REDEVELOPMENT OF THE GARVER FEED MILL:
SITE ANALYSIS AND CONCEPTUAL PLANS

Prepared for Olbrich Botanical Gardens

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May 2004

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Executive Summary

In winter 2004, the Urban and Regional Planning Department's Site Planning Class (URPL 601), taught by Dr. Jim LaGro Jr., undertook developing conceptual plans for the redevelopment of the Garver Feed Mill and adjacent property, which is currently owned by the City of Madison. The Garver Feel Mill is a historic structure that is not currently in active use. The large building is surrounded by property by the current and future grounds of the Olbrich Botanical Gardens. The class was charged will developing redevelopment plans for the site that would be revenue generating and compatible with Olbrich's mission.

The planning process for this Garver reuse analysis was broken down into two phases. Phase I of the project was the site analysis that examined physical characteristics, comparable projects, possible funding strategies, and stakeholder interests. Phase II of the project entailed developing three conceptual reuse plans for the Garver site. To complete each of the phases, Professor LaGro divided the class into working teams.

Phase I: Site Analysis

The intent of the site analysis phase of this project was to answer four basic questions affecting reuse of the Garver site. These questions included:

1. What physical characteristics make up the site?
2. Have similar projects have been completed elsewhere?
3. What are viable funding sources for renovation of a publicly owned building?
4. What would stakeholders like to see in the building and developed on the surrounding grounds and what concerns do stakeholders have about development on the property?

To answer these questions, the class worked in four groups to conduct a site inventory, examine project precedents, undertake a financial analysis, and meet with stakeholders.

Site Inventory

The site inventory team conducted basic legal and physical due diligence for the Garver site, which included conducting inventory work on deed restrictions, land use and zoning, transportation, environmental characteristics, public utilities, and building condition.

Project Precedents

The project precedents team examined six different adaptive reuse projects through out the world. Conclusion drawn through this exercise included:

- There are no shortage of excellent examples of adaptive reuse models, even for buildings with significant constraints
- It seems clear that redevelopment of the Garver building would require a public-private partnership with a development entity
- The potential reuses at the Garver site are limited to some degree by the size of the regional market

Financial Analysis

The financial analysis team examined the potential funding sources for the revitalization of the Garver building, including government and foundation grants, tax credit programs, private donations, and conventional financing such as city bonds and bank loans. Because the site is currently publicly owned, the potential funding sources are quite limited unless a public-private partnership is developed that would enable the project to tap into funding sources, such as state and federal historic tax credits or tax incremental financing. Without further refining the reuses within the building and surrounding grounds, the team found it difficult to make recommendations regarding specifics of potential funding sources.

Community Involvement

The community participation team met with many city staff, neighborhood and environmental organizations, and Olbrich staff to discuss how stakeholders envisioned potential reuse opportunities within at the Garver site and potential conflicts about its redevelopment. Additionally, the team conducted a survey of visitors to Olbrich. Activities visitors would like to see at Olbrich Botanical Gardens included a café, concert space, and an art gallery. Major themes that emerged from meetings and interviews were:

- A desire for connectivity between future park development and the surrounding neighborhoods
- A desire for minimal impact of parking and traffic
- A need for [environmental] educational facilities
- A desire to incorporate local history into the site's use
- The need to generate revenue from the Garver property use without intense competition to existing area businesses
- Opposition to the use of the Garver site for housing development
- A need to retain a sense of place at the Garver property which is somehow related to the overall uniqueness of the existing park atmosphere
- Genuine interest in accomplishing a successful and meaningful development

Phase II: Conceptual Plans

After the site analysis phase was completed, the class broke into three teams to develop conceptual reuse strategies for the Garver building and surrounding lands. The following describe the three schemes developed by the teams.

Conceptual Design 1: Sustainability in Action

This conceptual design strategy of the Garver Feed Mill seeks to provide a dynamic new destination, while expanding the facilities and scope of the Olbrich Botanical Gardens. Goals of the proposal include:

- Drawing on the industrial and agricultural history of the Garver Feed Mill and Wisconsin
- Supporting the horticultural core mission of Olbrich Botanical Gardens
- Making use of best practices in sustainable development and ecological design
- Providing facilities to the community and expand Olbrich's appeal to a broader audience

This redevelopment proposal for Garver brings these goals together under the theme of *Sustainability in Action*. The proposed renovation would demonstrate that a historic building can be rehabilitated using sustainable techniques. The anchor use, the Wisconsin Green Science Center (WGSC), would show how sustainable building techniques actually work. Along with the WGSC, the proposed renovation would add a café, retail store, event room, atrium, bicycle station, and greatly expand facilities for Olbrich staff.

The WGSC would use the central portion of the building for a highly interactive, activity-based destination where people of all ages can observe and interact with hands-on, dynamic exhibits that demonstrate the science behind sustainability. Exhibits would demonstrate sustainability concepts for alternative transportation, energy, wastewater treatment, storm water management, and more. The WGSC draws on precedents from across the country, foremost the Exploratorium in San Francisco.

Conceptual Design 2: Community-Oriented Garver Reuse Strategy

This conceptual redevelopment model seeks to incorporate the needs of Olbrich Botanical Gardens, while creating a regional attraction that focuses on education and natural history. Potential revenue generating activities have been developed in plan through the proposed café, rental spaces, and museum. The ability to generate revenue is considered critical to the long-term success of the gardens, and necessary to offset redevelopment costs. Another exciting potential source of revenue comes from the use of the proposed auditorium as a movie theatre and performance space. By showing movies indoors during the winter and in the gardens during the summer, Olbrich can generate local interest and revenue during the "off-season," while providing a unique attraction. In addition, many natural history museums often pair films with their exhibits.

Several assumptions have been made during development of this conceptual plan, including:

1. The west wing of the Garver building will be removed to not only create balance and symmetry, but also restore the original footprint and integrity of the building.
2. Vehicular traffic will enter from Fair Oaks Avenue and a pedestrian bridge will link visitors on either side of the railroad tracks between the Garver property and the existing gardens.
3. LEED Certified green building techniques will be used as is feasibly possible. With the existing Garver Cottage renovation, some green building concepts were incorporated, thereby setting a precedent and knowledge of green building techniques and standards.

Conceptual Design 3: Garver Environmental Arts Center

As envisioned, the Garver site will be transformed from a vacant building and non-landscaped area to a mixed-use facility integrated into the programming and mission of Olbrich Botanical Gardens. Known as the Garver Environmental Arts Center (GEAC), the facility will interweave activities relating to wellness and relaxation; arts and creativity; functions and events; and sustainable beauty into the meaning and design of the building and associated site.

Wellness and Relaxation: Tranquil for both mind and body, the peaceful setting amid Olbrich Botanical Gardens provides an excellent opportunity for the GEAC to create a space to integrating nature into daily living.

Arts and Creativity: The GEAC will be one of the axis points for arts and creativity within the Madison community. Building from the excitement generated through the Overture Project and associated Arts District located downtown, the GEAC will cater to providing space for artists to live and work in a studio environment. The dramatic space within the building itself provides an opportunity to make and display art too large for most gallery settings. Special attention will be paid to ensure that local and regional artists have space to exhibit and sell their works.

Functions and Events: The GEAC will provide Olbrich Botanical Gardens the opportunity to build and enhance on its existing ability to host functions and events. From corporate parties or meetings to weddings, the Garver building will offer a unique atmosphere for important events that is currently not available in the Madison area.

Sustainable Beauty: The GEAC is pictured as a living model of sustainable development, enabling visitors to the facility and the greater Madison community to see sustainable design practices in action. Sustainable design practices should be integrated into all aspects of this site, including the building as well as site improvements. The center will show that sustainable practices have moved to point that they are not just practical, but also aesthetically pleasing and desirable.

PART I:

SITE ANALYSIS

SECTION 1

Site and Contextual Inventory of the Garver Property

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Introduction

The Garver Feed Mill sits on 27 acres north of the current Olbrich Botanical Gardens. Olbrich, a division of the City of Madison Parks, acquired the property in 1994. It is the intention of Olbrich Botanical Gardens and the City of Madison to redevelop the building and property in a manner consistent with the mission of Olbrich Botanical Gardens.

The Garver Feed Mill and Olbrich Botanical Gardens are shown in Figures 1 and 2. Figure 1 is an existing site plan for Olbrich. Figure 2 shows a plan proposed for the Garver property as part of a master planning process completed in 1997. The area north of the railroads tracks that run through the middle of the Figure is the Garver property. The area south of the railroad tracks is the current Olbrich gardens. The Garver building is the large red structure immediately north of the railroad tracks.

The Garver property poses many challenges for redevelopment. A primary challenge is the size of the Garver Feed Mill (55,000 square feet) and its severe state of disrepair. The property is bounded to the east by Starkweather Creek, which has been part of a water quality improvement program for the past two decades. The property is also embedded in a residential area that is concerned about the impact and type of redevelopment associated with the Garver site. The site has very low visibility from existing roads and limited vehicular access. In addition, there are zoning regulations, deed restrictions, and the designation of the building as a historical landmark that must be addressed before any redevelopment can occur. This analysis provides an overview of the site including and a brief outline of the physical conditions of the building itself.

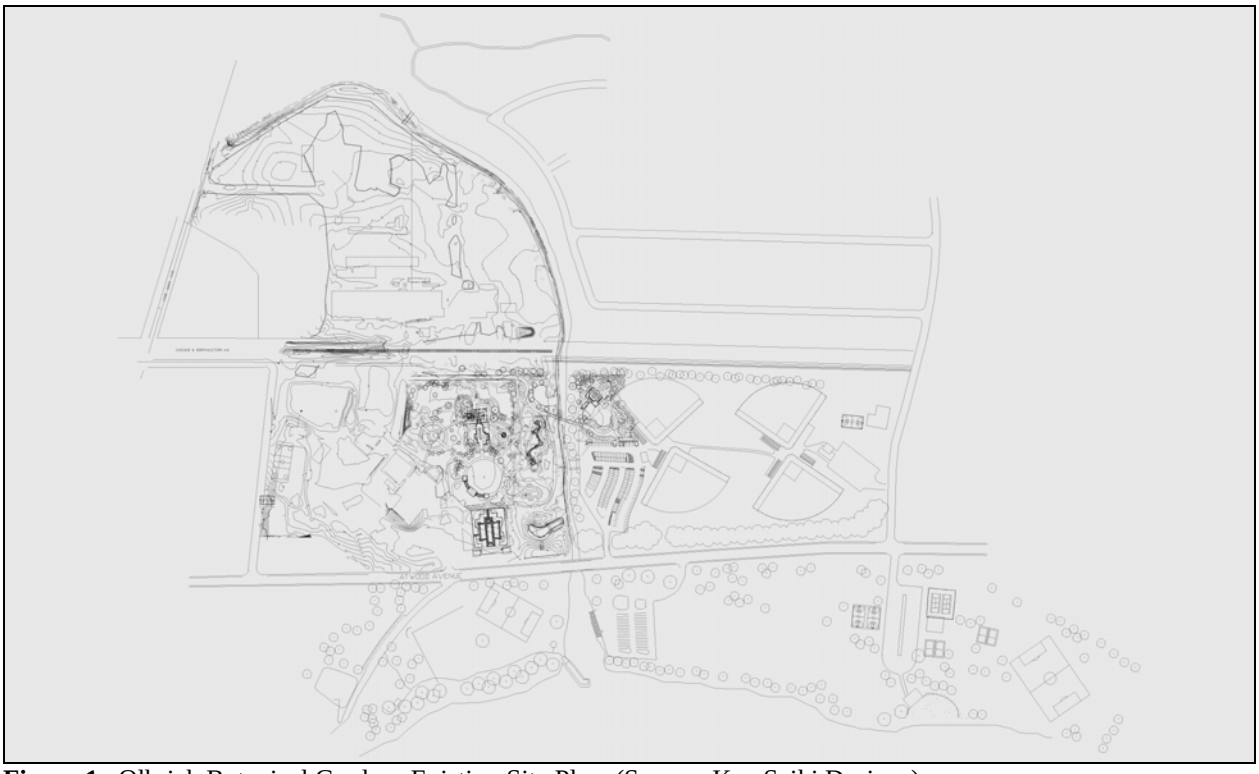

Figure 1. Olbrich Botanical Gardens Existing Site Plan. (Source: Ken Saiki Designs)

Figure 2. Olbrich Gardens and Garver Property proposed Master Plan, 1997.

Deed Restrictions on Garver Property

Deed restrictions were placed on the Garver property by Olbrich Botanical Gardens to ensure that the property be used in a manner consistent with the goals and mission of Olbrich. The Wisconsin Department of Natural Resources (DNR) also placed a restriction in return for funding received by Olbrich Botanical Gardens for the cleanup of the site. The third restriction was placed on the property by the City of Madison Landmark Commission to guarantee that the property would not be altered by construction or demolition without consultation. These restrictions may act as an impediment to certain redevelopment activities and require that the City of Madison, the Wisconsin DNR and the City of Madison Landmark Commission review all activities on the site.

Warranty Deed

This property is conveyed subject to the restriction, enforceable by Grantor, that the property be used, in perpetuity, as parklands devoted primarily to botanical gardens, except that the buildings currently on the property may be used for storage, offices, and other municipal uses on an interim basis. Following are the details on these deed restrictions.

Wisconsin DNR Stewardship Grant and Management Contract

The Stewardship Property shall be used in perpetuity as parklands devoted primarily to botanical gardens except that the buildings currently on the property may be used for storage, offices, and other municipal uses on an interim basis.

City of Madison Landmarks Commission

Name of the building or site: Garver Feed and Supply Company

1. That all building permits for the altering or constructing all buildings on said site shall be submitted to the Landmarks Commission of the City of Madison, Wisconsin for approval.

2. That all permits for demolition of any buildings on said site shall be submitted to the Landmarks Commission of the City of Madison, Wisconsin, for approval.

Land Use

According the most recent Dane County Land Use data, produced in 1998, the Garver Property is listed as an industrial property. This will need to be amended, as the property is now city-owned. Existing land uses are shown in Figure 3.

The parcel is part of a larger complex of parkland and open space, including the Olbrich Botanical Garden, Olbrich Park, and O.B. Sherry Park, as well as Starkweather Creek and nearby Lake Mendota. Adjacent land uses include commercial to the west and residential to the east.

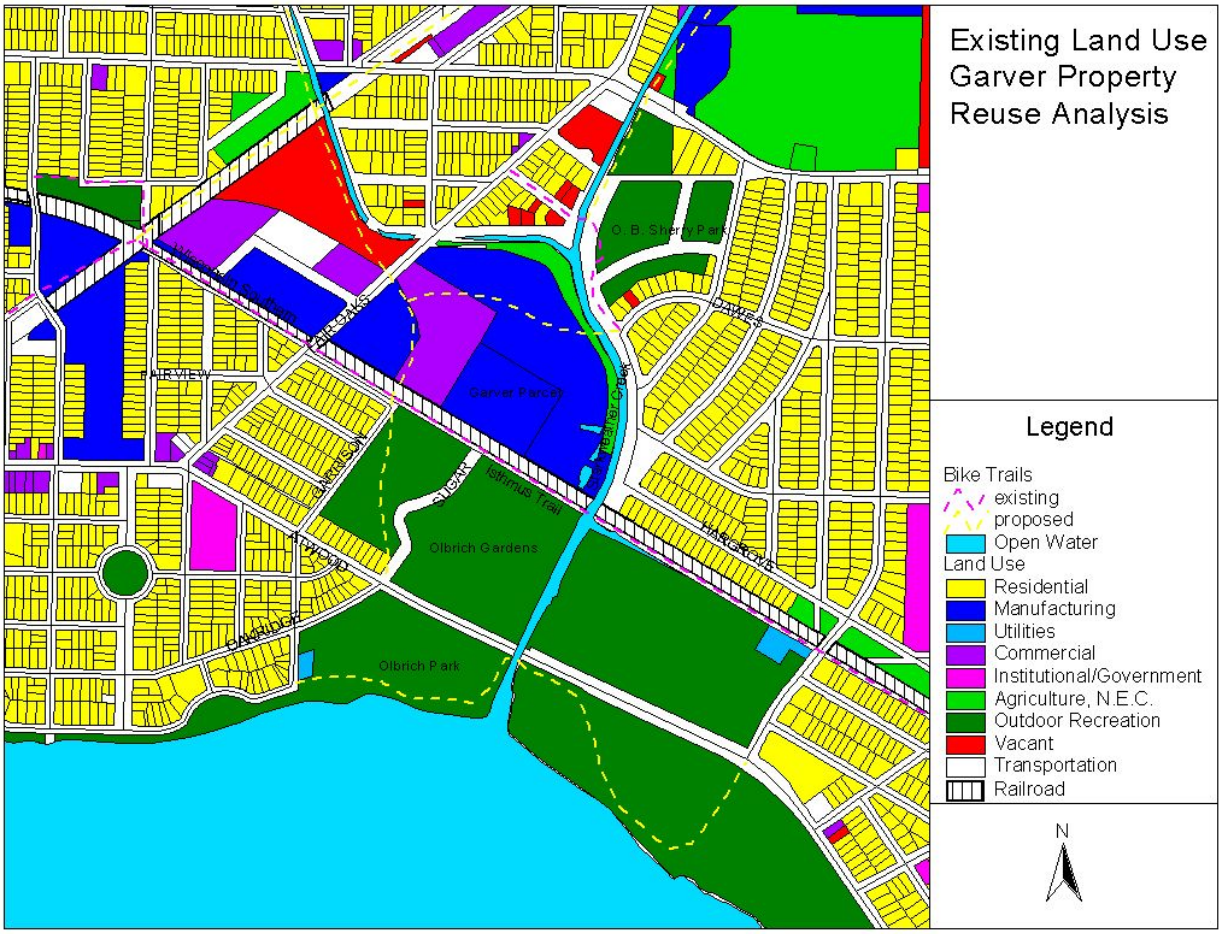

Figure 3. Existing land uses near Garver property.

City of Madison Zoning Regulations

Historically, the Garver property was part of a vital manufacturing corridor on the near east side of Madison. While manufacturing is no longer a staple of this community, the zoning regulations for the property still reflect its historical use. Redevelopment of the site may require zoning changes from a Limited Manufacturing District (M1) to something more applicable for the new use(s) of the building. Since the termination of manufacturing and warehousing uses in this area, the intent and purpose of this district are no longer applicable to the site. Rezoning this property would be dependent on the new use(s), but project managers should be aware of the need for possible rezoning.

Limited Manufacturing District (M1)

The Garver Building is currently zoned as a Limited Manufacturing District (M1) by the City of Madison. The purpose that the City of Madison sets forth in this district is to "accommodate existing non-nuisance type industrial uses presently located in relative proximity to residential areas" (Sec. 28.10(4)(a), City of Madison Zoning Code).

Additionally, “Development in the M1 limited manufacturing district is limited primarily to certain commercial uses and certain industrial uses, such as the fabrication of materials and specialized manufacturing and research institutions, all of a non-nuisance type” (Sec. 28.10(4)(a), City of Madison Zoning Code).

There are a variety of permitted uses under this zoning category, and some that may be relevant to the Garver redevelopment including amusement establishments; greenhouses; meeting, convention, or exhibition halls; offices; parks and playgrounds; restaurants (including catering services); restaurant/theatre; and farmers markets. Likewise, there is a large list of conditional uses for the M1 District. The one relevant conditional use is outdoor eating and recreation areas of restaurants and taverns.

The City of Madison also regulates the floor area ratio in this District. In the Limited Manufacturing District (M1), “the floor area ratio shall not exceed 2.0” (Sec. 28.10(4)(e), City of Madison Zoning Code).

There are also yard requirements for this District. The regulations are targeted towards the provision of a buffer between the Limited Manufacturing use and adjacent residential properties. Therefore, looking at the Garver property, the northern and the southwest third of the property line would be applicable to these regulations. Specifically, the southwestern part of the property (if this zoning district is maintained) would need to maintain a 25-foot yard. However, with the existence of the railroad right-of-way, this yard requirement may be trumped by the right-of-way distance. The northern, rear property line must have a yard of “10 feet in depth for buildings less than two stories in height, and 30 feet for buildings two stories or more in height” (Sec. 28.10(4)(f), City of Madison Zoning Code).

Conservancy District (C)

The current Olbrich Botanical Gardens (south of the Wisconsin and Southern railroad lines) is zoned Conservancy District (C). The purpose of the Conservancy Zoning District is to:

> Preserve and perpetuate in an open state certain areas such as lakes and waterways, wetlands and marshes, floodplains and stream beds, certain agricultural lands, slopes and other areas of aesthetic value which, because of their unique physical features, are deemed desirable and functional as natural drainage ways and water retention areas, natural habitat for plant and animal life, greenbelts and other multiple purpose uses beneficial to the community *(Sec. 28.07(2)(a), City of Madison Zoning Code).*

The permitted uses in this district include land and water preserves, such as arboretums, public parks and playgrounds, and educational, recreational, and office uses for governmental, educational, and nonprofit agencies.

A variety of conditional uses may be allowed in the Conservancy District. One such use is land and water preserves, (including restaurants or facilities “for outdoor recreation, including hotels, motels and other buildings containing dwelling units or lodging rooms for use by the transient public when accessory to such outdoor recreational use”) provided that the buildings and

structures are not located less than 300 feet from any lot in a residence district. (Sec. 28.07(2)(c)11, City of Madison Zoning Code).

Another conditional use is accessory uses such as "dwelling units and lodging rooms in detached buildings for persons regularly employed on the premises and their immediate families" (Sec. 28.07(2)(c)16, City of Madison Zoning Code). Additionally, "municipally owned recreational buildings and community centers" may be allowed, however, these buildings must be located at least 50 feet from any lot in a residential district (Sec. 28.07(2)(c)19, City of Madison Zoning Code). Other municipal uses that are city owned and operated may also be allowed. According to the lot area and lot width requirements of this District, the lot area must not be less than 10 acres, while the lot width and street frontage must not be less than 500 feet.

The height regulations in the Conversancy District do not allow any buildings or structures, "other than a civic auditorium complex," to exceed 2 stories or 35 feet in height.

Additionally, there are yard requirements for all buildings and structures (those other than a civic auditorium complex). The minimum yard requirement is at least 60 feet, the minimum side yard requirements are each 80 feet, and the rear yard is at least 100 feet.

Surrounding Districts

Surrounding the Garver property are General Residence Districts (R4) to the north and south, and to the east, a Single and Two-Family Residence District. On the west side of the property, the Limited Manufacturing District (M1) continues. In addition, there are two small areas, to the north of the property, that are zoned as wetlands.

Utilities

Utilities serving Olbrich, the Garver property, and the surrounding area are shown in Figure 4.

Stormwater

Because of the close proximity of Starkweather Creek and Lake Monona, stormwater runoff from the Garver property needs to be carefully considered in the redevelopment process. Stormwater runoff in and around Olbrich Botanical Gardens is primarily managed through conveyance. Conveyance is designed to move water using pipes and other impervious surfaces. As a management tool, it neither makes an allowance for infiltration nor does it prevent or

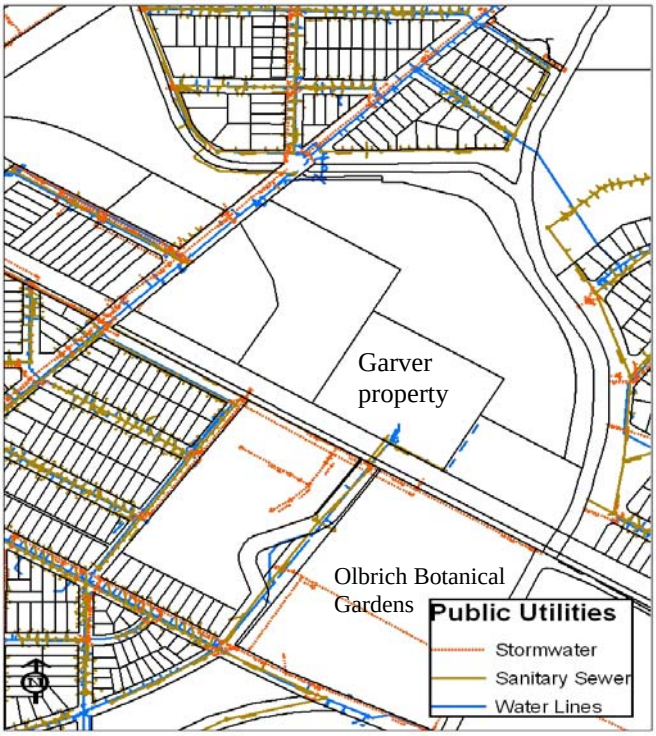

Figure 4. Public utilities.

mitigate stormwater pollution. The conveyance system on the northern section of the site allows for stormwater that has been collected in the surrounding neighborhoods to be drained into Starkweather Creek. The main stormwater pipe location around the northern section of the site uses pipes under the streets. Fair Oaks Avenue has a stormwater pipe that follows the road going north and south and drains into Starkweather Creek. The neighborhood north of Fair Oaks Avenue has several stormwater pipes leading either to Starkweather Creek or to the pipes under Fair Oaks Avenue.

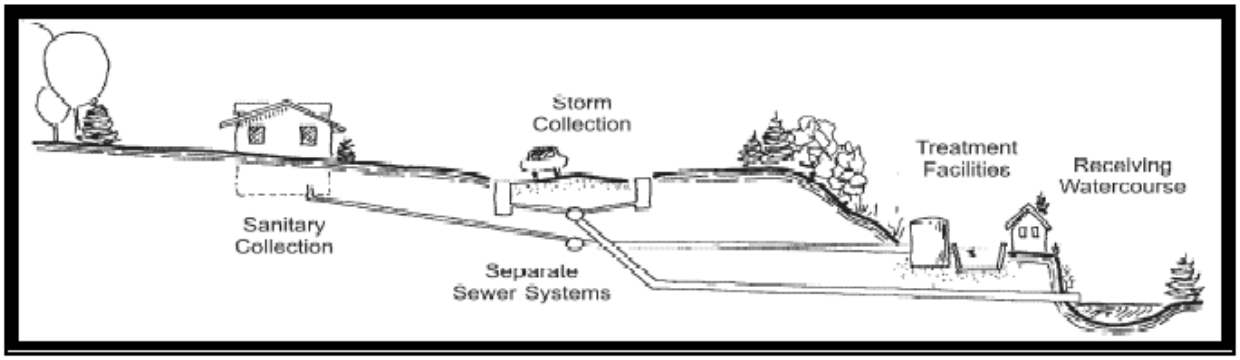

Figure 5. Separate Sanitary Sewer system and Stormwater drainage system. (Source: http://www.ene.gov.on.ca/envision/gp/4224e)

The stormwater pipes on the southern section of the site are designed in a similar fashion. However, the pipes from the southern neighborhoods are connected to underground pipes situated along the railroad tracks that stretch across the Olbrich property. The stormwater pipes follow the railroad east and drain into a lower section of Starkweather Creek.

Two separate stormwater pipes are located on the current Olbrich Botanical Gardens site. The first is shaped like an upside-down "T" with the top connecting to the conveyance section that stretches along the railroad tracks and the lower section parallel to the east and west section along the railroad tracks. This section is under the current maintenance facility of Olbrich Botanical Gardens. These pipes all connect to areas around Sugar Avenue and drain into Starkweather Creek.

Sanitary Sewer

The Olbrich site has one sanitary sewer line that connects the current buildings on the Olbrich site, including the Garver building (Figure 4). The sewer line runs along Sugar Avenue. There are several locations around the site where additional sanitary sewer could be connected:

- The intersection of Fair Oaks Avenue and Gateway Place
- The intersection of Bryan and Fair Oaks Avenue
- Along the East to West Section of Starkweather Creek connecting the dead end section of Ivy and Fair Oaks Avenue
- Along the North and South Section of Starkweather Creek Drive
- Along Emmet Street connecting with Fair Oaks Avenue
- Along Garlson Street connecting with Emmet
- Along Sugar Avenue connecting the Olbrich Botanical Gardens and stretching to the Garver building

- Along Atwood Avenue
- Along Lakeland Avenue

Water Lines

Olbrich has one water line that connects the current buildings and the Garver building (Figure 4). The water line runs along Sugar Avenue. There are several locations around the site where water lines could be connected:

- Along Fair Oaks Avenue and Gateway Place
- Along Ivy Street going through O.B. Sherry Park and following Starkweather Creek Drive
- Along Emmet Street
- Along Garlson Street
- Along Sugar Avenue
- Along Atwood Avenue

Other Water System Facilities

- Municipal well #8 is located across from Olbrich Botanical Gardens on the south side of Atwood Avenue
- A municipal reservoir is located at the end of Starkweather Creek near Atwood Avenue
- A municipal booster pump station is located near the entrance of Olbrich Botanical Gardens

Transportation

Roads

The two primary roads providing access to the site are Atwood Avenue and Fair Oaks Avenue. The only road providing direct access to the site is Sugar Avenue, which is routed through the existing Olbrich Botanical Gardens' parking lot.

There are a high number of daily vehicular trips generated near and around the Garver property. Table 1 indicates the traffic volumes reported at key locations on Atwood Avenue as reported in the Wisconsin Highway Traffic Volume Data Book (Wisconsin Department of Transportation 2002).

Location	Number of Trips (2002)
Atwood/Fair Oaks	10,800
Atwood/Garrison	18,600
Atwood/Sugar (Oak Ridge)	17,200
Atwood/Starkweather Creek (east)	17,200

Table 1. Traffic volumes. (Source: WisDOT 2002)

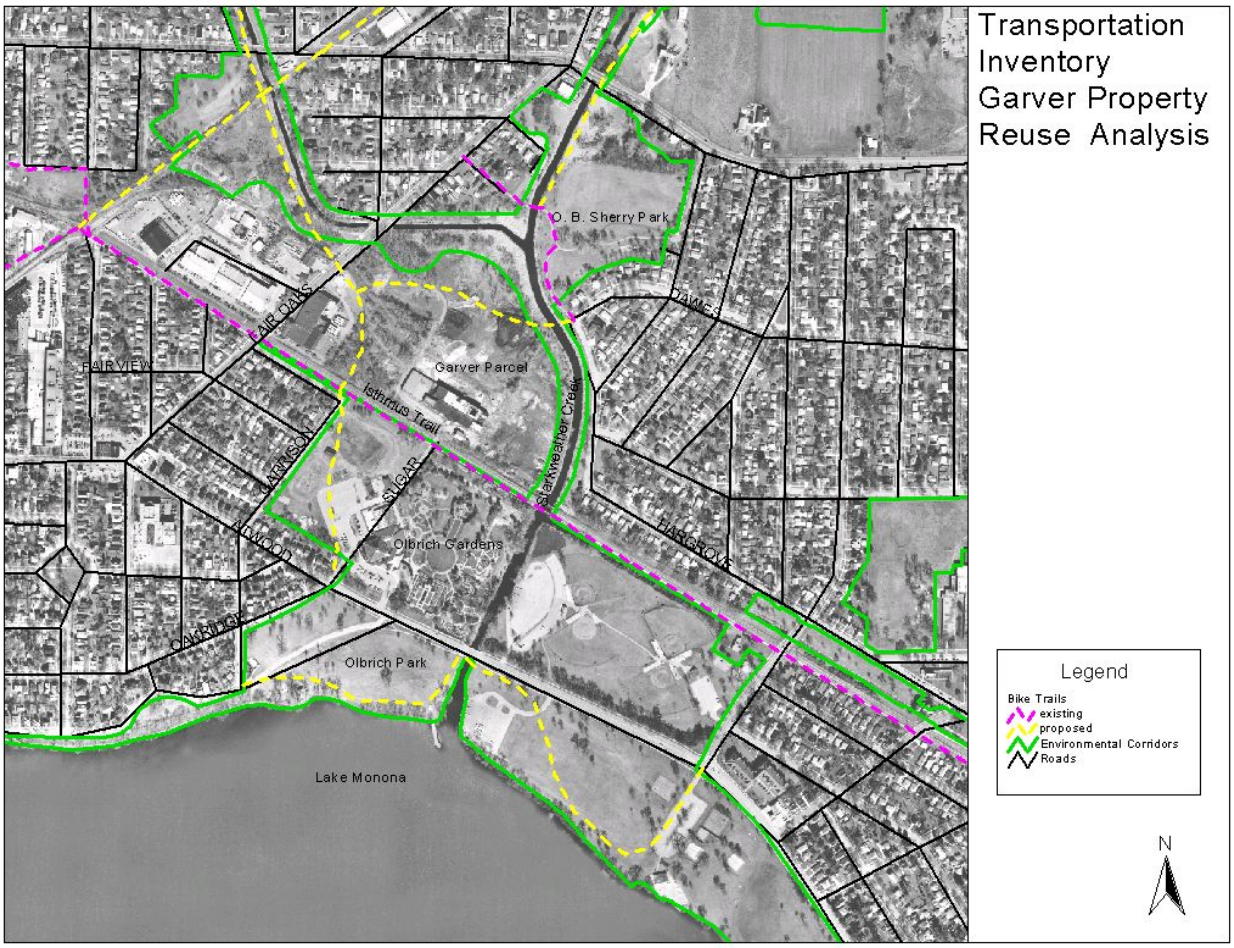

Figure 6. Recreation trails.

Recreation Trails

The Isthmus Bicycle Trail forms the southern boundary of the Garver parcel (Figure 6). This trail is part of the larger Capital City Trail network that ultimately connects in to the regional Ice Age Trail. Bicyclists and pedestrians use this trail for recreation and daily commutes. The City has proposed an additional recreation trail that would traverse the northern third of the parcel, linking it to the existing neighborhood recreational trails.

Rail

The Wisconsin Southern Railroad corridor is located to the south of the Garver parcel. This rail line is still active and several trains run along the tracks each week.

Environment

Environmental Corridors

The Dane County Regional Plan Commission has developed official environmental corridors for Dane County. These corridors delineate natural features, parks, and open space. On the Garver parcel, environmental corridors are located parallel to main and western branch of Starkweather Creek. If used as open space in the future, the Garver parcel will be included within the environmental corridor.

Open Space

The Garver parcel is part of a large city green space and open space complex. This includes Olbrich Botanical Gardens, Olbrich Park, O.B. Sherry Park, the Isthmus Trail, Starkweather Creek, and Lake Monona (Figure 2).

Water Resources

Starkweather Creek forms the eastern boundary of the project site. This creek has been channelized and drains into the Lake Monona basin.

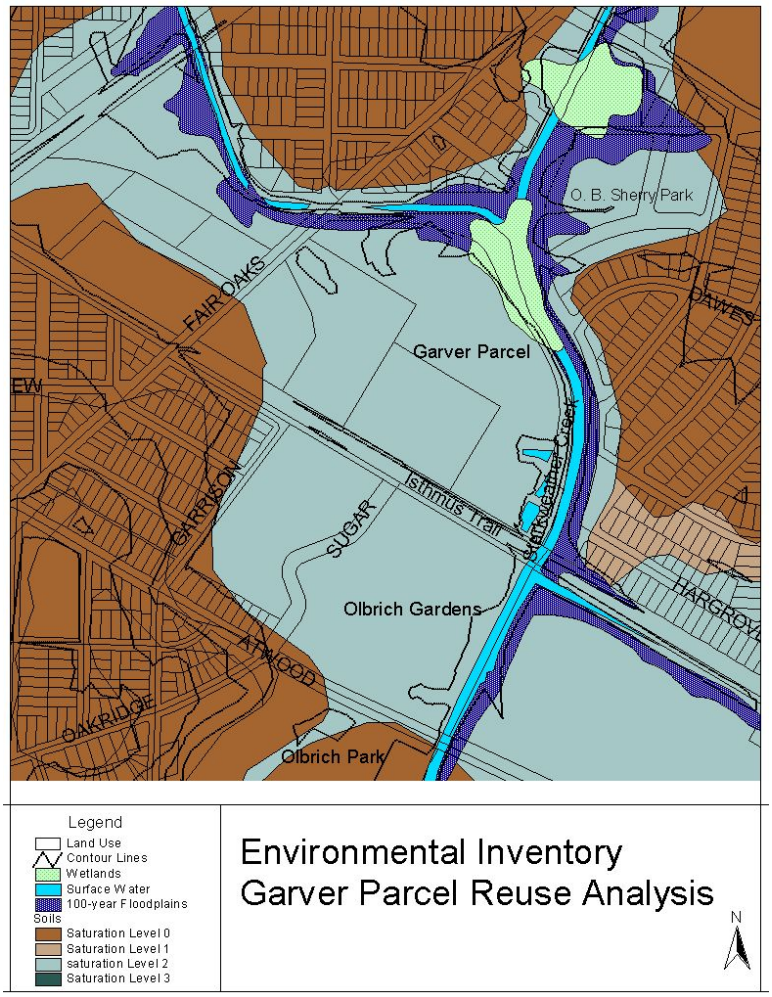

Figure 7. Environmental Inventory.

Soils

According to the Dane County Soil Survey, the soil type within the project area is Colwood silt loam. The Colwood series consists of deep, poorly drained, nearly level soils on low benches in old lake basins. This site was once part of a wetland complex and was drained to provide buildable land.

Structural Condition of Garver Building

The Garver building was built in 1906 and was very well constructed. It is made of brick and timber, but in recent years, has fallen into a state of disrepair. Following is an overview on the physical condition of the Garver building, based on the Observation Report of Structural Condition by Arnold and O'Sheridan Inc. in 1996.

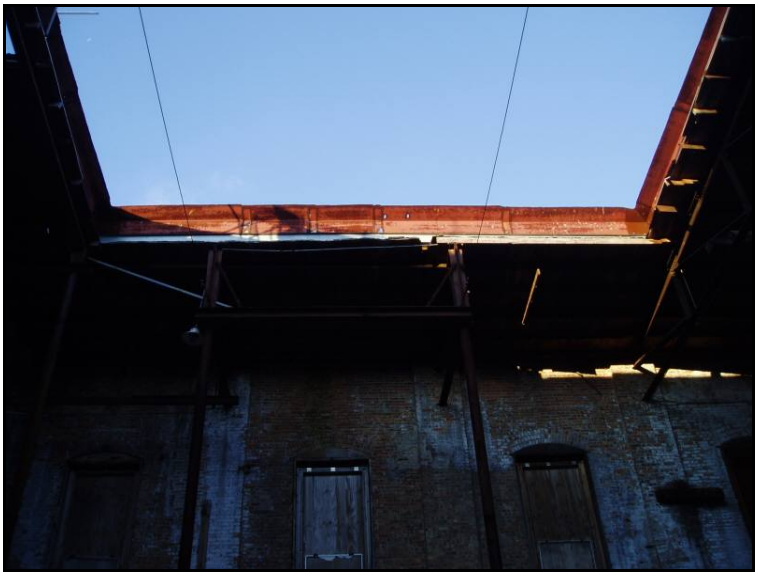

Figure 8. Example of Roof Deterioration. (Source: Bowen Dwelle 2004)

- There are several holes in the roof that allow water to stream inside. Areas that used wood construction are compromised by water damage. Several areas have already collapsed, although in some places the old structure has been left in place and a new one built over it.
- Exterior brick walls are still sound in many places.
- Evidence of structure settlement is minimal. Footings were properly constructed to support the building.

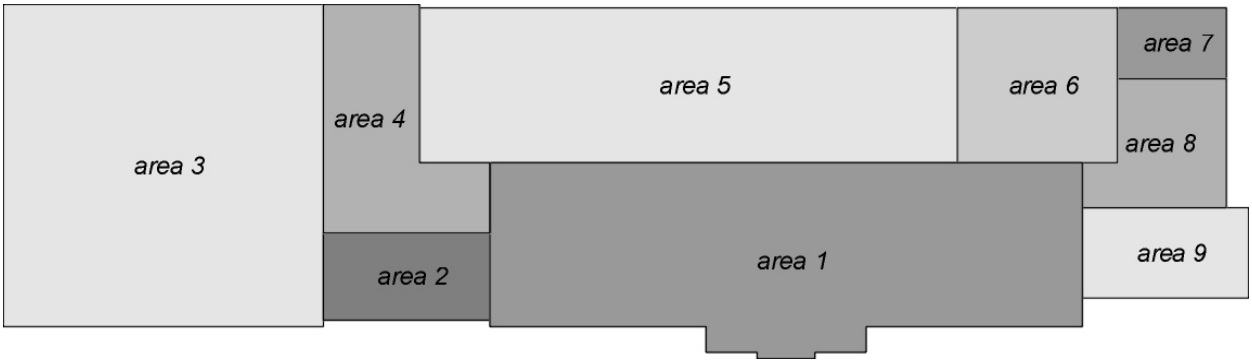

Figure 9. Floor Plan of Garver Building (Source: Arnold and O'Sheridan Inc.)

Structural Condition—Roof

According to the area indicated by Figure 9 above, the following is a condition report for each area.

Area 1. This area is the main entry of the building and its roof is steel framed. There is several heaps of snow inside the building, indicating holes in the roof. Several roofs have been replaced, but holes will further damage the structure.

Area 2. There are two concrete framed stories with a mezzanine framed in wood. There are also several holes in the roof. Possibly former scuttles cause moisture to accumulate in the upstairs.

Area 3. One-story wood joist and steel beam roof structure. There is evidence of fire in this area, specifically in the southeast corner. Extra joists support the original with possible loss of strength due to the fire. The roof slopes to the north to a gutter and downspout system, which both need to be replaced as well as new roof decking. Possible damage of roof drain system is eroding soils beneath the floor that may affect a crack in the south wall. The holes in the roof are allowing water to run down the wall and the floor slab is poorly maintained.

Area 4. One-story, wood floor structure. Ceilings make observation of the interior condition difficult. In several sections, there is newer decking, indicating that there was a previous roof leak. It is possible that the rest of the roof needs to be replaced. Some new construction done consists of wood joists and plywood.

Area 5. High bay area over bins. A portion of roof has been reconstructed above the original that has collapsed due to roof leaks.

Area 6. Room with pelletizer. It may be necessary to reconstruct the roof boards although the east section of this area has been done.

Area 7. Boiler room; the condition is serviceable.

Area 8. Vehicle repair garage. New wood roof structure was built inside the original walls and in serviceable condition.

Area 9. Two stories artists' room/apartments. The access is only available through first floor with the elevator to reach second floor. The floor structure condition is moderate and it seems serviceable.

Structural Condition—Walls

Generally, the structural condition of the walls is not good. As a result of the lack of parapet maintenance of the clay tile caps, moisture in the walls has caused deterioration of the mortar. One solution to this problem is tearing down the old parapets and rebuilding them with the original brick units. This condition is common to both exterior and interior walls.

The following is a description of the condition of the Garver building's walls in each area from the Arnold and O'Sheridan report (1996). Refer to the area number indicated by Figure 9 on the preceding page.

Area 1. Deterioration of the outer brick wythe (layer) between the lower level windows and the concrete foundation wall due to moisture wicked from soil under the elevator interior slab. The exterior surfaces have spalled from some brick units and have been repaired by mortar trowelled over the surface.

Area 2. Roof drainage has eroded the wall surface and vertical strip mortar. It needs removal and rebuilding of the outer masonry.

Figure 10. Wall Condition. (Source: Bowen Dwelle 2004)

Area 3. The condition of the walls is poor: cracks, improperly constructed corbels, parapet and face shell deterioration due to improper roof drainage.

Area 4. The wall is deteriorated where a downspout leaked. There was a temporary solution to the walls with surface mortaring. Some window sills are found broken and need replacement.

Area 5. The roof drains to the wall of this area. There are several locations of wall erosion that were caused by disconnected downspout. The erosion was repaired temporarily so it still needs a replacement. There are also broken windowsills that need to be repaired to avoid moisture intrusion to the wall.

Area 6. The walls appear to be in good condition. There are cracks in the arches above the window that still need to be repaired.

Area 7. The roof drains to the eave and no gutter or downspout are present. This condition has caused the deterioration of the fascia.

Area 8. Generally the problems here are the same as area 1. Much deterioration found in the wall at its base, face shell spalling, concrete band, corbelled brick joint, and at the downspout.

SECTION 2

Project Precedents

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Tobi Rutten
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Emily Ulmer

Building Envelope and Floor Space

The Garver building as it currently exists has approximately 53,000 square feet of floor space, including the single-story western section, and excluding the 6,415 square feet of space in the section that was destroyed by fire. Approximately 77,000 square feet could be created within the building envelope by adding 2nd floors to most of the full-height spaces, reconstructing the burned area with two floors, and adding a second floor in the main volume covering about half of the space. This space would be reduced to 62,000 square feet if the single-story western section were demolished as indicated in the current master plan. Although the Garver building seems large, the total amount of floor space available could be quickly consumed by any number of uses. In fact, the lack of overall floor space will likely be more of a constraint than a benefit in terms of possible uses.

The envelope includes a variety of volumes. It is not clear to what extent these could be changed, but it would likely be advantageous to make use of the existing spaces. The massive, two-story main volume and the two-story open atrium are particularly striking. Some of the other, smaller spaces might be better utilized if incorporated into larger volumes.

Potential Uses for the Garver Building

Garden Use

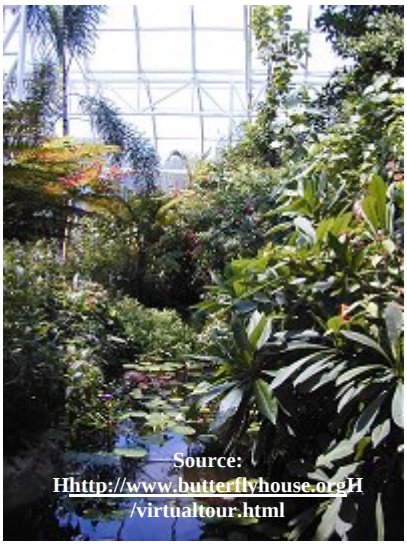
Since the development of the Garver building will be an extension of the existing Olbrich Botanical Gardens, it is logical to use part of the existing building as plant and garden space. Garden space could be implemented into the plan for the Garver building in numerous ways. From simple hanging plants or flowerbeds placed throughout corridors and retail areas, to elaborate arboretums and butterfly houses, plants are a necessity to a botanical garden extension.

Butterfly House

Ideal placement for this type of garden would be in the area of the Garver building that was destroyed by the fire. This area of the building is 6,415 square feet and has 34-foot walls on three sides, making the area an ideal location for a large indoor garden. The open area and destroyed wall can be replaced by greenhouse glass, which would provide a well-lit area.

A butterfly house can range in size from a few containers to many acres. The existing area in the building is more then enough. A garden within the Garver building would create an aesthetic flow from the Garver building to the new gardens planned behind the Garver building. The addition of a butterfly house would foster a better understanding of our natural world. It would also provide an opportunity to impact science and natural history education. A butterfly house would further diversify the attractions found at Olbrich Botanical Gardens. In this particular space, no new walls

The Butterfly Conservatory



Source: Hhttp://www.butterflyhouse.orgH/virtualtour.html

would have to be torn down and the chronological history of the building would be maintained.

Large butterfly houses such as, the Missouri Botanical Garden (www.mobot.org) and (www.butterflyhouse.org) have very similar dimensions to the space in the Garver building. The Missouri Botanical Garden has a butterfly house that is 8,000 square feet that costs approximately $300,000 annually to maintain. The Butterfly House is supported through private donations from individuals and corporations, annual memberships and six-dollar entry fees. The Butterfly House also has annexes of 12,000 square feet of display, retail and educational space.

Industrial Reuse Example

American Textile History Museum
Lowell, Massachusetts

The American Textile History Museum (http://www.athm.org) sits on the site of former Kitson Machine Shop, a 150,000 square foot building active in from the 1860s until 1918. The facility manufactured cotton-picking machines for Lowell's burgeoning textile industry. The Kitson Corporation abandoned the building around 1928 when it consolidated its operations elsewhere. The building was marginally used thereafter and became a public eyesore.

American Textile History Museum

Source: Doors Open Lowell

In 1992, American Textile History Museum purchased the site and undertook an intense rehabilitation of the building. Traditional wooden-framed windows were restored, the brickwork was repaired and repointed, and the entire front was cleaned. A modern entryway was added to the building to adapt it to today's use.

The American Textile History Museum is an independently run, not for profit institution. However, there is some coordination with the National Park Service and their adjacent Lowell National Historic Park. The museum has strong support in its community, thanks to its redevelopment project, its successful public school programs, and ample exhibit and meeting space.

The museum site features:

- Exhibits on the art, science and history of textiles: 30,000 square feet permanent gallery and 5,000 square feet of changing exhibit space.
- Café serves lunches, tea and coffee, and Sunday brunch. Up to 110 people can be accommodated in 1,800 square feet total, excluding kitchen space.
- Classroom space: three rooms total for 1,800 square feet, including a computer room. On-going educational programs with Lowell Public Schools utilize the site.
- Learning center: 1,100 square feet.
- Library: two floors of resources, 8,000 square feet total.
- Museum store: 2,300 square feet.

- Functional - Meeting Space: seats up to 225 people for weddings. Cocktail parties may accommodate 300 people. Executive conference room seats 20. Partitions may be installed to enclose space. 3,000 square feet total.

The redevelopment was completed with private fundraising. Museum membership, entrance fees and private fundraising continue to support operations.

Commercial Use/Public Plaza

Bridgemarket
New York, New York

Bridgemarket is a cathedral-like building situated underneath the Queensboro Bridge between 59th and 60th Streets linking First Avenue and Queensboro Oval. The 98,000 square-foot building was designed at the beginning of the 20th century by architect Henry Hornbostel and engineer Gustav Lindenthal. The building underneath the bridge, now known as Bridgemarket, opened in 1909 and served as an open market space for the public until 1946. The Department of Transportation then took advantage of the large space and used it as a sign shop and for vehicle storage.

http://www.brunerfoundation.org/p/2003_bridge_mrkt.html

After some time, the building then captured interest from Hardy Holzman Pfeiffer Associates, and in 1977 plans for Bridgemarket were presented. An extensive public review process followed with numerous different design options. The existing design of Bridgemarket is the work of Rafael Guastavino and is considered one of his most dramatic and exciting public spaces. He was able to adapt vernacular building technology called the boveda catalana, or Catalan vault, in which long flat tiles, ranging in height from 24 to 45 feet, are laid in courses and mortared together with a special mixture. In 2000, approximately thirty years later, Bridgemarket opened as an innovative reuse commercial development with three tenants including Gustavino's restaurant, The Terence Conran Shop, and a Food Emporium. The building also houses an exquisite public plaza designed by Lynden Miller. The finished Bridgemarket building is a $20 million collaborative product of developer Bridgemarket Associates, New York's Economic Development Corporation and Department of Transportation, and private historic preservation groups.

The existing commercial development of Bridgemarket serves as a successful reuse project where previously City-owned property has been captured by the private sector. After approximately a 30-year extensive public participation period and design process, the collaborative effort has allowed Bridgemarket to be re-established as a

flourishing economic area for the public.

Commercial Use
Watertown Arsenal Building
Watertown, Massachusetts

The Watertown Arsenal building was constructed in 1917 as a munitions factory and has recently been renovated into a modern office building (Pape 2004). The Arsenal rests on a 30-acre site. Transformed into a 360,000-square-foot multi-tenant office complex, the Arsenal has revived the once abandoned 30-acre site (Stevens 2001). The building houses a verity of companies, service industries, and restaurants. Tenants in this building also include university departments and publishing offices.

The 30-acre site was renovated by O'Neill Properties, with the financial backing of Prudential Life Insurance Co., which entered into a 50/50 joint venture arrangement. The Arsenal renovations cost $24 million; the average rehabilitation rate was $40 per square foot. Renovation of the 645,000 square feet cost approximately $38 per square foot. In addition to building costs, $4 million of the bid price was used for charities and community projects on the site, including an art center that is located in one of the buildings (Miara 1998).

The final development included the rehabilitation and conversion of 10 buildings on the property for use as office, research and development space. The site plans also set aside an adjacent 7-acre parcel that was turned into a park with walking trails and a soccer field (Miara 1998). The renovation of this complex was very lucrative. O'Neill Properties sold the complex to Harvard University and grossed roughly $28 million on the sale (Stevens 2001). The success of the project was based on its design, which was modernized to attract strong tenants while maintaining as much of the history as possible. These design features helped to create a thriving business and research community.

Space Requirements of Potential Uses

A number of possible uses were analyzed for rough space requirements. Clearly, many types of uses have a wide range of possible scales, but it should be possible to establish a baseline. Following are uses that are believed to be appropriate for the Garver building.

Artist Studios

Studio only (not live-work) is possible in roughly 15x30 ft (450 square feet) each, and would probably require a minimum of 4 studios for a viable “community” of studios, i.e., minimum 2000 square feet.

Auditorium/Community Theater

An auditorium or community theater that would seat 800 people would require approximately 15,000 square feet. A smaller theater could be in done in 10,000 square feet or even less. This would require a significant proportion of the available floor space for a single use.

Bed & Breakfast

Bed and Breakfast's (B&B) are often adapted from existing residences. While a B&B does not have the kitchen and back-of-house requirements of a hotel, at least a small kitchen and administration area are required. A small B&B with 3-4 guest rooms could probably be accommodated in perhaps 3,000 square feet, with additional rooms adding perhaps 200-250 square feet each.

Bookstore

A small bookshop could be accommodated in 500 square feet or less, with a larger one ranging up to perhaps 2,000 square feet.

Café

A café, as distinct from a restaurant, has much less requirement for back-of-house operations, since no hot food is served. Seating for 50 people would consume about 1,000 square feet, with back-of-house consuming perhaps another 300-500 square feet – i.e. total space approximately 1,500 square feet.

Classrooms

Classrooms are typically approximately 400-600+ square feet each, depending on capacity and activities.

Gift shop/Garden store

The existing gift shop is only a very modest 400 square feet. 1,000 square feet could be easily used for an expanded gift shop with some additional botanical materials and perhaps a few books. If a museum were to be included in the Garver plan, it could likely support an even larger retail shop with museum-related items.

Library

The existing library is approximately 3,000 square feet. While De Chiara cites some guidelines for size of libraries based on population served, Olbrich is a special case, and clearly a library can be any size, depending on requirements.

Meeting Rooms/Conference Space

Meeting rooms range from small, 240 square foot meeting rooms, to 600 square foot boardrooms to 5,000 square foot larger rooms. 1,000 to 2,000 square feet could easily be consumed if even a modest meeting facility was planned.

Museum

A very small display museum consisting of only a couple of 15 foot by 30-foot rooms could be accommodated in approximately 1,000 square feet. A somewhat larger (but still very modest)

operation might be accommodated in 5,000 square feet. An interactive science museum would require as much space as could be made available, easily consuming 20,000+ square feet.

Restaurant

A full service restaurant typically requires 70-100% of seating space for back-of-house operations. With seating for 50 people consuming about 1,000 square feet, total space would be approximately 2,000 square feet.

SECTION 3

Financial Options for the Garver Redevelopment

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Chris Shear

The following matrix presents information on eight potential sources of funding that may be applicable in the rehabilitation of the Garver property, including: *Historical Tax Credit (Federal), Supplemental Wisconsin Credit, New Markets Tax Credit Program, Foundation Grant, Self- Generated Funding, City Funding / Financing, Community Development Block Grants and Private Funding*. For each specific item information has been broken down into the following categories:

Type: The name of the financing option.
Description: A general description of what the particular financing option involves.
Relevance: How the particular financing option interlocks with the potential needs of Garver.
Examples: Any relevant examples of this type of development financing.
Resources / Weblinks: Links and resources that may be useful.

The aim of the matrix was to keep the information clean and concise, and to provide a brief overview of the possibilities. As the conceptual plans are more clearly defined, the financing/funding options will become clearer.

Type	Description	Relevance	Examples	Resources / Useful Weblinks
Historical Tax Credit (Federal)	A federal historic tax incentive requires the property to be income producing, according to the IRS. It also needs to be listed as a certified historic structure through the National Park Service (NPS). This necessitates a quite lengthy application process and numerous restrictions/building requirements. It does, however, return a substantial portion of costs by returning a total of 20%.	Being that the Garver property is tax exempt it becomes much more difficult to retain this tax credit. It is possible however, depending on circumstances. There is an IRC revision section 47(c)(2)(B)(v) which deals with property leased to a tax-exempt entity, which in this case pertains and impacts the use of the Garver property. More specifically, this provision deals with "disqualified lease guidelines" (basically guidelines for properties which are ineligible for this credit) which initially Olbrich falls under. There seems to be a possible way around this disqualified incentive status by forming a limited partnership with a taxable entity and retaining the credits through them. One stipulation is that a land lease would be a necessary part of the partnership. Again, there are limited application possibilities due to restrictions such as the necessity for the property to be substantially revenue generating. Of course, to retain this credit the use of the property must also be in compliance with the deed.	**Birchard-Follansbee Block,** Milwaukee, Wisconsin**:** The Brichard-Follansbee Block has been tracked back since its origination in 1867. In 2000 Johnson Bank bought and renovated the block to convert into office spaces. http://www.wisconsinhistory.org/hp/buildings/restorations/reckmeyer.asp	Wisconsin Historical Society http://www.wisconsinhistory.org/ US Department of the Interior National Park Services http://www.nps.gov/
Supplemental Wisconsin Credit	In 1989 Wisconsin established a 5% supplement credit to the 20% Federal tax credit. The supplemental credit follows the same guidelines as the historical federal tax credit. It just requires a bit further of an application process.	Qualifying for the federal tax credit means that you would also be eligible for the state tax credit. Thus, to qualify for this credit it would also involve establishing a limited partnership. Both credits would then return a total of 25% of costs.		Wisconsin Historical Society http://www.wisconsinhistory.org/

Type	Description	Relevance	Examples	Resources / Useful Weblinks
New Markets Tax Credit Program	The New Markets Tax Credit (NMTC) Program permits taxpayers to receive a credit against Federal income taxes for making qualified equity investments in designated Community Development Entities (CDEs). Substantially all of the qualified equity investment must in turn be used by the CDE to provide investments in low-income communities. The credit provided to the investor totals 39% of the cost of the investment and is claimed over a seven-year credit allowance period. In each of the first three years, the investor receives a credit equal to five percent of the total amount paid for the stock or capital interest at the time of purchase. For the final four years, the value of the credit is six percent annually. Investors may not redeem their investments in CDEs prior to the conclusion of the seven-year period.	Tim Sherry, Treasurer of the Olbrich Garden Society, thinks this is a possibility to secure financing for a renovation project. The New Markets Tax Credit Program is a way to engage the private sector in this project for public benefit. Qualifications include a low-income focus, which would be questionable in the case of the Garver project, unless the project can be oriented in that way. Loans must be paid pack in seven years, which is relatively quickly for such a huge project.		Source: United States Treasury Department http://www.cdfifund.gov/programs/nmtc/index.as

Type	Description	Relevance	Examples	Resources / Useful Weblinks
Foundation Grant	The Foundation Center at the UW-Madison defines a foundation as an entity that is established as a nonprofit corporation or a charitable trust, with principle purposes of making grants to unrelated organizations or institutions or to individuals for scientific, educational, cultural, religious, or other charitable purposes. This definition encompasses private and public foundations. The Foundation Center's Web site (www.fdncenter.org) features *Foundation Finder*, a free look-up tool containing over 65,000 grant makers. Source: UW Foundation Center brochure	The UW Foundation Center's web site should be the first stop to search for foundation grants. A search with the criteria "Grantmaker state: WI" and "Fields of Interest: Historical Preservation." produced a list of about 70, and further narrowed down to the 13 most feasible. Also, the *Chronicle of Philanthropy*, a journal relating to charitable grants may be a good source of information. The head of the UW Foundation Center gave some advice about searching for a grant. • Know what you want and be able to say it in three sentences when you telephone a grant maker. • Know what amount you need • 70 percent of the foundations have a geographic focus • Foundations offer different kinds of support including money, volunteers, expertise, space, research, etc. • Some foundations have matching gifts • Some support operating costs, some do not • People are often too specific in the database searches • Special resources exist for non-profits	MADISON - A gift of $2 million from the Pleasant T. Rowland Foundation will support the continued growth of the University of Wisconsin-Madison Waisman Center's renowned programs in education, research and intervention for children with disabilities.	http://www.waisman.wisc.edu/news/rowlandgift.html

Type	Description	Relevance	Examples	Resources / Useful Weblinks
Self-Generated Funding	Self-generated funding means selecting a use option that creates a profit at the end of each fiscal period. Simply, self-generated funding comes from the operation of a business, or by renting the space for a profit to an outside entity. While this option provides for no upfront cash in hand, the potential profit margins could be used to entice investors, etc.	While Garver is a non-profit entity, this does not prohibit them from establishing a profitable business to generate funding for their organization. There are no use restrictions, from the standpoint of a not-for-profit entity that would prohibit the Garver property to be used as a capital building venture.	As suggested by the class, the following options may provide for a profitable use of the property. • Café • Restaurant • Banquette Hall • Hostel / Hotel • Conference Center A successful plan would most likely implement a combination of for pay services, in addition to attractions, either free, or for pay, which would serve to expand the potential customer base.	
City Funding / Financing	City Funding / Financing is when the city government provides direct financing or funding of a project. This can come in various forms.	Very dependent on the infrastructural needs of the Garver building, and also how interested the city would be in absorbing some of the development costs. When the intended use of the building is more clearly determined, City Financing options will be clearer.	City absorbs infrastructure costs: • Roadways • Water / Sewer Hook Up • Electric Hook Up • Traffic Lights	

Type	Description	Relevance	Examples	Resources / Useful Weblinks
Community Development Block Grants	**T**he purpose of the Community and Neighborhood Development Program is to help make Madison a more viable urban community by providing decent housing and a suitable living environment and by expanding the economic opportunities for low and moderate income (LMI) persons. The program will work with non-profit community and neighborhood groups, and their associated business, resident, and neighborhood partners to plan, develop and invest in activities that relate to the six major goals established by the CDBG commission. These goals include, but are not limited to: Community and Neighborhood Services Facilities. Provide a safe, accessible and well-maintained environment for the delivery of human and recreational services to the CDBG target population. Community and Neighborhood Development Services. Improve the self-help and recreational services available to low and moderate income persons and neighborhoods of low and moderate-income people.	The rehabilitation of the Garver building, by the non-profit Olbrich Botanical Society, will achieve the CDBG's objective to strengthen community gardens, improve community facilities, neighborhood centers, and other neighborhood focal points. The Garver Project demonstrates the CDBG's requirement that the activities produced with CDBG funds promote the delivery and coordination of neighborhood-based services through the operating support of such focal points as community gardens or facilities shared by several agencies and which focus on human and recreational services to neighborhood residents. The Activities funded by CDBG must demonstrate coordination with other community groups and the support and participation of neighborhood residents. They must also illustrate that their service area contains a minimum of 51% lower income individuals, or that at least 51% of their participants are lower income individuals and that they are designed with an end outcome of strengthening neighborhoods. CDBG also provides funding for capital and related costs for the acquisition and/or improvement of buildings used by human service agencies for the delivery of social and recreational services to the CDBG target population. They include acquisition of shared facilities, rehab of such facilities, or the improvement of their accessibility or code compliance. The commission targets its funds to capital expenses of acquisition of property, and/or renovation of the facilities of agencies which can document that a minimum of 51% of their customers are low and moderate income persons.	**Warner Park Community Recreation Center**: The CDBG Commission will continue to work with Parks representatives to ensure that the WPCRC will be operated as a place where residents of all ages, income groups and backgrounds can come together to learn, recreate and socialize, and serve as a focal point for the community.	

Type	Description	Relevance	Examples	Resources / Useful Weblinks
Private Funding	The use of private funding for the redevelopment of the Garver Building by the Olbrich Botanical Society is an ideal means to implement the project. Fundraising efforts by Olbrich or unsolicited donations will undoubtedly help in funding.	Olbrich may offer donation incentives like many other civic projects have done in order to solicit private donations. They may also perform fund-raising that will bring in money while heightening interest in the project. Anything from collecting small contributions in a donation box, to a large complete funding contribution like that by Jerry Frautschi for Madison's new Overture Center for the Arts will be welcomed and helpful.		

SECTION 4

Community Involvement

Jessica Bullen
Alison Carpenter
Eric Goodman
Laura Stauffer
Ben Zellers

Introduction

As Olbrich Botanical Gardens is a public space and important destination in Madison, we identified the need to collect community input on the reuse of the Garver property. Reuse is likely to have a significant impact on the surrounding communities, Olbrich itself, the City, and other stakeholders. By consulting stakeholders, we hoped to identify concerns about the redevelopment and generate ideas about its reuse that would lead to a redevelopment plan more likely to garner broad-based support.

Outreach Strategy

Stakeholders

We interpreted the concept of "community" input broadly to reach a range of views about the building. Olbrich Botanical Gardens is situated within one residential neighborhood and near several others. In the past, nearby residents and neighborhood organizations have expressed interest and concerns about Olbrich's activities and expansion. We also consulted elected officials representing both the entire City and the areas surrounding Olbrich to gauge concerns they hear from constituents. The Olbrich staff and members of the Olbrich Botanical Society Board of Directors were seen as an important component of Olbrich's community as they are personally very familiar with Olbrich and have shown a commitment to its continued success. As a facility owned and partially operated by the City of Madison, we identified the City as another important stakeholder. Finally, we identified visitors to Olbrich as a final stakeholder group in order to garner an understanding of their interests and concerns regarding the use of Garver.

An initial step was to obtain copies of past community input efforts made by Olbrich regarding their expansion and/or the Garver property. Nancy Ragland provided this information. Appropriate representatives for each identified stakeholder were identified with the help of Nancy Ragland and through personal connections. Groups and individuals were contacted by either email or phone. Where possible, we arranged to attend meetings of stakeholder groups. For other cases, interviews were conducted by telephone, e-mail or in person. Appendix I provides summary details of these contacts.

Questions and Visitor Survey

Our group generated a list of questions and concerns to address at each meeting and interview. These questions were:

- Are you familiar with the Garver property and/or the Olbrich Master Plan?
- Were you involved in the Master Plan process?
- Do you/your group have ideas or preferences for the space? Do you/your group have ideas for revenue generating uses?
- Is there a particular need in the community or at Olbrich for a special facility of specific type of space?
- What uses are completely unacceptable and why?

- Do you see any current problems/issues with the space?
- Do you anticipate any future problems with the reuse of the Garver building and property?
- What physical changes to the Garver building are acceptable to you?
- What do you hear others say about the space? Do your friends and neighbors have feedback about potential uses, problems, etc.?

In addition to eliciting comments and discussions around the above questions, we prepared and distributed a comment sheet at the meetings to gather comments from those who may be more comfortable giving written comments rather than verbal.

To gain an understanding of visitor interests and preferences on possible reuse strategies, team members surveyed visitors to Olbrich Botanical Gardens on a Saturday, March 13, 2004, and Sunday, March 14, 2004. Despite the cool weather, there were many visitors both days drawn by special exhibits, the conservatory, meetings, and other events. We completed 113 surveys.

Summary of Community Input

Following is a summary of the major themes and issues that arose overall from identified groups. Complete notes from meetings, interviews, the comment sheet, and the visitor survey results are provided in Appendices I and II. There were a number of similar concerns raised by identified interest groups. These common themes revolved around aesthetics, viability and impact minimization, and are summarized below:

- The desire for connectivity between future park development and the surrounding neighborhoods
- The desire for minimal impact of parking and traffic
- The need for [environmental] educational facilities
- The desire to incorporate local history into the site's use
- The need to generate revenue from the Garver property use without intense competition to existing area businesses
- Opposition to the use of the Garver site for housing development
- The need to retain a sense of place at the Garver property which is somehow related to the overall uniqueness of the existing park atmosphere
- Genuine interest in accomplishing a successful and meaningful development

Stakeholder Summaries

Friends of Starkweather Creek

The Friends of Starkweather Creek (FSC) is a 70+ member citizen group dedicated to the environmental mitigation of the Starkweather Creek watershed. Their efforts are focused on four goals: establishing an environmental education program, developing a bicycle/pedestrian trail system along the creek watershed, improving overall Starkweather Creek water quality, and protecting the creek from negative impacts of future development. Two students attended the

March Board of Directors meeting to gather feedback on the Garver site. The FSC members discussed their general preferences for the physical site, primarily the provision of creek buffers with native vegetation, bank stabilization improvements, and wetland preservation. The group also discussed an environmental education initiative being developed as part of a watershed restoration project, partially funded by the City budget. FSC would like Olbrich to work with the City on this initiative, and incorporate an educational component into the Garver project. They would like to see such an educational effort incorporate the area's natural and community history, particularly as it relates to Starkweather Creek. The members also spoke to the importance of connectivity between the park and surrounding neighborhoods - suggesting the construction of bicycle/pedestrian bridges and decreased use of fencing around the site, as well as to the overall desire to minimize parking and traffic impacts.

Interview with local community leader, John Steines

John Steines is co-chair of the community group Friends of Starkweather Creek, and is active in the SASY Neighborhood Association. In an email interview, he expressed interest in seeing the development of a 'Watershed Based Educational Program' at the Garver site, using Starkweather Creek as an example. He noted that the City of Madison's *Priority Watershed Plans* call for the north plat of land (surrounding the Garver building) to be dedicated to watershed restoration'. He also mentioned the desire to see an art space/gallery integrated into the use, and spoke to his preference that the Garver building be used for future storage/greenhouse needs, instead of building additional storage units throughout the site as the 1995 Olbrich Master Plan indicates.

Interview with local community leader, Michael Forster-Rothbart

Michael Forster-Rothbart is a member of the FSC Board of Directors and an active participant in the SASY Neighborhood Association and the City Plan Commission. In various email and phone interviews, Michael expressed a desire to see increased connectivity between Olbrich and the surrounding neighborhoods. He suggested decreased use of fencing and additional bicycle and pedestrian connections to OB Sherry Park and the open space area northwest of the Garver building. Michael also expressed his wish to see an Isthmus Path connection to Lake Monona, as well as future connections to the proposed new trail system along the Starkweather Creek corridor.

Olbrich Botanical Society Board of Directors Executive Committee

The Olbrich Botanical Society (OBS) is the non-profit arm of Olbrich Botanical Gardens. OBS is the 'private' arm of the public-private partnership that funds and manages Olbrich Botanical Gardens. At their monthly meeting, two students spoke with three members of OBS's Board of Directors, as well as, Nancy Ragland and a staff member in charge of development and fundraising. The Board Members provided some background information on how the money to run Olbrich is secured and confirmed that the list of uses generated by the Master Plan was still relevant and captured the direction they would like to move towards. They are focused on creating revenue-generating uses in the Garver building to help pay for its renovation, but emphasized that any use needed to be compatible with the gardens. For example, they felt any use of the space for art-related activities would be appropriate, but the use by a private landscaping company would be problematic. The Board Members are very aware of neighborhood concerns and want to work with residents to come up with mutually agreeable solutions. Possible uses suggested included a restaurant, art gallery and studio space, and a

horticultural or botanical museum. Parking is a particular concern with Olbrich and nearby residents.

Olbrich Botanical Gardens' Staff

The staff of Olbrich Botanical Gardens identified a variety of space needs and preferences for the Garver site. The staff was particularly concerned about the relationship between the Garver site and the existing Olbrich Botanical Gardens' building. The point was raised that Olbrich Botanical Gardens is expanding its gardens space and this will likely lead to increased staff size in the future. Therefore, Olbrich department office and storage needs should be increased to anticipate these increases. Specific programming ideas are detailed in the meeting notes.

City of Madison Staff

The Parks Department and Planning Department were contacted to find individuals who could comment on the Olbrich site and the Garver Feed Mill building. Personal interviews were conducted with Simon Widstrand of the Parks Department and Kitty Rankin of Planning. These contacts yielded useful insight into the previous plan developed for the property and the historical landmark designation of the building. They also gave information about the ongoing city efforts to improve Olbrich Park. Some different opinions were expressed as to the viability of certain uses and these viewpoints are detailed in the meeting notes in Appendix I.

Jeanne Hoffman, Assistant of City of Madison Mayor

Since the impetus for moving forward with restoring the Garver building came from Mayor Cieslewicz, it was important to discuss the building with his staff to see what general thoughts his office had on the project. Jeanne Hoffman was the contact person in his office. She said that the Mayor feels that Garver is an underutilized, beautiful historic building. Originally the Mayor had wanted some sort of residential use, but realized that is not possible, due to the deed restrictions. Many of the ideas that have been brought up by various groups throughout public outreach efforts were well received by Jeanne. A café, gallery, garden store, and concerts were all discussed. Some new ideas, like an artist-in-residence program or a bicycle rental facility, were mentioned. Generally speaking, Jeanne said that it would be useful to have information on what possible tenants (like a café) are paying for rent in other areas, as well as, how much parking is required for each of the myriad uses which could go in the Garver space. At the same time, it is important to have a strong link to the bicycle path, which should be utilized as a way to draw visitors to the Garver site.

Summary of Results from Olbrich Visitor Survey

Although the survey can be a useful tool for gauging the interest of the general public as far as what happens at Olbrich, it should not necessarily be taken as representative of Olbrich's entire clientele. The conservatory, gift shop, special events, and other activities operate in the winter and are relatively popular, but late spring and summer remain the chief visitor seasons. Complete survey results can be found in Appendix II.

Question #1: Where do you live?

As part of the survey, people were asked where they live. Surprisingly, the majority of Olbrich's visitors come from *outside* of the City of Madison. Of the 113 responses, 49 (43%) people lived in the City of Madison, 30 (27%) lived in the Madison area, 25 (22% lived in other Wisconsin communities, and 9 came from out-of-state. Of the 9 out-out-of state visitors, seven were from states that border Wisconsin, one was from Indiana, and one was from Nebraska. Visitors from inside the state (and not Madison) came from communities as close by as Maple Bluff and Shorewood Hills, and as far away as, Eau Claire, Wausau and Milwaukee. There were 37 different communities represented in the non-Madison answers. This indicates that Olbrich has regional significance, drawing people from all over Wisconsin, and even from Iowa and Illinois.

Question #2: Approximately how often do you visit Olbrich Botanical Gardens?

Answers for this question were relatively evenly scattered though the six answer categories. Of the 100 responses to this question 21% said it was their first time visiting, 21% said they visited at least once a month, 18% said they visit at least once every 3 months, 15% said they visit at least once every 6 months, 16% said they visit at least once every year, and 9% said they visit every two or more years. Olbrich seems to be both attracting new customers and retaining existing customers, which bodes well for the future. When renovations or additions are made, care should be taken to maintain the current visitor base while enticing new visitors.

Question #3: What do you like most about Olbrich Botanical Gardens?

There were 31 different responses to this question (some people mentioned more than one thing). Of the many different responses, three responses stood out: the gardens (with 31 people mentioning them), the conservatory (26 people), and the flowers (21 people). Other popular responses included: special exhibits/events (9), serenity (8) and art shows (6). Some specific special events, like the "Winter Train Festival" and the "Chocolate Event" were brought up. Some people could not decide what they liked best and said "everything." Not surprisingly, answers suggest that what people like most about Olbrich coincides with its core purpose as a botanical garden: growing and exhibiting plants, flowers, and gardens. Various other complementary activities, like the aforementioned art shows, as well as the gift shop and concerts, seem to be appreciated by clientele, but not quite as important as the main focus.

Question #4: Is there anything you would change about Olbrich Botanical Gardens?

The overwhelming response to this open-ended question was "no", which was a full 75% of the 100 responses. Though there were 23 different responses, only three other things got more than one mention: more parking (4 people), "save the fountain" (2) and more flowers (2). The results speak for themselves: people enjoy Olbrich the way it is. Of course, this is not to say that people think it cannot be *improved* upon.

Question #5: Would you use or visit any of the following:

Eight different choices were given for this question, with most people choosing more than one of the eight (and a few choosing all eight). In order from most popular to least popular: a café (65 people), concert space (65), an art gallery (57), community garden space (41), a restaurant (40), a horticulture museum (39), a horticulture library (35), and event space (34). The idea of a café was significantly more popular than a restaurant. This could mean that people would be likely to grab a meal while they were at Olbrich, but they would be less likely to make Olbrich a *destination* for food. Concert space and an art gallery were both popular ideas. Significantly less popular were the horticulture museum and horticulture library. Event space, though it was the lowest-scoring response, should still be considered a viable idea – one person visiting an art gallery is one person visiting an art gallery; but one person holding an event could mean dozens and dozens of visitors.

Question #6: Do you have ideas for other activities you would like to see at Olbrich?

There were 31 different responses to this open-ended question, most of which got only one mention. The majority of people said "no". The top response was education space, which six people endorsed. Other answers that got multiple responses were: a children's garden, better bicycle path access, more concerts, and prairie restoration. Some people wanted more of what is already there, such as: more gardens, more volunteers, more classes, a bigger gift shop, or more exhibits. Other responses were varied widely, from Zen Garden demos to community theater to a small arboretum.

PART II

CONCEPTUAL PLANS

Conceptual Design 1

Sustainability in Action:
A Redevelopment Plan for the Garver Feed Mill

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Bowen Dwelle
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Goals

The redevelopment of the Garver Feed Mill offers a rare opportunity for Olbrich Botanical Gardens and the City of Madison to create a dynamic new destination while expanding the facilities and scope of the gardens. Olbrich has received acclamations from national horticultural groups and is one of Madison's most beautiful attractions. Because of the site's central location contiguous to Olbrich, it is essential that reuse of the Garver Feed Mill supports and complements Olbrich's mission. On account of the Gardens' status as a resource partially financed and owned by the City of Madison, it is important that any form of redevelopment is particularly sensitive to community concerns. Recognizing these issues, we identified the following goals for our redevelopment plan:

- Draw on the industrial and agricultural **history** of the Garver Feed Mill and Wisconsin
- Support the **horticultural** core mission of Olbrich Botanical Gardens
- Showcase best practices in **sustainable development** and **ecological design**
- Provide facilities to the **community** and expand Olbrich's appeal to a broader audience

Our redevelopment proposal for Garver brings these goals together under the theme of *Sustainability in Action*. This concept of sustainability links the past, present, and future of the site through the adaptive reuse of a historic building, integration with the botanical gardens, and a comprehensive use and demonstration of sustainable development practices.

Vision

As part of an effort to demonstrate the science of sustainability in action we propose to:

- Show that sustainable building works by renovating Garver to green building standards
- Show not only that historic buildings **can** be rehabilitated using sustainable techniques, but also **how** sustainable building techniques actually work by opening a green science center in the building

"Green" Renovation

High profile, comprehensive, and accessible examples of sustainable building, renovation, or planning are not present in many communities. As a result, many people do not understand how sustainable development works, which may weaken confidence in the utility of sustainable design. The redevelopment of Garver presents an opportunity for learning by example and demonstration. If people can learn how sustainable development works, they will become more comfortable with it, and understand how they can incorporate sustainable practices into their own lives.

The historic Garver property offers just such an example. Redevelopment of this infill site in the heart of Madison and reuse of the existing Garver Feed Mill building would reduce the development pressure on the urban fringe. The site is located adjacent to a well-used bicycle

trail that runs through the center of Olbrich Botanical Gardens property, providing an opportunity to showcase sustainable transportation. In addition to green building design, ecological landscape design and alternative transportation options, such as bicycling, would serve as a visible and comprehensive example of environmental practices.

The Garver building should be renovated and certified as a green building by the United States Green Building Council (USGBC) (Figure 1). The Leadership in Energy and Environmental Design (LEED) developed by USGBC has become the national standard in green building practices in the United States. To become LEED certified, a construction or renovation project must meet a series of standards involving the site selection, water efficiency, the energy and emissions, materials and resources, indoor air quality, and innovation and design process (USGBC 2001). A green renovation of the Garver building would include:

- Planting of the rooftop to reduce storm water runoff and diversion of collected water to a wetland
- Installation of photovoltaic cells for solar energy
- On-site collection and treatment of wastewater
- Pervious paving for walks and parking areas
- Sustainability-harvested building materials
- Natural lighting of indoor spaces
- Landscaping maintained with no pesticides

Figure 1. Examples of a Standard Green Building by LEED. (Source: http://www.usgbc.org/leed)

Wisconsin Green Science Center

Garver Feed Mill is a historic building that **can** be renovated in a way that meets the highest green building standards. The Wisconsin Green Science Center (WGSC) would be an interactive attraction that would demonstrate to the public the **how** of sustainable building techniques by becoming a public showcase and educational tool for sustainability. The heart of our

redevelopment plan is a proposal to use the central portion of the building for a highly interactive, activity-based destination where people of all ages can observe and interact with hands-on, dynamic exhibits that demonstrate the science behind sustainability. Examples of interactive exhibits could include the following:

Alternative Transportation

- Interactive exhibit where a visitor can power a bicycle on rollers, and show the power generated or expended versus comparable energy requirements and emissions for an automobile.
- Demonstration of safe bicycling techniques and free or reduced bicycle rental (Figure 2)

Figure 2. Bicycles in Copenhagen. (Source:

Figure 3. Solar power.

Energy

- An interactive exhibit that demonstrates how photovoltaic cells work, their efficiency versus other types of power generation, and the short and long-term costs of different types of power (Figure 3)
- Demonstration and information about solar energy generation and use in the Garver building

Wastewater Treatment

- On-site collection and treatment of biological wastewater treatment with a Living Machine (a treatment system that uses plants)
- Demonstrations building rain gardens (Figure 4)

Figure 4. Rain garden.

Figure 5. Green roof. (Source: http://www.greenroofs.ca/grhcc)

Stormwater Management

- Tour of the green roof (Figure 5)
- Interactive exhibit that shows structure of green roofing system, water capture, and reuse of collected water**Precedents**

The WSGC concept draws upon the precedent of the Exploratorium in San Francisco (Figure 6). The Exploratorium opened in 1969 in a vacant building originally developed as part of the Palace of Fine Arts complex for the Panama-Pacific International Exhibition of 1915. The Exploratorium's focus is hands-on exhibits that attract visitors of all ages. It has been extremely successful and has since set up a Partner Network to assist with the creation of similar science centers around the world. Possibilities exist for working with the Exploratorium via their Partner Network. With the focus on the science of sustainability, the WGSC would be unique.

Figure 6. Exploratorium. (Source: www.exploratorium.edu/map.html)

An example of a green building focused on education is the Adam J. Lewis Environmental Studies at Oberlin College in Ohio. Though this project was new construction it provides a multitude of examples of how a green building can be used an educational tool. Students use the building extensively for research projects. Information on the buildings' use of energy and water are posted in the building as well as on the Internet (Oberlin College 2003).

The Chicago Center for Green Technology is also another excellent precedent. Located on a former brownfield, this green building used 100 percent of an existing structural shell, generates energy with solar panels, and has a vegetated roof (Figure 7). The Center "serves as both a national model of environmentally friendly 'green' building design and a resource for those wanting to learn more about sustainable programs that benefit the immediate community as well as citizens of the greater Chicago area" (Chicago Center for Green Technology 2004).

Figure 7. Chicago Center for Green Technology. (Source: www.cityofchicago.org/environment/GreenTech/

Program

In addition to the Wisconsin Green Science Center (WSGC), we propose a variety of other uses for the Garver building. The proposed program with square footage of each use is listed in the following table.

Building Use	**Square feet**
Science Center	25,000
Storage/Workshop	9,030
Building support	7,484
Office space	3,605
Atrium	3,084
Classroom	2,848
Event Room	2,848
Retail	2,776
Café	2,508
Bicycle Station	2,007
Outdoor terrace	1,676
Catering Kitchen	1,000
Total square footage	**64,000**

Table 1. Proposed uses and square footage.

The following bubble diagrams (Figures 8 and 9) show the proposed location of each use. Besides the WGSC, all facilities in the building would be free and open to the public except when rented. In contrast to the master plan for the site, we assume that the one-story building on the western side of the building will be renovated rather than demolished.

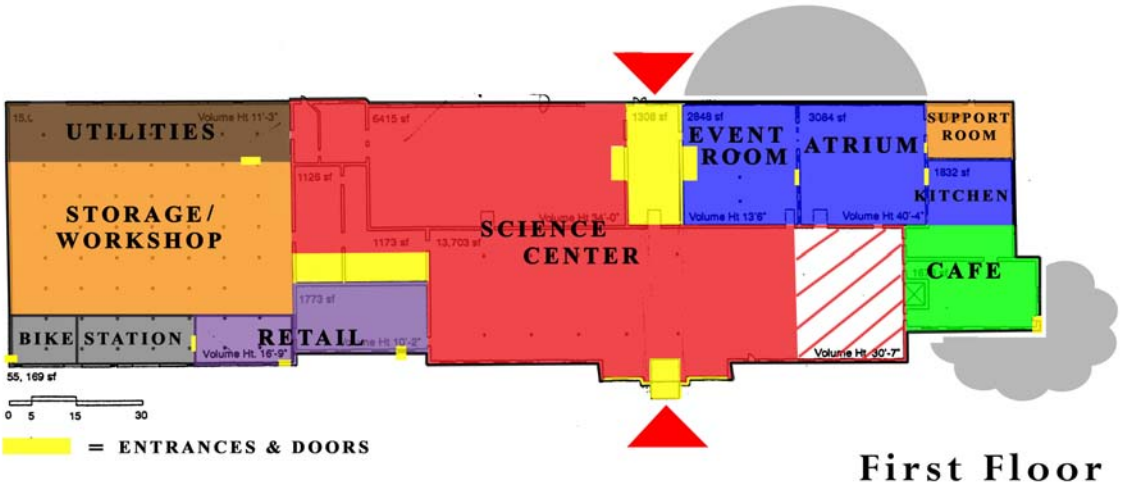

Figure 8. First Floor Program.

The red arrows in Figure 8 denote the major entrances to the building. The gray areas outside the event room, atrium, and café are outdoor patios. The red-hashed area indicates a mezzanine to be used by the WGSC. Yellow areas indicate hallways and entrances.

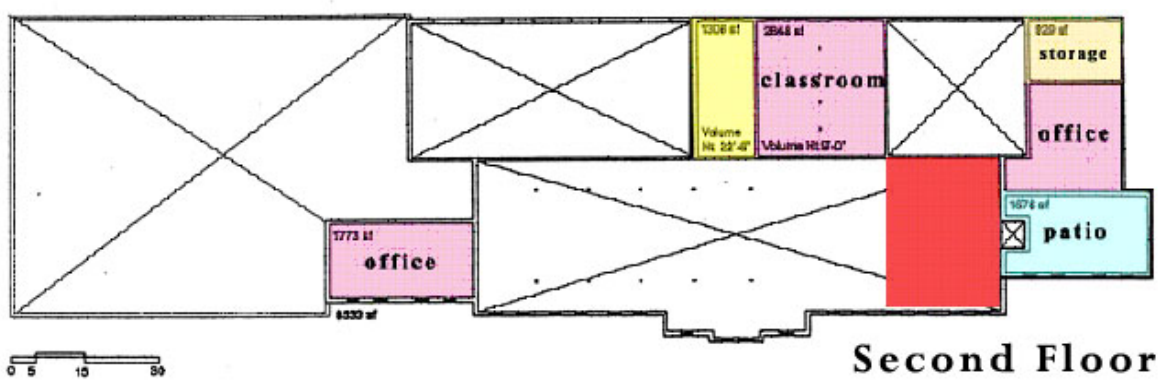

Figure 9. Second Floor Program.

Wisconsin Green Science Center

As described above, the WGSC would be the anchor use of the Garver building. The large open space of the Garver building would lend itself well to the WGSC as an anchor use. The WGSC would occupy the center of the building and a second floor mezzanine and would include a rebuilding of the back portion of the building that was destroyed by fire. The total space of the WGSC would be approximately 25,000 square feet, which would allow for up to 250 interactive exhibits (roughly 100 square feet per exhibit). The exhibit floor of the WGSC would be rentable during the museum's after-hours. The theme of the WGSC lends itself to a less than "pristine" renovation of Garver, which has cost savings potential. Thereby, the history of the building would remain visible, so that the WGSC would feel more like a workshop than a museum or lab.

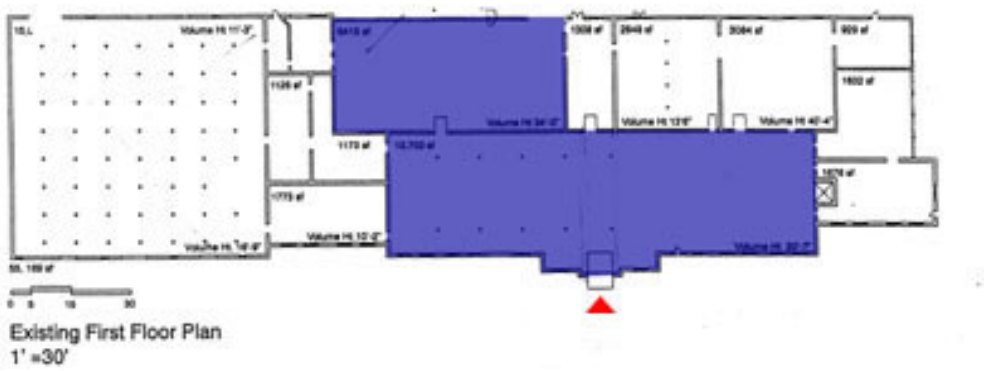

Figure 10. Wisconsin Green Science Center area.

Café

A delicatessen-style café would be situated on the southeast corner of the Garver building in order to take advantage of both the pedestrian traffic circulating around and through the building and Olbrich Botanical Gardens, as well as inviting bicyclists from the bicycle path to break for a sandwich and cup of coffee. A patio with trellis supporting foliage and thereby providing shade is envisioned for the area immediately outside the café. Shrubbery and flowers could add to a sense of enclosure, yet remain open enough to feel welcoming to passersby. In addition, seating would be available on the roof and provide a view of the building's green roof.

The indoor café area would provide a variety of indoor seating including couches, booths, and tables and chairs. The café should include the garden theme indoor as well outside, with potted plants, vines, and botanically themed murals.

In order to promote environmental stewardship and responsible commerce, the café should provide only fair trade, organic coffee brands. Further, sources of fresh, locally grown produce would make up the menu as much as possible. Partnership with the MATC culinary school is a possibility for the management of the café.

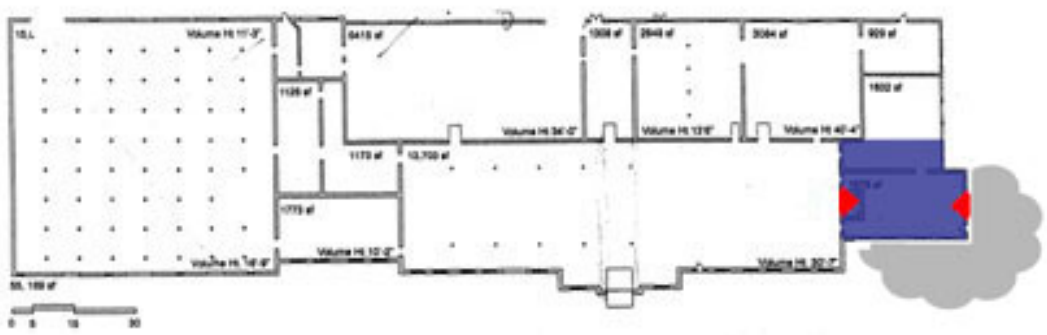

Figure 11. Café area.

Retail Store

The store would serve as a souvenir outlet for the museum and an expansion of the gift store already included within Olbrich's central facilities. The added space to Olbrich's retail supply would allow for more sales of plants and flowers. The stream of visitors leaving and entering the WGSC, the high volume traffic along the bicycle path, and the success of the current retail store are all indications that retail could be expanded at Olbrich. The new store space would also give Olbrich the option of closing the current gift store and using the space for an alternative use.

The store would be optimally located along the south side in front of the bicycle path and in between the bicycle station and the main entrance to the WGSC. Visitors to the renovated Garver Feed Mill may be drawn simply on account of the retail store, which would offer a unique niche in high-quality garden supplies, museum souvenirs, and resources on sustainability.

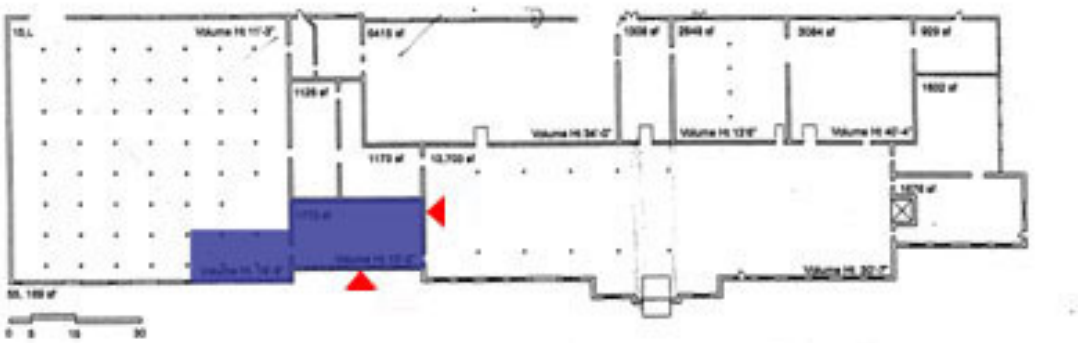

Image 12. Retail Store area.

Atrium

An atrium area would allow an indoor space for dramatic botanical displays. A unique two story-room would be free and open to the public, and the space would be well connected to other uses within the renovated Garver Feed Mill such as the adjacent Event Room. Currently this

space has no roof (Figure 13). We recommend a glass roof would provide abundant natural light while protecting the space from the natural elements so that year-round public events and weddings could take place in the atrium. The adjacent Event Room would be available for receptions.

Figure 13. Proposed area for atrium, left. (Source Bowen Dwelle 2004).

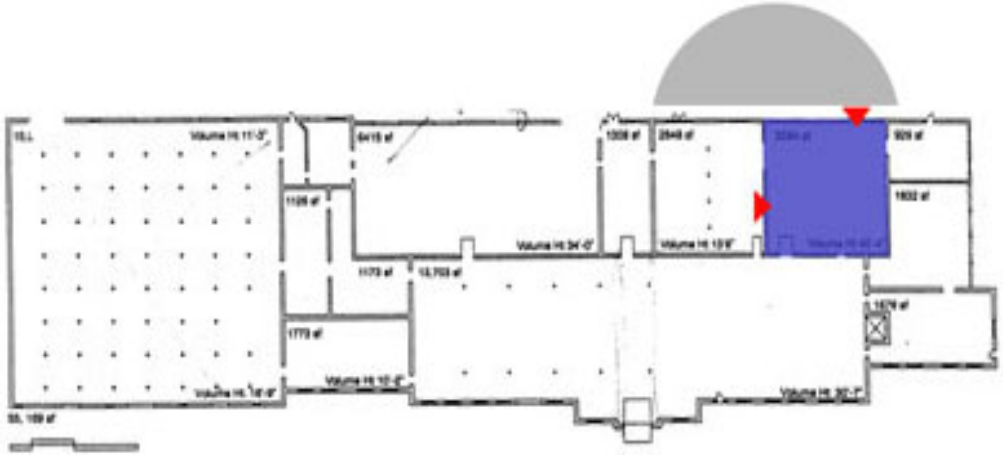

Figure 14. Atrium area.

Bicycle Station

The bicycle station would be located along the bicycle path on the southwest corner of the building. The station would provide bicycle rentals, a self-service and paid-service shop area for bicyclists, as well as storage lockers and sheltered bicycle racks. A bicycle station would accommodate visitors who choose to use bicycles as a means of accessing the building. The Garver Feed Mill could be a destination or a stop along the way for a bite to eat at the café or for a cool afternoon in the WGSC.

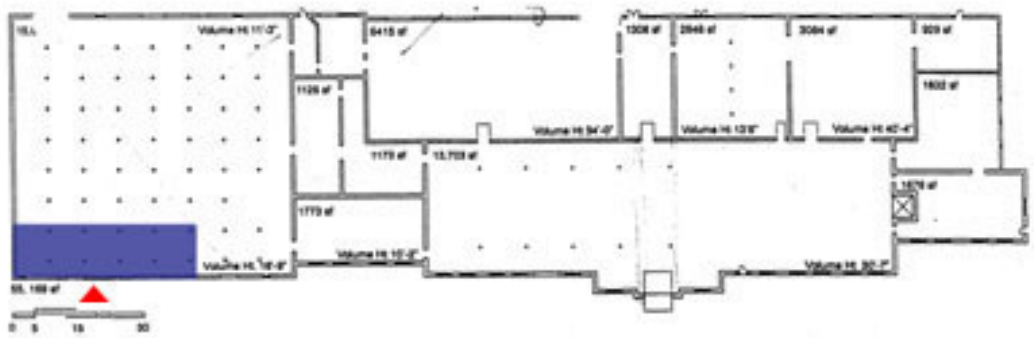

Figure 15. Bicycle Station area.

Community Rooms

Community rooms, denoted by blue areas in Figure 16, are provided because of high demand for space adaptable to multiple functions, such as neighborhood meetings. Included are an event room, a kitchen for catering purposes, and classroom space. As the name implies, these rooms would serve civic functions and additionally could be rented for large private gatherings such as retirement and Christmas parties.

The classroom space would allow for hands-on workspace and be divisible so that seminars and workshops could provide a variety of unique opportunities for learning. Undivided this room would have a capacity of 120 to 270 people.

The demand for space to hold wedding functions has been repeatedly expressed. This would be partly met with the atrium but also the main event room would be an excellent space for weddings and/or receptions. This space would also be available for meetings. It would also have a capacity for 120 to 270 people. The kitchen could be rented out to catering services for these events.

Office Space

Olbrich staff expressed a need for additional office space. The WGSC may also need office space. Alternatively, the office space could be rented out in order to generate revenue. The two areas of the building designated for office space would be on the second floor and integrated so that they would not clash with the civic nature of the building's other uses. Green areas in Figure 16 denote office space.

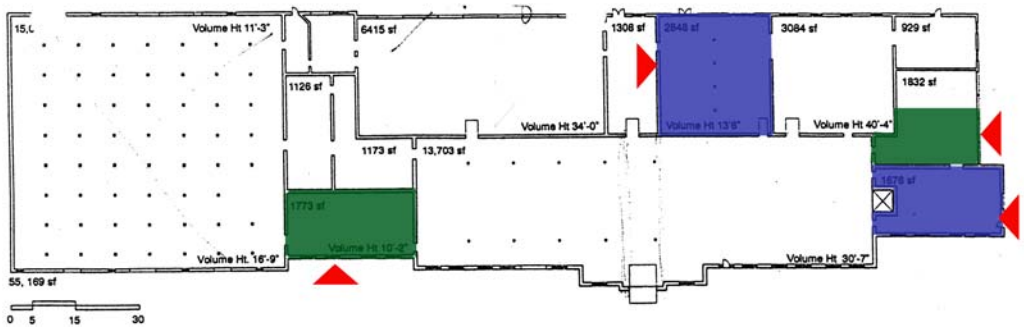

Figure 16. Community rooms (blue) and office space (green).

Service Areas

Service areas have two components: visitor areas and areas for the operation of the building and maintenance of Olbrich. For visitors the service areas are hallways, stairs, and bathrooms designated as yellow areas in Figure 17. Utilities, storage/workshop, support room, and additional storage would serve the operation of the building or as an extension of Olbrich staff facilities. Currently, the Olbrich staff use areas of the Garver Feed Mill as workshop space and as storage space for garden equipment. These uses and additional staff functions could continue to can be accommodated with the proposed renovation.

Image 17. Service Areas

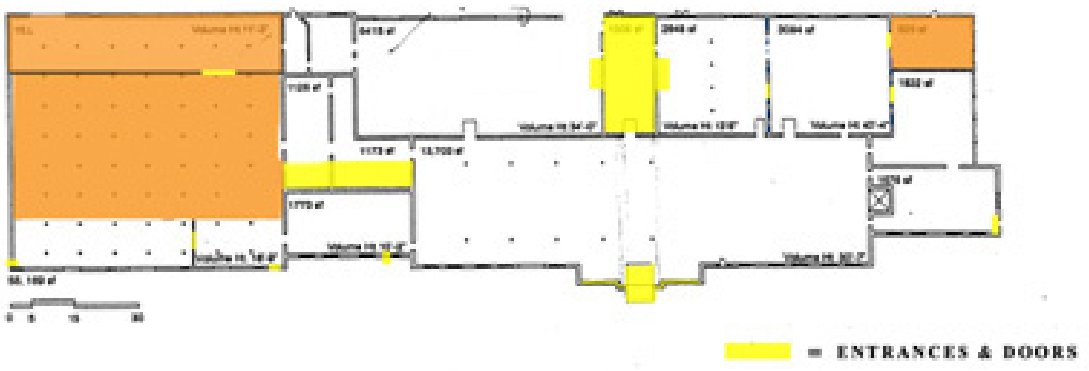

Figure 17. Service Areas.

Outdoor Terrace

Immediately outside the Atrium and Event Room will be an outdoor terrace (Figure 8). This terrace will overlook the gardens planned by Olbrich for the eastern section of the Garver property. The terrace will also be available for rent and its proximity to the Event Room and Atrium will provide the benefit of adjacent indoor space in case of inclement weather.

Financial Overview

Implicit in the goals of this redevelopment plan for Garver is the desire to have a positive economic impact on the neighborhood and the community. This type of economic development would bolster local business by pulling people to the Olbrich neighborhood for shopping, leisure, and education, instead of pushing them to the urban fringe to satisfy these consumer demands. Through historic preservation and infill redevelopment, the WGSC, café, and retail area can create jobs for the community. The estimated annual revenues and operating costs provide encouragement that the renovation of the Garver Feed Mill is financially feasible.

Redevelopment Costs

We estimate that the cost of the renovation would be $12 – 15 million. This approximates to a square foot renovation cost of $200 – 250. More exact numbers would require a more in-depth financial analysis, which is beyond the scope of this plan. However, Tim Sherry, treasurer of the

Olbrich Botanical Society, shared these ballpark estimates, as well as the uncertainty involved with such cost estimates (Sherry 2004).

Use	Annual Gross Revenue	Annual revenue minus operating costs
WGSC	$1,000,000	$300,000
Retail	$168,000	$120,000
Café	$200,000	$60,000
Event Room	$46,000	$32,000
Atrium Rental	$29,000	$20,000
Sum Revenue	***$1,400,000***	***$530,000***

Table 2. Main revenue generating uses and projected revenue.

Assumptions behind estimates

Wisconsin Green Science Center

For the WGSC, we estimate approximately 250,000 visitors per year. This figure is half of the San Francisco Exploratorium's annual visitor total, which approximates the number of visitors the Olbrich Botanical Gardens currently receives. The average admission price would be around four dollars. As with other labor-intensive uses, the operating costs are estimated to be about 70 percent of the gross revenue.

Retail

We obtained estimates on the annual gross revenue and annual revenue minus operating cost figures for Olbrich's existing retail store. With these figures, we conservatively estimate that the revenue figures for the new retail store in the renovated Garver Feed Mill would be half those of the current store. In addition to being a profitable enterprise itself, the new store may in fact boost sales at the existing store. However, there may also be a trade-off for consumer dollars between the two stores.

Café

We estimate that the annual number of visitors to the café would be about 100,000. This corresponds to one-fifth of the sum of the current number of visitors to the Olbrich Botanical Gardens and the projected annual number of visitors to the renovated Garver Feed Mill. Some persons may visit the café as their single destination. Perhaps, the café will become a common stopping point for bicyclists on the bicycle path. Further, the average expenditure per visitor was estimated at $2 per person. As with other labor-intensive uses, we estimated operating costs at 70 percent of gross revenue.

Event Room

We estimate four rentals per week and an average rental price of $220. This price is based on the average price Olbrich currently charges for its event rooms. As with other non-labor intensive uses, we estimate operating costs of 30 percent.

Atrium

We estimate four rentals per week and an average rental price of $140. This price is based on the average price that Olbrich currently charges for use of its atrium. As with other non-labor intensive uses, we estimate operating costs of 30 percent.

Site Concept

The goals of the site concept plan are to:

- Link the proposed uses of the Garver building with the current and proposed Olbrich gardens and the bicycle path that runs through the site
- Emphasize the redevelopment's theme of *Sustainability in Action* with alternative transportation and sustainable landscapes

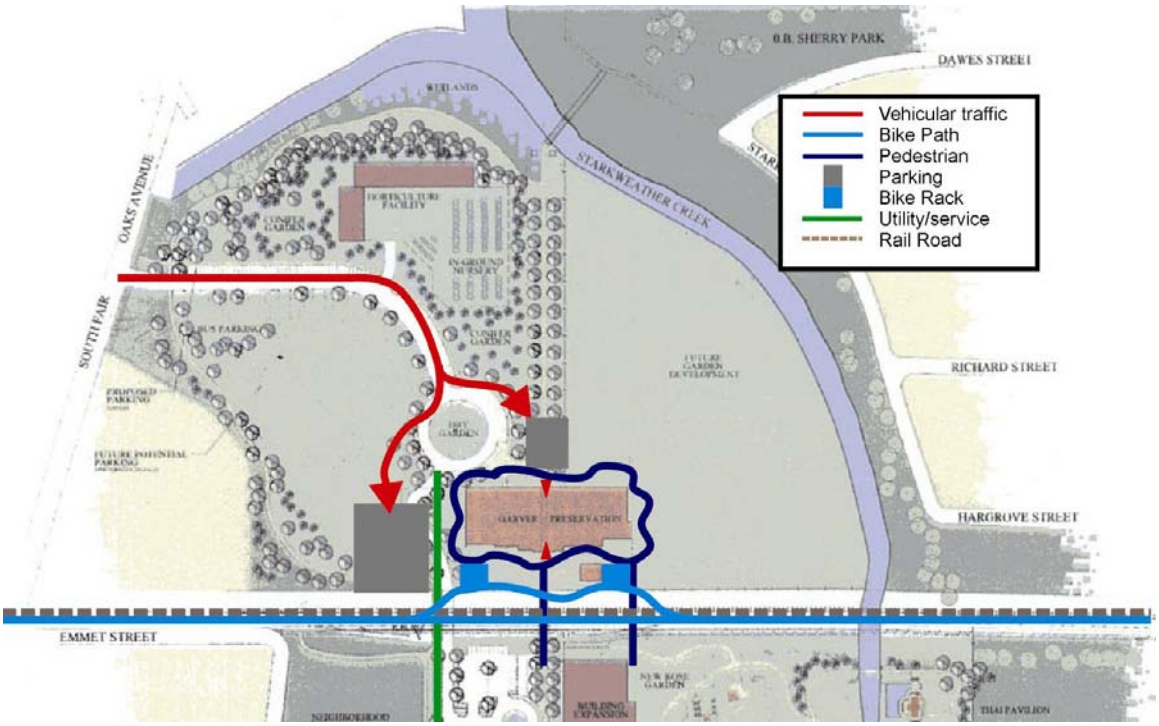

Figure 18. Circulation plan.

Circulation Plan

The circulation plan for the Garver site is presented in Figure 18.

Vehicular Site Access

The major access route to the Garver Building would be off South Fair Oaks Avenue. We would discourage a major traffic route through the current Olbrich site, as this may lead to the deterioration of the sanctity and beauty of the gardens. The access to Garver from South Fair Oaks Avenue would lead to a main parking lot on the west and a smaller one on the north side of

the building. A covered drop-off location, near the entrance to the community rooms on the north side of the building, would be available for visitors to Garver, who may have a difficult time walking from the parking lot to the building's entrance. In addition, a nominal fee should be collected from those parking in both the Olbrich Botanical Gardens and the Garver parking lots.

A minor access route for service vehicles would be maintained from the current Olbrich site to Garver. There is an obvious need to maintain a connection between the two sites for property maintenance and service access. This route would follow the current service road.

Delivery access to the Garver building would enter from the South Fair Oaks Avenue entrance. A loading dock would be located on the north side of the building, near the west corner. This delivery area would be heavily screened using landscaping such as trees, large shrubs, and other decorative vegetation. The facilities for the collection of trash and recyclable materials would also be located in this area and would have a decorative, yet functional wooden fence for separation and screening of the collection bins.

Bicycle Site Access

There is a major bicycle route that passes between the current Olbrich Botanical Gardens and the Garver building, on the south side of the Wisconsin and Southern Railroad track (Figure 19). Access and corresponding signage would be provided to the Garver building, across the railroad track.

Bicycle parking would be available for visitors in the bicycle station and by the café. A bicycle path and parking would still remain near the entrance of Olbrich Botanical Gardens.

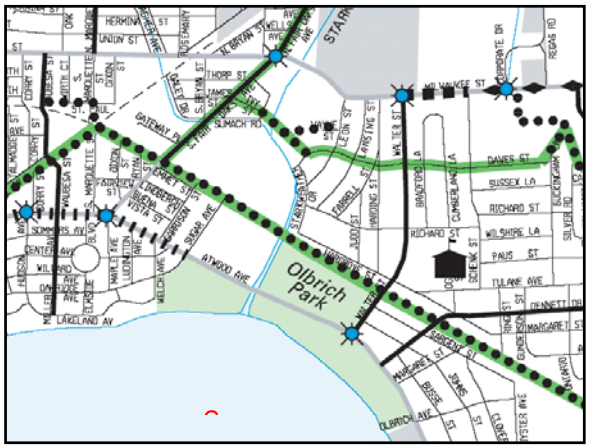

Figure 19. Bicycle access around Garver and Olbrich. (Source: www.ci.madison.wi.us)

Mass Transit Site Access

We recommend that a bus route be expanded to a bus stop near the Garver Site on Fair Oaks Avenue to provide easy access for those riding Madison Metro.

Building Entrances

The main entrance for the building would be located on the south side of the Garver building. This entrance would be the main access thoroughfare for the museum. This entrance would be supported by a decorative path leading from the parking lot, as well as from the north and east sides of the building. This south-facing building entrance would provide access to visitors coming from the bicycle trail and those walking from the current Olbrich Botanical Gardens.

The secondary entrance, for the wedding facilities, the classrooms, and the upstairs offices would be on the north side of the building. This entrance would be directly opposite the south entrance.

The south sides of the Garver building would also have two additional entrances: the main doors for the gift shop and the café. These two entrances would be visible from the bicycle trail and the Olbrich, and would be accentuated with quality marketing for the two retail businesses.

Pedestrian Paths

The current access to the Garver building from Olbrich Botanical Gardens would also serve as a pedestrian, bicycle, and handicapped accessible route to the Garver building. This path would lead pedestrians directly to the main entrance of the Garver building.

To facilitate the movement of visitors with disabilities (such as the elderly and handicapped), a golf-cart or bicycle taxi service would be provided to transport visitors to and from Olbrich to the Garver building. This service would follow the existing service route.

An additional pedestrian path would be constructed from the east side of the current Olbrich Botanical Gardens to the east side of the Garver site. An aesthetically pleasing and easily traversable bridge would cross the existing railroad track and bicycle path, and would connect the two gardens. This path would also provide a direct route from the existing gardens to the café.

Landscaping Plan

The landscaping plan has been designed in such a way that it would create connectivity between the proposed uses for the Garver building and Olbrich Botanical Gardens. In our vision for the redevelopment of Garver, the focus of the grounds around Garver would be educational gardens that connect to the existing gardens and Olbrich's mission. We plan to tie the Garver building's themes of sustainability, history, and education in with the site's gardens. The gardens themselves would serve as an education tool for the public that would be especially friendly to children. Below are examples of themes for gardens that would link the idea of sustainability showcased in the Garver building's renovation with Olbrich.

Native Plants

One of the gardens surrounding the Garver building could be a showcase of plants native to Dane County. Not only would it serve as a beautiful flora display, but it would also provide education to visitors about native plant species and their benefits for supporting local ecosystems and reducing pesticide use. Decorative signage and educational plaques are recommended for this garden.

Wetlands

A small wetlands area would be located on the Garver site to collect onsite rainwater and storm water. A wooden boardwalk would traverse the wetlands and signage along the path would educate visitors on the wetland's vegetation and common birds attracted to the wetland.

Rain Garden

Rain gardens would be located along the Garver site to catch rainwater from the building's roof and to divert the rainwater from pervious surfaces to these gardens where the water would infiltrate back into the groundwater. It would educate visitors on storm water management and the types of plants appropriate for rain gardens.

Green Roof

On-site storm water management practices would also be included in the site's design, including a roof top garden that would help minimize the amount of impervious surface on the site. Approximately one-third of Garver's roof would be dedicated as a green roof. This alternative garden form would have succulent plants (such as sedum) that are hardy and naturally collect large quantities of water. The green roof could be viewed from the café's roof patio or by tours.

Rain Barrels/ Cisterns

In addition to the other on-site storm water management techniques (e.g. rain gardens, green roof), the Garver property would have rain barrels or cisterns that would collect excessive water from the roof. This excessive water would be stored in these barrels or cisterns until they reach capacity or it is an appropriate time to water the vegetation on the surrounding site.

Traditional Agriculture

Paralleling Garver's history as a sugar beef production facility and area of hops cultivation, an area of Garver's new landscaping would be dedicated to the site's agricultural past. This area may include old machinery with signage, as garden accents and a garden with sugar beets and hops.

Organic Garden

As many citizens of the Madison community are interested in organic gardening, the Garver site would have a demonstration organic garden. This garden would provide information and displays that would be useful to educate the public about gardening without the use of pesticides, herbicides, and fungicides.

Other Educational Gardens

Educational gardens on the Garver site could introduce visitors to native plants and soil conditions. Sensory gardens would continue the hands-on theme that it the highlight of the Science Center. A demonstration garden would education people about planting techniques.

Conclusions

Our proposal for the redevelopment of the Garver Feed Mill seeks to provide a dynamic new destination while expanding the facilities and scope of the Olbrich Botanical Gardens. The proposal draws on the industrial and agricultural history of the Garver Feed Mill, supports the horticultural core mission of Olbrich Botanical Gardens, uses best practices in sustainable development and ecological design, provides facilities to the community, and expands Olbrich's appeal to a broader audience. These plans are brought together under the theme of *Sustainability in Action* to demonstrate to the community that sustainability can be accomplished and, just as importantly, how sustainability works.

Conceptual Design 2

Community-Oriented Reuse Strategy

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Introduction

The growth of Olbrich Botanical Gardens into a regionally and nationally recognized botanical garden has placed increased and sometimes conflicting demands on the existing facility. In fact, the current facility can no longer accommodate the staff and programming needs of the garden, making redevelopment of the former Garver Feed Mill a promising solution. This redevelopment design is the culmination of a semester's work. Utilizing the background information gathered during the first half of the semester for the site and contextual inventory, programming needs, redevelopment precedents, and financial feasibility options, we devised a redevelopment plan that incorporates these findings and builds upon them. The plan also accommodates the existing deed restrictions on the Garver property while maintaining Olbrich's mission and vision.

Our redevelopment model seeks to incorporate the needs of Olbrich Botanical Gardens while creating a regional attraction focusing on education and natural history. Our model also anticipates revenue generation through the proposed café, rental spaces, and museum. The ability to generate revenue is considered critical to the long-term success of the gardens and necessary to offset redevelopment costs. Another exciting potential source of revenue comes from the use of the proposed auditorium as a movie theatre and performance space. By showing movies indoors during the winter and in the gardens during the summer, Olbrich can generate local interest and revenue during the "off-season" while providing a unique attraction. In addition, many natural history museums often pair films with their exhibits.

Built into our model is a set of assumptions that should be noted. The first assumption is that the west wing of the Garver building will be removed. We felt this would not only create balance and symmetry, but also restore the original footprint and integrity of the building. The second assumption revolves around vehicular and pedestrian circulation systems. Specifically, vehicular traffic will enter from Fair Oaks Avenue and a pedestrian bridge will link visitors on either side of the railroad tracks between the Garver property and the existing gardens. The third assumption is that LEED Certified green building techniques will be used as much as feasibly possible. With the existing Garver Cottage renovation, some green building concepts were incorporated, thereby setting a precedent and knowledge of green building techniques and standards within Olbrich.

Floor Plans

First Floor

The first floor is dedicated to spaces for public use (Figure 1). The layout is efficient, accommodates many needs and scales, and generates revenue. The raised terraces on the north and south sides of the building are curved to add visual interest and to break up the linearity of the building. Ideally they will incorporate bricks from the burned out portion of the building. These terraces serve as public spaces for meeting and enjoying the garden.

We recommend reconstructing some of the burned portion on the north side of the building in order to increase the size of the museum and the wedding/reception space.

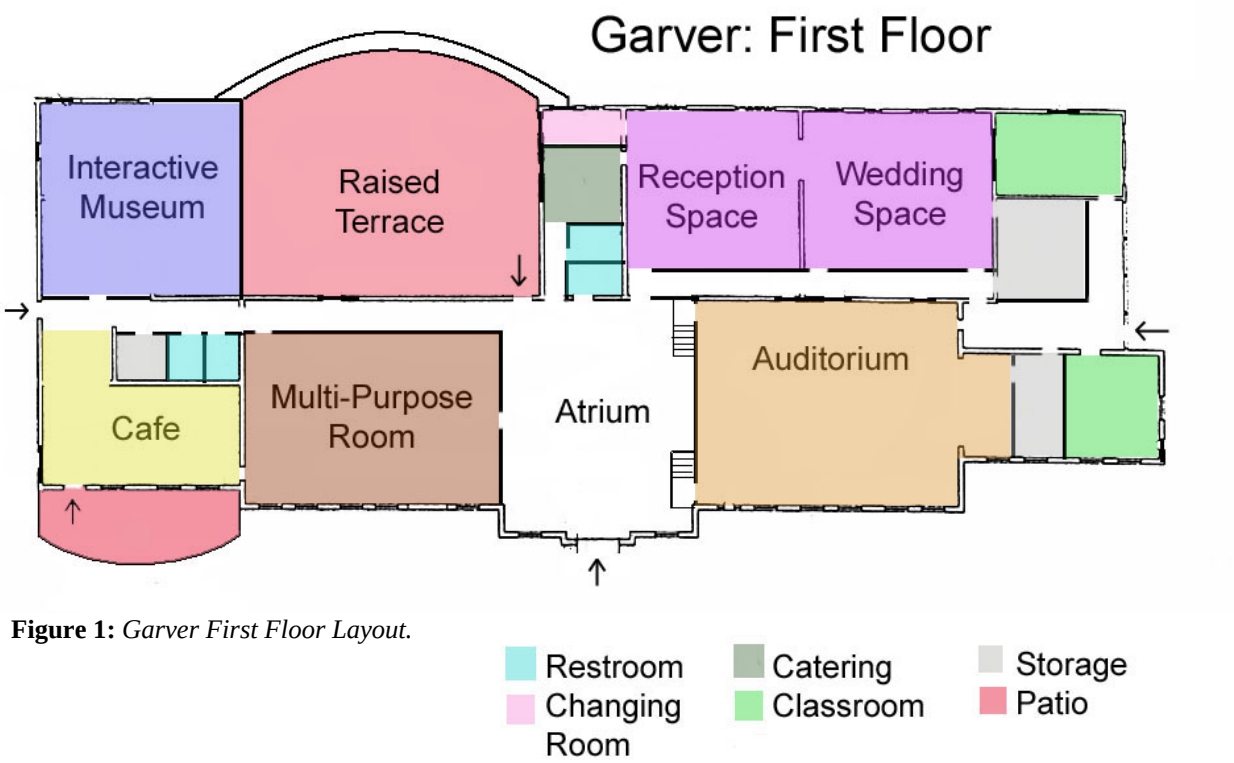

Figure 1: *Garver First Floor Layout.*

The remaining space will serve as the rear terrace, to be used for sitting and display of potted plants. It will also serve as the outdoor movie theatre during the summer months. Many cities across the country, including Boulder, New York, Chicago and San Francisco, have established successful programs that show classic Hollywood movies in city parks. In some cases, these events are used as fundraisers and draw 200-300 people per screening (Figure 2). Olbrich could be a pioneer in Madison in the creation of such an event. In San Francisco, film screenings are supported through sponsorship, with donations ranging from $100-$750 dollars. A staff of volunteers produces the events, which have become increasingly popular attractions. It is also possible that film screenings could be tied to the Wisconsin Film Festival, a regional festival that is gaining prominence and could enhance Olbrich's regional importance (see http://www.filmnight.org/ for more information on movies in the park).

Figure 2: *Outdoor movie screening. (Source: http://www.filmnight.org)*

Atrium

Upon walking through the main entrance on the south side of the building, one immediately enters the atrium (Figure 3), which is spacious and attractive. There are cathedral ceilings and a mezzanine, linking this open space with the auditorium and the multi-purpose room. This will be an important space for people to gather and can showcase plants and events being held at Olbrich. The atrium can also accommodate intermission revelers partaking in events in the auditorium, as well as, providing a sanctuary from the excitement of a wedding reception.

Figure 3: *Atrium example. (Source: http://www.fsj.nlc.bc.ca/staffpages/ahcote/atrium.jpg)*

Auditorium

One of many programming needs identified by Olbrich staff was an auditorium (Figure 4). Currently, Olbrich hosts symposia and lecture series that are constrained by the number of attendees they can be accommodated in the existing facility. As one stands in the atrium facing north, the auditorium is to the right. With stadium seating, an elevated stage, and a screen, the auditorium will provide a modern and comfortable place for lectures, films, and performances. Handicap access will be on the first floor with access to the second floor via stairs located at the back. This room will offer the latest technologies required to produce the symposia, lectures, and theatre productions envisioned, and seats 300.

Figure 4: *Auditorium example.*

Wedding and Reception Space

Currently, revenue generated through rental of the existing Olbrich "commons" is an important source of revenue for the gardens, but is constrained by size. The wedding space will have a glass roof and an abundance of plants. This setting will provide a year round space for weddings at Olbrich. Associated with the wedding and reception space is a small catering kitchen and a "bridal room," offering the bride and her wedding party a place to change and store their things. The reception room is designed to accommodate a dance floor and seating for approximately 250 people (Figure 5). These rooms are enhanced by excellent garden views, and when not in use for a wedding, can be rented as reception space for other events and meetings.

Figure 5: *Reception room example.*

Classrooms

Permanent education space is lacking in the current Olbrich facility. The staff identified this need as essential to the promotion of their educational classes. We have situated the classrooms on the east end of the building. They are large enough to accommodate a variety of educational needs and activities, and provide excellent views of the gardens and Starkweather Creek. Each classroom accommodates approximately 75-100 people, depending on the activity and use of space.

Café

A cafe is an important link between the existing gardens, the Garver property, and the bicycle trail. Situated at the southeast end of the building, it is easily accessible by cyclists and pedestrians alike (Figure 6). To minimize the cost and management of such an enterprise, we envision a menu of light food that varies seasonally and is locally catered. The café will be bright and spacious and enhanced by potted plants. In the warm weather, the adjoining terrace will have tables and umbrellas, fostering a comfortable and accessible public space.

Figure 6: *Café example. (Source: http://www.dispatchmonthly.com/nena_1997/cafe.jpg)*

Multi-Purpose Room

As its designation implies, this space is meant to accommodate a variety of uses as needed by Olbrich Botanical Gardens. The room will be able to accommodate flower shows and living exhibits. It will be well lit, have flooring that can withstand water and heavy traffic, and have access to water to facilitate such activities. When not in use for flower shows, it can be used for art exhibits, meetings or display space.

Natural History Museum

A natural history museum complements Olbrich's educational goals and provides an opportunity to educate the public about the region's natural history. In addition, Madison lacks a comprehensive natural history museum, although several museums on the University of Wisconsin's campus, such as the Geology Museum and the Archaeology Museum, address some natural history themes. There are many opportunities for Olbrich to tie museum exhibits to the gardens and to the surrounding natural environment. Some possible exhibits are plant/insect interactions, watershed models, and native plants of Wisconsin in the home garden. There are many organizations that promote and support small museums and their efforts, which Olbrich would have access to (for more information see http://www.smallmuseum.org/).

Second Floor
We have devoted the second floor of the building to office space and the library (Figure 7). The office space has the potential to be the largest source of revenue, depending on how much of the space is used by Olbrich staff. The potential to rent the office space is greatly enhanced by the amenities offered by the Garver site, including the bicycle trail, meeting spaces, a café, and scenic views. Attracting other non-profit organizations to the building would provide much needed revenue and minimize any potential conflicts with the deed restriction created by leasing space.

Moving the current library to the Garver building allows it to increase in size while freeing up space in the existing building. The library will be well lit and comfortable and continue to serve as the premier gardening library in the region. A new possibility arises to tie in book and video selections with museum exhibits.

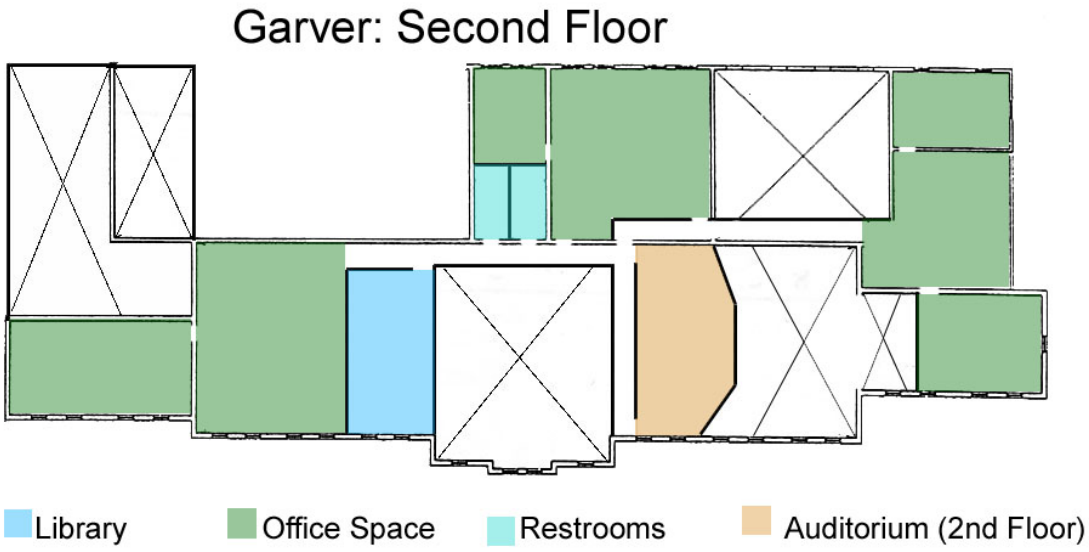

Figure 7: *Garver second floor layout.*

Green Building Features

With the available technology and progress of green building designs, we see no apparent reason for not incorporating many of these features into the Garver Redevelopment Project. Often the long-term benefits of green construction are not considered when calculating the costs of heating and cooling. The Garver Building is ideally situated to capture both passive and active solar energy. The incorporation of large windows on the south side of the building will serve as the primary source of passive solar capture. When combined with heat retaining flooring, such as tile or stone, this combination can dramatically increase efficiency and reduce heating costs. Passive solar energy will be an important component for flower shows held in the south-facing multi-purpose room (Figure 8)
.

Figure 8: *Capturing solar energy.* (Source: www.oberlin.edu)

Solar panels installed on the roof will be used for active solar capture. The use of solar panels as a source of heat can reduce heating costs by as much as 70%. This system could be used as part of a radiant heating system through the floor or baseboard radiators. A radiant floor system is currently used in the Garver Cottage, which is fueled by a low emission wood-burning stove. The solar panels have evolved into state of the art energy machine that take up less space and are less visually obtrusive in the past. Another simple tool that can reduce heating and cooling costs, as well as mitigating storm water runoff, is a green roof. As a botanical garden, Olbrich is the perfect venue for demonstrating the beauty and practicality of a green roof. A green roof provides natural insulating qualities, thereby reducing heating and cooling costs. They also act as natural sponges, effectively capturing and utilizing rainwater. There are several examples of green roofs in practice around the country, with Chicago's City Hall being a notable mid-western version (Figure 9).

Figure 9: *Chicago City Hall. (Source: http://www.asla.org/)*

For more information regarding green building designs and techniques, a visit to these websites can be helpful and thought provoking:

- LEED Certification Program: http://www.usgbc.org/leed/leed_main.asp
- Go Solar Company: http://www.solarexpert.com/Heatdhw.html
- U.S. Department of Energy, Solar Energy Technologies Program: http://www.eere.energy.gov/solar/sh_basics.html#active
- United States Green Building Council: http://www.usgbc.org/

- Envest (for calculating the cost of building and designing environmentally sound buildings): http://www.bre.co.uk/service.jsp?id=52

Circulation System

A key component of successful public spaces is a well-designed circulation system. We have designed a system that safely accommodates vehicles, pedestrians, and bicycles, and which nicely links with the Garver building and the Olbrich gardens. Unlike the current master plan that routes vehicular traffic across the railroad tracks and bicycle path, we have created a system that uses Fair Oaks Avenue as the primary vehicular access point to the Garver property. The main drive utilizes a roundabout located at the building's west entrance for pick up/drop off and allows vehicles to then conveniently enter the parking lot (Figure 10).

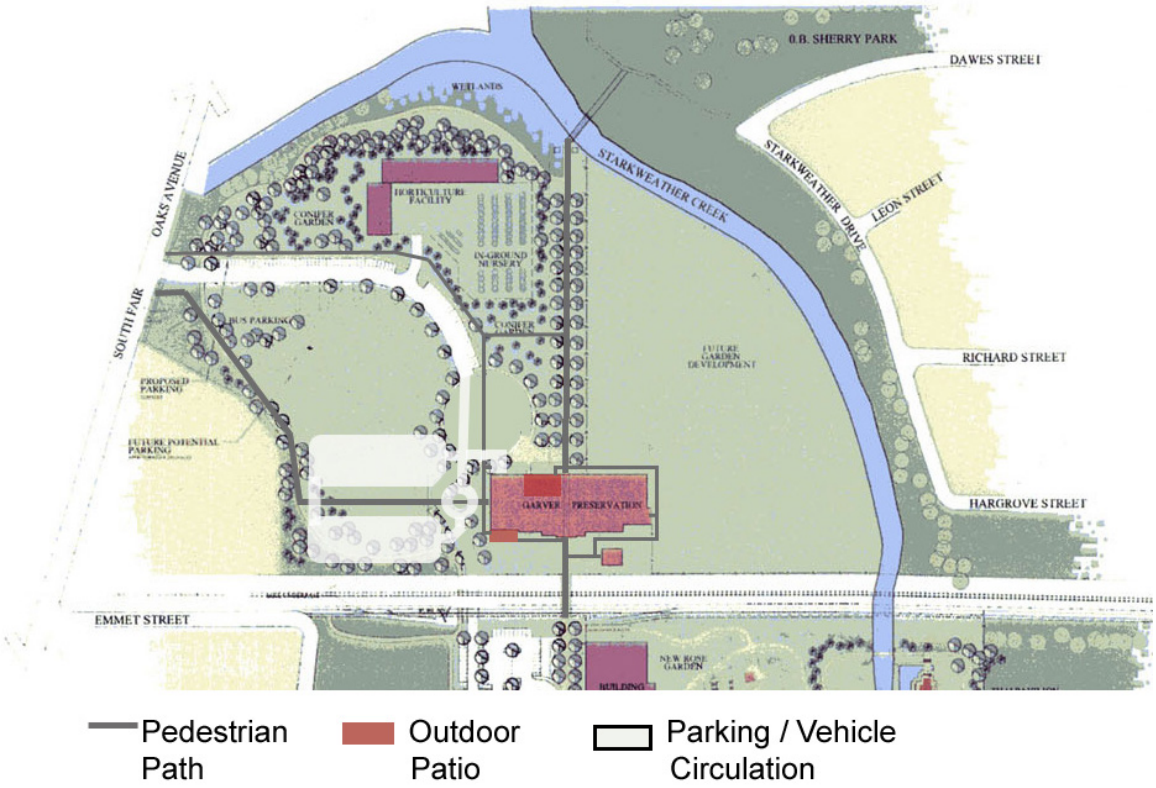

Figure 10: *Garver site circulation.*

The parking lot, which will be made of pervious paving materials, accommodates pedestrians via a pedestrian path. Running through the center of the parking lot, it conveniently and safely leads people to the west entrance. Plantings on either side of the path will provide shade for pedestrians and vehicles, lend visual interest, and allow water to slowly percolate into the soil.

We have also provided pedestrian access from Fair Oaks Avenue along a path that will meander through the western portion of the Garver property. It connects to the pedestrian path in the parking lot providing easy access to the west entrance. There are two other main pedestrian

systems on the property. One is the proposed pedestrian bridge that crosses the railroad tracks and bicycle path near the building's main entrance to the south. The other pedestrian system runs through the proposed allee of the current Master Plan. This path joins with the bridge at O.B. Sherry Park and will provide local pedestrian access, which is desired by the surrounding neighborhood.

In addition to the main circulation systems, there is a path around the building to facilitate easy access by staff and to accommodate events. Service circulation requiring a vehicle will follow the system outlined above using the western entrance. Refuse collection will be just beyond the western entrance towards the south. It will be discretely located behind plantings so as to be unobtrusive, while still allowing access.

Financial Projections

A project of such magnitude as the Garver Redevelopment requires a great deal of financing. A creative combination of various financial options such as grants, donations, tax credits, and loans will need to be utilized in order to fund the estimated $10 to 15 million cost of renovation. If the project is able to maintain substantial revenue generation, it will ease the pressure of debt financing. We have incorporated practical revenue generating uses into our design concept that embody the community's needs while upholding Olbrich's mission.

Estimations of potential revenue are based upon local market analysis. The individual revenue streams that our analyses have estimated vary depending on the time of year, time of day, length of event, services provided, number of guests, and the client. Our revenue generating facilities include a café, office space, auditorium, wedding and reception space rental, and classroom space rental. In the programming phase, we designated square footage for each space, incorporating the existing layout of the Garver building as much as possible. Potential revenue of each space was dictated by the allocated square footage.

Our largest revenue-generating feature is the 11,700 square feet of office space on the second floor (Table 1). Using a detailed search of local office rental rates we found competitive rent data provided by Commercial Investment Real Estate Exchange (CIREX) and Wisconsin Commercial Real Estate Property Listings. At $12 per square foot, the potential gross income from office space is $140,400. This or any other revenue derived from the leasing of office space could substantially offset debt incurred from renovation costs. This office space would be very marketable due to the amenities provided on the first level of the Garver building. In turn, the office space would encourage renters to lease the downstairs café space as a result of a higher level of consistent consumer traffic throughout the building.

The indoor-outdoor café space includes 2,100 square feet of indoor space, which would be leased at the market price of $15 per square foot. This would produce total gross revenue of $31,500 annually. This leasing cost may need to be kept low due to vacancy risk and its effect on the building. Low rent and long-term leases will prevent turnover in the management of the café.

The auditorium sector of the building will be available for rent according to use. The rental price range for the 500 person capacity auditorium will very between $500 and $1500. This range depends on a multitude of factors including, but not limited to, time duration and client. This pricing strategy also applies to the rental rates for the classrooms, which at 900 square feet each, have a capacity of 100 people per room, and can be rented for a price between $100 and $250. The available wedding and reception space has the potential to rent for $1000 per event. This rate has resulted from the comparison of similar reception facilities in the Madison area. The reception and wedding space has a capacity of 400 hundred people. This gives Olbrich Botanical Gardens the ability to host much larger events than at its current facility.

Description	**N.S.F**	**Revenue Generating**
Indoor Wedding Space	2,800	Yes
Reception Space	2,600	Yes
Café (leased out by Olbrich) -seating capacity 50 people -limited kitchen area 500 sq ft	1,500	Yes
Auditorium/Concert Space - seating capacity 300 people	5,500	Yes
Offices (leased or used for Olbrich staff)	11,700	Partially
Interactive Natural History Museum	3,600	Yes
Classrooms	900 each	No
Library	1,600	No
Multipurpose Room -plant displays -educational activities -special shows	4,600	Sometimes

Total Garver Area = 39,950 sq. ft. (does not include 1 story western section)

Table 1: Garver Building Programming

Conclusion

This redevelopment scheme incorporates a number of the needs identified through meetings with Olbrich Botanical Gardens staff and the surrounding neighborhoods. While providing innovative and much needed building uses, this redevelopment model also contains a variety of revenue generating components that are necessary to carry out the renovation of the historic Garver Feed Mill.

Conceptual Design 3

Garver Environmental Arts Center

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Design Concept

In order to create a design that aspires to more that just the rehabilitation of a historic building or the development of new gardens, the concepts of connectivity, beauty, and diversity were integrated into both the site design and building reuse strategy for Garver property (Figure 1).

Connectivity
Integration of the Garver site into the Olbrich Botanical Gardens complex should emphasize links between Olbrich Botanical Gardens and the neighborhoods, city and region; the bicycle path; and Starkweather Creek.

Beauty
Redevelopment of the Garver site should foster a pleasant sensory experience and stimulate positive identifications with the site amongst users and neighbors.

Diversity
The mix of uses that take place at the Garver site and within the Garver building should draw visitors from near and far to work, learn, play, celebrate, relax and renew in a unique urban garden setting.

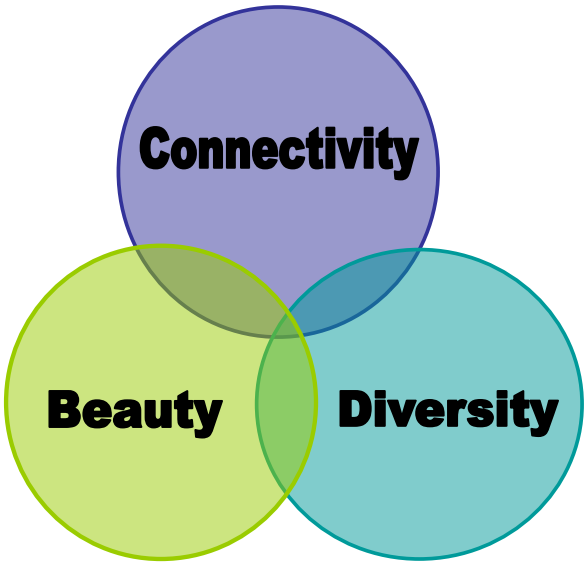


Figure 1. Design concept.

Vision

As envisioned, the Garver site will be transformed from vacant building and non-landscaped area to a mixed-use facility integrated into the programming and mission of Olbrich Botanical Gardens. Known as the Garver Environmental Arts Center (GEAC), the facility will interweave activities relating to wellness and relaxation; arts and creativity; functions and events; and sustainable beauty into the meaning and design of the building and associated site.

Wellness and Relaxation
Tranquil for both mind and body, the peaceful setting amid Olbrich Botanical Gardens provides an excellent opportunity for the GEAC to create a space to integrating nature into daily living.

Arts and Creativity

The GEAC will be one of the axis points for arts and creativity within the Madison community. Building from the excitement generated through the Overture Project and associated Arts District located downtown, the GEAC will cater to providing space for artists to live and work in a studio environment. The dramatic space within the building itself will provide an opportunity to create and display art that is too large for most gallery settings. Special attention will be paid to ensure that local and regional artists have space to exhibit and sell their works.

Functions and Events

The GEAC will provide Olbrich Botanical Gardens the opportunity to enhance its existing ability to host functions and events. From corporate parties or meetings to weddings, the Garver building will offer a unique atmosphere for important events that is currently not available in the Madison area.

Sustainable Beauty

The GEAC is pictured as a living model of sustainable development, enabling visitors to the facility and the greater Madison community to see sustainable design practices in action. Sustainable design practices should be integrated into all aspects of this site, including the building as well as site improvements. The center will show that sustainable practices have moved to point that they are not just practical, but also aesthetically pleasing and desirable.

Proposed Site Plan: Garver Environmental Arts Center

In order for the Garver property and surrounding Olbrich Botanical Gardens to properly interconnect together, a few changes to Garver's surrounding area are needed. Figure 2 displays a map of Olbrich Botanical Gardens and shows proposed changes to the site. The specific changes are described below.

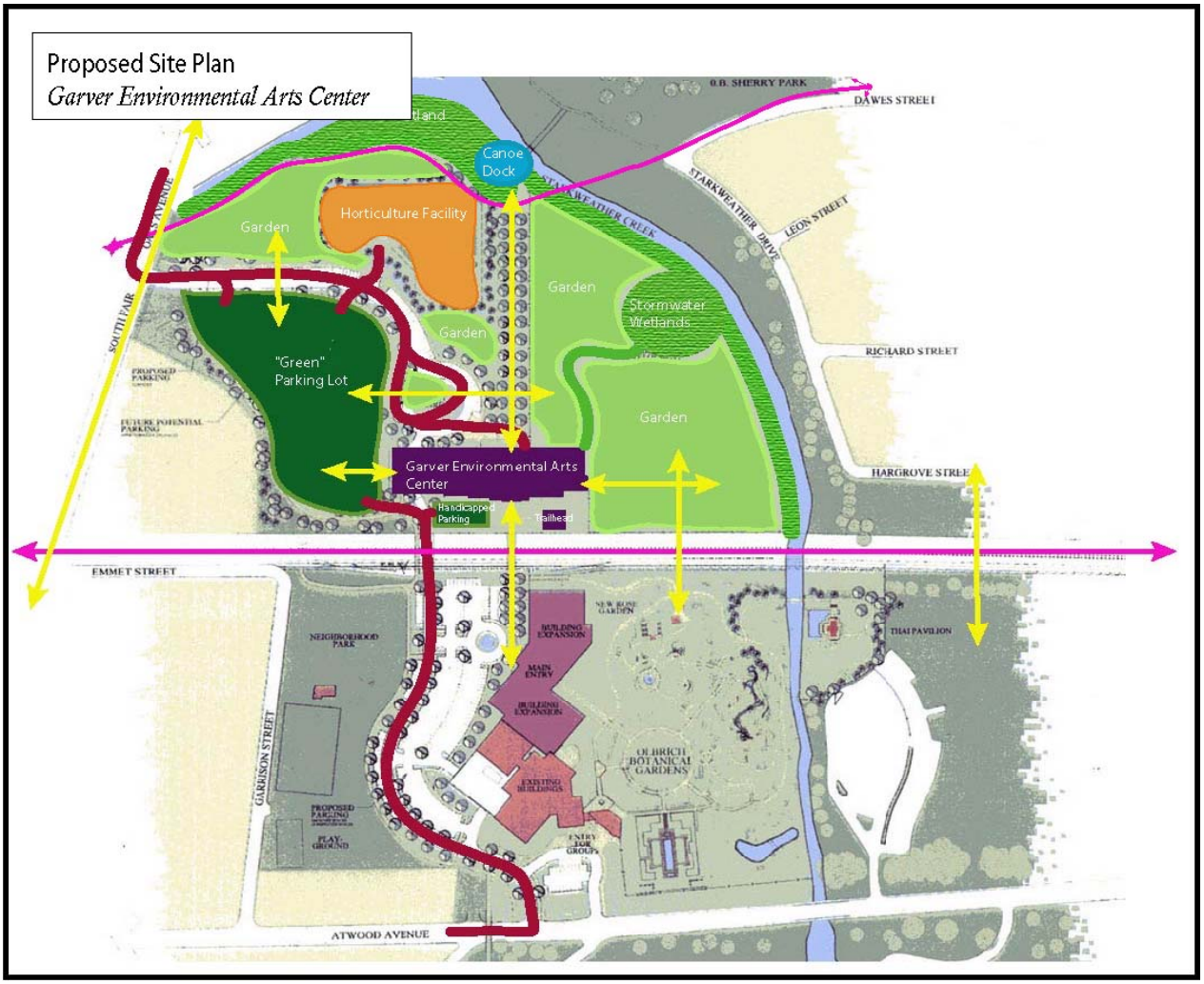


Figure 2. Proposed site plan.

Trailhead/Visitors Center and Bicycle Rental

As the newly renovated Garver building will provide extra space for Olbrich Botanical Gardens, the small building immediately south of the Garver building should be used for a new purpose as a trailhead/visitors center as well as a bicycle rental. This would be an ideal space for bicyclists to break or for visitors to take a short trip and explore a little more of the City of Madison.

Bicycle and Pedestrian Circulation

As shown in the proposed site plan map, there are a few changes proposed to the area in regards to bicycle and pedestrian circulation. The pink lines indicate bicycle routes on the site, and the yellow lines depict proposed pedestrian circulation routes. As shown the Garver property will connect well with Olbrich Botanical Gardens using Sugar Lane as a path or by using the existing gardens.

Vehicular Access Improvements

With the renovation of the Garver property, there will be a need for additional parking and access to the site. The proposed site plan map shows the new vehicle circulation routes as a dark purple color. Vehicles will be able to access the Garver building from Fair Oaks Avenue.

Pervious Paving in Parking Areas

The proposed site plan shows where the new parking lots, shown in dark green, will be located. The new parking lots will use pervious paving to reduce stormwater runoff from the site.

Wetland Gardens and Stream Bank Restoration

Because Starkweather Creek flows adjacent to Olbrich Botanical Gardens, the creek provides a special amenity to the site. The proposed site plan suggests a wetland gardens be placed along the creek for the public's enjoyment. Also, the plan proposes stream bank restoration where necessary.

Small Craft Pier on Starkweather Creek

A small craft pier on Starkweather Creek will provide increased access to the Olbrich Botanical Gardens as well as provide an additional recreational attraction.

Horticultural Facility

The proposed site plan suggests the proposed horticultural facility be located on the north side of the entire site. It will be connected to vehicular, bicycle, and pedestrian pathways to provide easy access.

Garver Restoration

Lastly, the Garver property, itself, will be renovated and provide a new space as the Garver Environmental Arts Center. The building will restored and provide mixed-uses for the enjoyment of all.

Building Circulation

The building circulation in both the first and second floors is shown below (Figure 3). Exits/entrances to the building are shown by arrows. The building has good access and visitor traffic will flow through the building nicely.

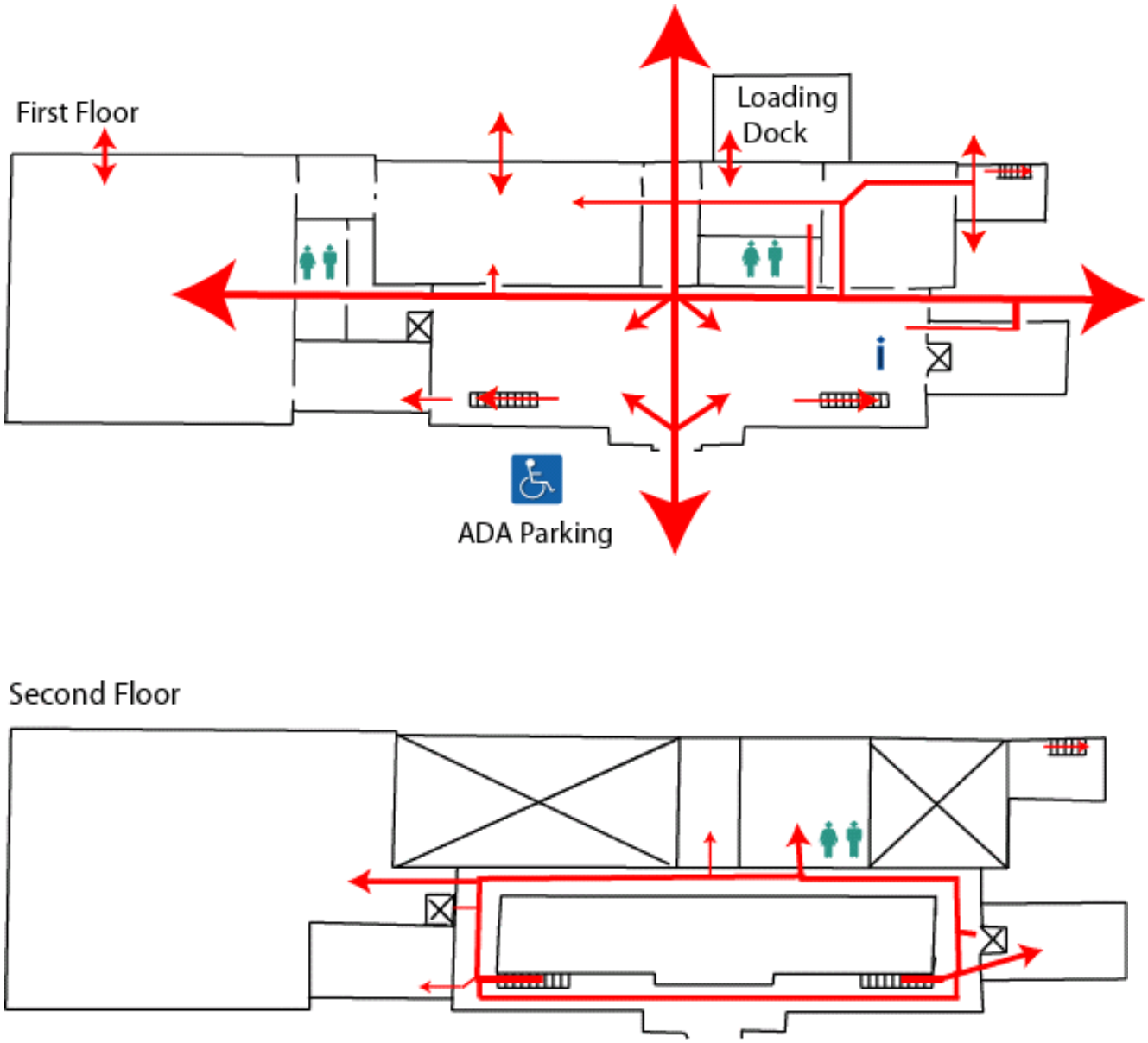


Figure 3. Building Circulation.

Proposed Garver Building Plan

The proposed building plan for the first floor is shown in Figure 4. The second floor is shown in Figure 5. The proposed Garver Environmental Center will provide various functions. The specific proposals are outlined below.

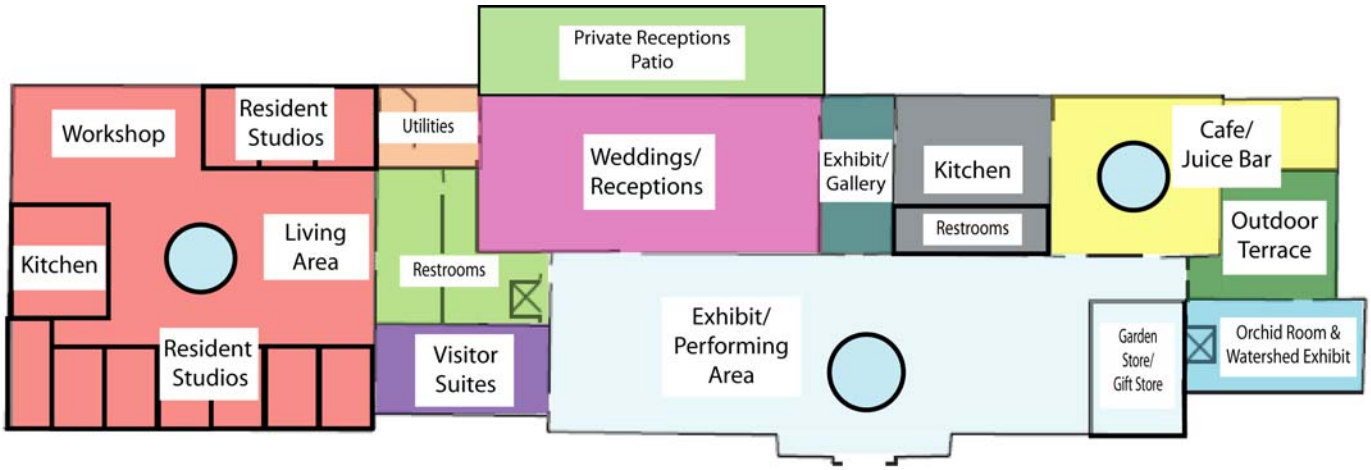


Figure 4. First Floor.

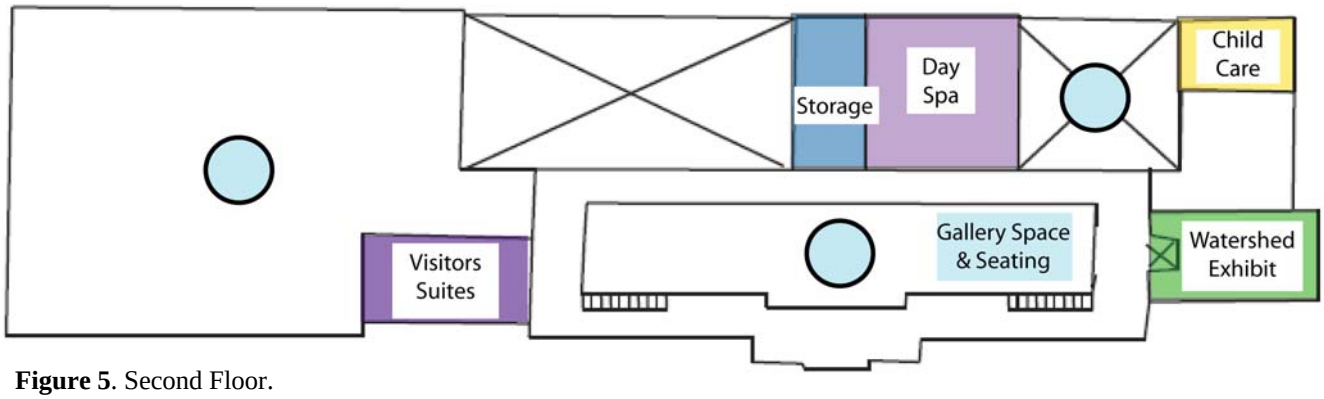
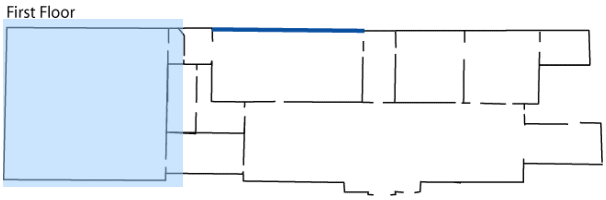
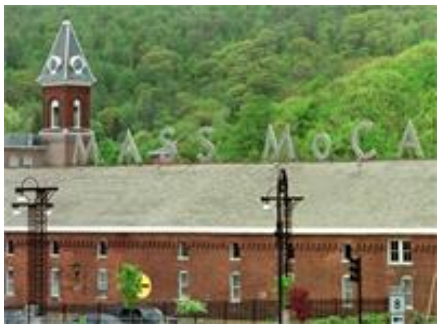


Figure 5. Second Floor.

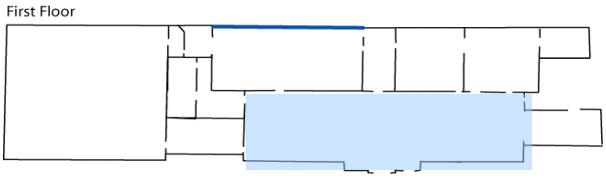
Residence Arts Center



The Residence Arts Center will be located in the far west side of the Garver building. It will encompass an area of approximately 15,000 square feet. The area will provide a place for resident artists to learn interactively from one another. The area will serve as a space for visitors to see an artist's on-going work. In addition, the space will be able to serve as a connection to an international network of residential art centers. The Residence Arts Center is modeled after MassMOCA in North Adams, Massachusetts where this kind of center is already established (see photo).



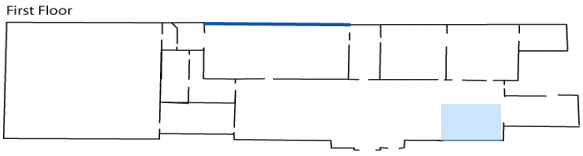
Main Hall and Gallery



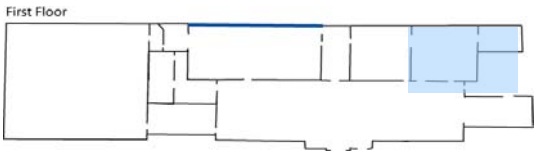
The Main Hall and Gallery will be located in the south side of the building and take up about 13,000 square feet. This area will provide the building with flexible exhibit space of Olbrich's choosing. The space could offer historical art and artifacts or showcase local art. An example of a space that may reflect that of Garver's is one found in Maritime Museum in Curacao (see photo). This area is used for displays of all sorts. There will also be stairs up to a mezzanine from this area. The mezzanine area will provide a seating area, as well as an additional display area.

Garden/Gift Store

A Garden/gift store (1,000 square feet) will be available in the new building as well. It will be located in conjunction with the main hall and gallery. The store will offer gifts as well as some small gardening items and books.



Atrium Café and Juice Bar/Outdoor Terrace

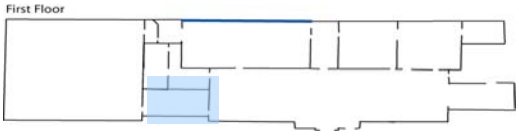


The proposed building plan for Garver includes a small atrium café and juice bar. Olbrich Botanical Gardens does not currently have any sort of eatery on its premises and the café will provide a place for visitors to eat and relax. The café will be in the northeastern corner of the building and will consist of about 3,000 square feet. It will be underneath a terrace. Immediately adjacent to the juice bar (929 square feet) will be an outdoor terrace (1,800 square feet) where visitors will be able to enjoy the view of the gardens and experience the fresh air.

Wedding Receptions and Banquets

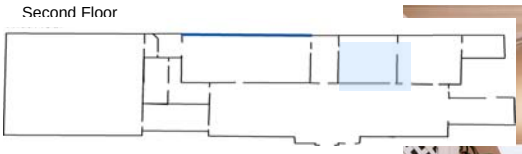
There is a proposed area in the north side of the building specifically designed for wedding receptions and banquets. This is a much-needed area for Olbrich as they have more demands for wedding rentals than they can accommodate. The new area will also provide an additional revenue source to the Olbrich as well. The area itself will be approximately 6,400 square feet and can be split into two rooms for a wedding area and a reception area. The room will have a high ceiling with a glass roof. As with all the rooms, there will be a garden aspect to the room with many plants and flowers. In addition, there will be a private patio for the room so that guests will be able to enjoy the outdoors and the gardens from the reception.

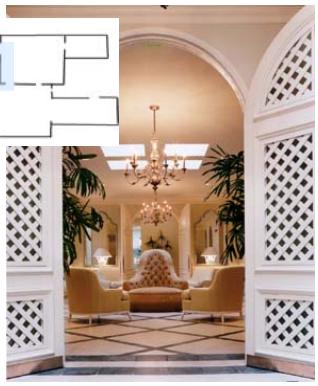
Visitor Suites



The proposed plan also includes visitor suites that will be located on the first and second floors on the south side of the building. There will be approximately 6-8 different suites in the 3,500 square feet area. These suites will provide wedding guests, visiting lecturers, or other visitors a comfortable place to stay while at Olbrich Botanical Gardens.

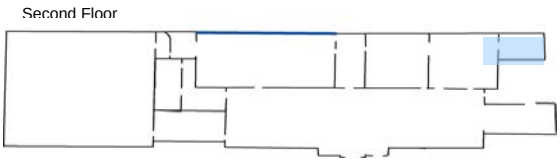
Day Spa





There will also be a 2,800-square foot day spa in the newly renovated Garver building. The day spa will attract repeat visitors from Madison and nearby communities and will provide an extra reason for someone to visit Olbrich. The spa will be a luxurious, relaxing experience with specially cultivated botanicals and will provide guests with a unique experience.

Childcare



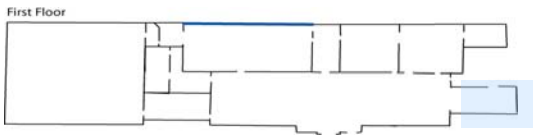
The newly restored building will also offer an area of about 930 square feet for visitors, employees, resident artists, or volunteers to have a safe, secure place for their children to stay. The childcare feature to the building will allow much more flexibility in people's lives. An added bonus is the convenience of having employees/volunteers be able to drop by and see their children from time to time.

Historical Gallery

A historical gallery will be located in the north side of the building entrance way. This area of 1,300 square feet would be a good area to display historical entities to the public.

Watershed Education Center

A watershed education center will be located in the southeast corner of the building. This area will provide visitors with displays and other educational tools to aid in the explanation of watersheds. The watershed exhibit will be on both the first and second floors consisting of a total of about 3,300 square feet.



Orchid Room

The watershed education center will share space with an orchid room only on the first floor. Olbrich Botanical Gardens needs an area specifically for orchid displays. This space would be able to provide this for the Gardens.

Green Building Attributes

Renovation of the Garver building and associated site should include green design attributes as set forth by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system. According to the Council, some of the key benefits of green design and sustainable building practices include:

- Lower electric and water utility costs
- Environmentally effective use of building materials
- Enhanced health and productivity
- Long-term economic returns
- Reduced environmental impacts

Green techniques that should be integrated into the Garver Environmental Arts Center include:

- Solar energy
- Sustainable materials
- Green rooftops (see adjacent photo)
- Daylighting
- Stormwater management

Financial Analysis

Costs

Undertaking historic rehabilitation is an expensive pursuit. Assuming a $250 per square foot renovation cost, the anticipated cost to complete the renovation of the approximately 55,000-square foot Garver building is nearly $13.8 million. This cost estimate does not include the annual operation costs associated with the building or the creation and maintenance of the surrounding grounds.

Funding Tools

Because the Garver site is publicly owned, many of the typical redevelopment tools are unavailable to this project, such as tax increment financing. As such, the renovations of this building will need to be paid for through traditional funding sources such as gifts/donations, governmental and foundation grants, and financing.

Gifts/Donations: Private donations will be very important to this project. This will be a very visible and interesting project—the type towards which the local philanthropic community will find worthy of contributing. Olbrich could consider naming rights of the Environmental Arts Center as a way in which to bring interested donors to the table.

Grants: As the vision of this project intertwines the arts, the environment, and sustainable development techniques, the project will be eligible for a wide variety of grants.

Financing: If the City is interested, it could bond or take out a loan to pay for improvements to this facility. Typically, this would require that the City be comfortable with either general revenue paying for debt service or feel that there will be sufficient revenues generated through the project.

However, if the City would form a public-private partnership with a developer, a wider range of tools could be used including federal and state historic tax credits.

Potential Revenue Sources

Assuming that debt is incurred during rehabilitation, the potential income to Olbrich that could be generated through the rehabilitation of the Garver site includes revenues received through:

- Exhibit space
- Weddings and banquet facility rentals
- Garden/gift shop
- Parking fees
- Rental income associated with the Cafe and Juice Bar, the Artist-in-Residence Workshop, and the Day Spa

Project Benefits

There are significant benefits to creation of the Garver Environmental Arts Center for the City of Madison and Olbrich Botanical Gardens as well as the community as a whole. Project benefits include:

- Preserving the City's agricultural and industrial heritage through the rehabilitation of the Garver Feed Mill
- Increasing economic activity and social vitality of the City's eastside
- Creating neighborhood connections to both art and nature
- Expanding on the success of Olbrich Botanical Gardens
- Developing a sustainable tourist destination
- Constructing a harmonious built and natural environment

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APPENDIX I:
SUMMARIES OF STAKEHOLDER MEETINGS AND INTERVIEWS

Interview with Simon Widstrand, City of Madison Parks Department
Madison Municipal Building, February 25, 2004

- The parks department is currently conducting a parking study at Olbrich Park to determine whether or not grassy areas should continue to be used for overflow parking and what other strategies could address the issue.

- He is working with Friends of Starkweather Creek to develop a park corridor plan.
- He said that adding parkland at the site would eventually be viewed as a great accomplishment for Madison.
- The gardens will have to be fenced in and locked off at night for security, but he said that the plan tried to keep some portion of the area always open to the public.

- Si was involved in the 2000 Olbrich planning process, but not previously to that.
    - His principal role was as a planner for the parks department.
    - He said he felt good about the outcome.
    - He was not disturbed discussing the lack of implementation and emphasized that the site was very challenging.

- He said the CDA originally wanted to use the land for housing, but after neighborhood objections, decided to give it to the parks dept and Olbrich Botanical Gardens.
- He said that the neighbors seemed to think of the gardens as a wonderful place but also displayed some hesitation at having a regional facility in their area.
- He also said that in the previous process, people were under the impression that the Garver building was too far from the main building at Olbrich Botanical Gardens to be an effectively linked office space for the organization.
    - To address that, they proposed a phased expansion that would build onto the existing buildings, slowly bringing them closer to the Garver property.
- No uses were planned for the Garver building, although there were many ideas.
    - The potential uses Si listed were: display space with changing exhibits, artist space, anything that is compatible with the gardens.
    - He did not want to see private business or housing.
    - The standard he suggested for the plan was to ask: “What do we want to see here in 50 years?”

- Si mentioned that the building would be very hard to deal with and very expensive.
- Si said it would be hard to do anything with the building short of a total renovation.
- Currently the parks department and Olbrich are using the building for storage.
    - This is primarily in the one story addition on the north side of the building, because the roof is in suitable condition.

- In the 2000 plan this section of the building was to be removed and storage would have been accommodated in two new horticulture buildings.

- He said parking issues were very contentious.
- He also said that the graver property is already used for overflow parking at times.
- Some people had wanted parking on Atwood Avenue.
- In the previous plan a compromise was reached that (1) allowed Olbrich Botanical Gardens to count all spaces at the park and some neighborhood street parking toward their requirement and (2) it set aside an area to be used for future parking needs.
- Other access issues also came up, such as the left turn out onto Atwood Avenue and the entrance from Fair Oaks, which could be the main point of entry for people coming off State Rt. 30.
- Pedestrian and bicycle access were discussed as concerns too. Si mentioned the need to improve pedestrian crossings on Atwood Avenue, with signals or medians, perhaps a bridge… and said the parks dept. was working with traffic engineering to develop some proposals.
- He said some bicycle advocates did not want to see any vehicle crossing over the bicycle path on the property.

- Simon Widstrand can be reached at 608-266-4711

Olbrich Botanical Society (OBS) Board of Directors Executive Committee
Olbrich Botanical Gardens, March 4, 2004

Present: Three OBS Board Members, Nancy Ragland and the OBS development/fundraising coordinator

- When asked about the list of uses detailed in the original Master Plan, the committee responded that the list was primarily generated by staff and some board input. It's meant to illustrate the kinds of uses/spaces (educational, office, public, plant display), rather than specifics.
  - They believe the list is still relevant and captures the direction they're moving in.

- In the garden's current newsletter, a column by Nancy R. explains where the gardens get their money.
- The committee is very conscious that the Garver building will have to be a revenue-generating venture. They seemed to think that tax credits would be instrumental in funding the capital development.
- They emphasized their current high demand for wedding space.
- They brought up the idea of a restaurant several times. Some concern that you wouldn't be able to see the restaurant from the street though. Also, they mentioned that any use that would draw a significant number of people is going to be an issue with the neighbors who have concerns about traffic and parking associated with the gardens.

Parking would not be a problem in the evenings, but increased need for parking during the day would be a problem.

- The committee is aware that the neighbors have issue with the shed/equipment building at the north edge of the property, but the committee said that they do not want to spend money restoring the Garver building in order to store equipment in it.
- Olbrich would like to arrange lease arrangements for parts of the Garver building so that the gardens would receive rental money and a percentage of profits from the lessee.
- They reiterated the necessity that the uses of the Garver building must be in line with the mission of the gardens. When asked to define that statement, they said they'd know it when they see it.
    - For example, they said it would be ok to have rental office space on the second floor.
    - They emphasized that art related uses would be fully compatible with the garden's mission.
    - Some for-profit businesses might be a problem. For example, they would not want to rent space to a landscaping company because they do not people to think that they endorse a particular company.

- They currently have an art display area, but have not made much money from it. When a piece sells, the garden gets a 20% commission.
- Nancy provided a list of local garden groups that we could get in touch with.
- Jim Draeger at the WI Historical Society was recommended to talk to. He is interested in the eastside renaissance.

Friends of Starkweather Creek (FSC) Board Meeting
Atwood Community Center, March 6, 2004

Approximately 12 persons in attendance

Group discussed the City Planning process for watershed:

- City allocated $40,000 for initial planning, plus $150,000/year in the subsequent four years for watershed improvements
- Concern that City has narrow focus, wants to see the watershed improvements addressed holistically

Major FSC water quality improvement priorities:

- Nutrient loading
- Base flow
- Sedimentation, erosion
- Scouring (fast stream flows due to high runoff, etc)

Concerns were voiced about the Garver site being fenced off. Group says if a fence is necessary, have gates that open onto bicycle path during daylight hours (north and south of tracks).

Group would like to see several bridges from neighborhood to park and connections b/w various paths:

- Bridge that connects OB Sherry Park to Garver
- Bridge across west branch of creek
- Bridge across drainage ditch by Thai Pavilion
- Bicycle path to Hargrove Street connection

FSC & City working to apply for federal and state grants for trail development plans along creek corridor.

Group would like to ensure natural resources & water quality are conserved:

- Encourage native plants at creek buffer (e.g. native prairie)
- Not happy with current state of creek development near Thai Pavilion, specifically the woodchips lining the bank down to water
- Wetland preservation
- Would like to see a native restoration demonstration area incorporated into site, as part of environmental education component of Starkweather resolution and educational space at Olbrich
- Idea to have miniature [clay?] model of watershed on site
- Idea to have rain garden demonstration on site

FSC would like to see community/natural history incorporated into the site, through display/museum space for example, as part of a public education effort

- Idea to display a chronological map of changes in watershed/wetland/etc.
- Group appreciated learning history of Garver building, and would like to see this info shared with visitors of the Garver site via display space, etc

When asked for feedback on revenue generating uses, the board members expressed that they were 'torn', as they understand the need for Olbrich to remain financially stable, but would want business uses in Garver to complement, not compete, with other local businesses in the Atwood area.

Request for minimal new parking.

Written Comments

1. Ideas for Other Activities
   - Children gardening activities, garden planning & design, rain garden courses
   - Renaissance music & dance
   - Environmental education program based on creek natural areas
   - Quiet benches overlooking the creek

2. Concerns
   - Parking/Traffic
   - Lack of connections to neighborhood
   - Competition of any businesses sited at Garver with those on Atwood

- Lack of native landscaping
- "Don't increase building footprints"
- Impact on creek

Phone Interview with Michael Forster-Rothbart, community leader and board member of Friends of Starkweather Creek

Michael gave background information on Friends of Starkweather Creek, including their goals:

1) Implement an environmental education program that ties directly into the Starkweather Creek watershed
2) Create an integrated bicycle/pedestrian trail system along the creek, from Olbrich to the airport and Eastowne Mall area, respectively (along two separate branches of creek)
3) Implement vast water quality improvements (i.e. complete clean-up)
4) Implement broad-based watershed quality improvements along the Starkweather Creek corridors and encourage public awareness/development oversight

Michael referred to the City Council resolution passed in February 2003 to support initiatives "aimed at restoring the biological integrity of Starkweather Creek and promoting recreational opportunities on surrounding lands." The resolution directed the City Parks & Engineering departments to develop a budget to accomplish these initiatives. Michael indicated that the City has since secured $50,000 in funds for the 2004 fiscal year, to plan for water quality and watershed improvements along the creek. He also indicated that the City is in the process of securing $600,000 of (grant?) funding in 2005 for plan implementation (i.e. remediation, bank restabilization, etc)

When asked specifically about the Garver site, Michael said that FSC is advocating for bridges and connections from Olbrich to the neighborhood east and northeast of the Garver property, and especially to OB Sherry Park. Michael also indicated that the neighborhoods would like to see a more open park space, with fewer fences and more fluid links to the surrounding community.

FSC is also pushing for an Isthmus Path link down to Lake Monona (possibly through the current Olbrich parking lot), as well as a path connecting the NW open space area. There is a summary of FSC's trail system recommendations available, and possibly a map available through the 'Missing Link' website.

There will be a public meeting held on April 21, to invite community input on the Starkweather 'vision.'

Documents cited above can be found at:
http://www.madison.com/communities/starkweather/library/index.php

Olbrich Partnership Committee Meeting
March 9, 2004

Approximately 10 people present

- It may be difficult to separate the administrative offices from the "heart" of the building (the conservatory area). Must consider whether or not a "campus approach" is appropriate for Olbrich.
- There is $35,000 that will be used for a study of the site/building ($10,000 from Mayor's Office, $10,000 from parks, $5,000 from OBS, and a $10,000 grant).
- Ideas floated for Garver building use: community space, exhibit space, wedding reception space, restaurant, classroom/educational space, rental office space for garden/botanical related non-profits.
- Unacceptable uses: housing, non-garden related retail, uses that create a lot of noise.
- There is a lack of community space on the East Side.
- Could consider the Warner Park Community Center as an example/model for bundle of uses and parking needs (but Olbrich is not necessarily looking to duplicate Warner).
- Offices in Garver would integrate it into the day-to-day use of the property as a whole.
- Most money made for Olbrich right now is through the gift shop and receptions/events that they host.
- Community support/publicity needed in getting the project started and finished (much like the role the community played in advocating the Warner Park facility).
- City will probably not be able to contribute funds for the project.
- Question posed: could rehab/restoration of Garver be done in phases?

Meeting with Olbrich Botanical Gardens Staff
Olbrich Botanical Gardens, March 11, 2004

Approximately 25 staff were present. Staff members were asked to comment on needs they have for space or facilities and ideas for reuse of the Garver building:

- Horticulture said they need: more nursery space (both container and in-ground), greenhouse space, office space, and weatherproof storage space.
- Bigger library space, now they have about 300sqft. Also a place to store archives.
- Reception space- they would like this to be modular so they can accommodate different sized groups.
    - They would like the space to be a botanical event space because that's why people choose to have events at Olbrich (waterfall, fountain, along those lines)
- Expanded retail/gift shop space. They would like to sell larger garden items (fountains, containers, plants)- this will also require they have more storage space.
- Dedicated lecture space for garden programs and they would rent the space as well. They would like it to have a stage so it could be used as a theater. Need to be able to see well. They have already done 40 educational events in their first quarter.
- Classroom space that can get dirty to do hands-on workshops. They would like to see Olbrich be a collaborative teaching center where students and teachers from MATC, UW, etc. come for educational activities.
- 2 people liked the idea of a Ruins/Reclamation Garden.
- Many people said they thought a cafe would do well. One person mentioned that the cafe could use herbs and vegetables from the garden.

- Volunteer space- they have 600 volunteers. They would like lockers. Also, they need workshop/bench space where the volunteers can work potting plants, etc.
- A couple people are interested in starting a horticulture therapy program. I don't think they're sure what kind of space they need necessarily.
- One woman raised the point that many of the visitors to Olbrich are very old and not able to walk through much of the garden. She would like to see the entrance of Olbrich be aimed more at the visitors' needs. For example, space for a TV to show a video of the garden for those unable to walk far. Introduction signs and videos for the bus tours that come to the gardens. A coat check, because the conservatory is very hot.
- More bicycle parking. Will also likely need more car parking.
- The art display space they have now is not very secure. They need a nice way to protect and display art (UV glass). They would like space to display 3D art; they do not have this now.
- There was an idea to curve the bicycle path through Olbrich so that bikers notice its there.
- Rooftop garden
- Bulb forcing area (big refrigerator)
- The bicycle path will be connected soon to the trail that goes from Cottage Grove to Milwaukee- should make Garver a biking destination.
- Apartments for garden interns, would act as caretakers.
- Olbrich is a family destination. There should be areas where kids can entertain themselves and room for them to run.
- One man mentioned that currently they get their water from the city, but maybe they could set up a water reclamation system for watering the gardens. I'm not sure entirely what he meant.
- They thought it would be a good idea to rent some office space to generate revenue. Need to have windows in the office space.
- A hostel, similar to those in Europe.
- Indoor growing area. Right now they have an indoor spring garden show, but the space is really small. They would like a larger area for these types of events.
- General considerations:
    - Organizations that work with Olbrich need to be good partners.
    - Olbrich is growing, so we should project future staff office needs
    - Accessibility of site for elderly and disabled
    - They really need a lot of storage space
    - Staff was very concerned about the interaction between Garver and the current building. Need to think about how to pair the buildings. For example, do you have gift shops in both buildings, or just a large one in one of the buildings?
    - Garver should be a destination

Interview with Kitty Rankin, City of Madison Planning, Historical Preservation
Madison Municipal Building, March 11, 2004

- The property was turned down on its' first nomination for the National Historical Register due to the alterations made to the original building, but subsequently was accepted when an application was filed based on the Garver Feed Mill period.

- It is now listed on the National Register and as a Local Landmark Building.

- Landmarks Commission would likely be open to creative ideas to save the structure. They would carefully inspect any plan to tear down part or all of the structure to ascertain whether it was truly unsalvageable.

- According to K.R. the building is up against two problems: time and a lack of will to figure out a solution. She would have liked to see housing or mixed use. She does not want to see the building torn down. Also, the more original it ends up, the better. Ruin gardens would be interesting for part, but not the whole building. She said everyone likes the building and wants to see something done with it. She wants the property around the building to become gardens.

- She liked the idea of hosting weddings and having a restaurant. She was open to the idea of a trailhead, office space, and a hotel, but said the building might not be easily adaptable to that use. For educational/museum space she wondered if it would be viable, as there are already many, and it is a common strategy that doesn't always work.

- She said we should get in touch with Christopher Berg who owns the Weary Traveler on Willy St. He would like to see a railroad depot and artist lofts with a euro-market.

- K.R. said no grants were available for non-profit restoration, but the mayor could request a special allocation. She said planning staff would like to help, but probably do not have time to do so.

- She would like to be kept informed of our progress.

Meeting With Jeanne Hoffman, Assistant to Mayor David Cieslewicz
March 18, 2004

- The Mayor feels that Garver is an underutilized, beautiful historic building. Originally he wanted some sort of residential use, but realizes that is not possible.
- Ideas for possible use: art space, gallery, artist-in-residence program, gift shop/garden store, café, plays/dancing/concerts, and bicycle rental.
- "A way to get away in the middle of the city", a relaxing place
- More upscale B&B a better idea than a hostel.
- The Mayor wants the project to move forward – do not rule out City's financial participation, since the Mayor has a significant amount of power when compiling the City's budget.
- Would be useful to have information on what area art galleries, cafes, etc. are paying per square feet., to get an idea of potential rent revenues.
- It is very important to show many options for the Mayor and the City Council to consider.

- Research parking needs – illustrate the number of spaces that would be necessary for different uses in the building.
- Encourage bicycle use – make sure of good bicycle access and bicycle racks, etc.
- Christopher Berg (of the Weary Traveler, etc.) is interested in the building/site – he would be a good person to consult.
- Are sewer and water connections already there? If not, putting them in would be a significant expense.
- Could the renovation of the building be a (art) project in itself (in order to reduce costs)?
- Make maximum use of grants & tax credits.
- It will be necessary to get neighborhood buy-in on traffic and parking issues.

Olbrich Botanical Gardens Comment Sheet

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1) Where do you live?_____

2) What form of transportation do you usually use to get to Olbrich?

a. Car b. Bus c. Bicycle d. Walk

2) Would you use or visit any of the following (circle all that apply):

a. Horticulture Library
b. Horticulture Museum
c. Event Space
d. Cafe (coffee, sandwiches, ice cream)
e. Restaurant
f. Art gallery
g. Community Garden space
h. Concert space

3) Do you have ideas for other activities you would like to see at Olbrich?

_____

_____

4) What do you like most about Olbrich?

_____

_____

5) Do you have any concerns about the development of the Garver site?

_____

_____

6) General Comments:

_____

_____

_____

_____

APPENDIX II:
OLBRICH BOTANICAL GARDENS VISITOR SURVEY

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1) Where do you live?_____
(city or neighborhood)

2) Approximately how often do you visit Olbrich Botanical Gardens?

a. 1st time visiting

b. at least once a month

c. at least once every 3 months

d. at least once every 6 months

e. at least once every year

f. every two or more years

3) What do you like the most about Olbrich Botanical Gardens?

_____

_____

4) Is there anything you would change about Olbrich Botanical Gardens?

_____

_____

5) Would you use/visit:

a. Horticulture Library

b. Horticulture Museum

c. Event Space

d. Cafe (coffee, sandwiches, ice cream)

e. Restaurant

f. Art gallery

g. Community Garden space

h. Concert space

6) Do you have ideas for other activities you would like to see at Olbrich?

_____

_____

Olbrich Botanical Gardens Visitor Survey Results

Total number of surveys: **113**

The number of responses do not always equal the number of surveys as most surveys were administered to groups and multiple answers were given to most questions.

1) Where do you live?

City of Madison	49 (43%)
Madison area	30 (27%)
(Burke, Cross Plains, DeForest, Maple Bluff, McFarland, Middleton, Monona, Mt. Horeb, Oregon, Shorewood, Stoughton, Sun Prairie, Verona, Waunakee)	
Other areas of Wisconsin	25 (22%)
Other states	9 (8%)
(Illinois, Indiana, Iowa, Nebraska)	

2) Approximately how often do you visit Olbrich Botanical Gardens?

a. 1st time visiting:	21 (19%)
b. at least once a month:	21 (19%)
c. at least once every 3 months:	18 (16%)
d. at least once every 6 months:	15 (13%)
e. at least once every year:	16 (14%)
f. every two or more years:	9 (8%)

3) What do you like most about Olbrich Botanical Gardens

➢ Gardens	31
➢ Conservatory	26
➢ Flowers (smell, spring, etc.)	21
➢ Special Exhibits/Events	12
➢ Everything!	9
➢ Serenity	8
➢ Variety of gardens:	7
➢ Art shows	6
➢ Quality & Atmosphere	5
➢ Butterflies	4
➢ Education opportunities	4
➢ Gift shop	4
➢ Walking around	4
➢ Open all year	4
➢ Thai Pavilion	3
➢ Herb garden	3
➢ Water features	3
➢ Clean air, smell	3

- Birds 2
- Concerts 2
- Interpretive signs 2
- Kids like it 2
- Ideas for own garden 2
- Great volunteers 2
- Always something new 1
- Rose Garden 1
- Location 1
- Good for all ages 1

4) Is there anything you would change about Olbrich Botanical Gardens?

- No 75
- More parking 4
- Save the fountain 2
- More flowers 2
- Sell food and drinks 3
- Open later 1
- More bicycle parking 1
- More art displays 1
- Get rid of Garver 1
- Need better upkeep 1
- *Less* change 1
- Location (closer to home) 1
- Another conservatory 1
- Organic, prairie - less lawn 1
- Sell more garden materials 1
- More seminars 2
- Bigger wedding space 1
- Longer conservatory hours 1
- More staff for plant sale 1
- More handicapped-accessible areas/raised gardens 1

5) Would you use/visit:

a. Horticulture Library: 3
b. Horticulture Museum: 39
c. Event Space: 34
d. Café: 65
e. Restaurant: 40
f. Art gallery: 57
g. Community Garden: 41
h. Concert space: 65

6) Do you have ideas for other activities you would like to see at Olbrich?

- Education space 6
- Children's garden 3
- Better bicycle path access 3
- More concerts 3
- Prairie restoration 2
- Environmental education classes
- Seasonal displays
- Nothing, "Olbrich is the best!"
- Ice cream shop in gardens
- Combine restaurant with art gallery and have a floral theme
- Slide show or photos for when people enter
- Sunday afternoon concerts in a concert space
- Small arboretum
- Zen Garden Demo
- Community Theater
- Trails
- Showcase tropical food plants at cafe
- Studio apartments for interns/ visiting scholars
- No more buildings
- Edible Garden
- More gardens
- Bigger Gift Shop
- More single classes (i.e., shrubs, tulips, etc.) for gardeners with small fees
- More volunteers to give informational tours of the gardens
- Tai chi in the gardens
- Cottage industry sales by local artists (weavers, potters, interior decorating)
- More exhibits
- Science Uses, related to aquaculture
- Child-oriented learning center
- Incorporate natural & community history
- Multi-use path along Starkweather Creek
- Civic use of Garver property (ex: high speed rail train station)