KELLOGG HOUSE: RELOCATION, RENOVATION, REUSE

WILLIAMS COLLEGE:

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0. Introduction

In January 2006, the Williams College Board of Trustees approved a new building project that is set to encroach on the footprint of Kellogg House, formerly the College's Center for Environmental Studies (CES). Kellogg House was closed in the summer of 2008 in anticipation of construction beginning on the new Stetson-Sawyer Library, but the project has since been postponed for more than a year due to the economic downturn.¹ The College expects to begin construction as early as the fall of 2010. In the meantime, Kellogg remains vacant and CES has moved to Harper House, a building across campus on Stetson Court. The reality of Stetson-Sawyer necessitates the relocation of Kellogg House, but the project also provides an incredible opportunity for reuse, relocation and renovation of this historic building. In the absence of a current comprehensive master plan for Williams College, this report looks to create a plan (or series of possible scenarios) for the reconstitution of Kellogg, supported by clearly stated programmatic and practical reasoning.

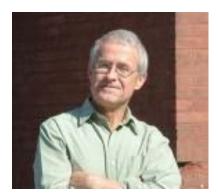
0.0 Project Clients

Our clients for this project are David Dower, Director of Facilities Planning and Construction at Williams College, and Andy Burr, principal in the Williamstown architecture firm Burr & McCallum. David is an experienced campus planner and Andy is well versed in the realities of historic preservation and green building, an auspicious combination for the purposes of this project. According to the clients, our project's main objective is to produce a thorough examination and evaluation of all possible solutions culminating in a well-supported recommendation to the College concerning the future of Kellogg House. Their goals, as well as ours, are to preserve the heritage of the building, to use the space in the way what would most benefit the College, and to diminish any impact on the natural environment. David Dower encouraged us to ask ourselves, "How could it [Kellogg House] be useful?" While he acknowledges that the single-family home option would be the most economical use of the building, David wants to know which use is the most *necessary*, and then which sites are fit best with adjacent buildings and nearby programs. On the other hand, Andy is more concerned with the historic preservation aspect of the project, proposing that we disassemble and save authentic pieces from Kellogg's extant, doomed renovations (and its soon to be moved or razed next-door neighbor Seeley House) for reuse in the new Kellogg House.

¹ [1] "New Sawyer Library—Construction Update." Williams College Libraries Website. Retrieved 11 Oct. 2009 from http://library.williams.edu/newlibrary/>.



David Dower



Andy Burr

1. The Problem

1.0 Redefining the Problem

Students in the Environmental Studies department have studied Kellogg House extensively before, but no previous work has explored the possibility of moving the building away from its current location. Some have intensively studied Kellogg's potential relocation, and made architectural recommendations for spaces to meet the department's growing needs; others have looked predominantly at green design and sustainable technologies to incorporate into a revamped Kellogg House.

Our project looks at Kellogg through a different lens, as we ask the questions of *what* to do with Kellogg, *where* to move it, and finally *how* to make it happen.

1.1 Addressing the Problem

Our objective is to determine the best use for Kellogg House, a goal we will achieve by evaluating the potential for use as housing and office space, either generic or more specifically the Center for Environmental Studies. In order to make our decision, we will assess the needs and wants of each of these programs as compared to the physical realities of Kellogg. Once the most appropriate programmatic use of the space is established, we will consider siting possibilities for the building. Sustainable design considerations and the economic feasibility of the project, important aspects of planning on the Williams College campus, will also help shape our decisions.

1.1.0 Research: Former Studies, Case Studies, Institutions

We consult a number of past projects to inform our understanding of the process as a whole. We gathered information on past considerations of and plans for Kellogg house as well as the College's history of moving and reusing buildings. We also looked to several case studies on other campuses that we felt could inspire and inform our project. This research provides valuable insight into campus planning and building use.

1.1.1 Defining Options

The two major options for reuse of Kellogg are student housing and an academic building possibly to be used as the Center for Environmental Studies (CES).² It is essential to identify programmatic goals and current physical realities for potential uses and then assess the impact of incorporating Kellogg House into residential or academic programs.

1.1.2 Identifying Programmatic Goals

Accurately identifying Williams College's programmatic goals and needs is essential for determining which of these options is most desirable for the campus. Our clients have made it clear that economic viability will not be the sole deciding factor, as might have been the case if the client were a real estate developer rather than an academic institution. Once we determine the best general use of the building, we will need to identify the subsidiary of the program or community whose needs best fit the structure. For example, deciding that Kellogg House's best use would be as a student residence will lead to an investigation into its suitability as a senior co-op versus a more traditional dormitory. Similarly, selection for use as an academic/office building will involve consideration of classrooms, faculty offices, laboratory space, etc. Naturally, the research into each reuse option for Kellogg will involve not only determining its specific function but also selecting an optimal site for relocation and identifying the exact needs of the renovation.

1.1.3 Analyzing Physical Realities

Determining the best location for any building requires an in-depth analysis of the various physical spaces available. Any design recommendations are subject to the constraints of a space; our project analyzes the physical realities of our potential sites, and takes into account both the architectural and programmatic contexts, the state of existing buildings on the site and the terrain of the site, and even the potential for future expansion on the site.

1.1.4 Proposing Kellogg's Future

The final step in solving the Kellogg problem will be balancing the wants and needs of the selected program with the physical and fiscal realities. This section will include our specific recommendations in terms of site selection, building program, and principles of design.

2. Background & Research

2.0 Williams College

Kellogg House: Relocation, Renovation, Reuse

² This project will not be investigating the merits of the single-family home option, which has been projected by Facilities to be the least expensive alternative (Michael Briggs' cover letter for EDM/Barr & Barr reports, February 2009), because it is programmatically impractical. Given the historic significance of Kellogg and its central location on campus, Williams has no intention of selling the building. That said, the College has no outstanding use for more single-family homes on campus; the only single-family home on campus is the President's house, which serves as a residence and a heavily used formal reception and dinner space. The College would only consider adding an on-campus single-family residence to its building stock if it saw significant benefits in housing an additional faculty or staff member (e.g., the Dean of the College) on campus. Given the current economic situation and the fact that the College is already trying to sell much of its single-family housing, the College has scant need or desire for an additional single-family house. It is also implausible to move Kellogg off-campus and convert the building into a single-family College rental house.

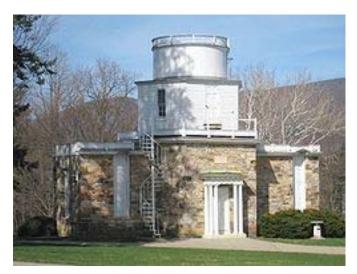
2.0.0 Community Profile

Founded in 1793, Williams College is a private liberal arts institution with a current undergraduate enrollment of about 2,150 students. It has two graduate programs in development economics and art history that together enroll about 50 students.³ The College operates more than 100 buildings, mostly on its 450-acre campus in Williamstown, Massachusetts; the school maintains an additional 2,900 acres of outlying property, much of it in Hopkins Memorial Forest. The school employs 312 faculty and 775 full-time-equivalent staff, and offers 33 majors and 12 concentrations, with additional special programs.⁴ The top five majors are Economics, English, Psychology, Art, and Political Science.⁵

2.1 Planning Precedent

Williams College has a long history of reusing historic buildings to meet evolving programmatic needs. Renovation and relocation of historic buildings is a somewhat common occurrence on the campus and is seen as a viable option in planning. The campus has not been planned so deliberately that buildings or campus regions can have only one purpose, and its small scale only adds to building reuse options. Although the College has a distinct science quadrangle (with the Biology, Chemistry, Physics, Geology, Mathematics and Psychology buildings), the residential freshman, Greylock, and Berkshire quads and a planned academic quad (which will include the new Stetson-Sawyer Library, the North Academic Building, Schapiro Hall, Chapin Hall, and the Paresky Center), many other campus buildings neither overlook Route 2 (the traditional Village Green about which original buildings were constructed) nor are affiliated with the existing quadrangles. In many ways, the haphazard building layout on much of the campus is poorly suited for the College's long-term goals.

2.1.0 Relocation: The Hopkins Observatory The 1838 Hopkins Observatory was originally built by Professor Albert Hopkins and his students. The building was moved in the 1850s to the south end of the Berkshire quadrangle, moving again to the north end of the quad in 1962 to make way for Prospect House. Much like the history of Kellogg House, the history of the Observatory illustrates that the College tends to make planning decisions incrementally with limited long-term vision.



³ Williams College Office of Public Affairs. "About Williams – Fast Facts November 2008." November 2008.

<http://www.williams.edu/home/fast_facts/>. Retrieved November 3, 2009.

⁴ Ibid.

⁵ Ibid.

Kellogg House: Relocation, Renovation, Reuse

Photos courtesy of Williams College⁶⁷

2.1.1 Relocation & Reuse: Griffin Hall

Griffin Hall opened in 1828 and originally served as the College chapel and library and provided various lecture spaces. In the following century the building was home to the College treasurer, Williamstown National Bank. In 1904, soon after the completion of Thompson Chapel to its west, Griffin Hall was shifted 100 feet northeast to fall in line with the newly constructed chapel façade. Over the years the College streamlined the use of the building and it continues to be used today for classes, lectures and faculty meetings. The history of this building is useful to the Kellogg project because one possible relocation option



for Kellogg is rotating it out of the Stetson-Sawyer footprint and into the current Seeley House lot directly to the northwest.

2.1.2 Reuse: West College

The quintessential example of renovation and reuse of a historic building is West College. Built in 1790, this building simultaneously served as the original dormitory, dining hall, library and chapel to all of the institution's first generations of students. By the mid-1850s a new chapel had been built and the portion of West previously occupied by the chapel was converted into a dormitory to house the increasing student body. In 1904, the interior of West College was gutted and re-built with more modern features. After West burned down in 1951, the original exterior of the building was reused to provide an original brick shell over a shell and concrete building. In 1998, West was again renovated again to provide better common space and facilities (bathrooms and a kitchen).



The renovations of West College transformed it from a multi-use building to a single-use residence hall. It is important to note that the West College that stands today is more of a ceremonial reminder of the College's first building than a pristine and accurate historic building as none of the interior is actually original. It will be important to keep West

ege_-_Griffin_Hall.JPG

College in mind when thinking about a future for Kellogg House because West illustrates that the historic charm and meaning of a building can be preserved on campus even if it is significantly modified to fit the College's current needs.

Photo courtesy of Williams College⁸

2.1.3 Proposed Reuse: Morgan Hall

Morgan Hall was constructed in 1882 and has served as a dormitory housing approximately 100 students. Morgan was the first Williams building to have indoor plumbing and the first to be connected to the heating plant.

The history of Morgan is useful to the Kellogg House project because of a proposal in 1988 to convert it from student housing to an academic building. The 1988 Bicentennial Development Plan identified the need for up to 18 new classrooms and 30 additional office spaces by the year 2000. One of the many proposed Photo courtesy of Williams College9



solutions was converting Morgan Hall to classrooms and faculty offices. The report states: "There are two reasons for considering this option: Morgan is optimally sited on campus to form a link between the sciences and humanities [which currently lie on opposite sides of Route 2]. Second, it could reduce the total long-term net increase in number of dorm beds, if it were necessary to build a new dorm in order to facilitate the renovation of the existing dorms".¹⁰ It was projected that Morgan could be converted to provide 18 classrooms and 28 faculty offices.

Though Morgan was not ultimately converted to an academic building, looking at the process by which the consultants came to their suggestion can be useful in thinking about the Kellogg project. They considered Morgan's location and saw it as ideal for connecting the sciences and humanities. It will be important to consider the impact of Kellogg's future location on its role in bringing together disparate programs or joining pre-existing communities of buildings. As a side note, Goodrich Hall was also proposed for conversion to office and classroom space at the time.

2.2 Kellogg House History

Kellogg House: Relocation, Renovation, Reuse



⁸http://images.google.com/imgres?imgurl=http://archives.williams.edu, ory/westcollege.php&usg=__AiZnYtscvmB6SmUWqoJaCi68sh0=&h=565 nh=134&tbnw=130&prev=/images%3Fq%3Dwest%2Bcollege%2Bwilliam D1

 ⁹ http://www.williams.edu/resources/sustainability/images/buildings/m
 ¹⁰ Bicentennial Development Plan, 2002, 27.

Kellogg House was built in 1794 on the site along Route 2 where Hopkins Hall now stands. Intended to house the College President, it was constructed on land donated by trustee David Noble as the College's second building. During its 64-year tenure as the president's house, Kellogg was the 'social center' of the College community. The building became faculty housing when President Mark Hopkins moved to Sloan House in 1858.

Less than two decades later, Kellogg was moved north to Stetson Hall's current site, rotated 90 degrees to face west, and given a complete renovation. After housing a series of faculty members (including beloved biology professor James Lawrence Kellogg, for whom the building was later named), Kellogg was moved further north in 1919 to make way for the construction of Stetson Hall, the new additions to which are currently set to displace Kellogg once more. At

Civil War Era Photograph on Hopkins Hall Site¹¹



this time, the house was turned 180 degrees to face east. the position it remains in to this day.

Kellogg on Current Site, 1927 above, 1978 below

In 1978, Kellogg was transformed from faculty housing into the home of the College's Center for Environmental Studies (CES). The building underwent another comprehensive renovation, including the enclosure of the porch to house the CES Library.

The library was dedicated to Matt Cole '80 in



1982, at which time the Cole family financed a restoration of the reading room. The Matt Cole Memorial Library was moved in 1995 to a new wing of Kellogg constructed as a gift from the Class of 1943, and its holdings were again moved from Kellogg to Schow and Sawyer Libraries in 2007. The enclosed porch was converted from the old library into faculty offices at the time the 1995 addition was built.^{14,15} Kellogg House has been closed since the summer of 2008.

Given the historic significance of portions of Kellogg House, and the College's inconsistent preservation record,

¹⁵ Allison Jacobs. "Kellogg House (1790-)." Williams College Archives Website. Retr http://archives.williams.edu/williamshistory/kellogg-house.php>. Kellogg House: Relocation, Renovation, Reuse



¹¹ Photo Courtesy of Williams Archives

¹² ibid

¹³ ibid

¹⁴ Laura Cavin. (2005) *Relocation, Renovation and Redesign of Kellogg House.* Unpul Williamstown, Massachusetts.

this project provides an excellent opportunity for Williams to perform a standout renovation that maintains the historic character of the building. That said, much of Kellogg's interior is historic, but not original, and the College and the project architects will need to draw the line somewhere to determine the features worth preserving at a given cost. We assume that the original 1794 portion of Kellogg will be preserved, along with the kitchen and student office on the second floor.

Kellogg House, Fall 200916

2.3 Previous Kellogg House-Related Projects

2.3.0 Laura Cavin Thesis, 2005

Laura Cavin's 2005 thesis, "Relocation, Renovation, and Redesign of Kellogg House," takes an integrative approach to revamping Kellogg as the Center for Environmental Studies. The paper assumes a "green design" viewpoint and looks to identify the current needs of the department, possible green technologies and renewable energy sources, and building and siting obstacles coming out of the new Stetson-Sawyer project. The study includes historical descriptions and a strong analysis of the current (2005) Kellogg building, including information on sewage infrastructure, heating logistics, summaries of power and water use, square footages for different parts of the Center for Environmental Studies, etc. Using this previously summarized data in our group's exploration of Kellogg as a new CES will allow our group to focus on comparing different sites and uses of the building instead of getting caught up in the analyzing the old building. Also, the Cavin thesis explores a number of green technologies and building practices including, but not limited to: water use reduction and reuse, designing for the sun, reducing heating needs and looking at sources of renewable energy, using local and recycled materials, and more. Further, Cavin suggests one particular building plan stemming off of the Matt Cole Memorial Library utilizing the historical portion of Kellogg as the West-facing façade of a larger structure with modern additions. This document is a comprehensive exploration of a single use on a single location of Kellogg.

2.3.1 Environmental Planning Workshop Paper, 2006

The 2006 Environmental Planning Workshop final paper, "Moving Up: A Plan for the Relocation and Renovation of Kellogg House, the Center for Environmental Studies," is somewhat similar to the Cavin thesis, but rather than making specific design suggestions, it explores general and a wide range of green technology solutions that could be implemented in the revamping of the house. The paper breaks down sustainable technologies and materials, education and funding, and social and functional design. The sustainability section is further broken down into subcategories mirroring Cavin's thesis: materials, energy, water, and landscaping. The report addresses the educational, social, and functional aspects of the plan using surveys and interviews to gauge the relative importance of different spaces in the building. This data is displayed in a number of charts and tables. A large table also summarizes the funding aspect of the report with expected payback periods for the various suggested green features. The group utilized a rating system to rank the various green technologies in terms of importance using factors

¹⁶ Photo by Jack Rudolph, October 2009

such as environmental impacts, educational value, cost, clients' preference, and student preference. The report ultimately concluded that a green roof should be the top priority, followed by passive solar design. The plan also makes several architectural recommendations, all for Center for Environmental Studies on the current Kellogg House site; the major considerations are an outdoor classroom and whether Log Lunch should be relocated to the CES. This paper is useful as a guide to possible green technologies and their relative paybacks, although the costs of many green technologies have dropped, even over the past two years. Further, the ranking system used in this report, although far from perfect, is a useful guide for our 2009 report.

2.3.2 Environmental Planning Workshop Paper, 2000

The 2000 Stetson Sawyer Environmental Planning Workshop report considers the history of architecture and use of Stetson Hall and Sawyer Library and ultimately recommends that Stetson be rotated to face south and Sawyer take on considerable additions on its north side. These recommendations are fairly implausible now in light of the Stetson-Sawyer mega-library project and the construction of the North Academic building that would impair the expansion of Sawyer to the North. The project addresses Kellogg House because if Sawyer Library were to be expanded and Stetson Hall rotated, Kellogg would essentially be trapped in a brick box. The report states how the new construction would lead to no structural encroachment, but it would create a visually unserviceable location for Kellogg. The report suggests moving Kellogg house to a location that centers the CES on campus to promote community engagement and visibility – the authors ultimately suggest a place in between Hopkins Hall and the Congregational Church (near the new Shapiro Hall). They cite \$136,000 as the cost of moving a similarly sized house, Jenness House, a short distance and on a low grade; this would be less expensive than moving Kellogg, which will need to move a greater distance and also up hill. While this report is largely focused on issues not pertinent to our Kellogg project, such as the construction of new but separate additions to Stetson and Sawyer, it provides a framework for thinking about moving the building. This project does not consider any uses for Kellogg other than CES, but it provides a rough cost-estimate and possible location that will be utilized in our planning process.

2.3.3 EDM/Barr & Barr Cost Estimates, 2009

EDM/Barr & Barr prepared a document as a part of the Stetson-Sawyer project in 2009. Michael Briggs, Senior Project Manager for the Stetson-Sawyer expansion wrote a cover letter for "Kellogg House – Three Scenarios" in February 2009. It explores three possible uses for Kellogg: office and classroom space (potentially the Center for Environmental Studies), a single-family residence, or student dormitory space. It does not look at the possibility of a co-op. The CES scenario assumes relocation and renovation of the original 2,800 ft² with a new 6,000 ft² addition to include nine offices, a 300-ft² classroom, a GIS lab, and a new kitchen. It would also include a new Matt Cole Library space and living room.

The single-family residence scenario includes the same 2,800-ft² historic portion with a 2,800-ft² addition. It would include a large eat-in kitchen, living room, dining room, office, three bedrooms, and a screened porch. The dormitory scenario suggests reusing the existing lining room as a common space, adding a Kellogg House: Relocation, Renovation, Reuse Charest, Martin, Rudolph, Sonnenfeldt modest kitchen/laundry room, a 240 ft² study, a large bathroom on each floor, 17 singles, two doubles, and one triple for a total of 24 beds. These are very analogous to the scenarios under consideration for our report, so it will be important for us to use their square footage, cost, and cost/square foot estimates. The report also contains some useful analysis that will help our group better understand the regulatory hurdles in renovating the building, such as required improvements to the life safety systems and accessibility..

2.3.4 Campus Master Plan, 2002

The College hired Venturi, Scott Brown & Associates to produce the 2002 Campus Master Plan to understand the pending Stetson-Sawyer Project's impact on the campus in terms of new space and circulation patterns. Though it is clearly focused on showcasing the new library, the report provides useful data and diagrams of the campus. We utilized this report in considering our various campus locations, and drew inspiration from the map of thoroughfares and linkages. We constructed our own versions of this map that can be found in section 5 of this report (Appendix E).

2.4 Case Studies: Historic Preservation & Green Renovation

2.4.0 Study of Vermont Law School's Debevoise Hall, South Royalton, Vermont Debevoise Hall¹⁷

The Vermont Law School acquired historic Debevoise Hall in 1972 and retrofitted the structure with modern green technologies between 2003 and 2005. Constructed in 1893 as Vermont's first centralized grade school, the Queen Anne style local landmark continues to anchor the surrounding village and the Vermont Law campus.¹⁸ The project goals were very similar to those of a Kellogg House renovation for the Center for Environmental Studies: consolidate program faculty in a central area of campus, provide classrooms and adaptable gathering spaces, preserve the building's history, and incorporate the latest green technologies.¹⁹ Debevoise Hall's green features



include renewably harvested wood, high-performance insulation and an airtight building envelope, an economical lighting system with high-efficiency features and motion sensors, and composting toilets. In order to maintain the building's historical character, the first floor hallway and classrooms were restored to their near-original state, incorporating the original wainscoting, wooden floors, and chalkboard; the architects kept the traditional appearance of the building by preserving the Queen Anne-style windows

¹⁷ http://forms.vermontlaw.edu/extended/images/mapImages/debevoise.jpg

¹⁸ Vermont Law School. "Debevoise Hall: Historic 'Old Classroom Building' Restored." Retrieved October 27, 2009 from http://www.vermontlaw.edu/Experience_VLS/The_Campus/Debevoise_Hall.htm>.

¹⁹ Truex Cullins & Partners Architects. "Vermont Law School Debevoise Hall Additions and Renovations" Northeast Sustainable Energy Association Building Meeting 2007. Retrieved October 18, 2009 from <www.bs07.org>.

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rather than replacing them with the newest triple-glazed models.²⁰ Throughout the project, architects carefully incorporated the latest energy efficiency technology so as to preserve the building's original aesthetic, with super-insulating fiberglass windows hidden inside the historic wood-frame windows and fiber-cement siding disguised as wooden clapboard.²¹ This case study is of particular interest for the Kellogg reuse project because the Vermont Law School gave historic preservation the same priority as energy efficiency, unlike Middlebury College, which preserved the exterior of its Center for Environmental Studies building, but little of the historic farmhouse feel. We hope that a successful Kellogg House renovation will achieve the same success in meeting high historic preservation and sustainability goals, but will retain more of a homey feel (this should be an important factor in choosing an architectural firm for the project).

2.4.1 Case Study of Brown University Urban Environmental Laboratory, Providence, Rhode Island

Brown University's Urban Environmental Laboratory (UEL) faces an uncertain future, and the project is up against many of the same issues as Kellogg House. In 1981, three years after Brown established its Center for Environmental Studies, a team of Brown students partnered with a Rhode Island School of Design graduate to create the University's new Urban Environmental Laboratory (UEL). Over the course

of two years, they transformed a dilapidated 1885 Providence carriage house into a cutting-edge green building; they replaced the building's roof, fitted new windows and thick insulation, dug out and insulated a basement, and installed a greenhouse (which uses solar radiation and convection to satisfy most of the UEL's heating needs).²² The building has changed little since, with a vegetable garden outside and a lounge, kitchen, living room with working fireplace, and faculty offices inside. The



UEL remains the greenest building on campus and is beloved by generations of students for fostering a strong sense of identity and community.²³ Brown Urban Environmental Lab²⁴

In recent years, however, the Center for Environmental Studies has outgrown its current space, and the once cutting-edge features have become archaic technology. Now, as part of Brown's Plan for Academic

²⁰ Vermont Law School. "Debevoise Hall Environmental Features Fact Sheet." Retrieved October 18, 2009

<http://www.vermontlaw.edu/Experience_VLS/The_Campus/Debevoise_Hall/Environmental_Features.htm>.

²¹ Ibid.

²² Beth Schwartzapfel and Norman Boucher. "What's in a building?" *Brown Alumni Magazine*. September/October 2008. Retrieved October 14, 2009 from .
²³ Ibid.

²⁴ http://greenzonegarden.files.wordpress.com/2009/04/uel.jpg

Enrichment, the University wants to replace the UEL structure with a new "mind, brain, and behavior" building.²⁵ The plan has left the Center with two options: relocate the department to a floor in a larger science building or physically move the UEL to a new site and construct new additions. The Center for Environmental Studies and the University have not yet decided what to do with the structure, but their situation greatly resembles that of Williams's own Center for Environmental Studies and Kellogg House. As the College contemplates the future of Kellogg, those involved in the project should monitor Brown's progress in making the tough decisions about their Urban Environmental Laboratory.

2.4.2 Case Study of Middlebury's Franklin Environmental Center at Hillcrest, Middlebury, Vermont Middlebury's Franklin Environmental Center at Hillcrest, completed in 2007, combines historic preservation and sustainable design, with a stronger emphasis on contemporary green architecture. Middlebury took an 1875 farmhouse and renovated it to LEED Platinum standards. Like Kellogg, the building has seen numerous former uses on the campus such as housing, classroom space, and faculty offices. The Franklin Center achieved LEED platinum certification under LEED NC 2.2 standards and, in the words of Bill McKibben, the "building is a powerful example that green architecture doesn't demand a cleared site and a new foundation."

The specifics of the LEED certification included local, natural, recycled, and certified materials, energy conservation, efficient technologies and renewable energy sources, efficient water systems, native

landscaping and alternative transportation, in addition to healthy indoor air quality and exceptional day lighting. The project integrated new additions to the original farm building to increase the amount of usable classroom space and work areas. However the project did not do a particularly good job of retaining the historical significance of the building. The façade of the building is well preserved and certainly pays homage to the heritage, but the interior of the house becomes sterile and less inviting because of all of the modern renewal. It will be important in the



Kellogg project not to let efficiency unnecessarily trump tradition.

Franklin Center at Hillcrest²⁶

3. Understanding Needs

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²⁵ Ibid.

²⁶ http://www.middlebury.edu/NR/rdonlyres/4DC18C66-D5B1-4080-BD9A-7EF2232602B5/0/HC3lo.jpg

We constructed interviews and surveys to evaluate the needs and desires of different groups at the College. Our analysis of the data from these instruments is one of our primary means of determining the best use of Kellogg, making them essential to our evaluation of the project's different reuse options. All interviews were flexibly formatted and lasted around 30 minutes, while the student survey was designed to determine student use of, and opinions regarding, the past, present, and future Center for Environmental Studies. Neither our interviews nor our surveys were designed to gather quantitative data on specific sites, options or uses; rather, we hoped they would help us to gauge general opinions and provide us with creative ways to address our planning problem.

3.0 Housing

3.0.0 Identifying Goals

As Aaron Gordon, Assistant Director of Campus Life for Residential Programs, explained, "The Office of Campus Life's residential programs are designed to enhance the value of students' educational experiences as active, purposeful members of the Williams College community. Residential Programs recognizes that education occurs outside as well as inside the classroom, and students must be challenged to create living, learning communities that celebrate the uniqueness of the individual, embrace learning about new ideas and cultures, and set standards that adhere to the concepts of social justice." This unofficial statement of goals is more useful to this project because of what it does not say than because of what it does say. In particular, it does not emphasize the structural requirements or desires for student residences. It does not dictate what size student residences ought to be or whether the buildings themselves ought to have historic significance for the school; it also contains no explicit statement of desired efficiency or sustainability standards.

For the purpose of our project, we have coupled Aaron Gordon's statement with other information we have gathered through interviews and research to conclude that the goal of student housing is to support the residential focus of Williams College with a diversity of quality options for students to live in.

3.0.1 Program Profile

Williams College houses all but 100 of its 2,100 students in 35 residences of various capacities and layouts dispersed among campus. Within these 35 residence halls, co-operative houses—smaller wood frame houses, often located on the periphery of campus, where up to 15 students live and cook for themselves in a more traditional single-family arrangement—accommodate approximately 100 members of the senior class. These buildings are not cost-efficient, as they are intended for seniors and therefore have numerous large singles (which in standard dormitories might become doubles); students, however, adore the co-op system and consistently call for more co-op spaces. Every year the number of students entering the co-op draw is two to three times more than number of beds available in co-ops.

Outside of the Williams housing pool, each year upperclassmen are permitted to enter a lottery for the 100 off-campus slots. This number is heavily capped because having more than 100 students live off campus is a financial burden on the College since the operating costs of residential houses are the same whether or not they are completely full.

In addition to research on the basic operations of student housing on the campus, we also used materials projecting Kellogg's potential for student housing. Based on projections associated with the Stetson-Sawyer project, only 24 beds could be added. In his report, Michael Briggs notes, "dormitory construction cost data recently provided to us suggests a range of \$225/ ft² to over \$400/ ft², with an average of approximately \$340/ft². However, at \$102,347/bed, the cost is average to high average on a per bed basis.²⁷

3.0.2 Interviews

To further supplement our understanding of the Williams College housing system and how Kellogg might be able to improve it, we conducted interviews with members of the administration including Karen Merrill (Dean of the College), Aaron Gordon (Assistant Director of Campus Life – Residential Programs and Housing), and Steve Klass (Vice President for Operations). We asked questions about how well the current housing options meet student need and whether there is any plan to increase student body size (and therefore housing demand); the ideal dormitory size, configuration and location; whether reusing extant buildings for dormitories was desirable; and whether there are other buildings not currently being used for student housing that could or should be (Appendix C).

Most importantly, we determined that there is no significant demand for additional dormitories. Specifically, there is no plan for drastic increase in student body size and though the housing pool is diverse, the Williams housing stock is good and ranks well among peers. We were informed of an initiative underway to increase the student body size by 60 over fall 2008 enrollment, but were told that this gradual change of 15 additional students per year for four years will not necessitate new dorms. The additional beds can be achieved by converting large singles or common spaces into doubles.

Another interesting finding of the interviews was that all three interviewees expressed indifference to whether adding beds to the housing stock should be a result of re-using an old building or building new. Specifically, Dean Merrill noted that small houses pose budgetary challenges given how superior the efficiency potential of new buildings has gotten. Considering the significant challenges and often high costs of historic preservation, it may be a waste to preserve Kellogg for use as a student dormitory, as the housing program does not value either the history of the house or the preservation of buildings with campus importance. That is not to say that many important buildings on campus have not been preserved for reuse as student residences, simply that housing might not be as dedicated to historic preservation as other programs.

²⁷ Briggs' cover letter for EDM/Barr & Barr reports, February 2009.

Lastly, all three interviewees mentioned challenges associated with using old wood frame houses as student residences. This is primarily because of the high cost to retrofit these buildings and bring them up to code.

3.0.3 Housing Conclusions

Given our findings about student housing at Williams, we believe that Kellogg House should not be used for student housing. The administrators we interviewed did not indicate a need for a space like Kellogg, especially given the high expense of this conversion option. In addition, we believe that an appreciation for historic preservation should play a significant role in the reuse of the building and a student residence would not be the best means to that end.

3.1 Generic Office Space

3.1.0 Identifying Goals

The College's goal with respect to faculty and staff offices is to meet the space needs of individuals necessary for the operation of the College in the most efficient manner possible.

3.1.1 Interviews

Since there are no current efficiency studies on faculty and staff office use, our understanding of the realities of office space on the campus were collected through interviews with Steve Klass (Vice President for Operations) and Diana Prideaux-Brune (Associate Vice President for Facilities).

From these interviews we have gathered that there is no current demand for additional general-use office buildings. Prideaux-Brune told us in November 2009 that Facilities has had no requests this year to find office space, which leads her department to believe that everyone has a spot. Klass noted that the completion of the Stetson-Sawyer project will add an additional fifteen to twenty offices to the current pool, although faculty and staff planning to move into those offices will have to wait at least two more years because of the project's construction delays.

Klass further explained that these displaced individuals are currently occupying less efficient buildings on campus while they await new offices. Prideaux-Brune noted that three of the most inefficiently used buildings on campus are Stocking, Morey and Mather houses, which are all older wood frame houses that have been converted from previous residential uses to office space. Prideaux-Brune also noted that Facilities is seeking ways to relocate those offices to other buildings since they are not only remote but also highly inefficient. Kellogg has many similarities to these buildings and is unlikely to be able to provide superior office space for this general pool. Somewhat unrelated to our project but interesting to the discussion of building reuse on campus, Klass warned that simply emptying inefficiently used buildings like Morey, Mather and Stocking might put them in a position much like Siskind house, which is currently being held empty as overflow office space. The main difference between Kellogg and these other buildings seems to be that Kellogg has important historic significance for the College and is therefore not simply being preserved because it is a space but because the house itself is important. Klass went on to note that converting buildings like Morey, Mather, Stocking, Siskind or even Kellogg back to faculty residential rentals is also unnecessary, as the College has been trying to decrease its rental portfolio.

3.1.2 Findings

In light of this assessment of demand for general-use office space on campus, we propose that Kellogg should not be added to the generic office stock. Instead, given the Center For Environmental Studies' historic relationship with the building and expressed need for its own space that matches the realities of Kellogg, the remainder of the project deals with proposing the best reuse of Kellogg as CES.

3.2 Center for Environmental Studies

3.2.0 Identifying Goals

The Williams College Center for Environmental Studies is highly interdisciplinary, drawing faculty and students from numerous departments in all three academic divisions, and so the CES building is central to the program's sense of community. Unlike other academic programs, CES has traditionally seen its building as an academic and social home for faculty, staff, and students, and has cherished the homey feel of its various buildings over the years. The Center strives to encourage academic rigor, community engagement, and interdisciplinary learning.

3.2.1 Program Profile

Upon its inception in 1967, the Center for Environmental Studies was one of the first collegiate Environmental Studies departments. The College offered its first Environmental Studies course ("Resource Policy and the Environment") during the spring 1968 term, and by the fall 1972 term, CES offered 12 courses and a sequence of core classes for an Environmental Studies concentration.²⁸ Much like Kellogg House itself, CES has moved several times: from its original location in Van Renssalaer House to Park House in 1973 as the school prepared to demolish Van Renssalaer to make room for Sawyer Library, and then from Kellogg House (CES's home from 1978 to 2008) to Harper House as the school prepared to move Kellogg out of the way of the new Stetson-Sawyer Library. In 1982, the department established the Matt Cole Memorial Library, whose collection grew after a 1995 addition to Kellogg House.

The Center for Environmental Studies, now located in Harper House on Stetson Court, has grown into one of the most popular non-major departments at Williams. As of the fall 2009 term, 29 faculty members from 11 departments teach courses listed or cross-listed in Environmental Studies, and 288 students were

²⁸ Laura Cavin. "Relocation, Renovation, and Redesign of Kellogg House." January 2005.

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enrolled in ENVI courses in fall 2009.²⁹ CES currently has 10 senior concentrators, 14 junior concentrators, and three junior Contract Majors in Environmental Studies. Eight faculty and staff have offices in Harper House: Professors Sarah Gardner, Jennifer French, Drew Jones, Bill Lynn, Wil Burns, Roger Bolton, Sheafe Satterthwaite, and the administrative assistant, Sandy Zepka. Should the department return to a relocated Kellogg House, those with offices in Harper House now would likely receive offices in Kellogg.

Beyond its academic role, CES offers the student body and wider town community numerous services and events. The department administers the 2,600-acre Hopkins Memorial Forest, located approximately one mile northwest of the campus, for undergraduate teaching, academic research, and low-impact recreation.³⁰ Closer to campus, CES runs Log Lunch, a weekly environmental studies speaker series, which regularly draws over 75 people (students and local residents alike) for a student-cooked vegetarian meal and environmental talk. The department also brings in several major environmental speakers annually, offering small seminars for students who are 1960 Scholars in Environmental Studies and then evening lectures open to the wider community. With the help of several endowments, CES offers approximately 20 summer grants for students to undertake independent studies, academic research (often thesis field work), and unpaid internships with non-profit environmental organizations.

3.2.2 Interviews

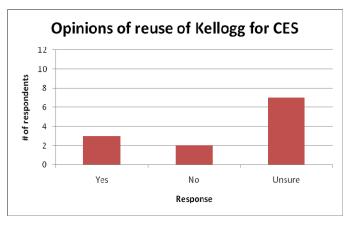
We e-mailed all CES-affiliated faculty and staff to give everyone an opportunity to contribute, and targeted those interested in addition to a few key members of CES. First were CES Associate Director Sarah Gardner and Director Jennifer French, whom we felt would be able to best outline the programmatic goals of the physical Center and hopes for the future. Next were two staff members with a long history with CES: Administrative Assistant Sandy Zepka and Hopkins Forest Manager Drew Jones, both of whom have worked in Kellogg House and Harper House. Professors Hank Art, David Dethier, Ralph Bradburd, and Joan Edwards have all been involved in previous proposals or steering for CES and Kellogg House, making them valuable sources of information about the future of the Center. Professors Roger Bolton and Sheafe Satterthwaite are long-standing members of CES who have had offices in both Kellogg House and Harper House to the project. Doug Gollin, the immediate past director of CES who oversaw the transition from Kellogg House to Harper House in 2008 and who chaired the most recent Kellogg project committee, was chosen to provide insight into past considerations of Kellogg. Finally, we interviewed Karen Merrill, who as former CES Director and current Dean of the College was able to answer questions from both the student housing and CES perspectives (Appendix C).

3.2.3 Faculty & Staff Interview: Graphical Results

²⁹ Personal correspondence with Sandy Zepka, November 4, 2009.

³⁰ Center for Environmental Studies. "Hopkins Memorial Forest." http://williams.edu/ces/hopkins/. Retrieved November 3, 2009.
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Charest, Martin, Rudolph, Sonnenfeldt

We successfully conducted 12 interviews, four with current or former CES directors, six with CES faculty, and two with CES staff members. Nine out of the twelve people interviewed mentioned a central location when asked about an ideal spot for CES. This suggests that any sites near the edges of campus may not be supported by core members of CES. Several suggested that CES be located equidistantly between the sciences and the humanities. Most (58.3%) did not take a stand

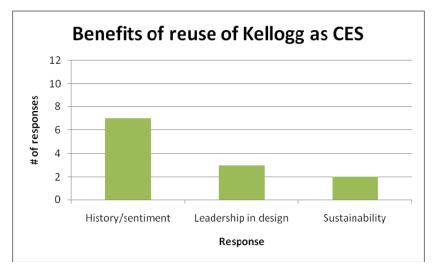


on whether Kellogg should be reused for CES, while a quarter supported reuse and one sixth opposed it (Fig. 1).

Figure 1

When asked to name some possible benefits of reclaiming Kellogg regardless of their personal opinions on the matter, most (7 people) mentioned the historical and sentimental value of the building. Several

people did mention that the 4year student turnover will cause the old CES to be quickly forgotten ("Newer students won't remember Kellogg."). Two suggested that reusing Kellogg would be more sustainable than building a new CES building, and four more proposed that renovating Kellogg could be an opportunity for the College to display leadership in green design and/or historic



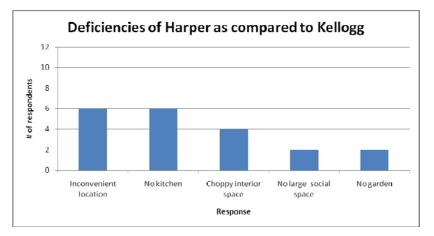
preservation (Fig. 2). In the words of Professor David Dethier, "The greenest building is the one you don't build."

Figure 2

There was less consensus on the benefits of building an entirely new, super green CES building, though energy efficiency, opportunity for experimentation, and malleability to programmatic needs were each mentioned twice. Professor Jay Thoman said he would "love to see sustainability and energy efficiency as primary goals for a new build."

None of the twelve interviewees had anything positive to say about Harper House as compared to Kellogg House, indicating that Harper has proven an unsatisfactory space for CES. Harper has only ever been intended as a temporary home for the Center until a decision is made about a future building (a decision that this project is trying to inform). CES Assistant Director Sarah Gardner commented that

Harper was "too far off the beaten path" and that the interior space was "too chopped up." Director Jennifer French noted that "the loss of the kitchen is significant." Along these lines, the most common criticisms of Harper were its inconvenient location and lack of kitchen (50% each), followed by its choppy interior space (33.3%) and its lack of open



social space (16.7%) or a garden (16.7%) (Fig. 3). Once again, central location came up as important to CES, calling into question the viability of any new sites on the campus fringes. *Figure 3*

As far as ideal features and set-up for CES, faculty and staff asked for many of the features found formerly in Kellogg House. Most popular was a reading room or quiet study area (33.3%), a garden (25%), classroom(s) (16.7%), a kitchen (16.7%) and a cozy/welcoming feel (16.7%) (Fig. 4). When asked if all CES faculty (including cross-listed professors) should be offered office space in CES, interviewees responded overwhelmingly negatively (83.3%). There was overall concern that "faculty would want to be in their main department [not CES]" and that "you don't want a building with a lot of empty office space, it detracts from the cozy feel." Limiting office space to only the core faculty of CES will result in a much smaller building footprint, giving us more flexibility in choosing a site. Overall, it seems that there is support for renovating Kellogg as the new CES or at least for designing a new CES reminiscent of Kellogg.

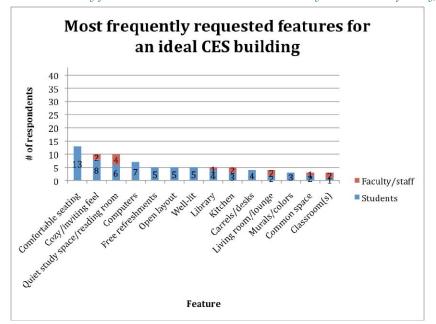
3.2.4 Student Surveys: Graphical Results

Survey questions covered both Harper House and Kellogg House, focusing on how CES could be improved for its current users and how it could attract new users from Williams and the local community (Appendix C). We asked for opinions on many of the potential changes to CES we are considering. The student surveys were administered to two different blocs of Williams students known to be interested in the environment.³¹ First, they were given to members of Environmental Studies 101, who are exploring an interest in environmental studies and may be considering the concentration, in order to learn what

³¹ We had originally included a third group, members of Economics/Environmental Studies 379: Economics of the Environment, a cross-listed course taken almost entirely by non-concentrators. We chose to survey this class to understand what could attract students outside of the department who have some interest in the environment to make use of CES. Unfortunately, we only received three surveys back from this group and decided to drop it from the data due to insufficient sample size, so our analysis will lack the perspectives of upperclass non-concentrators.

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features of CES would motivate them to stay involved in the department. Second, we surveyed students in Environmental Studies 302: Environmental Planning Workshop. This class is made up of juniors and seniors, almost all of who are Environmental Studies concentrators. From them, we hope to understand what the core of the Williams environmental community needs and wants in their physical center.





3.2.5 Graphical Student Survey Results

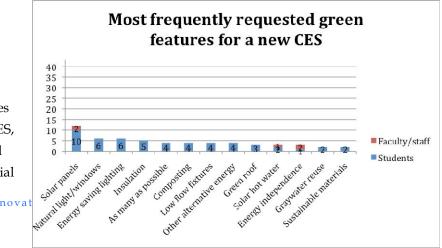
We received a total of 43 surveys back from Environmental Studies students in ENVI 101 and ENVI 302. Participants were 24 out of 29 students from one section of ENVI 101 and 19 out of 21 students from ENVI 302.

Figures 4, 5 and 6 illustrate the lack of consensus in our findings due to the open-ended nature of the questions. Like CES faculty and staff, students called for many of the features of the old Kellogg House when asked to describe their ideal CES (Fig 4). The most common requests were comfortable seating (30.2%) and a cozy, inviting feel (18.6%), followed by computers (58.3%) and a quiet study space or reading room (14.0%). Others included a well-lit building (11.6%) with an open layout (11.6%) and free

food and drink (11.6%). Figure 5: includes only features mentioned at least twice by respondents

When asked what green features should be included in a new CES, quite a few students mentioned solar panels (23.3%), the potential

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for which we considered in choosing a site (Fig. 5). A site's southern exposure determines the potential for natural lighting, requested by 14.0 percent of students, as well as for solar power. Students also suggested energy efficient lighting (14.0%), insulation (11.6%), composting (9.3%), low flow water fixtures (9.3%), and other alternative energy sources (9.3%), such as geothermal heating, biomass heating, and a small wind turbine. Over nine percent of students asked that as many green features as possible be incorporated into the building. Faculty and staff were not asked a question about green features, but several offered up suggestions during their interviews. These recommendations included solar panels, energy independence, and solar hot water.

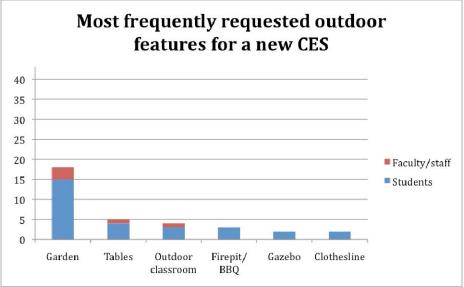


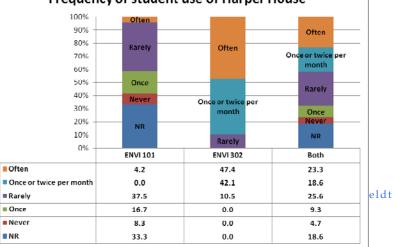
Figure 6: Includes only features mentioned at least twice by students and faculty/staff

Students responded very enthusiastically (97.7% support) to our proposal for outdoor space, with the missing 2.3% representing a student who did not respond. Unlike the other questions in the survey, the question about outdoor space prompted some responses by including a list of possibilities ("garden, outdoor classroom, gazebo, courtyard/patio, fire pit, picnic tables, clothesline"). This may explain why responses to this question show slightly more consensus. Nearly 35 percent of students requested a garden for CES, while 9.3 percent asked for picnic tables and 7.0 percent asked for an outdoor classroom (Fig. 6). Once again, faculty and staff were not asked this question but did mention some of these features in their interviews. Three suggested a garden, and picnic tables and an outdoor classroom also came up. **Frequency of student use of Harper House**

Figure 7

Overall, student usage of Harper House is low. Responses to our question about frequency of personal use of Harper House were somewhat difficult to

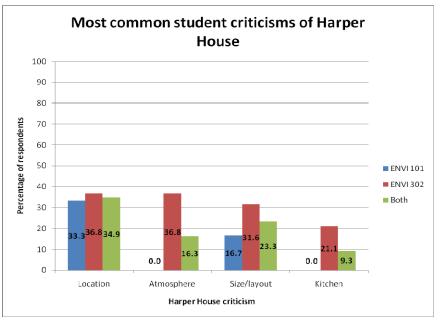
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categorize, as ENVI 101 students tended to answer verbally (e.g., often, rarely) and ENVI 302 students numerically (e.g., once/month, twice/week), which may have affected the findings slightly. Students from ENVI 302 (ENVI concentrators) use Harper House much more frequently than ENVI 101 students, with 89.5% of 302 students frequenting Harper more than once a month (Fig. 7). On average, only 23.3 percent of students surveyed use Harper "often," which we are defining as more than twice per month. Laura Cavin found in her 2005 thesis that Kellogg House users spent an average of 1-2 hours per week in the building³², indicating that current use of Harper House is much lower than past use of Kellogg.

Our data on student opinion of Harper House may offer some insight into the drop in usage that resulted from the Kellogg to Harper move. The most common criticism of Harper was its location, which students

from both classes were equally critical of (about 35%) (Fig.8). ENVI 302 students were much more likely to dislike Harper's atmosphere, size and layout, and kitchen. This may be explained by the fact that 57.9 percent of ENVI 302 students had been to Kellogg as opposed to 4.1 percent of ENVI 101 students. Because ENVI 101 students do not know what they are missing in Harper as compared to Kellogg (or



perhaps because they tend to spend less time in Harper), they were much less likely to criticize its features.

below

Harper's location was found to significantly discourage student use of the building. ENVI 101 students were more likely to be hindered by Harper's location, probably because first years are restricted to living in Frosh

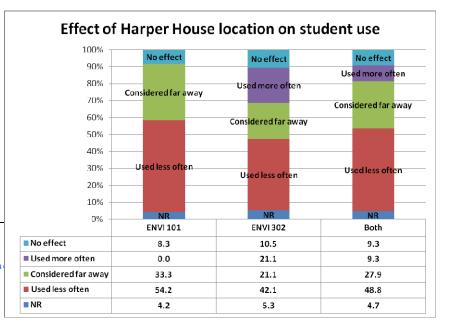


Figure 8 above, Figure 9

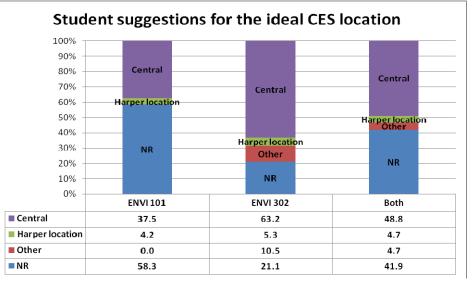
³² Cavin, 2005.

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Quad and Mission in the north central section of campus. ENVI 302ers, on the other hand, are much more likely to be upperclassmen living closer to the campus edge. The location of Harper in the southwest corner is less of a problem for them — in fact, 21.1 percent of ENVI 302 students said that Harper's location *encouraged* use (Fig. 9). Yet overall, Harper's location causes 48.8 percent of students to use it less often, and an additional 27.9 percent said they considered Harper to be "far away." These findings indicate the importance of locating the new CES centrally, especially since attracting first years and students considering the concentration is a high priority.

In line with the results above. almost half of all students want CES to be centrally located. There seems to have been some confusion as to whether the question about the ideal CES location should be explicitly answered or whether it was simply a lead-in because over 40 percent of students did not respond. ENVI 302 students were 25.7 percent more likely to ask for a central location (in contrast to findings that they

were more supportive of Harper's location), but they were also 37.1 percent more likely to answer the question (Fig 10). Between both groups of students, there were several requests for CES to be located near Frosh Quad, Paresky, Science

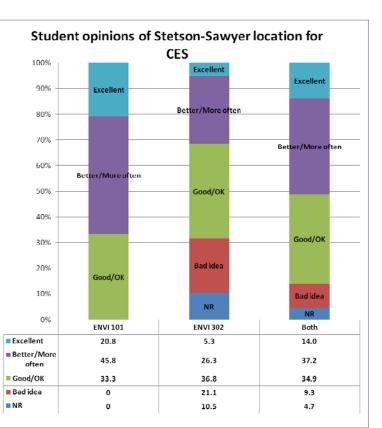


Quad, and/or Sawyer Library.

Figure 10 above, Figure 11 below

Overall, 86.0 percent of students surveyed were at least mildly supportive of locating CES near the Stetson-Sawyer Project (Fig. 11). ENVI 101 students were more likely to support this site, likely because it is close to their dormitories. ENVI 302 students who rebuffed the idea expressed concern about the

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encroachment of the surrounding buildings and the lack of southern exposure.

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3.2.6 CES Results Summary

CES faculty, staff, and students as a whole expressed that the location of Harper House was inconvenient and that a central location for the Center was preferable. This indicates that sites we may be considering near Harper or anywhere closer to the edges of campus will not be supported by the College's environmental community. Another general desire was for a space with a warm, homey feel, which lends itself more to the use of an old, wood frame building than to a designated floor in a larger academic building like NAB or Schapiro Hall.

Many of the features most commonly requested by students and faculty/staff were formerly found in Kellogg House, suggesting that this space would fit the needs of the Center for Environmental Studies. Elements that should be included in a design for the new CES include comfortable seating, a quiet reading/study room, an open and well-lit layout, computers, a library, a kitchen, desks and/or carrels, a living room/lounge, faculty offices and at least one seminar room. CES faculty and staff generally felt that only the core faculty of CES should be offered space in the building (12 offices at most). Outdoor space was widely supported, with many people requesting a garden.

3.2.7 Results Discussion

Because the purpose of the surveys and interviews was more to gather ideas for our project than to measure popular opinion, they were designed in an open-ended format. This makes it difficult to analyze the results numerically, but there were some important trends in the responses that lend themselves to graphic representation. While the quantitative compilation of responses is useful, it must be kept in mind that it is not entirely representative of student, faculty, and staff opinions. For instance, 7 out of the 43 students interviewed may have mentioned a certain feature when asked to describe the ideal CES in the open format we employed, but more like 25 out of 43 might have expressed support for this same feature if it had been prompted as a multiple choice response. It is important to remember; however, that these surveys were meant to help our group gather ideas and inform our location and building program choices.

4. Physical Realities

In choosing a site location for CES, we decided that the closer to the center of campus the new CES, the better. Proximity is a key factor that determines how many students will use a space, and our group speculates that keeping the space within a small or medium sized radius from the center of campus will attract the most attention. Williams has tried to keep Williams's sprawl to a minimum and maintain a tight, walkable campus, making a central location all the more important. A map from Facilities draws a circle from Hopkins Hall with multiple radii and we decided to keep our locations within this inner circle, ruling out perimeter locations on campus such as Mission Park, and Doughty on Denison Park (Figure 12).

Within the inner ring of campus we looked at many different locations that did not make our final cut for consideration. One of these locations was Morley Circle. We ultimately decided that the CES already has a fairly scientific slant, and that putting Kellogg close to the science quadrangle would only reinforce these already strong connections. Another potential relocation site, on Dodd Circle north of the North Academic Building, presented too many challenges with relocating the extant parking lot, accommodating the steep east-facing slope, and generally preventing crowding of nearby buildings.

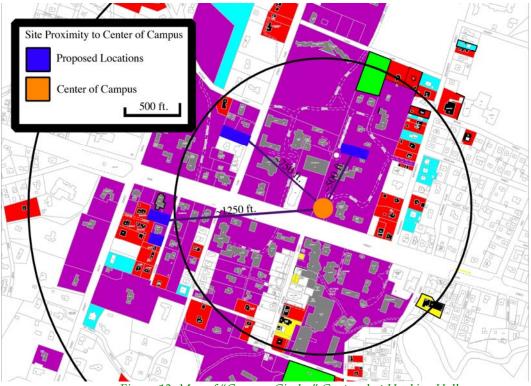
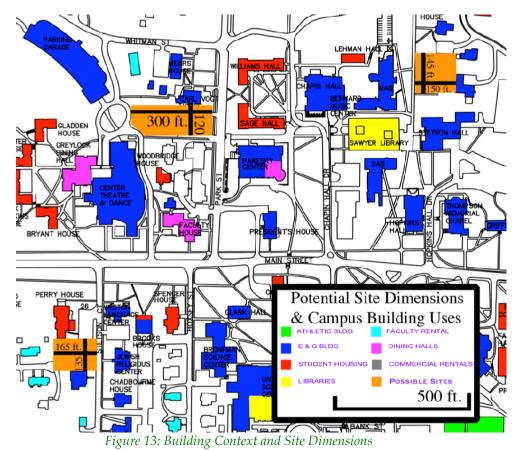


Figure 12: Map of "Campus Circles" Centered at Hopkins Hall. Stetson Court Location at 9 o'clock, 1937 House at 11, and Seeley House at 1

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4.0 Seeley House Location

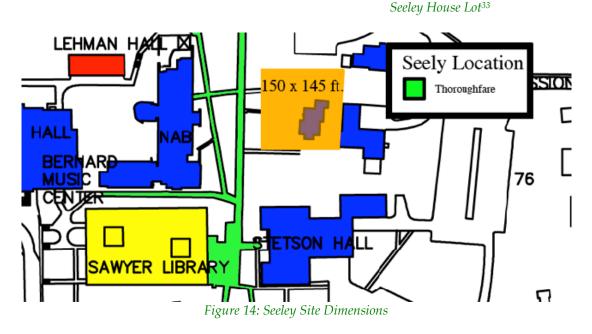
As part of the original Stetson/Sawyer project timeline, the College planned to raze Seeley House, a late-19th century timber-frame structure adjacent to Kellogg House, and move Kellogg there temporarily while determining a permanent location. Stetson Hall (eventually the new Stetson-Sawyer Library) and the North Academic Building border the site to the south and west, respectively, while the former Sawyer Library Drive (now a major north-south pedestrian footpath) runs along the western edge of the site. The buildable area extends north to Goodrich House and northeast to Sewell House, with a slice extending as far as the Lower Stetson Parking Lot to the east; this space could be utilized for additions or outdoor

features if the original Kellogg House were to replace Seeley House. This entire area forms a rough "L" shape, with most of the space between Goodrich, Sewell, Stetson, and the North Academic Building. A steep east-facing slope on the southern half of the site becomes a more gradual, northeast-facing incline on the northern half of the lot. The site lies between student housing (Goodrich and Sewall Houses, and other Dodd Circle residences beyond them to the northeast) and



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academic buildings (Stetson, the North Academic Building, and Hopkins Hall and the Schapiro Hall beyond them to the south).



The area where Seeley currently stands is both literally and figuratively in the shadows of Stetson (eventually Stetson-Sawyer) Library and the North Academic Building (Fig. 14). The towering Stetson addition would extend onto the current Kellogg House pad, blocking a significant portion of the southern light to a building that replaces Seeley House. Meanwhile, the North Academic Building's three stories would block much of the western light because the structure sits at least 15 feet higher than Seeley. At the same time, a small timber-frame building in Seeley's location would be dwarfed by the large buildings to the south and west, but might not be close enough to the Dodd Circle structures to fit in with them.

4.1 Stetson Court Locations

The largest of the proposed relocation sites, the Stetson Court site is composed of two lots on the western side of Stetson Court, immediately to the north and south of Bascom House. Both lots are free of buildings and, along with all the structures and land fronting Stetson Court, are owned by the College. The two lots are in a mixed-use area, with numerous small buildings nearby being used as single-family

residences, offices, and dormitory space. Three large brick fraternity houses surround the northern lot: Perry House (now a dormitory), Bascom House (now the Williams College Office of Admission), and Weston Hall (now classrooms, faculty offices, the Office of Career Counseling, and Office Services). Several

Kellogg House: Relocation, Renovation, Reuse



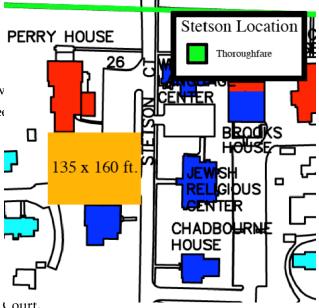
³³ Photo by Abby Martin, October 2009.

wooden single-family houses comprise the rest of the nearby buildings: two College rental properties (both still single-family residences), Chadbourne House (now a Williams co-op), Mather House (now College administrative offices), and Harper House (now the Center for Environmental Studies).

Stetson Court Site, Southern Lot Photo by Jack Rudolph

The northern lot is bordered by the village green, and across Main Street (Massachusetts Route 2), the '62 Center for Theatre and Dance, while Stetson Court, and Weston Hall and the Jewish Religious Center

across the street, form the eastern boundary. The site abuts Bascom House to the south, Perry House to the northwest, and a rental house on Chapin Court to the west. This upper Stetson Court lot is the more prominent of the tw lots, with frontage on heavily traveled Main Stree and currently houses student and admissions center parking and a beach volleyball court. A narrow wooded buffer stands between the admissions center parking lot and the Chapin Court residences to the west, and only about 15 feet separate the eastern end of Chapin Court and the western end of the parking lot. This upper lot is on a gentle southward gradient with a long eastern frontage on Stetson Court,



forming a backwards "L" shape where the lot widens towards the Chapin Court residences.

Figure 15: Stetson Court Site Dimensions



The roughly square southern lot is bordered by two College rental houses, one on Chapin Court to the northwest and one on Stetson Court to the south, with a wooded area (not owned by the College) to the west. Across the street on the eastern side of Stetson Court is Chadbourne House, with the Jewish Religious Center to the northeast and Harper House and Mather House to the southeast. This lower Stetson Court lot is the more sheltered of the two, with frontage only on the lowtraffic Stetson Court; it is occupied by a

southward- sloping lawn and, on the southeast corner, a transformer box. *Stetson Court Site, Northern Lot*³⁴

4.2 1937 House Location

This site, part of which is currently occupied by the 1937 House (formerly the Williams College Children's Center), is located directly across Park Street from the Paresky Center and Williams Hall and Sage Hall. The St. John's Episcopal Church rectory and parish hall abut the site to the south, while Williams College's Vogt House (presently occupied by the Development Office) and Sears House (occupied by several Facilities offices) abut the site to the north; its eastern and western boundaries are defined by Park Street and the '62 Center for Theater and Dance driveway, respectively. The 1937 House was extensively renovated in 1999 for use as the College's Children's Center, but has sat vacant since that program moved to another location in 2007; the building is currently used for storage by the Facilities department. According to Chris Williams, the College's Director of Architectural Services, the 1937 House



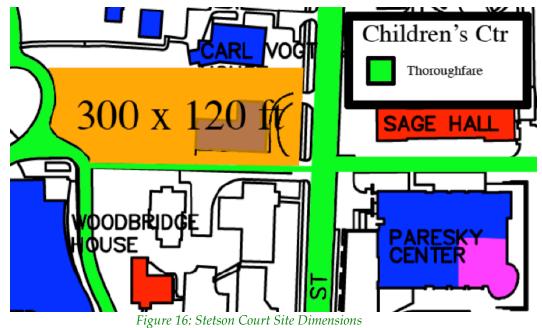
has at least five different levels, which would make retrofitting the building for dormitory or office space nearly impossible; he believes that the only viable use for the building would be as a private residence. The site is on a westfacing slope, with the eastern half (closest to Park Street) on a steeper grade than the western half. Of the potential sites for Kellogg House's relocation, the 1937 House site has the densest surrounding buildings, but the open

³⁴ Photo by Jack Rudolph, October 2009

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space on the western and northern portions of the site joins open space (which is unbuildable due to its steep grade) to the southwest of Sears and Vogt houses.

1937 House Site, Park Street Side³⁵



5. Evaluating Options: A Matrix Approach

In order to assess the three sites (Seeley, 1937 House and Bascom) we constructed a decision matrix. In the matrix we compared the three sites in terms of cost, visual fit, campus programmatic context, accessibility and flexibility of lot. The score for each of these categories was determined by averaging the relative desirability of subcomponents within the category. All categories and sub-categories are assessed on a scale of 0 to 5 where 0 is least desirable and 5 are most desirable.

5.0 Criteria

5.0.0 Cost

Since our different site options are only loose plans and do not take into account specific numeric costs associated with later-stage decisions on materials and specifics of construction, we will deal in relative rather than absolute cost terms. Particularly expensive aspects of our proposed projects include the price of demolishing an old structure to make room for Kellogg House, the cost of relocating Kellogg from its current location to the new site, and necessary site preparations such as decontamination, accounting for grade and constructing adequate drainage. The sub-components of Cost are building demolition, Kellogg House move, and site preparation; these subcomponents will be averaged for the cost score to be used in the matrix. Note that high cost corresponds with a 0 while lowest cost corresponds with a 5.

³⁵ Photograph by Abby Martin, November 2009.

5.0.1 Visual Fit

This category will assess the architectural context of Kellogg House and its proposed additions in each site. Visual fit addresses how Kellogg would contribute to the building density of the lot and the surrounding area. In terms of evaluation, the ideal density is somewhere in the middle: Kellogg is not too remote or so squished between other buildings that there is no opportunity for usable outdoor space. Lastly, visual fit includes how well a wood frame building like Kellogg could fit in the surrounding architectural context on each site. The sub-components of Visual fit are crowding and architectural context.

5.0.2 Campus Context

This category considers each site's proximity to other things going on at Williams College. Specifically it considers proximity to homes of other departments affiliated with CES. It is important that the new CES building is both close to and somewhat equidistant from these academic centers in each of the three divisions based on the interdisciplinary focus of CES. Here, we consider the North Academic Building and Schapiro Hall (South Academic Building) to be the center of the humanities and the science quad to be the center of the sciences while acknowledging that because of a lack of strict planning on the campus, departments and programs are often spread out in reality. We are, however, very focused on cultural experience of academic centers rather than whether they actually house the whole department.

The new CES should also be relatively close to social centers on campus in order to facilitate student use of the space. We believe encouraging student exchange with academic and social centers on campus will help to bring in students not traditionally affiliated with CES and help to bring together a more diverse environmental community on campus. The subcomponents for this Campus Programmatic Context are social proximity and academic proximity.

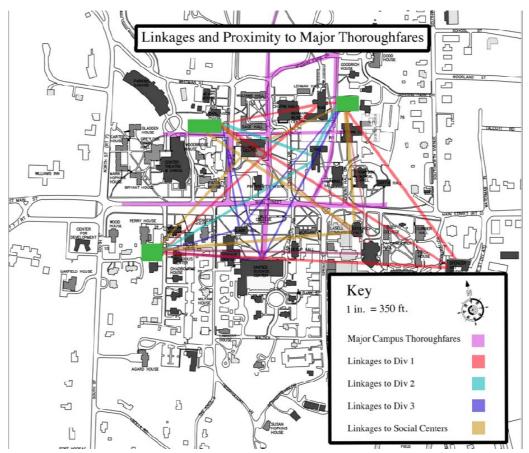


Figure 17: Linkages and Proximity to Major Thoroughfares (see Appendix E for broken down map)

5.0.3 Accessibility

One of our top priorities is CES users' ability to easily locate and access the renovated Kellogg House. Therefore, each site must be evaluated based on its prominence, proximity to major vehicular and pedestrian thoroughfares, and potential to offer both bike and car parking. Helping to strengthen thoroughfares by building along general walking lines on campus will also help encourage more campus traffic to pass by (and hopefully stop at) Kellogg House. The subcomponents of Accessibility are prominence, vehicular access, pedestrian access, and parking.

5.0.4 Flexibility of Lot

Another major consideration is the flexibility of each lot, or how well it could fulfill the Center for Environmental Studies' needs, both at present and in the future. This includes the amount of buildable space on the lot, as dictated by Williamstown Zoning Bylaw setback requirements and height limitations (meaning that the lot is sufficiently large to permit a setback without having to vertically compensate to make up desired square footage) and the grade of the land. The different shapes and physical attributes of the sites would accommodate CES's programmatic goals differently, and they offer a range of flexibility for additions when the building is initially relocated (and later expansions or renovations after it has been on a site for some time). CES also wants a variety of outdoor spaces, particularly a garden, and

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so we need to consider the potential for usable outdoor space: the southern exposure available for a garden, lawn or patio for outdoor gatherings, space for an outdoor classroom, and so forth. The subcomponents for Flexibility of Lot are amount of buildable space, potential for a garden and quality of outdoor space.

	Cost	Visual Fit	Campus Context	Accessibility	Flexibility of Lot	total
1937 House	1.0	4.0	4.5	4.8	4.3	18.6
Stetson Ct.	2.3	2.0	1.5	2.3	2.7	10.8
Seeley	3.7	2.5	3.0	3.3	2.3	14.8

5.1 Unweighted Decision Matrix

Figure 18: Unweighted Decision Matrix

The unweighted decision matrix had a maximum possible score of 25. According to the unweighted matrix, the 1937 House site is most desirable with a total score of 18.6, the Seeley House Site is less desirable with a score of 14.8 and the Stetson Court site was least desirable with a score of 10.8.

In order to better understand the evaluation methodology, we included descriptions of how each individual score was calculated.

5.1.0 Cost Evaluation

1937 House Site: Cost Results

This site would incur a high cost due to the need to demolish the 1937 House and therefore was assigned a 0 for high price of demolition. Since moving Kellogg to the 1937 House lot will be cheaper than moving to Stetson Court but more expensive than moving to Seeley, it has been assigned a 1 for the relative expense of moving Kellogg. To move Kellogg to either Stetson Court or 1937 House site the building will most likely have to be disassembled. Disassembling a structure makes it easier to move, though the pieces are still quite large, this method also requires intensive deconstruction and reconstruction to enable the move and costly man hours. In addition, since even a deconstructed house will still have large piece, one would need to move a lot of infrastructure like telephone lines, and to pull down trees, which is why both of these moves will incur significant fees. Since the 1937 House site is very narrow with a considerable grade, there is a likely need to do additional work on drainage, leading to a 2 for site preparation. The average Cost rating for the 1937 House site is 1.

Stetson Court Site: Cost Results

The proposed Stetson Court lot contains no permanent structure, but relocating Kellogg there would require relocating some parking, so it has been assigned a 4 for demolition cost. Moving Kellogg to this site would be the most expensive option by far, because engineers would need to maneuver the building further than in any other scenario, including around significant infrastructure (as with the 1937 House site). In addition, maneuvering Kellogg from its current location to Stetson Court would likely involve

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(very slowly) hauling an oversize load down Route 2, the main east-west thoroughfare in northern Massachusetts, including over a steep hill by West College and the Williams College president's house. As a result, moving Kellogg to the Stetson Court site was awarded a score of 0 because it would be significantly more costly than the other sites. This site was awarded a score of 2 for site preparation because of the need to deal with remnants of the parking lot. Specifically, the lower (southern) lot has grade that might require more work on drainage. The average Cost score for the Stetson Court lot is 2.3.

Seeley House Site: Cost Results

Since Seeley House needs to be removed to make way for the Stetson-Sawyer Library construction, regardless of Kellogg's relocation site, we did not see the demolition costs as isolated to this particular relocation scenario. Therefore, the Seeley House site was awarded a 5 for building demolition. The most expensive part of move Kellogg House to this site would be lifting Kellogg off its foundation, as opposed to moving the building long distances and around obstacles, as at other sites, so we awarded Seeley a moving cost score of 3. Since the Seeley lot is not a greenfield, one would need to deal with whatever is left of Seeley House (foundations, oil spills, contaminated soil, and so forth). In addition, the site is on a relatively steep slope, which could necessitate significant regarding and drainage work to prepare the area for Kellogg's relocation and expansion. Therefore, we awarded the site a 3 for site preparation costs. The average Cost score for the Seeley House site is 3.7.

5.1.1 Campus Programmatic Context Evaluation

1937 House Site: Campus Programmatic Context Results

Since this location is close to the Paresky Center, the Greylock quad, the '62 Center for Theatre and Dance, and the freshman quad – all central social hangout locations on campus – we gave it a 5 for social proximity. Because the lot is equally far from the humanities and sciences, so we gave the 1937 House lot a 4 for academic proximity. Thus, the average Campus Programmatic Context score for the site is 4.5.

Stetson Court Site: Campus Programmatic Context Results

Since Stetson Court is well removed from where students congregate, we awarded it a 1 for social proximity. The location is close to the western end of the science quad, particularly Bronfman and Clark Hall, but is pretty removed from the humanities, so we awarded it a 2 for academic proximity. The Stetson Court site's average Campus Programmatic Context score is 1.5.

Seeley House Site: Campus Programmatic Context Results

Since the new Stetson-Sawyer Library will eventually be a social center on campus, and Seeley House is relatively close to other student centers like the Paresky Center and Goodrich Hall, we gave it a 3 for social proximity. The site will seem considerably closer to Paresky and other buildings to the west once Sawyer Library is demolished and the academic buildings and new library form an open quadrangle. Because the Seeley site is in the middle of the humanities (for our planning study purposes, the North Academic Building and Schapiro Hall) but more removed from the sciences, we awarded it a 3 for academic proximity. The Seeley House site's campus programmatic context score is 3.

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5.1.2 Accessibility Evaluation

1937 House Site: Accessibility Results

Since this site is centrally located, across from the busy Paresky Center and the freshman quad, and Kellogg House would front a major town street, we awarded it a 5 for prominence. The 1937 House is on wide, well-traveled street with parking on both sides of street, so we awarded it a 5 for vehicular access. This site is also situated on a major pedestrian thoroughfare connecting the Paresky Center and the new Stetson-Sawyer Library with the Greylock quad and the '62 Center for Theater and Dance. We believe that this location, between many popular gathering places, would encourage students and faculty to visit Kellogg House because the building would be convenient so often. Given the major town street and cross-campus paths surround the site, we awarded it a 5 for pedestrian access. Visitors can park in the Greylock parking garage when there is not a special event at the '62 Center or for limited amounts of time on either side of Park Street; however, neither of these parking options is consistently available for CES employees. Therefore, we awarded the site a 4 for parking. The 1937 House site's average Accessibility score is 4.8.

Stetson Court Site: Accessibility Results

Though the Stetson Court site is next to Admissions and thus visible to individuals visiting the College, current students and faculty do not know the space well, so we gave it a 1 for prominence. Since it is located on a dead end street, it is unlikely that those traveling by car will happen upon the building or find it particularly convenient and therefore we gave it a 3 for vehicular access. Since this site is not on major thoroughfare but somewhat close to the popular Greylock quad and '62 Center, we gave it a 2 for pedestrian access. Because there is parking on the opposite side of street and many faculty/staff lots in the immediate vicinity, we gave Stetson Court a 3 for parking. The site has an overall score of 2.3 for Accessibility.

Seeley House Site: Accessibility Results

Since the Seeley lot will be adjacent to the new Stetson/Sawyer library and is next to the North Academic Building and close to Paresky, we gave it a 4 for prominence. Though the site is right off of a large parking lot, it is not on a street and therefore was given a 1 for vehicular access. Since it is located on a major pedestrian thoroughfare particularly between Mission Park and the academic buildings and is next to well-used buildings, we gave it a 4 for pedestrian access. Because it could have a lot of its own parking in the surrounding lots, we gave the Seeley site a 4 for parking. The Seeley House's average Acessibility score is 3.3.

5.1.3 Visual Fit Evaluation

1937 House Site: Visual Fit Results

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Because historic core of Kellogg House would fit easily into this lot's Park Street frontage, we awarded it a score of 4 for crowding. Since this lot is adjacent to wood frame houses on several sides (Vogt House, Sears House, St. John's Rectory) but near masonry and stone buildings (the freshman quad, Paresky Center, St. John's Parish Hall), there is a diversity of architectural styles into which a renovated Kellogg would fit. As such, we awarded the 1937 House site a 4 for architectural context. The average Visual Fit score for the 1937 House is 4.

Stetson Court Site: Visual Fit Results

The old fraternity houses along Main Street have a distinct rhythm of open space, and placing Kellogg House at the southwest corner of Stetson Court and Main Street would disturb this rhythm. Since Kellogg would significantly crowd Perry House and Weston Hall and interrupt the open space between the two buildings, we gave it a score of 2 for crowding. That lot is also surrounded by masonry buildings and has little visual connection to the wood-frame buildings down Stetson Court, so we gave the site a 2 for architectural context because Kellogg House would be out of place there. The average Visual Fit score for the Stetson Court site is 2.

Seeley House Site: Visual Fit Results

With the demolition of Seeley House, the site would open up considerably and a relocated and renovated Kellogg House could better take advantage of the extant open space. That said, the northern portion of the site is much more buildable (because the structure would be less in the shadow of the Stetson-Sawyer Library and the North Academic Building, and the grade is smaller), and placing Kellogg and its addition on that end would crowd Goodrich and Sewall houses. The large academic buildings nearby would also exacerbate the sense of crowding, so we gave the Seeley House site a 2 for crowding. The combination of the historic core of Kellogg House and a modern addition would visually bridge the gap between the newer glass and brick buildings (the North Academic Building, Stetston-Sawyer Library, Schapiro Hall) and old, white, wood-frame buildings (Goodrich, Sewall, and other Dodd Circle buildings). But the renovated Kellogg House would also stand as an awkward in-between for the big academic buildings and the small residential buildings, fitting in with neither; therefore, we gave it a score of 3 for architectural context. The average Visual Fit score for the Seeley House site is 2.5.

5.1.4: Lot Flexibility Evaluation

1937 House Site: Lot Flexibility Results

This lot is more spacious than the other options, and so we have given it a 5 for buildable space because its large footprint allows great flexibility for placing Kellogg and a variety of additions on the site. The site has good southern exposure and daylight, since it abuts a short building (the St. John's parish hall) and an open backyard (associated with the St. John's Rectory), although the '62 Center for Theater and Dance and the Rectory block some low-angled sunlight and light out of the southwest (which are likely to be weaker anyway). The western half of the site also a greenfield, which would give that area uncompacted soil for better gardening, and so we gave the site a 4 for its garden potential. This good daylight and abundance of usable space would make for a large, welcoming outdoor space at the site. Kellogg House: Relocation, Renovation, Reuse Charest, Martin, Rudolph, Sonnenfeldt Given its location at the center of campus and alongside a heavily traveled street and a major pedestrian thoroughfare, the outdoor space would receive significant use (but might be noisy at times), so we have scored the quality of outdoor space at a 4. The average Lot Flexibility score for the 1937 House is a 4.3.

Stetson Court Site: Lot Flexibility Results

This site is constricted by surrounding buildings (Perry House and Bascom House) to the west and south, and by the town green (a large setback from Main Street) to the north, so we gave it a 2 for buildable space. The lot at the northwest corner of Main Street and Stetson Court has compacted soil from the extant parking lots, and would have little room left for a garden once Kellogg House and its additions were in place. Further south on Stetson Court, however, an open lot between Bascom House and a rental house could support a decent garden, so we awarded the site a 3 for its garden potential. That southern lot, on the western side of the street, would make for a big, flexible outdoor space, but since the lawn currently there (and the beach volleyball court on the northern portion of the site) receive little use now, we gave the outdoor space a score of 3 for quality. The average Lot Flexibility score for the Stetson Court site is 2.7.

Seeley House Site: Lot Flexibility Results

Once Seeley House itself is demolished, the lot will have a large open space (with some areas more hospitable to building than others), so we gave it a 4 for buildable space. That said, any space left around Kellogg House and its additions would probably be shaded by one of the academic buildings or residential houses, and might be taken over by footpaths between the many buildings in the area, so we gave the site a 2 for its gardening potential. In the same vein, we scored the quality of the outdoor space at 1 because the shadow and steep grade of the area would make a usable, hospitable outdoor space around the renovate Kellogg difficult. The average lot flexibility score is 2.3 for the Seeley House site.

5.2 Weighted Decision Matrices

It is clear from the unweighted decision matrix that the 1937 House site is most desirable according to all categories but cost by a fairly significant margin. Therefore, the only way in which the other sites could beat out the 1937 House is if cost were weighted significantly more heavily than the other categories. If one were to only consider or more heavily consider cost, the Seeley site would be most desirable, followed by the Stetson Court site and then by the 1937 House. However, in describing our project, David Dower explicitly told us that cost would not be the only criteria for determining the best relocation and reuse options for Kellogg House. Short of such an extreme weighting in which only cost would matter, any other weighting schemes would simply alter the margin by which the 1937 House surpasses the other sites in desirability.

									Flexibility of		
	Cost	weight	Visual Fit	weight	Campus Context	weight	Accessibility	weight	Lot	weight	total
1937 House	1.0	1	4	2	4.5	3	4.8	4.0	4.3	5.0	63.2
Stetson Ct.	2.3	1	2	2	1.5	3	2.3	4.0	2.7	5.0	33.2
Seeley	3.7	1	2.5	2	3	3	3.3	4.0	2.3	5.0	42.3

Figure 19: Decision Matrix Weighted by CES Priorities

In the decision matrix weighted by CES priorities the categories are weighted on a scale of 1 to 5 where cost is least important followed by visual fit, campus context, accessibility and flexibility of lot. The maximum possible score under this scenario is 75. According to this weighting, the 1937 House site still wins with a total of 63.3, followed by Seeley House with 42.3, and Stetson Court with a total of 33.2.

	Cost	weight	Visual Fit	weight	Campus Context	weight	Accessibility	weight	Flexibility of Lot	weight	total
1937 House	1.0	5	4	3	4.5	3	4.8	3.0	4.3	1.0	49.1
Stetson Ct.	2.3	5	2	3	1.5	3	2.3	3.0	2.7	1.0	31.6
Seeley	3.7	5	2.5	3	3	3	3.3	3.0	2.3	1.0	46.9

Figure 20: Decision Matrix Weighted by College Priorities

In the decision matrix weighted by the College's general priorities, cost is ranked most highly with a weight of 5, flexibility of lot is least important with a weight of 1 and visual fit, campus context and accessibility are all relatively important with a weight of 3 each. The total possible number of points under this scenario is 75. According to this weighting, the 1937 House still wins with 49.1, followed closely by Seeley with 46.9 and then Stetson Court trailing with 31.6.

5.3 Siskind House Alternative

If the College decides that the best reuse option for Kellogg House would not be the Center for Environmental Studies, we hope that our evaluation of CES's programmatic goals will be incorporated into the planning process. The department's current setup in Harper House is less than ideal for student and faculty needs, and our survey and interview data clearly showed that Harper's location limits the building's student use – so Harper House is not a good long-term home for CES, at least not in its current configuration. When the department prepared to move out of Kellogg House two years ago, Siskind House (on Morley Circle, behind Schow Library and the unified science center) came up as a potential relocation option. Based on our knowledge of the department, we would recommend Siskind House be strongly considered as a solution for the department's needs if a relocated Kellogg House is not an option for CES's next home. The structure needs extensive renovations and repairs to bring it up to code, but Siskind seems to meet CES's programmatic goals much better than Harper House and would give the department a more usable space than it currently occupies.

6. Proposing a Building Program

6.0 Building Wants

Since the CES building has traditionally been a physical center for a geographically scattered program, and CES has always had its own building, we have planned for a large gathering place within the renovated Kellogg, to allow the department's faculty and staff to meet in the building. Although the Matt Cole Library will never again be a satellite branch of Sawyer Library, a sizable Matt Cole Reading Room in Kellogg could both honor his legacy and give CES a flexible space for large gatherings. Students and faculty affiliated with CES are passionate about the program's next building containing a kitchen – a

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social space that draws people and builds community. This desire for a kitchen is unique among academic departments, but student use declined when CES moved from Kellogg to Harper House in 2008 and many attribute that to the lack of a kitchen in Harper. In addition to those indoor spaces, CES has a unique need for outdoor spaces, particularly a garden. The program holds barbeques and other events outside, and students in the Environmental Studies community have a greater attachment to outdoor space, and so a lawn, terrace, or other outdoor feature would allow the program to get more out of the site.

6.1 Building Needs: Zoning, Code & Planning

Building codes have evolved considerably over Kellogg House's lifetime, and the renovation will need to accommodate both the historic structure and current building codes. According to Ryan Contenta, a Certified Building Official with the Town of Williamstown, the architects and engineers who design the renovation and addition to Kellogg will need to mitigate the realities of the existing building with the current standard, finding a happy medium somewhere between the two.

The most daunting regulations for this project will be accessibility requirements, which permeate architectural design and are bound to influence the very core of the renovation and reuse of Kellogg House. The Commonwealth of Massachusetts has stringent accessibility requirements, as defined in Commonwealth of Massachusetts Regulation 521: Architectural Access Board (521 CMR); the state building code accompanies the federal American with Disabilities Act, which is enforced at a national level by the Department of Justice.³⁶ Williams College buildings are classified as Type B structures (that is, business structures rather than Type E educational structures) under Massachusetts code, so any new construction or significant renovation of a College building must meet 521 CMR requirements for Type B structures. Therefore, all floors of a renovated Kellogg House must be handicapped-accessible — a requirement that will shape all aspects of the building, from the necessary elevator/wheelchair lift to the width of doors to the size and shape of bathrooms. In addition, the renovation will need to meet current fire codes. The building will need two means of egress that comply with fire codes, so the extant steep, open staircase in Kellogg House will need to be replaced or supplemented with two code-compliant staircases.

Another major consideration will be the environmental impact of the Kellogg House relocation and renovation on the building site and surrounding area. The project must meet Code of Williamstown §70-5.3, the town's environmental protection requirements, which dictate water management, erosion control, air quality, waste management, and other aspects of construction projects. Although none of the sites we are proposing for Kellogg House's relocation are adjacent to wetlands or other water features protected in the Massachusetts Wetlands Protection Act or Rivers Protection Act, common barriers to construction

 ³⁶ Ryan A. Contenta. Certified Building Official, Town of Williamstown. Personal Communication. November 16, 2009.
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 Charest, Martin, Rudolph, Sonnenfeldt

enforced by the Williamstown Conservation Commission, the project will still need to go before the Conservation Commission for approval to ensure it meets environmental standards.

The Code of Williamstown mandates that buildings follow specific setback and height restrictions, and although it would be on Williams College property, the relocated Kellogg House must be in compliance. These height and setback regulations "assure that all structures in Williamstown fit into their surroundings in terms of scale and mass and that viewsheds are preserved."³⁷ On sides facing the street, the building must have a setback no less than th

e setbacks of adjacent structures. This regulation would be most relevant for the Stetson Court and the 1937 House sites, where Kellogg House and/or its additions would have street frontage (the Seeley House site has no street frontage). Side and rear setbacks can be a minimum of 6 feet, and must allow sufficient light and air for adjacent buildings and their landscaping. The building is limited to 35 feet in height, or three levels above the average ground level in a multi-level house.

6.2 Building Needs: Historic Preservation

Williams College fully plans to save the historic core of Kellogg House, and has promised such to the Massachusetts Historical Commission (MHC) as part of the Stetson/Sawyer Library project (see Appendix B). Although the MHC does not object to the demolition of the 1973 Sawyer Library or the demolition of 1956 and 1962 additions to Stetson Hall, the College's plans for Seeley House and Kellogg House have raised concerns. In a 2006 letter to Guntlow and Associates, an architecture and engineering firm involved in the project, the MHC "requests additional information regarding the decision to demolish, rather than relocate, Seeley Hall," and notes that "consultation should also focus on rehabilitation of Kellogg House³⁸ (Appendix B). At that stage of the planning process, the College planned to raze Seeley House to create a temporary pad for Kellogg House, but the College has since agreed to solicit outside buyers who would move the building elsewhere; Williams has no plans to move the building to another site on campus, and so they still plan to demolish the structure if no buyer is found.³⁹ As stipulated in the letter from the Massachusetts Historical Commission, the College has developed a Memorandum of Agreement with the MHC, formally studying the project's impact on the historic buildings involved. These concerns are in keeping with Code of Williamstown §70-5.4H, which states that the "location and design shall not cause avoidable damage or impairment to the historic or archaeological value of buildings or sites recorded on the Massachusetts Register of Historic Places." As the College looks to accommodate the historic fabric of Kellogg into a revamped building, they might be able to use code compliance alternatives (subject to approval by the building inspector) to preserve the original structure while still meeting current codes.

³⁷ Code of Williamstown. Version 2008. §70-4.1B.

³⁸ Letter from Brona Simon, Deputy State Historic Preservation Officer, to Vincent P. Guntlow, Principal of Guntlow and Associates, Inc. November 29, 2006.

³⁹ David Dower. Director of Facilities Planning and Construction, Williams College. *Personal Communication*. October 15, 2009.

6.3 Physical Design Recommendations

6.3.0 Wants & Needs Implemented

Based on information synthesized from the various interviews, surveys, and space inventories, we believe we have figured out exactly what types of functional spaces the CES should have. Common consensus among surveyed faculty was that there should be between five and ten permanent office spaces in the CES building in addition to a couple of rotating faculty offices. There was also a strong desire for collaborative workspace, a functional kitchen and some sort of reading room to replace the Matt Cole library. Faculty and students alike thought that some sort of carrel system, like in the major libraries on campus, would be nice for students who wish to have some sort of consistent study space inside of CES. It will be important to take inventory of the number of students who would be interested in this type of more permanent workspace closer to the date of construction to accurately estimate demand. If construction were to start tomorrow, it would make sense to include approximately ten of these spaces. There was limited support for some sort of food service facility similar to the Eco-Café of the unified science buildings, and only a few respondents expressed interest for more laboratory space connected to the CES.

If it is cost-effective to re-allocate existing space on the first and second floors, it may be beneficial to create more, and smaller offices, as many of the offices are quite large compared to the needs of an average professor. We estimate that it would be possible to squeeze in up to eight faculty offices in the historic Kellogg structure. Overall needs, by our estimation, include about six faculty offices, one administrative office, a kitchen, a dining/meeting room, a living room/meeting room, a classroom, a computer lab, five to ten student work spaces, a reading room, and a garden or other significant outdoor space.

We hope the College and CES will work together to make as sustainable a building as possible. We have considered how each site might provide passive solar heating and day lighting, which are certainly important elements of sustainable design. The 2006 Environmental Studies 302 project on Kellogg House, "Moving Up: A Plan for the Relocation and Renovation of Kellogg House, the Center for Environmental Studies," includes an excellent discussion of green technology possibilities for Kellogg, although some are limited to the Seeley House site. Among the features addressed in that project, solar panels and efficient lighting and plumbing fixtures received the most attention from students we surveyed, but there are a variety of other options we hope to see implemented. Many sustainable design principles are simply smart building principles, so a tight building envelope, maximum day lighting, and passive solar heating should be prioritized. Some non-standard features, like low-VOC paint and carpeting, sustainably harvested wood, and assorted local or recycled materials, would be relatively easy to integrate into renovations of the historic core. Other features, like renewable onsite heat or energy sources (*i.e.* wind turbines, geothermal energy, ground source heat pumps, etc.), would be more challenging to accommodate physically and financially, but offer even greater rewards in the future. Ultimately, the specific green architecture features incorporated into the Kellogg House renovation will depend on the

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professionals involved in the project – but a strong push for sustainable design from CES and the wider College community would strengthen the case for sustainability.

In the course of our work on this project, numerous people asked us, "Why don't you just build a new, green CES building?" And although we see the appeal of a new building with latest green design and technological innovations, we believe that this is a better solution for the Williams College campus and for the Center for Environmental Studies. The campus and nearby College property contains over 100 buildings, and so a new building would only add to the spaces the school needs to maintain (and would not help satisfy the question of what to do with Kellogg House). Indeed, this is an opportunity for the College to make the most of its historic architecture and to promote its sustainability goals.

Historic preservation and sustainable design are commonly perceived as incompatible, and this project offers Williams an opportunity to prove that a renovation can at once maintain the historic character and create a green building. Realistically, the historic core of Kellogg House will need to be renovated considerably, and might retain little of the original building—it currently includes extensive historic, but not original, construction, and the College will have to decide which features to preserve. By preserving as much of the old Kellogg House as possible, however, the College would prevent additional resource depletion and pollution associated with building entirely from scratch. Reusing building materials from extant structures (*i.e.* the 1937 House, or possibly Seeley House, if one is demolished to make way for Kellogg) could likewise contribute to the sustainability of the renovated Kellogg House. Although the Leadership in Energy Efficient Design (LEED) sustainable building rating system has struggled to appropriately evaluate historic buildings, the latest version of LEED is significantly more preservation-friendly and addition improvements are expected in the next year. Ultimately, we hope the College will pursue the most stringent sustainability goals and green design rating possible for the building, whether LEED or another system, to demonstrate Williams's commitment to sustainability and the potential for greening historic buildings on campus.

6.3.1 Class of 1937 House Site

6.3.1.0 Site Preparation

The Class of 1937 House, formerly the Williams College Children's Center, will need to be demolished to clear the site. At 5,863 ft², the extant structure is no small demolition job, but the building has good road access from multiple angles and a wide buffer between it and surrounding buildings, which should make demolition easier. The site is not located on a flood plain or near bodies of water/wetlands, and seems in the clear for ecosystem impacts, but the Williamstown Conservation Commission will need to make the final determination. Razing the Class of 1937 House and excavating a basement would probably be most difficult parts of preparing this site for construction.

6.3.1.1 Design

The design solution we propose for the 1937 House site emphasizes the preservation of the original 18th century Kellogg House and the early 19th century additions, with some modern appendages providing both classroom and communal workspace. The proposed structure also utilizes existing, but unused attic and basement space to try to maximize functional space while minimizing the building's footprint.

We believe that the extant Kellogg House, with a renovated basement and attic, could fulfill almost all of CES's space needs. There is space for six offices, including one administrative office in the existing structure: one administrative office and one normal office on the first floor, four offices on the second floor, and one office in the attic. The existing building also has enough space for a meeting or dining room, in addition to a large living room that would serve well as an informal reading and study area. Significant renovation and expansion of the basement area would accommodate a computer lab in addition to all necessary storage for the structure. Extending the basement beyond the footprint of historic Kellogg to create a larger, walk-in basement would allow more natural light into the area and make a more pleasant and functional area. By tucking so much additional space under the extant building, we hope to take advantage of the steep grade at the site and make the most of the historic core of Kellogg House.

As for the above-grade additions, we envision a reading and study structure running about half the length of the pathway between Park Street and the '62 Center for Theatre and Dance/Greylock quadrangle. This would help to create well-defined negative space between Kellogg and Vogt houses and would also utilize as much southern exposure as possible. The design features a two-story addition with student study spaces on the second floor and collaborative, more social workspace on the first floor. The classroom on the western (Greylock quad) end of the structure would be small but full of natural light, and would act as a second entrance to CES when not in use for classes. We believe encouraging students to enter from different angles will cause more chance interactions between students as well as pull more people into the space. The open, glassy addition would stand out from the historic core of Kellogg House, and a new building that beckons people walking along the footpath on the southern edge of the site could attract more students and other visitors. We hope the new construction would bring in groups not traditionally at the core of Environmental Studies, providing an influx of new people and new energy for the department. We also envision sliding doors along the two-story portion that would allow the rooms to be opened up to the outdoors. A low stone wall, like those crisscrossing old New England fields, could be a wonderful nod to the area's history, and would gently demarcate a space that could be used for CES social gatherings, casual events, and even outdoor classes. (The garden and long east-west addition could easily be switched; it is simply a tradeoff between more light for a garden or more private green space.)

The central location of the 1937 House site gives it great importance for future campus planning, and our proposal for Kellogg House's relocation would be an excellent use for the site. As Williams College works on greening the entire College operations and campus, filling a prominent location with a green building, occupied by the Center for Environmental Studies, would make a great statement about the College's environmental priorities. Kellogg would be across the street from the Paresky Center, the hub of student Kellogg House: Relocation, Reuse Charest, Martin, Rudolph, Sonnenfeldt

life, and on the line to the new Stetson-Sawyer library; it would also be near the Alumni/Faculty House, the '62 Center for Theater and Dance, and along a heavily traveled town street. And, with the combination of historic preservation and new green building that we envision for a renovated Kellogg House, the College would also make a long-overdue statement about its priorities of greening historically- and architecturally-significant buildings.



Figure 21:A potential elevation of Kellogg with its additions on the left and a small porch on the right

Kellogg House: Relocation, Renovation, Reuse

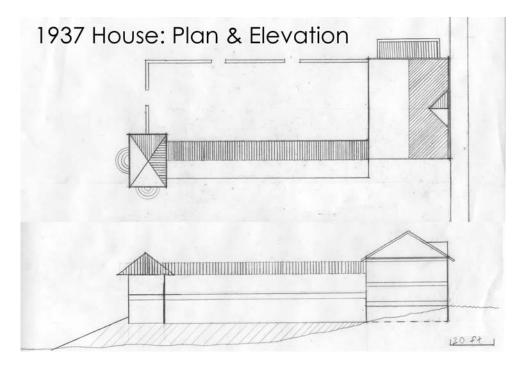


Figure 22: A Plan and side elevation for the 1937 House site

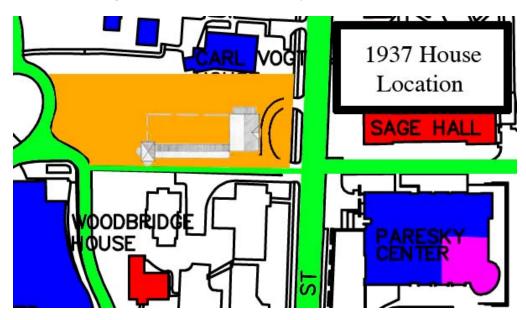


Figure 22: 1937 House Site with Building Plan

6.3.2 Seeley House Site

6.3.2.0 Site Preparation

Historic Seeley House currently occupies this site, although the College hopes to find an outside buyer who will save the building by moving it off campus; if that effort fails, Seeley will be razed (Appendix A). Our group assumed a scenario in which the building had already been moved and thus would not be an issue for our construction projects. The Seeley House site is also located outside of the flood plain, so Kellogg House: Relocation, Renovation, Reuse Charest, Martin, Rudolph, Sonnenfeldt there would not be many worries in terms of ecosystem disruption. Further, this is just a small project compared to the Stetson-Sawyer project that has already been approved on an almost identical location, so we foresee few, if any, obstacles. Digging out a basement and leveling the north-south grade would probably be the most difficult aspects of preparing this site for construction.

6.3.2.1 Design

The Seeley House location is more physically constrained than the 1937 House/Children's Center site, so we placed an even greater emphasis on maintaining as small of a footprint as possible while adding the necessary square footage. As with that site, we thought that creating a large walk-in basement would utilize the grade of the site. Also, creating a large, under-ground space will give the architect and engineers a chance to put a lot of the mechanical equipment in a more modern space.

The design for this space would cover less square footage than the 1937 House site, largely because the new Stetson-Sawyer project will be domineering and take up a huge amount of space. We believe that a large structure would still be dwarfed in the shadow of the new project, but a small Kellogg could be pushed farther to the north, away from the project. The historic core of Kellogg could still house the same six faculty offices, one administrative office, dining room, living room, and basement computer lab. However, with the more extensive basement additions we envision for the Seeley House location, the classroom and reading room would be at the basement level (instead of above grade, as in plans for the 1937 House site). This would also allow for a patio or porch above the walk-in basement, creating an outdoor space with great appeal to students and faculty, much like the sun porch at Harper House. In this plan, Kellogg would have little or no space for individual workspaces, but with the Seeley site in such close proximity to the new Stetson-Sawyer library, we think these spaces would prove redundant.

A large part of the logic of creating a smaller addition on the Seeley House site would be to preserve some sort of space for an outdoor area. There would be a similar opportunity to incorporate sliding doors into the back of the walk-in basement and thus open the space up to the garden, patio, outdoor classroom, or other outdoor features. Similarly, we recommend building low, New England style stone walls to designate an outdoor space for the CES and create some sort of privacy and intimacy. In both locations, outdoor fire pits, barbeques, and pizza ovens would encourage the frequent use of the space.

Seeley Location: Rear Elevation



Figure 24: Rear elevation of Kellogg on the Seeley Site including glass addition with sliding garage doors opening up to garden and small porch overlooking garden on roof of addition.

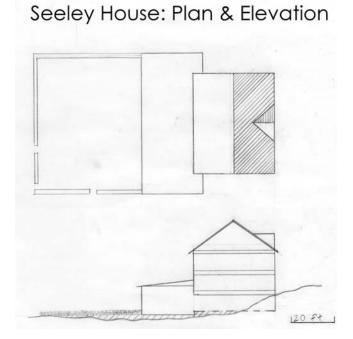


Figure 25: Renovated Kellogg plan and elevation on Seeley Location facing North Academic Building

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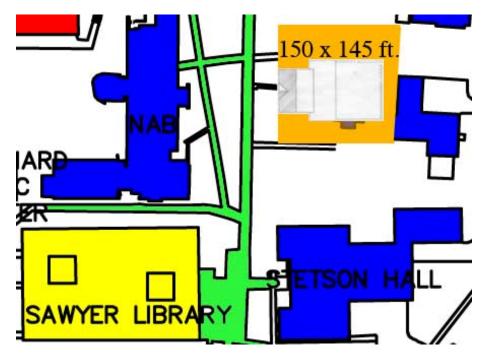


Figure 26: Seeley House Site with Building Plan

7. Conclusions & Thanks

7.0 Conclusions

We have determined through a combination of background research, interviews and surveys that reuse of Kellogg House as the Center for Environmental Studies would be the best way to preserve this historic space. We recommend the Class of 1937 House site or the Seeley House site as the future location of Kellogg as indicated by our quantitative site assessment. We hope the College will consider the basement as an already existing opportunity for space gains in a new Kellogg, and that an actual building program will incorporate best environmental practices.

We hope that our research on the goals, wants and needs of CES will be instrumental in the creation of any plans for a future CES building. If Kellogg House is not reused for a new and improved Center for Environmental Studies, as we have recommended, we suggest Siskind House as another strong possibility for CES's home given that our preliminary research indicates that physical realities of Siskind match the department's needs. But most of all, we want to see Williams give its Environmental Studies program the space and amenities befitting an academic community of this size and vitality. We understand that the decisions ahead will not be simple or easy, but we also know the CES faculty, staff, and students, and the wider College community, are up to the challenge. Although we will have graduated when Stetson-Sawyer begins again, we hope this proposal will come to fruition – and in doing

Kellogg House: Relocation, Renovation, Reuse

so give a whole new generation of Williams students the opportunity to fall in love with Kellogg House and the Center for Environmental Studies

7.1 Thanks

During the course of this project many members of the Williams community assisted us, and we cannot express enough gratitude to all of them for their time and support. Specifically, we would like to thank Professor Gardner and our clients Andy Burr and David Dower. We also appreciate the contributions of all of those we interviewed and surveyed, particularly our classmates in ENVI 302 and fellow Environmental Studies concentrators who gave so readily of their time in listening to (and graciously critiquing) our proposals. Lastly, we owe a special thanks to the Williams College Facilities department, which provided us with many of the reports and maps about the spaces, both built and proposed, that exist on this campus. Thank you again to everyone who helped us out.

8. Appendices

Appendix A: Seeley House Advertisement of Sale (published in the *North Adams Transcript*, early November 2009)

Historic Seeley House for Sale

The President and Trustees of Williams College seek offers from responsible parties interested in acquiring, relocating, and preserving Seeley House.

Built in 1868 to house faculty and staff, Seeley House has been used intermittently as faculty housing and academic offices.



The 4,397 sq. ft. building is located at 32 Sawyer Library Drive on the Williams College campus.

The buyer must agree to remove Seeley House from its current location and to preserve the building on another site. The buyer will bear all expenses associated with the building's relocation, *which must be completed before August 1, 2010.*

For more information or to arrange an inspection of the property, contact Bruce Decoteau at 413-597-3225.

Submit offers in writing to:

Mr. Bruce J. Decoteau, Senior Project Manager Williams College Facilities 60 Latham Street Williamstown, MA 01267

All offers must be received by January 15, 2010.

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Appendix B: Massachusetts Historical Commission Letter



The Commonwealth of Massachusetts William Francis Galvin, Secretary of the Commonwealth Massachusetts <u>Historical Commission</u>

November 29, 2006

Vincent P. Guntlow Guntlow and Associates, Inc. 55 North Street Williamstown, MA 01267

RE: Williams College, Stetson/Sawyer Library, Main Street and Spring Street, Williamstown; MHC# 40917

Dear Mr. Guntlow:

The Massachusetts Historical Commission is in receipt of the Project Notification Form you submitted, received at this office on October 30, 2006, concerning the proposed project referenced above. The project site, including Stetson Hall, Sawyer Library, Seeley, and Kellogg Houes, is included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth (WLL.A). The Williams College campus meets the criteria for listing in the National Register of Historic Places (36 CFR 60) under criterion A for its associations with the history of higher education and under criterion C as a fine collection of institutional buildings which has evolved and changed over time. After a review of materials submitted, MHC has the following comments.

The MHC understands that Williams College proposes to demolish the 1956 and 1962 additions to Stetson Hall, move Kellogg House, and demolish Sawyer Library and Seeley House. Two new academic buildings will be built on each side of Sawyer Library.

After a review of materials submitted, I have determined that the proposed project will have an adverse effect (950 CMR 71.05(a)) through the demolition of historic properties. Pursuant to 950 CMR 71.07(3), MHC requests the opportunity to consult with the proponent seek ways to avoid, minimize, or mitigate the adverse effect. The MHC has no concerns regarding the demolition of the wings of Stetson Hall or the demolition of Sawyer Library. However, MHC requests additional information regarding the decision to demolish, rather than relocate, Seeley Hall. Consultation should also focus on rehabilitation of Kellogg House and the remaining 1922 portion of Stetson Hall. A Memorandum of Agreement will need to be developed in order to take the account the effect of the proposed project. The MHC hereby invites the Williamstown Historical Commission to the consultation process, by copy of this letter. Please send all information submitted to this office to the Williamstown Historical Commission.

Please also provide the MHC with an update on the status of your review under local demolition delay bylaws.

220 Morrissey Boulevard. Boston, Massachusetts 02125 (617) 727-8470 - Fax: (617) 727-5128 www.sec.state.ma.us/mbr

These comments are offered to assist in compliance with Massachusetts General Laws, Chapter 9, Section 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00). Please do not hesitate to contact Ann Lattinville of my staff, should you have any questions.

Sincerely,

Brona Simon Deputy State Historic Preservation Officer Executive Director Massachusetts Historical Commission

xc: Benson Caswell, MHEFA Williamstown Historical Commission

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Appendix C: Interview/Survey Instruments

Housing Interview:

We want to gather information on three things: program goals, space realities, and how Kellogg could productively bridge the gap. We realize that these are three separate issues, but in the interest of time, we have combined them into one interview.

Proposed List of Interviewees for Housing: Dean Merrill, Aaron Gordon, Diana Pridaux-Brune, David Dower, Michael Briggs, Steve Class, Chris Williams.

- 1. What is the plan for increasing student body size?
- 2. Is a building that can add 24 beds useful?
- 3. In your opinion, does it make more sense to reuse extant buildings for dorms, build additions to existing dorms, or build new dormitories?
- 4. Which buildings on campus not in use for housing now could be turned into housing?
- 5. What characteristics of a building make it well suited for a co-op?
- 6. Where on campus do we need more housing?

CES Interview:

We want to gather information on three things: program goals, space realities, and how Kellogg could productively bridge the gap. We realize that these are three separate issues, but in the interest of time, we have combined them into one interview.

Proposed List of Interviewees in CES faculty/staff: Sandy Zepka, Sarah Gardner, Hank Art, Sheafe Satterthwaite, Roger Bolton, David Dethier, Joan Edwards, Jennifer French, Jay Thoman, Drew Jones, Doug Gollin, Ralph Bradburd. Also, non-CES: Karen Merrill.

- 1. What do you envision as the ideal location and physical set-up for CES?
- 2. What do you like/dislike about Harper House, particularly in contrast to Kellogg?
- 3. Have you ever or do you currently use Harper House to hold classes? What makes the space suitable or unsuitable for your classes?
- 4. What are the benefits of reusing Kellogg for CES?
- 5. Should CES build a new, super-green building?

- 6. Should all CES-affiliated faculty be offered office space in CES?
- 7. Should CES physically/visually stand out from other buildings? If so, how?
- 8. What would help foster student-faculty interaction in the next CES building?
- 9. What would draw the wider Williams/town community to CES?

Student Survey:

We want to gather information on three things: program goals, space realities, and how Kellogg could productively bridge the gap. We realize that these are three separate issues, but in the interest of time, we have combined them into one interview.

For students: Environmental Studies 101, Environmental Studies 302, Economics 379.

- 1. Do you use Harper House?
 - a. What do you like and dislike about the space?
 - b. Did you ever use Kellogg? Was there a difference? Why?
 - c. Does Harper's location discourage you from using it?
- 2. How do you envision the student space in a future CES?
 - a. What features would make you study in or use the building more?
 - b. Where do you think CES should be located with respect to other buildings/institutions on campus?
 - i. What if it were in the new Stetson/Sawyer quad?
 - ii. What if it were on Main Street (Route 2)?
 - c. Would you support the creation of an outdoor space associated with CES (garden, outdoor classroom, gazebo, courtyard/patio, fire pit, picnic tables, clothesline)?
 - d. What sustainable features would you like the building to have?
- 3. Should CES physically/visually stand out from other buildings? If so, how?
- 4. What would help foster student-faculty interaction in the next CES building?
- 5. What would draw the wider Williams/town community to CES?

Appendix D: Proposed Campus Environmental Advisory Committee (CEAC) Building Code

Background

In January 2007, the Board of Trustees approved the College's goal to reduce greenhouse gas emissions associated with campus operations to 10% below 1990/91 levels by 2020 and the adoption of environmental sustainability as a guiding College principle.

In 1991, the College's physical plant measured 1.9 million square feet, by 2007 it had grown about 24% to 2.4 million At the same time, its energy use per square foot increased 20%. The student population stayed roughly constant but the number of faculty/staff increased from 750 to 990 FTE.

The result of these trends was a 40% rise in greenhouse gas emissions.

Since January 2007, concerted efforts have significantly reduced building-related emissions. The College has invested in energy conservation projects and electricity and steam metering systems, installed photovoltaic panels on the Library Shelving facility, improved control systems and operating practices, and changed to cleaner sources of fossil fuels. It also is working toward LEED certifying new building projects and adopted energy modeling, building systems commissioning, recycled waste management, and other sustainable design practices. To continue to make progress, Williams must continue to find ways to reduce energy use and to ensure that new building and renovation projects support emissions goals.

About the Building Policy

This policy addresses situations in which construction has been deemed necessary, but the first consideration for any project is whether the College's needs could be fulfilled without new construction.

The policy serves three main purposes. It establishes goals for the energy use and emissions associated with building programs. It sets a common understanding of how Williams' guiding principle of sustainability should be realized in construction and major renovation projects. And it documents Williams' practices and intentions in a form that can be shared with individuals, other institutions, and the public.

The policy provides general guidance. The details of implementation will be managed by those with the knowledge relevant to particular projects. Implementation will need to accommodate changes in technology and situations over time. The policy therefore does not delineate all that is and is not allowed.

The Policy

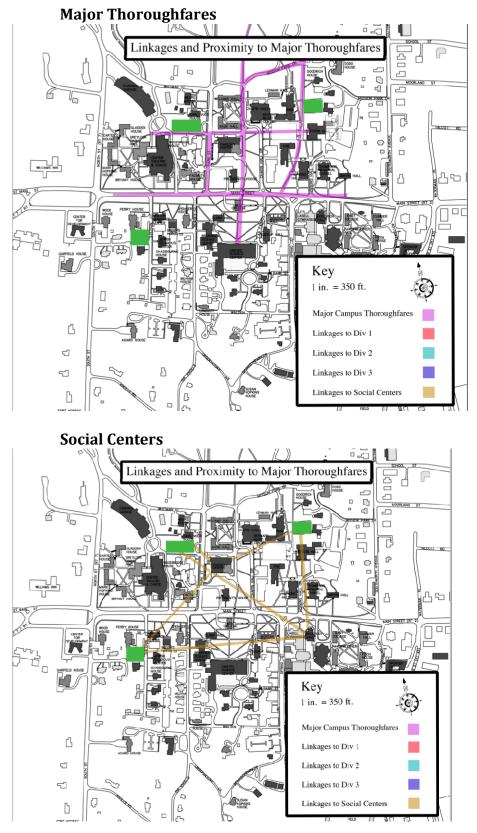
Williams should incorporate principles of sustainable design into the planning and construction of all building and major renovation projects in the following ways:

1. Any building program seeks to reduce, or at least not increase, the College's annual energy-related (heating, cooling, and electric) emissions through a combination of energy efficiency and renewable energy. This might be achieved through incorporating solar

energy strategies within the building project, providing energy for the building from an off-site renewable source, or taking inefficient facilities out of service.

- 2. The planning and design of a building or renovation program will establish energy goals for the finished structure(s), use energy modeling to project performance, and identify the source of energy.
- 3. The one-time energy use and emissions associated with construction should be monitored and minimized. This includes emissions associated with electricity, heating fuel, equipment fuel, and all others fuels consumed during construction and demolition. When practical, construction materials with low embodied energy and other environmental impacts will be selected based upon life cycle analysis.
- 4. Projects should conform to high standards of sustainable practices. All projects will seek LEED Gold or similar standard higher when feasible. The certification level sought should be established early in the planning process. Special circumstances may dictate that a lower level be established due to inapplicability of the LEED program to a specific building type.
- 5. The commissioning of new or renovated spaces should be conducted in ways that advance performance goals. New spaces should be evaluated regularly to ensure that performance does not deteriorate over time.
- 6. The College should establish processes to determine and, when necessary, develop, standards associated with the policy, including how to project energy use, measure "embodied" energy use, and other building sustainability measures
- 7. The policy and its associated standards should be reviewed and revised, as necessary, at least every five years.
- 8. The policy applies to projects valued at \$5 million (in 2010 dollars) or more and does not apply to buildings currently in final stages of design.

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Kellogg House: Relocation, Renovation, Reuse

