Contextual Design
Finding the Physical & Cultural Fit for a Student Union for The Ohio State University

Professional Bachelor of Architecture Thesis 2006
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Acknowledgements

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I also need to say a special thanks to Bob and L ITEMS for all of the guidance that you have provided during the course of these explorations and the job search. Without your insight and direction I don’t feel as though the level of thesis produced would have been as impressive and the job search would have been a much more rigorous process.

In the same sentiment, I feel it necessary to thank all of the faculty who have helped to shape my architectural education and experience during these last five years. A word of thanks needs to be extended to Rod Underwood, Jeff Culp, Zach Benedict, Pam Harwood and Stephen Kendall. Without your direction and ability to develop the potential inside a young individual, I don’t feel as though I would have the opportunities I have been given as I near graduation.

Finally, I must thank each and every one of my graduating classmates. Each of you are truly what makes the long hours in studio not only possible, but enjoyable. And to Tom, Kyle, Chris, Shea, Jake and Mike, I thank each of you for being a true friend and always being willing to lend your insight into my projects, no matter how busy you were.

To each of you, I THANK YOU.
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Ryan M. Strauser  
Professional Bachelor of Architecture Thesis 2006
The design of a new Ohio State University Student Union was an opportunity to explore the fundamental issues that are confronted by every designer who embarks on the challenge of creating a piece of architecture which has permanence and responds to the existing conditions that have been established through a century of development and growth. The proposed project location, on the southeast edge of the campus gives this building the potential to not only become a key component of The Ohio State University, but also the city of Columbus and Franklin County.

With the Columbus campus of The Ohio State University boasting an enrollment of over 50,000 students a year, the new Ohio Union will create much needed space in an environment that can serve students’ emerging technological needs and adapt with an ever changing collegiate atmosphere. The building itself will include a variety of student recreation areas, meeting rooms, a theatre, administrative offices and an assortment of food outlets. This complex and diverse program, along with the opportunity to make the building an immediate part of the students day to day activities created a challenge not only in manipulation of space, form and texture, but the manipulation of how students will interact through the formation of space in search of creating “place.”

Through this design, the opportunity was present for ideas to formulate and an in-depth understanding of the university and the community was able to merge with the design from conceptual stages to completion of the project. This approach to the design process created a vantage point from which I could feel free to explore the campus and learn the uniqueness of the university and generate a response that was acknowledged in the design of the building. In following this approach the issues of connection, flow, scale, massing, transparency, interaction, flexibility, and materiality were at the front of all discussions and were applied to the design solution to create a building that responds directly to the individuality of the University and adjacent communities.

Each of the topics above proved to be instrumental in designing a building that would not only respect the past, become an icon for the present, but also act as a symbol for the future of The Ohio State University.
The higher education community is a delicately orchestrated arrangement, based on scale, human interaction and involvement, progression over time, identity and status. Through time these ideas have transferred into a sophisticated master plan and created not only buildings, but also hubs of intellectual and social transfer, gateways and symbols. On The Ohio State University campus these hubs are a stadium, a student union, a center for the visual arts, quads, amphitheatres and many more cores of visual and historic interest. As a campus grows there will undoubtedly be change, some bringing the community closer together, while others will loosen ties and broaden the focus of the university both physically and academically. Through campus planning and detailed design the campus has the opportunity to be the unifying element that can bring over 50,000 students together and provide a vision for the university.

The development of The Ohio Union project will strive to be all these things and more. To do so the building must find a design vocabulary that allows it to achieve connections and respond to the campus vision while creating an experience that pronounces its significance in the landscape. The building should be a dominant element on the east side of campus. It has the ability to act as a campus gateway from north High Street which welcomes visitors to the campus daily, while at the same time directing students through the course of their day to day activities as they engage their student experience. This can be done through the investigation of building placement, development of exterior interaction spaces, and relating the building carefully to the adjacent quads, academic buildings and commercial district. This would allow the building to become the hub of campus activity that welcomes in the adjacent areas and provides a venue for gathering. In turn the facility becomes more than the facade and the designated functions held within, it becomes a community center. A venue that The Ohio State University needs on it’s southeast entry into campus.

The design decisions that are selected must be influenced by campus architecture which proved successful in the past, but not limit itself based on stylistic preferences of the past. It should respect, but not mimic. The design solution should above all enhance the experience of students, alumni, faculty and guests in a way that makes The Ohio Union a landmark for The Ohio State University.

Initial Thoughts & Goals

Project Goals

• Produce a building which has the capacity to become a unifying element on campus.

• Produce a building which evokes a response from the community.

• Create a building that is adaptable to the changing collegiate campus and a product of the overall campus vision.

• Design a facility that is both iconic and symbolic, while at the same time is grounded within the universities fabric.

• Produce a design which creates visual and symbolic connection to both the campus and the community.

• Design a building for the students that enhances their ability to interact with one another.

• Design to create “PLACE,” not just another space by keeping the issue of scale and human interaction at the forefront of all design decisions.

• Let the form of the building and the sophisticated space planning develop simultaneously to create a more fluid and unified design solution.

• Produce a building which can be a source of pride and a marketing tool for the University.

• Move the project to a detailed level of maturity.
Precedent Studies

Smith College Campus Center
- Owner: Smith College
- Location: Northampton, Massachusetts
- Design Architect: Weiss/Manfredi Architects
- Contractor: Daniel O'Connell's Sons
- Square Feet: 56,000
- Status: Completed in 2003

Smith College Student Union

The Smith College Campus Center became a focus of preliminary thesis studies due to its ability to create a focal center in the campus context and its dominance in the landscape. The building was also explored because it served to unite the traditional campus with a contemporary response that would make use of transparency to create a sense of openness. In addition, it quickly became an example of how a facility can begin to promote the collegiate responsibility of fostering the free exchange of ideas and social growth through the use of an open plan.
The University of Cincinnati Student Recreation Center was an early exploration that constantly was being brought back into discussion because of the potential that conceptual design solutions would have to introduce the principle of folding which Morphosis implements frequently. The building also became a study in skins and transparencies in conjunction with new opportunities in expression of materials.

Shapiro Campus Center
Charles Rose, Architect

The Campus Center at Brandeis University was a key in focusing in on preliminary massing solutions. The bifurcated form of the Campus Center instantly became a symbol which promoted entry, fluidity, transparency and functionality.

Shapiro Campus Center
Charles Rose, Architect

The campus center was very valuable in being able to site an example of a union building which sought introduction into a context and a campus culture. The building stretched out its wings to tie with the campus, while orientation was used to draw guests into the facility.
The Gateway Center became an important building in the investigation of higher education facilities that sought to welcome, make a dominant statement, blend with the contextual cultural heritage of the area and become an icon all simultaneously. The Gateway Center and its connection to the Indian heritage, which was at one point dominant, its reuse of trace elements on the site, and its overall clarity on the interior, in conjunction with Predocks ability to reinterpret the context became instrumental examples.

The work of Antoine Predock as a whole became a key component of my explorations throughout the year. His ability to investigate the contextual concerns and firmly root his design solutions to the site are principles that I feel many times are overlooked in educational architecture.
The work by Rem Koolhaas at IIT was very influential in demonstrating how an intervention can instantly become a hub for campus activity. It promoted the importance of contextual artery connection, the use of a derived plan, and how to insert a contemporary solution in a delicate contextual fabric. The building was also a valuable study in materiality, transparencies, lighting and the importance of creating sub-spaces within an open area in the attempt to reduce scale.

The Oakland Museum has been a constant example for decades of the success an urban plaza can have and its impact on the building itself. This example directly influenced the integration of terraces into my design solution and became a driving force in the connection of the facility with its context. The value of this building showcased the ability that landscaping has to soften the edges created by a rigid structure and the way it can activate the exterior environment and draw people into the area.
The integration of the building into the Ball State University campus became an opportunity for testing physical and transparent connections. The Student Center would become the last building on the west side of McKinley Avenue between Riverside and Neely filling the last void in a plan to physically connect the block of academic buildings. Being located at the physical center of the campus, the design solution had to not only respond in each direction to the context, but also to the future development of campus.

The buildings geometry would be derived from the overlapping of grids that represent the primary circulation on campus, the dominant north-south campus grid, and the connection axis created by the Arts & Journalism Building.

The buildings' ability to move towards the significant aspects both physically and socially became a guiding principle in the formal gestures that the building would make. These gestures would not only anchor the building and pronounce entrances, but also bring more layers of depth from the campus into the design.
Investigation Through Design

The nucleus for the University, being the physical and social center will become an integral part of the daily activities of the students and faculty, while serving as a symbol for the prospering current state of the campus and pointing to the future of the universities development.

The building itself was derived from overlapping grids that correspond to the campus layout and circulation axis, while orienting dominate building elements in directions that communicate with focal elements on the Ball State campus and the Muncie community. What was formed with these gestures was a building that was connected not only to the Arts & Journalism Building and Teachers College physically, but also to the Ball State campus of the present and one that will evolve within the years to come.

The project itself became key to formulating avenues of approach for a program as complex as that of The Ohio Union. It allowed for exploration into what designing on a higher education level is about and the challenges that would be incurred. It caused me to look at a project beyond its physical context and explore the deeper connections that could be created in a campus community. The project proved to be a very valuable learning experience and one which allowed the design of The Ohio Union to reach the maturity that it did.

And, the design for Ball State University granted the opportunity to see what designing a Union facility is all about. It is about creating a space for meeting, a setting for the exchanging of ideas in both an academic and recreational setting.
Investigation Through Design

The Ball State University
Student Center

Project Location
Muncie, Indiana

Building Owner/Occupant
Ball State University

Building Size
82,000 s.f.
Investigation Through Design

Ball State University
Student Center

BSU Student Center - Rendering of West Conference Wing Entrance

BSU Student Center - Interior Rendering

BSU Student Center - Rendering of East Facade Looking North

BSU Student Center - Model Photo
The Project Description

The Ohio Union Replacement Project

The project that was explored during the spring semester of this year was the design of the Ohio Union at The Ohio State University. The project itself is made up of many different elements including student recreation areas, study lounges, conference and meeting rooms, lecture halls, student organizations offices, a restaurant and many other functions. The approximate size of the project is 200,000 s.f. of usable space plus circulation and systems space, and two parking structures which are to be connected to the union building if the design solution can incorporate it. The proposed construction budget for the project is 80 million dollars plus contingencies and professional fees.

The challenges that a building of this type creates were taken and viewed as opportunities to explore and test the design criteria established for the project. The magnitude of the building provided the opportunity to explore many different material palettes, facade solutions and a deeper exploration into structural analysis. The facility also provided the opportunity to incorporate a sophisticated landscaping solution that would merge with the building design to create a fluid transition between the campus and the community.

A unique aspect of designing a student union versus a building that houses other academic activities is the ability the designer has to incorporate a more culturally significant design approach into the building because of the twenty-four hour human interaction. This allows for connections to be made that go far beyond the visual or physical and create transparent correlations that strengthen the tie of the building to the community.

The buildings programmatic elements create a facility that becomes more then a building; it can be viewed as a campus within a campus. The facility will not only house the physical needs of students on a twenty-four hour basis, but will stimulate academic discussion and social interaction due to the functional elements that are contained within. A total overview of the buildings programmatic outline is found on the following pages.
The Program

The Ohio Union Replacement Project

Total Square Footage
242,000 s.f.

Total Parking Square Footage
230,000 s.f.

The Ohio Union Replacement Program was selected out of a group of programs received from universities across the midwest. The decision to focus my attentions on the design of the Ohio Union was due to it’s overall complexity, the richness of The Ohio State University campus and surrounding Columbus, Ohio context and it’s proximity to Muncie facilitating so that numerous site visits.

The programmatic outline of the project would require consideration throughout the design process and would mandate constant coordination with with formal, structural, and mechanical gestures to insure fluidity throughout the building.

2.2
## The Program

### The Ohio Union Replacement Program

### Retail & Enterprise Zone

<table>
<thead>
<tr>
<th>Service/Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving/Staging</td>
<td>2,000 s.f.</td>
</tr>
<tr>
<td>Bulk Dry Storage</td>
<td>1,200 s.f.</td>
</tr>
<tr>
<td>Walk-in Refrigerator/Freezers</td>
<td>1,400 s.f.</td>
</tr>
<tr>
<td>Food Service Offices</td>
<td>300 s.f.</td>
</tr>
<tr>
<td>Food Service Lockers</td>
<td>400 s.f.</td>
</tr>
<tr>
<td>Dish/Pot Wash/Sanitation</td>
<td>1,600 s.f.</td>
</tr>
<tr>
<td>Cold Food/Salad Preparation</td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Hot Food Preparation/Cooking</td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Catering Supply</td>
<td>1,600 s.f.</td>
</tr>
<tr>
<td>Catering Preparation</td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Catering Pantries</td>
<td>600 s.f.</td>
</tr>
<tr>
<td>Plating Kitchen</td>
<td>1,200 s.f.</td>
</tr>
<tr>
<td>Marketplace</td>
<td>5,000 s.f.</td>
</tr>
<tr>
<td>Food Shops</td>
<td>2,800 s.f.</td>
</tr>
<tr>
<td>Common Dining Area</td>
<td>6,000 s.f.</td>
</tr>
<tr>
<td>Walk-in Refrigerator/Freezer</td>
<td>200 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>27,300 s.f.</strong></td>
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</table>

### Restaurant/Sports Bar

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitchen</td>
<td>3,000 s.f.</td>
</tr>
<tr>
<td>Lounge/Dining Area</td>
<td>3,000 s.f.</td>
</tr>
<tr>
<td>Storage</td>
<td>500 s.f.</td>
</tr>
<tr>
<td>Coffee Bar Lounge</td>
<td>600 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>7,100 s.f.</strong></td>
</tr>
</tbody>
</table>

### Instructional Kitchen

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Kitchen</td>
<td>3,600 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>3,600 s.f.</strong></td>
</tr>
</tbody>
</table>

### Retail Space

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfinished Fit-Out Retail Space</td>
<td>3,000 s.f.</td>
</tr>
<tr>
<td>Copy Center</td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Postal Center</td>
<td>800 s.f.</td>
</tr>
<tr>
<td>ATM</td>
<td>300 s.f.</td>
</tr>
<tr>
<td>Bank Branch with ATM</td>
<td>1,500 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>6,600 s.f.</strong></td>
</tr>
</tbody>
</table>

### Student Activities Zone

#### Student Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Org. Offices (40)</td>
<td>4,800 s.f.</td>
</tr>
<tr>
<td>Student Org. Offices (10)</td>
<td>4,000 s.f.</td>
</tr>
<tr>
<td>Student Work Spaces (5)</td>
<td>275 s.f.</td>
</tr>
<tr>
<td>Conference/Meeting Rooms (2)</td>
<td>800 s.f.</td>
</tr>
<tr>
<td>Shared Workspace/Lounge</td>
<td>600 s.f.</td>
</tr>
<tr>
<td>Graphics Room</td>
<td>500 s.f.</td>
</tr>
<tr>
<td>Resource Room</td>
<td>800 s.f.</td>
</tr>
<tr>
<td>Student Org. Mail Room</td>
<td>140 s.f.</td>
</tr>
<tr>
<td>Poster Room</td>
<td>200 s.f.</td>
</tr>
<tr>
<td>Storage Lockers</td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Greek Council Office</td>
<td>1,020 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>14,135 s.f.</strong></td>
</tr>
</tbody>
</table>

#### *SHARED SPACE*

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception Area</td>
<td>200 s.f.</td>
</tr>
<tr>
<td>Production/Workroom</td>
<td>200 s.f.</td>
</tr>
<tr>
<td>Kitchen/Pantry</td>
<td>80 s.f.</td>
</tr>
<tr>
<td>Office Coordinator</td>
<td>140 s.f.</td>
</tr>
<tr>
<td>Conference Room</td>
<td>400 s.f.</td>
</tr>
<tr>
<td>Conference Room (2)</td>
<td>400 s.f.</td>
</tr>
<tr>
<td><strong>USG</strong></td>
<td><strong>840 s.f.</strong></td>
</tr>
<tr>
<td>Student Offices (3)</td>
<td>360 s.f.</td>
</tr>
<tr>
<td>Student Work Stations (8)</td>
<td>440 s.f.</td>
</tr>
<tr>
<td>Lounge</td>
<td>100 s.f.</td>
</tr>
<tr>
<td>Supply Room</td>
<td>200 s.f.</td>
</tr>
</tbody>
</table>

#### *CGS*

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Offices (2)</td>
<td>240 s.f.</td>
</tr>
<tr>
<td>Student Work Stations (3)</td>
<td>165 s.f.</td>
</tr>
<tr>
<td>Supply Room</td>
<td>100 s.f.</td>
</tr>
<tr>
<td><strong>IPG</strong></td>
<td><strong>505 s.f.</strong></td>
</tr>
<tr>
<td>Student Offices (2)</td>
<td>240 s.f.</td>
</tr>
<tr>
<td>Student Work Stations (2)</td>
<td>110 s.f.</td>
</tr>
<tr>
<td>Supply Room</td>
<td>100 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>3,475 s.f.</strong></td>
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### Ohio Union Activities Board

<table>
<thead>
<tr>
<th>Space</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Office</td>
<td>140 s.f.</td>
</tr>
<tr>
<td>Student Work Stations (5)</td>
<td>275 s.f.</td>
</tr>
</tbody>
</table>
### The Program

#### The Ohio Union Replacement Project

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue Generating Spaces</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation/Game Center</td>
<td></td>
<td>3,400 s.f.</td>
</tr>
<tr>
<td>Billiards Area</td>
<td></td>
<td>2,000 s.f.</td>
</tr>
<tr>
<td>Arts &amp; Crafts Studio</td>
<td></td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Student Art Gallery</td>
<td></td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Photography Laboratory</td>
<td></td>
<td>600 s.f.</td>
</tr>
<tr>
<td>Photography Darkroom</td>
<td></td>
<td>400 s.f.</td>
</tr>
<tr>
<td>Interactive Cyber Lounge</td>
<td></td>
<td>600 s.f.</td>
</tr>
<tr>
<td>Lockers</td>
<td></td>
<td>240 s.f.</td>
</tr>
<tr>
<td>Multipurpose Room</td>
<td></td>
<td>1,500 s.f.</td>
</tr>
<tr>
<td>Dance Room</td>
<td></td>
<td>1,500 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td>12,240 s.f.</td>
</tr>
<tr>
<td><strong>Conference/Meeting Space</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tiered Conference Room</td>
<td></td>
<td>1,440 s.f.</td>
</tr>
<tr>
<td>Small Ballroom</td>
<td></td>
<td>7,000 s.f.</td>
</tr>
<tr>
<td>Grand Ballroom</td>
<td></td>
<td>12,000 s.f.</td>
</tr>
<tr>
<td>Pre-Function Space (2)</td>
<td></td>
<td>3,000 s.f.</td>
</tr>
<tr>
<td>Large Meeting Room A</td>
<td></td>
<td>5,000 s.f.</td>
</tr>
<tr>
<td>Large Meeting Room B</td>
<td></td>
<td>3,000 s.f.</td>
</tr>
<tr>
<td>Medium Meeting Room A</td>
<td></td>
<td>900 s.f.</td>
</tr>
<tr>
<td>Medium Meeting Room B</td>
<td></td>
<td>750 s.f.</td>
</tr>
<tr>
<td>Medium Meeting Room C (8)</td>
<td></td>
<td>4,800 s.f.</td>
</tr>
<tr>
<td>Medium Meeting Room D (2)</td>
<td></td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Small Meeting Room (6)</td>
<td></td>
<td>1,800 s.f.</td>
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<tr>
<td>A/V Storage</td>
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</tr>
<tr>
<td>Interfaith Center</td>
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<td>2,000 s.f.</td>
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<tr>
<td>Babysitting Room</td>
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</tr>
<tr>
<td>Conference Theatre</td>
<td></td>
<td>3,000 s.f.</td>
</tr>
<tr>
<td>Projection Booth</td>
<td></td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td>46,840 s.f.</td>
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<td><strong>Study Lounges/Information Center</strong></td>
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<td></td>
</tr>
<tr>
<td>Hall of Fame</td>
<td></td>
<td>500 s.f.</td>
</tr>
<tr>
<td>Information Center</td>
<td></td>
<td>500 s.f.</td>
</tr>
<tr>
<td>Large Lounge</td>
<td></td>
<td>3,000 s.f.</td>
</tr>
<tr>
<td>Medium Lounge (2)</td>
<td></td>
<td>4,000 s.f.</td>
</tr>
<tr>
<td>Study Lounge</td>
<td></td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td>Commuter Lounge</td>
<td></td>
<td>1,000 s.f.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
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<tr>
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**Mechanical/Circulation/Additional Sto.**

Subtotal ________ 40% s.f.
The Ohio Union project site is situated on the corner of High Street and 12th Avenue with the Ohio Union parking structure located directly on the north edge of the site. The current state of the site is best described as active. The old Ohio Union which will be demolished as part of this project currently brings students, faculty and guest into the area daily. This along with the direct adjacency to retail establishments on High Street and the positioning of the site as a gateway into campus creates heavy pedestrian traffic through the site which has to be acknowledged in the new design solution. Another advantage to this site is the relationship that is formed with the Quad located directly to the west and the south dormitory area located to the southwest. This adjacent quad contains Mirror Lake and an amphitheatre used for outdoor performance and will allow for a strong relationship from building to landscape and was a crucial element in integrating a new piece of architecture into the established context.
Contextual Studies

The Ohio State University
A Campus of Buildings & History

The character which is created throughout greater Columbus, Ohio is brought directly to the edge of The Ohio State University campus. When entering campus, you enter an area that has gone through progressive expansion. In 1871 when the university was conceived there as a minute number of small buildings located between the river and what is now High Street. Through the years the number and size of buildings has continually increased with the current acreage of the Columbus campus equalling 1,755 and the total number of buildings equaling 461. Through this expansion there has been a fundamental element that has been maintained. That is the idea of architectural consistency through materials, proportions, styles and relating to the overall campus vision. Many architectural additions to the campus within the last quarter century have found ways to maintain this consistency while incorporating individuality into their design. These predecessors have created an opportunity for designers to currently create a building which will make a statement on a campus that is looking for a dynamic element that can connect itself to the rich history.
Contextual Studies

The Ohio State University
A Campus of Buildings & History

The Lively Quad Atmosphere

The Contemporary Response on The OSU Campus

Form & Materiality

Campus Map

Campus - Aerial Photo

www.osu.edu

www.urbanohio.com

www.osu.edu/Stock Photos: R. Strauser

www.osu.edu/altered

Google Earth - Sept. 2005
Contextual Studies

The Adjacent Columbus
The High Street Atmosphere

The greater Columbus, Ohio region, with a population totaling 1.6 million people is currently a thriving metropolitan area with increasing business productivity and an ever expanding footprint. The city not only boasts The Ohio State University, but is home to numerous Fortune 500 companies' headquarters, private research institutions and a diverse workforce. The downtown area is surrounded by many different communities with individual character that create the Columbus region.

One of these diverse communities is the Short North and Campus District East which contain the High Street corridor. High Street is a unique addition to the campus setting with its multiple family owned dining establishments, its series of shops and other retail venues geared towards the needs of the college student. With the artistic flare and architectural diversity of the area, the High Street corridor has presented a unique contextual palette.
Connecting to the Campus

The building site formed the opportunity to connect to the campus in a variety of ways physically. A connection that I sought to create early in the design process was one recognizing the importance of gateways becoming a focal element of design on campus. In doing so, a contextual element that was drawn from was the concept of utilizing overlapping grids. This was done by Peter Eisenman in his design of the Wexner Center for the Visual Arts and it has formed one of the major gateways into the Campus. This solution became the driving force for building orientation and landscaping orientation. The result was a building that rooted itself more deeply in the university by incorporating traces of the campus and its history.
The Issues and Response
The Integration Into Contextual Diversity

• What does the current state of High Street offer a conceptual design?
• What makes High Street unique?
• How is High Street evolving and what effect does that have on a new union?
• What are the ideals that must be maintained so that there is a smooth transition for the campus?
• How can the building begin to bridge agap between the High Street community and the Ohio State community?
• Are these two communities one in the same or is the new union being designed for two clients and not just one?
• Is there possibility this design can respond to the atmosphere of High Street, the importance of the quad spaces, the functionality of the university and the needs of the students simultaneously?
• Is there possibility to maintain the scale of the surrounding with a physical intervention that carries the weight of this project?
• Can the exploration into what forms place on the site now contribute to the formation of place in the design solution?
• Is there an opportunity for the building to become a mediator between the campus and the community?
• Can the building serve as a gateway and icon while retaining the scale and personal qualities which have made the existing union stand the test of time?
• Can I as a designer create a solution which will incorporates a consistant, dynamic, functional intervention in a way that respects, acknowledges, incorporates and advances the context in which this building will grow from?

The Response
While maintaining true to these initial questions a conceptual design process was incorporated with site analysis research and precedent studies to better understand how to approach all of these issues. The result was a building that took on many of these topics full speed and in plain view, while others were approached with a more transient solution.

The building was able to respond to the High Street neighborhood by coming out and grabbing ahold of it. This created a more fluid urban edge and not only enhance the activity on the street, but also respond in a more appropriate manner to the ever-changing High Street with its northward advance of mid-rise development that will eventually reach adjacency to the site.

On the south side of the building the structure looked to reactivate the area between the new union and the existing law building addition. In turn, the siting of the building, scaling of the facade and adding the drop-off in this zone seeks to activate it as a gateway.

The building took the idea of creating gateways as one of its keys in addressing relationship to context. The building used elements derived from the context to create a central gateway, a student neighborhood gateway and a series of processional that would connect the building to the university.

Through these gateways, the integration of the landscape became key in visually symbolizing the formation of two dialectically opposed forces. The two would find a meeting space on site and utilize the building as a transition.
Campus Connection - The Cross Campus Gateway

As this issue was addressed there became a clear understanding that this building had the opportunity to promote more than just a connection to the High Street edge. The building and site together held the opportunity to connect across campus to a more contemporary gateway that is being transformed with the recent addition of the Knowlton School of Architecture, the renovation and additions to the football stadium, the new business quad, and student recreation center. This side of campus is alive and revived. The same opportunity and responsibility presented itself with this project. In responding to this, it was evident that the landscaping must be used in correlation with the building to create a series of spaces that would draw the individual into campus. The landscape acted as a mediator between the new union building and the existing campus. It began to ease the transition while at the same time framing views, altering perception and creating avenues to direct the individual in a more focused direction.

The Issues and Response
The Campus Gateway

The Issue
When a program lends itself to be more than just a functional building, how do you address this? In the case of the Ohio Union, the position of the site on the southeast corner of campus allowed for the building and the site to become a key entrance point, or transition from the community into the campus and vice-versa.

The Response
The stance that was taken to address this issue was to not hide the fact, but to make a statement. This allowed the building to shift from the center of the site and transition to form an urban edge. Once the urban edge was formed there then became the opportunity to puncture this in two distinct points which then began to create solid/void relationships within the facade. This decision was reinforced by the ability and necessity of splitting the building into two distinct programmatic areas and the addition of a third area with the parking structures. This solid/void relationship was then able to create areas of interest, areas that reveal what lie behind and enhance the clarity of entrance.

The second area that began to address this issue of gateway was the concept of using overhead cover as an indicator of entrance or transparencies that occur between the university and the campus. In many cases this was done to break down the scale of a space, in others it was to promote the ability for visual entrance into the building. The concept of overhead cover seems to manifest itself in the main entrance at the corner of 12th and High where the continuity of the roof form becomes a symbol that surges with the individual as they enter the community.
The Issues and Response
The Campus Gateway

Transition became a key theme within the buildings design development and implementation of a formal solution which would address all of the contextual influences involved in forming a gateway and procession. The transition from community to campus, the transition form building to campus, the transition form building to community. These transitions were all looked at as key in producing a succesful solution.

In looking at each of these transitions a better understandining was gained that there were many other transitions that occur with the inclusion of a building into a historically rich context. These are the material transitions. The solid/void transitions. The transition from space to space or even more powerful from place to place. These are the transitions, the details that must be a constant part of not just a stylistic or formal solution, but also through the space planning that begins to inform the gestures that can be made with a building of this magnitude. Each of these issues must enter a dialectic process as to create a consistency that can produce a clear response from the community and the individual.

Photos Courtesy of www.osu.edu & Stock Photos: R. Strauser 11.16.05
The Issues and Response
The Formation of Place

The Issue
When designing a building which inherits the position of a former structure and sits in a rich contextual fabric, how can you begin to address the issue by manipulating space to inform a user of place?

The Response
As a designer it must be understood that the individual user will bring their own interpretation of what constructs a place. It is then easier to discern that you have the opportunity to manipulate the way a user will engage the space. The interaction will then cause a response which becomes their value judgement.

In this facility the idea of using scale to create more intimate spaces in a building the size of the union became key. The attempt was made to break down volumes to create more of a human scale.

The second way at addressing this issue was through the use of a visual and physical element that would enhance the idea of uniqueness throughout the building. Through this concept the integration of two progressive elements were included in the building, one being a red band representing the university, the second being a green band representing the community. These two bands would move through the building puncturing the spatial volumes and creating planes at a point, canvases at others. This in turn creates an unpredictable element within the building, one that gives definition to specific spaces within the facility and create layers, and depth in which the idea of place is rooted.
The Issues and Response
The Icon & The Presence

The Issue
In the contextual circumstance presented with the addition of the union building, the opportunity is presented to create an icon on the southeast edge of campus.

The Response
The integration of a design solution that would be termed iconic is one that has to be stepped upon lightly when dealing with the issue of contextual design. The building first and foremost needs to integrate itself into the surrounding built environment.

In an attempt to not overwhelm the surrounding context the building engaged this task with the same design gestures that would respond to many of the other issues being dealt with. In doing so this would create a building which would motion clearly its contextual intent, while at the same time stand out.

The best opportunity to enhance the presence of the building would be to press it to the very edge of campus. This would be complimented by the roof which would seem to almost reach over the street. These give the building a presence on the streetscape, they give the building an identity. They create a reaction which is necessary when you are trying to insert an element that can become a symbol for the university, not just another piece of the campus.
The Issues and Response
Minimalization of Construction Impact for a University

The Issue
In a true replacement project there is an inherent shutdown of the existing facility. Is it possible given the current location of the union to minimize if not eliminate the shutdown time?

The Response
In conjunction with the driving issues of the design solution there was an ability which presented itself to not only shape the building, but also adjust the structural bays to create the possibility of The Ohio Union never shutting down. This response would maximize the productivity of both buildings for the university, minimize lost revenue that would be incurred with a shutdown, while at the same time insuring that students have the necessary facilities to maintain activities.
The key to this was the organization of a student wing to the east, a conference wing to the south and the setting of the wings upon a base which holds the performance and event spaces and creates a landscaped terrace which would merge the building and the quad.
This zoning would then allow for both the student and conference wings to be constructed while the existing union would remain in operation. Those functions would then shift to the new facility. The existing then would be demolished and the performance spaces, terrace area, parking structures and quad extension would then be completed to finalize the site.
The Issues and Response
Urban Fabric,
Suburban Campus

The Issue
The campus has maintained an Olmstead plan for the campus greenway through the years. This ideal is an attribute to the university as a vision, but is hindering the development of the campus on the urban edge. How can this greenway be accounted for and not limit the possibilities of a design?

The Response
The design solution must reinterpret the idea of the greenway. It must look at this vision abstractly and dissect its parts.

In staying true to this notion the design solution calls for the amount of green space on campus to not only be maintained, but to be enhanced as it complements the building. In doing so, the relocation of expanses of the greenway became necessary. This was done by making the greenway part of the building itself, which enabled the building to address the urban edge, while maintaining the greenway it encroached upon by changing its elevation from ground level to roof level.

The second area of the greenway is the informal quad which is cut-off from the site, rendering the green area located directly to the west of the existing building useless to formal and informal events. By relocating the building, more of the site was opened up and a bosque was created, water features added, and an exterior terrace added bringing a new life and energy to the area that is generally seen off-site at present.

Photos on page Courtesy of www.urbanohio.com & Stock Photos: R. Strauser 11.16.06
The Conceptual Response

**Conceptual Model Photo #1**
The early concept for the building would take on the form of the intended overall gestures. The monumental building approach closely tied all building functions, but removed the building from the urban edge and tightened its relation to the informal quad. The concept, although functional, was dropped due to its tendency to cut-off pedestrian flow.

**Conceptual Model #2**
The form of the building was then altered to extend to the urban edge and a clear separation of the building functions became apparent. The extension of the quad also began to develop and parking structure placement was decided.

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East Facade - Final Massing/Scale/Material Overlay Sketch

South Facade - Final Massing/Scale/Material Overlay Sketch

North Facade - Final Massing/Scale/Material Overlay Sketch

West Facade - Final Massing/Scale/Material Overlay Sketch
Final Conceptual Model
With the design process progressing into the details, the conceptual model expressed the structure of the facility, general massing of the building, and the formal gestures made by detailed elements. As the design process would progress from this point many of the details would be worked out with continued elevation studies and three-dimensional computer modeling.

Facade Screening Panel Detail
During the final stages of the design process there was the opportunity to explore the upper level screens that would create a more opaque appearance from street level, but maintain transparency from the interior of the building and allowing natural light into the corridors and meeting spaces.

The Conceptual Response

Conceptual Model #3
The conceptual thought then started to assume a more rigid formation and the entrances into the building and site became evident. The quad landscaping strategy also started to develop and strengthen the conceptual tie the building had to its context. The retail and parking structure design also began to move forward and a language was developed that would tie to the High Street community.

Conceptual Model #4
The design solution became more detailed and a structure began to surface on the exterior of the building as the space plan became more set in stone.
The Formal Response
The Ohio Union Site Plan
The Formal Response
The Ohio Union Plans

Lower Level Floor Plan
A. Performance Theatre
B. BOH Stage Preparation
C. Grand Ballroom
D. Small Ballroom
E. Conference Theatre
F. Pre-Function Space
G. Catering Preparation Area
H. Instructional Kitchen
I. Fan Room
J. Mechanical Room
K. Building Storage
L. Loading Dock
M. Loading Dock Ramp

Food Service Axonometric
The Formal Response
The Ohio Union Plans

First (Quad) Level Floor Plan
A. Performance Theatre
B. Baby-Sitting Room
C. Pre-Function Space
D. Temporary Exhibition/Lounge
E. Conference Theatre
F. Common Dining Area
G. Food Shops Area
H. Marketplace
I. Food Preparation
J. Food Storage
K. Food Services Office
L. University Police
M. Post Office
N. Copy Center
O. Bank
P. Restaurant/Sports Bar
Q. Build-Out Retail Space
R. Parking Structure One Ramp
S. Loading Dock Ramp
T. Parking Structure Two
The Formal Response
The Ohio Union Plans

Second (12th & High) Level Floor Plan
A__Conference Room
B__Meeting Room A
C__Meeting Room B
D__Entry/Information Center
E__Student Recreation Area
F__Cyber Lounge
G__Student Union Administration Offices
H__Parking Structure One
I__Parking Structure Two

Theatre Service Axonometric

Vertical Circulation Axonometric
The Formal Response
The Ohio Union Plans

Third Level Floor Plan
A. Conference/Meeting Room
B. Interfaith Center
C. Student Advocacy Office
D. Tiered Student Conference Room
E. Student Government
F. Shared Support Space
G. Enrollment Services
H. Buck ID Office
I. Off-Campus Student Services
J. Commuter Lounge
K. Parking Structure One
L. Parking Structure Two
The Formal Response
The Ohio Union Plans

Fourth Level Floor Plan
A. Conference/Meeting Room
B. Multi-Cultural Center
C. Upper Level Lounge
D. Tiered Student Conference Room
E. The Ohio State University Hall of Fame
F. Ohio Union Activities Board
G. Student Organizations
H. Parking Structure One
I. Parking Structure Two

MEP Service Axonometric

MEP Circulation Axonometric
The Formal Response
The Ohion Union Plans

Fifth Level Floor Plan
A. Student Art Gallery/Lounge
B. Student Fine Arts Studio
C. Multi-Purpose Room
D. Green Roof Exterior Terrace
E. Parking Structure One
F. Parking Structure Two

Fifth Level Floor Plan
The Formal Response
The Ohio Union Spatially

Model Photo - Birdseye from the southeast

Model Photo - View along axis to the Union

Model Photo - East Facade

The Ohio Union - High Street Facade Rendering looking South
The Formal Response
Building Sections

Building Section AA

Building Section BB

Building Section CC

Building Section Key
The Formal Response
Building Sections
The Formal Response
The Ohio Union Spatially
The Formal Response
The Ohio Union Spatially

Model Photo - 12th and High Street Corner

Model Photo - West Facade

Model Photo - Quad Extension toward Union
The Formal Response
Building Elevations

South Elevation

North Elevation

West Elevation

East Elevation
The Formal Response
Building Elevations
The Formal Response
The Ohio Union Spatially
The Formal Response
The Ohio Union Spatially

Model Photo - Birdseye from the east

Model Photo - Birdseye from the southeast

Model Photo - Birdseye from the northwest

The Ohio Union - Conference Center Entrance and Information Area Rendering
The Formal Response
Structural Plans

First Level Structural

Second Level Structural

Third Level Structural
The Conclusion

A Year of Investigation

Throughout the course of the last calendar year I have engaged in a dedicated study on the topic of contextual design and the higher education context. At the early stages this investigation dealt more heavily with the higher education aspect and what the challenge was that keeps educational architecture from evolving past the traditional intervention that has been reused for decades. Originally my investigations took me to politics, to economics and to timing. To this end I have determined that there is a plural reasoning to the downfall of the vast majority of higher education architecture. It is all the above, but it is also the inability of many architects in the current movement to understand how to incorporate contextual issues into their design solution in an appropriate manner without exceeding budgets or stepping on administrator's toes with their design. These architects must move away from individual stylistic norms in which they have become comfortable with and engage the a challenging set of circumstances that contextual design produces.

Contextual design also must be understood as a series of hurdles that must be jumped over, not a one-hundred yard dash to the finish line. You must investigate and understand before you can design. The idea of standardization must be removed and an individualized solution must be developed which incorporates each and every layer that makes up the context.

The higher education context is one that provides more clues to what a design should be then possibly any other sector of architecture. It hints, it points, it actually speaks. We just have to learn to listen.

The Ball State University Student Center Design - Fall 2005
The Ohio Union Program in combination with the selected thesis topic was challenging, engaging, thought provoking, at times frustrating, at times joyful, but most importantly an opportunity to further my understanding and prepare me for the complex issues that are ahead.

In looking back, this project became instrumental in my ability to deal with the complex and learn to manage a design and time. The building could be overwhelming and there was a realization early in the project that one could become immersed in one issue that design would present and immediately begin to overlook other issues. From this I was able to develop a better understanding of balance and how to integrate a dialectical process so that function and form would equally provide valuable insight into the design solution.

I also developed an understanding that there is always a need for the human scale in projects of every size and type. Without this relation to the individual, no building will be truly successful. There is also a better understanding of how to investigate a project more fully from precedents to material selections. Overall, the ability was gained to incorporate a more complete design solution.

In regard to the thesis topic of contextual design, I gained a greater knowledge of the depth that a context can hold and the influence it should have on the design of a building of any type. By addressing these issues it immediately becomes easier to validate your design decisions and root them more firmly in the site and immediate context.

In the end, I think this thesis exploration was successful on many levels. I grew as a designer and as a professional, which will be key as my career progresses. Secondly, I was able to create a design which has been greeted with a warm response by the vast majority and is a design solution which I am proud to end my architectural education.
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