PROPOSED COMPREHENSIVE PLAN AMENDMENT

ITEM: S13-IV-LP1
REVISED January 17, 2014

GENERAL LOCATION: South of Peniwill Drive, West of Ox Road (Rt. 123), North of Occoquan River

SUPERVISOR DISTRICT: Mount Vernon

PLANNING AREA: Area III and Area IV

PLANNING DISTRICT: Lower Potomac and Pohick

SUB-DISTRICT DESIGNATION:
LP1 Laurel Hill CPS and P5 Dominion CPS

PARCEL LOCATION: 106-3 ((1)) 4B and 9, 106-4 ((1)) 20B (pt.) 56A (pt.), 112-2 ((1)) 8, 9, 11, 12 and 14, and a portion of right-of-way located south of Peniwill Drive proposed to be vacated/abandoned.

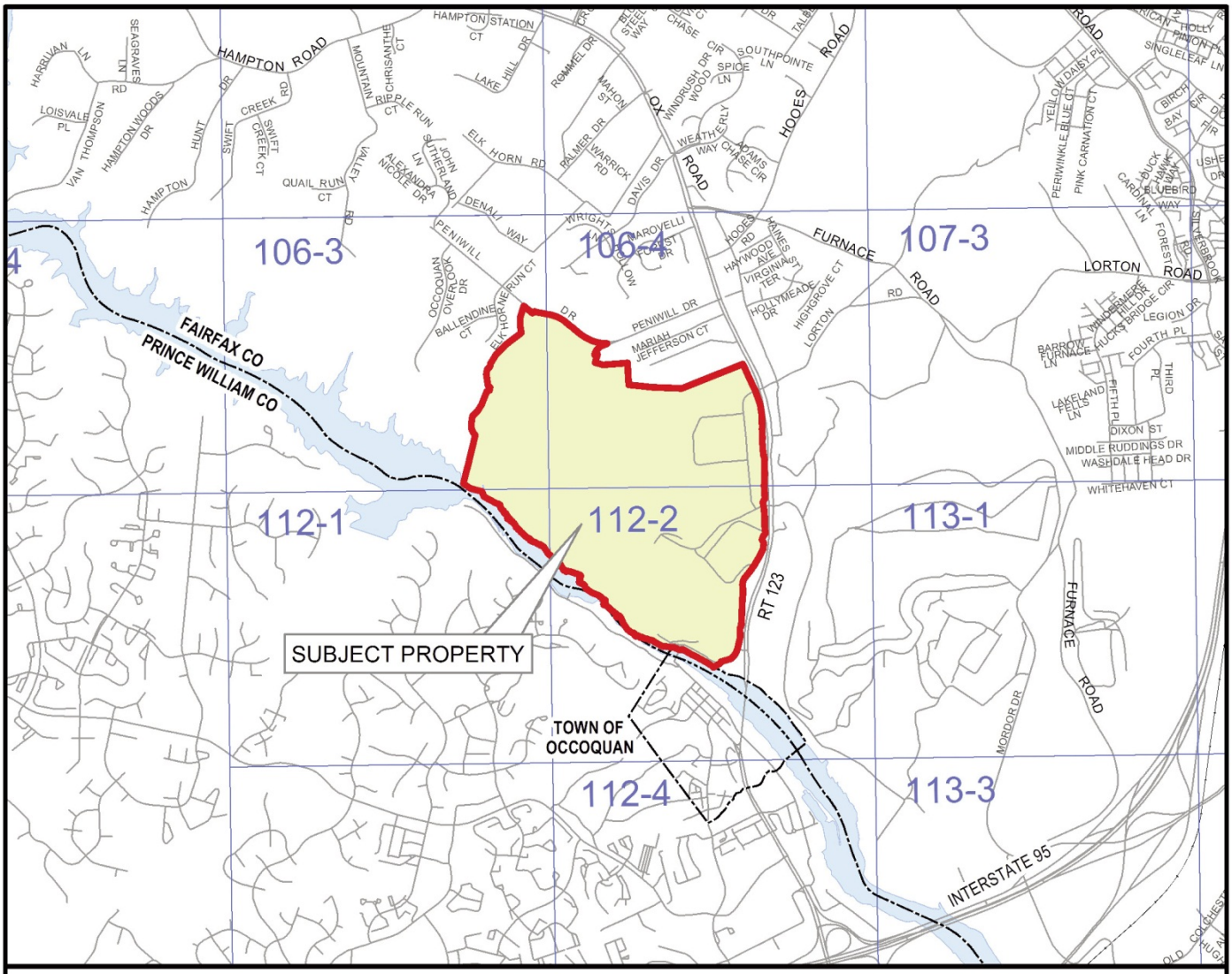
PLANNING COMMISSION PUBLIC HEARING:
Thursday, February 27, 2014 @ 8:15 PM

BOARD OF SUPERVISORS PUBLIC HEARING:
Tuesday, March 25, 2014 @ 4:30 PM

PLANNING STAFF DOES RECOMMEND THIS ITEM FOR PLAN AMENDMENT

Reasonable accommodation is available upon 48 hours advance notice. For additional information about accommodation call (703) 324-1334.

For additional information about this amendment call (703) 324-1380.



3000 FEET

PREPARED BY THE DEPARTMENT OF PLANNING AND ZONING USING FAIRFAX COUNTY GIS
VULCAN QUARRY

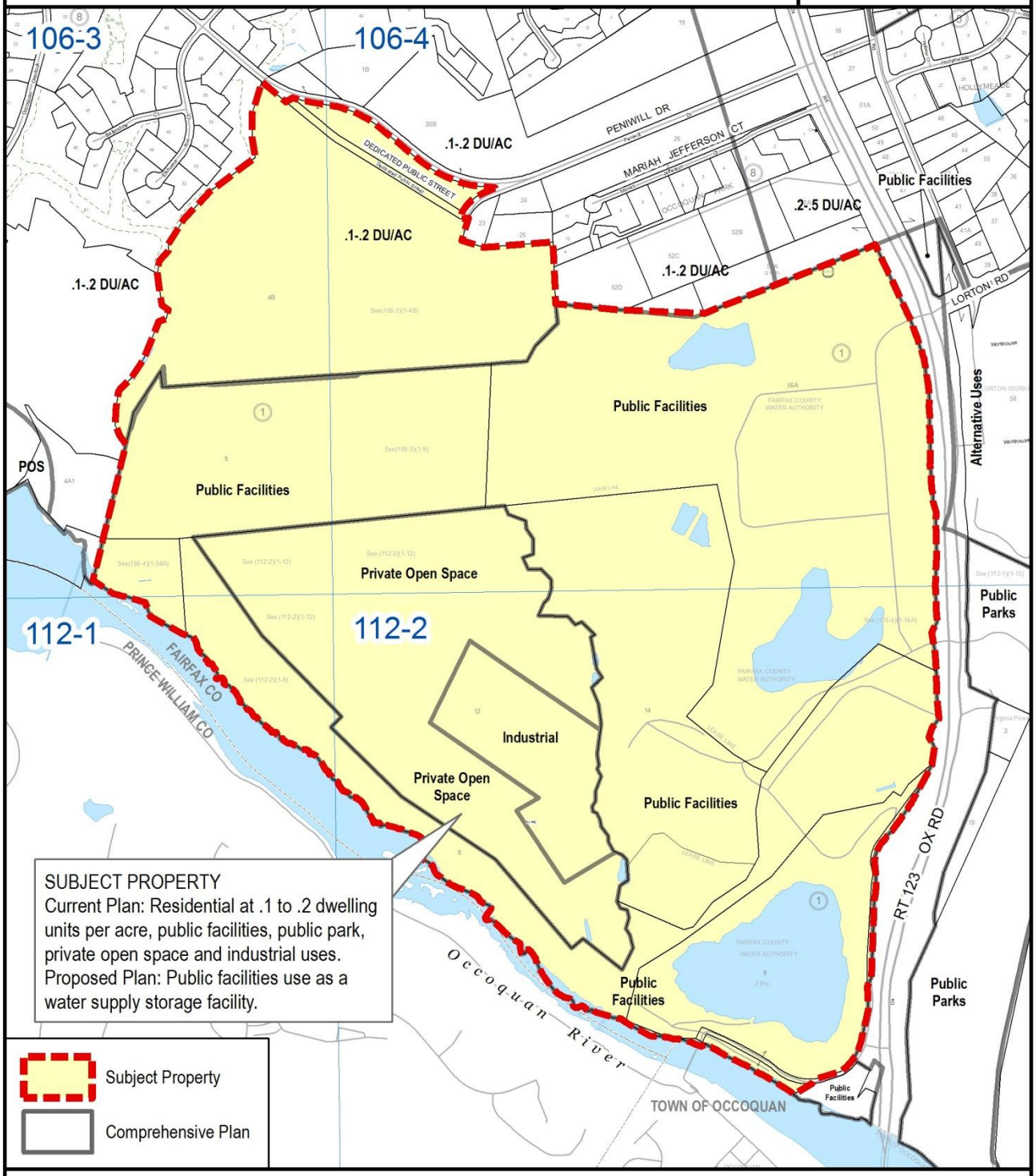
NOTE: STAFF REPORT REVISION

This document was revised on January 17, 2014. The changes include modifications to the subject area, phasing and other descriptive information.

CURRENT PLAN AND PROPOSED CHANGE

PARCEL LOCATION MAP SHOWING CURRENT PLAN AND PROPOSED CHANGE FOR SUBJECT PROPERTIES AND CURRENT PLAN MAP FOR ADJACENT AREAS

ITEM: S13-IV-LP1
January 17, 2014



1000 FEET

PREPARED BY THE DEPARTMENT OF PLANNING AND ZONING USING FAIRFAX COUNTY GIS
PARCEL INFORMATION CURRENT TO DECEMBER 2013
G:\projects\ocp\pd\OTPA_GRAPHICS - VULCAN QUARRY

STAFF REPORT FOR PLAN AMENDMENT S13-IV-LP1
(Revised January 17, 2014)

BACKGROUND

On June 4, 2013, the Board of Supervisors authorized a Comprehensive Plan amendment to consider the reconfiguration and ultimate reuse of Vulcan Quarry as a water supply storage facility. The subject area, Tax Maps 106-3((1))4B and 9, 106-4((1))20B (pt.,), 56A pt. and 112-2((1))8, 9,11,12 and 14, and a portion of right-of-way located south of Peniwill Drive proposed to be vacated/abandoned are in the Mount Vernon Supervisor District, within the LP1 Laurel Hill Community Planning Sector in the Lower Potomac Planning District and the P5 Dominion Community Planning Sector in the Pohick Planning District. Tax Map Parcel 112-2((1))14 contains the Vulcan Quarry onsite office and is located at 10000 Ox Road, Lorton VA, 22079. Tax Map Parcel 106-4((1))56A pt. contains the Fairfax Water Frederick P. Griffith Treatment Plant offices and visitor center located at 9584 and 9706 Ox Road, Lorton VA, 22079. The remaining parcels listed do not have assigned addresses. The Board has directed that staff consider replanning the subject area for public facilities uses to include a water supply storage facility.

CHARACTER OF THE SITE

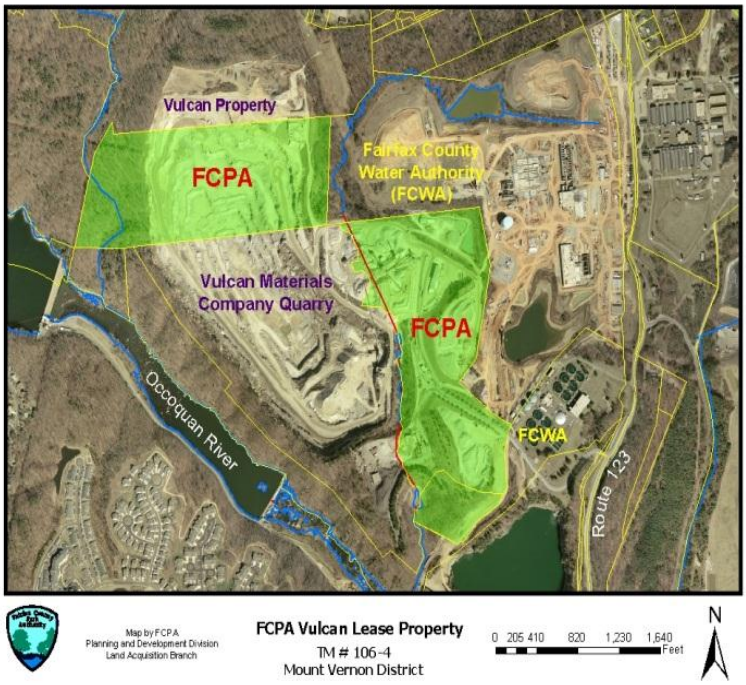
The 527-acre subject area contains the Vulcan Quarry and the Frederick P. Griffith Jr. water treatment plant owned by Vulcan Materials Company and Fairfax Water, respectively. The northern pit of the quarry is located within the Pohick Planning District and the southern pit of the quarry and the Frederick P. Griffith Jr. water treatment plant are located within the Lower Potomac Planning District. The site is planned for public facilities uses, public park use, private recreation use and industrial uses and zoned R-C; R-1, I-6 and is partially within the Natural Resources Overlay District.

CHARACTER OF THE AREA

To the north of the subject area is a neighborhood of low-density single-family homes planned for residential use at a density of .1-.2 dwelling units per acre and zoned R-1. To the east across Ox Road (Route 123) are the Occoquan Regional Park planned for public park use and the Lorton Arts Foundation (Workhouse) property within the Laurel Hill Adaptive Reuse Area, planned for alternative uses and zoned PDC. To the south is the Occoquan River and the Fairfax County-Prince William County line and to the west are single-family homes and vacant land planned for residential use at a density of .1-.2 dwelling units per acre and zoned RC.

PLANNING HISTORY

Figure 1. Subject Area – Previous Ownership Pattern



The guidance in the Area IV volume of the Comprehensive Plan describes the Vulcan Quarry as planned for public park use or private recreation use after the quarry ceases mining operations. This guidance reflects the creation of the quarry in two phases. The first phase, included land located in the southwest portion of the property that was leased to Vulcan Materials Company by the District of Columbia which was part of the Lorton Correctional complex, and which Vulcan eventually purchased. The second phase, included land conveyed to the Fairfax County Park Authority by the National Park Service, that was leased to Vulcan Materials Company in 1999, and which Vulcan eventually purchased in 2009, enabling the Park Authority to acquire what is now known as Colchester Park and Preserve on land that was deemed suitable for public park use. The land that Vulcan purchased and proceeded to mine was deemed unsuitable for public park use or for private recreation use by the Park Authority, and the Park Authority subsequently relinquished all rights to use the Vulcan property for park and recreation uses. The Comprehensive Plan guidance has not been updated to reflect these changes.

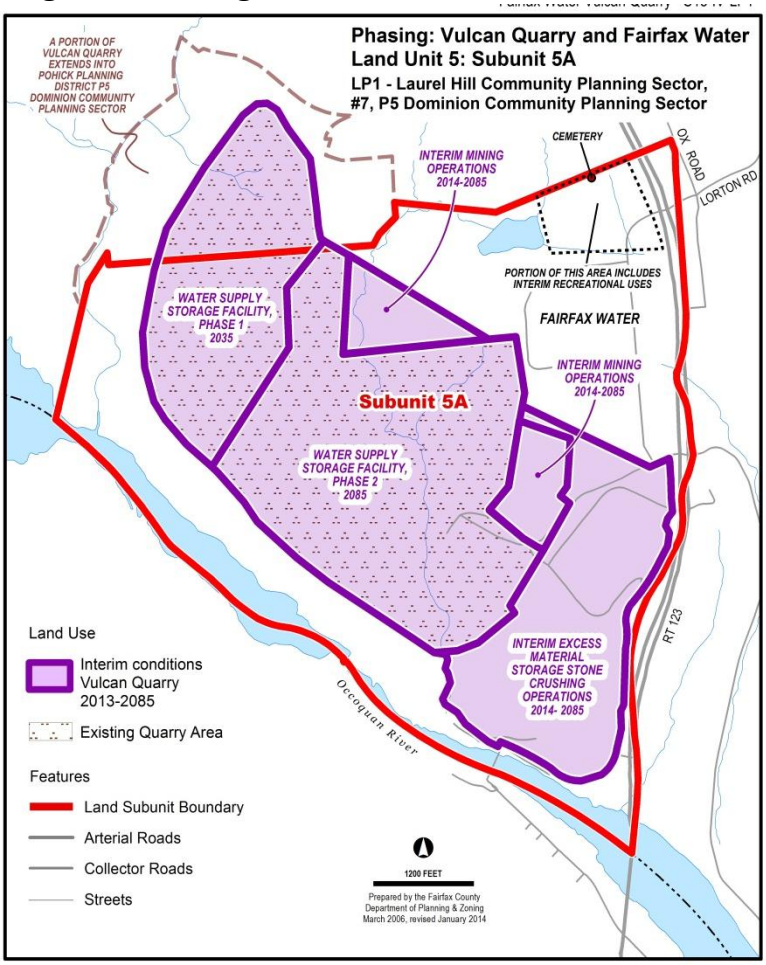
A portion of the subject area, Tax Map Parcels 106-3((1))4B and 9 that constitute the northern pit of Vulcan Quarry, were the subject of 2009-2010 South County Area Plans Review nomination 09-III-4P. The nomination proposed adding text to the P5 Dominion Community Planning Sector, Pohick Planning District portion of the Comprehensive Plan that stated that the operations of the Vulcan Quarry were incompatible with the surrounding residential uses and that the quarry should be closed at the earliest possible time. The Planning Commission denied the proposed nomination because the nominated area also included land in the LP1 Laurel Hill Community Planning Sector that was part of an ongoing planning study for the Laurel Hill Adaptive Reuse Area and therefore was ineligible for consideration.

ADOPTED COMPREHENSIVE PLAN

See Attachment I for adopted Comprehensive Plan text.

PROPOSED PLAN AMENDMENT

Figure 2. Phasing Plan



Fairfax Water has been pursuing a long-term strategy to acquire the Vulcan Quarry for future use as a water storage facility for almost a decade. A tentative agreement was reached that would satisfy Vulcan's timeline for completion of quarrying activities and allow Fairfax Water to acquire the quarry for use as a water supply storage facility by 2085. Interim steps include the reconfiguration and conversion of the quarry's northern pit to a water supply storage facility, and interim relocation of the northern pit quarrying operations and relocation of the southern pit stone crushing operations, cement plant and stockpiles to land currently owned by Fairfax Water. Reconfiguration of the mining operations area is required in order to construct a rock wall between the two pits that is required to convert the quarry's north pit to a water supply storage facility in 2035. Vulcan would continue quarrying operations in its southern pit until around 2085. In 2085, the southern pit would become a water supply storage facility.

The justification for the proposed Plan amendment relates to long standing regional water supply planning agreements and recently enacted Virginia water supply regulations. These activities resulted in the identification of the Vulcan Quarry as a possible alternative to meet the region's future demands for drinking water and summarized in the following paragraphs.

"There is a long history of regional water supply planning in the Washington D.C. area. In 1982, the Washington D.C. metropolitan area water suppliers that included Fairfax Water, the Washington Aqueduct Division of the U.S. Army Corps of Engineers (WAD), the Washington Suburban Sanitary Commission (WSSC) and the Interstate Commission on the Potomac River Basin (ICPRB) signed the Water Supply Coordination Agreement (WSCA). The WSCA established a framework for water supply planning, drought management, and resource optimization on the Potomac River. The Section for Cooperative Water Supply Operations on the Potomac River (CO-OP), a division of the ICPRB and jointly funded by three water suppliers, conducts studies and provides technical resources for implementing the WSCA. Every

five years, the CO-OP of ICPRB conducts a study of projected water demand. The ICPRB demand forecast process utilizes water use and demographic data along with assumptions regarding changes in water use patterns in the region. The most recent forecast report was completed in 2010". (Water Supply Need and Alternatives Summary Report, Fairfax Water, August 2010, pages 2-3).

In 2005, the State Water Control Board within the Virginia Department of Environmental Quality (DEQ), enacted a regulation that requires all local governments to develop local water supply plans that describe the development of water supply alternatives designed to meet projected demands for drinking water. DEQ reviews these plans once every ten years. The local governments of northern Virginia entered into an agreement with the Northern Virginia Regional Commission (NVRC) to prepare the Water Supply Plan for northern Virginia. The Water Supply Plan for northern Virginia incorporates the results of the 2010 ICPRB Water Demand Forecasts. The Board of Supervisors adopted the latest version of the plan on February 28, 2012. This plan identified Vulcan Quarry as an alternative for meeting future water demands in northern Virginia through the year 2040. Fairfax Water supplies drinking water not only to Fairfax County, but also to the cities of Alexandria and Falls Church, Fort Belvoir, the Town of Herndon and to portions of Prince William and Loudoun counties.

Fairfax Water outlined the benefits of the use of the Vulcan Quarry as a future water supply facility in their proposed Special Exception Amendment (SEA 81-V-017-2) and Proffer Condition Amendment applications (PCA 1998-MV-032, 033) dated July 8, 2013. At completion in 2085, the quarry would store up to 17 billion gallons of water with a yield of approximately 28-56 million gallons of drinking water per day.

ANALYSIS

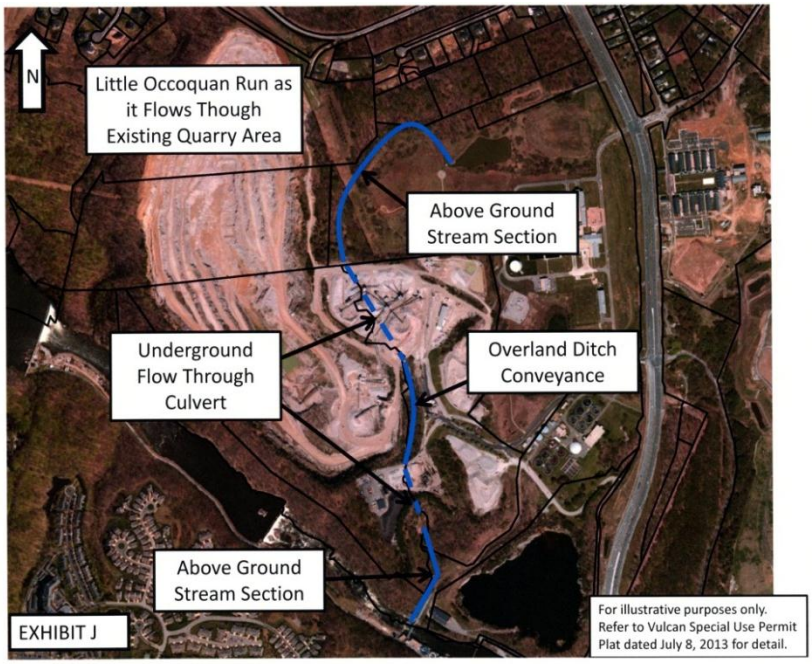
Water Supply Alternatives

Fairfax Water's Water Supply Need & Alternatives Summary Report document dated August 2013 indicates that existing water resources will be adequate through 2030, but by 2040, the system may have difficulty meeting water supply demands. This is due to projected increases in demand for water resources attributed to population and employment growth and demand for water for use in power plant and data center cooling systems. In addition, a reduction in the volume of available water in the Potomac and Occoquan rivers may occur due to more arid climate conditions in the future that could result in hotter summers and more severe periods of drought.

The magnitude of the anticipated shortfall in water supply necessitates the need for the north pit water supply storage facility (approximately 1.8 BG) by 2035. Together, the northern pit and the southern pit offer potential future water storage of up to a total of 17 billion gallons.

Environmental Impacts

Figure 3. Existing Little Occoquan Run Watercourse



The interim steps proposed by the quarry reconfiguration and conversion would have a substantial impact on the area's environmental resources. Around 2035, during Phase 1 of the proposed conversion of the quarry to a water supply storage facility, mining will cease in the northern pit of the quarry and Fairfax Water will lease a portion of its land for mining to Vulcan Quarry. This area is located between the existing pit and the Frederick P. Griffith Jr. Water Treatment Plant. In order to implement this phase, it will be necessary to divert the watercourse of the Little Occoquan Run. It is anticipated that the watercourse of Little Occoquan Run will be diverted around the northern pit of the quarry to drain into Elkhorn Run, located on the western side of the quarry. Subsequently, the watercourse of Little Occoquan Run would be diverted a second time so that it drains into the northern pit.

Both of these streams have associated Environmental Quality Corridors (EQCs) and Resource Protection Areas (RPAs). Elkhorn Run is a high quality, healthy stream with vibrant aquatic habitat. The potential negative impacts to Elk Horn Run from the proposed drainage diversion include erosion from the increased flow of water from Little Occoquan Run, and water quality issues related to warmer water that may contain a higher concentration of bacteria and algae. A commitment to the monitoring of the Elk Horn Run stream channel and corrective action if/where needed to mitigate these impacts should be addressed during the zoning process. An RPA Exception will need to be approved by the Board of Supervisors to allow encroachments, such as the proposed drainage diversions.

Parks and Recreation

- The Comprehensive Plan for the LP1 Laurel Hill Community Planning Sector, Land Unit 5A, refers to land in the northeast corner of Fairfax Water's property that is available to the Park Authority for use as athletic fields until the land is needed for water treatment facilities. The Park Authority recommends that this guidance be modified so that "athletic fields" is replaced with "park and recreation uses".

- The half-acre prison cemetery that is part of the District of Columbia Workhouse and Reformatory Historic District and National Register District should be preserved.

- The Fairfax Countywide Trails Plan designates a major regional trail along the Occoquan River. The Bull Run Occoquan Trail, the Potomac Heritage National Scenic Trail, the Fairfax Cross-County Trail, and the Laurel Hill Greenway are planned to connect with the Bull Run Occoquan Trail at this location. The Northern Virginia Regional Park Authority (NVRPA) strongly recommends that Fairfax Water permit a public trail within the property at an appropriate and safe location. Fairfax Water should work with NVRPA, Fairfax County and interested trail groups to consider a future trail route through the subject property that meets Fairfax Water security needs. Alternative trail alignments are limited by existing and planned development.

CONCLUSION

The proposed reconfiguration and conversion in phases of the Vulcan Quarry for a future water supply storage facility represents a historic opportunity to ensure that Fairfax County and the region have an adequate supply of potable water well into the next century. While the proposed Comprehensive Plan guidance supports the concept, significant implementation issues will need to be addressed at the time of rezoning. Among these are the proposed diversion of Little Occoquan Run to Elk Horn Run, which will have impacts to existing Resource Protection Areas and Environmental Quality Corridors. Water quality and drainage impacts will need to be monitored, and if necessary mitigated. Maintaining the health of Little Occoquan Run during the diversion period will be crucial as well.

RECOMMENDATION

Staff recommends the Comprehensive Plan be modified as shown below. Text proposed to be added is shown as <u>underlined</u> and text proposed to be deleted is shown with a ~~strikethrough~~.

MODIFY: Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, as amended through 4-9-2013, Lower Potomac Planning District Overview, page 1, paragraph 5:

. . .

"Regional-serving public facilities located in this planning district include the I-95 Energy Resource Recovery Facility, the I-95 Landfill Complex, the Norman M. Cole, Jr. Pollution Control Plant and the <u>Frederick P.</u> Griffith <u>Jr.</u> Water Treatment Plant."

. . .

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, as amended through 4-9-2013, Overview, Public Facilities, pages 17-18:

"3. ~~Construct a consolidated replacement facility for the FCWA Lorton/Occoquan Treatment Plants.~~ Consider the conversion of a reconfigured Vulcan Quarry to a water supply storage facility in order to meet the long term needs of Fairfax County and the region."

FIGURE 6
LOWER POTOMAC PLANNING DISTRICT
EXISTING PUBLIC FACILITIES

	Schools	Libraries	Public Safety	Human Services	Public Utilities	Other Public Facilities
LP1	Laurel Hill Elem., South County Middle, South County High		Co-Located Fire Station and Police Substation Site		~~FCWA~~Fairfax Water ~~Lorton~~Frederick P. Griffith Jr. Water Treatment Plant, I-95 Landfill, I-95 Resource Recovery Facility, Recycling Drop-Off Facility	
LP2	Lorton Station Elem., Lorton Admin. Center	Lorton Comm.	Lorton Fire Station Co. 19	Lorton Community Action, Lorton Senior Center	Noman M. Cole, Jr. Pollution Control Plant	
LP3	Gunston Elementary		Gunston Fire Station Co. 20		Underground Wastewater Holding Tanks	
LP4	*Ft. Belvoir Elem.		*Ft. Belvoir Fire Station, *Davison Crash and Rescue Station, *Ft. Belvoir Military Police Station	Eleanor U. Kennedy Shelter for the Homeless	Va. Power Fort Belvoir Substation, Sewage Pumping Station, ~~FCWA~~Fairfax Water Fort Belvoir Pumping Station	*Dewitt Army Hospital

. . .

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1-Laurel Hill Community Planning Sector, Character, page 23, paragraph 2:

"Most of the land in this planning sector is planned and utilized for park and related uses, public facilities and open space. North of the I-95 Landfill, uses include residential development, three schools, and Laurel Hill Park, which includes a public golf course. The southern area of the planning sector contains the I-95 Landfill, the I-95 Energy Resource Recovery Facility, an active rock quarry (Vulcan Quarry), the Frederick P. Griffith Jr. Water Treatment Plant and the Occoquan Regional Park. See Figure 9: Location of Former Prison Facility Sites; Existing Public and Industrial Uses."

. . .

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1-Laurel Hill Community Planning Sector, Land Use, pages 30-31:

Paragraph 1:

"The Laurel Hill Community Planning Sector (LP1) can be divided into~~ a southern part and a northern part.~~northern and southern parts.~~ The southern portion (approximately 1,300 acres) is dominated by the I-95 Landfill, the I-95 Energy/Resource Recovery Facility, the Fairfax Water Facility, the Occoquan Regional Park and the Vulcan Quarry (an active quarry) all of which are planned to be retained for the long term.~~ The northern portion of LP1 is generally defined as the area north of the I-95 Landfill and related facilities and includes the ~~Central Facility~~former D.C. Department of Corrections Lorton facilities, including the Former Reformatory and Penitentiary and~~ the~~ Occoquan Workhouse sites."

Paragraph 8:

"The southern portion of LP1 (approximately 1,400 acres) is ~~anticipated to retain the following uses:~~dominated by the I-95 Landfill, the I-95 Energy/Resource Recovery Facility,~~ and Fairfax Water Facility~~ the Frederick P. Griffith Jr. Water Treatment Plant and the Occoquan Regional Park, ~~and the Vulcan Quarry~~ all of which are planned to be retained for the long term. The Vulcan Quarry (an active rock quarry) is also located in the sector. It is planned to be mined and considered for reconfiguration and conversion in phases to facilitate the creation of a long term water supply storage facility owned by Fairfax Water. The area is planned accordingly for governmental and institutional uses, public park~~, and private recreation~~ and public facilities."

Paragraph 9:

"The Occoquan Regional Park is anticipated to expand northward to the southern boundary of the I-95 Landfill excluding the area of the former Youth Correctional Facility, which is planned for park use by the Fairfax County Park Authority. ~~The Fairfax Water Facility property was expanded to include the area abutting the west side of Ox Road. In addition to the land conveyed to Fairfax Water Facility, land on the west side of Ox Road was also conveyed to the Fairfax County Park Authority.~~"

. . .

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1-Laurel Hill Community Planning Sector, Open Space/Pedestrian Systems, page 35:

"As indicated previously, the southern part of the LP1 Community Planning Sector is dominated by uses such as the I-95 Landfill, the I-95 Energy/Resource Recovery Facility, the Fairfax Water Facility~~,~~ and the Occoquan Regional Park ~~and the Vulcan Quarry~~ which are all planned to be retained over the long term. The Vulcan Quarry (an active rock quarry), is also located in the sector. It is planned to be mined, and considered for reconfiguration and conversion in phases

to facilitate the creation of a water supply storage facility to be owned by Fairfax Water. The area south of the I-95 Landfill and north of the Occoquan Regional Park is planned for park use, ultimately encompassing the former Youth Correctional Facility."

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1-Laurel Hill Community Planning Sector, Open Space/Pedestrian Systems, page 38:

"• The area west of Ox Road, which includes the Fairfax Water Facility and the Vulcan Quarry, should provide ~~for recreational amenities and~~ buffering for the residential communities abutting to the north and should include the trail connections to the Regional Park System."

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1-Laurel Hill Community Planning Sector, Public Facilities, page 39:

"The LP1 Planning Sector has several major Countywide public facilities other than parks which are covered under Open Space/Pedestrian Systems. These include the I-95 Landfill, the I-95 Energy/Resource Recovery Facility and the Fairfax Water Facility. ~~These public facilities will remain with the redevelopment of the former Corrections Property.~~ The I-95 Landfill, ~~and~~ the I-95 Energy/Resource Recovery Facility and the Fairfax Water Facility are planned to be retained for the long term. Once the I-95 Landfill stops receiving material it will enter a post-closure care period of 30-years duration.

The I-95 Energy/Resource Recovery Facility is under contract until 2016, but anticipated to operate at least until 2031, if not beyond. ~~The~~ Fairfax Water ~~Facility has capacity~~ is required to provide adequate capacity to meet the long-term water ~~treatment~~supply needs for Fairfax County as identified in the Northern Virginia Regional Water Supply Plan, adopted by the Board of Supervisors on February 28, 2012, as may be amended by the Board. The proposed reconfiguration of the Vulcan Quarry and phased conversion to a water supply storage facility is an alternative identified in this Regional Water Supply Plan. These existing and planned public facilities should adhere to the following guidance:

- The portions of the I-95 Landfill that no longer receive material should be considered for adaptive reuse for active and passive recreational purposes and should be part of the long-term expansion program for the Occoquan Regional Park or the Fairfax County Park Authority to further serve the needs of the Northern Virginia area.

- The Fairfax Water Facility should be considered for expansion to include the adjacent Vulcan Quarry to create a water supply storage facility. The Fairfax Water Facility should be buffered and screened along Ox Road and ~~the~~its northern boundary. ~~The existing ponds north and south of the treatment facility should be preserved as natural resource areas.~~ As an interim use, land located on the northeast portion of the Fairfax Water Facility may be used by the Fairfax County Park Authority for ~~athletic fields~~park and recreational uses until such time as the area is needed for treatment plant expansion. ~~not needed for the expansion should be used by~~

~~the Fairfax County Park Authority for athletic fields. A new 42-inch water main is planned to replace the existing main that crosses the former Corrections Property.~~"

. . .

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1-Laurel Hill Community Planning Sector, Land Unit 5, pages 52-54:

"Sub-unit 5A: ~~Approximately 115 acres of the land within Sub-unit 5A, generally located south of the former Corrections Property line, west of Ox Road and north of the Occoquan River, is to be conveyed to the Fairfax County Park Authority.~~ A portion of this property is currently ~~being leased and~~ used for extraction by Vulcan Quarry. North of the Occoquan River between the quarry and Ox Road, is the approximately ~~250~~247-acre Fairfax Water ~~Facility~~ property. ~~Both of these uses should adhere to the following additional guidance:~~ Buffering and screening along Ox Road and the northern boundary should be provided. ~~The buffer area along the northern boundary should include that area's pond~~. In addition, if reconfiguration of the quarry is approved, a buffer area should be provided adjacent to the existing solids disposal area and the former Lorton treatment plant located south of the existing Frederick P. Griffith Jr. treatment facility to screen Route 123 from impacts created by the reconfigured mining area and relocation of the quarry's stone crushing operations to this area. As an interim use, land located on the northeast portion of the Fairfax Water Facility may be used by the Park Authority for park and recreational uses until such time as the area is needed for treatment plant expansion. The half-acre prison cemetery, which was established at the turn of the 20th century, located west of the former Occoquan Workhouse on the Fairfax Water property, should be preserved.

The Fairfax Water Facility property ~~has been expanded~~ extends northward to the ~~northern~~ boundary of the LP1 Laurel Hill Community Planning Sector. In order to meet the long term water~~treatment~~ supply storage needs ~~for~~of Fairfax County.~~Buffering and screening along Ox Road and the northern boundary should be provided. The buffer area along the northern boundary should include that area's pond and any sensitive biological areas associated with the pond. In addition, a buffer area should be provided adjacent to the pond located south of the new treatment facility in order to protect this natural resource area. In addition, the treatment plant expansion should be designed in a manner that will ensure future access to the quarry property on the west after its reclamation occurs.~~ and the region, a water supply storage facility may be considered for establishment on lands currently owned by the Vulcan Quarry and Fairfax Water. Phasing is envisioned to occur as follows:

- The northern portion of the Vulcan Quarry would be available to Fairfax Water in approximately 2035, when mining operations in this area would cease. At that time, this portion of the quarry would be converted to serve as Phase 1 of the planned water supply storage facility (shown on Figure 21). Additional land would be leased to Vulcan Quarry by Fairfax Water prior to Phase 1 to facilitate reconfiguration of the stone mining operations to replace lost capacity from the conversion of the northern portion of the quarry for water supply storage purposes, for relocation of the quarry's

stone crushing operations and for storage space for overburden (topsoil and excess material) from mining activities. Mining operations on the southern portion of the quarry would continue until about 2085.

- The entirety of Vulcan Quarry land would be acquired by Fairfax Water about 2085. All quarry operations would then cease. At this time, the southern portion of the quarry would be converted to serve as Phase 2 of the new water supply storage facility. The locations described for the proposed conversion of the Vulcan Quarry to a water supply storage facility are shown in Figure 21.

Evaluation of any proposal for any long term water supply storage areas should consider the following direct and indirect impacts to Environmental Quality Corridors (EQCs) and Resource Protection Areas (RPAs), as well as impacts created by proposed stream diversions. The following issues should be resolved during the review of any rezoning, special permit, special exception and proffer condition amendment applications:

- The extent to which the proposed water supply storage facility is needed to address short, medium and long term water supply needs;
- The extent to which the proposed action would meet the long term water supply needs with the least amount of adverse environmental impact, compared to other alternatives;
- The extent to which any existing buffer areas will be removed or impacted by any proposed stream diversion;
- The placement and orientation of proposed temporary mining capacity augmentation areas should be evaluated in order to avoid and/or minimize impacts to EQCs, RPAs and streams;
- The extent of any impacts that the proposal would have on EQCs and measures that would be pursued to address Policy Plan guidance regarding disturbances to EQCs;
- The extent of any impacts that the proposal would have on RPAs and measures that would be taken in support of an exception under Chapter 118 of the Fairfax County Code (the Chesapeake Bay Preservation Ordinance); and;
- The extent to which there would be any proposed diversion of drainage that would be needed to implement the proposal and the measures that would be pursued to ensure that any such drainage diversion would not have adverse impacts on receiving waters~~;~~.
- Extraction at the quarry should be predicated on the assumption that severe slopes, especially adjacent to swales and streams, will not be disturbed so as to pose a direct threat to stream water quality. Consequently, limits of clearing for proposed extraction sites should not encroach on severe slopes in such a manner as to render impossible sediment control and/or visual buffering for nearby residents. Further, sediment control measures should

be adequate to control erosion in conformance with the guidelines of the County sediment and erosion control regulations. A natural buffer of at least one hundred feet along the southwest line of the property parallel to the Occoquan ~~Creek~~River should be maintained; ~~In addition, within six months of final fill grade, or as soon thereafter as possible, the visual berm areas along the southwesterly property line, the northwest and southern corners of the property and at the creek entrance to the property along the northern property line should be planted. The plantings should consist of ground cover and evergreen trees. Upon completion of operations, the land should be left in a safe and stabilized condition so that the area can be developed for public park or private recreation uses as shown on the Comprehensive Plan map.~~

- ~~The Fairfax Water Facility property has been expanded northward to the northern boundary of LP.1 i~~In order to meet the long term water treatment needs for Fairfax County. ~~Buffering and screening along Ox Road and the northern boundary should be provided. The buffer area along the northern boundary should include that area's pond and any sensitive biological areas associated with the pond. In addition, a buffer area should be provided adjacent to the pond located south of the new treatment facility in order to protect this natural resource area. In addition, the treatment plant expansion should be designed in a manner that will ensure future access to the quarry property on the west after its reclamation occurs.~~

- ~~Any land not needed for the Fairfax Water Facility should be used for park purposes, including interim uses, such as athletic fields.~~

- ~~The half-acre prison cemetery, which was established at the turn of the 20th century, located west of the former Occoquan Workhouse and north of the Vulcan Quarry, should be preserved.~~

. . .

Fairfax County Comprehensive Plan, 2013 Edition, Area III, Pohick Planning District, Amended through 4-9-2013, Overview, pages 15-16:

. . .

7. Renovate and expand the ~~FCWA~~ Fairfax Water Popes Head Road Pumping Station in Sector P1.

8. Renovate and expand the ~~FCWA~~ Fairfax Water Pohick Pumping Station in Sector P6.

9. The Vulcan Quarry should be considered for reconfiguration and conversion in phases for use as a water supply storage facility in order to meet the long term water supply needs of Fairfax County and the region. The Fairfax Water Facility is planned to expand to include the reconfigured quarry when the conversion has been implemented.

FIGURE 6
POHICK PLANNING DISTRICT
EXISTING PUBLIC FACILITIES

	Schools	Libraries	Public Safety	Human Services	Public Utilities	Other Public Facilities
P1	Centreville High			Mott Community Center	Popes Head Sewage Pumping Station, ~~FCWA~~ Fairfax Water Popes Head Road Pumping Station	
P2	Burke Spec. Ed. Center, Bonnie Brae, Laurel Ridge, Rolling Valley, Hunt Valley, Oak View, Saratoga, White Oaks Elem., Robinson and Lake Braddock Sec., W. Springfield High, 3 Elem. Sites	Kings Park Community	Braddock District Supervisor's Office, Burke Fire Station Co. 14, West Springfield Police Station, Fire Station Co. 27 and Government Center	David R. Pinn Community Center, Cluster Residences for Mentally Retarded Adults, *No. Va. Training Center (State)	Va. Power Burke, Keene Mill and Sideburn Substations, 4 Storm Drainage Impoundments (P.L. 566)	*State Police Park-and-Ride
P3	Clifton Elem., Liberty Middle					
P4			Clifton Fire Station Co. 16			
P5	Silverbrook, Halley Elem.		Fairview Fire Station Co. 32		Va. Power Ox and Occoquan Substations	
P6	Fairview, Cherry Run, Sangster, Orange Hunt, Terra Centre Elem.	Pohick Regional, Burke Centre Community Library site	Pohick Fire Station Co. 35		1 Stormwater Impoundment, Public Works Line Maintenance Division Shop, ~~FCWA~~ Fairfax Water Pohick Road Pumping Station	Park-and-Ride
P7	Newington Forest Elem.				Storm Drainage Impoundment, Pohick Road Sewage Pumping Station	

. . .

Fairfax County Comprehensive Plan, 2013 Edition, Area III, Pohick Planning District, Amended through 4-9-2013, Overview, pages 62-63:

7. The area ~~immediately~~generally to the north of ~~the existing quarry operation~~Peniwill Drive is planned for residential use at .1-.2 dwelling unit per acre as shown on the Comprehensive Plan Map. ~~As an option, Parcels 106-3((1))4B, 106-4((1))1B and 20B pt. (not including property adjacent to the north side of Peniwill Drive) may be appropriate for an expansion of the existing quarry to the south, located in Community Planning Sector LP1 in Area IV.~~ The quarry pit limits to the west and north near Peniwill Drive should not be extended further west or north than currently exists. Industrial uses other than the ~~expansion of the~~ quarry or conversion of the quarry to a water storage facility are not planned in this area nor should they be permitted. As this area is adjacent to lands planned for very low density residential use, the quarry ~~expansion~~ area in this planning sector should be limited in size and well buffered from adjacent parcels. In addition, the environmental impacts of ~~the expansion~~ any quarry activities outside of this planning sector should be mitigated~~ and safe and adequate road access provided~~. The~~ expansion of the~~ quarry operations in this location ~~is only~~ are only appropriate if the following conditions are met:

- ~~The current operating conditions remain in effect;~~

- The ~~expansion of the~~ quarry ~~pit and operations~~ area in this community planning sector should be limited in size and location to insure that the impact of this use on surrounding uses is mitigated. This will provide for a supply of stone resources sufficient to meet demand for many years while assuring the quarry ~~expansion~~ will be finite in this location and will protect the residential character of the areas to the north, east and west from further expansion of nonresidential uses;

- The ~~proposed~~ pit ~~expansion~~ area should be limited to approximately ~~30~~ 32 acres ~~in the southern portion~~ of Parcel 106-3((1))4B and should be contiguous with the existing pit located in Area IV; ~~storage and equipment areas, settlement ponds, and access ways~~ any other areas of disturbance within the P5 Dominion Community Planning Sector should be located on approximately 30 to 40 acres~~; and a buffer area should consist of approximately 45 to 55 acres~~. ~~This~~A vegetative buffer should be provided around the periphery of the site and should include Environmental Quality Corridors (EQCs) and the maximum amount feasible of mature hardwood forests. In addition to including EQC and forest areas, this vegetative buffer ~~should be 100 to 200 feet in width~~ may also include berms to protect all existing or planned residential development from noise and visual impacts of the quarrying operations. Supplemental plantings should be provided in the buffer where no mature trees exist;

- The direct and the indirect environmental impacts of any proposed quarry ~~expansion~~reconfiguration and conversion to a water supply storage facility should be appropriately mitigated. The scope of the quarry ~~expansion~~reconfiguration and conversion should be designed to balance efficient stone removal with preservation of significant environmental resources such as EQCs and adjacent upland hardwood tree cover. In addition to the buffer area described above, other critical EQC areas and significant areas of upland hardwood forest cover adjacent to the EQCs

should be preserved to the maximum extent feasible. The applicant should comply with all requirements of the Chesapeake Bay Preservation Act;

- The quarry ~~expansion~~operations should ~~be carefully planned to~~ provide siltation basins that will contain sediment on-site and prevent off-site discharges that could adversely impact water quality. ~~The pit drainage system~~Any proposal to modify the ~~should be carefully designed to maintain~~ pre-quarry drainage pattern~~s~~ as a result of quarry operations or diversion of drainage around the quarry should be pursued in a manner that will ensure that bodies of water receiving new and/or increased discharges of water will be protected from any associated adverse impacts. ~~to the extent feasible.~~ Tree cover on the site should be maintained as long as possible. ~~Erosion and sediment controls should be in place prior to any clearing of expansion areas;~~

- ~~The quarry operator should provide necessary improvements at the site entrance to Ox Road and along Ox Road near the intersection as may be required by Virginia Department of Transportation (VDOT);~~

- The ~~proposed expansion of the~~ quarry should only use the existing access road through the Fairfax Water ~~Authority~~ property. ~~A second access for emergency vehicles only should be provided to Ox Road.~~ No use of any additional access points is recommended along Ox Road for daily quarry operations; and

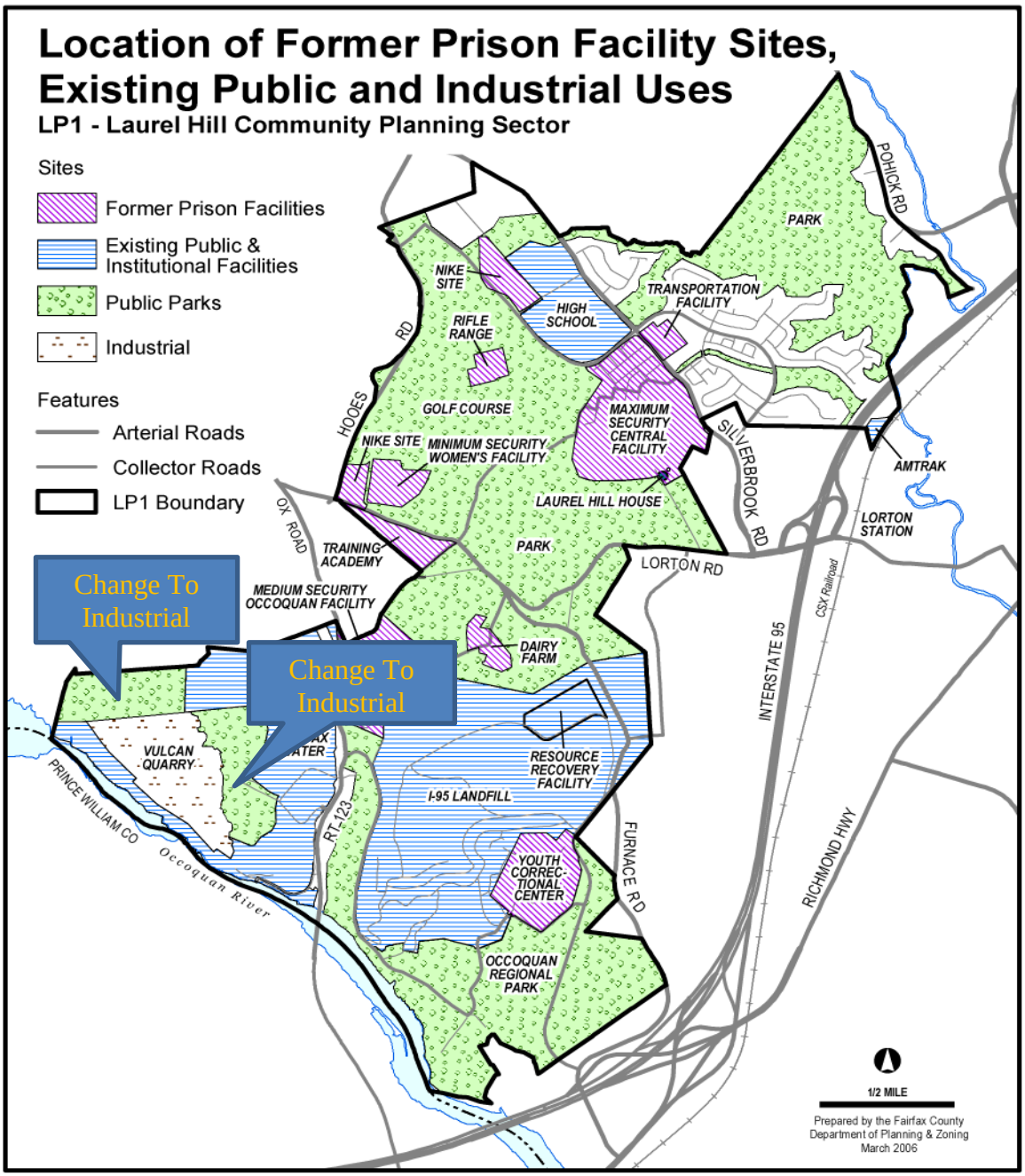
- Alternative public street access to Route 123 (Ox Road) should be provided to the residential land west of Elk Horn Run and should be well-buffered from all quarrying operations.

In order to meet the long term water supply storage needs of Fairfax County and the region, a water supply storage facility may be considered for establishment on lands currently owned by the Vulcan Quarry. The first phase of the water supply storage facility conversion would include Tax Map Parcels 106-3 ((1)) 4B, which is located in the northern portion of Vulcan Quarry. During this phase, mining operations in this northern area would cease and this portion of the reconfigured quarry would be used for water supply storage beginning around 2035 (shown on Figure 21). Guidance for the evaluation of any proposal affecting the Vulcan Quarry property for any new long-term water supply storage areas is provided within the recommendations for Land Unit 5 of the Laurel Hill Community Planning Sector in the Area IV Plan."

MODIFY FIGURES: Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1-Laurel Hill Community Planning Sector, page 24, 29, 37 and 53:

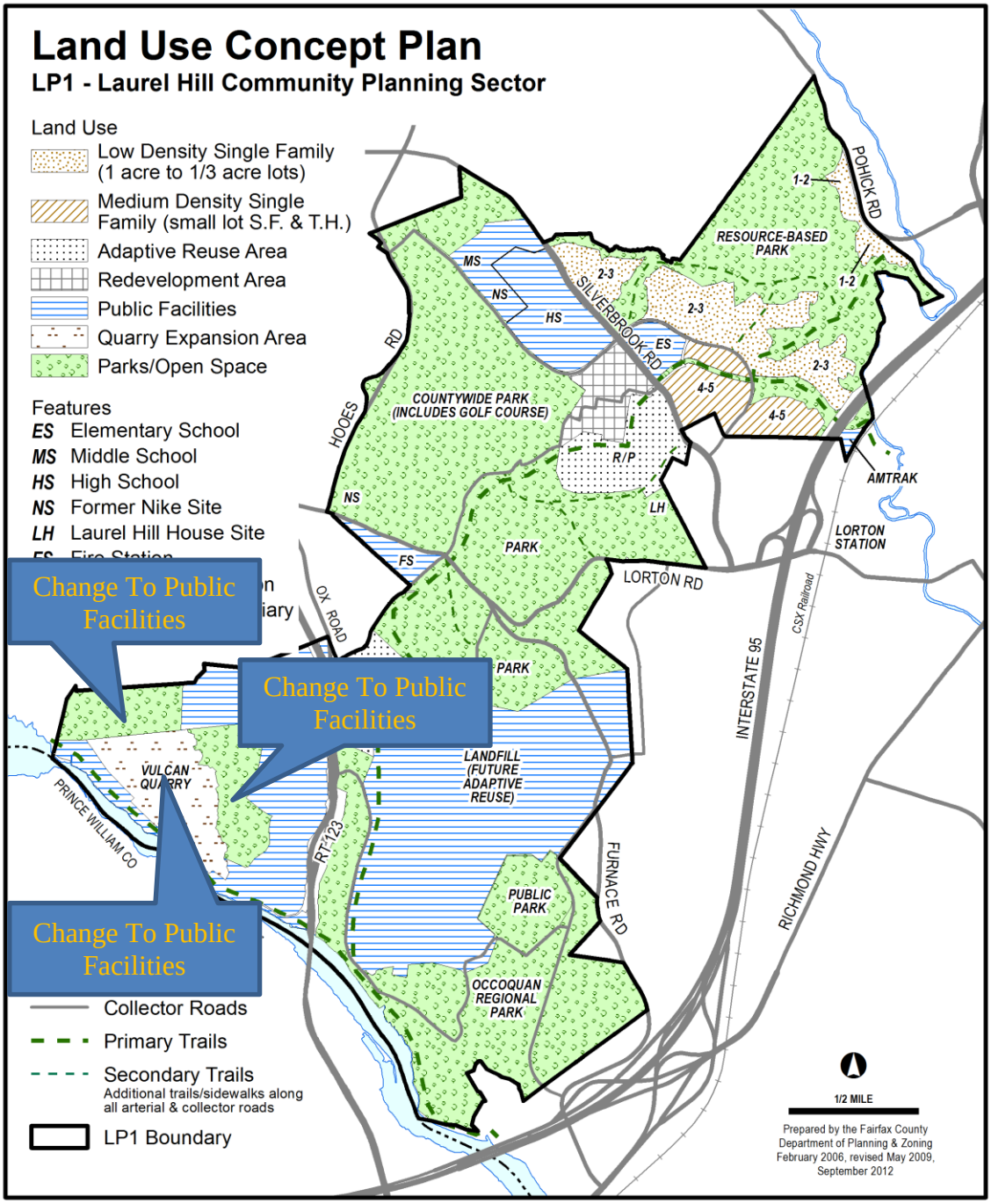
Modify Figure 9, Location of Former Prison Facility Sites-Existing Public and Industrial Uses to show that all parcels owned by Vulcan Quarry are shown as industrial uses.

FIGURE 9



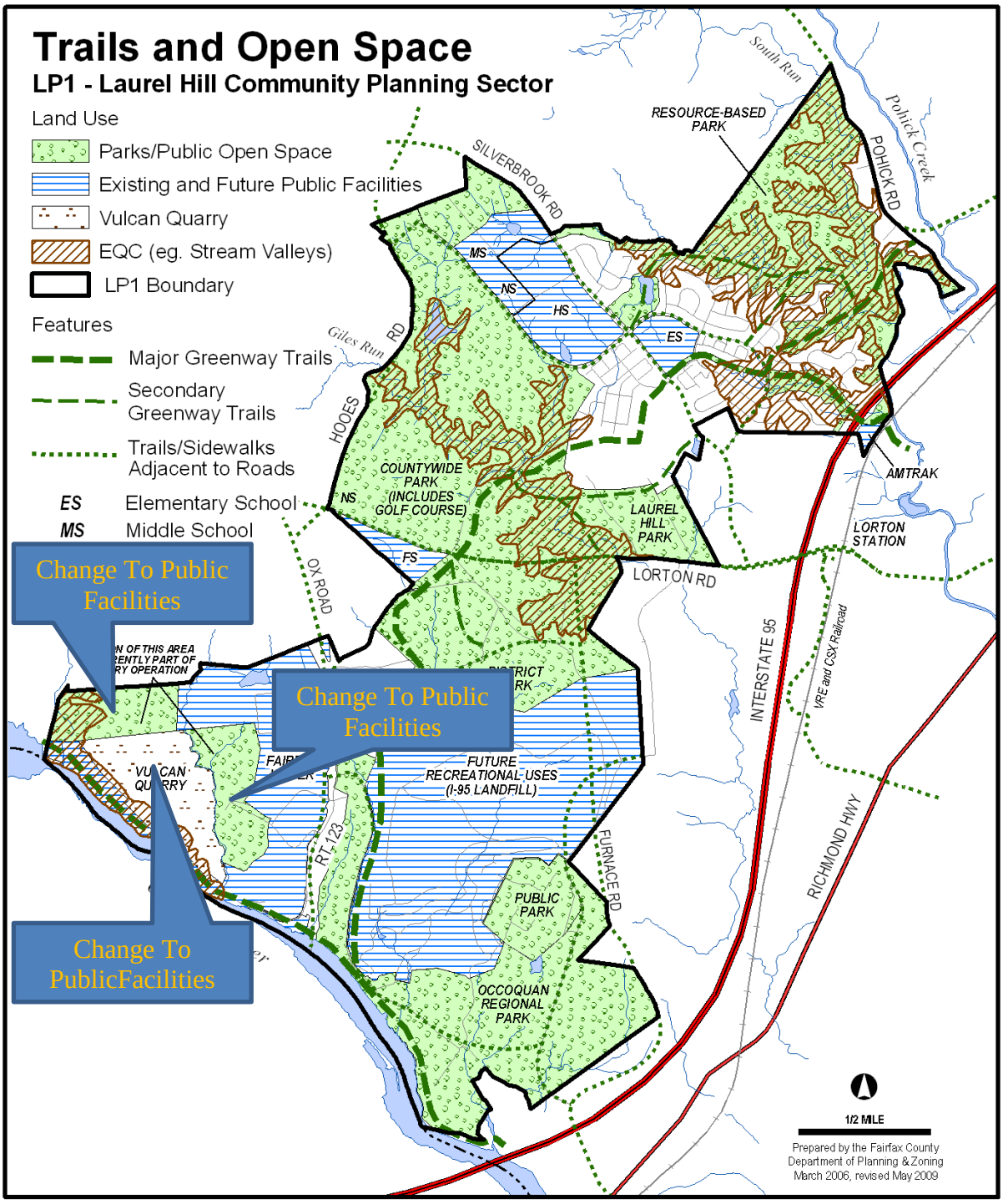
Modify Figure 11, Land Use Concept Plan to show that all parcels owned by Vulcan Quarry are shown as public facilities uses.

FIGURE 11



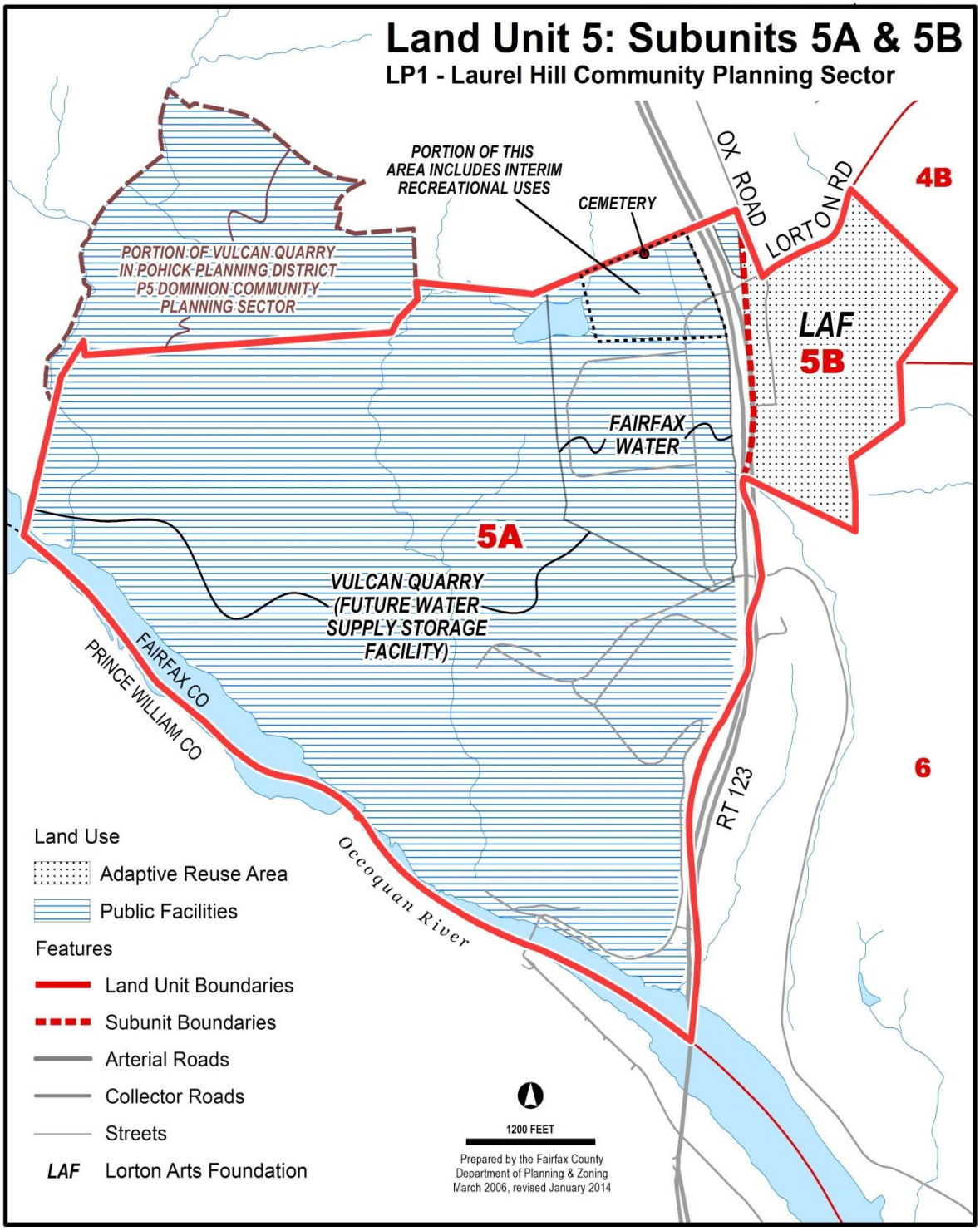
Modify Figure 14, Trails and Open Space so that all parcels owned by Vulcan Quarry are shown as public facilities uses.

FIGURE 14



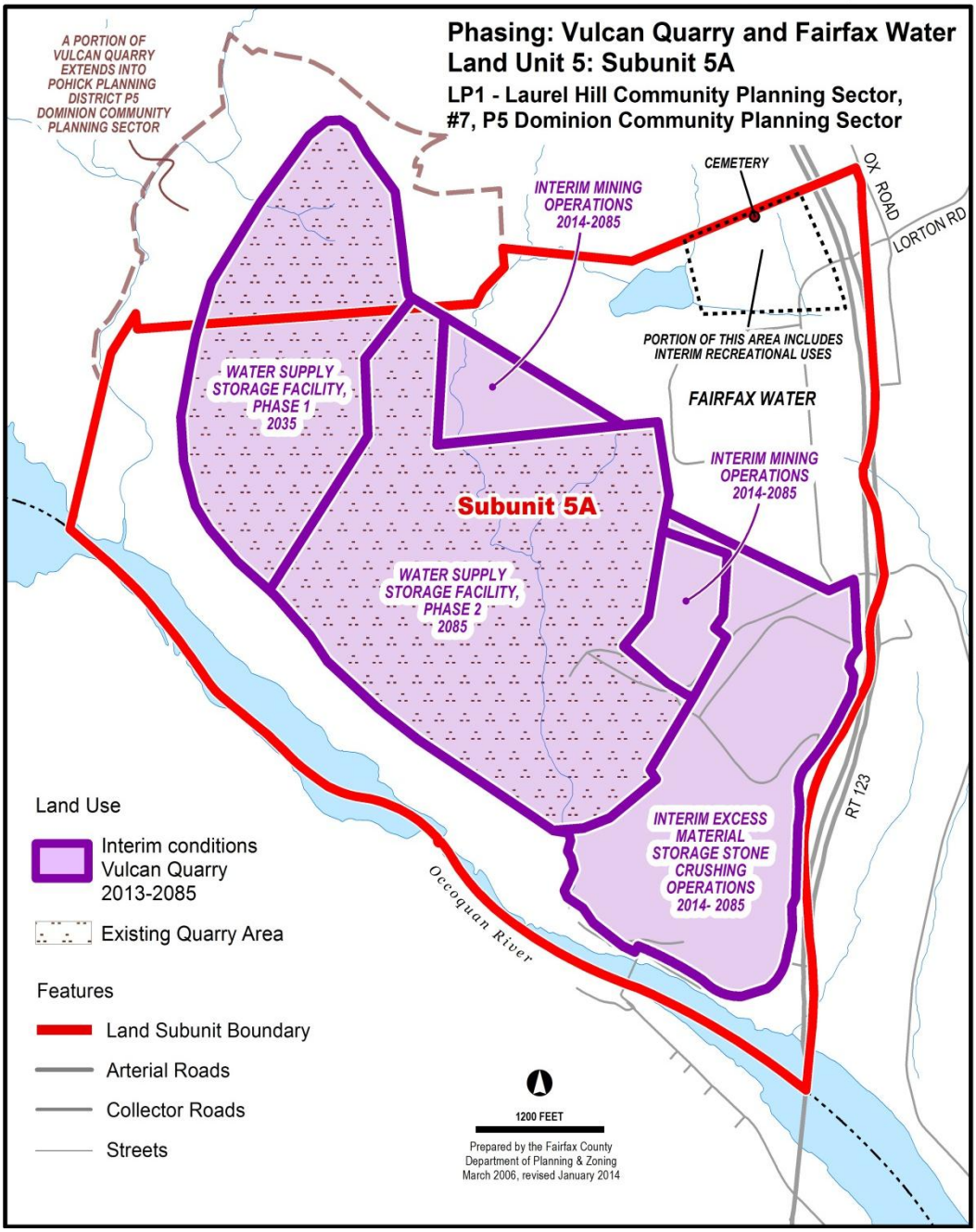
Modify Figure 20, Land Unit 5: Subunits 5A & B, so that all parcels owned by Vulcan Quarry are shown as public facilities uses.

FIGURE 20



ADD FIGURE: New Figure 21, Interim Land Use Concept Plan 2035-2085 – Land Unit 5: Subunit 5A. Subsequent figures will be renumbered.

FIGURE 21



PLAN MAP: The Comprehensive Plan map will be modified to show the entirety of the subject area as planned for public facilities uses.

ATTACHEMENT I
ADOPTED COMPREHENSIVE PLAN TEXT

Lower Potomac Planning District

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, Overview, Page 1:

"**LOWER POTOMAC PLANNING DISTRICT OVERVIEW**

The Lower Potomac Planning District is generally bounded on the north by the portion of Laurel Hill Park located southeast of the Southrun Road and Pohick Road intersection [formerly part of the District of Columbia (D.C.) Department of Corrections site], and Fort Belvoir Main Post; on the east by the property line of Fort Belvoir Main Post, Dogue Creek and the Potomac River; on the south by the Potomac and Occoquan Rivers; and on the west by the Vulcan Quarry and Hooes Road as shown on Figure 1. The Lower Potomac Planning District is approximately 29,300 acres in size, which comprises approximately 11 percent of the county.

The Lower Potomac Planning District contains the entirety of the Lorton-South Route 1 Suburban Center and Fort Belvoir Main Post. Fort Belvoir Main Post, a federally owned property, encompasses approximately 9,530 acres or about 30 percent of the planning district.

The Lower Potomac Planning District contains a variety of other land uses. Residential uses include garden apartments and single-family homes. Community-serving retail uses include a shopping plaza located south of Lorton Road at Lorton Market Street, a plaza located near the Lorton Virginia Railway Express (VRE) station at Lorton Station Boulevard, and Gunston Plaza located along Richmond Highway (Route 1) southwest of the Lorton Road and Richmond Highway intersection and east of Armistead Road. Industrial uses are located along portions of the CSX railroad tracks, near Lockport Place, and south of Gunston Cove Road between Interstate 95 (I-95) and Old Colchester Road. Parkland, open space and pockets of low density residential uses characterize the Mason Neck area to protect the valued natural resources in this area.

The major transportation corridors of Interstate 95 (I-95), Richmond Highway and the CSX railroad provide good regional access to the Lower Potomac Planning District.

Regional-serving public facilities located in this planning district include the I-95 Energy Resource Recovery Facility, the I-95 Landfill Complex, the Norman M. Cole, Jr. Pollution Control Plant and the Griffith Water Treatment Plant."

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, Overview, Page 17-19:

Public Facilities

Existing public facilities located within the Lower Potomac Planning District and those for which a future need has already been identified are included on Figure 6. Major expansions of existing facilities (with the exception of Federal or State facilities) or uses of land that are distinctly different than the use of the public facility must be considered by the County Planning Commission through provisions outlined in Section 15.2-2232 of the Code of Virginia. For these existing facilities minor expansions which are in keeping with the character of the facility may be considered in conformance with the Plan.

A number of public facilities have been identified as future needs in this planning district. These projects are included for informational purposes and in most cases will require a 2232 Review public hearing before the County Planning Commission prior to being established. Those facilities for which a specific location for future construction has been identified are also listed in the sector recommendations and are considered a feature and concurrence by the Planning Commission. If such feature shown determination is made, these projects will not require a future 2232 Review public hearing. The following public facilities are identified as future needs in the Lower Potomac Planning District:

1. In order to meet the growing need for public utilities, additional electrical sub-stations and transmission lines will be required by Virginia Power in Sectors LP1 and LP2.

2. Locate an electrical sub-station by Virginia Power on Parcel 107-2((1))8 in Sector LP2.

FIGURE 6
LOWER POTOMAC PLANNING DISTRICT
EXISTING PUBLIC FACILITIES

	Schools	**Libraries**	**Public Safety**	**Human Services**	**Public Utilities**	**Other Public Facilities**
LP1	Laurel Hill Elem., South County Middle, South County High		Co-Located Fire Station and Police Substation Site		FCWA Lorton Water Treatment Plant, I-95 Landfill, I-95 Resource Recovery Facility, Recycling Drop-Off Facility	
LP2	Lorton Station Elem., Lorton Admin. Center	Lorton Comm.	Lorton Fire Station Co. 19	Lorton Community Action, Lorton Senior Center	Noman M. Cole, Jr. Pollution Control Plant	

LP3	Gunston Elementary	Gunston Fire Station Co. 20		Underground Wastewater Holding Tanks	
LP4	*Ft. Belvoir Elem.	*Ft. Belvoir Fire Station, *Davison Crash and Rescue Station, *Ft. Belvoir Military Police Station	Eleanor U. Kennedy Shelter for the Homeless	Va. Power Fort Belvoir Substation, Sewage Pumping Station, FCWA Fort Belvoir Pumping Station	*Dewitt Army Hospital

*Federal and State facilities are not subject to the 2232 review process.

3. Construct a consolidated replacement facility for the FCWA Lorton/Occoquan Treatment Plants.

4. Locate a senior center and offices of County support agencies providing services to the elderly and relocate the Lorton Community Action Center to be part of the senior center on Parcel 107-4((1))34 in Sector LP2.

5. Locate a permanent site for the South County's Visitors' Center, which is currently in leased space.

6. Assess the need for a police station in the vicinity of the Lorton Fire Station in Sector LP2 to serve the southeastern part of the County.

7. Locate County offices responsible for environmental monitoring and zoning enforcement in Sector LP2.

8. Locate a residential facility for adults with mental illness who also need substance abuse services. This facility is needed in Planning Area IV.

9. Locate a recovery women's center in Planning Area IV which will provide outpatient treatment to women recovering from alcohol and drug addiction with the benefit of a child care center on site. The center should be located in a commercial area which is served by public transportation.

10. Provide an alcohol and drug residential treatment/detoxification program in Planning Area IV.

11. Locate an animal shelter satellite facility in Planning Area IV."

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1 Laurel Hill Community Planning Sector, Page 23:

"**LP1 LAUREL HILL COMMUNITY PLANNING SECTOR**

CHARACTER

The Laurel Hill Community Planning Sector is located west of Interstate 95 (I-95) and north of the Occoquan River, generally bounded on the north by a portion of Laurel Hill Park, to the east by Pohick Road and Furnace Road, to the west by Hooes Road, and to the south by the Occoquan River. This community planning sector contains the former D.C. Department of Corrections property.

Most of the land in this planning sector is planned and utilized for park and related uses, public facilities and open space. North of the I-95 Landfill, uses include residential development, three schools, and Laurel Hill Park which includes a public golf course. The southern area of the planning sector contains the I-95 Landfill, the I-95 Energy Resource Recovery Facility, an active rock quarry (Vulcan Quarry), the Griffith Water Treatment Plant and the Occoquan Regional Park. See Figure 9: Location of Former Prison Facility Sites; Existing Public and Industrial Uses.

The D.C. Workhouse and Reformatory Historic District was listed in the National Register of Historic places in 2006 and includes resources related to the former D.C. Department of Corrections property, including the Occoquan Workhouse, the Central Facility (which encompasses the former Reformatory and Penitentiary areas), the brick kiln on the northern bank of the Occoquan River and the Laurel Hill House. Heritage resources are located along the north bank of the Occoquan River and in the area southwest of Silverbrook Road. Similar archeological resources can be expected in undisturbed areas in the southeastern portion of this planning sector, northeast of the Occoquan River."

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1 Laurel Hill Community Planning Sector, pages 30-31:

"LAND USE

The Laurel Hill Community Planning Sector (LP1) can be divided into a southern part and a northern part. The southern portion (approximately 1,300 acres) is dominated by the I-95 Landfill, the I-95 Energy/Resource Recovery Facility, the Fairfax Water Facility, the Occoquan Regional Park and the Vulcan Quarry (an active rock quarry), all of which are planned to be retained for the long term. The northern portion of LP1 is generally defined as the area north of the I-95 Landfill and related facilities and includes the Central Facility and the Occoquan Workhouse.

The former D.C. Department of Corrections facilities, except for the former Youth Correctional Facility, are primarily located in the northern portion of Planning Sector LP1 (approximately 1,900 acres). These facilities include the Medium Security Occoquan Facility, the Dairy Farm, the Minimum Security Facility, the Central Facility, and the Transportation Facility. These former facilities are separated by large expanses of open space and extensive EQCs, which encompass approximately twenty-five percent of this portion of the planning sector.

While most of the northern portion of LP1 is planned for open space, parkland, recreation and public facilities, a portion of the area north of Silverbrook Road is planned for residential development and the former Central Facility area and adjacent land south of Silverbrook Road are planned for a mix of uses.

The EQC system, heritage resources, and the biologically sensitive areas located on the northern portion of LP1 are envisioned to be preserved as major resources by being incorporated into several County parks. Some of the EQC and heritage resources are connected by a public golf course, located between Silverbrook Road and Giles Run, linking the Rocky Branch EQC with the Giles Run EQC. A major greenway trail that utilizes the old rail bed traverses LP1 from the northeastern corner and will ultimately connect with the Occoquan Regional Park.

The residential neighborhoods located north of Silverbrook Road have developed in a manner that connects them with the surrounding open space system. This area has developed at densities of 1-2, 2-3, and 4-5 du/ac calculated on the developable land excluding EQC areas.

The Redevelopment Area on the northwestern portion of the former Central Facility is approved for housing oriented to active adults and independent seniors. The remainder of the former Central Facility (Reformatory and Penitentiary) is planned for adaptive reuse and new development as detailed in Land Unit 3B. At this location as well as the Occoquan facility, structures determined to be of historic significance are anticipated for adaptive reuse. (See Figure 12 for an example of one of these structures.) The former Occoquan Workhouse has been approved for and redeveloped as an arts center.

The remainder of the northern portion of LP1 is planned for public facilities as shown on Figure 11: Land Use Concept Plan. Figure 11 indicates the location of the elementary, middle, and high school sites as well as a future fire station.

The southern portion of LP1 is anticipated to retain the following uses: the I-95 Landfill, the I-95 Energy/Resource Recovery Facility, Fairfax Water Facility, the Occoquan Regional Park and the Vulcan Quarry. The area is planned accordingly for governmental and institutional uses, public park, and private recreation.

The Occoquan Regional Park is anticipated to expand northward to the southern boundary of the I-95 Landfill excluding the area of the former Youth Correctional

Facility, which is planned for park use by the Fairfax County Park Authority. The Fairfax Water Facility property was expanded to include the area abutting the west side of Ox Road. In addition to the land conveyed to Fairfax Water Facility, land on the west side of Ox Road was also conveyed to Fairfax County Park Authority."

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1 Laurel Hill Community Planning Sector, page 35:

"OPEN SPACE/PEDESTRIAN SYSTEMS

As indicated previously, the southern part of the LP1 Community Planning Sector is dominated by uses such as the I-95 Landfill, the I-95 Energy/Resource Recovery Facility, Fairfax Water Facility, the Occoquan Regional Park and the Vulcan Quarry which are all planned to be retained over the long term. The area south of the I-95 Landfill and north of the Occoquan Regional Park is planned for park use, ultimately encompassing the former Youth Correctional Facility."

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1 Laurel Hill Community Planning Sector, page 39:

"PUBLIC FACILITIES

The LP1 Planning Sector has several major Countywide public facilities other than parks which are covered under Open Space/Pedestrian Systems. These include the I-95 Landfill, the I-95 Energy/Resource Recovery Facility and the Fairfax Water Facility. These public facilities will remain with the redevelopment of the former Corrections Property. The I-95 Landfill and the I-95 Energy/Resource Recovery Facility are planned to be retained for the long term. Once the I-95 Landfill stops receiving material it will enter a post-closure care period of 30-years duration.

The I-95 Energy/Resource Recovery Facility is under contract until 2016, but anticipated to operate at least until 2031, if not beyond. The Fairfax Water Facility has capacity to meet the long-term water treatment needs for Fairfax County. These existing public facilities should adhere to the following guidance:

- The portions of the I-95 Landfill that no longer receive material should be considered for adaptive reuse for active and passive recreational purposes and should be part of the long-term expansion program for the Occoquan Regional Park or the Fairfax County Park Authority to further serve the needs of the Northern Virginia area.

- The Fairfax Water Facility should be buffered and screened along Ox Road and the northern boundary. The existing ponds north and south of the treatment facility should be preserved as natural resource areas. As an interim use, land not

needed for the expansion should be used by the Fairfax County Park Authority for athletic fields. A new 42-inch water main is planned to replace the existing main that crosses the former Corrections Property.

With redevelopment of the former Corrections Property, additional public facilities and utilities will be needed to serve the property as well as the surrounding community.

Public Facilities Recommendations and Guidelines: The following recommendations and guidelines to implement the public facility and utility needs of any redevelopment of the former Corrections Property are provided:

- If a site for Fire and Rescue has not been located off-site to serve this area, then a site of approximately five acres should be provided on the former Corrections Property. The location of that site may be on the south side of Furnace Road between Hooes Road and Lorton Road as shown on Figure 11, with the specific site location to be coordinated with Fire and Rescue. In addition, there should be the potential for a future police substation, which may collocate with the fire and rescue station.

- Adaptive reuse of existing buildings for public facilities should be provided as indicated in the Land Unit Recommendations.

- Utility easements and right-of-ways will be necessary as older lines are replaced or new ones are needed to provide utility services to future development in the area."

Fairfax County Comprehensive Plan, 2011 Edition, Area IV, Lower Potomac Planning District, Amended through 4-9-2013, LP1 Laurel Hill Community Planning Sector, pages 52-54:

"LAND UNIT 5

Land Unit 5 is comprised of approximately 590 acres of which about 15 percent is in environmentally sensitive areas (see Figure 20). Approximately 200 acres of this land unit is located outside of the former Corrections Property boundary and is currently used by Vulcan Quarry and the Fairfax Water Facility. The land unit is generally bounded by the Occoquan River to the south, Mills Branch to the east, the former Corrections Property line to the north and the American Telephone and Telegraph Easement to the west.

A major historic feature in Land Unit 5 is the former Occoquan Workhouse and related ancillary masonry buildings located immediately to the east of Ox Road. The former Occoquan Workhouse complex has the greatest potential for adaptive reuse. Development of this land unit should be in accordance with the guidance for the sub-units.

Sub-unit 5A: Approximately 115 acres of the land within Sub-unit 5A, generally located south of the former Corrections Property line, west of Ox Road and north of the Occoquan River, is to be conveyed to the Fairfax County Park Authority. A portion of this property is currently being leased and used for extraction by Vulcan Quarry. North of the Occoquan River between the quarry and Ox Road, is the approximately 250-acre Fairfax Water Facility property. Both of these uses should adhere to the following additional guidance:

- Extraction at the quarry should be predicated on the assumption that severe slopes, especially adjacent to swales and streams, will not be disturbed so as to pose a direct threat to stream water quality. Consequently, limits of clearing for proposed extraction sites should not encroach on severe slopes in such a manner as to render impossible sediment control and/or visual buffering for nearby residents. Further, sediment control measures should be adequate to control erosion in conformance with the guidelines of the County sediment and erosion control regulations. A natural buffer of at least one hundred feet along the southwest line of the property parallel to the Occoquan Creek should be maintained. In addition, within six months of final fill grade, or as soon thereafter as possible, the visual berm areas along the southwesterly property line, the northwest and southern corners of the property and at the creek entrance to the property along the northern property line should be planted. The plantings should consist of ground cover and evergreen trees. Upon completion of operations, the land should be left in a safe and stabilized condition so that the area can be developed for public park or private recreation uses as shown on the Comprehensive Plan map.

- The Fairfax Water Facility property has been expanded northward to the northern boundary of LP1 in order to meet the long term water treatment needs for Fairfax County. Buffering and screening along Ox Road and the northern boundary should be provided. The buffer area along the northern boundary should include that area's pond and any sensitive biological areas associated with the pond. In addition, a buffer area should be provided adjacent to the pond located south of the new treatment facility in order to protect this natural resource area. In addition, the treatment plant expansion should be designed in a manner that will ensure future access to the quarry property on the west after its reclamation occurs.

- Any land not needed for the Fairfax Water Facility should be used for park purposes, including interim uses such as athletic fields.

- The half-acre prison cemetery, which was established at the turn of the 20th century, located west of the former Occoquan Workhouse and north of the Vulcan Quarry, should be preserved."

Fairfax County Comprehensive Plan, 2011 Edition, Area III, Pohick Planning District, Amended through 4-9-2013, Overview, pages 15-17:

POHICK PLANNING DISTRICT OVERVIEW

"Public Facilities

Existing public facilities located within the Pohick Planning District are included in Figure 6. Major expansions of existing facilities (with the exception of Federal or State facilities) or uses of land that are distinctly different than the use of the public facility must be considered by the County Planning Commission through provisions outlined in Section 15.2 2232 (formerly Section 15.1-456) of the Code of Virginia. For these existing facilities minor expansions which are in keeping with the character of the facility may be considered in conformance with the Plan.

A number of public facilities have been identified as future needs in this Planning District. These projects are included for informational purposes and in most cases will require a 2232 (formerly 456) Review public hearing before the Planning Commission prior to being established. Those facilities for which a specific location for future construction has been identified are also listed in the sector recommendations and are considered a feature of the Comprehensive Plan upon review by the Planning Director and concurrence by the Planning Commission. If such feature shown determination is made, these projects will not require a future 2232 (formerly 456) Review public hearing. The following public facilities are identified as future needs in the Pohick Planning District:

1. A mini fire and rescue station should be provided to serve the area south of the Town of Clifton in order to meet the established criteria for Fire and Rescue Stations.

2. Locate a senior center at the South Run District Park to provide services for the growing senior adult population in the area.

FIGURE 6
POHICK PLANNING DISTRICT
EXISTING PUBLIC FACILITIES

	Schools	Libraries	Public Safety	Human Services	Public Utilities	Other Public Facilities
P1	Centreville High			Mott Community Center	Popes Head Sewage Pumping Station, FCWA Popes Head Road Pumping Station	
P2	Burke Spec. Ed. Center, Bonnie Brae,	Kings Park Community	Braddock District Supervisor's	David R. Pinn Community Center, Cluster Residences	Va. Power Burke, Keene Mill and	*State Police Park-and-Ride

	Laurel Ridge, Rolling Valley, Hunt Valley, Oak View, Saratoga, White Oaks Elem., Robinson and Lake Braddock Sec., W. Springfield High, 3 Elem. Sites		Office, Burke Fire Station Co. 14, West Springfield Police Station, Fire Station Co. 27 and Government Center	for Mentally Retarded Adults, *No. Va. Training Center (State)	Sideburn Substations, 4 Storm Drainage Impoundments (P.L. 566)	
P3	Clifton Elem., Liberty Middle					
P4			Clifton Fire Station Co. 16			
P5	Silverbrook, Halley Elem.		Fairview Fire Station Co. 32		Va. Power Ox and Occoquan Substations	
P6	Fairview, Cherry Run, Sangster, Orange Hunt, Terra Centre Elem.	Pohick Regional, Burke Centre Community Library site	Pohick Fire Station Co. 35		1 Stormwater Impoundment, Public Works Line Maintenance Division Shop, FCWA Pohick Road Pumping Station	Park-and-Ride
P7	Newington Forest Elem.				Storm Drainage Impoundment, Pohick Road Sewage Pumping Station	

*Federal and State facilities are not subject to the 2232 review process

3. In order to meet the growing need for public utilities, transmission lines and two electrical substations will be required on Parcel 75 3((1))10 in Sector P3 by Virginia Power and Northern Virginia Electric Cooperative.
4. Subsequent to provision of commuter rail service along the Norfolk Southern Railway, establish a commuter rail station west of Ox Road.
5. Expand the Pohick Regional Library in Sector P6 consistent with Policy Plan standards for regional libraries.
6. A future community library to be built consistent with Policy Plan standards for community libraries near the intersection of Fred's Oak Road and the Fairfax County Parkway to help alleviate overcrowding in existing library facilities.
7. Renovate and expand the FCWA Popes Head Road Pumping Station in Sector P1.
8. Renovate and expand the FCWA Pohick Pumping Station in Sector P6."

Fairfax County Comprehensive Plan, 2011 Edition, Area III, Pohick Planning District, Amended through 4-9-2013, Overview, pages 62-63:

"P5 DOMINION COMMUNITY PLANNING SECTOR

7. The area immediately north of the existing quarry operation is planned for residential use at .1 .2 dwelling unit per acre. As an option, Parcels 106 3((1))4B, 106 4((1))1B and 20B pt. (not including property adjacent to the north side of Peniwill Drive) may be appropriate for an expansion of the existing quarry to the south, located in Community Planning Sector LP1 in Area IV. Industrial uses other than the expansion of the quarry are not planned in this area nor should they be permitted. As this area is adjacent to lands planned for very low density residential use, the quarry expansion area should be limited in size and well buffered from adjacent parcels. In addition, the environmental impacts of the expansion should be mitigated and safe and adequate road access provided. The expansion of the quarry in this location is only appropriate if the following conditions are met:

- The current operating conditions remain in effect;

- The expansion of the quarry pit and operations should be limited in size and location to insure that the impact of this use on surrounding uses is mitigated. This will provide for a supply of stone resources sufficient to meet demand for many years while assuring the quarry expansion will be finite in this location and will protect the residential character of the areas to the north, east and west from further expansion of nonresidential uses;

- The proposed pit expansion area should be limited to approximately 30 acres in the southern portion of Parcel 106 3((1))4B and should be contiguous with the existing pit located in Area IV; storage and equipment areas, settlement ponds, and access ways should be located on approximately 30 to 40 acres; and a buffer area should consist of approximately 45 to 55 acres. This vegetative buffer should be provided around the periphery of the site and should include Environmental Quality Corridors (EQCs) and the maximum amount feasible of mature hardwood forests. In addition to including EQC and forest areas, this vegetative buffer should be 100 to 200 feet in width to protect all existing or planned residential development from noise and visual impacts of the quarrying operations. Supplemental plantings should be provided in the buffer where no mature trees exist;

- The direct and the indirect environmental impacts of any proposed quarry expansion should be appropriately mitigated. The scope of the quarry expansion should be designed to balance efficient stone removal with preservation of significant environmental resources such as EQCs and adjacent upland hardwood tree cover. In addition to the buffer area

described above, other critical EQC areas and significant areas of upland hardwood forest cover adjacent to the EQCs should be preserved to the maximum extent feasible. The applicant should comply with all requirements of the Chesapeake Bay Preservation Act;

- The quarry expansion should be carefully planned to provide siltation basins that will contain sediment on site and prevent off site discharges that could adversely impact water quality. The pit drainage system should be carefully designed to maintain pre quarry drainage patterns to the extent feasible. Tree cover on the site should be maintained as long as possible. Erosion and sediment controls should be in place prior to any clearing of expansion areas;

- The quarry operator should provide necessary improvements at the site entrance to Ox Road and along Ox Road near the intersection as may be required by Virginia Department of Transportation (VDOT);

- The proposed expansion of the quarry should only use the existing access road through the Water Authority property. A second access for emergency vehicles only should be provided to Ox Road. No use of any additional access points is recommended along Ox Road for daily quarry operations; and

- Alternative public street access to Route 123 (Ox Road) should be provided to the residential land west of Elk Horn Run and should be well buffered from all quarrying operations."