



Lardner/Klein Landscape Architects, P.C.

Memorandum:

To: Fort Ward Advisory Group
From: Lardner/Klein Landscape Architects
Cc: Laura Durham, Project Team
Date: November 6, 2013
Subject: Fort Ward Park Facilities and Recreational Infrastructure

Introduction

The historic core of Fort Ward Park, in addition to its historic and cultural significance, is valued for its passive recreational uses—walking, jogging, using the playground, dog exercising, picnicking and family gathering, relaxing and sunbathing, birding and observing wildlife and learning about history and nature. The events and gatherings associated with the historical aspects of the park—the Civil War fortification and the Fort Community—are also highly valued and are considered as part of the “recreational” experience of the park. Recreational users of the park are sometimes unaware of its historic and cultural significance.

The City of Alexandria’s Department of Recreation, Parks, and Cultural Activities staff have identified and documented some of the issues and conditions of facilities within the park¹. A citywide assessment of the Americans with Disabilities Act compliance was prepared in 2012 entitled “*Park & Open Space Facilities Prioritization Analysis*” prepared by *Kimley Horn and Associates*. The recommendations that follow build upon these earlier assessments, adjusted for new information that has since been developed by the Fort Ward Advisory Group (FWAG).

The FWAG draft chapter on recreational use (which is relatively unchanged from the 2011 report to the current 2012-13 draft chapters) recognizes the challenge in successfully balancing the cultural and natural needs of the park for education and recreation. An excerpt from the report states that “*the growing appreciation for the historic and cultural nature of this Park needs to be reflected in how Park resources and Park administration support the needs of citizens who value the Park as a site for passive recreation, relaxation and unstructured physical activity. Historic, cultural and recreational activities can mutually co-exist but reforms may be needed.*”²

Over the past four years a number of initiatives have taken place at Fort Ward Park to better manage recreational use in relation to the preservation needs associated with its historic and cultural significance as well as the interests of park neighbors. These actions³ include:

¹RPCA conducted a number of informal studies of park facilities prior to the formation of the Fort Ward Advisory Group.

² Forbes, Ripley and Robert Moir, Chapter 3, Recreational Use; Issues and Recommendations, Fort Ward Advisory Group, 2011 and 2012.

³ The actions noted were updated from the 2011 FWAG Chapter based upon information provided by RPCA staff.

- Decreasing the number of reserved picnic areas
- Limiting the size and length of picnics
- Provision of rangers on weekends
- Limiting the number of vehicles on the roadway during peak pedestrian use
- Moving the city maintenance facility
- Prohibiting amplified music other than Special Events
- Eliminating certain inflatable recreational devices
- Limiting alcohol use
- Increasing informational signage (parking, avoiding sensitive areas, establishing no mow areas)

The Management Plan for the park will identify specific recommendations for the preservation and management of historic, cultural and natural resources of the site, some of which overlap with these recommendations. As noted in the Interpretive Chapter of the Management Plan, recreational users are an important audience for increasing the awareness of the park's historical and cultural significance, and therefore some of the recommendations also overlap with the interpretive concepts. The following recommendations are specific to recreational use of Fort Ward Park. Overlaps with resource preservation, management and interpretation are noted, where applicable.

Recommendations for Park Facilities and Enhancements

Park needs and recommendations for park facilities and enhancements were drawn from three main sources:

- Fort Ward Advisory Group (FWAG) 2011 recommendations, Chapter 3, *Recreational Use; Issues and Recommendations*, by Ripley Forbes and Robert Moir (also included without change in the updated 2013 draft chapters report)
- 'Listening Session' held in early June in the park and the associated on-line survey
- Discussions in subsequent FWAG meetings

Recommendations are intended to address specific recreation management issues with the intent of enhancing the overall experience of visiting the park. This discussion is grouped geographically and thematically, with issues to be addressed and resultant recommendations contained in the same discussion thread. A concept diagram has been prepared and is included as Attachment 1. The areas are referenced on the map by the letters noted below. Park features included in this discussion are:

- A. Amphitheater and Adjacent Restrooms
- B. Dog Exercise Area
- C. Picnic Shelter
- D. Picnic Areas
- E. Playground
- F. Pedestrian Paths
- G. Parking and Vehicular Access
- H. Park Character and Landscape Design

The Americans with Disability Act recommendations from the Kimley-Horn report are incorporated into each of the elements noted above and not treated as a specific grouping of recommendations.

The adjoining and fenced-off portion of the park to the west and behind the St. Stevens and St. Agnes School includes a multi-purpose rectangular playing field and tennis courts. These active recreational uses are not included in the Fort Ward Park and Museum Area Management Plan as these uses and their management are already agreed upon and fixed.

Prohibited Uses

Currently the following uses are prohibited or controlled in the park as noted on the City of Alexandria web site and as posted on kiosks within the park:

- “Camping - No person shall set up tents, shacks, trailers or any other temporary shelter for the purpose of overnight camping. Exceptions: Overnight camping may be allowed for large groups under certain conditions.
- “Alcohol Beverage Policy: Fort Ward is specified and designed as a park where the use of alcoholic beverages by a group of 50 or more, based within the City of Alexandria, is permitted under strict regulation and control. Only draft beer and wine will be permitted in the park areas 2,3, and 4. Beer must be in a keg and served in paper cups.” *[Additional permitting requirements follow, but are not included, see City web site]*
- “Dogs: Unleashing dogs or allowing dogs to urinate or defecate in the park (except in the dog exercise area near the front gate is prohibited. Dog owners are required to clean up).”
- “Fires and Grills: Fires are permitted in park grills or personal grills only. Barbeque pits for cooking on the ground are prohibited. Propane gas grills are prohibited. All fires must be extinguished and ashes placed in designated containers or left in the park grill before the area is vacated.”

A) Amphitheater and Adjacent Restrooms

Programming for the amphitheater has been reduced significantly. Quarterly concerts with historical themes comprise the current schedule. Park users responding to the ‘Listening Session’ suggested that the amphitheater be more actively programmed for community events. One park user suggested that community arts organizations be encouraged to perform on site as a “thank you” to Alexandria when receiving City money and support. Another park user suggested movie nights at the amphitheater. Others mentioned positive memories of concerts and events they attended in years past.

One concern is whether or not the amphitheater facility meets the Americans with Disabilities Act (ADA) standards for accessible design. Kimley-Horn, a consulting firm, performed a system-wide analysis of Alexandria Parks for compliance with the 2010 Standards for Accessible Design. Their report states that they believe that the amphitheater meets the guidelines with the exception that the site does not have appropriate accessible parking spaces. Contrary to many who voiced concern that the facility itself was inadequate, the study states that the facility has the required number of accessible viewing areas and that there is appropriate access to restrooms, a drinking fountain and the stage itself.

Anecdotally, community members have stated that they miss the extensive programming that used to occur in the amphitheater. Others expressed that larger events unrelated to historic significance of the park were inappropriate. No one has suggested removing the amphitheater.

Assuming the amphitheater is to stay, more programming is needed to justify additional investment. A feasibility study is needed to determine the following:

- Evaluate the physical condition and life cycle maintenance costs for the current 360-seat amphitheater, including confirming that the amphitheater is fully compliant with the Americans with Disability Act (to confirm the city-wide concept level study performed by Kimley Horn in 2012)
- Evaluate the costs and benefits of current and potential uses and programs including but not limited to:
 - historical interpretation including living history and performing arts
 - performances by City of Alexandria performing arts groups and schools
 - summer movie night series
 - restoration of the summer concert series
- Based on the results of the feasibility study, determine the operating conditions under which such performances can occur

Previous staff assessments have recommended a major upgrade and expansion of the restrooms at the amphitheater. Alternative approaches to rehabilitating the current building should also be studied as part of the feasibility study. Options to be studied should include:

- Adaptive re-use of existing facility
- Demolition and reconstruction of new permanent facility
- Demolition and replacement with an alternative facility including constructing a shell within which portable restrooms can be placed

B) Dog Exercise Area

The existing off-leash dog exercise area appears to be little used⁴. Many dogs are walked through out the park on leash, but in visits to the park, no dogs have been observed running loose in the designated exercise area. At one time, the exercise area was located to the east of the entry drive. A dog walker (dog on leash) said that the current location is unfenced and too close to a busy road (North Van Dorn Street). Relocating the dog exercise area within the park would be very difficult. Alternative, suitable locations within the park do not exist. Any alternative site will infringe upon historically significant areas, adjacent uses or have the same exposure to traffic. The existing location could be slightly modified to be more functional, with better signage provided and the footprint of the current exercise area shifted away from the rifle trench. Fencing is not a feasible option. The FWAG draft chapter on Recreation recommends removing the dog exercise area from the park in its entirety. Removal will likely require a public hearing and an assessment of the locations of nearby dog exercise areas.

C) Picnic Shelter (s)

Although at one time the park had multiple picnic shelters, today it has one large shelter available for rent. Assessed in 2008, it was noted to be in relatively good shape. Regular inspections of the shelter should continue. Modifications and improvements should include:

- Accessible parking spaces and an accessible route to the shelter from the parking space, as noted in the 2012 Accessibility Study. The accessible route should be incorporated into the proposed soft path trail network.

⁴ Based on observation and interviews with park users, June 1 and June 5, 2013

- The ground surface immediately adjacent to the shelter needs to be maintained so that roof runoff and compaction associated with normal use of the shelter do not create walking and trip hazards. A surface using the Flexi-pave or a well-graded stone dust material (with subgrade improvements) could be used to address accessibility and soil compaction issues around the perimeter of the shelter.

An opportunity exists to make a dual use structure that could support the interpretive framework for the park and serve as a second picnic shelter. The interpretive framework recommends creating a shelter as part of the interpretation of “The Fort” Community and Schoolhouse Lane. The structure could be used for special events such as family reunions and as an interpretive site. The potential structure would include sliding doors and could be secured when not in use. There are a number of issues that need to be resolved prior to moving forward with the idea:

- How much is too much—would the interpretation be better left more to the imagination and simply marked on the ground, or is there a need for such a structure that could be home to more in-depth exhibits about “The Fort” Community families and their descendants?
- Would the new structure require an expansion of the existing parking to better serve events that might take place there?
- Would the new structure require kitchen and restroom facilities, or is the restroom at the museum close enough?
- If a structure is appropriate for the site and for housing more in depth interpretive exhibits, what would be the criteria for its use—such as educational programs and meetings, family reunions, civic group meetings, etc.?

D) Picnic Areas

One enthusiastic respondent to the ‘Listening Session’ was a park user in search of a grill. He had been to many city parks before finding Fort Ward and its numerous grills. Fort Ward’s picnic areas house the only grills in close proximity to a parking area. Other grilling opportunities in the City require long walks while toting along picnic supplies and grilling gear. Picnic areas are also valued for their shade and for their accommodation of groups.

Now that the number and location of picnic sites has been reduced to five (see Attachment 1 for locations, D1-D5), the management challenge has narrowed geographically, but it has increased in terms of management needs. Keeping the ground surface stable and preventing or reducing erosion and tree root exposure is difficult with the amount of foot traffic the picnic areas receive. Picnic tables are already set on concrete bases, minimizing issues related to soil compaction near the table; however, significant compaction is occurring between some pads. In order to achieve some of the turf management goals outlined in the resource management section, the following should be considered:

- One additional picnic area should be added to provide an opportunity to rotate picnic areas on a seasonal basis—closing one area for a growing season or sufficient enough time to reestablish the turf
- Shade is one of the most important assets of the picnic areas. The natural resources and best practices sections of the management plan address this issue as well as the issue of best tree planting practices within archeological resource areas. Maintenance of the tree canopy in and around the picnic shelters should be a high priority for both the safety and comfort of park users.

- Updating the picnic area map—the historic areas marked on the picnic area map need to be updated to include the areas associated with the burial sites. This will help to increase awareness of African American heritage as well as the Civil War fortification. In addition, the picnic area map could be used to provide interpretive information about the significance of the historic areas.

E) Playground

The existing playground is used by nearby residents with young families and young children with their families that are picnicking in the park. According to the 2012 ADA Accessibility Study, the current site does not have an accessible parking space or route between the parking area and the equipment that meets current ADA accessibility criteria. While RPCA staff performs weekly playground safety inspections, there is no recent evaluation as to whether the playground equipment is ADA accessible. In addition, the playground is located in a low and wet area that impedes the natural surface flow of stormwater runoff. The runoff creates maintenance issues and erosion.

There was no mention of removing the playground equipment in any of the FWAG reports or in comments by park neighbors and visitors. There was concern expressed, that if the facility is to be relocated, the existing equipment should not be removed before its replacement is constructed. Three options exist for the play area:

- Retain the equipment in its current location (and upgrade, if needed, to meet the most current ADA accessibility standards). This site requires the addition of an ADA compliant parking space and accessible route. This option would also require installation of new stormwater runoff management practices to address the flow of surface water through and around the playground.
- Relocate or replace the playground to the site south of the existing Dog Exercise Area, just north of the loop road. This site requires the addition of an ADA compliant parking space and accessible route (although the structure could be placed closer to the parking area thereby shortening the route) between the parking area and equipment, is near the single picnic shelter in the park.
- Relocate or replace the playground to the area south of amphitheater. This site requires the addition of an ADA compliant parking space and accessible route (although the structure could be placed closer to the parking area and thereby shortening the route) between the parking area and the equipment. This locates the equipment near an existing restroom.

Criteria for determining the most suitable location for the playground include:

- Quality of recreational experience (shady areas, grassy areas nearby, level and well drained surface)
- Potential impact to archeological resources (associated with the installation of footings to support the play structure, installation of a sub-base below the surface of the playground to support the playground surface, and modifications to the soil surface and subsurface to create an accessible route and parking space for the playground)
- Proximity to adjoining neighborhoods and future uses
- Proximity to existing parking and length of ADA accessible route that would have to be constructed
- Relationship to other uses—nearby picnic areas and restrooms are beneficial, but the dog park is not, unless it is removed from the park or the area

Pros and cons for Playground Location within Fort Ward Park

Criteria	Existing Site	South of Dog Exercise Area	South of Amphitheater
Potential Impact to Archeological Resources	Accessible route and expansion of ADA accessible parking space will require excavation into the subsoil	Construction of footings (below frost line) and play surface (12-24 inches) will require excavation and replacement with suitable materials; Accessible route and expansion of ADA accessible parking space will require excavation into the subsoil (but for a shorter distance than the existing site)	Construction of footings (below frost line) and play surface (12-24 inches) will require excavation and replacement with suitable materials; Accessible route and expansion of ADA accessible parking space will require excavation into the subsoil (but for a shorter distance than the existing site)
Proximity to Neighbors	Close to path that links from Van Dorn on the north and proximate to adjoining houses on east side	Close to path that links from Van Dorn on the north and proximate to adjoining houses on east side	Farther distance from adjoining residential areas
Proximity to Parking	Longer accessible route (approximately 175-200 feet)	Shorter accessible route (Approximately 100-125 feet depending upon location chosen)	Shorter accessible route (Approximately 100-125 feet depending upon location chosen)
Relationship to other users (both positive and negative)	Adjacent to existing picnic area	Adjacent to picnic area and dog park (dog park would need to be relocated); This site may also raise concerns about being too close to the Civil War fortifications.	Adjacent to amphitheater, public restrooms and picnic area

F) Pedestrian Paths - Loop Road Management and Enhancement

One of the main ways to experience the park is along the six-tenths of a mile loop road that generally circles the Civil War fortification. Over 400 walkers were counted on a weekend day in early September 2010 walking the route⁵. The walk is valued for its shade and generally smooth walking surface.

With the exception of the entrance to the park, the park road varies in width between 12 and 14 feet, not wide enough to separately allocate portions of the road to pedestrians and portions to vehicles. Between the entrance and the museum parking lot, the road width is approximately 22-24 feet. Sharing the pavement between pedestrians and vehicles and limiting the number of cars that can enter the park at any one time (based upon parking availability) continues to be the best way to manage the shared use. However, changing the sign to encourage vehicles to look out for pedestrians rather than the current version that encourage pedestrians to look out for vehicles would help to clarify that the pedestrian use is the primary use of the loop road, and that vehicular use is secondary.

⁵ FWAG, 2011, Chapter 3

Shared use between pedestrians of all shapes, abilities and ages, and motor vehicles using the park road is an ongoing challenge. Speed humps have been installed along the loop road, but while these slow the speed of vehicles, they do not meet current standards for accessible routes and are challenging to navigate for some users. The following enhancements to the shared loop road are recommended:

- In the short term, consideration should be given to convert the speed humps to “speed cushions” providing the minimum gap width to meet accessibility guidelines.
- Introducing a sharp curve right at the point where the park road changes from two-way to one way would also keep drivers from accelerating along that stretch of roadway (see Attachment 2, Concept Diagram enlargement).
- At the time of resurfacing the park road, consider modifications to the shoulder using a reinforced turf shoulder (subsoil being composed of 50% topsoil and 50% gravel mix) that will also support greater pedestrian use along the edge of the road and the occasional vehicle that runs off the road.
- Roadside drainage should be addressed by improving the infiltration rates of areas that receive roadside runoff (see recommendations in resource management section for aeration). In addition, where runoff rates exceed the soil moisture holding capacity of a turf area, runoff should be directed to specially designed infiltration areas. As this requires trenching and replacement of soil, it can only be done in areas that have been surveyed for archeological potential and where such potential has been ruled out (see resource management section).

Pedestrian Paths - Soft Path Trail Network

The proposed pedestrian path “soft path trail network” needs to support multiple functions including historical interpretation, natural resource interpretation, exercise, connectivity and safety. The trail network, as proposed, would circulate around the perimeter of the park with connection points to major destination and orientation points (see map included as Attachment 1). Formalizing a park entrance (or entrances) from North Van Dorn, the linkage will benefit the preservation of the rifle trench by providing an alternate entry route other than the top of the parapet.

The surface of the trail will vary depending upon location: a natural soil or mulch surface in the less traveled portions of the wooded areas, mowed grass for connecting trail routes where interpretation is desirable or where cut through traffic is likely; stone dust as the primary surface material and flexi-pave or other similar permeable paving solution in the most heavily trafficked areas and associated with interpretive installations.

The following table summarizes the design criteria that should be utilized for building the trail network over time:

Trail Type	Surface Type	Cleared Width	Cleared Height	Tread Width
<i>Wooded Section</i>	Natural soil, leaf mold or wood chips from park maintenance	10'	8'	6'
<i>Open Grass or Meadow</i>	Mowed turf	10'	NA	NA

<i>Interpretive Trail Portions</i>	Well-graded surface of stone dust or permeable pavement material such as flexi-pave	12'	8'	8-10'
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The Universal Trail Assessment Process (UTAP) is recommended to more closely monitor the conditions of trails. The UTAP is used by many federal agencies to monitor and prioritize maintenance activities and report on conditions of the trails for park users. While typically applied to larger areas, the UTAP process can be adapted to an urban park and conducted by volunteers.

The UTAP process records the accessibility data for the trail including:

- Trail length
- Maximum and average cross slopes
- Maximum and average grades
- Surface type and firmness
- Minimum clear width
- Average tread width

The primary maintenance information recorded about a trail includes:

- Tread condition
- Obstacle locations and magnitude
- Vegetation within the trail corridor
- Condition of drainage structures
- Presence of downed trees
- Washed out sections of the trail
- Condition of signage and related trail amenities

By recording conditions on a regular basis, a prioritized list of maintenance needs can be established and monitored on a seasonal basis.

G) Parking and Vehicular Access

There are a number of issues that have been identified that need to be addressed in both the short-term and the long-term related to parking and access. There are 152 parking spaces distributed throughout the park. For the most part, these spaces are adequate for the current and anticipated use in the park. When large events are scheduled, however, parking sometimes requires that one lane of Braddock Road is shut down and used for parking along the park boundary. In other cases, shuttles are required to support parking for events. The amphitheater, for example has 360 seats. To fully park on site for an amphitheater production (assuming two attendees per vehicle and a full house, and additional attendees for production and as performers) all on-site parking available in the park would be consumed.

School and tour bus drop off and parking is another concern that has been raised by museum staff. Use of the parking area behind the museum requires that buses turn around in the lot, or alternatively block the access road to drop off passengers. Attachment 2, Concept Diagram Enlargement, illustrates one approach that would create a loop drive so that buses (WB-40 type) can circulate through the lot, drop off passengers and return to Braddock Road.

The main 24-space lot adjacent to Braddock Road requires that visitors cross the entrance road to visit the museum and fort or restrooms. The current configuration of the split rail fencing around the lot pushes the pedestrian to cross the entrance road close to West Braddock Road, where vehicle driver distraction is most likely.

Potential ways to address these issues include:

- Narrow the main parking lot, as it is over 70' wide. The lot could be narrowed to 62' wide, with the addition of a central island or reduced in overall width. The area removed from the current parking configuration could be transformed into an accessible walkway route on the northern edge of the lot, connecting to an orientation area (as recommended in the interpretive chapter). An ADA accessible parking space should be located in this lot as recommended in the Kimley-Horn report. Contrary to the report's recommendation, consideration should be given to locating it on the northwest side of the lot, close to the proposed orientation area.
- Designate and mark a crosswalk on the northern side of the parking area, relocating the existing access road crossing further from the park entrance off of West Braddock Road. This would give greater visibility to oncoming drivers (with more time to react and slow down).
- Accommodate school group/bus access and parking by reconfiguring the lot behind the museum as a "U" shaped lot, allowing enough room for school busses (WB-40) to turn within the lot.
- Replace Loop Road speed humps and change the existing sign to give the right-of-way to pedestrians rather than vehicles.
- Develop a Pedestrian path trail network (see soft path above).
- Provide better access between the athletic fields and the park by installing another opening in the fence as shown on the path network diagram. Currently the only connection is located in the school parking lot, further to the south. Having a second opening in the field side would enhance personal safety by removing a potential "trap" in the northeast corner of the fenced field.
- Provide for additional parking. The current parking configuration is suitable for events in the amphitheater. However, if a new structure is built for interpretation, educational activities, and special events along Schoolhouse Lane as discussed in the interpretive section of the report, then additional parking with an accessible space and an accessible path may need to be considered on the east side of the existing main parking lot. Any additional parking should be developed either as a drivable grass surface (such as turf block, or similar), or as permeable pavers.

H) Park Character and Landscape Design

There are several landscape architectural design strategies that should be implemented to reinforce the desired enhancements to park facilities. Several of these strategies involve protection of the Civil War fortification, and these are discussed in the resource management section (protection of the rifle trench, for example). Others address utilizing landscape elements associated with the Fort Community to help set the context for interpreting the lives of the families that lived there or to help mark the burial sites nearby; these are discussed in the interpretive section.

- **Main entrance** - establish an identifiable landscape character (use shade trees and hedges or hedgerows to define circulation).
- **Braddock Road** - bring the park and its interpretation out to Braddock Road and make Braddock Road "part of the park" by establishing a double row of street

- trees at the edge of the park to create an opening and orientation point for visitors at the historical location of Schoolhouse Lane.
- **Secondary entrances** - create a welcoming appearance and improve safety at the Van Dorn entrance.
 - **Parking areas** - consider reshaping both parking lots to get more efficient use of gravel surfaces, and for the long term, consider an alternative type of permeable paving system (see circulation discussion above).
 - **Loop road** - maintain a shaded route for recreational use by planting new shade trees on both sides of the road. Vary the landscape design and species selection to reflect the adjoining uses—more formal in the entrance areas, at orientation points where trails intersect with the loop road and grassy open areas, and more informal in the existing wooded areas.
 - **Renovating Special Areas** - the legacy of the azalea gardens and the City Arborist's Memorial need to be restored. Renovation of the azalea beds will require careful management to gradually reshape the azaleas to their natural form, coupled with the use of various soil amendments and mulches to achieve the proper pH and soil drainage to achieve optimal growth. Similarly, the Arborist's Memorial will require special attention and an inventory of the condition of the original landscape design. Work can begin by pruning out and removing dead materials, amending the soil to achieve proper pH and drainage, and weeding and mulching the beds on regular basis to revitalize the desired and original plants. In both cases, where trees from the original planting have died, they should be replaced in kind, or with an appropriate substitute if the plant is either no longer available, susceptible to disease or considered to be invasive.