

# WITTER RECREATIONAL FIELDS

Docket Item #11 A-C

Master Plan Amendment #2007-0003(A)

Rezoning #2007-0004(B)

Development Special Use Permit #2007-0014(C)

**PLANNING COMMISSION  
OCTOBER 2, 2007**



Docket Item# 11 A-C

Master Plan Amendment#2007-0003

Rezoning#2007-0004

Development Special Use Permit#2007-0014

Witter Recreation Fields

Planning Commission Meeting

October 2, 2007

**ISSUE:** DSUP#2007-0014 Consideration of a request for a development special use permit, with site plan, for multi purpose recreation fields with lighting and pavilions, and approval for increased height of the proposed lighting and buildings

MPA#2007-0003 Consideration of a request for a master plan amendment to change the land use designation in the master plan from (I) Industrial to (POS) Public Open Space.

REZ#2007-0004 Consideration of a request for an amendment to the zoning map to change the zoning designation from the I zone to the POS zone.

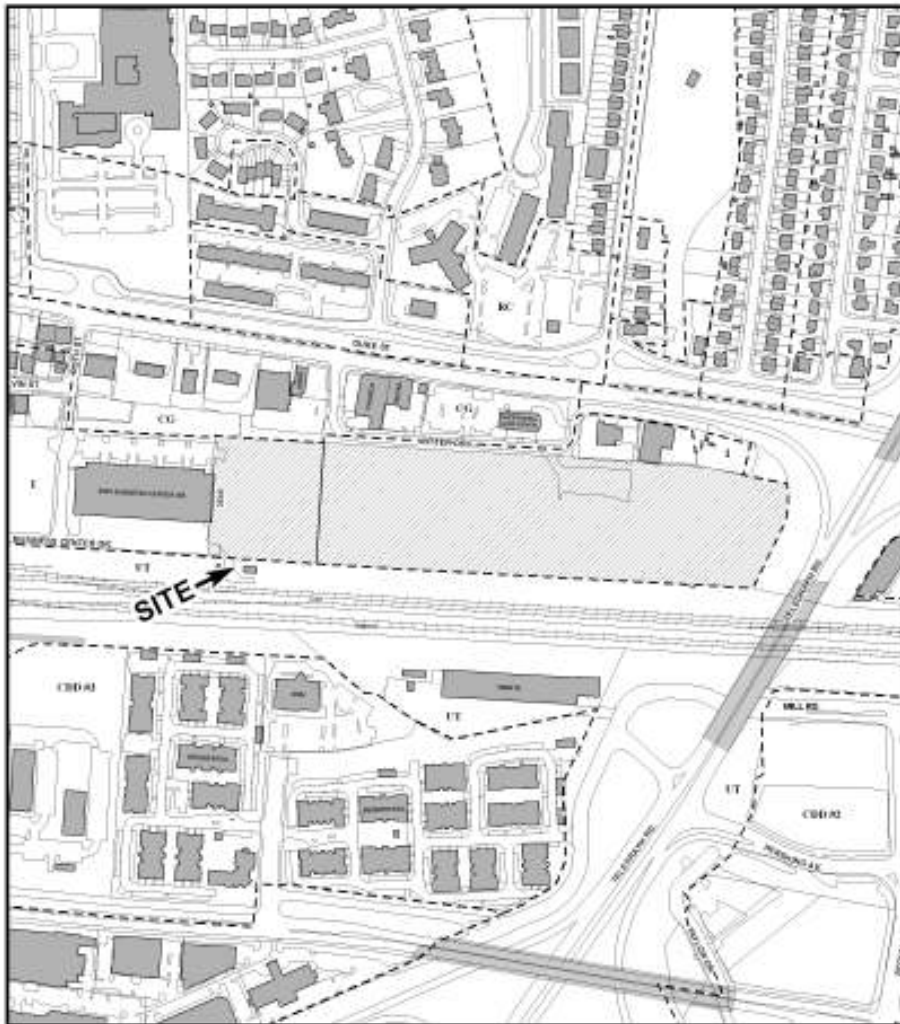
**APPLICANT:** City of Alexandria, Department of Transportation and Environmental Services, by Emily A. Baker, City engineer

**STAFF:** Jeffrey Farner, Chief, Development; jeffrey.farner@alexandriava.gov  
Gary Wagner, Principal Planner; gary.wagner@alexandriava.gov

**LOCATION:** 2600 Business Center Drive

**ZONE:** I/Industrial  
POS/Public Open Space and Community Recreation (Proposed)

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**MPA #2007-0003**  
**REZ #2007-0004**  
**DSUP #2007-0014**

**10/02/07**



**I. IMPACT/BENEFIT**

IMPACT/BENEFIT	COMMENTS
Consistency with Strategic Plan and Open Space Master Plan.	<ul style="list-style-type: none"> <li>▪ Consistent with Strategic Plan to provide quality open space for outdoor active and passive recreational facilities, construct environmentally sensitive development.</li> <li>▪ Consistent with Alexandria Open Space Plan to designate site as public open space.</li> </ul>
Use	<ul style="list-style-type: none"> <li>▪ Active and passive park.</li> </ul>
Open Space	<ul style="list-style-type: none"> <li>▪ 13.7 acres of active and passive open space, including two irrigated, synthetic infill turf, multi-purpose fields; one irrigated, engineered turf, diamond field; preservation of existing cemetery.</li> </ul>
Pedestrian	<ul style="list-style-type: none"> <li>▪ Approximately one-half mile pedestrian loop around site that connects to Witter Drive.</li> </ul>
Mass and Scale/Building Compatibility	<ul style="list-style-type: none"> <li>▪ One restroom facility (480 sq. ft.) and two pavilions (676 sq. ft. each).</li> <li>▪ Approximately 22 ft. in height at highest peak.</li> <li>▪ All three structures contain green building elements.</li> </ul>
Traffic/Transit	<ul style="list-style-type: none"> <li>▪ Site is accessible by Duke Street and Witter Drive.</li> <li>▪ DASH and Metro bus stops along Duke Street.</li> <li>▪ A maximum of 182 weekday trips and 819 weekend trips are projected.</li> <li>▪ Existing left turn lane to be extended and traffic signal to be added at the intersection of Duke Street and Witter Drive.</li> </ul>
Parking	<ul style="list-style-type: none"> <li>▪ 141 total surface parking spaces.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>▪ Sustainable design techniques such as solar panels on buildings, rain gardens and bioretention systems, vegetation preservation, slope retention, reforestation, and recycled materials</li> </ul>
Fiscal	<ul style="list-style-type: none"> <li>▪ Annual operating and maintenance costs are estimated to be \$350,000 to \$450,000</li> </ul>

## II. EXECUTIVE SUMMARY

The proposal consists of a Master Plan amendment, rezoning and special use permit to construct outdoor dedicated recreational facilities and sports field lighting for this 13.7 acre property that was recently purchased from CSX as part of the Woodrow Wilson Bridge settlement agreement with the Federal Highway Administration (FHWA). The Agreement with the FHWA calls for a recreational facility that will include a diamond baseball/softball field, two rectangular multi-purpose playing fields, a maintenance building with public restrooms and a paved parking lot with a maximum of 145 spaces.

The proposal presents an exciting opportunity to provide three much needed active recreational fields that can be lighted for nighttime use. In addition, the design and acquisition of the fields will be part of the Woodrow Wilson Bridge mitigation and will therefore come at no cost to the City other than the ongoing maintenance. Potential impacts, such as lighting of the fields and traffic congestion at peak use, have been addressed in the site design and engineering process.

Staff recommends approval of each of the three applications.



Figure 1. Project Site



Figure 2. Site Plan with Existing Context

### III. BACKGROUND

#### A. *History of Site*

In the 18<sup>th</sup> and 19<sup>th</sup> centuries, portions of several farmsteads occupied the property with frontage on Duke Street. A family cemetery dating from the 18<sup>th</sup> or 19<sup>th</sup> Century is located on the eastern portion of the site. The cemetery is incorporated with the design of the park, including interpretive signage. In 1926, the property was sold to the Fruit Growers Express Company, which used the site primarily for the manufacturing and maintenance of refrigeration cars. In 1989, CSX Transportation bought the Fruit Growers Express Company, along with this property, and demolished existing structures, including switching tracks, the refrigeration car maintenance facility, and various industrial buildings. As a result of these industrial uses, the soil is contaminated and will require remediation when redeveloped. Additionally, in 1989, a portion of the site was subdivided and developed as an industrial warehouse building. In conjunction with the Woodrow Wilson Bridge settlement agreement, the site was purchased by the City in December 2006, and is proposed to be an active park.

#### B. *Site Description/Existing Conditions*

The site is located at 2600 Business Center Drive, west of Telegraph Road, between Witter Drive and Business Center Drive. South of the site is the Norfolk Southern and WMATA railroad corridor and immediately north is the Alexandria Animal Hospital, Land Rover car dealership, and other office and light industrial uses. To the west of the site there are currently several City uses, including the Dash bus facility, the T&ES and RP&CA maintenance facility, and the City's refueling station, in addition to the school bus parking lot (see Figure 1).

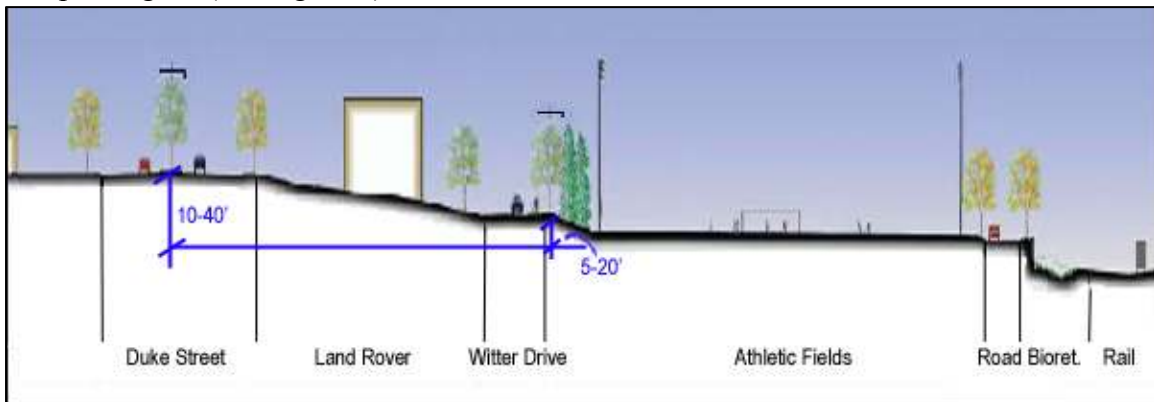


Figure 3. Site Section from Duke Street, to Witter Drive, to the Athletic Fields

The site is a long, narrow, relatively flat, rectangular-shaped parcel of land (approximately 350 ft. wide by 1,600 ft. long). The site is sparsely vegetated due to the previous uses. While the site is generally flat with minimal topographic change, there is a considerable change in grade (10 to 40 ft.) from the site to Duke Street and a 5 to 20 ft. change in grade from Witter Drive. The proposal will require a considerable amount of soil to be added to the top of the site to be accessed from Witter Drive, which is also part of the mitigation for the soil contamination.

Due to the historical uses and resulting soil contamination, the site was accepted into the Virginia Department of Environmental Quality (VDEQ) Voluntary Remediation Program (VRP) in October, 2000. In compliance with VDEQ VRP submittal requirements and City guidelines, a site characterization, risk assessment, remediation plan, and health and safety plan were developed for the site. In order to eliminate any potential exposure to contaminants during future recreational uses, the current plan calls for the entire site to be covered with several feet of clean fill before redevelopment. The proposed synthetic infill turf fields will then be placed on top of the clean fill cap. This site closure plan has received an initial concept approval from the VDEQ VRP and final approval is expected within the next year.

### ***C. Funding and Land Acquisition***

In 1999, the City and the Federal Highway Administration (FHWA) entered into an agreement to settle the dispute over the design of the replacement Woodrow Wilson Bridge. That agreement called for a large urban deck with recreational fields at South Washington Street over the Capital Beltway. In 2000, the City and FHWA concluded that the design and construction of this large deck would be more complex than anticipated, and agreed to explore a smaller deck and alternative mitigation. In 2002, the City and FHWA executed a modification to the agreement, including the acquisition and enhancement of the Freedmen's Cemetery site at South Washington and Church Streets as well as funding for the purchase of land to construct recreational fields at 2600 Business Center Drive.

The agreement enabled the City to acquire the site from CSX in December of 2006. The modified agreement with FHWA calls for a recreational facility on the site that will include a diamond ball field, two rectangular multi-purpose playing fields, a maintenance building with public restrooms and a maximum 145-space paved parking lot.

### ***D. Need for Athletic Fields***

The City of Alexandria's athletic fields are among the most used park and recreation facilities in the region and are currently unable to meet the demand for a variety of field sports. Currently the City hosts more than 15,000 youth, adult, and school participants on its athletic fields. To understand the capacity of its athletic fields, the Department of Recreation, Parks and Cultural Activities worked with a consultant to analyze the current

and future usage and demands for its fields. To identify how well the current demand is being supported, the consultant compared the current capacity of each existing field to the current demand for its use. Further analysis organized each field by season and dedicated sports usage. The overall analysis allowed for an understanding of the additional field capacity needed to meet the demands of multiple user groups.

One of the significant findings of this analysis determined that the demand is high for practice and field play space throughout the City, but the current field inventory is relatively low. As a result of this high demand and low inventory, most of the existing fields are over-scheduled for games and practices and therefore cannot be consistently maintained at an appropriate standard to support quality play. Additionally, due to the lack of field capacity, the City has had to allow team practices in a number of general open space areas, reducing the open space's ability to support other park and civic uses.

The proposed development of athletic fields at this site will provide the City of Alexandria with an opportunity to improve the low inventory of athletic fields and better meet the needs of its multiple field users. The proposed design of these fields is intended to maximize the use and enhance the City's maintenance capabilities. The development will also retain an existing 18<sup>th</sup> century cemetery, incorporating it with a passive open space area within the park.

### ***E. Project Description***

The project addresses the City's need for open space by providing two multi-purpose fields and a diamond ball field, passive open space, associated parking, and the preservation of an existing cemetery. The site is in a location where noise and light spillover from games will not negatively impact nearby residents. The closest residents are approximately 300-500 feet away from the lighted fields.



Figure 4. Site Plan



### *Vehicular and Pedestrian Access*

Two access points will be provided for the project off of Witter Drive that will be connected by a two-way ring road for vehicular and pedestrian access. The portion of the ring road bordering the railroad tracks will have a fire hydrant and access gate, secured by a rapid entry system (Knox-box) every 600 feet in the event of a railroad emergency.

Pedestrians access the site from Duke Street along the east side of Witter Drive and can continue into the site along the ring road, which provides a complete half-mile pedestrian loop. A total of 141 surface parking spaces are provided on site. A 124-space surface parking lot is provided on the western end of the site and 17 spaces are provided adjacent to the diamond field. Overflow parking is available on the south side of the ring road where a mountable curb is provided.

### *Athletic Fields*

The two proposed multi-purpose rectangular fields (360 ft. x 240 ft) are designed to accommodate soccer, lacrosse, rugby, field hockey, and football. The two fields are oriented with their longest sides parallel to Witter



Figure 5. Synthetic Infill Turf System at Minnie Howard

Drive. Made of a synthetic infill turf system, which is constructed of recycled materials such as tires and commercial plastics, the rectangular fields require little maintenance and no fertilizers. The synthetic infill turf system is composed of a rubber mixture integrated with fibers, with a safety impact board and stone base beneath the carpet to provide structural support and facilitate drainage. An irrigation management program is also included in the design and maintenance of the athletic fields. Irrigation is necessary for periodic washing of the synthetic infill turf fields and supplements natural precipitation to maintain the engineered turf grass proposed for the diamond field.

A synthetic infill turf system was recently installed at Minnie Howard within the City and has successfully been used at facilities in New York City, Arlington County, Montgomery County, Fairfax County, and in the District. In addition to the environmental benefits of utilizing recycled materials and less irrigation, a benefit of the synthetic infill turf system is that the fields can provide more play time than engineered turf fields, meeting the high demand for practice and dedicated athletic field space throughout the City.

The proposed diamond field is made of engineered turf grass and is located at the far east of the site. The distance from home plate to the fence in the outfield is 265 feet. The field is oriented east west with home plate facing Telegraph Road. This orientation provides players and spectators with the best daylight conditions. In order for both softball and baseball to be played on the same field, temporary mounds can be moved accordingly to provide the appropriate distances between home plate and the pitcher’s mound for each sport.

***Lighting***

In order to meet the recreational needs of Alexandria’s citizens, and to improve evening play on the field, this proposal includes field lighting. All three fields are lighted with advanced technology sports lighting to eliminate light spill beyond the play fields and atmospheric glare. The proposed lighting will consist of up to six (6) pole-mounted field lights per field, with a height of seventy (70) feet. Locations for the light poles are indicated on the proposed site plan. Similar to Minnie Howard, the lights will be turned off at 10:30pm. Because the lights are seventy (70) feet tall, a special use permit is required as discussed in more detail below.

***Programming of the Fields***

As previously discussed, the fields are designed for multiple types of sporting events. The rectangular fields can accommodate rugby, football, soccer, field hockey, and lacrosse. The diamond field is designed for softball and baseball. The current athletic facilities in the City are in high demand and intensely scheduled. Below is a table that depicts the likely schedule for the proposed facility. The uses scheduled for the weekdays typically consist of youth school or club team events (Under 5 – Under 18). The night and weekend games are intended to be allocated for adults. Similar to other public open spaces and athletic fields, the facility will close at 10:30pm.

**Table 1. Program of Anticipated Scheduled Field Usage.**

Day	Time	Facility		
		Field 1	Field 2	Diamond Field
<b>March 1 – March 6</b>				
Monday – Friday	6PM – 10PM	2 games	2 games	
Saturday	9AM – 10PM	6 games	6 games	
Sunday	1PM – 7PM	6 games	6 games	
<b>March 7 – June 30</b>				
Monday – Friday	6PM – 10PM	2 games	2 games	
Saturday	8AM – 10PM	6 games	6 games	6 games
Sunday	1PM – 7PM	6 games	6 games	6 games
<b>July 1 – July 15</b>				

Monday – Friday	No scheduled games			
Saturday	8AM – 6PM			6 games
Sunday	1PM – 7PM			6 games
<b>July 16 – July 31 -----NO SCHEDULED SPORTS ACTIVITIES-----</b>				
<b>August 1 – August 31</b>				
Monday – Friday	6:30PM – 10:30 PM			Open Use
Saturday	8AM – 6PM			6 games
Sunday	1PM – 7PM			3 games
<b>September 1 – November 15</b>				
Monday – Friday	6PM – 10 PM	2 games	2 games	
	6:30PM – 10:30PM			Open Use
Saturday	8AM – 6PM	6 games	6 games	6 games
Sunday	1PM – 7Pm	6 games	6 games	6 games
<b>November 16 – February 28----NO SCHEDULED SPORTS ACTIVITIES</b>				

The schedule reflects the seasonal use of the fields for the different sports, as well as the ability to provide users adequate playing conditions. Engineered turf fields require respite periods between games and seasons in order to restore the engineered turf and maintain safe field conditions. The synthetic infill turf systems do not need this relief, and as a result provide the City with a higher capacity of continuing the current demanding game schedule. Additionally, because of the synthetic infill turf systems, the drainage for the rectangular fields is more effective than engineered turf; thus making them virtually all-weather. For these reasons, the rectangular fields are scheduled more often than the diamond field; however the schedule does not incorporate spontaneous use (i.e. pick-up games or unorganized recreation), which may occur when any of the three fields are free for play. During these unscheduled times, users may acquire reservations to use the fields.

### ***Building Design***

The proposal includes two open-air pavilions and one public restroom facility. One pavilion is on the far west side of the rectangular fields and the other is between the east rectangular field and the passive open space near the cemetery. The restroom is centrally located between the two rectangular fields.

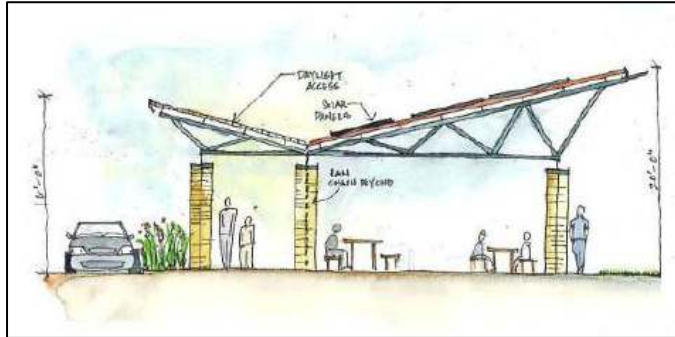


Figure 6. Elevation of Pavilion

There are no showers in the restrooms and the doors may be locked when the hours of operation conclude. The building height of the pavilions is approximately twenty feet and the restroom facility is approximately twenty-one feet. In accordance with Section 6-106 of the Zoning Ordinance, buildings over fifteen (15) feet high require a special use permit. The net square footage of all three buildings is 1,832 sq. ft. The buildings are too small for LEED certification; however substantial green building technologies are incorporated in the design and explained in further detail below.



Figure 7. Elevation of Restroom

### ***Environmental Design Elements***

As previously stated, the buildings are too small to qualify for LEED certification; however various green building technologies are incorporated in the design of the three structures. For instance, the roofs of the buildings will have solar panels or photovoltaic shingles; the use of natural daylight will reduce heat gain and provide lighting and passive solar shading in the restroom; recycled glass aggregate is in the concrete pavement for the foundation pads;

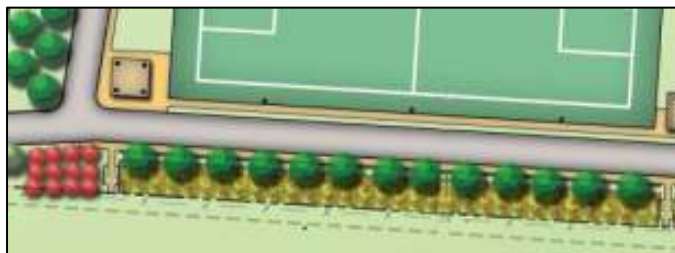


Figure 8. Bioretention Area South of Fields

low-voltage lights reduce the amount of electricity consumed; and rainwater is captured in roof crickets and fed into on-site bioretention areas instead of the stormsewer.

There are bioretention systems throughout the site. For example, the fields are essentially large stormwater basins that capture rainwater. Bioretention islands in the parking lot collect surface run-off, and a series of rain gardens are provided along the southern property line. The rain gardens are intensely planted with indigenous plant species that will help absorb and filter the water. The proposed indigenous plantings also reduce establishment time and long-term maintenance. These techniques substantially reduce the amount of rainwater runoff. Interpretive areas will be placed in the large bioretention areas to explain the environmental goals and processes to the public.

To aid slope retention, reforestation techniques and quickly naturalizing native groundcovers are proposed on steep slope areas. Existing vegetation will also be preserved to the extent possible.

### ***Cemetery and Passive Open Space***

The project area has two archaeological sites and both were disturbed by the property's previous uses. The first archaeological site has Native American artifacts dating back approximately 3000 years; the other is the Bloxham family cemetery on the eastern portion of the site. Both the cemetery and the area with the Native American artifacts will continue to be protected below approximately fifteen (15) feet of existing fill grade. The cemetery is to be preserved and protected throughout the development process and memorialized for guests of the park to better understand the historical and cultural significance of the site. Two archaeological investigations verified that twelve (12) graves exist in the unmarked cemetery. During the first investigation, the remains of one family member, thought to be William Whaley were recovered and removed. Plans call



Figure 9. Archaeological Dig of Cemetery

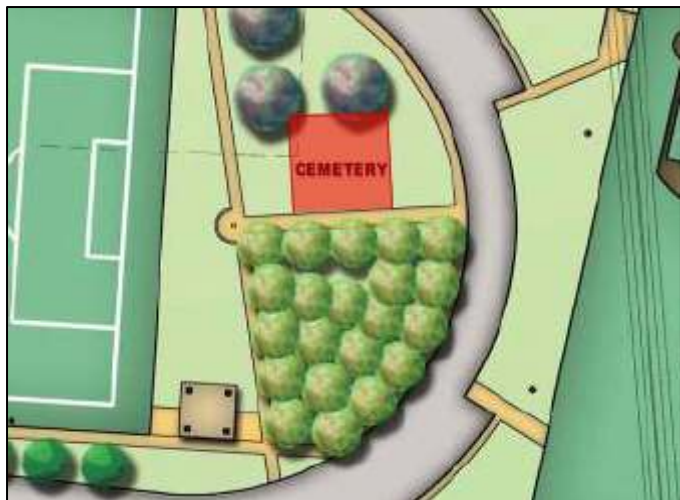


Figure 10. Cemetery Site Location

for the reinturnment of the remains and artifacts, such as coffin hardware, before development of the athletic fields. Each grave will be marked, and interpretive panels will provide historical information about the extended Bloxham family, the archaeological findings, and the area in general.

The fields and infrastructure of the project have been designed to protect the cemetery with a buffer zone, which will be delineated by a decorative metal fence and interpretive markings within a passive open space area. The passive open space area is south of the cemetery and will have a small grove of canopy trees that will also provide shade refuge for players and spectators between games.

### ***Pedestrian Amenities***

The proposed project includes pedestrian circulation throughout the site. A one-half mile loop begins at the park entrance, wraps around the rectilinear fields, and connects to Witter Drive. All of the sidewalks are a minimum of six (6) feet wide to enable two users to walk side-by-side. Seating such as picnic tables is provided in both pavilions and a seatwall is incorporated within the passive open space area east of the rectangular fields. Interpretive signage in the cemetery and the bioretention areas provide educational opportunities to pedestrians. Attractive landscaping and shaded walkways are also incorporated in the design of the proposal.

### ***Parking***

The VDOT contract specifies that a maximum of 145 parking spaces may be provided on the site. The project proposal includes a total of 141 on-site surface parking spaces, including six handicap accessible spaces. The parking is located in two areas on the site; one west of the rectangular fields and the other east of the cemetery and passive open space. The Zoning Ordinance does not contain any specific parking requirements for outdoor athletic fields. However, the amount of parking provided on-site should be sufficient to accommodate parking necessary for the typical events at the facility, based on parking provided at other similar facilities in the City. Additionally, should larger events occur, spillover parking is available along the south side of the access road that circulates around the site. For further information on parking, see Traffic and Parking under Staff Analysis below.

In addition, staff utilized topography to create screening between the fields and the west parking lot in order to obstruct light-shed on the fields from car headlights. Various sustainable design technologies are also incorporated in the parking area, including large planting islands with bioretention areas.

## IV. ZONING – MASTER PLAN

### A. *History*

Prior to the site's annexation in 1952, the land was a part of Fairfax County. Once annexed by the City, the property was zoned Industrial 2 (I-2) and maintained this classification through the 1960s and 1970s. This zone allowed heavy industrial uses and all uses permitted in the I-1 zone. The I-1 zone included such uses as light manufacturing, storage, warehousing and distribution, and commercial development such as office, retail and services. With a Planned Unit Development, residential dwellings could also be developed on I-1 and I-2 zoned land.

In 1992, with the adoption of the Taylor Run/Duke Street Small Area Plan and the updates of the Zoning Ordinance, the site was zoned Industrial (I). This change combined all the previous industrial areas into one common zone. Today, this zone permits developments that include service, distribution, manufacturing, wholesale, and storage facilities at low densities.

Public recreational facilities, such as those being proposed are only permitted in the Public Open Space and Community Recreation Zone. This application includes a request for rezoning the property to POS Zone.



Figure 11. Current Zoning of Site and Surrounding Areas

- Commercial
- Townhouse
- Public Open Space and Community Recreation
- Office/Commercial Medium
- Apartment/Multi-Family
- Industrial
- Utility

Property Address: 2600 Business Center Drive			
Total Site Area: 13.7 acres or 566,280 sq. ft.			
Zone: I – Industrial (POS proposed)			
Current Use: Vacant			
Proposed Use: Active fields, lighting, and associated parking			
	<u>Existing (I zone)</u>	<u>Proposed (POS zone)</u>	<u>Provided</u>
<b>FAR</b>	0.85 (1.25 maximum with SUP)	N/A	N/A
<b>Yards*</b>			
Front Yard	N/A	N/A	N/A
Rear Yard	N/A	20 foot setback if adjacent to residential lot	N/A, not adjacent to residential
Side Yard	N/A	20 foot setback if adjacent to residential lot	N/A, not adjacent to residential
<b>Height</b>	50 feet	15 feet (30 feet with SUP, 40 feet if ornamental structure)	22 feet for pavilion, 16 feet for bath house, 70 feet for lights***
<b>Open Space</b>			
Ground Level	N/A	N/A	81.70%
Above Grade	N/A	N/A	N/A
<b>Parking**</b>			
Compact	N/A	N/A	0
Standard	N/A	N/A	135
Handicapped	N/A	N/A	6
Total	N/A	N/A	141****

\*Yard requirements apply only to single family, two family, and townhouse dwellings.

\*\*There are no parking provisions in the Zoning Ordinance for outdoor athletic fields.

\*\*\*Special Use Permit requested.

\*\*\*\*Up to 20 additional overflow parking spaces available along the south drive.

### ***B. Section 9.06 Approval History***

Section 9.06 of the City Charter requires the Planning Commission to review and approve at public hearing any acquisition or sale of public land and any change in streets, squares, parks, public buildings or spaces in order to ensure that any such acquisition, sale, or change is consistent with the City’s Master Plan. In the spring of 2005, the Planning Commission approved the Section 9.06 and approved a recommendation to purchase the



13.7-acre property located at 2600 Business Center Drive for use as outdoor recreational fields. Funds for the purchase of the land came from the mitigation package established by the Woodrow Wilson Bridge settlement agreement.

### ***C. Alexandria Open Space Plan***

The Alexandria Open Space Plan was adopted in 2002 in order to define a comprehensive vision for the enhancement and protection of Alexandria's green and open spaces. As the population increases and the City continues to develop, the need for open space and recreational areas intensifies. The plan includes fifteen goals, several of which are achieved in conjunction with this development proposal. In particular, progress towards the following goals is addressed with the development of the proposed athletic fields and passive park uses:

*Goal: Seize opportunities quickly when land suitable for open space usage becomes available, including developed commercial or industrial land that could be converted to open space uses.*

*Goal: Develop innovative opportunities for creating additional open space.*

A unique opportunity was created with the Woodrow Wilson Bridge settlement agreement that allowed the City to acquire the property for open space and recreational use.

*Goal: Create an open space network in new development areas.*

Directly adjacent to the "green crescent", the property provides an opportunity to connect to a network of other open space/park areas nearby; such as Angel Park/Taylor Run to the north; the Masonic Temple to the east; Luckett Park and Ben Brenman Park to the west; and other parks along Cameron Run.

*Goal: Preserve and protect cemeteries.*

The preservation of the Bloxham Family cemetery on the site will be one of the features of the passive area of the park. As an educational and cultural resource, the cemetery will be memorialized with attractive ornamental fencing, landscaping and interpretive signage for the community to enjoy.

*Goal: Create public open space from vacant land.*

The creation of an open space amenity at this location will result in a much needed public open space with active and passive recreational uses at a convenient location for the residents of the City to enjoy. The City of Alexandria's existing stock of athletic fields does not currently meet the demand for a variety of field sports. The proposed

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development of athletic fields and open space at 2600 Business Center Drive will provide the City of Alexandria an opportunity to improve the low inventory of athletic fields and better meet the needs of its multiple field users.

## V. STAFF ANALYSIS

### A. *Master Plan Amendment and Rezoning*


The proposal requires an amendment to the Taylor Run/Duke Street Small Area Plan chapter of the Master Plan to change the land use designation of the property from the Industrial (I) zone to Parks and Recreation (P). The proposed rezoning would revise the property from the Industrial (I) zone to the Public Open Space and Community Recreation (POS) zone. The result of the Master Plan amendment and rezoning would be a technical implementation of the Alexandria Open Space Plan to clarify the land use designation from industrial to public open space. The Alexandria Open Space Plan recognizes the site as a potential open space site. Staff recommends approval of the Master Plan Amendment and Rezoning of the property from the I zone to the POS zone.

### B. *Coordination with Adjoining Development*

A conceptual site plan has been submitted to relocate the existing animal hospital to the north of the site. As part of the conceptual review of the proposal, staff has discussed with the adjoining property owners the possibility of realigning Witter Drive in coordination with the access and internal street for the park.



Conceptually, the property owners have agreed to the extension of

Figure 12. Possible Future Extension of Witter Drive 

Witter Drive, which would include a future land exchange between the City and the property owner and subsequent approval by City Council. The extension of Witter Drive will enable the relocation of the eastern access point of the park farther to the east away from the multi-purpose fields, which will improve the condition between the fields and the road, provide more open space on this site, and improve the northern frontage of the property. The park functions without the extension of Witter Drive, however the extension will enable an enhanced point of access and more open space to the park. Additionally, the adjoining property owners have been coordinating with the City to contribute towards a signal at the intersection of Witter Drive and Duke Street. A traffic signal at Witter Drive will enable west-bound traffic on Duke Street to access the commercial sites as well as Witter Fields more easily in the future.

### ***C. Overhead Utilities***

One of the staff discussions for the proposal has been the relocation of overhead utilities below grade. There are existing overhead utilities located on the northern portion of the site on Witter Drive. Since the project is funded through VDOT and FHWA monies, the City would pay the cost of placing the utilities below grade if it were done as part of this project. Given the adjoining primarily commercial and industrial uses, staff is not recommending that the utilities be located below grade as part of this application. However, if some of the commercial or industrial uses redevelop, which as discussed above is a possibility, some of the utilities could be located below grade as part of the redevelopment proposals and/or a future CIP project if the character of the neighborhood changes considerably in the future.



Figure 13. Utilities along Witter Drive

### ***D. Duke Street Median***

One of the traffic improvements proposed as part of the project is to increase the length of the left turn lane at Duke Street and Witter Drive to enable additional stacking for cars making left turns onto Witter Drive. The proposed extension of the left turn lane will remove approximately four existing trees located in the current fifteen (15) foot wide median. Due to the current width and amount of paving on Duke Street, staff is concerned with this loss of trees, which at present reduce the perceived width of Duke Street and create a green entrance to the park and commercial properties. Staff has explored the possibility of creating a wider median to provide street trees. However, due to the width of the median, it may not be possible to provide street trees within the median. Instead, staff recommends landscaping and groundcover be provided within the median. Also, because of the increased traffic at this location, staff recommends that pedestrian count-down signals be provided on the south side of Duke Street at Witter Drive.

### ***E. Building Height Special Use Permit***

The proposed rezoning to the POS zone requires that building heights and other structures without a special use permit be limited to fifteen (15) feet high. This type of

height limitation is appropriate for typical structures in open spaces; however the zone also includes permission to increase height to a maximum of thirty feet depending on locational and functional context. The proposed pavilions and restroom are approximately twenty-two (22) feet and sixteen (16) feet in height to the top of the roof. The structures are substantially setback from Witter Drive and somewhat secluded from other buildings that would otherwise influence a need for height compatibility. The increase in height is caused by the roof form of the buildings, which is based on green building technologies. The offset butterfly roof form incorporates daylight access and solar panels. The intent of the lower height requirements within the POS zone was to ensure that the scale of buildings is compatible with other park uses permitted within the zone. Clearly these buildings are typical height for park pavilions and the primary reason the buildings are taller than the 15 ft permitted is that the roof is designed to channel rainwater into a nearby rain garden. Staff supports the increased building height due to the City’s commitment to innovative utilization of sustainable design, as well as the locational and functional context of the structures.

***F. Lighting Special Use Permit***

The height of the proposed athletic field lights is seventy (70) feet, which requires a special use permit. The reason for the height is due to the functionality of the athletic lighting. The taller the light, the better the lighting and the more effective the full cut-offs are in reducing the amount of light spill-over onto adjoining properties (see table). Lowering the athletic field light poles increases light spill, increases the quantity of poles, and increases the quantity of fixtures. The lower the pole, the less cutoff one gets from the fixtures.



Figure 14. Athletic Field Lighting

**Table 2. Illumination Measurements of Light Spillover at Minnie Howard**

Location	Foot-candles* (fc)
Ten (10) feet from turf surface (@ spectator fence)	3.9 fc
Fifteen (15) feet from turf surface (behind light poles)	1.00 fc
Thirty (30) feet from turf surface (behind light poles)	0.35 – 0.50 fc

*\*Foot-candles are a measurement of the intensity of light falling on a surface, equal to one lumen per square foot and originally defined with reference to a standardized candle burning at one foot from a given surface.*

Only a portion of the proposed lights will be visible from Duke Street because of the 10-40 foot grade difference from Duke Street to the fields. The proposed lights are also 300 feet from the nearest residential uses on the other side of Duke Street and approximately 500 to 700 feet from the nearest residential uses to the south across the rail corridor. Due to the change in topography, the light cut offs, and the distance from the adjoining residential uses staff is recommending approval.

### ***G. Traffic and Parking***

Due to the area in which the project is located and the proposed use, a traffic and parking study was conducted by A. Morton Thomas and Associates (AMT) (July 2007). The parking study determined existing and future traffic conditions as well as recommendations to mitigate any traffic impacts. The parking study was done to determine if the number of proposed parking spaces on the site is adequate to meet the needs of the future users of the site.

The traffic study considered the number of days during the week, the number of games on a daily basis, as well the times of the year the fields are available. The proposed recreational fields are for use during the weekdays and weekends. The majority of the games will be played on the weekends, with about twelve to eighteen games scheduled for Saturdays and six to nine games on Sundays. A typical weekday schedule will include four games.

For the purpose of the traffic study, a 30/70 drop-off/pick-up versus arrive and remain scenario was considered for analysis. For instance, thirty-percent (30%) of the people will be drivers dropping off park users, and seventy-percent (70%) of the drivers will remain on-site. Therefore, it is anticipated that the proposed site will generate 91 new evening peak hour weekday trips (70 in and 21 out) and up to 137 peak hour weekend trips (105 in and 35 out).

The trips generated by the proposed development were then converted into a Level of Service (LOS). LOS is a quantitative measurement describing operational conditions within a traffic stream. LOS is based on measures such as travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. The values range from A to F. LOS A, is considered the best. Values from B to E represent increasing levels of delay. LOS F is considered the worst level and indicates unacceptable delays.

Traffic analysis results (summarized in the table below for key area intersections) indicate that the proposed development on this parcel will ***not significantly*** change traffic conditions on Duke Street. However, improvements recommended mitigating the impacts of the site and other developments include the installation of a new traffic signal at the intersection of Duke Street and Witter Drive and the extension of the westbound left-turn storage lane on Duke Street at Witter Drive.

**Table 3. Comparison of Peak Hour Traffic Conditions**

Intersection	Existing Conditions (2007)		Future Conditions (2010)	
	LOS (delays in seconds/vehicle)			
	AM	PM	AM	PM
Duke Street and West Taylor Run Parkway	C (28.3)	C (31.6)	C (30.9)	C (33.6)
Duke Street and Witter Drive	Stop Controlled		B (12.8)	B (14.8)
Duke Street and Roth Street	B (28.5)	B (25.3)	C (38.5)	C (32.0)

As part of the traffic study, a signal warrant analysis was conducted at the intersection of Duke Street and Witter Drive for both existing and future conditions. The analysis concluded that future conditions warrant a signal at this location. The traffic signal will be installed in conjunction with construction of recreational fields. The cost of the signal will be offset by contributions from future development; i.e. the Alexandria Animal Hospital and the LandRover dealership.

The specified number of parking spaces outlined in the Woodrow Wilson Bridge settlement agreement was based on the parking spaces included with the previously proposed large urban deck. The parking study was based on existing conditions, the projected trip generation for the facility, and the types of uses proposed for the facility. Based on a 30%/70% scenario, the number of parking spaces need for the site would range from 49 to 147 spaces. For special events where the ratio may be higher (20%/80%), the study found that the number of parking spaces needed was a range of 56 to 168. To address this potential shortfall, a mountable curb has been provided along the south side of the loop road for overflow parking if needed.

Additionally, in comparison to other City facilities with similar programs and schedules (Table 4), staff supports the proposed number of parking spaces.

**Table 4. Parking Spaces Provided at Similar Facilities within the City**

Location	Program	Parking Spaces
Ben Brenman Park	2 diamond fields, 1 multi-purpose field	132
Boothe Park	1 diamond field, 3 multi-purpose play courts	127
Simpson Fields	2 diamond fields, 2 tennis courts, 1 basketball court	77 (shared with YMCA)

**H. Community**

Over the past two years, the applicant and staff conducted public meetings with various community organizations. Several community and public meetings have been held to discuss the project (see table).

**Table 5. Community and Public Meetings to Date.**

June 7, 2005	City Charter, Section 9.06; Case #2005-0001 – Planning Commission Hearing
June 16, 2005	Public Information Meeting/Land Acquisition – Park & Recreation Commission Public Hearing
July 21, 2005	Location & Design/Land Acquisition - Park & Recreation Commission Public Hearing
October 26, 2006	Progress on Site Design - Park & Recreation Commission Update
November 16, 2006	Fields at Witter Drive – Park & Recreation Commission Public Hearing
March 15, 2007	Progress on Site Design – Park & Recreation Commission Update
April 30, 2007	Progress on Site Design – Park & Recreation Commission Public Hearing
June 14, 2007	Public Information Meeting, Bishop Ireton High School
September 24, 2007	Public Information Meeting, Bishop Ireton High School

The proposal has evolved to achieve a site plan that respects the environment, meets the challenges of the site, and provides the public with the much-needed open space, athletic facilities, and community recreation. The proposed project has been positively received and the community input has helped to considerably improve the proposal.

The Park and Recreation Commission has since determined that the application is in line with the intent of the City’s Master Plan and Open Space Plan, as well as satisfactorily addresses the aforementioned desires and concerns of the community (see attachment).



## VI. CONCLUSION

Staff recommends *approval* of the DSUP for the construction of recreational fields, lighting, the Master Plan amendment, and the rezoning of industrial zoned land to public open space subject to compliance with all applicable codes and the following recommended conditions.

Staff: Faroll Hamer, Director, Planning and Zoning;  
Jeffrey Farner, Chief, Development;  
Gary Wagner, Principal Planner, P&Z;  
Colleen Rafferty, Urban Planner, P&Z;  
Ron Kagawa, Landscape Architect, RP&CA; and  
Laura Durham, Open Space Coordinator, RP&CA;

## **VII. STAFF RECOMMENDATIONS**

Staff recommends **approval** subject to compliance with all applicable codes and ordinances and the following conditions:

### **PEDESTRIAN IMPROVEMENTS:**

1. The level of pedestrian improvements shall be provided as depicted on the preliminary site plan dated July 20, 2007 and shall also provide the following to the satisfaction of the Directors of RP&CA, P&Z and T&ES:
    - a. Revise the main entrance on Witter Drive by shifting the drive aisle approximately five feet to the west to provide the following:
      - i. A 5 ft. wide landscape strip adjacent to the drive aisle, a 6 ft wide continual concrete sidewalk and a 10 ft. landscape strip between the sidewalk and the retaining wall.
      - ii. A continual row of street trees shall be provided along the west entrance.
      - iii. A city standard stone and precast concrete park sign shall be along the entrance drive aisle.
    - b. The design of the median at the intersection of Duke Street and Witter Drive shall be further explored to support street trees or other landscaping and/or groundcover.
    - c. Pedestrian count down signals shall be provided on the south side of Duke Street at the signalized intersection. Install PRISMA DAPS accessible buttons for the pedestrian crossing.
    - d. Provide a pedestrian crosswalk across Witter Drive at the entrances to the park. Ensure that the sidewalks on both sides of the streets are ADA compliant.
    - e. The sidewalk to the south of the cemetery shall be a minimum 8 feet wide and shall be a special paving material.
    - f. Provide a concrete sidewalk on the east side of the west parking lot. The sidewalks located in the bioretention areas in the west parking lot shall be reduced in width in an effort to reduce impervious areas.
    - g. Extend the sidewalk on the south side of the eastern access drive to provide pedestrian access to the baseball field.
    - h. All pedestrian crosswalks shall be a stamped asphalt crosswalk within the site.
    - i. Final dimensions for all of the above shall be determined at Final Site Plan to the satisfaction of the Directors of P&Z, T&ES, and RP&CA.
- General*
- j. Sidewalks shall be a minimum of six feet wide, made of concrete, and shall conform to City Standards.

- k. Americans with Disability Act (ADA) ramps shall comply with the requirements of Memorandum to Industry No. 03-07 on Accessible Curb Ramps dated August 2, 2007 with truncated domes on the end of the ramp with contrasting color from the rest of the ramp.
  - l. Provide all pedestrian and traffic signage in accordance with the *Manual of Uniform Traffic Control Devices* (MUTCD), latest edition to the satisfaction of the Director of T&ES.
  - m. The trash cans shall be City standard black decorative street trash cans.
  - n. All raised speed tables shall be stamped asphalt. (RP&CA)(P&Z)(T&ES)
2. Provide ten (10) bicycle parking spaces on-site to the satisfaction of the Director of T&ES. (T&ES)

**LANDSCAPING:**

3. A revised landscape plan shall be provided with the final plan submission to the satisfaction of the Directors of P&Z and RP&CA. At a minimum the plan shall provide the amount, location and quantity of landscaping depicted on the preliminary landscape plan and shall also provide the following:
- a. The street trees adjacent to Witter Drive shall be selected in consultation with the City Arborist.
  - b. Seasonal landscaping shrubs and plantings shall be provided at each entrance in conjunction with site signage.
  - c. Explore the use of naturalizing with wild flowers or native groundcovers under the grove of Maples south of the cemetery to reduce long term maintenance.

***General***

- d. Develop a landscape plan in compliance with City of Alexandria Landscape Guidelines as amended April, 2007 that emphasizes use of indigenous/native trees, groundcovers and other plantings.
- e. Provide a site irrigation/water management system designed to the satisfaction of the Directors of RP&CA and T&ES.
- f. Delineate location and species of existing vegetation to remain on-site and along Duke Street on site demolition, sediment/erosion control and landscape plans. In compliance with City of Alexandria Landscape Guidelines, protection measures for vegetation to remain shall be approved by the City Arborist.
- g. Develop a palette of design components and elements that provides for public interpretation of proposed best management practice/bioretention facilities and water quality systems. (RP&CA)(P&Z)

**ATHLETIC FIELDS:**

4. Infill synthetic turf system shall implement a manufacturer and product type(s) specified in the City's preapproved/prequalified vendor/product list. (RP&CA)
5. Field underdrainage, turf systems and associated components for rectangular and diamond fields shall be designed to the satisfaction of the Director of Recreation, Parks & Cultural Activities and Transportation & Environmental Services. (RP&CA)
6. Coordinate site improvements in a manner that ensures adequate maintenance access for athletic fields. (RP&CA)
7. Perimeter safety fence for rectangular and diamond fields shall be designed and located to the satisfaction of the Director of Recreation, Parks and Cultural Activities. All fencing material shall be dark green vinyl-coated. (RP&CA)(P&Z)
8. Rectangular field areas shall incorporate a washdown system with one hose bib at each location. (RP&CA)
9. Diamond field dugouts/team shelters and scoring box spectator area shall be designed to the satisfaction of the Director of Recreation, Parks and Cultural Activities. Bleacher seating shall be of quality and quantity consistent with other similar City facilities. (RP&CA)
10. Scoreboard shall be illuminated and designed to the satisfaction of the Director of RP&CA. (RP&CA)

**PARKING:**

11. The design and allocation of parking shall be subject to the following to the satisfaction of the Directors of P&Z, T&ES, and RP&CA:
  - a. Parking shall be provided per the Woodrow Wilson Bridge Settlement Agreement.
  - b. Handicap parking spaces shall be properly signed and identified as to their purpose in accordance with the USBC and the Code of Virginia. Parking within any space identified as a handicap parking space shall be limited to only those vehicles which are properly registered to a handicap individual and the vehicle displays the appropriate license plates or window tag as defined by the Code of Virginia for handicap vehicles. The reduction or increase of any handicap parking space shall only be approved through an amendment to the approved site plan.

- c. Provide a parking management plan that outlines construction parking for the entire project prior to the release the final site plan. Employee parking shall not be permitted on adjacent public streets. (P&Z)

**SITE PLAN:**

12. Explore modification of geometry to accommodate turning movements at the eastern entrance on Witter Drive to the satisfaction of the Directors of T&ES, RP&CA and P&Z. (P&Z)
13. As part of the request for a certificate of occupancy permit, a building and site location survey shall be submitted to the Department of P&Z for all site improvements. A certification of height for the building shall also be submitted as part of the certificate of occupancy for each building(s). The certification shall be prepared and sealed by a registered architect and shall state that the height of the building complies with the height permitted pursuant to the approved development special use permit and that the height was calculated based on all applicable provisions of the Zoning Ordinance. (P&Z)
14. Depict and label all utilities and the direction of service openings on above grade utilities such as transformers. As part of the final site plan, the applicant shall coordinate with all applicable utility companies the amount, type and location of all utilities on the final site plan. (P&Z)(RP&CA)
15. A note shall be added to the plan that a temporary informational sign shall be installed on the site prior to construction for the project and shall be displayed until construction is complete; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project. (P&Z)(T&ES)
16. The applicant shall prepare and submit a plan that delineates a detailed construction management plan for the entire project for review and approval by the Directors of P&Z, T&ES, and Code Enforcement prior to the release the final site plan. Before commencing any clearing or grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners to explain the plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. Copies of plans showing the hauling route, construction worker parking, and temporary pedestrian and vehicular circulation and temporary construction trailer location shall be posted in the construction trailer and given to each subcontractor before they commence work. (P&Z) (T&ES)

17. Temporary construction trailers shall be permitted and be subject to the approval of the Directors of P&Z, T&ES, Code, and RP&CA. The trailer(s) shall be located on the final site plan and removed prior to the issuance of a certificate of occupancy permit for the park. (P&Z) (T&ES) (Code) (RP&CA)
18. Site walls shall be comprised of an open cell vegetation system such as “Geogrid” cell system. Provide top of wall and bottom of wall spot elevations for all walls and detail design sections through all site retaining walls. A separate building permit is required for retaining walls. A safety barrier shall be provided on top of the retaining walls where required by applicable codes. Detail(s) shall be submitted at Final Site Plan. (RP&CA) (Code) (P&Z)
19. Locate and design entrance gates and emergency/security access man-gates along the south property line to the satisfaction of the Directors of RP&CA and T&ES and Code Enforcement. (RP&CA)
20. Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES, P&Z, and RP&CA, in consultation with the Chief of Police and shall include the following:
  - a. Clearly show location of all existing and proposed street lights and site lights, shading back less relevant information;
  - b. A lighting schedule that identifies each type and number of fixtures, mounting height, and strength of fixture in Lumens or Watts;
  - c. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s), and security lighting.
  - d. A photometric plan with lighting calculations that include all existing and proposed light fixtures, including any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all the adjacent streets and/or 20 feet beyond the property line on all adjacent properties, and right-of-way. Show existing and proposed street lights and site lights.
  - e. Photometric site lighting plan shall be coordinated with architectural/building mounted lights, site lighting, street trees and street lights and minimize light spill into adjacent residential areas.
  - f. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
  - g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be flush to grade except as required to the satisfaction of the Directors of T&ES, P&Z, and RP&CA)
  - h. The lighting for the areas not covered by the City of Alexandria’ standards

shall be designed to the satisfaction of Directors of T&ES and P&Z.

- i. Provide numeric summary for various areas (i.e., roadway, walkway/sidewalk, alley, and parking lot, etc.) in the proposed development.
- j. Provide site lighting that illuminates the flagpole and flag(s).
- k. Develop athletic field lighting systems that include sharply cut-off/hooded light fixtures to minimize light spill onto adjacent properties and atmospheric glare. (RP&CA) (T&ES)(P&Z)

### **BUILDING:**

21. Restroom building and park pavilions shall be programmed and constructed of materials and at a scale and dimension generally consistent with information shown in the Preliminary Plan submittal. The building heights shall be consistent with the POS Zone. (RP&CA) (P&Z)
22. Provide hose bibs on the east, west, south and north sides of the restroom building. Provide one hose bib at each park pavilion. Provide one hose bib at each dugout/team shelter and at the scoring box for the diamond field. (RP&CA)
23. Provide exterior space for dedication plaque and solar power interpretive equipment on south side of restroom. (RP&CA)

### **STREETS AND TRAFFIC:**

24. All driveway entrances, sidewalks, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
25. A minimum of 30 feet separation between beginning of street corner radius and any driveway apron radius shall be maintained. Additional curb cuts at this location are not recommended since these will impede traffic flow. (T&ES)
26. If the curb, gutter, and side walk are in a state of disrepair adjacent to the proposed development or are damaged during construction then the applicant shall repair the same to the satisfaction of Director, Transportation and Environmental Services. All improvements to the City's, including but not limited to, curb, gutter, sidewalk, and driveway aprons, and patch work required for utility installation, etc., shall be designed and constructed as per the City of Alexandria standards and specifications. (T&ES)
27. Construct/install missing public infrastructure, including but not limited, to streets, alleyways, sewers, street lighting, traffic and pedestrian signals, sidewalks, curb and gutter, and storm water drop inlet structures. (T&ES)
28. Install and maintain accessible pedestrian crossings, where applicable. (T&ES)

29. All streets must comply with the City's Minimum Standards for Streets. (T&ES)
30. As a part of the final site plan, provide a Traffic Control Plan for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging. (T&ES)
31. All Traffic Control Device design plans, Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)
32. The design of parking spaces and facilities shall be completed as per the requirements of the City of Alexandria Zoning Ordinance § 8-200. Show turning movements of standard vehicles in the parking lots. The turning movements shall meet AASHTO vehicular guidelines and shall be to the satisfaction of the Director of T&ES. (T&ES)

### **ARCHAEOLOGY:**

33. Develop a palette of design components and elements that provides for public interpretation of existing cultural resources on site.
34. The buffer for the cemetery shall be 10 to 25 feet on the south, east and west sides, and 45 feet on the north side.
35. The plan shall show a temporary construction fence surrounding the buffer zone around the cemetery. The plan must indicate that this is an archaeologically sensitive area.
36. The plan shall indicate the location of the previously identified prehistoric site.
37. The following statements shall appear in the General Notes of all site plans and on all site plan sheets that involve demolition or ground disturbance (including sheeting and shoring and grading) so that on-site contractors are aware of the requirements:
  - a. All archaeological preservation measures shall be completed prior to ground-disturbing activities (such as coring, grading, filling, vegetation removal, undergrounding utilities, pile driving, landscaping and other excavations as defined in Section 2-151 of the Zoning Ordinance). To confirm, call Alexandria Archaeology at (703) 838-4399.
  - b. Call Alexandria Archaeology immediately (703-838-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work shall



cease in the area of the discovery until a City archaeologist comes to the site and records the finds.

38. To insure that significant information is not lost as a result of the current development project, the applicant shall hire an archaeological consultant to complete an Archaeological Evaluation in the areas where ground disturbance will go to the depths where significant resources could be present. (This includes areas within the cemetery buffer zone where ground disturbance will penetrate to depths below 37.5 feet above sea level, areas within the previously identified prehistoric site where ground disturbance will penetrate to depths below 39 feet above sea level, and areas to the east of the culvert where ground disturbance will penetrate to depths below 44 feet above sea level.) Contact Alexandria Archaeology to obtain the scope of work for this investigation. If significant resources are discovered, the consultant shall complete a Resource Management Plan, as outlined in the *City of Alexandria Archaeological Standards*. Preservation measures presented in the Resource Management Plan, as approved by the City Archaeologist and federal and state regulators, will be implemented.
39. To insure continued protection of the cemetery shall include a historically appropriate, permanent fence surrounding the cemetery area and buffer zone. Interpretive markers shall be erected in this area, according to specifications provided by Alexandria Archaeology and the Department of Recreation. The markers will highlight the historical and archaeological significance of the property. An archaeological consultant will provide information on appropriate fencing and the identification of people possibly buried in the cemetery, and will provide text and images for the signs.
40. The contractor shall call Alexandria Archaeology immediately (703-838-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work shall cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
41. The archaeological consultant will produce a booklet for the public on the history and archaeology of the property, according to specifications provided by Alexandria Archaeology.
42. The final site plan shall not be released until the City archaeologist confirms that all archaeological field work has been completed or that an approved Resource Management Plan is in place.

**STORMWATER:**

43. Per the requirements of the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site. If the existing storm system is determined to be inadequate then the applicant shall design and build on-site or off-site improvements to discharge to an adequate outfall; even if the post development storm water flow from the site is reduced from the pre-development flow. The Plan shall demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)
44. Per the requirements of the City of Alexandria Zoning Ordinance (AZO) Article XXII, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan so that from the site, the post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of the Zoning Ordinance shall be met. (T&ES)
45. Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer outfall as per the requirements of Memorandum to the industry on Downspouts, Foundation Drains, and Sump Pumps, Dated June 18, 2004 that is available on the City of Alexandria's web site. The downspouts and sump pump discharges shall be piped to the storm sewer outfall, where applicable after treating for water quality as per the requirements of Article XIII of Alexandria Zoning Ordinance (AZO). (T&ES)
46. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
47. All storm sewers shall be constructed to the City of Alexandria standards and specifications. The minimum diameter for storm sewers shall be 18-inches in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead shall be 15". The acceptable pipe material will be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. For roof drainage system, Polyvinyl Chloride (PVC) ASTM 3034-77 SDR 35 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.5 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public Right of Way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public Right of Way shall be owned and maintained privately). (T&ES)

48. In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. (T&ES)
49. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility. Any deviation from these requirements must be addressed by the submission of a formal exception letter to the City of Alexandria as described in Memorandum to Industry #2002-0001. (T&ES)
50. Provide BMP narrative and complete pre and post development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Worksheet A or B and Worksheet C, as applicable. (T&ES)
51. The storm water Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to release of the performance bond, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:
  - a. Constructed and installed as designed and in accordance with the approved Final Site Plan.
  - b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. (T&ES)
52. Surface-installed storm water Best Management Practice (BMP) measures, i.e. Bio-Retention Filters, Vegetated Swales, etc. that are employed for this site, require installation of descriptive signage to the satisfaction of the Director of T&ES. (T&ES)
53. A storm water quality BMP Maintenance Agreement shall be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan. (T&ES)

54. Prior to release of the performance bond, a copy of the Operation and Maintenance Manual shall be submitted to the Division of Environmental Quality on digital media. (T&ES)
55. Prior to release of the performance bond, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations and that they are functioning as designed and are unaffected by construction activities. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. (T&ES)
56. The storm water collection system is located within the Holmes Run watershed. All on-site storm water curb inlets and public curb inlets within 50 feet of the property line shall be duly marked using standard City markers, or to the satisfaction of the Director of T&ES. (T&ES)
57. The final site plan shall not be released, and no construction activity shall take place until the following has been submitted and approved by the Director of T&ES:
  - a. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
  - b. Submit a Risk Assessment indicating any risks associated with the contamination.
  - c. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors. "Clean" backfill shall be used to fill utility corridors.
  - d. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment.
  - e. Applicant shall submit 5 copies of the above. The remediation plan must be included in the Final Site Plan. (T&ES)

**MISCELLANEOUS:**

58. The applicant shall provide storage space for solid waste and recyclable materials containers as outlined in the City's "*Solid Waste and Recyclable Materials Storage Space Guidelines*", or to the satisfaction of the Director of Transportation & Environmental Services. The City's storage space guidelines and required Recycling Implementation Plan forms are available at: [www.alexandriava.gov](http://www.alexandriava.gov) or contact the City's Solid Waste Division at 703-519-3486 ext.132. (T&ES)

59. Show all existing and proposed public and private utilities and easements. (T&ES)
60. The applicant shall relocate the overhead utility poles, where necessary due to interferences and/or accessibility requirements. (T&ES)
61. The site is located on marine clay areas as delineated on the City map of marine clay areas. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments. (T&ES)
62. Any structural elements that extend into public right-of-way, including footings, foundations, etc., shall be approved by the Director of T&ES. (T&ES)
63. A “Certified Land Disturber” (CLD) shall be named in a letter to the Division Chief of C&I prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheets on the site plan. (T&ES)
64. During the construction phase of this development, the applicant, their contractor, certified land disturber, or other agent shall implement a waste and refuse control program. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of Transportation and Environmental Services and Code Enforcement. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. (T&ES)

## CITY DEPARTMENT CODE REQUIREMENTS

Legend: C – code requirement R – recommendation S – suggestion F - finding

### Archaeology:

- F-1 Archaeological investigations were conducted in 1989 and 2004 on the property to be developed into the Witter Recreational Center. The work resulted in the identification of two archaeological sites registered with the Virginia Department of Historic Resources: 44AX 127 -- Native American site with a hearth, perhaps dating as early as 1000 B.C., and 44AX128 -- Bloxham Family Cemetery. Alexandria Archaeology has been working with the Dept. of Recreation to insure preservation of these sites.
- F-2 During the 1989 archaeological investigation by Parsons Engineering Science, one of the burials was partially excavated. To comply with state regulations, these human remains shall be re-interred on the site after obtaining a permit from the Virginia Department of Historic Resources (VDHR). Alexandria Archaeology will coordinate with VDHR and other City staff to insure that the reburial process is completed.
- F-3 This project must comply with Virginia state law regarding the reburial of the human remains that were excavated as part of an archaeological project in 1989.
- C-1 All archaeological preservation measures must be completed prior to ground-disturbing activities (such as coring, grading, filling, vegetation removal, undergrounding utilities, pile driving, landscaping and other excavations as defined in Section 2-151 of the Zoning Ordinance). To confirm, call Alexandria Archaeology at (703) 838-4399.
- C-2 This project must comply with the federal historic preservation laws; it is a Section 106 resulting from the Woodrow Wilson Bridge Improvement project. Alexandria Archaeology will coordinate with the Virginia Department of Historic Resources, the Federal Highway Administration, and the Virginia Department of Transportation.

### Code:

- F-1 The access road bordering the railroad tracks shall have a fire hydrant and access gate to be secured by a rapid entry system (Knox-box) no more than every 600 – feet. Finding resolved.
- F-2 An access road shall completely circle the proposed site to allow Fire Department access to the fields and railroad tracks. Finding resolved.

- C-1 Prior to the issuance of a demolition permit or land disturbance permit, a rodent abatement plan shall be submitted to Code Enforcement that will outline the steps that will taken to prevent the spread of rodents from the construction site to the surrounding community and sewers.
- C-2 New construction must comply with the current edition of the Uniform Statewide Building Code (USBC).
- C-3 A soils report must be submitted with the building permit application.
- C-4 Construction permits are required for this project. Plans shall accompany the permit application that fully details the construction as well as layouts and schematics of the mechanical, electrical, and plumbing systems.
- C-5 The applicant must obtain a Certificate of Occupancy prior to occupancy (use) of the structure (USBC 116.1).

**T&ES:**

- F-1 The plan shall show sanitary and storm sewer, and water line in plan and profile in the first final submission and cross reference the sheets on which the plan and profile is shown, if plan and profile is not shown on the same sheet. Clearly label the sanitary and storm sewer, or water line plans and profiles. Provide existing and proposed grade elevations along with the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers; and water line in plan and use the corresponding stationing in respective profiles. (T&ES)
- F-2 Since the record drawings, maps, and other documents of the City of Alexandria, State, and Federal agencies show the true north pointing upwards, the Final Site Plan shall show the true north arrow pointing upward as is customary; however, for the sake of putting the plan together and/or ease of understanding, the project north arrow pointing upward, preferably east, or west may be shown provided it is consistently shown in the same direction on all the sheets with no exception at all. The north arrow shall show the source of meridian. The project north arrow pointing downward will not be acceptable even if, it is shown consistently on all the sheets. (T&ES)
- F-3 The Plan shall provide a dimension plan with all proposed features fully dimensioned and the property line shown clearly. (T&ES)
- F-4 Include all symbols, abbreviations, and line types in the legend. (T&ES)

- F-5 All stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and storm water flow conveyance systems shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. The design of storm sewer shall include the adequate outfall, inlet, and hydraulic grade line (HGL) analyses that shall be completed to the satisfaction of the Director of T&ES. Provide appropriate reference and/or source used to complete these analyses. If applicable, the Director of T&ES may require resubmission of all plans that do not meet this standard. (T&ES)
- F-6 All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. The minimum diameter of sanitary sewers shall be 10” in the public Right of Way and sanitary lateral 6”. The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM 3034-77 SDR 35, ASTM 1785-76 Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12” or larger diameters); however, RCP C-76 Class III pipe may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Lateral shall be connected to the sanitary sewer through a manufactured “Y” or “T” or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured “Y” or “T”, or else install a manhole. (T&ES)
- F-7 Crossing Water Main Over and Under a Sewer: When a water main over crosses or under crosses a sewer then the vertical separation between the bottom of one (i.e., sewer or water main) to the top of the other (water main or sewer) shall be at least 18”; however, if this cannot be achieved then both the water main and the sewer shall be constructed of Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing and the pipes shall be pressure tested in place without leakage prior to installation. Sewers crossing over the water main shall have adequate structural support (concrete pier support and/or concrete encasement) to prevent damage to the water main. Sanitary sewers under creeks and storm sewer pipe crossings with less than 6” clearance shall be encased in concrete. (T&ES)
- F-8 No pipe shall pass through or come in contact with any part of sewer manhole. Manholes shall be placed at least 10 feet horizontally from the water main whenever possible. When local conditions prohibit this horizontal separation, the manhole shall be of watertight construction and tested in place. (T&ES)



- F-9 Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12” of separation or clearance with water main, sanitary, or storm sewers. If this separation cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 and pressure tested in place without leakage prior to installation. Sewers and water main crossing over the utilities shall have adequate structural support (pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES)
- C-1 Bond for the public improvements must be posted prior to release of the plan. (T&ES)
- C-2 The sewer tap fee must be paid prior to release of the plan. (T&ES)
- C-3 Plans and profiles of utilities and roads in public easements and/or public Right of Way must be approved prior to release of the plan. (T&ES)
- C-4 All drainage facilities must be designed to the satisfaction of T&ES. Drainage divide maps and computations must be provided for approval. (T&ES)
- C-5 Provide site lighting plan. (T&ES)
- C-6 Provide a phased erosion and sediment control plan consistent with grading and construction plan. (T&ES)
- C-7 Per the Memorandum to Industry, dated July 20, 2005, the applicant is advised regarding a requirement that applicants provide as-built sewer data as part of the final as-built process. Upon consultation with engineering firms, it has been determined that initial site survey work and plans will need to be prepared using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88. Control points/Benchmarks which were used to establish these coordinates should be referenced on the plans. To insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (Site Plans) (T&ES)
- C-8 The applicant shall comply with the City of Alexandria’s Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line.
- C-9 The applicant must comply with the Chesapeake Bay Preservation Act in accordance with Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for storm water pollutant load reduction, treatment of the water quality volume default, and storm water quantity management.

- C-10 The applicant must comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. This includes naming a Responsible Land Disturber on the Erosion and Sediment Control sheets prior to engaging in land disturbing activities in accordance with Virginia Erosion and Sediment Control Law.
- C-11 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, Virginia Marine Resources must be in place for all project construction and mitigation work prior to release of the final site plan. This includes the state requirement for a VSMP permit for land disturbing activities greater than 2500 SF.

**American Water:**

- F-1 Hydraulic calculations (computer modeling) will be completed to verify main sizes upon final submittal of the site plan. Profiles will be required for hydraulic calculations.
- F-2 VAWC will require a copy of the Code Enforcement approved needed fire flow calculations for this project.
- F-3 Show all existing water facilities on the existing conditions and site utilities sheets.
- F-4 Keep the proposed water main in the proposed and existing roadways.
- F-5 All proposed water mains must be poly wrapped.
- F-6 Show the domestic service size to the bath house. If this service is going to be 1 ½" or larger, there must be a gate valve located at the connection to the water main.
- F-7 Show any proposed irrigation services.
- F-8 Show the existing water main in Duke St. on sheet C-304 and show the connection for the proposed main to the existing main.
- F-9 A double detector check backflow prevention device is required on all fire services. If located inside the premise, it must have a remote reading meter in a separate accessible room.
- F-10 Maintain a 10' horizontal separation between water and sewer mains.

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- F-11 Provide a 10' water line easement for mains and hydrants out of the public right-of-way.
- F-12 Please add the following note to the site plan and utility plan sheets, "All water facility construction shall conform to Virginia American Water Standards and Specifications".

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**REPORT ATTACHMENTS  
AVAILABLE IN PLANNING AND ZONING**