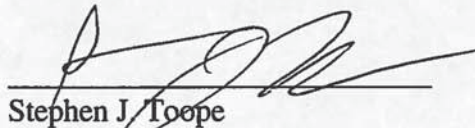


THE UNIVERSITY OF BRITISH COLUMBIA

REQUEST FOR DECISION

FORWARDED TO: BOARD OF GOVERNORS ON RECOMMENDATION
OF PRESIDENT STEPHEN J. TOOPE

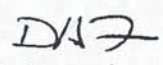

APPROVED FOR SUBMISSION:


Stephen J. Toope

DATE:

13/01/12

PRESENTED BY:

Dave Farrar, Provost & Vice President Academic 
Pierre Ouillet, Vice President, Finance, Resources & Operations 
Paul Smith, Vice Provost & Associate Vice President, Academic
Facilities & Enrolment
Simon Peacock, Dean, Faculty of Science
John Metras, Managing Director, Infrastructure Development
Al Poettcker, President & CEO, UBC Properties

DATE OF MEETING: February 2, 2012

SUBJECT: Geological Field School, Oliver, BC

DECISION REQUESTED: **Approval – Board 2**

Approvals:

Capital Budget:	\$ 2,400,000
Preliminary Operating Budget	\$ 31,000
Revised Program	
Revised Schedule	
Proceed to Working Drawings and Tender	
Funding Release:	\$300,000

Information:

Expenses to Date:	\$35,000
Funding Releases to Date	\$ 100,000

EXECUTIVE SUMMARY:

UBC Faculty of Science has initiated a campaign to fundraise \$2.4 million to develop new Geological Field School (GFS) buildings and replace existing dilapidated structures on land owned by UBC and managed by the Department of Earth & Ocean Science (EOS) near Oliver, BC. At the GFS, UBC Geological Sciences and Geological Engineering students learn to create geological maps and develop other skills needed to find and explore for minerals, oil and gas. Replacement of the existing buildings is critical to maintaining the GFS as a functioning facility and the project is a high priority for the Faculty of Science. The proposed new buildings total 1,005 gross square metres (GSM) and include a dining/lecture hall, map study hall, and sleeping cabins to accommodate 90 students, faculty and staff.

ORIGIN OF REQUEST AND ADVANCED CONSULTATION:

PLACE AND PROMISE COMMITMENT

The University provides the opportunity for transformative student learning through outstanding teaching and research, enriched educational experiences, and rewarding campus life.

PLACE AND PROMISE ACTION

Provide all students with at least two enriched educational opportunities during their course of studies.

PROJECT RATIONALE

Geological field training forms a critical requirement of modern earth science education and represents a truly enriching educational experience for the students. Having a well-designed and well-implemented field geology program is a hallmark of all top geosciences programs.

The UBC Geological Field School facility at Oliver provides EOS students with world-class field training at a reasonable cost. Replacement of the existing deteriorated buildings is critical to maintaining the GFS as a functioning facility and the project is a high priority for the Faculty of Science.

Previous Report	September 27, 2011 Board of Governors Meeting	Decision	Approved: Board 1, \$100,000 Funding Release
Discussion Points	n/a		
Action / Follow Up	n/a		
Previous Report	September 20, 2011 Board of Governors Meeting	Decision	Approval recommended: Board 1, \$100,000 Funding Release
Discussion Points	n/a		
Action / Follow Up	n/a		

DISCUSSION SUMMARY

Project Management

UBC Properties Trust is managing the design and construction of the project.

Consultant

Battersby-Howatt Architects has been selected as the design consultant for the project.

Campus & Community Planning Review

As this facility is outside UBC campus boundaries, development permit and building permit approvals will need to be obtained from the local authority having jurisdiction. The Regional District of Okanagan Similkameen will be contacted in this regard.

C&CP supports the design direction of the Oliver Field School pavilions, subject to reviewing and supporting the site plan, elevations and material palette that have yet to be provided. The current plans of the various pavilions, shown in Attachment 3, achieve a very good balance of user comfort, functionality and a rustic architectural character in keeping with the forest setting.

Current Project Status

Schematic design for the project was completed on December 13, 2011. Skuka Construction, a Kelowna-based Construction Manager has been hired, and an Environmental Consultant is being retained to obtain approvals for setbacks from the existing dry creek bed.

The fundraising campaign is in progress. Approximately 25% of the targeted \$2.4 million is banked, with commitments for an additional 10%. A lead gift request is in progress, and prospects for the remaining funding have been identified.

Revised Building Program

	Net Sq. Metres (NSM)	Net Sq. Feet (NSF)	Gross Sq. Feet (GSF)
90 seat dining/lecture/study (incl. kitchen & storage)	198.6	2,138.0	2,299.0
Map study classroom	66.2	712.3	787.7
Faculty/staff cabins (C2) x 2	108.6	1,168.6	1,320.2
Faculty/staff cabin (C2a) x 1	53.6	576.9	660.1
Large student cabins (C1) x 3	273.1	2,939.4	3,253.8
Large student cabin (C1a) x 1	99.5	1,070.5	1,183.0
Wash House x 2	109.0	1,173.4	1,320.2
Total	908.6	9,779.1	10,824.0

Capital Budget

Construction	\$1,643,850	\$152/sq.ft.
Consultant Budget, Printing & Disbursements	300,000	
Project Management (UBCPT)	\$60,000	
FF+E & Signage	\$40,000	
Permits and Insurance	\$122,000	
Commissioning, Inspection and Testing	\$10,000	
Contingency	<u>\$80,000</u>	
Subtotal	\$2,255,850	\$208/sq.ft.
HST (@3.42%)	\$77,150	
Retained Risk Fee	\$20,000	
Construction Period Financing Charges	<u>\$47,000</u>	
TOTAL	\$2,400,000	\$222/sq.ft.

Operating Budget

The GFS is in operation annually from May through October. The 2 week activity of the UBC Geological Field School is supplemented with rental of the facility by other academic and research groups. UBC Faculty of Forestry, UBCO (Housing & Conferences), BCIT (Mining & Mineral Exploration), SFU (Faculty of the Environment), Environment Canada, the University of Calgary and Parks Canada have all expressed interest in renting the renewed GFS for a combined total of approximately 1200 people-nights.

Annual operating expenditures for the renewed facility are estimated to be approximately \$31,000 in the first year of operation. Operating expenditures include repair and maintenance costs, utilities, IT/telecomm, security and seasonal opening and closing costs. These expenses are intended to be covered by rental revenues which are planned to increase over current levels, through a combination of increased rental volume and increased rental rates, in order to achieve and maintain a 'breakeven' status.

Revised Project Schedule

	Board 1	Board 2
Board of Governors (Board 1)	September 2011	September 2011
Board of Governors (Board 2)	December 2011	February 2012
Board of Governors (Board 3)	April 2012	April 2012
Commence Construction	May 2012	May 2012
Final Occupancy	April 2013	April 2013
Board of Governors (Board 4)	April 2014	April 2014

Meeting UBC's Sustainability Objectives

Design and construction of the new facilities will incorporate sustainable building practices. Sustainable design strategies such as utilization of beetle damaged wood products, installation of solar panels for water heating, and rain water capture systems are being explored in detail as part of the design process. LEED certification will not be sought given the small size and seasonal use nature of these facilities.

Funding Release

Approval for funding release of \$300,000 from banked donations is requested to take this project through working drawings and tender.

Attachments

1. Capital Project Accountability Scope & Planning
2. Capital Project Accountability Budget & Funding
3. Schematic Design

PROJECT NAME		CURRENT APPROVAL STATUS				
Project Name:	Geological Field School, Oliver BC		Level	Approval Date		
Department/Unit:	UBC Faculty of Science	Executive:	3	23-Aug-11		
Sponsor:	Simon Peacock, Dean, Faculty of Science	Board:	1	27-Sep-11		
PROJECT DESCRIPTION		FUNCTIONAL PROGRAM				
Development Type:	New Construction	Space Type	Net SM	Net SF	Gross SF	
Facility Type:	Field study camp	Dining/lecture, study hall	199	2,138	2,299	
Gross Building Area:	10,824 gsf (1,005 gsm) - Approximate	Map Classroom	66	712	788	
Capital Cost:	\$2,400,000	Cabins x 9	644	6,929	7,737	
Location/Site:	Oliver BC	Total	909	9,779	10,824	
Primary Users / Tenants:	Earth & Ocean Sciences, Faculty of Science					
PROJECT RATIONALE & BENEFITS						
Need/Benefit Area		Description				
Learning & Research Environment		Hands on geological field training is an enriching education experience and essential to modern earth science education.				
Student Amenity		Provides student education and training				
Community Amenity		Provides student mentorship and links to the business community via alumni mentoring & network.				
Other Benefits:		Building promotes partnerships: BCIT (Mining & Mineral Exploration), UBCO Housing & Conferences, SFU (Faculty of the Environment, Environment Canada, Faculty of Forestry, + others				
SCHEDULE		SUSTAINABILITY GOALS				
		Target	Actual	Indicator	Target	Actual
Board 1		Sep 2011	Sep 2011	Certification:	Project too small to pursue	
Board 2		Dec 2011	Feb 2012	Energy Efficiency Level:	TBD % better than MNECB	
Board 3		Apr 2012		Energy Use Intensity:	TBD (kWh/ft ²)	
Construction Start		May 2012		GHG Reduction:	TBD % better than standard	
Substantial Completion		Apr 2013		Const Waste Recycling	TBC % recycling rate	
Occupancy		May 2013		Water Use Efficiency	TBD % better than standard	
Board 4		Apr 2014		Innovative Features:		
DEVELOPMENT PROCESS						
Project Manager	UBC Properties Trust (Crystal Roche)		Construction Manager		Scuka Enterprises Ltd.	
Architect	Battersby-Howatt Architects		Infrastructure Development Rep		Barb Gordon, Facilities Planner	
	Date	Comments				
AUDP Review		Not applicable since not on UBC Vancouver campus				
Dev. Review Committee		As required by local authority.				
Public Open House		As required by local authority.				
Development Permit		As required by local authority.				
Building Permit		As required by local authority.				
CAMPUS & COMMUNITY PLANNING COMMENTS						
As this facility is outside UBC campus boundaries, it will be approved by the Regional District of Okanagan Similkameen, who will be contacted and local development and building permit processes will be followed. C&CP supports the design direction of the Oliver Field School pavilions, subject to reviewing and supporting the site plan, elevations and material palette that have yet to be provided. The plans of the various pavilions achieve a very good balance in achieving user comfort and functionality and a rustic architectural character in keeping with the forest setting.						

Capital Project Accountability Budget & Funding

Attachment 2

PROJECT NAME			
Project Name:	Geological Field School, Oliver BC		
Department/Unit:	UBC Faculty of Science		
Sponsor:	Simon Peacock, Dean, Faculty of Science		

CAPITAL BUDGET (\$000s)			LIFE-CYCLE OPERATING BUDGET			
Capital Development Cost	\$000s	\$/GSF	Operating Costs	Annual \$	\$ / GSF	Funding Source
Construction	\$ 1,644	\$ 152	Ops & Maintenance*			
Planning & Design	\$ 300		Utilities			
Furniture & Equipment & Signage	\$ 40		Gross Total O&M Cost	\$ 31,000	\$ 2.97	Science
Commissioning, Inspection Testing	\$ 10		Less: Savings from Demolished Space			
IIC, CAC, Permits, Insurance & Legal	\$ 122		Net O&M Cost	\$ 31,000	\$ 2.97	Science
Project Management	\$ 60		* Amt derived from Whitestone Research & excludes landscape, mgmt overhead			
Contingency	\$ 80					
Subtotal	\$ 2,256	\$ 209	Life-Cycle Capital Costs	Annual \$	\$ / GSF	Funding Source
Tax	\$ 77		Cyclical Maintenance			
Retained Risk Contingency	\$ 20		Modernization/Upgrade			
Construction Financing	\$ 47	If required	Total Cap Renewal Cost	\$ 10,000	\$ 0.96	Science
Total Project Budget	\$ 2,400	\$ 222				

Capital Budget Notes:	Operating Budget Notes:
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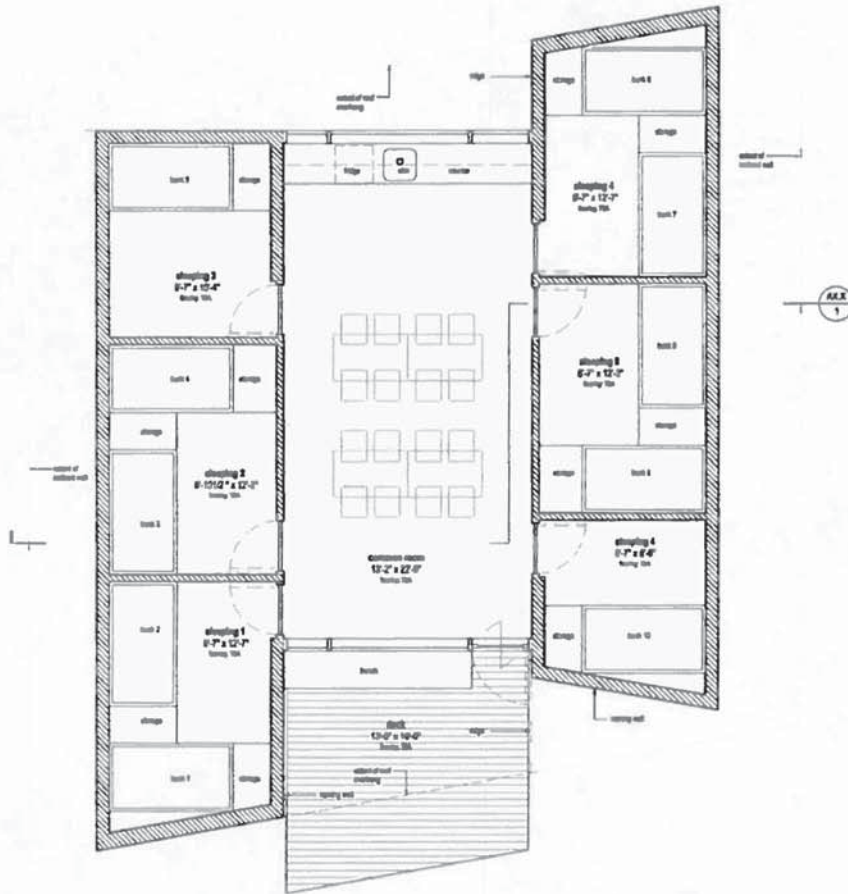
FUNDING AGREEMENTS (\$000s)				FINANCING AGREEMENTS				
Funding Source	Liability with:	Committed	Secured*	Debt Serviced By:	Loan Amt*	Amort.	Int.	Ann. Payment
Donor Fundraising	Faculty of Science	\$ 2,400,000	\$ 860,000	Faculty of Science	\$ 1,540,000			\$ -
GPOF - Faculty/Unit		\$ -	\$ -		\$ -			\$ -
GPOF - Central Admin		\$ -	\$ -		\$ -			\$ -
Grants/Other (WED)		\$ -	\$ -		\$ -			\$ -
Total		\$ 2,400,000	\$ 860,000	Total	\$ 1,540,000			\$ -

* Funding paid or firmly committed to be paid before end of construction	* Loan amts in this case represent liabilities for unsecured funding sources
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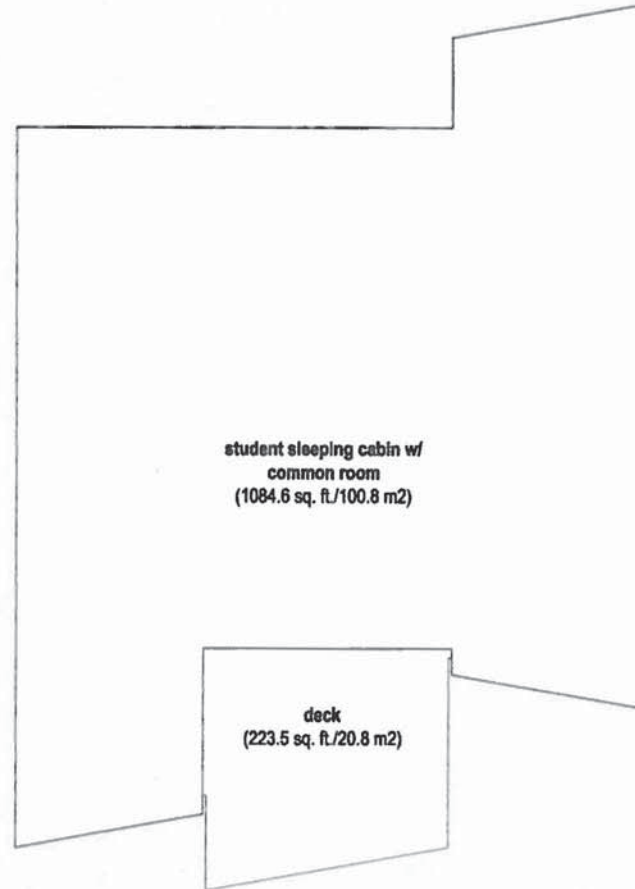
Funding Notes:	Debt Capacity Impact: No long term financing is required. Short term bridge financing may be required to cover timing differences between completion of construction and receipt of donations.
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PROJECT REQUIREMENTS CHECKLIST & SIGN-OFF				
CHECK	REQUIREMENT	NAME	SIGNATURE	DATE
	Programmatic need and benefit	Vice Provost & AVP, Academic Facilities & Enrolment	Paul Smith	31-Aug-11
	Project scope and budget	Infrastructure Development	John Metras	31-Aug-11
	P3 screen	Managing Director		
	Project manager assignment			
	Swing space requirements			
	Project site	Campus & Community Planning	N/A	
	Development review process	Associate Vice President		
	Sustainability measures			
	Classroom/teaching lab review	Classroom Services	N/A	
		Director		
	Food, housing and child care	Student Housing & Hospitality Services	N/A	
		Managing Director		
	Funding & financing agreements	Project Sponsor	Simon Peacock	31-Aug-11
		Dean, Faculty of Science		
	Funding & financing agreements	Treasury	Peter Smailes	31-Aug-11
	Debt capacity	Treasurer		
	Fundraising plan	Development Office	Heather McCaw	1-Sep-11
		AVP, Development Services		
	Life-cycle operating costs	Infrastructure Development	John Metras	31-Aug-11
		Managing Director		
	Security & access control	University Community Services	N/A	
	Parking	Managing Director		

ATTACHMENTS



1 Student Sleeping Cabin C1 - Plan
1/4" = 1' - 0" • Dec. 14, 2011



2 Student Sleeping Cabin C1 - Areas
1/4" = 1' - 0" • Dec. 14, 2011

**BATTERSBY
HOWAL**

225 - 45 QUINCY AVENUE, WASHINGTON
DISTRICT OF COLUMBIA, 20004
TEL: 202-338-4400 FAX: 202-338-4401
WWW.BATTERSBYHOWAL.COM

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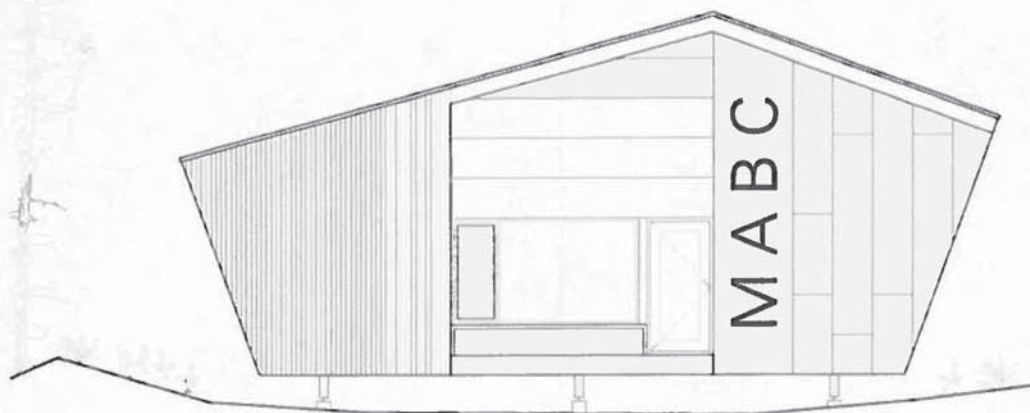
USC Geological Field School
30210 Folsom White Lake Road
Ottawa BC

Job no. 11104

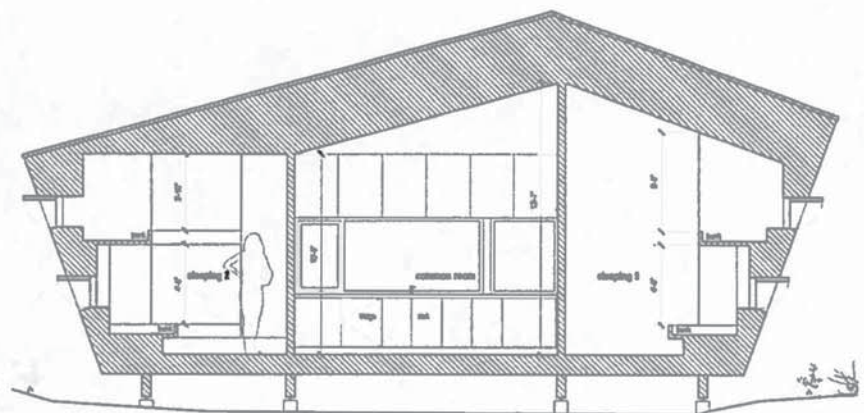
PLAN
STUDENT CABIN C1

PD 1.0

SCALE: as indicated
Date: December 15, 2011



1 Student Sleeping Cabin C1 - Front Elevation
1/4" = 1' - 0" - Dec. 14, 2011



2 Student Sleeping Cabin C1 - Cross Section
1/4" = 1' - 0" - Dec. 14, 2011

**BATTERSBY
HOWAL**

220 - 44 BATTERSBY AVENUE, WHISTLER, BC
V8N 3Z1 CANADA
TELEPHONE 604 695 8857, FACSIMILE 604 695 1010
www.battersbyhowal.com

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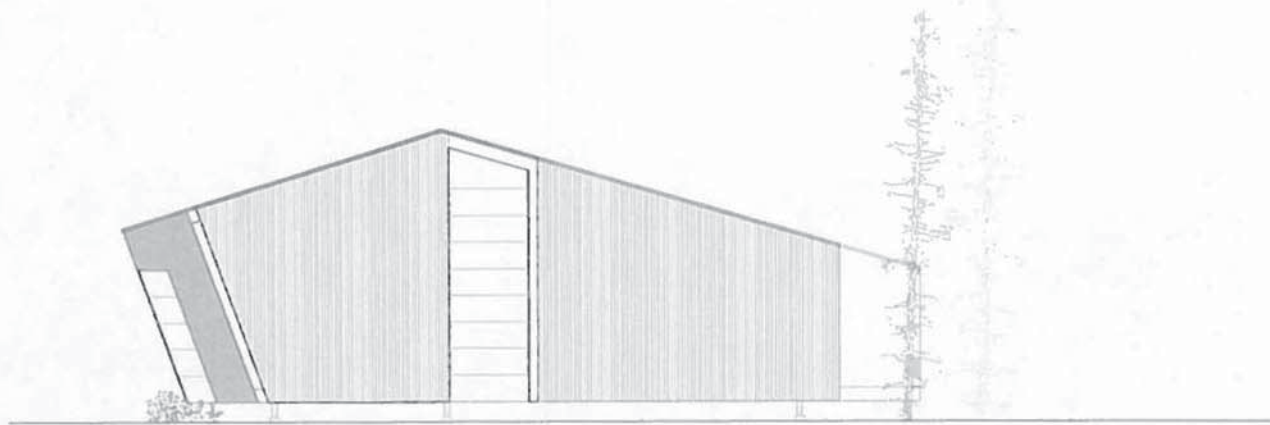
USC Geological Field School
382110 Fairview White Lake Road
Osoyoos BC

2011-10-11 11:00

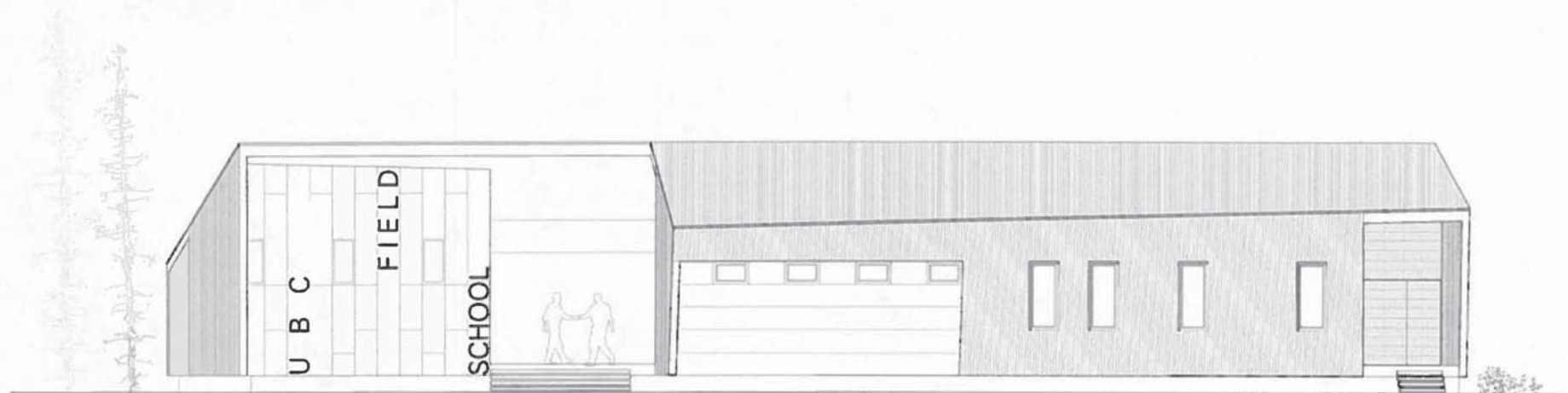
**SECTION & FRONT ELEVATION
STUDENT CABIN C1**

PD 1.1

SCALE: as indicated
Date: December 19, 2011



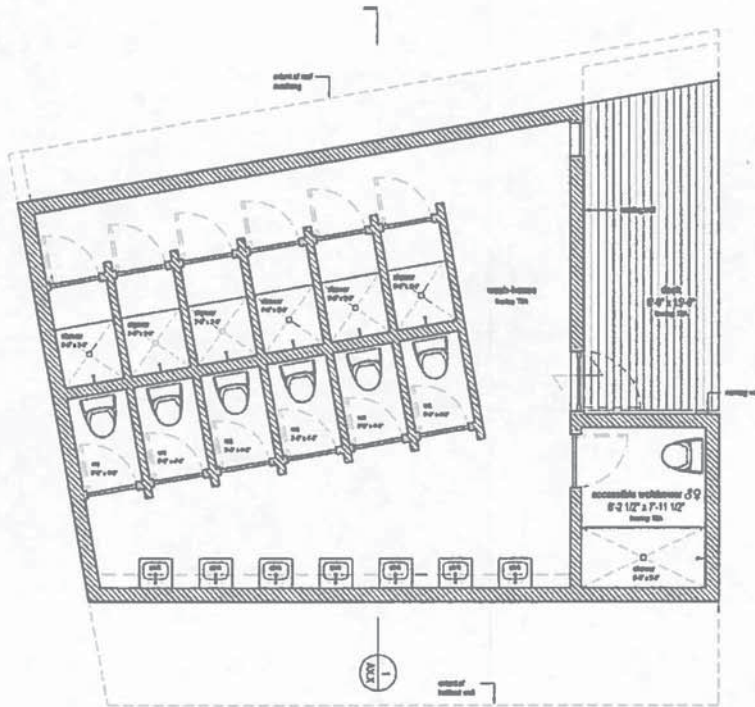
Side Elevation at Service Entry
1/8" = 1'-0"



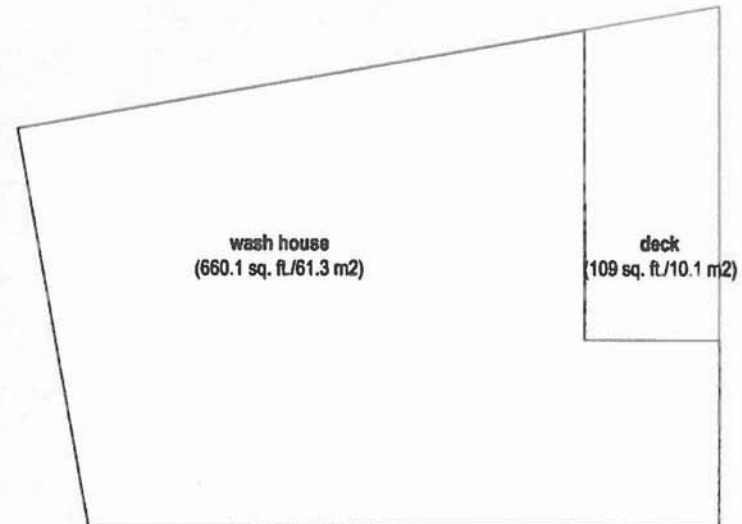
Front Elevation at Entry
1/8" = 1'-0"

**BATTERSBY
HOWAL**
Architects

Architects
1000 Buntingfield Road
Vancouver, British Columbia
V6L 1A1
Tel: 604.681.1111
Fax: 604.681.1112
www.battersbyhowal.com
PD 1.4
Scale: as indicated
Date: December 18, 2011



1 Wash House - Plan
1/4" = 1' - 0"



2 Wash House - Areas
1/4" = 1' - 0"

**BATTERSBY
HOWAL**

228 - 43 DUNDAS STREET WEST, VANCOUVER
BRITISH COLUMBIA, V6C 3K4 CANADA
TEL: (604) 681-1111 FAX: (604) 681-1112
www.battersbyhowal.com

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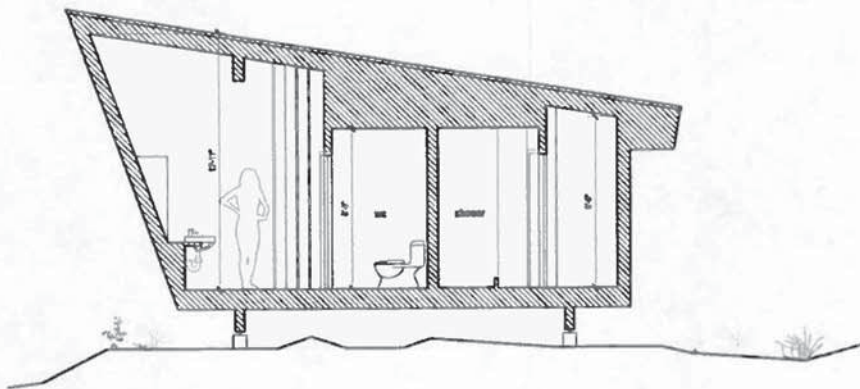
USC Geological Field School
38218 Fairview White Lake Road
Osoyoos BC

job no. 111104

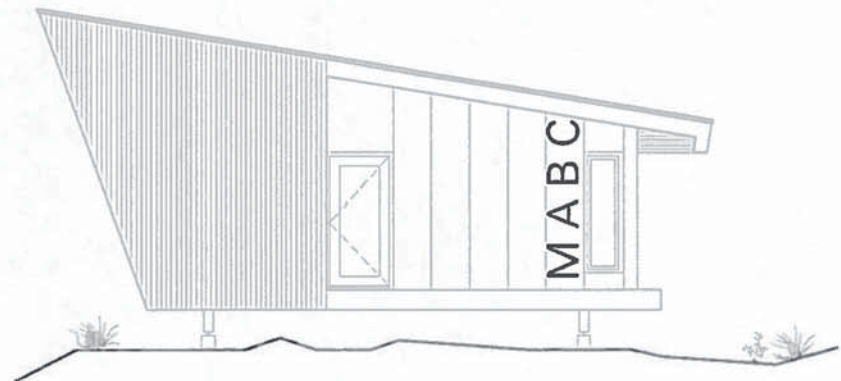
**PLAN
WASH HOUSE**

PD 1.0

SCALE: as indicated
Date: December 19, 2011



1 Wash House - Section
1/8" = 1' - 0"



2 Wash House - Front Elevation
1/8" = 1' - 0"

**BATTERSBY
HOWAL**

229 - 43 DUNLEVY AVENUE, VICTORIA
BRITISH COLUMBIA, V8L 3H3 CANADA
TELEPHONE 250 680 5807, FACSIMILE 250 680 5818
www.battersbyhowal.com

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UBC Geological Field School
38216 Fairview White Lake Road
Oliveir BC

Job no. 11104

SECTION 2 FRONT ELEVATION
WASH HOUSE

PD 1.1

SCALE, as indicated
Date: December 10, 2011