# Phase 2 - Civil Room Revitalization

CLASSROOM/TEACHING INFRASTRUCTURE DEVELOPMENT FUND:

MODERNIZATION OF EN.2050 FOR ENHANCED TEACHING

WINTER-SPRING 2007

### Submitted to:

Office of the Dean,
Faculty of Engineering and
Applied Science
Memorial University of Newfoundland

## Submitted by:

S. Bruneau on behalf of Civil Engineering Discipline Chair Faculty of Engineering and Applied Science Memorial University of Newfoundland



PR. xx\_03 November 28, 2006 St. John's, Nf., Can



This proposal has been prepared so that the balance of funds required to implement the civil room renovations can be secured. Previous application for funds was limited to digital projection, console and projection screen-related items. This proposal focuses on the renovation of the room, installation of new computers, implementation of healthy living space items such as natural lighting and ventilation, plus the replacement of aging and derelict desks and chairs.

### 1.0 Project/Initiative Title

The modernization of the Civil Engineering Lecture Room, EN.2050.

#### 2.0 Unit and Contact Information

Civil engineering discipline, Faculty of Engineering and Applied Science.

Proposal requested by Tahir Husain, 737-8781
Proposal drafted by Steve Bruneau, 737-2119 - Primary contact person.

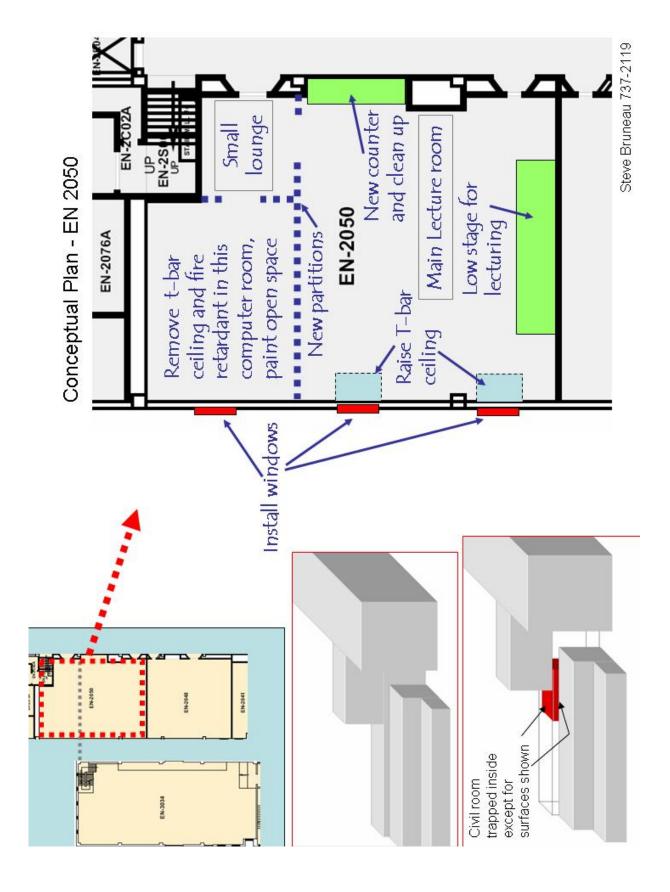
### 3.0 Project Overview

The first phase of the EN.2050 Classroom Modernization Project is outlines in Appendix A. It involves the installation of new electronic equipment allowing for digital projection and internet access. In addition a new stage and lecture area were proposed. Funding for Phase 1 totaling \$34k has been secured – the work has not yet been carried out. It is intended that the additional work proposed herein take place concurrently with the previously proposed to work to limit the construction downtime and optimize construction costs.

This proposal outlines the remaining work for room revitalization. In summary the proposed work includes the removal and replacement of ceiling system, the permanent opening of one-third of the ceiling space for better air circulation, building system visibility as an educational tool and new access to external walls allowing for window and vent installation. Windows, new acoustic divider system and mechanical system improvements are also included. The entire room is to be cleaned up and repainted (the murals and tiles will be looked after by students).

Significantly, the second phase of the project also includes forty new desks and chairs that provide for a long term solution to the aging and damaged units currently in place. From the old units in place the best 20 will be preserved to allow for class expansion during the 2010 wave of enrollment. New units will have locking drawers and stable healthy chairs that will relieve the chronic security and comfort challenges currently faced by students. The phase 2 concept drawing is shown below.

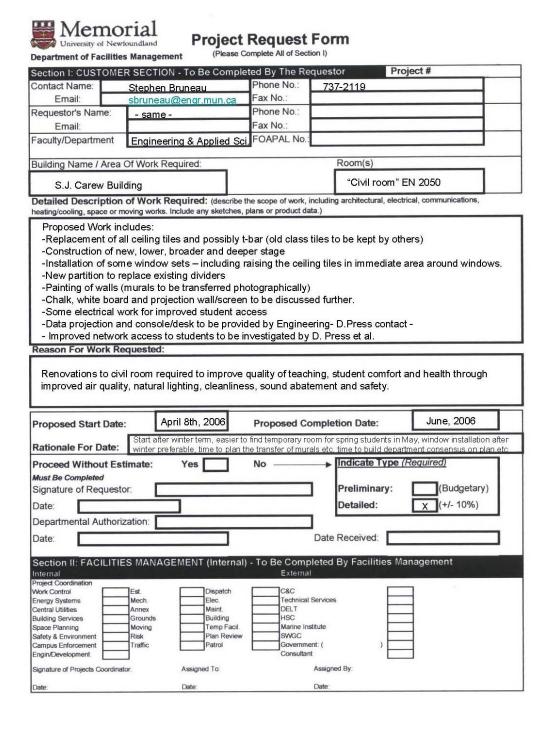




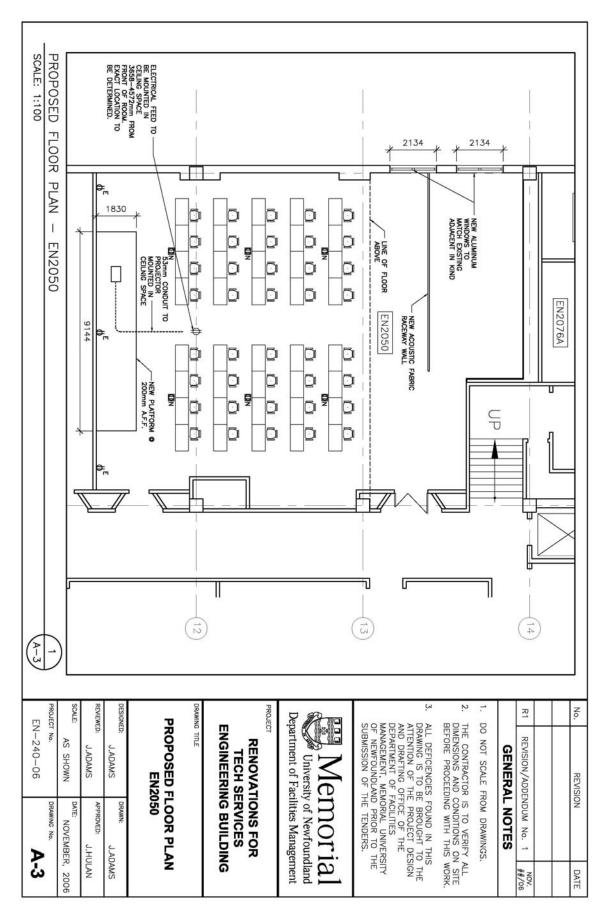


### 4.0 Detail of Project and Summary of Estimated costs

Working closely with Facilities management of Memorial University a detailed breakdown of the project elements and costs has now been procured. The application to facilities management is provided below, the proposed floor plan and estimate is provided on the following pages.











#### Department of Facilities Management

Project Estimate	Prepared By: Jason Adams	Project No.	EN-251-06	
Client Department:	Engineering	Contact:	Steven Bruneau	
Project Title:	Renovations to EN2050	Date Prepared:	November 28, 2006	
Project Description:		Remarks:		
Install new windows & ceiling system, furniture, raised platform, a/vequipment.		This estimate is based on current market prices and is subject to change. Estimates are only valid for 45 days after which time the yare subject to mandatory revision. Acharge may apply for this work.		

DESCRIPTION OF WORK	COST	
Corse Hing	\$	+
Demo litios	\$	523
Remoue existing ceiling tile and grid	\$	08.000,0
Remoue existing accustic wall panels	\$	183.00
Demo existing concrete block (windows)	\$	366.00
Demoexisting face brick (windows)	\$	488.00
Remoue existing light fixtures at rear of class	\$	1,952.00
Remoue existing chank board, display screens	\$	183.00
Remoue existing platform & step	\$	244.00
Construction	\$	3 <del>7</del> (2
lustall new ce iling tile and grid	\$	5,734.00
listalliew bikke ad @ edge of rew ceiling	\$	488 00
li stall iew gypsim board metal stiid wall ii ceiling	\$	2,690.10
li stall iew aco isto wall pare is o/w laceway	\$	3,513.60
lestall new alom is om wis dows	\$	¢,026.00
New Painting interior walls	\$	1,921.50
New Prime & Pairting of walls @ exposed ceiling	\$	2,058.14
Gyps im board patching & repair	\$	366.00
New platform at frost of class	\$	2,440.00
Mediarical	\$	+
Upgrade a lowar ce	\$	1,830.00
Electrical .	\$	19 <del>0</del> 21
Relboate existing conduits & wiring (windows)	\$	610.00
Install new suspended 2'x 4' flourescent fix tures	\$	00.40€,€
listalliew fbormorited receptacks	\$	2,196.00
Frmishings/Window Diessings	\$	188
New 24x48 desk c/w b b,f	\$	50,752.00
New white boards (∜x8) 2 ∎∎its	\$	1,464.00
Stade at Assistance	\$	-
	\$	10 <del>-</del> 10
Safety	\$	5. <del>1</del> 6.0
Safety Fees	\$	610.00
Other Contingencies	\$	-
Ckaring	\$	305.00
	\$	<del></del>

DISCLAIMER:	SUBTOTAL		\$ 91,654.94
This estimate does not include such items as			
computer e quipment, data cabling, network, or	Taxes	14%	\$ 12,831.69
projection equipment, unless otherwise noted in			
this estimate.	TOTAL		\$ 104,486.63



In addition to the costs outlined above in the facilities management estimate the following three items are to be included in this proposal for EN.2050 upgrade:

- Digital Overhead Projector System Canon system \$4500
- Millwork, shelving and cabinetry for civil engineering resource material \$5,500
- Computer resources for the civil computing laboratory area inside 2050. This is to include 15 new HP machines with LCD monitors to reduce heat production.
   Cabinet desks for the security of each of these units are also to be installed.
   Cost per computer/desk unit has been estimated at \$3000 for a total of \$45,000

The subtotal from these extra items is thus \$55,000 + tax.

The grand total budget for this Phase 2 proposal is as follows:

\$91,654.94 + \$55,000.00 **\$146.654.94** + tax

## 5.0 Implementation Schedule

The work is proposed to begin after the completion of the term 8 academic semester in April 2007 – allowing for the easier relocation of civil students during the less-busy spring and summer semester.

## 6.0 Benefits of Proposed Changes

#### (a) Solutions Provided

In addition to the benefits outlines in the phase 1 proposal this project will improve the quality of air, natural lighting and educational value of the classroom itself. It will enhance the comfort and security of students and provide a clean respectable room with a rational system for marking the legacy of previous classes.

#### (b) Further the Goals of MUN

The project furthers the goals of the university by improving the quality of instruction, and the learning and health of students. It will provide the same tools currently available at other schools and assist in future development of on-line related education.

#### (c) Number of students benefiting

The number of students benefiting from this project will be 20-40, every academic semester of the calendar year. These students will receive all instruction (approx 20 lectures per week) via this new infrastructure. In addition, during the year in which a second group of new entrants will be accepted, the proposal makes provision for seating and desks within the existing space.



## (d) Consequences of Not Receiving Funds

The consequences of failing to receive this funding will demonstrate the general apathy toward student health and wellbeing by ignoring the demands for improved air quality and natural lighting, in addition the poor condition of the room will reflect on the civil discipline as a whole – general disrespecting the work environment or people. For more information on the proposed modernization please contact Steve Bruneau at 737-2119.



# **APPENDIX A**

Proposal form January 2006 - Phase 1