



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

Solicitation for Architect / Engineer Services

Value Based Selection Method

August 13, 2009

WASATCH HALL RENOVATION

**WEBER STATE UNIVERSITY
OGDEN, UTAH**

DFCM Project No. 09191810

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WSU Wasatch Hall Renovation Program dated February 12, 2009
WSU Design & Construction Standards For Architects, Engineers, and Contractors (online at www.weber.edu/fm)

Current copies of the following documents are hereby made part of this Solicitation for A/E Services by reference. These documents are available on the DFCM web site at <http://dfcm.utah.gov/StdDocs/index.html> “Standard Documents” – “Reference Documents I” – “Item 6. Supplemental General Conditions” or are available upon request from DFCM:

- DFCM Supplemental General Conditions dated July 1, 2009 ***
- DFCM Supplemental General Conditions dated July 15, 2008
- DFCM Design Manual dated March 15, 2006
- DFCM General Conditions dated May 25, 2005

*** NOTE: THE NEW SUPPLEMENTAL GENERAL CONDITIONS EFFECTIVE JULY 1, 2009 ADDRESSING HEALTH INSURANCE AND IMMIGRATION ARE REFERENCED AT THE LINK ABOVE.**

The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM’s web site at <http://dfcm.utah.gov>

NOTICE TO ARCHITECTS / ENGINEERS

The State of Utah - Division of Facilities Construction and Management (DFCM) is soliciting the services of qualified firms/individuals to perform design services for the following project:

WASATCH HALL RENOVATION
WEBER STATE UNIVERSITY - OGDEN, UTAH
DFCM PROJECT NO. 09191810

This project is for AE services (design, bidding, and construction administration services) for the Weber State University (WSU) Wasatch Hall student housing renovation. Construction budget for this project is approximately \$8,000,000.00.

The selection shall be under the Value Based Selection method. The Solicitation for A/E Services documents, including the submittal requirements and the selection criteria and schedule, will be available beginning at 2:00 PM on Thursday, August 13, 2009 from DFCM at the State Office Building - Room 4110, Salt Lake City, Utah 84114 and on the DFCM web site at <http://dfcm.utah.gov>. For questions regarding this solicitation, please contact Matthias Mueller, DFCM, at 801-538.3018. No others are to be contacted regarding this solicitation.

A **MANDATORY** pre-submittal meeting will be held 9:00 AM on Monday, August 24, 2009 at Wasatch Hall, WSU, Ogden, Utah. All design firms wishing to submit on this project must attend this meeting.

Submittal dates for the required references, management plans, statements of qualifications, and interviews will be based on the Project Schedule included in the Solicitation for A/E Services.

The Division of Facilities Construction & Management reserves the right to reject any or all submittals or to waive any formality or technicality in any submittal in the interest of the State.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
MARLA WORKMAN, CONTRACT COORDINATOR
4110 State Office Bldg., Salt Lake City, Utah 84114

PROJECT DESCRIPTION

The existing Weber State University (WSU) Wasatch Hall was constructed in 1964, is approximately 48,400 gross square feet in size, and provided over 200 student housing beds in traditional dormitory-style two-bed rooms. It is currently used for educational and administrative space, with partial use for student housing. The building does not meet current codes and is in need of major upgrades and renovation.

This project consists of renovating Wasatch Hall so that it will provide a minimum of 160 student housing beds, transform the building into an appealing and student oriented design, and achieve a 50 year life-cycle construction quality level. The project's program was completed in February of 2009 and the project's construction budget is approximately \$8,000,000.

The work shall include, but is not limited to the following:

- Any and all necessary site geotechnical investigation/analysis and site surveying services.
- Provide consultant services (including AV services) through and including the schematic design, design development, contract documents, bidding, construction administration, and post construction phases of the project.
- The AE will be responsible to comply with all local and state standards such as sewer design, dust control, and storm water runoff permits. This information shall be incorporated into the design and construction drawings and specifications. The design shall also comply will all ADA guidelines. The future successful contractor shall be responsible for all utility connection and impact fees (if any). However, the AE shall work with WSU and DFCM prior to bidding the contract documents to determine those fees. Building Official, Fire Marshal, and all State/Local agency approval letters will be mandatory prior to design completion.
- The design of the building shall also comply with DFCM's high performance building standards, which now require a LEED silver rating.
- Working with the DFCM selected commissioning agent.
- The AE will be expected to generate and provide up to four architectural renderings of the project. The renderings may (WSU will make the final determination) consist of two exterior elevations, one floor plan set, and one interior elevation of a typical resident's room. The renderings shall be 24" x 36" in size, mounted, and shall also be provided in electronic format (Photoshop, Indesign, etc.).
- The program document is somewhat conceptual and was prepared to evaluate renovation possibilities and potential housing capacities. Although the content accurately reflects the desires of WSU, a program verification phase is required to complete standard program elements, including but not limited to a code study, energy assessment and goals, etc.

The design schedule is approximately six months after award of the contract. Time should be planned to conduct meetings with the user groups, prepare preliminary plans based upon site and building program requirements and submit, for comments, the drawings with specifications to WSU and DFCM at schematic design, design development, and contract document design stages. Each review will take approximately two weeks. The construction duration has not been established at this time.

Teams will need to demonstrate the method of delivery and the competency of the individuals who will manage its work. All team Management Plans and Schedules are required to reflect the Project Schedule requirements. Failure of the team Management Plan and Schedule to comply with the Project Schedule will not necessarily be an automatic disqualification. However, it will be evaluated by the VBS Selection Committee in determining which team provides the best value.

Before submitting the Management Plan, teams may examine the site and ascertain all of the physical conditions of the site. All teams desiring to do so must coordinate and schedule their visit with Matthias Mueller at 801-538-3018. Failure to examine the site will not release the successful team from performing the work in strict compliance with the terms of the contract.

PROCUREMENT PROCESS

The State of Utah intends to enter into an agreement with a firm to provide professional services as described.

The selection of the firm will be made using a Value Based Selection (VBS) system. The Project Schedule lists the important events, dates, times and locations of meetings and submittals. The terms of the project schedule are hereby incorporated by reference and must be met by the selected firm.

1. Solicitation for A/E Documents

The Solicitation for A/E Services documents consist of all of the documents listed in the Table of Contents and all said documents are incorporated in this solicitation by reference. The solicitation will be available at DFCM per the attached schedule and on the DFCM web site at <http://dfcm.utah.gov>.

2. Contact Information

Except as authorized by the DFCM Representative or as otherwise stated in the solicitation or the pre-submittal meeting, communication during the selection process shall be directed to the specified DFCM Representative. In order to maintain the fair and equitable treatment of everyone, A/Es shall not unduly contact or offer gifts or gratuities to DFCM, any Board officer, employee or agent of the State of Utah, users or selection committee members in an effort to influence the selection process or in a manner that gives the appearance of influencing the selection process. This prohibition applies before the solicitation is issued, as the project is developed, and extends through the award of an agreement. Failure to comply with this requirement may result in a disqualification in the selection process. A/Es should be aware that selection committee members will be required to certify that they have not been contacted by any of the A/Es in an attempt to influence the selection process.

3. Requests for Information

All requests for information regarding this project shall be in writing and directed to:

Matthias Mueller
Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114
E-mail: mmueller@utah.gov
Facsimile: 801-538-3267

4. Project Schedule.

The Project Schedule lists the important events, dates, times, and locations of meetings and submittals that must be met by the A/E.

5. Mandatory Pre-Submittal Meeting

A mandatory pre-submittal meeting will be held on the date and time and at the location listed on the Project Schedule.

A representative from each interested prime firm is required to attend. During the meeting, a presentation will be made to describe the overall scope of work and intended schedule. Interested firms may ask questions and request clarification about the project and the procurement process.

Subconsultants are invited to attend this meeting but it is not mandatory for them.

THE PRIME FIRMS ABSENCE FROM THE PRE-SUBMITTAL MEETING AND/OR FAILURE TO REGISTER PRECLUDES PARTICIPATION AS A SUBMITTING FIRM ON THIS PROJECT.

6. Submittal Due Dates and Times

All required submittals must be delivered to, and be received by, the Division of Facilities Construction and Management previous to the date and time indicated in the Project Schedule. Submittals received after the specified time will not be accepted. Please allow adequate time for delivery. If using a courier service, the submitting firm is responsible for ensuring that delivery will be made directly to the required location. It is your responsibility to allow for the time needed to park on Capitol Hill as recent construction activity has made the parking more difficult. Identification is required to enter the building.

7. Last Day to Submit Questions

All questions must be received at the office of DFCM no later than the time and dated listed in the Project Schedule. Questions must be submitted in writing to Matthias Mueller at DFCM.

8. Addendum

All references to questions and requests for clarification will be in writing and issued as addenda to the Solicitation for A/E Services. The addenda will be posted on DFCM's web site.

Any addenda issued prior to the submittal deadline shall become part of the Solicitation for A/E Services and any information required shall be included in your submittal.

9. Past Performance and References

As an A/E completes each DFCM project, DFCM, the contractors and the using agency or institution will evaluate the A/E. It is the intent of DFCM that this process will be the major source for evaluating past performance.

A/Es shall submit past performance and reference information by the time indicated on the Project Schedule.

For all DFCM projects completed in the last five years identify the project by name, number and DFCM project manager. Each A/E wishing to compete for this project that has not completed at least three DFCM projects in the last five years, will be required to provide one copy of a list of references on additional similar projects for a total of three projects. Additionally, each A/E wishing to compete for this project that has not completed any DFCM projects in the last five years, will be required to provide one copy of a list of references on ALL prior projects completed or worked on in the last three years. Failure to provide a complete list of projects and references for the last three years, by A/E's without a current DFCM rating, will result in a disqualification from the selection process

For non-DFCM projects provide the following information:

Point of Contact:	Person who will be able to answer any customer satisfaction questions.
Phone Number:	Phone number of the contact we will be surveying.
User Name:	Name of Company / Institution that purchased the construction work.
Project Name:	Name of the project.
Date Completed:	Date of when the work was completed.
Address:	Street, city and state where the work was performed.
Size:	Size of project in dollars.
Duration:	Duration of the project / construction in months.
Type:	Type of the project (i.e.: School, Offices, Warehouse, etc)

10. Management Plan

Firms will be required to develop and submit a plan demonstrating how they will manage their responsibilities, identifying risks, and how risks will be mitigated. An organization chart showing the roles and responsibilities of all pertinent decision-makers is a required part of the presentation.

Address project specific criteria, risks that have been identified by the Solicitation for A/E Services and additional risks that the team has identified. State how those risks will be mitigated.

As part of the Management Plan include your proposed project schedule. Indicate critical dates and other information in sufficient detail for the selection committee to determine if the time frames are reasonable.

The Management Plan should be concise yet contain sufficient information for evaluation by the selection committee.

The submitting firm shall provide seven copies of the Management Plan by the time indicated on the Project Schedule.

11. Statements of Qualifications

The submitting firm shall provide seven copies of the Statements of Qualifications by the time indicated on the Project Schedule.

The Statement of Qualifications is a short document that indicates the experience and qualifications of the firm, the project manager and other critical members of the team. It describes what talents their team brings to the project, how their knowledge of the subject will provide benefit to the process, how the team has been successful in the past and how that relates to this project. It should include information on similar projects that have been completed by the firm, project manager and other team members. Include the experience and special qualifications that are applicable to this project and/or are part of the project specific selection criteria.

12. Selection Committee

The Selection Committee may be composed of individuals from DFCM, the User Agency / Institution, and a representative from the design or construction disciplines.

13. Termination or Debarment Certifications

The firm must submit a certification that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from soliciting work by any governmental department or agency. The firm must also certify that neither the firm nor its principals have been terminated during the performance of a contract or withdrew from a contract to avoid termination. If the firm cannot certify these two statements the firm shall submit a written explanation of the circumstances for review by DFCM. Firms are to submit these certifications with their Statement of Qualifications.

14. Interviews

Interviews will be conducted with all firms who have met all of the requirements except as follows. If more than six firms are eligible for interviews, DFCM may convene the selection committee to develop a short list of firms to be invited to interviews. This evaluation will be made using the selection criteria noted below based on the information provided by the past performance/references, performance plan and statement of qualifications.

The purpose of the interview is to allow the firm to present its qualifications, past performance, management plan, schedule and general plan for accomplishing the project. It will also provide an opportunity for the selection committee to seek clarifications from the firm.

The proposed primary project management personnel, including the project manager, should be in attendance. The project manager is the firm's representative who has overall job authority, will be in attendance at all job meetings, and is authorized by the firm to negotiate and sign any and all change orders in the field, if necessary. Unless otherwise noted, the attendance of subconsultants is at the discretion of the firm.

The method of presentation is at the discretion of the firm. The interviews will be held on the date and at the place specified in the Project Schedule.

15. Selection Criteria for VBS Professional Services

The following criteria will be used in ranking each of the teams. The team that is ranked the highest will represent the best value for the state. The criteria are not listed in any priority order. The selection committee will consider all criteria in performing a comprehensive evaluation of the proposal. Weights have been assigned to each criteria in the form of points.

- A. **DFCM Past Performance Rating. 20 Points.** Each prime firm will be given a past performance rating. The rating will be based first on how well the firm did on past projects with DFCM. If a minimum of three DFCM past performance ratings are not available a rating will be established using any DFCM past performance ratings that are available, supplemented by references supplied by the firm at the time the Management Plans and SOQ are submitted.
- B. **Strength of Team. 30 Points** Based on the statements of qualifications, the interview, and management plan, the selection team shall evaluate the expertise and experience of the team and the project lead as it relates to this project in size, complexity, quality, duration, etc. Consideration will also be given to the strength brought to the team by critical consultants including how they were selected and the success the team has had in the past in similar projects. The teams shall demonstrate past success with challenging renovation work in a college/university campus setting. The team shall also demonstrate the same for their selected sub-consultants.
- C. **Project Management Approach. 30 Points** Based on the information provided in the statements of qualifications, the management plan and information presented in the interview the selection team shall evaluate how each team has planned to approach the project. The selection team will also evaluate the degree to which risks to the success of the project have been identified and a reasonable solution has been presented especially as it pertains to university/college type of renovation work.
- D. **Schedule. 20 Points** The A/E's schedule will be evaluated as to how well it meets the objectives of the project. Unless other objectives are stated the shorter the duration that is evaluated to be feasible while achieving an appropriate design is preferred. The A/E shall discuss during the interview the project schedule identifying major work items with start and stop dates that are realistic and critical subconsultants and if they have reviewed and agree to the schedule. The completion dates shown on the schedule will be used in the contract.

TOTAL POSSIBLE POINTS: 100 POINTS

16. Fee Negotiation

Following selection of a design firm by the Selection Committee and prior to the award of the design agreement, DFCM will negotiate the final agreement fee with the selected firm. Should the DFCM be unable to agree to a satisfactory contract with the top ranked firm at a price that DFCM

determines to be fair and reasonable to the State, discussions with that firm shall be formally terminated. Negotiations will then be undertaken with the second ranked firm.

This process will be repeated until an agreement is reached or DFCM determines that it is in the best interest of the State to initiate a new selection process.

17. Form of Agreement

At the conclusion of negotiations, the selected A/E will be required to enter into an agreement using the attached form of the Design Agreement between DFCM and Architect/Engineer.

18. Licensure

The A/E shall comply with and require its subconsultants to comply with the license laws of the State of Utah.

**PROJECT SCHEDULE**

**PROJECT NAME: WASATCH HALL RENOVATION
WEBER STATE UNIVERSITY – OGDEN, UTAH
DFCM PROJECT #: 09191810**

Event	Day	Date	Time	Place
Solicitation for A/E Services Available	Thursday	August 13, 2009	2:00 PM	DFCM 4110 State Office Bldg SLC, UT and the DFCM web site*
Mandatory Pre-submittal Meeting	Monday	August 24, 2009	9:00 AM	Wasatch Hall Weber State University Ogden, Utah (see attached map)
Last Day to Submit Questions	Thursday	August 27, 2009	12:00 NOON	Matthias Mueller – DFCM E-mail mmueller@utah.gov Fax 801-538-3267
Addendum Deadline	Tuesday	September 1, 2009	4:00 PM	DFCM web site *
Management Plans, References, Statements of Qualifications, and Termination / Debarment Certifications Due	Thursday	September 3, 2009	12:00 NOON	DFCM 4110 State Office Bldg SLC, UT
Short Listing by Selection Committee, if applicable.	Wednesday	September 9, 2009		DFCM web site *
Interviews	Tuesday	September 15, 2009	To be determined	DFCM 4110 State Office Bldg SLC, UT
Announcement	Wednesday	September 16, 2009	By 5:00 PM	

* DFCM's web site address is <http://dfcm.utah.gov>.

**DESIGN AGREEMENT
BETWEEN DFCM AND ARCHITECT / ENGINEER**

This AGREEMENT is made this __th day of _____, 2008, between the Division of Facilities Construction and Management, hereinafter referred to as "DFCM", and the "Architect / Engineer", _____, a corporation of the State of Utah, whose address is _____ Utah _____, hereinafter called the "A/E", agree to all the provisions of this Agreement for the Project identified as:

**ARTICLE I.
DOCUMENTS INCORPORATED BY REFERENCE**

A. DFCM GENERAL CONDITIONS.

1. The DFCM General Conditions ("General Conditions") and Supplemental General Conditions ("also referred to as General Conditions") which are current as of the date of this Agreement and on file with the DFCM is incorporated by reference as if fully set forth in this Agreement.

2. The A/E and DFCM shall be bound by the definitions and terms described in the General Conditions.

3. Unless the context provides otherwise, all definitions and interpretations of provisions of this Agreement shall be as stated in the General Conditions. In case of conflict between the provisions of this Agreement and the General Conditions, the provisions of this Agreement shall control.

B. SOLICITATION / PROCUREMENT DOCUMENTS AND REQUIREMENTS.

The A/E shall comply with the following:

1. State Procurement requirements.
2. The DFCM solicitation documents and A/E submitted documents for this project are hereby incorporated by reference as part of this Agreement. Attachment "C" hereto indicates changes to the A/E's response, if applicable.
3. The procurement documents and Contract Documents.

C. DFCM DESIGN MANUAL.

1. The DFCM Design Manual (“Design Manual”) dated March 15, 2006 and on file with the DFCM is incorporated by reference as if fully set forth in this Agreement.

2. The A/E and DFCM shall be bound by the definitions and terms described in the Design Manual.

D. ATTACHMENTS TO THIS AGREEMENT

All attachments to this Agreement are incorporated by reference as if fully set forth in this Agreement. Unless the context requires otherwise, any reference in this Agreement to an “Attachment” means such an incorporated by reference attachment to this Agreement.

E. HIERARCHY OF DOCUMENTS.

In case of conflict, the following documents supersede each other in accordance with the following respective hierarchy:

1. Codes and applicable law;
2. The attachments hereto;
3. The solicitation documents issued by DFCM for the selection of the A/E;
4. Any response by A/E to the procurement documents attached to this Agreement;
5. The body of this Agreement;
6. The General Conditions; and
7. The Design Manual.

**ARTICLE II.
GENERAL REQUIREMENTS**

A. GENERAL OBJECTIVES. The objectives of the Work under this Agreement include, but are not limited to the following:

1. Comply with the requirements of the Predesign Program;
2. Provide designs that comply with applicable laws, codes, rules, regulations and quality requirements;

3. Comply with this Agreement including the General Conditions and Design Manual;
4. Meet the established Construction Budget in Attachment "A";
5. Maintain the Project Schedule in Attachment "A"; and
6. To work with DFCM and the Contractor to accomplish all these objectives.

B. SCHEDULE. Time is of the essence. The A/E shall commence and prosecute the work diligently so as to be in compliance with the Project Schedule in Attachment "A." However, the A/E shall not be responsible for failure to comply with the Project Schedule or any portion thereof to the extent such noncompliance is not due to the fault of the A/E or anyone for whom the A/E is liable.

C. STANDARD OF CARE; RESPONSIBILITY. The services of A/E and its Subconsultants, if any, shall be performed in accordance with and judged solely by the standard of care exercised by licensed members of their respective professions having substantial experience providing similar services on projects similar in type, magnitude and complexity to the Project that is the subject of this Agreement. The A/E shall be liable to the DFCM or the State of Utah for claims, liabilities, additional burdens, penalties, damages or third party claims (i.e. a Contractor claim against DFCM or the State of Utah), to the extent caused by errors or omissions that do not meet this standard of care.

D. PUBLIC INFORMATION RELEASE. A/E shall not make any public information release in connection with the Project without advance written permission of DFCM. A/E shall require of its Subconsultants the same agreement to maintain the confidentiality of information. Notwithstanding this provision, the A/E does not need DFCM's consent to respond to any information release which is needed to defend the A/E's interest, or to the extent such public information release is protected by constitutional free speech rights.

E. CONFLICT OF INTEREST. A/E and the A/E's Subconsultants shall not have any member that has a conflict of interest that may reasonably affect the A/E or Subconsultants professional judgment in regard to the Project, unless such conflict is disclosed to the DFCM and approved by the DFCM in writing. It is the A/E's duty to enforce this provision with the Subconsultants.

1. **Use of "Sales Agents."** The A/E warrants that no person or selling agency has been employed or retained except as indicated in writing to DFCM.

F. LAWS, CODES AND REGULATIONS. A/E and its Subconsultants shall use their best efforts consistent with the Standard of Care stated herein to comply with laws, codes, rules, regulations, ordinances and quality requirements applicable to the Project as established by State statute, codes adopted by State law, administrative rule and/or deemed applicable to the Project pursuant the express terms of this Agreement including those documents incorporated by reference. A/E or DFCM may request, and will be granted, a meeting with the other to discuss any additional codes or requirements that are applicable to the Project. In the case of change(s) or

conflicts in the applicable code requirements, laws, rules or regulations, during the work of the Scope of A/E's Services, when and if the A/E becomes aware of such change(s) or conflicts, the A/E shall promptly notify the DFCM in writing. If the DFCM determines that work that has already been properly performed must now be changed, such change will be considered additional work under this Agreement and the A/E shall then prepare all documents to comply with the needed change(s).

G. ESTABLISH CONSTRUCTION BUDGET. The A/E shall prepare a construction budget (including cost estimate) for each phase of work under this Agreement in accordance with the Design Manual.

H. IF BIDS/PROPOSALS EXCEED CONSTRUCTION BUDGET. If no acceptable bid or proposal is received within the Construction Budget, the DFCM in its sole discretion may elect any one or more of the following options:

1. Give written approval of an increase in the Construction Budget; and/or
2. Rebid or renegotiate the construction contract within a reasonable time; and/or
3. Revise the Project scope and/or quality as necessary to meet the Construction Budget; and/or
4. Abandon the Project and terminate this Agreement.

If the DFCM elects an option or options which does not abandon the Project, the A/E shall perform the A/E's services to implement the selected option or options at no additional cost to the DFCM.

I. STAFFING. The A/E shall maintain the human, physical and other resources reasonably necessary to timely meet its obligations under this Agreement.

J. DFCM REVIEWS, LIMITATIONS. The right of the DFCM or any entity/user to perform plan checks, plan reviews, other reviews and/or comment upon the work of the A/E, as well as any approval by the DFCM, shall not be construed as relieving the A/E from its professional and legal responsibility for services required under this Agreement. No review by the DFCM or any entity/user, approval or acceptance, or payment for any of the services required under this Agreement shall be construed to operate as a waiver by the DFCM of any right under this Agreement or of any cause of action arising out of the performance or nonperformance of this Agreement, and the A/E shall be and remain liable to the DFCM in accordance with applicable law for all damages to the DFCM caused by the A/E's acts, errors and/or omissions.

K. USE OF PROTOTYPICAL DESIGNS OR DESIGNS PROVIDED BY DFCM. A/E shall use prototypical designs or other design drawings, specifications or calculations provided by DFCM in the request for proposal. A/E shall recheck such designs and any other design data, drawings, specifications and calculations provided by DFCM. A/E shall correct any error or omission as deemed necessary thereafter, and shall be responsible therefore to the same extent as if such materials had been provided by A/E under this Agreement. A/E shall be provided with all

change orders, proposed change orders, and clarifications, from previous projects that are applicable to this Project. A/E shall incorporate all pertinent material into the new plans and specifications. If A/E has provided design services to DFCM on previous projects and has designed buildings similar to the components of this Project, which are in A/E's charge, at the direction of DFCM, A/E shall modify and reuse existing design as much as possible. Where existing designs are being reused, drawings are required to conform to DFCM graphic/CAD standards unless prior written approval is given by DFCM.

L. SUBCONSULTANTS. The A/E shall be responsible and liable to the DFCM for the services of any Subconsultant of A/E. Any reference in this Agreement to Subconsultant shall refer to any subcontractor, consultant or subconsultant of the A/E at any tier. A/E shall, without additional expense to DFCM, be responsible for obtaining any business and professional licenses and for complying with any applicable Federal, State, and local laws, codes, and regulations, as necessary for the performance of the A/E's services.

M. HAZARDOUS MATERIALS. The A/E shall comply with the General Conditions and Design Manual provisions regarding hazardous materials.

N. DISCRIMINATION AND SEXUAL HARASSMENT PROHIBITED. Pursuant to the laws of the State of Utah, the A/E, or any person acting on behalf thereof, will not discriminate against any employee or applicant for employment because of race, creed, color, sex, religion, ancestry or national origin. To the extent applicable, said persons will comply with all provisions of Executive Order No. 11246 dated September 24, 1965 and rules, regulations, orders, instructions, designations and other directives promulgated pursuant thereto. The A/E, or anyone for whose act the A/E may be liable, shall not act in any manner as would violate the laws, regulations and policies of the United States or the State of Utah prohibiting sexual harassment.

ARTICLE III. PROJECT TEAM.

A. DFCM REPRESENTATIVE. The DFCM Representative is the person assigned by the Director of DFCM to manage the Project and is the sole person authorized to act on behalf of DFCM or the State of Utah.

B. A/E AND SUBCONSULTANTS.

1. **Need DFCM Permission to Change Organizational Chart.** The A/E and Subconsultants have been selected to perform the services of this Agreement because of the skills and expertise of designated key personnel. Attachment "B" to this Agreement provides the organization chart of the A/E and Subconsultants. The identified persons and entities in the organizational chart cannot be changed without advance written approval by DFCM.

2. **A/E's Representative.** The A/E's Designated Representative identified in the organization chart is and shall be authorized to act on the A/E's behalf and bind the A/E in regard to the Project.

**ARTICLE IV.
DFCM RESPONSIBILITIES AND RIGHT TO EVALUATE A/E**

A. DFCM RESPONSIBILITIES. Unless otherwise expressly agreed herein, DFCM shall at its sole cost and expense shall:

1. Place advertisements for bids or proposals;
2. Conduct bid or proposal openings and interviews;
3. Timely provide and update A/E with available “public” information in DFCM’s possession regarding the Project, including but not limited to, legal descriptions, topographic surveys, ALTA or other boundary surveys, utility surveys, record drawings, reports, project objectives, budgets, and other material requirements and limitations.
4. Notify A/E of any known fault, known defect, or known deficiency in the Project, including but not limited to acts, errors, omissions, or inconsistencies in A/E’s services and Deliverable Instruments of Service. Notwithstanding this provision, any failure to notify the A/E, shall not relieve the A/E of any responsibility or liability for such fault, defect or deficiency.
5. The DFCM Representative shall timely render decisions so as to avoid unreasonable delays in the orderly progress of the Project.

B. PERFORMANCE EVALUATION OF A/E. The DFCM may conduct a performance evaluation of the A/E’s services, including specific personnel of A/E or any Subconsultant at any time. Results of any evaluation will be made available to the A/E upon request.

**ARTICLE V.
SCOPE OF A/E’S BASIC SERVICES.**

A. IN GENERAL. The A/E's Basic Services consist of those described in this Agreement, the General Conditions, and Design Manual, and include normal structural, mechanical, electrical, and architectural as well as other consulting services reasonably necessary to fulfill the A/E's duties under this Agreement. Any additional scope of service requirements are provided in Attachment "A" and the Design Manual.

1. **Incidental Services.** A/E shall provide all services incidental to the A/E’s identified Basic Services as established by standard professional custom and practice.
2. **Direction from DFCM Representative Only.** A/E has neither the responsibility nor the authority to accept directives or determinations from any person other than the DFCM Representative. The A/E shall not take any direction from the end User’s of the Project, Contractor or any other third party’s representative.

3. **Review Requests for Information.** The A/E shall review properly prepared and timely Requests for Information by the Contractor.

4. **Issue ASI's and Supplemental Drawings and Specifications.** If approved by the DFCM Representative, the A/E shall issue an ASI, and prepare, reproduce, and distribute supplemental and/or corrected drawings and/or specifications in response to Requests for Information by the Contractor.

B. SCHEMATIC DESIGN PHASE.

1. **Review Program and Statement of Scope.** The A/E shall review the program or other "statement of scope" furnished by DFCM to ascertain the requirements of the Project and shall arrive at a mutual understanding of such requirements with the DFCM Representative. The term "program" as referred to in this Agreement shall be deemed to include any "statement of scope" provided by DFCM.

2. **Preliminary Evaluation.** The A/E shall provide a preliminary evaluation of DFCM's program, schedule and construction budget requirements.

3. Documents and Drawings.

a. Based on the mutually agreed upon program, or scope of work, schedule and construction budget requirements, the A/E shall prepare, for written approval by DFCM, Schematic Design Documents consisting of drawings and other documents illustrating the scale and relationship of Project components.

b. The Schematic Design Documents shall comply with this Agreement and the Design Manual.

c. The Schematic Design narrative shall include the A/E's proposed design and construction budget which shall be within the DFCM budget provided to the A/E.

4. **Alternative Approaches.** The A/E shall review with DFCM, alternative approaches to design and construction of the Project. Several options shall be submitted for DFCM's evaluation.

5. **Land Use Approval Assistance.** The A/E shall cooperate with DFCM in obtaining applicable permits, and land use approvals, so as to allow for construction of the Project. However, appearances as an expert as well as the preparation of necessary drawings, visual aids and any other design work solely prepared for an appearance with zoning boards or planning commissions or other governmental meetings or hearings, shall be considered as Additional Services, if not included in Attachment "A".

C. DESIGN DEVELOPMENT PHASE.

1. **General Description of Design Development Submittal.** A/E shall prepare, for written approval by the DFCM Representative, Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate. The narrative shall include the A/E's proposed design and construction budget which shall be within the DFCM budget provided to the A/E. The Design Development submittals shall comply with the following:

- a. The DFCM approved Schematic Design Documents and any adjustments authorized by DFCM in the program, scope of work, schedule or construction budget; and
- b. The provisions of this Agreement and the Design Manual.

2. **Authorization to Proceed Required in Writing from DFCM.** The A/E may proceed on and be paid for Design Development work only after a written authorization to proceed to the Design Development Phase is provided by the DFCM Representative.

3. Should DFCM initiate or require a material change from the approved Design Development Documents and there is no fault or responsibility of the A/E related to DFCM's initiation or requirement of the change, A/E's effort implementing said change(s) shall be compensated as an Additional Service and the schedule for delivery of A/E's services shall be equitably adjusted if/as appropriate.

D. CONSTRUCTION (CONTRACT) DOCUMENTS PHASE.

1. **General Description of Construction Documents Submittal.** A/E shall prepare, for written approval by the DFCM Representative, Construction Documents consisting of Drawings and Specifications setting forth in detail the requirements for the construction of the Project. The narrative shall include the A/E's proposed design and construction budget which shall be within the DFCM budget provided to the A/E. The A/E shall advise the DFCM of any adjustments to previous preliminary estimates of Construction cost indicated by changes in requirements or general market conditions. The Construction Documents shall comply with the following:

- a. The DFCM approved Design Development Documents and any further adjustments in the scope or quality of the Project or in the construction budget authorized by DFCM;
- b. The Construction Documents shall comply with and identify all applicable codes, tests and inspections; and
- c. The provision of this Agreement and the Design Manual.

2. **Authorization to Proceed Required in Writing from DFCM.** The A/E may proceed on and be paid for Construction Documents work only after a written authorization to proceed to the Construction Documents Phase is provided by the DFCM Representative.

3. **Assistance with Procurement Documents.** The A/E shall assist DFCM in the preparation of the necessary procurement documents to obtain a Contractor and other entities needed to complete the Project.

4. **Assist with Filing for Governmental Approval.** When requested by DFCM, A/E shall assist DFCM in preparation and filing of documents required for the approval of governmental authorities having jurisdiction over the Project.

E. PROCUREMENT OR NEGOTIATION PHASE.

1. **In General.** The A/E, after written authorization is provided by the DFCM Representative, shall assist DFCM in obtaining bids or negotiated proposals and assist in awarding contracts for construction.

2. **Pre-Bid (including pre-proposal) Conference.** The A/E shall attend any pre-bid conference as requested by the DFCM. DFCM shall control all advertising, bid openings, publishing of bid results, awarding of the Contract.

3. **Available for Interpretations.** The A/E shall at all reasonable times be available personally, or have available, a responsible member of his or her staff to make such interpretations of the Construction Documents as are necessary to facilitate completion of the construction contract.

F. CONSTRUCTION PHASE - ADMINISTRATION OF THE CONSTRUCTION CONTRACT.

1. **Commencement and Termination.** The A/E's responsibility to provide Basic Services for the Construction Phase commences with DFCM's written authorization to proceed on to this Phase and terminates upon the completion of the guaranty period of the Contractor's work, unless extended by written agreement of the A/E and DFCM. Any final payment made prior to the end of the guaranty period does not terminate A/E's obligation to provide full performance of the A/E's services throughout the guaranty period for the fee already paid for basic services.

2. **A/E's General Assistance During Construction and One-Year Guaranty Period.** A/E shall advise and assist DFCM (1) during the Construction Phase, and (2) during period of the Contractor's guaranty obligations under the Contract Documents. During the One-Year Guaranty Period, the A/E shall make a qualified representative available to answer questions and to perform a 1-year guaranty walk through. A/E shall have authority to act on behalf of DFCM only to the extent provided in this Agreement unless otherwise modified in writing by DFCM and A/E. The A/E shall be liable for any representations made by the A/E or anyone for whose acts the A/E may be liable, not consistent with the provisions of the Contract Documents, unless DFCM has given written approval in advance.

3. **Site Visits.**

a. **In General.** Site visits shall be conducted in accordance with Attachment “A” and the Contract Documents.

b. **Compliance with Contract Documents, Reporting Defects and Deficiencies.** Site visits shall require the A/E to examine the Work of the Contractor in progress to assist the DFCM in identifying any lack of compliance with the Construction Documents, defects or deficiencies in the Work and to determine whether the Work is proceeding in a manner such that, when completed, will likely be in accordance with the Construction Documents. Except as may otherwise be provided in Attachment “A”, the A/E’s on-site construction-phase services are (i) not full-time, continuous, or exhaustive; (ii) do not include a duty to discover latent defects in the Work; and (iii) do not constitute a guarantee of the A/E’s Work or relieve the Contractor of its responsibilities. A/E is not responsible for the Contractor’s selected means, methods, or sequences of work. The A/E shall cooperate and assist the DFCM in enforcement of the Construction Documents. The A/E shall promptly report known or obvious defects to the DFCM. This provision does not relieve the Contractor of its responsibility to comply with the Construction documents.

c. **Written Report.** A/E shall promptly submit to DFCM a written report subsequent to each site visit.

d. **Limitations.** A/E shall not be required to make exhaustive or continuous on-site inspections or observations to check the quality or quantity of the Work unless specified elsewhere in this Agreement including the Attachment(s).

4. **Submittals.** Contractor submittals shall be addressed in accordance with the Contract Documents.

5. **Modifications.** A/E shall prepare Change Orders, or Construction Change Directives, with supporting documentation and data for DFCM’s approval and execution in accordance with the Contract Documents, and may issue ASI’s not involving an adjustment in the Contract Sum or an extension of the Contract Time which are not inconsistent with the intent of the Contract Documents. ASI’s must be approved by the DFCM Representative prior to being issued. When approved by DFCM, the A/E shall prepare Statements of Justification, detailed cost and time estimates of the proposed change in the work, Requests for Proposals, Construction Change Directives, and Change Orders. A/E shall prepare, reproduce, and distribute Drawings and Specifications to completely describe Work to be added, deleted, and/or modified. The preparation of all such documentation shall not be considered additional services unless the change in the Work is determined by DFCM to be a scope change and/or an unknown condition.

6. **Record Drawings (As-Builts).** The A/E shall monitor the Contractor’s efforts to regularly update the redline drawings during construction. Upon completion of the Construction Phase, A/E shall prepare Record Drawings based upon redline construction drawings and/or other information provided by Contractor. A/E has no duty to verify the accuracy or completeness of said information and, unless A/E knows that said information is on its face inaccurate and/or

incomplete, A/E is entitled to rely upon said information in preparing Record Drawings. If and to the extent A/E knows that said information is on its face inaccurate and/or incomplete, A/E shall promptly advise DFCM in reasonable detail of the inaccurate and/or incomplete information. Subject to said obligation to advise and its obligation to transcribe the Contractor's redline construction drawings and/or other information provided by Contractor in a manner consistent with the Standard of Care, A/E makes no representation regarding the accuracy or completeness of its Record Drawings.

7. **Review Process.** A/E shall comply with any review process required by DFCM. A/E shall make submissions to the reviewing entity in a timely manner so as not to delay the reviewing entity.

8. **Specific Delay Liability of A/E.** The A/E shall be liable to DFCM for damages incurred to DFCM or the State of Utah as a result of impact on the Contractor's critical path schedule to the extent due to A/E's error, act or omission.

9. **Notification of Impacts on Critical Path.** The A/E shall promptly notify DFCM in writing of facts, events or circumstances of which the A/E is or should be aware and which have or likely will adversely impact the critical path schedule.

ARTICLE VI DELIVERABLE INSTRUMENTS OF SERVICE

A. DEFINED. "Deliverable Instruments of Service" as used in this Agreement shall mean the drawings, specifications, addendum, attachments, calculations, manuals, reports, official project meeting minutes, project observation reports and/or other information, regardless of medium, identified in and required to be delivered or submitted to the DFCM under this Agreement.

B. OWNERSHIP. It is acknowledged and agreed that all documents developed pursuant to this Agreement are Instruments of Service. Deliverable Instruments of Service are the sole property of DFCM. DFCM shall have unlimited rights, for the benefit of DFCM, in all said deliverable instruments of service, including, but not limited to use, re-use, modification, and transferability for reference only related to the site.

C. PROMOTIONAL ISSUES. The A/E shall have the right to include photographic or artistic representations of the design of the Project among the A/E's promotional and professional materials, provided that the A/E appropriately gives recognition to the State of Utah regarding the Project. The A/E shall be given reasonable access to the completed Project to make such representations. However, the A/E's materials shall not include the DFCM confidential or proprietary information. The DFCM shall provide professional credit for the A/E in the DFCM's promotional materials that relate to the A/E's work for the Project. Except to the extent related to the A/E's defense of any statements made by others in regard to the A/E's performance, and notwithstanding any other provision of this Agreement, the A/E shall not make any public information release in connection with services performed under this Agreement without the

advance written approval of the Director of the Division of Facilities Construction and Management.

D. LICENSE. A/E hereby grants DFCM a nonexclusive license for governmental purposes to any copyrighted portion of Deliverable Instruments of Service. Such license shall include, but not be limited to, the right to use and reuse such copyrighted materials to construct the buildings, facilities, or other matters covered by such copyrighted materials for additional use and to license such copyrighted materials for reuse. DFCM's rights and licenses in and to said Deliverable Instruments of Service are conditioned upon A/E receiving all sums related to DFCM approved deliverables due under this Agreement.

E. INDEMNIFICATION RELATED TO CERTAIN DFCM'S ACTION WITH DELIVERABLES. DFCM's use on other projects, DFCM's re-use, or DFCM's modification of the Deliverable Instruments of Service shall be at DFCM's sole risk and without recourse against A/E, its Subconsultants at any tier, and their principals, agents and employees. DFCM shall hold harmless, indemnify and defend A/E, its Subconsultants at any tier and their respective principals, agents and employees from and against any and all actions, claims, loss, or damages of any nature whatsoever to the extent related to and resulting from any said use, re-use, or modification of all or any portion of the Deliverable Instruments of Service by or on behalf of DFCM, or under any license issued by, through, or on behalf of DFCM, irrespective of any actual or alleged fault on the part of the indemnitee(s). Under no circumstances shall A/E be indemnified for the use of the Deliverable Instruments of Service for the Project that is the subject of this Agreement. For purposes of this paragraph, DFCM includes the State of Utah or any department, division or agency of the State of Utah.

F. ACCESS TO DELIVERABLES. A/E, for a period of three (3) years after completion of the Project, agrees to furnish and to provide access to all the aforesaid Deliverable Instruments of Service upon the request of DFCM. DFCM shall pay all costs for labor, reproduction and/or shipping of requested documents. DFCM agrees to make no demand on A/E for responsibility for DFCM use of such material for any other DFCM work which is not the subject of an Agreement between DFCM and the A/E for such use.

G. STAMP. If the A/E is not the same A/E commissioned for the project within the Deliverable Instruments of Services, DFCM shall reasonably remove all indications of authorship, including the title blocks, names, initials, signatures, and professional stamps of A/E, its Subconsultants at any tier, and their agents and employees.

ARTICLE VII. COMPENSATION, PAYMENTS TO THE A/E, AND DAMAGES

A. FEES IN ATTACHMENT "A." Payment shall be in accordance with the schedule of lump sum payments for each phase listed under this Agreement as shown in the Schedule of A/E's and Subconsultant Fees (Attachment "A"). Progress payments with respect to such lump sum amounts shall be based upon percentage of such services completed.

B. PAYMENT IN FULL. The fee for any particular phase or activity described in Attachment “A” shall be the full payment owing by DFCM for such phase or activity.

C. WITHHOLDING OF PAYMENT; LIABILITY OF EXCESS OWING. Should the A/E fail to perform any of its obligations hereunder, be in default of this Agreement, or otherwise fail to complete the services of this Agreement within the time established by the Project Schedule (Attachment “A”), the A/E shall be liable to the DFCM for the actual damages incurred and such amount, may be deducted from any amount due or that may become due the A/E. To the extent that the damages exceed any amount that would otherwise be due the A/E, the A/E shall be liable for such excess to the DFCM. The DFCM may seek enforcement of such obligation by legal action, and if such is necessary, shall recover the related costs and attorney fees. Notwithstanding the above, the DFCM agrees that the A/E is not responsible for damages arising directly or indirectly from any delays for causes beyond the A/E’s control.

D. OTHER PREREQUISITES TO RECEIVE PAYMENT: In addition to any other requirements under this Agreement, the following is required before any payment shall be made and/or deemed owed by the DFCM:

1. **Invoices.** The A/E shall submit invoices for progress payments not more than once a month. Invoices shall include the DFCM project and contract number, and be signed by the A/E. Each invoice shall include a detailed description by line item showing the contract prices, percentage of the services completed for the period, payments received to date, payment requested for the period, the overall percentage of completion, any lien waivers or releases previously requested by DFCM.

2. **Adjustments of Progress Payments.** The DFCM may, at its discretion, adjust any progress payments so that it corresponds to the percentage of completion as estimated by the DFCM. Notice shall be given to the A/E prior to making any such adjustments.

E. ACCEPTANCE OF FINAL PAYMENT. The acceptance by the A/E of final payment without a written protest filed with DFCM within three (3) days of receipt of final payment, shall release the DFCM from all claims and all liability to the A/E for fees and costs of the performance of the services pursuant to this Agreement.

F. INTEREST ON LATE PAYMENTS. Except as otherwise provided by law, if any payment is late based upon the provisions of this Agreement, the A/E shall be paid interest in an amount equal to the published Wall Street Journal prime rate plus 2%. The published Wall Street Journal Prime Rate shall be determined using such rate that is published closest to the 1st of the month for each month of the late period. The amount of payment of interest shall be apportioned using such rate(s) for the late period.

**ARTICLE VIII.
REQUIREMENTS FOR ADDITIONAL SERVICES.**

A. ADDITIONAL SERVICES; IN GENERAL.

1. **Not Allowed when Correcting an Error, Omission or is Already Part of this Agreement.** Notwithstanding any provision of this Agreement, the A/E shall not be entitled to any additional compensation or the considering of any work as an additional service when such work is being performed in order to resolve an error or omission of the A/E or is otherwise required to meet the terms of this Agreement.

2. **Written Modification in Advance of Work Required.** The A/E shall perform additional services when authorized by a written modification to this Agreement in advance of the performance of the subject work. Failure of the A/E to obtain a written approval from the DFCM of the cost and authorization to proceed shall result in the A/E's forfeiture of the right to seek additional compensation for the contended additional service. A/E shall have no obligation, and shall not, begin or provide any additional services unless and until such written modification has been provided by the DFCM.

**ARTICLE IX.
INSURANCE AND INDEMNIFICATION**

A. INSURANCE. To protect against liability, loss and/or expense arising in connection with the performance of services described under this Agreement, the A/E shall obtain and maintain in force during the entire period of this Agreement without interruption, at its own expense, the following stated insurance from insurance companies authorized to do business in the State of Utah, in a form and content satisfactory to the DFCM, and rated "A-" or better with a financial size category of (a) Class X or larger where the applicable Construction Budget is \$1,000,000 or greater; or (b) Class VII or larger where the applicable Construction Budget is under \$1,000,000. All said ratings and financial size categories shall be as published by A.M. Best Company at the time this Agreement is executed. The A/E shall require all Subconsultants to have and maintain similarly required policies. All of the following listed insurance coverages shall be provided by the A/E:

1. **A/E's Professional Liability Insurance.** The A/E shall maintain a policy on a claims made basis, annual aggregate policy limit based on the following chart, unless modified in Attachment "A" to this Agreement.

Construction Budget	Minimum Liability Coverage
\$50,000,000 and above	\$2,000,000 per claim, \$4,000,000 aggregate
\$25,000,000 and above, but under \$50,000,000	\$2,000,000 per claim, \$2,000,000 aggregate

\$1,500,000 and above but under \$25,000,000	\$1,000,000 per claim, \$1,000,000 aggregate
Under \$1,500,000	\$ 500,000 per claim, \$ 500,000 aggregate

The DFCM reserves the right to require additional coverage from that stated in the chart herein above, at the DFCM's expense for the additional coverage portion only. DFCM also reserves the right to require project specific insurance, and if such right has been exercised it shall be indicated as an exhibit to this Agreement. Unless project specific insurance is required by the DFCM, the coverage may be written under a practice policy with limits applicable to all projects undertaken by the firm but must be maintained in force for the discovery of claims for a period of three (3) years after the date final payment is made to the A/E under this Agreement. All policies provided by the A/E must contain a "retroactive" or "prior-acts" date which precedes the earlier of, the date of the A/E's Agreement or the commencement of the A/E's services. The A/E's policy must also include contractual liability coverage applicable to the indemnity provision of this Agreement for those portions of the indemnity provisions that are insured under the A/E's policy and in accordance with this Agreement, including the attachments hereto.

2. **Commercial General Liability Insurance.** A/E shall provide, at its own expense, Commercial General Liability Insurance, on an "occurrence basis", including insurance for premises and operations, independent Subconsultants, projects/ completed operations, and contractual liability coverage including specifically designating the indemnity provisions of this Agreement as an insured contract on the Certificate of Insurance. Such Commercial General Liability Insurance must provide coverage for explosion, collapse and underground hazards. Insurance required by this paragraph shall provide for limits that are not less than the following:

\$2,000,000	General Aggregate
\$2,000,000	Products-Completed Operations Aggregate
\$1,000,000	Personal and Advertising Injury
\$1,000,000	Each Occurrence
\$ 50,000	Fire Damage (any one fire)
\$ 5,000	Medical Expense (any one person)

3. **Workers' Compensation Insurance and Employers' Liability Insurance.** Worker's Compensation Insurance shall cover full liability under the Worker's Compensation Laws of the jurisdiction in which the Project is located at the statutory limits required by said jurisdiction's laws. Employer's Liability Insurance shall provide the following limits of liability: \$100,000 for each accident; \$500,000 for Disease-Policy Limit; and \$100,000 for Disease-Each Employee.

4. **Automobile.** Automobile liability insurance for claims arising from the ownership, maintenance, or use of a motor vehicle. The insurance shall cover all owned, non-owned, and hired automobiles used in connection with the work, with the following minimum limits of liability: \$1,000,000 – Combined Single Limit Bodily Injury and Property Damage Per Occurrence.

5. **Valuable Papers and Records Coverage and Electronic Data Processing (Data and Media) Coverage.** The A/E and all Subconsultants of the A/E shall provide coverage for the physical loss of or destruction to their work product including drawings, specifications and electronic data and media.

6. **Aircraft Use.** A/E using its own aircraft, or employing aircraft in connection with the work performed under this Agreement shall maintain Aircraft Liability Insurance with a combined single limit of not less than \$1,000,000 per occurrence. Said certificate shall state that the policy required by this paragraph has been endorsed to name the State of Utah and DFCM as Additional Insureds.

7. **Certificates.** Before this Agreement is executed, the A/E shall submit certificates in form and substance satisfactory to the DFCM as evidence of the insurance requirements of this Article. Such certificates shall contain provisions that no cancellation, or non-renewal shall become effective except upon thirty (30) days prior written notice by US Mail to DFCM as evidenced by return receipt, certified mail sent to DFCM. The A/E shall notify the DFCM within thirty (30) days of any claim(s) against the A/E which singly or in the aggregate exceed 20% of the applicable required insured limits and the A/E shall, if requested by DFCM, use its best efforts to reinstate the policy within the original limits and at a reasonable cost. The State of Utah and DFCM shall be named as an insured party, as primary coverage and not contributing, on all the insurance policies required by this Article except the professional liability and workers' compensation policies. The DFCM reserves the right to request the A/E to provide a loss report from its insurance carrier.

8. **Maintain Throughout Agreement Term.** The A/E agrees to maintain all insurance required under this Agreement during the required term. If the A/E fails to furnish and maintain said required insurance, the DFCM may purchase such insurance on behalf of the A/E, and the A/E shall pay the cost thereof to the DFCM upon demand and shall furnish to the DFCM any information needed to obtain such insurance.

9. **Waivers of Subrogation.** All policies required, except Practice Professional Liability Insurance and Workers Compensation Insurance, shall be endorsed to include waivers of subrogation in favor of the State of Utah and DFCM.

10. **Excess Coverages.** Any type of insurance or any increase of limits of liability not described in this Agreement which the A/E requires for its own protection or on account of any statute, rule or regulation, shall be its own responsibility and at its own expense.

11. **Not Relieve A/E of Liability.** The carrying of any insurance required by this Agreement shall in no way be interpreted as relieving the A/E of any other responsibility or liability under this Agreement or any applicable law, statute, rule, regulation or order.

12. **A/E Compliance with Policies.** A/E shall not violate or knowingly permit to be violated any of the provisions of the policies on insurance required under this Agreement.

B. INDEMNIFICATION

1. **“Indemnitees”** as that term is used in this Article IX-B means the State of Utah, its institutions, agencies, departments, divisions, authorities, and instrumentalities, boards, commissions, elected or appointed officers, employees, agents, and authorized volunteers.

2. **“A/E”** as that term is used in this Article IX-B, means the A/E, its Subconsultants at any tier, or any of their agents, employees including those employed directly or indirectly, or other persons or entities for whose acts the A/E or its Subconsultants at any tier may be liable.

3. Indemnification Requirements.

a. **A/E’s Indemnification of Indemnities.** To the fullest extent permitted by law, A/E shall indemnify and hold harmless the Indemnities from and against every kind and character of claims, damages, losses and expenses, including but not limited to reasonable attorneys' fees, to the extent caused by any negligent or wrongful act, error or omission of the A/E.

b. **Defense by A/E.** A/E shall defend all actions brought upon such matters to be indemnified hereunder and pay all costs and expenses incidental thereto, but the State of Utah shall have the right, at its option and its own expense, to participate in the defense of any such action without relieving the A/E of any obligation hereunder. A/E shall be reimbursed by DFCM their reasonable costs and expenses incurred under this provision to the extent such costs and expenses relate to the fault of DFCM and not the A/E.

c. **Not Affect Other Indemnification Rights or Obligations.** Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person under this Agreement.

d. **Not Affected by Workmen’s Compensation or Certain Benefit Acts.** In claims against any person or entity indemnified under this paragraph by the A/E, the indemnification obligation under this paragraph shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the A/E under workers' or workmen's compensation acts, disability benefits acts or other employee benefit acts.

e. **Affect of Written Directives by DFCM.** Notwithstanding any of the above, to the extent A/E is complying with a written directive from DFCM, that is not based on the A/E’s recommendation, the A/E shall not be held liable under the indemnification provisions of this Agreement if the A/E has promptly disagreed with the written directive by delivering such objection to DFCM in writing.

f. **Specific Waiver for Damages Covered by Builder’s Risk.** DFCM and A/E waive all rights against each other for damages, but only to the extent covered by the State of Utah's Builder's Risk Policy concerning damage to the Work during construction, except such rights as they may have to the proceeds of such insurance as set forth in the General Conditions.

DFCM and A/E each shall require similar waivers from their Subconsultants and agents at any tier.

ARTICLE X. LIMITATIONS OF ACTIONS

A. STATUTE OF LIMITATION AND STATUTE OF REPOSE. An action by or against the A/E, the A/E's Subconsultant, agent, independent Subconsultant, or anyone for whom the A/E may be liable, shall comply with and be bound by the applicable and lawful statute of limitation and statute of repose provisions. Notwithstanding this, any action by or against the A/E, the A/E's Subconsultant, agent, independent Subconsultant, or anyone for whom the A/E may be liable, that is based in contract or warranty shall be commenced within six (6) years of the date of substantial completion of the improvement or abandonment of construction except that such period of limitation shall be modified as follows:

1. **Fraudulent Concealment.** In the event that the A/E, the A/E's Subconsultant, agent, independent Subconsultant, or anyone for whom the A/E may be liable has fraudulently concealed the act, error, omission or breach of duty, or the injury, damage or other loss caused by the act, error, omission or breach of duty, the six year period shall not begin to run until such time as the DFCM discovers or, through the exercise of reasonable diligence, should have discovered its claim.

2. **Willful and Intentional.** In the event that the A/E, the A/E's Subconsultant, agent, independent Subconsultant, or anyone for whom the A/E may be liable commits a willful or intentional act, error, omission, or breach of duty, the six year period shall not begin to run until such time as the DFCM discovers or, through the exercise of reasonable diligence, should have discovered its claim.

3. **Unintentional and Nonfraudulent Latent Acts, Errors, Omissions or Breaches of Duty.** In the event of an unintentional and nonfraudulent latent act, error, omission or breach of duty, the DFCM shall have the time period allowed by Utah law and the Utah Code, unless a longer period is provided for in an attachment to this Agreement.

4. **"Different Period of Limitation" from Utah Code.** These provisions are understood and agreed to by the A/E as establishing a "different period of limitations" as that terms is used in UCA 78-12-21.5(3)(a) or any other similar statute of the Utah Code. These provisions are not intended to shorten any time period allowed by Utah law and code for non-contract actions, including but not limited to, those based in tort.

ARTICLE XI. PRELIMINARY RESOLUTION EFFORTS, CLAIMS AND DISPUTES

A. GENERAL CONDITIONS REQUIREMENTS APPLY. The provisions of Articles 7.7 through and including 7.14 of the General Conditions shall allow to Preliminary Resolution

Efforts, Claims and Disputes under this Agreement. References in said Articles 7.7 through and including 7.14 to the term “Contractor” and “Subcontractor” shall refer to A/E and Subconsultant under this Agreement, respectively. Unless inconsistent with the provisions of this Agreement, definitions in the General Conditions shall apply to this Agreement.

B. TIME FOR FILING. Notwithstanding paragraph A above, the PRE must be filed in writing with the DFCM Representative within twenty-one (21) days of any of the following:

1. Issuance of a denial by DFCM of an A/E request for additional monies or other relief under this Agreement;
2. In the case of a Subconsultant, after the expiration of the time period for the A/E / Subconsultant PRE process under Paragraph 7.7.5 of the General Conditions; or
3. When the A/E knows or should have known about any other issue where the A/E seeks additional monies, time or other relief from the State of Utah or DFCM.

C. NOT LIMIT DFCM RIGHTS. As stated in Rule R23-26-1(6), this does not limit the right of DFCM to have any of its issues, disputes or claims considered. DFCM reserves all rights to pursue its issues, disputes or claims in law or equity including, but not limited to, any or all of the following: damages, delay damages and impacts, losses, liability, patent or latent defects, or failure to perform under this Agreement. If the Director appoints an expert or a panel to consider any such issue(s), dispute(s) or claims(s) of DFCM, the A/E shall cooperate with such expert or panel process.

ARTICLE XII. TERMINATION OR SUSPENSION

A. TERMINATION FOR CAUSE. The DFCM or A/E may terminate this Agreement for cause should the other party fail to substantially perform the material covenants herein contained at the time and in the manner herein provided, including the failure to design the project within the Construction Budget. In such event, the party seeking termination shall give the other party fourteen (14) calendar days written notice of intent to terminate for cause. If the other party cures said default, or is diligently pursuing a cure, within said fourteen (14) day period, there shall be no termination for cause.

1. **DFCM May Proceed; Liabilities.** In the event of such termination for cause by the DFCM, the DFCM may proceed with the work in any manner deemed proper by the DFCM. The cost to the DFCM or damage to the DFCM as a result of the failure to perform shall be deducted from any sum due the A/E under this Agreement, and the balance, if any, shall be paid to the A/E upon demand. If the cost or damage to the DFCM exceeds the sums due the A/E, such costs or damages shall be paid to the DFCM by the A/E.

2. **Paid Sums Owing Through Date of Termination.** In the event of such termination for cause by the A/E, the A/E shall be paid all sums owing A/E through the date of

termination. Under no circumstances, shall A/E be paid for any other sums related to the termination for cause, including but not limited to, lost profits or consequential damages.

B. TERMINATION FOR CONVENIENCE. The DFCM reserves the right to terminate this Agreement for convenience or any reason upon fourteen (14) calendar days written notice to A/E. The DFCM may also suspend the services of the A/E for a period not to exceed 180 days and pay the A/E all sums owing through the date of suspension. For any period beyond 180 days, the A/E may consider it a termination for convenience. Should said termination occur during or upon completion of the Schematic Design Phase, A/E shall be entitled to receive and shall be paid all fees stated herein through the Schematic Design Phase, together with reimbursable expenses incurred to date, less the amount of said fees and expenses paid by DFCM and received by A/E through said date. Should said termination occur during the Design Development Phase or any subsequent phase, A/E shall be entitled to receive and shall be paid the greater of: (i) all fees earned and reimbursable expenses incurred through the effective date of said termination, less said fees and expenses paid by DFCM and received by A/E through said date; (ii) the actual, reasonable cost to A/E and its Subconsultants (regardless of tier) of the authorized services provided, plus a profit thereon of 10%, plus reasonable reimbursable expenses incurred under this Agreement through the effective date of said termination, less said fees and expenses paid by DFCM and received by A/E through said date; or such other amount as agreed to by A/E and DFCM.

C. DEATH OR INCAPACITY. If the A/E transacts business as a sole proprietorship, the A/E's death or incapacity shall automatically terminate this Agreement as of the date of such event. Under these circumstances, neither the A/E nor the A/E's estate shall have any further right to perform hereunder and the DFCM shall pay the A/E or the estate shall be paid through the date of termination.

D. DELIVERABLES PROVIDED TO DFCM. Promptly after termination and payment of any sums owing the A/E, the A/E shall deliver all of the Deliverable Instruments of Services, including those in progress, to the DFCM as hereinbefore described.

E. RIGHT TO COMPLETE. Subject to the above termination provisions of this Agreement, DFCM shall have the right to complete the work or any portion thereof by itself or others, and to modify and/or use the A/E's work in part or in its entirety as hereinabove described.

ARTICLE XIII GENERAL LEGAL REQUIREMENTS

A. SEVERABLE AGREEMENT. This Agreement is severable. Authorization to perform one of the design phases or activities under this Agreement shall not be considered as creating any obligation of DFCM to authorize any further phase(s) or activity(ies).

B. INDEPENDENT CONTRACTOR. A/E is an independent contractor and not an employee of DFCM or the State of Utah. A/E shall have no authorization, express or implied, to bind the State of Utah or DFCM to any agreement, settlement, liability or understanding

whatsoever, nor to perform any acts as agent for the State of Utah or DFCM, except as specifically set forth in this Agreement.

C. THIRD PARTIES. Nothing contained in this Agreement shall create a contractual relationship or a cause of action in favor of a third party against the State of Utah and DFCM and/or A/E or its-Subconsultants at any tier.

D. AGREEMENT BINDING AND ASSIGNMENT LIMITATIONS. This Agreement shall be binding upon DFCM, A/E, and their respective partners, employees, agents, joint ventures, successors and assigns. Neither the performance of this Agreement, a right or claim, nor any part thereof including any monies to be paid, may be assigned by the A/E or DFCM without the prior written consent and approval of the other party. The DFCM may assign this Agreement to an institutional lender providing financing for the Project. In such event, the lender shall assume the DFCM's rights and obligations under this Agreement. The A/E shall execute all consents reasonably required to facilitate such assignment.

E. ENTIRE AGREEMENT AND AMENDMENT LIMITATION. This Agreement represents the entire and integrated agreement between the DFCM and the A/E and supersedes all prior negotiations, representations or agreements, either written or oral. This agreement may be amended only by written instrument signed by both DFCM and A/E.

F. NOTICES. Any notice required by this Agreement shall be served upon the recipient's designated representative by hand delivery at the last known business address, or by mail with "delivery confirmation" to the last known address. Notwithstanding any other provision of this Agreement, written notice shall also be deemed to have been duly served by verified use of a FAX system by using the known and operative calling number. Service by use of the FAX system is encouraged when timely notice will benefit the DFCM, A/E, or Subconsultant. Notice shall be considered complete and verified upon the sending and confirmation of delivery using the FAX system, if on the same day notice is also sent by registered or certified mail, return receipt requested, to the last business address known to the party giving notice, confirming the FAX delivery.

G. WAIVERS. No waiver by the DFCM or A/E of any default shall constitute a waiver of the same default at a later time or of a different default.

H. APPLICABLE LAW AND VENUE. This Agreement shall be construed in accordance with the laws of the State of Utah. Venue for any legal proceeding regarding this Agreement shall in the Salt Lake County, State of Utah.

I. AUTHORITY TO EXECUTE. The A/E and DFCM each represent that the execution of this Agreement and the performance thereunder is within their respective duly authorized powers.

(Name of Project)
DFCM Project No. _____

Attachment "A"

1. **BASIC SERVICES:** Basic Services Fee: \$_____. Construction Budget: \$_____
(See attached A/E's proposal dated _____ for schedule of A/E's and A/E's subconsultant's fees and further breakdown). **The following services are provided in the basic fees:** architectural, mechanical, electrical, structural, civil, and landscape design as required for the project. Services shall also include Value Engineering Session participation; meeting minute production and distribution for design and construction period duration; cost estimating; fire/water flow analysis; plan reviews with the Building Official, the Fire Marshall and the Health Department; Construction Procurement Phase services; travel as outlined in Item A below; document reproduction as outlined in Item B below; and Construction Period services as outlined in Item C below.

Please reference Attachment D for changes to meeting minute production and cost estimating services for CM/GC projects.

- A. Travel reimbursement requirements: As outlined in A/E's attached proposal.
B. Document reproduction requirements (needs for review sets, bidding, construction, etc.):
Note: Printing for use by design team in presentations and for coordination is included in basic services fee. As outlined in A/E's attached proposal.
C. Construction Period site visits: As outlined in A/E's attached proposal.
D. Record drawings: Amount of fee allocated to completion of Record drawings \$_____

The Basic Services Fee is divided into the following percentages for the different phases of Work: schematic design - 15%; design development - 20%; construction documents - 40%; bidding - 5%; and construction closeout/warranty period - 20%.

Exceptions to this list of basic services are: _____

2. **ADDITIONAL SERVICES / REQUIREMENTS:** The following additional services/requirements (i.e. hazardous material requirements, special inspection services, insurance requirements) will be provided as described and at the listed fee: _____ \$_____

High Performance Building Rating System: _____(Yes/No) Fee: \$_____
USGBC LEED Required: _____(No/Certified/Silver/Gold/Platinum) Fee: \$_____

3. **TOTAL FEE FOR AGREEMENT** (Total of Items 1 and 2) \$_____

4. **MILESTONES / SCHEDULE:** Required project milestones and A/E's project schedule.
(See attached schedule of A/E's work plan):

Design complete ready for bidding: _____
Construction complete and ready for occupancy permit: _____

Attachment "B"

The A/E's Organization Chart is hereby identified and attached.

Attachment "C"

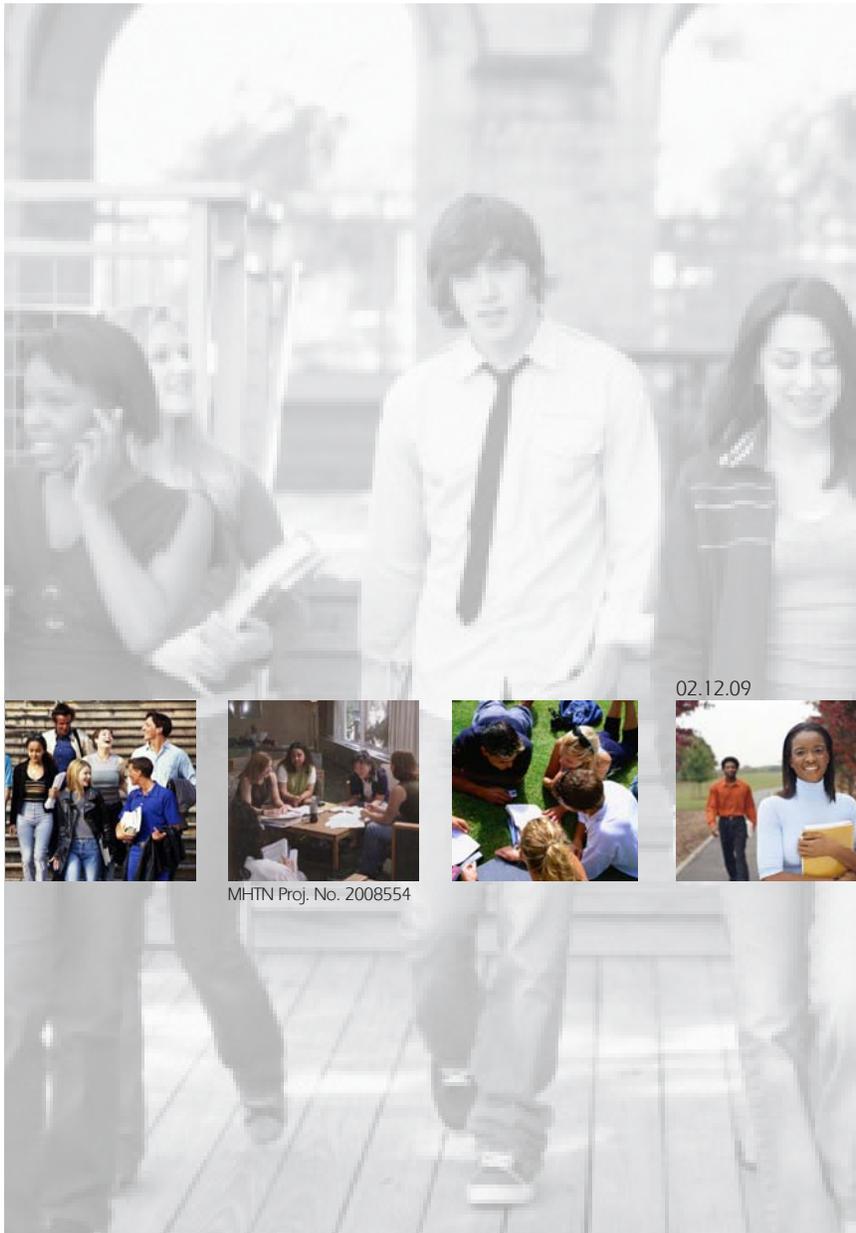
Any additional explanation of the A/E's response to the DFCM's submittal documents are hereby identified and attached.

(Name of Project)
DFCM Project No. _____

Attachment “D”
Attachment to Design Agreement for CM/GC Projects

1. The CM/GC Agreement with the selected firm for this Project, is hereby incorporated by reference. The A/E shall abide by all A/E responsibilities identified in that Agreement.
2. As per Article 5 of the CM/GC Agreement, the A/E shall cooperate with the CM/GC to present mutually agreed upon designs, estimates and value engineering.
3. Article II.G. of the Design Agreement shall be omitted and replaced with the following: The A/E shall review the estimates of the CM/GC for concurrence, and shall design within the estimates approved by DFCM.
4. Schedule. The A/E is required to cooperate with the CM/GC schedule for delivering bid packages in the scope required by the CM/GC and agreed to by DFCM. It is the intent of DFCM to keep the number of bid packages to the practical minimum.
5. **Cost Escalation Allowance:**
 - A. The project construction budget (FLCC) has been established at present estimated construction cost.
 - B. DFCM will hold a contingency, which is not part of the FLCC, which may be available to the Project by modification to the FLCC, to account for legitimate material and labor escalation costs as may be determined by the A/E and CM/GC team until the results of a bid package is obtained for a particular scope of work.
 - C. Following the results of the bid package, the CM/GC is solely responsible for any material and labor escalation costs.
 - D. DFCM reserves the right to reject any bid package where the escalation is excessive in the sole opinion of DFCM, at which time scope reduction or value engineering will be considered by CM/GC in cooperation with the A/E. This consideration of the CM/GC and the A/E will be submitted to DFCM for acceptance.
 - E. The A/E and CM/GC's fee will not be adjusted due to material or labor cost escalations experienced at any phase of this Project.
6. Minutes. The A/E is responsible for meeting minutes throughout the design phase. The CM/GC is responsible for meeting minutes throughout the construction phase, except that the A/E shall ensure that accurate meeting minutes are managed by the CM/GC and make any necessary comments on the minutes prior to approval by DFCM.
7. Incentive. If the final costs of the Project are equal to or less than the final approved FLCC, then the A/E shall be entitled to 10% of the savings between the final approved GMP and the final cost, or \$30,000, whichever is less.

For purposes of this paragraph, changes to the final GMP that are the due to DFCM initiated scope changes or unforeseen conditions under the Contract Documents, shall not affect the A/E's entitlement herein. A/E errors or omissions that increase the GMP will affect the amount of the A/E's entitlement.



02.12.09



MHTN Proj. No. 2008554

2009

Program Document

Weber State University | Wasatch Hall Renovation

Wasatch Hall Program
Weber State University

Weber State University Review Signatures

We have reviewed the Wasatch Hall Program and warrant that it adequately represents our request for a facility to fulfill our mission and programmatic needs. All appropriate parties representing the University have reviewed it for completeness and accuracy.

F, Ann Millner, President
Weber State University

Date

Norm Tarbox, Vice President
Administrative Services

Date

Janet Winniford, Vice President
Student Affairs

Date

Brett Perozzi, Associate Vice President
Student Affairs

Date

01 Executive Summary

02 Site Analysis

03 Building Analysis

04 Space Needs

05 Cost Opinion

06 Appendix

- a Residential Life Facilities Evaluation Summary Letter, October 2008
- b WSU Housing Structural Report, September 2008
- c WSU Housing Mechanical Report, October 2008
- d Wasatch Hall Electrical System Evaluation, September 2008
- e Facility Condition Analysis, Wasatch Hall, May 2005
- f WSU Housing & Residential Life Planning Meeting Reports
- g WSU Housing Needs Assessment & Report
- h WSU Housing Site Evaluation Civil Report, January 2009

02.12.09

contents

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Acknowledgements

The following participated in the development of the Weber State University Wasatch Hall Program:

WEBER STATE UNIVERSITY FACILITIES MANAGEMENT

Jim Harris, Director of Campus Development

HOUSING AND RESIDENTIAL LIFE PLANNING COMMITTEE

Norm Tarbox, Vice President for Administrative Services

Jan Winniford, Vice President for Student Affairs

Brett Perozzi, Associate Vice President for Student Affairs

Nancy Collinwood, Director of Student Activities & Associate Union Director

Nicole Fronk

Bill Fruth, Shepherd Union Director

Denae Hoog

Daniel Kilcrease

Lynn Kraaima, Facilities Coordinator of Auxiliary Enterprises

Tyler Lathem

Chad Mosher, Scheduling, Events, Conference; Associate Union Director

Keith Murray

Sarah Trescott

Brady Wilkinson

CONSULTANT TEAM

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Randy Boudrero, ASLA, Principal, Landscape Architecture

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Sean Catherall, AIA, Project Manager

Glen Beckstead, SPE, Cost Estimator

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Colvin Engineering Associates

Stephen Connor, PE, LEED-AP

Bret Christiansen, Project Manager

Electrical Engineering Consultants (ECE)

Akbar Matinkhah, PE

John Michie

Great Basin Engineering - North

Christian Michaelson



01

Executive Summary

Weber State University | Wasatch Hall Renovation

Introduction

This document describes the programmatic needs for the renovation of Wasatch Hall, an existing student housing facility on the Weber State University main campus.

Built in 1964, Wasatch Hall is a three-story building of 48,427 gross square feet which in the past provided 228 student housing beds in traditional dormitory-style, two-bed rooms. The building does not meet current codes and is in need of major upgrades and renovations. It is currently used for educational and administrative space, with partial use for student housing. A recent housing evaluation study concluded that it was more economically viable for the University to renovate Wasatch Hall rather than replace it, at estimated costs of \$8.5 million and \$10.8 million, respectively.

As part of the University's plan to strengthen its on-campus housing program, three other existing residence halls in the vicinity will be demolished and replaced by two new facilities. The two new facilities, in combination with the renovated Wasatch Hall, will form a revitalized housing neighborhood with total of 524 beds.

This document describes Weber State's goals for the renovated Wasatch Hall, and the elements and space needs that will fulfill those goals.



Project Goals

The statements below are a summary of ideas expressed by Weber State University representatives over the course of project meetings.

The renovation of Wasatch Hall will:

1. Provide a minimum of 160 student housing beds, in a combination of two suite configurations and traditional two-bed rooms.
2. Transform the building into an appealing and student-oriented design, while keeping the renovation as economical as possible.
3. Create a student housing facility that supports and enhances student life, as an initial step in the University's plan to strengthen on-campus housing.
4. Enable the University to offer an economical housing option that can compete with the area's private rental market.
5. Support the building's use as a summer conference facility.
6. Achieve a quality level that gives the building a 40-year lifespan.





01

Executive Summary

Weber State University | Wasatch Hall Renovation

Project Process

The programming process included the following:

- Background materials provided by the University, including a Wasatch Hall 2005 ISES Facility Condition Analysis, Wasatch Hall original construction and renovation documents, and a site survey that include topographical and utilities information.
- On-site observations of the existing building and site.
- Meetings with University Residence Life, Administration, and Facilities representatives, as well as students, to gather general and specific input regarding needs and desired direction.
- Evaluation of the building's structural, mechanical, and electrical systems by engineering consultants, and recommendations for needed modifications and upgrades.
- Concurrent development of the WSU Housing Master Plan. Project meetings addressed both Housing Master Plan and Wasatch Hall programming issues, resulting in a comprehensive and coordinated planning effort.
- A Housing Needs Assessment, implemented by WSU Housing to determine students' preferences for housing types, features and costs.
- Initial planning "test fits" to develop suite configurations that fit into Wasatch Hall's existing structural bays, and to determine how many beds could be provided with the desired mix of housing types.
- Cost modeling to determine the feasibility of renovating Wasatch Hall, and to establish a project construction budget.
- Documentation of the information, decisions and space needs that resulted from the programming process, with review and approval by University represent

Program Summary

1. HOUSING UNITS. The building will offer a variety of housing styles. One floor will contain traditional two-bed rooms with common toilet/shower rooms located on the main hallway. The other two floors will contain a mix of suites with one-bed and two-bed rooms and shared bathrooms. The program test fit demonstrates that a total of 164 housing beds can be achieved with the following:
 - 34 traditional two-bed rooms with two common bathrooms.
 - 16 suites containing two 2-bed rooms with shared bath.
 - 16 suites containing two 1-bed rooms with shared bath.
2. COMMON AREAS. Common areas will be similar to those offered in the original building. Each housing wing will have, on separate floors, a Kitchen/Social Lounge, a Study Lounge, and a Laundry. The Main Lobby/Lounge, in the central portion of the building, will be augmented by a small C-Store offering pre-packaged and grab-and-go food items for the convenience of residents.
3. MAINTENANCE SHOP/STORAGE. The Maintenance Shop and Storage areas currently located in the lower level of Promontory Tower, an adjacent residence hall, will be relocated to the basement of Wasatch Hall.
4. INFRASTRUCTURE. The renovation will include extensive retrofit of the building's structural, mechanical and electrical systems. The layout of the housing units must accommodate these upgrades, working within new structural shear wall locations and stacking plumbing, HVAC and electrical elements.
5. ACCESSIBILITY. Wasatch Hall is not currently accessible. The project will create three new accessible pathways: from the East Terrace Parking to the east main level entry, and from building entries to surrounding pedestrian walkways. The building's main level will be fully accessible.
6. SCHEDULE. The estimated timeline for the Wasatch Hall renovation is:
 - Design/construction documents: 5 months
 - Project bid: 2 months
 - Construction: 10 months
 - Total: 1 year, 5 months
7. COSTS. The estimated total project cost to renovate Wasatch Hall as described in this program is \$11, for a bid date of February 2010. This includes a construction cost of \$8.5 million plus related soft costs. See section 5 for a breakdown of estimated costs.

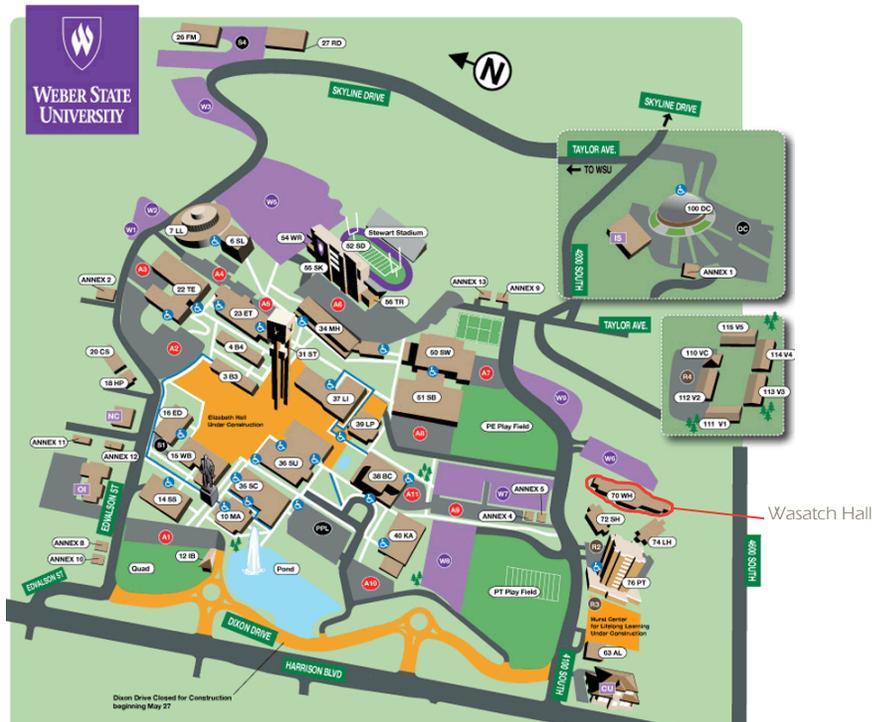


02 Site Analysis

Weber State University | Wasatch Hall Renovation

General Location and Site Description

Wasatch Hall is one of four residence halls that form a housing community on the south end of the Weber State University campus. The easternmost of the four buildings, Wasatch Hall sits on a hillside that slopes upward approximately twenty feet from west to east. The building is long, with a north-south orientation that works well with the site's natural grade. The site is well landscaped with many trees. The landscaping should be protected and preserved during the renovation project.



Wasatch Hall is one of four residence halls on the South edge of the main campus.

Vehicular Access and Parking

Wasatch Hall is accessed from E. 4100 S. Street to the north. E. 4100 S. forms the southernmost part of a vehicular loop that encircles the main portion of the Weber State campus.

The building is served by a parking lot of 150 stalls above it to the east (East Terrace Parking). The parking lot has a north-south orientation, and parallels the building. The lot is accessed from E. 4100 S. to the north at two points (ingress and egress). Three concrete staircases slope down from the parking lot's west edge to entries at the building's midpoint, and its north and south ends.

There are two points of vehicular access to the building. At the south end of the East Terrace Parking, a drive continues southward a short distance, sloping down and reaching an entry on the building's south end that serves as a loading/unloading point for the south wing of the residence hall.

The second vehicular access is a small drive that connects the north end of the building to 4100 South Street. This is the service access for the north wing.

There is no paved vehicular access to the building's central portion. Currently, when service vehicles must reach this area, they use the north drive and continue driving across a lawn on the east side of the north wing to the building's center.

The renovation project includes placing a maintenance shop and storage area for this housing community in the basement of the center portion of Wasatch Hall. The project should provide a paved vehicular access path to facilitate maintenance shop access and movement of materials.



Vehicular access is from E 4100 S Street to the North



02

Site Analysis

Weber State University | Wasatch Hall Renovation

Site Functions & Relationships

The west side of the building is open, public space. The building's ceremonial main entrance is located at the midpoint of the west side and is pedestrian-only (not vehicular). Two long exterior staircases climb down from the building to the west, connecting with exterior walkways that form a pedestrian link to the area's other residence halls and to the main campus to the north.

On the building's east side, in addition to the East Terrace Parking described above, are a covered concrete entrance patio at the building's midpoint, and a flat grassy area that parallels the north wing.



Civil Report

A civil and utilities evaluation of Wasatch Hall was recently completed (see Appendix H) and included the following observations and recommendations.

There is adequate water and sewer capacity in this housing area for Wasatch Hall and the additional housing facilities that are planned. Current storm drainage appears adequate, but there is no site storm detention.

Sidewalks and stairs are deteriorating. Differential settlement between curb and gutter and sidewalks has resulted in tripping hazards. Stairs and handrails are in moderate to poor condition.

There are no handicapped stalls in the East Terrace Parking and there is no ADA compliant path from the parking to the building. There is moderate cracking in the East Terrace Parking asphalt and the lot's drainage is poor, allowing water collection in low areas. The lot has an estimated lifespan of 7-12 years before requiring "a significant rebuild". Light poles and bases in the lot have significant deterioration. The existing size and shape of the parking lot makes access by current fire apparatus difficult.



The utilities at the site are adequate for the intended use of the renovated Wasatch Hall, as well as future residential facilities, totaling approximately 500 beds.

Culinary water pressure is adequate but the water lines are aging. The sewer main is an 8" line running north of the building across 4100 South Street. It appears to have adequate capacity.

Gas line capacity for the housing facilities in the area has been a problem in the past. The area is serviced by a 4" high-pressure (30 psi) line, with a 2" line to boilers and a 1-1/4" line for cooking and clothes dryers.



02

Site Analysis

Weber State University | Wasatch Hall Renovation

Civil and Utilities Recommendations

- Resurface or reconstruct the East Terrace Parking lot for proper drainage.
- Re-stripe the parking lot to include the code-required quantity of handicap-accessible stalls.
- Construct one or more accessible pathways from the parking lot to the building.
- Reconstruct the entire culinary water distribution system for Wasatch Hall, beginning at the meter set.
- Incorporate an 8" water line into the master plan's proposed loop parking and access road, to service future fire hydrants and to provide a level of redundancy for future fire sprinkler supply lines. This water line would allow fire hydrant spacing to meet code, when the two additional housing facilities are constructed. As part of the Wasatch Hall renovation, install a first phase of the 8" water line, from 4100 South Street to the building.
- Assess the condition of the existing Wasatch Hall 8" sewer line to see if replacement will be necessary as part of the renovation project. Estimated amount of piping is 250 feet.
- Anticipate a reconstruction of the gas distribution system as part of the Wasatch Hall renovation, as well as future housing construction projects.

Project Limit



Wasatch Hall vicinity of Residential Life Master Plan



02

Site Analysis

Weber State University | Wasatch Hall Renovation



Residential Life Master Plan



03

Building Analysis

Weber State University | Wasatch Hall Renovation

General Building Description

Wasatch Hall was built in 1964 and is 48,427 gross square feet. It is a long building, oriented in a north-south direction, and sits on a hillside that slopes twenty feet downward from east to west. It is built in three portions.

See Appendix Sections A, B, C, D, E and H for facility condition and building systems reports.



The central area consists of a single story with a basement. The main floor is primarily a large open space that contains common areas, including the building entries, main lobby, reception desk, and manager's apartment/office. The east side has large, sliding-glass doors and a swing glass door that open onto a covered concrete patio and narrow grass areas. There is an entrance on the east side that connects with the building's parking lot, which is up the hill to the east.

The basement is accessed from enclosed stairs adjoining the central lobby area. It originally contained student recreation / TV rooms, two student laundry rooms and mechanical system space. In recent years, the recreation spaces have been converted to classrooms, as have other spaces in the building.





03

Building Analysis

Weber State University | Wasatch Hall Renovation

The central portion is flanked by two three-story housing wings extending to the north and the south. The wings are configured with a central corridor lined on both sides with traditional dormitory-style double bedrooms. Each floor of both wings has a common toilet/shower room accessed from the corridor. Each wing's floor also has a common-use lounge at the end. The wings have exit stairs at each end. Those toward the building's center connect to the main lobby/lounge in the center of the building. Those at the far end exit to grade on the first level, but also have doorways that lead to small exterior balconies at each level.



The floors of the main level housing wings are approximately 12 inches higher than the main lobby floor. Originally, a stair with two risers connected these different floor levels; the stairs have been replaced by small ramps that do not meet current codes.

Each housing wing floor contains 19 traditional 2-bed dormitory rooms, for a building total of (114) 2-bed rooms.



General Building Recommendations

- Demolish existing interior finishes, elements and improvements and replace with new, with the exception of the main lobby fireplace, which should be refurbished.
- Demolish existing finishes, elements and improvements in the basement level to the greatest extent possible, to provide clear and open space for the new Facilities Maintenance Shop and storage functions.

Floor-to-Floor and Ceiling Heights

The central portion of the main level has a ceiling height noted at 11'-10.75" on the original construction documents. The main lobby ceiling has an exposed wood beam and cross-beam system with acoustic tiles attached to the ceiling surface between the beams.





03

Building Analysis

Weber State University | Wasatch Hall Renovation

The ceiling height of the housing wing corridors and rooms is noted on the original construction documents as 8'-4". The ceiling is a sprayed-on, textured material which is reported to contain asbestos.

Floor-to-floor height is noted as 9'-0" on the construction documents.

Exterior Materials

The building's exterior materials are Weber State standard buff brick and precast concrete panels. There is some efflorescence on the south-eastern elevation of the building.



The roofs of the central portion and south housing wing were replaced with a Sarnafil roofing system in 2001 and are in good condition. The built-up roof of the north housing wing was installed in the 1980's and is showing signs of age.

The exterior windows in the housing wings are single-pane, sliding-glass units, some with failing hardware.

The large, sliding-glass doors on the east side of the main lobby are failing and are not currently used as doors.



Exterior Materials Recommendations

- Remove efflorescence from exterior surfaces.
- Repoint exterior brick where needed.
- Investigate the water infiltration problems and correct these conditions.
- Replace the roofing on the north housing wing, with new metal flashings and roof access hatch assembly.
- Replace the housing wings exterior window units with new double-pane operating units.
- Replace the exterior glazing in the building's central portion with new double-pane glazing.



03

Building Analysis

Weber State University | Wasatch Hall Renovation

Code Issues

The intent of the Wasatch Hall renovation project is to bring the existing building into conformance with Weber State University standards and all current building, accessibility and energy codes. Code issues and compliance should be coordinated with Weber State Facilities Management representatives. The following is a partial list of applicable codes that should be used for the project.

- International Building Code (IBC) 2006, with Utah Amendments
- International Plumbing Code (IPC)
- International Mechanical Code (IMC)
- International Fire Code (IFC)
- National Electric Code (NEC), with Utah Amendments
- Life Safety Code NFPA 101, with Utah Amendments
- Laws, Rules and Regulations of the Utah State Fire Marshall
- International Energy Conservation Code
- ASHRAE Indoor Air Quality 62-2001 and Addendum 62n
- American Society of Heating, Refrigeration and Air Conditioning (ASHRAE)
- Utah Code for Energy Conservation in New Building Construction (ASHRAE Standard 9.1-1989)
- Sheet Metal and Air Conditioning Contractor National Association (SMACNA)
- Americans with Disabilities Act Title III, 1991/1998 (ADA)
- Fair Housing Act
- Planning and Design Criteria to Prevent Architectural Barriers for Aged and Physically Handicapped (Fourth Revision, with lever hardware amendment)
- ICC/ANSI A117.1-2003 Accessible and usable Buildings and Facilities
- Weber State University Campus Design Standards
- Underwriters Laboratory (UL)
- American Society of testing Materials (ASTM)

Code-Related Recommendations

- Abate the asbestos in the building (contained in the sprayed-on textured ceilings in the housing wings and basement level mechanical room; may be in other materials / locations).
- Install fire sprinklers throughout the building, with controls that interface with the fire alarm system.
- Provide new LED exit signage and emergency lighting connected to the emergency power network.
- Investigate designing the housing wing corridors as 30-minute-rated corridors. This will necessitate enclosing the lounge spaces at the ends of the wings with new walls and doors to separate them from the corridors and stair enclosures.
- Install new code-compliant metal handrail and guard rail systems in stairs and at exterior balconies.
- Provide an automatic shut-off valve for the natural gas main.



03

Building Analysis

Weber State University | Wasatch Hall Renovation

Accessibility

The existing building is not accessible, from its exterior access points and pathways to its interior configuration, clearance, fixtures and equipment. The building's renovation must provide accessible approaches to the building and a main and lower level that are compliant with accessibility codes. No elevators are planned for the building, so the upper levels will not be accessible.

Specific Accessibility Recommendations

- Construct an accessible pathway from the East Terrace Parking to the building east entrance. Construct new exterior accessible pathways from the building's north and south entries, to other exterior walkways in the area.
- Modify existing or install new exterior concrete ramps and handrails as needed for code compliance.
- Construct the main and lower levels to be fully accessible and compliant with current codes and regulations, including clearances, hardware, signage, etc.
- Install a limited use/limited application lift connecting the main and lower levels, so the new Maintenance Shop will be accessible.



Structural

A structural evaluation of Wasatch Hall was recently completed (see Appendix B) and included the following observations and recommendations:

The Wasatch Hall center portion is one story with a basement and the housing wings are 3-stories with slab-on-grade construction. The housing wings were constructed with lift-slab construction techniques, with 8" thick post-tensioned slabs.

The building is a very heavy structure because of the large amount of thick concrete used to build it. It was designed with first level corner shear walls that were typical of construction in the 1960's. The shear walls do not meet current codes.

Structural Recommendations

- Strengthen the existing first level shear walls and add more as required to meet current codes. Make the shear walls continuous to the roof of the building. Reinforce the existing footings as required to support the new shear walls.
- Replace existing interior non-reinforced masonry walls with metal stud walls.
- Verify the integrity of the original lift-slab connections and strengthen / repair as necessary.
- Verify the original attachments of precast concrete panels on the building exterior and strengthen / repair as necessary.
- Investigate the roof structure of the one-story central portion of the building for current seismic code compliance; upgrade as required.



03

Building Analysis

Weber State University | Wasatch Hall Renovation

Mechanical

A mechanical evaluation of Wasatch Hall was recently completed (see Appendix C) and included the following observations and recommendations:

The central portion of the building (main level and basement) are served by two air handlers with hot and chilled water coils. The housing wings are served by wall-mounted fan coils with a 2-pipe system. Hot water is generated from one atmospheric boiler in the basement. Chilled water is generated from two chillers located to the east of the building. All domestic piping is galvanized. Domestic hot water is generated from a heat exchanger.

Mechanical System Recommendations

- Replace the two basement air handlers.
- Replace housing wing 2-pipe fan coil system with new 4-pipe system.
- Replace basement atmospheric boiler.
- Replace all galvanized domestic water piping.
- Replace air compressor for pneumatic controls.

Electrical

A electrical evaluation of Wasatch Hall was recently completed (see Appendix D) and included the following observations and recommendations:

The transformer and distribution switch that provide power to Wasatch Hall are in good condition and can be reused. They are located in the Electrical Distribution Building northeast of Wasatch Hall.

The emergency power system for the building is located adjacent to the Electrical Distribution System. It is in good shape and can likely be reused.

The existing light fixtures in the building are inefficient and in poor condition.

The fire alarm system was recently upgraded to a new addressable system and meets current codes.

There is no security system in the building.

There is an existing wireless Internet access system throughout the building.

Electrical System Recommendations

- Replace the basement mechanical room panelboards. Locate them to meet code clearance requirements.
- Replace main distribution panel.
- Replace exterior lighting fixtures at entry doors and tie to the emergency power system.
- Replace all interior lighting fixtures with new, energy efficient fixtures with electronic ballasts.
- Use automatic lighting controls in corridor and lobby spaces.
- Install carbon monoxide detectors in housing units.



04

Space Needs

Weber State University | Wasatch Hall Renovation

Introduction

Section 4 describes the space needs for Wasatch Hall. It contains:

1. A spreadsheet listing spaces and square footage amounts for the building. The first page is a summary of the total building. This is followed by lists of the building's individual spaces, organized into three space categories: Residential Areas, Community Areas, and Building Support.
2. A housing unit test fit diagram developed during the programming process. This diagram shows the housing unit layout that will achieve the resident bed quantities represented in the program.
3. Room criteria sheets that list the detailed requirements for each space in the spreadsheet. Some of the room criteria sheets are accompanied by plan diagrams of the space.

Building Summary

No.	Space Grouping	Total NSF	Efficiency Factor	Total Dept. GSF	Building Grossing Factor	GSF	Net-to-Gross Ratio
Building Summary							
A	Residential Areas	21,580		27,900		32,922	
B	Community Areas	4,580		5,567		6,570	
C	Building Support	6,560		7,608		8,978	
Building Totals:		32,720	1.26	41,076	1.18	48,469	0.68

Spreadsheet Definitions		
1	NSF/Space	Net Square Feet per Space: Area as measured inside surrounding walls
2	Total NSF	Total Net Square Feet; NSF/Space multiplied by the space quantity
3	Efficiency Factor	Multiplier for area needed for surrounding walls and immediate circulation
4	Dept. GSF	Department Gross Square Feet; NSF multiplied by the Efficiency Factor
5	Building Grossing Factor	Multiplier for area needed for mechanical/electrical/telephone, stairs, main corridors, exterior walls
6	GSF	Gross Square Feet, or total building area measured from outside surfaces of exterior walls (Dept. GSF x Building Grossing Factor)
7	Net-to-Gross Ratio	Ratio of net to gross SF in overall building; used to evaluate building efficiency

The chart above is a summary of the total space needs for Wasatch Hall. The following pages list the spaces and square foot amounts for the building, organized into three categories.

- A. Residential Areas include the building's sleeping and toilet/shower rooms. The Building Manager's apartment is included in the category.
- B. Community Areas are the gathering and support spaces for the building's residents, including the Main Lobby, laundry facilities, and lounge spaces.
- C. Building Support includes the custodial and storage facilities for the building. This category also includes a Facilities Maintenance Shop and storage areas that will be located in the basement of Wasatch Hall, that will support all Weber State University housing facilities.



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Space Needs

Weber State University | Wasatch Hall Renovation

Residential Areas

No.	Space	Qty.	NSF/Space	Total NSF	Effic. Factor	Dept. GSF	Building Grossing Factor	GSF
A Residential Areas								
A1	Suite 1 (Two 1-Bed Rooms/1-Bath)	16	340	5,440	1.33	7,235	1.18	8,538
A2	Suite 2 (Two 2-Bed Rooms/1-Bath)	16	510	8,160	1.25	10,200	1.18	12,036
A3	Traditional 2-Bed Room	34	180	6,120	1.33	8,140	1.18	9,605
A4	Common Toilet/Shower Room	2	500	1,000	1.25	1,250	1.18	1,475
A5	Manager Apartment/Office	1	860	860	1.25	1,075	1.18	1,269
Subtotals:				21,580		27,900		32,922

HOUSING OPTIONS. Wasatch Hall will offer three housing options: two suite configurations and traditional dormitory-style two-bed rooms. Suite 1 has two 1-bed rooms (two beds total) with a common entry hall and shared bath. Suite 2 has two 2-bed rooms (four beds total) with a common entry hall and shared bath. The suite common entry hall contains a double-sink vanity outside the toilet/shower room, as well as a small millwork cabinet/countertop that can house a tenant-provided microwave and undercounter refrigerator.

The housing wings with the traditional dormitory two-bed rooms will have a Common Toilet/Shower Room, accessed from the corridor, to serve those residents. The Common Toilet/Shower Rooms will have individual shower stalls with attached dressing/changing cubicles, in addition to toilets/urinals and lavatories.

MANAGER APARTMENT/OFFICE. A Residence Hall Manager's apartment and office are needed in the building. The apartment has one bedroom, with a kitchen, living room and bathroom. The Manager's Office should be adjacent to the Hall's reception desk (located in the Main Lobby) and should have a view into the Main Lobby/Lounge and entry area. It would be beneficial if the Manager's Apartment connected directly with or were adjacent to the office.

ACCESSIBLE UNITS. This program assumes that the Traditional 2-Bed Rooms and Common Toilet/Shower Rooms will be located on the main level. The main level of Wasatch Hall will be the only accessible floor in the building. All main level spaces, including the sleeping rooms and toilet/shower facilities, must comply with accessibility codes.

INFRASTRUCTURE COORDINATION. The housing unit layout must be planned in conjunction with the placement of new longitudinal and transverse shear walls in the building. Toilet rooms should be stacked on the housing wing's three floors for efficiency and streamlining of plumbing lines and mechanical shafts.

HOUSING BED QUANTITY. The University would like to achieve a minimum of 160 housing beds in Wasatch Hall. Preliminary test-fits show that if one floor contains all Traditional 2-Bed Rooms, and the other two floors contain a mix of the two suite types, a total of 164 housing beds will be reached. If the University requires Resident Advisors to have 1-bed rooms, up to six of these beds could be lost, for a total quantity of 158 (assumes one Resident Advisor per floor per wing).

SUMMER CONFERENCE BED QUANTITY. The University would like to increase bed quantities for summer conferences; ideally, the number of beds in each room would double. With regard to plumbing fixture counts and code-required ratios, the two upper levels will be able to double their bed capacity, from 24 to 48 beds on each floor of each wing. The main level will not be able to double its capacity; the plumbing fixture quantities in the Common Toilet / Shower Rooms will limit the increase from 34 to a total of 48 beds per floor per wing. Overall, the building's bed count, per plumbing fixture capacities, can increase from a total of 164 during the school year to 288 during summer conferences.

Community Areas

No.	Space	Qty.	NSF/ Space	Total NSF	Effic. Factor	Dept. GSF	Building Grossing Factor	GSF
B	Community Areas							
B1	Kitchen/Social Lounge	2	280	560	1.33	745	1.18	879
B2	Quiet Study Lounge	2	280	560	1.33	745	1.18	879
B3	Laundry	2	280	560	1.33	745	1.18	879
B4	Main Lobby/Lounge	1	2,000	2,000	1.10	2,200	1.18	2,596
B5	C-Store	1	800	800	1.25	1,000	1.18	1,180
B6	Vending	1	100	100	1.33	133	1.18	157
Subtotals:				4,580		5,567		6,570

RESIDENT SUPPORT SPACES. Wasatch Hall has existing lounge areas that stack at the ends of each of the six housing wings. These spaces will be re-used for functions that support the needs of the residents. Each wing will contain, on separate floors, a Kitchen/Social Lounge, a Quiet Study Lounge, and a Laundry room.

The Kitchen/Social Lounge will have millwork cabinets and countertop with a cooktop, microwave, kitchen sink and refrigerator, as well as several tables with chairs for dining or socializing. This room will also have a TV. The Quiet Study Lounge will contain lounge furniture suitable for reading or laptop use, in addition to study tables with chairs. The Laundry will have five card-operated, heavy-duty, large capacity washers and dryers, as well as folding tables, hanging space and an iron.

MAIN LOBBY/LOUNGE. The central portion of the main floor will house the Main Lobby/Lounge. This is the primary point of entry for the building. It will contain the reception desk, wall-mounted student mailboxes, lounge furnishings, a TV, and tables and chairs suitable for socializing, casual study or dining.

C-STORE. A portion of the existing main lobby will be used for a new C-Store that will provide a local food option for residents. In preliminary discussions, the C-Store is envisioned as offering drinks, snacks and simple pre-packaged/grab-and-go food items that require minimal on-site preparation. Tables and chairs located in the Main Lobby/Lounge will provide dining space for C-Store purchases.

VENDING. An area for up to four vending machines area will provide snacks and drinks to residents at all hours of the day and night. It should be located near the Main Lobby and C-Store, be easily accessed and located, but should not be highly visible.

TOILET ROOMS. Although not listed, two new accessible, single-user toilet rooms should be provided adjacent to the Main Lobby/Lounge and C-Store.



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Space Needs

Weber State University | Wasatch Hall Renovation

Building Support

No.	Space	Qty.	NSF/ Space	Total NSF	Effic. Factor	Dept. GSF	Building Grossing Factor	GSF
C	Building Support							
C1	Custodial Closet	6	80	480	1.40	672	1.18	793
C2	Housekeeping/Custodial Storage	6	180	1,080	1.33	1,436	1.18	1,695
C3	Facilities Maintenance Shop	1	5,000	5,000	1.10	5,500	1.18	6,490
Subtotals:				6,560		7,608		8,978

The custodial and housing support spaces will support the residents in Wasatch Hall; the Facilities Maintenance Shop will support all residence halls on the Weber State University campus.

CUSTODIAL CLOSET. The custodial closets must adhere to Weber State University standards for size and configuration. The program calls for a total of six closets, one for each floor of both housing wings. These could be co-located with the Housekeeping/Custodial Storage rooms, one of which will also be on each floor of both wings. The Custodial Closets will be accessed from the main corridor, and will contain a floor mop sink, wall-mounted, adjustable shelving for supplies, and a wall-mounted mop and broom rack. The rooms will require sufficient open floor space for storage of a custodial cart.

HOUSEKEEPING/CUSTODIAL STORAGE. Housekeeping/Custodial Storage Rooms will be located on each floor of both housing wings. They will contain adjustable shelving for storage of housekeeping supplies, and may have a limited amount of storage space for furnishings and equipment that are most needed adjacent to the housing units. Housekeeping and building storage will primarily be located in the building's basement, somewhat difficult to access due to the building having no elevators. The Housekeeping/Custodial Storage Rooms will provide some storage space that is more convenient.

FACILITIES MAINTENANCE SHOP. The Facilities Maintenance Shop planned for the basement of Wasatch Hall will serve all of the University's Housing facilities, as well as the Shepherd Student Union. It will replace the existing Housing facilities shop located in Promontory Tower. Promontory Tower is slated for demolition after the completion of the Wasatch Hall renovation.

The majority of the currently existing Promontory Tower shop functions will be moved into the new Facilities Maintenance Shop in Wasatch Hall, although some will be combined or co-located with other existing University shops. In order to maximize the use of the Wasatch Hall basement for the shop, the space should be gutted to the greatest extent possible, to provide clear, open space. There are no elevators in Wasatch Hall. A new lift will be installed as part of the renovation project to connect the main level with the basement. This will greatly facilitate shop functions and movement of materials and equipment, and provide accessibility to maintenance shop staff.

The design team will need to determine the best location for the lift, with regard to vehicle access to the building, which is now limited to two points: the north end of the north wing and the south end of the south wing. Currently, when vehicles are required to reach the center portion of the building, they drive across a lawn located along the east side of the north housing wing. A more suitable vehicular access will be required with the location of the Housing facilities shop in the Wasatch Hall basement.

Toilet rooms will need to be installed on the lower level for Maintenance Shop staff.

The inclusion of the Facilities Maintenance Shop in the Wasatch Hall program was decided upon late in the programming process. The current program information is preliminary and will require more detail during project design.

Housing Unit Test Fit Diagram

In the renovation of Wasatch Hall, the University has two goals: 1) providing an economical student housing option in the form of traditional 2-bed rooms, and 2) offering suite options that represent current national trends. Early in the programming process, the design consultants studied various suite configurations to determine which would fit into the building's existing structural bays while providing the University's desired bed count. This planning effort, along with input from University Housing's student preference survey, resulted in the selection of the Suite 1 and Suite 2 configurations represented in this document.

The building and floor layouts that achieved the programmed bed count, using the programmed housing options, are represented in the diagram opposite.

Floor 1 contains Traditional 2-Bed Rooms and the Common Toilet/Shower Rooms accessed from the corridor. It is recommended that each wing of Floor 1 become women-only / men-only, so that the Common Toilet/Shower Room for that wing can be designed for one sex.

Floors 2 and 3 are identical in their layouts, with four each of Suite 1 and Suite 2, stacked so that plumbing lines and mechanical shafts will align.

Each floor in the diagram has a Community Area room, in a stacked location at the end of the wing. Each also has a stacked Housekeeping/Custodial Storage room. The space opposite the Housekeeping/Custodial Storage room in the diagram (180 SF) has not been assigned, but can be used for electrical, telecommunication, custodial or mechanical system space.

ACCESSIBLE HOUSING. Floor 1 will be the only code-defined accessible housing floor in the building. (The building does not have an elevator, so the upper levels will not be accessible.) During the programming process, the team decided to place the Traditional 2-Bed Rooms, rather than housing suites, on the accessible level, for these reasons:

- Wasatch Hall will be the only building in this housing vicinity to offer traditional, 2-bed rooms; future buildings will offer only suite configurations. The University wanted to ensure that traditional, dormitory-style 2-bed housing, which will be its lowest-cost housing option, was available in an accessible location.
- The two future buildings that will be built in this vicinity will contain only accessible housing suites. It was not a priority to offer accessible suites in Wasatch Hall, since they will be available elsewhere.
- Shear walls must be added to Wasatch Hall to increase its seismic structural resistance. Lower levels of a building require a greater quantity of shear resistance than upper levels; traditional 2-bed rooms, with transverse walls located at 2-3 times the frequency of suites, will facilitate achieving the required level of shear resistance on Floor 1.

The Traditional 2-Bed Room, as represented in the Individual Room Diagram in Section 4, complies with accessibility codes. The Laundry facilities are required to be placed on the accessible, main level, as shown in the Housing Unit Diagram opposite.

Space Key

A1	Suite 1 (two 1-bed rooms)
A2	Suite 2 (two 2-bed rooms)
A3	Traditional 2-bed room)
A4	Common Toilet/Shower Room
B1	Kitchen/Social Lounge
B2	Quiet Study Lounge
B3	Laundry
C2	Housekeeping/Custodial Storage

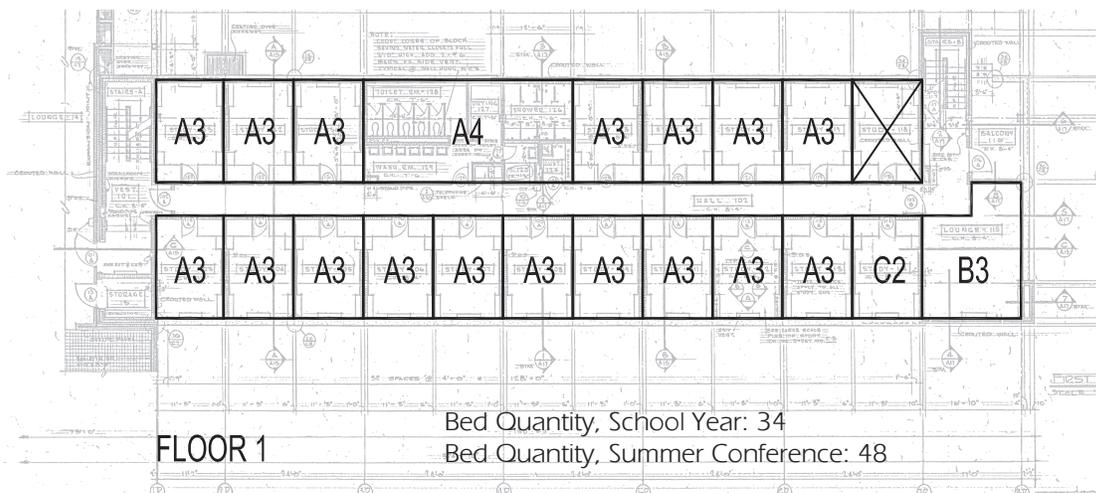
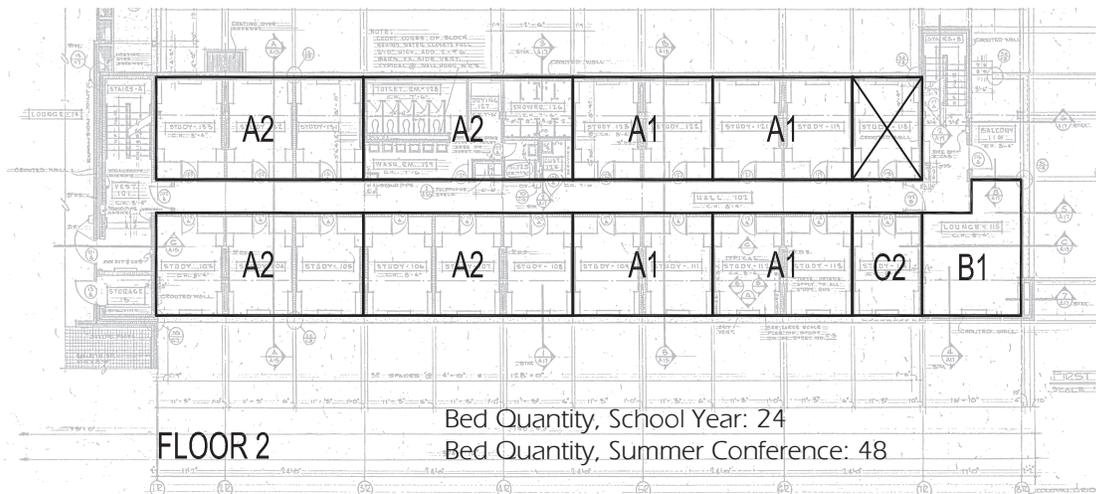
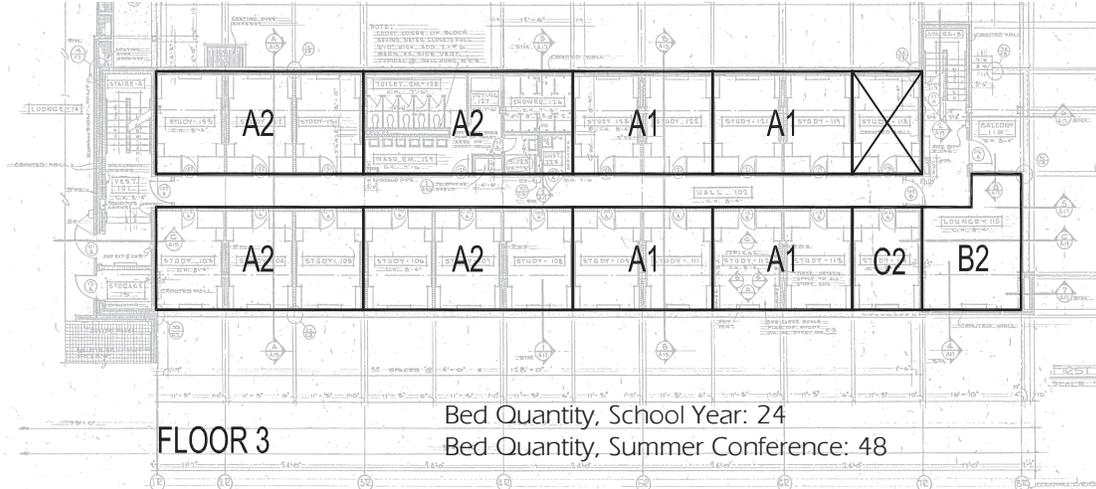


04

Space Needs

Weber State University | Wasatch Hall Renovation

Housing Unit Test Fit Diagram



Note: Diagram represents north housing wing. South housing wing is a mirror image of this layout.

A1.1 - Suite 1, One-Bed Room

Area:	110 NSF
Occupants:	1 resident student
Function:	Sleeping / studying/living space for 1 student
Adjacency:	Within Suite 1, accessed from Entry
Environment:	
Floor:	Carpet
Walls:	Painted impact-resistant gypsum board or masonry
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, operating for egress and ventilation; with window coverings
Equipment:	Solid-core wood entry door with lock Closet alcove, 5' W x 2' D with closet rod and fixed shelf
Furnishings:	Extra-long twin bed; 4' W x 2'D desk; desk chair
Mechanical:	Wall HVAC unit connected to 4-pipe heating and cooling system Sidewall head fire-sprinkler
Electrical:	4 duplex electrical convenience outlets (coordinate locations with furnishings locations) 1 voice/data outlet, adjacent to electrical outlet near desk 1 ceiling-mounted fluorescent light fixture with switch at door Cable TV outlet, adjacent to electrical outlet, in wall opposite bed
Notes:	Sound insulation in walls and above ceiling Students may have small refrigerators, microwaves and TV's in bedroom; electrical system must accommodate loads

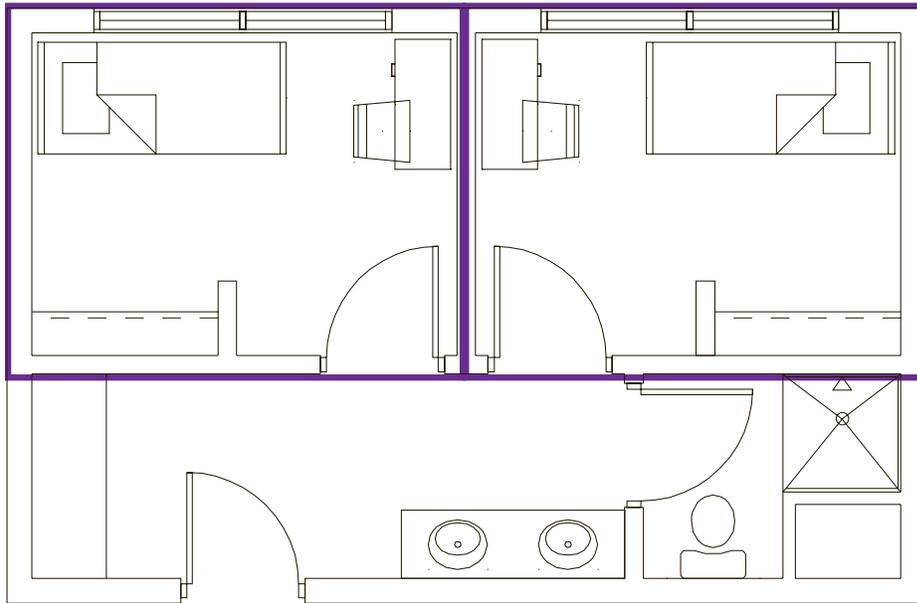


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Space Needs

Weber State University | Wasatch Hall Renovation

A1.1 - Suite 1, One-Bed Room



A1.2 - Suite 1, Toilet / Shower Room

Area:	32 NSF
Occupants:	1 resident student
Function:	Single-user toilet/shower room
Adjacency:	Within Suite 1, accessed from Entry
Environment:	
Floor:	Ceramic tile
Walls:	Ceramic tile
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	None
Equipment:	Solid-core wood entry door with privacy lock Fiberglass shower stall, 3' x 3' Toilet Toilet/shower specialties: shower curtain rod, robe hook, toilet paper dispenser
Furnishings:	Commercial-grade washable nylon shower curtain
Mechanical:	Exhaust fan Plumbing for shower and toilet
Electrical:	1 duplex electrical convenience outlet, GFCI-rated 1 ceiling-mounted fluorescent light fixture with switch at door
Notes:	Sound insulation in walls and above ceiling Vertical stacking with plumbing on other floors

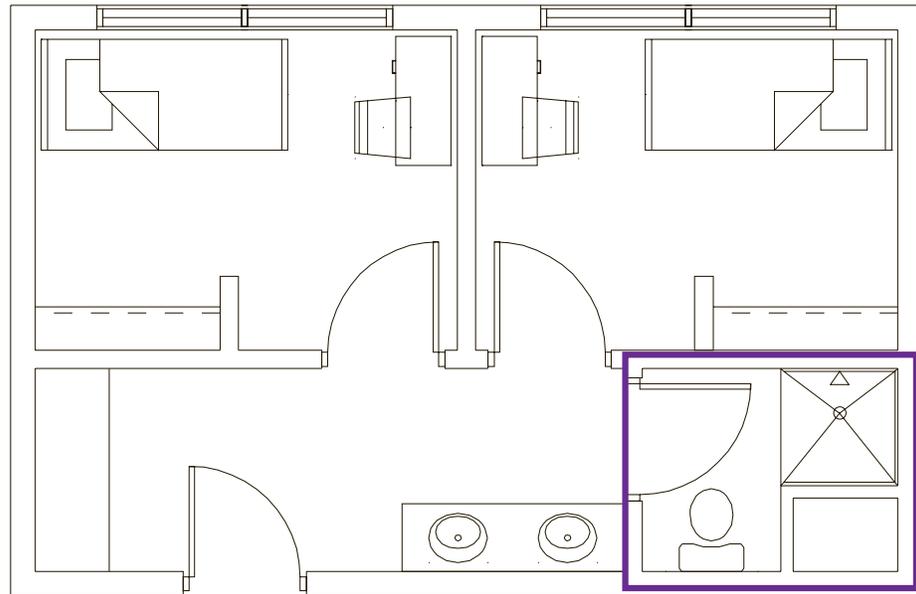


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Space Needs

Weber State University | Wasatch Hall Renovation

A1.2 - Suite 1, Toilet / Shower Room



A1.3 - Suite 1, Entry

Area:	76 NSF
Occupants:	2 resident students
Function:	Suite entry point from main corridor Access to Suite 1 Bedrooms and Toilet/Shower Room Vanity area that supports Toilet/Shower Room Shared kitchenette
Adjacency:	Entry to Suite 1, accessed from wing main corridor
Environment:	
Floor:	Carpet
Walls:	Painted impact-resistant gypsum board
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"; furred down to accommodate fire sprinkler supply line
Windows:	None
Equipment:	Solid-core wood suite entry door with lock Millwork vanity: 5' W x 2' D; plastic laminate countertop, backsplash and cabinet; 4 storage drawers Full-width and height mirror above vanity 2 lavatory sinks Kitchenette: 5' W millwork countertop/cabinet with storage drawers, upper cabinets, and space for undercounter refrigerator
Furnishings:	None
Mechanical:	Exhaust fan Plumbing for lavatories
Electrical:	2 duplex electrical convenience outlets, one at either end of vanity, GFCI-rated 1 ceiling-mounted fluorescent light fixture at suite entry door, with switch at door 1 valance fluorescent light fixture above vanity mirror, with switch at vanity 1 general-purpose wall duplex electrical convenience outlet Electrical convenience outlets for countertop microwave and undercounter refrigerator at kitchenette
Notes:	Sound insulation in walls and above ceiling Vertical stacking with plumbing on other floors

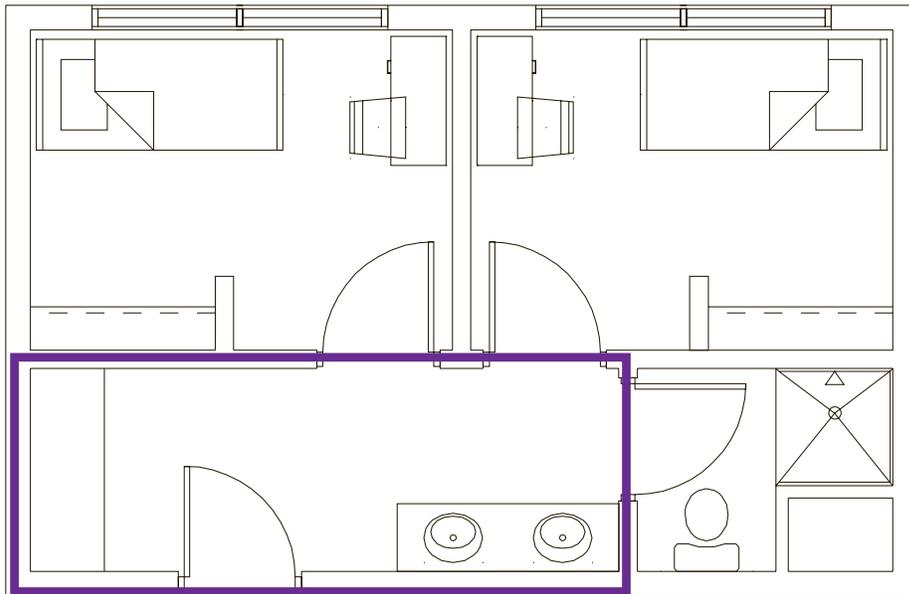


04

Space Needs

Weber State University | Wasatch Hall Renovation

A1.3 - Suite 1, Entry



A2.1 - Suite 2, Two-Bed Room

Area:	170-200 NSF
Occupants:	2 resident students
Function:	Sleeping / studying / living space for 2 students
Adjacency:	Within Suite 2, accessed from Entry
Environment:	
Floor:	Carpet
Walls:	Painted impact-resistant gypsum board or masonry
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, operating for egress and ventilation; with window coverings
Equipment:	Solid-core wood entry door with lock 2 closet alcoves, 5' W x 2' D, with closet rod and fixed shelf
Furnishings:	2 extra-long twin beds; (2) 4' W x 2'D desks; 2 desk chairs
Mechanical:	Wall HVAC unit connected to 4-pipe heating and cooling system Sidewall head fire-sprinkler
Electrical:	8 duplex electrical convenience outlets (coordinate locations with furnishings locations) 2 voice/data outlet, adjacent to electrical outlet near desk 1 ceiling-mounted fluorescent light fixture with switch at door Cable TV outlet, adjacent to electrical outlet
Notes:	Sound insulation in walls and above ceiling Students may have small refrigerators, microwaves and TV's in bedroom; electrical system must accommodate loads

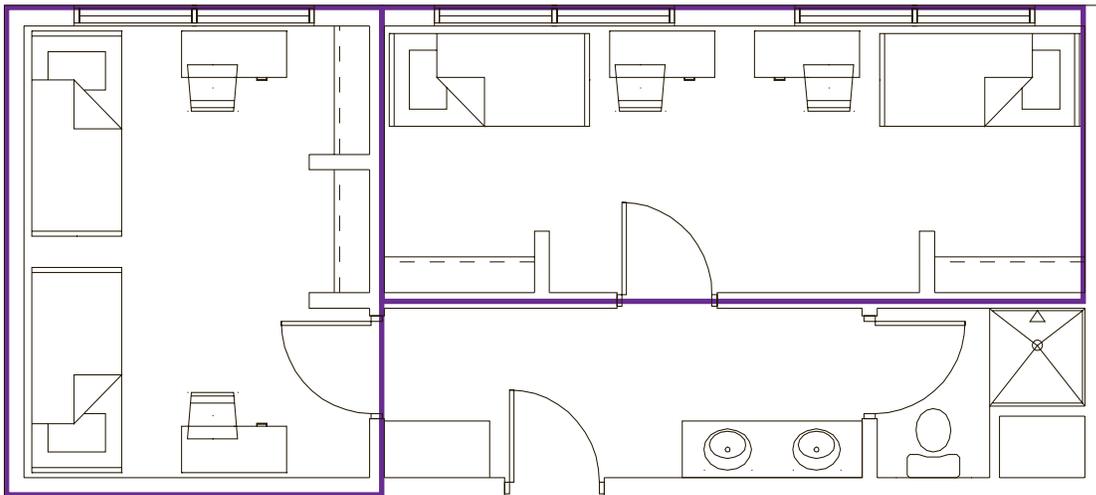


04

Space Needs

Weber State University | Wasatch Hall Renovation

A2.1 - Suite 2, Two-Bed Room



A2.2 - Suite 2, Toilet / Shower Room

Area:	32 NSF
Occupants:	1 resident student
Function:	Single-user toilet / shower room
Adjacency:	Within Suite 2, accessed from Entry
Environment:	
Floor:	Ceramic tile
Walls:	Ceramic tile
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	None
Equipment:	Solid-core wood entry door with privacy lock Fiberglass shower stall, 3' x 3' Toilet Toilet/shower specialties: shower curtain rod, robe hook, toilet paper dispenser
Furnishings:	Commercial-grade washable nylon shower curtain
Mechanical:	Exhaust fan Plumbing for shower and toilet
Electrical:	1 duplex electrical convenience outlet, GFCI-rated 1 ceiling-mounted fluorescent light fixture with switch at door
Notes:	Sound insulation in walls and above ceiling Vertical stacking with plumbing on other floors

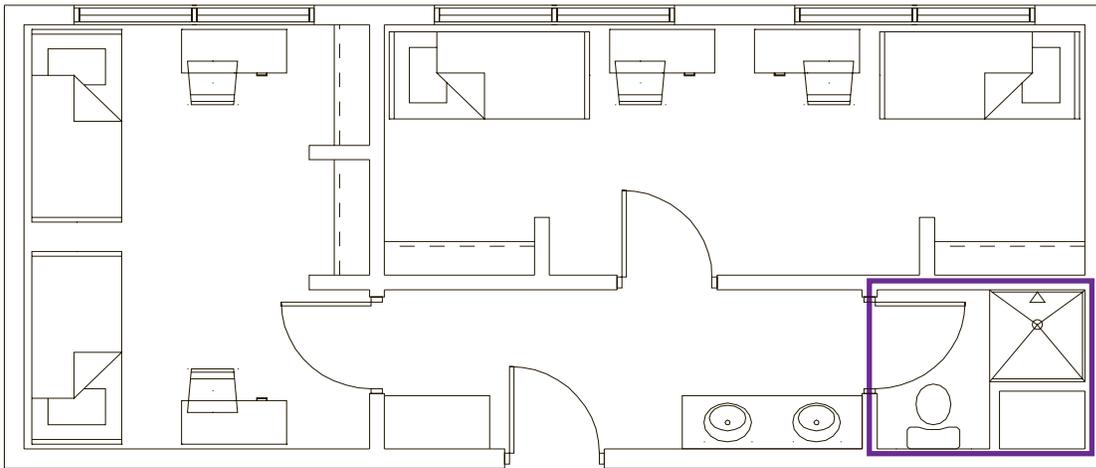


04

Space Needs

Weber State University | Wasatch Hall Renovation

A2.2 - Suite 2, Toilet / Shower Room



A2.3 - Suite 2, Entry

Area:	76 NSF
Occupants:	2 resident students
Function:	Suite entry point from main corridor Access to Suite 2 Bedrooms and Toilet/Shower Room Vanity area that supports Toilet/Shower Room Shared kitchenette
Adjacency:	Entry to Suite 2, accessed from wing main corridor
Environment:	
Floor:	Carpet
Walls:	Painted impact-resistant gypsum board
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"; furred down to accommodate fire sprinkler supply line
Windows:	None
Equipment:	Solid-core wood suite entry door with lock Millwork vanity: 5' W x 2' D; plastic laminate countertop, backsplash and cabinet; 4 storage drawers Full-length and height mirror above vanity 2 lavatory sinks Kitchenette: 5' W millwork countertop/cabinet with storage drawers, upper cabinets, and space for undercounter refrigerator
Furnishings:	None
Mechanical:	Exhaust fan Plumbing for lavatories
Electrical:	2 duplex electrical convenience outlets, one at either end of vanity, GFCI-rated 1 ceiling-mounted fluorescent light fixture at suite entry door, with switch at door 1 valance fluorescent light fixture above vanity mirror, with switch at vanity 1 general-purpose wall duplex electrical convenience outlet Electrical convenience outlets for countertop microwave and undercounter refrigerator at kitchenette
Notes:	Sound insulation in walls and above ceiling Vertical stacking with plumbing on other floors

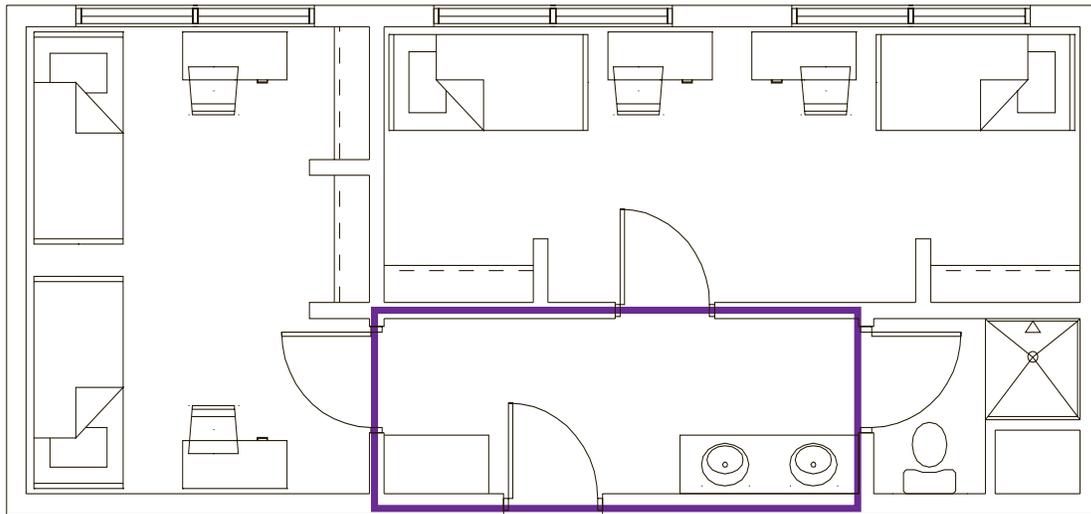


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Space Needs

Weber State University | Wasatch Hall Renovation

A2.3 - Suite 2, Entry



A3 - Traditional Two-Bed Room

Area:	180 NSF
Occupants:	2 resident students
Function:	Sleeping / studying / living space for 2 students (accessible)
Adjacency:	Accessed from main corridor; co-located with other Two-Bed Rooms on main floor of each wing, near Common Toilet/ Shower Room
Environment:	
Floor:	Carpet
Walls:	Painted impact-resistant gypsum board or masonry
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, operating for egress and ventilation; with window coverings
Equipment:	Solid-core wood entry door with lock 2 built-in closets, 5' W x 2' D with closet rod and fixed shelf
Furnishings:	2 extra-long twin beds; (2) 4' W x 2'D desks; 2 desk chairs
Mechanical:	Wall HVAC unit connected to 4-pipe heating and cooling system Sidewall head fire-sprinkler
Electrical:	8 duplex electrical convenience outlets (coordinate locations with bed and desk locations) 2 voice/data outlets, adjacent to electrical outlet near desks 1 ceiling-mounted fluorescent light fixture with switch at door Cable TV outlet, adjacent to electrical outlet
Notes:	Sound insulation in walls and above ceiling Students may have small refrigerators, microwaves and TV's in bedroom; electrical system must accommodate loads

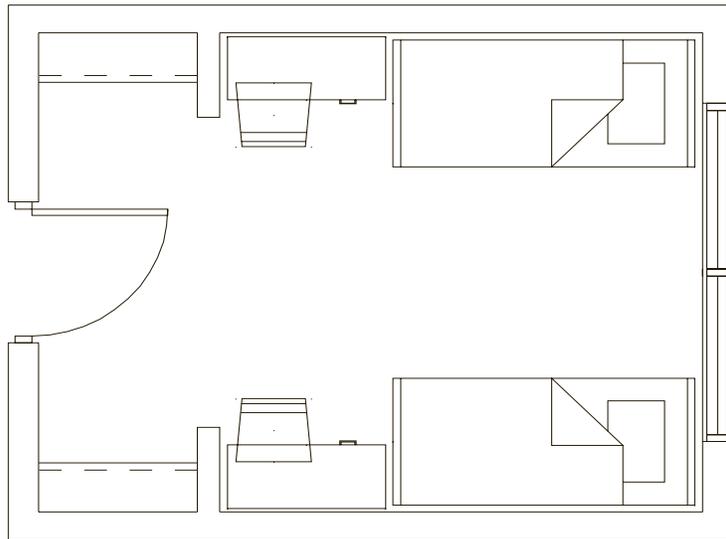


04

Space Needs

Weber State University | Wasatch Hall Renovation

A3 - Traditional Two-Bed Room



A4 - Common Toilet / Shower Room

Area:	500 NSF
Occupants:	Resident students
Function:	Shared-use toilet/shower facility for students in Traditional Two-Bed Rooms, with accessible facilities
Adjacency:	Located with Traditional Two-Bed Rooms on main floor of each wing; accessed from main corridor
Environment:	
Floor:	Ceramic tile
Walls:	Ceramic tile
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	None
Equipment:	Solid-core wood entry door 6 fiberglass shower stalls, 3' x 3', with individual dressing compartments (includes 1 accessible) 5 toilets in stalls-Women's; 2 toilets in stalls/3 urinals-Men's Toilet/shower specialties: shower curtain rods, robe hooks, toilet paper dispensers; paper towel dispensers 5 lavatories; 5 mirrors above lavatories
Furnishings:	Commercial-grade washable nylon shower curtains
Mechanical:	Exhaust fan Plumbing for fixtures
Electrical:	Duplex electrical outlets, GFCI-rated, at each mirror Ceiling-mounted fluorescent light fixtures Valance fluorescent light fixtures above mirrors
Notes:	Sound insulation in walls and above ceiling Vertical stacking with plumbing on other floors These rooms serve accessible sleeping rooms; comply with accessibility codes for quantities and features Code required plumbing fixture ratios: Showers: 1 per 8 occupants Toilets/Urinals: 1 per 10 occupants Lavatories: 1 per 10 occupants

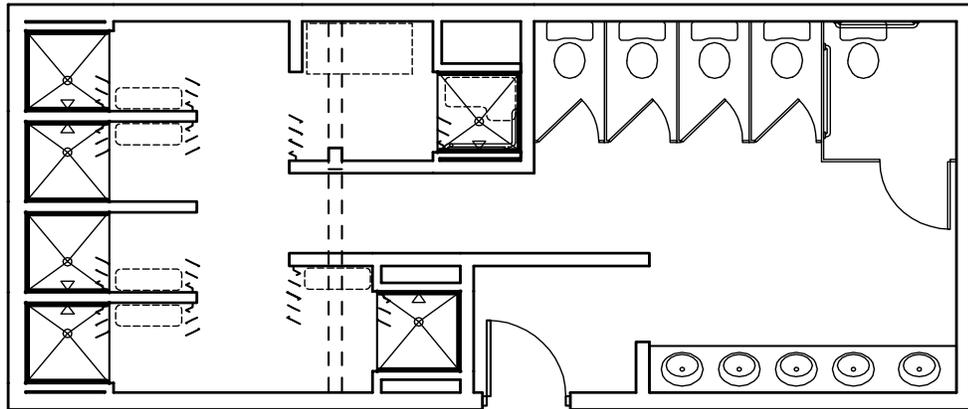


04

Space Needs

Weber State University | Wasatch Hall Renovation

A4 - Common Toilet / Shower Room



A5.1 - Manager Apartment, Bedroom

Area:	160 NSF
Occupants:	Residence Hall Manager
Function:	Sleeping room for RH Manager
Adjacency:	Accessed from hallway within Manager Apartment, adjacent to Manager Apartment Bathroom
Environment:	
Floor:	Carpet
Walls:	Painted gypsum board or masonry
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, operating for egress and ventilation; with window coverings
Equipment:	Solid-core wood entry door Built-in closet, 7' W x 2' D with closet rod, fixed shelf and swing doors
Furnishings:	Double bed; nightstand; dresser
Mechanical:	Wall HVAC unit connected to 4-pipe heating and cooling system Fire-sprinkler
Electrical:	4 duplex electrical convenience outlets (coordinate locations with planned furniture locations) Voice/data outlets, adjacent to electrical outlet 1 ceiling-mounted fluorescent light fixture with switch at door Cable TV outlet, adjacent to electrical outlet
Notes:	Sound insulation in walls and above ceiling

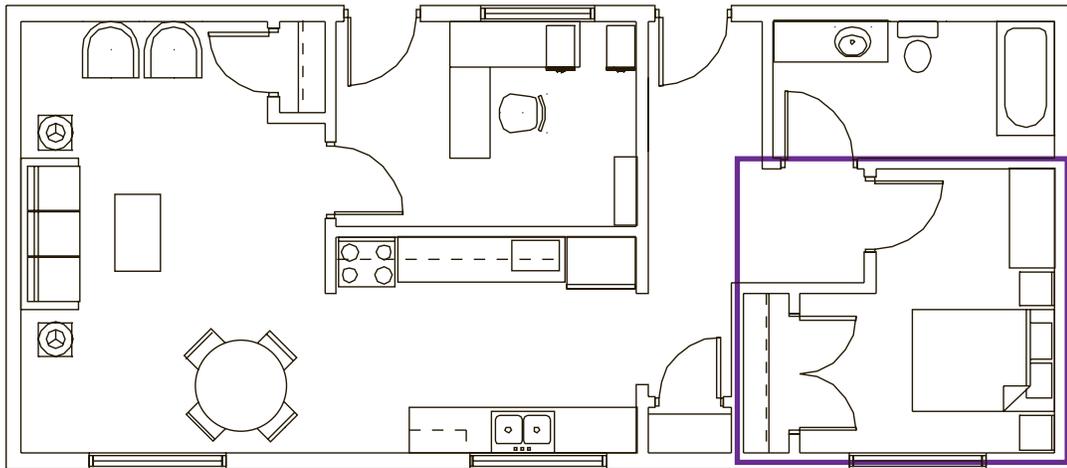


04

Space Needs

Weber State University | Wasatch Hall Renovation

A5.1 - Manager Apartment, Bedroom



A5.2 - Manager Apartment, Bathroom

Area:	60 NSF
Occupants:	Residence Hall Manager
Function:	Private bathroom
Adjacency:	Accessed from hallway within Manager Apartment, near Manager Apartment Bedroom
Environment:	
Floor:	Ceramic tile
Walls:	Ceramic tile
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	None
Equipment:	Solid-core wood entry door with privacy lock Fiberglass bathtub/shower unit Toilet Toilet/shower specialties: shower curtain rod, robe hook, toilet paper dispenser, towel bars Lavatory sink in millwork vanity; full-width mirror above vanity
Furnishings:	Commercial-grade washable nylon shower curtain
Mechanical:	Exhaust fan Plumbing for fixtures
Electrical:	2 duplex electrical convenience outlets, GFCI-rated, at mirror Ceiling-mounted fluorescent light fixture on switch at door Valance fluorescent light fixture above mirror, on switch at door
Notes:	Sound insulation in walls and above ceiling

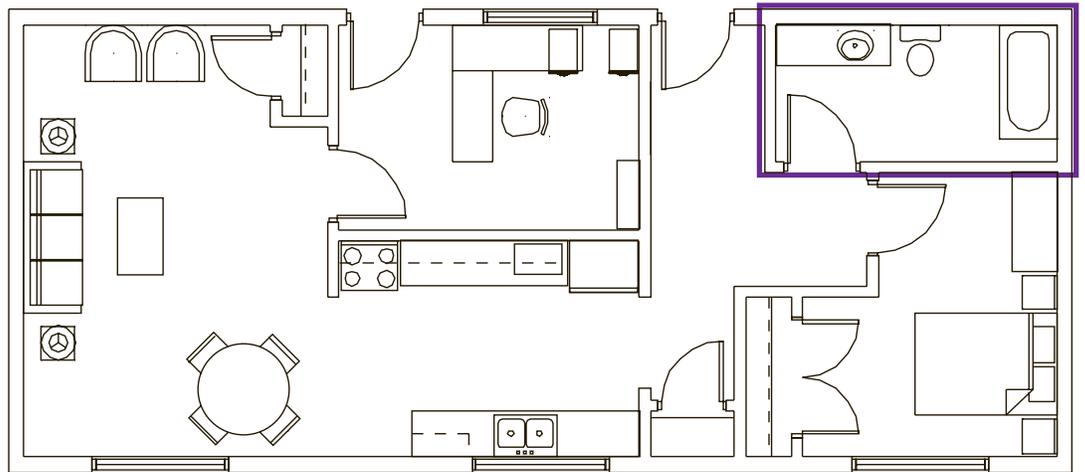


04

Space Needs

Weber State University | Wasatch Hall Renovation

A5.2 - Manager Apartment, Bathroom



A5.3 - Manager Apartment, Living Room

Area:	240 NSF
Occupants:	Residence Hall Manager
Function:	Living/dining area for RH Manager Coat storage closet for RH Manager
Adjacency:	Within Manager Apartment; Living Room adjacent and open to Manager Apartment Kitchen; accessed from main corridor or Residence Hall Lounge. Connects with Residence Hall Office
Environment:	
Floor:	Carpet
Walls:	Painted gypsum board or masonry
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, operating for ventilation; with window coverings
Equipment:	Solid-core wood entry door with lock Built-in coat storage closet, 4' W x 2' D, with rod and fixed shelf
Furnishings:	Sofa/lounge chairs; dining table/chairs for 4 people; TV stand
Mechanical:	Wall HVAC unit connected to 4-pipe heating and cooling system Sidewall head fire-sprinkler
Electrical:	Duplex electrical convenience outlets per code (coordinate locations with planned furniture locations) Voice/data outlet, adjacent to electrical outlet Ceiling-mounted fluorescent light fixtures with switch at door Cable TV outlet, adjacent to electrical outlet
Notes:	Sound insulation in walls and above ceiling

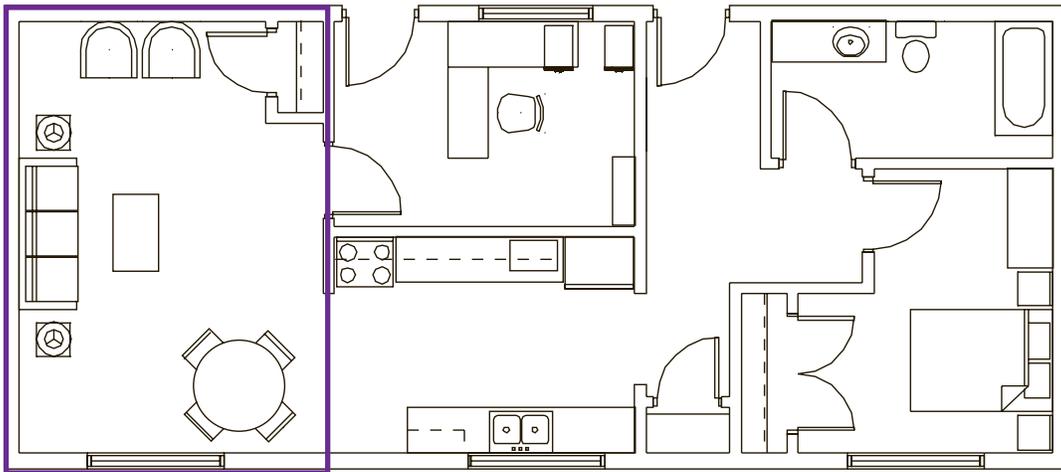


04

Space Needs

Weber State University | Wasatch Hall Renovation

A5.3 - Manager Apartment, Living Room



A5.4 - Manager Apartment, Kitchen

Area:	140 NSF
Occupants:	Residence Hall Manager
Function:	Kitchen for Residence Hall Manager
Adjacency:	Within Manager Apartment, adjacent and open to Manager Apartment Living Room
Environment:	
Floor:	Ceramic or vinyl tile
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, operating for ventilation; with window coverings
Equipment:	Millwork plastic laminate upper and lower storage cabinets with countertop Double-compartment kitchen sink Electric range with oven and vent hood Dishwasher Refrigerator Microwave
Furnishings:	None
Mechanical:	Exhaust fan Plumbing for fixtures
Electrical:	Duplex electrical convenience outlets above countertop, GFCI-rated as required Ceiling-mounted fluorescent light fixture with switch at entry point Electrical outlets for appliances
Notes:	Sound insulation in walls and above ceiling

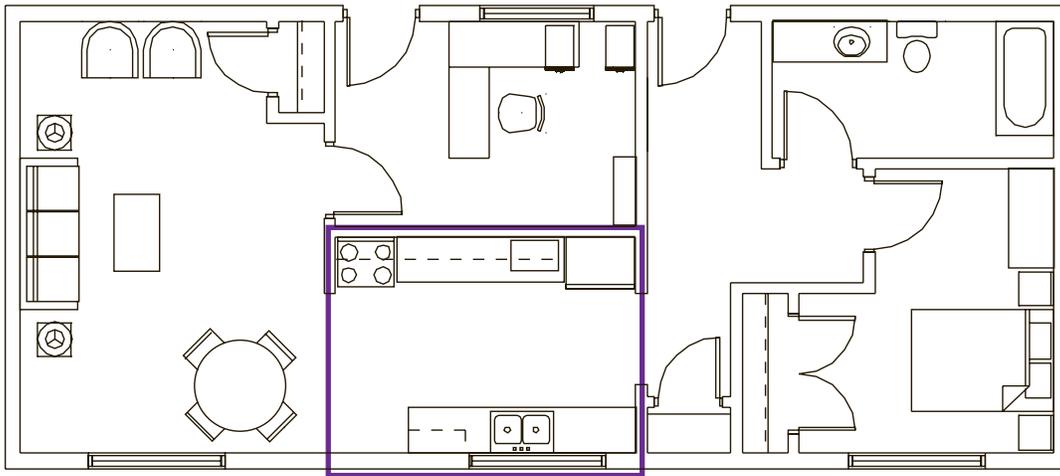


04

Space Needs

Weber State University | Wasatch Hall Renovation

A5.4 - Manager Apartment, Kitchen



A5.5 - Manager Apartment, Office

Area:	120 NSF
Occupants:	Residence Hall Manager
Function:	Private office for RH Manager View into/oversight of Main Lobby/Lounge
Adjacency:	Direct access from Main Lobby/Lounge Direct access to Manager Apartment Direct access to Main Lobby reception desk
Environment:	
Floor:	Carpet
Walls:	Painted gypsum board or masonry
Ceiling:	Lay-in acoustic tile
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	Interior window, minimum 5' W, into Main Lobby/Lounge and reception desk
Equipment:	Solid-core wood entry door with lock
Furnishings:	Desk with chair, bookcase, file/storage cabinet
Mechanical:	HVAC unit connected to 4-pipe heating and cooling system Sidewall head fire-sprinkler
Electrical:	Duplex electrical convenience outlets per code (coordinate locations with planned furniture locations) Voice/data outlet, adjacent to electrical outlet Lay-in fluorescent light fixtures with switch at entry
Notes:	Sound insulation in walls and above ceiling

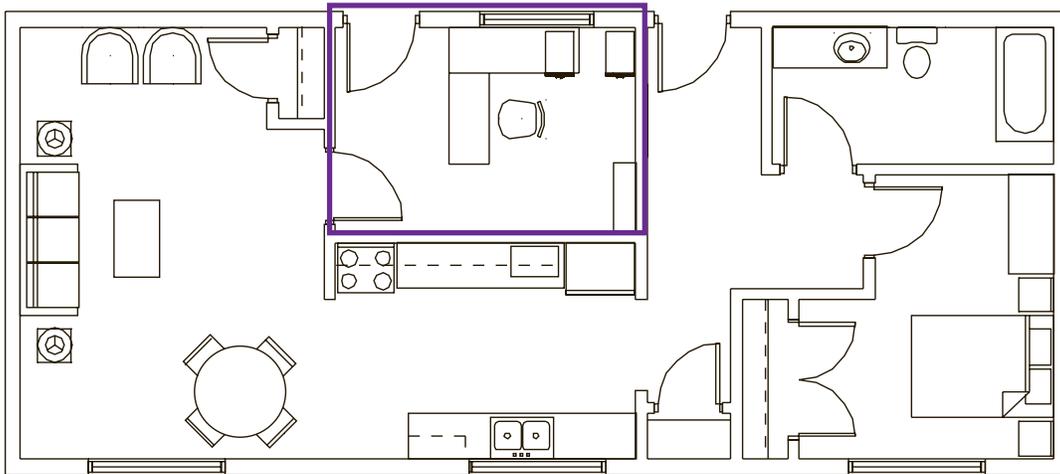


04

Space Needs

Weber State University | Wasatch Hall Renovation

A5.5 - Manager Apartment, Office



B1 - Kitchen / Social Lounge

Area:	280 NSF
Occupants:	Resident students and visitors
Function:	Social lounge space with kitchen facilities
Adjacency:	Located on 1 floor of each wing, within easy access of entire wing's residents
Environment:	
Floor:	Ceramic or vinyl tile
Walls:	Painted impact-resistant gypsum board
Ceiling:	Lay-in acoustic tile
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, with window coverings Interior windows to main corridor
Equipment:	Millwork plastic laminate upper and lower storage cabinets with countertop Double-compartment kitchen sink Electric 4-burner cook-top with vent hood Dishwasher Refrigerator Microwave Solid-core wood entry door with window
Furnishings:	Tables with chairs Wall mounted TV
Mechanical:	Exhaust fan Plumbing for fixtures
Electrical:	Duplex electrical outlets, GFCI-rated as required Electrical outlets for appliances Cable and electrical outlets for wall mounted TV Lay-in fluorescent light fixtures with switch at room entry
Notes:	Sound insulation in walls and above ceiling

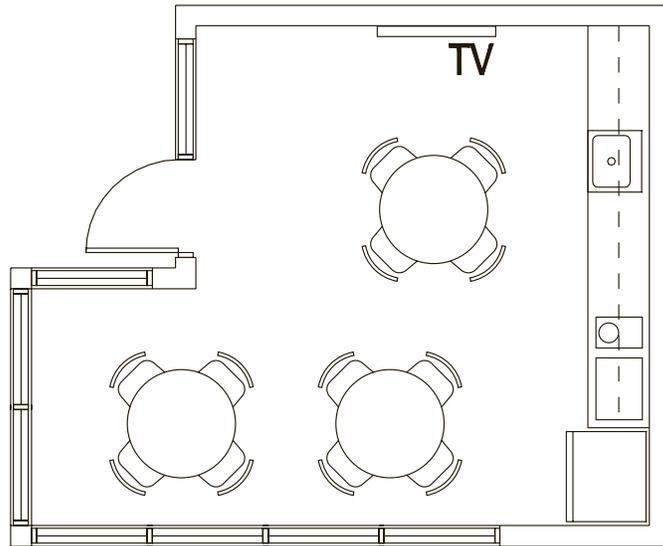


04

Space Needs

Weber State University | Wasatch Hall Renovation

B1 - Kitchen / Social Lounge



B2 - Quiet Study Lounge

Area:	280 NSF
Occupants:	Resident students and visitors
Function:	Group or individual study space
Adjacency:	Located on one floor of each wing, within easy access of entire wing's residents
Environment:	
Floor:	Carpet
Walls:	Painted impact-resistant gypsum board or masonry
Ceiling:	Lay-in acoustic tile
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, with window coverings Interior windows to main corridor
Equipment:	White board, 6' W x 4' H Solid-core wood entry door with windows
Furnishings:	Tables with chairs Lounge seating
Mechanical:	Wall HVAC unit connected to 4-pipe heating and cooling system Sidewall head fire-sprinkler
Electrical:	Duplex electrical convenience outlets per code (coordinate locations with planned furniture locations) Lay-in fluorescent light fixtures with switch at room entry Cable TV outlet, adjacent to electrical outlet
Notes:	Sound insulation in walls and above ceiling

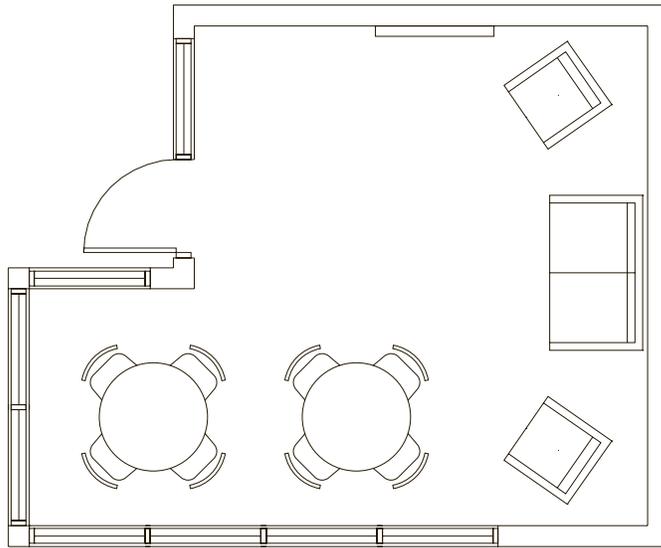


04

Space Needs

Weber State University | Wasatch Hall Renovation

B2 - Quiet Study Lounge



B3 - Laundry

Area:	280 NSF
Occupants:	Resident students
Function:	Fully accessible laundry facilities for residents – clothes washing, drying, folding, sorting and ironing
Adjacency:	Located on main floor of each wing, within easy access of entire wing's residents
Environment:	
Floor:	Ceramic or vinyl tile
Walls:	Painted impact-resistant gypsum board
Ceiling:	Lay-in acoustic tile or painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	New exterior windows required, with window coverings Interior windows to corridor
Equipment:	5 extra-large capacity clothes washers, card operated 5 extra-large capacity clothes dryers, card operated 6' L x 3' D folding table(s) Hanging space Solid core wood entry door with window
Furnishings:	Ironing board
Mechanical:	Exhaust fan Plumbing for washers Vents for clothes dryers
Electrical:	Duplex electrical convenience outlets, GFCI as required Electrical outlets for equipment, GFCI as required Data outlets for card-operated equipment Lay-in or surface-mounted fluorescent light fixtures
Notes:	Comply with accessibility codes

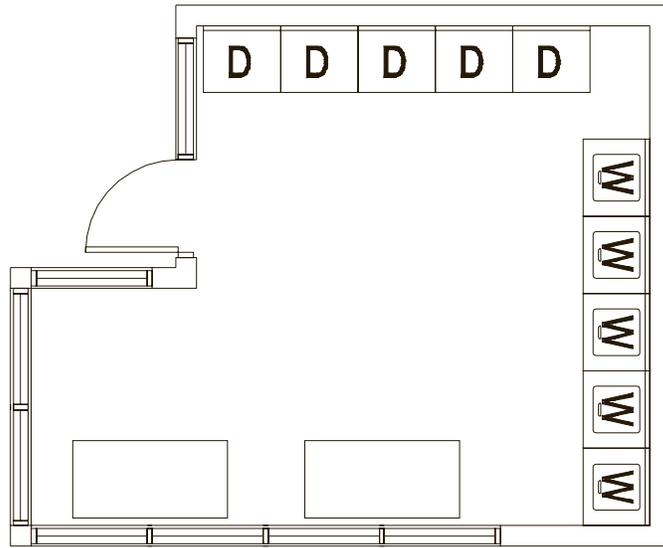


04

Space Needs

Weber State University | Wasatch Hall Renovation

B3 - Laundry



B4 - Main Lobby / Lounge

Area:	2,000 NSF
Occupants:	Resident students and visitors
Function:	Building main entry lobby and reception Central social lounge for building residents Dining space for C-Store
Adjacency:	At primary building entry (existing location) Reception desk directly adjacent to Manager's Office
Environment:	
Floor:	Hard surface at entry and dining areas; carpet in lounge areas; walk-off entry mat at building entries
Walls:	Painted impact-resistant gypsum board or masonry
Ceiling:	Painted gypsum board and lay-in acoustic tile
Clg. Height:	As high as possible within existing structure; approx. 12'-0"
Windows:	New exterior windows and frames, in existing locations; with window coverings
Equipment:	Existing fireplace, refurbished Millwork reception desk, 8' W x 8' D, U-shaped
Furnishings:	Sofas, lounge chairs and occasional tables; game/study tables with chairs; TV; dining table with chairs
Mechanical:	4-pipe heating and cooling system Fire-sprinklers
Electrical:	Duplex electrical convenience outlets per code; locate for laptop computer use at lounge seating Cable TV outlet, adjacent to electrical outlet (Coordinate outlet locations with planned furniture locations) Lay-in fluorescent light fixtures with switch at room entry point Accent lighting at fireplace Accent lighting at dining tables
Notes:	Sound insulation in walls

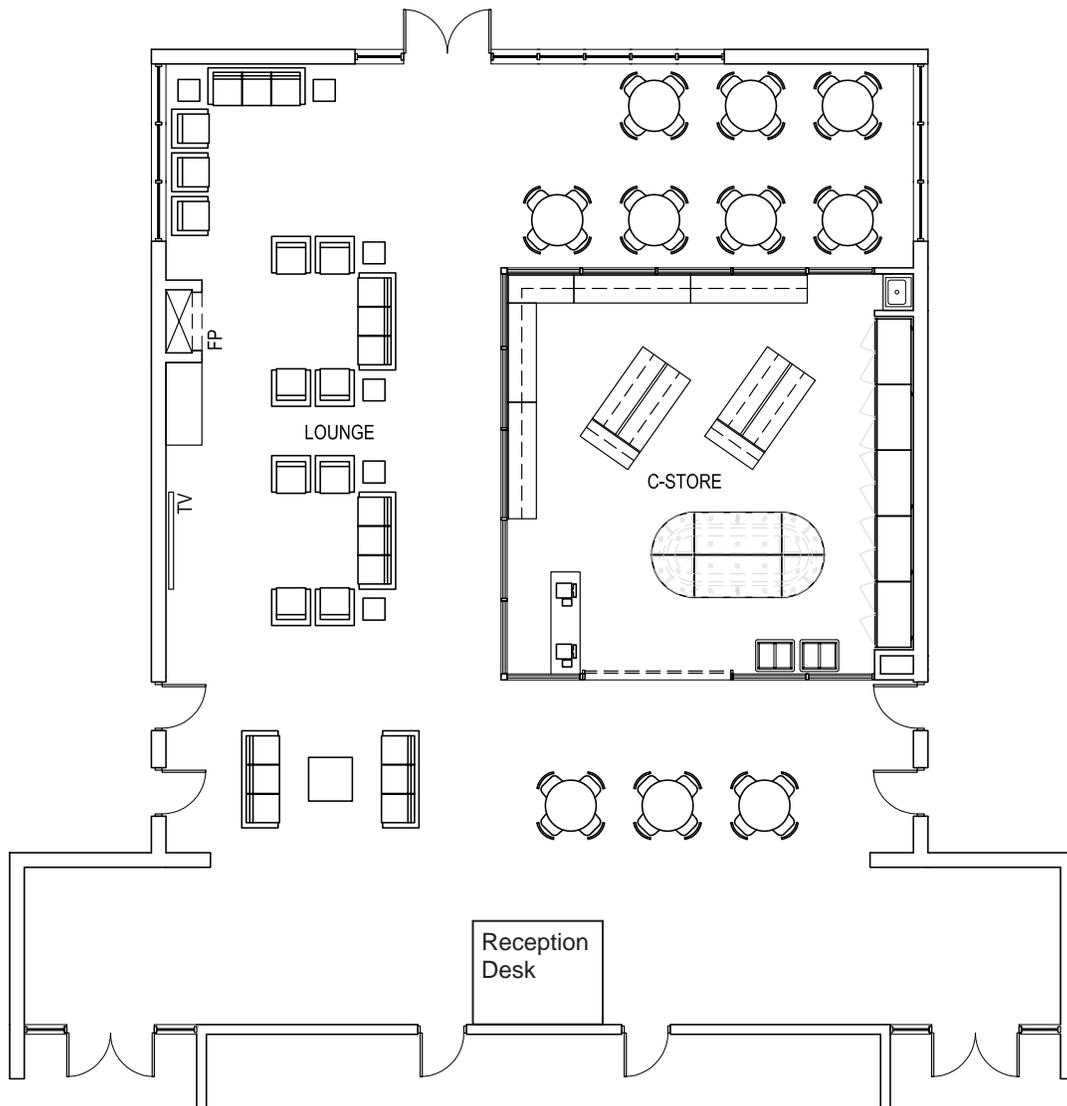


04

Space Needs

Weber State University | Wasatch Hall Renovation

B4 - Main Lobby / Lounge



B5 - C Store

Area:	800 NSF
Occupants:	C-Store staff; resident students and visitors
Function:	Sales of snacks, packaged foods, grab-n-go items, drinks, and sundries to building residents. Light breakfast and dinner food items
Adjacency:	Adjacent to Main Lobby/Lounge at main building entry; highly visible Easy access from building service entry to C-Store entrance
Environment:	
Floor:	Ceramic or vinyl tile
Walls:	Painted impact-resistant gypsum board
Ceiling:	Lay-in acoustic tile
Clg. Height:	As high as possible within existing structure; approx. 12'-0"
Windows:	Glass walls to promote visibility
Equipment:	Display shelves/racks/cases; refrigerated display cases Cashier counter with computer Microwave(s) Millwork plastic laminate cabinets/countertops Sink
Furnishings:	None
Mechanical:	Exhaust fan Plumbing for sink
Electrical:	Duplex electrical convenience outlets Electrical outlets for equipment Lay-in fluorescent light fixtures Food service sales accent lighting
Notes:	Locking glass entry door or grille for after-hours security

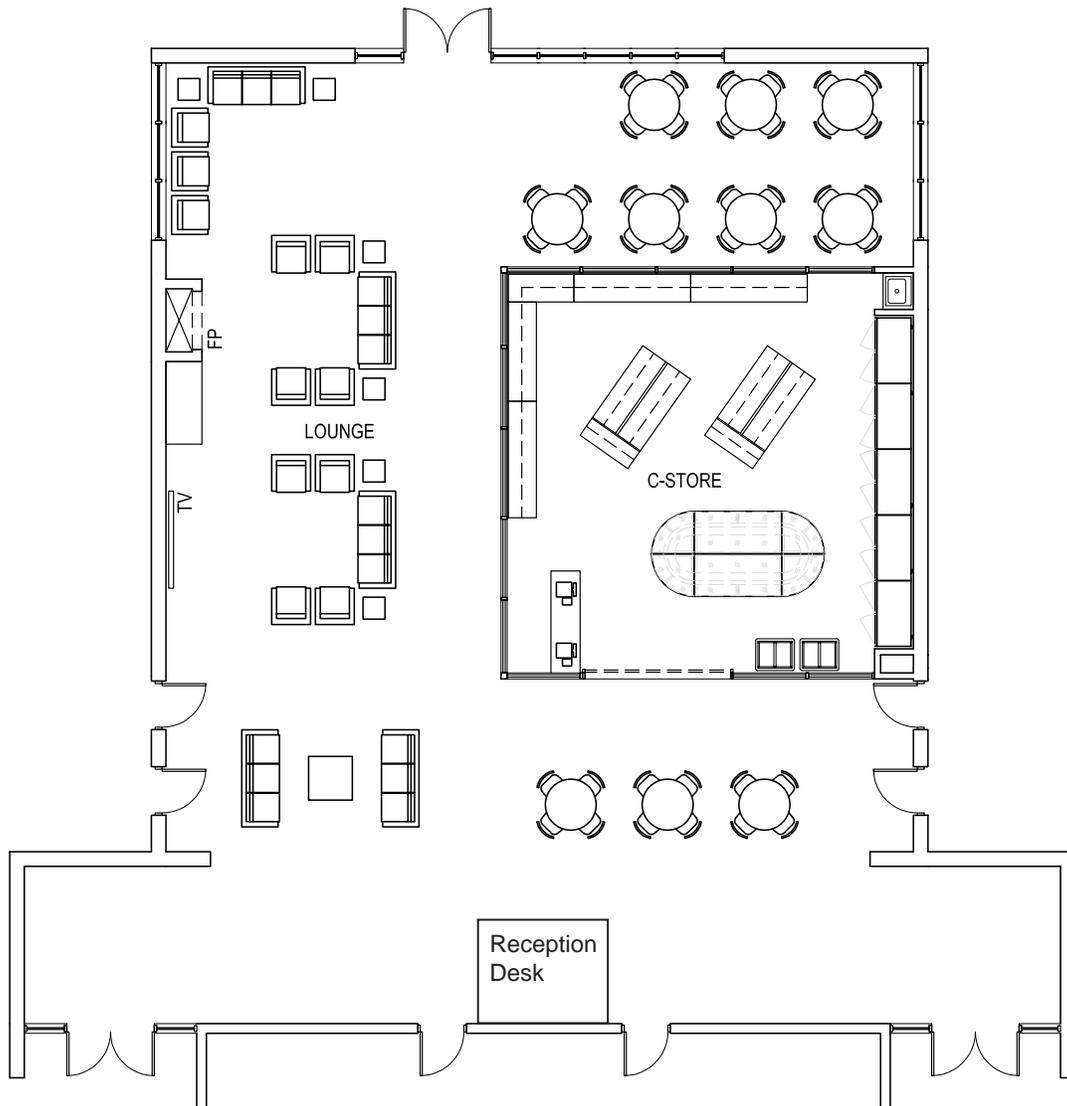


04

Space Needs

Weber State University | Wasatch Hall Renovation

B5 - C Store



B6 - Vending

Area:	100 NSF
Occupants:	None
Function:	Alcove or recess for 3-4 vending machines for 24-hour access by all building residents
Adjacency:	Adjacent to C-Store, Main Lobby/Lounge tables/chairs or Laundry Easy to locate and access, but not highly visible
Environment:	
Floor:	Ceramic or vinyl tile
Walls:	Painted impact-resistant gypsum board
Ceiling:	Lay-in acoustic tile
Clg. Height:	As high as possible within existing structure; approx. 9'-0"
Windows:	None
Equipment:	3 or 4 vending machines, coin or card-operated
Furnishings:	Waste and recycling containers Possible plumbing for some machines; to be coordinated during design
Mechanical:	Exhaust fan
Electrical:	Duplex electrical convenience outlets Electrical outlets for equipment (4 machines) Data outlets for card-operated equipment (4 machines) Lay-in fluorescent light fixtures
Notes:	

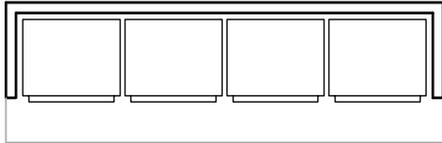


04

Space Needs

Weber State University | Wasatch Hall Renovation

B6 - Vending



C1 - Custodial Closet

Area:	80 NSF
Occupants:	None
Function:	Room for custodial equipment and supplies
Adjacency:	Located on each floor of each wing Accessed from main corridor
Environment:	
Floor:	Vinyl tile
Walls:	Painted impact-resistant gypsum board; 4' H ceramic tile wainscot at floor sink
Ceiling:	Open structure or painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	None
Equipment:	3' x 3' corner floor mop sink Heavy-duty, wall-mounted adjustable steel shelving for custodial supplies Wall-mounted mop and broom rack Solid core wood entry door with lock
Furnishings:	None
Mechanical:	Exhaust fan Plumbing for sink
Electrical:	Duplex electrical convenience outlets, GFCI as required Electrical outlets for charging equipment, GFCI as required Suspended or surface-mounted fluorescent light fixtures
Notes:	

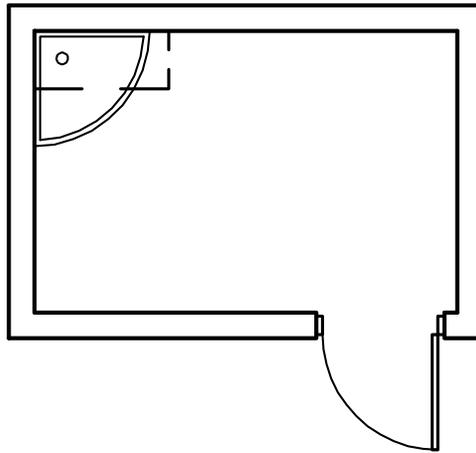


04

Space Needs

Weber State University | Wasatch Hall Renovation

C1 - Custodial Closet



C2 - Housekeeping / Custodial Storage

Area:	180 NSF
Occupants:	None
Function:	Room for storage of housekeeping/custodial supplies or other items
Adjacency:	One Storage Room located on each floor of both wings Accessed from main corridor
Environment:	
Floor:	Vinyl tile
Walls:	Painted impact-resistant gypsum board
Ceiling:	Painted gypsum board
Clg. Height:	As high as possible within existing structure; approx. 8'-0"
Windows:	None
Equipment:	Solid core wood entry door with lock
Furnishings:	Heavy-duty, adjustable steel shelving units for housekeeping supplies or other items
Mechanical:	Minimal
Electrical:	Duplex electrical convenience outlets Suspended or surface-mounted fluorescent light fixtures
Notes:	

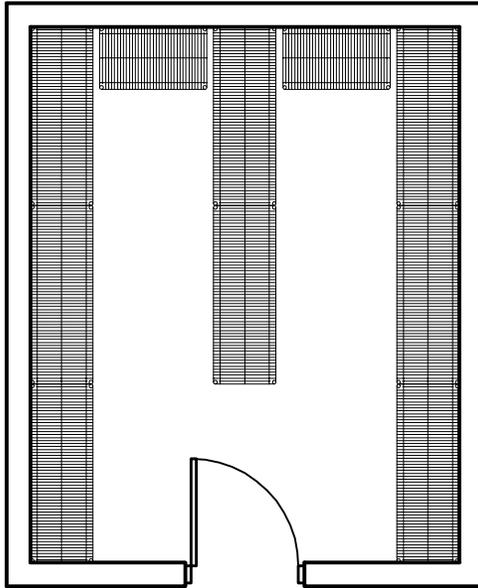


04

Space Needs

Weber State University | Wasatch Hall Renovation

C2 - Housekeeping / Custodial Storage



C3 - Facilities Maintenance Shop and Storage

Area:	5,000 NSF
Occupants:	2 Facilities Maintenance staff members
Function:	General maintenance shop for maintenance and repair of on-campus housing units Wood-working shop for minor wood-working repairs and maintenance Storage of furniture and maintenance materials and equipment
Adjacency:	Adjacent to building vehicle access point Location in basement of Wasatch Hall, served by lift from main level
Environment:	
Floor:	Vinyl tile
Walls:	Painted impact-resistant gypsum board
Ceiling:	Open structure
Clg. Height:	As high as possible within existing structure; approx. 10'-0"
Windows:	Interior window from Maintenance staff office to Shop access point
Equipment:	General shop and woodworking equipment Utility sink
Furnishings:	Maintenance office furnishings (desks, chairs, bookcases, file cabinets, etc.)
Mechanical:	Dust collection and exhaust system for wood-working equipment Plumbing for sink
Electrical:	Electrical outlets for specific pieces of equipment, exact requirements TBD Electrical convenience outlets Electrical and telephone/data outlets for office area computers, printer, fax machine and telephones Ceiling-suspended fluorescent light fixtures
Notes:	Will require walled office for two maintenance staff members, with interior window with view to Shop access point

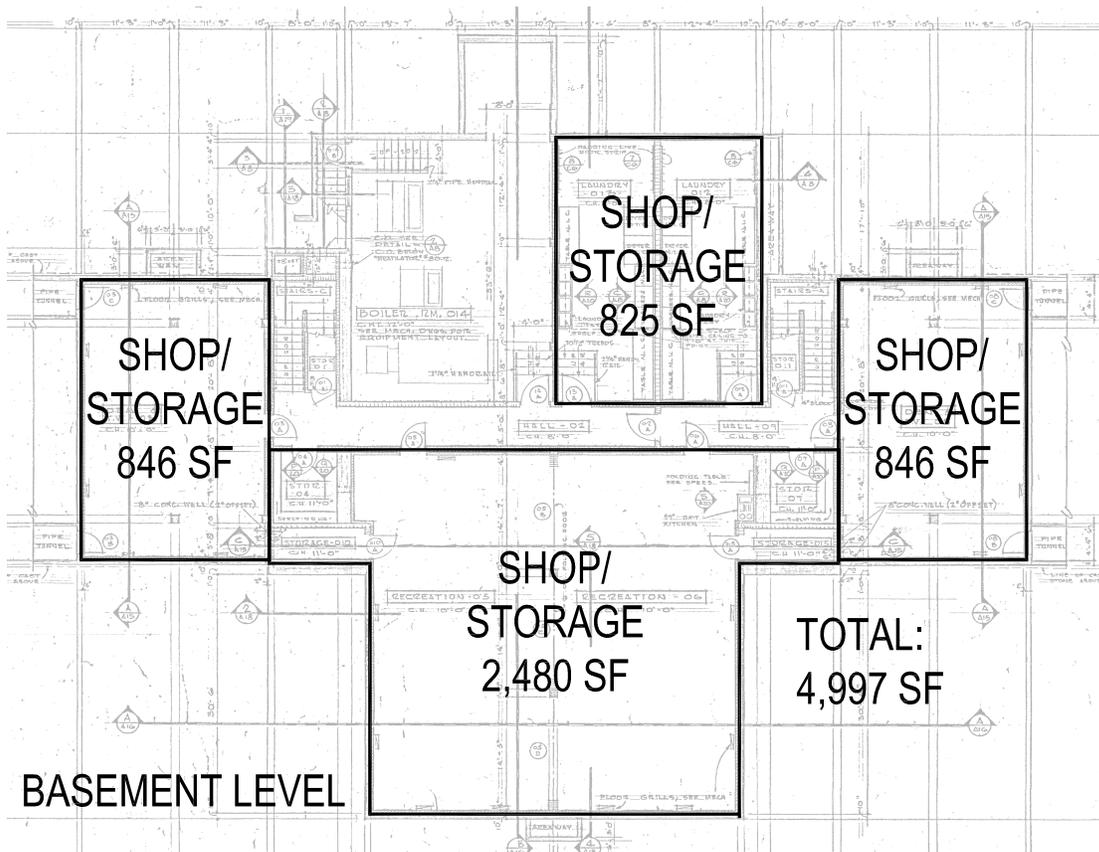


04

Space Needs

Weber State University | Wasatch Hall Renovation

C3 - Facilities Maintenance Shop and Storage



Wood Shop Preliminary Equipment List (to be finalized during design)

- | | |
|----------------------|-------------------|
| 1 Panel Saw | 1 Sanding Station |
| 1 Router Table | 1 Spindle Sander |
| 1 Radial Arm Saw | 2 Band Saws |
| 1 Stroke Sander | 2 Table Saws |
| 1 Compound Meter Saw | 1 Planer |
| 1 3hp Shaper | 1 Sander Planer |
| 1 Large Belt Sander | 1 Scroll Saw |



05

Cost Opinion

Weber State University | Wasatch Hall Renovation

Cost Summary

The total project cost to renovate Wasatch Hall as described in this document is \$11 million, for a bid date of February 2010. This includes a construction cost of \$8.5 million plus related project soft costs.

Section 5 contains a CBE (Capital Budget Estimate) form which shows the breakdown of total project costs, followed by a 16-division estimate of the project construction costs.



Project Name:		Wasatch Hall Renovation	
Agency/Institution:		Weber State University	
Project Manager:			
Cost Summary			
		Cost	
	\$ Amount	Per SF	Notes
Facility Cost	\$ 8,429,226	\$173.85	
Additional Construction Cost	\$ -	\$0.00	
Site Cost	\$ -	\$0.00	
High Performance Building	\$ 126,438	\$2.61	
Total Construction Cost	\$ 8,555,664	\$176.46	
Soft Costs:			
Hazardous Materials	\$ 107,100		
Pre-Design/Planning	\$ -		
Design	\$ 812,788		
Property Acquisition	\$ -		
Furnishings & Equipment	\$ 732,365		
Information Technology:	\$ -		
Utah Art (1% of Construction Budget)	\$ 85,557		
Testing & Inspection	\$ 55,278		
Contingency	\$ 402,340		
Moving/Occupancy	\$ 75,000		
Builder's Risk Insurance (0.15% of Construction Budget)	\$ 12,833		
Legal Services (0.2% of Construction Budget)	\$ 17,111		
DFCM Management	\$ 50,000		
User Fees	\$ 50,000		
Commissioning	\$ 36,365		
Other Costs	\$ 15,000		
Total Soft Costs	\$ 2,451,737	\$50.57	
TOTAL PROJECT COST	\$ 11,007,402	\$227.02	
Previous Funding	\$ -		
Other Funding Sources (Identify in note)	\$ 11,007,402		
REQUEST FOR STATE FUNDING	\$ (0)		
Project Information			
Gross Square Feet	48,486	Base Cost Date	1-Feb-09
Net Square Feet	48,486	Estimated Bid Date	1-Feb-10
Net/Gross Ratio	100%	Est. Completion Date	1-Feb-10
		Last Modified Date	
		Print Date	3/4/2009



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Cost Opinion

Weber State University | Wasatch Hall Renovation

Project Name:		Wasatch Hall Renovation					
Agency/Institution:		Weber State University					
Project Manager:							
Description	Explanation	Units	Unit Cost	Cost	Escalated Cost		
Facility Cost		GSF					
New Facility Cost Details:							
New Facility Construction Phase I		48,486	\$ 139.31	\$ 8,429,226	\$ 8,429,226		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
Subtotal - New Facility Costs		48,486		\$ 8,429,226	\$ 8,429,226		
Remodel Facility Cost Details:							
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
Subtotal - Remodel Facility Costs		-		\$ -	\$ -		
TOTAL FACILITY COST		48,486		\$ 8,429,226	\$ 8,429,226		
Additional Construction Cost Details:							
Connection Fees				\$ -	\$ -		
0		-	\$ -	\$ -	\$ -		
0	above & beyond high performance	-	\$ -	\$ -	\$ -		
0		-	\$ -	\$ -	\$ -		
0		-	\$ -	\$ -	\$ -		
				\$ -	\$ -		
TOTAL ADDITIONAL CONSTRUCTION COST				\$ -	\$ -		
Site Cost Details:							
Site Development - Ph. I		-	\$ -	\$ -	\$ -		
Site Utilities - Ph. I		-	\$ -	\$ -	\$ -		
Site Development/Utilities - Ph. II		-	\$ -	\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
				\$ -	\$ -		
TOTAL SITE COST				\$ -	\$ -		
HIGH PERFORMANCE BUILDING	If N/A, change YES to NO. To supercede 1-1/2% calculation enter amount in unit cost	YES		\$ 126,438	\$ 126,438		
TOTAL CONSTRUCTION COST				\$ 8,555,664	\$ 8,555,664	176.4564	
				\$ 176			
OTHER PROJECT INFORMATION:							
Total Net Square Feet:	48,486						
Base Cost Date Ph. I:	2/1/2009						
	2/1/2010						
Estimated Completion Date:	2/1/2010						
Last Modified Date:							
Inflation Escalation Factor Ph I:	0.00%						
Location Factor Included:	0.00%						
Hazardous Materials Cost Details:							
Pre-Construction Survey							
Plan and Monitoring	Ph. I	1	\$ 7,100	\$ 7,100	\$ 7,100		
Abatement/Removal	Ph. I	1	\$ 100,000	\$ 100,000	\$ 100,000		
TOTAL HAZARDOUS MATERIALS COST				\$ 107,100	\$ 107,100		

Project Name:		Wasatch Hall Renovation					
Agency/Institution:		Weber State University					
Project Manager:							
Description	Explanation	Units	Unit Cost	Cost	Escalated Cost		
Pre-Design/Planning:							
Planning Fund Reimbursement				\$ -			
				\$ -			
Programming							
Environmental Assessment				\$ -			
				\$ -			
Geotechnical Investigation/Surveys				\$ -			
				\$ -			
TOTAL PRE-DESIGN/PLANNING COST				\$ -			
Design Costs:							
A/E Design Fees							
		7.00%	\$ 8,555,664	\$ 598,897			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
Total A/E Design Fees				\$ 598,897			
				\$ -			
Additional Printing Costs				\$ -			
High Performance Design	If N/A, change YES to NO. To supercede 1/4% calculation enter amount in unit cost	YES		\$ 213,892			
Value Management Costs							
TOTAL DESIGN COST				\$ 812,788			
Property Acquisition:							
				\$ -			
				\$ -			
				\$ -			
				\$ -			
TOTAL PROPERTY ACQUISITION COST				\$ -			
Furnishings & Equipment Costs:							
Furnishings Detail:							
Furnishings		1	\$ 684,453	\$ 684,453			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
Total Furnishings				\$ 684,453			
Equipment Detail:							
				\$ -			
				\$ -			
				\$ -			
Total Equipment				\$ -			
FF&E Design Costs	Ph. I	1	\$ 47,912	\$ 47,912			
TOTAL FURNISHINGS & EQUIPMENT COSTS				\$ 732,365			
Information Technology Costs:							
				\$ -			
				\$ -			
TOTAL INFORMATION TECHNOLOGY COST				\$ -			



05

Cost Opinion

Weber State University | Wasatch Hall Renovation

Project Name:		Wasatch Hall Renovation					
Agency/Institution:		Weber State University					
Project Manager:							
Description	Explanation	Units	Unit Cost	Cost	Escalated Cost		
UTAH ART	If N/A, change YES to NO. To supercede 1% calculation enter amount in unit cost	YES		\$ 85,557			
Testing & Inspection Costs:							
Building Code Inspection		1	\$ 12,500	\$ 12,500			
Material Testing		1	\$ 42,778	\$ 42,778			
Special Inspections		-	\$ -	\$ -			
TOTAL TESTING & INSPECTION COSTS				\$ 55,278			
Moving/Occupance Costs:							
		1	\$ 75,000	\$ 75,000			
				\$ -			
				\$ -			
TOTAL MOVING/OCCUPANCY COSTS				\$ 75,000			
DFCM Management:							
		1	\$ 50,000.00	\$ 50,000			
				\$ -			
				\$ -			
				\$ -			
				\$ -			
TOTAL DFCM MANAGEMENT				\$ 50,000			
User Fees:							
Weber state management fee		1	\$ 50,000	\$ 50,000			
				\$ -			
				\$ -			
				\$ -			
TOTAL USER FEES				\$ 50,000			
Commissioning:							
		48,486	\$ 0.75	\$ 36,365			
				\$ -			
				\$ -			
TOTAL COMMISSIONING COSTS				\$ 36,365			
Other Costs:							
Energy Study		1	\$ 15,000	\$ 15,000			
				\$ -			
				\$ -			
TOTAL OTHER COSTS				\$ 15,000			
Previous Funding:							
(Only show state appropriated funding & include costs covered by that funding in appropriate category.)							
				\$ -			
				\$ -			
TOTAL PREVIOUS FUNDING				\$ -			
Other Funding Sources:							
(List and describe each source)							
Donations/Other Non-State Funds		1		\$ 11,007,402			
				\$ -			
				\$ -			
				\$ -			
TOTAL OTHER FUNDING SOURCES				\$ 11,007,402			

STUDENT HOUSING
 WEBER STATE UNIVERSITY
 MHTN ARCHITECTS
 Mick Gaviglio
 COST OPINION BY MHTN COST CONTROL

PREPARATION DATE
 Feb-09
 48060

WASATCH HALL RENOVATION	COST PER SF	TOTAL
SITE WORK	\$ 14.39	\$ 691,361
CONCRETE	\$ 9.27	\$ 445,686
MASONRY	\$ 2.34	\$ 112,223
METALS	\$ 2.60	\$ 125,145
WOODS AND PLASTICS	\$ 3.26	\$ 156,460
THERMAL AND MOISTURE PROTECTION	\$ 10.20	\$ 490,163
DOORS AND WINDOWS	\$ 8.67	\$ 416,663
FINISH	\$ 30.64	\$ 1,472,548
SPECIALTIES	\$ 1.15	\$ 55,045
EQUIPMENT	\$ 1.07	\$ 51,447
ELEVATOR	\$ 2.91	\$ 140,000
MECHANICAL	\$ 38.00	\$ 1,826,280
ELECTRICAL	\$ 22.40	\$ 1,076,632
SUB TOTAL	\$ 146.89	\$ 7,059,653
UNDEFINED BUILDING ELEMENTS	\$ 14.69	10.00% \$ 705,965
GENERAL CONDITIONS	\$ 7.34	5.00% \$ 352,983
BONDING	\$ 1.32	0.90% \$ 63,537
PROFIT AND OVERHEAD	\$ 5.14	3.50% \$ 247,088
CONSTRUCTION TOTAL	\$ 175.39	\$ 8,429,226



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Cost Opinion

Weber State University | Wasatch Hall Renovation

SITE WORK

DEMOLITION

LANDSCAPE DEMOLITION	50962 SF	\$	0.75	\$	38,221
BUILDING DEMOLITION GUT INTERIOR	48060 SF	\$	5.00	\$	240,300
REMOVE EXISTING WINDOWS	6985 SF	\$	2.00	\$	13,970
REMOVE ROOFING - BUILT UP WITH BALLAST	17164 SF	\$	3.00	\$	51,492

EARTH WORK

CLEAR AND ROUGH GRADE	50962 SF	\$	0.40	\$	20,385
ALLOW FOR SITE CUT AND FILL	1887 CY	\$	9.00	\$	16,987
FINISH GRADE	50962 SF	\$	0.25	\$	12,740
HAUL OFF SITE	1887 CY	\$	12.00	\$	22,650

SITE IMPROVEMENTS

HARDSCAPE, PAVING ALLOW 30% OF SITE	15289 SF	\$	6.00	\$	91,731
SOFTSCAPE, PLANTING ALLOW 70% OF SITE	35673 SF	\$	2.00	\$	71,347
FLAGPOLE 30'	1 EA	\$	3,850.00	\$	3,850
PIPE BOLLARDS ACCESS CONTROL ALLOW)	6 EA	\$	200.00	\$	1,200
SIGNAGE	1 SUM	\$	3,500.00	\$	3,500
TREES 2 1/2" ALLOW 1 PER 3000 SF SITE	12 EA	\$	300.00	\$	3,567

SITE UTILITIES

WATER DISTRIBUTION	150 LF	\$	38.00	\$	5,700
SITE DRAINAGE	15289 SF	\$	0.50	\$	7,644
WATER METER AND VAULT	48060 SF	\$	0.25	\$	12,015
ELECTRICAL DISTRIBUTION BY ELECTRIC CO	150 LF	\$	125.00	\$	18,750
GAS DISTRIBUTION BY GAS CO.	150 LF	\$	29.00	\$	4,350
SITE LIGHTING	50962 SF	\$	1.00	\$	50,962
				\$	691,361

CONCRETE				
CONTINUOUS FOOTING	5 CY	\$ 400.00	\$	2,000
SPOT FOOTINGS	12 CY	\$ 400.00	\$	4,800
ELEVATOR PIT, CONCRETE	2 EA	\$ 12,500.00	\$	25,000
PATCH SLAB FOR NEW FINISH	48060 SF	\$ 0.50	\$	24,030
ALLOW FOR STRUCTURAL UPGRADES	48060 SF	\$ 8.00	\$	384,480
FOUNDATION WALL AT ELEVATOR	192 SF	\$ 28.00	\$	5,376
				<u>\$ 445,686</u>
MASONRY				
EXTERIOR FINISH CLEAN EXISTING	6985 SF	\$ 1.00	\$	6,985
NEW ELEVATOR ENCLOSURES	2 EA	\$ 50,000.00	\$	100,000
PATCH AND REPAIR	10477 SF	\$ 0.50	\$	5,239
				<u>\$ 112,223</u>
METALS				
COLUMNS WF SHAPES	24 TON	\$ 3,700.00	\$	88,911
ROOF STRUCTURE JOIST ALLOWANCE	5 TON	\$ 3,700.00	\$	18,500
MISC. STEEL .1 LB PER SF	2.4 TON	\$ 3,700.00	\$	8,891
WALL CAP	655 LF	\$ 13.50	\$	8,843
				<u>\$ 125,145</u>
WOOD AND PLASTICS				
WOOD TOP PLATE	655 LF	\$ 7.00	\$	4,585
MISC. ROUGH CARPENTRY	48060 SF	\$ 0.30	\$	14,418
CASEWORK AT SUITES	408 LF	\$ 200.00	\$	81,641
VANITY SOLID SURFACE	68 LF	\$ 275.00	\$	18,709
CASEWORK AT MAIN LOBBY	5672 SF	\$ 4.00	\$	22,688
MISC. CASEWORK & FINISH CARPENTRY	48060 SF	\$ 0.30	\$	14,418
				<u>\$ 156,460</u>
THERMAL AND MOISTURE PROTECTION				
EXTERIOR RIGID WALL EXTERIOR	4000 SF	\$ 2.00	\$	8,000
SOUND INSULATION (ALLOW 50% OF WALL)	84105 SF	\$ 0.50	\$	42,053
ROOFING - SINGLE PLY	17164 SF	\$ 4.00	\$	68,656
ROOF INSULATION BAT	17164 SF	\$ 3.00	\$	51,492
ROOFING SPECIALTIES	17164 SF	\$ 0.20	\$	3,433
* SOFFIT FINISH, EIFS OR METAL	6500 SF	\$ 45.00	\$	292,500
ALLOW FOR SEALANT	24030 LF	\$ 1.00	\$	24,030
				<u>\$ 490,163</u>
DOORS AND WINDOWS				
DOORS EXTERIOR METAL				
* COMPLETE HARDWARE, 6' X 7'	6 EA	\$ 3,280.00	\$	19,680
DOORS INTERIOR WOOD OR HOLLOW METAL				
COMPLETE HARDWARE, PAINTED	80 EA	\$ 900.00	\$	72,090
CARD READERS	14 EA	\$ 3,250.00	\$	45,500
GLASS AND GLAZING	6985 SF	\$ 40.00	\$	279,393
				<u>\$ 416,663</u>



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Cost Opinion

Weber State University | Wasatch Hall Renovation

FINISH

EXTERIOR STUDS 6"	10640 SF	\$	3.00	\$	31,920
INTERIOR WALLS STUDS GYP. TWO SIDES	84105 SF	\$	8.00	\$	672,840
GYP FINISHED AT EXTERIOR WALL	10640 SF	\$	2.00	\$	21,280
FLOOR FINISH CARPET AND BASE	48060 SF	\$	3.00	\$	144,180
FLOOR FINISH CERAMIC TILE & BASE	4806 SF	\$	15.00	\$	72,090
FLOOR FINISH SEALED CONCRETE	4806 SF	\$	2.00	\$	9,612
WALL FINISH UPGRADED 20%	17885 SF	\$	0.50	\$	8,943
WALL FINISH CERAMIC TILE 10%	14418 SF	\$	14.00	\$	201,852
WALL FINISH PAINT	178850 SF	\$	0.55	\$	98,368
CEILING FINISH ALLOW	38448 SF	\$	3.50	\$	134,568
CEILING SUSPENDED GYPSUM	9612 SF	\$	8.00	\$	76,896
				\$	1,472,548

SPECIALTIES

FIRE EXTINGUISHER IN CABINET	20 EA	\$	200.00	\$	4,000
SHOWER STALLS	17 EA	\$	1,245.00	\$	21,165
BATHROOM SPECIALTIES	20 EA	\$	980.00	\$	19,600
JANITOR SHELVING	2 EA	\$	180.00	\$	360
TRAFFIC MATT	45 SF	\$	22.00	\$	990
SIGNAGE ALLOW	85 EA	\$	105.00	\$	8,930
				\$	55,045

EQUIPMENT

WINDOW BLINDS	6985 SF	\$	2.50	\$	17,462
ROOM EQUIPMENT	36 EA	\$	750.00	\$	27,000
MISC. SPECIAL EQUIPMENT	6985 SF	\$	1.00	\$	6,985
				\$	51,447

MECHANICAL

PLUMBING AND ROOF DRAINS	48060 SF	\$	6.00	\$	288,360
HVAC	48060 SF	\$	28.00	\$	1,345,680
FIRE SPRINKLER	48060 SF	\$	4.00	\$	192,240
TOTAL				\$	1,826,280

ELECTRICAL

MAIN DISTRIBUTION CONDUIT AND WIRE	48060 SF	\$	1.00	\$	48,060
BRANCH DISTRIBUTION CONDUIT AND WIRE	48060 SF	\$	5.50	\$	264,330
LIGHTING	48060 SF	\$	6.00	\$	288,360
MECHANICAL HOOK UP	48060 SF	\$	0.70	\$	33,642
SPECIAL SYSTEMS, FIRE ALARM	48060 SF	\$	2.00	\$	96,120
SPECIAL SYSTEMS, DATA CONDUIT ONLY	48060 SF	\$	2.00	\$	96,120
ALLOW FOR GENERATOR	1 SUM	\$	250,000.00	\$	250,000
				\$	1,076,632



06

Appendix

Weber State University | Wasatch Hall Renovation

Contents

- a. Residential Life Facilities Evaluation Summary Letter, October 2008
- b. WSU Housing Structural Report, September 2008
- c. WSU Housing Mechanical Report, October 2008
- d. Wasatch Hall Electrical Systems Evaluation, September 2008
- e. Facility Condition Analysis, Wasatch Hall, May 2005
- f. WSU Housing & Residential Life Planning Meeting Reports
- g. WSU Housing Needs Assessment and Report
- h. WSU Housing Site Evaluation Civil Report, January 2009



Residential Life Facilities Evaluation Summary Letter

3 October 2008

Mr. Norm Tarbox, Vice President for Administrative Services
Weber State University
Administrative Services
1006 University Circle
Ogden, UT 84408-1006

Mr. Jim Harris, Director of Campus Development
Weber State University
Facilities Management Department
2606 University Circle
Ogden, UT 84408

RE: Ogden Campus Residential Life Facilities Evaluation
Project No. 2008554/Pre-Design Phase

Dear Norm and Jim:

As directed, we have evaluated the existing conditions of Promontory Tower, LaSal Hall, Stansbury Hall and Wasatch Hall. We made use of the following in our evaluation:

- ISES reports for Wasatch, LaSal and Stansbury Halls prepared in 2005
- Structural Summary for Promontory Tower prepared in 2004
- Record drawings of the existing buildings
- Our on-site observations
- Commentary we received from campus staff
- Current building codes and Accessibility law

In summary, we found that extensive renovation and replacement of existing systems is necessary in order to continue to use these buildings as residence halls well into the future, including many renovations necessary to bring the buildings up to current life safety code and accessibility law. Specific renovation recommendations made by the structural, mechanical and electrical engineers are attached. Specific architectural recommendations are as follows:

Promontory tower:

- Remove and replace corridor, common space and lobby ceilings to the extent required to install additional light fixtures, lighting control and remove and re-install domestic water piping (refer to electrical recommendations).
- Remove and replace aged flooring throughout.
- Make interior renovations to cover seismic upgrades.
- Remodel interior as required to make the housing style viable, including the bedroom size and layout and bedroom/bathroom ratio and relationships.

LaSal and Stansbury Halls:

- Follow recommendations of ISES report with the exception of the elevator addition recommendation (accessible rooms can be provided on an accessible main level).
- Remove and replace deteriorated exterior concrete exit stairs.
- Remove and re-anchor many exterior pre-cast concrete panels.
- Remove and replace deteriorated exterior sealant joints between pre-cast concrete panels.
- Remove and replace existing ceilings to the extent required to replace existing electrical, plumbing and mechanical systems and to install new fire alarm and fire sprinkler systems.
- Make interior renovations to cover seismic upgrades.
- Provide new accessible routes within main level of building currently accessed only by stair.
- Remodel interior as required to make the housing style viable, including the bedroom size and layout and bedroom/bathroom ratio and relationships.

Residential Life Facilities Evaluation Summary Letter

Wasatch Hall:

- Follow recommendations of ISES report with the exception of the elevator addition recommendation (accessible rooms can be provided on an accessible main level).
- Remove and replace deteriorated exterior concrete exit stairs.
- Remove and re-anchor many exterior pre-cast concrete panels.
- Remove and replace deteriorated exterior sealant joints between pre-cast concrete panels.
- Provide new wall ventilator unit condensate drainage system.
- Remove and replace existing flooring on interior stairs.
- Remove and replace existing ceilings to the extent required to replace existing electrical, plumbing and mechanical systems and to install new fire alarm and fire sprinkler systems.
- Remove and replace existing main-level ramps to bring them up to current accessibility guidelines.
- Make interior renovations to cover seismic upgrades.
- Provide new accessible routes to the building entrances currently accessed only by stair.
- Remodel interior as required to make the housing style viable, including the bedroom size and layout and bedroom/bathroom ratio and relationships and to provide new program space under consideration by the University.

Our opinion of probable cost of these renovations is as follows (comparison to probable costs of new individual buildings with equivalent residential capacity is also shown for analysis purposes):

Building	Probable Cost to Renovate*	Probable Cost to Replace*	Renovation/Replacement Ratio
Promontory Tower	\$25,186,857	\$26,836,425	93.85%
LaSal Hall	\$3,907,491	\$4,442,625	87.95%
Stansbury Hall	\$3,907,491	\$4,442,625	87.95%
Wasatch Hall	\$8,373,551	\$10,813,500	77.44%

*These amounts do not include any estimates for furnishings, fixtures, equipment or removal of existing asbestos-containing material.

The probable replacement costs shown above represent the cost of individual replacement buildings. Replacing multiple buildings with a single larger building with shared common spaces may prove to be a more cost-effective option and may raise the renovation/replacement ratio.

With renovation costs near or above 90% of the replacement cost, and given the fact that a renovated facility never has quite the lifespan or quite as low maintenance and energy costs as a facility designed to today's standards, it would seem clear that the costs of new facilities to replace Promontory, LaSal and Stansbury are justifiable. In addition, it is generally the case that a new facility, designed to accommodate currently-preferred housing styles, will achieve the University's housing objectives with greater efficiency than a renovated facility due to the difficulty of fitting new housing configurations into existing floor plates. We would expect this efficiency to yield greater lifecycle economies in energy use and maintenance.

Wasatch Hall, on the other hand, has the potential to be a viable renovation project due to its lower renovation/replacement ratio.

Given these facts, we recommend replacing Promontory Tower, LaSal Hall and Stansbury Hall with new facilities. We recommend further evaluation of Wasatch Hall.

Sincerely,

MHTN Architects, Inc.

Mick Gaviglio, AIA
Principal



06.a

Appendix

Weber State University | Wasatch Hall Renovation

Residential Life Facilities Evaluation Summary Letter

MG:sc

Attachments: ARW Engineers structural evaluation 9/15/08
Colvin Engineering mechanical evaluation 9/16/08
ECE electrical evaluation of Promontory Tower 9/16/08
ECE electrical evaluation of LaSal and Stansbury Hall 9/16/08
ECE electrical evaluation of Wasatch Hall 9/16/08



06.b

Appendix

Weber State University | Wasatch Hall Renovation

WSU Housing Structural Report



September 15, 2008

Sean Catherall, AIA,
Senior Associate
MHTN Architects, Inc.
420 East South Temple, Suite 100
Salt Lake City, Utah 84111

Re: Weber State University Housing Investigations (Wasatch, LaSall, Stansbury Halls)
08109

Dear Sean:

ARW Engineers has completed a limited structural review of the existing building drawings for Wasatch, LaSall, and Stansbury Halls at Weber State University. An in-depth structural investigation was not conducted but rather a thorough review of existing building drawings. The purpose of our review was to identify areas of concern and suggest items for further review relative to the seismic lateral force resisting system of the buildings, and other structural systems as necessary.

LaSall and Stansbury Halls are identical to each other as far as the plans are concerned. One set of construction documents was created and used to construct two buildings. Wasatch Hall is a unique building and has its own set of construction documents. All three buildings sit adjacent to one another on campus. The buildings were built in the mid 1960's, prior to modern seismic design. Modern seismic building codes were not readily used until the early 1970's.

LaSall and Stansbury Halls are each a 4-story student housing building. Each building has a floor space of approximately 4800 square feet per floor for a total floor area of approximately 19,200 square feet per building. Wasatch Hall is a two wing 3-story housing building with a single story common area between the wings. The housing wings of Wasatch Hall are slab on grade buildings and the common area is one story above a basement. Wasatch Hall has a total floor space of about 45,500 square feet.

All three buildings were constructed using lift-slab construction techniques. Lift slab construction is a construction technique in which cast-in-place concrete or precast concrete columns are constructed and the main level footings and slab on grade are constructed. Then, all of the subsequent floor slabs and the roof slab are cast one on top of the other on the main level floor slab. In this case, the slabs are 8" thick post-tensioned concrete slabs. Each slab is separated by some sort bond breaking material. When all of the slabs have cured, the slabs are lifted straight up the building and anchored to the columns at the appropriate level. All masonry and/or partition walls are then constructed between the slabs.

Because the buildings are constructed with 8" flat concrete slabs at every floor and the roof, they are relatively heavy buildings. Seismic forces are directly proportional to the weight of the structure. The large mass of these buildings imparts seismic loads that are significantly larger than those for similar sized building using a more typical construction technique for this area.

Shear walls were noted in the drawings to be constructed on the first level at the corners of the buildings. The shear walls are detailed as a double wythe of 4" brick with a 2" solid grouted core

WSU Housing Structural Report

between the wythes. This type of construction does not meet the definition of a shear wall in the current building code for this area. They do not have sufficient strength to support these buildings under an IBC design level seismic event. These shear walls do not continue up to other levels in the buildings. As part of a seismic upgrade, the first floor shear walls would require strengthening and they would be required to continue up to the roof of the buildings. Shear walls could be designed and constructed using several different wall types such as shotcrete walls attached to existing masonry walls or by constructing new reinforced masonry shear walls or cast-in-place concrete that replace the existing masonry walls. Upper level walls would be constructed by either cast-in-place concrete or reinforced masonry. In addition to wall upgrades and construction, footing upgrades would likely be required to support new shear walls. The actual length of new shear walls required to stabilize these buildings is low enough such that there will be a lot of flexibility with wall placement when considering the new architectural floor plan.

The stair towers of LaSall and Stansbury Halls were not designed or constructed to resist lateral seismic loads nor are they attached to the building sufficiently to secure them in the event of a code level seismic event. Currently, the towers are in poor condition with extensive rebar corrosion in the cast in place concrete walls. The rebar corrosion has caused severe spalling of the concrete. Attempts have been made in the past to patch the concrete but the extent of the corrosion makes patching difficult. It is strongly recommended that these towers be replaced.

Other aspects of all three existing buildings that will require review and possible upgrading as part of a seismic upgrade would include;

- 1- Bracing interior unreinforced masonry partition walls where they are required to remain. Where possible, we recommend removing unreinforced masonry partition walls and replacing them with metal stud partition walls. By replacing masonry walls with metal stud walls, the weight of the building will be reduced and seismic forces will be lower. This may result in reduced seismic upgrade costs for the remaining building.
- 2- Verifying the integrity of the lift slab connections. The existing conditions should be reviewed during demolition to verify that the connections will remain intact during a seismic event.
- 3- Verify attachments of precast concrete cladding elements. The effects of weather and other environmental factors should be determined if the connections are expected to remain in service for another building life cycle.

The one-story common area between the two multi-level residential buildings at Wasatch Hall was constructed using wood framing and plywood roof sheathing. The plywood roof diaphragm would need to be analyzed and probably upgraded as part of a seismic upgrade. Plywood roof diaphragms are typically upgraded by overlaying the existing plywood roof sheathing with an additional layer of plywood. The roof joists would require upgrading due to the consideration of snow drifting from the residential halls. Roof framing can be upgraded by installing new joists as required between the existing.

Because this review was based on as-built drawings and not an extensive site investigation, a detailed cost estimate could not be compiled. However, general construction costs can be estimated based on our experience with similar sized buildings. Typically, a building of this size, in this area, construction costs associated with a full seismic upgrade would range between \$10.00-\$20.00 per square foot.



06.b

Appendix

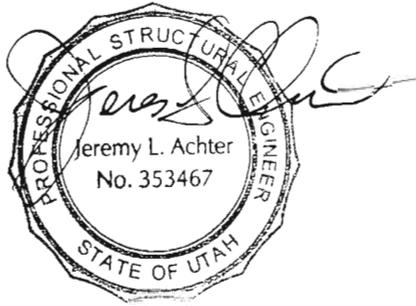
Weber State University | Wasatch Hall Renovation

WSU Housing Structural Report

If you have any questions or comments regarding these buildings or need any additional information please do not hesitate to contact me.

Respectfully,

Jeremy Achter, S.E., LEEDap
Project Structural Engineer
08109_itr_091508





WSU Housing Mechanical Report



Attention: Sean Catherall
MHTN Architects, Inc.
420 East South Temple #100
Salt Lake City, Utah 84111

RE: Weber State University Residential Life Buildings
Mechanical review of HVAC and plumbing systems

Dear Sean,

We have the following mechanical observations for the Promontory Towers, Stansbury Hall, Wasatch Hall and LaSalle Hall residential buildings.

Promontory Towers

HVAC system consists of two air handler serving Basement and Main Level common areas with hot water and chilled water coils.

Both air handlers are in need of replacement based on equipment age and condition.

Student housing and offices are served by wall mounted fan coils with a 2-pipe switch over between cooling and heating. Fan coils are in need of replacement based on equipment age and condition.

Hot water is generated with two atmospheric boilers in the basement.
Both boilers are at the end of the expected life and are in need of replacement.

Chilled water is generated by two chillers in the basement and a cooling tower on the ground at the southwest corner of the site.

Both chillers and cooling tower are at the end of the expected life and are in need of replacement. Both use refrigerant R-11 that is phasing out of use.

New wet pipe fire sprinkler system covers entire building.

All domestic piping is galvanized and in need of replacement.
Domestic hot water is generated with a heat exchanger and is in good condition.
Existing plumbing fixtures are in reasonable condition, the flushvalves, faucets and valves are worn and in need of replacement due to age and wear.

All controls are pneumatic.

LaSalle Hall

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HVAC / Energy Efficient Solutions / CFD Modeling / Air Pollution Control
244 West 300 North, Suite 200 / Salt Lake City, Utah 84103-1147 / 801.322.2400 / FAX 801.322.2416

WSU Housing Mechanical Report

HVAC system consists of one air handler serving Main Level common areas with hot water and chilled water coils.

Air handler is in need of replacement based on equipment age and condition.

Student housing are served by wall mounted fan coils with a 2-pipe switch over between heating and cooling. Fan coils are in need of replacement based on equipment age and condition.

Hot water is generated with one atmospheric boiler in the basement.

Boiler is newer and could be reused.

Water is leaking from piping and pumps and flooding the floor.

Chilled water is generated from a remote chiller plant to the East of adjacent Wasatch Hall.

There is no fire sprinkler for this building, only electronic fire alarms.

All domestic piping is galvanized and in need of replacement.

Domestic hot water is generated with a heat exchanger and is in good condition.

Existing plumbing fixtures are in reasonable condition, the flushvalves, faucets and valves are worn and in need of replacement due to age and wear.

All controls are pneumatic.

Stansbury Hall

HVAC system consists of one air handler serving Main Level common areas with hot water and chilled water coils.

Air handler is in need of replacement based on equipment age and condition.

Student housing are served by wall mounted fan coils with a 2-pipe switch over between heating and cooling. Fan coils are in need of replacement based on equipment age and condition.

Hot water is generated with one atmospheric boiler in the basement.

Boiler is at the end of the expected life and in need of replacement.

Chilled water is generated from a remote chiller plant to the East of adjacent Wasatch Hall.

There is no fire sprinkler for this building, only electronic fire alarms.

All domestic piping is galvanized and in need of replacement.

Domestic hot water is generated with a heat exchanger and is in good condition.

Existing plumbing fixtures are in reasonable condition, the flushvalves, faucets and valves are worn and in need of replacement due to age and wear.

All controls are pneumatic

Wasatch Hall

I:\PROJECTS\2008 Projects\2008-096.00 WSU-Housing Evaluation\Basis of Design Documents\Housing report.doc

HVAC / Energy Efficient Solutions / CFD Modeling / Air Pollution Control
244 West 300 North, Suite 200 / Salt Lake City, Utah 84103-1147 / 801.322.2400 / FAX 801.322.2416



WSU Housing Mechanical Report

HVAC system consists of two air handler serving Basement and Main Level common areas with hot water and chilled water coils.

Both air handlers are in need of replacement based on equipment age and condition.

Student housing are served by wall mounted fan coils with a 2-pipe switch over between cooling and heating. Fan coils are in need of replacement based on equipment age and condition.

Hot water is generated with one atmospheric boiler in the basement. Boiler is at the end of the expected life and in need of replacement.

Chilled water is generated from two chillers located to the East of building that also serve LaSalle Hall and Stansbury Hall.

Chillers have some life expectancy left and can be reused. They utilize refrigerant R-134A.

There is no fire sprinkler for this building, only electronic fire alarms.

All domestic piping is galvanized and in need of replacement.

Domestic hot water is generated with a heat exchanger and is in good condition.

Existing plumbing fixtures are in reasonable condition, the flushvalves, faucets and valves are worn and in need of replacement due to age and wear

All controls are pneumatic, air compressor is in need of replacement.



Wasatch Hall Electrical System Evaluation

**Weber State University
Wasatch Hall
September 16, 2008**

Electrical System Evaluation

A. Power Distribution System

Primary power is provided to this building from 12470V, SF6, MV Switch. Located in the Electrical Distribution Building Northeast of the Wasatch Hall building.



Power to Wasatch, Lasall & Stansburry Hall Buildings power is provided through a freestanding 1000kVA, 12470V primary – 208/120V secondary transformer located in Electrical Distribution Building northeast of the Wasatch Hall building. Transformer is in good shape and should be reused. No drawings indicate when this transformer was installed but the switchgear it is tied to has a manufacture date of 1991.



Power is distributed from the transformer to the three dormitory buildings through a freestanding Westinghouse Pow-R-Line 2500A distribution switchboard. The Wasatch Hall building is feed from an 800A circuit breaker. Switchboard is in good shape and should be reused. Label indicates that gear was manufactured in 1991.



Wasatch Hall Electrical System Evaluation

Power to the Wasatch-Lasal-Stansbury Hall chillers is provided through a pad mounted 12470V switch and 500kVA, 12470V Primary-480/277V Secondary Cooper pad mounted transformer, both were installed with the Chiller upgrade in 1999. Equipment is in good shape and should be reused as possible.



Main distribution panel is an 800A, 208/120V, 3-phase, 4-wire, Square D Power Style freestanding panel located in the Basement Mechanical Room. This panel is original to the building and is showing signs of corrosion on the enclosure.





06.d

Appendix

Weber State University | Wasatch Hall Renovation

Wasatch Hall Electrical System Evaluation

Panel “C-17” is a 100A, 208/120V, 3-phase, 4-wire, Square D exterior lighting branch panel and is located in the Basement Mechanical Room behind one of the air handlers. There is no access to this panel without climbing over railing.



Panel “C-16” is a 225A, 208/120V, 3-phase, 4-wire, Square D power branch panel and is located partially behind large mechanical equipment.



Each wing of the building has two (2) 100A, 208/120V, 3-phase, 4-wire, Square D panel. The coverplates of these panels have been abused and locks have had to be replaced. Each panel is feed from a 70A circuit breaker. Each panel has approximately (6) spaces for future circuit breakers.

Lobby and Basement each have a 225A, 208/120V, 3-phase, 4-wire, 30 circuit breaker panel feeding lighting and branch circuits in these areas.

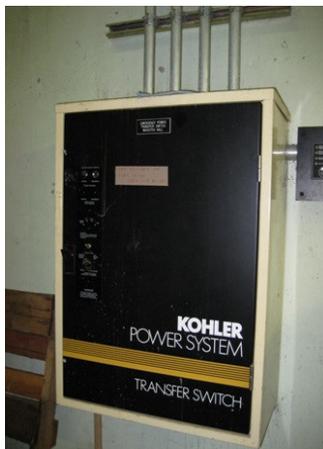
Wasatch Hall Electrical System Evaluation

B. Emergency Power System

The Emergency Power System originates at a Kohler 50kW diesel engine generator located in its own weatherproof enclosure Northeast of Wastatch Hall adjacent to the Electrical Distribution Building. The engine feeds a 150A, 208/120V 3-phase, Siemen's distribution panel "EM". This panel is located in NEMA 3R enclosure next to the engine and has a 70A, 3-pole circuit breaker feeding Wasatch Hall, and (2) 50A, 3-pole circuit breakers feeding Lasall and Stansbury Halls. This Emergency distribution system was installed April of 1993 and is in good shape. The entire system should be reused as possible. The engine generator may have a leak in one of the gaskets that has stained the block. This should be investigated further with Generator Manufacturer.



Wasatch hall has a 70A, 3-pole Automatic Transfer Switch located in the Basement Mechanical Room. The switch is tied to the 70A circuit breaker in panel "EM" and to a 70A circuit breaker disconnect that is tapped from bus of the Wasatch Hall main distribution panel. There is an engine annunciator panel next to the ATS. At the time of this report this annunciator had a warning light for "E-Stop".





Wasatch Hall Electrical System Evaluation

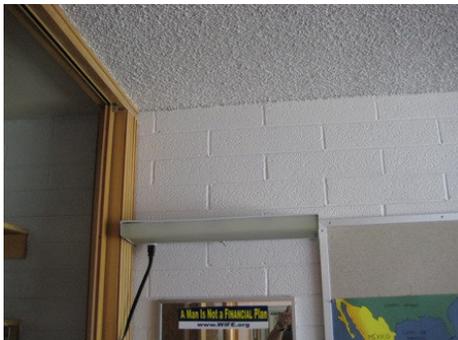
C. Lighting System

Interior light fixtures are a mix of surface and recessed mounted fluorescent fixtures with prismatic acrylic lenses and T-12 lamps in the Corridors and Lobby spaces. There are many fixtures that have cracked or otherwise damaged lenses. The lighting level in these spaces is sufficient. T-12 Lamps are inefficient and should be replaced with T-8 lamps with electronic ballasts.



Classrooms spaces have surface mounted fluorescent fixtures with prismatic acrylic lenses and T-12 lamps. The lighting levels in these spaces should be increased to create better learning environment. Fixtures are tied to a single light switch in each room. The addition of multi level switching would improve the lighting quality during use of projectors in each classroom. Egress lighting should be added to classrooms.

Dormitory Rooms have a two wall mounted linear wall fluorescent light fixtures each with integral toggle switch and power receptacles.



Exterior lighting is surface mounted high-pressure sodium and fluorescent fixtures. Some lenses are damage or discolored. There are no exterior emergency egress light fixtures adjacent to the doors.

Emergency egress lighting is tied to the Emergency Power System.

Wasatch Hall Electrical System Evaluation

Exit Signs are incandescent fixtures and many have damaged faceplates. These fixtures are tied to the Emergency Power System.

D. Fire Alarm System

The fire alarm system was recently upgraded to new Notifier addressable system and is up to current codes. Dormitory rooms each have addressable smoke detectors.



E. Security System

There is no security system in this facility.

F. Voice/Data System

The telephone terminal board is located in the basement mechanical room. There is no ground bus bar or spare conduits available at this location.



Data systems in the building are accomplished with wireless access nodes surface mounted throughout the corridors of the facility.



Wasatch Hall Electrical System Evaluation

G: Special Systems

The classrooms have had projector systems installed. The raceways to these systems were surface mounted. Some of the raceway has pulled away from the ceiling and needs to be more permanently mounted.



Electrical System Deficiencies and Code Violations

- A. Two electrical panels in basement mechanical room do not have required clearances.
- B. All panelboards are old and parts will be difficult to find parts for.
- C. No exterior egress lighting exists.
- D. Exit signs are inefficient and some are damaged.
- E. No low-level exit signs are installed in dormitory corridors.
- F. Lighting levels in classrooms is insufficient. Multi-level switching would improve learning environment.
- G. Dormitory room light switches do not meet ADA requirements.
- H. There are no automatic light switches or motions sensors in the building to meet energy requirements.
- I. Dormitory rooms do not have fire alarm sound annunciation.

Recommendations

A. Immediate Action Items: (code violations and safety issues)

- a. Relocate panelboards in basement mechanical room to meet NEC clearance requirements.
- b. Replace exterior fixtures adjacent to doors with fluorescent lamping and tie to the emergency power system.
- c. Evaluate leak at engine generator.
- d. Replace damaged exit signs.
- e. Verify e-stop at generator annunciator.
- f. Install low-level exit signs.
- g. Replace damaged or discolored exterior fixture lenses.

Wasatch Hall Electrical System Evaluation

B. Short Term Action Items:

- a. Replace existing main distribution panel with new.
- b. Install additional fixtures in the Classrooms.
- c. Install multi-level switches in the Classrooms.
- d. Replace all T-12 lamps with T-8 and electronic ballasts.
- e. Install carbon monoxide detectors in dormitories.
- f. Add automatic lighting control in corridors and lobby spaces to save energy.
- g. Replace incandescent exit signs with LED type.
- h. Install new Sounder bases in dormitories.

C. Long Term Action Items:

- a. Replace light switches in Dormitories to meet ADA Requirements.



06.e

Appendix

Weber State University | Wasatch Hall Renovation

Facility Condition Analysis, Wasatch Hall

STATE OF UTAH
DIVISION OF FACILITIES AND CONSTRUCTION MANAGEMENT
Facility Condition Analysis

WSU – WASATCH HALL

BUILDING NUMBER: 0769

FACILITY CONDITION ANALYSIS

MAY 31, 2005

ARCHITECTURAL ENGINEERING EVALUATION

DFCM PROJECT NO.

FM-96150



State of Utah—Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building / Salt Lake City, Utah 84114 / 538-3018

APPROVAL:

DFCM

DATE

Facility Condition Analysis, Wasatch Hall

STATE OF UTAH
DIVISION OF FACILITIES AND CONSTRUCTION MANAGEMENT
Facility Condition Analysis

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A. BUILDING SUMMARY

Wasatch Hall is a 1964, four-story, 48,427 gross square foot student dormitory on the campus of Weber State University. This dormitory is currently primarily used for campus office swing space as various campus administrative buildings are being renovated. Wasatch Hall is divided into three sections. There is a central single story common area with a basement and two flanking three-level dormitory wings. Unlike nearby LaSal Hall and Stansbury Hall, which have apartment suite layouts, Wasatch Hall has the standard individual two-bed dormitory rooms with communal hall bathrooms. There are approximately 114 dormitory rooms in Wasatch Hall, and each housing wing has a lounge located at the end of the hall. Each dormitory wing also has egress stair towers at each end of the double loaded corridor. The central common area contains the main RA apartment and a few administrative spaces. The basement level of the central lobby contains a student recreation room, two student laundries, a TV room, and the building boiler room.

The information in this report is based solely on physical observations, and no testing or engineering analysis has taken place to confirm these observations. From our visual inspection, we feel that in the event of seismic activity this structure would perform at an average to fair level in comparison to the average facility inspected on this campus. Seismic upgrades appear to be costly and impractical in the short-term, but may be more feasible if this dormitory is extensively renovated in the future.

Information for this report was gathered during a site visit on April 18, 2005.

SITE

The grounds around this dormitory are lightly planted with a few mature trees, and there are also some low growing shrubs around portions of the building perimeter, especially the main entry. The majority of the site, like the other dormitories in the area, is grass. The current landscaping layout is deemed adequate, and no additional planting is recommended at this time.

Concrete sidewalks around the building perimeter are generally in adequate condition. Although there is a small percentage of sidewalk cracking, the main sidewalk problem is that site drainage tracks down one of the main sidewalks by this dormitory. This water runoff could become a safety problem, especially if water freezes on the walkway during the winter months. Site grading and possibly some french drains may be needed to redirect the water runoff away from the walkway. No parking areas are directly associated with this dormitory.

EXTERIOR STRUCTURE

The exterior brick and concrete façade on this student dormitory is overall in good condition, although some efflorescence was noted on the southeastern elevation of the building. Selective repointing is recommended for the exterior brick in conjunction with the recommended exterior window upgrade work to help control unwanted water infiltration.

The north upper flat, built-up roof was reportedly installed in the 1980s, and this flat roof is beginning to show signs of weathering and age. A new built-up roofing system should be installed within the next six

Facility Condition Analysis, Wasatch Hall

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to ten years on this dormitory wing. The new roof should again be a built-up application that includes all new metal flashing and a new roof access hatch assembly. The lower central roof and the flat roof on the south wing were both damaged by high winds and were reroofed with a Sarnofil roofing system in 2001. Both of these roofs appear to be in good overall condition at this time.

The exterior windows in this student dormitory are single pane, sliding glass windows units. A number of these windows have failing hardware. In the long-term, these existing original window units are nearing the end of their serviceable life and should be replaced with new thermal pane, metal frame, operable windows within the next ten years.

Exterior glass entry doors on the first floor are in good overall condition, as are the metal egress doors that access exterior balconies off the two secondary egress stairs on each of the north and south wing end elevations. The basement level exterior metal service door is also deemed adequate at this time. The oversized sliding glass doors in the first floor common area are original and timeworn. These large sliding glass doors should be locked and not used in the short-term. Long-term operation of this dormitory will require replacement of these glass doors and the accompanying lounge glazing, but this common area upgrade is not included in the ten-year future projection of this report.

INTERIOR FINISHES / SYSTEMS

The interior finishes in this student dormitory vary from average to fair throughout the facility. Carpeting on all of the floors is showing signs of wear, especially in some of the common areas and lounges, and should be ideally replaced within the next three to five years. The new carpeting should be a good grade of commercial, roll carpeting. Some of the support areas have vinyl floor tile, and this 12 x 12 floor tile should also be upgraded. Install new vinyl composite floor tile in each of these areas within the same three to five year timeframe.

Interior painted wall finishes are in average to fair condition. Repaint interior walls on all floors as part of refitting this building for student housing. Once Wasatch Hall is again part of the active campus housing inventory, these interior walls should be put back on an interior repainting cycle to properly maintain interior aesthetics in the facility.

The interior door assemblies in this dormitory were previously upgraded, and no additional recommendation, other than an Accessibility category project to upgrade to lever handle door hardware, is included in this report.

Ceramic floor tile in the various individual hall bathrooms are in average to good condition for the age of the bathrooms. However, it is anticipated that some ceramic floor tile upgrades will be needed in conjunction with the recommended additional upgrading of some of the interior hall bathrooms for accessibility compliance. Coordinate this work with the recommended plumbing upgrades, and install new ceramic floor and wainscot tile as needed.

Interior apartment furniture and built-in apartment bedroom closets are in good overall condition, and no furniture upgrades appear to be needed in the near-term. Furniture in the first floor common area and lower floor recreation room is also in overall adequate condition at this time. General finishes in the first floor RA apartment, including the apartment kitchen, are in good general condition, and no finish upgrades are recommended for the near future.



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Most of the interior ceilings have a spray-on texture. This textured ceiling finish is reported to contain asbestos. Although this type of finish can be encapsulated with paint and maintained in place, and since these apartments are reportedly being considered for use as married student housing (which would likely reduce incidents of ceiling finish damage), it is recommended that these asbestos containing material (ACM) laden ceiling finishes be properly abated and replaced with new spray-on ceiling finishes within the next three to five years, or ideally prior to reoccupying the facility.

ACCESSIBILITY

This student dormitory building has few or no accessible features, and a number of upgrades will be needed to make this facility even partially accessible. Several of the key building entry points should be refitted with permanent accessible concrete entry ramps and a handrail system to accommodate wheelchairs.

The remaining first floor wall-mounted water fountain should be replaced with a new dual level, fully accessible, wall-mounted unit within the next three to five years, and ideally the removed water fountain on the opposite wall of the common area should be reinstalled with a similar accessible fountain. Also, the aging dormitory floor corridor fountains should be replaced with new dual level water fountains set in accessible alcoves.

The interior doors have been upgraded, but as a cost saving measure, the original interior knob hardware was reused. This hardware is not accessible and is becoming timeworn. Replace existing interior door hardware with new accessible lever action units within the next six to ten years. This upgrade will allow both rekeying of the building and greater accessibility.

Interior signage in the building is both inadequate and non-accessible. A new building-wide signage package will be needed prior to re-establishing this building as a dormitory. The new signage package should be accessible and have both raised lettering and Braille as part of campus-wide efforts to provide uniform accessible interior signage.

As part of long-term use of this housing facility, at least five of these dormitory rooms and several of the accompanying hall baths should be modified to meet full accessibility standards. These dormitory room modifications would include lever action door hardware, closet configuration changes, and desk replacement. Other accessibility upgrades would include horn strobe alarms and possible other non-audible emergency alarms designed for sleeping areas. The existing hall baths have some accessible features, but additional modifications are needed, such as grab bars in the toilet area and an enhanced accessible shower area. The sink area has an accessible, wall-mounted sink.

These dormitory floor accessibility upgrades should be accompanied by the installation of accessible passenger elevator towers to provide access to the upper lodging floors and the basement recreation level. These passenger elevators should be sized to aide in the cyclical student move-in / move-out process in the building.

Existing stair tower metal handrail and guardrail configurations are not accessible and do not meet current building standards. These stair runs should be retrofitted with new accessible railings and guardrails. It is also recommended that end balconies be fitted with an additional top guardrail to raise the height of the existing concrete guardrailing to the current standard height of forty-two inches above finished floor. These upgrades should be completed within the next three to five years.

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HEALTH

No immediate health risks were noted or reported during this building inspection, except for the presence of spray-on textured ceilings that are typically found in most of the building. As previously mentioned, these interior ceiling finishes can be encapsulated with painted and managed in place, but it is recommended that all of these textured ceilings be properly abated and replaced with new textured ceiling finishes.

FIRE / LIFE SAFETY

This dormitory appears to have adequate egress pathways, and the various egress towers provide at least two means of egress for the housing floors. Also, unlike the two adjoining student dormitories, LaSal Hall and Stansbury Hall, the exterior end egress stairs are not external and, as such, do not have the concrete stair nosing and tread spalling problems that plague these other two dormitories. The stair towers located adjacent to the hall lounges are open to these student lounge areas. It is recommended that stair access doors be installed to isolate the stair towers from these lounge areas and the many combustibles that these rooms contain. Also, the handrail and guardrail configurations do not meet current building or accessibility standards and should be upgraded. These railing upgrades are addressed in the Accessibility section of this report. No other fire rating issues or egress obstructions were noted during the course of this building inspection.

This facility is protected by a central fire alarm system that covers all common and circulatory areas. This system consists of a zoned panel, audible and visible devices, smoke and heat detectors, and manual pull stations. The resident rooms have battery-powered smoke detectors present. The fire alarm system has served beyond its expected life cycle and is recommended for modernization. Install a modern comprehensive point addressable system with a supervised control panel and communicator. Position the devices in accordance with current NFPA and ADA requirements.

There is no form of automatic fire suppression provided for this facility. Manual dry-chemical fire extinguishers and a standpipe are currently the only means of fire suppression available. It is recommended that a comprehensive, automatic, wet-pipe fire sprinkler system be installed. Controls for this installation should interface with the proposed fire alarm system. Ensure that all piping is seismically braced.

The exit signage in this facility consists of mostly fluorescent illuminated applications that are connected to the emergency power network. These fixtures will reach the end of their intended life cycles within years two and five of this audit. It is recommended that they be replaced at that time. Specify LED type applications for their longevity, energy efficiency, and low maintenance requirement. Emergency lighting is provided by select light fixtures that are connected to the emergency power network.

The incoming natural gas main is currently without seismic shutoff service. Due to the locale of this facility, it is recommended that a shutoff valve be installed within the next year. This type of valve is earthquake sensitive and automatically shuts off the gas supply in the event of seismic activity.

HVAC



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Hot water produced by a local boiler is circulated throughout the building as the heating medium. The boiler is located in the basement and has a dual fuel burner that utilizes primarily natural gas and diesel as backup. This unit is approximately ten years old and will outlast the scope of this study given proper maintenance.

Two district chillers located onsite in the northeast mechanical enclosure produce chilled water for cooling. The district also includes Stansbury and LaSal Halls. These applications are packaged, air-cooled, screw chillers that were manufactured by Carrier. They provide 125 and 135 nominal tons of cooling, respectively. The chillers are a recent installation and should serve beyond the concern of this report given proper maintenance.

The resident rooms are served by two-pipe fan coil unit systems. These systems alternate seasonally between heating and cooling. The first floor and basement common areas have forced-air systems. Outside air is available throughout the facility. Controls for the HVAC systems are pneumatic. Supplemental cooling for the first floor offices and RA apartment is provided by window-mounted air conditioners.

The HVAC system is aged and inefficient. Asbestos piping is present on heating / cooling media piping. A complete redesign and replacement of the HVAC system is recommended. Demolish and dispose of existing equipment. Install a new modern HVAC system with four-pipe fan coil units in the resident rooms and air handling systems for the corridors and common areas. Air handlers should also deliver outside air to the resident rooms in accordance with ASHRAE ventilation standards. This work includes new fan coil units, air handlers, ductwork, terminal units, exhaust systems, pumps, piping, controls, and electrical connections. Specify direct digital controls (DDCs) for the new equipment. Incorporate variable frequency drives (VFDs) and economizers into the new HVAC design as applicable. All new equipment and piping should be seismically braced.

ELECTRICAL

The northeast electrical vault houses a 208 volt main distribution panel that is rated for 2,500 amp service and supplies Wasatch, Stansbury, and LaSal Halls. Power is stepped down to this voltage from 15 kV by an oil-filled, pad-mounted transformer that is estimated to be rated for 750 kVA service. This transformer is located just outside the vault in the adjacent equipment enclosure. All of this equipment is of recent installation and will outlast the scope of this report with proper testing and maintenance.

The secondary electrical distribution system is aged and undersized for this application. The only outlets located in the rooms are those that are incorporated into select fluorescent light fixtures. Electrical panels are full. It is recommended that the secondary electrical system be modernized. Replace all outlets, switches, conductors, raceways, circuit breakers, and panels. Install additional circuits for devices. Ensure that ground fault circuit interrupter (GFCI) receptacles are used where required.

Interior spaces are illuminated by fluorescent fixtures with magnetic ballasts and T12 lamps. This system is approaching the end of its statistical life cycle and is recommended for replacement within two to five years. Replace the original fluorescent fixtures with new electronic ballast fixtures and energy-efficient lamps. Install occupancy sensors in select areas for additional energy conservation. Ensure that all new lighting applications are seismically braced.

Exterior lighting is provided by fluorescent lamps with weatherproof casings at the exterior balconies and HID fixtures on the ground level. These fixtures are approaching the end of their statistical life cycles. It

Facility Condition Analysis, Wasatch Hall

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should be anticipated that they will require replacement within the next six to ten years. Replace the balcony fixtures with compact fluorescent applications. Place all new exterior lighting on photocell activation.

Emergency power is supplied by a diesel powered emergency generator located in the northeast electrical enclosure that is estimated to be of 50 kW capacity. This system supports all emergency and egress lighting in Wasatch, Stansbury, and LaSal Halls. The life cycle of the generator will expire within years six and ten of this study. It is recommended that it be replaced at that time with a system sized to support all life safety and HVAC equipment for all three buildings.

PLUMBING

Potable water for this facility is supplied through a primarily galvanized steel network. Spot renovations and repairs have been performed with copper piping. This network has served well beyond its intended life cycle and has been worn by the hard water at this locale. Additionally, there is asbestos on insulation. It is recommended that the piping be replaced in conjunction with the proposed plumbing fixture and drain piping upgrades. The new network should be a homogenous copper network. Ensure that proper backflow prevention, seismic bracing, and water softening devices are implemented.

Sanitary and drain piping consists of cast-iron main lines. This network is approaching the end of its statistical life cycle and is recommended for replacement in conjunction with the proposed supply piping and plumbing fixture replacements. Install a new sanitary and drain piping network consisting of cast-iron, no-hub construction. Ensure that this network is seismically braced.

Plumbing fixtures in this facility are original to the building construction and have outlived their intended life cycles. It is recommended that all plumbing fixtures, including lavatories, urinals, toilets, kitchen sinks, laundry sinks, and service sinks, be replaced. Specify automatic, hands-free faucets and flush valves for the restroom fixtures. Specify vacuum breaker faucets for the custodial sinks.

Potable water is heated for this facility by an instantaneous steam to domestic water heat exchanger. This unit has recently undergone a tube bundle replacement. However, due to the proposed piping network upgrades, it is recommended that it be replaced and sized to accommodate the new plumbing needs.

Note: The deficiencies outlined in this report were noted from a visual inspection. ISES engineers and architects developed projects with related costs that are needed over the next ten-year period to bring the facility to "like-new" condition. The costs developed do not represent the cost of a complete facility renovation. Costs not represented in this report include telecommunications, furniture, window treatment, space change, program issues, relocation, swing space, contingency, or costs that could not be identified or determined from the visual inspection and available building information. However, existing fixed building components and systems were thoroughly inspected. The developed costs represent correcting existing deficiencies and anticipated life cycle failures (within a ten-year period) to bring the facility to



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Appendix

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modern standards without any anticipation of change to facility space layout or function. Please refer to Section Three of this report for recommended Specific Project Details.

1.1.7

Facility Condition Analysis, Wasatch Hall

**Life Cycle Model
Building Component Summary
0769 - WSU - WASATCH HALL**

Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp
A2020	FOUNDATION WATERPROOFING (DEPTHS UP TO 10 INC EXCAVATION)	2,800	SF	\$41.84		\$117,152	1964	25
B2010	CLEAN POINT AND CAULK EXTERIOR MASONRY SURFACES	13,400	LF	\$7.17		\$96,078	1964	20
B2020	CUSTOM GLASS DOORS	5	EA	\$5,221.48		\$26,107	1964	20
B2020	WINDOW REPLACEMENT (OPERABLE)	4,400	SF	\$69.52		\$305,888	1964	70
B2030	LO - USE EXT. DOOR LOCKSET REPLACEMENT	14	EA	\$243.91		\$3,415	1964	10
B2030	EXTERIOR DOORS (METAL)	7	EA	\$2,321.82		\$16,253	1964	30
B2030	EXTERIOR SLIDING GLASS DOOR	2	EA	\$3,440.53		\$6,881	1964	30
B3010	FLAT ROOFING SYSTEM (BUR) BAD WINTERS	4,850	SF	\$4.26		\$20,661	1985	15
B3010	FLAT ROOFING SYSTEM (UNBALLASTED 1 - PLY)	14,535	SF	\$6.58		\$95,640	2001	20
B3020	VINYL FLOOR TILE UPGRADES (NO ACM)	1,800	SF	\$5.74		\$10,332	1964	20
C1020	LO - USE INT. DOOR LOCKSET REPLACEMENT	160	EA	\$120.05		\$19,208	1964	10
C1020	INTERIOR DOOR REPLACEMENTS (LESS HARDWARE)	160	EA	\$1,263.17		\$202,107	1964	30
C3010	INTERIOR PAINTING (DRYWALL PLASTER REPAIR INCLD)	89,300	SF	\$0.92		\$82,156	1964	6
C3020	LO - USE CARPET REPLACEMENT	4,195	SY	\$40.85		\$171,366	1964	10
D2010	DUAL-LEVEL DRINKING FOUNTAIN	8	EA	\$2,689.48		\$21,516	1964	10
D2010	PLUMBING FIXTURE COMPONENTS	48,427	SF	\$0.84		\$40,679	1964	8
D2010	PLUMBING FIXTURES	48,427	SF	\$3.03		\$146,734	1964	32
D2020	WATER SUPPLY PIPING	48,427	SF	\$2.44		\$118,162	1964	25
D2020	DOMESTIC WATER PRESSURE BOOSTER SYSTEM	1	SYS	\$7,857.18		\$7,857	1964	20
D2020	WATER HEATER SHELL AND TUBE HEAT EXCHANGER	45	GPM	\$352.05		\$15,842	1964	24
D2030	DRAIN PIPING SYSTEMS	48,427	SF	\$3.58		\$173,369	1964	40
D2050	AIR COMPRESSOR PACKAGE (MEDIUM SIZE)	1	SYS	\$4,838.47		\$4,838	1964	25
D3020	BOILER (MBH)	5,860	MBH	\$30.74		\$180,136	1995	25
D3030	PACKAGE CHILLER - AIR COOLED 130 TO 210 TONS	136	TON	\$1,175.52		\$159,871	2000	20
D3030	PACKAGE CHILLER - AIR COOLED 80 TO 130 TONS	125	TON	\$1,404.86		\$175,608	2000	20
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	3	EA	\$1,581.23		\$4,744	1964	20
D3040	HVAC SYSTEM	48,427	SF	\$18.57		\$899,289	1964	22
D3040	BASE MTD. PUMP - UP TO 15 HP	16	HP	\$1,551.97		\$24,832	1964	20
D3040	BASE MTD. PUMP - 15 HP TO 50 HP	40	HP	\$780.92		\$31,237	1964	20

1.2.1



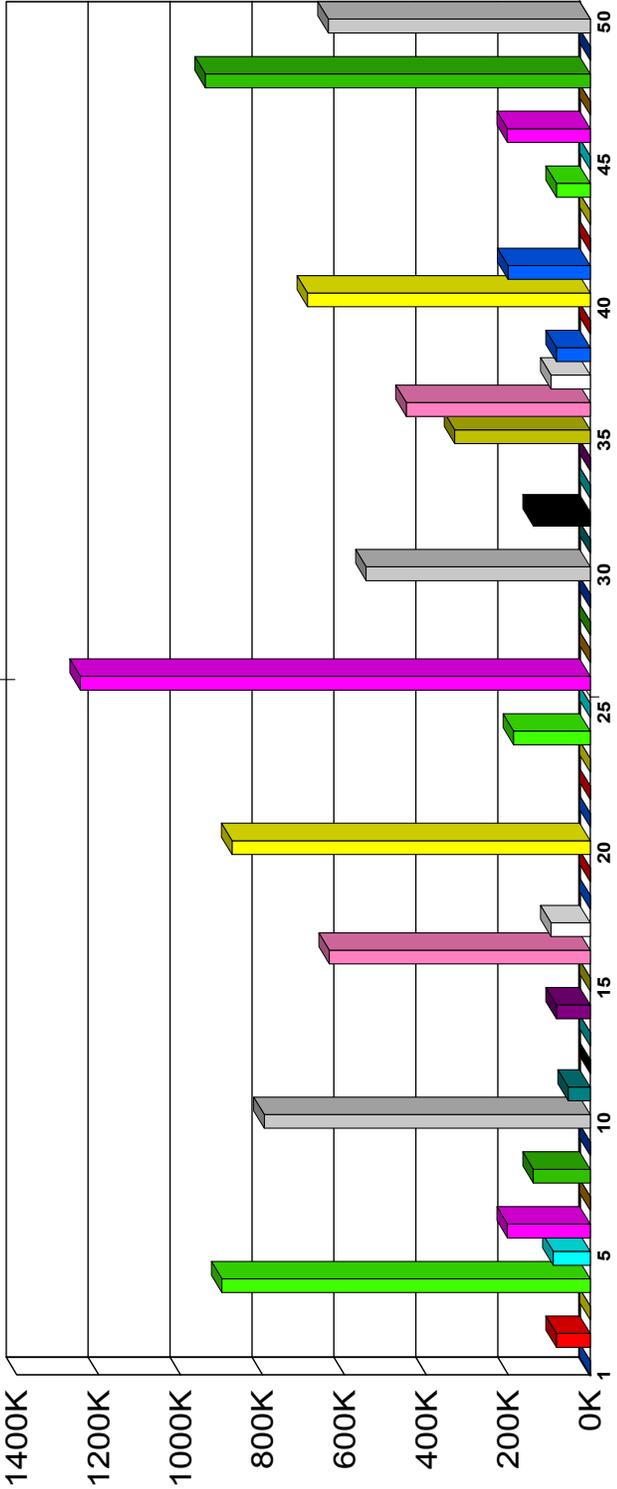
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**Life Cycle Model
Building Component Summary
0769 - WSU - WASATCH HALL**

Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Tot Cost
D5010	SECONDARY ELECTRICAL SYSTEM	48,427	SF	\$6.49		\$31
D5010	ELECTRICAL SWITCHGEAR 2000A 208V	1	EA	\$64,708.53	1.25	\$8
D5010	ELECTRICAL SWITCHGEAR 800A 208V	1	EA	\$26,872.58		\$2
D5010	TRANSFORMER OIL 5-15KV 500 TO 1500 KVA	1,000	KVA	\$39.84		\$3
D5020	EXIT SIGNS (CENTRAL POWER)	26	EA	\$181.83		\$
D5020	EXTERIOR LIGHT (HID)	2	EA	\$749.32		\$
D5020	INTERIOR LIGHTING	48,427	SF	\$4.05		\$19
D5020	SWITCHES AND RECEPTACLES	48,427	SF	\$0.53		\$2
D5030	FIRE ALARM SYSTEM NON-ADDRESSABLE	48,427	SF	\$1.87		\$9
D5040	EMERGENCY GENERATOR 50 KW	50	KW	\$659.16		\$3
G2030	CONCRETE SIDEWALK REPLACEMENT	1,000	SF	\$7.30		\$
						\$3,99

Life Cycle Model Expenditure Projections

0769 - WSU - WASATCH HALL



Future Year

Average Annual Renewal Cost per SqFt \$4.04

1.3.1



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C. INSPECTION TEAM DATA

DATE OF INITIAL INSPECTION: April 18, 2005

INSPECTION TEAM PERSONNEL:

<u>NAME</u>	<u>POSITION</u>	<u>SPECIALTY</u>
Richard Gadd	Facility Analyst	Mechanical / Electrical / Plumbing / Energy / Fire Safety
Albert Rodriguez	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Jon Thomas	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety
Carl Turner	Project Architect	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

FACILITY CONTACTS:

<u>NAME</u>	<u>POSITION</u>	<u>TELEPHONE NUMBER</u>
Jeff Reddoor	Preventive Maintenance Coordinator - DFCM	(801) 538-9620
Kevin Hansen		
Tom VanCleave		

REPORT DEVELOPMENT:

Report Development by:	ISES CORPORATION 2165 West Park Court Suite N Stone Mountain, GA 30087	Contact: Michael Jordan, Project Manager 770-879-7376
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D. FACILITY CONDITION ANALYSIS - DEFINITIONS

The following information is a clarification of Building Report Sections using example definitions.

1. REPORT DESCRIPTION

Section 1: Building Summary, Life Cycle Model Building Component Summary, and General Report Information.

Section 2: Detailed Project Summaries and Totals

- A. Detailed Project Totals – Matrix with FCNI Data and Associated Charts
- B. Detailed Projects by Priority Class / Priority Sequence
- C. Detailed Projects by Cost within range [\$0 - <\$200,000]
- D. Detailed Projects by Cost within range [≥ \$200,000 - < \$500,000]
- E. Detailed Projects by Cost within range [≥\$500,000]
- F. Detailed Projects by Project Classification
- G. Detailed Projects by Project Rating Type - Energy Conservation
- H. Detailed Projects by Category / System Code

FCNI = Facility Condition Needs Index, Total Cost vs. Replacement Cost. The FCNI provides a life cycle cost comparison. Facility replacement cost based on replacement with current construction standards for facility use type, and not original design parameters. This index gives the State a comparison within all buildings for identifying worst case / best case building conditions.

$$\text{FCNI} = \frac{\text{Deferred Maintenance / Modernization} + \text{Capital Renewal} + \text{Plant Adaption}}{\text{Plant / Facility Replacement Cost}}$$

I.

Section 3: Specific Project Details Illustrating Description / Cost

Section 4: Photographic Log

Section 5: Drawings with Iconography

The drawings for this facility are marked with ICONS (see legend), denoting the specific location(s) for each project. Within each ICON is the last four (4) characters of the respective project number (e.g., 004IS01 is marked on plan by IS01). There is one set of drawings marked with ICONS representing all priority classes (1, 2, 3, & 4).

Note: For Sections 2 and 3, at the end of the reports and project detail, an *Inflation Adjustment Factor* will be designed and built into the program for update purposes. Updates will not be reflected in the original report.



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2. PROJECT CLASSIFICATION

- A. Plant / Program Adaption: Expenditures required to adapt the physical plant to the evolving needs of the institution and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g. accessibility), facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).
- B. Deferred Maintenance: Refers to expenditures for repairs which were not accomplished as a part of normal maintenance or capital repair which have accumulated to the point that facility deterioration is evident and could impair the proper functioning of the facility. Costs estimated for deferred maintenance projects should include compliance with applicable codes even if such compliance requires expenditures beyond those essential to effect the needed repairs. Deferred maintenance projects represent catch up expenses.
- C. Capital Renewal: A subset of regular or normal facility maintenance which refers to major repairs or the replacement / rebuilding of major facility components (e.g., roof replacement at the end of its normal useful life is capital repair; roof replacement several years after its normal useful life is deferred maintenance).

3. PROJECT RATING TYPE

- A. Energy Conservation - Projects with energy conservation opportunities, based on simple payback analysis.
- B. Seismic Considerations – Projects where seismic issues need to be considered.

4. PRIORITY SEQUENCE BY PRIORITY CLASS (Shown in Sections 2 and 3)

All projects are assigned both a Priority Sequence number and Priority Class number for categorizing and sorting projects based on criticality and recommended execution order.

Example:

PRIORITY CLASS 1

CODE	PROJECT NO.	PRIORITY SEQUENCE
HV2C	002HV04	01
PL1D	002PL02	02

PRIORITY CLASS 2

CODE	PROJECT NO.	PRIORITY SEQUENCE
IS1E	002IS06	03
EL4C	002EL03	04

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5. **PRIORITY CLASS** (Shown in Sections 2 and 3)

PRIORITY 1 - Currently Critical (Immediate)

Projects in this category require immediate action to:

- a. return a facility to normal operation
- b. stop accelerated deterioration
- c. correct a cited safety hazard

PRIORITY 2 - Potentially Critical (Year One)

Projects in this category, if not corrected expeditiously, will become critical within a year. Situations in this category include:

- a. intermittent interruptions
- b. rapid deterioration
- c. potential safety hazards

PRIORITY 3 - Necessary - Not Yet Critical (Years Two to Five)

Projects in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

PRIORITY 4 - Recommended (Years Six to Ten)

Projects in this category include items that represent a sensible improvement to existing conditions. These items are not required for the most basic function of a facility; however, Priority 4 projects will either improve overall usability and / or reduce long-term maintenance.

6. **COST SUMMARIES AND TOTALS**

The cost summaries and totals are illustrated by Detailed Projects sorted in multiple formats (shown in Sections 2 and 3).

City Index material / labor cost factors: (shown in Sections 2 and 3)

Cost factors are based on the Salt Lake City, Utah City Index and are adjusted for material and labor cost factors (2005). Refer to the project related labor report found later in this section.

Global Markup Percentages

R.S. MEANS

Local Labor Index:	76.9 %	of National Average
Local Materials Index:	107 %	of National average
General Contractor Markup:	20 %	Contractor profit & overhead, bonds & insurance
Professional Fees:	16 %	Arch. / Eng. Firm design fees, in-house design cost, and contingencies



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7. **PROJECT NUMBER** (Shown in Sections 2 and 3)

Example:

Project Number = 1580-EL-04 (unique for each independent project)

- 1580 - Building Identification Number
- EL - System Code, EL represents Electrical
- 04 - Sequential Assignment Project Number by Category / System

8. **PHOTO NUMBER** (Shown in Section 4)

A code shown on the Photographic Log identifies the building number, photo sequence, and architect or engineer.

Example: 0001006a

<u>Building Number</u>	<u>Photo Sequence</u>	<u>Arch / Eng</u>
0001	006	a

9. **LIFE CYCLE COST MODEL DESCRIPTION AND DEFINITIONS** (Shown in Section 1)

Included in this report is a Life Cycle Cost Model. This model consists of two elements, one is the component listing (starting on page 1.2.1) and the other is the Life Cycle Cost Projections Graph (page 1.3.1). The component list is a summary of all major systems and components within the facility. Each indicated component has the following associated information:

Uniformat Code	This is the standard Uniformat Code that applies to the component
Component Description	This line item describes the individual component
Qty	The quantity of the listed component
Units	The unit of measure associated with the quantity
Unit Cost	The cost to replace each individual component unit (This cost is in today's dollars)
Total Cost	Unit cost multiplied by Quantity, also in today's dollars. Note that this is a one time renewal / replacement cost
Install Date	Year that the component was installed. Where this data is not available, it defaults to the year the asset was constructed
Life Exp	Average life expectancy for each individual component

The component listing forms the basis for the Life Cycle Cost Projections Graph shown on page 1.3.1. This graph represents a projection over a fifty year period (starting from the date the report is run) of expected component renewals based on each individual item's renewal cost and life span. Some components might require renewal several times within the fifty year model, while others might not occur at all. Each individual component is assigned a renewal year based on life cycles, and the costs for each item are inflated forward to the appropriate year. The vertical bars shown on the graph represent the accumulated (and inflated) total costs for each individual year. At the bottom of the graph, the average annual cost per gross square foot (\$/GSF) is shown for the facility. In this calculation, all costs are not inflated. This figure can be utilized to assess the adequacy of existing capital renewal and repair budgets.

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10. **CATEGORY CODE** (Shown in Sections 2 and 3)

Refer to the following Category Code Report.

Example: Category Code = EL5A

Example:

EL = System Description
5 = Component Description
A = Element Description

CATEGORY CODE	SYSTEM DESCRIPTION
AC1A - AC4B	ACCESSIBILITY
EL1A - EL8A	ELECTRICAL
ES1A - ES6E	EXTERIOR
FS1A - FS6A	FIRE / LIFE SAFETY
HE1A - HE7A	HEALTH
HV1A - HV8B	HVAC
IS1A - IS6D	INTERIOR / FINISH SYSTEMS
PL1A - PL5A	PLUMBING
SI1A - SI4A	SITE
SS1A - SS7A	SECURITY SYSTEMS
VT1A - VT7A	VERTICAL TRANSPORTATION



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CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SYSTEM DESCRIPTION: ACCESSIBILITY			
AC1A	SITE	STAIR AND RAILINGS	Includes exterior stairs and railings which are not part of the building entrance points.
AC1B	SITE	RAMPS AND WALKS	Includes sidewalks, grade change ramps (except for a building entrance), curb ramps, etc.
AC1C	SITE	PARKING	Designated parking spaces including striping, signage, access aisles and ramps, etc.
AC1D	SITE	TACTILE WARNINGS	Raised tactile warnings located at traffic crossing and elevation changes.
AC2A	BUILDING ENTRY	GENERAL	Covers all aspects of entry into the building itself including ramps, lifts, doors and hardware, power operators, etc.
AC3A	INTERIOR PATH OF TRAVEL	LIFTS/RAMPS/ELEVATORS	Interior lifts, ramps and elevators designed to accommodate level changes inside a building. Includes both installation and retrofitting.
AC3B	INTERIOR PATH OF TRAVEL	STAIRS AND RAILINGS	Upgrades to interior stairs and handrails for accessibility reasons.
AC3C	INTERIOR PATH OF TRAVEL	DOORS AND HARDWARE	Accessibility upgrades to the interior doors including widening, replacing hardware power, assisted operators, etc.
AC3D	INTERIOR PATH OF TRAVEL	SIGNAGE	Interior building signage upgrades for compliance with ADA.
AC3E	INTERIOR PATH OF TRAVEL	RESTROOMS/BATHROOMS	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms, which are an integral part of residential suites, are catalogued under HC4A.
AC3F	INTERIOR PATH OF TRAVEL	DRINKING FOUNTAINS	Upgrading/replacing drinking fountains for reasons of accessibility.
AC3G	INTERIOR PATH OF TRAVEL	PHONES	Replacement/modification of public access telephones.
AC4A	GENERAL	FUNCTIONAL SPACE MODIFICATIONS	This category covers all necessary interior modifications necessary to make the services and functions of a building accessible. It includes installation of assistive listening systems, modification of living quarters, modifications to laboratory workstations, etc. Bathrooms, which are integral to efficiency suites, are catalogued here.
AC4B	GENERAL	OTHER	All accessibility issues not catalogued elsewhere.
SYSTEM DESCRIPTION: ELECTRICAL			
EL1A	INCOMING SERVICE	TRANSFORMER	Main building service transformer.
EL1B	INCOMING SERVICE	DISCONNECTS	Main building disconnect and switchgear.
EL1C	INCOMING SERVICE	FEEDERS	Incoming service feeders. Complete incoming service upgrades, including transformers, feeders, and main distribution panels are catalogued here.
EL1D	INCOMING SERVICE	METERING	Installation of meters to record consumption and/or demand.
EL2A	MAIN DISTRIBUTION PANELS	CONDITION UPGRADE	Main distribution upgrade due to deficiencies in condition.
EL2B	MAIN DISTRIBUTION PANELS	CAPACITY UPGRADE	Main distribution upgrades due to inadequate capacity.
EL3A	SECONDARY DISTRIBUTION	STEP DOWN TRANSFORMERS	Secondary distribution stepdown and isolation transformers.
EL3B	SECONDARY DISTRIBUTION	DISTRIBUTION NETWORK	Includes conduit, conductors, sub-distribution panels, switches, outlets, etc. Complete interior rewiring of a facility is catalogued here.
EL3C	SECONDARY DISTRIBUTION	MOTOR CONTROLLERS	Mechanical equipment motor starters and control centers.
EL4A	DEVICES AND FIXTURES	EXTERIOR LIGHTING	Exterior building lighting fixtures including supply conductors and conduit.
EL4B	DEVICES AND FIXTURES	INTERIOR LIGHTING	Interior lighting fixtures (also system wide emergency lighting) including supply conductors and conduits.
EL4C	DEVICES AND FIXTURES	LIGHTING CONTROLLERS	Motion sensors, photocell controllers, lighting contactors, etc.

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CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
EL4D	DEVICES AND FIXTURES	GFCI PROTECTION	Ground fault protection including GFCI receptacles and breakers.
EL4E	DEVICES AND FIXTURES	LIGHTNING PROTECTION	Lightning arrestation systems including air terminals and grounding conductors.
EL5A	EMERGENCY POWER SYSTEM	GENERATION/ DISTRIBUTION	Includes generators, central battery banks, transfer switches, emergency power grid, etc.
EL6A	SYSTEMS	UPS/DC POWER SUPPLY	Uninterruptible power supply systems and DC motor-generator sets and distribution systems.
EL7A	INFRASTRUCTURE	ABOVE GROUND TRANSMISSION	Includes poles, towers, conductors, insulators, fuses, disconnects, etc.
EL7B	INFRASTRUCTURE	UNDERGROUND TRANSMISSION	Includes direct buried feeders, ductbanks, conduit, manholes, feeders, switches, disconnects, etc.
EL7C	INFRASTRUCTURE	SUBSTATIONS	Includes incoming feeders, breakers, buses, switchgear, meters, CTs, PTs, battery systems, capacitor banks, and all associated auxiliary equipment.
EL7D	INFRASTRUCTURE	DISTRIBUTION SWITCHGEAR	Stand-alone sectionalizing switches, distribution switchboards, etc.
EL7F	INFRASTRUCTURE	AREA AND STREET LIGHTING	Area and street lighting systems including stanchions, fixtures, feeders, etc.
EL8A	GENERAL	OTHER	Electrical system components not catalogued elsewhere.
SYSTEM DESCRIPTION: EXTERIOR			
ES1A	FOUNDATION/FOOTING	STRUCTURE	Structural foundation improvements involving structural work on foundation wall/footing, piers, caissons, piles including crack repairs, shoring & pointing
ES1B	FOUNDATION/FOOTING	DAMP/PROOFING/ DEWATERING	Foundation/footing waterproofing work including, damp proofing, dewatering, insulation, etc.
ES2A	COLUMNS/BEAMS/ WALLS	STRUCTURE	Structural work to primary load-bearing structural components aside from floors including columns, beams, bearing walls, lintels, arches, etc.
ES2B	COLUMNS/BEAMS/ WALLS	FINISH	Work involving restoration of the appearance and weatherproof integrity of exterior wall/structural envelope components including masonry/pointing, expansion joints, efflorescence & stain removal, grouting, surfacing, chimney repairs, etc.
ES3A	FLOOR	STRUCTURE	Work concerning the structural integrity of the load supporting floors both exposed and unexposed including deformation, delamination, spalling, shoring, crack repair, etc.
ES4A	ROOF	REPAIR	Work on waterproof horizontal finish (roof) involving repair and/or limited replacement (<40% total) including membrane patching, flashing repair, coping caulk/resetting, PPT wall parging/coating, walkpad installation, skylight and roof hatch R&R, etc.
ES4B	ROOF	REPLACEMENT	Work involving total refurbishment of roofing system including related component rehab.
ES5A	FENESTRATIONS	DOORS	Work on exterior exit/access door including storefronts, airlocks, air curtains, vinyl slat doors, all power/manual operating hardware (except handicapped), etc.
ES5B	FENESTRATIONS	WINDOWS	Work on exterior fenestration closure & related components including glass/metal/wood curtain walls, fixed or operable window sashes, glazing, frames, sills, casings, stools, seats, coatings, treatments, screens, storm windows, etc.
ES6A	GENERAL	ATTACHED STRUCTURE	Work on attached exterior structure components not normally considered in above categories including porches, stoops, decks, monumental entrance stairs, cupolas, tower, etc.
ES6B	GENERAL	AREAWAYS	Work on attached grade level or below structural features including subterranean light wells, areaways, basement access stairs, etc.
ES6C	GENERAL	TRIM	Work on ornamental exterior (generally non-structural) elements including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.
ES6D	GENERAL	SUPERSTRUCTURE	Finish and structural work on non-standard structures with exposed load-bearing elements such as stadiums, bag houses, bleachers, freestanding towers, etc.



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CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere including finish and structural work on freestanding boiler stacks.
SYSTEM DESCRIPTION: FIRE / LIFE SAFETY			
FS1A	LIGHTING	EGRESS LIGHTING/EXIT SIGNAGE	R & R work on exit signage and packaged AC/DC emergency lighting.
FS2A	DETECTION/ALARM	GENERAL	Repair or replacement of fire alarm/detection system/components including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.
FS3A	SUPPRESSION	SPRINKLERS	Repair or installation of water sprinklers type automatic fire suppressions including wet pipe & dry pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.
FS3B	SUPPRESSION	STANDPIPE/HOSE	Repair or installation of standpipe system or components including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.
FS3C	SUPPRESSION	EXTINGUISHERS	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.
FS3D	SUPPRESSION	OTHER	Other fire suppression items not specifically categorized elsewhere including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.
FS4A	HAZARDOUS MATERIALS	STORAGE ENVIRONMENT	Installation or repair of special storage environment for the safe holding of flammable or otherwise dangerous materials/supplies including vented flammables storage cabinets, holding pens/rooms, cages, fire safe chemical storage rooms, etc.
FS4B	HAZARDOUS MATERIALS	USER SAFETY	Improvements, repairs, installation, or testing of user safety equipment including emergency eyewashes, safety showers, emergency panic/shut-down system, etc.
FS5A	EGRESS PATH	DESIGNATION	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.
FS5B	EGRESS PATH	DISTANCE/GEOMETRY	Work involving remediation of egress routing problems including elimination of dead end corridors, excessive egress distance modifications and egress routing inadequacies.
FS5C	EGRESS PATH	SEPARATION RATING	Restoration of required fire protective barriers including wall rating compromises, fire rated construction, structural fire proofing, wind/safety glazing, transom retrofitting, etc.
FS5D	EGRESS PATH	OBSTRUCTION	Clearance of items restricting the required egress routes.
FS5E	EGRESS PATH	STAIRS RAILING	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.
FS5F	EGRESS PATH	FIRE DOORS/HARDWARE	Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.
FS5G	EGRESS PATH	FINISH/FURNITURE RATINGS	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.
FS6A	GENERAL	OTHER	Life/fire safety items not specifically categorized elsewhere.
SYSTEM DESCRIPTION: HEALTH			
HE1A	ENVIRONMENTAL CONTROL	EQUIPMENT AND ENCLOSURES	Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and all associated mechanical equipment.
HE1B	ENVIRONMENTAL CONTROL	OTHER	General environmental control problems not catalogued elsewhere.
HE2A	PEST CONTROL	GENERAL	Includes all measures necessary to control and destroy insects, rodents and other pests.
HE3A	REFUSE	GENERAL	Issues related to the collection, handling and disposal of refuse.
HE4A	SANITATION EQUIPMENT	LABORATORY AND PROCESS	Includes autoclaves, cage washers, steam cleaners, etc.
HE5A	FOOD SERVICE	KITCHEN EQUIPMENT	Includes ranges, grilles, cookers, sculleries, etc.
HE5B	FOOD SERVICE	COLD STORAGE	Includes the cold storage room and all associated refrigeration equipment.
HE6A	HAZARDOUS MATERIAL	STRUCTURAL ASBESTOS	Testing, abatement and disposal of structural and building finish materials containing asbestos.

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CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HE6B	HAZARDOUS MATERIAL	MECHANICAL ASBESTOS	Testing, abatement and disposal of mechanical insulation materials containing asbestos.
HE6C	HAZARDOUS MATERIAL	PCBs	Includes testing, demolition, disposal and cleanup of PCB contaminated substances.
HE6D	HAZARDOUS MATERIAL	FUEL STORAGE	Includes monitoring, removal and replacement of above and below ground fuel storage and distribution systems. Also includes testing and disposal of contaminated soils.
HE6E	HAZARDOUS MATERIAL	LEAD PAINT	Testing, removal and disposal of lead-based paint systems.
HE6F	HAZARDOUS MATERIAL	OTHER	Handling, storage, and disposal of other hazardous materials.
HE7A	GENERAL	OTHER	Health related issues not catalogued elsewhere.
SYSTEM DESCRIPTION: HVAC			
HV1A	HEATING	BOILERS/STACKS/ CONTROLS	Boilers for heating purposes including their related stacks, flues, and controls.
HV1B	HEATING	RADIATORS/ CONVECTORS	Including cast iron radiators, fin tube radiators, baseboard radiators, etc.
HV1C	HEATING	FURNACE	Furnaces and their related controls, flues, etc.
HV1D	HEATING	FUEL SUPPLY/STORAGE	Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related leak detection/monitoring.
HV2A	COOLING	CHILLERS/ CONTROLS	Chiller units for production of chilled water for cooling purposes, related controls (not including mods for CFC compliance).
HV2B	COOLING	HEAT REJECTION	Repair/replacement of cooling towers, dry coolers, air-cooling and heat rejection. (Includes connection of once-through system to cooling tower.)
HV3A	HEATING/COOLING	SYSTEM RETROFIT/ REPLACE	Replacement or major retrofit of HVAC systems.
HV3B	HEATING/COOLING	WATER TREATMENT	Treatment of hot water, chilled water, steam, condenser water, etc.
HV3C	HEATING/COOLING	PACKAGE/SELF-CONTAINED UNITS	Repair/replacement of self-contained/package type units including stand up units, rooftop units, window units, etc; both air conditioners and heat pumps.
HV3D	HEATING/COOLING	CONVENTIONAL SPLIT SYSTEMS	Repair, installation, or replacement of conventional split systems; both air conditioners and heat pumps including independent component replacements of compressors and condensers.
HV4A	AIR MOVING/ VENTILATION	AIR HANDLERS/ FAN UNITS	Includes air handlers & coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems or other specifically categorized systems.
HV4B	AIR MOVING/ VENTILATION	EXHAUST FANS	Exhaust fan systems including fans, range and fume hoods, controls, and related ductwork.
HV4C	AIR MOVING/ VENTILATION	OTHER FANS	Supply, return, or any other fans not incorporated into a component categorized elsewhere.
HV4D	AIR MOVING/ VENTILATION	AIR DISTRIBUTION NETWORK	Repair, replacement, or cleaning of air distribution network including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.
HV5A	STEAM/HYDRONIC DISTRIBUTION	PIPING NETWORK	Repair/replacement of piping networks for heating and cooling systems including pipe, fittings, insulation, related components, etc.
HV5B	STEAM/HYDRONIC DISTRIBUTION	PUMPS	Repair or replacement of pumps used in heating and cooling systems, related control components, etc.
HV5C	STEAM/HYDRONIC DISTRIBUTION	HEAT EXCHANGERS	Including shell and tube heat exchangers and plate heat exchangers for heating and cooling.
HV6A	CONTROLS	COMPLETE SYSTEM UPGRADE	Replacement of HVAC control systems.



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CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HV6B	CONTROLS	MODIFICATIONS/ REPAIRS	Repair or modification of HVAC control system.
HV6C	CONTROLS	AIR COMPRESSORS/ DRYERS	Repair or modification of control air compressors and dryers.
HV7A	INFRASTRUCTURE	STEAM/HOT WATER GENERATION	Generation of central steam and/or hot water including boilers and related components.
HV7B	INFRASTRUCTURE	STEAM/HOT WATER DISTRIBUTION	Distribution system for central hot water and/or steam.
HV7C	INFRASTRUCTURE	CHILLED WATER GENERATION	Generation of central chilled water including chillers and related components.
HV7D	INFRASTRUCTURE	CHILLED WATER DISTRIBUTION	Distribution system for central chilled water.
HV7E	INFRASTRUCTURE	TUNNELS/ MANHOLES/ TRENCHES	Repairs, installation, replacement of utility system access chambers.
HV7F	INFRASTRUCTURE	OTHER	HVAC infrastructure issues not specifically categorized elsewhere.
HV8A	GENERAL	CFC COMPLIANCE	Chiller conversions/replacements for CFC regulatory compliance, monitoring, etc.
HV8B	GENERAL	OTHER	HVAC issues not catalogued elsewhere.
SYSTEM DESCRIPTION: INTERIOR / FINISH SYSTEMS			
IS1A	FLOOR	FINISHES-DRY	R & R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum & tile, marble, terrazzo, rubber flooring, underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)
IS1B	FLOOR	FINISHES-WET	Flooring finish/underlayment work in predominantly "wet" areas including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.
IS2A	PARTITIONS	STRUCTURE	Structural work on full height permanent interior partitions including wood/metal stud & drywall systems, CMU systems, structural brick, tile, glass block, etc.
IS2B	PARTITIONS	FINISHES	Work on full height permanent interior partitions including R & R to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.
IS3A	CEILINGS	REPAIR	Repair of interior ceilings (<40% of total) including tiles, gypsum board, plaster, paint, etc.
IS3B	CEILINGS	REPLACEMENT	Major refurbishments (>40% of total) to interior ceiling systems including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.
IS4A	DOORS	GENERAL	Any work on interior non-fire rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).
IS5A	STAIRS	FINISH	Any finish restorative work to stair tower walking surfaces including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).
IS6A	GENERAL	MOLDING	R & R to interior trim/molding systems including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.
IS6B	GENERAL	CABINETS	R & R work to interior casework systems including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).
IS6C	GENERAL	SCREENING	Work on temporary or partial height partitioning systems including toilet partitions, urinal/vanity screens, etc.
IS6D	GENERAL	OTHER	Any work on interior elements not logically or specifically categorized elsewhere including light coves, phone booths, interior light wells, etc.
SYSTEM DESCRIPTION: PLUMBING			

Facility Condition Analysis, Wasatch Hall

STATE OF UTAH
DIVISION OF FACILITIES AND CONSTRUCTION MANAGEMENT
Facility Condition Analysis
Section One

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.
PL1B	DOMESTIC WATER	PUMPS	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	DOMESTIC WATER	STORAGE/ TREATMENT	Equipment or vessels for storage or treatment of domestic water.
PL1D	DOMESTIC WATER	METERING	Installation, repair, or replacement of water meters.
PL1E	DOMESTIC WATER	HEATING	Domestic water heaters including gas, oil, and electric water heaters, shell and tube heat exchangers, tank type and instantaneous.
PL1F	DOMESTIC WATER	COOLING	Central systems for cooling and distributing drinking water.
PL1G	DOMESTIC WATER	FIXTURES	Plumbing fixtures including sinks, drinking fountains, water closets, urinals, etc.
PL1H	DOMESTIC WATER	CONSERVATION	Alternations made to the water distribution system to conserve water.
PL1I	DOMESTIC WATER	BACKFLOW PROTECTION	Backflow protection devices including backflow preventers, vacuum breakers, etc.
PL2A	WASTEWATER	PIPING NETWORK	Repair or replacement of building wastewater piping network.
PL2B	WASTEWATER	PUMPS	Pump systems used to lift wastewater including sewage ejectors and other sump systems.
PL3A	SPECIAL SYSTEMS	PROCESS GAS/FLUIDS	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.
PL4A	INFRASTRUCTURE	POTABLE WATER STORAGE/ TREATMENT	Storage and treatment of potable water for distribution.
PL4B	INFRASTRUCTURE	INDUSTRIAL WATER DISTRIBUTION/ TREATMENT	Storage and treatment of industrial water for distribution.
PL4C	INFRASTRUCTURE	SANITARY WATER COLLECTION	Sanitary water collection systems, sanitary sewer systems; including combined systems.
PL4D	INFRASTRUCTURE	STORM WATER COLLECTION	Storm water collection systems, storm sewer systems; storm water only.
PL4E	INFRASTRUCTURE	POTABLE WATER DISTRIBUTION	Potable water distribution network.
PL4F	INFRASTRUCTURE	WASTEWATER TREATMENT	Wastewater treatment plants, associated equipment, etc.
PL5A	GENERAL	OTHER	Plumbing issues not categorized elsewhere.
SYSTEM DESCRIPTION: SITE			
SI1A	ACCESS	PEDESTRIAN	Paved pedestrian surfaces including walks, site stairs, step ramps, paths, pedestrian signage, sidewalk bridges/canopies, pedestrian plaza/mall areas, etc.
SI1B	ACCESS	VEHICULAR	Paved vehicular surfaces including roads, paths, curbs, guards, bollards, bridges, skyways, joints, shoulder work, culverts, ditches, vehicular signage, etc.
SI2A	LANDSCAPE	GRADE/FLORA	Landscape related work including new grass/turf refurbishment, grade improvements, catch basins, swales, berms, pruning, new ornamental flora, etc.
SI3A	HARDSCAPE	STRUCTURE	Permanent hard site features, predominantly ornamental, including terraces, fences, statues, freestanding signage, fountains, benches, etc.
SI4A	GENERAL	OTHER	Other site work not specifically categorized elsewhere.
SYSTEM DESCRIPTION: SECURITY SYSTEMS			
SS1A	LIGHTING	EXTERIOR	Fixtures, stanchions, foliage interference, cleanliness, locations, etc.



Facility Condition Analysis, Wasatch Hall

STATE OF UTAH
DIVISION OF FACILITIES AND CONSTRUCTION MANAGEMENT
Facility Condition Analysis
Section One

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SS2A	SITE	FENCING	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.
SS2B	SITE	GENERAL	Hidden areas due to foliage, fencing, parking, walls, etc.
SS3A	COMMUNICATIONS	EMERGENCY PHONES	Access, locations, visibility, function, reliability, etc.
SS4A	ACCESS CONTROL	DOORS	Access, locks, keys, two way speakers, reliability, redundancy, etc.
SS4B	ACCESS CONTROL	WINDOWS	Locks, screens, access, reliability, etc.
SS4C	ACCESS CONTROL	SYSTEMS	Card key, proximity devices, data control, data use, reliability, system design, etc.
SS5A	MONITORING	SYSTEMS	Cameras, audio communication, monitoring stations, locations, system design, etc.
SS6A	CIRCULATION	PEDESTRIAN	On campus as well as to and from off campus housing and class locations, etc.
SS6B	CIRCULATION	VEHICULAR	Guard gates, access, systems, data control and use, identification, etc.
SS7A	GENERAL	OTHER	General information/projects pertaining to security issues.
SYSTEM DESCRIPTION: VERTICAL TRANSPORTATION			
VT1A	MACHINE ROOM	GENERAL	Machine, worm gear, thrust bearing, brake, motors, sheaves, generator, controller, selector, governor, pump(s), valves, oil, access, lighting, ventilation, floor.
VT2A	CAR	GENERAL	Position indicator, lighting, floor, gate-doors, operation devices, safeties, safety shoe, light ray/detection, emergency light, fire fighter service, car top, door operator, stop switch, car frame, car guides, sheaves, phone, ventilation.
VT3A	HOISTWAY	GENERAL	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, compensation.
VT4A	HALL FIXTURES	GENERAL	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, card/key access.
VT5A	PIT	GENERAL	Buffer(s), guards, sheaves, hydro packing, floor, lighting, safety controls.
VT6A	OPERATING CONDITIONS	GENERAL	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, nudging.
VT7A	GENERAL	OTHER	General information/projects relating to vertical transportation system components.

Facility Condition Analysis, Wasatch Hall

FACILITY CONDITION ANALYSIS

SECTION 2

DETAILED PROJECT SUMMARIES AND TOTALS



Facility Condition Analysis, Wasatch Hall

Detailed Project Totals
Facility Condition Analysis
System Code by Priority Class
0769 - WSU - WASATCH HALL

System Code	System Description	Priority Classes				Subtotal
		1	2	3	4	
AC	ACCESSIBILITY	0	70,554	107,409	520,849	698,813
EL	ELECTRICAL	0	347,738	200,782	52,006	600,526
ES	EXTERIOR	0	0	27,238	326,301	353,539
FS	FIRE/LIFE SAFETY	0	274,747	114,262	0	389,009
HE	HEALTH	0	0	188,924	0	188,924
HV	HVAC	0	0	920,498	0	920,498
IS	INTERIOR/FINISH SYS.	0	0	263,601	0	263,601
PL	PLUMBING	0	92,601	306,010	0	398,612
SI	SITE	0	6,104	0	0	6,104
TOTALS		\$0	\$791,744	\$2,128,725	\$899,157	\$3,819,625

Facility Replacement Cost	\$7,796,854
Facility Condition Needs Index	0.49

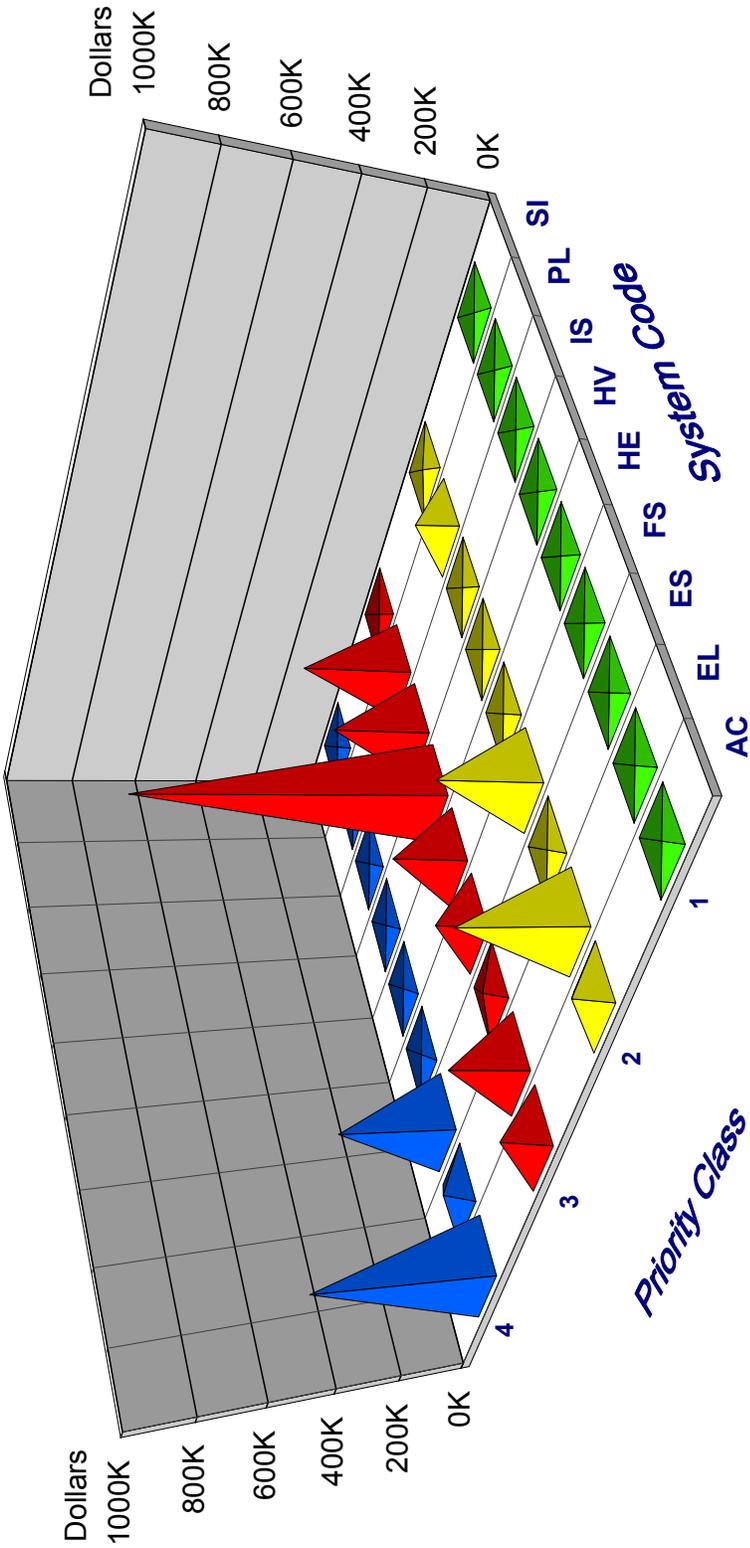
Gross Square Feet 48,427

Total Cost Per Square Foot \$78.87

2.1.1

Facility Condition Analysis, Wasatch Hall

FACILITY CONDITION ANALYSIS
System Code by Priority Class
 0769 - WSU - WASATCH HALL





Facility Condition Analysis, Wasatch Hall

Detailed Project Totals
Facility Condition Analysis
System Code by Project Class
0769 - WSU - WASATCH HALL

System Code	System Description	Project Classes			Subtotal
		Capital Renewal	Deferred Maintenance	Plant Adaption	
AC	ACCESSIBILITY	0	0	698,813	698,813
EL	ELECTRICAL	252,788	347,738	0	600,526
ES	EXTERIOR	326,301	27,238	0	353,539
FS	FIRE/LIFE SAFETY	4,741	109,521	274,747	389,009
HE	HEALTH	0	0	188,924	188,924
HV	HVAC	0	920,498	0	920,498
IS	INTERIOR/FINISH SYS.	0	263,601	0	263,601
PL	PLUMBING	127,732	270,879	0	398,612
SI	SITE	0	6,104	0	6,104
TOTALS		\$711,563	\$1,945,579	\$1,162,483	\$3,819,625

Facility Replacement Cost	\$7,796,854
Facility Condition Needs Index	0.49

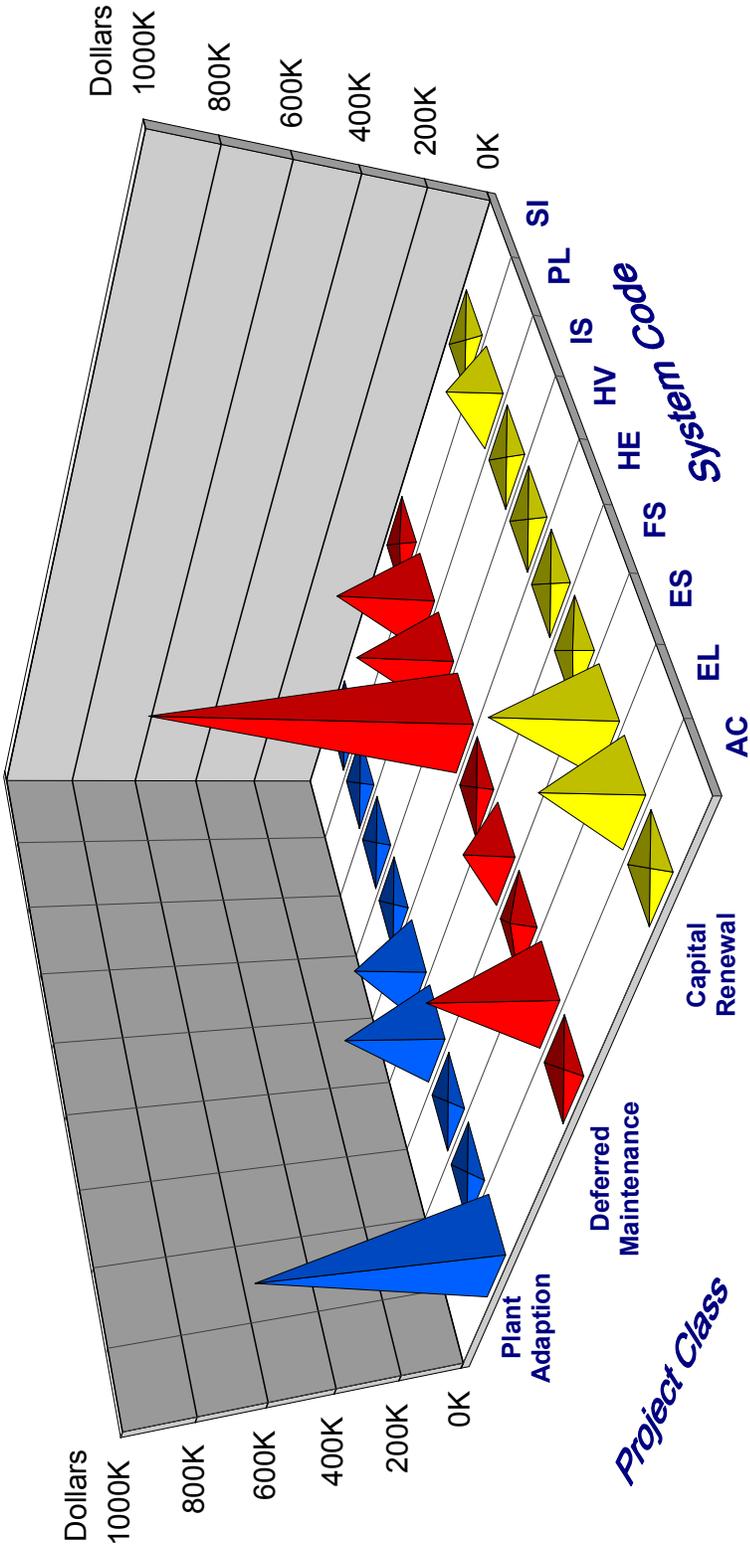
Gross Square Feet 48,427

Total Cost Per Square Foot \$78.87

2.1.2

Facility Condition Analysis, Wasatch Hall

FACILITY CONDITION ANALYSIS System Code by Project Class 0769 - WSU - WASATCH HALL



Detailed Project Summary
 Facility Condition Analysis
 Project Class by Priority Class
 0769 - WSU - WASATCH HALL

Project Class	Priority Classes				Subtotal
	1	2	3	4	
Capital Renewal	0	0	333,255	378,307	711,563
Deferred Maintenance	0	446,443	1,499,137	0	1,945,579
Plant Adaption	0	345,301	296,333	520,849	1,162,483
TOTALS	\$0	\$791,744	\$2,128,725	\$899,157	\$3,819,625

Facility Replacement Cost	\$7,796,854
Facility Condition Needs Index	0.49

Gross Square Feet 48,427

Total Cost Per Square Foot \$78.87

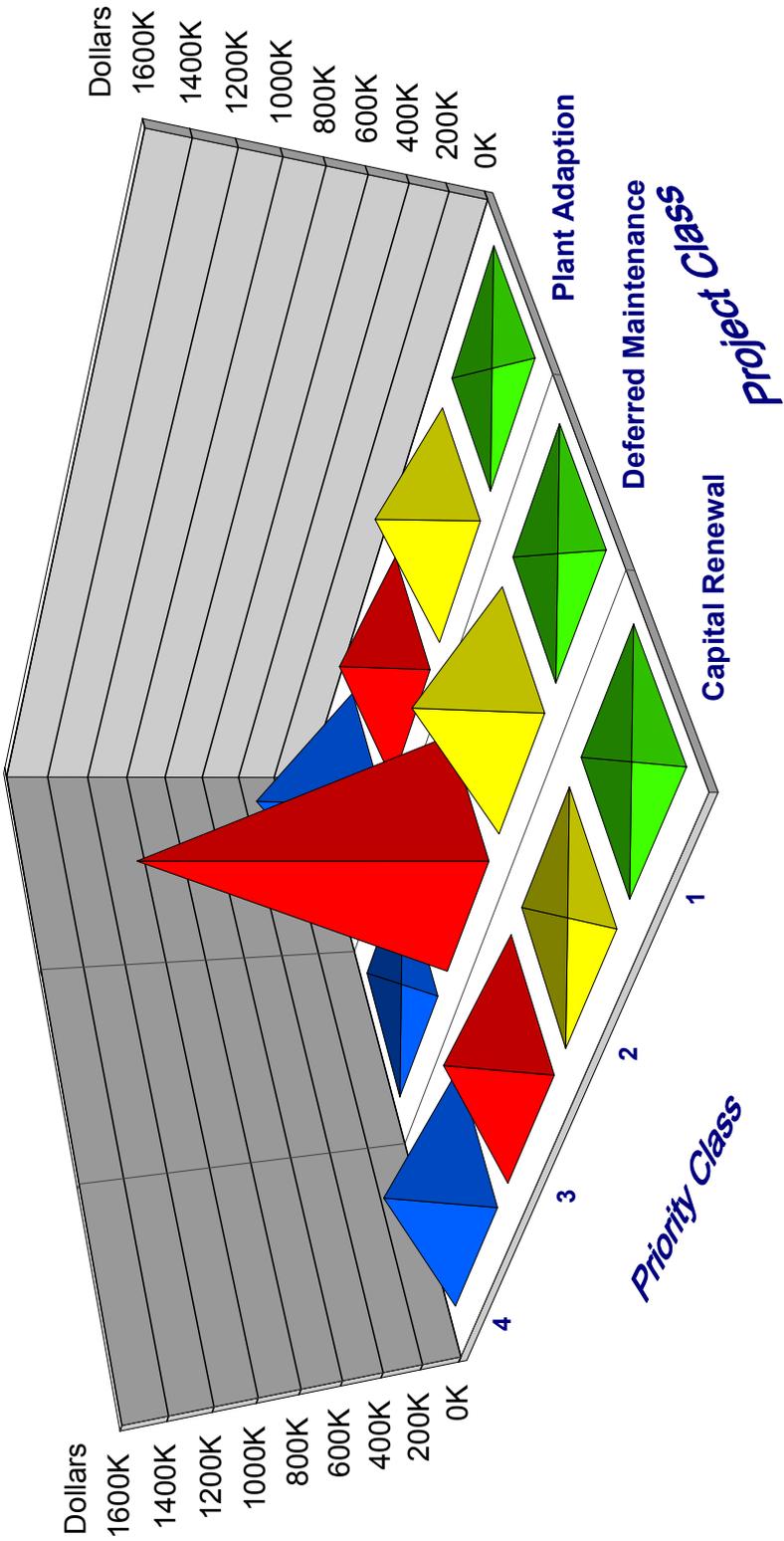


Facility Condition Analysis, Wasatch Hall

2.1.3

Facility Condition Analysis, Wasatch Hall

FACILITY CONDITION ANALYSIS
Project Class by Priority Class
 0769 - WSU - WASATCH HALL





Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
Facility Condition Analysis
Section Two
Priority Class - Priority Sequence
0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS6A	0769FS04	2	1	INSTALL SEISMIC SHUTOFF VALVE	1,765	282	0	2,048
FS3A	0769FS03	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	216,125	34,580	0	250,705
FS5C	0769FS05	2	3	EGRESS STAIR DOOR INSTALLATIONS	18,960	3,034	0	21,993
AC3D	0769AC01	2	4	INTERIOR SIGNAGE PACKAGE UPGRADE	13,955	2,233	0	16,188
AC2A	0769AC06	2	5	EXTERIOR / INTERIOR ACCESSIBLE RAMP INSTALLATIONS	46,868	7,499	0	54,366
EL3B	0769EL02	2	6	SECONDARY ELECTRICAL SYSTEM UPGRADE	299,774	47,964	0	347,738
PL1A	0769PL02	2	7	WATER SUPPLY PIPING NETWORK REPLACEMENT	79,829	12,773	0	92,601
SI7B	0769SI01	2	8	CONCRETE SIDEWALK SITE DRAINAGE CORRECTION WORK	5,262	842	0	6,104
Totals for Priority Class 2					682,538	109,206	0	791,744
FS2A	0769FS01	3	9	FIRE ALARM SYSTEM UPGRADE	94,415	15,106	0	109,521
FS1A	0769FS02	3	10	EXIT SIGNAGE UPGRADE	4,087	654	0	4,741
HE6F	0769HE01	3	11	ASBESTOS TESTING / ABATEMENT OF TEXTURED CEILING	162,865	26,058	0	188,924
AC3F	0769AC02	3	12	DUAL LEVEL DRINKING FOUNTAIN UPGRADE	44,373	7,100	0	51,473
AC3E	0769AC03	3	13	ADDITIONAL HALL BATH ACCESSIBILITY IMPROVEMENTS	40,747	6,520	0	47,266
AC3B	0769AC08	3	14	STAIR TOWER RAILING ACCESSIBILITY UPGRADES	7,474	1,196	0	8,670
ES2B	0769ES03	3	15	SELECTIVELY CLEAN, POINT, AND CAULK EXTERIOR BRICK SURFACES	27,238	0	0	27,238
HV3A	0769HV01	3	16	HVAC SYSTEM REPLACEMENT	793,532	126,965	0	920,498
EL4B	0769EL01	3	17	INTERIOR LIGHTING UPGRADE	173,088	27,694	0	200,782
IS2B	0769IS01	3	18	INTERIOR REPAINTING AND MINOR WALL REPAIRS	87,952	0	0	87,952
IS1A	0769IS02	3	19	INTERIOR FLOOR FINISH RESTORATION	151,422	24,227	0	175,649
PL1G	0769PL01	3	20	PLUMBING FIXTURE REPLACEMENT	153,688	24,590	0	178,278
PL1E	0769PL04	3	21	REPLACE DOMESTIC HOT WATER CONVERTER	17,061	2,730	0	19,790

Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
Facility Condition Analysis
Section Two
Priority Class - Priority Sequence
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
PL2A	0769PL03	3	22	DRAIN PIPING NETWORK REPLACEMENT	93,053	14,889	0	107,942
Totals for Priority Class 3					1,850,996	277,729	0	2,128,725
AC4A	0769AC07	4	23	OVERNIGHT LODGING ACCESSIBILITY UPGRADES	22,185	3,550	0	25,735
AC3C	0769AC04	4	24	INTERIOR DOOR HARDWARE UPGRADES	56,726	9,076	0	65,803
AC3A	0769AC05	4	25	PASSENGER ELEVATOR INSTALLATION	370,097	59,215	0	429,312
ES4B	0769ES01	4	26	NORTH BUILT-UP ROOFING SYSTEM REPLACEMENT	54,080	8,653	0	62,732
ES5B	0769ES02	4	27	EXTERIOR WINDOW UNIT UPGRADES	227,214	36,354	0	263,569
EL5A	0769EL03	4	28	EMERGENCY GENERATOR REPLACEMENT	41,385	6,622	0	48,006
EL4A	0769EL04	4	29	EXTERIOR LIGHTING REPLACEMENT	3,449	552	0	4,000
Totals for Priority Class 4					775,135	124,022	0	899,157
Grand Total:					3,308,669	510,956	0	3,819,625



Facility Condition Analysis, Wasatch Hall

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects < 200,000

0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS6A	0769FS04	2	1	INSTALL SEISMIC SHUTOFF VALVE	1,765	282	0	2,048
FS5C	0769FS05	2	3	EGRESS STAIR DOOR INSTALLATIONS	18,960	3,034	0	21,993
AC3D	0769AC01	2	4	INTERIOR SIGNAGE PACKAGE UPGRADE	13,955	2,233	0	16,188
AC2A	0769AC06	2	5	EXTERIOR / INTERIOR ACCESSIBLE RAMP INSTALLATIONS	46,868	7,499	0	54,366
PL1A	0769PL02	2	7	WATER SUPPLY PIPING NETWORK REPLACEMENT	79,829	12,773	0	92,601
SI7B	0769SI01	2	8	CONCRETE SIDEWALK SITE DRAINAGE CORRECTION WORK	5,262	842	0	6,104
Totals for Priority Class 2					166,638	26,662	0	193,301
FS2A	0769FS01	3	9	FIRE ALARM SYSTEM UPGRADE	94,415	15,106	0	109,521
FS1A	0769FS02	3	10	EXIT SIGNAGE UPGRADE	4,087	654	0	4,741
HE6F	0769HE01	3	11	ASBESTOS TESTING / ABATEMENT OF TEXTURED CEILING	162,865	26,058	0	188,924
AC3F	0769AC02	3	12	DUAL LEVEL DRINKING FOUNTAIN UPGRADE	44,373	7,100	0	51,473
AC3E	0769AC03	3	13	ADDITIONAL HALL BATH ACCESSIBILITY IMPROVEMENTS	40,747	6,520	0	47,266
AC3B	0769AC08	3	14	STAIR TOWER RAILING ACCESSIBILITY UPGRADES	7,474	1,196	0	8,670
ES2B	0769ES03	3	15	SELECTIVELY CLEAN, POINT, AND CAULK EXTERIOR BRICK SURFACES	27,238	0	0	27,238
IS2B	0769IS01	3	18	INTERIOR REPAINTING AND MINOR WALL REPAIRS	87,952	0	0	87,952
IS1A	0769IS02	3	19	INTERIOR FLOOR FINISH RESTORATION	151,422	24,227	0	175,649
PL1G	0769PL01	3	20	PLUMBING FIXTURE REPLACEMENT	153,688	24,590	0	178,278
PL1E	0769PL04	3	21	REPLACE DOMESTIC HOT WATER CONVERTER	17,061	2,730	0	19,790
PL2A	0769PL03	3	22	DRAIN PIPING NETWORK REPLACEMENT	93,053	14,889	0	107,942
Totals for Priority Class 3					884,376	123,070	0	1,007,445
AC4A	0769AC07	4	23	OVERNIGHT LODGING ACCESSIBILITY UPGRADES	22,185	3,550	0	25,735
AC3C	0769AC04	4	24	INTERIOR DOOR HARDWARE UPGRADES	56,726	9,076	0	65,803

Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
Facility Condition Analysis
Section Two
Priority Class - Priority Sequence - Projects < 200,000
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
ES4B	0769ES01	4	26	NORTH BUILT-UP ROOFING SYSTEM REPLACEMENT	54,080	8,653	0	62,732
EL5A	0769EL03	4	28	EMERGENCY GENERATOR REPLACEMENT	41,385	6,622	0	48,006
EL4A	0769EL04	4	29	EXTERIOR LIGHTING REPLACEMENT	3,449	552	0	4,000
Totals for Priority Class 4					177,824	28,452	0	206,276
Grand Totals For Projects < 200,000					1,228,838	178,184	0	1,407,022



Facility Condition Analysis, Wasatch Hall

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects >= 200,000 and < 500,000

0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS3A	0769FS03	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	216,125	34,580	0	250,705
EL3B	0769EL02	2	6	SECONDARY ELECTRICAL SYSTEM UPGRADE	299,774	47,964	0	347,738
Totals for Priority Class 2					515,899	82,544	0	598,443
EL4B	0769EL01	3	17	INTERIOR LIGHTING UPGRADE	173,088	27,694	0	200,782
Totals for Priority Class 3					173,088	27,694	0	200,782
AC3A	0769AC05	4	25	PASSENGER ELEVATOR INSTALLATION	370,097	59,215	0	429,312
ES5B	0769ES02	4	27	EXTERIOR WINDOW UNIT UPGRADES	227,214	36,354	0	263,569
Totals for Priority Class 4					597,311	95,570	0	692,881
Grand Totals For Projects >= 200,000 and < 500,000					1,286,298	205,808	0	1,492,106

Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
Facility Condition Analysis
Section Two
Priority Class - Priority Sequence - Projects >= 500,000
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
HV3A	0769HV01	3	16	HVAC SYSTEM REPLACEMENT	793,532	126,965	0	920,498
Totals for Priority Class 3					793,532	126,965	0	920,498
Grand Totals For Projects >= 500,000					793,532	126,965	0	920,498
Grand Total for All Projects:					3,308,669	510,956	0	3,819,625



Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
Facility Condition Analysis
Section Two
Project Classification
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
FS1A	0769FS02	10	Capital Renewal	3	EXIT SIGNAGE UPGRADE	4,087	654	0	4,741
EL4B	0769EL01	17	Capital Renewal	3	INTERIOR LIGHTING UPGRADE	173,088	27,694	0	200,782
PL1E	0769PL04	21	Capital Renewal	3	REPLACE DOMESTIC HOT WATER CONVERTER	17,061	2,730	0	19,790
PL2A	0769PL03	22	Capital Renewal	3	DRAIN PIPING NETWORK REPLACEMENT	93,053	14,889	0	107,942
ES4B	0769ES01	26	Capital Renewal	4	NORTH BUILT-UP ROOFING SYSTEM REPLACEMENT	54,080	8,653	0	62,732
ES5B	0769ES02	27	Capital Renewal	4	EXTERIOR WINDOW UNIT UPGRADES	227,214	36,354	0	263,569
EL5A	0769EL03	28	Capital Renewal	4	EMERGENCY GENERATOR REPLACEMENT	41,385	6,622	0	48,006
EL4A	0769EL04	29	Capital Renewal	4	EXTERIOR LIGHTING REPLACEMENT	3,449	552	0	4,000
Totals for Capital Renewal						613,416	98,147	0	711,563
EL3B	0769EL02	6	Deferred Maintenance	2	SECONDARY ELECTRICAL SYSTEM UPGRADE	299,774	47,964	0	347,738
PL1A	0769PL02	7	Deferred Maintenance	2	WATER SUPPLY PIPING NETWORK REPLACEMENT	79,829	12,773	0	92,601
SI7B	0769SI01	8	Deferred Maintenance	2	CONCRETE SIDEWALK SITE DRAINAGE CORRECTION WORK	5,262	842	0	6,104
FS2A	0769FS01	9	Deferred Maintenance	3	FIRE ALARM SYSTEM UPGRADE	94,415	15,106	0	109,521
ES2B	0769ES03	15	Deferred Maintenance	3	SELECTIVELY CLEAN, POINT, AND CAULK EXTERIOR BRICK SURFACES	27,238	0	0	27,238
HV3A	0769HV01	16	Deferred Maintenance	3	HVAC SYSTEM REPLACEMENT	793,532	126,965	0	920,498
IS2B	0769IS01	18	Deferred Maintenance	3	INTERIOR REPAINTING AND MINOR WALL REPAIRS	87,952	0	0	87,952
IS1A	0769IS02	19	Deferred Maintenance	3	INTERIOR FLOOR FINISH RESTORATION	151,422	24,227	0	175,649
PL1G	0769PL01	20	Deferred Maintenance	3	PLUMBING FIXTURE REPLACEMENT	153,688	24,590	0	178,278

Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
Facility Condition Analysis
Section Two
Project Classification
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
Totals for Deferred Maintenance						1,693,112	252,467	0	1,945,579
FS6A	0769FS04	1	Plant Adaption	2	INSTALL SEISMIC SHUTOFF VALVE	1,765	282	0	2,048
FS3A	0769FS03	2	Plant Adaption	2	FIRE SPRINKLER SYSTEM INSTALLATION	216,125	34,580	0	250,705
FS5C	0769FS05	3	Plant Adaption	2	EGRESS STAIR DOOR INSTALLATIONS	18,960	3,034	0	21,993
AC3D	0769AC01	4	Plant Adaption	2	INTERIOR SIGNAGE PACKAGE UPGRADE	13,955	2,233	0	16,188
AC2A	0769AC06	5	Plant Adaption	2	EXTERIOR / INTERIOR ACCESSIBLE RAMP INSTALLATIONS	46,868	7,499	0	54,366
HE6F	0769HE01	11	Plant Adaption	3	ASBESTOS TESTING / ABATEMENT OF TEXTURED CEILING	162,865	26,058	0	188,924
AC3F	0769AC02	12	Plant Adaption	3	DUAL LEVEL DRINKING FOUNTAIN UPGRADE	44,373	7,100	0	51,473
AC3E	0769AC03	13	Plant Adaption	3	ADDITIONAL HALL BATH ACCESSIBILITY IMPROVEMENTS	40,747	6,520	0	47,266
AC3B	0769AC08	14	Plant Adaption	3	STAIR TOWER RAILING ACCESSIBILITY UPGRADES	7,474	1,196	0	8,670
AC4A	0769AC07	23	Plant Adaption	4	OVERNIGHT LODGING ACCESSIBILITY UPGRADES	22,185	3,550	0	25,735
AC3C	0769AC04	24	Plant Adaption	4	INTERIOR DOOR HARDWARE UPGRADES	56,726	9,076	0	65,803
AC3A	0769AC05	25	Plant Adaption	4	PASSENGER ELEVATOR INSTALLATION	370,097	59,215	0	429,312
Totals for Plant Adaption						1,002,141	160,343	0	1,162,483
Grand Total:						3,308,669	510,956	0	3,819,625



Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
 Facility Condition Analysis
 Section Two
 Energy Conservation
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
FS1A	0769FS02	3	10	EXIT SIGNAGE UPGRADE	4,741	250	18.97
HV3A	0769HV01	3	16	HVAC SYSTEM REPLACEMENT	920,498	10,180	90.42
EL4B	0769EL01	3	17	INTERIOR LIGHTING UPGRADE	200,782	5,300	37.88
PL1G	0769PL01	3	20	PLUMBING FIXTURE REPLACEMENT	178,278	1,650	108.05
Totals for Priority Class 3					1,304,299	17,380	75.05
ES5B	0769ES02	4	27	EXTERIOR WINDOW UNIT UPGRADES	263,569	1,900	138.72
Totals for Priority Class 4					263,569	1,900	138.72
Grand Total:					1,567,867	19,280	81.32

Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
 Facility Condition Analysis
 Section Two
 Category/System Code Update Report
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
AC3D	0769AC01	2	4	INTERIOR SIGNAGE PACKAGE UPGRADE	13,955	2,233	0	16,188
AC2A	0769AC06	2	5	EXTERIOR / INTERIOR ACCESSIBLE RAMP INSTALLATIONS	46,868	7,499	0	54,366
AC3F	0769AC02	3	12	DUAL LEVEL DRINKING FOUNTAIN UPGRADE	44,373	7,100	0	51,473
AC3E	0769AC03	3	13	ADDITIONAL HALL BATH ACCESSIBILITY IMPROVEMENTS	40,747	6,520	0	47,266
AC3B	0769AC08	3	14	STAIR TOWER RAILING ACCESSIBILITY UPGRADES	7,474	1,196	0	8,670
AC4A	0769AC07	4	23	OVERNIGHT LODGING ACCESSIBILITY UPGRADES	22,185	3,550	0	25,735
AC3C	0769AC04	4	24	INTERIOR DOOR HARDWARE UPGRADES	56,726	9,076	0	65,803
AC3A	0769AC05	4	25	PASSENGER ELEVATOR INSTALLATION	370,097	59,215	0	429,312
Totals for System Code: ACCESSIBILITY					602,425	96,388	0	698,813
EL3B	0769EL02	2	6	SECONDARY ELECTRICAL SYSTEM UPGRADE	299,774	47,964	0	347,738
EL4B	0769EL01	3	17	INTERIOR LIGHTING UPGRADE	173,088	27,694	0	200,782
EL5A	0769EL03	4	28	EMERGENCY GENERATOR REPLACEMENT	41,385	6,622	0	48,006
EL4A	0769EL04	4	29	EXTERIOR LIGHTING REPLACEMENT	3,449	552	0	4,000
Totals for System Code: ELECTRICAL					517,695	82,831	0	600,526
ES2B	0769ES03	3	15	SELECTIVELY CLEAN, POINT, AND CAULK EXTERIOR BRICK SURFACES	27,238	0	0	27,238
ES4B	0769ES01	4	26	NORTH BUILT-UP ROOFING SYSTEM REPLACEMENT	54,080	8,653	0	62,732
ES5B	0769ES02	4	27	EXTERIOR WINDOW UNIT UPGRADES	227,214	36,354	0	263,569
Totals for System Code: EXTERIOR					308,532	45,007	0	353,539
FS6A	0769FS04	2	1	INSTALL SEISMIC SHUTOFF VALVE	1,765	282	0	2,048
FS3A	0769FS03	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	216,125	34,580	0	250,705



Facility Condition Analysis, Wasatch Hall

Detailed Project Summary
 Facility Condition Analysis
 Section Two
 Category/System Code Update Report
 0769 - WSU - WASATCH HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
FS5C	0769FS05	2	3	EGRESS STAIR DOOR INSTALLATIONS	18,960	3,034	0	21,993
FS2A	0769FS01	3	9	FIRE ALARM SYSTEM UPGRADE	94,415	15,106	0	109,521
FS1A	0769FS02	3	10	EXIT SIGNAGE UPGRADE	4,087	654	0	4,741
Totals for System Code: FIRE/LIFE SAFETY					335,353	53,656	0	389,009
HE6F	0769HE01	3	11	ASBESTOS TESTING / ABATEMENT OF TEXTURED CEILING	162,865	26,058	0	188,924
Totals for System Code: HEALTH					162,865	26,058	0	188,924
HV3A	0769HV01	3	16	HVAC SYSTEM REPLACEMENT	793,532	126,965	0	920,498
Totals for System Code: HVAC					793,532	126,965	0	920,498
IS2B	0769IS01	3	18	INTERIOR REPAINTING AND MINOR WALL REPAIRS	87,952	0	0	87,952
IS1A	0769IS02	3	19	INTERIOR FLOOR FINISH RESTORATION	151,422	24,227	0	175,649
Totals for System Code: INTERIOR/FINISH SYS.					239,374	24,227	0	263,601
PL1A	0769PL02	2	7	WATER SUPPLY PIPING NETWORK REPLACEMENT	79,829	12,773	0	92,601
PL1G	0769PL01	3	20	PLUMBING FIXTURE REPLACEMENT	153,688	24,590	0	178,278
PL1E	0769PL04	3	21	REPLACE DOMESTIC HOT WATER CONVERTER	17,061	2,730	0	19,790
PL2A	0769PL03	3	22	DRAIN PIPING NETWORK REPLACEMENT	93,053	14,889	0	107,942
Totals for System Code: PLUMBING					343,631	54,981	0	398,612
SI7B	0769SI01	2	8	CONCRETE SIDEWALK SITE DRAINAGE CORRECTION WORK	5,262	842	0	6,104
Totals for System Code: SITE					5,262	842	0	6,104
Grand Total:					3,308,669	510,956	0	3,819,625

Facility Condition Analysis, Wasatch Hall

FACILITY CONDITION ANALYSIS

SECTION 3

**SPECIFIC PROJECT DETAILS
ILLUSTRATING DESCRIPTION / COST**



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769FS04	Title:	INSTALL SEISMIC SHUTOFF VALVE
Priority Sequence:	1		
Priority Class:	2		
Category Code:	FS6A	System:	FIRE/LIFE SAFETY
		Component:	GENERAL
		Element:	OTHER
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Seismic Considerations		
Code Application:	IFGC	FG409	
Project Class:	Plant Adaption		
Project Date:	05/13/2005		
Project Location:	Item Only: Floor(s) 1		

Project Description

Currently, there is no seismic shutoff valve serving this facility. It is recommended that a seismic shutoff valve be installed at the incoming natural gas service line. This type of valve is earthquake sensitive and automatically shuts off the gas supply in the event of seismic activity.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769FS04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install an automatic seismic shutoff valve on the incoming natural gas line	EA	1	\$800	\$800	\$800	\$800	\$1,600
Project Totals:				\$800		\$800	\$1,600

Material/Labor Cost		\$1,600
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$1,471</u>
General Contractor Mark Up at 20.0%	+	\$294
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$1,765</u>
Professional Fees at 16.0%	+	<u>\$282</u>
Total Project Cost		<u><u>\$2,048</u></u>



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769FS03	Title:	FIRE SPRINKLER SYSTEM INSTALLATION
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS3A	System:	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Seismic Considerations		
Code Application:	NFPA	1, 13, 13R, and 101	
	IBC	903 and 1621.3	
Project Class:	Plant Adaption		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

There is no form of automatic fire suppression provided for this facility. Manual dry-chemical fire extinguishers and a standpipe are currently the only means of fire suppression available. It is recommended that an automatic fire sprinkler system be installed throughout the facility, to include piping, valves, sprinkler heads, and piping supports. Install flow switches and sensors that interface with the proposed fire alarm system. This project will reduce overall liability and risk of loss.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769FS03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install a wet-pipe sprinkler system, including valves, piping, sprinkler heads, piping supports, etc.	SF	48,427	\$1.60	\$77,483	\$2.61	\$126,394	\$203,878
Project Totals:				\$77,483		\$126,394	\$203,878

Material/Labor Cost		\$203,878
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$180,104
General Contractor Mark Up at 20.0%	+	\$36,021
Inflation	+	\$0
Construction Cost		\$216,125
Professional Fees at 16.0%	+	\$34,580
Total Project Cost		\$250,705



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769FS05	Title:	EGRESS STAIR DOOR INSTALLATIONS
Priority Sequence:	3		
Priority Class:	2		
Category Code:	FS5C	System:	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	SEPARATION RATING
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Plant Adaption		
Project Date:	05/27/2005		
Project Location:	Item Only: Floor(s) 1,2,3		

Project Description

The end stair towers in each of the two dormitory wings adjoin the student lounge. It is recommended that fire-rated stair access doors be installed to isolate these egress stairs from the lounges. Due to the amount of combustibles typically located in these lounges and the potential for fire or smoke migration into these key stair towers, it is recommended that these door assemblies be installed prior to re-establishing this building as a dormitory.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769FS05

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Rated metal stud and sheetrock wall assembly	EA	6	\$445	\$2,670	\$700	\$4,200	\$6,870
90-minute rated fire door and assembly with panic hardware	EA	6	\$1,040	\$6,240	\$524	\$3,144	\$9,384
Dump truck rental and dumping fee	DAY	1	\$475	\$475	\$144	\$144	\$619
Project Totals:				\$9,385		\$7,488	\$16,873

Material/Labor Cost		\$16,873
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$15,800
General Contractor Mark Up at 20.0%	+	\$3,160
Inflation	+	\$0
Construction Cost		\$18,960
Professional Fees at 16.0%	+	\$3,034
Total Project Cost		\$21,993



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769AC01	Title:	INTERIOR SIGNAGE PACKAGE UPGRADE
Priority Sequence:	4		
Priority Class:	2		
Category Code:	AC3D	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	SIGNAGE
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.30	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

The interior signage in this dormitory is both inadequate and non-accessible. Prior to re-establishing this building as a dormitory, a new signage package should be installed. Legislated criteria includes sign location and mounting height, raised Braille characters and pictograms, character height and proportion, and sign finish and contrast. Update the building-wide signage package to identify all permanent spaces and accessible entry / egress routes in order to meet all ADA requirements.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769AC01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Adhesive backed, ADA compliant, acrylic signs with raised characters, pictograms, and Braille	EA	200	\$45.00	\$9,000	\$13.00	\$2,600	\$11,600
Project Totals:				\$9,000		\$2,600	\$11,600

Material/Labor Cost		\$11,600
Material Index		107.0%
Labor Index		76.9%
		\$11,629
Material/Labor Indexed Cost		\$11,629
General Contractor Mark Up at 20.0%	+	\$2,326
Inflation	+	\$0
		\$13,955
Construction Cost		\$13,955
Professional Fees at 16.0%	+	\$2,233
		\$16,188
Total Project Cost		\$16,188



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769AC06	Title:	EXTERIOR / INTERIOR ACCESSIBLE RAMP INSTALLATIONS
Priority Sequence:	5		
Priority Class:	2		
Category Code:	AC2A	System:	ACCESSIBILITY
		Component:	BUILDING ENTRY
		Element:	GENERAL
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.1.3 and 4.8	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Item Only: Floor(s) 1		

Project Description

Due to the significant site elevation changes around the main building entry point, it is more practical to create accessible entry ramps at the two end elevation entry doors, which are also closer to the small onsite parking area (current ramping at these locations is loading ramp installations). Also, interior access to the dormitory wing corridors is steeply ramped and not accessible. A permanent accessible exterior concrete entry ramp and rail and interior carpeted corridor access ramps and handrailings should be installed to serve this structure.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769AC06

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Door operator, signage, and accessories	SYS	2	\$2,420	\$4,840	\$1,622	\$3,244	\$8,084
Concrete ramp, galvanized steel handrails, paint (two coats), supplies, and tools	SYS	2	\$5,500	\$11,000	\$7,245	\$14,490	\$25,490
Interior corridor ramp construction with carpeted finish and accompanying handrails	SYS	2	\$1,730	\$3,460	\$3,100	\$6,200	\$9,660
Project Totals:				\$19,300		\$23,934	\$43,234

Material/Labor Cost		\$43,234
Material Index		107.0%
Labor Index		76.9%
		\$39,056
Material/Labor Indexed Cost		\$39,056
General Contractor Mark Up at 20.0%	+	\$7,811
Inflation	+	\$0
		\$46,868
Construction Cost		\$46,868
Professional Fees at 16.0%	+	\$7,499
		\$54,366
Total Project Cost		\$54,366



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769EL02	Title:	SECONDARY ELECTRICAL SYSTEM UPGRADE
Priority Sequence:	6		
Priority Class:	2		
Category Code:	EL3B	System:	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	Articles 110, 210, 220, 230	
Project Class:	Deferred Maintenance		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

The secondary electrical system is aged and undersized compared to modern standards and is recommended for replacement. Aging components, such as the circuit breakers, serve as potential fire hazards due to the inability to open a circuit in an overload or short circuit condition. It is recommended that the secondary electrical system be replaced, to include all power panels, switches, raceways, conductors, and devices. Provide molded case thermal magnetic circuit breakers and HACR circuit breakers for HVAC equipment. Redistribute the electrical loads to the appropriate areas to ensure safe and reliable power to building occupants. Provide GFCI protection where required, and clearly label all panels for circuit identification.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769EL02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace secondary electrical system, to include power panels, conductors, raceways, devices, and cut and patching materials	SF	48,427	\$2.32	\$112,351	\$3.48	\$168,526	\$280,877
Project Totals:				\$112,351		\$168,526	\$280,877

Material/Labor Cost		\$280,877
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$249,812
General Contractor Mark Up at 20.0%	+	\$49,962
Inflation	+	\$0
Construction Cost		\$299,774
Professional Fees at 16.0%	+	\$47,964
Total Project Cost		\$347,738



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769PL02	Title:	WATER SUPPLY PIPING NETWORK REPLACEMENT
Priority Sequence:	7		
Priority Class:	2		
Category Code:	PL1A	System:	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Seismic Considerations		
Code Application:	IBC	1621.3	
	IPC	Chapter 6	
	OSHA	29 CFR 1910.1001, 1926.1101	
	EPA	40 CFR 61.M, 763	
Project Class:	Deferred Maintenance		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

The existing water supply piping network is of galvanized steel construction, with some copper patching. This network is aged and has been worn by hard water. Additionally, there is asbestos on insulation. It is recommended that the piping be replaced. Remove the existing water supply network. Install new copper water supply piping with fiberglass insulation. Also install isolation valves, pressure regulators, water softening equipment, shock absorbers, backflow preventers, and vacuum breakers in the appropriate areas. Ensure that all new equipment is seismically braced.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769PL02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Copper pipe and fittings, valves, backflow prevention devices, insulation, hangers, demolition, and cut and patching materials	LOT	1	\$26,690	\$26,690	\$49,370	\$49,370	\$76,060
Project Totals:				\$26,690		\$49,370	\$76,060

Material/Labor Cost		\$76,060
Material Index		107.0%
Labor Index		76.9%
		\$66,524
Material/Labor Indexed Cost		\$66,524
General Contractor Mark Up at 20.0%	+	\$13,305
Inflation	+	\$0
		\$79,829
Construction Cost		\$79,829
Professional Fees at 16.0%	+	\$12,773
		\$92,601
Total Project Cost		\$92,601



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769SI01	Title:	CONCRETE SIDEWALK SITE DRAINAGE CORRECTION WORK
Priority Sequence:	8		
Priority Class:	2		
Category Code:	SI7B	System:	SITE
		Component:	PATH/TRAILS/SIDEWALK
		Element:	REPLACE
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.3.8 and 4.5.2	
Project Class:	Deferred Maintenance		
Project Date:	05/24/2005		
Project Location:	Item Only: Floor(s) 1		

Project Description

Site drainage along the south side of the building tracks down the concrete sidewalk, bypassing the site drainage grate beside the walkway. This running water on the sidewalk can pose a safety hazard for pedestrians, especially during the winter months, and efforts should be made to correct the site grading to redirect the site runoff to the proper drain line.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769SI01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Selective site fine grading and reseeding	LOT	1	\$1,870	\$1,870	\$3,100	\$3,100	\$4,970
Project Totals:				\$1,870		\$3,100	\$4,970

Material/Labor Cost		\$4,970
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$4,385</u>
General Contractor Mark Up at 20.0%	+	\$877
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$5,262</u>
Professional Fees at 16.0%	+	<u>\$842</u>
Total Project Cost		<u>\$6,104</u>



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769FS01	Title:	FIRE ALARM SYSTEM UPGRADE
Priority Sequence:	9		
Priority Class:	3		
Category Code:	FS2A	System:	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 4.28		
	NFPA 1 and 101		
	IBC 907		
Project Class:	Deferred Maintenance		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

The existing fire alarm system has served beyond its intended life cycle and is recommended for modernization. Install a modern zone-type fire alarm system. Specify a point addressable, multizone, four-wire, Class A, supervised fire alarm panel with an annunciator. This work includes pull stations, audible / visual and visual devices, smoke detectors, duct smoke detectors, and heat detectors. Install all devices in accordance with current NFPA and ADA requirements. The system should report activation or trouble to an applicable receiving station, such as campus security and / or the local fire department.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769FS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, and cut and patching materials	SF	48,427	\$1.08	\$52,301	\$0.61	\$29,540	\$81,842
Project Totals:				\$52,301		\$29,540	\$81,842

Material/Labor Cost		\$81,842
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$78,679</u>
General Contractor Mark Up at 20.0%	+	\$15,736
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$94,415</u>
Professional Fees at 16.0%	+	\$15,106
Total Project Cost		<u><u>\$109,521</u></u>



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769FS02	Title:	EXIT SIGNAGE UPGRADE
Priority Sequence:	10		
Priority Class:	3		
Category Code:	FS1A	System:	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Energy Conservation	\$250.00	
Code Application:	IBC	1109	
	NFPA	101-47	
Project Class:	Capital Renewal		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

The exit signage in this facility consists of mostly fluorescent illuminated applications that are connected to the emergency power network. These fixtures will reach the end of their intended life cycles within two to five years. It is recommended that they be replaced at that time. Specify LED type applications for their longevity, energy efficiency, and low maintenance requirement. Emergency lighting is provided by select light fixtures that are connected to the emergency power network.

Facility Condition Analysis, Wasatch Hall

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Project Cost

Project Number: 0769FS02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replacement of existing exit signs with LED units	EA	26	\$75.00	\$1,950	\$66.00	\$1,716	\$3,666
Project Totals:				\$1,950		\$1,716	\$3,666

Material/Labor Cost		\$3,666
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$3,406</u>
General Contractor Mark Up at 20.0%	+	\$681
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$4,087</u>
Professional Fees at 16.0%	+	\$654
Total Project Cost		<u><u>\$4,741</u></u>



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Project Description

Project Number:	0769HE01	Title:	ASBESTOS TESTING / ABATEMENT OF TEXTURED CEILING
Priority Sequence:	11		
Priority Class:	3		
Category Code:	HE6F	System:	HEALTH
		Component:	HAZARDOUS MATERIAL
		Element:	OTHER
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	EPA	40 CFR 61.M, 763	
	OSHA	29 CFR 1910.1001, 1926.1101	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Undefined: Floor(s) 1,2,3,B		

Project Description

Most of the ceilings in this dormitory have a textured finish which is reported to contain asbestos. It is assumed that these ACM findings are a result of actual sampling and testing procedures. While this textured ceiling can be managed in place, it is recommended that the textured ceiling material be abated and disposed of properly. Prepare and refinish these ceilings on all four floors.

Facility Condition Analysis, Wasatch Hall

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Project Cost

Project Number: 0769HE01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost
Asbestos testing and abatement of textured ceiling finish	LOT	1	\$9,460	\$9,460	\$28,400
Spray-on ceiling texture	LOT	1	\$50,400	\$50,400	\$64,800
Project Totals:				\$59,860	

Material/Labor Cost	
Material Index	
Labor Index	
Material/Labor Indexed Cost	
General Contractor Mark Up at 20.0%	
Inflation	
Construction Cost	
Professional Fees at 16.0%	
Total Project Cost	



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Project Description

Project Number:	0769AC02	Title:	DUAL LEVEL DRINKING FOUNTAIN UPGRADE
Priority Sequence:	12		
Priority Class:	3		
Category Code:	AC3F	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DRINKING FOUNTAINS
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.15	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Item Only: Floor(s) 1,2,3		

Project Description

The aging, single level, non-accessible drinking fountain in the first floor common area should be upgraded with a new dual level water fountain. The former water fountain location on the opposite wall of the common area should be refitted with a new fountain. Also, individual water fountains located in the dormitory corridors should be upgraded to wall-mounted, dual level fountains. Install new dual level, refrigerated water fountains in each of these locations, and create recessed, wheelchair accessible alcoves for each new installation. These fountains should be upgraded within the next three to five years.

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Project Cost

Project Number: 0769AC02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dual level drinking fountain, piping, supplies, and tools	EA	8	\$1,040	\$8,320	\$320	\$2,560	\$10,880
Studs, drywall, fasteners, tools, paint (two coats), and supplies	LOT	8	\$750	\$6,000	\$3,200	\$25,600	\$31,600
Project Totals:				\$14,320		\$28,160	\$42,480

Material/Labor Cost		\$42,480
Material Index		107.0%
Labor Index		76.9%
		\$36,977
Material/Labor Indexed Cost		\$36,977
General Contractor Mark Up at 20.0%	+	\$7,395
Inflation	+	\$0
		\$44,373
Construction Cost		\$44,373
Professional Fees at 16.0%	+	\$7,100
		\$51,473
Total Project Cost		\$51,473



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Project Description

Project Number:	0769AC03	Title:	ADDITIONAL HALL BATH ACCESSIBILITY IMPROVEMENTS
Priority Sequence:	13		
Priority Class:	3		
Category Code:	AC3E	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	RESTROOMS/BATHROOMS
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.22 and 4.23	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Undefined: Floor(s) 1,2,3		

Project Description

Since there are no public restrooms in this building, a first floor public restroom should be created off the common area. Also, a select number of the hall bathrooms should be further modified to fully comply with current accessibility standards. Additional grab bar units should be installed, and the shower area will need to be modified to provide accessible clearances and accessories for wheelchair access. These hall bathroom modifications should be coordinated with the installation of accessible dormitory rooms. Also, some ceramic tile repair work is anticipated in some of the hall bathrooms in conjunction with any needed plumbing fixture upgrades.

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Project Cost

Project Number: 0769AC03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Selective hall bathroom renovations, including ADA accessories and shower area circulation modifications	EA	3	\$3,010	\$9,030	\$5,985	\$17,955	\$26,985
Bathroom ceramic tile repair work	SF	1,200	\$4.25	\$5,100	\$5.45	\$6,540	\$11,640
Project Totals:				\$14,130		\$24,495	\$38,625

Material/Labor Cost		\$38,625
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$33,956
General Contractor Mark Up at 20.0%	+	\$6,791
Inflation	+	\$0
Construction Cost		\$40,747
Professional Fees at 16.0%	+	\$6,520
Total Project Cost		\$47,266



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Project Description

Project Number:	0769AC08	Title:	STAIR TOWER RAILING ACCESSIBILITY UPGRADES
Priority Sequence:	14		
Priority Class:	3		
Category Code:	AC3B	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	STAIRS AND RAILINGS
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.8 and 4.9	
	NFPA	5.2.2	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Item Only: Floor(s) 1,2,3,B		

Project Description

Existing stair tower metal handrail and guardrail configurations are not accessible and do not meet current building standards. These stair runs should be retrofitted with new accessible railings and guardrails. It is also recommended that end balconies be fitted with an additional top guardrail to raise the height of the existing concrete guardrailing to the current standard height of forty-two inches above finished floor. These upgrades should be completed within the next three to five years.

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Project Cost

Project Number: 0769AC08

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Exterior / interior metal guardrails / handrails, fasteners, tools, and supplies	LF	450	\$8.30	\$3,735	\$6.45	\$2,903	\$6,638
Project Totals:				\$3,735		\$2,903	\$6,638

Material/Labor Cost		\$6,638
Material Index		107.0%
Labor Index		76.9%
		\$6,228
Material/Labor Indexed Cost		\$6,228
General Contractor Mark Up at 20.0%	+	\$1,246
Inflation	+	\$0
		\$7,474
Construction Cost		\$7,474
Professional Fees at 16.0%	+	\$1,196
		\$8,670
Total Project Cost		\$8,670



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Project Description

Project Number:	0769ES03	Title:	SELECTIVELY CLEAN, POINT, AND CAULK EXTERIOR BRICK SURFACES
Priority Sequence:	15		
Priority Class:	3		
Category Code:	ES2B	System:	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	05/27/2005		
Project Location:	Building-wide: Floor(s) 1,2,3		

Project Description

The exterior brick surfaces are generally in average condition for their age. Some areas along the southeastern corner of the building need brick pointing and construction joint caulking to restore weather protection. This work is selective, so matching mortar should be applied. Following a detailed examination of the brick and the repair of mortar construction joints, the entire building should be pressure washed to remove soil and stains.

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Project Cost

Project Number: 0769ES03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Construction joint caulk and backer	LOT	1	\$145	\$145	\$600	\$600	\$745
Scaffolding / man lift rental	WK	2	\$2,100	\$4,200	\$1,600	\$3,200	\$7,400
Tuck pointing of the building facades	SF	4,000	\$0.25	\$1,000	\$4.57	\$18,280	\$19,280
Project Totals:				\$5,345		\$22,080	\$27,425

Material/Labor Cost		\$27,425
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$22,699
General Contractor Mark Up at 20.0%	+	\$4,540
Inflation	+	\$0
Construction Cost		\$27,238
No Professional Fees Required	+	\$0
Total Project Cost		\$27,238



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Project Description

Project Number:	0769HV01	Title:	HVAC SYSTEM REPL
Priority Sequence:	16		
Priority Class:	3		
Category Code:	HV3A	System:	HVAC
		Component:	HEATING/COO
		Element:	SYSTEM RETR
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Seismic Considerations	\$10,180.00	
Code Application:	EPA	40 CFR 61.M, 763	
	OSHA	29 CFR 1910.1001, 1926.1101	
	ASHRAE	62-2001	
	IBC	1621.3	
Project Class:	Deferred Maintenance		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B,R		

Project Description

The HVAC system is aged and inefficient. Asbestos piping is present on heating / cooling media | complete redesign and replacement of the HVAC system is recommended. Demolish and dispos equipment. Install a new modern HVAC system with four-pipe fan coil units in the resident rooms handling systems for the corridors and common areas. Air handlers should also deliver outside ai resident rooms, in accordance with ASHRAE ventilation standards. This work includes new fan c handlers, ductwork, terminal units, exhaust systems, pumps, piping, controls, and electrical conne Specify direct digital controls for the new equipment. Incorporate variable frequency drives and e into the new HVAC design as applicable. Ensure that all new systems and piping are seismically

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Project Cost

Project Number: 0769HV01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost
Fan coil units, air handlers, ductwork, exhaust systems, piping, pumps, controls, terminal units, and demolition and disposal fees	SF	48,427	\$8.04	\$389,353	\$6.57
Project Totals:				\$389,353	

Material/Labor Cost	
Material Index	
Labor Index	
Material/Labor Indexed Cost	
General Contractor Mark Up at 20.0%	
Inflation	
Construction Cost	
Professional Fees at 16.0%	
Total Project Cost	



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Project Description

Project Number:	0769EL01	Title:	INTERIOR LIGHTING UPGRADE
Priority Sequence:	17		
Priority Class:	3		
Category Code:	EL4B	System:	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	INTERIOR LIGHTING
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Seismic Considerations	\$5,300.00	
Code Application:	IBC	1621.3	
	NEC	Articles 210 and 410	
Project Class:	Capital Renewal		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

Lighting in this facility consists of mostly fluorescent applications. It should be anticipated that the interior lighting system will require replacement within two to five years of this analysis. Replace the original fluorescent fixtures with new electronic ballast fixtures and energy-efficient lamps. Select lamps with the same color temperature and rendering index for lighting uniformity. Incandescent fixtures should be retrofitted to accommodate compact fluorescent lamps, which provide approximately fifteen percent savings and have five times the illumination hours. Install occupancy sensors in select areas for additional energy conservation. Ensure that all new applications are seismically braced.

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Project Cost

Project Number: 0769EL01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High efficiency fluorescent fixtures, occupancy sensors, and demolition of existing lighting	SF	48,427	\$1.49	\$72,156	\$1.80	\$87,169	\$159,325
Project Totals:				\$72,156		\$87,169	\$159,325

Material/Labor Cost		\$159,325
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$144,240</u>
General Contractor Mark Up at 20.0%	+	\$28,848
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$173,088</u>
Professional Fees at 16.0%	+	<u>\$27,694</u>
Total Project Cost		<u><u>\$200,782</u></u>



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Project Description

Project Number:	0769IS01	Title:	INTERIOR REPAINTING AND MINOR WALL REPAIRS
Priority Sequence:	18		
Priority Class:	3		
Category Code:	IS2B	System:	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	05/24/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

The interior painted sheetrock walls in this facility are in average to fair condition. This building should be repainted prior to being fully reoccupied. Prepare and repair interior wall finishes on all four floor levels.

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Project Cost

Project Number: 0769IS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cleanup and masking removal	SF	89,400	\$0.01	\$894	\$0.10	\$8,940	\$9,834
Masking, surface preparation, and minor repair work	SF	89,400	\$0.13	\$11,622	\$0.24	\$21,456	\$33,078
Paint, supplies, and application	SF	89,400	\$0.08	\$7,152	\$0.42	\$37,548	\$44,700
Project Totals:				\$19,668		\$67,944	\$87,612

Material/Labor Cost		\$87,612
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$73,294
General Contractor Mark Up at 20.0%	+	\$14,659
Inflation	+	\$0
Construction Cost		\$87,952
No Professional Fees Required	+	\$0
Total Project Cost		\$87,952



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Project Description

Project Number:	0769IS02	Title:	INTERIOR FLOOR FINISH RESTORATION
Priority Sequence:	19		
Priority Class:	3		
Category Code:	IS1A	System:	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	05/24/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

Carpeting in the first floor common area and in the individual lounges and dormitory rooms varies in condition from average to worn. Upgrade carpeting throughout the dormitory with a quality grade of commercial, roll carpeting within the next three to five years. Also, the vinyl floor tile in service areas, such as the lower floor student laundry rooms, varies from average to poor condition and largely should be upgraded. Install new vinyl floor tile in each of these service areas within the same three to five years.

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Project Cost

Project Number: 0769IS02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
40 oz. nylon, level loop, direct glue down carpet, mastic, tools, and supplies	SY	4,195	\$18.00	\$75,510	\$12.00	\$50,340	\$125,850
Marbleized vinyl floor tile, mastic, tools, and supplies	SF	1,800	\$1.25	\$2,250	\$0.85	\$1,530	\$3,780
Dump truck rental and dumping fee	DAY	5	\$475	\$2,375	\$144	\$718	\$3,093
Project Totals:				\$80,135		\$52,588	\$132,723

Material/Labor Cost		\$132,723
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$126,185
General Contractor Mark Up at 20.0%	+	\$25,237
Inflation	+	\$0
Construction Cost		\$151,422
Professional Fees at 16.0%	+	\$24,227
Total Project Cost		\$175,649



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Project Description

Project Number:	0769PL01	Title:	PLUMBING FIXTURE REPLACEMENT
Priority Sequence:	20		
Priority Class:	3		
Category Code:	PL1G	System:	PLUMBING
		Component:	DOMESTIC WATER
		Element:	FIXTURES
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Energy Conservation	\$1,650.00	
Code Application:	IPC	Chapter 4	
Project Class:	Deferred Maintenance		
Project Date:	05/13/2005		
Project Location:	Room Only: Floor(s) 1,2,3		

Project Description

The existing plumbing fixtures are original and have aged beyond their expected life cycles. Many of them have been worn by the hard water in this locale. It is recommended that they be replaced. Remove the existing plumbing fixtures, and install new fixtures, including rough-ins. Specify automatic, hands-free faucets and flush valves for restroom fixtures. These should be hard-wired, not battery-type. Specify anti-scald thermostatic mixing valves for showers. Also specify vacuum breaker equipped faucets for service sinks and other sinks with hose connections. Coordinate this work with proposed accessibility upgrades.

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Project Cost

Project Number: 0769PL01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Lavatory, automatic faucets, trap, rough-in, and demolition	EA	43	\$625	\$26,875	\$525	\$22,575	\$49,450
Water closet, automatic flush valve, rough-in, and demolition	EA	28	\$865	\$24,220	\$515	\$14,420	\$38,640
Kitchen sink, stainless steel, trim fittings, rough-in, and demolition	EA	7	\$525	\$3,675	\$505	\$3,535	\$7,210
Shower fittings, anti-scald mixing valve, head, and supply and drain piping	EA	42	\$245	\$10,290	\$98.00	\$4,116	\$14,406
Bathtub with shower surround, trim fittings, rough-in, and demolition	EA	7	\$1,350	\$9,450	\$1,080	\$7,560	\$17,010
Service sink, vacuum breaker faucets, rough-in, and demolition	EA	6	\$760	\$4,560	\$720	\$4,320	\$8,880
Project Totals:				\$79,070		\$56,526	\$135,596

Material/Labor Cost		\$135,596
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$128,073
General Contractor Mark Up at 20.0%	+	\$25,615
Inflation	+	\$0
Construction Cost		\$153,688
Professional Fees at 16.0%	+	\$24,590
Total Project Cost		\$178,278



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Project Description

Project Number:	0769PL04	Title:	REPLACE DOMESTIC HOT WATER CONVERTER
Priority Sequence:	21		
Priority Class:	3		
Category Code:	PL1E	System:	PLUMBING
		Component:	DOMESTIC WATER
		Element:	HEATING
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	05/13/2005		
Project Location:	Item Only: Floor(s) B		

Project Description

Replacement of the domestic hot water converter is recommended in conjunction with all other proposed plumbing upgrades. As it ages, the heat exchanger's efficiency is reduced by internal tube scaling and weakening of heat transfer support surfaces. A new heat exchanger, circulating pump, controls, and associated piping and electrical equipment are recommended. This work includes the demolition of existing equipment.

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Project Cost

Project Number: 0769PL04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Domestic hot water converter, double-wall, 2" connection, 55 gpm continuous / 115 gpm intermittent, and demolition of existing equipment	SYS	1	\$9,997	\$9,997	\$4,578	\$4,578	\$14,575
Project Totals:				\$9,997		\$4,578	\$14,575

Material/Labor Cost		\$14,575
Material Index		107.0%
Labor Index		76.9%
		\$14,217
Material/Labor Indexed Cost		\$14,217
General Contractor Mark Up at 20.0%	+	\$2,843
Inflation	+	\$0
		\$17,061
Construction Cost		\$17,061
Professional Fees at 16.0%	+	\$2,730
		\$19,790
Total Project Cost		\$19,790



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Project Description

Project Number:	0769PL03	Title:	DRAIN PIPING NETWORK REPLACEMENT
Priority Sequence:	22		
Priority Class:	3		
Category Code:	PL2A	System:	PLUMBING
		Component:	WASTEWATER
		Element:	PIPING NETWORK
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Seismic Considerations		
Code Application:	IPC	Chapters 7 - 11	
	IBC	1621.3	
Project Class:	Capital Renewal		
Project Date:	05/13/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

The drain piping network is recommended for replacement in conjunction with the proposed supply piping network replacement. Remove the existing sanitary and storm drain piping. Install new cast-iron drain piping networks, with copper runouts to the fixtures. Install new floor drains, roof drains, and traps. Coordinate this work with related plumbing projects, and ensure that the new network is seismically braced.

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Project Cost

Project Number: 0769PL03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cast-iron drain piping and fittings, copper pipe and fittings, floor / roof drains, traps, hangers, demolition, and cut and patching materials	LOT	1	\$32,620	\$32,620	\$55,450	\$55,450	\$88,070
Project Totals:				\$32,620		\$55,450	\$88,070

Material/Labor Cost		\$88,070
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$77,544
General Contractor Mark Up at 20.0%	+	\$15,509
Inflation	+	\$0
Construction Cost		\$93,053
Professional Fees at 16.0%	+	\$14,889
Total Project Cost		\$107,942



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Project Description

Project Number:	0769AC07	Title:	OVERNIGHT LODGING ACCESSIBILITY UPGRADES
Priority Sequence:	23		
Priority Class:	4		
Category Code:	AC4A	System:	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	9.1 and 9.2	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Undefined: Floor(s) 1,2		

Project Description

As part of long-range use of this dormitory, at least five of the existing individual dormitory rooms will need to be made accessible. In conjunction with the recommended passenger elevator installations and the additional accessibility upgrades of some of the hall bathrooms, a select number of first and second floor dormitory rooms should be modified to provide accessible lodging layouts. Entry doors will need to be fitted with levered hardware, and closets and furniture will need to be modified for wheelchair access. Horn strobe fire alarms and other sleeping area safety devices should be installed as needed. This effort should be completed within the next ten years.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769AC07

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dormitory room accessibility upgrades: horn strobes, accessible furniture and closet upgrades, lever action door hardware, etc.	LOT	5	\$1,145	\$5,725	\$3,215	\$16,075	\$21,800
Project Totals:				\$5,725		\$16,075	\$21,800

Material/Labor Cost		\$21,800
Material Index		107.0%
Labor Index		76.9%
		\$18,487
Material/Labor Indexed Cost		\$18,487
General Contractor Mark Up at 20.0%	+	\$3,697
Inflation	+	\$0
		\$22,185
Construction Cost		\$22,185
Professional Fees at 16.0%	+	\$3,550
		\$25,735
Total Project Cost		\$25,735



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769AC04	Title:	INTERIOR DOOR HARDWARE UPGRADES
Priority Sequence:	24		
Priority Class:	4		
Category Code:	AC3C	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DOORS AND HARDWARE
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.13	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Floor-wide: Floor(s) 1,2,3,B		

Project Description

Interior doors in this dormitory have been upgraded with new solid core wood doors. However, as a cost saving measure, the original knob hardware was reused. Many of these interior hardware sets are aging and timeworn. Interior door hardware should be replaced with new lever action hardware sets within the next six to ten years.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769AC04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Lever actuated lockset with cylinder (knurled, where required), supplies, and tools	EA	160	\$233	\$37,280	\$60.00	\$9,600	\$46,880
Project Totals:				\$37,280		\$9,600	\$46,880

Material/Labor Cost		\$46,880
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$47,272</u>
General Contractor Mark Up at 20.0%	+	\$9,454
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$56,726</u>
Professional Fees at 16.0%	+	\$9,076
Total Project Cost		<u>\$65,803</u>



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769AC05	Title:	PASSENGER ELEVATOR INSTALLATION
Priority Sequence:	25		
Priority Class:	4		
Category Code:	AC3A	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	LIFTS/RAMPS/ELEVATORS
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	4.10	
Project Class:	Plant Adaption		
Project Date:	05/24/2005		
Project Location:	Undefined: Floor(s) 1,2,3,B		

Project Description

As part of long-range upgrades to this dormitory, accessible passenger elevators should be installed to provide access to the upper floors of both wings and to the central basement level recreation area. The new elevators should have accessible controls and hands-free, two-way communication capabilities, and it should be sized to adequately aid students in moving in and out of the dormitory.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769AC05

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Accessible four-stop passenger elevator tower system	EA	1	\$71,000	\$71,000	\$115,000	\$115,000	\$186,000
Accessible three-stop passenger elevator tower system	EA	1	\$62,000	\$62,000	\$101,000	\$101,000	\$163,000
Project Totals:				\$133,000		\$216,000	\$349,000

Material/Labor Cost		\$349,000
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		\$308,414
General Contractor Mark Up at 20.0%	+	\$61,683
Inflation	+	\$0
Construction Cost		\$370,097
Professional Fees at 16.0%	+	\$59,215
Total Project Cost		\$429,312

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Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769ES01	Title:	NORTH BUILT-UP ROOFING SYSTEM REPLACEMENT
Priority Sequence:	26		
Priority Class:	4		
Category Code:	ES4B	System:	EXTERIOR
		Component:	ROOF
		Element:	REPLACEMENT
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	05/24/2005		
Project Location:	Floor-wide: Floor(s) R		

Project Description

This existing north wing built-up roofing system was reportedly installed in the 1980s, and this roof has a weathered overall appearance. The south wing and the central common area were reroofed due to previous storm damage. It is likely that the remaining older built-up roofing system will reach the end of its normal life cycle over the next six to ten years. Replace this older flat roof with a new built-up roofing system, including all new metal cap flashings. Also replace the deteriorated roof access hatch assembly on the north roof as part of this project.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769ES01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Tear off and replace existing roof with new built-up roof and new metal flashing	SQ	49	\$455	\$22,295	\$505	\$24,745	\$47,040
Roof access hatch and ladder assembly	EA	1	\$1,500	\$1,500	\$750	\$750	\$2,250
Project Totals:				\$23,795		\$25,495	\$49,290

Material/Labor Cost		\$49,290
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$45,066</u>
General Contractor Mark Up at 20.0%	+	\$9,013
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$54,080</u>
Professional Fees at 16.0%	+	<u>\$8,653</u>
Total Project Cost		<u>\$62,732</u>



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769ES02	Title:	EXTERIOR WINDOW UNIT UPGRADES
Priority Sequence:	27		
Priority Class:	4		
Category Code:	ES5B	System:	EXTERIOR
		Component:	FENESTRATIONS
		Element:	WINDOWS
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Energy Conservation	\$1,900.00	
Code Application:	UBC	1632	
Project Class:	Capital Renewal		
Project Date:	05/24/2005		
Project Location:	Building-wide: Floor(s) 1,2,3		

Project Description

The existing single pane, aluminum-framed, sliding glass windows are timeworn, and some of the hardware is failing. These original units are not energy-efficient, and the weatherstripping is aging. They should be upgraded with new thermal pane, aluminum-framed, retrofit applications within the next ten years.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769ES02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Aluminum frame, operable and fixed, thermal pane, retrofit window unit	SF	4,400	\$28.00	\$123,200	\$17.00	\$74,800	\$198,000
Project Totals:				\$123,200		\$74,800	\$198,000

Material/Labor Cost		\$198,000
Material Index		107.0%
Labor Index		76.9%
Material/Labor Indexed Cost		<u>\$189,345</u>
General Contractor Mark Up at 20.0%	+	\$37,869
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$227,214</u>
Professional Fees at 16.0%	+	<u>\$36,354</u>
Total Project Cost		<u><u>\$263,569</u></u>



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769EL03	Title:	EMERGENCY GENERATOR REPLACEMENT
Priority Sequence:	28		
Priority Class:	4		
Category Code:	EL5A	System:	ELECTRICAL
		Component:	EMERGENCY POWER SYSTEM
		Element:	GENERATION/DISTRIBUTION
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NEC 700 NFPA 72 and 101		
Project Class:	Capital Renewal		
Project Date:	05/13/2005		
Project Location:	Item Only: Floor(s) 1		

Project Description

Replace the existing emergency generator and associated automatic transfer switch (ATS) with an appropriately sized diesel generator and ATS, based on the facility current emergency requirements. The installation cost includes a demolition fee for removal of the existing generator, including the ATS, and installation fee for the new emergency generator and ATS. Size the new unit to support all life safety and non-essential loads. Loads considered as life safety include egress lighting, exit signs, elevators, and fire alarm systems. Non-essential loads include HVAC equipment, refrigeration equipment, computer equipment, etc.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769EL03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
90 kW diesel generator set, including battery charger, muffler, and automatic transfer switches	kW	90	\$315	\$28,350	\$60.00	\$5,400	\$33,750
Project Totals:				\$28,350		\$5,400	\$33,750

Material/Labor Cost		\$33,750
Material Index		107.0%
Labor Index		76.9%
		\$34,487
Material/Labor Indexed Cost		\$34,487
General Contractor Mark Up at 20.0%	+	\$6,897
Inflation	+	\$0
		\$41,385
Construction Cost		\$41,385
Professional Fees at 16.0%	+	\$6,622
		\$48,006
Total Project Cost		\$48,006



Facility Condition Analysis, Wasatch Hall

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0769EL04	Title:	EXTERIOR LIGHTING REPLACEMENT
Priority Sequence:	29		
Priority Class:	4		
Category Code:	EL4A	System:	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING
Building Code:	0769		
Building Name:	WSU - WASATCH HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	410	
Project Class:	Capital Renewal		
Project Date:	05/13/2005		
Project Location:	Building-wide: Floor(s) 1,2,3		

Project Description

Exterior lighting is provided by fluorescent lamps with weatherproof casings at the exterior balconies and HID fixtures on the ground level. These fixtures are approaching the end of their statistical life cycles. It should be anticipated that they will require replacement within the next six to ten years. Replace the balcony fixtures with compact fluorescent applications. Place all new exterior lighting on photocell activation.

Facility Condition Analysis, Wasatch Hall

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: 0769EL04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
HID wall-mount fixture and demolition of existing fixture	EA	2	\$427	\$854	\$122	\$244	\$1,098
Compact fluorescent, recessed exterior light and demolition of existing light	EA	9	\$105	\$945	\$110	\$990	\$1,935
Project Totals:				\$1,799		\$1,234	\$3,033

Material/Labor Cost		\$3,033
Material Index		107.0%
Labor Index		76.9%
		\$2,874
Material/Labor Indexed Cost		\$2,874
General Contractor Mark Up at 20.0%	+	\$575
Inflation	+	\$0
		\$3,449
Construction Cost		\$3,449
Professional Fees at 16.0%	+	\$552
		\$4,000
Total Project Cost		\$4,000



FACILITY CONDITION ANALYSIS

SECTION 4

PHOTOGRAPHIC LOG

Facility Condition Analysis, Wasatch Hall

Photo Log - Facility Condition Analysis
0769 - WSU - WASATCH HALL

Photo ID No.	Description	Location	Date
0769001a	View of upper flat, built-up roof and lower central single ply roof	Southern and central roof areas	04/18/2005
0769001e	Original electrical distribution panel	North wing, third floor, corridor	04/18/2005
0769002a	Lower Sarnafil roofing system	Lower central roof	04/18/2005
0769002e	Restroom exhaust fan	North wing roof	04/18/2005
0769003a	Older built-up, flat roof	Upper north roof	04/18/2005
0769003e	Custodial sink without vacuum breaker faucet	North wing, third floor, custodial closet	04/18/2005
0769004a	Damaged roof access hatch	Upper north roof detail	04/18/2005
0769004e	Aged lavatory and faucet	North wing, third floor, bathroom	04/18/2005
0769005a	Freestanding water fountain	Third floor, corridor	04/18/2005
0769005e	Aged, worn toilet	North wing, third floor, bathroom	04/18/2005
0769006a	Typical level of finish in corridor	Third floor, corridor	04/18/2005
0769006e	Aged shower fixture	North wing, third floor, bathroom	04/18/2005
0769007a	Typical solid core wood door with older knob hardware	Third floor, corridor	04/18/2005
0769007e	Fan coil unit	Room 341	04/18/2005
0769008a	Typical dormitory room closet configuration	Typical student dormitory	04/18/2005
0769008e	Fluorescent vanity lighting	Room 341	04/18/2005
0769009a	Typical student desk furniture	Typical student dormitory	04/18/2005
0769009e	Battery powered smoke detector	Room 341	04/18/2005
0769010a	Stained carpeting	Third floor, lounge	04/18/2005
0769010e	Fire alarm horn strobe device	North wing, third floor, corridor	04/18/2005
0769011a	Non-accessible stair handrail and guardrail	Third floor, egress stair	04/18/2005
0769011e	Hard-wired smoke detector	North wing, third floor, corridor	04/18/2005
0769012a	Signs of water infiltration around roof skylight	Third floor, stair tower	04/18/2005
0769012e	Surface-mounted fluorescent lighting	North wing, third floor, corridor	04/18/2005
0769013a	Lower guardrail height on exterior stair landing	End egress stair landing detail	04/18/2005
0769013e	Exit sign with fluorescent illumination	North wing, third floor, corridor	04/18/2005
0769014a	Lack of stair tower separation from lounge area	Second floor, student lounge area	04/18/2005
0769014e	Light switch	Room 347	04/18/2005
0769015a	Typical shower layout	Typical hall bathroom	04/18/2005
0769015e	Typical power outlet in dormitory rooms	Room 347	04/18/2005
0769016a	Typical sink layout	Typical hall bathroom	04/18/2005



Facility Condition Analysis, Wasatch Hall

Photo Log - Facility Condition Analysis
0769 - WSU - WASATCH HALL

Photo ID No.	Description	Location	Date
0769016e	Damaged electrical outlet	Lounge 348	04/18/2005
0769017a	Accessible wall-mounted sink	Typical hall bathroom	04/18/2005
0769017e	Expansion tank for heating water system	Third floor, north stairwell	04/18/2005
0769018a	Wall-mounted toilet without accompanying grab bars	First floor, hall bathroom	04/18/2005
0769018e	Manual pull station	North wing, third floor, south stairwell	04/18/2005
0769019a	Partially accessible shower	First floor, hall bathroom	04/18/2005
0769019e	Zoned fire alarm control panel	First floor, lounge	04/18/2005
0769020a	Non-accessible corridor ramp detail	First floor, corridor off main lobby	04/18/2005
0769020e	Boiler with dual fuel burner	Basement, boiler room	04/18/2005
0769021a	Typical level of finish in lobby	First floor, lobby	04/18/2005
0769021e	Fan coil unit, air handler, and standby heating water pumps	Basement, boiler room	04/18/2005
0769022a	View of main service counter	First floor, lobby	04/18/2005
0769022e	Domestic water circulation pumps and storage tank	Basement, boiler room	04/18/2005
0769023a	Wall-mounted, aging water fountain	First floor, lobby area	04/18/2005
0769023e	208 volt, 800 amp sub-panel	Basement, boiler room	04/18/2005
0769024a	Aging public pay telephone	First floor, lobby	04/18/2005
0769024e	Controls air compressor	Basement, boiler room	04/18/2005
0769025a	Blocked roof drain	Lower central membrane roof area	04/18/2005
0769025e	Chilled water pumps	Basement, boiler room	04/18/2005
0769026a	Small modular kitchenette unit	Basement, lounge area	04/18/2005
0769026e	Domestic water heat exchanger	Basement, boiler room	04/18/2005
0769027a	Partial west facade	Exterior elevation	04/18/2005
0769027e	Air handling unit	Basement, boiler room	04/18/2005
0769028a	Main west entry	Exterior elevation	04/18/2005
0769028e	New packaged, air-cooled chillers	Northeast chiller enclosure	04/18/2005
0769029a	Southwest corner	Exterior elevation	04/18/2005
0769029e	Oil-filled transformer	Northeast chiller enclosure	04/18/2005
0769030a	Perimeter sidewalk, noting water draining down walkway	Site	04/18/2005
0769030e	Emergency generator	Northeast generator enclosure	04/18/2005
0769031a	Southeast corner	Exterior elevation	04/18/2005
0769031e	Main distribution panel serving Wasatch, Stansbury, and LaSal Halls	Northeast electrical vault	04/18/2005

Facility Condition Analysis, Wasatch Hall

Photo Log - Facility Condition Analysis
0769 - WSU - WASATCH HALL

Photo ID No.	Description	Location	Date
0769032a	Exterior, noting efflorescence on brick veneer	Southeast corner elevation detail	04/18/2005
0769032e	Abandoned oil-filled district switches	Northeast electrical vault	04/18/2005
0769033a	Non-accessible ramped side entry	North side entry area	04/18/2005
0769033e	Abandoned district switches	Northeast electrical vault	04/18/2005
0769034a	Northwest corner	Exterior elevation	04/18/2005



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Appendix

Weber State University | Wasatch Hall Renovation

Facility Condition Analysis, Wasatch Hall

FACILITY CONDITION ANALYSIS

SECTION 5

DRAWINGS AND PROJECT LOCATIONS

**NO CAD DRAWINGS ARE
AVAILABLE FOR THIS
BUILDING**

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- 01.05 Jim indicated that the fan coil units as designed in the University Village buildings have been a maintenance nightmare. Something more maintenance friendly would have to be used for the new and remodeled residence halls.
- 01.06 Jim indicated that LEED-certified buildings are desirable.
- 01.07 Jim indicated that the facilities department is fairly well convinced that Promontory Towers needs to be demolished.
- 01.08 The team was introduced to Lynn Kraaima, Facilities Coordinator, with offices in Promontory Towers. Lynn provided Sean Catherall with a key for access to the residential facilities.
- 01.09 Promontory Tower existing condition observed: Water lines built above high voltage switch in main mechanical/electrical room with large pan above switch to prevent switch from getting wet.
- 01.10 Additional existing condition observations made by architect and engineers are to be included in future reports.

- 01.11 Sean Catherall indicated that full findings and evaluations are to be submitted, along with cost analyses, for inclusion in a written report. The final deliverables, including the masterplan and renderings are expected to be made available to the University around 30 September.

End of Meeting Report No. 01
Minutes will stand as recorded unless notified within 3 working days of any discrepancies o



WSU Housing & Residential Life Planning Meeting Reports

M H T N A R C H I T E C T S



Meeting Report - No. 02

Project: Weber State University Residential Life Facilities

MHTN Project No.: 2008554.00

Phase: Pre-Design

Date: 26 September 2008

Time: 8:00 a.m.

Location: Administrative Offices

Purpose: Review of Facility Evaluation; Programming/Master Planning Kick-Off

Attendees

Name	Representing	Phone	Fax	Email
<input checked="" type="checkbox"/> Norm Tarbox	Weber State University	801.626.6003		ntarbox@weber.edu
<input checked="" type="checkbox"/> Jim Harris	Weber State University	801.626.6677	801.626.7488	jrharris@weber.edu
<input checked="" type="checkbox"/> Jan Winniford	Weber State University	801.626.6008		jwinniford@weber.edu
<input checked="" type="checkbox"/> Brett Perozzi	Weber State University	801.626.6361		brettperozzi@weber.edu
<input type="checkbox"/> Brent White	ARW Engineers	801.782.6008	801.782.4656	brentw@arwengineers.com
<input type="checkbox"/> Jeremy Achter	ARW Engineers	801.782.6008	801.782.4656	JeremyA@arwengineers.com
<input type="checkbox"/> Bret Christiansen	Colvin Engineering Assoc.	801.505.5411	801.322.2416	bchristiansen@cea-ut.com
<input type="checkbox"/> Akbar Matinkah	ECE	801.521.8007	801.521.8057	
<input type="checkbox"/> John Michie	ECE	801.521.8007	801.521.8057	john@eceonline.com
<input checked="" type="checkbox"/> Mick Gaviglio	MHTN Architects, Inc.	801.595.6700	801.595.6717	Mick.Gaviglio@mhtn.com
<input checked="" type="checkbox"/> Randy Boudrero	MHTN Architects, Inc.	801.326.3210	801.595.6717	Randy.Boudrero@mhtn.com
<input checked="" type="checkbox"/> Sarah Miller	MHTN Architects, Inc.	801.326.3203	801.595.6717	Sarah.Miller@mhtn.com
<input checked="" type="checkbox"/> Josh Vel	MHTN Architects, Inc.	801.326.3227	801.595.6717	Josh.Vel@mhtn.com
<input checked="" type="checkbox"/> Sean Catherall	MHTN Architects, Inc.	801.326.3234	801.326.3334	Sean.Catherall@mhtn.com
<input type="checkbox"/> Glen Beckstead	MHTN Architects, Inc.	801.326.3225	801.595.6717	Glen.Beckstead@mhtn.com

Item	Information or Action Required	Action By:	Due By:
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- 02.01 The scope of the project was summarized as follows:
1. Evaluation of existing facilities (Promontory, LaSal, Stansbury and Wasatch)
 2. Master plan (plan for 1000 beds on 12.5 existing acres of campus; which existing buildings to keep and renovate, which to demolish and replace)
 3. Programming (a renovated Wasatch Hall or new facility, depending on the outcome of the evaluation)

02.02 Sean Catherall presented the findings of the evaluation. All four buildings would need significant architectural, structural, mechanical and electrical renovation in order to continue their useful life well into the future. The architect's opinion of probable cost to renovate Promontory Tower is approximately \$25.4 million, whereas the building could be replaced for approximately \$26.8 million. A renovation of LaSal and Stansbury Halls is expected to cost approximately \$4 million each, compared to a replacement cost of approximately \$4.4 million each. And the architect estimates a

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renovation cost of \$8.5 million for Wasatch Hall of \$8.5 million as opposed to an estimated replacement cost of \$10.8 million.

- 02.03 Some additional discussion needs to take place on the following evaluation subjects:
- To what level of construction would a renovation be done and what level of construction was assumed in the estimate? 20-year? (University Village was built to a residential standard of construction and has proved to be a high-maintenance facility, not something the University is eager to repeat.) What are the demographic and income/cost parameters that impact this? Costs of durable materials need to be balanced with lifecycle benefits and the rents that can be expected with these materials in place.
 - What life expectancy assumptions have been made in the renovation estimates?
 - Have we made the right assumptions on the number of units and the configuration of the housing units?
 - If replacement buildings are built, would four or fewer buildings be built? Would replacements costs be lowered if the buildings are combined? How many beds can be put in a single building? How does the number of beds per floor affect community-building among the residents? How much growth space is desired on the site?
- 02.04 The comparable costs of renovating or replacing Promontory, LaSal and Stansbury would appear to justify the cost of replacement. However, further evaluation of Wasatch should take place. Norm indicated that a creative re-examination may show that the estimated costs are higher than they should be. A meeting with Glen Beckstead (MHTN's estimator) and the team's engineers should be scheduled to further review the evaluation and the possibilities. Discussion should include:
- MHTN
- Comparison to the renovation of the Swenson Building and how similar things can be done on this project.
 - Diagrammatic studies of rooms to determine what can be fit into the unit mix and the effect on building capacity (ideally 2-bed and 3-bed units with private bathrooms for each unit). No kitchens are needed and no gang bathrooms. Some single-bed units may also be desirable for variability. What sense of community can be provided in the existing building with these units?
 - Other amenities may include classrooms, faculty offices, recreational space, RA's, community space on each floor, laundry.
 - No elevator is needed. This should be removed from the estimate. Accessible units can be provided on the main level.
 - Although food service may be more efficiently located in a new building for cost of kitchen construction and for centrality, food service may be needed in the renovated Wasatch Hall due to construction phasing. Perhaps two schemes should be prepared: one showing food service and one without.
 - Shared kitchenettes on each floor could be acceptable if they do not add much cost.
 - The renovated Wasatch Hall could be the lowest priced residential option on campus. Something is needed to



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compete with very inexpensive housing available nearby off-campus. In order to accomplish this, less should be devoted to “like to haves” and more devoted to “must haves” at this stage.

- Take into consideration that this facility would be used heavily for summer conferences.

- | | | | |
|-------|---|------|----------|
| 02.05 | In the next phase of the project: new Wasatch Hall concepts and a program should be prepared and evaluated and a new cost estimate for Wasatch Hall should be prepared. | MHTN | |
| 02.06 | The engineers' evaluations presented today are to be bound, along with a cover memo summarizing the cost estimates. The memo should include the recommendation to replace Promontory, LaSal and Stansbury and to conduct further evaluation of Wasatch. | MHTN | 10/3/08 |
| 02.07 | Some opinion regarding the future viability of the existing buildings would be desirable. How long can they reasonably be used? Mick Gaviglio expressed concerns about their ongoing use due to life safety issues. | | |
| 02.08 | After a final decision has been reached regarding Wasatch Hall, master planning for the site will begin. Master planning should take into consideration green/field space and future expansion, a village concept and student engagement. | | |
| 02.09 | The next meeting will be held on 14 October at 3:00 at Norm Tarbox's office. At the meeting, the Wasatch Hall concepts and new estimate will be reviewed and discussed. | Team | 10/14/08 |

End of Meeting Report No. 02

Minutes will stand as recorded unless notified within 3 working days of any discrepancies or inaccuracies.

WSU Housing & Residential Life Planning Meeting Reports

M H T N A R C H I T E C T S



Meeting Report - No. 03

Project: Weber State University Residential Life Facilities

MHTN Project No.: 2008554.00
 Phase: Pre-Design
 Date: 14 October 2008
 Time: 3:00 p.m.
 Location: Administrative Offices
 Purpose: Review of Facility Evaluation; Programming/Master Planning Kick-Off

Attendees

Name	Representing	Phone	Fax	Email
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<input checked="" type="checkbox"/> Bret Christiansen	Colvin Engineering Assoc.	801.505.5411	801.322.2416	bchristiansen@cea-ut.com
<input type="checkbox"/> Akbar Matinkah	ECE	801.521.8007	801.521.8057	
<input checked="" type="checkbox"/> John Michie	ECE	801.521.8007	801.521.8057	john@eceonline.com
<input type="checkbox"/> Mick Gaviglio	MHTN Architects, Inc.	801.595.6700	801.595.6717	Mick.Gaviglio@mhtn.com
<input type="checkbox"/> Randy Boudrero	MHTN Architects, Inc.	801.326.3210	801.595.6717	Randy.Boudrero@mhtn.com
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Item Information or Action Required Action By: Due By:

- 03.01 Josh Vel presented two concept sketches for laying out new housing units within the existing Wasatch Hall. Each concept shows windows in every bedroom and the preservation of existing common lounge space in each wing of each floor and the existing double-loaded corridor arrangement:
 - Concept 1: 8 beds in 2 structural bays with private bedrooms and bathrooms
 - Concept 2: 8 beds in 1.5 structural bays with private bathrooms and with the possibility of some private bedrooms and some double bedrooms
 - Both schemes can blend concepts 1 and 2 or concepts 1 and/or 2 with the existing housing scheme (16 beds in 2 structural bays with a collective bathroom for the entire wing on each floor).
- 03.02 Both schemes can add mini-refrigerators and/or microwaves in lieu of the hall closets adjacent to the hall doors.

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WSU Housing & Residential Life Planning Meeting Reports

- 03.03 With 10 structural bays per wing, 2 wings and 3 floors:
 - Concept 1: Approximately 120 beds total for the building (if the entire building is converted to this type)
 - Concept 2: Approximately 144 beds total for the building (if the entire building is converted to this type)
- 03.04 Layouts may vary from floor to floor, however, stacking the toilet cores is important due to the difficulty of making plumbing and HVAC chases shift from floor-to-floor with the low floor-to-floor height (9'-0" according to record document).
- 03.05 This low floor-to-floor height also makes wall HVAC units advisable. A strong argument was made in favor of a new 4-pipe system for the building (the existing system is a 2-pipe system). The low height also requires creativity in planning the new fire sprinkler system. Running piping down the corridor, furred-down heads in restrooms and other auxiliary spaces and sidewall heads in bedrooms is recommended (the building is currently not sprinklered).
- 03.06 Shear walls must be introduced and they must be continuous from foundation to roof deck. Longitudinal shear walls can efficiently be located on the exterior of the building. Transverse shear walls are likely to be required on every other structural grid line. Shear is carried across the corridor through the post-tensioned concrete floor slabs.
- 03.07 The University's goal is to achieve a total of 1,000 beds on campus in a mixture of types.
- 03.08 It was estimated that a 40-year lifespan should be achieved in this facility, whether the existing Wasatch hall is refurbished as recommended and estimated or whether a new facility is built to replace it.
- 03.09 Costs to refurbish Wasatch Hall could be approximately \$2.5M less than replacement costs (based on current estimates). Renovation savings of \$0.5M to \$1.0M (based on current estimates) could be achieved by maintaining the existing housing style of the building.
- 03.10 The University will review and discuss the options presented and decide how to proceed, including what housing style(s) are desirable and how much of the building will retain the existing housing style, if any and how much structural upgrade will be pursued. WSU +/- 10/21/08
- 03.11 Current estimates do not include estimates for hazardous material abatement, but the cost for asbestos abatement should be factored into future estimates. Current replacement cost estimates do include costs to demolish the existing building. MHTN
- 03.12 The existing basement includes mechanical space and some existing classrooms. A decision will need to be made about whether the classroom functions remain in this building or get relocated to another building.

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- 03.13 Programming for Wasatch Hall and the new facilities master plan will run concurrently, once MHTN has been released to begin that phase of the project.

End of Meeting Report No. 03

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WSU Housing & Residential Life Planning Meeting Reports



MHTN
ARCHITECTS

Meeting Report - No. 04

Project: Weber State University Residential Life Facilities

MHTN Project No.: 2008554.00

Phase: Pre-Design

Date: 17 November 2008

Time: 8:30 a.m.

Location: Weber State University Miller Administration Building (Lampros Board Room)

Purpose: Housing Masterplanning/Programming charrette

Attendees

Name	Representing	Phone	Fax	Email
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Item	Information or Action Required	Action By:	Due By:
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- | | | | |
|-------|--|------|------------|
| 04.01 | <p>A decision has been made by the President's council to offer two different housing options in Wasatch Hall based on the results of the student survey conducted.</p> <ul style="list-style-type: none"> One floor is to consist primarily of single-bed rooms configured in suites of two rooms sharing a bath and other amenities (option #1 in the survey, most preferred by 42% of the respondents). The other floor is to consist of a mixture of two-bed rooms configured in suites of two rooms sharing a bath and other amenities including a living area (option #4 is to be re-designed to fit into 1.5 bays similar to option #2 in the survey to fit this type, most preferred by 20% of the respondents) and two-bed rooms configured with a community bathroom (option #5 in the survey, most preferred by 18% of the respondents). In order for this layout to work, the infrastructure remodel will need to be made to coincide with the existing building structure. | MHTN | +/-12/1/08 |
|-------|--|------|------------|

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-
- Practicality requires an objective of 160 beds for this housing mix for the building. MHTN will program the building and provide concepts showing this configuration.
- 04.02 The group discussed whether or not to add a student housing consultant to the contract for this project to do market analysis. Cost considerations might influence this. Such a consultant could augment the group's knowledge base and lend expertise on current trends, latest issues and innovations nationally. They would also organize focus groups. (The WSU survey was done quickly. Another survey could be more direct and thorough.)
- One potential consultant is Alan & O'Hara, with whom MHTN has worked in the past. They are recommended for market surveys.
- 04.03 Master plan outcomes:
- Definition of open space
 - Definition of living arrangements and mix of units
- 04.04 Wasatch Hall programming/master planning goals:
- Replace beds currently occupied by new beds in the renovated Wasatch hall (Promontory is currently occupied by 130 students, Wasatch currently has about 30; for a total of 160 beds.)
 - Maximize units as much as possible
 - Renovate as economically as possible
 - Make the final design as appealing as possible
- 04.05 Other programming/master planning goals:
- In order to achieve the goal of 1000 beds on campus, the 2-3 new buildings on the site need to accommodate another 360-370 beds total (University Village has 476 beds)
 - Make recommendations on the use of open space
 - Define the framework for site development, including the relationships to other important buildings and areas of the campus.
 - Define the living style of the units; the amount, location and nature of common spaces; and the unit mix.
 - Take into consideration known information about the housing market and the parameters of acceptability for the various housing types considered.
- 04.06 Married student housing:
- May not be affordable for WSU, poses a price point problem.
 - It would attract students.
 - Donors needed; SUU's only became possible with donations.



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04.07 Dining:

- Would be needed, but should have a dual use, such as a community center.
- A student housing consultant could help determine if dining could be supported at this location.
- A smaller, grab 'n' go facility could be viable in lieu of a full-service dining facility.
- We would need to make assurances that the dining included here does not hurt the Union food service offering.
- Wasatch Hall does not appear to have space available for the full kitchen and dining area to support a board plan for 500, although it could house temporary food service through an early phase until a later dining area can be built in a new building.
- The #1 complaint from residence halls is that there are no food options close by. Refrigerators and microwaves in units are typical requests.
- Hybrid meal plans with flexible dollars in the plan are popular.
- The Union was planned with future residential food use in mind. The C-store with food service from the grill has worked out well. The Union and residential food service should be looked at together, comprehensively. Part of the University's plan is to re-establish the board plan and the residential base.
- A "real board plan" is needed for the future with these 500 beds in the area.
- In order for this residential area to stand alone, more centrally-placed food service is needed—something to cover Sunday mornings. We want to achieve a village feel and a strong sense of community, but any food service on this site must be secondary to the Union and must be a support to it and to the housing. (By analogy, any exercise space on this site would be secondary to and supportive of central campus exercise space.) But something closer to the housing that is supplemental to it does appear to be necessary.

04.08 Parking:

- It was suggested that at least 0.5 parking spaces per bed be provided, within a 30 second walk from the building entrances.
- Housing mostly freshman, with sophomore and junior RA's, and expecting students to move to University Village when older, students on this site may not have as many vehicles that require parking.
- We may want to intentionally limit parking in order to limit vehicle use.
- There are about 200 spaces on site now for the 160 beds, some of which are being used by the administrative staff housed at Promontory. Of those, many in the Wasatch lot are empty.

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- We may consider designating space in the master plan that can be green space in the early phases that can be converted to parking at a future time.
- Jan will obtain additional information about the number of cars to plan for, most likely in terms of a ratio of cars to beds.

04.09 Outdoor recreation space:

- Existing outdoor recreation facilities include a sand volleyball court, hard basketball courts, picnic tables, and a barbecue area. These are not used much, possibly due to their "hidden" location. Basketball courts would still be desirable going forward, perhaps in a location where they would be used.
- One suggestion was to provide a stage area and seating, using the existing grades to our advantage.
- If space is available, a softball diamond would be desirable.

04.10 Other outdoor uses:

- Fire-fighting equipment access to all buildings is desirable. But, if a continuous hard paved fire loop around the building complex can be avoided, that would be ideal. Likewise, hammerheads that waste space should be avoided.
- The facilities maintenance storage and work yard at the southeast corner of the site should be maintained in place.
- No children's play area will be needed in the future.
- A walking path through the site, connecting back to 41st street, with exercise stations along the path would be desirable, but we don't want to duplicate amenities that are available elsewhere on campus. A small indoor workout facility should be included in the new housing buildings.
- Some seat walls around planted areas would be desirable, especially as planted areas are raised to mitigate slopes and areas between buildings are developed to create outdoor social areas. We will want to have some ideas on program for these areas and keep their use flexible.

04.11 Wasatch Hall's existing basement:

- The basement is currently used as a swing space for classrooms.
- However, by law, the University needs to make sure that all of its programs and services are accessible, making this space difficult to use without adding an elevator to the building.
- The best possible use for the basement, then, may be for storage and other staff support, due to requirements that an elevator would require that upper levels have accessible residential units, which would also have a reduced capacity.



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04.12 Program deliverable:

- The program deliverable is to include all the information necessary to design the renovation of Wasatch Hall.
- Student feedback suggests that variety and options of unit styles are wanted. Some want the cheapest option with a community bathroom. Refer to directions given above.
- Other amenities are to include:
 - Laundry
 - TV lounge
 - Study lounge
 - Vending area for late-night access
 - Food service area (C-store or grab 'n' go, possibly in an early phase only)
 - Common kitchenettes at the end of the hall
 - Building storage (basement?).
 - Small fitness room for yoga, small scale activities and a separate space for workout equipment is desirable. Something similar to a hotel fitness room is appropriate. This is a low priority, however.
 - Multi-purpose/meeting space is desirable. Something that fits the available space would be appropriate.
 - Student storage is needed. One large item that is a frequent storage problem is bicycles. They require frequent, even daily access but do not fit will in rooms. Should they be stored outdoors? Perhaps some sort of in-room storage system (rack? hook?) would be a good idea.
 - Facilities management may need storage in the building for attic stock, light bulbs, furnace filters, etc.

04.13 Schedule and phasing:

- It's anticipated that Wasatch would be renovated in 10-12 months by the summer of 2010.
- With Promontory's serious mechanical issues, by that time it will have ended its useful life and will be at a perfect time to be demolished following its use for conference housing.

04.14 It was suggested that more student input on the master plan and program be collected and considered, expanding this group.

- Brett Perozzi will organize a group for student input.
- It will take a couple of weeks to prepare concepts.
- A casual meeting with flexible times for students to come in, review concepts and give input, perhaps at the Union building, was suggested.

Brett +/-12/1/08

End of Meeting Report No. 04

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WSU Housing & Residential Life Planning Meeting Reports



Meeting Report - No. 05

Project: Weber State University Residential Life Facilities
 MHTN Project No.: 2008554.00
 Phase: Pre-Design
 Date: 11 December 2008
 Time: 1:30 p.m.
 Location: Weber State University Miller Administration Building (Lampros Board Room)
 Purpose: Housing Masterplanning/Programming charrette

Attendees

Name	Representing	Phone	Fax	Email
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Item Information or Action Required Action By: Due By:

- 05.01 Housing masterplan issues:
- Village living/learning concept
 - Price points
 - Variation in room styles
 - Dining options
 - Married housing accommodation:
 - Difficult to make pencil out, but should be addressed
 - Family housing, couples or both?
 - Price points?



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- How do we create multiple campus energy centers? If we try to create too many, none end up becoming energy centers—Food?
 - Dinner program but no breakfast or lunch?
 - Married students less likely to use dining hall
 - Students not interested in using Union 3 meals a day 7 days a week (not open late, interested in common kitchen on each floor of each building with fridge & cooking capability)
 - Greater variety desirable (dinner at the Union every night could become boring)
 - Although we may not know now what form it will take, something from a C-store to a new dining facility in the housing area will be needed
 - What is the experience desired by students?
 - The ideal would not be to have kitchenettes in every unit, however
- Outdoor open space important for social events
 - May have 3 or 4 types of activities in the same space (University Village works well)
 - Used heavily for conferences
 - Green space in front of buildings is ideal
 - Flat green space is the most useful, although some grade makes it good for winter activities
- Landscaping should evoke tradition/nostalgia
 - Notable and memorable landmarks
 - Smaller outdoor rooms
 - Distinct places that are unique to the campus and not part of the “outside world”
 - Places with which students can make lasting emotional connections and develop a sense of ownership
- Integrating married and traditional housing (low demand for family housing)
 - Can we successfully mix single students and married students without children? It could be well-received; units could be flexible enough to accommodate both single and married students
 - Housing options could allow greater flexibility for married couples or unmarried couples sharing a suite
 - Flexibility (similar to lock-out condos, movable/convertible wall suites, and other ideas raised at recent webinar)

05.02 Three masterplan concepts were presented and discussed. Among the items discussed:

- All concepts show:
 - Fire & emergency vehicle access being completed across the site
 - Buildings set up on a plinth to establish some boundaries
 - Parking at 0.5 stalls per bed (assuming current parking trends continue)
 - Common green space/outdoor gathering space

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- Community centers: Should there be one for the entire complex? It was agreed that there should be one per building to be most effective.
- Perhaps there could be multiple levels of community centers of different sizes with different emphasis: on each floor, in each building, in each complex, with social space provided in each suite and each pair of floors (or groups of floors)
- It was agreed that the design should provide a welcoming atmosphere to all student; the distance between the residential area and the rest of campus will create a great enough separation to provide a feeling of ownership and privacy for the residents. A perception of safety will also be a key aspect of the design.
- Preserving as many existing mature trees as possible is a desirable outcome.
- A pedestrian loop trail/walk around the building is represented and is considered a positive feature.
- In Concept C, the “sea of parking” around the buildings was generally considered a negative aspect of the concept, along with the way the buildings close the complex’s open space off to the rest of campus
- In Concept A, the somewhat closed relationship between the complex’s open space and the rest of the campus was considered a drawback.
- In Concept B, the open relationship between the complex’s open space and the remainder of the campus was appreciated. Berms and other landscape features visually diminishing and screening the expanse of the parking were suggested. This Concept was favored.
- MHTN will develop Concept B for further discussion.

MHTN +/- 1/1/09

05.03 Project timeline:

- First, Wasatch Hall will be remodeled to make it a viable place to accommodate all the students now using Wasatch, Stansbury, LaSal and Promontory.
- Second, Promontory, Stansbury and LaSal will be demolished following completion of the Wasatch Hall remodel. Adequate time for conference accommodation will be provided in scheduling the demolition (Brett has a chart projecting capacity—summer conference contracts extend through the summer of 2010). No specific timeframe has been agreed upon, although Promontory will be near the end of its useful life within the next couple of years and its demolition will become an urgent item to reduce seismic hazard and mechanical maintenance costs.
- Third, new housing will be built on former site of Promontory, Stansbury, LaSal.

End of Meeting Report No. 05

Minutes will stand as recorded unless notified within 3 working days of any discrepancies or inaccuracies.

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MHTN
ARCHITECTS

Meeting Report - No. 06

Project: Weber State University Residential Life Facilities

MHTN Project No.: 2008554.00

Phase: Pre-Design

Date: 7 January 2009

Time: 3:00 p.m.

Location: Weber State University Shepherd Union Building, Room 320

Purpose: Housing Masterplanning/Programming charrette

Attendees

Name	Representing	Phone	Fax	Email
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<input checked="" type="checkbox"/> Jan Winniford	Weber State Univ.	801.626.6008	801.626.6620	jwinniford@weber.edu
<input type="checkbox"/> Brady Wilkinson	Weber State Univ.	801.626.6677	801.626.7488	bradywilkinson@mail.weber.edu
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<input checked="" type="checkbox"/> Josh Vel	MHTN Architects	801.326.3227	801.595.6717	Josh.Vel@mhtn.com
<input checked="" type="checkbox"/> Sean Catherall	MHTN Architects	801.326.3234	801.326.3334	Sean.Catherall@mhtn.com
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Item	Information or Action Required	Action By:	Due By:
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- 06.01 A masterplan concept drawing was presented. The following features and recommended changes were discussed:
- Two new buildings arranged around a common green to the west of Wasatch Hall, based upon the strengths of the favored concept previously presented. The green is open to the campus to the north, with a gateway connecting the green to campus circulation.
 - Approximately 250 parking stalls arranged in a crescent around the west and south of the new buildings, connecting to the existing parking east of Wasatch, with emergency vehicle access through the site passing through the parking. The slope of the parking is about 2.5%.

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- With these slopes, the parking to the southeast of the new south building is near the same level as the 2nd floor of the new building, so functions on the 1st floor of that building may not include housing but could include food service, storage and maintenance and other housing support, shared restrooms for traditional style rooms, laundry and other common spaces.
 - The central green can be configured to have “spectator berms”, a larger single panel of grass without walks crossing it and a gentler slope to accommodate a larger play area for soccer or other informal recreation.
 - A volleyball court is shown in a prominent central location. While this has advantages over an outer circle position, its featured location might be a better location for other functions of arrival and casual socializing (sort of the “front porch” of Wasatch Hall). The court will be relocated to another position near the central green and the central area will receive a mix of hard and surfaces with the idea that tents could be set up there, etc.
 - The plaza between the new buildings is a paved area with seating for arrival at both buildings. It could conceivably be a covered or enclosed space.
 - A fire pit could be located in the central paved area at the center of the green. It could be gas-fired or wood-burning. Its location relative to the buildings does not preclude either one.
 - The master plan should indicate where auxiliary spaces might go and how much space might be dedicated to those functions, such as fitness, laundry, etc.
 - A copy of the new master plan drawing will be distributed to the meeting participants. MHTN ASAP
 - MHTN will revise the drawing in response to today’s comments. MHTN 1/14/09
- 06.02 The master plan should address possible locations for a food service component: MHTN 1/14/09
- This might consist of a café (limited food service, possibly dinner-only, possibly a café/c-store combo).
 - Options for variety and healthy choices are important.
 - Students want food near housing but it is important that food at the housing area not detract from the food service at the Union.
 - Housing is different from other campus buildings in terms of food needs: we are trying to create a residential environment and encourage connections and community; food is essential to that.
- 06.03 A preliminary program for Wasatch Hall’s renovation was discussed:
- Wasatch’s basement is a good place for functions that do not require access, unless an inexpensive lift is used. A Lu-lu lift was suggested (see Lampros Hall) to get inexpensive, infrequent single-level access.

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WSU Housing & Residential Life Planning Meeting Reports

Meeting Report
Page 3

- Where should Promontory's mail function be located?
Bill Fruth suggested moving it all to the Shepherd Union.
 - A front desk is recommended to enhance security.
 - Lobby/lounge space is needed.
 - A C-store is a good idea.
 - A laundry is still needed.
 - Vending
 - Manager apartment/office...should be in conjunction with the front desk.
 - Storage (basement).
 - Housekeeping areas (these need to be located throughout the building)
 - MHTN will continue refining the program and update it to show which spaces will fit in the basement and which will fit in other locations. MHTN 1/14/09
 - Copies of the preliminary program will be sent out for review immediately after this meeting. MHTN ASAP
- 06.04 The existing housing general maintenance functions in the lowest level of Promontory will get demolished and need to be replaced, presumably at Wasatch. MHTN 1/14/09
- Would the basement be a good place for that? Yes, provided the basement functions do not require student access and fit within ADA's Title II requirements (require access only by personnel whose job description requires personnel to be ambulatory or the function can become readily accessible or the Lu-lu lift is provided as was discussed)
 - Shop
 - Key-making
 - Office
 - MHTN will review the existing maintenance space for existing dimensions and adequacy with existing personnel to determine the space needed in the program. MHTN 1/14/09
- 06.04 The next meeting will be held on the morning of 14 January (tentatively). The meeting following that will be held approximately a week later in order to keep with the schedule of completing the project no later than the end of the month.

End of Meeting Report No. 06

Minutes will stand as recorded unless notified within 3 working days of any discrepancies or inaccuracies.

WSU Housing & Residential Life Planning Meeting Reports



Meeting Report - No. 07

Project: Weber State University Residential Life Facilities
MHTN Project No.: 2008554.00
Phase: Pre-Design
Date: 14 January 2009
Time: 8:00 a.m.
Location: Weber State University Miller Administration Building, Board Room
Purpose: Housing Masterplanning/Programming charrette

Attendees

Name	Representing	Phone	Fax	Email
<input checked="" type="checkbox"/> Norm Tarbox	Weber State Univ.	801.626.6003	801.626.7922	NTARBOX@weber.edu
<input checked="" type="checkbox"/> Jim Harris	Weber State Univ.	801.626.6677	801.786.1457	JRHARRIS@weber.edu
<input type="checkbox"/> Brett Perozzi	Weber State Univ.	801.626.6361	801.626.6620	brettperozzi@weber.edu
<input checked="" type="checkbox"/> Jan Winniford	Weber State Univ.	801.626.6008	801.626.6620	hwinniford@weber.edu
<input type="checkbox"/> Brady Wilkinson	Weber State Univ.	801.626.6677	801.626.7488	bradywilkinson@mail.weber.edu
<input checked="" type="checkbox"/> Sarah Trescott	Weber State Univ.	801.626.6677	801.626.7488	sarahrtrescott@weber.edu
<input type="checkbox"/> Nicole Fronk	Weber State Univ.	801.626.6677	801.626.7488	nicolefronk@weber.edu
<input checked="" type="checkbox"/> Nancy Collinwood	Weber State Univ.	801.626.6349	801.626.7538	ncollinwood@weber.edu
<input type="checkbox"/> Chad Mosher	Weber State Univ.	801.626.8539	801.626.7763	chadmosher@weber.edu
<input checked="" type="checkbox"/> Keith Murray	Weber State Univ.	801.626.6677	801.626.7488	keithmurray@weber.edu
<input checked="" type="checkbox"/> Bill Fruth	Weber State Univ.	801.626.7641	801.626.7488	bfruth@weber.edu
<input type="checkbox"/> Christian Michaelson	Great Basin Eng.	801.394.4515	801.392.7544	christianm@gbenorth.com
<input type="checkbox"/> Bret Christiansen	Colvin Engineering	801.505.5411	801.322.2416	bchristiansen@cea-ut.com
<input type="checkbox"/> Mick Gaviglio	MHTN Architects	801.595.6700	801.595.6717	Mick.Gaviglio@mhtn.com
<input checked="" type="checkbox"/> Randy Boudrero	MHTN Architects	801.326.3210	801.595.6717	Randy.Boudrero@mhtn.com
<input checked="" type="checkbox"/> Sarah Miller	MHTN Architects	801.326.3203	801.595.6717	Sarah.Miller@mhtn.com
<input type="checkbox"/> Josh Vel	MHTN Architects	801.326.3227	801.595.6717	Josh.Vel@mhtn.com
<input checked="" type="checkbox"/> Sean Catherall	MHTN Architects	801.326.3234	801.326.3334	Sean.Catherall@mhtn.com
<input type="checkbox"/> Glen Beckstead	MHTN Architects	801.326.3225	801.595.6717	Glen.Beckstead@mhtn.com

Item	Information or Action Required	Action By:	Due By:
------	--------------------------------	------------	---------

- 07.01 An updated masterplan concept drawing was presented. The following features and recommended changes were discussed:
- A 70'x150' grass playfield area is now shown in the central green. It is free of walks crossing it and it is relatively flat, other than the spectator berms on the edges.
 - A fire pit is represented in the center of the complex with a small lawn east of it for special events (a soft surface where tents can be pitched, etc.)
 - Main entries of the new residential buildings are conceived at this stage to be near the center of each



WSU Housing & Residential Life Planning Meeting Reports

Meeting Report
Page 2

building, with secondary entries at the ends.

- It was mentioned that the building footprints appear small relative to Wasatch Hall and the number of beds they need to accommodate. MHTN will re-verify that these are 3-story buildings and that they are capable of accommodating the 334-382 beds required. MHTN ASAP
- Three possible loading areas are shown for flexibility in locating potential food and support areas within the two new residential buildings: one in the center where the two buildings come together, and one at the opposite ends of each building.
- More attention needs to be paid in the master plan to possible locations for food and other support services. These will probably need a dock and dumpsters— items which require a service yard, an aesthetic challenge which should be addressed in the master plan in the location of these pieces. Revision required. MHTN ASAP

07.02 The following was discussed relative to the Wasatch Hall program:

- As mentioned in a memo issued on 13 January, the actual space available in the basement of Wasatch Hall appears to be around 5,000 s.f., while the actual space in use by Student Affairs Maintenance at Promontory Tower appears to be around 7,300 s.f. and this space is not adequate according to Lynn Kraaima.
- The team decision was to continue to work with Lynn Kraaima on his needs and how to fit the program into the basement of Wasatch Hall, while considering using portable storage “pods” in the existing maintenance yard for furniture storage, and push to fit the remainder of the maintenance functions into the WH basement with the lift as previously discussed
- Sarah Miller emphasized that previous estimates did not include the cost of the lift and dust evacuation system.
- The mechanical engineer should review the condition of the existing condensate water piping to the existing cooling tower. Colvin ASAP
- It was pointed out that the program calls for a minimum bed count and a maximum bed count, depending on how many beds are located in some of the rooms at the University’s option.
- The laundry should be acoustically and visually separate from the main lounge while not being so isolated that it does not feel like a safe or inviting place. This is a design challenge.
- The mail room should remain in the program, but it may eventually move to the Shepherd Union
- Custodial room areas are to be checked against the campus standard
- DFCM has a new standard for expenditure on ADA upgrades on these types of projects (20%?). Glen Beckstead should be aware of this. MHTN is to verify.
- Program is to be updated according to the above. MHTN ASAP

WSU Housing & Residential Life Planning Meeting Reports

Meeting Report
Page 3

- 07.03 A color rendering of the master plan is needed for presentation to potential donors. It should show the context of the Hurst center and the additional row of parking between Hurst and housing. MHTN ASAP

End of Meeting Report No. 07

Minutes will stand as recorded unless notified within 3 working days of any discrepancies or inaccuracies.



WSU Housing Needs Assessment and Report

October 28, 2008

Housing Needs Assessment

1st 30 people to complete the survey get \$10 in Wildcat cash. Everyone to complete the survey will be entered into a drawing for a \$100 Visa giftcard.

Do you currently live on campus?

Yes (27%) No (73%)

Yes Branch-If yes, what factors influenced this decision (mark all that apply)

- 41% Cost
- 66% Proximity to classes
- 14% Dining Options
- 24% Better conditions for studying
- 56% From out of town/state/country
- 42% Availability of transportation
- 5% Ability to live with selected friends
- 8% Safety and security issues
- 8% Scholarship required me to live on campus or paid for housing
- 14% I wanted to experience student life on campus
- 7% Other (please specify) _____

No Branch-If no, what factors influenced this decision (mark all that apply)

- 54% Cost
- 12% Proximity to classes
- 6% Dining options
- 6% Conditions for studying
- 7% From out of town/state/country
- 9% Ability to live with selected friends
- 3% Safety and security issues
- 12% Living with parents
- 17% Living with family
- 2% Did not get on-campus housing option that I wanted
- 9% Other (please specify): most common response: had children

No Branch 2-Have you ever lived on campus?

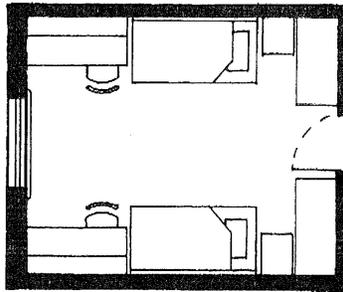
Yes (16%) No (84%)

WSU Housing Needs Assessment and Report

October 28, 2008

Assuming you are going to live on campus, please **rank** the following room designs in which you would like to live. *Do not rank the room setups in which you would not want to live.*

Classic Style

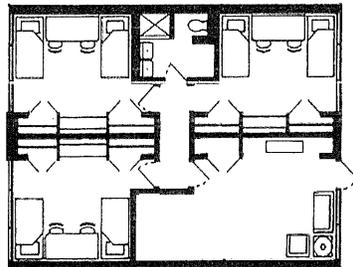


Responses:	
15%	1 - most preferred
11%	2
5%	3
11%	4
58%	5 - least preferred

Single or Double Room
Community (hallway) Bathroom

Double: \$1100 per person, per semester (\$245 per month)
Single: \$1400 per person, per semester (\$310 per month)

Suite #1



Responses:	
19%	1 - most preferred
20%	2
23%	3
29%	4
9%	5 - least preferred

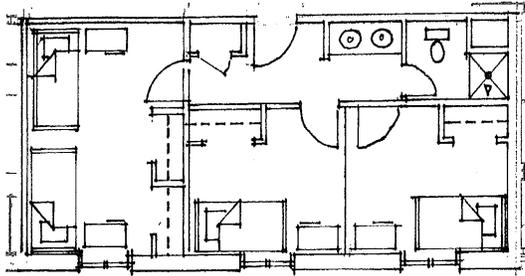
2 Double bedrooms & 1 single bedroom per suite
5 people sharing a bathroom
Common lounge space
Microwave and mini fridge (in lounge area; no full kitchen)

Double: \$1300 per person, per semester (\$290 per month)
Single: \$1600 per person, per semester (\$355 per month)



WSU Housing Needs Assessment and Report

October 28, 2008

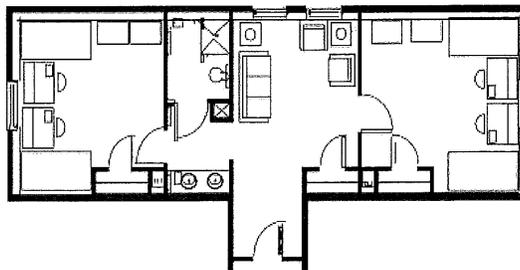


Responses:	
12%	1 - most preferred
25%	2
37%	3
18%	4
8%	5 - least preferred

Suite #2

1 Double bedroom & 2 Single bedrooms per suite
4 people sharing a bathroom

Double: \$1500 per person, per semester (\$335 per month)
Single: \$1800 per person, per semester (\$400 per month)



Responses:	
22%	1 - most preferred
33%	2
22%	3
16%	4
7%	5 - least preferred

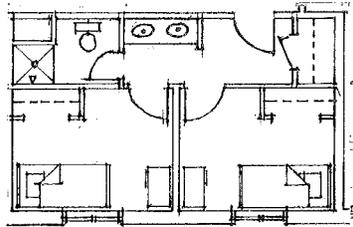
Suite #3

2 Double bedrooms per suite
4 people sharing a bathroom
Common lounge space

Double: \$1700 per person, per semester (\$375 per month)

WSU Housing Needs Assessment and Report

October 28, 2008



Suite #4

2 Single bedrooms per suite
2 people sharing a bathroom

Single: \$2000 per person, per semester (\$445 per month)

Responses:	
41%	1 - most preferred
15%	2
14%	3
20%	4
10%	5 - least preferred

Which of the following would make you want to live (or continue to live) on campus? (Check all that apply):

- 43% A survey that would help match me with roommates similar to me
- 33% Tutoring available within the residence halls
- 25% Living/learning community options were available (where intentional groups of students live in a "community" of individuals with a similar interest or academic focus; programming will be centered around that focus)
- 50% Dining commons available within the residence halls
- 42% Multiple meal program options
- 42% Meal programs not required
- 61% A room to myself
- 6% Two people per room
- 17% Multiple people in my suite
- 16% Suites alternated by gender
- 37% More social activities were offered
- 17% Only residents were allowed in the building at all times (visitors only allowed when escorted by resident)
- 11% I would not ever live on campus
- 10% Other (please specify): Most common response: More married or family housing

If living/learning community option selected, the following question appears.

With whom would you like to live in a living/learning community? (Check all that apply)

- 59% Individuals with the same major
- 45% Individuals within my college
- 75% Individuals with similar interests (e.g.: leadership, exploring Utah, etc.)
- 4% None of the above



WSU Housing Needs Assessment and Report

October 28, 2008

Traditional style residence hall rooms (2 people per room with floor community bathrooms) cost approximately \$1000 per person/per semester.

For which of the following additional amenities would be willing to pay more per person/per semester? (Check all that apply)

- 19% Lounge area within a suite (additional cost: \$280)
- 45% Lounge area with fridge/microwave combination within a suite (additional cost: \$310)
- 18% 1 bathroom shared by 4 people (additional cost: \$500)
- 30% 1 bathroom shared by 2 people (additional cost: \$ 1000)
- 33% Would not be willing to pay anything additional

What is your marital status?

- 64% Single
- 1% Single with children
- 17% Married/Domestic partner
- 18% Married/Domestic partner with children

Do you currently have health insurance?

- 37% Yes, I have my own health insurance
- 41% Yes, I am covered by my parent's health insurance
- 3% Yes, I am covered by Medicare or Medicaid
- 19% No, I do not have health insurance

Do your children have health insurance?

- 72% Yes, my children are covered by my health insurance
- 5% Yes, my children are covered by CHIP or PCN
- 16% Yes, my children are covered by Medicare or Medicaid
- 7% No, my children do not have health insurance

WSU Housing Needs Assessment and Report

November 11, 2008

Housing Needs Assessment Report

Sample Characteristics

314 Respondents

- Stratified random sample, including: 350 students in on-campus housing, 100 scholarship students, 50 international students, and 150 out-of-state students
- 12% Response Rate
- Confidence Interval: $\pm 5\%$; Confidence Level: 95%

27% of students currently live on campus

11% of students have lived on campus previously

61% of students have never lived on campus

Age

Mean: 24

Median: 22

Mode: 18

Gender

59% Female

41% Male

Class Standing

32% Freshman

16% Sophomore

49% Junior

0% Senior

3% Graduate

Marital Status

64% Single

1% Single with children

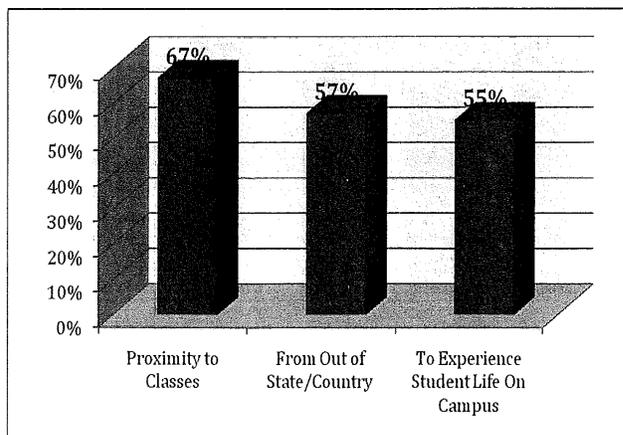
17% Married/Domestic Partner

18% Married/Domestic Partner with children

The following summary excludes those who reported that they would never live on campus, those who are married, and those with children.

Highlighted Questions

Students reported living on campus for the following reasons:

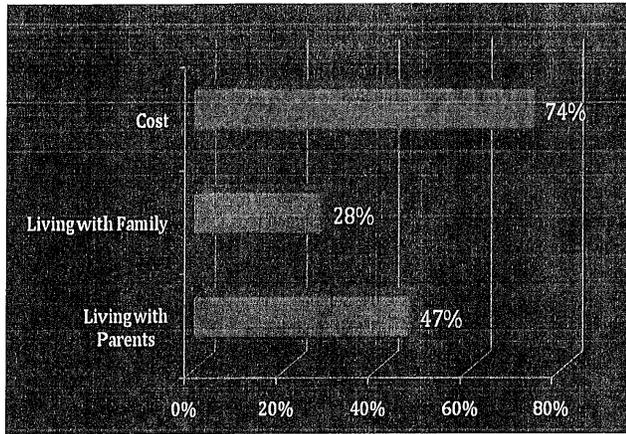




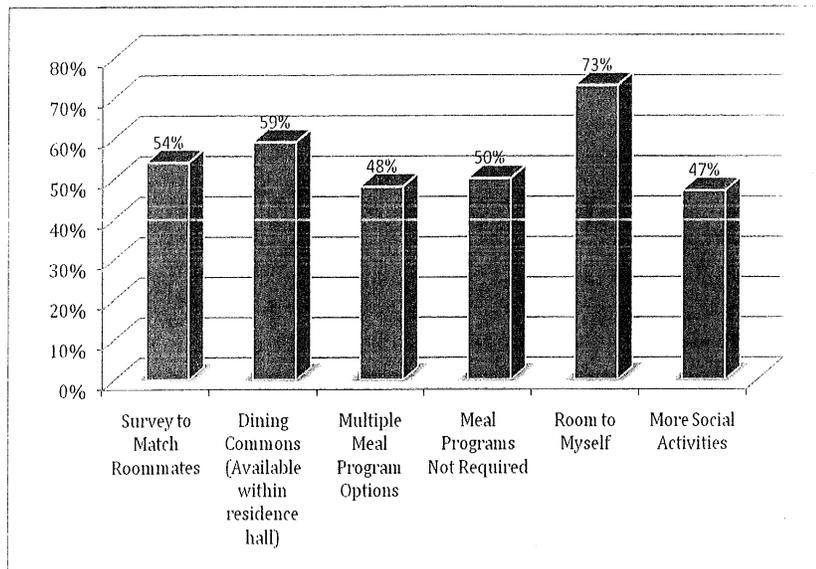
WSU Housing Needs Assessment and Report

November 11, 2008

Students reported living off campus for the following reasons:



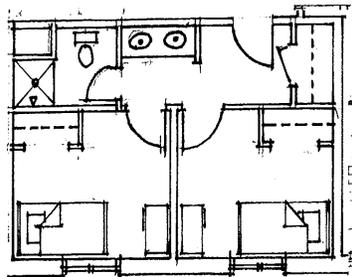
Students reported that they would be willing to live on campus (or would continue to live on campus) if:



WSU Housing Needs Assessment and Report

November 11, 2008

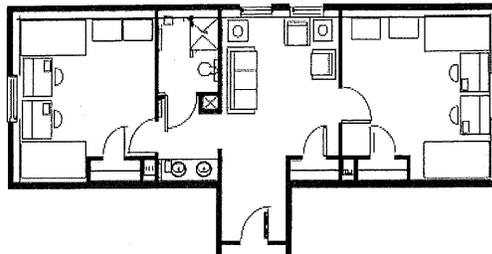
Below are student responses to 5 separate floor plan designs. Students ranked the floor plans in order of preference. The final ranking is located to the right of the floor plan layout.



#1

- 42% of students most preferred this floor plan.
- 57% of students ranked this floor plan 1 or 2.
- 9% of students least preferred this floor plan.

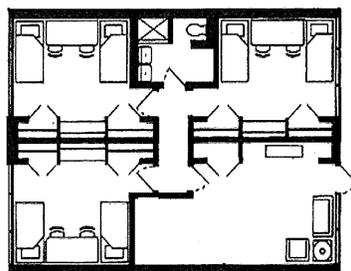
Single: \$2000 per person, per semester (\$445 per month)



#2

- 20% of students most preferred this floor plan.
- 51% of students ranked this floor plan 1 or 2.
- 9% of students least preferred this floor plan.

Double: \$1700 per person, per semester (\$375 per month)



#3

- 19% of students most preferred this floor plan.
- 38% of students ranked this floor plan 1 or 2.
- 8% of students least preferred this floor plan.

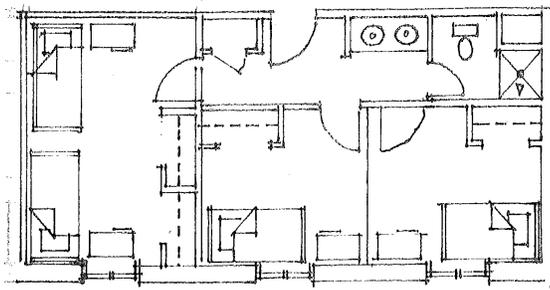
Double: \$1300 per person, per semester (\$290 per month)

Single: \$1600 per person, per semester (\$355 per month)



WSU Housing Needs Assessment and Report

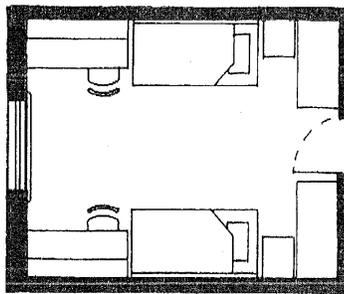
November 11, 2008



#4

- 9% of students most preferred this floor plan.
- 35% of students ranked this floor plan 1 or 2.
- 9% of students least preferred this floor plan.

Double: \$1500 per person, per semester (\$335 per month)
 Single: \$1800 per person, per semester (\$400 per month)



#5

- 18% of students most preferred this floor plan.
- Of that 17%, 52% of respondents were female, and 44% currently live on campus.
- 29% of students ranked this floor plan 1 or 2.
- 58% of students least preferred this floor plan
- Of that 40%, 69% of respondents were female and 49% currently live on campus.

Community Bath
 Double: \$1100 per person, per semester (\$245 per month)
 Single: \$1400 per person, per semester (\$310 per month)

Additional Information:

- 28% would want to live (or continue to live) on-campus if they had the opportunity to live in a living/learning community
- 47% of students would pay \$310 more per semester for a lounge area with a fridge/micro combination
- 32% of respondents would pay \$1000 per person/ per semester for a bathroom shared by only 2 people
- 34% of students would not be willing to pay for anything more than \$1000 per semester for a classic style residence hall (i.e., community bath)



WSU Housing Site Evaluation Civil Report



CONSULTING ENGINEERS
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WSU Housing Site Evaluation Utility and Site Analysis Civil Report Jan 29, 2009

EXECUTIVE SUMMARY:

The areas of civil review are as follows: general site condition (parking, walks, and ADA accessibility and fire truck accessibility), site drainage, utility availability, and future recommendations for utility sizing and replacement. This report evaluates the areas with respect to their current condition and proposed improvements at the time of this report. It was found that the site has adequate capacity for water and sewer services to serve the proposed 500 bed facilities currently under consideration. The current storm drainage appears to work but no on site detention is provided. It is possible that the detention capacity is provided as a part of the regional detention pond located centrally on the Weber State University Campus. The site is located in Zone X according to FEMA meaning that it is outside the 500 year floodplain.

GENERAL SITE CONDITIONS:

The general site conditions vary widely due to some reconstruction of walks in the recent past. The site can be broken down into East and West areas by means of parking service.

WEST:

Promontory Towers, LaSal Hall and Stansbury Hall are currently being served by the parking located on the West side of the sites central hub. Some of the sidewalks in the central hub area and paralleling 4100 South have been recently replaced and constitute roughly 30% of the total sidewalk on the site. Even the recently replaced portions of the sidewalk show spalling and flaking occurring on their surfaces. (See Fig. 1) The remaining portions of sidewalk and site concrete are in poor condition and suffer differential settlement resulting in the necessity of heavy grinding to make snow removal possible and make free from tripping hazards. Some of these grinds appear to be recent which is probably not the result of settlement but of frost heaving indicating that inadequate amount of free draining backfill may have been used. Differential settlement has also caused significant cracking in the sidewalks virtually site wide.

A.D.A. access has recently been upgraded to Promontory Towers; however the upgrade does not meet current A.D.A. code and is less than desirable. A.D.A. access to LaSal Hall and Stansbury Hall is provide but requires the patrons to park near Promontory Towers and then traverse the parking lot to access the building. During periods of heavy snowfall it is highly possible that this access would be impassible to those requiring A.D.A. access. The A.D.A. access situation to all three building on the West side of the central hub is poor.

WSU Housing Site Evaluation Civil Report

WSU Housing Site Evaluation

West side parking lot conditions are fair to poor. The use of curb wall in lieu of curb and gutter in some area has contributed to the premature deterioration of the asphalt. The majority of the existing asphalt is moderately cracked and evidence of crack sealing is apparent. More significant is the condition of the asphalt where water has been collecting into pools. These areas are beginning to show evidence of alligator cracking and loss of underlying fines in the base material due to pumping. Without significant maintenance this parking lot would likely last only another 5-7 years. (See Fig. 2)

The geometry of the West parking lot while acceptable for vehicles is sub par when it comes to current day fire apparatus access. The possibility of interference to fire apparatus due to snow storage and parked cars is a significant risk that should be considered. A loop system connecting the East and West parking areas would be vastly superior to the current loop which requires the apparatus to make a small radius turn at its terminus.

EAST:

The East Parking area suffers from many of the same conditions that the West parking lot suffers from, most notably the condition of the sidewalks and stairs. The sidewalks are almost all suffering from some significant level of deterioration. (See Fig. 3) Differential settlement between the curb and gutter and sidewalk presents a tripping hazard that is not easily corrected with grinding. Some sections have been rebuilt however they represent very little of the current East side infrastructure. Stairs and rails are in better condition with the possible exception of the handrails. The stairs and handrails may have to be considered for replacement even if Wasatch hall is preserved and renovated due to the A.D.A. access situation.

A.D.A. access to Wasatch hall is poor at best. There are currently no designated stalls in the East parking area and even if there were there is no path for them to access to building which is A.D.A. compliant. This represents a design challenge considering the proposed use of the building will almost certainly require A.D.A. stalls to be incorporated into the design of the renovated building. A.D.A. access to Wasatch hall could be accomplished while leaving the current parking lot in its current arrangement but not without some reconstruction of stairs and ramps.

The condition of the East side parking lot asphalt while slightly better than that of the West side is still fair. Moderate cracking is evident throughout the parking lot. The current parking lot design allows water to collect in low areas of asphalt with poor drainage. This allows ice to pool and freeze in the winter which will contribute to a shorter lifespan than would otherwise be expected. Without the benefit of knowing the section thickness of this parking lot and the traffic load it sees on a daily basis it is estimated that this parking lot has a 7-12 year lifespan before requiring a significant rebuild. It should also be noted that the light poles and bases in the East parking lot are in a significant state of deterioration. (See Fig. 4)



WSU Housing Site Evaluation Civil Report

WSU Housing Site Evaluation

The geometry of the East parking lot is also better than that of the West but still less than desirable for the size of fire apparatus currently in use. Site inspection reveals that because there is no curb and gutter in the center of the parking lot itself it would be a relatively simple matter to upgrade the parking lot with re-striping. The linking of the East and West lots via a loop road would also improve this situation without the need for re-striping and likely bring the fire access for both sides of the plaza up to fire code access.

AMENITIES:

Various amenities exist within immediate walking distance of all four buildings. Sand volleyball, basketball, and small to medium size areas of grass for general exercise are also available. Barbeque and grilling facilities along with benches and picnic tables are present. (See Fig. 5)

UTILITIES:

In general the utilities available to the site currently are adequate for its intended use. The proposed use is virtually identical with upgraded facilities. Given the information available at time of this report and discussion with the facilities staff onsite; meeting the needs of the proposed buildings with the available supplies of each utility currently available at the site should not pose any significant challenges beyond the demolition of outdated and deteriorating infrastructure and construction of new infrastructure.

WATER:

At this point no flow tests have been undertaken and therefore the exact nature of the working and residual pressures are unknown. What is known is that there have been no reports of lack of pressure in the current facilities. Sufficient working pressure at the top floor of Promontory towers indicates that the pressure in the 10" main in 4100 South should be adequate for the new facilities. The current facilities are all supplied via a single meter or valve set. The nature of which is undetermined.

The culinary distribution lines to Promontory Towers, LaSal Hall and Stansbury Hall will be demolished or abandoned in place when the proposed building are constructed leaving only Wasatch Hall with aging lines. It is likely that upgrades in Wasatch Hall could create greater demand on the water line servicing it as well and therefore the reconstruction of the entire culinary water distribution system from the meter set to Wasatch Hall and the proposed buildings is recommended. There was also mention of aging water lines was made by Lynn Kraaima which leads to the same conclusion.

Wasatch, Stansbury and LaSal Halls are currently not fire sprinkled. Promontory Towers is serviced through an existing 6" fire line installed in the early nineties. While upgrades to Wasatch Hall may or may not require it to be sprinkled the installation of an 8" fire loop mimicking the shape of the proposed parking loop will be required to bring the exterior spacing of fire hydrants up to code and provide adequate fire protection for the buildings should they be sprinkled. The looped fire line would also provide some level of redundancy in the fire protection system and an additional level of serviceability for the loop in the future due to the ability to back feed the fire line supply.

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SEWER:

Wasatch, Stansbury and LaSal Halls are serviced by 8", 6" and 6" sewer lines respectively. Promontory Towers is currently serviced by what is believed to be a 6" line although WSU's utility drawings indicate at 4" sewer line. All lines to Promontory Towers, LaSal and Stansbury halls will be demolished or abandoned in place as a part of the proposed construction leaving only Wasatch hall with an existing sewer system in place. It is believed that this is a ductile iron line. While the renovation of Wasatch hall is an ideal time to replace the 8" D.I. line currently servicing Wasatch Hall it is recommended that the lines condition be assessed through potholing and its compatibility with proposed grading changes prior to any decision being made about whether to replace it or not. If replaced the likely amount of pipe required to be reinstalled is around 250'.

The entire site is provided sewer service via an 8" main running to the North across 4100 South Street. This line has provided adequate capacity in the past for the existing facilities and should be capable of handling the proposed facilities at full build-out. New sewer will be provided to the proposed buildings from a manhole just South of 4100 South Street behind the sidewalk near the sidewalk access to Stansbury Hall. This means that no crossing of the street with new sewer line will be required.

STORM DRAIN:

Site drainage appears to be functioning as designed. Upon discussion of this topic with Lynn Kraaima, he revealed that there has been flooding of LaSal Hall on two occasions. This appears to be the only problem evident with the storm drainage on campus. This problem could be fixed if some additional catch basins were relocated to more advantageous locations, however the proposed buildings and grading make any effort to do so obsolete.

Surface drainage on the site appears to be functioning properly with the exceptions noted in the parking lot evaluations. The site slope lends itself toward adequately drained landscaped areas and no significant problems were discovered upon inspection of the site.

The site on the whole drains to 4100 South to a catch basin serviced by a 24" pipe crossing under 4100 South Street. There is no indication of any detention on the surface upon inspection and no record of any underground detention shown on WSU's utility plans. This most likely means that the detention takes place lower on campus at the "duck pond" central to WSU. Should the need arise for on site detention it is likely to be difficult to accomplish given the proposed site plan. Underground detention would be the most likely option for use in this case. The capacity of the storm drain at 4100 South does not appear to be a problem currently and would most likely not present any problems in the proposed site. Footing drains appear to be present on all four buildings. The footing drain from Wasatch hall will most likely be picked up by the proposed system and the drains from Promontory Towers, LaSal Hall and Stansbury Hall would be demolished. A significant demolition and reconstruction process of the storm drain system is anticipated as a part of the re-grading of the proposed site and construction of the two proposed buildings.



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GAS:

Gas service is provided to all four buildings. Wasatch, Stansbury and LaSal Halls are each serviced by what appear to be a 2" line to the boilers and a 1-1/4" line for cooking and running clothes dryers. Promontory Towers is currently serviced by what is believed multiple lines of unknown size. The entire site is serviced by a 4" high pressure (30 psi) line according to WSU's utility drawings. The facilities staff has indicated that gas supply has been a problem for them in the past on rare occasions and at the request of Questar they have used alternative means for fire their boilers. This should be further explored once the full demand of the proposed facilities is known. Based on the information available at the time of this report about the layout of the existing gas utilities, a major reconstruction of the gas distribution infrastructure from the curb into all buildings should be anticipated during the course of construction. (See Fig. 6)

OTHER UTILITIES:

Chilled water is currently being provided by electric chillers near Wasatch Hall for Wasatch, LaSal and Stansbury Halls. These appear to be functioning and could likely continue to serve Wasatch Hall in the future. Each building appears to have its own boiler for heating purposes. Promontory Towers is heated and cooled independently and stands alone.

CONCLUSIONS:

The site while aging has the ability to provide the necessary utilities to the proposed buildings with upgraded distribution systems. Water and storm drain will be almost entirely replaced from the curb into the site. Sewer will be partially replaced and possibly entirely replaced depending on the observed conditions in the field. Upgrades to A.D.A. access and parking are a potential stumbling block but could likely be resolved with some minor reconstruction in the East parking area. It is anticipated that the West parking area will be removed in its entirety to make way for the proposed buildings and new parking lot/drive loop.

Christian Michaelson,

Project Manager, GBEN

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Fig. 1



Fig. 2



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Appendix

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Fig. 3



Fig. 4

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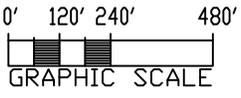
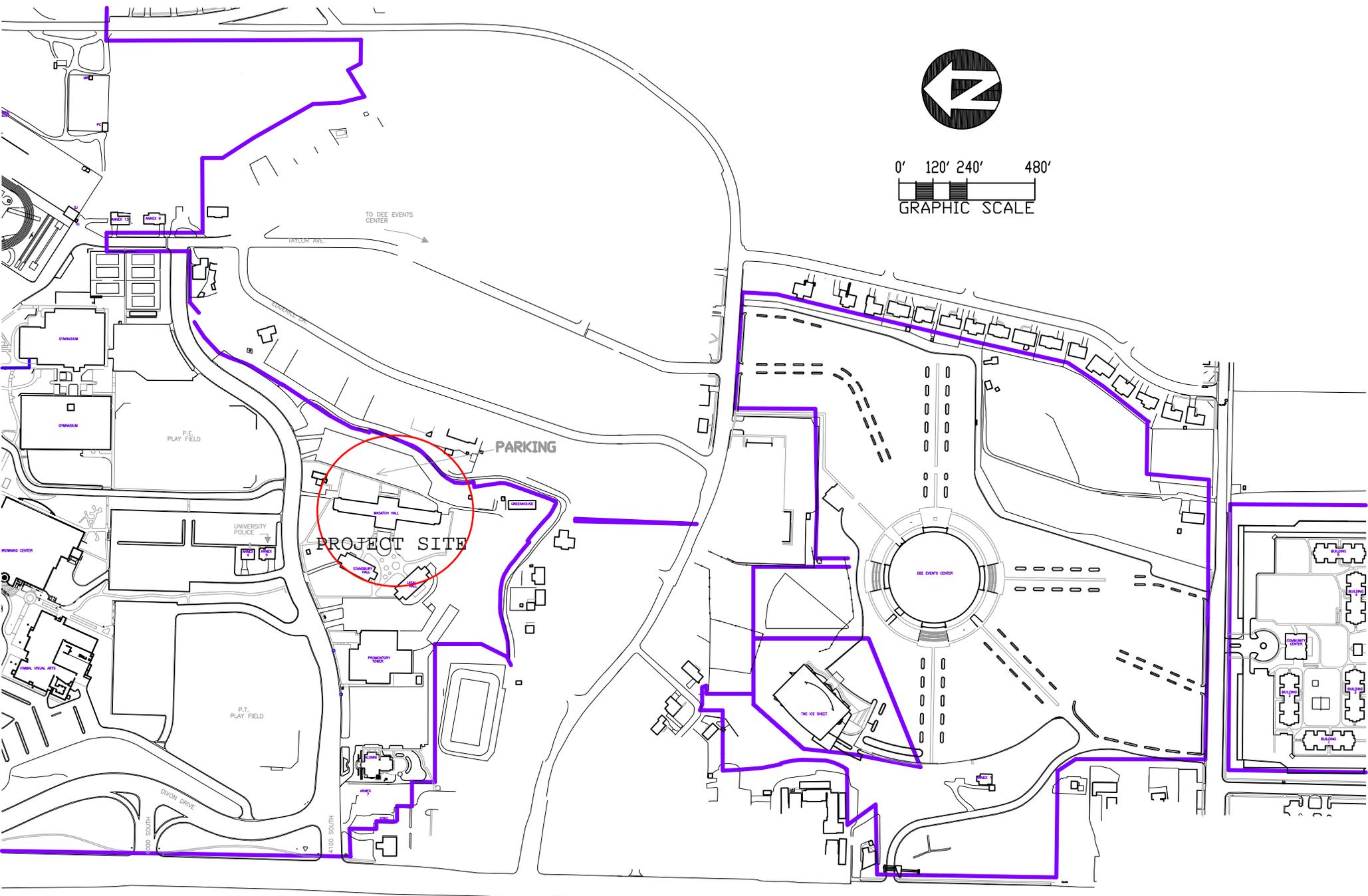
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Fig. 5



Fig. 6



WEBER STATE UNIVERSITY - OGDEN CAMPUS