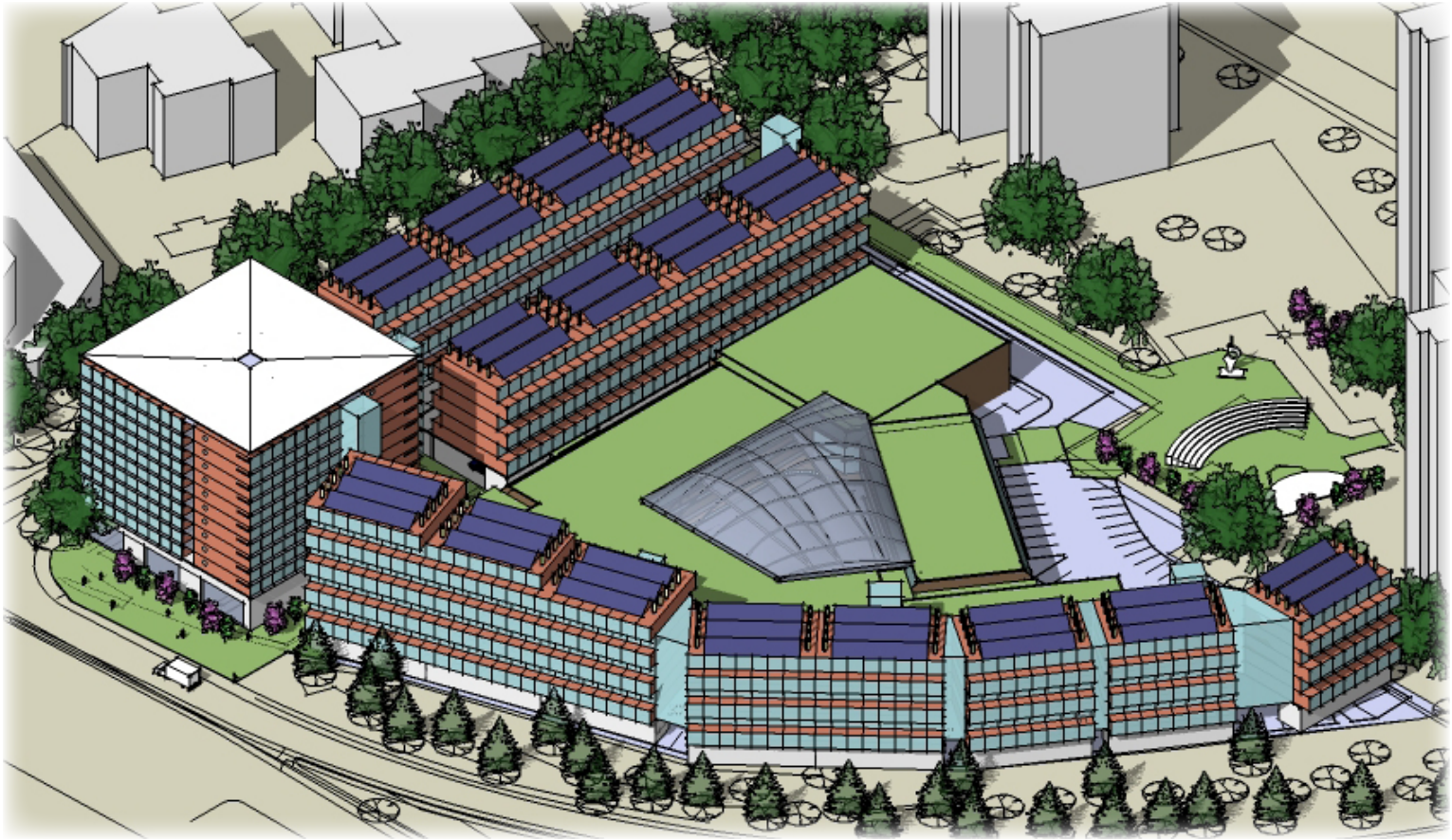
University Place

A Solid Economic, Environmental, & Educational Case for Sustainability



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Project Overview & Goals

Portland State University purchased the University Place property in 2004 with the aim of redeveloping the site within the next 5-10 years. The goal of this workshop has been to add value to the ongoing discussion as to the opportunities for redeveloping the site. Through colaboration with PSU Administration, professional mentors, and faculty, the PSU student team has developed a proposal that we believe to be economically, environmentally, and educationally sustainable.

GOAL 1: Meeting University Needs:

— Support anticipated University space planning needs for academic classroom, housing, performance, conference, and meeting spaces.

Housing: Need for approximately 2,000 units Immediately

Conference Space: Need for Educational Conference space to host national, regional, and local academic conferences.

Hotel: Aproximately 150 rooms to service the educational conference center and to provide rooms for visiting faculty, Staff, and Families.

Classroom Space: Need for high-capacity, technology classrooms (200+ Occupancy Classrooms)

— Focus on student housing at the graduate level engineering, architecture, urban planning, business, real estate development, public affairs, community health, and other programs that focus on sustainable development. Allow for interconnectivity between other schools as well, such as OHSU and UO's Portland's center.

— Maximize the value of the University's scarce resources of land, buildings and funds for capital infrastructure investment.

GOAL 2: Demonstration Project:

— Demonstrate the economic and environmental feasibility of shipping container housing as an optimal way of providing high-quality, low-cost housing for a wide range of diverse users in the United States.

— Build a bold and exciting gateway to PSU and downtown Portland, one that showcases the City's creative energy and independent thinking.

GOAL 3: Project Feasibility:

— Provide a project that stands on its own financially, one that is feasible within the University's financial framework. A project that maximizes the return on the University's $23.5MM investment.

GOAL 4: Sustainability and Connectivity:

— Support and engage the University's sustainable mission and goals.

— Provide inter-collegiate and inter-disciplinary opportunities for students and faculty of all academic backgrounds who have a strong interest in sustainability.

— Strengthen connections between University Place and the surrounding community and neighborhood.

GOAL 5: Strategic Relationships:

— Facilitate the development of strategic relationships within PSU colleges and with other Oregon University System schools.

— Capitalize on those relationships to assist in the planning, design, manufacturing, and testing of the shipping container housing.

Site Overview

Site Attributes:

— The site is situated at the southwest end of the downtown neighborhood at 310 SW Lincoln Avenue. This is adjacent to I-405 and the 4th Avenue off-ramp. The site is zoned CX (central commercial) with a 5:1 FAR or 875,000 SF development potential and a 75 FT height limit.

— It was purchased in 2004 from the Portland Development Commission for approximately $19.7M with a $23.5 M tax-exempt bond allowing for further site improvements.

— The 4.03 acre site is owned by PSU. It includes an operational 235 unit hotel, restaurant, and small 8,000 SF conference center supported by 239 parking spaces.

— A Small portion of the hotel units in the southernmost wing are currently rented for student housing. A 0.46 acre parcel in the NW corner of the site currently not under PSU ownership.

Current Conditions & Site Challenges:

— Average Annual Occupancy is 29% (2006), hotel clearly underperforming
— $1.5M in annual debt service on bonds, bond cannot be paid early
— $23.5 MM investment in center of site is too valuable to demolish
— University limited to a 1.25 debt coverage ratio for new infrastructure projects, all new projects must cash flow at year 1
— Neighborhood noise and height concerns, PSU Good Neighbor Agreement
— Existing zoning has a height limit of 75FT
— DDA with PDC calls for high density, living/learning village, maximizing use of the site, and 150 affordable housing units (0 to 120% MFI)

Hotel

235 Rooms
Approximately 300 SF rooms
Hotel 138,000 SF
$75-100/night
$12/night parking

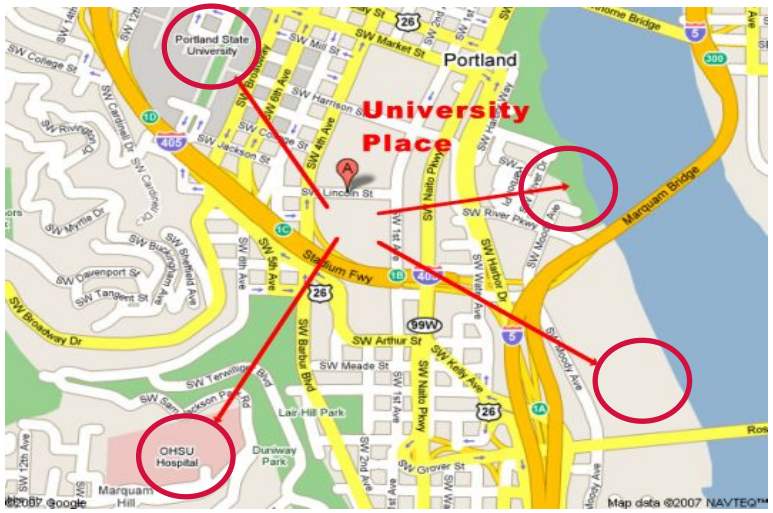
Parking

239 Surface Parking Spaces
$125/Month

Conference

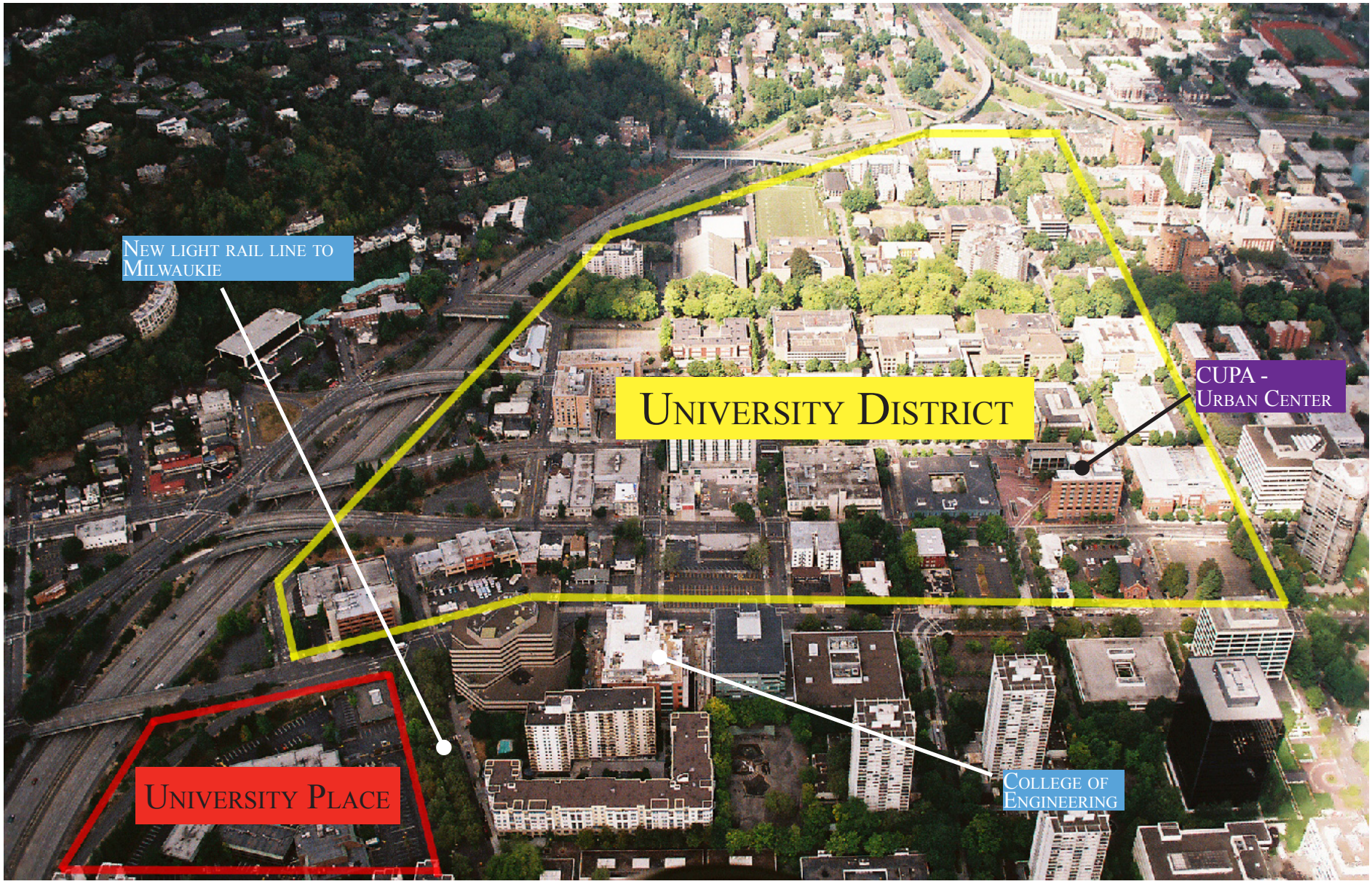
11,000 Gross SF
8,000 Net SF
Max 400 People - Theater Style
Max 340 People - Banquet Style
Restaurant/Lounge

— The site is centrally Located between the University District, the emerging South Waterfront, Riverplace. OHSU's main campus, and the planned OHSU schnitzer medical campus.

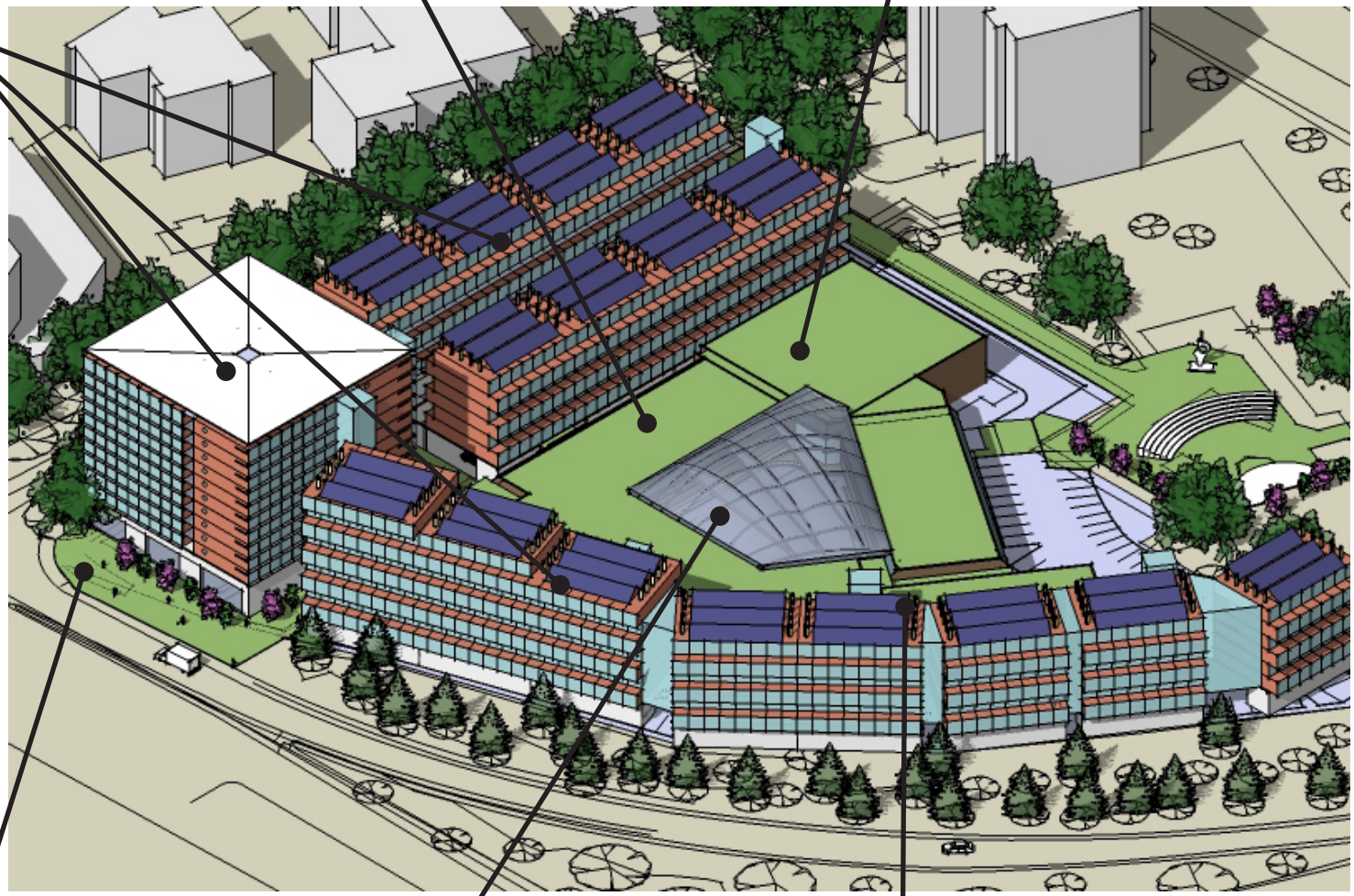


Site Overview

—The site is located less than 5 minutes walking from the main campus (University District) and across the street from the College of Engineering. It is 1-block off of the new transit mall light rail (MAX) and two blocks from the Portland Streetcar on SW Harrison Street. A proposed new light rail line from downtown to South Waterfront and Milwaukie will potentially pass right in front on Lincoln Ave.



Development Program Summary



Shipping Container Housing

Containers are shipped stacked 10-high, interlocked for stable shipment across rolling oceans.

Conainters can hold over 67,000 pounds and bear loads of over 210 pounds per SF.

Our trade imbalance with China has caused massive buildups of shipping containers in US ports.

The cost of a container ranges from $600 used to $3,000 new. It costs more to ship a container back to China empty than it does to produce a new shipping container there. While in the long run the larger issue of the US trade deficit and America's insatiable appetite for goods needs to be addressed, in the short term utilizing these excess containers for housing is an optimal reuse of an abundant asset that is clogging our Ports.

Shipping Container Housing

The team investigated a number of student housing options and types - one innovative solution was the conversion of common shipping containers to housing. Yes, shipping containers. Pause here to let it sink in.

A successful example of this type of housing was found in the Keetwonen student housing complex of 1,000 units built by Tempo Housing Company in Amsterdam. Standard shipping containers are 320 SF which is larger than the 288 SF units recently built by PSU in Epler Hall in 2003. 53-foot long units cantilevered over standard 40-foot units provide 424 SF of space, more than 36% larger than Epler units, with more natural light and ventilation, individual private balconies at a significantly lower cost. Shipping containers are in surplus supply at low cost because of the large U.S. trading deficit, especially in the northwest on the Pacific Rim supply routes from China.

The cost for a 320 SF waterproof welded steel shell is less than $4.00 per SF, far lower than any conventional or modular construction. Containers are seismically stable welded steel frame modules that are stacked 10 high and interlocked for stable shipment across rolling oceans. They can hold over 67,000 pounds and bear loads of over 210 pounds per SF, far greater than any student use, or abuse, can generate. In addition, 53-foot long containers, which cantilever over standard 40-foot units, produce 424 SF units which will be interspersed with standard units on alternate levels. These will produce larger balconies and entry walkways for the standard units while the larger units can house more students at lower costs.

The university can add more units on top of proposed units easily when, and as needed. Containers can be relocated at any time should the University wish to build to a height higher than 10 stories.

Reusing shipping containers is the ultimate in sustainability, using far fewer materials and less embodied energy than any kind of construction. Utilizing shipping containers as housing will put PSU in the forefront in creating affordable and sustainable housing in the the United States. It will add to its leadership in sustainable studies and will become a model studied across the country.

Shipping Container Unit Features

So, What Exactly Comes in These Containers?

Prefabricated Bathroom & Kitchenette Modules:

— Included in the shipping container units are prefabricated "Wet Modules," which are bathrooms and kitchenettes situated around one main wet core. The wet modules are built of molded fiberglass with all fixtures molded into the module, as was done in at Moshe Safdie's Habitat project designed and built in 1964 at the World Fair in Montreal. A principal benefit of the fiberglass is to eliminate all seams, caulking, water leakage and to simplify plumbing and cleaning. These single modules are commonly known as European style bathrooms.

— These modules will minimize construction expenses and reduce overall construction installation time. Wet modules reduce plumbing connection costs, room finishes, and will also minimize in-factory and onsite construction time by consolidating all servicing elements into one single wet core. Building 1200 units should be a sufficient quantity to attract manufacturers to build a mold.

— The European style bathroom/kitchenette unit will include:

*Dual-flush toilet

*Shower

*Bathroom sink

*Kitchen sink to be placed on exterior side of the unit to maintain all plumbing is contained in the modular unit

*Range to be placed on exterior side of the unit adjacent to kitchen sink

*Refrigerator

— An efficient floor layout like that shown to the right, with a central drain, will even permit the entire bathroom to be hosed out. Elimination of seams and caulking will reduce maintenance and repair expenses for PSU's operation.

Interiors:

— Within the remainder of the unit, simple, functional, and attractive IKEA/Dania-like furnishings are proposed.

— Our initial discussion included the idea of constructing a Murphy-bed that is that is both attached and suspended to the wall with a similar fold up/retractable desk supported by the steel walls. However, based on several discussions with potential student tenants, our group determined that the opportunity to personalize rooms was more important to potential tenants. Nonetheless, this design will be constructed in several demonstration rooms to showcase the ultimate in utilitarian and space conservation.

Shipping Container Unit Features Continued

Daylighting:

— Each unit will have a translucent entry door on one end with individual heat pump over the door to maximize efficiency. To increase daylighting, entry doors could also be "barn door" style sliders with double-skinned acrylic sheets. To increase day lighting at the opposite end, the 8 x 8 foot opening would be filled with sliding glass doors.

Insulation:

— Each container will be insulated. The Keetwonen student housing complex of 1000 units in Amsterdam lined the walls and ceiling with rigid insulation and sheetrock.

— An alternative to be investigated will be common fireproof insulation spray used for steel beams and floor decks on the corrugated walls and roofs except for end units. This would reduce construction time and materials cost and expand interior space. It would also reduce future operating expenses for repairs and turnover costs. Students could personalize spaces easily with magnetic lamps and other attachments on the corrugated walls. A sprayable insulated ceramic coating has also been used to coat containers converted in other parts of the country and is a potential solution for the exposed end units.

Exterior:

— The strong steel doors of adjacent units would be locked together and would support a private 4-foot by 8-foot steel grated balcony and railing for each container unit.

Heating/Cooling Systems:

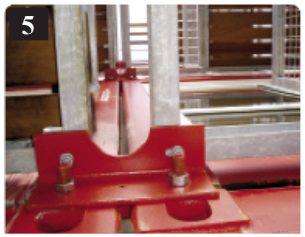
— The presence of individual heat pumps/AC will minimize PSU operating expenses as those costs will be passed through to the students/residents through the use of sub-metereding of electricity and water. This will help facilitate both conservation and energy efficiency, along with reducing overall operating expenses.

Purchase Containers

Install Factory

Stack Onsite

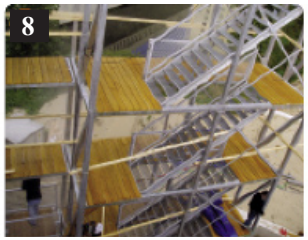
Build up to 10 Levels



Add Locking System

Add External Walkways

Add Balconies



Add Staircases

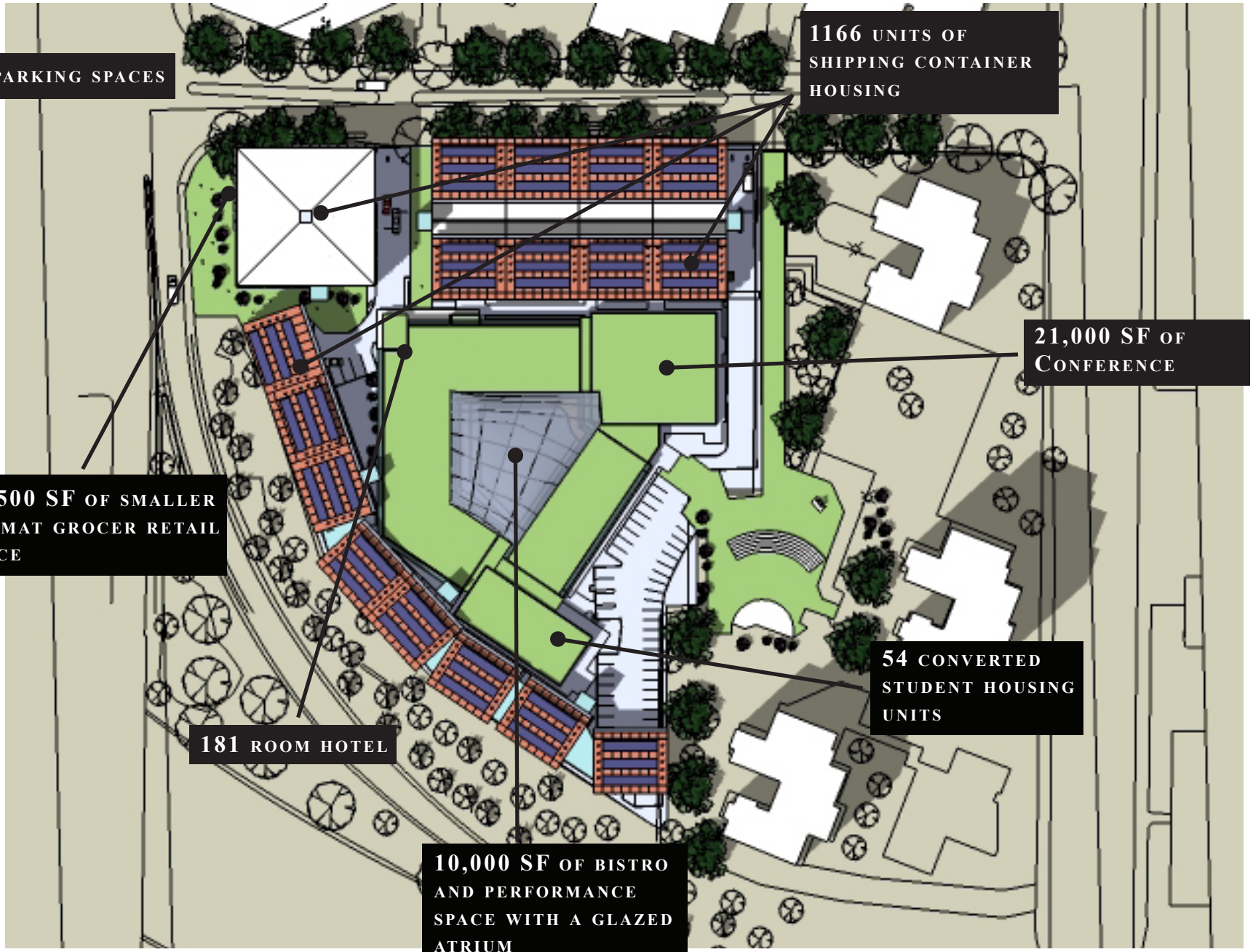
Add Roof

view of Sleeping/Living Space

view of Kitchenette/ Bathroom

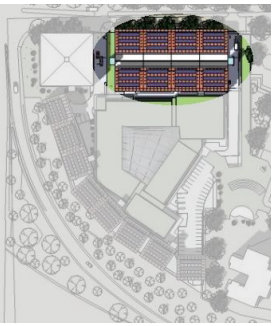
view of inside Bathroom

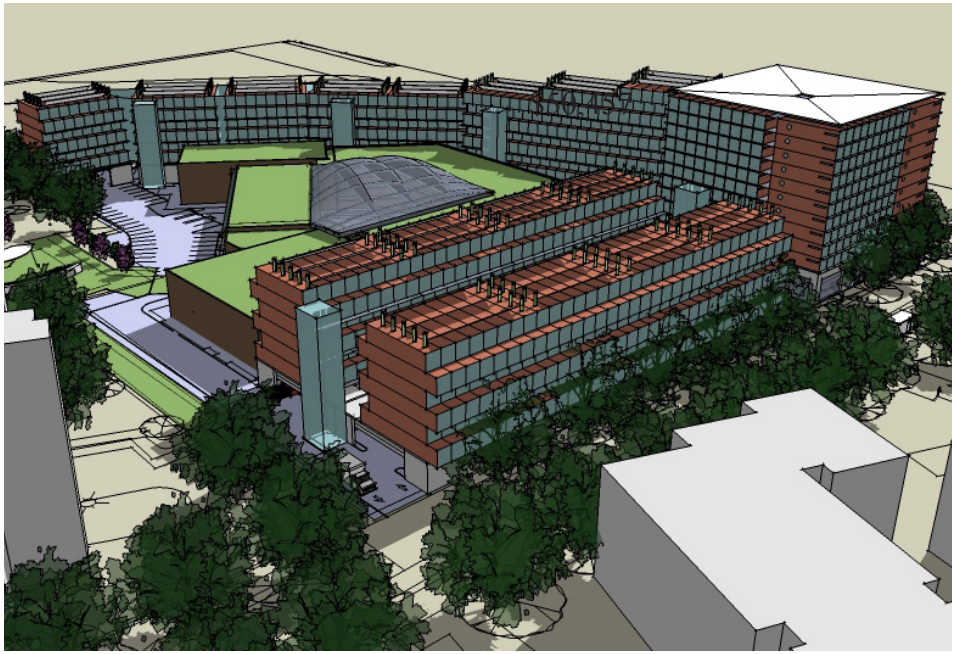
Development Program Summary - Plan View

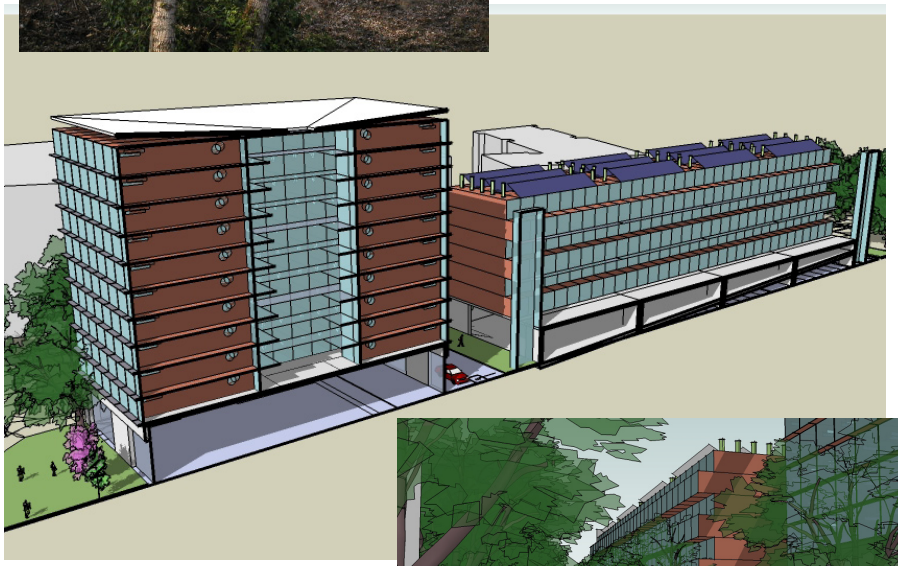


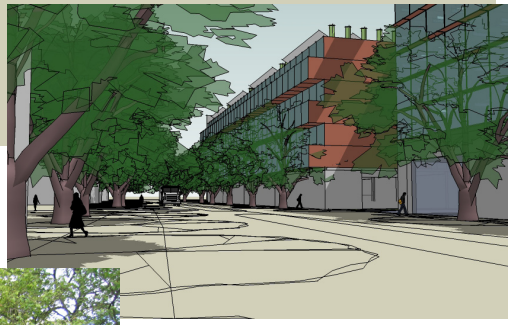
NE Quadrant - Container Student Housing

— In the Northeast quadrant of the site adjacent to SW Lincoln Avenue, 2 rectangular container housing buildings, each 9 stories high, will be built on top of a split-level parking structure with approximately 240 structured spaces, (120 spaces on each level). In total there are 384 units. Each of the 9 stories in the container buildings will utilize varying sized containers, either the longer 53-foot containers or the 40 foot standard containers, thereby producing a dynamic cantilevered design.







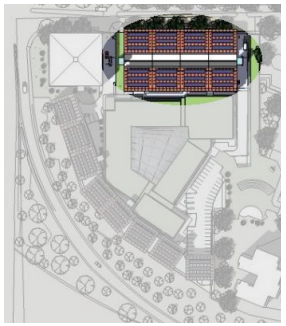


— The 53-foot containers when placed over the standard 40 foot containers provide a 6.5 foot cantilevered overlap on both sides. This overlap provides a covered patio for the 1st floor units, while providing a larger walk-out patio/balcony for all 3rd story housing units (and so on up the alternating floors. The cantilevered design of the northern edge will produce an articulated glass wall that will bring University Place to the street, activate it, and conceal the original suburban motel design. The existing curb cuts into a surface parking lot will be formalized as tree-lined extensions of 2nd and 3rd Avenues into University Place.

Before

After

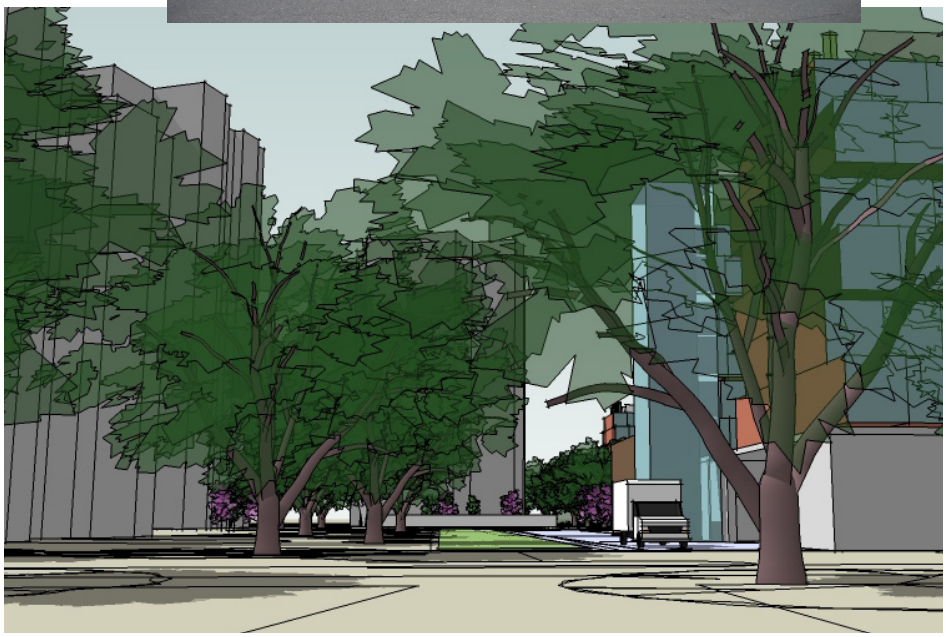
NE Quadrant - Container Student Housing



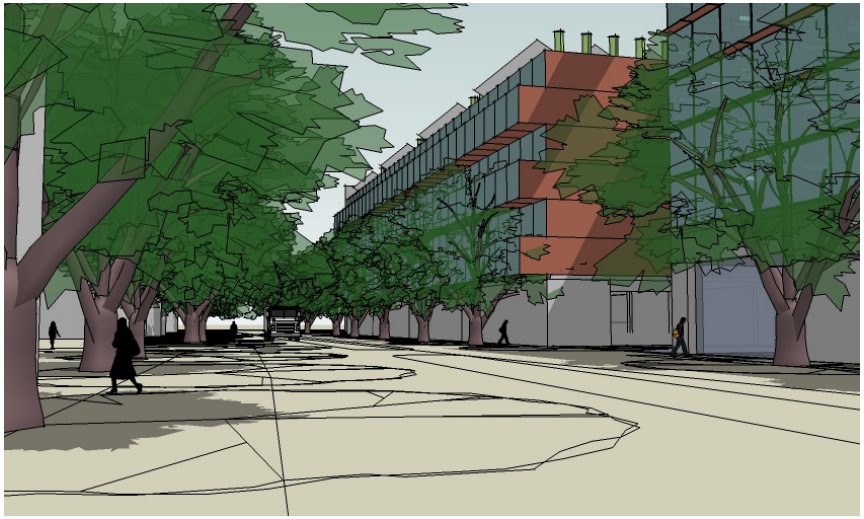
— Ground floor incubator retail/office space was initially considered at this location due to the likely construction of the new Milwaukie MAX line frontage along SW Lincoln Avenue, but given the performance of the retail center adjacent to the hotel, it was determined that the ground floor as split parking was more practical.

— Sky bridges will also be created to provide students access to the garden rooftop terrace on the A-wing of the hotel and at each other stairway/elevator joint of the existing hotel. These bridges will enhance connectivity and facilitate increased sense of community among residents by allowing residents and guests alike to transition through the entire development uninterrupted.

Before



After



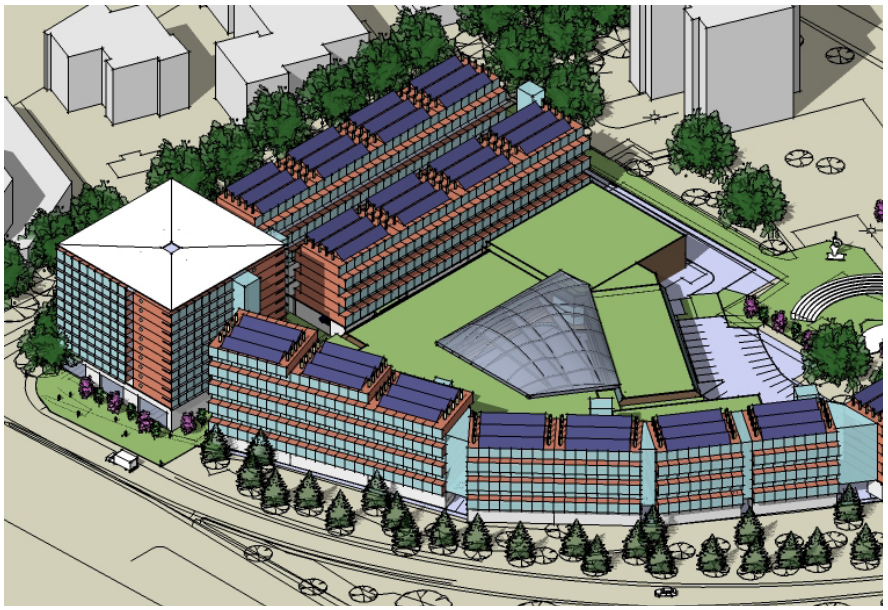
Financial Snapshot:

— Development Cost:	$39.8M
— % of TDC:	34%
— Return on Cost	8.20%

Year 1 Pro-Forma	
	In 2011 Dollars
Total Effective Gross Income (EGI)	$ 4,751,000
Total Operating Expenses (OE)	($1,488,000)
Net Revenues (NOI)	$3,264,000
Total Debt Service (DS)	($2,812,000)
Cash Flow After Debt Service	$451,000
Debt Service Coverage Ratio	1.16

SW Quadrant Container Housing

— In the Southwest quadrant of the site adjacent to SW 4th Street, an additional 432 units of container housing will be stacked 4 to 6 floors high on top of a raised parking podium, thus allowing for surface parking to remain below the housing units. Additional units could be added if needed, or removed later and reused, thereby freeing the site for future high rise construction. All units will have balconies and exterior corridors with elevator access on the side facing the hotel.

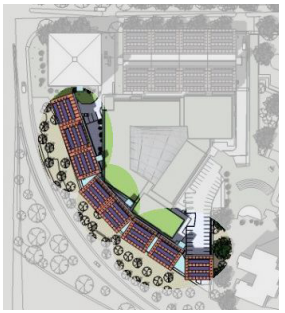


— At each joining space a glazed in area is created to accomidate small gathering spaces for groups and individuals.

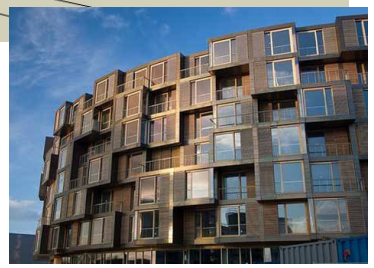
— All rooftops will have solar photovoltaic arrays and wind generators developed by the PSU College of Engineering. The site will have maximuim solar access since the rooftops will never be shaded. It will also have access to higher velocity, uninterrupted wind travelling down the I-405 corridos. Both site attributes allow us to take maximum advantage of both solar and wind corridors to generate a significant amount of power onsite.

— All containers and glazed areas will have a roof structure to collect rainwater to be stored in cisterns around the site.

Before



After



Financial Snapshot:

— Development Cost:	$31.9M
— % of TDC:	27%
— Return on Cost:	9.46%

Year 1 Pro-Forma	
	In 2011 Dollars
Total Effective Gross Income (EGI)	$4,652,000
Total Operating Expenses (OE)	($1,628,000)
Net Revenues (NOI)	$3,024,000
Total Debt Service (DS)	($1,680,000)
Cash Flow After Debt Service	$1,344,000
Debt Service Coverage Ratio	1.80

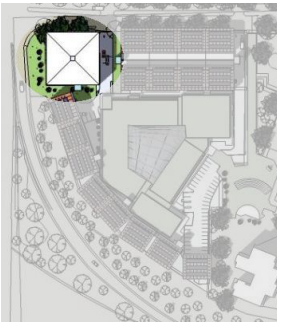
NW Quadrant Pinwheel Container Housing

— In the NW quadrant, 350 container units will be constructed in a "pinwheel" tower form over a concrete podium to create a unique and efficient building design. All Pinwheel tower circulation is interior, with a glass-covered central atrium for building efficiency, protection from the elements, and communal gathering place. The design is effecient in that it allows for the maximium number of units to be stacked into a smaller footprint than a regular container housing structure.

— The top of the tower is covered by an inverted roof covering the containers. The collected rainwater flows down through the interior of the tower to a rain tower art feature, and is then stored on site either through underground cisterns or raingardens.

— The tower will be built on top of a concrete podium that will house a 14,500 SF smaller format grocer at the busy corner of 4th Avenue and Lincoln St. The target tenant for this space is a niche grocer specialized in smaller format, mixed unit environments, that are owned by rapidly expanding companies, such as Tesco's Fresh & Easy or Trader Joes.

Before



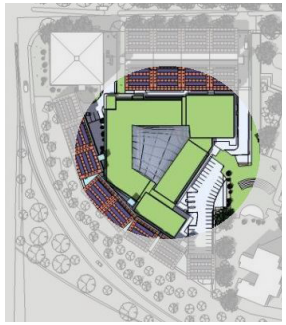
After

Financial Snapshot:

— Development Cost:	$27.5M
— % of TDC:	24%
— Return on Cost:	8.55%

Year 1 Pro-Forma	
	In 2011 Dollars
Total Effective Gross Income (EGI)	$ 3,516,000
Total Operating Expenses (OE)	($1,165,000)
Net Revenues (NOI)	$ 2,351,000
Total Debt Service (DS)	($1,328,000)
Cash Flow After Debt Service	$1,023,000
Debt Service Coverage Ratio	1.77

University Place Hotel & Conference Center



Hotel:

— The team determined that the $23.5 MM hotel investment was too valuable to demolish, especially since the hotel is currently servicing the property's debt payments. With minimal cosmetic upgrades and the addition of a compact module kitchenette in each room (cooktop, sink, microwave, refrigerator combined), the hotel can be transformed into an 181 extended stay hotel positioned to be the low cost provider for several niche markets:

* educational conference attendees
* visiting professors
* student families
* OHSU patient families
* prospective students
* guest speakers
* inter-collegiate students
* recent graduates
* visiting performers
* extended-stay research

The Atrium:

— We propose to transform the underutilized courtyard into a 3-story high, 10,000 SF four-season atrium double the size of Hoffman Hall. This atrium will act as a major, year-round, flexible space for banquets, lectures, PSU theater, recitals, jazz performances, concerts, town hall meetings, exhibits, and cafe dining. Multiple "Flex" rooms on the 1st & 2nd levels will act as skyboxes and meeting rooms that can be easily adapted to various events and uses. The fully-enclosed glazed cover will provide 4-season comfort within, while also acting as a solar capturing device used to help heat the building. And because the space is already enclosed, it can be built at far lower cost than a new structure that large. This atrium will be an active, focal gathering point for University Place and the larger University.

Educational Conference Center:

Included in the hotel renovation plan is the expansion and reconfiguring of the existing conference space. In total, over 21,000 SF of conference space will be provided - almost 13,000 SF more than the current configuration of 8,000 SF. This additional space can be provided in a shorter timeframe and lower cost than building new space, and can temporarily relieve the conference space lost in Shattuck Hall, Lincoln Hall, and the PCAT building.

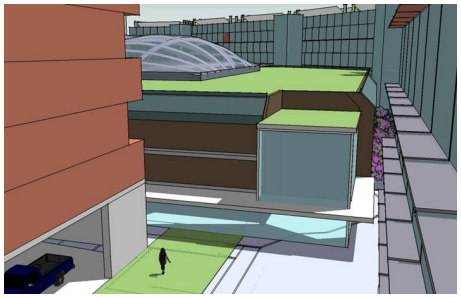
Hotel Renovation

Hotel Entrance & A-Wing:

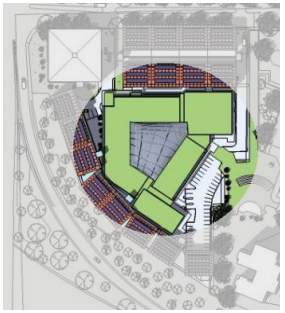
— The improvements to the hotel start with the relocation of the entrance to the NW corner. This allows for the entrance and drop off area to be prominently visible to the new sidewalk and tree-lined 3rd Avenue entrance. A main goal of the renovation is to upgrade the hotel in way that shows PSU student's creativity and reflects PSU's status as a dynamic urban university.

Other improvements to the hotel include:

* A remodeled grand lobby showcasing student art and University displays
* Glass sunroom style 3-story front desk area connecting entrance to lobby
* Addition of meeting rooms/social rooms and flex rooms with fold-up bed, hospitality bar, etc.
* Conversion of B-Wing Hotel rooms to student housing units
* All hallways will be remodeled as LED-spotlighted student demonstration galleries filled with student art, ar chitecture, planning, development, and other projects.



Flex Rooms:



— Included in the hotel renovation will be the conversion of 15 rooms facing the hotel atrium to "Flex" rooms. These rooms will be available as skyboxes, hospitality rooms, breakout rooms, private dining rooms, conference rooms and private guest rooms with wallbeds. The idea behind these "Flex" rooms is to increase revenue by creating versatile and easily adaptable space that can be utilized for a number of diverse events and users.

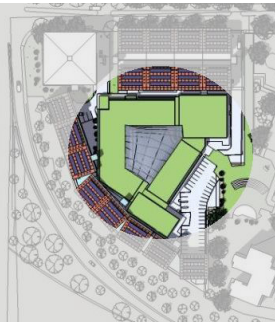
— The uprades to these rooms are minimal in that they require only cosmetic changes to be made. This includes putting in a combined under-counter refrigerator, bar, sink, burner unit, and a wall bed. Flex-rooms will produce expanded rental and income possibilities during the week for conferences, and during evenings and weekends for the performance space and theater operations.

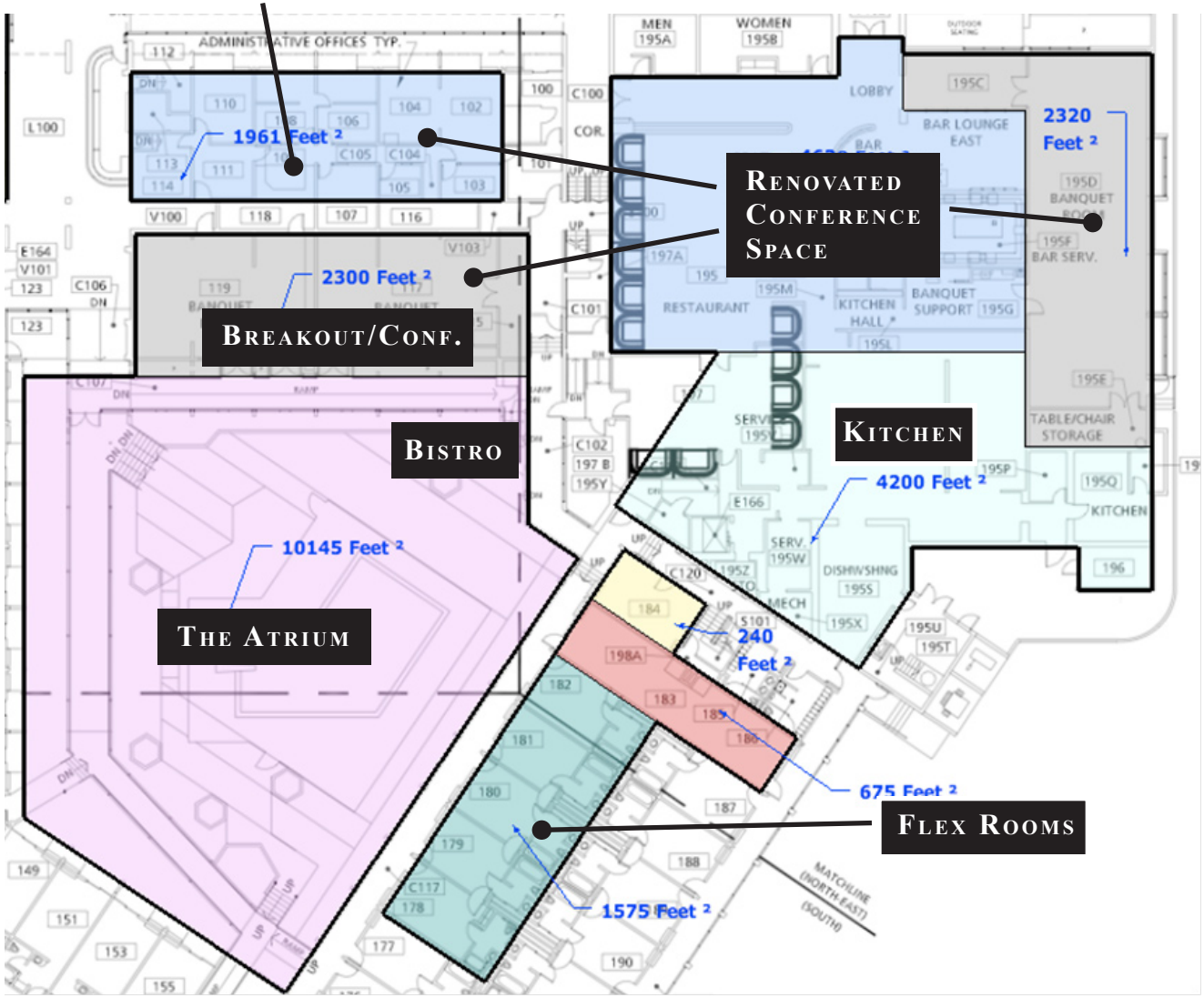
Financial Snapshot:

— Development Cost:	$9.3M
— % of Total Project Cost:	8%
— Return on Cost:	4.89%

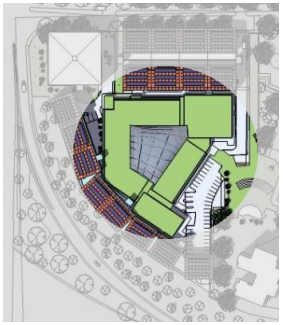
Year 1 Pro-Forma	
	In 2011 Dollars
Total Effective Gross Income (EGI)	$ 4,177,000
Total Operating Expenses (OE)	($3,542,000)
Net Revenues (NOI)	$635,000
Total Debt Service (DS)	($797,000)
Cash Flow After Debt Service	($162,000)
Debt Service Coverage Ratio	0.80

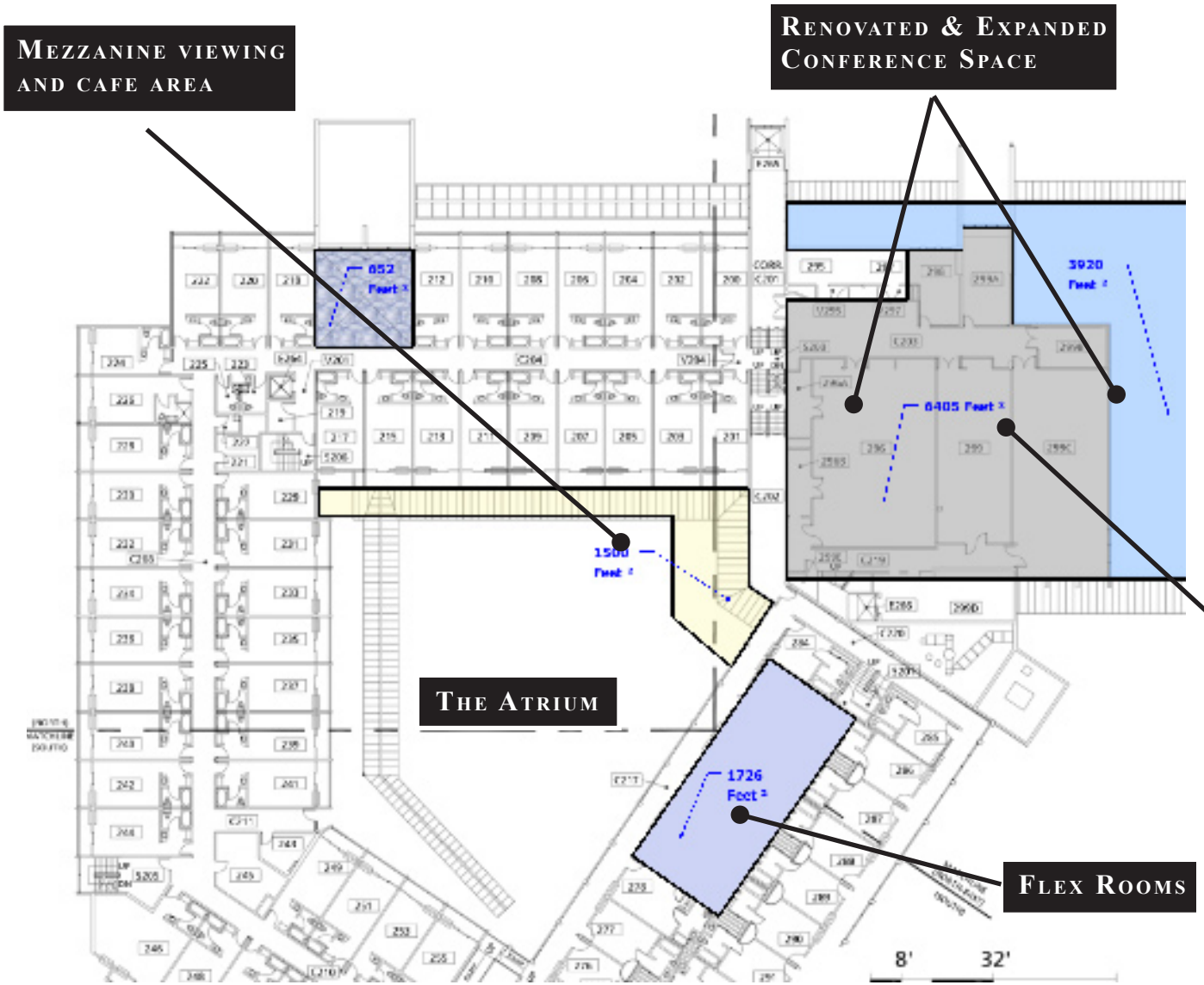
The Hotel Renovation Floorplan - L1





The Hotel Renovation Floorplan - L2





This new space will be the largest conference room at University Place. It is greater than 10,000 and can seat between 700-1,000 people - a capacity increase of more than 50% from today's largest room.

The Atrium

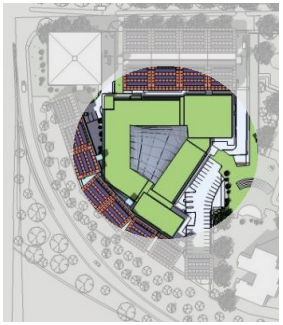
The Atrium:

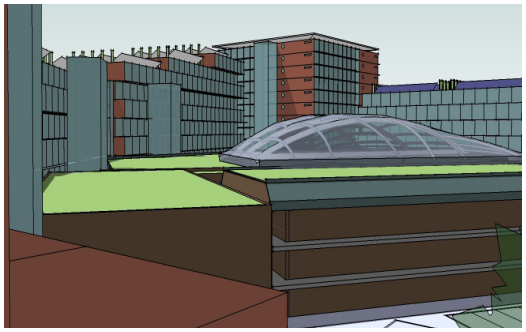
— The conversion of the courtyard to the Atrium will provide more than 10,000 SF flexible, multi-use space. This space can accommodate more than 600 people for banquets, and 1,000 people for special events and performances.

The 4-season Atrium will allow for multiple uses that can help drive revenue maximization.

Uses such as:

*Conferences
*Banquets
*PSU theater
*Concerts
*Exhibits
*Bistro
*Recitals
*Lectures
*Jazz club (LV's)
*Town hall meetings
*Cafe dining





— This space is more than double the size of the meeting space in Hoffman Hall, and larger than Montgomery Park's atrium in NW Portland. The 10,000 SF of space is highly flexible and will work to enhance all development elements by creating synergy between the hotel, educational conference, and student housing. The Atrium will act as a hub of activity for the site and provide a sense of place for the wide variety of patrons and guests. It will also act as a focal hub for PSU's sustainability conferences and act as a showcase in the use of green building strategies such as passive solar heating and cooling.

— The conference, hotel, and student housing could not be successful without the synergies created by the atrium space. The team viewed the Atrium as a necessary component whose cost could be offset by the income generated from the student housing, hotel, and educational conferences. The space is highly flexible for the University and can be used for a variety of important purposes such as alumni gatherings, fundraising receptions, and college convocations.

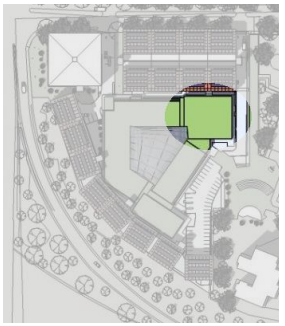
Educational Conference Expansion

Educational Conference Center:

— The renovation and expansion of the conference facility will create approximately 21,000 SF on conference space. The largest single conference room will be over 10,000 SF in size with a capacity to hold up to 1,000 people. Each conference room will function as dual-purpose conference space and technology classrooms through the use of partitions. It is our intention that this space be actively programmed to obtain maximum usage for conference and academic purposes.

— In addition there are 4,500 SF (20 rooms) of flex-room breakout space, and 4,300 of conference room breakout space. These breakout spaces can be used for smaller meetings during or after conferences and small graduate level classrooms. There will also be over 10,000 SF of space with the Atrium that can be used as overflow for large conferences

— This additional space can be provided in a shorter timeframe than building new space, and can temporarily relieve the conference and performance space lost in Shattuck Hall, Lincoln Hall, and the PCAT building. This space fills a demonstrated need by the University for educational conference and large/medium sized technology classroom space. Along the same lines as the Atrium, the educational conference space is integral to the overall success of the University Place development, in particular helping to generate revenue for the hotel.



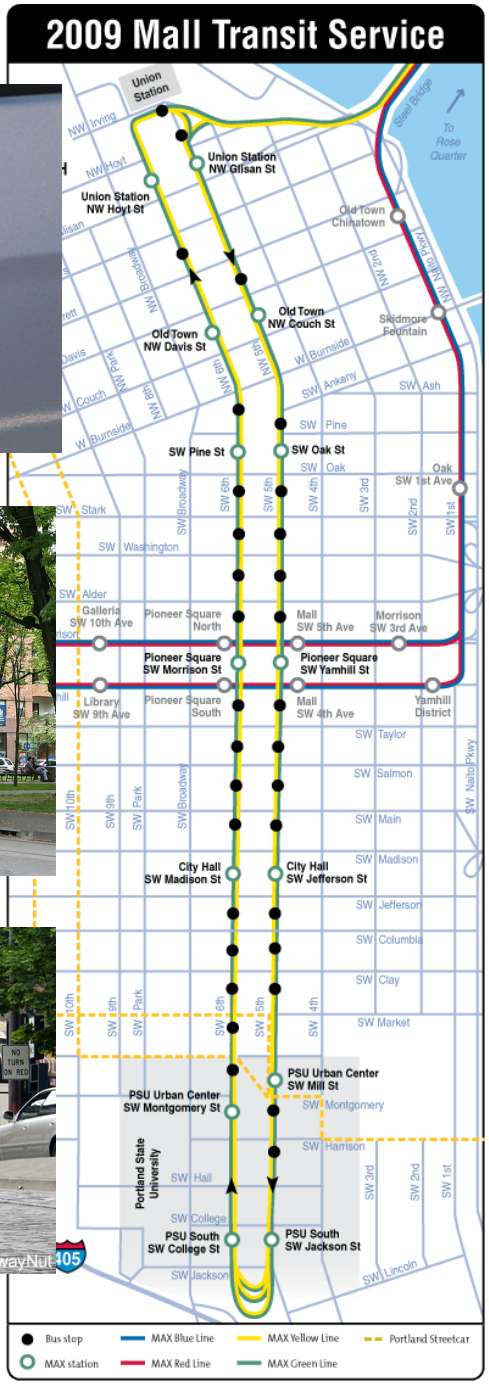
Parking Strategy

— The University currently has approximately 4,000 parking spaces. This proposal maintains all 239 parking spaces on the University Place site, while also adding 120 spaces under the northeast quadrant parking structure, for a total of 359 parking spaces. All container buildings along the SW side (fronting I-405) will be elevated to eliminate the loss of existing ground level parking.

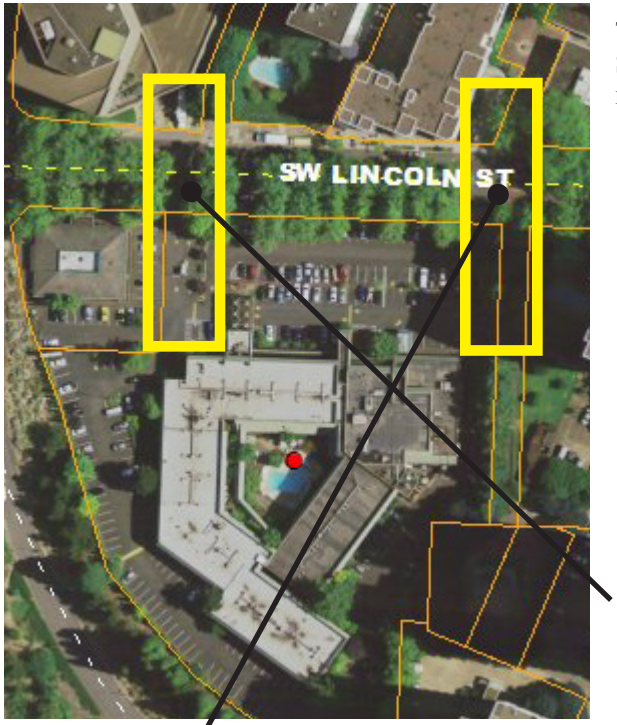
— On the northeast quadrant, split-level parking is the most financially feasible since it will allow us to take advantage of existing slopes and grades to eliminate the inefficiency of an internal ramp and increase the functionality of bringing patrons in at both 2nd and 3rd Avenue levels. This also results in ½ the cost associated with excavation, building retaining walls, and ventilation.

— Mentors recommended lower parking ratios, and our finances clearly limit the amount of parking we can construct. As such, we have chosen to minimize parking ratios onsite given the site's downtown location, proximity to alternative transportation and high construction costs per stall for parking structures. The overall parking ratio for the residential and hotel units is 0.25. Parking will be managed as shared parking with the conference center and retail space.

— Flexcar, is willing to place 4 cars at the location, with the potential to add Smart Cars to the mix of options. The team recommends that parallel parking on Lincoln Street be replaced with perpendicular parking for up to 34 Smart cars to be purchased by Flexcar or added to the University fleet pool.



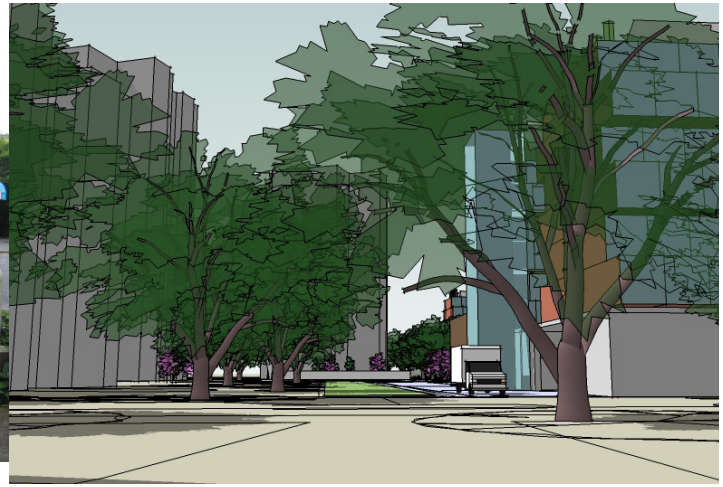
2nd and 3rd Avenue Extensions



The development plan proposes extending both 2nd and 3rd Avenues into the University Place Site. The current hotel street entrances will be transformed into tree-lined, pedestrian friendly streets.

3rd Ave Entrance

2nd Ave Entrance



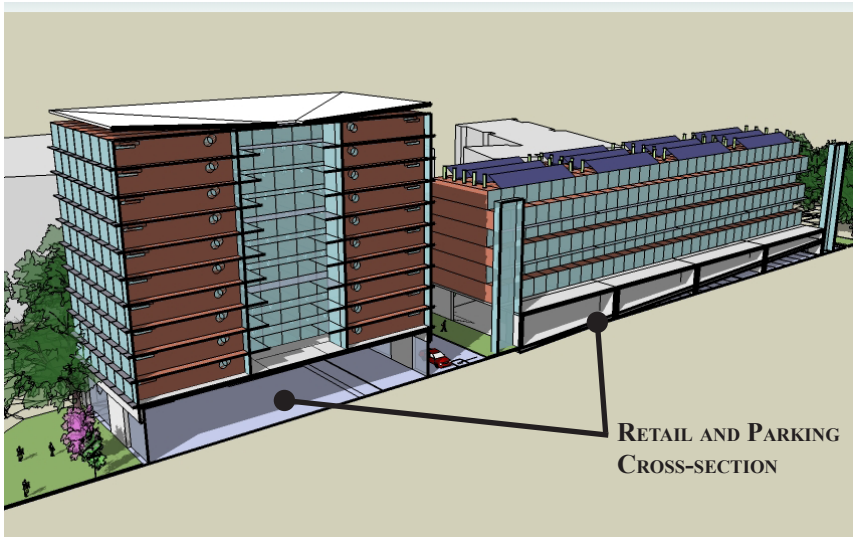
Market Analysis

Retail Market Analysis:

— There is a population of over 125,000 people within a 3 mile radius of University Place. Within that population base, more than 50,000 people are college educated or higher; and 43% of that same 125,000 people have incomes over $50,000.

Population

Year	1-Mile	3-Mile
2011 Projection	24,000	127,207
2006 Estimate	22,500	126,000
2000 Census	22,000	126,000
Growth 2006-2011	4%	1%
Growth 2000-2006	3.5%	0%



Retail and Parking Cross-section

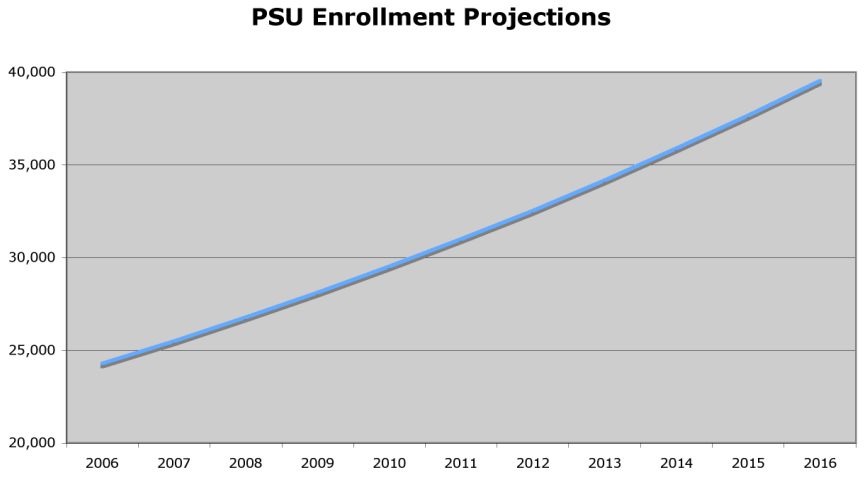
— Given the demographics of this sub-market and the positive population growth outlook for the downtown neighborhood, the University Place site is well positioned to capture a growing downtown and southwest Portland market. The site's access to I-405 and the major arterials into downtown make this an ideal setting for a smaller format/urban/mixed-use retailer.

Housing Market Analysis:

— There are over 30,000 on PSU campus and over 14,000 students and employees at the OHSU campus. Agressive growth for both campuses are predicted within the next 15 years. By 2015, PSU predicts student enrollment to be above 35,000 students, an almost 40% increase in enrollment since 2006.

— Currently the University has determined that there is unmet demand for 2000+ units of student housing on campus. Few new buildings have been proposed within or near the University District with students in mind. Most of the new buildings are higher end condominium towers. New construction is unlikely to meet the rental price point for students due to skyrocketing construction costs.

— Given the market's unmet demand for student housing and the low supply of new units, the University Place housing is well positioned to capture the majority of students looking to live on or near campus. The target markets for University Place student housing are graduate and international students, particularly those attracted to sustainability studies from the nearby engineering, architecture, planning, development, education and business schools.



PSU Sustainability Goals

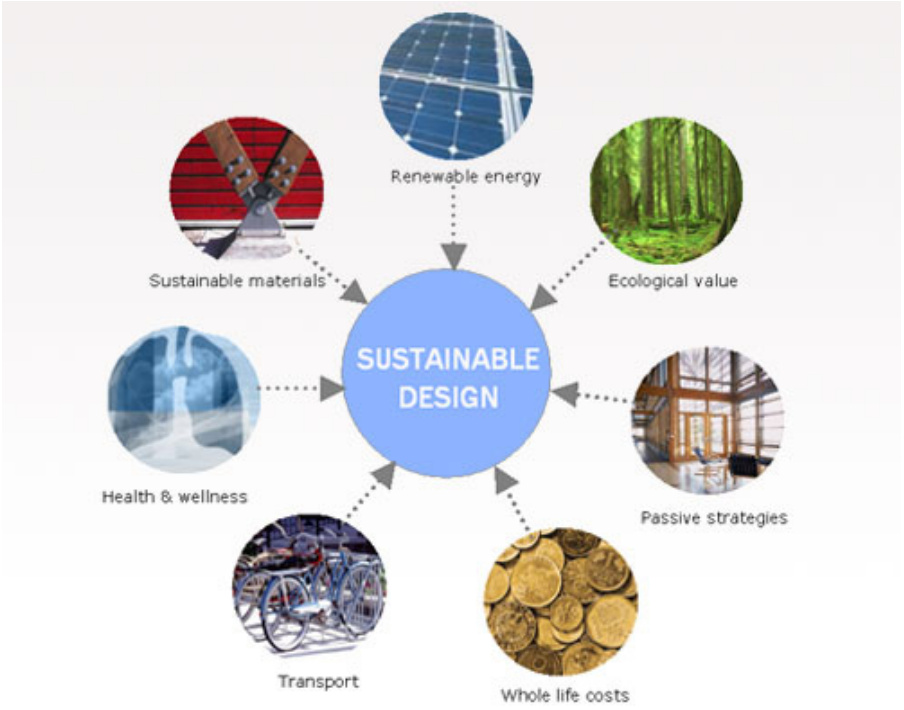
Our University Place Concept Integrates PSU's Stated Sustainability Goals:

— "Infuse sustainability into all colleges, schools and programs"

— "Develop a sustainable physical campus that is an example to other institutions"

— "Make Portland State University a demonstration model of sustainable processes and practices"

— "Develop core multidisciplinary research competencies in key sustainability areas related to pressing real world problems"



Environmental Sustainability

Container Re-use:

— Reusing shipping containers is the ultimate in sustainability. By re-using containers, far fewer materials, labor and less embodied energy are used than in any other type of conventional construction.

Innovative Demonstration Project:

— Container housing is an innovative green building demonstration project. By conducting materials testing through PSU's College of Engineering as well as other outside groups such as UL (Underwriters Laboratory), PSU will be able to confirm safety and to provide necessary data to update current codes. This will facilitate container housing projects throughout the Country.

Energy Conservation & Generation:

— The design will include clerestory base controls for ventilation, high efficiency insulation, LED lights, Daylight sensors, and Sub-metering, in order to reduce energy consumption.

— The development will take full advantage of the 4 acres of unobstructed solar energy with the addition of Photovoltaic panels on the roofs of each building. Selected buildings will also have grant-funded wind turbines developed by PSU.

— The glazed roof atrium essentially creates a greenhouse that will capture heat and recycle warm air to different parts of the hotel where needed. It will also work in the opposite way to exhaust hot air in the summer through the operable vents and will both insulate and insolate half of the hotel complex.

Water Capture/Reclamation:

— Rain on nearly 4 acres of rooftop will be collected, stored and re-used for a number of purposes onsite. Today the University Place site costs the University over $17,000 a year in stormwater runoff payments.

Open Space:

— Rooftop terraces, gardens, and eco-roofs will be utilized onsite to insulate the roof, thereby increasing its longevity while also reducing the heat island effect and storm water runoff into the Portland combined sewer system.

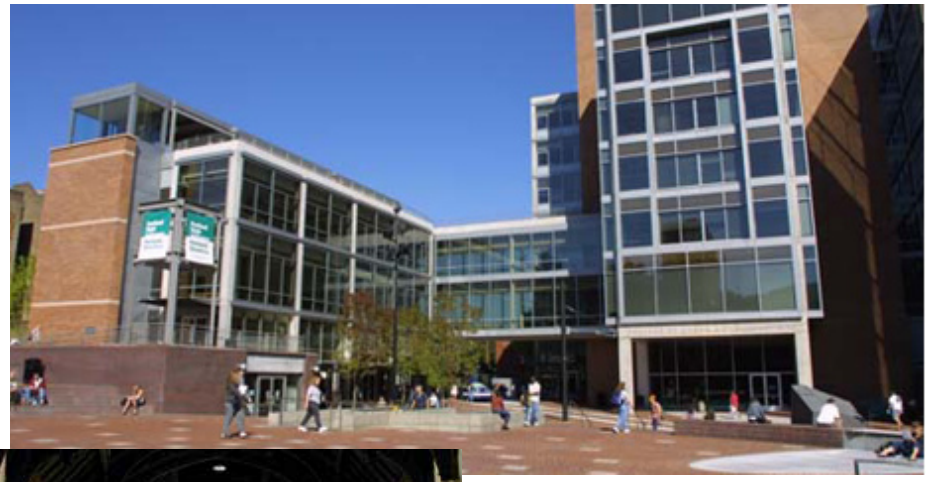
Transportation:

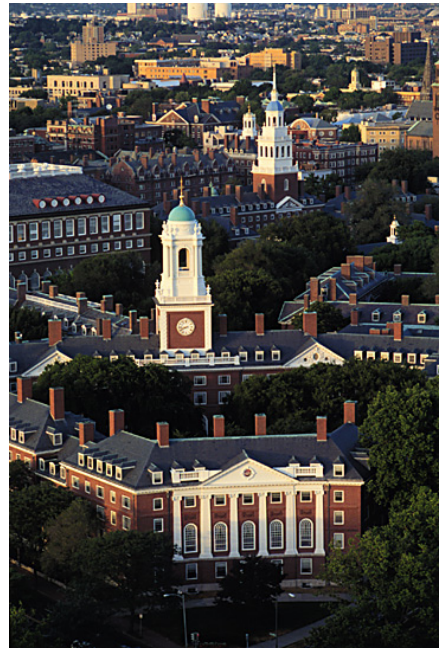
— The limited addition of parking, proximity to current and future alternative transportation systems, presence of FlexCar, and promotion of alternate forms of transportation will all help reduce the carbon footprint produced by this site.

Educational Sustainability

Federated Oregon College of Urban Sustainability:

— Included in the development proposal is the creation of the Federated Oregon College of Urban Sustainability, or FOCUS, a residential college housed in the renovated B-Wing of the hotel. This residential college will be available for students interested in green building and sustainability who come from a variety of diverse academic backgrounds and experiences. students and faculty in urban planning, engineering, community health, medicine, architecture, business, real estate, etc., who are interested in urban sustainability would be able to participate in the college.





— FOCUS will also house visiting students and professors from other colleges within the Oregon University System, with the goal of making the college not only inter-disciplinary, but also inter-collegiate in nature. It will be a place for students interested in sustainability to stimulate and share ideas - a place where students can push the envelope in innovation and design. It also meets the specific provision of the PDC-PSU agreement to create "a vibrant and dense mixed-use learning-living village".

Oregon University System

Economic Sustainability

Financially, this proposal works for the University. In fact it provides positive cash flow of $2.6MM in the first full year of operation while also generating $30MM in equity value. These are resources that can be plugged back into the University for a number of important uses, including funding ongoing innovation in sustainable studies through the creation of the Federated Oregon College of Urban Sustainability or FOCUS.

So how does this proposal cash flow $2.6MM while also meeting the University's financial criteria? The answer is relatively simple - the shipping container housing is profitable. On the basis of conversations with contractors, each container should cost less than $50,000 to build and yet the capitalized net operating income from them supports over $100,000 in debt. That additional debt can then go to fund the components of the development proposal that do not pay their way - like the educational conference center, parking, and the Atrium. And the whole project is phased so that the University does not dip below the required 1.25 debt service coverage ratio. This proposition is a win-win proposition for the University. And even if these projections based upon conservative assumptions were not realized initially, strong student housing demand limits risk. The hotel could always be turned into more student housing and classrooms even if strong marketing and management were not able to resuscitate the educational conference center and supporting hotel.

Total Development Cost Breakdown

Hard Costs	$69,042,000
Soft Costs	$24,874,000
New Bond Amount	$93,916,000
Old Bond Amount	$21,000,000
Corner Lot Acquisition	$2,000,000
Total Development Cost	**$116,916,000**

Year 1 Pro-Forma Snapshot, Initial Year of Project

Total EGI	$19,877,000
Total OE	($10,108,000)
Net Revenues (NOI)	$9,769,000
Total Debt Service	($7,178,000)
Cash Flow After Debt Service	**$2,591,000**
Debt Coverage Ratio	1.36

Value

Development Value	$146,930,000*
Total Development Cost	$116,916,000
Equity Value Added	**$30,014,000**

*Blended Cap rate of 6.65% used

Development Structure:

— PSU will manage the student housing, parking, and retail component of this development as it is well-equipped to continue with current operations.

— A single purpose entity (SPE) created by the University Foundation will manage and market the renovated hotel, bistro, and conference space. The goal is to get a creative hotel management group that will capitalize on PSU's market niche in order to raise the current 29% occupancy of the hotel, program and increase the number of conferences, and to actively program the performance space. An entity should capitalize on the types of creative skills shown by such hotels as the Ace, Jupiter or McMenamin's to effectively fill niche markets.

— PSU will finance the whole project through issuing tax-exempt bonds. The project will be broken up into 4-phases:

(1) SW Perimeter Student Housing
(2) Hotel and Educational Conference Center
(3) NE Quadrant Shipping Container Housing & Parking
(4) Pinwheel Tower Shipping Container Housing & Retail

Why This Proposal Works

So really, why does this proposal make sense for the University?

First and foremost, the University benefits financially. At project completion the University is looking at a positive net cash flow of roughly $2.6MM after debt service. These are funds that can be used for a variety of purposes, including the development of FOCUS as a leading institute of sustainable learning and living. The University is therefore able to Maximize its initial investment by creating approximately $30MM in added development equity value.

On top of that, the University creates 1220 units of flexible, affordable student housing - thereby meeting 60% of the immediate demand for housing in a shorter timeframe and at a lower cost than any other type of development.

The University also transforms a poorly performing hotel into a niche market hotel, one that is a low-cost provider of affordable extended-stay hotel rooms serving a wide range of unique markets, from visiting professors, prospective students, educational conferees, to extended stay academic researchers.

With respect to conference space, the University more than doubles its current capacity and provides immediate classroom space in the current building. This expanded space will allow for more national, regional, and local educational conferences to come to PSU and to hold academic programs discussing the various issues with respect to sustainability and green building.

The University and the downtown neighborhood will also gain an iconic 10,000 SF public atrium space for multiple university, conference and performance uses. Overall, University Place is to become an activated and inviting public space for residents, visitors, and students to gather and enjoy.

And finally, the University will have developed a worldwide model in sustainable student housing. By reusing low-cost surplus shipping containers and turning them into affordable student housing, PSU is developing a project directly in line with its sustainable mission and an ultimate model of sustainable building practices. This project will place PSU at forefront of green building movement in a way that will bring international recognition for innovation and creativity.

Appendix - Economic Model Assumptions

Retail:
One 14,000 net SF grocer NNN retail lease tenant. Monthly lease rate of $18/SF/Yr NNN for grocer. Operating Expense Ratio equal to 10% of EGI, vacancy underwritten at 8%.

Hotel:
181 rooms remaining from existing 235 rooms (54 "B-Wing" units converted to student housing) for a total of 54,000 net SF and average room size of 302 net SF. Average Daily Rate (ADR) of $75, Occupancy of 70% for RevPar of $52.50. Operating Expense ratio of 84.8% of EGI, other income equal to 6.3% of gross room income (Based on RMA industry averages for NAICS/SIC classification and revenue size cohort). A total of 10 rooms share use as flex "sky boxes" with additional income recognized in conference center component for model purposes.

Bistro:
One 4,000 SF bistro style dining seating 200 + capacity for a total of 3,600 net SF. Serving an average 150 plates per day, average plate of $12, 150 liquor per day, average liquor $5. Operating Expense Ratio of 94.6% of EGI- items are: 39.7% COGS, 30% payroll, 24.9% other expenses, other income of 1.5% EGI (Based on RMA industry averages for NAICS/SIC classification and revenue size cohort). 4,000 gross SF represents "dedicated" atrium space to bistro; balance of 6,145 gross SF (10,145 SF atrium – 4,000 SF bistro) is allocated to conference center component for model purposes.

Parking:
Maintain existing supply of 239 spaces, plus an additional 120 spaces in north lot 2 story garage. Shared parking, for example space demand could be allocated as: 55 retail @ 4/1,000 SF, 179 hotel @ 1 per unit, 32 bistro @ 9/1,000 SF, 92 conference @ 4/1,000 SF (total 359). Retail, restaurant and conference parking generates no direct income. Hotel parking generates $360/month per space (at $12/day*30 days) minus (1 – the hotel occupancy rate). Operating expenses and reserves at 20% EGI.

Container Housing:
1,166 container housing units, 304 net SF per unit for single occupancy, 40' long units (350 units in pinwheel, 384 units in N lot, and 432 units in SW lot) and 400 net SF per unit for double occupancy, 53' long units (384 units in N lot and 432 units in SW lot) for a total of 393,632 net SF (414,349 gross SF). 54 units in B-Wing of hotel converted to single occupancy housing for FOCUS students. Average monthly rent per unit of $700 for singles and $500 per person doubles ($1,000 per unit), 5% V&C, 35% Operating Expenses.

Financing:
Bond financing at 4.5% fixed interest for 30 years, cost of issuance of 1%, capitalized interest at 50% of bond amount during construction/rehab period of 18 mos. + 6 month contingency period (total of 24 months for construction of all Phases). General inflation factor of 3% used for cost and income projections.

Returns & Debt Service:
The combined project is projected to generate $2.6MM in cash flow after debt service with a DSCR of 1.36 in Year 1 of operations (2011). The debt service is primarily from container student housing, which represents over 60% of the project based on gross SF, 70% of the project based on cost, and 80% of the project based on NOI.

Appendix - Economic Model Assumptions

Development Cost:

Hard Costs estimates based on the following assumptions:

Component	Cost/GSF	GSF
Retail Grocer	$208.00	14,500
ECC Hotel	$90.00	60,782
Bistro	$214.00	4,000
Container Student Housing	$118.00	414,300
Conference Center (ECC)	$113.00	27,200
Parking	$80.00	84,050
Converted Student Housing	$56.00	18,100
Total Hard Cost, All Components	**$111.00**	**622,932**

Soft costs estimated at 20% of hard costs, developer fee of 6% of cost before financing. Bond of $2MM to purchase corner lot and reallocation of debt service of existing bond balance estimated at $21MM in 2010-11 also included.

Educational Conference Center:

Total of 17,996 net SF (21,172 SF gross) of conference space. Conference space available for classroom/university use 250 days per year with an effective average annual lease rate of $15/SF when used for this purpose. In addition, shared space in 10 flex rooms (3,000 net SF) and atrium (6,145 gross SF) available for conference center programming. A 25% discount assumed for university related events in atrium and flex rooms. Banquet and Catering income estimates based on 40,735 attendees per year with average catering income of $15 (2007 $$'s) per attendee for $688,000 Year 1 (2011) EGI. Combined operating expenses for conference center and catering estimated at 90% EGI.

Conference Center income calculation assumptions based on the following table:

Conference Center Economic Model Assumptions

Use/Room	Avg./Event Rate*	Avg. # Events/Year	Net SF	Per Event $/SF	Capacity	Annual Revenue*
General Use						
2nd Floor Large Room	2,000	25	8,861	0.23	591	50,000
1st Floor Large Room	1,200	25	5,913	0.20	394	30,000
1st Floor Office	750	75	1,667	0.45	111	56,250
Astoria	350	75	781	0.45	52	26,250
Coos Bay	350	75	774	0.45	52	26,250
Atrium- General Use	2,500	5	8,500	0.29	567	12,500
Flex (10)- General Use	250	50	3,000	0.08	200	12,500
General Use Totals	**1,057**	**330**	**29,496**	**0.31**	**1,966**	**213,750**
University Use						
Conference	Annual Equiv.	N/A	17,996	15.00	1,200	253,750
Atrium	2,000	5	8,500	0.24	567	10,000
Flex (10)	200	30	3,000	0.07	200	6,000
University Use Totals			**29,496**		**1,966**	**269,750**

Appendix - Container Cost Breakdown

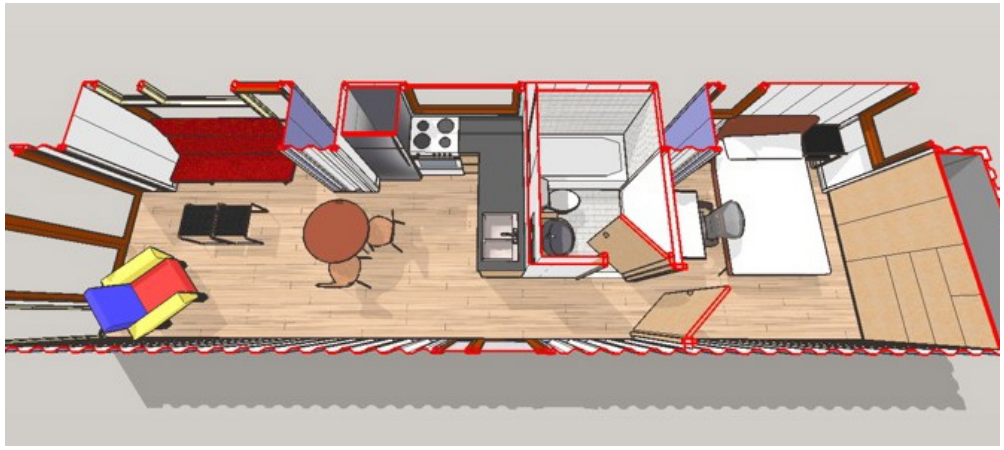
Container Housing Cost Per Unit:

ITEM	COST PER UNIT
Shell	$1,000
Sliding Glass Doors (2)	$2,800
Electrical Package, w/Submetering	$3,600
HVAC package	$1,800
Plumbing Package	$1,000
Interior Framing and Insulation	$1,400
Flooring	$500
Exterior Rust Inhibitive Primer	$350
Fiberglass Bathroom Module	$2,000
Kitchen Sink	$175
Bed	$200
Desk	$75
Cabinets	$100
Dishwasher	$175
Contractor Profit & Overhead (15%)	$2,607
Total Shell and Finish Cost	**$17,782**

ITEM	COST PER UNIT
Transportation Fee	$500
Crane/Scaffolding	$1,200
Labor	$3840
Concrete Podium & Steel Framing	$8400
Green Roof	$500
Elevator, terminal, and walkway	$2,140
Contractor Profit & Overhead (15%)	$2,996
Total Structural Costs	**$19,576**

ITEM	COST PER UNIT
Total Cost (in 2007 $$'s)	$37,358
Contingency @ 20%	$7,472
Total Cost in 2007 $$'s	**$44,830**

* Estimates based on interviews with Walsh Construction and other contractors

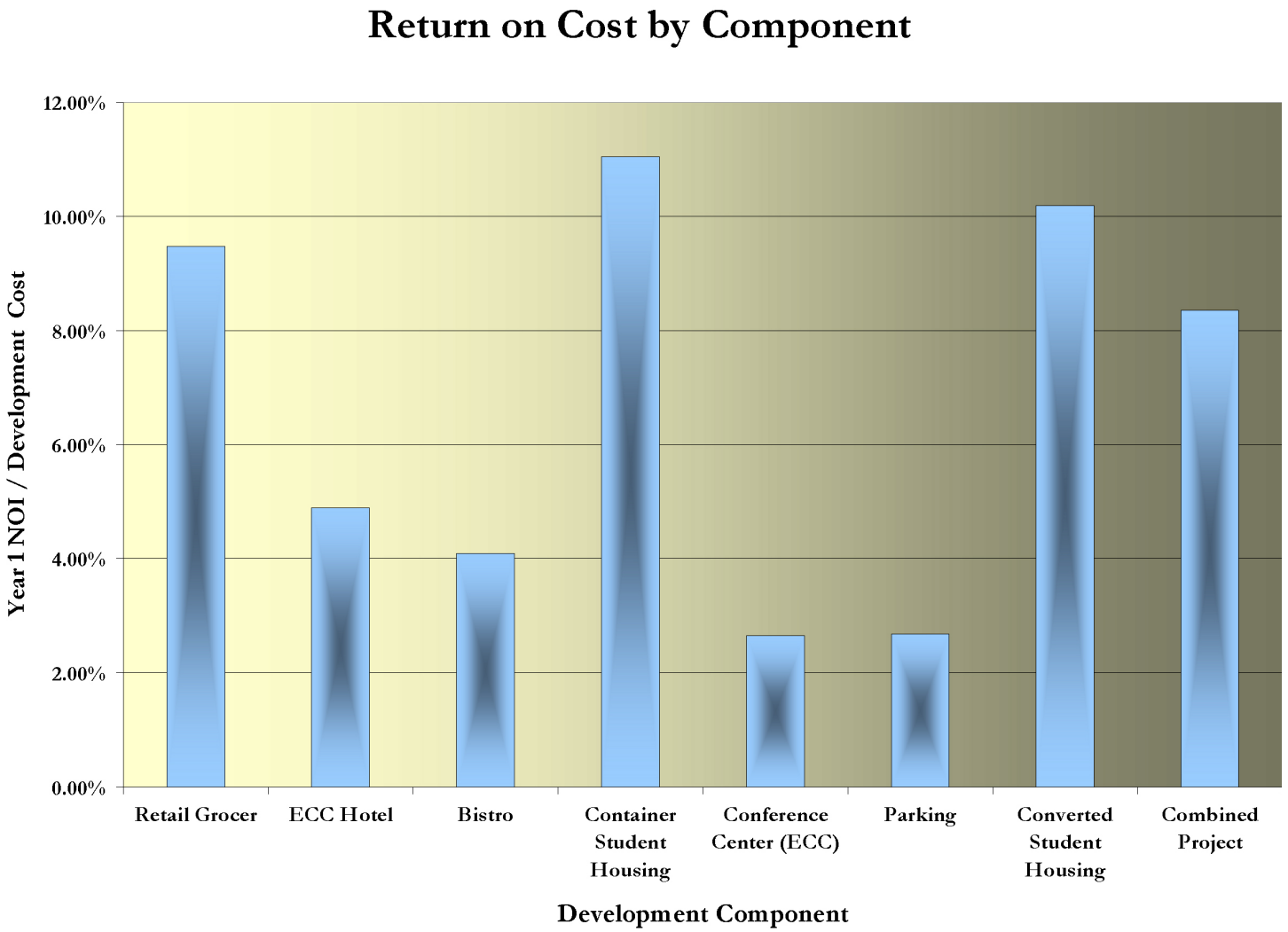


Appendix - Summary of Combined Project Key Data

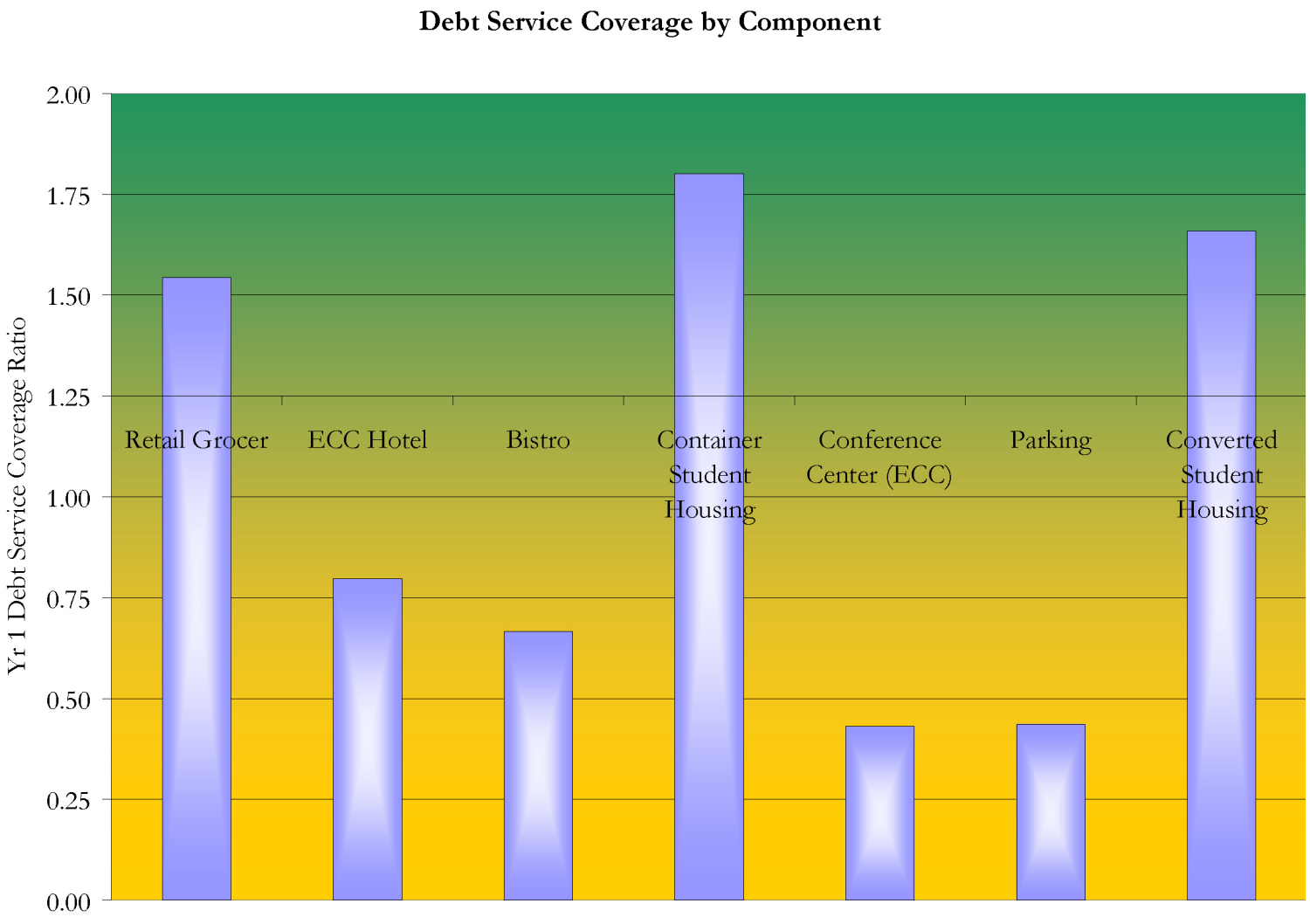
Summary of Combined Project Key Data

	Retail Grocer	ECC Hotel	Bistro	Container Stud	Conference Ce	Parking	Converted Stu	Combined Project
Program Assumptions								
Number of Units	1	181	1	1,166	Varies	359	54	**1,762**
Gross SF per unit/room/stall	14,500	419	8,200	355	N/A	350	335	**388**
Net SF per unit/room/stall	14,000	377	7,400	338	N/A	315	302	**361**
Total Gross SF	14,500	75,900	8,200	414,300	27,200	125,700	18,100	**683,900**
Total Net SF	14,000	68,300	7,400	393,600	23,100	113,100	16,300	**635,800**
Percentage of Gross SF	2.1%	11.1%	1.2%	60.6%	4.0%	18.4%	2.6%	**1**
Area Efficiency	96.50%	90.00%	90.00%	95.00%	85.00%	90.00%	90.00%	**92.97%**
Parking Demand Ratio	3.80	1.00	9.00	0.00	4.00	N/A	0.00	
Income Assumptions								
Rental Period	Annual	Daily	Daily	Monthly	Per Event	Monthly	Monthly	
Rent Type	NNN	Irregular	Irregular	Net	Irregular	Irregular	Full Svc	
Vacancy Factor	8.00%	30.00%	0.00%	5.00%	0.00%	0.00%	5.00%	
Operating Expense Ratio	10.00%	84.80%	94.60%	35.00%	90.00%	20.00%	35.00%	**50.85%**
Effective Gross Income	$ 260,938	$ 4,176,990	$ 1,063,490	$ 12,042,989	$ 1,231,895	$ 616,040	$ 485,004	**$ 19,877,347**
Operating Expenses	$ (26,094)	$ (3,542,087)	$ (1,006,062)	$ (4,215,046)	$ (1,108,705)	$ (40,518)	$ (169,751)	**$ (10,108,264)**
Net Operating Income	**$ 234,844**	**$ 634,902**	**$ 57,428**	**$ 7,827,943**	**$ 123,189**	**$ 575,522**	**$ 315,253**	**$ 9,769,083**
Development Value								
Net Operating Income	$ 234,844	$ 634,902	$ 57,428	$ 7,827,943	$ 123,189	$ 575,522	$ 315,253	**$ 9,769,083**
Cap Rate	7.50%	8.00%	8.00%	6.50%	7.50%	7.00%	6.50%	**6.65%**
Capitalized Value	$ 3,131,256	$ 7,936,281	$ 717,856	$ 120,429,893	$ 1,642,526	$ 8,221,745	$ 4,850,043	**$ 146,929,599**
Value per Unit	**$ 3,131,256**	**$ 43,847**	**$ 717,856**	**$ 103,285**	**N/A**	**$ 22,902**	**$ 89,816**	
Development Cost								
Hard Cost per Gross SF	$ 163.20	$ 90.04	$ 168.83	$ 118.32	$ 112.55	$ 80.39	$ 56.28	
TI's per Gross SF	$ 45.02	$ -	$ 45.02	$ -	$ -	$ -	$ -	
Soft Cost per Gross SF	$ 32.64	$ 18.01	$ 33.77	$ 23.66	$ 22.51	$ 16.08	$ 11.26	
Total Cost per Gross SF	$ 240.86	$ 108.05	$ 247.61	$ 141.99	$ 135.06	$ 96.47	$ 67.53	**$ 121.19**
Total Cost per Unit	$ 3,494,326	$ 36,265	$ 990,448	$ 50,457	N/A	$ 67,531	$ 22,660	
Total Build Cost	**$ 3,494,326**	**$ 6,563,967**	**$ 990,448**	**$ 58,832,985**	**$ 3,669,879**	**$ 8,103,712**	**$ 1,223,653**	**$ 82,878,970**
Financing								
Share of Bond Amount	$ 2,478,845	$ 12,975,471	$ 1,401,830	$ 70,826,581	$ 4,649,971	$ 21,489,021	$ 3,094,282	**$ 116,916,000**
Share of Bond Payment	$ 152,181	$ 796,589	$ 86,061	$ 4,348,181	$ 285,471	$ 1,319,253	$ 189,964	**$ 7,177,700**
% of Hard Cost	2.12%	11.10%	1.20%	60.58%	3.98%	18.38%	2.65%	**100.00%**
Debt Service Ratio	**1.54**	**0.80**	**0.67**	**1.80**	**0.43**	**0.44**	**1.66**	**1.36**
LTV	79.16%	163.50%	195.28%	58.81%	283.10%	261.37%	63.80%	
Returns								
Return On Cost	**9.47%**	**4.89%**	**4.10%**	**11.05%**	**2.65%**	**2.68%**	**10.19%**	**8.36%**
Dev'mt Value Less Costs	**$ (363,070)**	**$ 1,372,313**	**$ (272,592)**	**$ 61,596,908**	**$ (2,027,353)**	**$ 118,033**	**$ 3,626,389**	**$ 64,050,630**

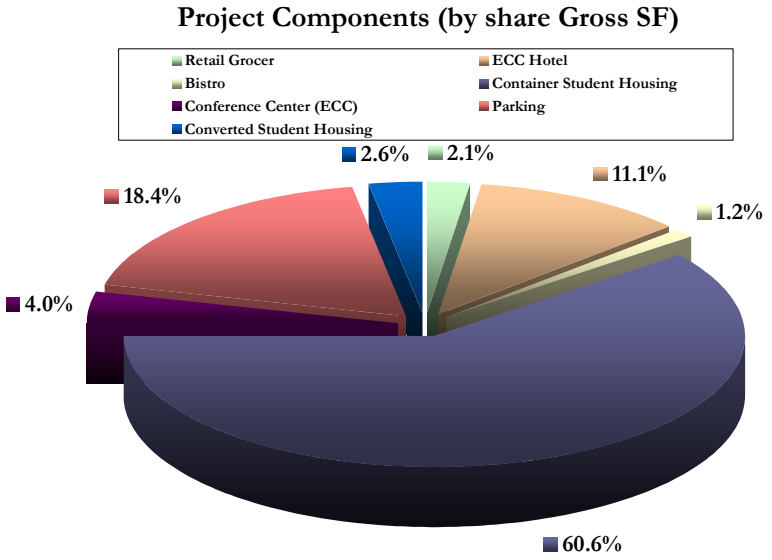
Appendix - Economic Model



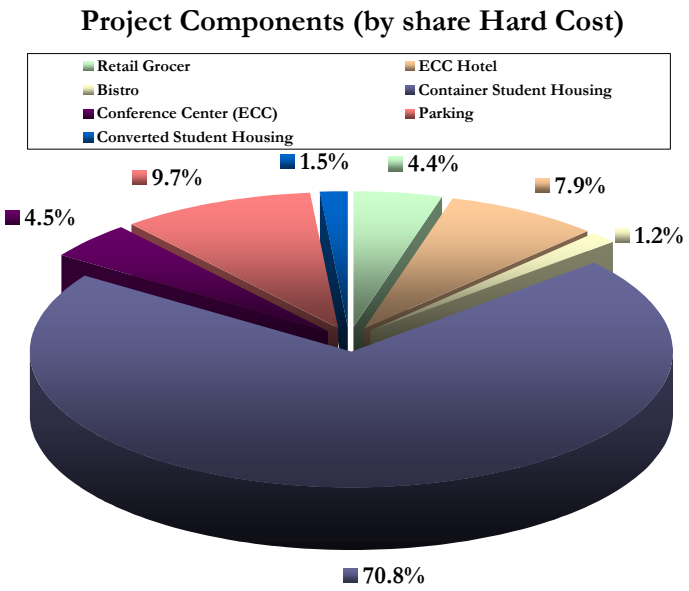
Appendix - Economic Model



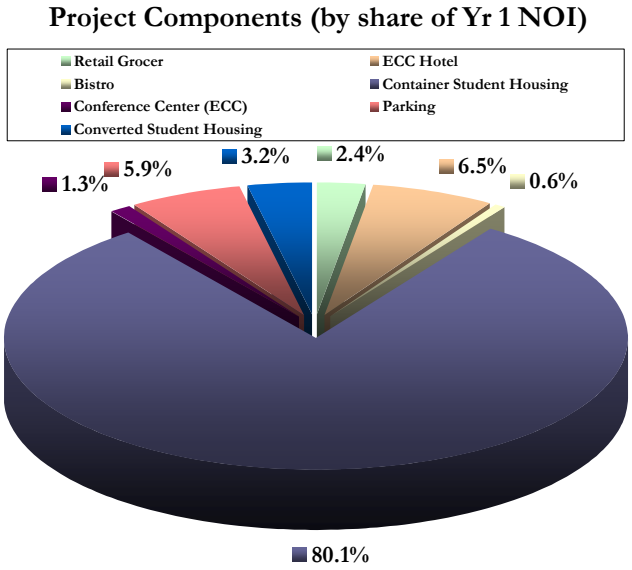
Appendix - Economic Model



Student housing is %60 of the gross square footage of the site



It is 70% of the total hard cost of the development



But it produces 80% of the income

Appendix - Phasing

DEVELOPMENT TIMELINE		Q1 Jan-08 Apr-08	Q2 Apr-08 Jul-08	Q3 Jul-08 Oct-08	Q4 Oct-08 Jan-09	Q1 Jan-09 Apr-09	Q2 Apr-09 Jul-09	Q3 Jul-09 Oct-09	Q4 Oct-09 Jan-10	Q1 Jan-10 Apr-10	Q2 Apr-10 Jul-10	Q3 Jul-10 Oct-10	Q4 Oct-10 Jan-11	Q1 Jan-11
1.0.0	**Pre-Development**													
1.1.0	Schematic Design	■												
1.2.0	Design Development		■	■										
1.3.0	Environmental and other studies			■	■									
1.4.0	Entitlements research and prep			■	■									
1.5.0	Construction Docs			■	■									
1.6.0	Final Approvals				■	■								
1.7.0	Bond Underwriting & Issuance				■									
1.8.0	Build University Alliances	■	■	■	■	■								
2.0.0	**Phase I: SW Quadrant Container Housing**													
2.1.0	Staging Setup & Coordination					■								
2.2.0	Structural						■	■						
2.3.0	Stack Containers							■						
3.0.0	**Phase II: Educational Conference Center and Hotel**													
3.1.0	Build Atrium Cover							■						
3.2.0	Room/Common Area Remodel					■	■	■	■					
3.3.0	Convert/Rehab Student Rooms	■	■	■	■	■	■	■	■					
3.4.0	Conference Center Improvements								■	■	■			
4.0.0	**Phase III: NE Quadrant Container Housing**													
4.1.0	Staging Setup & Coordination						■							
4.2.0	Structural							■	■	■				
4.3.0	Stack Containers									■				
5.0.0	**Phase IV: Pinwheel Container Housing & Retail**													
5.1.0	Staging Setup & Coordination								■					
5.2.0	Structural									■	■			
5.3.0	Stack Containers										■	■		
5.4.0	Retail Tenant Improvements											■	■	

Appendix - Economic Sustainability

Development Cost Snapshots

Development Cost by Component

	Year 2011 $$'s
Retail Grocer	5,109,000
ECC Hotel	9,263,000
Bistro	1,450,000
Container Student Housing	82,785,000
Conference Center (ECC)	5,206,000
Parking	11,386,000
Converted Student Housing	1,717,000
Total Development Cost	116,916,000

Development Cost by Phase

	Year 2011 $$'s
Phase I: SW Quadrant Container Housing	31,981,000
Phase II: Educational Conference Center and Hotel	17,636,000
Phase III: NE Quadrant Container Housing	39,813,000
Phase IV: Pinwheel Container Housing & Retail	27,486,000
Total Development Cost	116,916,000

Development Cost Snapshot Notes:

Calculation/Reallocation based on components % of hard cost

Other Soft Cost @ 20% of Hard Costs

Cost of Bond Issuance @ 1% Cost before Financing

Developer Fee @ 6% of Cost before Financing

Capitalized interest @ 50% of bond amount drawn during construction

All figures rounded to nearest $1,000

Development Cost Summary

	Year 2011 $$'s
Summary of Hard Costs	
Retail Grocer	3,017,000
ECC Hotel	5,470,000
Bistro	856,000
Container Student Housing	48,887,000
Conference Center (ECC)	3,074,000
Parking	6,724,000
Converted Student Housing	1,014,000
Total Hard Cost, All Components	69,042,000
Summary of Soft Costs	
Developer Fee	4,971,000
Cost of Bond Issuance	1,108,000
Capitalized Interest	4,987,000
Other Soft Costs	13,808,000
Total Soft Costs	24,874,000
Summary of Existing Bonds (Reallocated)	
Bond to Purchase Corner Lot	2,000,000
Allocated to Hotel (est. in 2010-11)	18,500,000
Allocated to Parking (est. in 2010-11)	2,500,000
Total Unallocated Costs	23,000,000
Total Development Cost/Bond Amount	**116,916,000**

Appendix - Economic Sustainability

Pro-Forma Snapshots, by Development Phase

Year 1 Pro-Forma Snapshot, Initial Year of Project:

	8.36% Year 2011 $$'s
Total Effective Gross Income (EGI):	19,877,000
Total Operating Expenses (OE):	(10,108,000)
Net Revenues (NOI):	9,769,000
Total Debt Service (DS):	(7,178,000)
Cash Flow After Debt Service	2,591,000
Debt Service Coverage Ratio	1.36

Pro-Forma Snapshot Notes:

Phase I includes container student housing in SW Quadrant

Phase II includes Educational Conference Center, Hotel, Bistro, and remodel of converted "B Wing" student housing

Phase III includes container student housing in NE Quadrant and 2-story parking structure

Phase IV includes container student housing in NW Quadrant and retail grocer structure

All figures rounded to nearest $1,000

Phase I Pro-Forma, Initial Year of Project:

	9.46% Year 2011 $$'s
Total Effective Gross Income (EGI):	4,652,000
Total Operating Expenses (OE):	(1,628,000)
Net Revenues (NOI):	3,024,000
Total Debt Service (DS):	(1,680,000)
Cash Flow After Debt Service	1,344,000
Debt Service Coverage Ratio	1.80

Phase II Pro-Forma, Initial Year of Project:

	6.41% Year 2011 $$'s
Total Effective Gross Income (EGI):	6,957,000
Total Operating Expenses (OE):	(5,827,000)
Net Revenues (NOI):	1,131,000
Total Debt Service (DS):	(1,358,000)
Cash Flow After Debt Service	(227,000)
Debt Service Coverage Ratio	0.83

Phase III Pro-Forma, Initial Year of Project:

	8.20% Year 2011 $$'s
Total Effective Gross Income (EGI):	4,751,000
Total Operating Expenses (OE):	(1,488,000)
Net Revenues (NOI):	3,264,000
Total Debt Service (DS):	(2,812,000)
Cash Flow After Debt Service	451,000
Debt Service Coverage Ratio	1.16

Phase IV Pro-Forma, Initial Year of Project:

	8.55% Year 2011 $$'s
Total Effective Gross Income (EGI):	3,516,000
Total Operating Expenses (OE):	(1,165,000)
Net Revenues (NOI):	2,351,000
Total Debt Service (DS):	(1,328,000)
Cash Flow After Debt Service	1,023,000
Debt Service Coverage Ratio	1.77

APPENDIX - ECONOMIC SUSTAINABILITY

Pro-Forma Snapshots, by Development Component

Retail Grocer Year 1 Pro-Forma:

	Year 2011 $$'s
Total Effective Gross Income (EGI):	261,000
Total Operating Expenses (OE):	(26,000)
Net Revenues (NOI):	235,000
Total Debt Service (DS):	(152,000)
Cash Flow After Debt Service	83,000
Debt Service Coverage Ratio	1.55

Pro-Forma Snapshot Notes:

All figures rounded to nearest $1,000

ECC Hotel Year 1 Pro-Forma:

	Year 2011 $$'s
Total Effective Gross Income (EGI):	4,177,000
Total Operating Expenses (OE):	(3,542,000)
Net Revenues (NOI):	635,000
Total Debt Service (DS):	(797,000)
Cash Flow After Debt Service	(162,000)
Debt Service Coverage Ratio	0.80

Bistro Year 1 Pro-Forma:

	Year 2011 $$'s
Total Effective Gross Income (EGI):	1,063,000
Total Operating Expenses (OE):	(1,006,000)
Net Revenues (NOI):	57,000
Total Debt Service (DS):	(86,000)
Cash Flow After Debt Service	(29,000)
Debt Service Coverage Ratio	0.66

Container Student Housing Year 1 Pro-Forma:

	Year 2011 $$'s
Total Effective Gross Income (EGI):	12,043,000
Total Operating Expenses (OE):	(4,215,000)
Net Revenues (NOI):	7,828,000
Total Debt Service (DS):	(4,348,000)
Cash Flow After Debt Service	3,480,000
Debt Service Coverage Ratio	1.80

Conference Center (ECC) Year 1 Pro-Forma:

	Year 2011 $$'s
Total Effective Gross Income (EGI):	1,232,000
Total Operating Expenses (OE):	(1,109,000)
Net Revenues (NOI):	123,000
Total Debt Service (DS):	(285,000)
Cash Flow After Debt Service	(162,000)
Debt Service Coverage Ratio	0.43

Parking Year 1 Pro-Forma:

	Year 2011 $$'s
Total Effective Gross Income (EGI):	616,000
Total Operating Expenses (OE):	(41,000)
Net Revenues (NOI):	576,000
Total Debt Service (DS):	(1,319,000)
Cash Flow After Debt Service	(744,000)
Debt Service Coverage Ratio	0.44

Converted Student Housing Year 1 Pro-Forma:

	Year 2011 $$'s
Total Effective Gross Income (EGI):	485,000
Total Operating Expenses (OE):	(170,000)
Net Revenues (NOI):	315,000
Total Debt Service (DS):	(190,000)
Cash Flow After Debt Service	125,000
Debt Service Coverage Ratio	1.66

Appendix - Economic Sustainability

Return & Development Value Snapshots

Return on Cost by Component

Retail Grocer	9.47%
ECC Hotel	4.89%
Bistro	4.10%
Container Student Housing	11.05%
Conference Center (ECC)	2.65%
Parking	2.68%
Converted Student Housing	10.19%
Overall Return on Cost	**8.36%**

Capitalized Development Value by Component

	Year 2011 $$'s
Retail Grocer	3,131,000
ECC Hotel	7,936,000
Bistro	718,000
Container Student Housing	120,430,000
Conference Center (ECC)	1,643,000
Parking	8,222,000
Converted Student Housing	4,850,000
Overall Capitalized Development Value	**146,930,000**

Return on Cost by Phase

Phase I: SW Quadrant Container Housing	9.46%
Phase II: Educational Conference Center and Hotel	6.41%
Phase III: NE Quadrant Container Housing	8.20%
Phase IV: Pinwheel Container Housing & Retail	8.55%
Overall Return on Cost	**8.36%**

Capitalized Development Value by Phase

	Year 2011 $$'s
Phase I: SW Quadrant Container Housing	46,523,000
Phase II: Educational Conference Center and Hotel	15,147,000
Phase III: NE Quadrant Container Housing	49,576,000
Phase IV: Pinwheel Container Housing & Retail	35,684,000
Overall Capitalized Development Value	**146,930,000**

Capitalization Rate Assumption by Component

Retail Grocer	7.50%
ECC Hotel	8.00%
Bistro	8.00%
Container Student Housing	6.50%
Conference Center (ECC)	7.50%
Parking	7.00%
Converted Student Housing	6.50%
Overall Capitalization Rate	**6.65%**

Appendix - Team Profiles

Professor Will Macht

Will Macht, President of Macht & Company, has been a developer and development consultant in the Portland metropolitan area for over 30 years, an Adjunct Professor for over 28 years and teaches courses on Real Estate Development Planning I & II and the Development Planning Workshop. Mr. Macht has served as a gubernatorial appointee to the Oregon Investment Board, a Commissioner for the Port of Hood River, founding board member of the Hood River Urban Renewal Agency, a development director of the Rouse Company, aide to Senators Jacob Javits and Robert F. Kennedy, an international attorney for the U.S.Treasury, and International Counsel of the Gates Rubber Company, and Gates Land Company. He writes the Solution File column for Urban Land Magazine and is Vice-Chair of the Urban Law Institute District Council-Oregon/SW Washington. Mr. Macht is a graduate of Princeton University and its Woodrow Wilson School of Public and International Affairs and the University of Virginia Law School.

Todd Bouchard

Todd is the founder of Kingslin Capital, a specialist in creative project structuring. His qualifications include 15 years of experience in national real estate ownership, analysis, operations, and financing.

Matthew Collier

Matthew graduated Phi Beta Kappa from Bucknell University in 2005, with a degree in International Relations and minors in Economics and Italian. He has also spent a year in Italy studying Renaissance Architecture and City Planning at Syracuse University in Florence. He has worked as a project manager for Accenture, Inc., in their Business Consulting division out of New York City prior to pursuing his interest in real estate development in Portland. Matthew recently began work with the Portland Development Commission where he will focus on Portland's downtown retail strategy. He is currently pursuing the Certificate of Real Estate Development at PSU.

Dave Fenwick

Dave is currently founder and CEO of vLetter, inc. in Hood River, Oregon, and is finishing up dual Masters degrees in Engineering Management and Business Administration, plus a certificate Real Estate Development. Dave sold a prior company of his to Apple Computer, and has also written multiple software patents and managed projects for Hewlett-Packard, Apple Computer and Sunset magazine. He has a Bachelors degree in Journalism and another Masters degree in Computer Science from Cal Poly, and teaches occasionally at the Portland campus of the University of Phoenix in the MBA program. Dave is serving a term as chairman of the Columbia Gorge Community College elected board of education, and is on the board of the Oregon branch of the Partners of the Americas. He is also an active member of the Hood River Rotary and Toastmasters clubs as well as the Gorge Technology Alliance and Hood River yacht club.

Justin Isle

Justin graduated from Willamette University magna cum laude and Phi Beta Kappa, double majoring in Business Economics and Environmental Science. Justin is currently a project manager and biologist at Mason, Bruce & Girard, Inc, a local natural resources consulting firm. Justin is a certified professional wetland scientist and has spent the last 9 years assisting public and private clients with environmental permitting and regulatory compliance needs throughout the pacific northwest. Justin is currently pursuing the Certificate of Real Estate Development at PSU.

Dan Johnson

Dan Johnson is the managing principal and founder of Glass Boxx Studios LLC, an Architectural Design & Interactive Media development company based in Bend Oregon area. Prior to moving to the Bend area, Dan was a Portland native and active in the community. He has served as a community director in the revitalization of the Alberta Arts District and served on the board of the Hillsdale town center plan. Dan has been a division manager for AT&T Wireless, Hollywood Video Entertainment and Herman Miller office furnishing. He has also been involved in the design of several condominium buildings with Hoyt St. Properties in the Pearl District. In the Bend area, he has designed several high end custom homes and maintains client projects across the west coast. Dan holds dual undergraduate degrees in Architecture and Urban Planning. He has completed a Post-Baccalaureate certificate in Interactive Media & Virtual Worlds development. He is completing the Masters certificate in Real Estate Development and will pursue his MBA in the near future.

Appendix - Team Profiles

Jeremy McVeety

Jeremy McVeety has a B.S. in Economics from Idaho State University and is completing the Graduate Certificate in Real Estate Development at PSU this June. Jeremy currently works for Chetco Federal Credit Union as a commercial loan analyst. In addition, Jeremy has consulting experience with several Oregon cities assisting with urban renewal plans, tax increment financing, and fixed asset reporting.

Chris Peterson

Chris Peterson graduated from the University of Oregon with a degree in Business Administration. His past work experience includes owning a small painting company and a seasonal Christmas light hanging company, being a member of the Army reserves, and working as a real estate agent. He is currently a Project Manager and Estimator for Interstate Roofing and is working towards his Real Estate Development certificate at PSU.

Amy Shum

Amy Shum, CCIM, CRS, CIPS, GRI, ABR, CRFS, CNHS, LUTCF, is a native of Hong Kong, and is a licensed real estate broker of Oregon and Washington. She is a graduate of Oregon State University, with a major in Finance. At present Amy is working towards completing the Graduate Certificate Program for Real Estate at PSU. Amy had been an insurance agent with Allstate Insurance Company and was working as a secretary for Department of Justice and Water Resources Department.