Support for this project was provided in part by the Virginia Department of Forestry through an Urban and Community Forestry grant.
Acknowledgements

Staci Boone          Waldron Family YMCA
Karen Cronin         EastMont Garden Club
Tom Dunkenberger     Mountain Valley Charitable Foundation
Joshua Galloway      CDAC Design Review Panel Member; Apprentice Architect and Certified Landscape Architect, Community Housing Partners
Joyce Graham         Mountain Valley Charitable Foundation
Michael Hemphill     Executive Director, Mountain Valley Charitable Foundation
Randy Hester         Landscape Architecture Professor, University of California at Berkley
Kent Hipp            President, Virginia Tech Student Chapter, American Society of Landscape Architects
Cindy Minnick        Meadowbrook Public Library
Dale Mull            Mountain Valley Charitable Foundation
Meredith Novak       Shawsville Farmer’s Market
Melissa Pilkington   Shawsville Farmer’s Market
Robert Pilkington    Architect & Vice President, Balzar & Associates
Diane Relf           Community Member & Project Initiator
Ellen Ryan           Mountain Valley Charitable Foundation
Dr. George R. Smith, Jr.  Mountain Valley Charitable Foundation
George Smith         Mountain Valley Charitable Foundation
Linda Wilson         EastMont Arts Association
Table of Contents

Project Description  Page 5
Design Process  Page 7
Design Charette  Page 8
Site Inventory & Analysis  Page 19
Preliminary Design Concepts  Page 22
Final Conceptual Master Plan  Page 30
Conclusion  Page 36
Appendices  Page 37
The Meadowbrook Center is a public-private partnership between the Mountain Valley Charitable Foundation (MVCF) and Montgomery County. The facility is owned by the county and leased to MVCF with the exception of the library, which is retained by the County. The 40,000 square foot facility includes Meadowbrook Community Library, Waldron Family YMCA, Meadowbrook Museum, and Carilion Community Center. Also housed within the Community Center are the Shawsville Ruritan Club Square Dance, EastMont Arts Association, EastMont Garden Club, the Boys & Girls Club of the New River Valley office, EastMont Massage Therapy, Meadowbrook Quilters, and a café. There is still room in the facility for more organizations, mostly in the office wing. Housing the additional organizations assists the MVCF with their revenue stream.

The grounds of the Community Center are used quite a bit with various activities and programming uses such as a farmer’s market, walking area, a playground, festivals, and parking for the various activities.

The MVCF Stakeholders Committee identified several possible additional uses and needs for the grounds area. Possibilities include:

- permanent structure for the farmers market,
- walkway/trail,
- outside stage area,
- sculpture garden,
• children’s garden area,
• additional parking opportunities,
• enhancing the visibility of the museum entrance,
• fencing to screen the site from an unsightly adjacent property,
• looking into the possibility of relocating the farmers market on the site from its current location due to safety concerns about cars exiting from 460 onto Alleghany Springs Road,
• providing safe, controlled access to the adjacent stream for educational events,
• and looking into the “identity” of the facility and seeing if it is possible to create a stronger identity/making it more prominent and recognizable to those driving along Route 460.

The Community Design Assistance Center worked with a stakeholders committee composed of representatives of the various organizations of the Meadowbrook Center to develop a conceptual site master plan to address the various needs, wants, and issues described above.
The Community Design Assistance Center began work on the project in early February 2010. The CDAC project team met with the MVCF Stakeholders to discuss desires for the site and to plan for the upcoming design charette - a design brainstorming session described in more detail on pages 10 through 20.

The design charette was held on February 19th, 2010 and included architecture and landscape architecture students from the School of Architecture + Design at Virginia Tech, local design practitioners, MVCF board members, and local community members. An array of design ideas were generated through the design charette. Afterwards, the CDAC team met with the MVCF Stakeholders to process the ideas and to define the direction for the remainder of the project.

The CDAC team used the feedback from stakeholders as well as additional site inventory and analysis information to develop two preliminary design concepts. These preliminary design concepts were presented first to CDAC design review panel member Joshua Galloway for review and comment and then to the MVCF Stakeholders in mid-April 2010. The concepts were displayed at the Meadowbrook Center at the EastMont Garden Festival in April for further community review and comment.

The CDAC team met with the MVCF board in early May to discuss their preferences for the final conceptual master plan. Based on feedback from the board and guidance from area professionals, the CDAC team refined the concepts into one final conceptual master plan. This final conceptual master plan was presented to the community on June 14th, 2010.

This short, supporting report was prepared to document the design process and describe the concepts prepared.
Design Charette

The Community Design Assistance Center partnered with the Virginia Tech student chapter of the American Society of Landscape Architects (ASLA) to organize a design charette for the Meadowbrook Center. A design charette is, in essence, a brainstorming session that brings together designers, community members, and staff to generate a range of possible ideas for whatever issue is being addressed.

The Meadowbrook Center design charette was organized as part of the Virginia Tech Landscape Architecture Department’s annual LAR (Landscape Architecture) Week and was privileged to include Randy Hester, a nationally-known landscape architect and a forerunner in participatory design. Preparation for the design charette began weeks before the actual event, with the CDAC team preparing base maps and site photos for the break-out groups and organizing an agenda for the day.

The charette was held on the morning of February 19th, 2010 in the Carilion Community Center room at the Meadowbrook Center. Over 40 community members, students, MVCF board members, and local practitioners participated. The charette began with a guided tour of the Meadowbrook facility by Michael Hemphill. After discussing desires for the site’s landscape and goals for the day, participants broke up into one of four different topic groups. Each group was given a list of issues and desires for the site to address, ensuring that the full range of topics was explored by charette participants.

After working for approximately 1.5 hours, the break-out groups reconvened and presented their ideas to the larger group. Design concepts generated by each of the groups are described in more detail on pages 11 through 20. Additional charette information, such as the agenda, handouts, and a full list of participants, can be found in Appendix A.
Group 1A

**Facilitators: Michael Hemphill and Joshua Galloway**

Group 1A was charged with looking at ideas for a permanent structure for the farmer’s market, ideas for additional parking, and an external entrance to the café and curb side pickup.

A permanent farmer’s market structure was sited in the library parking lot. Here it would still retain visibility from 460 but also provide a safe space for vendors to set up on market days. On non-market days the space under the structure would still be available for library parking. The structure could also be multifunctional and serve as an outdoor exhibit space.

Additional parking was proposed adjacent to the thrift store with a nature trail meandering along the stream bank and connecting to the picnic shelter.

Group 1A proposed moving the tot lot (currently located outside the cafe) into the internal courtyard and opening up that space to become an extension of the café, offering outdoor seating with a shade structure for comfortable dining. Plantings on the bank would help improve the aesthetics of the space. A series of steps and a lower plaza form the rest of the space, linking it with the existing driveway. An arch structure is also proposed off the corner of the building to create more of a significant entrance to the back area and café space.
Plan showing farmer’s market location and outdoor café space

Sketch of arch at entrance to the back area

Sketch of nature walk and additional parking around thrift store

Section of outdoor café

Sketch of outdoor café space
Group 1B

Facilitators: Elizabeth Gilboy and Robert Pilkington

Group 1B was facilitated by CDAC Director Elizabeth Gilboy (left) and Architect and project stakeholder Robert Pilkington (right).

Group 1B was also charged with exploring ideas for a permanent structure for the farmers market, ideas for additional parking, and an external entrance to the café and curb side pickup.

Their solution was concentrated in the back café space in creating a stronger connection between the café, the farmer’s market and the thrift store. The farmer’s market was moved to the back area between the creek and café with signage that would direct customers to its new location.

The thrift store would function as a hub for the market with small outdoor patios that take advantage of the beautiful view of the creek. An outdoor trellis, access to the creek, and additional plantings would help enhance the area.

The outdoor cafe space is also located off the back of the café with terraced gardens leading down the parking which is immediately adjoining the space.
Plan of outdoor café and farmer’s market

Concept for farmer’s market

Plan sketch

Sketch of thrift store

Sketch of transition to path
Group 2

Facilitators: Tish Poteet and William West

Group 2 was charged with exploring ideas for the internal courtyard and courtyard adjoining the community center. Specifically, ideas for a sculpture garden, children’s garden, and outdoor event space were considered with the need to maintain shade in the large courtyard.

A yoga/exercise space and garden was proposed for the internal courtyard. The exercise space would be laid with pavers and a border of bamboo or similar planting would surround the space. An adjoining garden would be composed of stepping stones, various plantings and dwarf trees with places for seating.

In the large courtyard the path has been moved to avoid surface tree roots. Portable shade/seating structures are located throughout which could be used to facilitate various events that occur in the space, such as the Tomato Festival. A covered walkway would lead out from the community center. An additional design element would be raised beds that children could use for gardening.

The group also looked at a plan for the outdoor café which included a patio/dining space and a series of steps and terraces.
Sketch of internal courtyard

Sketch of covered walkway outside of the community center

Sketch of outdoor café terraces

Plan of outdoor café

Sketch of raised bed for children

Sketch of courtyard path and portable seating structures
Group 3

Facilitators: Joyce Graham, Melissa Philen, and Amanda Rexrode

Group 3 was in charge of looking at issues of signage and identity. These included enhancing the visibility of the museum entrance, suggesting visual improvements for the exterior of the facility, improving the visual “identity” of the facility and creating a stronger identity that would be recognizable to those driving along Route 460, and exploring ideas for signage that would be dynamic in publicizing upcoming events.

A range of proposals were generated from the outlandish to the subtle. It was intended for these to help the community think about what they really wanted the identity of the facility to be.

The most outlandish idea involved LED lights wrapping the building. This would not only draw attention but could also display the many functions of the facility and advertise upcoming events. Other proposals were for a huge sign to span across Route 460, or for interchangeable banners to be placed along Route 460 that could advertise special events. A wall along 460 could display signage and help create a degree of separation between the road and the building for safety.

Ideas to increase visibility of the museum entrance focused on creating a structure on that corner or a more visible roof line. The subtlest of ideas was a simple planting plan in which seasons and events would be signaled with the blooming of different plants.
Concept for improving visibility to museum entrance

Concept for enhancing exterior and increasing visibility

Sketch of banners along 460

Building wrapped with LED signage

Sketch of signage spanning 460

Sketch showing plantings

Sketch of wall along 460 front

Sketch showing plantings to enhance exterior
Group 4

Facilitators: Kim Steika and Kent Hipp

Group 4 was charged with looking at ideas for a walkway or trail around the site, an outdoor stage area, and safe access to the stream for educational events.

The gazebo was proposed to be relocated on the opposite side of the creek where it would serve as a trail head to a path that would weave up the forested slope. A footbridge would connect this area. A walking path loops around the entire site. The thrift store would be transformed into an indoor support facility for the adjacent farmer’s market, allow for an covered and air conditioned space for perishables just as eggs, milk, and cheese.

A stage was proposed for the west side of the large courtyard space. A reading garden would be located off the library with a children’s or sculpture garden nearby. A large plaza would be created adjoining the community center and function as an outdoor gathering space.

Group 4 also proposed a solution for the internal courtyard with half of the space being devoted to a reflective yoga space, and the other half housing a small greenhouse for the use by the garden club.
Plan showing courtyard and paths

Sketch of internal courtyard

Sketch of thrift store

Sketch showing bridge crossing the stream and the relocated gazebo

Sketch of courtyard paths
Site Inventory & Analysis

The site inventory and analysis was conducted through multiple site visits in which the needs and issues of the site were discussed with members of the Mountain Valley Charitable Foundation and representatives from various organizations that use the facility.

The analysis on the following page was compiled from discussions with community members and the results of the charette. It organizes the spaces on-site into five categories: building as focal point, enhanced entrances, event spaces, creekside programming, and farmer’s market space.

Since the building sits rather low in the landscape and is easily overlooked when driving on Route 460, there was a need to emphasize the building from the road. Many people in the community still associate the building with its former use as a nursing home, so there was a desire to improve the visual identity of the facility and also look at signage that would reveal more of the varied functions that occur at the center.

Because the facility houses so many activities there was a need for the outdoor spaces to be flexible and multi-purpose but also for them to work together as a cohesive whole. The large outdoor courtyard is one of the most used spaces on the site, this space was approached with the desire to keep the large shade trees, create a gathering space and provide for outdoor functions. Consideration also needed to be given to the path due to surface roots from the Silver Maple. There was also a desire to program spaces in the under-utilized interior courtyard and area outside the café and thrift store.

The creekside was also seen as a valuable asset to the site with the potential for educational programming. The plantings to be proposed would need to be low-maintenance and support the overall design concept.

Additional site images and an 11x17 pullout of the site analysis can be found on the subsequent pages.

The Site Evaluation Form and Plant Inventory can be found in Appendix B.
White pines partially screen the view of adjacent property.

View of Whitehouse Creek on the southern edge of the property line at the Meadowbrook Center.
Meadowbrook Center
Site Analysis
Two alternative preliminary design concepts were formulated as a response to the design charette. These concepts were intended to provide alternative solutions for the site. After the presentation, feedback from community members pulled favored ideas from each design which aided formation of a final conceptual plan.

**Concept A**

Preliminary Design Concept A uses native plants and local inspiration to create a landscape for the Meadowbrook Center. Drawing inspiration from the nearby Rhododendron Gazebo, a signature entry is created at the museum entrance with a pergola structure. *Persian parrotia* highlight the YMCA side of the center and a swath of meadow plantings create a buffer between the road and the parking lot. Proposed signage will be more visible and display more of the functions that happen within the center, such as the Museum and Café.

The farmer’s market will be housed in a permanent structure in the parking lot adjacent to the library drop-off turn around. Parking under the structure will still be available on non-market days. A small reading garden is proposed in the courtyard space adjoining the library. A Victorian inspired container garden will also be in this area and can provide opportunities for programming with the Garden Club. A patio extending from the community center creates a comfortable outdoor gathering space with brick pavers and is defined by perennial beds.

The thrift store becomes more prominent with a pergola that wraps around the two sides of the façade and a small seating area in the back provides access to the stream below. A series of grass terraces lead to the café’s outdoor seating area.

The interior courtyard is transformed into a children’s garden and play space. Resilient paving is used throughout to cushion falls. A play structure occupies the north end, while the south end houses a sensory garden and raised planting beds for the children.

11x17 pullouts of Preliminary Design Concept A can be found on the following pages.
Meadowbrook Center
Concept A: Preliminary Site Design

Native Plants
Local Inspiration

This design uses native plants and local inspiration to create a landscape for the Meadowbrook Center. Drawing inspiration from the nearby Rhododendron Gazebo, a signature entry is created using a pergola structure over the Museum entrance. Meadow plantings and a series of Persian Parrotia also highlight the YMCA side of the center. Proposed signage will be more visible and display more of the functions that happen within the center, such as the Museum and Café.

A permanent structure for the farmer’s market will be located in the parking lot adjacent to the Library drop-off zone. Parking will still be available under the structure on non-market days. A small seating area is created in the courtyard adjoining the library taking inspiration from Victorian-inspired container gardens. A patio extending from the community center creates a comfortable outdoor gathering space with brick pavers and is defined by perennial beds.

The thrift shop becomes more prominent with a pergola that wraps around two sides of the façade and a small seating area in the back with access to the stream below. A series of grassed terraces lead to the Café’s outdoor seating area.

The interior courtyard is transformed into a children’s garden and play space. Resilient paving is used throughout the space to cushion falls. A play structure is placed in the north end which complies to fall zones for safety standards. The south end of the interior courtyard has a sensory garden on the edges of the space and a hop-scotch pattern painted on the ground leads to a raised planting bed for the children and a compost pile for organic waste.
Concept B

Preliminary Design Concept B uses the process of the water cycle as a parallel way of thinking about community gathering and the rebirth of the Meadowbrook building. The concept is used throughout seven areas of the site: Museum, YMCA, Library, Courtyard, Café, Farmer’s Village, and Creekside Recreation. Throughout the site, rain cisterns gather rainwater and feed it into rain gardens. Interpretive signage is also found throughout the site to help educate visitors about the environment’s water system.

At the museum entrance a sculptural element of rusted farm equipment communicates identity and creates visual impact. The façade of the YMCA and Library is improved with stained stucco. Meadow-grass plantings along the roadside are defined and edged with boulders. Water gathered from the building passes along permeable pavers these plantings. A trail originating from the YMCA circles the site.

The interior courtyard is designed as a children’s space and includes a low metal trellis maze, raised sensory garden, interactive water walls and a shade structure.

In the Farmer’s Village, the storage building is converted into a market building with a permanent structure to protect vendors and shoppers from inclement weather. The existing gazebo is proposed to be relocated across the creek with a trail on both sides of the bank and a deck cantilevered over the creek. Here interpretive signs discuss animal habitat, plant identification and water system details.

In the courtyard, an outdoor reading area is proposed outside the library. A bandstand replaces the existing gazebo and a plaza covered by a temporary structure is located outside the Carillion Community Center. The café includes pick-up parking and an accessible entrance to the dining terrace.

11x17 pullouts for Preliminary Design Concepts B can be found on the following pages.
Rebirth of The Meadowbrook building demonstrates a cyclical process.

The cyclical process is similar to the recycling and renewal property of water.
Meadowbrook Center
Concept B: Preliminary Site Design

Landscape Architecture: Melissa Philen, Horticulture: Tish Poteet

April 21, 2010

Credit: Melissa Philen
Credit: Melissa Philen
Credit: Melissa Philen
Credit: Melissa Philen
Credit: Kimberly Steika
Credit: Taken on April 7, 2010 from http://www.djc.com
Credit: Taken on April 7, 2010 from http://chicagonorthshore.typepad.com
Credit: Scott Constable
Credit: Seattle Daily Photo
TRAIL ALONG 460 AND MUSEUM ENTRANCE

Shrubs:
- Smooth serviceberry (Viburnum nudum ‘Winterthur’) – 6-10’ tall
- Virginia sweetspire (Itea virginica)
- Inkberry holly (Ilex glabra) – ‘Green Magic’ – selected for lower branch retention, 4’ – 5’ tall, ‘Nignis’, or ‘Shomrock’ – both compact cultivars

Grasses:
- Little bluestem (Schizachyrium scoparium) – upright form, nice fall color, fades to tan
- Prairie dropseed (Sporobolus heterolepis) – fluffy light tan/cream flowers, tussock form with upright flowers

Perennials (all are chosen with some salt tolerance):
- ‘Green Magic’ – selected for lower branch retention

Grasses:
- Switchgrass ‘Shenandoah’ (Panicum virgatum) – cascading form with red tips

Perennials:
- ‘Blue Muffin’ – selected for lower branch retention

DESIGN HIGHLIGHTS
Sculptural Façade
Structure composed of rusted farm equipment for a gateway to building entrances
YMCA’s and Library’s façade receive a stained stucco treatment

Under powerlines on west side of property

Northern bayberry (Myrica pennsylvanica)

7 WATERSHEDS in detail: MUSEUM (top), LIBRARY (bottom), and YMCA (bottom)

INTERIOR COURTYARD

Yard in box

DESIGN HIGHLIGHTS
Rain chains gather water and feed it into rain gardens found along the building’s foundation and trink

Water gathered from building passes along permeable pavers into gardens along property’s edge

Interpretive signage (highlighted in red on the site design) help educate visitors about the environment’s water system

YMCA’s and Library’s facade receive a stained stucco treatment

Structure composed of rusted farm equipment for a gateway to building entrances

YMCA trees:
- Crape myrtle (Lagerstroemia) cultivar 13-20 feet tall with pink blooms

Some suggested cultivars include:
- ‘Comanche’ – light sandalwood bark
- ‘Cherokee’ – chestnut brown bark
- ‘Sioux’ – medium gray-brown bark
- Underplant with Repandens Yew (Taxus baccata Repandens)

UNDER POWERLINES ON WEST SIDE OF PROPERTY

Northern bayberry (Myrica pennsylvanica)

INTERIOR COURTYARD

Yard in box

DESIGN HIGHLIGHTS
Rain chains gather water and feed it into rain gardens found along the building’s foundation and trink

Water gathered from building passes along permeable pavers into gardens along property’s edge

Interpretive signage (highlighted in red on the site design) help educate visitors about the environment’s water system

YMCA’s and Library’s facade receive a stained stucco treatment

Structure composed of rusted farm equipment for a gateway to building entrances

YMCA trees:
- Crape myrtle (Lagerstroemia) cultivar 13-20 feet tall with pink blooms

Some suggested cultivars include:
- ‘Comanche’ – light sandalwood bark
- ‘Cherokee’ – chestnut brown bark
- ‘Sioux’ – medium gray-brown bark
- Underplant with Repandens Yew (Taxus baccata Repandens)

UNDER POWERLINES ON WEST SIDE OF PROPERTY

Northern bayberry (Myrica pennsylvanica)
Meadowbrook Center
Concept B: Preliminary Site Design
Landscape Architecture: Melissa Philen, Horticulture: Tish Poteet

FARMER’S MARKETPLACE: CREEKSIDERECREATION

DESIGN HIGHLIGHTS

Storage building converted to a market building selling gourmet foods and perishable items

- Permanent structure protects vendors and shoppers from inclement weather
- Existing gazebo relocated to across creek, trail on both bank-sides, deck cantilevered over creek, private garden space overlooking creek behind Marketplace
- Interpretive signs discuss animal habitat, plant identification, and water system details
- YMCA trail continues through designed areas and children’s playground near picnic structure

7 WATERSHEDS in detail: FARMER’S MARKETPLACE (top), CREEKSIDERECREATION (top), CAFÉ (bottom left), and EXTERIOR COURTYARD (bottom right)

Illustration of Farmer’s Marketplace
Illustration of Cafe
Illustration of Library area in Exterior Courtyard

DESIGN HIGHLIGHTS

- Outdoor reading area outside library
- Rain cisterns gather water and feed it into rain garden plantings
- Bandstand replaces existing gazebo
- Place covered by a temporary structure located outside Carillion Community Center

SOURCES:
The final conceptual site master plan for the Meadowbrook Center aims to bring a reflection of the beauty, vitality, and diversity of the activities that happen inside the Center into the landscape. The master plan also provides an opportunity to express the new identity of the building in physical form. The plan seeks to enhance existing outdoor spaces and create additional gathering spaces for small and large groups, activities, and events. Permanent sculpture installations are woven around the exterior of the site. A proposed walking loop encircles the site, offering additional outdoor opportunities for community members to enjoy. The addition of a community Christmas tree and sugar maples with a tap for sap (for syrup production) provide exciting community gathering areas and memories. Key focus area/topics include site entry and identity, space for the farmer’s market, café terrace, the external courtyard, and the internal courtyard.

**Entry and Identity:**

The final conceptual master plan addresses the entry to the site approaching from both US 460 and Alleghany Springs Road. The addition of new signs, interchangeable banners, and colorful plantings add splashes of color and attention-grabbing markers that help bring the Meadowbrook Center’s and site’s activities to the awareness of the community and other passing motorists. Hardy, showy, and low maintenance plants have been selected. Plant heights were given strong consideration to ensure proposed plantings will not hinder sight lines near the entrances and exits to the facility. Additionally, the proposed perimeter plantings serve to better define the boundaries of the site and create comfortable outdoor spaces that compliment adjacent indoor spaces, such as the community room adjacent to the library.

Flowering trees, shrubs, and perennials provide seasonal interest along the western fence line. Proposed plant material consisting mainly of perennial grasses and perennial flowers along both US 460 and Alleghany Springs Road intends to suggest the region’s agricultural tradition. Boulders within the boarder plantings not only add an attractive contrast to the plantings, but also help deter motorists from parking within landscaped areas. Proposed foundation plantings and other possible changes to the façade, which are being explored by local architect Robert Pilkington, help articulate the multiple uses contained within the building.
Farmer’s Market Area:

A covered structure is proposed in the southern portion of the site, parallel to the gravel parking area. This simple covered structure would contain permanent tables and offer the farmer’s market vendors a safe place to sell their products. The structure could be used for other events and activities when the market was not in session. A portion of the proposed walking loop extends along the rear edge of the covered structure. Proposed pavers along the path, below the structure, and at the entrances to the market area extend a dry and durable walking surface. The addition of shade-tolerant trees, shrubs, perennials, and benches enhance this pedestrian environment.

The proximity of the market to the existing thrift store and café terrace presents an excellent opportunity for creating a wonderful market atmosphere. A permanent sculpture is located at the entrance of the space. Parking around the thrift store is formalized in the conceptual master plan. Within the parking lot, a proposed shade tree offers cool and welcoming shade to visitors. Pergolas are proposed around the thrift store structure, providing visual enhancement and offering areas to sit. A wooden deck at the rear of the thrift store offers a creek-side gathering space. The small gazebo in the existing courtyard is relocated behind the thrift store. From the rear of the building and in the landscaped setting, patrons of the site can enjoy the sights and sounds of the lovely Whitehouse Creek that is currently overlooked and under-utilized.

Café Terrace:

Access to the café becomes more functional with the addition of the proposed terrace and take-out parking. A café take-out window is proposed to better service customers. A series of steps and a handicap access ramp allow pedestrians to easily climb the multi-level plaza. Pavers installed upon the terrace provide a low-maintenance alternative to lawn. Retaining walls support the once-sloping terrain and provide a gardenesque focal point as patrons eat under umbrella-covered, café tables. Colorfully potted plants and herbs and a permanent sculpture are staged to provide additional eye-pleasing detail within plaza.

Ann Gardner Gray Courtyard:

The Ann Gardner Gray Courtyard is currently the jewel of the Meadowbrook Center landscape. The large canopy trees and walking loop provide a wonderful outdoor environment for users to enjoy. The CDAC team, with guidance from the MVCF, sought to enhance existing attributes and introduce new opportunities into this space.

A small plaza is proposed adjacent to the library rear entry, serving as an outdoor reading area and enhancing access to the library from the courtyard. Low shrubs and flowering trees will provide patrons with a semi-private gathering space. A permanent sculpture is located in the interior of the space. Colorful potted plants and herbs help make this space inviting.

The existing walking loop is reworked to better define the courtyard and to avoid tree roots. A porous paver plaza is proposed adjacent to the Carilion Community Center. This space will allow for enhanced use of the Community Center by providing complimentary outdoor event space. Space for tent poles should be designed into the paving to make for easy construction and deconstruction of outdoor tents. Two benches and flowering trees flank the corners of this space. A low shrub and perennial border define the edges of this versatile space.

An outdoor sculpture gallery is proposed along the western edge of the courtyard. This space offers an excellent area for rotating sculpture exhibits. Mowed paths, perennial plantings provide a backdrop for art pieces. Benches, located
under a stand of shade trees provide a relaxing retreat in view of the Meadowbrook Center’s local talent. At the opposite corner of the courtyard, a small covered stage is proposed, enhancing opportunities for outdoor events such as concerts and plays.

**Internal Courtyard:**

The internal courtyard, flanked by the YMCA and the recreation center is transformed into a semi-private space designed to serve children and YMCA exercise classes such as Yoga as the primary users. While the space has a target audience in mind, it will offer an intimate and reflective space for others to enjoy as well. A children’s garden is proposed in the southern end of the site. Rubber safety surfaces enhance the space’s friendliness for children. Several pergolas with ceiling fans have been added to provide shade and air circulation. The existing air handling units should be moved to the roof if possible to decrease the amount of warm air entering the space. A pondless water garden and a meditation garden are sited on the northern end of the courtyard, providing a space for reflection. At the southern end a small herb garden with stepping stones welcome children to smell, taste, touch, and participate in gardening activities. The internal courtyard, flanked by the YMCA and the recreation center is transformed into a semi-private space designed to serve children and YMCA exercise classes such as Yoga as the primary users.

11x17 pullouts for Final Conceptual Master Plan can be found on the following pages.
Meadowbrook Center
Illustrations

Foundation Planting along Waldron Family YMCA

YMCA Thrift Store and Farmer's Market

Pergola Fan Structures within Interior Courtyard

Bandstand within the Ann Gardner Gray Courtyard
The Meadowbrook Center is an important part of the Shawsville community. The support and enthusiasm of the community was seen throughout the entire project. This project could not have been completed without their valuable participation in the design process. The proposed conceptual design has created the framework for a cohesive landscape plan that supports the multipurpose use of the facility and its need to include the outdoors in its programming.

By expanding its vision to the outdoors, the Meadowbrook Center has created the potential to engage all the physical and emotional benefits that access to nature and fresh air can provide. It is hoped that as the Meadowbrook Center continues to grow and reach out to its community that these benefits will be seen in abundance.
Appendices

Appendix A: Design Charette Format and Participants---------------------------------------------page 38
Appendix B: Site Evaluation Form and Plant Inventory---------------------------------------------page 41
Appendix C: Soil Test Results-------------------------------------------------------------------page 46
Appendix D: Sun/Shade Study---------------------------------------------------------------------page 48
Appendix E: MVCF Board & Stakeholder Comments-----------------------------------------------page 51
Appendix F: Final Design Presentation Powerpoint---------------------------------------------page 54
Appendix G: Planting Recommendations----------------------------------------------------------page 58
Appendix A

Design Charette Format and Participants

The CDAC design team worked with the MVCF to develop a format for the design charette and to prepare background information for charette participants. The project background information, charette agenda, and list of charette participants can be found on the following pages.

Project Background:
The Meadowbrook Center Design Charette ~ a featured event of Landscape Architecture Week 2010

Organized by Virginia Tech student chapter of the American Society of Landscape Architects and the Community Design Assistance Center (CDAC) at Virginia Tech.

Project Background: The Meadowbrook Center (MC) is a public-private partnership between the Mountain Valley Charitable Foundation (MVCF) and Montgomery County. The facility is owned by the county and leased to MVCF with the exception of the library, which is retained by the County. The 40,000 square foot facility includes Meadowbrook Public Library, Waldron Family YMCA, Meadowbrook Museum, and Carilion Community Center. Also housed within The Meadowbrook Center are the Shawsville Ruritan Club Square Dance, EastMont Arts Association, EastMont Garden Club, the Boys & Girls Club of the New River Valley office, EastMont Massage Therapy, Meadowbrook Quilters, and a small restaurant. Currently under construction is a pottery studio to be operated by the YMCA at Virginia Tech. There is still room in the facility for more organizations, mostly in the office wing. Housing the additional organizations assists the MVCF with their revenue stream.

The MC grounds are used quite a bit with various activities and programming uses such as a farmers market, walking area, a playground, festivals, and parking for the various activities.

The MVCF Stakeholders Committee has identified several possible additional uses and needs for the grounds area. Possibilities include:

• permanent structure for the farmers market,
• walkway/trail,
• outside stage area,
• sculpture garden,
• children’s garden area,
• additional parking,
• enhancing the visibility of the museum entrance,
• fencing to screen the site from an unsightly adjacent property,
• looking into the possibility of relocating the farmers market on the site from its current location due to safety concerns about cars exiting from 460 onto Allegheny Springs Road,
• providing safe, controlled access to the adjacent stream for educational events,
• and looking into the “identity” of the facility and seeing if it is possible to create a stronger identity/making it more prominent and recognizable to those driving along Route 460.
Utilizing the ideas generated from the design charette, the Community Design Assistance Center will work with the Stakeholders Committee to refine concepts and develop a final conceptual site master plan to address the various needs, wants, and issues.

**Charette Agenda and Group Structure:**

Agenda: Meadowbrook Center Design Charette  
Friday, February 15, 2010 – Carillion Community Center, Shawsville, VA  
9am to Noon

9:00 – 9:15am Welcome, introductions, and overview of charette  
9:15 – 9:45am Guided tour of facilities with brief background from project stakeholders  
9:45 – 10:15 Form charette teams; Idea sharing for site: review of expressed ideas, concerns and events; opportunity for community members to share additional information  
10:15 – 10:45 Group design work  
10:45 – 11:00 Brief group sharing; opportunity for Q/A; break  
11:00 – 11:30 Group design work  
11:30 – noon Reconvene for individual design group presentations

**Meadowbrook Center Events:**

Outdoor:  
Farmers Market: Weekly; from April to October  
Tomato Festival (second Saturday of August – this year Aug. 14, 2010)

Indoor:  
Ruritan Square Dance: fourth Saturday night of every month

**Group 1**
- permanent structure for the farmer’s market  
- ideas for additional parking  
- external entry to the café; curbside pick up

**Group 2**
- sculpture garden  
- children’s garden area
- outdoor event space (hardscape) adjacent to Carilion Community Center with set up for tents
- maintain shade in large courtyard
- new design ideas for internal courtyard (near YMCA)

**Group 3**

- enhancing the visibility of the museum entrance
- suggestions for visually improving the exterior of the facility
- improving the visual “identity” of the facility and seeing if it is possible to create a stronger identity/making it more prominent and recognizable to those driving along Route 460
- signage
- dynamic: publicize upcoming events
- static: identify community resources in the center

**Group 4**

- walkway/trail around the side
- trail on hillslope
- outside stage area
- providing safe, controlled access to the adjacent stream for educational events

**Other ideas:**

- pool (indoor)
- vegetative screening along property boundary

**Concerns:**

- Funding for implementation and maintenance
- Clear way-finding on the site (where to enter for different purposes)
- Pedestrian safety (Alleghany Springs Road and US 460 Business have high speed traffic)

**Charette Participants:**

<table>
<thead>
<tr>
<th>Lauren Cline</th>
<th>Samatha Hugo</th>
<th>George Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liz Crim</td>
<td>Joseph Kim</td>
<td>Laura Sokol</td>
</tr>
<tr>
<td>Brad Davis</td>
<td>Erin Lubeshkoff</td>
<td>Ben Turpin</td>
</tr>
<tr>
<td>Caitlin Edenfield</td>
<td>Christine Ly</td>
<td>Christine Vishneski</td>
</tr>
<tr>
<td>Andrew Fenstemaker</td>
<td>Colin McCann</td>
<td>Linda Wilson</td>
</tr>
<tr>
<td>Andrew Folsom</td>
<td>Dale Mull</td>
<td>Yanting Zhang</td>
</tr>
<tr>
<td>Joshua Galloway</td>
<td>Meredith Novak</td>
<td></td>
</tr>
<tr>
<td>Naixuan Gan</td>
<td>Robert Pilkington</td>
<td></td>
</tr>
<tr>
<td>Marie Goodwin</td>
<td>Nick Proctor</td>
<td></td>
</tr>
<tr>
<td>Joyce Graham</td>
<td>Da Pu</td>
<td></td>
</tr>
<tr>
<td>Jennifer Hare</td>
<td>Brian Ross</td>
<td></td>
</tr>
<tr>
<td>Laurel Heile</td>
<td>Jon Runge</td>
<td></td>
</tr>
<tr>
<td>Randy Hester</td>
<td>Bob Smith</td>
<td></td>
</tr>
<tr>
<td>Kent Hipp</td>
<td>Dustin Smith</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

Site Evaluation Form and Plant Inventory

Description of Site
Meadowbrook Center

Legal Factors:
Historic or landmark status:
N/A
Easements, setbacks, other government regulations:
VDOT right-of-way setback marked on the plan

Structural Factors:
Wires overhead
Power lines run along the west side property line, then along the back to one of the back corners of the building. Approximate locations marked on plan.
Underground utilities:
Not yet assessed

Design Factors:
Existing or proposed design changes that will affect pedestrian or vehicular traffic:
Cars are driving over parts of the turf on side closest to the road of the east side parking lot. Gravel is getting into turf areas near gravel lots on the south side. Setting up farmer’s market on grassy areas could compact the soil and lead to poor turf health and higher weed populations.
Existing or proposed uses of site that will affect plantings:
Any regular traffic on turf or garden beds can compact the soil over time, leading to poor plant health.
Planting strip along east side of building has restricted root space. If any changes are made to the plantings in that area, consider plants that will tolerate those conditions.
Climate and Microclimate:

Supplemental irrigation on site would be excellent.

One water spigot was located on the east side of the building, one behind the yews on the west side next to the drive up entrance, and one near the café entrance from the courtyard.

Other moisture considerations:

Three raised brick planters are under overhangs, they will require watering if anything is planted in them. They are located next to the YMCA and library entrances.

Sun and shade patterns

See sun study pg 46

Other exposure considerations:

Predominant winds tend to come from the southwest. The building is somewhat sheltered by the mountain just behind the center to the south.

Site specific temperature (any microclimates created by topography and buildings, sidewalks, etc):

The air conditioning units in the small courtyard add heat in the summer. There are air conditioning units on the east side of the building which may affect plants near them.

Soil Factors: (note locations of soil samples)

See Soil Test Results pg 45

Any visible soil erosion? No

Plant List (see map for location, pg 44, if nothing is written in comment box, assume plant is in good condition)

<table>
<thead>
<tr>
<th>Letter on map</th>
<th>No.</th>
<th>Tree/Shrub</th>
<th>Size</th>
<th>Notes on condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>38</td>
<td>Yew (Taxus sp.)</td>
<td>4'x4' / 4'x2.5'</td>
<td>Irregularly trimmed, 4-5 near hvac units, some have snow damage.</td>
</tr>
<tr>
<td>A</td>
<td>6</td>
<td>Yew (Taxus sp.)</td>
<td>3'x4'</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>Blue Star Juniper</td>
<td>3'x1.5'</td>
<td>Plant closest to conference room entrance is hidden by yew, should be removed.</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>Burning Bush (Euonymous alata 'Compacta')</td>
<td>4’x3’</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>Foster Holly</td>
<td>12’x4’</td>
<td>Lot of shade, needs amendment and mulch. Rootball is above grade (4-6”). The soil around the tree could be gently amended, brought as close to top of rootball as possible and mulched.</td>
</tr>
<tr>
<td>Letter on map</td>
<td>No.</td>
<td>Tree/Shrub</td>
<td>Size</td>
<td>Notes on condition</td>
</tr>
<tr>
<td>--------------</td>
<td>-----</td>
<td>-----------------------------</td>
<td>------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>Sugar maple (Acer saccharum)</td>
<td>36’T (22”)</td>
<td>Sooty mold from aphids on trunk (not significant). Would benefit from structural trim.</td>
</tr>
<tr>
<td>F,G,H</td>
<td>3</td>
<td>Dogwood (Cornus kousa)</td>
<td>8-10’</td>
<td>Need pruning to train trees. Some wounds on the truck of tree G. Tree F needs to be replaced.</td>
</tr>
<tr>
<td>J</td>
<td>1</td>
<td>Rhododendron</td>
<td>2’</td>
<td>Should be removed</td>
</tr>
<tr>
<td>K</td>
<td>1</td>
<td>Rhododendron</td>
<td>3 x 2’</td>
<td>Full sun site may not be optimal for this plant. Unthrifty.</td>
</tr>
<tr>
<td>L</td>
<td>7</td>
<td>Sweetspire (Itea virginica)</td>
<td>3’</td>
<td>Some snow damage; needs mulch; three of the shrubs need to be replaced.</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>Redbud (Cercis canadensis)</td>
<td>10’</td>
<td>Structural pruning would be beneficial.</td>
</tr>
<tr>
<td>M</td>
<td>2</td>
<td>Burning bush (Euonymous alata ‘Compacta’)</td>
<td>3 x 2’</td>
<td>Good condition.</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>Dogwood (Cornus florida)</td>
<td>10-12’</td>
<td>Minor structural pruning would be beneficial.</td>
</tr>
<tr>
<td>O</td>
<td>1</td>
<td>Dogwood (Cornus florida)</td>
<td>10’</td>
<td>Structural pruning would be beneficial.</td>
</tr>
<tr>
<td>P</td>
<td>1</td>
<td>Purpleleaf plum (Prunus cerasifera cv.)</td>
<td>15’</td>
<td>Structural pruning would be beneficial.</td>
</tr>
<tr>
<td>Q</td>
<td>1</td>
<td>Purpleleaf plum (Prunus cerasifera cv.)</td>
<td></td>
<td>Structural trim needed due to multiple leaders and crossing limbs.</td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td>Purpleleaf plum (Prunus cerasifera cv.)</td>
<td></td>
<td>Center shows signs of rot, dead wood on side of trunk. Replacement would be recommended.</td>
</tr>
<tr>
<td>S</td>
<td>4</td>
<td>Rhododendron</td>
<td></td>
<td>Not healthy; needs replacement.</td>
</tr>
<tr>
<td>T</td>
<td>6</td>
<td>Sweetspire (Itea virginica)</td>
<td></td>
<td>Good condition</td>
</tr>
<tr>
<td>U</td>
<td>4</td>
<td>Yews (Taxus sp.)</td>
<td></td>
<td>Good condition</td>
</tr>
<tr>
<td>V</td>
<td>3</td>
<td>Yews (Taxus sp.)</td>
<td></td>
<td>Some snow damage, may reestablish good form in spring.</td>
</tr>
<tr>
<td>W</td>
<td>10</td>
<td>Yews (Taxus sp.)</td>
<td>3 x 4’</td>
<td>Good condition</td>
</tr>
<tr>
<td>W</td>
<td>3</td>
<td>Yews (Taxus sp.)</td>
<td>3 x 6’</td>
<td>Good condition</td>
</tr>
<tr>
<td>AA</td>
<td>1</td>
<td>Tulip Popular</td>
<td></td>
<td>Good condition</td>
</tr>
<tr>
<td>AB</td>
<td>1</td>
<td>Sugar maple (Acer saccharum)</td>
<td></td>
<td>Minor woodpecker damage, may need large limb removed.</td>
</tr>
<tr>
<td>X</td>
<td>1</td>
<td>Goldenrain tree (Koelreuteria paniculata)</td>
<td></td>
<td>Trunk is splitting, needs removal.</td>
</tr>
<tr>
<td>Y</td>
<td>1</td>
<td>Silver maple (Acer saccharinum)</td>
<td>30” diameter</td>
<td>Surface roots buckling sidewalk, some structural issues, but otherwise in good health.</td>
</tr>
<tr>
<td>Z</td>
<td>1</td>
<td>Sweet gum (Liquidambar styraciflua)</td>
<td></td>
<td>Lower limb extending over walkway could be fun for kids or a hazard for adults.</td>
</tr>
<tr>
<td>Letter on map</td>
<td>No.</td>
<td>Tree/Shrub</td>
<td>Size</td>
<td>Notes on condition</td>
</tr>
<tr>
<td>--------------</td>
<td>-----</td>
<td>-----------------------------------</td>
<td>--------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AD</td>
<td>1</td>
<td>Dogwood (Cornus florida)</td>
<td>8-10’</td>
<td>Some structural pruning would be beneficial.</td>
</tr>
<tr>
<td>AE</td>
<td>1</td>
<td>Redbud (Cercis canadensis)</td>
<td></td>
<td>Really handsome tree, some dead wood, watersprouts, minor rot and insect damage. Consider some minor pruning.</td>
</tr>
<tr>
<td>AF</td>
<td>1</td>
<td>Maple</td>
<td></td>
<td>Rot, fungus, large dead limbs, woodpecker damage, recommend removal.</td>
</tr>
<tr>
<td>AG</td>
<td>20</td>
<td>White pine (Pinus strobus)</td>
<td></td>
<td>Conflict with wires, unhealthy, removal recommended.</td>
</tr>
<tr>
<td>CA</td>
<td>11</td>
<td>Nandina (Nandina domestica cv.)</td>
<td>1 x 1’</td>
<td>Good condition</td>
</tr>
<tr>
<td>CB</td>
<td>2</td>
<td>Nandina (Nandina domestica cv.)</td>
<td>1 x 1’</td>
<td>Good condition</td>
</tr>
<tr>
<td>CD</td>
<td>1</td>
<td>Serviceberry (Amalanchier sp.)</td>
<td></td>
<td>Training would be beneficial.</td>
</tr>
<tr>
<td>CE</td>
<td>2</td>
<td>Yucca (Yucca filamentosa)</td>
<td></td>
<td>Good condition</td>
</tr>
<tr>
<td>CF</td>
<td>1</td>
<td>Stump</td>
<td></td>
<td>Should be removed.</td>
</tr>
<tr>
<td>CG</td>
<td>2</td>
<td>Inkberry holly (Ilex glabra)</td>
<td>2 x 1.5’</td>
<td>Plants are thin, a soil test might help determine the problem.</td>
</tr>
<tr>
<td>CJ</td>
<td>1</td>
<td>Witchazel (Hamamelis virginiana)</td>
<td>5’</td>
<td>Tree of Heaven (Ailanthus altissima) growing next to this tree should be removed.</td>
</tr>
<tr>
<td>CK</td>
<td>10</td>
<td>Burkwood Viburnum (Viburnum xburkwoodii)</td>
<td>5 x 3’</td>
<td>Good condition</td>
</tr>
<tr>
<td>CL</td>
<td>3</td>
<td>Nandina (Nandina domestica cv.)</td>
<td></td>
<td>Good condition</td>
</tr>
<tr>
<td>CM</td>
<td>2</td>
<td>Butterfly bush (Buddleia davidii)</td>
<td>5 x 3’</td>
<td>Good condition</td>
</tr>
<tr>
<td>CN</td>
<td>6</td>
<td>Blue Star Juniper</td>
<td>1 x 1’</td>
<td>May reestablish good form in spring.</td>
</tr>
<tr>
<td>CO</td>
<td>2</td>
<td>Juniper</td>
<td>1 x 3’</td>
<td>Good condition</td>
</tr>
<tr>
<td>CP</td>
<td>2</td>
<td>Arborvitae (Thuja occidentalis)</td>
<td>4 x 2’</td>
<td>Healthy, but will probably outgrow their current location.</td>
</tr>
</tbody>
</table>
Soil samples were gathered and sent to the Virginia Cooperative Extension Soil lab for testing. Results from the testing can be found on the following page.
Appendix C

Soil Test Results

**pH Results**

A. 7.9  
B. 7.4  
C. 7.7  
D. 7.4  
E. 7.5  
F. 7.6  
G. 7.9  
H. 7.8  
I. 7.9  
J. 7.4  
K. 7.8  
L. 7.8

**Compaction (tip)**

- 1.99
- 2.100
- 3.50
- 4.100
- 5.125
- 6.90
- 7.150
- 8.190
- 9.200
- 10.75
- 11.100
- 12.110
- 13.170
- 14.105
Appendix D

Sun/Shade Study

March

9 am

12 noon

3 pm
June

9 am

12 noon

3 pm
Appendix E

MVCF Board & Stakeholder Comments

The following are comments related to various concept iterations throughout the course of the CDAC project.

Initial Concept Ideas

The initial concept ideas were presented to CDAC by Diane Relf. These ideas formed the basis of the CDAC project. The ideas included six key ideas and related applications:

Key Ideas:

1) The grounds of Meadowbrook can serve a link between the programs in the facility and the community, communicating to the people of the community the resources that are available at the Meadowbrook Center and encouraging them to access these resources;

2) Properly designed the grounds can be a low cost way to significantly increase the available space for programming by those organizations housed in the Meadowbrook Center, as well as new ones to be identified;

3) The grounds can provide opportunities for programming not possible within a building, including the psycho-social benefits of caring for plants and being in close contact with plants; the physical benefits of outdoor exercise and Vitamin D accumulation; etc.

4) The design of the grounds can take into account the need for multi-functional usage of all man-made structures.

5) The design of the grounds must take into account such basic considerations as parking; safe, easy access from the road for pedestrian and car traffic; safe and accessible foot paths

6) The selection of low maintenance designs and plants to minimize inputs including water, fertilizer, weed control and labor must be a priority.

Application related to each concept:

1) The grounds provide visual cues to inform the public of functions of the Meadowbrook Center. This includes but is not limited to signage, art, arches, modification of the façade of the building, etc

2) Locations on the grounds need to be designated (but not fully designed) for use by all organizations affiliated with the Meadowbrook Center. These marked but undeveloped spaces can serve to stimulate ideas for program applications as members and volunteers in each group change. In addition, space to meet the needs of businesses in the facility (parking, outdoor lunch and recreation sites) must be provided.

3) The design will encourage the use of outdoor space for programs designed around nature to help individuals (especially children) experience the importance of caring for our natural environment. In this technology age, it is increasingly important that people have the opportunity to interact with nature. (note: Unfortunately the courtyard is extremely hot in mid-day and may only lend itself to early morning or evening events.)

4) In a space as limited as the MC grounds, all structures will need have several potential uses. For example, the Farmer’s Market could have built-in tables to house produce on the week-ends and crafts projects for special groups during the week

5) Parking is at a premium and needs to be expanded without increasing environmental problems such as runoff and without diminishing the use of the grounds for the Meadowbrook Center related outdoor programming. A current safety issue is the roots of older trees, which are dangerous. A method of dealing with them without causing damage to the trees is important, such as new location for the paths.

6) Maintenance of the general grounds needs to be kept at a level not to exceed current maintenance. Individual designated sites for specific programming will require funding and volunteer maintenance targeted to that specific location (for example a children’s garden). A significant maintenance issue is the size of the plants and shrubs when mature, which should insure that no view lines or over head wires are disturbed; in addition they should not block any sidewalks.
The CDAC design team met with the Mountain Valley Charitable Foundation Board and project stakeholders to review the design concepts developed during the charette and to determine which ideas the board and stakeholders wanted the CDAC team to pursue in great detail. Comments from the board and stakeholders related to each charette group are as follows:

**Design Charette, Group 1 Ideas:**

**Inner Courtyard:** The YMCA representative was very excited about the idea of moving the playground to the inner courtyard area and having that space be totally designed for kids. She mentioned envisioning a small (low) basketball goal at the end, a place where kids could run from one end of the courtyard to another, and hopscotch. Someone else mentioned having a place for chalk art. Michael mentioned adding an awning from roof to roof to provide some cover to the space. There is definitely a need for the creation of some shade. Maintenance of this space is also a challenge – because everything has to be hauled in and out in bags. The group discussed about minimal maintenance plants, adding a composter, worm compost, composting café food waste (maybe that happens in a different space).

**Farmer’s Market:** Library staff were concerned about losing library parking during the farmer’s market if the structure was located right in front of the library. This could also become a frustrating pedestrian circulation problem on Saturdays between library and market patrons. Library staff liked the idea of having the market back by the cinderblock building. Market vendors liked the idea of having the market along the side of the property (where the white pines currently are). Vendors said if attendance was higher, they’d like it in the back as well. The CDAC team was asked to explore both options. Either option needs to address increasing awareness of the market through signage/banners along 460.

Creating a “village” in the rear of building by converting the storage building into a gourmet shop selling wines and cheeses was also mentioned. Vendors expressed their desire for signage and visibility.

**Café** – The board and stakeholders liked the idea of locating outdoor eating where the YMCA playground currently is. They would like at least one parking spot for pick up orders for the café. The group also discussed a parallel parking spot near the road. One stakeholder mentioned wanting a walk-up window near the rear of the building. The group also discussed wanting to explore the idea of placing the entrance to the café off the side (where the Y playground is now) instead of the back. The CDAC team feels the main entry to the café is more effective from the rear of the building.

The board and stakeholders liked the idea of removing the YMCA door and steps at the rear of the building (no longer functional) and replacing it with pedestrian circulation to the rear of building. They also liked the concept of a “gateway” along the one-way road.

**Design Charette, Group 2 Ideas:**

**Courtyard:** The board and stakeholders like the idea of portable seating, shade structures, and porous pavers within courtyard. Some members wanted the CDAC team to explore design options for an outdoor wedding space near the community center by allowing room for a tent, pavers, and landscaping.

**Inner Courtyard:** The board and stakeholders prefer this space be used as a kids’ space and would like the CDAC team to possibly add some hardscape for chalk or 4 square

**Design Charette, Group 3 Ideas:**

**Identity and Signage:** The board and stakeholders didn’t feel like an actual silo would be an appropriate addition to the site; They liked the idea of adding a structure to the top/edge of the building. They also discussed adding a false roof (or faux façade similar to what is over the library community room) to other parts of the building to improve the building’s exterior appearance. They liked the idea of colorful banners. One gentleman commented to make sure the banners don’t blow around in the wind so that what is written on them is not visible. They preferred defining the space in front of the building through plantings rather than a wall. They would like all the existing signage to be removed and would like recommendations for new signage. They also envisioned using murals to help improve identity of the exterior facility.

**Exterior Improvements:** The board and stakeholders would like a unique look for each part of the building that has a different use (library; YMCA; café; museum; etc) so that it reads as a mixed use/multi-purpose community center. Painting the brick was suggested as one option. The board and stakeholders wanted the CDAC team to consider other ideas as well. The addition of plantings and awnings/entrance features was also discussed. Previous discussions have occurred about adding a green roof and solar panels too; look for ways to incorporate this into portions of the building’s visual improvement and identity as well.
Design Charette, Group 4 Ideas:

Pedestrian Circulation: The board and stakeholders liked the proposed loop trail around the site – utilizing existing sidewalk, adding stairs from the YMCA parking lot to access the back portion of the site, and bringing a section of the trail near the creek. For the creek trail section, they envision this portion would be crushed gravel. They liked the idea of the footbridge and hiking trails up the hillslope.

Preliminary Design Concepts Comments, April 21st, 2010

The CDAC team presented two preliminary design concepts to the MVCF Board and interested project stakeholders on April 21st, 2010. Following that presentation, the board and stakeholders took some time to review both comments and discuss internally which aspects they would like the CDAC team to pursue for the final conceptual master plan. A summary of their thoughts for the different areas of the Meadowbrook landscape are as follows:

Building Enhancements and Signage:

- While Concept B’s farm equipment motif is indeed striking, we feel Concept A’s more traditional design better suits our needs. That being said, we prefer a taller, more visible green-roofed structure at the corner of 460 and Alleghany Spring that better defines the space ... perhaps designed so that LED message boards can be seen from both directions of traffic.

- We are open to other low-cost building enhancements such as painting. We also like the banners cited in Concept A, not so much to communicate info to motorists but as another striking visual element.

- Returning to Concept B’s farm equipment, we wonder if there is an appropriate space at Meadowbrook for a sculpture garden to incorporate this idea?

Farmer’s Market:

- Yes, to removing the island between the library and Concept A’s farmer’s market site to make room for more parking.

- However, we prefer building a Farmer’s Market structure (which could be used for other purposes such as outdoor crafts, etc.) to be built along the new parking area between the Thrift Shop and picnic shelter.

Courtyard:

- Yes, to everything (almost) in Concept B. We wondered about the stone dust walkways and wonder if pavers or something more durable and permeable might be more appropriate?

- The only major change we would like is the location of the bandstand. We would like it moved across the courtyard to the corner where the library meets the wing that contains the pottery studio. This would allow easy access to the indoors (via the library door) for bands, weddings, plays, etc., and make use of an area that is currently not being used. At the same time, we would not want the bandstand structure to block the windows of the two rooms that will one day be converted into office space.

Back Cafe Area

- No need for handicapped access/parking since it’s already available in front of Y.

- Terracing should not be grass if possible due to excessive maintenance.

Interior Courtyard

- Perhaps no playground equipment in this space? We like having the space for children, but perhaps reserving some of it for an adult exercise class?
Meadowbrook Center
Final Conceptual Site Master Plan

Process

• Initial meeting with Mountain Valley Charitable Foundation Board (Feb)
• Design Charette (Feb)
• Meeting with Board to review charette ideas and chart course for next steps (March)
• Site Inventory, Analysis, and Preliminary Design Presentation (April)
• Meeting with Board to discuss ideas for final master plan (May)
• Final Presentation (June)
MASTER PLANT LIST

SUGGESTED USED

- Sugar Maple
- Maple Seedless
- Sweetgum Zelkova
- Baldcypress Cucumber Magnolia
- Blue Spruce Sycamore
- Serviceberry 'Bloodgood'

- Japanese Maple Fringe Tree 'Winter King'
- Hawthorn Persian Parrotia
- Redosier Dogwood Inkberry Holly
- Snow Queen Hydrangea 'Brandywine'
- Viburnum Compact Koreanspice Viburnum Virginia Sweetspire English Yew

- Hardy Kiwi Vine
- Geranium Lambs Ear Coreopsis Purple Coneflower Butterfly Weed
- Joe Pye Weed Toadlily Blue Gramma Bachlor Button
- Hardy Kiwi Vine Virginia Bluebells

- Foamflower Lemon Balm Thyme Yarrow (S - Perennial Mix)
- Basil

- Hardy Kiwi Vine Virginia Bluebells
- bonsai

- Tree, Rock Prince
- Switchgrass 'Shenandoah'

- Hardy Kiwi Vine Virginia Bluebells
- bonsai
Appendix G

Planting Recommendations

YMCA Front ------------------------------------------------------------------------------------------------------------------------------------- 58
Alleghany Springs Road Buffer ------------------------------------------------------------------------------------------------------------------------------------- 58
North Side of Building ------------------------------------------------------------------------------------------------------------------------------------- 59
Frontage Along 460 ------------------------------------------------------------------------------------------------------------------------------------- 60
Café ------------------------------------------------------------------------------------------------------------------------------------- 60
Farmer’s Market ------------------------------------------------------------------------------------------------------------------------------------- 61
Internal Courtyard ------------------------------------------------------------------------------------------------------------------------------------- 61
Courtyard ------------------------------------------------------------------------------------------------------------------------------------- 62
West Fence ------------------------------------------------------------------------------------------------------------------------------------- 62

Sources

<table>
<thead>
<tr>
<th>Nursery</th>
<th>Plants</th>
<th>1-800</th>
<th>Website</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riverbend Nursery</td>
<td>perennials, grasses</td>
<td>8362</td>
<td><a href="http://www.riverbendnursery.com">www.riverbendnursery.com</a></td>
<td>local wholesale</td>
</tr>
<tr>
<td>Stock Seed Farms</td>
<td>grass seed</td>
<td></td>
<td><a href="http://www.stockseed.com">www.stockseed.com</a></td>
<td>mailorder</td>
</tr>
<tr>
<td>Waynesboro Nurseries</td>
<td>shrubs, trees</td>
<td>8676</td>
<td><a href="http://www.waynesboronurseries.com">www.waynesboronurseries.com</a></td>
<td>wholesale</td>
</tr>
<tr>
<td>Grelen Nursery</td>
<td>shrubs, trees</td>
<td>5462</td>
<td><a href="mailto:grelen43@gmail.com">grelen43@gmail.com</a></td>
<td>wholesale</td>
</tr>
<tr>
<td>Lacie’s Garden Center</td>
<td></td>
<td>382-8797</td>
<td><a href="http://www.laciesinthevalley.com">www.laciesinthevalley.com</a></td>
<td>local retail</td>
</tr>
<tr>
<td>Edible Landscaping</td>
<td>hardy kiwi vine</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

58
### YMCA - Front

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Pillar's serviceberry</td>
<td>Amalanchier canadensis 'White Pillar'</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Persian parrotia</td>
<td>Parrotia persica</td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Repandens' yew</td>
<td>Taxus baccata 'Repandens'</td>
<td></td>
<td>10</td>
<td>This shrub does not need pruning.</td>
</tr>
<tr>
<td>Inkberry</td>
<td>Ilex glabra 'Green Magic'</td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Brandwyine' smooth witherod</td>
<td>Viburnum nudum 'Brandywine'</td>
<td></td>
<td>11</td>
<td>This shrub does not typically need pruning. If pruning is desired, do so just after flowering.</td>
</tr>
<tr>
<td>Virginia sweetspire</td>
<td>Itea virginica 'Henry's Garnet'</td>
<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Snow Queen' oakleaf hydrangea</td>
<td>Hydrangea quercifolia 'Snow Queen'</td>
<td></td>
<td>7</td>
<td>This shrub does not typically need pruning. If pruning is desired, do so just after flowering.</td>
</tr>
<tr>
<td>bachelor's button</td>
<td>Centaurea montana</td>
<td></td>
<td></td>
<td>This perennial can look appealing if left standing for the winter. Cut back in late winter.</td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yarrow</td>
<td>Yarrow millefolium</td>
<td></td>
<td>157.5</td>
<td>Combined total of perennials based on 225 sq.ft. drift of plants.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This area has a 2-3&quot; layer of white marble 5&quot; under the soil level which should be removed prior to planting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mulched areas should be maintained at 3-4&quot; for good weed control. Keep mulch pulled back a few</td>
</tr>
</tbody>
</table>

### Alleghany Road Buffer

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shenandoah' switch grass</td>
<td>Panicum virgatum 'Shenandoah'</td>
<td></td>
<td>170</td>
<td>Drifts cover 680 sq.ft.</td>
</tr>
<tr>
<td>feather reed grass</td>
<td>Calamagrostis 'Karl Foerster'</td>
<td></td>
<td>49</td>
<td>Cut back in late winter.</td>
</tr>
<tr>
<td>Prairie dropseed</td>
<td>Sporobolus heterolepis</td>
<td></td>
<td>38</td>
<td>Cut back in late winter.</td>
</tr>
<tr>
<td>butterflyweed</td>
<td>Asclepias tuberosa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>blue grama</td>
<td>Bouteloua gracilis 'Bad River'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joe Pye weed</td>
<td>Eupatorium purpureum</td>
<td></td>
<td>274</td>
<td>Combined total of perennials based on 365 sq. ft. drift.</td>
</tr>
<tr>
<td>coreopsis</td>
<td>Coreopsis verticillata</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The soil in this area is compacted and should be rip tilled to improve growing conditions. One method would be riptilling to a depth of 24&quot;.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mulched areas should be maintained at 3-4&quot; for good weed control. Keep mulch pulled back a few</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>inches from the base of trees and shrubs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>If meadow areas grow in enough so that mulch is not required, and vegetation is cut back and removed yearly, add some compost or organic fertilizer to replenish the soil.</td>
</tr>
<tr>
<td>Common Name</td>
<td>Botanical Name</td>
<td>Minimum Installation Size</td>
<td>Quantity</td>
<td>Notes</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------</td>
<td>---------------------------</td>
<td>----------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>blue spruce</td>
<td>Picea pungens var. glauca</td>
<td>3-4’</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>redosier dogwood</td>
<td>Cornus sericea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snow Queen oakleaf hydrangea</td>
<td>Hydrangea quercifolia 'Snow Queen'</td>
<td>1</td>
<td></td>
<td>This shrub does not typically need pruning. If pruning is desired, do so just after flowering.</td>
</tr>
<tr>
<td>Repandens' yew</td>
<td>Taxus baccata 'Repandens'</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia sweetspire</td>
<td>Itea virginica 'Henry's Garnet'</td>
<td>25</td>
<td></td>
<td>This shrub does not need pruning.</td>
</tr>
<tr>
<td>Brandywine' smooth witherod</td>
<td>Viburnum nudum 'Brandywine'</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>butterflyweed</td>
<td>Asclepias tuberosa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>blue grama</td>
<td>Bouteloua gracilis 'Bad River'</td>
<td></td>
<td></td>
<td>Cut back in later winter.</td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td>This perennial can look appealing if left standing for the winter. Cut back in late winter.</td>
</tr>
<tr>
<td>Joe Pye weed</td>
<td>Eupatorium purpureum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>coreopsis</td>
<td>Coreopsis verticillata</td>
<td>150</td>
<td></td>
<td>Combined total of perennials based on 200 square feet of planting space.</td>
</tr>
<tr>
<td>geranium</td>
<td>Geranium macrorhizum 'Bevan's Variety'</td>
<td>181</td>
<td></td>
<td>Based on 290 square feet of planting area.</td>
</tr>
<tr>
<td>Museum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter King' hawthorne</td>
<td>Crataegus viridis 'Winter King'</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>zelkova</td>
<td>Zelkova serrata</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repandens' yew</td>
<td>Taxus baccata 'Repandens'</td>
<td>9</td>
<td></td>
<td>This shrub does not need pruning.</td>
</tr>
<tr>
<td>Brandywine' smooth witherod</td>
<td>Viburnum nudum 'Brandywine'</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Pillar' serviceberry</td>
<td>Amalanchier canadensis 'White Pillar'</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inkberry</td>
<td>Ilex glabra 'Green Magic'</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bachelor's button</td>
<td>Centaurea montana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td>This perennial can look appealing if left standing for the winter. Cut back in late winter.</td>
</tr>
<tr>
<td>toadlily</td>
<td>Tricyrtis hirta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yarrow</td>
<td>Yarrow millefolium</td>
<td>234.5</td>
<td></td>
<td>Combined total of perennials based on 335 sq. ft. planting area.</td>
</tr>
</tbody>
</table>

Notes:
- Mulched areas should be maintained at 3-4” for good weed control. Keep mulch pulled back a few inches from the base of trees and shrubs.
- Young stems show the best winter color. Every other year (or third year) cut this shrub back to 8-12 inches in late winter to encourage new, more colorful growth.
- This shrub does not need pruning.
### Frontage Along 460

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>inkberry</td>
<td>Ilex glabra ‘Green Magic’</td>
<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Shenandoah’ switch grass</td>
<td>Panicum virgatum ‘Shenandoah’</td>
<td></td>
<td>212</td>
<td>Based on 850 square feet of planting area</td>
</tr>
<tr>
<td>feather reed grass</td>
<td>Calamagrostis ‘Karl Foerster’</td>
<td></td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Prairie dropseed</td>
<td>Sporobolus heterolepis</td>
<td></td>
<td>136</td>
<td>Based on 225 square feet of planting area, plus 80 plants on west side</td>
</tr>
<tr>
<td>butterflyweed</td>
<td>Asclepias tuberosa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>blue grama</td>
<td>Bouteloua gracilis ‘Bad River’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joe Pye weed</td>
<td>Eupatorium purpureum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>coreopsis</td>
<td>Coreopsis verticillata</td>
<td></td>
<td>135</td>
<td>Combined total of perennials based on 180 square footage of planting area.</td>
</tr>
<tr>
<td>redosier dogwood</td>
<td>Cornus sericea</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

- Based on 850 square feet of planting area
- Based on 225 square feet of planting area, plus 80 plants on west side
- This perennial can look appealing if left standing for the winter. Cut back in late winter.
- Mulched areas should be maintained at 3-4" for good weed control. Keep mulch pulled back a few inches from the base of trees and shrubs.
- If meadow areas grow in enough so that mulch is not required, and vegetation is cut back and removed yearly, add some compost or organic fertilizer to replenish the soil.
- Combined total of perennials based on 180 square footage of planting area.
- Combined total of perennials based on 245 square feet of planting space.
- The soil in the area where the farmer's market has been held is compacted, and should be remediated before planting. One method is to rip till to a depth of 24".
- Mulched areas should be maintained at 3-4" for good weed control. Keep mulch pulled back a few inches from the base of trees and shrubs.

### Café

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>zelkova</td>
<td>Zelkova serrata</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>inkberry</td>
<td>Ilex glabra</td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Virginia sweetspire</td>
<td>Itea virginica ‘Henry’s Garnet’</td>
<td></td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Snow Queen’ oakleaf hydrangea quercifolia ‘Snow Queen’</td>
<td>3</td>
<td>This shrub does not typically need pruning. If pruning is desired, do so just after flowering.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repandens’ yew</td>
<td>Taxus baccata ‘Repandens’</td>
<td></td>
<td>5</td>
<td>This shrub does not need pruning.</td>
</tr>
<tr>
<td>bachelor’s button</td>
<td>Centaurea montana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yarrow</td>
<td>Tricyrtis hirta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yarrow</td>
<td>Yarrow millefolium</td>
<td></td>
<td>172</td>
<td>Combined total of perennials based on 245 square feet of planting space.</td>
</tr>
</tbody>
</table>

**Notes**

- Combined total of perennials based on 245 square feet of planting space.
- Mulched areas should be maintained at 3-4" for good weed control. Keep mulch pulled back a few inches from the base of trees and shrubs.
### Farmer's Market

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>serviceberry</td>
<td>Amalanchier ‘Autumn Brilliance’</td>
<td></td>
<td></td>
<td>The area where this tree is to be planted is compacted and should be remediated before planting. Zelkova (Zelkova serrata) or baldcypress (Taxodium distichum) could also be used for this bed.</td>
</tr>
<tr>
<td>Zelkova</td>
<td>Zelkova serrata</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American sycamore</td>
<td>Platanus occidentalis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fringe tree</td>
<td>Chionanthus virginicus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brandywine' smooth witherod</td>
<td>Viburnum nudum 'Brandywine'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>redosier dogwood</td>
<td>Cornus sericea</td>
<td></td>
<td></td>
<td>Young stems show the best winter color. Every other year (or third year) cut this shrub back to 8-12 inches in late winter to encourage new, more colorful growth.</td>
</tr>
<tr>
<td>inkberry</td>
<td>Ilex glabra ‘Green Magic’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>blue grama</td>
<td>Bouteloua gracilis 'Bad River'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td>This perennial can look appealing if left standing for the winter. Cut back in late winter.</td>
</tr>
<tr>
<td>Joe Pye weed</td>
<td>Eupatorium purpureum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>coreopsis</td>
<td>Coreopsis verticillata</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>butterflyweed</td>
<td>Asclepias tuberosa</td>
<td></td>
<td></td>
<td>Cut back in late winter.</td>
</tr>
<tr>
<td>Virginia bluebells</td>
<td>Mertensia virginica</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>foamflower</td>
<td>Tiarella cordifolia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada ginger</td>
<td>Asarum canadense</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Internal Courtyard

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact koreanspice viburnum</td>
<td><em>Viburnum compactum</em> ‘Compacta’</td>
<td></td>
<td>35</td>
<td>This shrub does not typically need pruning. If pruning is desired, do so just after flowering.</td>
</tr>
<tr>
<td>hardy kiwi vine</td>
<td><em>Actinidia deliciosa</em></td>
<td></td>
<td>5</td>
<td>Plant two different varieties, unless planting 'Issai' which is self-fertile. Plants should be considered sensitive to drought until established. However, they do not thrive in consistently wet soil.</td>
</tr>
<tr>
<td>inkberry</td>
<td><em>Ilex glabra</em> ‘Green Magic’</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>thyme</td>
<td><em>Thymus vulgaris</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lemon balm</td>
<td><em>Melissa officinalis</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>basil</td>
<td><em>Ocimum basilicum</em></td>
<td></td>
<td>46</td>
<td>Based on 75 sq. ft. of planting space.</td>
</tr>
<tr>
<td>lamb's ear</td>
<td><em>Stachys byzantina</em></td>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>butterflyweed</td>
<td><em>Asclepias tuberosa</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>blue grama</td>
<td><em>Bouteloua gracilis</em> ‘Bad River’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple coneflower</td>
<td><em>Echinacea purpurea</em></td>
<td></td>
<td></td>
<td>This perennial can look appealing if left standing for the winter. Cut back in late winter.</td>
</tr>
<tr>
<td>Joe Pye weed</td>
<td><em>Eupatorium purpureum</em></td>
<td></td>
<td>79</td>
<td>Combined total of perennials based on 105 sq. ft. drift.</td>
</tr>
<tr>
<td>coreopsis</td>
<td><em>Coreopsis verticillata</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mulched areas should be maintained at 3-4" for good weed control. Keep mulch pulled back a few inches from the base of trees and shrubs.
### Courtyard

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>sweetgum</td>
<td>Liquidambar styraciflua 'Rotundiloba'</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Persian parrotia</td>
<td>Parrotia persica</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>cucumber magnolia</td>
<td>Magnolia acuminata</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bloodgood' Japanese maple</td>
<td>Acer palmatum 'Bloodgood'</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>serviceberry</td>
<td>Amalanchier 'Autumn Brilliance'</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Zelkova</td>
<td>Zelkova serrata</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Winter King' hawthorne</td>
<td>Crataegus viridis 'Winter King'</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>fringe tree</td>
<td>Chionanthus virginicus</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Inkberry</td>
<td>Ilex glabra 'Green Magic'</td>
<td></td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Virginia sweetspire</td>
<td>Itea virginica 'Henry's Garnet'</td>
<td></td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Snow Queen' oakleaf hydrangea</td>
<td>Hydrangea quercifolia 'Snow Queen'</td>
<td></td>
<td>12</td>
<td>This shrub does not typically need pruning. If pruning is desired, do so just after flowering.</td>
</tr>
<tr>
<td>Brandywine' smooth witherod</td>
<td>Viburnum nudum 'Brandywine'</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Repandens' yew</td>
<td>Taxus baccata 'Repandens'</td>
<td></td>
<td>39</td>
<td>This shrub does not need pruning.</td>
</tr>
<tr>
<td>feather reed grass</td>
<td>Calamagrostis 'Karl Foerster'</td>
<td></td>
<td>5</td>
<td>Cut back in late winter.</td>
</tr>
<tr>
<td>Shenandoah' switch grass</td>
<td>Panicum virgatum 'Shenandoah'</td>
<td></td>
<td>50</td>
<td>Cut back in late winter.</td>
</tr>
<tr>
<td>geranium</td>
<td>Geranium macrorrhizum 'Bevan's Variety'</td>
<td></td>
<td>156</td>
<td>Combined total of perennials based on 250 square feet of planting space.</td>
</tr>
<tr>
<td>bachelor's button</td>
<td>Centaurea montana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td>903</td>
<td>This perennial can look appealing if left standing for the winter. Cut back in late winter.</td>
</tr>
<tr>
<td>toadlily</td>
<td>Tricyrtis hirta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yarrow</td>
<td>Yarrow millefolium</td>
<td></td>
<td></td>
<td>Combined total of perennials based on 1290 square feet of planting space.</td>
</tr>
</tbody>
</table>

**Notes:**
- Mulched areas should be maintained at 3-4” for good weed control. Keep mulch pulled back a few inches from the base of trees and shrubs.

### West Fence

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Minimum Installation Size</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>serviceberry</td>
<td>Amalanchier arborea 'Autumn Brilliance'</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>fringe tree</td>
<td>Chionanthus virginicus</td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>sugar maple</td>
<td>Acer saccharum</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Winter King Hawthorne</td>
<td>Crataegus viridis 'Winter King'</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Virginia sweetspire</td>
<td>Itea virginica 'Henry's Garnet'</td>
<td></td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>redosier dogwood</td>
<td>Cornus sericea</td>
<td></td>
<td>8</td>
<td>Young stems show the best winter color. Every other year (or third year) cut this shrub back to 8-12 inches in late winter to encourage new, more colorful growth.</td>
</tr>
<tr>
<td>feather reed grass</td>
<td>Calamagrostis 'Karl Foerster'</td>
<td></td>
<td>9</td>
<td>Cut back in late winter.</td>
</tr>
<tr>
<td>butterflyweed</td>
<td>Asclepias tuberosa</td>
<td></td>
<td></td>
<td>Cut back in late winter.</td>
</tr>
<tr>
<td>blue grama</td>
<td>Bouteloua gracilis 'Bad River'</td>
<td></td>
<td></td>
<td>This perennial can look appealing if left standing for the winter. Cut back in late winter.</td>
</tr>
<tr>
<td>purple coneflower</td>
<td>Echinacea purpurea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joe Pye weed</td>
<td>Eupatorium purpureum</td>
<td></td>
<td>465</td>
<td>Combined total of perennials based on square footage of drift</td>
</tr>
<tr>
<td>coreopsis</td>
<td>Coreopsis verticillata</td>
<td></td>
<td></td>
<td>Mulched areas should be maintained at 3-4” for good weed control. Keep mulch pulled back a few inches from the base of trees and shrubs.</td>
</tr>
</tbody>
</table>