



MONTGOMERY COUNTY DEPARTMENT OF PARKS
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
Item No.
Date: 7/30/15

July 16, 2015

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Michael F. Riley, Director *MFR*
Mitra Pedoeem, Acting Deputy Director *MP*
Michael Ma, Acting Chief, Park Development Division (PDD) *PM (acting)*
Christy Turnbull, Chief, Enterprise Division *CT*

FROM: Aaron Feldman, Landscape Architect (PDD), 301-650-2887 *AF*
Patricia McManus, Design Section Supervisor (PDD), 301-495-3580 *PM*

SUBJECT: Feasibility Study for Rockwood Manor Special Park

STAFF RECOMMENDATION

- 1) Approve the Feasibility Study for Rockwood Manor Special Park. The recommendations from this study will guide future phases of improvements to the park.
- 2) Approve design and construction of the first phase of work including cost estimate. Work is anticipated to occur in FY 16-19.

PROJECT BACKGROUND

Rockwood Manor Special Park is a public park and event center operated by the M-NCPPC Montgomery County Department of Parks' Enterprise Division. Rockwood Manor is used for weddings, business retreats, education sessions, reunions, workshops and other events. In the spring of 2014, Parks staff initiated a project to address long-standing problems with the park's sole vehicular access point, which does not currently accommodate two-way traffic nor does it provide adequate turning radii for fire trucks, large maintenance vehicles, catering trucks and buses to access the site. Instead of focusing on this issue in isolation, staff chose to take a holistic look at the needs for the entire property to ensure an integrated approach for making individual improvements to the property. This led to the development of a comprehensive Feasibility Study (Attachment A), which explores solutions to address a number of environmental, circulation and site utilization issues present at Rockwood Manor. The purpose of the study is to recommend short and long term improvements to the current facility without changing the character of the site, its use or the existing event capacity. Parks staff has brought this project to the Planning Board for review prior to moving forward with a first phase of improvements to the property, because there is opposition by neighbors to some of the proposed recommendations.



Rockwood Manor Special Park and surrounding area.

Location & Context

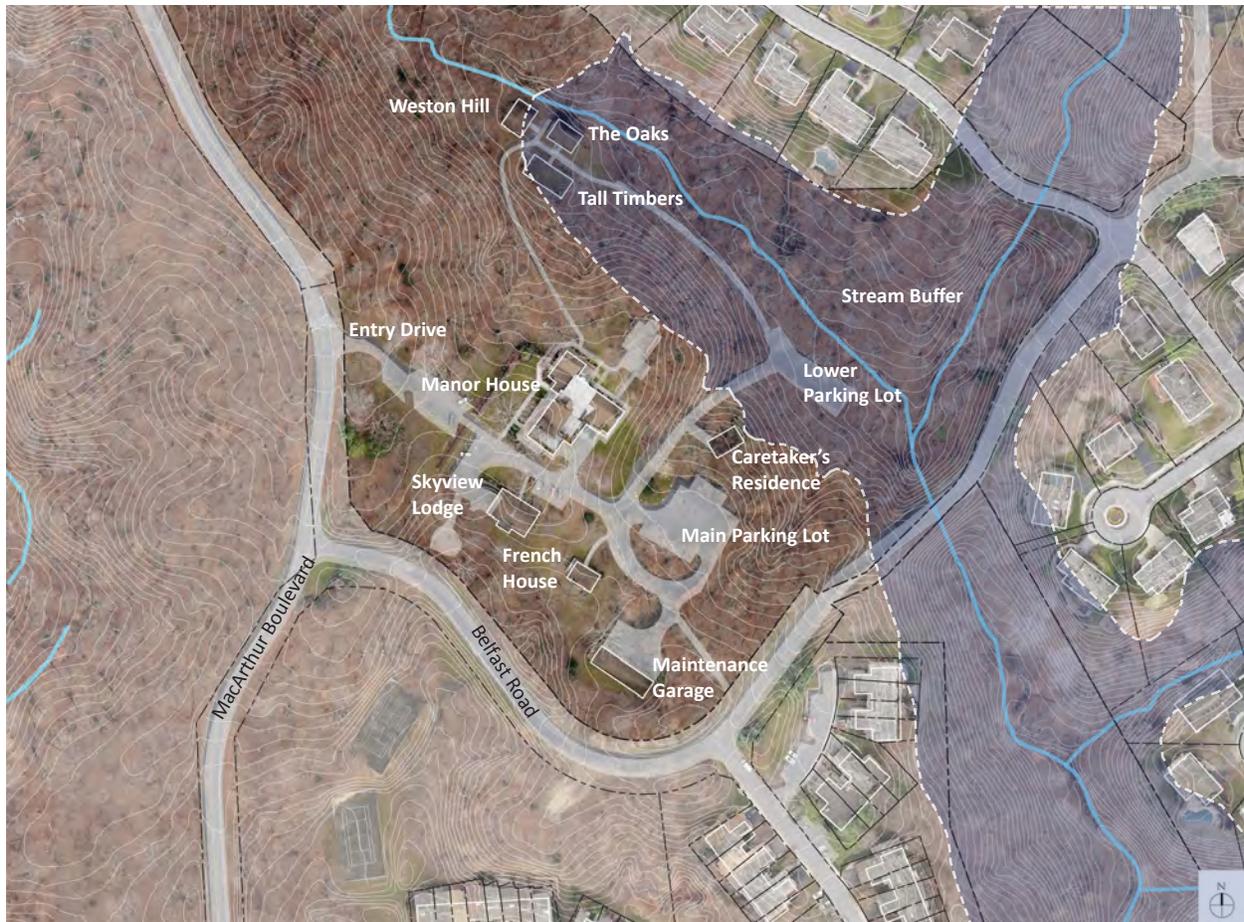
Rockwood Manor Special Park occupies approximately 45 acres of hilly, forested parkland located at 11001 MacArthur Boulevard in the Potomac Sub-Region Master Plan Area. The property is bounded on the north, east and south by low density, single-family residential development (zoned R-200), and on the west by the Chesapeake and Ohio Canal National Historical Park. The site is bisected by Belfast Road, which provides vehicular access to the adjacent residences. The portion of the park south of Belfast Road is located entirely within stream buffer. The park's developed area is concentrated on the approximately 20 acre parcel that lies to the north and west of Belfast Road and is the focus of this Feasibility Study.

Site History

Originally 93 acres in size, Rockwood Manor was developed in the 1920s as the country estate of Carolyn Gangwer Caughey, a wealthy Washington socialite and real estate investor, and her husband, John Wilson Caughey. The Caugheys lived in what is now known as the Manor House until Mrs. Caughey's death in 1936. Per the instructions in Mrs. Caughey's will, the entire property was donated to the Girl Scouts of America, which operated the site as the Rockwood Girl Scout National Center until 1978.

Citing excessive operating costs, the board of directors of the Girl Scouts attempted to sell the entire property to local developers. The sale was contested in a lawsuit filed by a number of local Girl Scout troops and citizens associations claiming that it violated the terms of Mrs. Caughey's will. The out-of-court settlement resulted in the sale of approximately 60 acres to developers. The remaining 30 acres, including the Manor House and associated outbuildings, were transferred to the M-NCPPC for its use as a public park (MCPB 81-30, Attachment B). A 1981 memo

from the M-NCPPC Montgomery County Director of Parks to the Montgomery County Planning Board (Attachment C) outlines the intent of the Department to manage Rockwood Manor as revenue-producing facility through its Enterprise Division. This document still accurately describes the various programs for which Rockwood Manor is currently used.



The main developed area of Rockwood Manor Special Park in relation to the existing stream buffer.

Existing Conditions

Rockwood Manor is situated within a densely wooded, steeply sloping landscape that is characteristic of the MacArthur Boulevard corridor. The Manor House is situated on a knoll, affording views down to the stream buffer that runs from the northwest corner of the site to the southeast. The remaining flat areas of the site contain guest houses (Skyview Lodge, French House and the Caretaker's Residence), a maintenance garage and the main parking lot. Three bunkhouses of more recent construction (Weston Hill, The Oaks and Tall Timbers) are located at the edge of the stream buffer just north of the Manor House. The remainder of the site is located within stream buffer or contains steep slopes, making additional development unfeasible.

A network of narrow asphalt driveways provides vehicular access onto the property and between its various buildings and parking areas. Largely unimproved since at least the early 1980s, portions of the main vehicular access routes are as narrow as twelve feet, requiring one vehicle to pull off the edge of pavement to allow an oncoming vehicle to pass. Existing mature trees and character-defining site features (landscape walls, pillars, etc.) preclude the widening of these drives to allow two-way traffic throughout the site. A total of 85 parking spaces are scattered throughout the park to accommodate both guests of Rockwood Manor and visitors to the Chesa-

peake and Ohio Canal National Historical Park, accessible via a hiking trailhead directly across MacArthur Boulevard. The parking lots are also a popular staging area from which local outfitters embark on rafting and kayaking tours of the Potomac River.

The park's main developed area contains several large specimen oak and beech trees (30 inch to 45 inch DBH) that create a nearly continuous canopy over the space. Surrounding the main developed area is a healthy, mature oak-hickory forest, which also contains tulip poplar, beech, birch and pine trees.

A small stream that runs along the northern edge of the site receives a significant portion of the site's stormwater runoff. Because Rockwood Manor was developed prior to the existence of stormwater management regulations in Montgomery County, little has been done to mitigate the effects of the site's impervious surfaces on stormwater runoff. This has resulted in erosion along many of the steep slopes and scouring of the stream banks.



Large oak trees flanking the entrance to the Manor House. The mature oak-hickory forest is visible beyond.

Operation

Rockwood Manor is operated by the Enterprise Division as a rental facility for both business and social events (Attachment D). The Enterprise Division is mandated by the Montgomery County Council to generate revenue for the maintenance and operation of its facilities, so that the facilities are self-supporting and not subsidized by tax revenue. The Manor House can accommodate a maximum of 150 guests. Because rental rates do not change based on the number of guests, small and large events are given equal preference in the reservation process. Overnight accommoda-

tions include ten hotel-style guest rooms (the Manor House and Skyview Lodge) with a combined capacity of 29 guests, a three-bedroom family cottage (the French House) with a capacity of eight guests and three bunk-style cabins (Weston Hill, The Oaks and Tall Timbers) with a total capacity of 80 guests. The variety of overnight accommodations make Rockwood Manor a popular location for destination weddings, multi-day business retreats and overnight events for school groups and scouting troops. Individual rooms are available for overnight rental, or they can be rented as part of a package to include event rental at the Manor House.

Rockwood Manor's size, setting, flexibility and cost make it attractive for planners of both business and social events. Spring, summer and fall weekend bookings tend to fill up 18 months in advance and the facility typically accommodates two to three corporate events each week.

PROJECT INITIATION AND COMMUNITY INPUT

On April 1, 2014, a day-long charrette was held on site with M-NCPPC staff, operational stakeholders and a consultant team to collect information, identify programmatic and site issues and opportunities, and to discuss preliminary ideas for improvements to the park. Neighboring residents observed Parks staff walking the site during this charrette and subsequently invited staff to discuss the proposed project at the West Montgomery County Citizens Association meeting on May 14, 2014 and at a meeting with the Woodrock Homeowners Association on May 20, 2014.

Because the project was still in the information-gathering stage, staff used these meetings as an opportunity to present the issues facing Rockwood Manor as they understood them and to gather information and comments from the community. The project issues, goals and opportunities presented by staff at these meetings included the following:

- Improve passenger vehicle ingress and egress to the site.
- Improve access and circulation for emergency vehicles, catering service, maintenance vehicles and buses.
- Improve the site's entry experience and wayfinding.
- Increase pedestrian safety and accessibility to reduce vehicle/pedestrian conflicts and to comply with the Americans with Disabilities Act.
- Provide low impact stormwater management facilities to treat runoff from paved surfaces.
- Reduce impervious surfaces within the stream buffer to improve water quality and to repair eroded stream banks.
- Protect existing specimen trees and remove hazard trees.
- Maximize the efficiency of parking, service, loading and maintenance areas in order to reduce overall impervious surfaces and improve circulation.
- Relocate park activities (such as the campfire/amphitheater area) to better serve park users.
- Consider providing additional recreation opportunities.
- Enhance visual and noise buffers to adjacent residences.
- Enhance the character of the property, retain Ms. Caughey's original vision of Rockwood Manor and preserve the site's Girl Scout heritage.

Staff obtained valuable early input from the community at these meetings, particularly related to concerns about noise coming from the facility. Community comments are summarized below. Detailed community meeting notes are included in Attachment E.

- Neighbors indicated that there are nuisance levels of noise generated from programs in the facility every weekend including amplified music playing after midnight. Neighbors requested that the facility should comply with all applicable noise ordinances.
- There is a fundamental tension between the programming of the park and the surrounding residential neighborhood. There needs to be a way to meet the objectives of the facility and also be a good neighbor.
- Consideration should be given to physical barriers to buffer noise.
- Buses idle in the parking lot and create a lot of noise. The idling buses are not necessarily related to events occurring within the park and are sometimes from events occurring in the National Park. There is a statewide idling code that needs to be enforced.
- Neighbors expressed concern over the idea of a one-way vehicular traffic system that would create another entrance or exit onto Belfast Road. Neighbors were concerned that the easiest location to construct an exit would be at the southeastern corner of the property, across from Whiterim Terrace. This would be extremely disruptive to neighbors and would dump traffic onto neighborhood roads.
- The trees are very important assets to the park that should be retained.
- There was general support for removing impervious surfaces within the stream buffer and implementing stormwater management practices.
- There was general support for providing additional facilities on the property that neighbors could use, such as picnic facilities or trails.
- The driveway is degrading and needs to be patched or repaved.
- The dumpsters at the loading dock should be screened.

OPERATIONAL CHANGES AND TECHNICAL ANALYSIS

Following the meetings, staff took immediate action to address the community concerns regarding the operation of the facility. The community comments also informed the need for additional studies to be conducted as part of the Feasibility Study in order to gain a more thorough understanding of the site and to test the possible implications of future design interventions on the site and surrounding community. Operational changes and technical studies that were undertaken as a result of these community meetings are described below.

Operating Policy Changes/Acoustic Review

In response to neighborhood concerns about excessive noise generated by events and by idling buses, staff investigated applicable state and county ordinances and codes dealing with noise generation and vehicle operation. Montgomery County Code 31B sets maximum allowable noise levels for residential receiving areas at 65 decibels during the daytime (7:00 am to 9:00 pm on weekdays and 9:00 am to 9:00 pm on weekends and holidays) and 55 decibels at night (9:00 pm to 7:00 am on weekdays and 9:00 pm to 9:00 am on weekends and holidays). Maryland Transportation Code 22-402(C)(3) states that a motor vehicle engine may not be allowed to operate for more than five consecutive minutes when the vehicle is not in motion except under the following conditions:

- 1) the vehicle is stopped due to mechanical or traffic conditions;
- 2) the engine is operating heating and cooling or auxiliary equipment;
- 3) to bring the engine to the manufacturer's recommended operating temperature; or
- 4) to accomplish the intended use of the vehicle.

On multiple occasions during the summer of 2014, the Enterprise Division Chief (Christine Brett) visited the home of a community member to witness the noise levels from nighttime events occurring at Rockwood Manor. Staff also hired an acoustic engineer to measure noise during events in the summer and fall of 2014 and to provide recommendations for noise abatement. Measurements were taken in multiple locations, both within the park and on adjacent properties. The consultant conducted measurements during two wedding receptions, including an event that amplified music from an outdoor tent (when music would be the loudest) and concluded that the noise levels were in compliance with the Montgomery County noise ordinance (Attachment F). Based on recommendations from the consultant, Parks staff initiated the following physical, operational and policy changes in 2014 in response to neighborhood complaints and to further reduce noise levels:

- Amplified music is prohibited outdoors and tents are no longer allowed.
- Amplification speakers were repositioned within interior event spaces to lessen sound escaping the building. All doors and windows must remain closed while amplified music is playing within the building.
- New reservations require event activities to end by 10:00 pm and clean-up to be completed by 11:00 pm.
- The amphitheater and fire pit can no longer be used past 8:00 pm.
- Rentals and overnight guests are required to adhere to the County noise ordinance or risk forfeiting their security deposit.
- Vendors are requested to load and unload their deliveries during daytime hours to avoid beeping associated with large vehicles backing up into the loading area.
- Renters are now required to inform Rockwood Manor staff if a charter bus is contracted for their event, and the rental contract includes idling rules from the Maryland Transportation Code. Buses for events are directed to load and unload passengers in the parking area closest to MacArthur Boulevard.
- Using a recently purchased decibel reader, on-site event staff take decibel readings throughout events to ensure compliance with the County's noise ordinance.
- Between August 2014 and June 2015, Park Police officers were on site to monitor all large events scheduled to end after 8:00 pm (a total of 17 events). During that time, Park Police did not report any calls through their dispatcher or on-site citizen complaints regarding noise (Attachment G).

Rockwood Manor's Rules and Regulations were formally revised in February 2015 to incorporate many of the changes outlined above, and they are included in Attachment H.

Turn Study

The impetus for this Feasibility Study was based on anecdotal evidence that a full-sized fire truck is unable to make the turn from MacArthur Boulevard into the site's sole vehicular entrance. Additionally, standard, full size, charter and school buses are only able to access the site with great

difficulty. Based on this information, a turn study (Attachment I) was conducted using Montgomery County Fire Code Standards to identify any obstructions preventing fire truck access into the site. Mathematical models were developed based on the existing site survey and the turning radius of an Aerial Tower 729 fire truck as it would enter the site.

Coming from the north (the direction of the three nearest fire houses), a fire truck must leave the edge of pavement of MacArthur Boulevard in order to make the turn into the site. Any miscalculation in this initial entry turn will cause significant damage to an entry pillar and the roots of two large canopy trees which flank either side of the site's entrance. If a fire truck were to clear these first obstacles, it may not be able to get past parked cars in the constricted parking area closest to MacArthur Boulevard.

If a fire truck were to drive past the site, turn around and approach the entrance drive from the south, it would be required to maneuver into oncoming traffic on MacArthur Boulevard in order to make the turn into the driveway and would then be confronted by obstacles described above.

This Turn Study and subsequent correspondence with the Montgomery County Fire & Rescue Services' Fire Code Compliance Section underlined the need for site circulation improvements to ensure that Rockwood Manor, its staff and guests will be safe in the event of an emergency. These improvements are also an opportunity to increase efficiency and safety for all vehicles accessing the facility.

Fire Code Compliance

On June 25, 2015, Parks staff met with a representative from the Office of the Fire Marshal within the Montgomery County Department of Fire and Rescue Services to present the findings of the Turn Study and to receive feedback on the recommendations proposed in the Feasibility Study. After reviewing the findings of the Turn Study, the Assistant Fire Marshal concluded that the property does not conform to current Montgomery County Fire and Rescue Service vehicular access requirements.

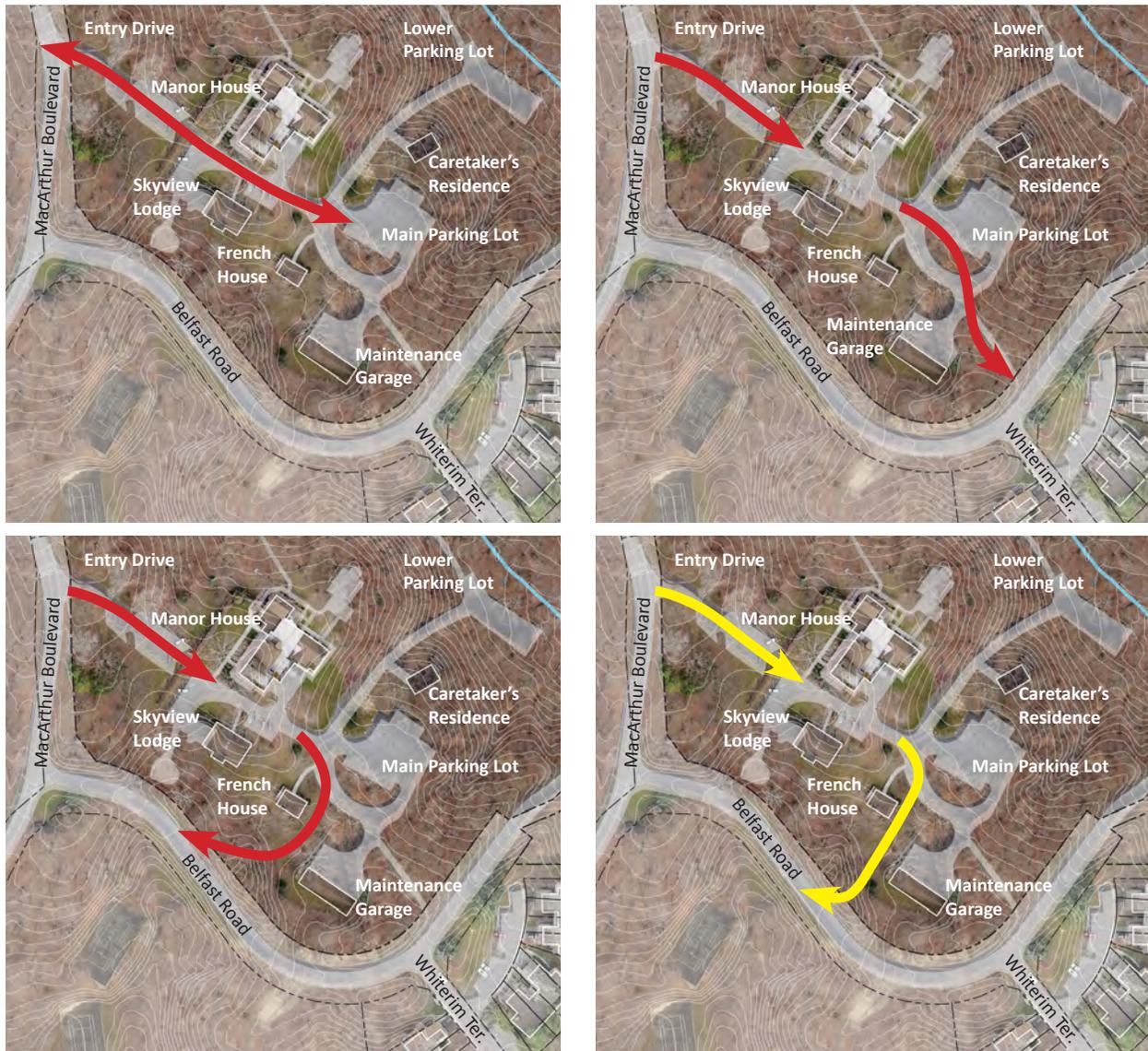
The Assistant Fire Marshal endorsed the one-way drive loop proposed in the Feasibility Study, indicating that it allows for improved access and more efficient emergency response. Furthermore, because Belfast Road would have been designed to accommodate full-sized fire trucks, an egress drive onto that road would allow for emergency vehicles to safely return to MacArthur Boulevard. The Assistant Fire Marshal also provided recommendations to be incorporated into future design stages of the project. Those recommendations are summarized below:

- All drive alignments should accommodate the unobstructed turning movements of a full-sized fire truck.
- Driveways should be a minimum of twelve feet wide through straight areas. Ideally, driveways should be 15 to 18 feet wide through curving sections of the drive.
- Curb aprons should be of a sufficient width as to allow a fire truck through.
- Accommodations should be made for two fire trucks to lay down directly in front of the entrance to the Manor House. This can be accomplished through a single, continuous, clear area of 20 feet by 80 feet or through two areas measuring 20 feet by 40 feet each.
- Any elevated driveway (e.g. a bridge) should be designed to have load bearing capacity to handle a full-sized fire truck.

Vehicular Circulation

As previously described, there are many issues facing the existing vehicular circulation within Rockwood Manor. Emergency vehicles cannot adequately enter the site, multiple segments of the driveway are too narrow to allow two vehicles to pass one another and there are conflicts with pedestrians using the main roadway as a walkway. Several alternatives for vehicle circulation were studied that looked at either a two-way driveway throughout the site or a one-way loop drive with an outlet onto Belfast Road. The two-way options were all rejected because the pavement width required would necessitate the removal of several large, healthy specimen trees that directly contribute to the character and setting of Rockwood Manor.

Creating a one-way loop drive through the site would allow for a narrower pavement width than a two-way drive, causing significantly less disturbance to the surrounding landscape. Several al-



Four alternatives for improving circulation through the Rockwood Manor Property. Top Left: Widen the existing driveway to allow for two-way traffic throughout the site. Top Right: Create a one way drive way entering from MacArthur Boulevard and exiting onto Belfast Road at the intersection with Whiterim Terrace. Bottom Left: Create an exit drive on Belfast Road, near the intersection with MacArthur Boulevard. Bottom Right: Create an exit drive on Belfast Road, generally equidistant from Whiterim Terrace and MacArthur Boulevard.

ternatives for an egress alignment were studied and evaluated based on environmental impact, effect on surrounding traffic patterns and ease of navigation. The first option explored was to expand and extend an existing asphalt path that generally aligns with the intersection of Belfast Road and Whiterim Terrace. This option was rejected because of the negative traffic impact that would be created on the surrounding neighborhood and the number of mature canopy trees that would be impacted through the widening of the path.

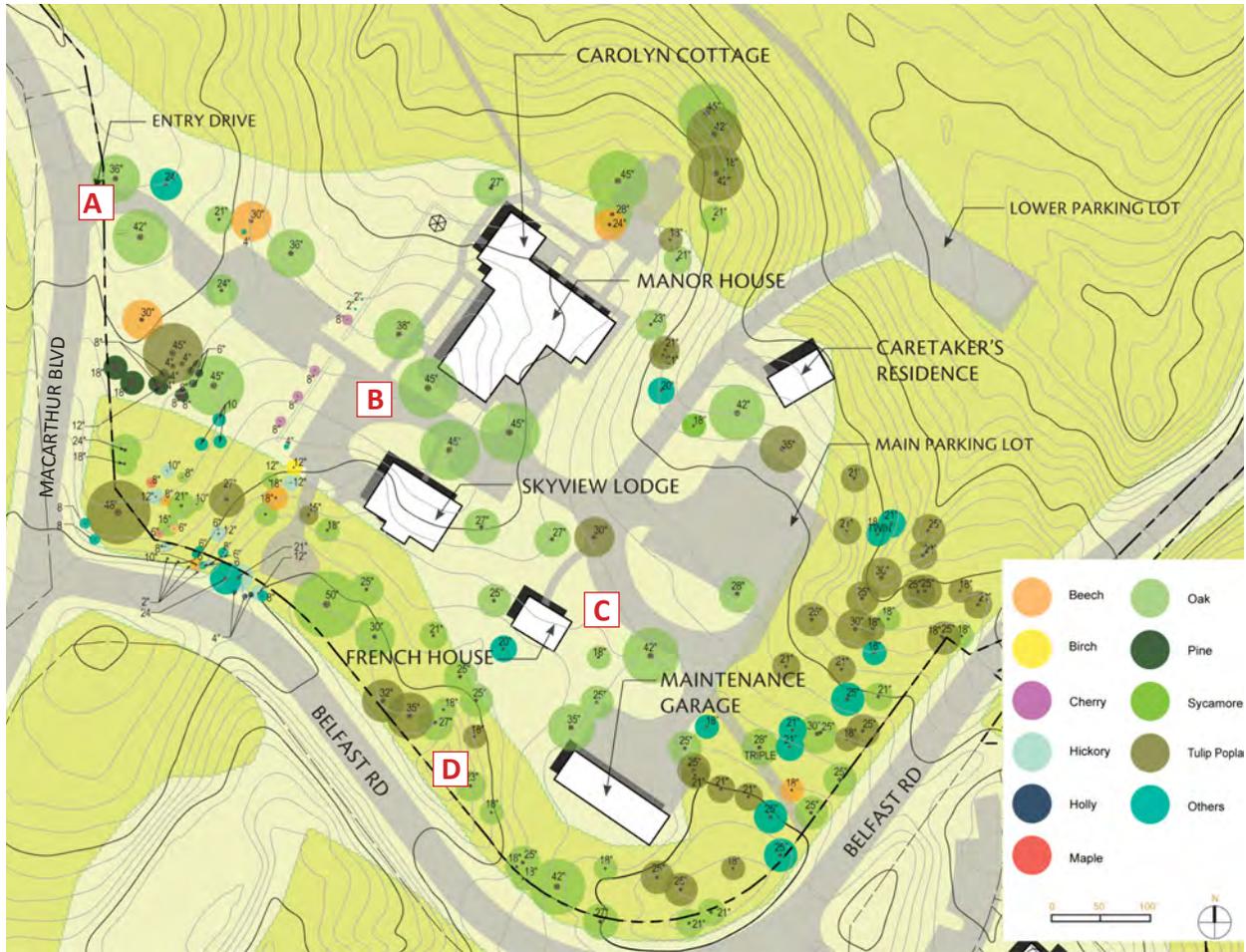
Creating a new vehicular exit from the southwestern edge of the site onto Belfast Road became an attractive option due to the presence of fewer mature canopy trees, the proximity to the intersection with MacArthur Boulevard and minimal impact to surrounding residences (the property on the other side of Belfast Road is undeveloped). Two alternatives were explored that could take traffic from the main parking lot to the exit without disrupting the open space around Skyview Lodge and the French House. While an egress driveway closer to MacArthur Boulevard may be preferred for improved navigation and reduced impact to the neighborhood, a minimum distance of 250 feet is required between the exit driveway on Belfast Road and the intersection with MacArthur Boulevard.

Tree Assessment

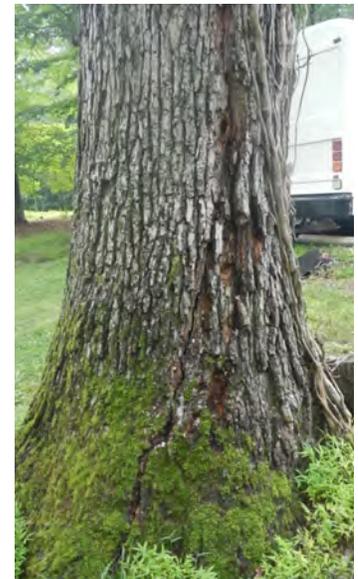
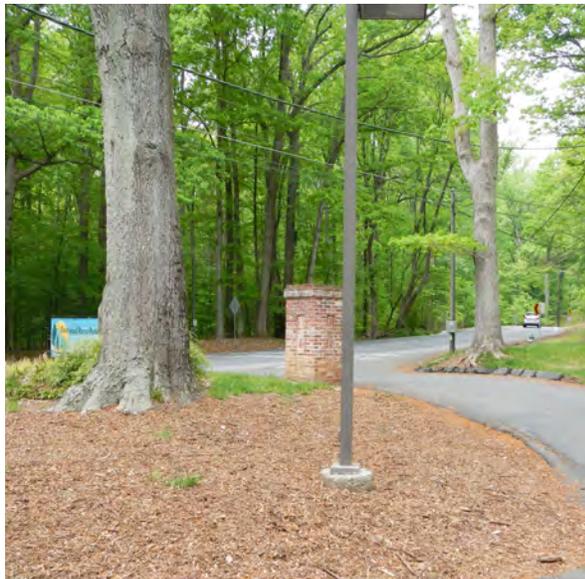
One of the most distinct character-defining features of Rockwood Manor is its mature, healthy tree canopy. In order to fully understand the impact of the various vehicular circulation alternatives on the site's existing trees, a tree survey was conducted within and around the main developed area of Rockwood Manor. Additionally, a staff arborist was consulted on the health of the trees and potential risks associated with site improvements. This initial assessment provided an understanding of the opportunities and constraints afforded by the existing trees on site. Additional study would be required during future phases of design work.

The study of four key areas provided particular insight that helped guide recommendations for future vehicular access and circulation improvements: the property's frontage along MacArthur Boulevard (Area "A" on the tree survey on the following page), the main entrance to the Manor House (Area "B"), the canopy trees between the French House and the maintenance garage (Area "C") and the wooded ravine separating the site from Belfast Drive (Area "D").

- Area A: Rockwood Manor's frontage along MacArthur Boulevard is lined with several mature canopy and evergreen trees that visually separate the site from the adjacent roadway and create an impressive gateway into the site. Subsurface investigation with an air spade revealed relatively few major tree roots immediately alongside the existing entry drive. This means there is an opportunity to widen and realign the entry drive just enough to allow a fire truck to enter the site without causing significant damage to the surrounding trees.
- Area B: Although opportunities have been identified for widening the entry drive to allow for improved access into the site, four large, healthy oak trees between the Manor House and Skyview Lodge flank the driveway, preventing any further expansion beyond its current width of 14 feet. Based on their size (three trees are 45 inches DBH and one is 38 inches DBH) and location, it is likely that these trees stood in this location before the Manor House was built. The removal of even one of these trees would significantly alter the character and setting of Rockwood Manor. One solution to preserving all of these trees is to turn the entry drive into a one-way roadway, which could retain the drive at its existing limits.
- Area C: In order to convert the existing site circulation pattern into a one-way loop, an outlet drive needs to be created such that it will not impact the large trees in the corridor



Survey of existing trees, including species and diameter at breast height.



Left: Oak trees at the facility's only vehicular entrance. Center: The crown of this tulip poplar near the main parking lot was removed due to significant die back. Right: A large lateral crack in this oak near the maintenance yard runs approximately 25 feet up the trunk of the tree.

between the Manor House and Skyview Lodge. From a tree preservation perspective, the best alternative would be a drive that runs from the area of the main parking lot, between the French House and the maintenance garage, connecting to Belfast Road somewhere along the southwest edge of the property. Although two large trees stand in the way of this alignment, they are both in decline and already scheduled for removal. The 30 inch tulip poplar northeast of the French House is missing its crown and a large cavity has formed at its base. The 35 inch oak at the northwest corner of the maintenance garage has a 25 foot lateral crack in its trunk, creating the possibility of failure during a storm.

- **Area D:** Several areas along the property's southwest boundary with Belfast Road would allow for the creation of an egress drive without having to remove a significant number of trees. A large, deep swale approximately midway between Whiterim Terrace and MacArthur Boulevard along Belfast road provides the opportunity to construct a bridge, whose individual footings would be much less intrusive than a standard roadway.

Traffic Study

Although a one-way drive through the Rockwood Manor site may be beneficial to site circulation and preserving the overall mature tree canopy within the site, an egress driveway onto Belfast Road must also work within the existing traffic patterns of the surrounding community. In response to neighborhood concerns expressed about impacts to traffic, a consultant was hired to evaluate the effects of a new egress drive on the traffic flow of both Belfast Road and MacArthur Boulevard (Attachment J). Using 24-hour machine counts along both Belfast Road and MacArthur Boulevard and a "beyond worst case scenario" of 200 occupants at the facility (maximum capacity for any single event is 150 occupants), the traffic engineering consultant concluded that "the



Conceptual one-way roadway alignment. Vehicles would enter the site on MacArthur Boulevard and exit on Belfast Road.

proposed modifications to the Rockwood Manor Facility would not result in unsatisfactory conditions along the adjacent roadways in Montgomery County.”

Following a public meeting held on January 14, 2015, and in response to continued neighborhood concerns about traffic impacts of the proposed one-way egress drive onto Belfast Road, Parks staff conducted an additional evaluation of traffic. Time-stamped, motion-activated cameras were set up at Rockwood Manor’s existing entrance/exit and along Belfast Road to count, simultaneously, the number of cars on both roadways under a variety of conditions. Cameras were

		5/20/2015 Corporate Event, 20 People		5/21/2015 No Events (Control)		5/23/2015 Wedding, 100 People		5/24/2015 Wedding Checkout					
30 MINUTE BLOCK		ROCKWOOD MANOR	BELFAST ROAD										
MORNING													
8:00	8:30	2	1		2	No traffic-generating events occurred at Rockwood Manor during this time.							
8:30	9:00		8	1	6				2				
9:00	9:30	1	3	2	1			3	2				
9:30	10:00		5		4			2	6				
10:00	10:30		4		1			3	7				
10:30	11:00	2	8		3			11	6				
11:00	11:30	4	5	2				2	6				
11:30	12:00	1	2		2			1	8				
AFTERNOON													
12:00	12:30	3	5	1		No traffic-generating events occurred at Rockwood Manor during this time.							
12:30	1:00				1								
1:00	1:30		2					6	4				
1:30	2:00	3	6					3	5				
2:00	2:30	1	6		1			4	4				
2:30	3:00	1	5	1				4	8				
3:00	3:30	1	2					7	6				
3:30	4:00	1	5		5			1	5				
4:00	4:30	2	6	1	3			4	1				
4:30	5:00	16	8	1	4			2	5				
5:00	5:30	2	5					4	4				
5:30	6:00	3	5		3				7				
6:00	6:30	3	3		4			1	1				
6:30	7:00	No traffic-generating events occurred at Rockwood Manor during this time.		No traffic-generating events occurred at Rockwood Manor during this time.				1	1				
7:00	7:30								5				
7:30	8:00								1		2		
8:00	8:30						4		2				
8:30	9:00					No traffic-generating events occurred at Rockwood Manor during this time.		No traffic-generating events occurred at Rockwood Manor during this time.					
9:00	9:30												
9:30	10:00												
10:00	10:30										5		
10:30	11:00												
11:00	11:30												
11:30	12:00												

Counts by half-hour time slot of vehicles exiting Rockwood Manor and eastbound vehicles on Belfast Road.

set up for one week, and specific events at the facility were analyzed to compare the number of vehicles exiting Rockwood Manor with the number of vehicles travelling on Belfast Road toward MacArthur Boulevard within distinct half-hour increments before, during and after events occurring at the facility.

For the most part, there was little overlap between vehicles leaving Rockwood Manor and westbound vehicles leaving the neighborhood on Belfast Road. The traffic exiting large events from Rockwood Manor tended to be dispersed over several hours, rather than in a concentrated flow. In any given half-hour time period, the combined number of vehicles leaving Rockwood Manor and vehicles headed westbound on Belfast Road from the neighborhood was usually less than ten, and only once were more than 20 vehicles observed on both roadways within one half-hour period. Overall, the findings of this more detailed (although less technical) traffic study concur with the initial study that the addition of an egress drive onto Belfast Road would not constitute a significant impact on the surrounding neighborhood traffic pattern.

OVERALL DESIGN GOALS

Recommendations in the The Rockwood Manor Feasibility Study are guided by a framework of six design principles:

- Contextual Design The site shall fit into the larger residential neighborhood and forested parkland context by respecting and embracing the surrounding physical, social and community contexts. The design will create connections to nearby uses and relocate site features to appropriate locations with consideration of the adjacent neighborhood.
- Culturally Sensitive Design The design shall maintain the site’s “rustic elegance” and respect the site’s layered history by honoring Ms. Caughey’s original vision of Rockwood Manor as well as the Girl Scouts’ heritage. Rockwood Manor will continue its current function as a countywide event center to host social events, and to provide a facility for the use of civic and business organizations, Girl Scouts, Boy Scouts, youth groups and students of the Montgomery County Public Schools who may use Rockwood Manor as an outdoor education facility.
- Environmentally Sensitive Design The design shall preserve the site’s natural beauty and enhance its natural features by providing low impact stormwater management features, addressing runoff and drainage issues and improving stream quality. The design will also assess the existing trees on site and promote the health of the mature forest that surrounds the park.
- Efficient Site Use The design shall maximize the efficiency of the site to best serve its users and help to achieve contextually and environmentally sensitive design goals by reviewing the site’s parking and layout configuration, addressing existing service, loading and maintenance areas.
- Improved Circulation and Safety The design shall improve circulation and safety and reduce internal pedestrian/vehicular conflicts by enhancing visual cues at the entry; improving emergency, service and bus access and circulation; improving circulation for loading and deliveries; and upgrading the site to be compliant with the Americans with Disabilities Act.
- Improved Visitor Experience The design shall enhance the visitor experience for users of the park through a variety of methods including: improvement of wayfinding, integration



Rockwood Manor Recommended Plan (Oehme, van Sweden, 2014). This plan is a combination of the two alternatives presented in the Feasibility Study.

of site accessibility, consideration of additional recreational opportunities, enhancement of visual and noise buffers, relocation of activities to better serve park users, and improved site lighting.

RECOMMENDATIONS

The recommendations presented in the Feasibility Study outline long-term improvements to the facility, carried out in phases over time. Although they are the product of careful study and analysis, these recommendations are still conceptual in nature and would need to go through a detailed design process before they can be constructed. The recommended treatment plan addresses five areas of improvement: Public Safety, Stormwater Management, Accessibility, Service Access and Visitor Experience.

Public Safety

In order to provide adequate site access for emergency vehicles while preserving as many healthy, mature canopy trees as possible and causing minimal impact to the surrounding neighborhood, a one-way drive system is proposed, with the entrance drive located on MacArthur Boulevard and the egress on Belfast Road, approximately halfway between Whiterim Terrace and MacArthur Boulevard. The egress onto Belfast Road would be configured and signed to allow a right turn

only, so traffic would be directed to MacArthur Boulevard and not to the residential neighborhood. Further study will need to be conducted to determine the exact alignment of the entrance drive along MacArthur Boulevard and its impact to existing tree roots. The egress drive alignment crosses a sizeable swale that would likely require a bridge to connect Rockwood Manor to Belfast Road. A bridge in this location may be advantageous for tree protection, as constructing individual support piers would be less invasive than grading and installing base material required for a standard roadbed. The remainder of the site's primary vehicular spine would utilize the existing roadway alignment. Because of the immediate need to provide improved emergency access into the site, the Public Safety component of work would constitute the first phase of work to be completed.

Stormwater Management

The recommended plan incorporates three strategies for improving the health of the stream that receives all of Rockwood Manor's unmitigated runoff: consolidation of parking to remove impervious surfaces from sensitive areas, reconfiguration of pavement to better conform to natural contours and introduction of microbioretention facilities to capture and treat runoff. The existing main parking lot can be slightly expanded and reconfigured to accommodate a significant portion of the 85 parking spaces currently scattered throughout the site. This would allow for the removal of paved parking areas within the stream buffer near the residences on Laurel Leaf Drive. Additionally, the driveway leading down to the three cabins could be realigned to better fit in with the steep slope leading from the main parking lot. This would eliminate the flume condition that occurs during heavy rains, slowing down runoff before it is able to erode the banks of the stream. Finally, there are opportunities throughout the site to create microbioretention facilities that would catch runoff from adjacent structures and paved areas, allowing the water to infiltrate back into the soil instead of rushing directly into the stream.

Accessibility

Although most of the structures within Rockwood Manor have been upgraded to meet the current requirements of the Americans with Disabilities Act (ADA), several improvements can be made to the overall site to further improve accessibility. Currently, the cross slope of designated accessible parking spaces immediately adjacent to Skyview Lodge does not meet ADA requirements. The recommended plan indicates a reconfigured entry court that would create a level pad for compliant accessible parking spaces. Additionally, this reconfiguration would allow for a more formal drop-off area directly in front of the Manor House's main entrance, while doubling as a laydown area for fire trucks in the event of an emergency.

Currently, the only way to get a wheelchair-bound guest to the cabins is to drive him or her around the east side of the Manor House and down the sloping drive toward the stream. Once at the cabins, a vehicle must back-up several hundred feet before turning around at the lower parking lot. The recommended plan proposes a small service court adjacent to the cabins to allow for a vehicle to turn around. Additionally, the path that leads north from the Manor House down to the cabins can be realigned so that the slope is less than five percent, meeting the ADA requirement for an accessible route.

Service Access

Currently, trash trucks, delivery vehicles and event vendors (such as caterers, florists and musicians) must all compete for space within one small loading dock off of the southeast side of the



Top Left: Erosion caused by runoff at the lower parking lot. Top Right: The narrow loading dock that must be shared by trash, delivery and vendor vehicles. Bottom Left: Existing amphitheater with Belfast Road beyond. Bottom Right: Potential amphitheater character (Amphitheater at McConnell Springs, Image by Sydney Poor and Russell Poor).

Manor House. The recommended plan would reconfigure the existing service area to make more efficient use of the space through the construction of a retaining wall between the Manor House and the main parking lot. Additionally, the dumpsters would be relocated to the bottom of the slope, in a screened area accessible from the reconfigured parking lot. This solution would both expand the usable space in the loading dock and relocate one of the competing services from this area.

Visitor Experience

The final phase of the recommended plan includes site improvements that can be utilized by event guests and casual park visitors alike. The existing amphitheater and fire pit, located along Belfast Road at the southwest corner of the site, would be removed, and a new one built near the cabins and the former site of the lower parking lot. Certain undeveloped areas could be identified for nature play, deliberately placing stepping stones, tree stumps and other natural elements for children to explore. The existing garden on the northwest face of the Manor House could be expanded to create a formal garden, ideal for park users to stroll or for event guests to use as the location for photographs. Finally, simple amenities such as picnic tables and benches can be added in strategic locations for all park visitors.

ADDITIONAL COMMUNITY OUTREACH

The final recommendations from the Feasibility Study were presented in a public meeting on January 14, 2015. Following the meeting, the Feasibility Study report, PowerPoint presentation and acoustic study were posted to the project's website to allow further community review and an opportunity to provide additional comments prior to the Planning Board's review of the project. The primary issues expressed at the meeting are summarized below (notes from the meeting are included in Attachment E).

- There was a suggestion that the fire truck turning radius requirements be confirmed with the County to ensure the study is not assuming the need for a turning radius from a larger truck than would respond to an emergency at the site. Parks staff followed up and confirmed these requirements with the Montgomery County Fire & Rescue Service.
- Concerns were expressed that the proposed exit drive from the facility onto Belfast Road may create adverse effects on the neighborhood traffic and queueing times at the intersection with MacArthur Boulevard. In response to this concern, Parks staff conducted traffic counts and found that traffic exiting Rockwood Manor from large events was dispersed over several hours and would not have a concentrated impact on neighborhood traffic.
- A concern was expressed that the use of Rockwood Manor as an event center with catered events is not in keeping with the original owner's intent for the property and that the M-NCPPC Department of Parks may be violating an agreement for use of the property. Parks staff reviewed the documents related to the transfer of the property to the M-NCPPC in 1981 and included them in Attachments B and C. These documents clearly describe the Department's intent to manage this property through the Enterprise Division as a revenue-producing facility that could accommodate overnight guests. The programs for which the property is used (such as weddings, outdoor receptions, seminars, conferences and special events) are included in the 1981 description for how the park property would be used.

Other than requests to be notified of the Planning Board hearing date, few additional public comments have been received for this project since the public meeting in January 2015. On June 8, 2015, Parks staff received a public comment regarding a proposed development application by the Maryland Catering Company (Old Angler's Inn) on MacArthur Boulevard for a country inn. Concerns were expressed that if this application were to be approved, the facility would become a competitor to Rockwood Manor and subsequently contribute additional traffic congestion on MacArthur Boulevard, creating additional neighborhood impacts. Parks staff assumes that the impacts to roads and the neighborhood of this proposed use would be carefully evaluated by the appropriate authorities prior to granting approval of this application. Attachment K includes community correspondence received throughout the study period for this project.

FUNDING AND COSTS

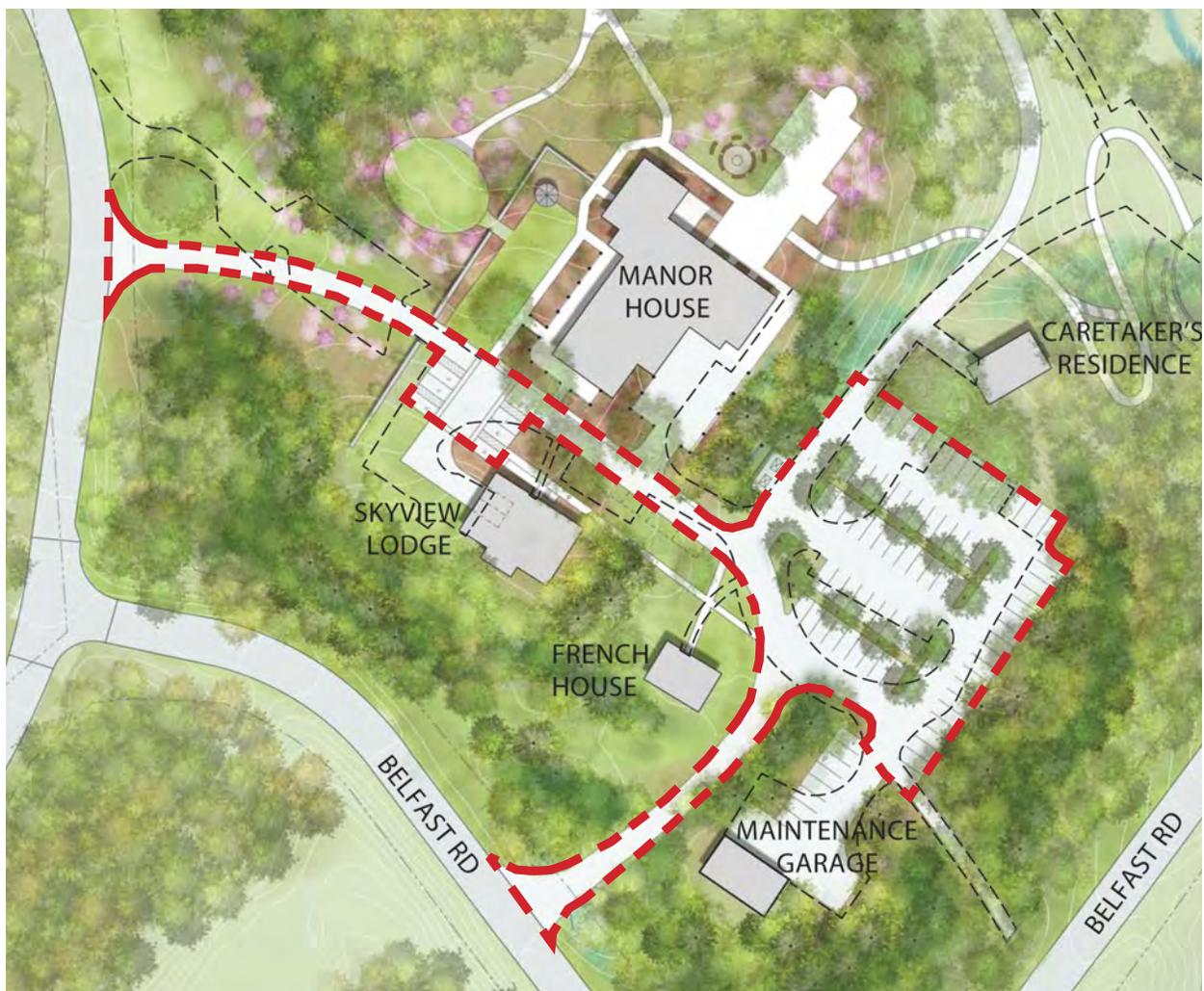
This Feasibility Study was funded with \$60,000 from the Enterprise Fund. It is anticipated that the work recommended in the Feasibility Study would occur in phases over multiple years. There is an immediate need to implement the Public Safety component of the Recommended Plan in order to provide adequate access for emergency vehicles and to improve efficiency for internal vehicular circulation and parking. The following items would be included in this first phase of work:

- Create a one-way drive system with the entrance drive located on MacArthur Boulevard and the egress on Belfast Road.
- Create an entrance court/drop off area in front of the main entrance to the Manor House that would include a clear area to accommodate fire truck access and laydown.
- Reconfigure the existing accessible parking spaces in front of the main entrance to the Manor House to meet ADA requirements.
- Consolidate the remainder of the site's parking spaces in a reconfigured main parking lot and provide pedestrian access to the Manor House.

The overall anticipated cost for design and construction for this phase of work is approximately \$650,000, to be funded by the Enterprise Fund. Detailed design for this project is proposed to begin immediately with construction following in FY 17-19. Additional phases of work would be designed and constructed as Enterprise funds become available and as the need arises.

CONCLUSION

The improvements identified in the Feasibility Study for Rockwood Manor were carefully considered to meet a series of pressing needs while enhancing the facility. The recommendations



Recommended Plan enlargement with first phase of work outlined in red.

from the study ensure the continued safe operation of a culturally significant facility within an ecologically sensitive setting. If approved by the Planning Board, a first phase project to design and construct the driveway and parking lot improvements would be initiated immediately.

ATTACHMENTS

- A. Rockwood Manor Feasibility Study
- B. Montgomery County Planning Board Resolution 81-30
- C. June 19, 1981 Memo from the M-NCPPC Montgomery County Director of Parks to Montgomery County Planning Board.
- D. Rockwood Manor Rate Sheet
- E. Community Meeting Notes from May 14, 2014 and January 14, 2015
- F. Acoustical Review
- G. Summary of Park Police Activity
- H. Rockwood Manor Event Rules and Regulations
- I. Turning Study
- J. Traffic Study
- K. Community Correspondence