

Proposals for New Initiatives to Increase the Sustainability of the Barn Coffee Shop
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Group 11 – Scenario 5

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ABSTRACT

The goal of the UBC Food System Project (UBCFSP) is to improve the overall sustainability of the campus food system. The current food system reflects the imbalance of the global food system, which tends to value economic profitability over environmental health and social well-being. This study focuses on the Barn Coffee Shop which is located at the top of Sustainability Street (SS). Previous sustainability initiatives that have been implemented at the Barn focused on a local food supply, nutrition development and waste management. Many other issues need addressing to increase the overall sustainability of the Barn Coffee Shop. The goal of Group 11 was to investigate other components that would contribute to establishing the Barn as an economic, social and environmental sustainable model on Sustainability Street. Research was conducted that focused on ways of improving the sustainability of the building and surrounding landscape. This was achieved through literature review of previous UBCFSP papers and consultation with numerous collaborators such as UBC Food Services (UBCFS), Sustainability Office (SO), Campus and Community Planning (CCP), Plant Operations (PO) and Landscape Architecture (LARC). Funding and promotion for the project was also created through a fundraising event held in March.

Based on the information gathered and the interest expressed by collaborators, it was concluded that actual implementation of the proposals for the building and landscape would be part of a long-term strategy. Short-term goals have been achieved through the initial contact with collaborators and the initiation of a fund dedicated towards future sustainability initiatives at the Barn Coffee Shop.

Keywords: sustainability

1. – INTRODUCTION

The Barn building, built in 1917, originally served an educational purpose as a horticultural barn and is now simply The Barn Coffee Shop. It still has tremendous potential for education. As UBC's Sustainability Street project enters phase 2, the Barn can become a flagship sustainable restaurant, representative of the community's success at reconnecting with the land and complementing Sustainability Street's purpose. Programs such as Environmental Design, Food and Nutritional Sciences, Landscape Architecture, and Agroecology can use the restaurant and the surrounding area as an educational tool in relevant courses. Sustainable practices can be integrated into the daily operations of The Barn with the involvement of relevant stakeholder groups such as UBCFS, UBC SO, UBC CCP and UBC PO.

This paper is a proposal to reposition The Barn as an educational resource and a more sustainable food retail outlet, reflecting UBC's pursuit of sustainable developments. Current initiatives are assessed, and findings from relevant stakeholders are discussed. Recommendations regarding landscape design, building efficiency, and a Barn Fund designated towards sustainability at The Barn are also provided.

2. – PROBLEM STATEMENT

The Barn Coffee Shop is ideally suited to be the flagship for the UBCFSP to showcase a sustainable food system on the campus. The overall objective for the UBCFSP Scenario 5 is to reposition the Barn as a socially vibrant, economic and environmentally sustainable destination on campus. As a retail outlet operated by UBSFS, the Barn represents the retail sector at UBC, a microcosm of the global food system, with many underlying problems that reach beyond menu items. It is an under-utilized old building with marginal exterior appeal, is not energy efficient and suffers from the impact of a delocalized food system, which compromises food security and

disconnects consumers from their food, culture and community.

Free trade and globalization of the food systems have contributed to the lack of food security world wide. In developed countries, the demand for imported foods has increased, resulting in communities losing their ability to grow their own food and maintain stability. Dependence on the global market exposes people to fluctuations in supply and price due to natural calamities, politics and oil prices. Food security is further compromised by the loss of biodiversity and seasonality from the production of plants grown for their weight, volume, predictability, or responsiveness to fertilizers (Heasman and Lang, 2004) while profitability and productivity are maximized. Environmental degradation and pollution experienced from the intensification of agriculture spawned by the current global food system have a serious impact on food security. Epidemics of food related illnesses, such as malnutrition, diabetes, heart disease, obesity and diseases such as mad-cow and avian flu, have also created concern over the stability of the global food market.

The proliferation of the global food market has diminished the sense that people have of place and community as land and food roles are less visible. The global food industry spends hundreds of millions of dollars annually on advertising, public relations and other promotional activities which contributes to a loss of food culture (Heasman and Lang, 2004). Expansion of global markets enabled the de-territorialization of culture which has left North Americans with little place-identity (Inda & Rosaldo, 2002). Instead, the culture of food is characterized by homogenization so that foods typically found in local restaurants lack the diversity, distinctiveness and seasonality of the region. *Commons*, collective spaces in which people share the land, resources and knowledge (M'Gonigle & Starke, 2006), are being lost in the global food market and people are hindered from experiencing a true sense of community

The Barn is a retail outlet, an integral part of this flawed global food system, but there is support to make it part of the “alternative”. A food system cannot be wholly sustainable without addressing each of its parts; and retail is a big one. Initiatives for sustainability have been already been implemented as a result of Phase I of Sustainability Street and from recommendations made from past Agsci groups. Repositioning the Barn will involve more than localizing the food supply, it must also make the building and landscape sustainable. The process must include the campus community to form a plan of action that represents the stakeholders’ needs.

3. – VISION STATEMENT AND VALUE ASSUMPTIONS

Our group has a diverse composition which includes students specializing in global resource systems, food science, dietetics and food market analysis. The majority believe that sustainable decisions should be made to prioritize the health of the environment and people, with a secondary consideration to financial details. However, there is some diversion from this belief from our food science and food market analysis majors, who feel that the role of economics and technology should sometimes override environmental concerns. These members believe that economic prosperity will lead to better environmental health due to the fact that an increased wealth will lead to an increase in willingness to abate harm done to the environment (Field and Olewiler, 2005). Therefore, we are all environmentalists, but we do envision different means to achieving sustainability. Collectively, we identify as weak anthropocentric, defined as a belief that the earth’s natural resource and environmental health are essential to human wellbeing, and it is humankind’s responsibility to care for them (Lang and Heasman, 2004).

We feel that the seven guiding principles stated in the Vision Statement for a Sustainable UBC Food System parallel the weak anthropocentric paradigm. There will have to be a change in the focus away from production for profits, a system that leads to unsustainable use of resources

and eventually to degradation of the environment. Emphasis must be placed on food production by socially and ecologically conscious producers, and on them receiving fair prices. To effectively realize environmental sustainability, however, we feel that this principle needs to be strengthened. Producers and suppliers need to be more than just ecologically conscious; they must be active citizens of a wholly sustainable food system.

4. – METHODOLOGY

In accordance with the UBCFSP methodology laid out in the Executive Summary Report 2006, we adopted the Community Based Action Research (CBAR) model. Within CBAR, we become collaborators and facilitators in the process of assessing the current state of sustainability at the Barn, discovering areas for change, determining the feasibility of changes, and formulating realistic proposals for action. CBAR is important because appropriate and deep-rooted change is only possible if it reflects the needs of an empowered community of stakeholders.

Beginning with background research, we read the Scenario 5 Context and Problem Statement document to gauge the general directions for the three groups (11, 15 and 18) working on the scenario. At this stage our group brainstormed *new* “ways to increase the sustainability of the Barn Coffee Shop” (Richer & Project Partners, 2007). We visualized improvements to the economical and ecological efficiency of the Barn structure, the attractiveness and ecological and social sustainability of the surrounding landscape, and funding stability for sustainability initiatives at the Barn. We reviewed papers by the past AGSC 450 groups listed in the Scenario to maintain and add to the collective memory of the UBCFSP. Past groups have conducted extensive research on re-localization of food sources and research and development of local menu items for UBCFS outlets. These findings were taken into consideration when deciding where to focus our direction, in order to build on, but not replicate past years’ progress.

Andrew Parr and Dorothy Yip from UBCFS gave a presentation to the AGSC 450 class, highlighting the role of UBCFS on campus and its goals as a partner in the UBCFSP. After the presentation, we discussed our ideas about the Barn efficiency, landscape and funding with Parr and Yip in order to gauge if they were open to sustainability ideas beyond improving the menus. They responded to our ideas with enthusiasm and suggested we put together a proposal supplying groundwork and direction for plans to increase sustainability at the Barn (Parr, A & Yip, D, 2007). Further consultation with groups 15 and 18 revealed their plans to explore social sustainability, hours of operation, develop an appetizer menu, expand current menus and improve the interior aesthetics. This consultancy ensured each scenario group wasn't doubling up or conducting redundant research.

In collaboration with the other Barn scenario groups, we organized the "Think and Drink Green Beer Garden" at the Barn, coinciding with St Patrick's Day. The aim was to raise both awareness about future sustainability initiatives and funds to be used exclusively for these initiatives. We invited the SO to host a booth at the event, showcasing their aims and relating this project to the overarching goals of sustainability on campus. We displayed a poster that highlighted our group's vision for the Barn. Groups 15 and 18 conducted surveys, the results of which helped determine what recipe ingredients could be grown in the Barn landscape.

In a planning session we identified stakeholders and determined our course of action, to focus the scope of the initiatives we were undertaking. We used information presented by collaborators in lectures and sought direction from our TA, Chris Suen. A list of stakeholders, collaborators and resources is listed in Appendix E. The faculties of LARC and Land and Food Systems were contacted to involve the groups closest to the Barn, and to integrate the project with existing course curricula. SO and SS were contacted because they are involved in similar

projects, into which part of the Barn initiative could be integrated, and to gain from their expertise in these areas. CCP was contacted because they are the major administrative body for changes to the campus environment. PO was contacted because they are key stakeholders in the feasibility and maintenance of landscape projects. Finally, UBCFS was frequently contacted as a resource for data, and because they are inherently involved with any changes to the Barn interior.

We divided tasks within the group for efficiency. WebCT and weekly group meetings served to keep us informed and to refocus on our goals and vision. Because our investigation was pioneering new possibilities, the majority of our tasks involved *seeing, thinking, asking, and connecting*. We expect more *action* and change after the necessary stakeholders modify and approve the project proposals. Collaborators were first contacted by email, a non-invasive medium which provides time for more reflection. Several subsequent face-to-face meetings were held, these being the most accurate and efficient way of gaining collaborator input. The need to follow-up warranted further telephone and email contact. The best source of data and guides for building efficiency retrofits was found on government, private sector, nonprofit and UBC websites. The research uncovered the bureaucratic, logistical and pragmatic complexity of implementing any initiative at the Barn, and getting all stakeholders to agree. We finally synthesized all our findings and their implications. This proposal seeks to outline realistic projects to improve the Barn and consequently increase the sustainability of UBC's food system.

5. – FINDINGS and DISCUSSIONS: (indented text = discussion)

5.1 – Previous and Current Colleagues

There has been extensive previous UBCFSP research to create a sustainable campus food system. The feasibility of re-localizing produce by adopting the right balance of seasonal, locally produced and imported foods was analyzed. A survey showed the need to increase student

awareness about the connection between local food consumption and campus sustainability. While some purchases are made from local suppliers, there are too few suppliers with the quantity and prices desired by UBCFS. The UBC farm was investigated as a supplier, but was deemed insufficient for a complete and stable supply of produce. There is a significant bank of recipes in the archives that incorporate local, seasonal foods. (Reports, 2004-2007). Current Barn scenario groups 15 (2007) and 18 (2007) have designed recipes for the Barn in response to their survey results. The research consistently reveals that re-localization is feasible but difficulties lie in locating reliable suppliers that offer competitive prices and required quantity and quality of local produce.

The primary focus of the Barn scenario has been on local, sustainable food supply; recipe and nutrition development and some waste management. These are key components for attaining sustainability. We identified gaps in information regarding other components that would contribute to establishing full sustainability at the Barn. This was a factor in determining our goal; to investigate other components of a holistic sustainability by making proposals to address the sustainability of the Barn's structure and surrounding landscape. In parallel with the other scenario groups, we determined that the Barn landscape could produce herbs such as rosemary and mint, which grow all year, require little maintenance and are resilient. These could then become recipes in the Barn's special menu items.

Sauder School of Business students are working on promoting economic sustainability at the Barn. They are analyzing the financial situation and recommending possible strategies to increase consumer awareness of the Barn. The Barn is currently operating at a loss due to internal weaknesses and external threats. They propose implementing a seasonal sustainability program in partnership with the UBC Farm, augmenting the existing menu items with

sustainably grown produce to significantly increase consumer awareness of the Barn. Their goal is for Barn operations to break-even. They conducted a survey investigating food-purchasing habits on campus, but have not yet found results. (Sauder School of Business, 2007).

We recognize the importance of economic sustainability that they are investigating. Their continued involvement will benefit the UBCFSP with expertise in finance and marketing. Data from the survey conducted could provide useful guidance for initiative proposals when it is made available.

5.2 – Stakeholder Mandates and Campus Plan

“Sustainability” has been highlighted in the objectives of various UBC organizations. UBCFS’s support for sustainability is outlined in the SPICE Value Statement (UBC Food Service, 2007). Campus wide projects headed by the SO are diverse and range from energy reduction projects to food waste recycling. The UBC SEEDS project, which involves students, faculties, and staff, also demonstrates the university’s determination towards achieving sustainability (UBC Sustainability, 2007a). The Ecotrek project retrofitted and rebuilt buildings for energy and water use efficiency campus-wide (UBC Ecotrek Project, 2007). Sustainability Street acts as an evolving educational resource and demonstrates innovative solutions to urban problems such as storm water collection and waste water treatment (UBC Sustainability, 2007b).

The Barn is an ideal way for these various campus groups to fulfill their officially declared mandates for sustainability. Furthermore, it’s an opportunity to showcase UBC’s leadership in integrating campus sustainability initiatives into curricula. We envision LARC, Agroecology, Nutrition and Business courses benefiting most from this partnership. After the AGSC 450 lecture, we briefed Andrew Parr and Dorothy Yip (2007) about our ideas for the Barn Fund, building efficiency and food producing landscape. They were supportive and

asked that we investigate the details and form a proposal they could take to the appropriate people. They want to hear from students and get our input on UBCFS projects. This response, from such key collaborators, confirmed the directions for our project. The UBC Campus Plan Phase 2: Ideas & Issues Consultation Summary included several comments from the community saying they admire the natural landscape around the Barn but also felt that there is a lack of common, outdoor spaces on campus, such as outdoor benches and patios, and that more landscaping and grassy areas should be developed. Many respondents prefer the older-style buildings rather than the modern glass buildings and those buildings should follow Leadership in Energy and Environmental design (LEED) guidelines when undergoing renovation and construction. Respondents recognized a need for increased variety of healthier food and more sustainable focused businesses and also pointed out the responsibility of UBCFS to promote locally grown foods and encourage sustainable practices (UBC Campus Plan, 2007).

There is commonality between our vision for the Barn and the needs and expectations of students, faculty, staff and alumni expressed through the Campus Plan consultation. The large area currently around the Barn is underutilized and we propose to enhance the landscape and create a public space with seating and a community food garden. The food grown in those gardens could also be used in feature items in the Barn's menu and promote the use of locally grown food on campus. The actual structure of the Barn has a lot of potential in terms of improving energy efficiency and environmental sustainability and being seen as a great example of reusing and outfitting existing, older buildings.

5.3 - The Barn Fund

The beer garden was a somewhat successful undertaking due to the collaborative efforts of the 3 Barn Scenario groups (11, 15 & 18). Approximately \$150 was raised and the event was a good

vehicle that was used to promote sustainability and awareness through posters (see appendix A), a promotion booth from the SO and surveys. (See surveys results in group 15 and 18 reports).

The beer garden was essentially organized, advertised and executed in under 3 weeks. This probably accounted for the turnout of less than half of the capacity of 400 patrons, which dramatically decreased the potential of a larger profit margin. Group 18 compiled a handbook that has detailed instructions on putting on such an event so there is great potential for future Agsci students to establish a stable, student driven source of funding, to market the Barn outlet and increase student awareness on the positive aspects of sustainability on campus.

Matt Edgar, the current president of AgUS and member of group 18, suggested that any money raised this year or in future years should not be held by AgUS because it would be difficult to ensure that the funds are kept separate and not used for student activities (Edgar, M, 2007). We initially pursued the possibility of setting up a bank account the SO, since we wanted to ensure that UBCFS would only have access to use these funds for sustainability at the Barn and not for campus wide expenditures. Brenda Sawada from the SO was fully supportive of our efforts and stated that while such an account could be set up, it would be very difficult to do so. The SO is not set up to handle funds and so there are numerous administrative hurdles that would have to be dealt with on an annual basis. She suggested exploring the logistics of operating the account through UBCFS (Sawada, B, 2007). Andrew Parr of UBCFS was very positive and felt that it would be simple to set up either a deferred revenue account which would overcome any accounting headaches or set it up as a sub-line in an existing line (Parr, A. 2007).

Andrew Parr at UBCFS was very receptive to creating and administering a student driven account to be used by UBCFS specifically for the Barn. This appears to be the best option

for housing any current or future funds that are raised. We feel strongly as a group that there is a cost associated with repositioning towards sustainability and that all stakeholders must factor this into their budget. The UBCFS SPICE Value Statement states a commitment to sustainability, therefore, we feel that UBCFS should commit to an annual deposit of a pre-set percentage of net earnings from sales at the Barn into this account.

5.4 - The Barn Building Efficiency

Patrick McIsaac informed us that CCP is researching the possibility of acquiring heritage status for the Barn building (McIsaac, P, 2007).

Achieving heritage status and retro-fitting the building to become sustainable and energy efficient would be an exciting achievement. The heritage status would highlight the Barn as a building set apart at UBC and make it a destination on campus, which would be a great promotion for SS.

A visual inspection on the current state of the Barn was conducted. As an old building, it is presumed to have poor insulation and the windows are old, single paned. Bathroom facilities are old and water efficiency is problematic. There is a large, energy consuming neon rainbow that is left on even when the restaurant is not open. There are limited options for menu items due to inadequate cooking space and equipment, so most of the food is outsourced and then re-heated. The wait times for food can be upwards of 10 minutes, with very long lines during peak hours. Cutlery and china have replaced disposable containers for in-restaurant use however Styrofoam containers are used for take-out orders. The restaurant is only open until 3:00pm and is in direct competition with a Starbucks operation across the street.

Our team recognizes that the Barn, as an old building, is in need of expensive retro-fitting to improve energy and economic efficiency, so funding and income assistance become

imperative to realize the full vision of SS. Development of a niche market should also be considered while planning the repositioning process in order to counter the proximity and competition of a well-known, familiar coffee company.

There are several existing projects on campus, as noted in the table below, that could be used as an information source for planning a retro-fit of the Barn.

Buildings	Materials	Energy	Waste
UBC Green Buildings	Fly ash concrete, reused and recycled materials, renewable wood sources	Natural ventilation, solar lighting and heating, green air-conditioning, optimize land use	Composting toilets, water efficient landscape
Dockside Green	Fly ash concrete	4 pipe fan coil system, low energy double glazing, blinds on south and west facing sides, energy star appliances, florescent, LED lighting, green roofs and tree planting on site,	Treat sewage on site and reuse water for toilets, high performance water fixtures and appliances
Sustainability Street	Reusing materials, refurbish and reuse old equipment	Use the earth as a heat source	Manage storm water, turn waste water into clean water

(Sustainability Office, 2006; Dockside Green, 2007; UBC Sustainability, 2007b)

Several possibilities of funding for the Barn were researched however, only one would be a viable possibility. The Evergreen Foundation only provides grants to grade schools K-12 and public day cares (Evergreen, 2007). BC Hydro, the Sustainable Building Centre and many others do offer free audits to businesses to make them more sustainable but the Barn does not fit into the financing criteria. However, BC Hydro does provide incentives for businesses that switch over to more energy efficiency (BC Hydro, 2007). The Office of Energy Efficiency through the Government of Canada offers an ecoENERGY Retrofit Incentive for Buildings. The office requires the business to follow specific steps to receive funding and reimbursements (see Appendix D). This is a tangible method to seek funding, however, it is questionable whether a university restaurant qualifies for the program (Government of Canada, 2007). The one

possibility that could prove advantageous was recommended by Patrick McIsaac of CCP, who suggested combining SS initiatives with energy saving proposals at the Barn. The funds that are going to be used in building up SS could be then be used for building up the Barn to fit into the value assumptions of the SS project and its commitments to sustainability (McIsaac, P, 2007).

We were told repeatedly by our collaborators at CCP that if we wanted this project to get off the ground, we would need to find a source of money to get it done. This became our first task and after looking into outside possibilities, we came to the conclusion that we should use internal sources whenever possible.

5.5 - The Barn Landscape

Matt Filipiak, GSS President and LARC student was involved in the LARC Design/Build project. This project involved a public on-sight interactive brainstorm/design session to plan the landscape between MacMillan and the LARC buildings. It was put on by LARC 503/583E, led by faculty member Hans Hohenshau. Three designs have been on display in Agora for community members to provide further input via Post-It notes. (See Appendix B). The comments will be adapted into a final design and the landscaping will then be constructed by the LARC students and volunteers. Some materials, plantings and construction details have not yet been decided. Matt was vivaciously in support of our ideas for the Barn landscape, and said he “could mobilize a group” to take on the design process. He also participated in our meeting with Art Bomke to get information regarding soils around MacMillan Building, because this summer he is planting a small pilot garden plot southwest of MacMillan. Matt suggested we monitor his progress, and if the plot is successful, it could be referred to as proof that food production can work on campus (Filipiak, M, 2007).

Filipiak’s willingness to mobilize a group to take action and responsibility for the design

process is invaluable. It is also an example of the potential to involve more students in collaborating, participating and promoting sustainability initiatives on campus. The landscape designs from this year's Design/Build project are congruent with our vision for sustainable landscapes, except that we would like to see more edible plants and space for small crops, which would put more emphasis on integrating the food system with the visible campus. The pilot plot could serve as a critical tool for convincing skeptical UBC stakeholders of the viability and value of edible landscapes and garden plots.

Cynthia Girling is the Director of LARC and she showed her support for the Barn initiative by agreeing to consult with the LARC faculty by forwarding our email to the entire department to try and identify anyone interested in taking on the project as independent studies. This action put Hans Hohenschau and our group in contact (Girling, C, 2007).

We did not receive response to the department-wide email however, it did serve to promote the Barn project and outreach to some potential untapped resources. Collaboration with potential new partners will be easier next year because more people will already be familiar with the project. Girling could be an important collaborator for the project in the future.

Hans Hohenschau, one of the professors in charge of this year's LARC Design/Build project, informed us that the project is a pilot and if it is deemed successful, he should be able to promote a second session next year. He believes the Barn landscape proposal "sounds like a worthwhile project" for the LARC course. The construction of the landscape could likely occur by the summer of 2008. He also suggested that an alternative route would be to promote the project to CCP, PO and SEEDS, and "recruit [two or three] landscape architecture students to assist with the design and outreach through a directed studies course." (Hohenschau, H, 2007)

Hohenschau's support is critical for the adoption of the Barn project into the LARC

curriculum. His comments and concrete faculty commitment would be powerful assets in enlisting commitment from the other stakeholders, especially FS, PO, CCP and SS.

Hohenschau's involvement would also lead to fulfilling the scenario goal of connecting the university to its food system. Giving students *real* projects that are directly related to their food system, bridges an existential gap, helps institutionalize sustainability on campus and helps meet the mandates of FS, SEEDS, CCP, and LARC.

According to David Grigg from CCP, Phase 2 of the SS project involves extending it up to Main Mall. In 2008, Phase 3 will be a pedestrian plaza, *Fairview Square*, around the intersection to de-emphasize road infrastructure and allow for a more park-like atmosphere. (See Appendix C).

While the Barn is in the vicinity of SS, CCP has not yet included it in any plans. David Grigg would like to see the Barn become "the center of Fairview Square" considering that is already a popular destination for summer school groups that often visit the area due to its proximity to the Pacific Museum of the Earth, located in the adjacent Earth and Ocean Sciences building. Grigg also expressed interest in our proposal for a food garden at the exterior of the Barn but encourages us to be innovative and creative rather than "work on what's been done before" in terms of agriculture. (Grigg, 2007).

There appears to be a great opportunity to implement change at the Barn in collaboration with CCP's plans for SS. Our group sees a synergy between both projects and believes that it would be much more effective to work together to promote sustainability around the area of the Barn and the future site of the Fairview Square. David Grigg is open to suggestions has expressed interest in our proposals for the exterior landscape which is a great opportunity for students to contribute ideas.

Art Bomke and his SOIL 502 student, Beth Brockett, and her soil analysis report, provided

information regarding the soil near the barn. The soil is flawed but is far from unmanageable (Brockett, B., 2007). The main problem is poor drainage. Regardless of food production, this must be improved for ecological and social reasons (mud and erosion). In addition, the limited amount of sunlight due to the number of tall trees in the area sunlight could be problematic for optimal plant growth. Bomke recommends keeping food production simple, perhaps limited to root crops and herbs. (Bomke, A, and Brockett, B, 2007).

Drainage issues are a big problem campus wide, as evidenced by the soggy grounds and massive puddles. Thus, in order for the barn to effectively initiate edible landscaping, the drainage problem should be addressed. Otherwise raised beds could be used in the meantime. Drainage is an enormous undertaking. It would make sense to incorporate this task with the SS project.

Consultations with Jeff Nulty from UBC Plant Operations helped gain valuable insight into potential maintenance issues surrounding the proposed landscape project. Nulty expressed both enthusiasm and concern for the viability of a food garden on the property. One of the main issues surrounding a food garden is the need for ongoing maintenance. Although Plant Ops supports sustainability initiatives such as this one, they are challenged by persistent limitations for funding and manpower resources. Plant Ops could consider the maintenance of the food garden if costs could be absorbed by CCP as a new capital project. However, Nulty suggested that the key to sustainability and success of a project of this scope would be the collaboration and definitive support of all necessary stakeholders (Nulty, J., 2007).

Much of the research for this project has involved the consultation with various stakeholders, such as PO and CCP. Our group realized the benefit of consulting with all stakeholders from Nulty, who was able to provide a wealth of insight and advice. We

agree that it would be unsustainable to depend solely on the support of PO and have explored the possibility of using the food gardens at the Barn as a site for education and research. This finding is a further cause to integrate the Barn project with other course curricula. Courses in Agroecology (AGRO 260/360/402) could integrate hands on learning into existing curriculum around topics such as urban agriculture, integrated pest management and sustainable soil management. This educational venture could, in turn, be considered a source of sustainable, ongoing maintenance from September to April.

Summer months remain a problem however, because few students are on campus.

5.6 - New Developments

Andrew Parr of UBCFS informed us that a complete bio-diverse building is being built kiddy-corner across Main Mall from the Barn and that this will have an impact on UBCFS plans to implement sustainability at the Barn. UBCFS will have the opportunity to generate a fully sustainable food system from the ground up, including construction materials and the café they are planning for the building will include a menu that is healthy, organic and fully sustainable. Parr stated that he does not feel that two restaurants with the same objectives so close together would be economically sustainable. There is an increased cost to sustainable food products and the campus has a real price sensitivity which is unlikely to support two such earth/environment friendly facilities at this time. He feels that the Barn lends itself to a big breakfast and/or destination burger joint; options which he admits are not exactly healthy choices, however, he would like to avoid a MacDonald's type place per se. He suggested that we could look into possibly transferring our funds into establishment of this new café or perhaps look into contributing it towards a community recycling station that is being considered for implementation next to the Barn (Parr, A, 2007).

We find it very exciting to have a new building and food outlet on campus that will be built and function as a fully sustainable operation, after all, that is our overriding goal. We do, however, strongly feel that this new development should not supersede plans to reposition the Barn as a sustainable outlet. This is a great opportunity to showcase two very different models of sustainability; a brand new, ground up operation and an older, refurbished building. Sustainability absolutely includes economic stability and so the close proximity of the two food outlets must be considered. This could be overcome by marketing them to different demographics. Groups 15 and 18 are currently investigating social sustainability which would include licensing and extending the hours at the Barn. This could be complemented with a menu featuring healthy appetizers, healthy burgers and sides that could still be a destination joint that is sustainable and not in direct competition with the new food outlet.

6. – RECOMMENDATIONS

6.1 - To the UBCFSP Teaching Team:

- The course instructor(s) of Agsci 450 LFC III should inform the class about the beer garden fundraiser and distribute the handbook at the beginning of the course. This will give students the time to better advertise and market this event, ensuring a greater financial success.

Repositioning the Barn into a vibrant, sustainable destination will be costly and this fundraiser is a great opportunity for student driven funding and promotion of sustainability.

- Redesign the course syllabus so that students are able to begin scenario work at the onset of the course. This would also alleviate some of the very real time constraints inherent in UBC diplomacy/bureaucracy and make student efforts more effective.

- Consider inviting LARC (Hohenschau), CCP (McIsaac), PO (Nulty), UBCFS (Parr) and SO (Sawada) for a panel discussion in an AGSC 450 LFC III lecture. This would provide an interesting “guest lecture” session with the added benefit of presenting a forum for key stakeholders, including students, to actively discuss proposals and bring the project closer to implementation
- Maintain communication with Hans Hohenschau so that if a second LARC design/build community outreach session is scheduled, the Barn can be selected as the site and the group assigned to the Barn scenario can deliver input.

6.2 - To AGSC 450 LFC III 2008 Colleagues:

- AGSC 450 LFC III 2008 class should consult with UBCFS and set up bank account to house the funding raised for the Barns sustainability expenses. This would involve setting parameters for use and negotiation with UBCFS to determine a feasible percentage of earnings from the Barn that could be deposited into the account.
- Investigate possibilities of incorporating courses such as AGRO 100, AGRO 402, ENDS 420, ENDS 440, courses and ENVR 449 into landscaping and establish a means of fixing the soil around the barn. Also the potential to involve directed studies courses and other faculties, such as engineering for input and action into retro-fitting.
- Explore education possibilities, similar to the Landed Learning Project at the UBC Farm, which could involve school groups coming to campus to learn about urban agriculture and take over the care and maintenance of the Food Gardens at the Barn during the summer months.
- Maintain contact with collaborators that are or will be working at the Barn site so that the different ideas and departments integrate their tasks.

- Consider installing a comment/survey box at the Barn to gather information from site users that are more difficult to contact, such as summer patrons. This could be designed and installed by the 2007/08 class, to collect data over the spring and summer and then used by all stakeholders to adjust planning if required.
- Investigate the possibility of having the building audited. Proof of a poor energy rating would be powerful tool towards investing in retrofitting the Barn. Instead of getting an outside source to come in and audit the Barn, research the possibility that a UBC program can incorporate it into curriculum. If UBC cannot accommodate that, investigate options such as BCIT.
- Research the new government grant program for small business building-retrofitting. As of the writing of this report, the new program has been announced, but no details are available.
- Seek funding for a stipend for a summer job maintaining the landscape in the summer.

6.3 – To UBCFS:

- UBCFS continue to work with AGSC 450 LFC III classes to establish sustainability at the Barn, with the objective of complementing rather than competing with the new bio-diverse café that is being constructed.
- Recommend sustainability initiatives at the Barn as something to save money as well as the planet. A “sustainable destination” isn’t only a marketing tactic, but also sound economics.

6.4 – To Campus and Community Planning:

- Continue to engage the campus community participation in the proposals and plans for the Barn to ensure that all their needs and expectations are met and to ensure the success and sustainability of the development
- Put the Sustainability Street address somewhere on the Barn to increase the profile of the building as a key component of Sustainability Street.

6.5 – To Sauder School of Business:

- Work with the students from the Sauder School of Business to market the Barn and to promote sustainability awareness.

7. – CONCLUSION

The globalization of food systems has served as a catalyst to plummet the planet down the precarious path of pending social, economic and environmental non-sustainability. This deep rooted dilemma has already manifested widespread problems as demonstrated by increasing food related health illnesses, mounting food insecurity, rising social ills, economic instability and the ever looming global warming disaster. There is no quick fix and the solution has now gone beyond re-localization of the food sources. Our investigation into new avenues for sustainability at the barn, which symbolically mirrors a component of larger food system situation, exposed the profundity of the problem, with each new discovery uncovering yet another issue to be addressed. Implementing change will not be easy, cheap or quick to realize and a shift in paradigm must occur for change to begin. Sustainability and all the benefits associated with it will come at a price beyond financial considerations and will only be achieved through the collective efforts of the entire community. It will be a gradual process and it is imperative that the first steps are taken. We have started with research and assessment of the Barn's current state to devise a proposal and developed recommendations that can serve as a guide for implementation of sustainable initiatives.

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9. – APPENDICES:

Appendix A: Sustainability Poster used at our group’s booth during the Beer Garden

BARN SUSTAINABILITY

BUILDING

Refurbish and redesign the interior of the Barn based on UBC Green Building initiatives.

WILDERS AND GAMES



LANDSCAPE

Reclaim the exterior landscape to incorporate edible fruit trees, plants and herbs as well as provide a comfortable social space.

- We would like collaborating from everyone to create a vibrant and pleasant outdoor atmosphere.



COLLABORATORS

- UBC Food Services
- UBC Sustainability Office
- UBC Food Services
- UBC Green Building
- UBC Community Planning
- UBC Environmental Program

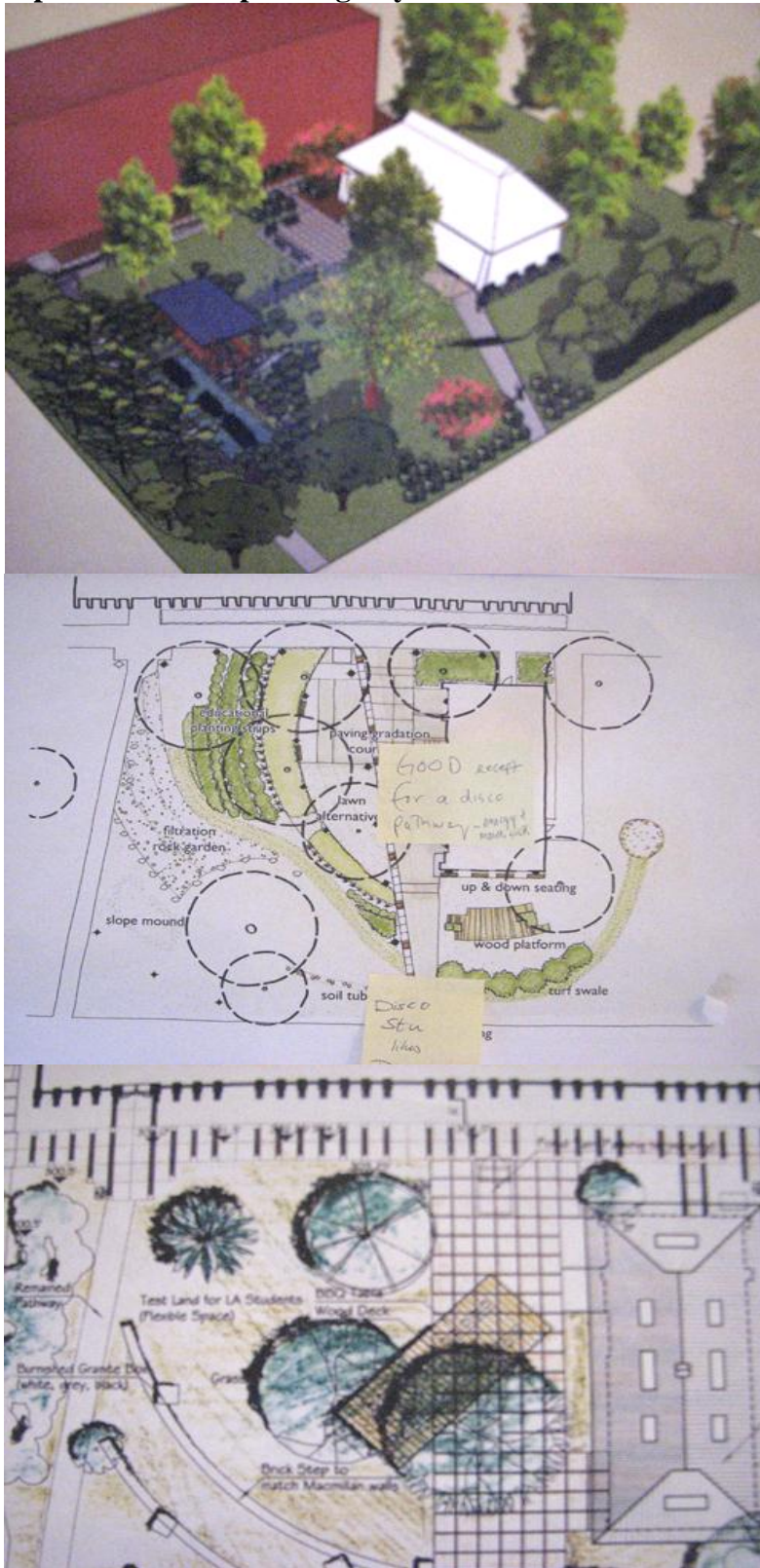
• SEEDS

FUND

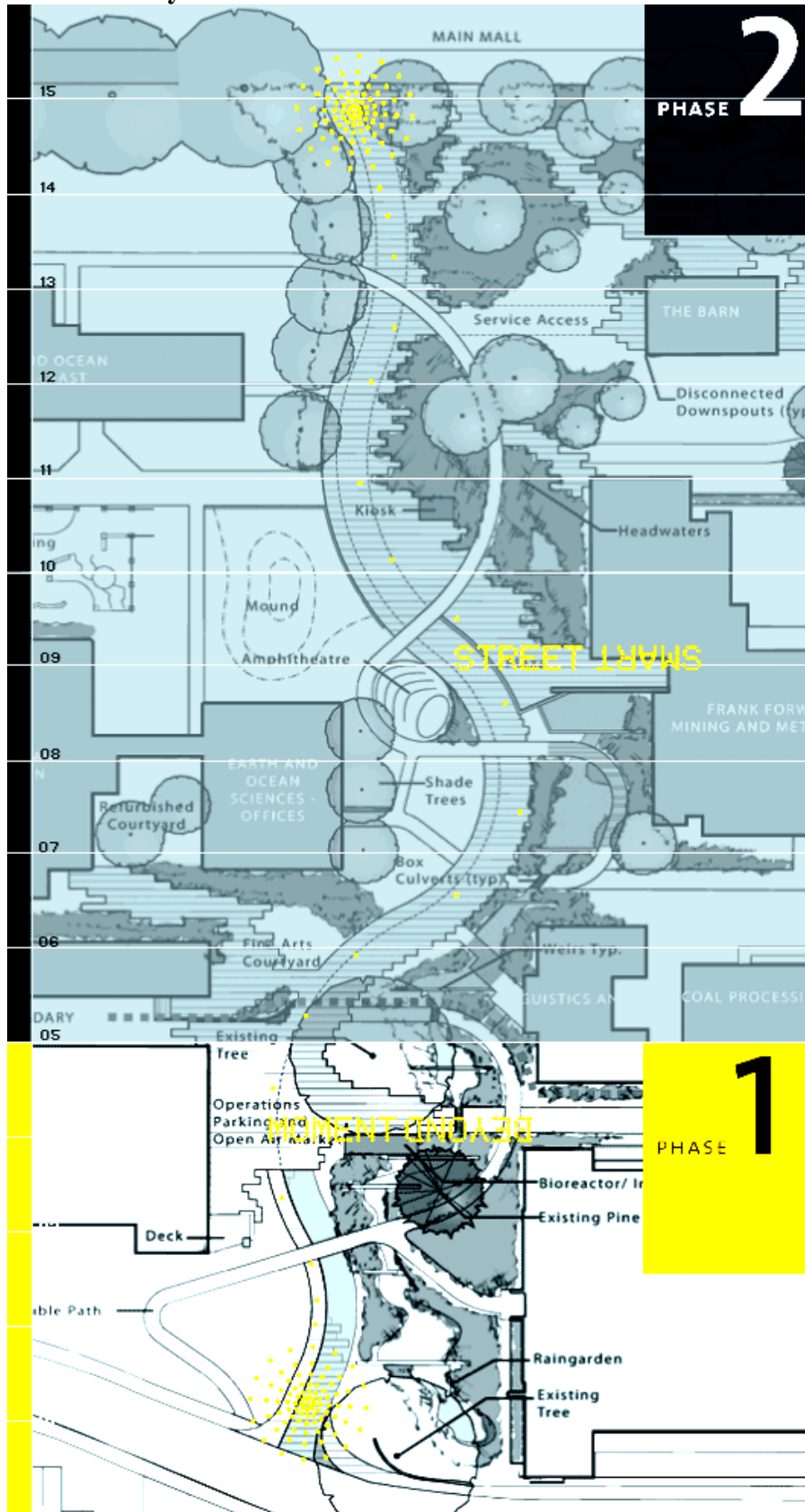
All the money raised this evening will be donated into a sustainability fund. This fund will go to various initiatives that we've discussed are applied to The Barn.

fundraiser

Appendix B: Examples of Landscape Design by LARC Students.



Appendix C: Sustainability Street Plans



Appendix D: Resources for Green Buildings / initiatives

Office of Energy Efficiency - Steps to funding:

1. Subscribe to the Heads Up Energy Efficiency newsletter
 2. Need a technical energy analysis of each building
 3. Submit your proposal during the first call for proposals from June 15 until midnight on September 15, 2007. Future deadlines will be announced at a later date.
 4. All proposals are evaluated based on available funding and other criteria
 5. All applicants are notified if their projects are approved by November 15, 2007. If the project is approved, a Contribution Agreement is prepared and sent to you. It needs to be signed first by your organization and then by the Government of Canada before you can start the project.
 6. Have up to 12 months to complete your project after the Government of Canada signs your Contribution Agreement.
 7. Fill in the final report form and send us copies of all invoices for eligible costs within 120 days after you complete the project.
 8. We may send someone to your buildings for a visual inspection, and we may arrange a third-party audit of some projects to verify technical and financial information.
 9. If everything is in order, we will send you a cheque for the final amount.
- (<http://oe.e.nrcan.gc.ca/commercial/financial-assistance/existing/steps.cfm?attr=20>)

Appendix E: Collaborator Contact Information

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