understandable decision making process; Vision 2020 model for generating ideas; Harness student enthusiasm; Acknowledgement of (student) concerns; Student associations as part of events bookings process; and Improved communications

“The impact of infrastructure on curriculum and teaching - Recent changes in Chemistry” - Presentation by Professor Bruce Lennox

- The nature of chemical intensity in undergraduate education has changed hugely in 50 years. The Maass Chemistry Building opened in 1964 building; it was built for another era.
- When chemical sophistication exceeds resource capabilities, one has to migrate to “demonstration” from “experimentation”. Curriculum reform was inhibited by a 1964 facility which by now was worn out. Capacity issues also forced the use of research labs for overflow.
- The radical new design for both research and teaching labs has revolutionized teaching and allowed undergraduates to undertake sophisticated experiments within their curriculum.
- Two installations have been completed and are now in use. One additional installation is awaiting the availability of funding.

“Vision 2020: Toward a Sustainable McGill” - Presentation by Lilith Wyatt and Julia Solomon

Vision 2020 is the planning process that is led by the Office of Sustainability working to set a McGill strategy that is from and for the campus communities. There are three phases:

- Where we are now? A situational analysis was completed in May 2012.
- Where do we want to go? Long term vision and goals
- How do we get there? Short term action plan
 - o It has been a collaborative, exciting, forward thinking and accessible exercise. The team is willing to set up customized sessions within or outside campus, as required. Six students or recent alumni are involved in the core team.
 - o The first draft of a Vision & Goals based on community engagement is being circulated for feedback – select themes relevant to this committee’s mandate include:
 - Built environment changes
 - Hubs for interaction
 - Campus as a living laboratory
 - o The Vision & Goals process is to continue through the fall session with more presentations around campus and one working group downtown for each realm of the university – Research; Education; Connectivity; Operations; Administration & Governance – and one working group at Macdonald Campus.
 - o The winter session will focus on action planning to finalize McGill’s Sustainability Strategy by April 2013.

**Senate Committee on Physical Development
MEMBERSHIP FOR 2012-2013**

- The Associate Vice-Principal (University Services) – Mr. Robert Couvrette (Chair)
- The Provost or delegate – Professor Jan Jorgensen (Delegate)
- The Associate Vice-Principal (Macdonald Campus) – Professor Chandra Madramootoo
- The Director of the Gault Nature Reserve – Professor Gregor Fussmann
- The Trenholme Director of Libraries or delegate – Ms. Diane Koen (Delegate)

Eight representatives of Senate approved by Senate on the recommendation of Senate Nominating Committee (3-year renewable terms):

- Professor Alan Watson, Department of Plant Science - Senate Representative (2014) Chair, *Macdonald Subcommittee on Physical Facilities*.
- Jonathan Rousham, - Maintenance Manager, McGill Residences - Senate Representative (2013).
- Jana Luker, - Executive Director, Student Services - Senate Representative (2013).
- Professor Nik Luka, - School of Architecture/Urban Planning – Senate representative (2015)
- Professor Louis Hermo,- Department of Anatomy & Cell Biology, Faculty of Medicine – Senate representative (2015)
- Professor Gerhard Multhaup, - Chair, Department of Pharmacology and Therapeutics, Faculty of Medicine – Senate representative (2015)
- Ms Joan Hobbins, Libraries – Senate representative (2015)
- Ms Helen Wilicka, (alternate Savy Marino) - Director of Administration, Faculty of Arts – Senate representative (2015)

Four student representatives:

- Undergraduate: Josh Redel, Students' Society of McGill University Representative
- Undergraduate: Jimmy Gutman, Students' Society of McGill University Representative.
- Graduate: Maria Garcia Hologuera, Post Graduate Students' Society Representative
- Macdonald Campus: Evan Henry, Macdonald Campus Students' Society Representative

Secretary: Mr. Brian Karasick (Office of Campus and Space Planning)

Resource persons:

- Professor David Covo, School of Architecture ; Chair, *Visual Arts Subcommittee*; Chair, *Architectural Advisory Subcommittee*;
- Charles Adler - Director, Office of Campus and Space Planning

**Senate Committee on Physical Development
TERMS OF REFERENCE OF THE COMMITTEE**

As approved by Senate in May 2009

The Committee on Physical Development is a Standing Committee of Senate charged with advising on the nature of physical development as it reflects the academic priorities and needs of the University.

Specific Areas of Responsibility

The Committee shall:

1. Advise Senate on the extent to which major physical development projects on campus reflect the academic plans and priorities of the University as expressed in the principles defining the University's Master Plan. These nine principles are:
 - a. facilitate a dynamic intellectual community
 - b. achieve strategic growth
 - c. reinforce campus identities
 - d. support excellence in research, teaching and learning
 - e. invest in priority service areas
 - f. conserve and build upon strengths of historic buildings and landscapes
 - g. provide appropriate facilities and infrastructure
 - h. improve campus accessibility
 - i. Develop and maintain the campus open spaces for maximum benefit.
2. Consider possible modifications to the Master Planning principles over time.
3. Appoint subcommittees and workgroups that may assist the Committee in carrying out its mandate, and to dissolve them as necessary.
4. Monitor trends in the use, for academic purposes, of facilities, including those not located on the main campuses, to receive reports on these facilities and to advise Senate and the Associate Vice-Principal (University Services) on such matters.
5. Report on the Committee's deliberations and to submit the appropriate recommendations, on behalf of Senate, to the Board of Governors Building and Property Committee.
6. The Committee shall meet at least four times per year and report annually to Senate.

Composition

- The Associate Vice-Principal (University Services) – Chair
- The Provost or delegate
- The Associate Vice-Principal (Macdonald Campus)
- The Director of the Gault Nature Reserve
- The Trenholme Director of Libraries or delegate
- Eight representatives of Senate, approved by Senate on the recommendation of Senate Nominating Committee
- Two undergraduate students
- One graduate student
- One student representative of Macdonald Campus