# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Vision</td>
<td>1</td>
</tr>
<tr>
<td>History</td>
<td>3</td>
</tr>
<tr>
<td>Hilberry Theatre Concepts</td>
<td>7</td>
</tr>
<tr>
<td>Theatrical Systems</td>
<td>31</td>
</tr>
<tr>
<td>Sustainability Statement</td>
<td>37</td>
</tr>
<tr>
<td>Engineering Systems</td>
<td>39</td>
</tr>
<tr>
<td>Project Details</td>
<td>47</td>
</tr>
<tr>
<td>Appendix</td>
<td>49</td>
</tr>
</tbody>
</table>
PROJECT VISION

At Wayne State University (WSU), the development of performance spaces for academic programs has evolved, and the existing University Theatre Program has completely outgrown its home - an existing 1960s conversion of a religious facility on the corner of Cass and Hancock Avenues. While WSU will continue to define and refine the requirements of each academic performance program, and as public event offerings progress, there is an opportunity to provide modern support for all of the Theatre, Dance and Music programs, as well as develop the WSU presence along the Cass Avenue corridor.

The role and history of Cass Avenue as the main artery from downtown Detroit to the northern metropolitan area neighborhoods is well established. As Greater Detroit works to reestablish the City's standing as a vibrant urban center, Wayne State University continues to play an important role in the resurrection of the upper north side or mid-town area. Straddling both sides of Cass Avenue, WSU has brought an energy back to its campus and presently, with the Hilberry Gateway Project, has the opportunity to develop a new face for the southern entry to campus, improve the street life along Cass Avenue, and put the Performing Arts offered by WSU on greater display.

The existing Hilberry Theatre, housed in a converted 1916 Christian Science Church facing Hancock Avenue, has long needed more updated facilities to provide safe, modern training for students while better serving audiences - particularly individuals with special needs. In addition, the dance and music programs constantly seek appropriate performance venues and WSU is in need of spaces for larger public presentations. With the Hilberry Gateway plan, all of these goals can be met, while another portion of the Cass Avenue corridor is improved.

On University-owned land at the corner of Cass and Forest Avenues, a new purpose-built venue to house the Hilberry Theatre Program is envisioned. Its new lobby would present a welcoming face as WSU's public entry from the South along Cass Avenue. Building a new theatre and related support facilities would allow the academic and performance programs to continue in the existing space, while the new construction takes place. Upon completion, the Hilberry Theatre and the academic programs would consolidate almost all operations within the new space. The existing building would be renovated into a multi-use, multi-form venue. This renovated venue will serve a variety of WSU events that currently do not have suitable space. Planned so that the support facilities would parallel Cass Avenue behind the two venues, the westside streetscape could then open up as a public and social space. The theatre would anchor the south and the multi-form venue would anchor the north end of the block, leading into the WSU campus.
HILBERRY THEATRE HISTORY

Created in 1963, the Hilberry Theatre Company was the brainchild of Leonard Leone, who believed that repertory theatre is the best possible training ground for careers in theatre. Clarence B. Hilberry, then president of Wayne State University, personally took responsibility for raising the funds to convert the First Church of Christ Scientist in Detroit into an open-stage theatre, which now stands as a memorial to his vision and leadership.

Following the theatre’s opening, Hilberry invited a group of community leaders to form a women’s committee to ensure the continuity of the growing company. “The Understudies,” as the group became known, has solicited funds for almost 50 years, primarily from individual donors, to provide essential support for the artists of the Hilberry Company.

Widely known for the high quality of its productions, the Hilberry Company has received numerous honors and awards. The Company has been selected to perform at Ford’s Theatre and The Kennedy Center in Washington, D.C., and in the Far East for the USO.

Over the years, the Hilberry Company has been honored with awards by several Detroit newspapers, including “Best Director” and “Best Play” for the 2003-2004 season’s The Kentucky Cycle Parts I and II, co-directed by Patricia Ansuini and Lavinia Hart; “Best Season” (Oakland Press); “Favorite Local Professional Production - Drama” for Glengarry Glen Ross; and “Favorite Local Professional Production - Comedy” for Lovers and Executioners (Between the Lines), as well as many individual awards for members of the company.
HILBERRY THEATRE CONCEPTS

The Hilberry Gateway Project will be completed in 3-phases:
1. Add a new Main Thrust Stage Facility
2. Renovate the existing Hilberry building
3. Add support space

The Gateway Project will be the southern entrance to the WSU Campus along Cass Avenue. It will claim the corner of Cass and Forest Avenues, enhancing the University’s image in the community and bringing The Hilberry closer to neighborhood amenities, including parking. In addition to improving the Hilberry, this project will encourage outside development in the area. The goal is to pay homage to and expand an iconic image for the University, while enhancing the surrounding community.

The new Main Thrust Stage will be a state-of-the-art performance space for the Hilberry Company. It will retain the intimate feeling of the existing theatre, while providing the theatrical amenities that are lacking in the existing renovated church building. The new facility will include a gallery and trap room, as well as back-of-house spaces, adjacent to both new performance spaces.

The renovated existing Hilberry Building will change the space’s use from a limited thrust stage to a Multiform Performance Space. This space will be suitable for more intimate theatrical or dance performances, and for other uses such as dinners, lectures, receptions, presentations or exhibits. The renovation will also include upgraded patron facilities and restrooms. All of this will be undertaken within the existing envelope of the building, preserving the historic nature of the exterior shell.

The new support space will bring the functions of the existing 95 West Hancock building to the Hilberry facility. It will move costume and scene shops for both the Hilberry and Bonstelle Theatres adjacent to the Hilberry performance spaces, along with storage for both. These shops will be greatly improved from the existing, with adequate volume, improved ventilation and plenty of natural light.

The elements of the Hilberry Gateway Project will be unified by a public entry concourse that will provide a strong, striking and friendly image to the community. It will serve as a secure and inviting beacon to redefine and rejuvenate the community. Essentially, the project will create a place to meet, with or without a planned performance in the space.
SITE NARRATIVE

The location of the Hilberry Theatre building is important to both the City of Detroit and Wayne State University. Its position on the corner of Hancock and Cass Avenues makes it part of the southern border between Campus and City. With the major traffic flow on Cass and Forest Avenues, it is also a highly visible part of Wayne State University. This will only grow with the development of the Mid-Town Loop along Cass Avenue.

Within this existing framework, one goal of the Hilberry Gateway Project is to build on these strengths and developments. To achieve this, the addition to the Hilberry will extend down to Forest Avenue, creating both a marker to the heavy Forest Avenue traffic, and to support the Mid-Town loop with a strong streetscape. To further enliven the streetscape, the Cass Avenue façade will be articulated to create outdoor gathering space.

Another goal of the Project is to increase access to the Hilberry and to the University. By adding a connecting lobby along Cass Avenue, from Forest through the existing building, there will be an entrance deeper into the community south of the Campus. This entrance will also be significantly closer to the existing parking deck on Forest Avenue. This glassy, transparent, and active lobby will give the community reason to enter and be introduced to Wayne State University. These interventions will enhance the greater community’s familiarity with the University and its intellectual, cultural and educational offerings.

The relocation of the historic Mackenzie House will facilitate the creation of this new Gateway linkage along Cass Avenue, and will offer the opportunity to re-locate the house along the Forest Arena Corridor, thereby enhancing that zone as well. The prospect of re-developing the Forest Avenue edge from Second Avenue to Cass is desirable and consistent with the overall Gateway Concept.
Site Plan - Existing Conditions
PHASE 1

It will be important for the Hilberry Theatre to continue its performance schedule during construction of the Hilberry Gateway Project. To achieve this goal, the first phase of construction will be an addition directly south of the existing Hilberry building, stretching to the corners of Cass and Forest Avenues. The Historic Mackenzie House will be relocated prior to Phase 1 construction.

This new construction will create a new image for the Hilberry Theatre, with a new main entrance and a connecting lobby that will interact with the pedestrian traffic on Cass Avenue. It will set up the Hilberry as the gateway to the WSU campus, inviting the greater community into the main campus.

The Gateway lobby will connect the new 500-seat Main Thrust Stage to the Existing Hilberry Building. The new, glassy construction will create an open, welcoming face to the public, and will include updated patron amenities that can be used by people within both performance spaces.

The Main Thrust Stage will be complete with a second level Gallery for spectator and actor use. It will include vomitories, a trap room and a fully rigged fly loft. It is important that this space is designed to retain the intimate actor/audience relationship that is the hallmark of the existing main stage.

Additionally, Phase 1 will include backstage facilities to be used by both the Main Thrust Stage and the future Multi-Purpose Performance Space. These facilities will include an assembly/scene shop with a loading dock, dressing rooms, make-up rooms, a green room and storage. The new mechanical equipment installed in Phase 1 will also service both the new and existing building.

Phase 1 will include office and support space for use by the facility's staff. These spaces will be on the second level, overlooking the Gateway lobby.
Main Level - Phase 1

New main stage, gateway lobby, assembly shop and back of house functions.
Lower Level - Phase 1
Phase 2

Following the completion of Phase 1 and the Main Thrust Stage, the Phase 2 renovation can begin on the existing Hilberry building. The renovation will include refurbishing the existing exterior leaded glass windows, total reconfiguration of the existing theatre house, expansion of the upper floor patron space, upgrading bathroom facilities, addition of an elevator and total reconfiguration of the mechanical systems. In addition, the existing lobby will be connected to the new Gateway lobby to encourage visitor interaction between all performance spaces.

While the exterior envelope is in very good condition, the exterior wood windows are in need of maintenance and repair. The interior coverings that were added to block light will be removed, while the wood frames and leaded glass will be refurbished for enhanced energy conservation.

The existing theatre house will be transformed from a raised seating, formal theatre to a flat-floor Multi-Use Performance Space. This space will include flexible spectator seating, accommodating up to 200 patrons, and an upper Gallery for both audience and actor use. With its flat floor and elegant high ceiled volume, the Multi-Use Performance Space will be suitable for gatherings, exhibitions, dance, community performances, lecture series and much more.

To support this Multi-Use Performance Space, there will be pre-function space on either side with multiple connection openings. The updated windows will allow daylight in this space, as desired. Additionally, new appropriately sized restrooms will be added between the existing lobby and the pre-function spaces. An elevator will also be added, connecting the existing lobby to all levels of the existing building.

Just as importantly, an expanded patron area on the second level will take advantage of the high volume and exceptional detail of the existing building. It will also connect to the gallery space, and will include renovated restrooms for patron use.

The emphasis on flexible use potential for the performance space, the pre-function and lobby areas, and the patron area will open a wide range of new use opportunities for the Hilberry Theatre, the College of Fine, Performing and Communication Arts and the entire University community.
Main Level - Phase 2

Renovated Hilberry, including Multi-Form Performance Space, patron lounge and updated facilities.
**PHASE 3**

The final phase of construction will be an addition that will accommodate the support functions currently housed at 95 West Hancock Avenue. This addition will be located west of the Phase 1 construction and will be connected at the scene shop by a new loading dock.

Phase 3 will house a second scene shop and a costume shop on the first level, costume storage on the upper level, and property storage on the lower level. These levels will be connected by a freight elevator at the loading dock.

While not as transparent as the Phase 1 construction, the exterior materials of Phase 3 will blend with the Phase 1 materials. From the street, some views into the shop will be possible. Emphasis on bringing natural light into these Phase 3 areas will enhance not just the functionality of the spaces, but will also contribute to the overall Gateway concept at the corner of Forest and Cass Avenues.
Main Level - Phase 3

New scene, costume, and paint shops, with storage.
View East on Forest Avenue
Theatrical Systems
PHASE 1 THEATRICAL SYSTEMS

The “new” Hilberry Theatre and Stage

Envisioned as a purpose-built venue for theatre, the initial concept drawings illustrate a modern thrust type facility similar to the new Guthrie Theatre in Minneapolis and the new Shakespeare Theatre facilities built in Stratford, England. Both are more modern interpretations of the original Guthrie and the Festival Theatre in Stratford, Ontario, Canada. The newer theatres reflect changes in dramatic offerings, public expectations, advances in stage technology, as well as audience access and support services.

The new venue will consist of approximately five hundred seats on two tiers. The venue will include an orchestra level and an upper gallery or balcony. At the rear of the thrust stage, a proscenium opening approximately 38 feet wide by 21 feet tall will include a full stage house with flying capability. The depth of the stage will be approximately 30 feet with a full stage crossover behind. The stage will have a resilient floor that meets Actor Equity Association standards. It will also feature orchestra and vignette staging opportunities and, as it is to be used for theatre performance alone, it will allow for scenic reveals from below the stage.

The plan allows for use of presentation techniques not currently possible in the existing Hilberry Theatre. These include: complete performer access to a variety of entrances through the use of corridors under the audience seating bowl, a stage fly system and overhead space to support changes of scenery, preparations to facilitate special effects technology, and the potential for proper orchestra areas to support musical theatre. From an audience perspective, the plan will allow for: better sight and hearing lines, improved acoustics, better access and options for handicapped audience members, accessible restrooms, appropriate audience services such as ticket and intermission support, and planned “vehicle to event” secure accessible pathways.

Theatrical Equipment

The specialty lighting and theatrical equipment will be planned to support a variety of activities on various levels. These include stage, audience space, lobby and pre-function areas as well as academic and laboratory activities in the performing arts, production and presentation in the performing arts, and lecture and instructional activities for the theatre program. The performance space will serve the University’s educational needs as well as provide the public face of the academic training programs being executed as a facet of the University curriculum.

Theatrical Light Dimming and Controls

Theatrical lighting will consist of 384 fully programmable and dimmable circuits. Five dimmer racks of 96 circuits each will be furnished. The fifth rack will support audience, rehearsal and class dimmable lighting. The individual circuits for theatrical lighting are designed to be easily accessed throughout the theatrical space via tension grid platforms or catwalks to serve the various stage locations. The onstage lighting circuits will feed both fixed electrics battens and a number of drop boxes. Drop boxes allow lighting to be placed in a variety of locations as well as allow any pipe battens to be used for theatrical lighting or a special effect. This feature is particularly useful for creating lighting and projected effects behind scenery.

One control console to operate the stage and house
lighting will be provided in the equipment package. Lighting operators will have the ability to run the console from any one of several positions as required for individual shows. With one position at the control booth in the rear of the audience chamber, additional locations will be identified as the design progresses. With modern lighting consoles, the cost to install additional receptacles is minimal. Every effort will be made to anticipate all possible operational locations.

House lighting will be controlled using dedicated houselight control stations. The houselight control system will be software-based, allowing access not only to dedicated houselights but also selected theatrical lighting circuits. This system simplifies the set-up for lectures, pure music functions using the orchestra shell, and other activities not requiring the more complex theatrical control console.

Control wiring will be distributed throughout the catwalks and to the electrics battens above the stage to provide the opportunity for the rental or future purchase of color scrollers for theatrical lights or even “intelligent” lighting fixtures.

Theatrical Light Fixtures and Luminaries

The design will provide for two or more followspots, approximately 200 stage lighting fixtures, 4-color cyclorama lighting fixtures, 25 “intelligent” lighting fixtures and work lights. These lighting fixtures are not permanently wired, thus allowing all lighting fixtures to be set up for each event. The fixtures should provide the University with the ability to light and serve its own events and to provide supplemental support to outside productions. At any time, the Theatre Department can add to this basic inventory either one fixture at a time or by purchasing whole groups of fixtures. Due to the fact that the fixtures are plugged in for each event, there is no additional contracting required to add fixtures. The amount of additional house-owned fixtures the facility requires will depend on the course of future programming growth. The fixtures provided are a base on which future expansion can be built.

![Drapery and Rigging](image)

Drapery and Rigging

The most important code requirements for the rigging system will be determined once the height of the over stage fly area is established. If the fly space exceeds 50 feet of height above the stage, a fire curtain will be required. This fire curtain will be a straight lift curtain that will comply with both the Life Safety Code and appropriate building codes.

In the fly space, approximately 35 stage scenery and/or masking battens will be installed. These modern computer-controlled motorized linesets can be controlled at the stage level. In addition, dedicated stage masking drapery battens will be established based upon audience sightlines.

A full complement of stage draperies will be furnished for the venue. These will include a main curtain with side travel, a full sized lined “guillotine” curtain which will allow vertical reveals and closures, masking legs, masking borders, and mid-stage and rear stage travelers. At least one sky-drop and a scrim will be included in the project.

A motorized remote control projection screen will be provided for instructional and lecture presentations. The type of screen will be based on Owner consideration of cost and benefit factors. One option is a screen that supports both front and rear projection. Another approach would be to utilize a screen that supports only front projection. These decisions will be made during the next level of design.
Orchestra Pit Equipment

An orchestra pit is typically a large depressed area between the fixed edge of the stage and the audience. However, for many productions it is desirable to have that area at the same elevation as the rest of the stage so that it is accessible for performers or presenters or to establish singer/orchestra interaction. At this time it is not known if an orchestra pit will be required. If one is included, a full set of pit filler platforms will be furnished in order to cover the orchestra pit opening when not in use. These platforms will be able to be set up at stage level or removed to provide access to the orchestra pit for pit bands. If an orchestra pit is established as a high priority, a fully motorized orchestra pit lift would replace the pit filler platforms. This system would allow faster and easier changeovers from an event requiring the orchestra pit to an event for which the orchestra pit is not required.

Production Audio, Audio Reinforcement and AV Equipment

A complete production audio and sound reinforcement system will be planned into the facility support equipment design. These will support a variety of activities on various levels. These include stage - audience space audio, audio for lobby and pre-function areas as well as academic and laboratory areas within the performing arts, production and support, lecture and instructional activities for the Theatre program. The performance space will serve the educational needs including AV equipment for the academic training programs being executed as a facet of the university curriculum.

Audio/Sound Reinforcement System and Controls

The Audio/Sound Reinforcement System, including emergency public announcements package will include what is typically referred to as the "Public Address" system support both in the performance venue and throughout the entire Academic complex of spaces. This will include the ability to inform people about emergency public announcements, including but not limited to weather, security and other emergency notifications.

Two central control points will be provided in the equipment package to operate the Audio/Sound Reinforcement System. One control will have the ability to be run from any one of several positions as required for individual shows. One position will be at the control booth at the rear of the audience chamber, additional places will be identified as the design progresses. The second control point that can reach those support and academic areas outside of the Theatre itself will be located at the central academic office for theatre.

Presentation Audio and AV Equipment

The Presentation Audio and AV Equipment package will provide for complete audio reinforcement for both production sound and amplification of individual performer voices. The package will provide for multiple wireless body microphones controlled through different channels so the total auditory presentation can be mixed and balanced during performance. For sound effects a series of portable speaker locations will be provided throughout the performance chamber. The audio circuits provided will be a base on which future expansion can be built.

The Presentation Audio and AV Equipment package also will include for a complete production communications, show monitoring, projection and screens package.

Monitoring and remote TV Viewing System package

Based on today's technology a Close Circuit Camera and TV monitoring system and remote TV Viewing System will be wired throughout the Theatre Department complex of spaces. The closed circuit system will allow classrooms, rehearsal spaces, faculty office, shops, dressing areas and even the lobby areas to be connected together for both information and communication. For example, this would allow production work to continue in shop areas while individuals monitored a production or rehearsal in progress thus making waiting time productive.
PHASE 2 THEATRICAL SYSTEMS

The "new" Multiform Performance/Presentation Venue

The space planned within the existing Hilberry Theatre former church building will support a wider range of performance and/or assembly activities than a traditional theatre. In addition to providing academic flexibility, the multiform facility is planned to allow for rapid changeovers to accommodate a wide variety of events. This capability increases the potential number of public event days available within the venue and creates greater options for both campus and community usage.

Multiform venues are often referred to as "blackbox" theatres, yet they are rarely "black" and even more rarely shaped like a perfect "box." What multiform rooms do share in common is the ability to alter the presentation and audience relationship to meet the different criteria desired by a variety of event users. Much like ballrooms in hotels and convention centers, multiform rooms may host a dance performance, followed by a catered "at table" dinner, followed by a lecture or awards presentation with rows of seats and a head table, followed by an intimate music recital. Often at peak use times, such a space is expected to accommodate more than one type of event in a single day. Therefore, the success of a multiform venue is often judged by how efficiently the room can be transformed for the next user.

Honoring the existing church facility's structural and floor elevations will be more easily accomplished by renovation into a multi-use venue. As a multiform, the space can fulfill the public performance needs of the WSU Dance and Music program events while also serving many other campus public assemblies in need of appropriate facility support. These assemblies include recognition events, dinners, alumni receptions, donor development functions, etc.

To retain the historic Hancock Avenue entry while opening the building's face to Cass Avenue, the public lobby and pre-function area will include space parallel to Cass Avenue. This arrangement will allow a rectangular presentation/assembly area to be created within the original auditorium chamber. With large door openings created between the Cass Avenue side lobby and the event room, the two spaces can be virtually one space or segregated as operation demands. With an expanded lobby, more accommodating entry points and restroom facilities can be included to meet Americans with Disabilities standards, while adding to the building's Cass Avenue presence.

The multiform event room will feature a flat floor space roughly two stories high with access points on all four sides. While the Cass and Hancock sides will be primarily audience entry oriented and the two opposite walls "back of stage" oriented, only the space to the west of the room will be reserved as event support exclusively. That event support could include elements such as a catering marshalling area, materials holding, performer off stage space as well as storage for items such as banquet tables, stackable seating carts, drapery, etc. To allow appropriate sightlines for Dance and Music events, units stored on the north wall will pull out, complete with theatre style seating that can fold up for use or fold down flat to move into storage.
Theatrical Equipment

Specialty lighting and theatrical equipment will be planned to support a variety of activities on various levels. These include stage, audience space, lobby and pre-function areas as well as academic and laboratory activities in the performing arts, production and presentation in the performing arts. University and instructional meeting activities within the event room will also be supported. The lighting will support dance, music and some drama performance as well as a myriad of Wayne State University and potential community functions unrelated to the performance arts.

Theatrical Light Dimming and Controls

Theatrical lighting will consist of 288 fully programmable dimmable or non-dim circuits. Three dimmer racks of 96 circuits each will be furnished; portions of the third rack will support facility-wide dimmable lighting. The individual circuits for theatrical style event lighting are designed to be accessed throughout the theatre space, including access via tension grid platforms or catwalks to serve the event lighting and support locations. Drop boxes allow lighting to be placed in a variety of locations and they allow any pipe batten to be used for theatrical lighting or special effects. This feature is particularly flexible for future needs.

One control console to control the stage and house lighting will be provided in the equipment package. The console is to be located at any one of several positions as required for individual shows. With one position at the control booth in the rear of the audience chamber, additional locations where the lighting console can be plugged in and located will be identified as the design progresses. With modern lighting consoles, the cost to install additional receptacles is minimal. Every effort will be made to anticipate all possible operational locations.

House lighting will be controlled using dedicated houselight control stations. The houselight control system will be software-based, allowing access not only to dedicated houselights but also selected theatrical lighting circuits. This system simplifies the set-up for lectures, pure music functions using the orchestra shell, and other activities not requiring the more complex theatrical control console.

Control wiring will be distributed throughout the catwalks and to the electrics battens above the stage to provide the opportunity for the rental or future purchase of color scrollers for theatrical lights or even "intelligent" lighting fixtures.

Theatrical Light Fixtures and Luminaries

The design will provide for two or more followspots, approximately 150 stage lighting fixtures, 25 "intelligent" lighting fixtures and work lights. These lighting fixtures are not permanently wired, thus allowing all lighting fixtures to be set up for each event. The fixtures should provide the University with the ability to light and serve its own events and to provide supplemental support to outside productions. At any time, the Theatre Department can add to this basic inventory, either one fixture at a time or by purchasing whole groups of fixtures. Due to the fact that the fixtures are plugged in for each event, there is no additional contracting required to add fixtures. The amount of additional house-owned fixtures the facility requires will depend on the course of future programming growth. The fixtures provided are a base on which future expansion can be built.
Draper and Rigging

In the ceiling space, stage scenery and/or masking battens will be installed so that drapery can be attached as required. These battens will be motorized computer-controlled elements that can be controlled at the event floor level. A full complement of stage drapery panels will be furnished for the venue. Included in the inventory will be a main curtain with side traverse operation as well as vertical and horizontal masking panels.

In addition to the stage or performance draperies, there will be a full complement of motorized acoustic drapes. These drapes will be located throughout the event room at areas selected to provide the best acoustical conditions for events as varied as spoken word or music presentations. These acoustical draperies will be operated using motor controls located at the event floor and possibly at one other control location.

A motorized remote control projection screen will be provided for instructional and lecture presentations. As the room’s geometry will vary by event, the projection screen will attach to one of the several rigging battens mentioned previously. The type of screen will be based on Owner consideration of cost and benefit factors. One option is a screen that supports both front and rear projection. Another approach is a screen that supports only front projection. These decisions will be made during the next level of design.

Audio/Sound Reinforcement System and Controls

The Audio/Sound Reinforcement System, including emergency public announcements package will include what is typically referred to as the “Public Address” system support both in the performance venue and throughout the entire Academic complex of spaces. This will include the ability to inform people about emergency public announcements, including but not limited to weather, security and other emergency notifications.

Two central control points will be provided in the equipment package to operate the Audio/Sound Reinforcement System. One control will have the ability to be run from any one of several positions as required for individual shows. One position will be at the control booth at the rear of the audience chamber, additional places will be identified as the design progresses. The second control point that can reach the support areas outside of the Theatre itself will be located at the central management office for multi-form theatre.

Presentation Audio and AV Equipment

The Presentation Audio and AV Equipment package will provide for complete audio reinforcement for both production sound and amplification of individual performer voices. The package will provide for multiple wireless body microphones controlled through different channels so the total auditory presentation can be mixed and balanced during performance. For sound effects a series of portable speaker locations will be provided throughout the performance chamber. The audio circuits provided will be a base on which future expansion can be built. This is especially important as the uses become more defined and then re-defined with a flexible performance environment.

The Presentation Audio and AV Equipment package also will include for a complete production communications, show monitoring, projection and screens package.

Monitoring and remote TV Viewing System package

Based on today’s technology a Close Circuit Camera and TV monitoring system and remote TV Viewing System will be wired throughout the venues complex of spaces. The closed circuit system will allow support rooms, rehearsal preparation spaces, offices, shops, dressing areas and even the lobby areas to be connected together for both information and communication. For example, this would allow catering to monitor production to predict when meals need to be served as part of the event progression.
SUSTAINABILITY STATEMENT

The Hillberry Gateway Project features three main sustainable components.

Adaptive Re-Use

One of the most sustainable solutions in construction is to reuse or salvage an existing building. Adaptive re-use prevents aged materials from reaching landfills, does not require the use of resources for new materials nor the energy and costs associated with transporting these materials. Not only will the Hillberry Gateway Project adapt and re-use the existing Hillberry Building, but the historic MacKenzie House will be relocated rather than demolished.

Energy Efficiency

The Hillberry Gateway Project is designed to be more efficient in its energy use with new mechanical and electrical systems in the new and renovated portions. The cornerstone of this sustainable component will be the displacement ventilation planned for the Main Thrust Stage. This means of supplying air from under the seats is more efficient than conventional heating and cooling due to the supply of air closer to occupants. The conditioned air is supplied at a temperature closer to the optimal patron comfort level. Displacement ventilation also delivers better quality air to theater patrons.

Green Space

It is the goal of the Hillberry Gateway Project to include outdoor performance space and green space to improve the surrounding area. This sustainable component will complement and enhance the surrounding community's Mid-Town Loop effort. Green space benefits both air quality and storm water management, as it enhances the overall ambiance of the building and its setting.

These components will be the foundation for a sustainable facility in the heart of Detroit. Additional measures can be planned to reduce the Gateway Project's environmental impact. Planning for sustainability will enhance Wayne State University's dedication to the community by demonstrating a commitment to the environment.
Indoor Air Design Conditions - Temperature and Humidity
Summer: 72-75°F dbt, 50-55%RH
Winter: 72-75°Fdbt, not humidified

Outside Air Ventilation Rates
Outside air ventilation rates will be in accordance with ASHRAE Standard 62.1-2007 “Ventilation for Acceptable Indoor Air Quality” and the Michigan Mechanical Code.

Site Utilities
- Storm water from the new addition’s roof will be routed off of the roof through a new roof drainage system to below-ground and to the site storm main located below the street. An overflow roof drainage system will be provided as required by code.
- The new addition’s sanitary loads will be routed to the site sanitary system located below the street.
- City water from the site system will be extended to the new building.
- Natural gas will be extended to the new building as required for the hot water heating system and domestic hot water heating boilers.

PLUMBING SYSTEMS:
- New sanitary waste and vent piping will be provided as required to serve new plumbing fixtures in both the new and existing buildings. Sanitary piping will be routed to below grade and to the exterior of the building where it will be connected to the site sanitary system.
- New water service to the building will be extended as required to serve new plumbing fixtures in both the new and existing buildings. This new water service will be provided with a reduced pressure zone principle backflow preventer immediately after the water meter. All above ground plumbing in the existing building will be replaced with new plumbing.
- A direct vented, condensing type water heater with storage tank will be provided to generate hot water, and piping will be extended as required to serve the new plumbing fixtures in the new and existing buildings. A hot water recirculation pump will be provided to keep the domestic hot water piping system warm. All above ground plumbing in the existing building will be replaced with new plumbing.
- Low flow plumbing fixtures with manual flush valves for water closets, battery operated sensor flush valves for urinals, and battery operated sensor faucets for lavatories and sinks will be provided.
- It is anticipated that these plumbing fixtures will reduce water use in this new space by approximately 40% below the Energy Policy Act of 1992.

FIRE PROTECTION SYSTEM:
- The new building requires and will be provided with a new fire pump and standpipe system.
- Automatic sprinklers will be installed throughout.
- The fire protection system shall be designed in accordance with NFPA 13, NFPA 14, and City of Detroit requirements.

HVAC SYSTEMS:
- The concept for HVAC of the spaces is as follows:
  - Provide a displacement ventilation system for the new theatre and Multiform Performance Spaces. Outdoor air will be pre-treated with an enthalpy wheel energy recovery coil to reduce energy consumption.
  - Provide a variable air volume air handling system with terminal units to serve the smaller dressing room, green room, wardrobe, and associated spaces.
  - Provide constant volume air handling units to serve larger scene shops, costume shops, lobby, and pre-function spaces.
- The air handling units will include 30% pre and 95% final air filters, enthalpy wheel energy recovery for high outdoor air percentage units, hot water heating coil with redundant pumps, chilled water cooling coil, and variable air volume supply and exhaust fans.
MECHANICAL SYSTEMS

Existing Mechanical Systems:

Plumbing Systems

Multiple problems exist with the site/storm drainage system that must be addressed to prevent basement flooding. There is a sump pump located outside that pumps site drainage into the building and to a janitor closet sink. There are two drain tile sump pumps located in the basement that pump into the same sink. This sink plugs on occasion and causes flooding of the basement. This merits further investigation, but it is assumed that new below-floor drain tile is required, along with a new storm sump pump that will pump directly to the site drainage system outside the building.

Hot and cold water piping within the building is mostly original and is recommended for replacement with plumbing upgrades. The domestic hot water heaters are relatively new units located in the boiler room. These were added with the steam boilers a few years ago.

Fire Protection

Fire pump is not adequate in capacity at 500 GPM and 42 PSI to serve stage standpipes and the sprinkler system, and would require replacement with the building upgrades and/or any additions to bring the building up to code.

Chilled Water

The chilled water system, sized at 92 tons, was sized for the existing theatre equipment and was configured without expansion capability. The addition to the building will require added chilled water capacity. The system consists of an outdoor condensing unit and an indoor evaporator tube bundle. The condensing unit is located in the area of building expansion, and will require relocation. The chilled water serves cooling coils in the air handling units.

Heating System

The steam boiler system, with a firm capacity of 1040 lbs per hour, was sized for the existing theatre equipment. The steam serves heating coils in the air handling units as well as perimeter steam radiators throughout the building. The condensate return system/boiler feed system is inadequately sized, resulting in wasted condensate on occasion. The building expansion will require an expansion of the heating plant, preferably a high efficiency condensing water boiler in lieu of steam. It is not recommended to re-use or expand the steam system as there is much inefficiency/additional maintenance associated with heating systems that use steam.

Air Handling System

The existing air handling systems are original, in poor condition, noisy, lack adequate filtration, are beyond their expected useful life, and require replacement.

New Mechanical Systems:

Codes and Standards of Jurisdiction
- 2009 Michigan Building Code
- Uniform Federal Accessibility Standards
- 2009 Michigan Mechanical Code
- 2009 Michigan Plumbing Code
- 2002 NFPA 13 Sprinkler Systems
- 2002 NFPA 14 Standpipe Systems
- NFPA 70 - National Electrical Code 2008 Edition with Wayne State University modifications

Outdoor Air Design Conditions
HVAC Winter: -10F & 0% RH
HVAC Summer: 89F DB / 71F WB (ASHRAE 2.5%)
Indoor Air Design Conditions - Temperature and Humidity
Summer: 72-75°F dbt, 50-55%RH
Winter: 72-75°F dbt, not humidified

Outside Air Ventilation Rates
Outside air ventilation rates will be in accordance with ASHRAE Standard 62.1-2007 “Ventilation for Acceptable Indoor Air Quality” and the Michigan Mechanical Code.

Site Utilities
- Storm water from the new addition’s roof will be routed off of the roof through a new roof drainage system to below-ground and to the site storm main located below the street. An overflow roof drainage system will be provided as required by code.
- The new addition’s sanitary loads will be routed to the site sanitary system located below the street.
- City water from the site system will be extended to the new building.
- Natural gas will be extended to the new building as required for the hot water heating system and domestic hot water heating boilers.

Plumbing Systems:
- New sanitary waste and vent piping will be provided as required to serve new plumbing fixtures in both the new and existing buildings. Sanitary piping will be routed to below grade and to the exterior of the building where it will be connected to the site sanitary system.
- New water service to the building will be extended as required to serve new plumbing fixtures in both the new and existing buildings. This new water service will be provided with a reduced pressure zone principle backflow preventer immediately after the water meter. All above ground plumbing in the existing building will be replaced with new plumbing.
- A direct vented, condensing type water heater with storage tank will be provided to generate hot water, and piping will be extended as required to serve the new plumbing fixtures in the new and existing buildings. A hot water recirculation pump will be provided to keep the domestic hot water piping system warm. All above ground plumbing in the existing building will be replaced with new plumbing.
  - Low flow plumbing fixtures with manual flush valves for water closets, battery operated sensor flush valves for urinals, and battery operated sensor faucets for lavatories and sinks will be provided.
  - It is anticipated that these plumbing fixtures will reduce water use in this new space by approximately 40% below the Energy Policy Act of 1992.

Fire Protection System:
- The new building requires and will be provided with a new fire pump and standpipe system.
- Automatic sprinklers will be installed throughout.
- The fire protection system shall be designed in accordance with NFPA 13, NFPA 14, and City of Detroit requirements.

HVAC Systems:
- The concept for HVAC of the spaces is as follows:
  - Provide a displacement ventilation system for the new theatre and Multiform Performance Spaces. Outdoor air will be pre-treated with an enthalpy wheel energy recovery coil to reduce energy consumption.
  - Provide a variable air volume air handling system with terminal units to serve the smaller dressing room, green room, wardrobe, and associated spaces.
  - Provide constant volume air handling units to serve larger scene shops, costume shops, lobby, and pre-function spaces.
  - The air handling units will include 30% pre and 95% final air filters, enthalpy wheel energy recovery for high outdoor air percentage units, hot water heating coil with redundant pumps, chilled water cooling coil, and variable air volume supply and exhaust fans.
• Areas such as entrance vestibules will be provided with hot water cabinet unit heaters.

• Outdoor air supplied to high occupancy/high latent load spaces will be on a demand-controlled basis utilizing CO2 sensors.

• New roof-mounted air cooled chillers will be provided to handle the cooling loads of the building. This new chilled water system will be provided to serve both the new and existing buildings.

• High efficiency condensing hot water boilers will be utilized to generate hot water for both new and existing building heating. Design heating hot water temperature will be reset based on outdoor air temperature, and will be low enough during non-peak periods to take advantage of the higher efficiencies obtainable with the high efficiency condensing boiler.

**CONTROL SYSTEMS:**

• The building’s heating hot water system, chilled water system, and air handling systems will be controlled by a networked building automation system (BAS). Each individual temperature controlled zone will include a room temperature sensor or controller that will be monitored and adjusted through BAS Owner interface. Depending on location, DDC room temperature sensors will be capable of tenant push-button override of the unoccupied mode, zone temperature display, and zone temperature set point adjustments within prescribed limits.

• The BAS system will consist of stand-alone, microprocessor based direct digital control (DDC) panels (controllers), temperature sensors, relays, switches, transducers, airflow probes, static pressure probes, current sensors, etc.

• Boilers and chillers will be equipped with packaged controls for self-contained operation. Various monitoring points and setpoint adjustment points associated and available with the packaged controls will be integrated with the BAS. Chiller activation and sequencing will be accomplished through the DDC system. Boiler activation and sequencing will be accomplished through a boiler sequencing panel furnished by the boiler supplier.

• Lighting for interior general public spaces and corridors and lighting for the building’s exterior will be controlled by the BAS.

• Electronic valve and damper actuators will be used for all HVAC equipment control valves and dampers.

• A demand controlled ventilation strategy using space-mounted CO2 sensors to modulate ventilation air terminal units will be incorporated where appropriate.

• The BAS will be connected to and capable of communicating through the Owner’s selected non-dedicated local area network. Operator interface will be accessible through a standard web browser application located on any PC connected to the local area network. A complete graphics package will be provided to include floor plan overviews of building temperatures and links to all systems connected to the BAS. The BAS will be configurable to provide specific alarm notification to e-mail or text message pager addresses.
ELECTRICAL SYSTEMS

Existing Electrical Systems:

Electrical Distribution

Main Switchboard

The existing main switchboard is a Siemens 2000A, 208/120V, 3Ph, 4W located in the main electrical room. The main switchboard provides power to the entire building and is connected to an outdoor DTE Net bank 208/120V service.

The existing main switchboard is a switch and fuse type, with no spares available. Some space is available for an additional switch. However, it appears that the current chiller upgrade project will occupy any remaining space in the main switchboard.

The existing main switchboard appears to be in good condition.

Distribution Panelboards

There are two distribution panelboards located in the mechanical room. One distribution panelboard is a 400A, 240/120V, 3Ph, 4W and is original to the building. A 800A, 208/120V, 3Ph, 4W new distribution panelboard was recently added under the chiller project.

The existing distribution panelboard is switch and fuse type. There are three spares in the distribution panelboard. The existing distribution panelboard appears to be in fair condition.

Panelboards

There are a number of receptacle/lighting panelboards located throughout the building. Most of the panelboards are 200A, 208/120V, 3Ph, 4W. New panelboards have been recently added under the boiler and chiller projects.

The existing panelboards are circuit breaker type. There are a limited number of spares and spaces in each panelboard.

The existing panelboards appear to be in good condition. We are unaware if the breakers have been properly maintained.

Disconnect/Starters

There are a number of combination disconnects/starters for the mechanical equipment.

The existing disconnects/starters appear to be in fair condition.

Receptacle Outlets

There are a number of receptacle outlets located throughout the building.

The existing receptacle outlets appear to be in good condition. However, some receptacle outlets and coverplates are damaged.

Grounding

We have not been able to verify if the electrical distribution in the building, receptacle outlets, etc are properly grounded.

Electrical Lighting Systems

Lighting

The existing lighting consists of a variety of lamp sources including incandescent and fluorescent lamps. Lighting in the main lobby includes chandeliers, wall sconces, downlights and track lighting. Lighting in mechanical rooms consists of linear fluorescent light fixtures with T12 lamps. Lighting in corridors, storage rooms and other support areas consist of incandescent light fixtures.

There is a theatrical lighting dimmer system consisting of theatrical incandescent fixtures located on the catwalk. The theatrical lighting system manufacturer is ETC and it appears to have been installed a few years ago. The master control for the theatrical lighting dimmer system is located in the control booth. Exit signs are located throughout the building. Most of the exit signs have incandescent lamps and some
have LED lamps. The exit signs appear to be in fair condition. Emergency battery units are located throughout the building and provide emergency egress lighting. The emergency battery units appear to be in good condition. However, we did not test the emergency battery units to confirm if they operate properly.

Switching

Lighting is controlled from local light switches located in each room. There are no occupancy sensors or low voltage lighting controls for the lighting.

Electrical Auxiliary Systems

Fire Alarm

A new fire alarm system was recently installed as part of a separate project. The Notifier fire alarm system consists of a voice system including pull stations, speakers, strobes, smoke detectors, duct smoke detectors, tamper and flow switches.

Telecommunications

There is a telecommunications rack located on the first floor. The telecommunications rack provides connectivity for the data outlets. There is a minimal amount of data outlets located throughout the building. The condition of the data wiring is not known.

New Electrical Systems-

Typical Electrical Power Densities

- Lighting 1.2 watts/ft²
- General Power 6 watts/ft²
- Mechanical Equipment 10 watts/ft²

Illumination for Typical Interior Spaces

- Main Entry 20 footcandles
- Gateway Lobby 20 footcandles
- Pre-function 20 footcandles
- Back of House 30 footcandles

- Main Stage
- Scene Shops
- Costume Shops
- Telecommunication Room
- Mechanical/Electrical Rooms
- Elevator Machine Rooms
- Elevator Pit
- Storage Areas
- Restroom Facilities

Illumination for Typical Exterior Spaces

- Walkways 0.5 footcandle (min)
- Building Perimeter 2 footcandles

POWER DISTRIBUTION

Primary Service

A new 4.8kV primary service will be provided from a nearby DTE primary manhole. The new 4.8kV primary service will terminate at an outdoor primary metering cabinet and 5kV primary switch. The primary metering cabinet and 5kV 600A primary switch will be located at the West side of the existing Hilberry Theatre.

Secondary Distribution

A 1500kVA, 480-277V, 3PH, 4W outdoor pad-mounted transformer will be located next to the primary metering cabinet and 5kV primary switch.

A 2500A, 480/277V, 3 Ph, 4 W switchboard will be located in the main electrical room in the building addition. The new switchboard will provide power for the new building addition, renovated building and the 95W Hancock future addition.

Dry type step down transformers will be provided to transform power from 480 volts to 208/120 volts. General branch circuit power and lighting requirements will be located throughout the building and will utilize 208/120V, 3
phase, 4 wire receptacle panels and 480/277V and 208/120V lighting panels. Lighting panels will be 480/277V NEMA PB1 style panelboards. Receptacle panels shall be 208/120V, NEMA PB1 style panelboards. All branch circuits shall utilize a separate neutral and a separate insulated ground.

A 800A, 480/277V, 3 Ph, 4 W distribution panelboard will provide power to the mechanical equipment. Motors 1/2 horsepower and larger will be 480 volt, three phase. Motors smaller than 1/2 horsepower will be 120 volt. Elevator motor shall be 480 volt, three phase. Motor starters will have combined fusible disconnects and motor starters, including bimetal overloads, two field convertible contacts, running light, “H-O-A” selector switch, “start” push button and fused control transformer.

Wiring Devices

Receptacles shall be provided throughout the building as required and shall be 20 ampere, 125 volt, NEMA 5-20R configuration. A maximum of six receptacles will be connected per circuit. Special receptacles and dedicated receptacles will be provided in areas as required. Toilet rooms and all other areas with sinks shall have GFI protected receptacles within six feet of the sinks. Individual GFI receptacles will be used.

Special Power Requirements

Surge Protective Device (SPD) will be provided at the main switchboard.

Isolated ground system will not be provided.

A 150 kW, 480/277V, 3Ph, 4W natural gas engine generator will provide back-up for the egress emergency lighting, exit signs and elevator. The emergency generator will be located outdoors on grade next to the outdoor pad mounted transformer. The emergency generator will be provided with a critical grade muffler sound-attenuated outdoor enclosure. Emergency distribution systems including automatic transfer switches and emergency distribution panelboards will be located next to the main electrical room.

Lighting Systems

Lighting levels will be designed to meet the ASHRAE 90.1-2007 Energy Standard. Lighting shall meet the Illuminating Engineering Society (IES) guidelines. Lighting fixtures shall be specification grade and UL listed.

Fluorescent lighting fixtures shall utilize 277 volt, fused, high power factor, Class A sound rated, Class P thermal rated, low harmonic, electronic ballasts and T-8 and compact fluorescent, 3500 degree Kelvin lamps. Lighting fixtures in spaces without lay-in ceilings such as storage rooms, mechanical and electrical rooms shall be industrial type.

Switching of light fixtures will be on an individual room basis. Three lamp fluorescent lighting fixtures will have multilevel switching to provide varying levels of illumination within a space. Infrared type motion sensors will be used for control of light fixtures in every room to comply with ASHRAE 90.1-2007 Energy Standard.

Common areas and corridors will be controlled by an automatic lighting control panel. Low voltage switches will be provided for manual override of automatic lighting controls.

Exit lights shall be 277 volt emergency LED type powered by integral battery packs. Units will be located to identify paths of egress. Emergency lights in corridors shall be fluorescent lighting powered by integral battery packs. These fixtures will be distributed among the normal fluorescent fixtures to illuminate the paths of egress.

Fire Alarm Systems

The point addressable fire alarm system shall be expanded to include the building additions. Fire alarm devices in the existing building will be relocated as required to accommodate the building renovation. The fire alarm system will include: manual pull stations, duct smoke detectors on mechanical air handling units, audible/visual and visual alarms (strobos shall meet A.D.A. requirements), flow switches, as well as tamper switches and a remote annunciation panel located at the main entrance. The fire alarm system is connected to
the WSU Department of Public Safety in case of emergency. All fire alarm system wiring shall be in conduit. No wiring other than fire alarm system wiring shall be allowed in fire alarm conduits.

*Telecommunications/Data Systems*

2-4” conduits will be provided from the Building Entrance Room to an existing telecommunications manhole.

A Building Entrance Room (BE) will be provided. A Telecommunication Room (TR) will be provided.

The Building Entrance Room (BE) will have fireproof plywood backboard on every wall; four dedicated 120 volt receptacles, and a ground bus. Power will be provided at the telecommunication racks in the BE room.

The Telecommunication Room (TR) will have fireproof plywood backboard on every wall; two dedicated 120 volt receptacles, and a ground bus. Power will be provided at the telecommunication racks in the TR room.

3-4” conduits will be provided between the BE room and the TR room.

Raceways and back boxes for telephone and data outlets will be provided where required. Conduits from outlet boxes will be stubbed up into the cable tray located above the corridor ceiling. Electronics in the BE and TR rooms and wiring for telephone and data will be provided per the WSU Telecommunications Design Standards. Telecommunication systems will meet WSU Telecommunication/Data System specification requirements.

*Security Systems*

Raceways, back boxes and power for security systems will be provided where required. Equipment and wiring for security will be provided by the Owner.

*Lightning Protection Systems*

The building shall not be equipped with a master labeled lightning protection system.

*Grounding Systems*

Grounding systems to meet the requirements of the National Electric Code will be provided. All feeder and branch circuit conduits will be provided with an equipment-grounding conductor. Special equipment or system grounding requirements will be provided.
# Project Details - Cost Information

Hilberry Gateway Project  
Wayne State University  
Cost Model Summary  
1/6/2011 revised 2/28/11  
Prepared by TMP Architecture  

<table>
<thead>
<tr>
<th></th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Total Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option A</strong></td>
<td>$22,103,205</td>
<td>$15,206,936</td>
<td>$5,407,106</td>
<td>$42,717,247</td>
</tr>
</tbody>
</table>

New Thrust Theatre and Renovated Multiform Theatre & Relocation of Mackenzie House based on relocation distance of approximately 3-4 blocks  

| **Option D**     |            |            |            | $3,492,111    |
|                  |            |            |            |               |

Renovated 95 W. Hancock Building  

Note: All costs exclude WSU costs and fees.
# Project Details - Naming Opportunities

**Hilberry Gateway Project - Wayne State University**  
5/30/2011

Prepared by TMP Architecture

**Named Spaces Opportunities - New Construction (Phase One)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Stage House and Thrust Stage</td>
<td>$3,750,000</td>
</tr>
<tr>
<td>New Thrust Theater and Gallery</td>
<td>$6,600,000</td>
</tr>
<tr>
<td>New Gateway Lobby</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>New Green Room</td>
<td>$350,000</td>
</tr>
<tr>
<td>New Dressing Rooms (2)</td>
<td>$350,000</td>
</tr>
<tr>
<td>New Assembly Shop</td>
<td>$1,300,000</td>
</tr>
<tr>
<td>New Makeup Room</td>
<td>$130,000</td>
</tr>
<tr>
<td>New Wardrobe Room</td>
<td>$130,000</td>
</tr>
<tr>
<td>New Control Booths (5)</td>
<td>$100,000</td>
</tr>
<tr>
<td>New Box Office</td>
<td>$250,000</td>
</tr>
<tr>
<td>New Office Suite</td>
<td>$250,000</td>
</tr>
<tr>
<td>New Trap Room and Understage</td>
<td>$1,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$17,710,000</strong></td>
</tr>
</tbody>
</table>

**Named Spaces Opportunities - Renovation (Phase Two)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiform Theater</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Pre-function Spaces (2)</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Makeup Room</td>
<td>$80,000</td>
</tr>
<tr>
<td>Dressing Rooms (2)</td>
<td>$80,000</td>
</tr>
<tr>
<td>Lobby</td>
<td>$1,700,000</td>
</tr>
<tr>
<td>Arts Center/Patron Lounge</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Theater Loft</td>
<td>$250,000</td>
</tr>
<tr>
<td>Control Booths (5)</td>
<td>$100,000</td>
</tr>
<tr>
<td>Studio Theater</td>
<td>$1,500,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$11,410,000</strong></td>
</tr>
</tbody>
</table>

**Named Spaces Opportunities - New Construction (Phase Three)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Scene Shop One</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>New Scene Shop Two</td>
<td>$750,000</td>
</tr>
<tr>
<td>New Paint Shop</td>
<td>$500,000</td>
</tr>
<tr>
<td>New Costume Shops (2)</td>
<td>$500,000</td>
</tr>
<tr>
<td>New Prop Shop</td>
<td>$880,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,630,000</strong></td>
</tr>
</tbody>
</table>
APPENDIX A - ACKNOWLEDGEMENTS

The College of Fine, Performing and Communication Arts gratefully acknowledges the following organizations for their financial in support of the Hilberry Gateway Project Study.

The Kresge Foundation

Wayne State University

The college also wishes to recognize those that participated in this project including:

The faculty, staff and students of Wayne State University's Department of Theatre
- Professor James Thomas, Ph. D., Interim Chair
- Professor Blair Anderson, Ph.D., Former Chair

The Maggie Allessee Department of Dance, Wayne State University
- Eva Powers, Interim Chair & Associate Professor

Board of Visitors, College of Fine, Performing and Communication Arts, Wayne State University
- Dan Kanter
- Delf Dodge

Facilities, Planning and Management, Wayne State University
- Jim Sears, Associate Vice President
- Anne-Lee Vandenbussche
- Christa Azar
- Matthew Bodhe

College of Fine, Performing and Communication Arts
- Matthew Seeger, Ph. D., Interim Dean
- Joan Ferguson, Assistant Dean

- Kevin McAlpine, Director of Development
- Kelly Cronin, Assistant Director of Development

Hilberry Gateway Project Focus Group Attendees including:
- Leslie Balian Bush - The Understudies
- Phoebe Mainster, Ph.D. - The Understudies
- Janet Schmitt - The Understudies
- Julianne Bjarnesen, Development Officer - Wayne State University
- Steve Calkins, Associate Vice President, Student Affairs - Wayne State University
- Andrea Dickson, Executive Vice President - Wayne State University
- Jane Hoehner, University Press - Wayne State University
- Sue Mosey - Midtown Detroit Inc.
- Ladene and Fred Schoen - Hilberry Subscribers
- John Vander Weg - Chair, Music Department, Interim Senior Associate Dean/Faculty Affairs, Wayne State University

TMP Architecture, Inc.
- Tim Casai, FAIA, President
- Derek Dinkeloo, AIA, Project Manager

- Van Phillips, President

Peter Basso Associates, Inc.
- Brian Runde, PE, LEED AP
- Jose Meijer, LEED AP

Hopkins Burns Design Studio
- Gene Hopkins, FAIA, Principal
APPENDIX B - FOCUS GROUPS

Meeting Minutes for the November 10, 2010, Focus Group Meetings

10:00 am Session

1. Blair Anderson kicked off the session and defined the 3 goals of the study and any ensuing project.
   A. Serve the students of the College.
   B. Present the finest theater in Detroit.
   C. Engage the community.

2. Tim Casail led the discussion on the definition of “Gateway” and what that means to the Hilberry. The group had the following comments:
   A. Raise up programs organic to the city.
   B. It should be a gateway to new development in the area.
      I. Upcoming developments include the Cass Greenway, to extend past the Hilberry, and multiple private projects in the works down Cass Ave.
   C. It should give Hilberry a new face to Cass, and extend to Forest Ave. Welcome people from Cass Ave.
   D. Respect the existing building, but add new, light, contemporary architecture to the area.
   E. Connect to entertainment in the city.
   F. A fantastic building.
   G. Claim the corner of Cass and Forest.
   H. Create a destination to attract people to the area.
      I. Turn the Hilberry outward.
      J. Make a statement.

K. Build off other projects in the area and influence new projects.
L. It should be iconic and forward thinking.
M. It should allow the whole area to thrive.
N. Give a reason to be there even when there isn’t a performance.
O. Change the perception of the area.
   I. Light
   II. Secure
   III. Transparent (“What’s going on in there?”)
   IV. Animated

3. The group discussed program elements, and gave the following comments:
   A. The facility should be multi-use, but additional functions should not water down specific use spaces.
   B. It should include a lobby/social space on Cass Ave.
   C. It should have connected parking, or a better visual connection and proximity to existing parking.
   D. Include people magnets.
      I. Retail
      II. Art
      III. Food
      IV. Music
      V. Tours
   E. E. Natural light in shops.
1:00 pm Session

4. Blair Anderson kicked off the session. See goals above.

5. Tim Casai led the discussion on the definition of “Gateway” and what that means to the Hilberry. The group had the following comments:
   A. The public should be able to see what is going on at the University.
   B. Let the public understand that the Hilberry is part of the University.
   C. Create an energy between the performance spaces in the facility – Create an awareness to all patrons to all the events that are happening in the facility – “What else is happening?”
   D. Bring Forest Ave. traffic into the Hilberry – With signage and with the architecture.
   E. Create a relationship between the public and the art. The intimate feel of the existing theater is an important aspect of this.
   F. The group discussed program elements, and gave the following comments:
      A. Incorporate film as a magnet.
      B. Not a community center.
      C. The existing stage has an identifiable audience/performer relationship that should be maintained.

D. Inclusive to the community.
E. The form should announce what it is.
F. Visually open – welcoming.
G. Beautiful.
H. It needs to grab the traffic on Forest.
I. The massing should be relatable to the neighborhood – part of the fabric.

8. The group discussed program elements, and gave the following comments:
   A. The existing stage is intimate. It should remain so.
   B. Outdoor space is important. Performance space and green space.
   C. Multiform stage for theater and dance.
   D. More performance spaces, including multi-media.
   E. More dance studios.
   F. Should music be a part?
   G. Costume and scene shops physically connected to the facility.

The Architect welcomes any additions and/or corrections to this memorandum.

Attachments
\dd-kjh
Meeting Minutes for the November 16, 2010, Faculty Meeting

1. Tim Casai led the discussion on the definition of “Gateway” and what that means to the Hilberry. The group had the following comments:
   A. Inviting to the community.
   B. Interactive.
   C. Sharing.
   D. “Host Space” for the community – Classes, art, performance.
   E. Transparency – Porous Surfaces - “Showcase what we do”.
   F. Enhancing the mission of the Theater Department.
   G. Create curiosity.
   H. A place to grow.
      I. Indoor/outdoor spaces.
      J. Gathering place – surrounded by art.
   K. Audience development.
   L. Space for community – Dance companies, pilates, yoga.
   M. Video display – Inside and outside.
   N. Connection to center of campus – Pathway – memorial bricks?
   O. Multiple options.
   P. The building should be a beautiful work of art.
   Q. Flexibility
      I. Unusual performance space
      II. Modular
      III. Comfortable to large and small audiences
      IV. Multiple surfaces for varied performances
      V. Storage

2. Tim Casai led the discussion on the existing Hilberry building and what it means to the faculty. The group had the following comments:
   A. Uninviting.
   B. Inward facing.
   C. Not entertaining.
   D. No space to extend the experience.
      I. Lectures
      II. Drinks
      III. Patron gatherings
   E. Bad sightlines – Rake of seating is bad.
   F. Bad acoustics.
   G. Stage and Audience Chamber are too wide.
   H. Could completely change – a new theater would be preferable.
      I. Controllable natural light is acceptable.

The Architect welcomes any additions and/or corrections to this memorandum.

Attachments
\dd-kjh
## Appendix C - Additional Cost Information

### Hilberry Gateway Project
Wayne State University
11/2/2010 revised 12/10/10 revised 1/8/11
Prepared by TMP Architecture

**Draft**

Room Description | Quantity | Unit Area | Net Area | Cost/SF | Net Cost  
--- | --- | --- | --- | --- | ---  
**Hilberry Theater**

### New Thrust Theater Construction

| **Main Level** |  |  |  |  |  
| --- | --- | --- | --- | --- | ---  
| Stage with motorized rigging & wings | 1 | 2,200 | 2,200 | $500 | $1,100,000  
| THRST Stage | 1 | 1,200 | 1,200 | $500 | $600,000  
| Theatre w/ Gallery (500 seats) | 1 | 6,000 | 8,000 | $500 | $3,000,000  
| Vomitories | 2 | 150 | 300 | $200 | $50,000  
| Side stage stairs | 2 | 300 | 300 | $200 | $50,000  
| Back stage toilets | 2 | 50 | 100 | $200 | $50,000  

| **Gateway Lobby/Gallery** |  |  |  |  |  
| --- | --- | --- | --- | --- | ---  
| Gateway Lobby/Gallery | 1 | 4,000 | 4,000 | $400 | $1,600,000  
| Gateway Toilets | 2 | 400 | 800 | $200 | $160,000  
| Gateway Café | 1 | 2,000 | 2,000 | $300 | $600,000  
| Stair and elevator | 1 | 1,000 | 1,000 | $200 | $200,000  

| **Green Rooms, Toilets, and Kitchenette** |  |  |  |  |  
| --- | --- | --- | --- | --- | ---  
| Green Room, Toilet, and kitchenette | 1 | 800 | 800 | $200 | $160,000  
| Dressing Rooms | 2 | 400 | 800 | $200 | $160,000  
| Make-up Room | 1 | 300 | 300 | $200 | $60,000  
| Wardrobe | 1 | 400 | 400 | $200 | $80,000  
| Assembly Shop | 1 | 3,000 | 3,000 | $200 | $600,000  
| Dock | 1 | 400 | 400 | $200 | $80,000  

| **Upper Level** |  |  |  |  |  
| --- | --- | --- | --- | --- | ---  
| Follow Spot Booth | 1 | 400 | 400 | $200 | $80,000  
| Prof. & Light Control Booth | 1 | 200 | 200 | $200 | $40,000  
| Sound Booth | 1 | 200 | 200 | $200 | $40,000  
| Dinner Room | 1 | 200 | 200 | $200 | $40,000  
| Lighting Shop | 1 | 400 | 400 | $200 | $80,000  

| **Box Office** |  |  |  |  |  
| --- | --- | --- | --- | --- | ---  
| Box Office | 1 | 600 | 600 | $200 | $120,000  
| Office Suites | 1 | 600 | 600 | $200 | $120,000  

| **Lower Level** |  |  |  |  |  
| --- | --- | --- | --- | --- | ---  
| Trap Room and crossovers | 1 | 3,000 | 3,000 | $150 | $450,000  
| Vomitories | 2 | 300 | 600 | $100 | $60,000  
| Storage | 1 | 500 | 500 | $100 | $50,000  

| **Total Net New SF** | 30,300 | **$9,620,000**  
| **Efficiency Factor** | 68% |  
| **Total Gross New SF** | 44,559 | **$12,471,765**  
| **Total Gross SF** | 44,559 | **$12,471,765**  

| **Site Development** | Acres 2 | Cost/Acre | **$250,000** | **$500,000**  
| **Design Contingency** | 10% |  
| **Construction Contingency** | 10% |  
| **Total Construction** |  |  | **$349.34** | **$10,560,118**  

| **Soft Costs** |  
| WSU Fees | 7 |  
| AVE Fees |  |  
| CM Fees |  |  
| Theater & Sound Equipment |  |  
| FF & E |  |  
| Instruments (Pianos) |  |  
| Technology |  |  
| Printing, Permits, Fees, etc. |  |  
| University Site Temporary Services |  |  
| **Total Soft Costs** |  |  | **$151.45** | **$5,857,087**  

| **Total Project Cost (2010 dollars)** |  |  |  | **$480.78** | **$121,423,205**  

Project Cost does not include:
- a. Financing Costs
- b. Land acquisition costs
- c. Consumable supplies
- d. Marketing and promotional costs
- e. Artwork
- f. Musical instruments other than pianos
- g. Hand tools
## Hilberry Gateway Project

Wayne State University

11/2/2010 revised 12/10/10 revised 1/6/11

Prepared by TMP Architecture

**Draft**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Quantity</th>
<th>Unit Area</th>
<th>Net Area</th>
<th>Cost/SF</th>
<th>Net Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hilberry Theater</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Multiform Theater Renovation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Main Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiform Theater w/ Gallery (200 seats)</td>
<td>1</td>
<td>6,500</td>
<td>6,500</td>
<td>$400</td>
<td>$2,600,000</td>
</tr>
<tr>
<td>Pre-function &amp; Box Office/Support</td>
<td>2</td>
<td>1,000</td>
<td>2,000</td>
<td>$300</td>
<td>$600,000</td>
</tr>
<tr>
<td>Makeup Room</td>
<td>1</td>
<td>200</td>
<td>200</td>
<td>$200</td>
<td>$40,000</td>
</tr>
<tr>
<td>Women's Dressing and Toilet</td>
<td>1</td>
<td>200</td>
<td>200</td>
<td>$200</td>
<td>$40,000</td>
</tr>
<tr>
<td>Men's Dressing and Toilet</td>
<td>1</td>
<td>200</td>
<td>200</td>
<td>$200</td>
<td>$40,000</td>
</tr>
<tr>
<td>Backstage Toilets</td>
<td>2</td>
<td>50</td>
<td>100</td>
<td>$200</td>
<td>$20,000</td>
</tr>
<tr>
<td>Crossover</td>
<td>1</td>
<td>500</td>
<td>500</td>
<td>$150</td>
<td>$75,000</td>
</tr>
<tr>
<td>Side Stage Stairs</td>
<td>2</td>
<td>362</td>
<td>724</td>
<td>$100</td>
<td>$72,400</td>
</tr>
<tr>
<td><strong>Upper Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lobby</td>
<td>1</td>
<td>4,230</td>
<td>4,230</td>
<td>$200</td>
<td>$846,000</td>
</tr>
<tr>
<td>Audience Toilets (lobby level)</td>
<td>2</td>
<td>550</td>
<td>550</td>
<td>$300</td>
<td>$165,000</td>
</tr>
<tr>
<td>Staff and elevator</td>
<td>1</td>
<td>400</td>
<td>400</td>
<td>$500</td>
<td>$120,000</td>
</tr>
<tr>
<td><strong>Lower Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lobby</td>
<td>1</td>
<td>1,200</td>
<td>1,200</td>
<td>$100</td>
<td>$120,000</td>
</tr>
<tr>
<td>Follow Spot Booth</td>
<td>1</td>
<td>400</td>
<td>400</td>
<td>$200</td>
<td>$80,000</td>
</tr>
<tr>
<td>Prep, &amp; Light Control Booth</td>
<td>1</td>
<td>200</td>
<td>200</td>
<td>$200</td>
<td>$40,000</td>
</tr>
<tr>
<td>Sound Booth</td>
<td>1</td>
<td>200</td>
<td>200</td>
<td>$200</td>
<td>$40,000</td>
</tr>
<tr>
<td>Dimmer Room</td>
<td>1</td>
<td>200</td>
<td>200</td>
<td>$200</td>
<td>$40,000</td>
</tr>
<tr>
<td>Lighting Shop</td>
<td>1</td>
<td>400</td>
<td>400</td>
<td>$200</td>
<td>$80,000</td>
</tr>
<tr>
<td>Side Stage Stairs</td>
<td>2</td>
<td>362</td>
<td>724</td>
<td>$100</td>
<td>$72,400</td>
</tr>
<tr>
<td>Staff and elevator</td>
<td>1</td>
<td>400</td>
<td>400</td>
<td>$300</td>
<td>$120,000</td>
</tr>
<tr>
<td><strong>Total Net Renovated SF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$7,455,800</td>
</tr>
<tr>
<td><strong>Efficiency Factor</strong></td>
<td></td>
<td></td>
<td></td>
<td>77%</td>
<td>Page 1</td>
</tr>
<tr>
<td><strong>Total Gross Renovated SF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$8,195,914</td>
</tr>
</tbody>
</table>

### A-2

<table>
<thead>
<tr>
<th>Total Gross SF</th>
<th>37,829</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Development</td>
<td>0.5</td>
</tr>
<tr>
<td>Design Contingency</td>
<td>10%</td>
</tr>
<tr>
<td>Construction Contingency</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total Construction</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Soft Costs

- **WSU Fees**
  - A/V Fees
  - CM Fees
  - Theater and Sound Equipment
  - FF & E
  - Instruments (Pianos)
  - Technology
  - Printing, Permits, Fees, etc.
  - University Site Temporary Services

<table>
<thead>
<tr>
<th>Total Soft Costs</th>
<th>$106,32</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Project Cost (2010 dollars)</strong></td>
<td>$402,00</td>
</tr>
<tr>
<td></td>
<td>$15,206,926</td>
</tr>
</tbody>
</table>

Project Cost does not include:
- a. Financing Costs
- b. Land acquisition costs
- c. Consumable supplies
- d. Marketing and promotional costs.
- e. Artwork
- f. Musical instruments other than pianos
- g. Hand tools

Page 2
### Hilberry Gateway Project
Wayne State University
11/2/2010 revised 6/11
Prepared by TMP Architecture
Draft

#### Hilberry Theater

**New 95 W. Hancock Replacement**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Quantity</th>
<th>Unit Area</th>
<th>Net Area</th>
<th>Cost/SF</th>
<th>Net Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scene Shop One</td>
<td>1</td>
<td>3,200</td>
<td>3,200</td>
<td>$200</td>
<td>$640,000</td>
</tr>
<tr>
<td>Scene Shop Two</td>
<td>1</td>
<td>2,200</td>
<td>2,200</td>
<td>$200</td>
<td>$440,000</td>
</tr>
<tr>
<td>Paint Shop</td>
<td>1</td>
<td>1,400</td>
<td>1,400</td>
<td>$200</td>
<td>$280,000</td>
</tr>
<tr>
<td>Deck</td>
<td>1</td>
<td>400</td>
<td>400</td>
<td>$200</td>
<td>$80,000</td>
</tr>
<tr>
<td>Laundry</td>
<td>1</td>
<td>600</td>
<td>600</td>
<td>$200</td>
<td>$120,000</td>
</tr>
<tr>
<td>Toilets</td>
<td>2</td>
<td>50</td>
<td>100</td>
<td>$200</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Costume Shop One</strong></td>
<td>1</td>
<td>1,300</td>
<td>1,300</td>
<td>$200</td>
<td>$260,000</td>
</tr>
<tr>
<td><strong>Costume Shop Two</strong></td>
<td>1</td>
<td>1,300</td>
<td>1,300</td>
<td>$200</td>
<td>$260,000</td>
</tr>
<tr>
<td><strong>Upper Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prop Storage</td>
<td>1</td>
<td>2,400</td>
<td>2,400</td>
<td>$200</td>
<td>$480,000</td>
</tr>
<tr>
<td>Toilets</td>
<td>2</td>
<td>50</td>
<td>100</td>
<td>$200</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Costume Storage</strong></td>
<td>1</td>
<td>2,400</td>
<td>2,400</td>
<td>$150</td>
<td>$360,000</td>
</tr>
<tr>
<td><strong>Costume Storage</strong></td>
<td>1</td>
<td>1,200</td>
<td>1,200</td>
<td>$150</td>
<td>$180,000</td>
</tr>
<tr>
<td><strong>Total Net Renovated SF</strong></td>
<td>16,800</td>
<td></td>
<td></td>
<td></td>
<td>$3,180,000</td>
</tr>
<tr>
<td><strong>Efficiency Factor</strong></td>
<td>65%</td>
<td>2,965</td>
<td></td>
<td>$150</td>
<td>$444,766</td>
</tr>
<tr>
<td><strong>Total Gross Renovated SF</strong></td>
<td>18,765</td>
<td></td>
<td></td>
<td>$183</td>
<td>$3,624,766</td>
</tr>
<tr>
<td>Site Development</td>
<td>1</td>
<td>250,000</td>
<td></td>
<td></td>
<td>$250,000</td>
</tr>
<tr>
<td>Design Contingency</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td>$357,471</td>
</tr>
<tr>
<td>Construction Contingency</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td>$357,471</td>
</tr>
<tr>
<td><strong>Total Construction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,649,447</td>
</tr>
</tbody>
</table>

### Soft Costs
- WSU Fees and costs: $308,100
- A/E Fees: $109,359
- CM Fees: $50,000
- Theater Equipment: $50,000
- FF & E: $0
- Instruments (Pianos): $50,000
- Technology: $50,000
- Printing, Permits, Fees, etc.: $50,000
- University Site Temporary Services: $50,000

**Total Soft Costs**: $383,32

**Total Project Cost (2010 dollars)**: $273,57

**Total Project Cost (2010 dollars)**: $5,407,106

Project Cost does not include:
- Financing Costs
- Land acquisition costs
- Consumable supplies
- Marketing and promotional costs.
- Artwork
- Musical instruments other than pianos
- Hand tools
### Mackenzie House Move

<table>
<thead>
<tr>
<th>Trade</th>
<th>Construction Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move structure/existing site:</td>
<td></td>
</tr>
<tr>
<td>General Conditions</td>
<td>$25,000</td>
</tr>
<tr>
<td>Bonds/permits/inspections</td>
<td>$5,000</td>
</tr>
<tr>
<td>Right of Way/Soil Erosion permits</td>
<td>$6,000</td>
</tr>
<tr>
<td>DTL, AT&amp;T, Comcast, etc.</td>
<td>$50,000</td>
</tr>
<tr>
<td>Selective demolition</td>
<td>$12,000</td>
</tr>
<tr>
<td>Move structure</td>
<td>$175,000</td>
</tr>
<tr>
<td>Existing foundation removal/backfill</td>
<td>$25,000</td>
</tr>
<tr>
<td>Site restoration/landscaping</td>
<td>$8,000</td>
</tr>
<tr>
<td><strong>SubTotal:</strong></td>
<td><strong>$306,000</strong></td>
</tr>
</tbody>
</table>

New site location:

- Excavate new foundation                                   | $15,000             |
- Basement walls and footings                               | $50,000             |
- Basement floor slab                                        | $12,000             |
- Structural steel                                           | $15,000             |
- Masonry restoration                                        | $35,000             |
- Carpentry restoration                                      | $55,000             |
- Plumbing                                                   | $12,000             |
- HVAC                                                       | $8,500              |
- Electrical                                                 | $7,500              |
- Site improvements                                          | $18,000             |
| **SubTotal:**                                              | **$228,000**        |

Construction Contingency (10%)                               | **$53,400**         |

25-Feb-11

**Notes**

- Allowance for temporary utility relocation
- Lifting, moving and setting structure

Reinforcing first floor for commercial use
- Between foundation and first floor at lift area

First floor structure and porches
- Underground rough in to house
- Temporary heating to protect house
- New service and temporary electrical
- Grading, seeding, landscaping, walks

**$587,400.00**

Estimate of probable Construction Cost (not including professional fees)
APPENDIX D - ADDITIONAL PHOTOS

Existing Thrust Stage

Existing Audience Seating

Existing Leaded Glass Windows

Existing Lighting

Corner of Cass & forest

Existing Box Office

Corner of Cass & Forest

Stage Steps

Audience Photo